



DEMAND FOR DIABETES PREVENTION PROGRAMS

A Feasibility Study

ABOUT THIS RESEARCH...



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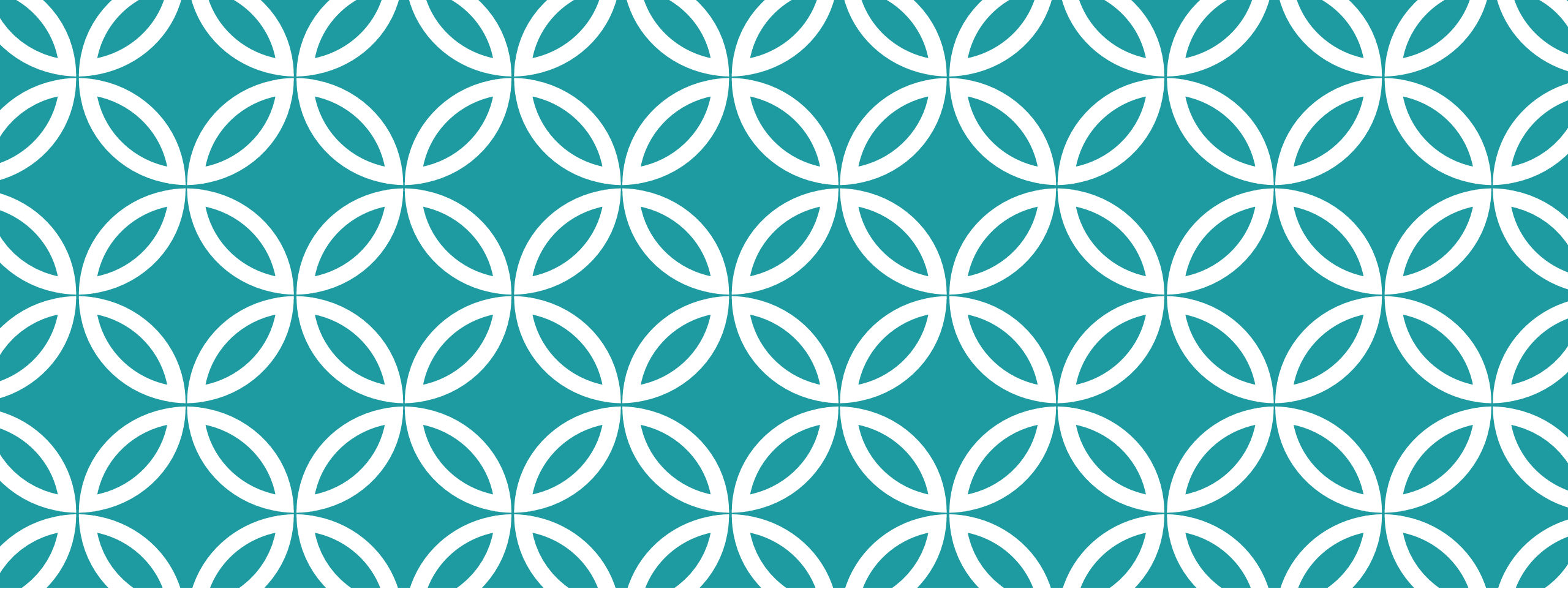
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OUR PRESENTATION

Today's Topics

OUR PRESENTATION

- **Study Overview**
- **Qualitative Research**
 - Interviews with Decision-Makers
 - Focus Groups with Potential Program Recipients
- **Next Steps**

STUDY OVERVIEW | SIGNIFICANCE

- **86 million** American adults have prediabetes, but only about 11% are aware they have it.
- Each year, about **11% will progress to type 2 diabetes** if they do nothing (no lifestyle change or weight loss).
- **Early detection and treatment** of prediabetes can help slow down the projected increase in diabetes prevalence.

STUDY OVERVIEW | SIGNIFICANCE



So why don't we see more diabetes prevention programs offered?

STUDY OVERVIEW | OUR AIMS

What would it take to offer more diabetes prevention programs?

- More organizations to offer?
- More adults with prediabetes to want/enroll in programs?

Aim 1: Assess the **perceived demand for DPPs** and the potential program delivery role of Community Health Workers (**CHWs**) among...

- Potential program participants
- Healthcare decision-makers (health departments/centers)

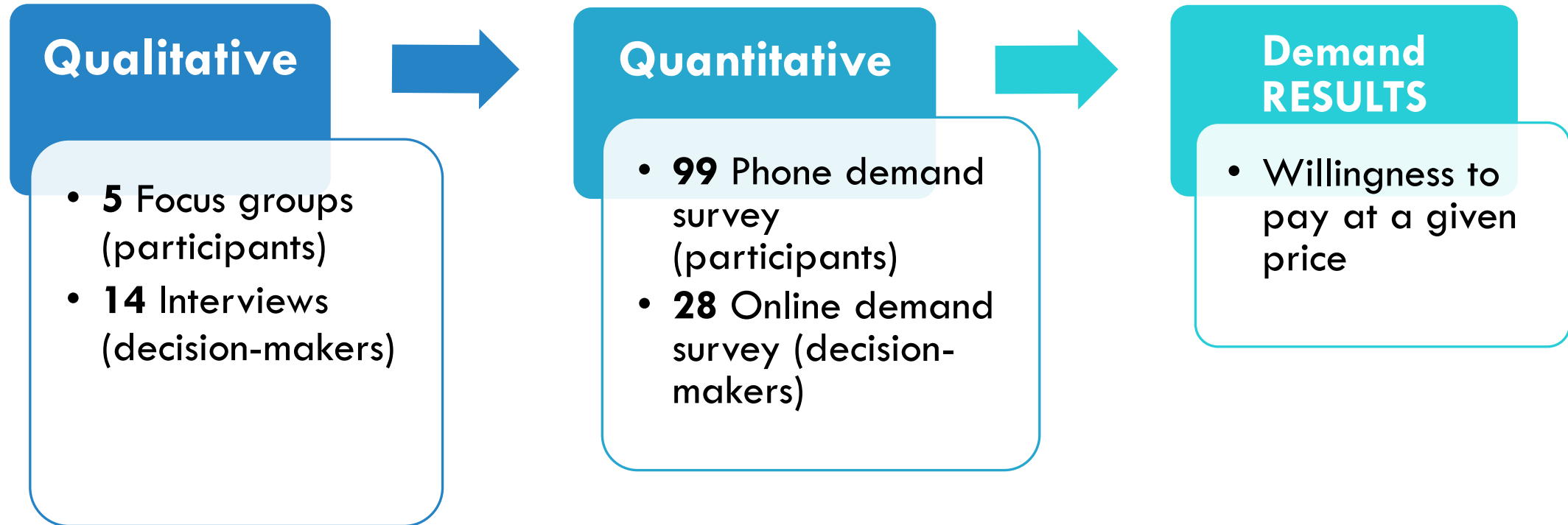
STUDY OVERVIEW | OUR AIMS

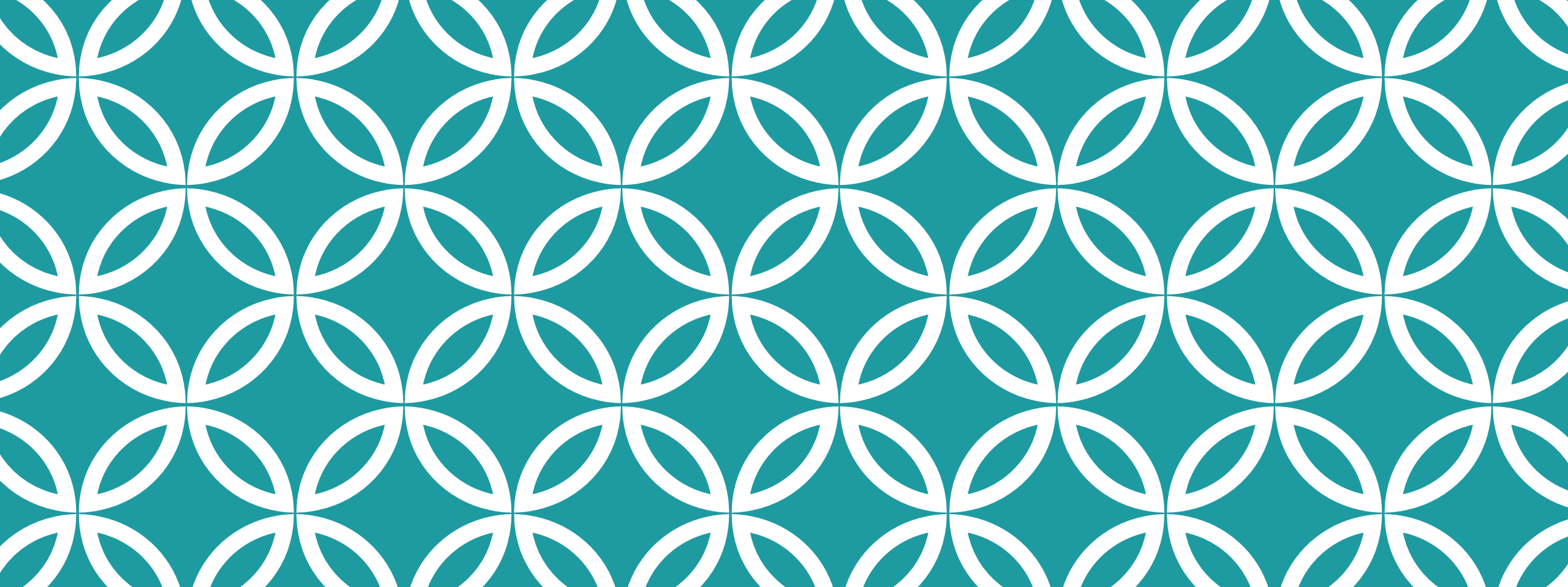
What is the perceived value and willingness to pay for diabetes prevention programs?

Aim 2: Use *demand-based pricing methods* to determine the **perceived value and willingness to pay for DPPs**, among...

- Potential program participants
- Healthcare decision-makers (health departments/centers)

IN THE MIX...





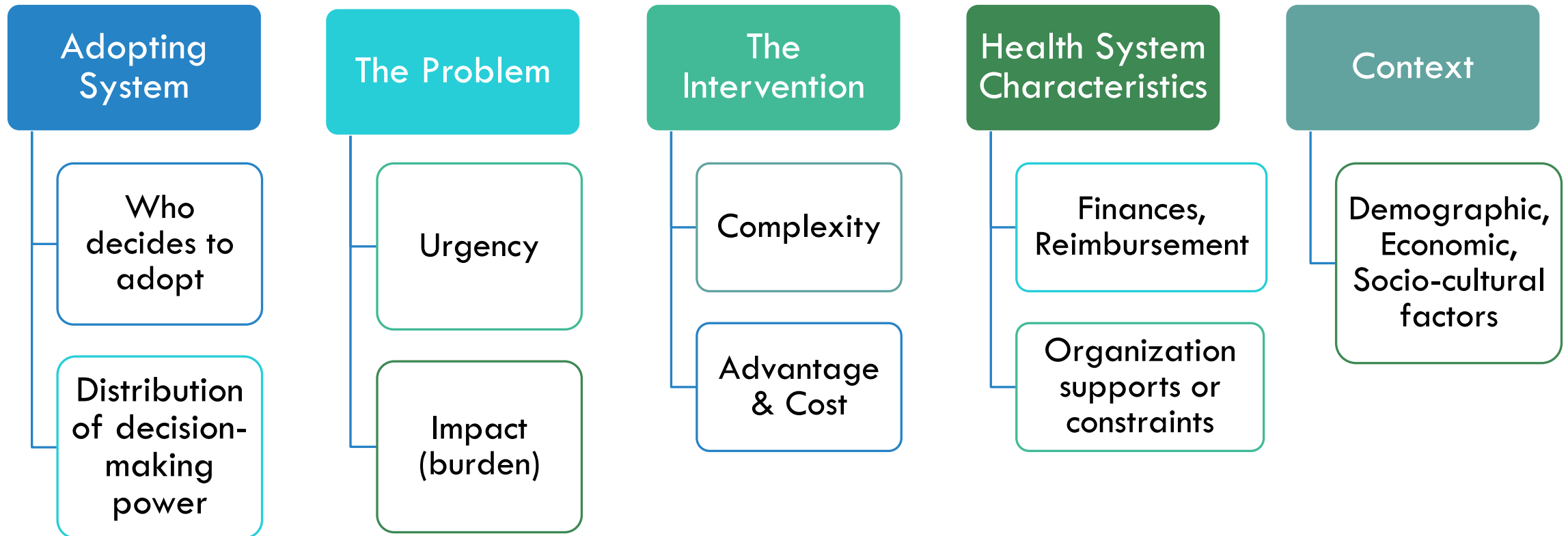
INTERVIEWS WITH DECISION-MAKERS

Our Questions &
Selected Findings

WHAT WE ASKED |



5 factors that determine whether a health system will adopt an intervention



