



ChristianaCare's Food Is Medicine Programs

Health Equity Initiatives Helping to End Disparities

[Food is Medicine | ChristianaCare](#)



Evolution of FIM Programs



Produce Rx
2018-2020

Produce Delivery
2020-2021

DFF PCSC
2021 - 2025

**Healthy Food
Delivery**
2021-2025

DFF WH
2023-2025



FIM Programs *2018 – 2021*

ProduceRx

- **Partners:** Urban Acres
- **FIM Approach:** Produce prescription
- **Patient Population:** Women's Health
- **Procurement Modality:** Pickup - patient choice at farmstand
- **Funding:** ChristianaCare
- **Referral:** ChristianaCare practice referral
- **Outcomes:** Feasibility – demand/acceptability

Produce Delivery

- **Partners:** Urban Acres
- **FIM Approach:** Produce prescription
- **Patient Population:** Women's Health & Primary Care
- **Procurement Modality:** Delivery, bi-weekly – standard box
- **Funding:** ChristianaCare
- **Referral:** ChristianaCare practice referral
- **Outcomes:** Feasibility – demand/acceptability



FIM Programs *2021 – 2025*

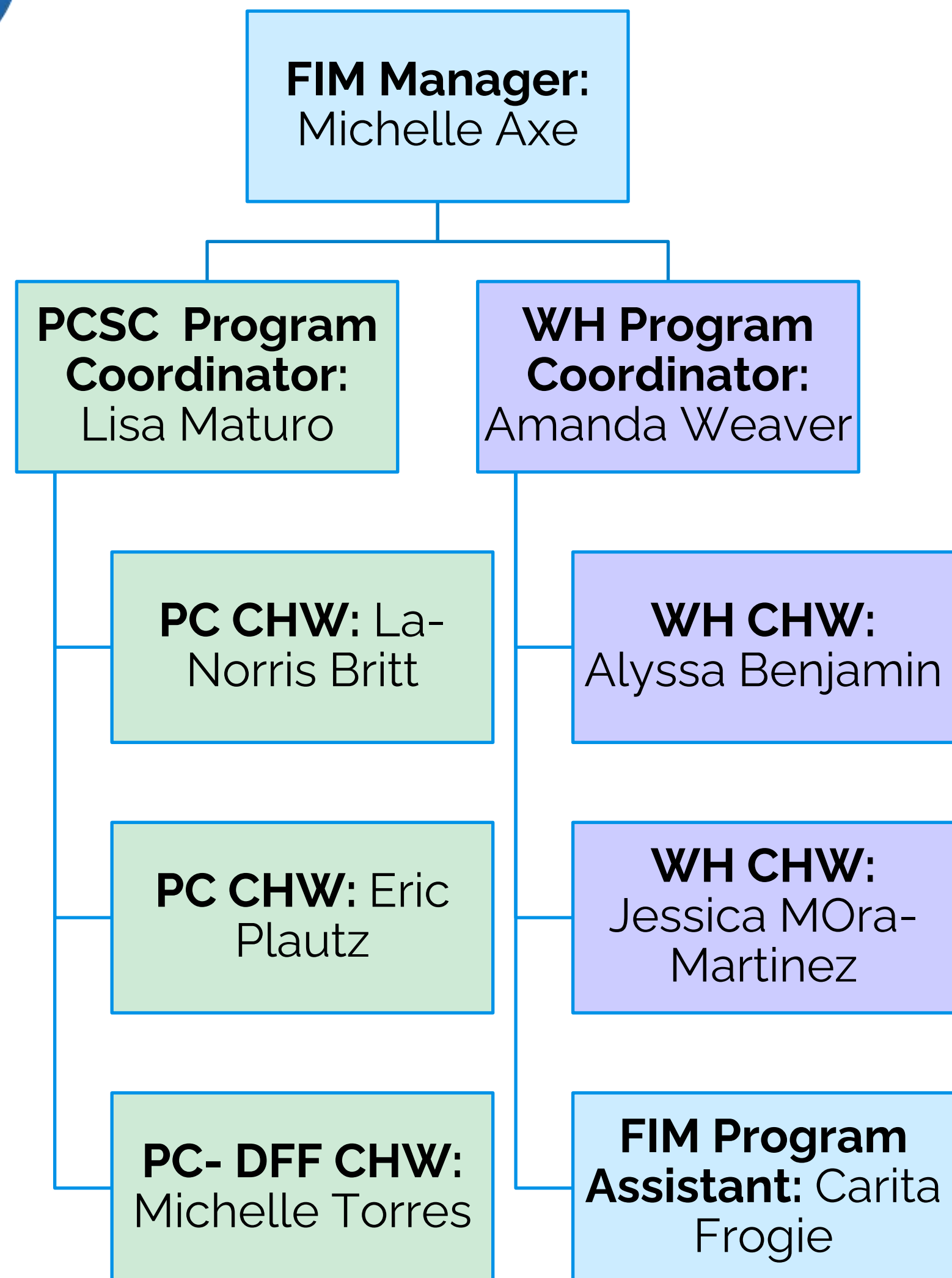
Healthy Food Delivery

- **Partners:** Hungry Harvest
- **FIM Approach:** Produce prescription & healthy food items
- **Patient Population:** Primary Care
- **Procurement Modality:** Delivery, bi-weekly – patient via online platform
- **Funding:** ChristianaCare
- **Referral:** ChristianaCare practice referral
- **Outcomes:** Dietary behaviors, health outcomes, hospital utilization

Delaware Food Farmacy

- **Partners:** Lutheran Community Services
- **FIM Approach:** Medically tailored groceries & community health worker model
- **Patient Population:** Primary Care & Women's Health
- **Procurement Modality:** Delivery or pick-up, weekly – patients select foods from a menu
- **Funding:** ChristianaCare and The Administration for Children and Families
- **Referral:** ChristianaCare practice referral
- **Outcomes:** SDOH connection, dietary behaviors, health outcomes, hospital utilization

FIM Team





A Food Is Medicine, Community Health Worker Program



Delaware Food Farmacy

6-month “Food Is Medicine” Community Health Worker (CHW) Program

An evidence-based intervention:

Dietary Approaches to Stop Hypertension (DASH) eating plan

- Associated with decreased incident of CHD, stroke, and diabetes
- Associated with decrease SBP, DBP, total C, HbA1c, and weight

Community Health Worker Model

- Associated with improved CAHPS/HCAHPS, chronic disease management, health outcomes, hospital utilization, and cost savings per person



Delaware Food Farmacy

The DFF Primary/Specialty Care Program:

- A 6-month Food is Medicine, Community Health Worker program designed to help patients self-manage their diabetes, hypertension and/or heart failure.
- Provides wrap around services for patients' clinical and social needs
- Delivers enough food for patients to prepare healthy meals for their entire household - (10 meals per week, per person)

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Eligibility Criteria:

- ChristianCare Primary or Specialty Care patient
- Screen positive for Food Insecurity
- Medicaid as primary or secondary insurance, Medicaid eligible, or uninsured
- Hypertension, CHF **and/or** diabetes
- Lives in New Castle County
- **AND** is not currently enrolled in a CHW program



