Introducing the Social Determinants of Health in Rural Communities Toolkit – 08/19/2020

Kristine Sande: Hello, everyone. Welcome to today's webinar. I'm Kristine Sande, and I'm the Program Director of the Rural Health Information Hub. We're very excited to have you all here for the webinar, Introducing the Social Determinants of Health and Rural Communities Toolkit. We have a few housekeeping items that we'll run through before we begin the presentations.

We do hope to have time to answer some of your questions at the end of today's webinar. If you do have questions for the presenters, please submit those at the end of the presentations using the Q&A button at the bottom of your screen. We have provided a PDF copy of the presentation on the RHIhub website, and that's accessible through the URL on your screen, and we have also just sent that link via the chat function. If you have any technical issues during the webinar, we do ask that you visit the Zoom Help Center at support.zoom.us.

Now, it is my pleasure to introduce our speakers for the webinar. Our first speaker will be Luci Rocha, and she's a Research Scientist at the NORC Walsh Center for Rural Health Analysis, and she will introduce the Rural Social Determinants of Health Toolkit. Her research focuses on the root causes of health inequity, and rural healthcare access and delivery.

Next, we'll hear from Lisa Rogers, who is a Deputy Director at CASA of Oregon and has been with the agency since 1999. She is responsible for the day-to-day operations of the agency to ensure that the cost of purpose and values are implemented. Lisa has demonstrated accomplishments in financial management, administration, program and project development, supervision, analysis, and problem solving. She serves on the Housing Oregon Board of Directors, the Chehalem Parks and Recreation District Board of Governors, the Mid-Willamette Council of Government Board of Directors, and the Chehalem Cultural Center Board of Directors.

Prior to CASA, Lisa worked for 10 years as a Float Manager, Business Manager, and Housing Manager. She spent two years in Brazil working at an American-Brazilian school as their business manager, and one year in getting the Guinea Bissau working with the United States Agency for International Development. She holds a BS in Economics from the University of Washington and has completed the achieving excellence program sponsored by NeighborWorks America and Harvard University.

Our last speaker will be Kymie Thomas. She is an enrolled member of the Navajo Nation and resides on the reservation with her family. Kymie received her degree in Health Sciences from Sheridan College, where she then decided to come back to her community and serve her people. She is currently employed with the Community Outreach and Patient Empowerment, or COPE Program, a nonprofit organization that serves the indigenous communities through patient empowerment. Ms. Thomas' work involves addressing health issues and communities that are affected by diet-related diseases through education and prevention by way of the Navajo Fruit and Vegetable Prescription Program, which is implemented in collaboration with healthcare professionals serving Navajo Nations.

So welcome to all of our speakers. Thank you for being with us today. At this point, I will turn it over to Luci.

Luciana Rocha: Thank you, Kristine, and thank you all for joining the webinar. Today I'm happy to introduce The Rural Social Determinants of Health Toolkit. Throughout this presentation, I'll also use the acronym SDOH.

So the toolkit was developed as part of the Rural Health Outreach Tracking and Evaluation Program, which is funded by the Federal Office of Rural Health Policy within the Health Resources and Services Administration. The project is conducted by the NORC Walsh Center for Rural Health Analysis, in partnership with the University of Minnesota Rural Health Research Center. NORC and the University of Minnesota are also working with the National Organization of State Offices of Rural Health, and the National Rural Health Association to disseminate findings from the evaluation.

A key focus of our work has been to establish rural evidence base, including evidence-based toolkits based on the experiences of FRHP grantees and other rural communities. Evidence-based toolkits are an important step in disseminating successful programs. Our toolkits have three aims. The first is to identify evidence-based and promising programs. The second is to study the experiences of these programs to figure out what's working in rural communities and why. The third is to disseminate best practices from their experiences so future grantees and other rural communities can learn from these programs and replicate them.

Today we're focusing on the Rural Social Determinants of Health Toolkit. Organizations and agencies use different definitions of SDOH, which highlights the complex nature of the multiple environments, systems, and policies that affect health. Healthy People 2020 defines SDOH as conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality of life outcomes and risks. Addressing SDOH means targeting the root causes that can contribute to poor health. Multiple SDOH impact health and well-being, including racism and discrimination, income and poverty, and housing quality and affordability, to name a few.

In the rural SDOH toolkit, we share these promising approaches and resources to help other rural communities address the social determinants of health. Next, I want to show you how to navigate through the toolkit. This is a snapshot of the main page of the toolkit, which is organized into different modules as shown on the menu on the left. Each module includes information and resources for planning, implementing, evaluating, sustaining, and disseminating SDOH programs in rural communities. There's also a program Clearinghouse that contains information about promising rural communities.

Today I'll focus on Module 2, our SDOH Program Models. Module 2 describes evidence-based and promising program models implemented in rural communities. Next, I'll briefly describe each model. We organize the models by the five key SDOH domains used by Healthy People 2020: economic stability, education, social and community context, health and healthcare, and neighborhoods in the built environment. You can find more information on each model in the toolkit.

The first set of models address economic stability, which allows people to access resources essential to life, including financial resources, quality housing and food, and a job that provides a stable living wage. The toolkit describes five types of models and approaches for improving economic stability to address rural SDOH. Economic development projects typically seek to increase employment opportunities for residents. Workforce development and human capital models strengthen the workforce in rural communities and invest in changes to improve local economies and employment equity.

Individual asset building approaches help individuals and families accumulate monetary assets, which can involve paying off debt, increasing credit scores, and building savings. Approaches for improving housing affordability focus on strategies and mechanisms for improving access to

affordable housing. And finally, services integration and multi-generational approaches focus on addressing the needs of the entire family, with the ultimate goal of reducing rates of poverty and improving the financial and employment outlooks of families.

Next, education has been described as the most important modifiable social determinant of health and has shown to increase healthy behaviors and improve health outcomes across the lifespan. Models include early childhood education programs that aim to lay a foundation of health by building the social and emotional skills of young children; high school completion programs that work to increase the chances that students will graduate from high school; out of school time academic and enrichment programs; community schools which foster partnerships between educators, families and community services; and college access programs, which aim to expand higher education opportunities for students from low-income and minority communities.

The next category in the toolkit are models focused on improving the social and community context in which people live, including the relationships formed between neighbors, as well as the impact that voting and civic engagement has on community outcomes. Models include asset-based community approaches which focus on leveraging the people and resources in communities as assets to address SDOH; incarceration prevention and community reintegration approaches that aim to prevent involvement with the criminal justice system and provide services and support to those who are previously incarcerated to help with community reintegration; and food systems approaches to address food insecurity, which helped increase access to affordable, nutritious food.

Next, the toolkit includes models focused on improving health and healthcare. Many factors affect access to healthcare in rural communities, such as health insurance coverage, distance to healthcare settings, and the availability of healthcare providers. Models for improving health and healthcare include: interdisciplinary care teams; patient navigators and community health workers who help address SDOH in the healthcare setting, for example, by coordinating access to support services; medical-legal partnerships that provide legal services to patients in conjunction with healthcare services to address multiple SDOH, such as housing quality; school-based health centers, which provide healthcare and other services to students in kindergarten through 12th grade; and approaches to improve remote access to healthcare, which help rural residents overcome transportation barriers.

The last category of models in the toolkit focuses on neighborhoods and the built environment. Improving neighborhoods in the built environment could include increasing access to high quality and affordable housing, such as making repairs and renovations to existing housing; implementing Health in All Policies, which is a formal approach to integrating health considerations into policies across multiple sectors of government; addressing transportation access; and implementing smart growth models, which typically promote long-term economic development while preserving the natural environment.

Finally, the last model is promoting environmental quality, including clean and safe water, better air quality, and reduced environmental hazards. The toolkit provides information and resources about planning for, implementing, and evaluating programs that involve SDOH. When planning a rural program that addresses SDOH, it may be necessary to become familiar with terms such as health disparities, which describe the differences in health between groups of people; and health inequity, which refers to differences in health status that arise from social constructs such as racism and discrimination. In Module 1 of the toolkit, we define and provide examples of these SDOH concepts.

The toolkit also provides context about how specific populations may be affected by SDOH. Intersecting challenges related to race, gender identity, disability status, socioeconomic status, language abilities, age, and other factors, can have complex implications for health and well-being. For example, race-based discrimination, social exclusion, and violence can contribute to traumatic outcomes. Trauma can cause physical and behavioral symptoms, which affect the health and well-being of future generations. These concepts of historical and intergenerational trauma are particularly pertinent to certain populations, including American Indian and Alaska Native communities.

In Module 4 of the toolkit, we provide information and materials to support implementation approaches to address these topics. So thank you all for your time today, we hope you'll visit the toolkit. I'm very happy to introduce Lisa Rogers, who will speak to us about CASA of Oregon.

Lisa Rogers: Good morning, to some of you, I think good afternoon to the rest of you. As you have heard, my name is Lisa Rogers. At CASA, we develop affordable housing and asset building programs for low-income Oregonians. We have four primary lines of business that include real estate development, the preservation of manufactured home parks for resident ownership, a matched savings program to build assets, and a community loan fund to assist the balance of our lines of business. We believe housing is a key factor in determining the health of a family, and we'll focus this presentation on our manufactured housing program.

So, manufactured housing is the largest naturally occurring affordable housing in the state, and CASA is a certified technical assistance provider under the ROC USA Network. In that role, we help residents of manufactured home parks convert their park to resident ownership. When the residents own their own park, they're ensuring a long-term term affordability. They only are paying for their operations and for the debt service on the park, and there's no return to the owner. It is a limited equity cooperative model, so no one member can benefit over another and this ensures the affordability for the entire park.

So far, CASA has been able to help 17 parks convert to resident ownership for a total of about 1,036 families in 12 different counties throughout the state. Four of those parks are senior parks, and the balance are family parks. The cooperative model is a . . it's a membership that's limited to the park residents, and only one member per household is able to be a member. The members must own and not rent their home, and the members control the rent. So with CASA's help, we help them create a budget annually, and only in the case of if there's an increase in taxes, utilities, that type of thing, would they would their rents change.

The first park that we converted was in 2008, and it has only had one increase in its rent by like $10, and that's when they refinanced seven years later. The members share equally in the decision making process in this model, and so it is not only a preservation of affordability, but it is also an empowerment program for them to learn how to self-determine. It is owned collectively by the cooperative, and the cooperative holds the mortgage and is responsible for paying the debt service and operating expenses of the park. Every year the membership elects a Board of Directors who then acts on their behalf in the operations of the park.

So the membership, their two primary responsibilities at their annual meeting is to elect new members to the board and to approve the annual budget. The Board of Directors is not able to go ahead and expand beyond what the budget says by line item unless they get membership approval to do so. So if there's an emergency and they need to, maybe, repair something at the park that wasn't budgeted for, they would have to go to the membership and ask for approval to do so, which is usually given quite easily.

The benefits to the homeowners in the park is this long-term security and stabilization of the rents, which currently go from $200 to $600 a month. I was on a call with a gentleman the other day who is living in an investor-owned park, and they are currently paying $922 a month in space lease at that park, which for seniors on a fixed income is really, really, really difficult for them to do. Another benefit is wealth building through the homeownership and asset appreciation because when you have your space lease stabilized, it's a very desirable outcome, and thus people want to buy homes in the park. So if somebody is going to sell it, they usually see an increase in the value of their home because of the resident ownership of the land under it.

It's a democratic control, as we were talking about a little bit earlier, and the community both rules and maintains the park themselves. So they hire out, they have CASA as a Technical Assistance Provider. They hire a Property Management company to help them so that they don't have to address any issues with their neighbors in terms of non-payment of rent or a violation of community rules. The Property Manager can step in and do that on their behalf as well as they're not getting all of their neighbors' personal information, the property management company keeps all of that, and only in cases of if there's a legal issue would any of that information be shared.

They do health and safety improvements to the parks. There are some parks where we have had full replacement of the infrastructure in the park, and that is a very big learning curve for the residents because they need to go out and hire a Project Manager to help them through this process. It really teaches them a lot of leadership skills through not only just learning through the technical assistance that we're providing, but there are leadership trainings both nationally and regionally that they are able to go ahead and take advantage of.

So what makes a successful resident purchase? There's a few things that just are kind of critical in order for the residents to purchase the park, and that's where you have both a willing seller and willing residents that want to take on this challenge, the available, affordable financing to do so. It really is based all on, when we run numbers for this, what kind of impact the purchase will have on the rents of the cooperative members.

In Oregon, and I'm sure this is true in a lot of other places around the country, manufactured home parks are becoming a really good investment opportunity for investors. They are looked at as cash cows because all they're owning is the land and infrastructure, typically they don't own the homes, but sometimes the investor owners do. So when we go out to try to help residents convert their park to resident ownership, we are competing with these investors who have lots of money and can close in a much shorter period of time than we're able to, so it is a bit of a challenge.

Some of the things that we would prefer is the ability to complete the deal in a reasonable amount of time, which would be under six months. When we compete with the investor owners, they can usually close between 45 and 90 days, depending on whether they have to borrow money or whether they have cash on hand, and a lot of them have cash on hand. We really prefer to have a low vacancy rate because what we do is underwrite the purchase to the number of spaces that are occupied to make sure that we know what that impact is going to be on each individual's rent.

