



Development of the

**DHOMES**

Diabetes Homeless  
Medication Support

program



# Authors, acknowledgement

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# Our research team



Kate Diaz Vickery  
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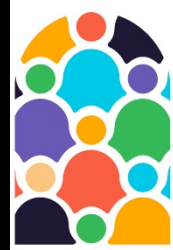


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Moncies Franco  
(Community Engagement)

# Diabetes + Homeless community engaged research team



# Quorum

Re-imagining health through community connection



# Objectives

1. Appreciate the resiliency and multi-level barriers faced by people with diabetes experiencing homelessness
2. Describe a community engaged process to develop a tailored program, the Diabetes Homeless Medication Support (D-Homes), to support health improvement and overall wellness among people with diabetes experiencing homelessness
3. Detail the process to develop an evidence-based program for use in diabetes

Background:  
type 2 diabetes +  
homelessness



**SAMPLE**

**25,000**  
surveys

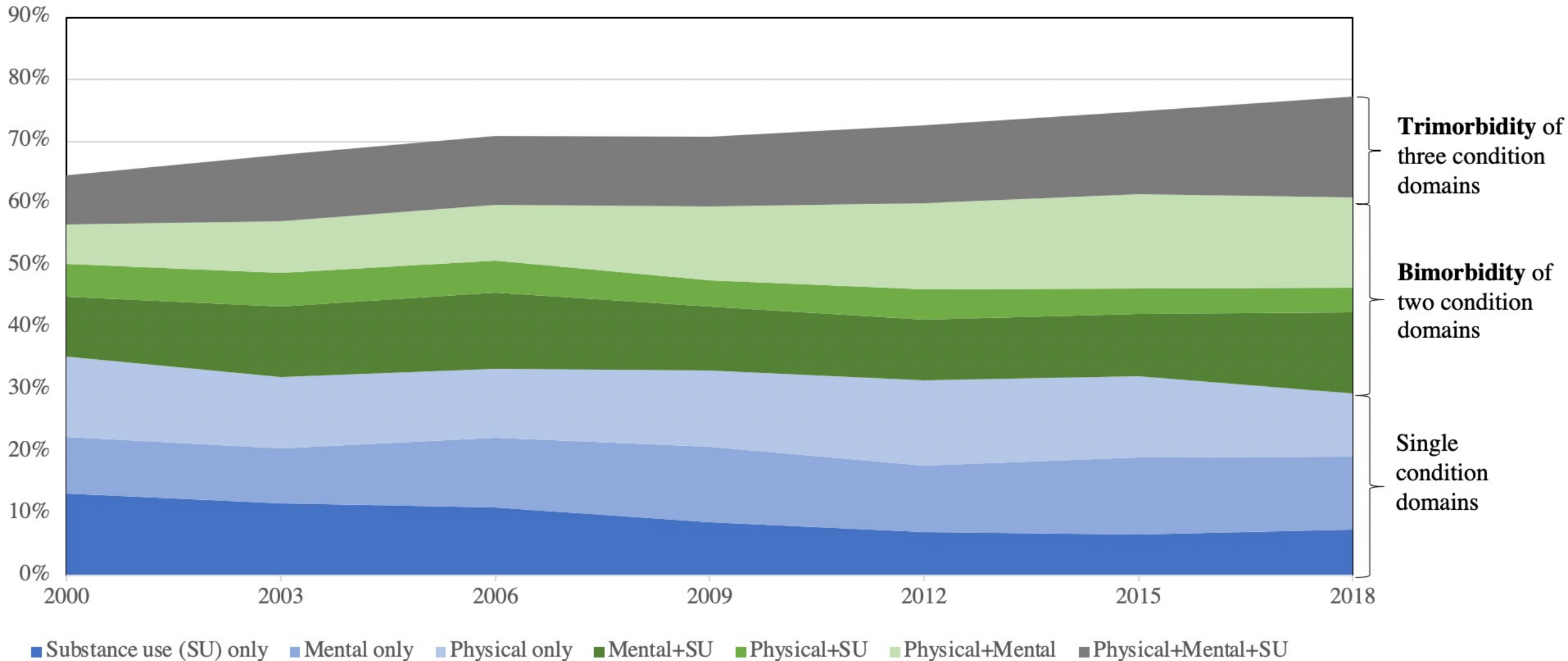
**HOMELESS  
ADULTS IN  
MINNESOTA,  
2000-2018**