Registered Dietician Nutritionist Input

Patient Name: _____
MRN: _____

Delaware Food Farmacy

Food Group	Servings you are eating per day	Goal servings per day	Serving Size	Handy Portion Guide
Oils and Fats Avoid margarine and dressings made with partially-hydrogenated oils		1	• 1 tsp. soft margarine • 1 tsp. canola or olive oil • 1 Tbsp. mayonnaise • 2 Tbsp. light salad dressing • 2 Tbsp. or 1/5 avocado	 1 tsp. and 1 Tbsp.
Fat-free skim or Low-fat 1% Milk and Dairy Choose lactose-free alternatives as needed		2-3	• 1 cup 1% or fat-free milk or yogurt, lactose free if needed • 1 cup calcium-fortified unsweetened almond or soy milk • 1 1/2 oz. fat free or 2% fat cheese	 1 1/2 oz.
Lean Meat, Fish and Poultry Avoid lunch meats like bologna, and processed meats like sausage, bacon, and hot dogs		3-4 or less	• 1 oz. cooked meat or poultry • 1 oz. cooked fish • 1 egg ("omega 3" eggs are best) - Since eggs are high in cholesterol, limit egg yolk intake to no more than four per week	 3 oz.

Delaware Food Farmacy Weekly Items **A** **lcs**
lutheran community services

Preferences

► You will be given items from this list on weeks marked "A" on the first page of the packet. Rank the options in each section based on your preferences. If you can not be provided your first choice, you will be given your second and so on.

EXAMPLE Option A 2 Option B 1 Option C 3
If we have Option B in stock, we will provide you with it
If we are out of Option B, we will instead give you Option A
If we are out of both, we will give you Option C

Fruit	Grains	Dairy	Nuts	Snacks	Beverages
Apple _____ Banana _____ Mango _____	Oranges / Mandarin _____ Blueberries _____ Pears _____ Bread, whole wheat _____ Pasta, whole wheat or legume varieties (all varieties) _____ Corn tortilla, soft _____ Oats _____ Couscous, whole grain _____	Milk, skim or 1% _____ Lactose free, 1% Milk _____ Almond Milk, unsweetened, vanilla _____ Yogurt, plain, low-fat _____ Cheddar Cheese, low-fat _____	Almonds, no salt _____ Walnuts, no salt _____ Peanut Butter, natural _____	Raisins, no sugar added _____ Dried Fruit/Nut mix, no sugar added _____ Dried Cherries, no sugar added _____	Crystal Light, powder mix _____ Tomato & Vegetable Juice, low sodium _____ Orange Juice, no sugar added _____
Vegetables	Lean Proteins	Beans & Peas			
Broccoli _____ Tomato, sauce low sodium _____ Tomatoes, fresh (vine, roman, cherry, etc.) _____ Spinach _____ Cabbage, Green _____ Cucumbers _____ Mushrooms, all varieties _____ Squash, acorn _____	Chicken Breast, ground _____ Egg Whites _____ Turkey, breast _____ Pork, tenderloin _____ Tilapia, frozen _____ Salmon, fresh/frozen, or canned in water _____ Shrimp, frozen _____ Tofu, firm _____	Black Beans, canned, no salt _____ Black-eyed peas, canned, no salt _____ Chick Peas, canned, no salt _____ Kidney Beans, canned, no salt _____ Pinto Beans, canned, no salt _____ Lentils, dry _____			

Lutheran COMMUNITY Services info@lcsde.org 2809 Baynard Blvd
Wilmington, DE, 19802

Delaware Food Farmacy Standard Items **lcs**
lutheran community services

How much food to expect?

Food is distributed by household size. Enough is given to fill 50% of each member's food needs for the week. The amount of items per category is shown on the table to the right.

Please note that our inventory changes from day to day. There may be times we are unable to provide an item listed.

	1	2	3	4	5	6	7	8	9	10
Whole Grains	2	3	5	6	8	9	11	12	14	15
Vegetables	1 lb	2 lb	3 lb	4 lb	5 lb	6 lb	7 lb	8 lb	9 lb	10 lb
Fruits	1 lb	2 lb	3 lb	4 lb	5 lb	6 lb	7 lb	8 lb	9 lb	10 lb
Fat Free, & Low Fat Dairy	1	2	2	3	3	4	4	5	5	5
Lean Proteins	2 lb	4 lb	5 lb	7 lb	9 lb	11 lb	12 lb	14 lb	16 lb	18 lb
Nuts / Seeds	1	1	1	1	1	2	2	2	2	2
Beans / Peas	1	2	3	4	5	6	7	8	9	10
Snacks	1	1	1	1	1	1	1	1	1	1
Beverages	1	1	1	1	1	2	2	2	2	2

Monthly Pantry Kit

► You will receive the following items once per month. Select which item you would like to receive where appropriate. If you would like to opt out of receiving an item, check the box beside it.

Oil ☐ I do not want this product
Olive Oil _____ OR Canola Oil _____

Bouillon ☐ I do not want this product
Chicken Bouillon, low sodium _____ OR Vegetable Bouillon, low sodium _____

Vinegar ☐ I do not want this product
Red Wine Vinegar _____ OR Balsamic Vinegar _____

Canola Oil Cooking Spray ☐ I do not want this product

Weekly Cooking Kit

► You will receive the following items each week. Examples of items included can be found below.

Onion i.e. yellow, sweet, white, red
Garlic
Fresh Citrus i.e. lemon, lime, orange
Fresh Herb i.e. Basil, Parsley, Cilantro, Thyme, Rosemary
Weekly Vegetable Comes with recipe

