

Diabetes: An Introduction for Community Health Workers in Iowa

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Presented by Iowa Chronic Care Consortium

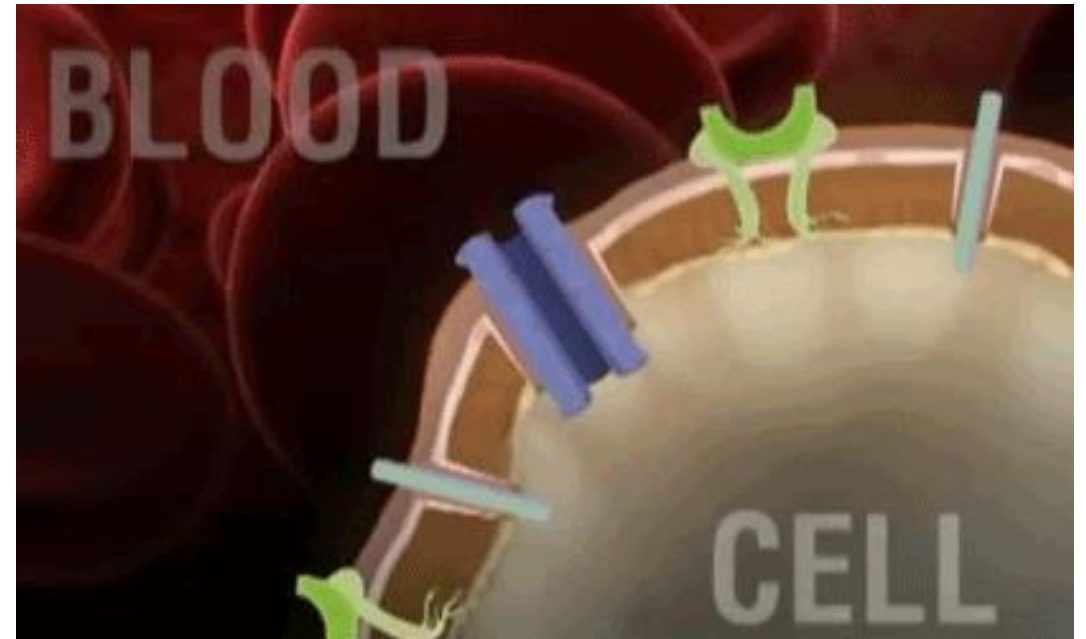


Goals for this Webinar

- Learn about what diabetes is and how it affects a person's health
- Know the social factors that impact individuals living with diabetes
- Know the crucial activities that are involved in diabetes self-management
- Feel empowered to assist clients make healthy decisions that will improve their ability to self-manage their diabetes according to their abilities

Insulin Function in Non-Diabetic Individuals

- The body breaks down carbohydrates into glucose, causing blood sugar levels to rise
- The pancreas releases a hormone called insulin that allows glucose to be used by cells



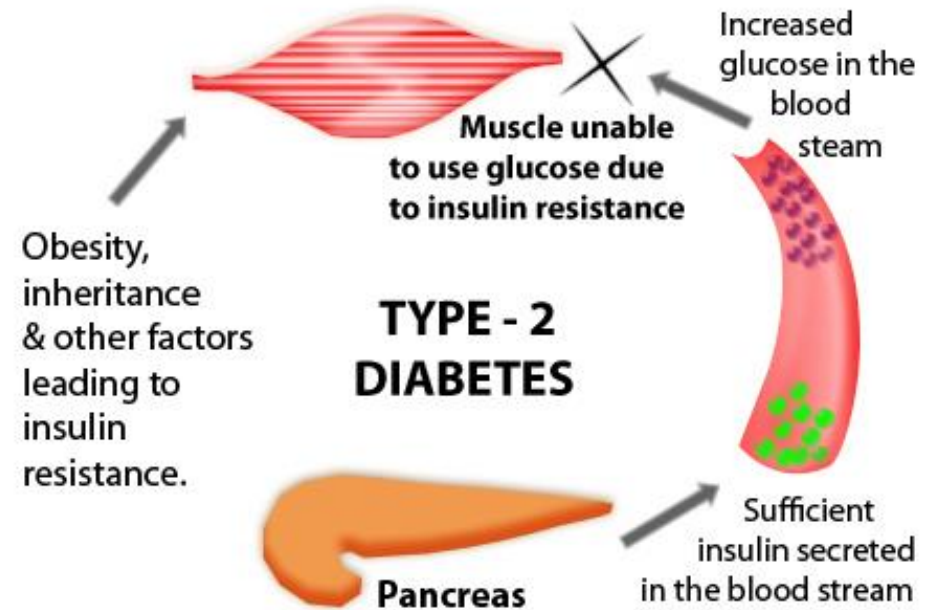
Type 1 Diabetes

- Individuals with type 1 diabetes produce little or no insulin
- As a result, glucose remains in the blood stream and cannot be used by cells
- