

Division of Diabetes Treatment and Prevention

Advancements in Diabetes Seminar Fresh Food Pharmacy

Michelle Passarretti, BSN, RN, CCM
Director, of Health Management Clinical Operations, Geisinger Health Plan

Michelle Passaretti:

Good afternoon and Happy Nutrition Month everyone. As Kelli mentioned and Jan mentioned, my name is Michelle Passaretti. I am a Registered Nurse and Certified Case Manager. I currently work as Director of Geisinger Health Plan, Health and Wellness Department and really charged with the clinical operations of our department. I have about 20 years experience in public health, including case management and really responsible for our case management, our registered nurse case management activities, our registered nurse health management activities and of course our certified health coaching responsibilities. I'm really thrilled to have been asked to present the Fresh Food Pharmacy with you all today and attempt to combat food insecurity and diabetes. So, thank you for having me.

So when we think about food insecurity by definition, really food insecurity is the inability to afford nutritious, adequate, safe foods. We really identify those individuals, those are typically the individuals who have -- they lack access to food. They may be those individuals who are dependent upon food assistance programs like SNAP, WIC. They often skip meals. These are the individuals who often -- you'll see have this "treat or eat mentality" where, "I have enough money for one or the other. Do I buy my medications or do I buy food to feed myself and my family?" They have this "treat or eat mentality" and often we see that these are food insecure people who are skipping meals. They will often replace nutritious food with less expensive alternatives. We've all gone to the supermarkets and we see ramen noodles, 10 for \$10. You could potentially have a meal for a dollar. So folks who are food insecure may go down this alternative path. These are often the individuals who you'll see in soup kitchens and food pantries.

So how do we know if an individual is food insecure or not? Well the best is to just ask. We have two food insecurity questions that have been -- they're the approved USDA food insecurity questions and they're quite simple. The questions are, within the last 12 months, have you been worried that your food would run out before you had the money to buy more food? The second question really is, in the last 12 months the food that you bought didn't last and you didn't have enough money or means to be able to buy more food, and if either one of these questions is answered yes, then they are food insecure.

When we think about statistics, it was quite startling to see that in 2015, one in eight Americans or 13% were food insecure and what was even more alarming is that 18% or one in six American children are food insecure. When we think about food insecurity often we relate this to poverty. What we've learned is that while they're closely linked, they're really not synonymous. Each family has its own uniqueness. It has its own expenses, its own standard of living and different costs are associated with that different family unit. It is possible and we've seen this in the populations in which we serve is that we have folks who earn below poverty levels, but they are food secure and that maybe because they live on a farm or they live near a farm or they have access to healthy, nutritious sustainable food. And yet on the flip, we've also seen individuals who earn above poverty level but they are food insecure because they don't have the transportation or the means or the access to healthy nutritious food.

When we think about those who are food insecure versus those who are food secure, we know that there's more likelihood that there are children in households who could potentially be going hungry. We also identify that food insecure people have a poor self-rated health. They have a limited health care access or perceived limited health care access. There's more frequent physical and mental health days, so more missed days from work which is then creating this domino effect because if they are missing more work days, they're at risk for job loss. They have higher BMIs and of course then there's the higher prevalence of chronic disease such as the diabetes, smoking, depressive symptoms and really just increased functional limitations with this population.

When we think about food insecurity and some of the health implications that come with it, again, we know that food insecure people are disproportionately poor in health and functional status. We've seen that they participate in -- have a higher prevalence in risky health behaviors. We mentioned previously the mild and severe depressive symptoms that are much more prevalent. And due to this perceived or actual real impact to health care, they are less likely to seek treatments for or report issues like arthritis, cancer, hypertension and diabetes. And therefore because of the lack of access to health care, perceived access to health care, we have unmet needs that are happening so there's less screening and prevention measures.

So our CEO came from UCLA and when he came to Pennsylvania to take care of Geisinger, he brought along his wife who just happened to also be a physician and by trade, she was a critical care physician and she wasn't exactly sure if that was her niche when she moved here to Pennsylvania but was still trying to really figure out what it was that she wanted to do with her career in moving to rural Pennsylvania. And so she started to do some volunteer work and had volunteered at some of our local school districts and she was really responsible for helping -- there was book bag programs in which they fill book bags full of food and they gave them to children who may go hungry and she was really struggling because she was finding that they were filling these book bags with Pop-Tarts and Fruit Roll-ups, food that was contributing to childhood obesity or diabetes or hypertension. And so she asked, "Why are we doing this?" And really the food banks in which we were partnering with during this project or this volunteer work that she was doing was to eliminate food insecurity.