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Wilmington, DE, 19802

Carrot Cake Muffins

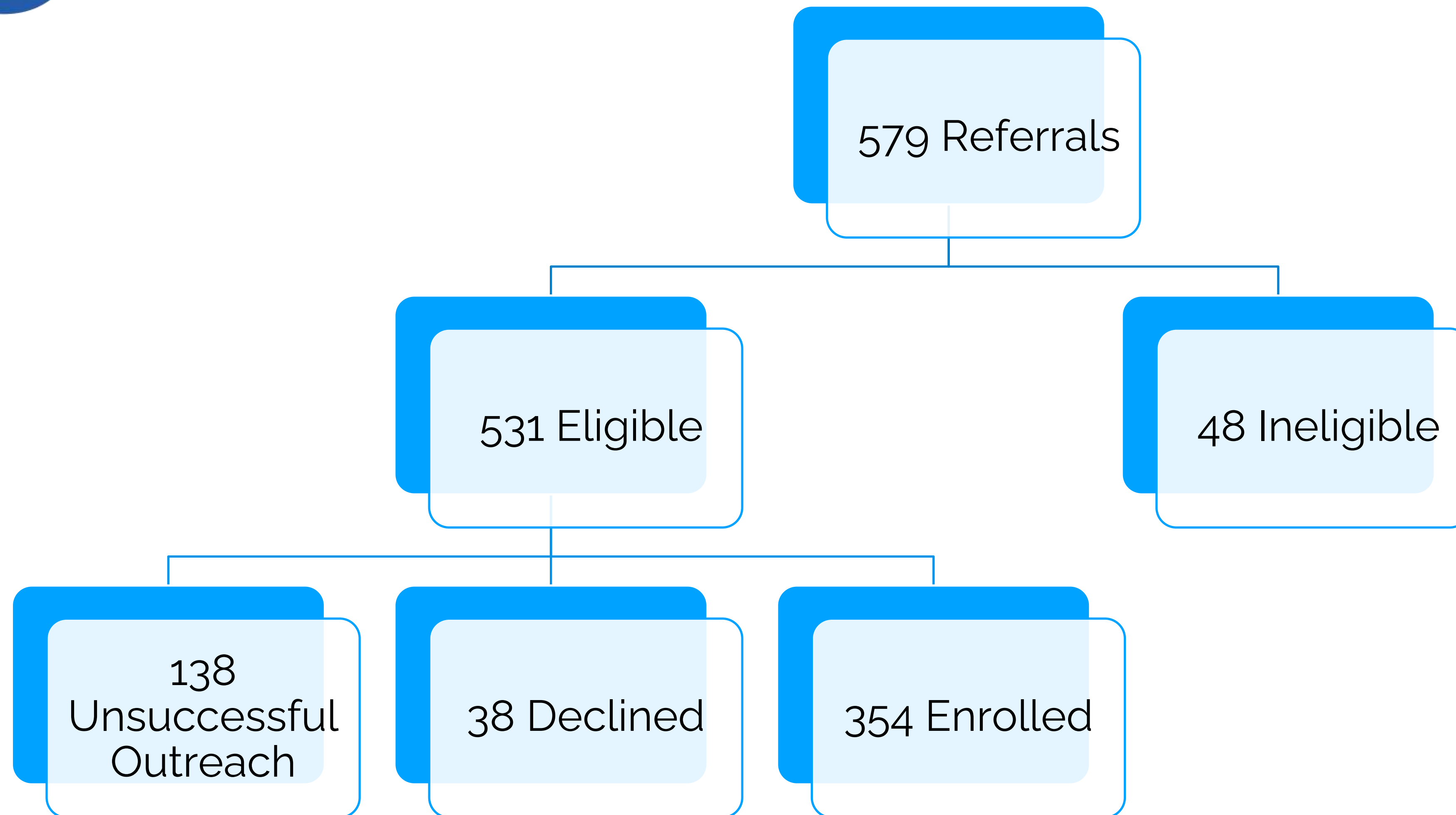
Ingredients

- 1 cup orange juice
- 1/3 cup canola oil
- 1/2 cup apple sauce
- 2 cups all-purpose flour
- 1/2 cup rolled oats
- 3/4 cup packed brown sugar
- 2 teaspoons ground cinnamon
- 1 teaspoon powdered ginger
- 1/4 teaspoon ground cloves
- 2 teaspoons baking powder
- 1/2 teaspoon baking soda
- 1/2 teaspoon salt
- 1 cup finely shredded carrots (about 2 medium carrots)
- 1/2 cup chopped walnuts or pecans (optional)

© 2020 Board of Regents of the University of Oklahoma / Recipe developed by Chef Valerie Carter, MPH, of the OU Culinary Medicine Program

Program Reach

March 2025



Who's Been Participating

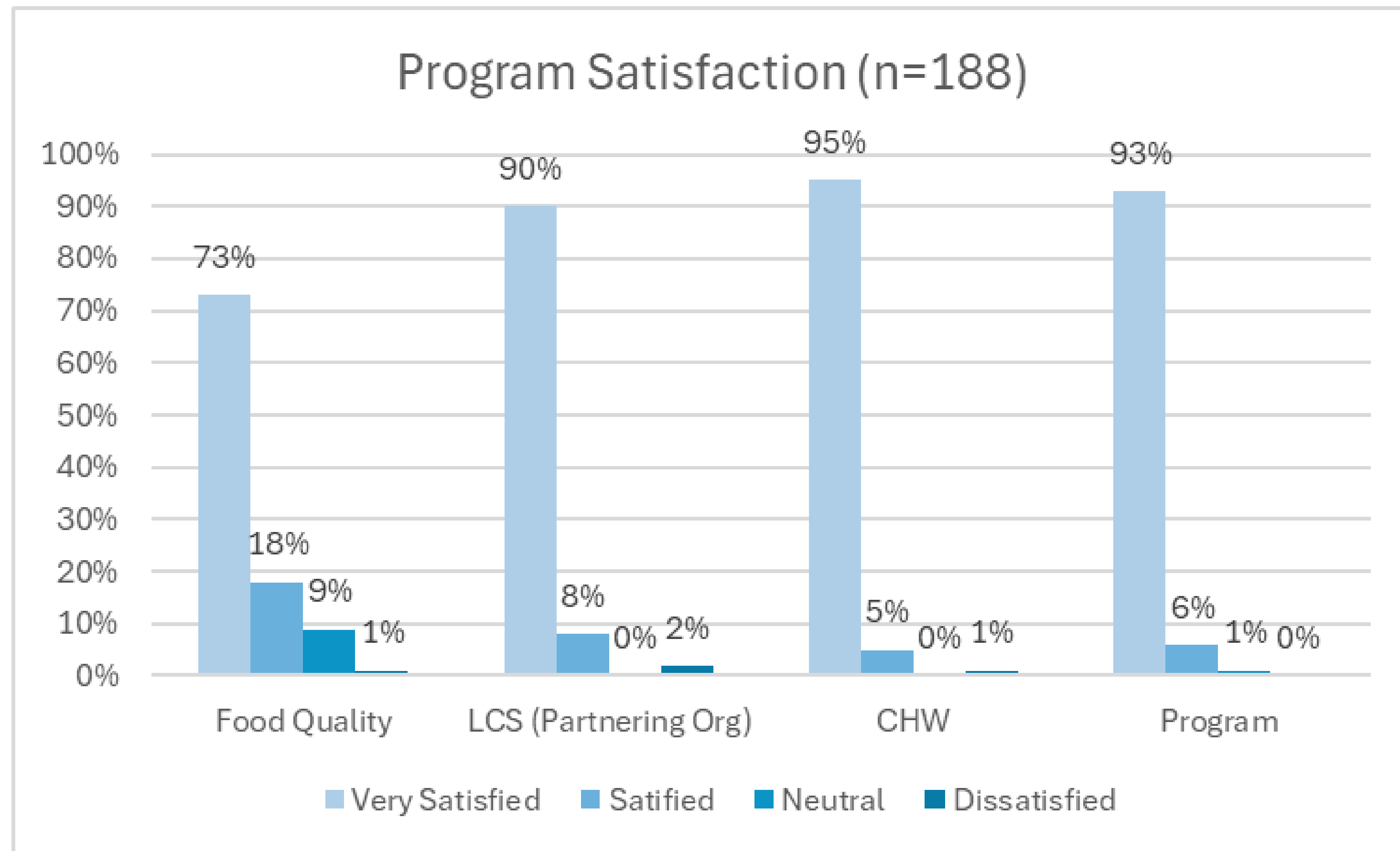
March 2025 (N = 354)

Demographics	
Age	M = 53 y/o
Household Size	M = 3
Gender	
Male	40%
Female	60%
Race	
Black/African American	62%
White	25%
Other	12%
Ethnicity	
Hispanic/Latino	17%
Non-Hispanic/Latino	83%