## **Trimorbidity**

THE OVERLAP OF  
PHYSICAL  
HEALTH, MENTAL  
HEALTH, AND  
SUBSTANCE USE  
CONDITIONS

# Cumulative chronic disease burden among people experiencing homelessness in MN, 2000-2018

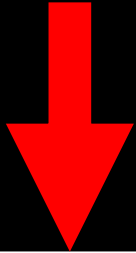




# Conceptual model of diabetes & homelessness: medication adherence



# D-Homes project phases



Phase 1:  
Qualitative data

Phase 2a: Single-arm  
pilot trial

Phase 2b: Randomized  
pilot trial

Input from community-engaged research team

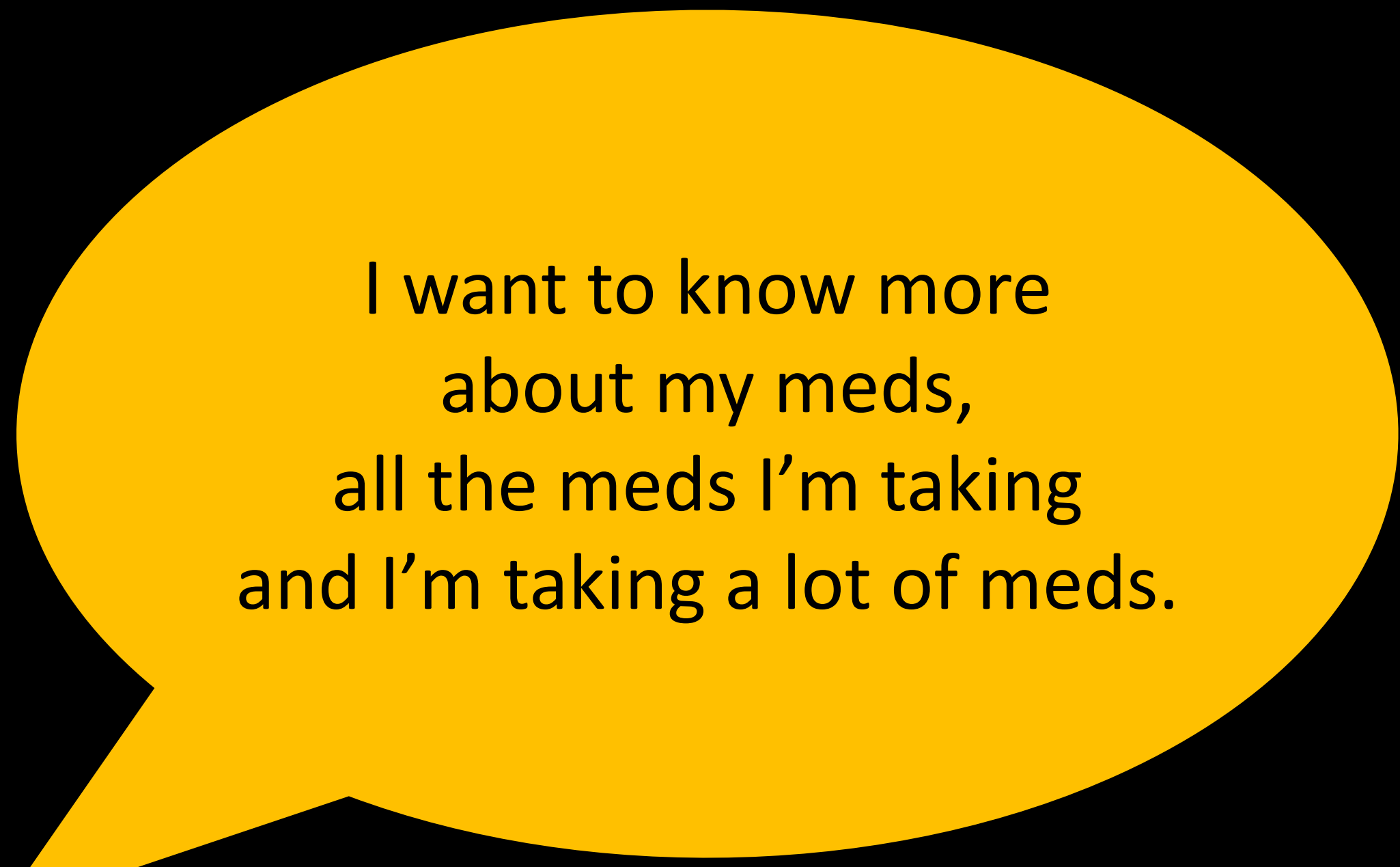
# Resilience: Supportive and knowledgeable relationships support diabetes self care

**Supportive &  
Knowledgeable  
Relationships:  
Social &  
Medical**

*Positive, supportive social relationships that encourage and motivate DM2 self-management and connection to resources*

- **Goal-setting:** encouragement to eat healthfully, exercise, take medications, and make changes supporting health

*I've been on a 21 day,  
6,000 steps [challenge].  
[My son] sends me  
motivation tapes...*



I want to know more  
about my meds,  
all the meds I'm taking  
and I'm taking a lot of meds.

# Resilience: Supportive and knowledgeable relationships support diabetes self care


**Supportive &  
Knowledgeable  
Relationships:  
Social &  
Medical**

*Positive, supportive social relationships that encourage and motivate DM2 self-management and connection to resources*

- **Goal-setting:** encouragement to eat healthfully, exercise, take medications, and make changes supporting health
- **Social Networks:** peer support, connection to supplies, ease housing instability, share positive DM2 experiences

*Medical and mental healthcare relationships that are...*

- **Connected, comfortable, accessible and resilient** patient – clinic – provider relationships



So then, I've got good  
friends, like my buddy...  
here. I've got an extra kit.



**LIFE**

**HEIST**

**Stealing Hope While Surviving  
Diabetes and Homelessness**





# Design of D-Homes program

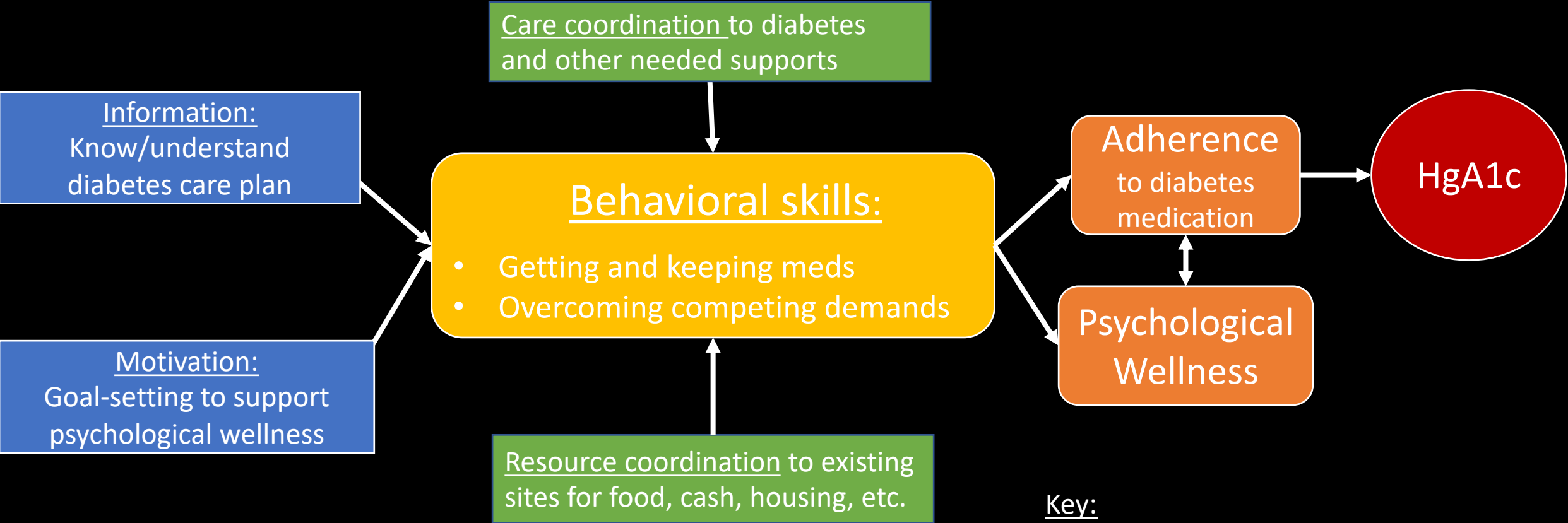
Health Care for  
the Homeless,  
H-PACT