But, her mission as a provider was to do no harm, and so really she wanted to understand our community a bit better and had gotten her hands on our community needs assessment to really appreciate the community in which she now was a part of and the challenges. And so what we really discovered was quite startling.

We found that the national average of food insecurity was 12.7% and in the state of Pennsylvania, it was 13.8. But Northumberland County where she was doing this book bag program, food insecurity was 14.2%. She had also identified that childhood insecurity rates were almost 23% in this community that she was doing volunteer work for, when the national average is 18% and in Pennsylvania, it was 19.3%. And then the diabetes rate was 12.1% compared to 9.6% in Pennsylvania and 9.3% in the USA.

She knew something had to be done and so what she looked at is really all of the communities in which scored much more favorably towards having chronic disease or insecurity rates. And so these three counties that are specifically called out on this slide, Northumberland County, Lackawanna, and Juniata are the counties in which we have the Fresh Food Pharmacy concept. We started in Northumberland County. We will be in Lackawanna and Juniata County in the fall/winter of this year.

But what we learned with this whole exercise was that one in four patients had diabetes and they didn't even know it and therefore was untreated. And that there were 22,000 people in Northumberland County who had pre-diabetes and 90% of those individuals didn't even know that they had pre-diabetes. As you can see in this chart, really there's a significant burden to food insecurity and diabetes in Northumberland, Lackawanna and Juniata Counties hence really are our roadmap for Fresh Food Pharmacy programs.

When we look at food insecurity and diabetes, we've learned from Feeding America that one in eight are food insecure as previously reported. But when we look at the individuals who are food insecure and diabetes, 20% or one in five, their A1Cs fell within 6.5 and 8.9 range and one in four or 25% were diabetic, food insecure and had A1C up greater than 9.

We know that diabetes is the fastest growing chronic condition and by 2020, we're going to have 39 million people or 15% of adults, one in three adults will actually be affected by diabetes. We also know that food insecurity can worsen a person's diabetes and vice versa. And so there's this lower dietary quality and so we know that there's the lack of nutritious foods yet they are the higher availability of nutrition poor foods. There's this treat or eat mentality that we mentioned previously and decreased capacity for self-care. If they're not taking care of themselves, they have reduced capacity to possibly be productive in the workforce, there's the higher stress and obesity rates that we're finding along with our poor mental health. We see that there are lack of opportunities to be physically active and that there's a lack of access to health care not to mention the transportation issues that we were not prepared for when we went live with the Fresh Food Pharmacy but we've quickly adapted in some strategies that we can share with you later on in the presentation on how we tackled transportation issues.

And what we do know is that this whole population of patients, we've seen historically that they increase our emergency room rates and if they're seeking care, it's not with primary care. And so they're going into urgent care or emergency room care and they're not really getting the level of care treatment that they need for their diabetes.

So when we take care of a patient, what we can share with you is that only 20% of what we do as health care providers impact that patient's overall care. We know that 30% of their outcomes are going to be attributed to their behavior whether they follow a good diet or exercise, if they smoke or consume alcohol, what their sexual activity risks are. We know that 10% of the physical environmental, that 10% of your outcome is attributed to the physical environment, where they live and what barriers they have to cross and then 40% really are socioeconomic factors, so their level of education, their job status and their social support, what their income is and really the community surroundings that help a patient.

When we collected all of this at the end of the day, we ask ourselves, what can we do? What could we do if we would be -- could we eliminate hunger and really prevent chronic disease in the process? And so this is really the idea. We went live with it. Let's start a Fresh Food Pharmacy program. And so we targeted a Geisinger owned clinic in the Northumberland County since that was identified as a high risk for food insecurity and diabetes and we started in July of 2016. We expanded to the full scope of what we were able to manage geographically located within a 30-mile radius of our Fresh Food Pharmacy and really had that in place March, so one year ago today, and the idea is that we will provide food to 250 patients and their families. And so it's really adapting this food is medicine approach and addressing both the medical but as well as socioeconomic determinants of health.