Chronic Diseases*	
Diabetes	71%
Hypertension	78%
Congestive Heart Failure (CHF)	23%
Medicaid Payer	
Health Options	47%
AmeriHealth Caritas	29%
Delaware First Health	15%
Other/Uninsured	9%

*Majority of DFF patients have comorbidities (81%)

Satisfaction & Food Procurement

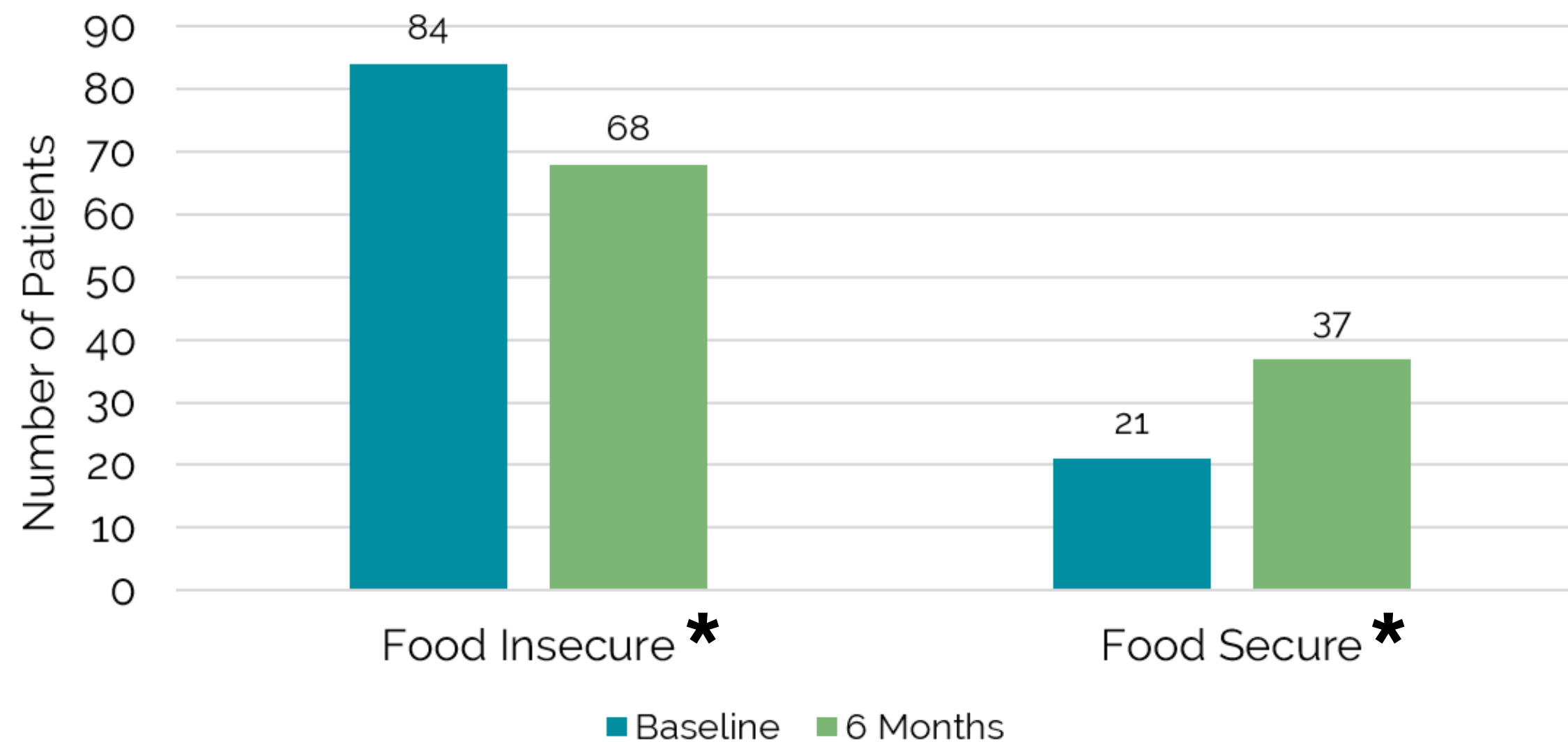


The program has fed **896 community members**

Providing enough food for over **207,480 meals** as of March 2025

DFF Preliminary Findings

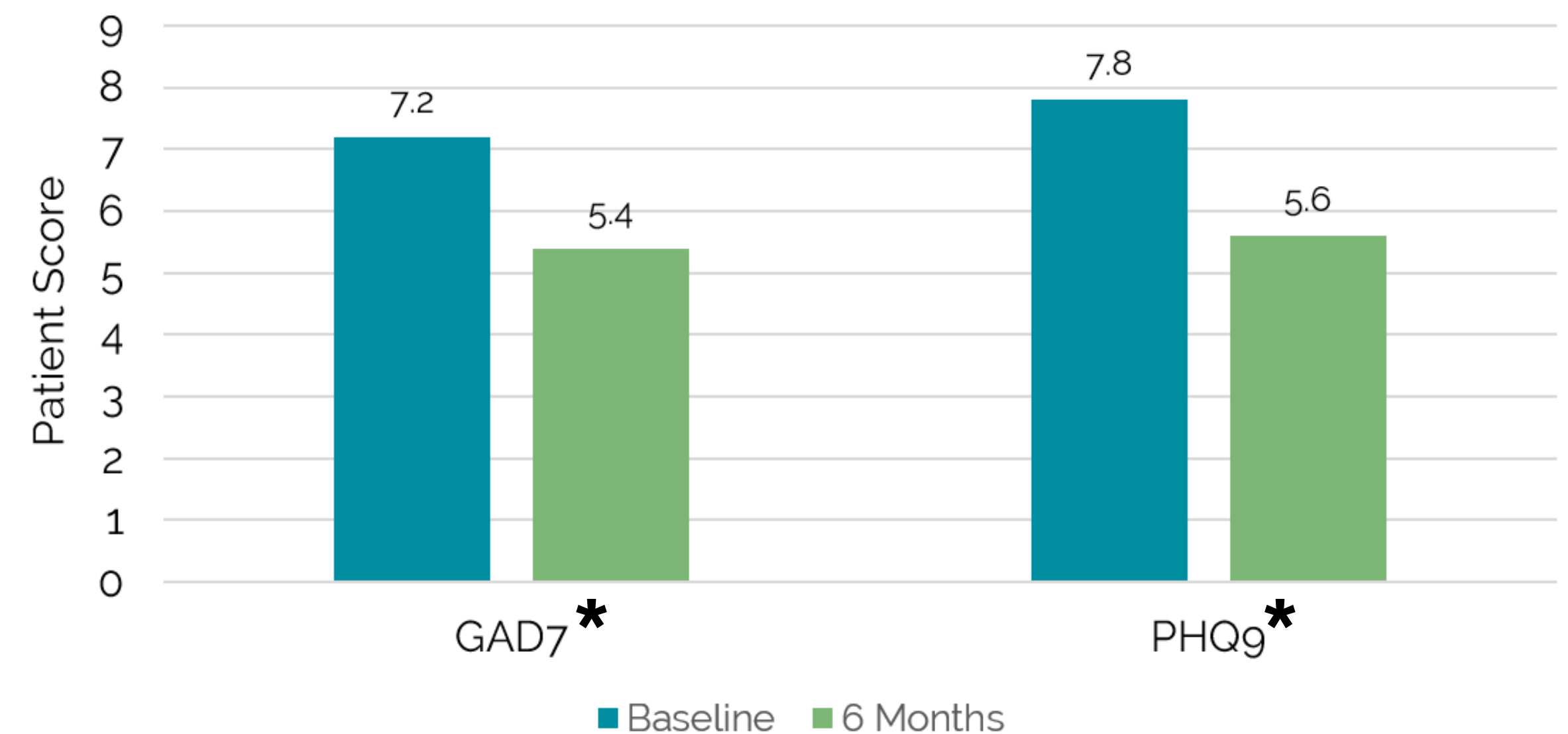
One Group Pre-Test Post-Test Outcome Evaluation (N = 150)



Statistically significant decrease in the number of DFF patients experiencing food insecurity at baseline and at 6 months

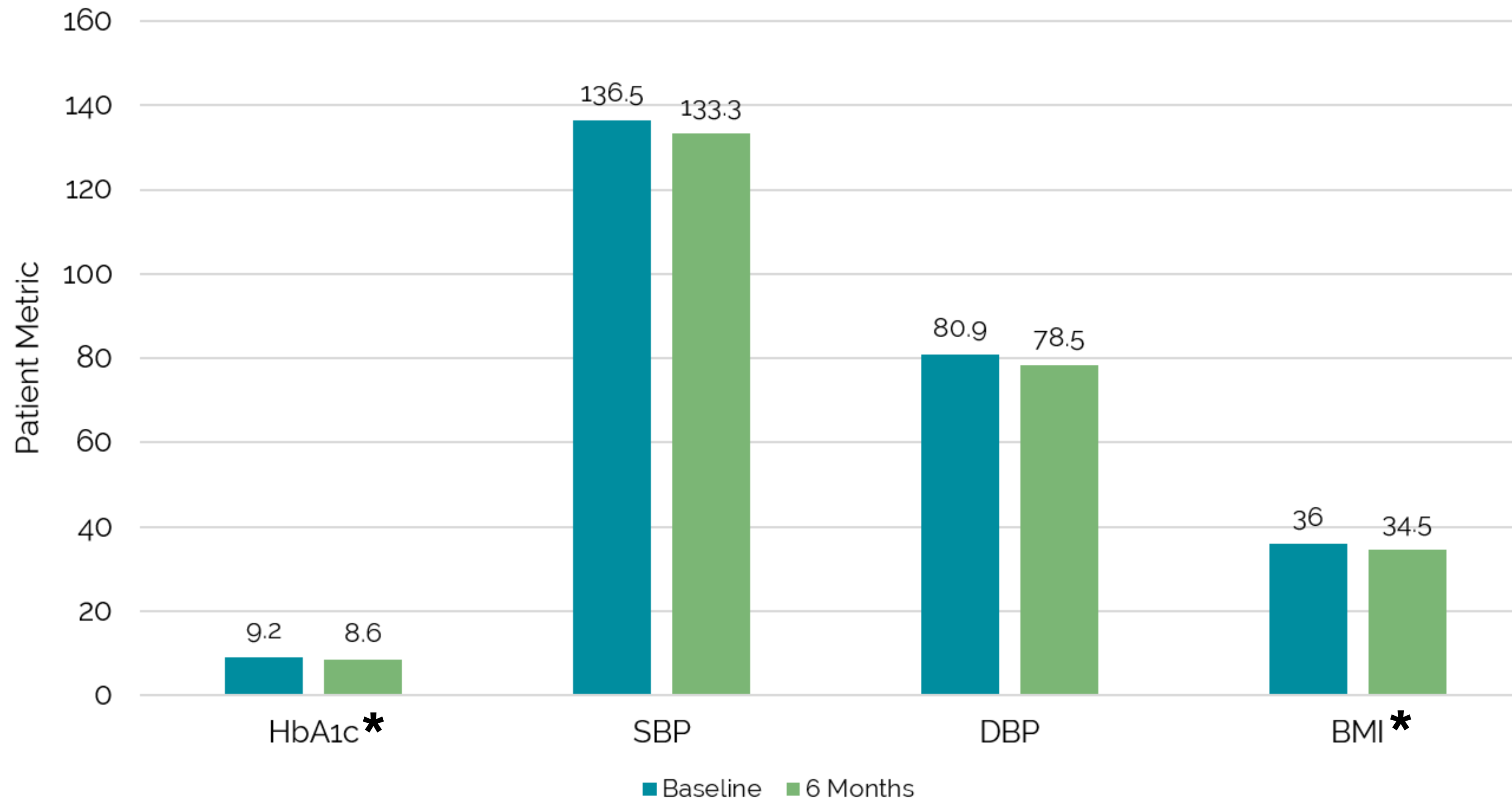
Statistically significant decrease in GAD7 scores by 1.8 points

Statistically significant decrease in PHQ9 scores by 2.2 points



DFF Preliminary Findings

One Group Pre-Test Post-Test Outcome Evaluation (N = 150)



Statistically significant decrease in HbA1c by 0.5%

SBP decreased by 3.1 mm Hg

DBP decreased by 2.3 mm Hg

Statistically significant decrease in BMI by 1.5kg/m²

- 55% of patients lost weight with a mean weight loss of 15.3 lbs



Culinary Medicine Pilot

Coming Soon - Fall 2025!

DFF Program Enhancement:

- **6 class series** group education and cooking series at a teaching kitchen
- Patients **educated on chronic disease management** and **nutrition topics** along with hands-on **food preparation**
- Weekly sessions conducted by a ChristianaCare PCP who is a **Certified Culinary Medicine Specialist** w/ additional support from an RD
 - Billable under medical coding for a shared medical appointment **99213**

SPROUTS
HEALTHY COMMUNITIES
FOUNDATION



**Nutrition and culinary
education**

DFF for Women's Health!

6 to 8 month "Food Is Medicine" Community Health Worker (CHW) Program

An evidence-based intervention:

The Mediterranean Diet

- Associated with improved dietary behaviors
- Associated with a decrease in preterm birth (17%), growth restriction (42%), and preeclampsia (35%)

Community Health Worker Model

- Associated with improved CAHPS/HCAHPS, chronic disease management, health outcomes, hospital utilization, and cost savings per person



Delaware Food Farmacy

The DFF Women's Health Program:

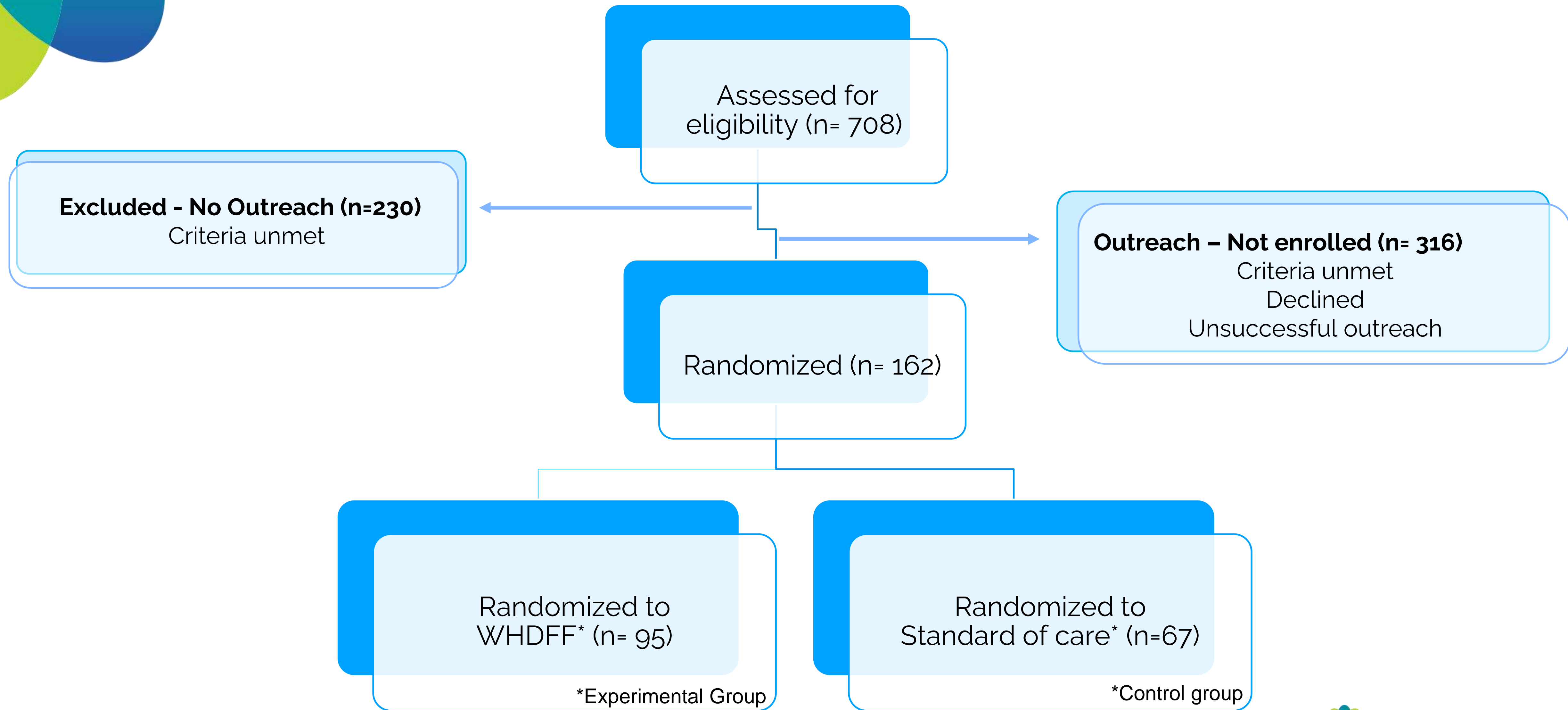
- A 6-to-8 month Food is Medicine, Community Health Worker program designed to provide patients with the holistic care necessary for a healthy pregnancy.
- Participants randomized to participate in WHDFF will receive:
 - Wrap around services for clinical and social needs
 - Enough food for patients to prepare healthy meals for their entire household - (10 meals per week, per person)

Study Eligibility Criteria:

- ChristianaCare Women's Health patient
- Between 4 and 14 weeks pregnant
- 18 years or older
- Medicaid insurance
- Singleton pregnancy
- BMI of 30 or higher
- Lives in New Castle County



Study Reach





Who's Been Participating (WHDFF)

March 2025 (N =95)

Demographics	
Age	M = 30
Household Size	M=4
Race	
Black/African American	54%
White	26%
Other	13%
Multiracial	7%
Ethnicity	
Non-Hispanic/Latino	80%
Hispanic/Latino	20%
CHNA High-Risk Zip Codes	56%

Eligibility Criteria	
Gestational Age	M=10.12
BMI	M=38
Medicaid Payer	
Health Options	48%
AmeriHealth Caritas	26%
Medicaid Traditional	16%
Delaware First Health	9%



Who's Been Participating (Control)

March 2025 (N =67)

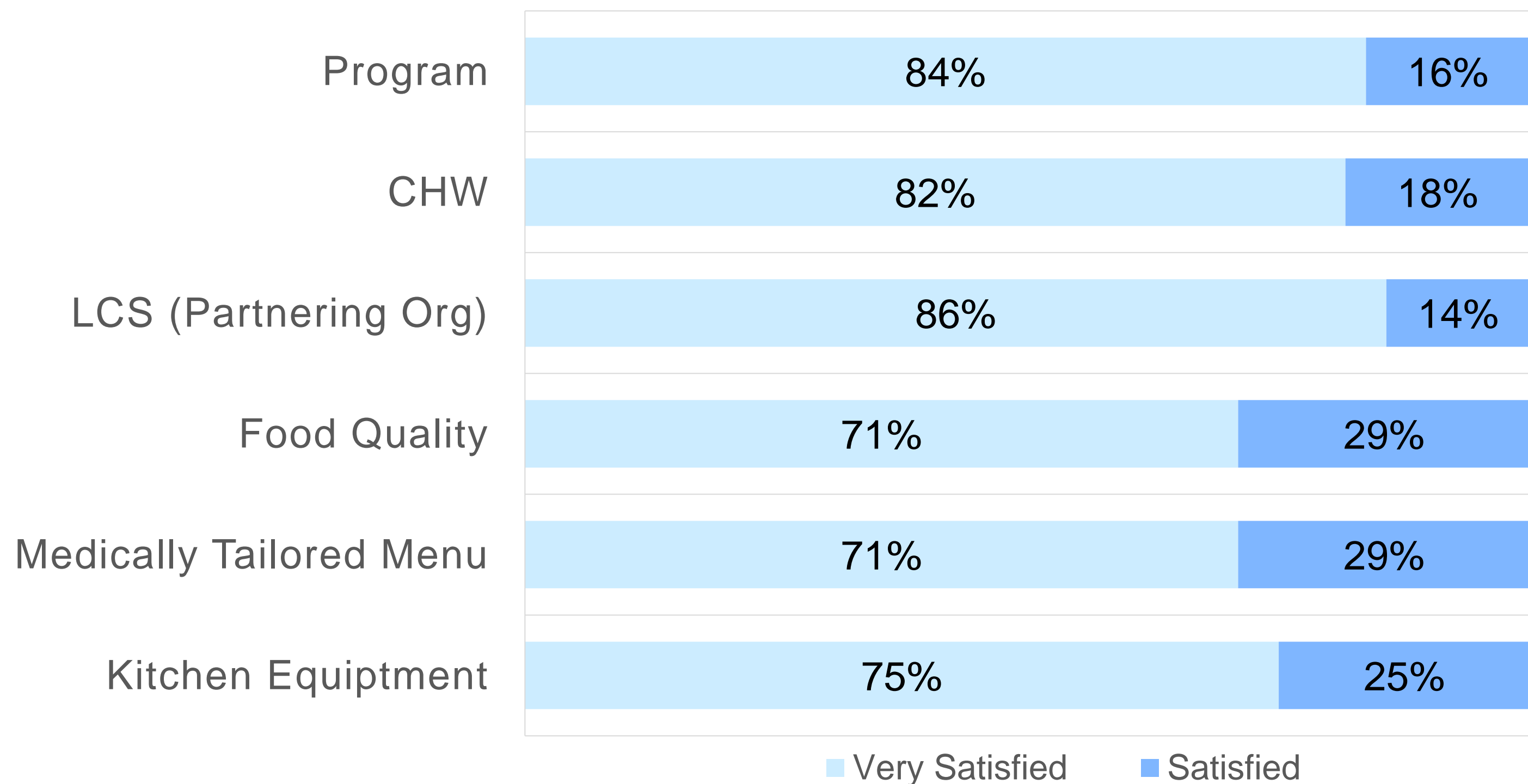
Demographics	
Age	M =30
Household Size	M=4
Race	
Black/African American	63%
White	25%
Other Race	9%
Multiracial	3%
Ethnicity	
Non-Hispanic/Latino	76%
Hispanic/Latino	24%
CHNA High-Risk Zip Codes	43%

Eligibility Criteria	
Gestational Age	M= 9.3
BMI	M= 39
Medicaid Payer	
Health Options	46%
AmeriHealth Caritas	40%
Medicaid Traditional	9%
Delaware First Health	4%

Satisfaction & Food Procurement



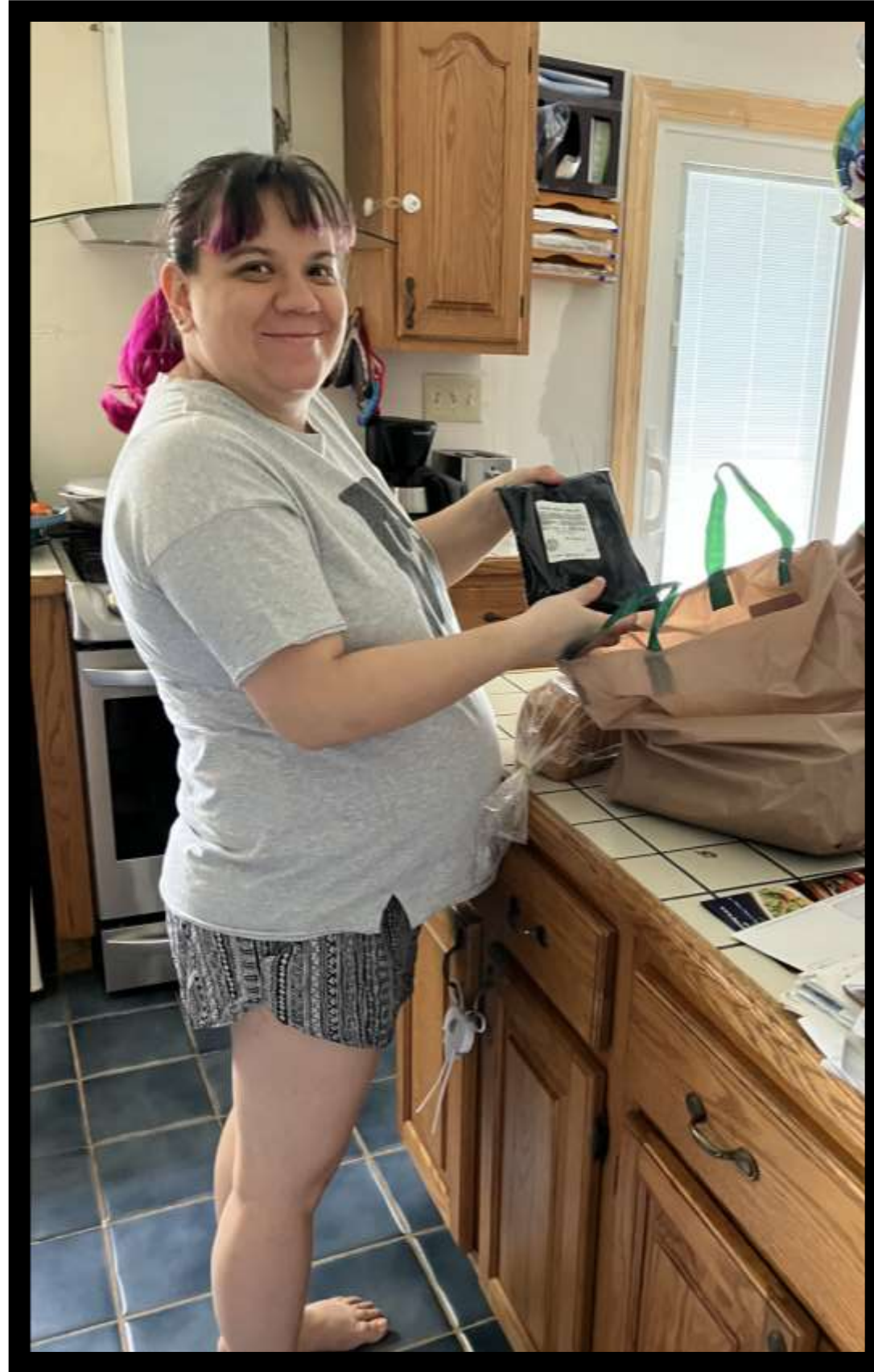
Program Satisfaction (n=49)



★ **100%** selected they would recommend to program.

The program has fed **350 community members** past year
Providing enough food for over **52,560 meals** as of March 2025

Patient Testimonials



Access

"I have the ability to be able to feed my family without stressing if we would have enough to eat."

Expertise

"I appreciate the assistance provided by the healthcare professional, who ensured that I received all the necessary information. Furthermore, I gained valuable knowledge regarding healthier dietary choices and improved eating habits."

Choice

"Really helped cut down on weekly grocery bill and make better food choices."

Education

"Very helpful to my pregnancy and my health. I love this program; it also taught me how to cook healthier for my pregnancy that will forever stick to me."

Opportunity

"The program offered the opportunity to try foods that I typically would not get; Consistent grocery deliveries; Opportunities the program offers. Overall, a good program!"