Diabetes CHW/  
peer coaching  
models

Behavioral  
activation for  
mood + health  
behaviors

Collaborative  
care: physical +  
mental health

# Conceptual model of D-HOMES

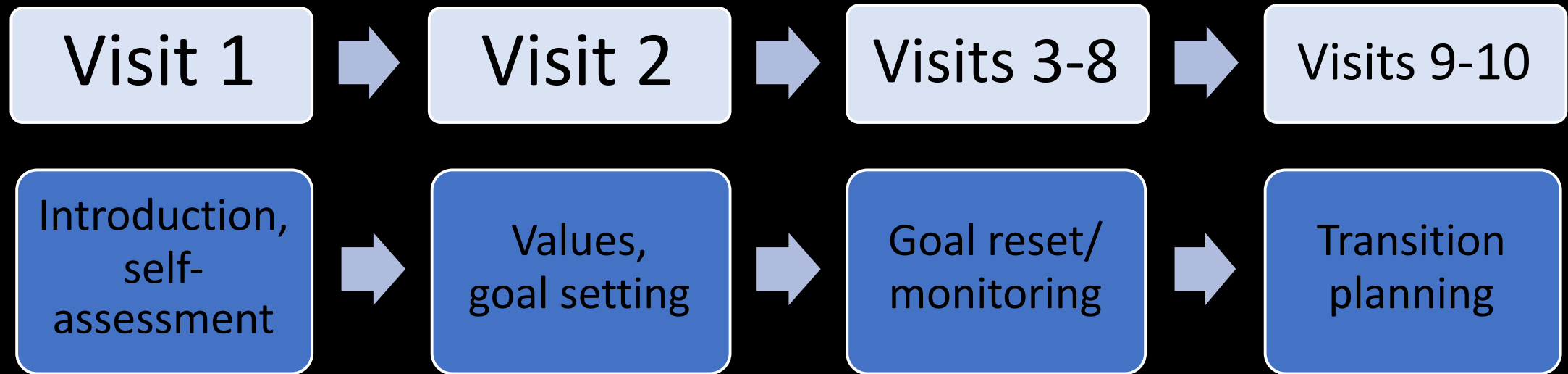


Key:  
Blue = Core treatment components  
Green = Secondary treatment components  
Yellow = Behavioral skills  
Orange = Primary behavioral targets  
Red = Primary clinical target