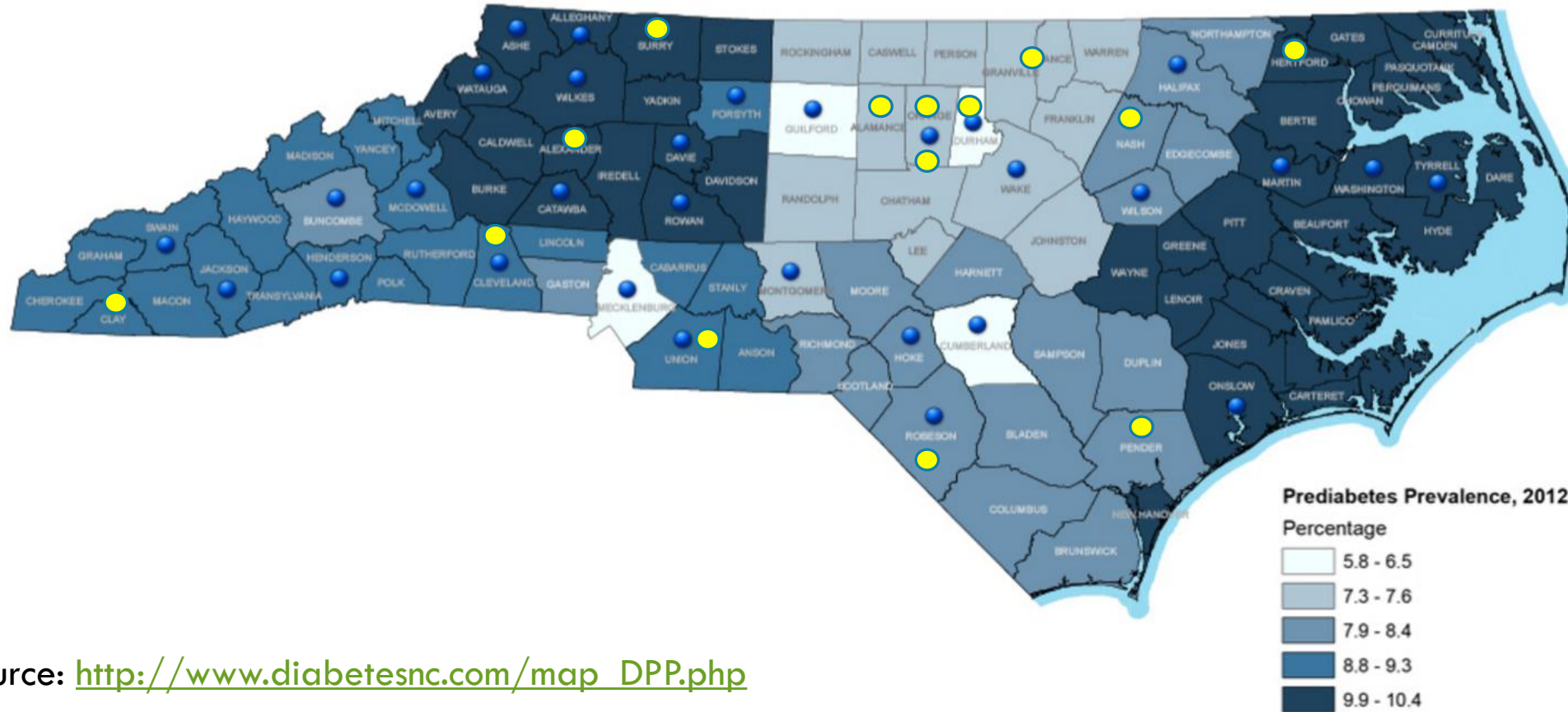
WHO RESPONDED | DECISION-MAKERS

Diabetes Prevention Programs in North Carolina

● County with Program(s)

Click on a county for contact information.