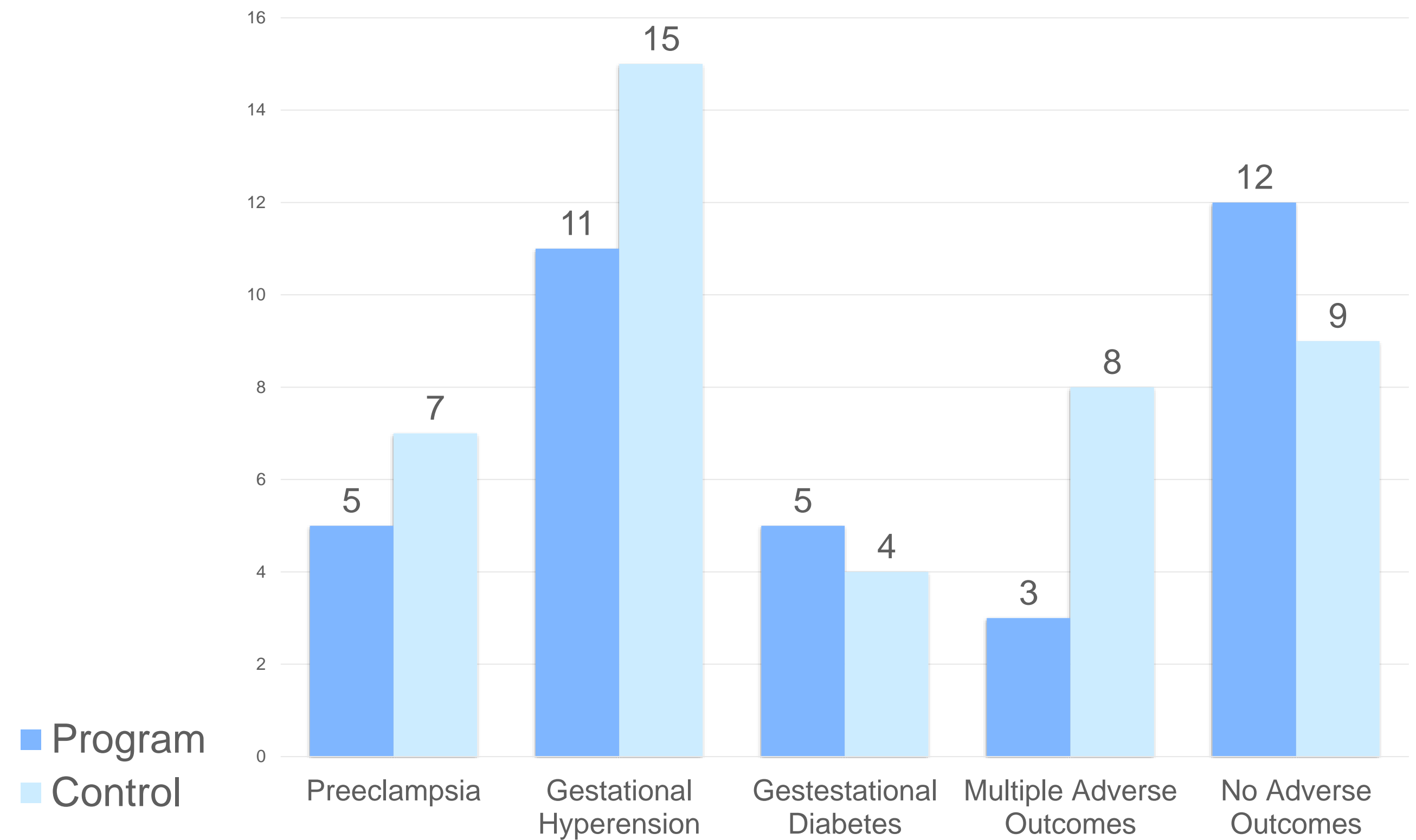
Future

"I hope this program gets off the ground and takes off and more people get the food that many people are not able to get. I love hearing that this might be something possible for many other moms in the future."

Preliminary Outcomes

Childbirth Outcomes (N=74)		
	Full –Term	Pre-Term
Program (n = 38)	34 (89%)	4 (11%)
Control (n= 36)	28 (77%)	8 (22%)

Maternal Health Outcomes*





WHDFF Preliminary Findings

Question 1:

How many days during the past 30 days was your *physical health not good*?

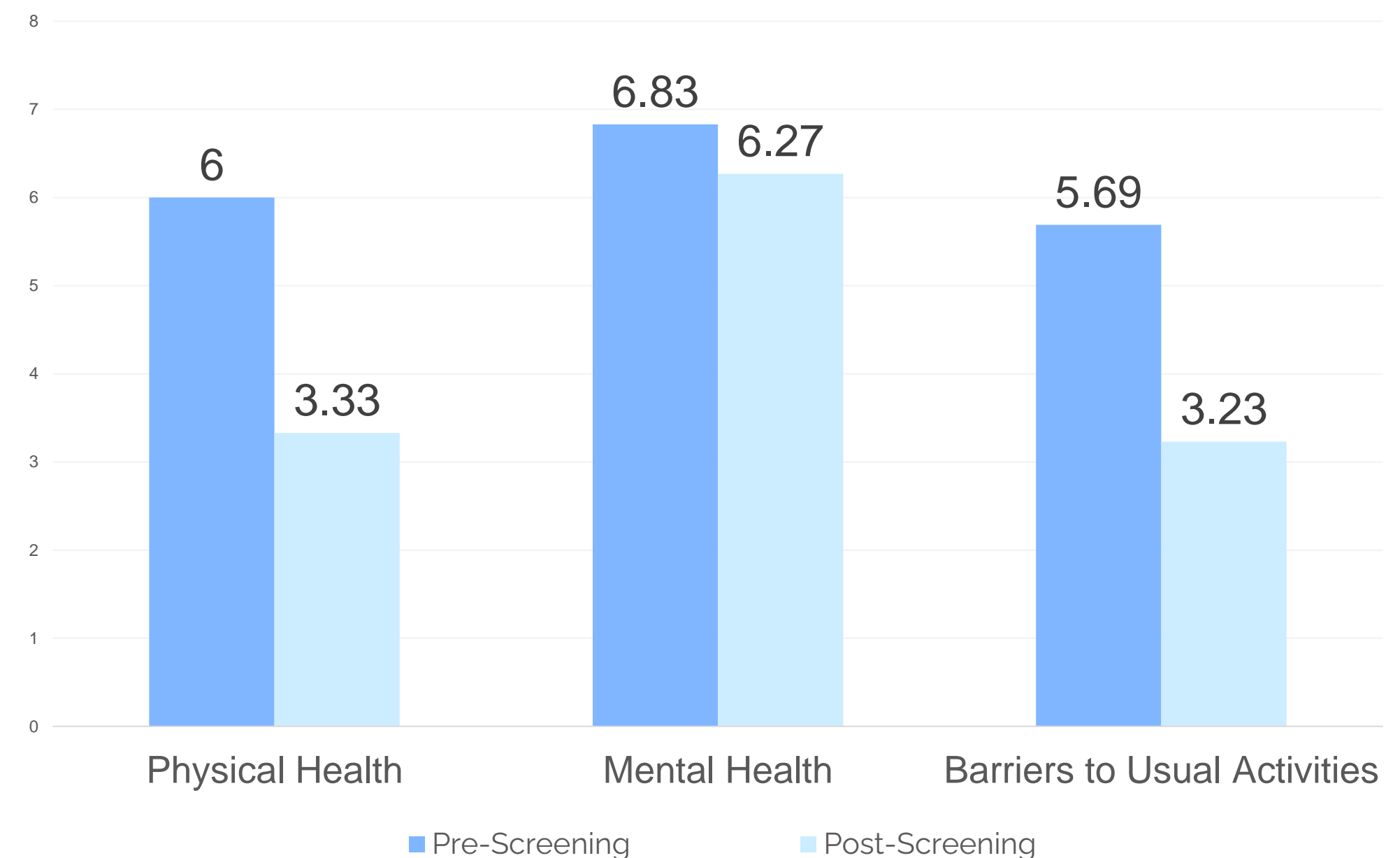
Question 2:

How many days during the past 30 days was your *mental health not good*?

Question 3:

How many days did *poor physical or mental health keep you from doing your usual activities*, such as self-care, work, or recreation?

WHDFF_HRQOL Screening Reflection





Thank you!

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