We try to find parks that don't have a lot of RV spaces in them. The lenders that we work with underwrite RV spaces to a 25% vacancy rate, whereas the mobile homes are underwritten to seven percent. That difference is quite large if 40% to 60% of the spaces are RVs. The seller is able to benefit from a state capital gains tax exemption, which is currently at about 9.9%. So if

they're not going to be doing what they call a 1031 exchange, which is basically taking the money that they make off of this park and investing into another park or another business venture, and then they're just going to sell it and remove themselves from this industry, then they would be taxed on those revenues.

The state gives that capital gains tax exemption, which it's a good incentive, fortunately, with few infrastructure improvements necessary. That's becoming more of a challenge because a lot of people who want to sell the park, it's usually at the end of its useful life, the infrastructure. So a lot of these parks, most of them are rural and some of them are within city limits. The ones in the city limits are on a city water and sewer, and the ones that are a little bit more rural are on a well and septic. So if all of the infrastructure needs to be replaced, it's usually taking them a couple million dollars to do so, so that has a significant impact on their rents.

The types of financing that we need, we apply for and get pre-development loans that help with doing all of the due diligence necessary for the residents to purchase the park, like getting a capital needs assessment, doing an environmental assessment of the park. We want to make sure that we're not going to be having them buy something that's going to have a bigger impact down the road that we didn't anticipate, and so we try to really take care of all the things that are necessary, and they cost money. So getting a pre-development loan helps to pay for those costs before the park is actually purchased.

We also need to find private loans. There are a limited number of resources that we can go to currently. ROC Capital actually will loan funds to any of the CTAPs or the residents that are under the CTAP Model, but their funding is a little bit more expensive than our residents. Most of the parks that we are working with are in rural areas and they are very low-income folks, and the interest rate at somewhere between five and six percent really has a big impact on what the cost of the park will be. They will only usually provide a 75% loan to value on the purchase actually; it's 75% of the purchase price. So we have to come up with a secondary financing, and that's where we use our community loan fund, and we've been able to provide most of the secondary financing for each of these parks.

Fortunately, we have a state that has been incredibly supportive of preserving manufactured home parks as affordable units, and as such, they have not only helped, we've been able to pass opportunity to purchase legislation that allows for the residents to always have an opportunity to at least put an offer in on the park. But the state has provided grants and state tax credits to help assist in these purchases, so currently, the grants, until they run out allow for somewhere between $35,000 and $45,000 a space in a grant.

Then they provide these what are called Oregon Affordable Housing Tax credits and those credits are an interest rate reduction of four percent on the permanent loan. So if you're getting a five or six percent using these tax credits, we can get that interest rate down to one or two percent, which makes a big difference, which is why the ROC Capital financing for us doesn't work. It works for a lot of other folks in other states because they don't have the same kind of resources that we've been fortunate enough to access. The rest is the park income for the ongoing operations and to pay the debt service.

The next few slides are just some of the parks that we've actually helped preserve to date. On these slides, and I'll slowly go through them, it's data that we keep, as well as data that we share with our legislators to show the impact of some of the work that we're doing. But the parks range in anywhere from 25 spaces up into 142. There are a variety of different kinds of parks, you have some that are in the urban area that homes are really close together because the cost of land is so much greater, and then you can go out to some of the ones in the country where

they're on a riverbank, or they have much larger spaces. So it's interesting to see all of the variety of different parks that are around the state.

Universally, the residents are always wanting to be able to own and operate if they possibly can, but between resources and availability, we can't convert as many as we'd like to every year. So all told, we have been able to preserve the 17 parks using $24.9 million in affordable housing tax credits, and $15 million in grant funding, which gives you the per space average on these. It's preserved 1,036 spaces that averages about $38,000 a space. CASA's Community and PAC Capital has provided over $6.5 million in secondary financing and over $950,000 in pre-development financing for all of these parks.

One of the things that we have learned over the last 10 years in adopting this program and implementing it is that the parks that we're usually able to convert are older parks with very low-income residents, and so many of the homes that are within these parks are in pretty dilapidated condition. However, frequently manufactured housing can be the housing of last resort, so people will live there because they have no other option. So one of the things that we started looking at was how can we help low-income residents replace that old dilapidated home with a new energy-efficient home because we also know that not only is it the affordability that is a determinant of health, but also the conditions of the home that are there.

So if they're able to get out of a drafty, moldy home, obviously those will have impacts on someone's health. So we went ahead and were fortunate enough to get a grant from Meyer Memorial Trust to look at ways that we can try to replace these homes. It takes a lot of coordination. We have to coordinate with the Cooperative Boards, we have had to identify a variety of different subsidy resources, along with trying to find lenders who will loan on these homes. Normally when you buy a manufactured home, you buy it from a manufacturer, and it's considered chattel financing because you don't own the land under the home. Chattel financing has rates at 10% or higher to buy a home.

So the only ways that folks are usually able to get home is either, A, they have a sufficient amount of resources that they can borrow money to buy a home from the manufacturer who will provide the financing. But like I say, it's at much higher rates, or they have cash to be able to buy it. Frequently cash is what ends up happening for what people can afford, so they're buying very old homes because they don't have a lot of cash available. So we partnered up with a variety of different folks, Oregon Housing Community Services, which is our State Housing Finance Agency. Meyer Memorial Trust has been a huge supporter of trying to help preserve the parks, as well as to do the replacement of the homes.

Energy Trust of Oregon is looking for ways to get these old homes take up a lot of energy off the grid and replace, so they're providing some subsidy in their service area to help some of these homes get replaced. Craft3 is a local lender, who has received some grant funding to try to see if they can develop a loan product that would loan funds to individuals at somewhere between five and six percent, which is much better than the Chattel Financing. We have Community Action Program agencies in the state that are also... they get weatherization money that can be used to do improvements to the homes, , and so we are working with some of them to try to see if they can get up to like $20,000 to repair a home.

So we're working with some of them to see if they would agree to go ahead, and instead of using it just for repairs for weatherization purposes, use it as a down payment for one of the homes. Then the Network of Oregon Affordable Housing, NOAH, who has kind of helped spearhead this with CASA and Energy Trust of Oregon to do these replacements of the homes. Oopsie, sorry. The challenges that we've faced so far in this program is that I think some of our

premises were not fully seen and a lot of the people who really want to replace their homes are the lowest income folks.

When you're a lender, one of the things that you do is that you use averages, like people should not be paying more than 30 or 33% of their income towards their housing costs. So when you already add in the cost of the space lease that they're paying, most of them have very little capacity to borrow additional funding to buy a home. The other thing that is a challenge for us is trying to figure out how do we cover the cost of somebody who would be like a shepherd to help get somebody through the entire process. From the beginning of saying, "Oh wow, I have this opportunity," to going through credit counseling, to doing whatever is necessary for them to get to the place where they're lender ready and they can actually buy a home.

We're continuing to work with all of our partners on making sure that we can find a resolution to replace many of these homes because we believe that it's vitally important to the health and wellness of the residents in these cooperatives. That's all I have for now, so thank you very much. I will now turn it over to Kymie Thomas.

Kymie Thomas: Hello everyone. Thank you again for joining us, and good afternoon. My name is Kymie Thomas; I am the COPE FVRx Program. Today I wanted to introduce a little more about the work that COPE does and then highlight specifically the Navajo FVRx Program.

COPE Program is community outreach and patient empowerment, a non-profit organization based out in Gallup, New Mexico that has worked to reduce health disparities on the Navajo reservation since 2009. A lot of our work involves empowering the local communities and then providing them with the resources necessary for them to overcome some of the health challenges that they're currently facing by using the Healthy Navajo Stores Initiative, which provides access to healthy foods with stores on the Navajo Nation, the cancer program, and then our fruit and vegetable prescription, our monitoring and research evaluation program, the youth program, training and outreach, and our growers initiative.

So all of these initiatives have their own little way to support the community and to find the gaps within the limitations of resources to promote the health and well-being of community members. A lot of our work, again, falls within the Navajo reservation, which spans across three states; Arizona, New Mexico, and Utah. It also has a land base of 20,000 square miles. Just for reference, there are fewer than 15 grocery stores within the Navajo Nation. Families residing on the reservation often travel an hour or more to the nearest grocery store, and most often it is off the reservation. Families living on the reservation also face food insecurity rates five times the national average.

So we figured out with the FVRx Program the importance of healthy food access and why it's important. The prevalence of diabetes among the Native American women is relatively higher to compared to other populations as well as the rate at which four year olds within the study that was done was part of the National Health Institute, 31% of them were obese, which is higher than any other racial or ethnic group. Then also, people living in areas where there is an availability of fresh produce have better health outcomes and a decrease in diet-related diseases.