● Respondent



Source: http://www.diabetesnc.com/map_DPP.php

WHAT THEY SAID | TWO AREAS

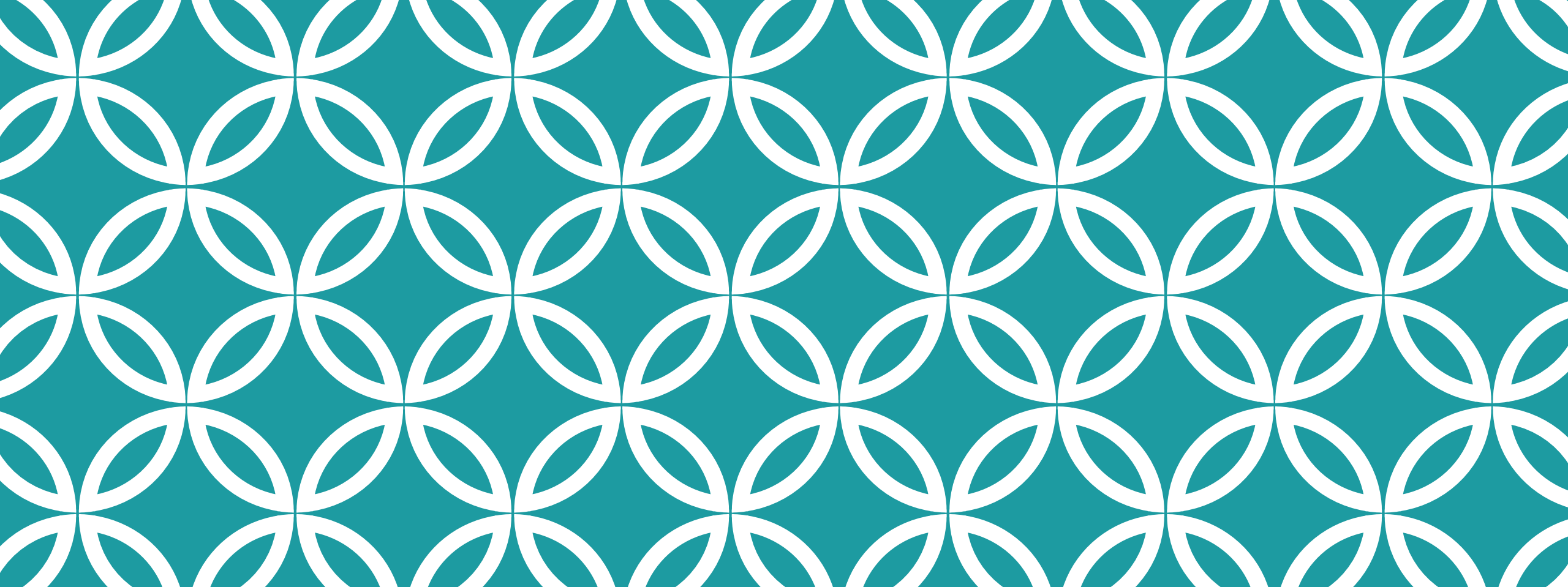


Health System Characteristics |
Supports & Constraints



Community Health Workers





FOCUS GROUPS

Our Preliminary Findings

BACKGROUND

- To scale up the implementation of diabetes prevention evidence-based interventions, we need to address the challenges of getting community members to enroll in programs.
- **Five focus groups (n=37)** were conducted across North Carolina: Durham County (1), Wake County (2), Orange County (1), and Lenoir County (1).

[Putting the Brakes on Diabetes]

If you've seen what it's like to live with diabetes and want to help us prevent it, please consider taking part in this study.



[What's Involved]

- You will be asked to take part in a small group discussion (a focus group) with 6-8 adults who have prediabetes or at-risk for getting it.
- In the group we will ask you to share your thoughts about what you would consider important to have in programs that promote healthy weight loss to prevent diabetes.
- We will pay you \$25 for your time. Your total time in the study is about 2 hours.

[You May Qualify If]

- You are an adult, 18 or over
- Diagnosed with prediabetes
- At-risk for getting diabetes (If your score is 9 or more points on the CDC Prediabetes Screening Test).
- English-speaking

[If you are interested]

Please send an email to Dr. Carmen Samuel-Hodge at Carmen_samuel@unc.edu or call (919) 966-0360.

[CDC Prediabetes Screening Test]

Answer these seven simple questions. For each "yes" answer, add the number of points listed in the []. All "No" answers are 0 points.

1. Are you a woman who has had a baby weighing more than 9 pounds at birth? [1]
2. Do you have a sister or brother with diabetes? [1]