We started with the diabetic patients because they were the most of course diet responsive and then we recently started to tackle pre-diabetes and patients with other chronic conditions such as heart failure and hypertensive patients with very favorable outcomes.

We did this by forming a partnership with Central Pennsylvania Food Bank. We also reached out to other community organizations such as Weiss grocers, who has been just a wonderful partner with us in this endeavor. We worked with area school districts.

We have about 80% of the food that's provided our food pantry is provided through the Central Pennsylvania Food Bank and the other 20% is purchased. So, we used our Geisinger System -- our vendor to provide some of the additional food items that at were lacking, Weis Foods has been great, so we rely on donations. And really most of our cost is put into the FTEs to support the program and to maintain and sustain the program. And we are able to provide those dollars, really through philanthropy.

So, when we took this idea or this model, this Fresh Food Pharmacy model, we really put the patient at the center, patient centered care and we took all of the teams or people or entities that would intersect with that patient and built it around the patients and just building this big community, this big network community and just built it around the patient to improve health outcomes.

So, we involved the primary care doctors at the surrounding clinics. We deployed services from a community health assistant, who a community health assistant is an individual who has some level of medical knowledge like a nurse aide and they're really able to help us close some of this other social determinants of health, such as transportation, affordable medications, electricity, things that sometimes we just take for granted that we don't have the resources to be able to help us.

We employ the assistance of case managers. So, case and health managers and in our facility, case managers are those registered nurses who really take care of the sick of the sick, patients who have heart failure, COPD, end stage renal disease, oncology and they help with our transitions of care program. Our health managers are registered nurses who take care of the moderate risk population, who really target our asthmatic patients, our hypertensive patients, they target osteoporosis, diabetes and coronary artery disease.

We work with a registered dietitian. We have clinical pharmacists to help us with medication optimization. We pull in our health coaches or our community health educators and these are -- many of them have a master's degree, but a minimum of a bachelor's education and some types of exercise phys, or health information backgrounds. We work with our food banks, as I mentioned, the Central Pennsylvania Food Bank has been a great resource for us and provides 80% of our food sourcing.

We work with social workers, if there are other barriers such as alcoholism or drug abuse, we really pull in the work of social workers to assist with that. We have wellness events that we offer to our patients who are part of the Fresh Food Pharmacy and really encourage and incentivize them to increase physical activity and basically, to overall goal is to reduce diabetes disparity and have patients who are food insecure, become more engaged in their own wellbeing to improve their overall health.

So, the criteria for the program is they must be 18 and older with the diagnosis of type 2 diabetes. We started with an A1C greater than eight. They had to have a Geisinger primary care or specialty care physician and be food insecure. We do not ask for any forms to prove of food insecurity, we simply ask the questions and we revisit food insecurity annually. And so, as long as the patient is food insecure, they will stay in the program. As an individual's A1C improves, but they are still food insecure, they stay in the program. We just look at our model a little bit differently for those who may now have met their goal from an A1C perspective or a BMI perspective, but they're still food insecure. They may not be as intimately involved with our registered nurses, but now more managed at a passive level with our health coaches and participate in sustained classes and our community health assistant may assess for any other care gaps that she or he can assist with.

So, the program as mentioned, is for those individuals who have an A1C of greater than eight who are food insecure and we took an already existing care team, these people, they were not new hires, they were an already existing care team, we were just a little bit more creative on how we had them work together in a cohesive collaborative setting. And it works nice, because each individual skill set, there may be some duplication on what they are capable of doing, but we really identified who was the responsible party.

Our registered nurse health manager is really the gatekeeper of the program. She will receive the referral and she'll screen the patient. And there are exclusionary criteria, so a patient cannot -- they obviously should not be in hospice, they shouldn't be on dialysis at this point, we don't have a program in which we can offer the food insecure patients who maybe on dialysis or have CKD stage four or five as far as food options. We are just not there yet, so some of the exclusionary criteria would be less than 18. If they have stage four or five, end stage renal disease or on dialysis, if they are on hospice, if they were recently

admitted to the hospital, we'll wait during that transition of care period while they have an increased touch rate with the case manager and the primary care provider. And once they get over that, then we'll enroll them into our program.