So within this program we decided to, or COPE had identified the gaps in food access on the reservation and the limitations of families and their ability to consume more fruits and vegetables for a better health outcome and also to really combat the growing rates of diet-related diseases that plague most indigenous communities along with the concept of food is medicine. So going back to early traditions and highlighting the importance that our ancestors

and how their diet consisted of a lot of homegrown fruits and vegetables mainly, and then just really the impact that has when a lot of that shifted to where we are now.

With the Navajo FVRx Program, the mission, we believe that the power to overturn longstanding historical health inequalities lies inherently within the Navajo communities themselves. Then by investing in these communities and their resources, with our vision along with the tribal leadership, creating this system-level change will create the better health outcomes that we are hoping to see not only for this generation but also the continuing generations as well.

The overall goals of the Navajo Fruit and Vegetable Prescription Program is to increase access to healthy foods among Navajo families, to increase the consumption of healthy and locally grown fruits and vegetables, as well as improve health outcomes in people that are affected by diet-related diseases, and also to stimulate the economy and promote the local sales of healthy foods on the Navajo Nation. Specifically working within the stores and a lot of the smaller growers and the establishments on the reservation.

So this next slide is pretty much just an overview of what the process looks like for an FVRx participant. The first step, the families and the households are identified from the community health team, the clinics which is comprised of the healthcare providers, and then also when they are identified they find the gap in between I guess the areas of where their target population would be. For example, if the community provider sees that there is really higher rates of gestational diabetes in postpartum or prenatal moms then they are going to go ahead and shift the enrollment to include that specific target population.

Then also, once they are identified and enrolled into the program, the participants attend monthly education sessions during the program to be able to obtain the program vouchers. Then by this time, the families are able to set healthy goals and targets for healthy lifestyles. By then, the clinical provider then helps assist with them with healthy coaching and the development of these goals and then distributes the FVRx Program vouchers during each visit. Then they collect the health indicators like BMI and the fruit and vegetable consumption, their food insecurity and things like that, and then monitors them throughout the duration of the program.

The prescription is then redeemed for fresh fruits and vegetables that local stores within the community or the local growers. Then our hope and the ending outcome is that the families will show an increase in healthy habits and that we'll see a decrease in chronic diseases within the reservation. So going over a little bit about the program enrollment, we serve two primary targets, which is the maternal cohort and the pediatric cohort. This is basically just the criteria that we give to our clinical providers, and it is up to them if they identify or they want to modify it and include a specific group of people that meet these cohorts.

For example, maternal. They see a high rate of type two diabetes or gestational diabetes then they will tailor the program so that it provides the health education coaching for that specific diet. Then also for pediatric, for example, if they see within the community that there is a high-level obesity among children, then they'll tailor the program to meet that specific cohort as well. Then also if families, in general, are facing food insecurity, then they are more than welcome to also create and help those families enroll into this program so that they receive the vouchers for food.

The nutrition education is a big component of the program, along with the health education coaching. The nutrition education is delivered in group sessions or one-on-one visits depending on who is delivering the program. So if it's a doctor and they see the participants regularly at

their appointments, then the one-on-one visit will work best for them or any of the home visitation agencies we have on the reservation. Or some of the providers will do a big group session where they hold the number of enrollees that they have for that cycle and do a big group session and include food demonstrations and topics that cover the importance of fruit and vegetables and a healthy diet.

COPE itself encourages curriculums we use that are evidence-based or practice-based to enhance the knowledge of our families about the importance of fruits and vegetables consumption. So for the voucher redemption, families receive vouchers that are dependent to household size. For example, a family of two will receive two booklets per month. The maximum amount of vouchers family can receive per month is $112, which is the equivalent to four booklets. Within each booklet, there are vouchers that are worth $7 each. So one booklet will have four vouchers, and that's equivalent to $28 per booklet. These vouchers are then redeemed with our partnering retailers on the reservation for fresh or frozen produce and traditional food items.

We are working to increase the partnership and collaboration with the local growers within our communities. Some of our clinics have expressed growing interest in partnering with our local growers and helping them also receive money as part of our program. One way, for example, that we were thinking of was providing food boxes from the growers. Any of the items that they have grown this past season they will be put into boxes, and then families can purchase these food items, and then it'll also in turn help the local growers within the community. So that is something that we are working on and continuing to build upon. We are working to implement that within hopefully this season, but it's a trial and error, but it is definitely something that we are working to include more of.