3. Do you have a parent with diabetes? [1]
4. Find your height on the chart on the back of this page. Do you weigh as much or more than the weight listed for your height? [5]
5. Are you younger than 65 years of age and get little or no exercise on a typical day? [5]
6. Are you between 45 and 64 years of age? [5]
7. Are you 65 years of age or older? [9]

Your Score

RESEARCH QUESTIONS



What are the views of North Carolinians at risk for pre-diabetes on:

1. Diabetes, pre-diabetes, and weight loss?
2. Key components of a diabetes prevention program such as program **price, delivery, and outcomes?**
3. **Community health workers** delivering diabetes prevention programs?

DEMOGRAPHICS

Gender	
Female	86.5%
Male	13.5%
Race	
White	8.1%
Black	73%
Hispanic Black	2.7%
Other	13.5%
No Race Reported	2.7%
Diagnosed Pre-Diabetes	48.6%
At Risk for Pre-Diabetes	51.4%

Education	
Less than HS	2.7%
High School	10.8%
Some College	29.7%
College	56.8%
Employment Status	
Employed	48.6%
Unemployed	51.4%
Income	
>\$30,000	54.1%
<\$30,000	40.5%
No income reported	5.4%

RESULTS

- ❖ 3 thematic areas:
 - ✓ Reasons for Inaction
 - ✓ Family History & Household Structure
 - ✓ Program Selection

Diabetes

• 29 million

Prediabetes

• 86 million

THEME: REASONS FOR INACTION

Overview

- 2 main reasons for inaction:
 1. Ambiguity of pre-diabetes diagnosis
 2. Lack of diabetes prevention knowledge

Quote

Participant 208: I just wanted to go back to about when you were asking about the pre diabetes and why people don't react to that. I think that people think that if it was really serious then why didn't the doctor tell me that I was diabetic? I think that that's a good diagnosis for the medical profession to use but for a consumer it's indefinite and it's like well, I don't really have to do anything about it.