And they can't have any significant mental health barriers, if they are severely depressed or bipolar, suicidal, homicidal, we would not include them into the program yet, but we would certainly make sure that they get connected to the appropriate resources and would revisit their need when they are a bit more stable, but we truly are looking for patients who are engaged and deeply interested in making a change into their health.

We work with pharmacy. Pharmacy we pull in, if a patient is really -- so, our registered nurse, health managers or our registered nurse, case managers, our registered dietitians are savvy with medication optimization and they make recommendations, of course with the physician blessing. However, pharmacy in our institution, if a pharmacist is involved, they are able to make therapy recommendations without a physician approval, but we save pharmacy intervention for those individuals who were really struggling, optimizing their medications or yielding very little success with medications adjustment.

We provide diabetes education. So, as part of our program requirement, we have the patient sign a bit of a social contract, that they will come into the facility and pick up their food once a week, they will work with the care team including a primary care provider, their registered nurse, health or case manager, their registered dietitian and that they will attend the diabetes self-management classes that are offered once a week for six weeks and that is a Stanford based -- Stanford University evidence based program.

So, we do have a couple of patients who have committed to attending the classes and they've not kept their end of the bargain and they still stayed in the program. What we have identified is and I'm not sure if I have a slide later to show you this, but I can't speak to it is that, those individuals who participate fully in our program, we see about a 20% reduction in the A1C and those who do not participate fully, whether they are little bit more difficult to engage, there is some compliance issues or they have not attended the classes, they're still benefitting from the program, but we see that their A1C improvement is about 10% as opposed to about 20% for those who are attending the diabetes self management classes.

There is a nutritional consult. Our nutritionist is on site embedded at our Fresh Food Pharmacy in addition to our wellness associate and our community health assistant. And what happens is the patient gets enrolled, they come in, they meet with the dietitian, they review their historical diet plan, how they historically planned their diets, and they'll come up with a new food prescription.

We provide two meals per day for five out of the seven days per week for the patient and we are feeding not only the patient, but the family, the entire family, the entire household. So, on average, there is about four people in the household, we currently have a little over 100 patients that are enrolled in the program, so we're feeding about 400 mouths.

We have been able to close transportation gaps and how we've been able to do that is again through grants and working with our local transportation providers, but also we have an adult, a Geisinger owned and operated adult day care, where there are vans that go and pick up folks in the same surrounding community. And the vans are not being used from about ten to three o'clock, so we really tapped into that and utilized that to our advantage, so that we can utilize these vans when they're not being used for the adult day care to help with any transportation needs that exist.

We coordinate food pickup with classes, as well as, care team appointments because we recognize that transportation is a barrier. So, there are certainly days at the Fresh Food Pharmacy where it's quite chaotic because we may have 20 people attending class that day and so they come into the food pantry and then look and see what are all the available options are to select from that week. They fill out their paper and then we'll go back and have all their bags ready for them for when they finish class.

There are comprehensive meal planning that occurs and the part of our registered dietitian is really that she creates recipes in conjunction with the available food items that we have either purchased or that we've gotten through Central Pennsylvania Food Bank.

This is a picture of the real live food pantry. The young lady on the left hand side is our community health assistant, I'm there in the middle talking to our health manager and then on the right hand side, in the green shirt, she's our wellness associate. It really is all hands on deck. It's a very busy facility and a lot of people coming in and out of this facility. But this is where we store all of our dry storage. You can see that when this picture was taken, it was during the winter months, so we have to rely a little bit more and be a little bit more flexible with our food ordering during off season, so we have a little bit more canned items during the winter months. And it's just something that we talk through especially as we deploy different chronic conditions, such as hypertension and heart failure. We have to be very cognizant of our sodium levels and so forth.

And then, we wanted to just really share some of our patient success stories with you. So, this is Rita and Rita is a grandmother, a 55-year-old, who has three grandchildren that are living with her and her husband is on dialysis. I've known Rita well beyond the Fresh Food Pharmacy. She has been a young lady who we had received a referral, our health manager had received a referral due to diabetes noncompliance in the past, outside of the Fresh Food Pharmacy and she was not engaged, she was not interested, she would often not return our calls. She was in a very, very bad place, a bit depressed, her adult -- she was raising her grandchildren and she had lost her child due to a history of drug abuse and was just in a bad place. She had been either underinsured or lost insurance over the course of the year and had really just at that point just really given up.