So this is just some of the baseline statistics from our previous cohort, 2015 to 2018. We have our pediatric cohort, then the gender, their average age. The maternal cohort, their average age, and their diabetes status, which is what we have previously focused on before. A lot of the data that we collect is in form of pre and post surveys, so in the initial intake, we will monitor their health metrics and also their fruit and vegetable consumption, the food insecurity rate, and then also any of the diabetes status that they want to mention to us. Again, this data is self-reported from the participants, and as you can see within the specific cohort, the diabetes status is more than half, and 48% of or 90 of our participants within the specific cohort didn't specify or actually they indicated they had no diabetes.

But this is just all self-reported from the participants, and you can see the rate at which diabetes is affecting the maternal participants within our reservation. Then this is also from the same era within that specific cohort, and from the pre- and post-tests of all the participants that were able to complete the program from beginning to end, we were able to take the data from the initial and then also the end of the program and then really see the overall change in consumption that we've seen among the participants. For the pediatric cohort, we've seen that at the beginning of the program, they had at least two servings of fruits and vegetables or fruits or actually I'm sorry vegetables a day and, and then that had increased to three at the end of the program.

The same with the fruits, they had at least two servings of fruit per day, and that had increased to almost four servings. Then also for the maternal cohort, the same thing. The average was about a serving of fruit that was actually increased when the participants were participating within our program. When our participants are within these programs, it doesn't matter if they are under SNAP, WIC, or any other assistance program. This program doesn't interfere with any of the assistance that they already receive.

Then some of the challenges that are specific to the program across that we've encountered has been very different. In terms of technology, there's limited access to internet connectivity in each region. So one area will have good internet connection and cellular connection, and you could go 10 minutes north, and then there would be no service. So just having that access to technology I think has been one of the biggest barriers just because finding a system that is really efficient enough to work across the reservation has been one of the challenges. Because again, we are a multi-regional program, so it's really hard to find what works best for all of our sites.

Then again, going back to also multi-regional programming, some of the funding that we receive is specific to regions, so we have to modify our forms and our programs so that's inclusive of all of the grant requirements that we have. So it also includes some of the specific metrics and data collection that we are hoping from one specific grant and then making sure that we at least have that for all of our sites so one site doesn't get a different form or anything like that. So multi-regional programming has been one of our challenges, especially across when we're operating in three different states.

Data collection, again, is another barrier for us, and it also stems back to technology because we are still running under our vouchers. We tried to implement an electronic system to help some of the bigger stores and the larger stores to process them. But at the same time when we do that it was brought up that some of the smaller stores and the mom and pop stores, or trading posts that we call them, don't have the capacity to implement a system that large within their area because again they might have limited access to technology. So just really finding an electronic system that works for both stores while not excluding the smaller stores has been something also that we've been working on, trying to identify among each of our sites.

Then also just figuring out the clinic level data that we need just because it's been, again, very difficult because we work with a lot of the IHS sites, and then they have some of their limitations with their electronic health records. Then some other clinics that we work with are 638 sites, and they also have their different restrictions in place. So it's really just trying to work together to create a program that is efficient enough to be delivered at any clinical setting on our reservation, and then when we are able to identify that and overcome that, and then it would be easier to implement at another region or within another state.

What makes our program successful is the level of partnerships that we have and the commitment that the clinical providers have delivering to the quality of care for their patients and also their dedication to improving the health outcomes for the Navajo people. On the store level, the involvement of the stores within community initiatives and then the collaborations that they create with the clinical provider. Then overall, our team in general and their commitment to serving the Navajo people. All of these have played a hand in ensuring that our program is successful and that if there any gaps identified either within the store level or within the clinic level that our team member and the clinic were able to address these issues and work together collaboratively to enhance the program.

Then I just realized I don't think I have included the slide for our funders, which is a big part of making our program happen. We are funded by the CDC, the REACH Grant. We are also funded by smaller foundation grants because we are a non-profit organization. Then we have also recently acquired Gus Schumacher Nutrition Incentive Grant with the USDA, and then the Arizona First Things First Grant, which covers our Arizona state. So it's a big team effort in identifying some of the resources or the limitations within each region.

As we've been going along we've been identifying more of the challenges, but also on the long way what works best for one site is something that another is facing, so just really creating that collaboration between the sites and then really enhancing the overall delivery of the program has been very successful. Then also, again, if you guys have any questions, feel free to reach out to me. I am happy to answer any questions. Again, thank you. Thank you guys for having me.