# D-Homes project phases



# Single arm trial procedures



Baseline

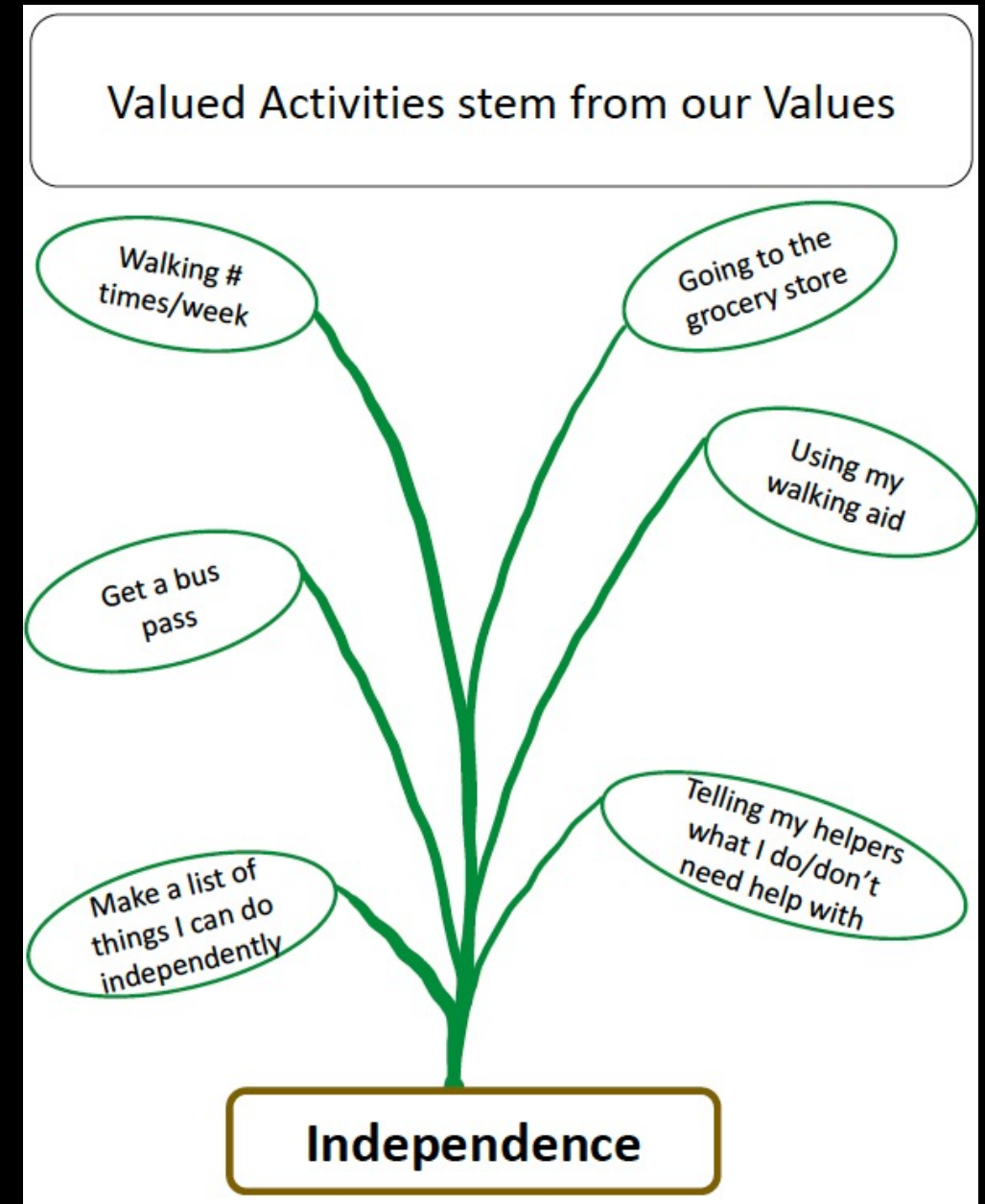
12 weeks

# Values assessment

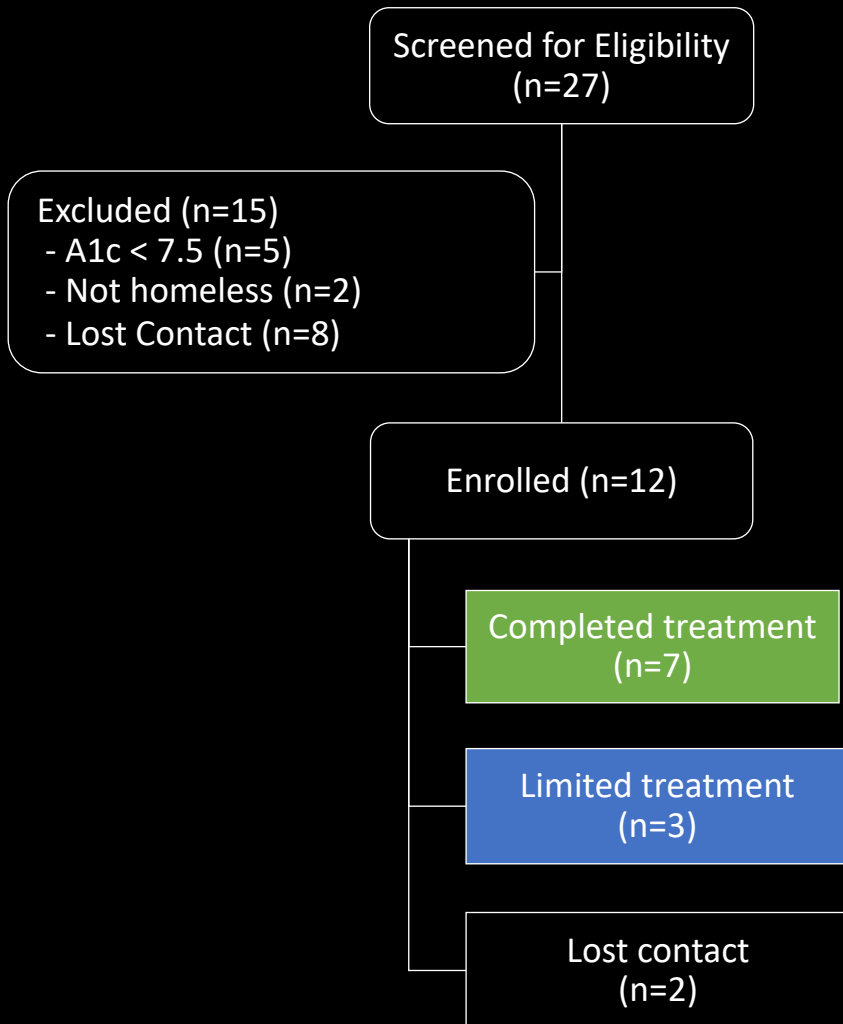
Values are the stuff that really matters to you, the things that you need to live a content life.

Our values lead us to valued activities that help us lead our best life.