One of the things she had indicated every time that there would be an outreach to get her enrolled in our health management program was that we didn't have what she needed, and we were unable to provide her the resources. Who was going to watch the grandchildren? How did her husband get to dialysis, she didn't have time to shop, they didn't have the financial means to be able to afford nutritious healthy food. And so, when we opened the Fresh Food Pharmacy, it was a different approach, it was a different program, it had a look in a different field and what are historical health management program was. It had a nice complement which was -- that they would get two meals a day for five out of seven days a week. You can see she enrolled into the program January of 2017, very reluctant I must say but she knew she was going to get some food out of this. So that was a little bit of the hook. Her A1c was 13.8, blood pressure 124/80 and her weight was 181. September, you can see the nice decrease in her A1C but in September of last year, her A1C had decreased to 5.8, blood pressure 102/72 and her weight is now 155.

What happened to this lady is just so transformational. We didn't only get her to a better place but her entire family. Her grandkids, they come in to the Fresh Food Pharmacy and okra was on the menu the one day and we just kind of made light of, "Oh, you should try it" and she has indicated how that -- if she does treat them to fast food which is now far and few between because they're very interested in cooking and being part of this whole process with her, that they'll do apples slices instead of the French fries if she takes them to McDonald's or what have you. But they are very, very much a part of this program and they have attended some of the classes with her and she reported to us a few weeks ago that now the children are actually -- they've lost a little bit more weight, they're not getting picked on or bullied at school and the one young girl has signed up for soccer, so she's really changed the entire family dynamics.

This is Brenda Lee. That is our registered dietitian and basically what Brenda Lee said was that the Fresh Food Pharmacy has been very beneficial because we keep track with classes, food, recipes, it just makes being diabetic a little bit easier so she was just really thankful for the support and we can see that she enrolled July of last year with an A1C of 9 and in just a few short months was really able to her A1C down to 7.7.

We started the Fresh Food Pharmacy before we actually took real estate. We started with six patients and had a little tiny office that we worked out of and all of our food at that point, we were going and getting it from our Weis market just to see if we could really make this “food is medicine” valid. So we had six patients and -- the same criteria existed, A1Cs are greater than 8, they were food insecure, they were older than 18 years of age and we had baseline A1Cs. As you can see patient one was about a nine A1C the second patient was close to a ten with the A1C and patient five was really above a ten as far as the A1C, and the gray bar that you’ll see is really the first repeat A1C and for the most part that was within a three-month window and then the second A1C was then about six months after the baseline A1C was captured. So, what’s really nice about the program is that we saw a pretty significant decrease from the baseline A1C to the first A1C, so that three-month enrollment into the Fresh Foods Pharmacy we saw a significant decrease in their A1C. The challenge then becomes how to keep them interested and motivated into continued improvement in their A1Cs.

And what we’re able to see is these individuals’ weight start creeping up or their blood pressures are not where they should be or their A1Cs are increasing. You know, we talk to them. Are they really following their diet? Are they taking their medications? And we have -- with working for the Geisinger Health Plan, we do have the luxury of being able to see claims and so we can identify when they had their medications filled and we look for an 80% fill rate to indicate some level of commitment there. But they’re very real conversations that we have with patients. We don’t share patient specific data, but we show them as a whole, “Well, here are some other people that are benefiting from the program and here’s the numbers that we’re seeing.” And really try to take into consideration what we would expect to see from them but taking into consideration what may be going on in their life. These are really sick people. We’ve seen folks who have lost spouses or have had significant barriers in which they’re having a hard time overcoming and we can see that. It’s some of their social deterrents or challenges are reflected in their overall care.

We see that there’s about -- outside of the pilot now, 24 patients who have been enrolled for now more than a year and their average baseline reading was -- A1C reading was 9.9 and those same 24 people are now about 7.9. So we still have a little bit more wiggle room to go with these individuals. We know that if there’s individuals who have been enrolled in our program for 6 to 12 months, there are 36 patients that fall into this category, their A1C started off at 9.8 and now it’s dipped nicely to 8.2 and we have 18 patients who have been enrolled for three to six months and we’ve been able to get their A1C from 10 to 8.1.