THEME: FAMILY HISTORY & HOUSEHOLD STRUCTURE

Overview

- **Family history** of diabetes shaped overall perceptions of both diabetes and pre-diabetes management.
- Participants felt that since diabetes was a “**generational curse**”, they would not be able to avoid a diagnosis
- **Household structure** also contributed to perceptions of diabetes, pre-diabetes and diabetes management
- Pre-diabetic participants had difficulties making certain lifestyle changes because family members continued to eat normally and they did not want to **inconvenience** their family with their pre-diabetes-related needs

Quote

Participant 209: [...] I, too, am a child of a parent who is diabetic so it makes me more conscious but living in that environment with someone having diabetes it's an inconvenience.

THEME: PROGRAM SELECTION

	# of Sessions	Length of Sessions	Session Leader(s)	Format	Weight Loss	BP/ BG Reduction	Cost
Program A	16	1 hour	Dietician	In-person	15 lbs.	None	\$250 (\$16/lb.)
Program B	16	1.5 hours	Health Educator	In-Person	15 lbs.	None	\$250 (\$16/lb.)
Program C	16	1.5 hours	Dietician + CHW	In-person	18 lbs.	None	\$250 (\$14/lb.)
Program D	16	1.5 hours	Dietician + CHW	In-person	12 lbs.	Yes	\$250 (\$21/lb.)
Program E	16	1 hour	Fitness Coach	In-person	12 lbs.	None	\$150 (\$12.5/lb.)
Program F	16	1 hour	Fitness Coach	Online	8 lbs.	None	\$150 (\$6.25/lb.)
Program G	16	1.5 hours	CHW	In-person	15 lbs.	None	\$150 (\$10/lb.)
Program H	12	1.5 hours	CHW	In-person	10 lbs.	None	\$100 (\$10/lb.)

THEME: PROGRAM SELECTION

Overview

- **Program D** was consistently selected and made it to the final round. When compared to other programs, it was more likely to be selected unanimously to move forward
- Overall, participants valued physiologic changes (i.e., lowered blood glucose and lowered blood pressure) over weight loss.

Quotes

“And you know that it's gonna make you lose weight but then it ain't gonna help none of the sickness that you have or health problems. What's the use of losing weight [...].”

“And I think the community health worker can, the combination, to me, that's why I like D is because you've got a community health worker to work with everybody as a group. But then you got the dietician who gives specific information based on each person and that you get three sessions with them at least so that they can see your progress and give you a plan to work on [...].”

THEME: PROGRAM SELECTION

Program Leader

- Most participants did not have a particular preference for a program leader but saw benefits in each
- Overall they wanted a program leader who was credible, trained, and knowledgeable of diabetes
- CHWs were seen as valuable program leaders because they were familiar with the community and community resources, were thought to be more personable, and could relate better to participants

Quotes

“For me it would depend on where I need to focus more. Right now I’m good with exercise so maybe a trainer wouldn’t be something I need but a dietician would be more of what I need now. So it depends on my needs sometimes.”

THEME: PROGRAM SELECTION

Program Payment

- Many participants were willing to pay up to **\$250 for 16 week programs** but for this amount, they expected to achieve results
- While most participants did not expect the program to be free, they did desire some **cost sharing**
- Participants suggested **payment plans** to make these program more accessible to low-income populations

Quotes

“And I think, someone else mentioned would be important to have some kind of payment plan because \$250.00 up front might not be something everyone who would want to do it could do.”

DISCUSSION

- The combination of education on how to lose weight and an attainable weight loss goal seemed to be what participants wanted from providers in order to move to action
- It may be important to **target families** when designing diabetes prevention programs in order to orient households to diabetes prevention strategies and improve support for lifestyle changes for persons with pre-diabetes.
- Highlight potential physiologic changes (**as benefits**) that programs can provide

NEXT STEPS

- ✓ Complete Data Analysis
- ✓ Report on Findings
- ✓ Leverage Results for Larger Demand Study





QUESTIONS? | **Thank You!**