My Values



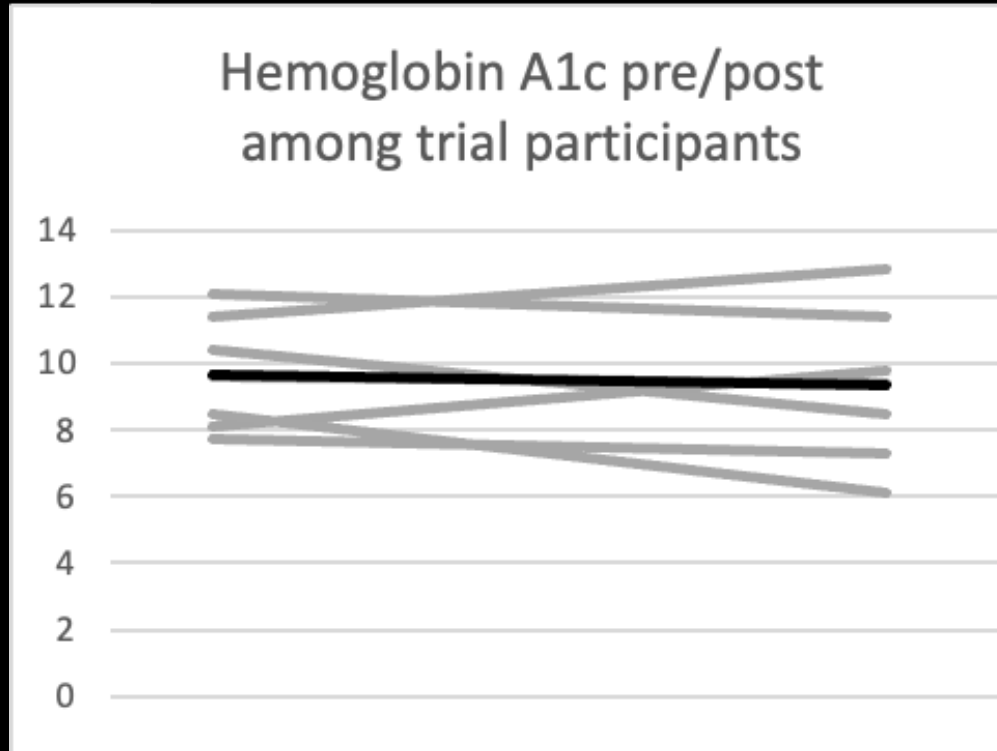
# Single arm pilot trial results



## Treatment completers:

- More stably housed
- More likely to use clinic
- More white
- Most satisfied with coaching

# Single arm pilot trial results



A1c mean: 9.7% → 9.3%

## Client satisfaction survey

(scores: 8=dissatisfied to 32=v. satisfied)

- Mean = 26.1 (range 8-32)
- 5 high ratings (31-32), all more stably housed
- 2 low ratings (8, 16), both less stably housed

# D-Homes project phases



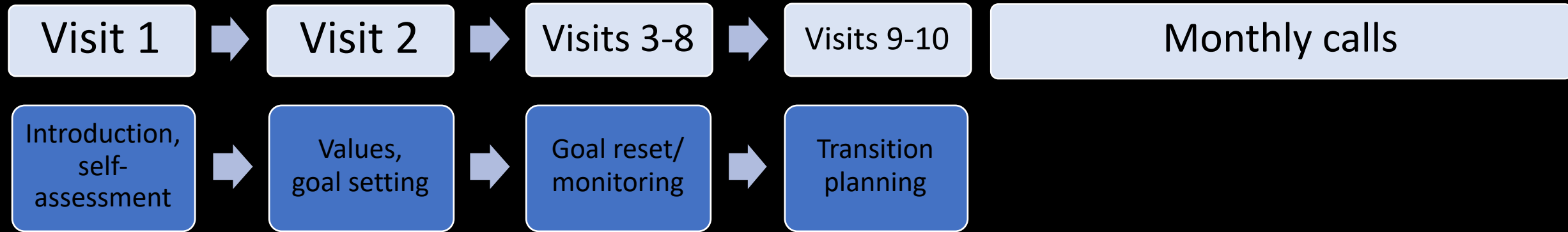


# Eligibility criteria

- Adults (18+)
- English speaking
- Diagnosed with type 2 diabetes
- Willing to work on taking medications
- Planning to stay in the area over the next 24 weeks
- Experienced homelessness
  - Best for people in transitional or permanent supportive housing

# Randomized pilot trial procedures

## Intervention



## Comparison



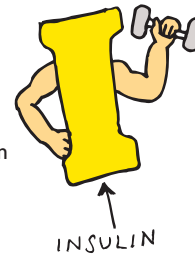
## Assessments



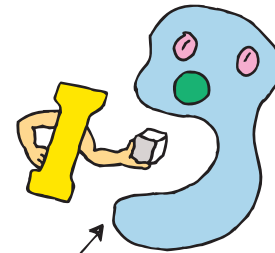
# Education

## TYPE 2 DIABETES

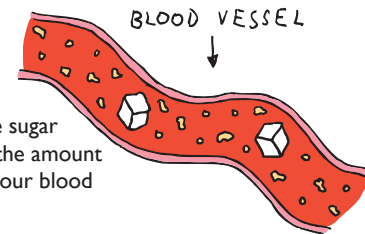
With type 2 diabetes, your body makes some insulin, but not enough. Or, the insulin your body makes does not work right.



Much of the food you eat is changed by your body into a kind of sugar. The medical word for this sugar is glucose. Insulin helps sugar move from your blood into your body's cells.



BODY CELL



If you don't have enough insulin to move sugar from your blood into your body's cells, the amount of sugar in your blood goes up. When your blood sugar levels stay high, you have diabetes.