Kristine Sande: All right, thank you so much. At this time, we will open the webinar up for questions. You'll see a Q&A button at the bottom of your screen, and if you click on that, the questions box will pop up and you can enter your questions. To the extent possible, if you could indicate who the question is for in the text of your question, that would be really helpful. It looks like we do have one question that has come in already, and it's for Kymie. The question is, "I'm wondering if the COPE Program employs community health workers from the reservation for nutrition, education, or other parts of the program?"

Kymie Thomas: Thank you. That's a great question. We do work in conjunction with the Navajo Nation and their community health representatives, so the CHR Program. They do have also their own separate programs where they do implement a separate curriculum that they're trained in, which is a Family Spirit. So yes, we do work really closely with the community health program on our reservation.

Kristine Sande: Great, thank you. A question for Lisa, it's really interesting what you've done with using the cooperative model for housing affordability. So when you form these Cooperative Boards, what are the major challenges that the Cooperative Boards face in this process?

Lisa Rogers: They face a lot of them. First, they come to this concept like, "How can we do this? We've never run a business before." We have an organizer that goes out and works with them from the minute a purchase and sales agreement is signed and they formed themselves into an organization. The organizer works with the newly elected Interim Board Directors to figure out what they need to do. So every week they're going over different things.

The biggest challenges sometimes that they face are people who are in the park that may not... This may not be politically correct, and I apologize, but a lot of times people who don't have a lot don't believe that I'm not going to get something for nothing. So there's always a few people who are like, "There's something going on here, I don't trust this," and they cause problems for the board during the conversion process. They try to go around and speak to different members of the community that this isn't a good idea. But ultimately, I think with just all the information that is provided to the members, we've never had somebody not convert to resident ownership that has started the process.

So trying to make sure that they understand the role that they're playing and then not playing favoritism with anybody else in the co-op. So really getting that message across to them that this is a limited equity cooperative model where you pay $100 to be a member of the cooperative, and if you leave you get your $100 back, even if it's 20 years from now, but that no member will benefit over another. Which is sometimes kind of difficult because some of the seniors, they're getting $900 or $1,000 a month in social security and then are only able to... They have to pay $200 to $600 in space lease, and that doesn't leave a whole lot left for anything else.

So folks want to normally help them out a little bit more but are unable to. So we really try to work on getting their rents down as low as we possibly can so that the impact is not as great in taking on this purchase.

Kristine Sande: Thank you. Another question or comment that maybe has come in says, "I would love to hear about a community applying the social determinants of health toolkit as an example. So I'll ask Luci to weigh in on whether she has an example of that, but one caveat there would be that the social determinants of health toolkit is fairly new, so we might not have that impact information yet. But we'd love to hear from any of you who have used it. Luci, do you have anything to add on that?

Luciana Rocha: Nope, nothing to add yet. The social determinant toolkit is like Kristine said pretty new, but we're always looking for additional resources and for additional stories to add, so we would love to hear directly from communities.

Kristine Sande: Great. One more question for Kymie. Kymie, when you talked about the pediatric cohort, I was wondering if the education that's provided, is that primarily provided to the adult members of the household, or are the children involved in that education?

Kymie Thomas: Yeah, great question. Thank you. The way our curriculums are set up is mainly the adult receives the education component, but we encourage them to if they want to bring their children into the education session, they're more than welcome to. A lot of the curriculum the way it's set up its included so that the mom and the child that are enrolled are able to complete the education. We do have the program set up so that all of our curriculums are hands-on with the families and not just necessarily for the participant that's involved.

As part of our education session, a lot of the sites have gotten really creative with involving the mom, the dad, and also the child into their education sessions. So it's really nice the way a lot of the sites have specifically set it up so that it's including most members of the family. But if mom isn't there, if grandma is the one that's there when enrolling in the child, then we would encourage the grandparent or whoever's attending the education session to also include the child in it as well. But there are areas within the curriculums where that information can also be easily interpreted for children.

Kristine Sande: Thank you. It looks like that's the end of our questions and about the end of our time, so we will now bring the webinar to a close. On behalf of the Rural Health Information Hub I'd like to take this opportunity to thank our speakers for the great information and insights that you shared with us today. There have been some really great examples given.

Also, thank you to our participants for joining us today. A survey will automatically open at the end of today's webinar, and we encourage you to complete the survey to give us some 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, the toolkit is available on our website, so I would encourage you to check that out.

Also, a recording and a transcript of today's webinar will be made available on the RHIhub website and sent to you by email in the near future so that you can listen again or share this presentation with your colleagues. Thank you again, and have a great day.