What we also identified is that if we see a slight increase in the A1C, so as I mentioned previously, part of the program requirements is that they participate in the diabetes self-management classes and what we’ve found is that at the three to six months journey, they have now finished their classes and if their A1C spiked a little bit and they’re faithful, they provide the blood sugar logs with us and there are just some other things, we explore having reunion classes or really trying to tailor their needs to offer some motivational support in a group session and we’ll be creative in offering some other type of sessions that meet the individual needs at our food pantry.

We can see that we’ve experienced overall from baseline to current an 18% reduction really in the A1C. We’ve seen 28.8% improvement in glucose, 18% cholesterol, 22% for LDL, about 3% for HDL. We are starting to target an exercise program so we have a nice big campus and there’s a nice walking trail near us and so as the weather will start to get hopefully get a little bit nicer here for us, we will explore Walk a Mile and offer some type of incentive. When I say incentive, we just started to provide them a little card and for every stamp that they get on our card, a stamp represents something outside of the program that they’ve done. Chair yoga, walking, some type of enrollment into a fitness program and different activities will have different weights so they’ll be a different number of stamps that occur. But really what we might offer is then a new measuring cup or measuring spoons or an extra meat item from the food pantry that day. So we’ve gotten a little creative in that and it’s really some sweet competition and it has worked out very nicely for us.

We see that there has been a 20% decrease in triglycerides. We've seen a weight decrease but we would really like now for those individuals who have been in this program a little bit longer to really start to target some of the weight, and again an improvement in diastolic blood pressures.

So we have 14 patients who started with a baseline cholesterol reading around 188 and those are now currently down to 175. Those are the individuals who've been in the program for 12 or more months with 207 was the average reading for 21 of our patients who've been enrolled in the program for 6 to 12 months and those 21 patients now, we see that their cholesterol reading is 150 and for those individuals who are a bit new to the program, three to six months, there are six patients, their cholesterol reading is 176 and so as you can see 128 is their total cholesterol reading. So you definitely see that biggest went from the three to six-month window.

LDL reading, much the same, 12 months the average was 17 of our patients was a 102. We've decreased 17 individuals who've been in the program 12 plus months to having an LDL of 85. Those individuals who've been enrolled 6 to 12 months, there were 26 patients who had an average LDL reading of 103 and the decrease of 26 patients LDL to 82.7. And then the individuals who have been enrolled in the program three to six months, there were six patients who had an average LDL of 102 and they are now currently at 62.

If we look at triglycerides, those individuals who have been enrolled 12 plus months, there are fourteen patients who had a triglyceride level of 214 on average and that's now down to 181. At 6 to 12 months, there were 19 patients who had 286 was their average triglyceride reading and those 19 patients are to 242 and three to six months there were six patients who had a triglyceride reading of 292 and it is down to 161.

In addition to providing the statistics, we can see that there is an improvement in our care gap compliance. So we looked at patients -- so getting an A1C to goal. With a baseline, we only had 1% who had at goal in A1c and now we have 24% who have an A1C at goal. When we talk about blood pressure, we had about 75% of our patients were at goal for blood pressure and now we have about 84% who are at goal.

The eye exams, so we see that 42% had eye exams that were completed within the last year and now we have 58% that are completed. Foot exams, we started off at 40% and we're now at 75% have completed foot exams. And so you can see the statin as I continue, 59% had a statin and 59% now were appropriately prescribed statin therapy. Pneumovax, we were at 74%, we moved to 76%. Beta blockers stayed about the same as well as for our beta blocker for our heart failure patients. We have as I mentioned the registered nurses, the registered dietitians and our LPN is -- we hired an LPN as our wellness associate, so care gaps can be closed right at the food pantry, there's a private office, there's the ability for us to do height, weight, blood pressure and perform a foot exam right there in the pantry, so as an individual comes in to pick up their food for the week, we log in to our dashboard and they are able to identify what care gaps exist and if we have the power to close it within our facility, we try to close it that day. Some people are a little bit sensitive so we'll prepare them. I notice that you're due for a diabetic foot exam, we don't need to do that today but next week, please come prepared and come in a couple of minutes early, or to be prepared, stay a few minutes late and we'll close that care gap. And then we have a flu clinic so we did do flu vaccines last year.