Type 2 diabetes is more common in adults, but the number of children and young people with type 2 diabetes is growing. Eating healthy foods, in the right amounts, and being physically active can help people lower their blood sugar. Most people with type 2 diabetes take diabetes pills and many also take insulin.

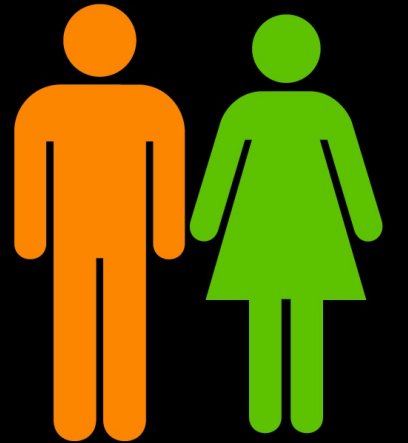
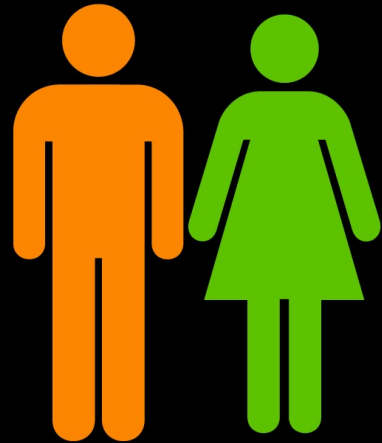
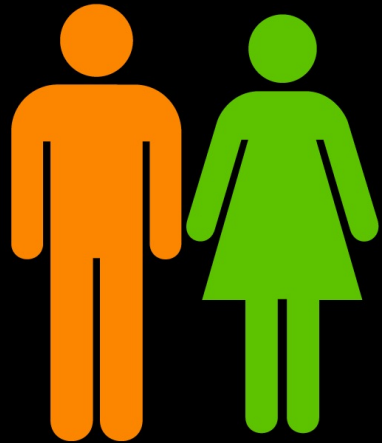
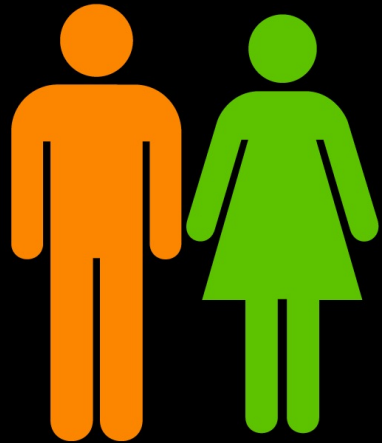
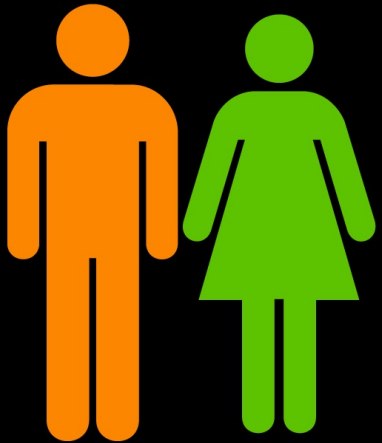
Diabetes cannot be cured, but you can control it! People who control their blood sugar levels can lead full and happy lives - just like everyone else. Talk to your doctor or health clinic for more information.