So, what we had identified is and this slide this shows us nicely is the health plan we need to provide that we're showing a return on investment. And so if you just look right in the middle of the screen where there's a zero, everything to the left of that was the typical cost of the patients that were not enrolled in the Fresh Food Pharmacy and what their typical per member per month was, and on the right hand side is really what the total cost per member per month was for an individual after enrollment into the Fresh Food Pharmacy. So being able to show that return on investment, getting them more involved in preventative services and seeking care appropriately, having them more involved, they're vested in their overall care really has helped to improve the total cost of care.

So, as I mentioned, we are expanding into two other communities in the fall.

That is some of our care teams not of course all of our care teams. The young lady in the blue suit up in the front is Dr. Andrea Feinberg, who is our medical director and the wife of our CEO for Geisinger who really is responsible for this wonderful program and the work that we've certainly seen. We've reached out to include family medicine, general, internal medicine, women's health and endocrinology as part of our recruitment efforts in identifying appropriate patients. So, that's all I have.

Kelli Begay:

Great. Thank you so much. That was awesome and I really was blown away by the success that, you guys have had -- and I was commenting that in the chat and our participants were like, "Where are those slides?" Sorry guys, I forgot that we weren't or Shelley was unable to release some of the data from the program. Shelley, do you want to say anything else about that?

Shelley:

Yeah, yeah, unfortunately there's just the statistical data in there that we're not able to share, but we did provide the premise of the program and so I'm happy to speak through some of them. It's just that, I was not at liberty to share that financial data.

Kelli Begay:

Yeah, sure. No, we understand, thank you. We are so glad you're able to share the program. And just a couple of things I wanted to point before we get into questions, one thing that I really love is that you guys started your pilot program with six patients and I think that's great. I think a lot of times our dietitians or anyone in the field when they want to start something new think really big and I think really breaking it down to what can you handle and six seems very doable. If anyone is out there who would maybe wanted to attempt this, let me know. I would love to see how this goes especially our tribal programs out there.

The other thing that I really, really like is how you leverage your resources. So your elder care van, you guys needed help with transportation and your elder care centers had transportation that they weren't using for a good six, five hours or so. And so I loved you how you guys tapped into that resource and was able to use that. So kudos to you guys and I'm excited as you can tell probably and I think again, like a lot of our tribal programs hopefully could do something like this even on a small scale. So thank you for sharing what you all have done.

Shelley:

Yeah. I will say the power of the human spirit is truly when you get the right people with the same passion, anything is possible. Rome wasn't built in a day. And so sometimes, I'm very visionary and I get so excited. It's like, "Okay now, how do we tackle 150 people?" But it is about starting small and learning - there were certainly lessons learned within those six people that they really help to create the program which it is today. So absolutely start small and anything is certainly possible.

Dr. Ann Bullock:

Thank you Kelli and hi everyone and thank you, Ms. Passaretti, that was wonderful. We have definitely been trying to figure out how to do those kinds of things. I mean, food is such a basic thing, even a basic human right one could say and in addition to the great statistics you showed, other research has shown that about half of people in this country who are below the poverty line are food insecure.

And so we when we are looking at many of our communities with very high poverty rates, we know that food insecurity is all around us. It affects every part of life, it affects people's ability as we saw so nicely

in the presentation to manage their chronic diseases, it increases the risk for those chronic diseases, both because of types of food that people that people eat who are food insecure, but also because of the stress of dealing with food insecurity. It's been shown to be associated with depression, behavior problems in children and so on. So, it truly is a holistic approach to many problems including diabetes and obesity when we address this very fundamental need.

So, I just want to thank you for that and encourage folks around our system to think of ways, "How can we connect our patients to the food resources that are already available in our communities?" And I reference that IHS Food Insecurity Tool that Kelly posted both the link to and it's also available for download.

The same two questions that Ms. Passaretti mentioned in terms of being validated questions screening for food insecurity are on that tool plus you can put in there all the resources that are available in your community so your patients and families know how to find them. So, consider linking to them and also as we're hearing here, think about expanding them. What else can we do? So, I want to get to the questions, but I want to thank you again for a great presentation and thank everyone for joining us today.