Enrollment goal

N=54

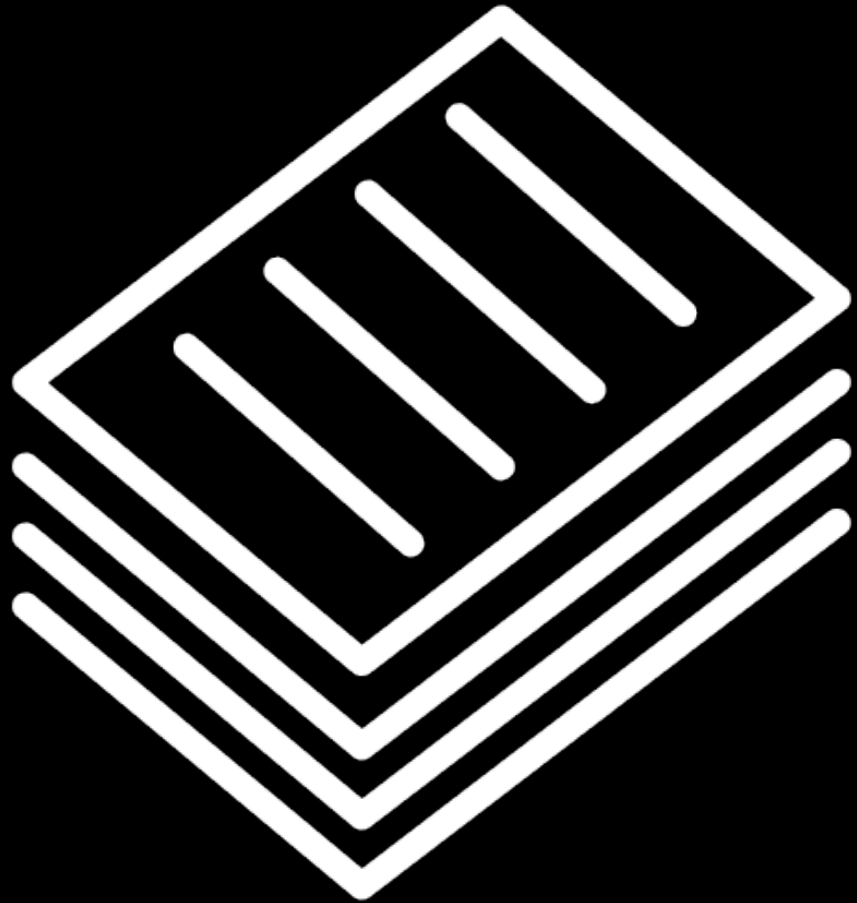
1-2 people/week in 2022


















# Logo adjustment



# Consent form coversheet



Assessment Visit #1 (1h, today)					
					
Consent		A1c check, BP, weight, etc.		Questions about your health, life	
Assessment Visit #2 (1h, in 1-2 weeks)					
					
	Questions about you			Randomize to Treatment A or B	
A: Diabetes Education Session, #1			B: Diabetes Wellness Coaching Sessions, #1-10		
					
1 x education (20 min.)	Pillbox	5 x calls (monthly)	10 x coaching (30 min., weekly)	Pillbox/other tool	3 x calls (monthly)
Assessment Visit #3 (1h, in 12-16 weeks)					
					
	A1c check, BP, weight, etc.			Questions about your health, life	
Assessment Visit #4 (1h, in 24-30 weeks)					
					
	A1c check, BP, weight, etc.			Questions about your health, life	

# Change of flyer

## Diabetes Research Study

Do you have type 2 diabetes?  
Have you experienced unstable housing or homelessness in the past year?  
Consider participating in our research study.

The purpose of this study is to design a support program for individuals who have diabetes and have experienced homelessness

### Participation involves

- Meeting with a diabetes wellness coach to set goals related to your diabetes care
- Completing study surveys
- Conducting A1c tests

### You May Qualify If You

- Are 18 years old or older
- Have type 2 diabetes
- Have experienced homelessness in the past year
- Are interested in working on goals related to your diabetes care
- Will be available in-person or by phone for the next 16 weeks
- Speak English

### Potential Benefits

- We cannot guarantee that you will benefit from this research study
- This study may benefit other individuals with type 2 diabetes in the future

If you're interested in participating, call or email the study staff:

[DHomes@hhrinstitute.org](mailto:DHomes@hhrinstitute.org)  
(651) 508-3741

You will be compensated for your time if you qualify and choose to participate.

Living with  
**type 2 diabetes?**

History of homelessness?  
You may be eligible for a  
**paid diabetes study**

**CALL/TEXT US:**  
**(651) 508-3741**

**OR EMAIL:**  
**DHOMES@HHRINSTITUTE.ORG**

 HennepinHealthcare  
Research Institute  
HSR #: IRB-FY2021-317



**DHOMES**  
Diabetes Homeless  
Medication Support

**Get Paid:**  
\$150 across 4 study visits  
**& Get a Phone:**  
or \$20/month toward your bill

# Recruitment video to build trust

- BIPOC participants were less likely to complete enrollment, treatment in D-Homes

## In general

- BIPOC communities continue to experience health disparities
- Housing barriers represent structural racism
- Research and health institutions have been harmful to BIPOC



# Recruitment video



# Next steps

- Finish randomized pilot, seeking funds to see if/how D-Homes works
- Translate and adapt D-Homes into Spanish, targeting rental assistance
- Broaden wellness coaching for people entering supportive housing
- Grow community engaged research team
- Adapt for people in less stable housing
- Expand to substance use?



**CVHOMES**  
Cardiovascular Health  
Homeless Support



Thank you!

Stay in touch...

@KateDiazVickery

[Katherine.Vickery@hcmed.org](mailto:Katherine.Vickery@hcmed.org)

<https://linktr.ee/kvickery>

# Trial Incentives

	Assessment Visits			
	#1	#2	#3	#4
Assessment Payment	\$20	\$30	\$40	\$60

	Study phone provided for your use *OR*					
	Mo. 1	Mo. 2	Mo. 3	Mo. 4	Mo. 5	Mo. 6
Use your own phone with monthly stipend	\$20	\$20	\$20	\$20	\$20	\$20

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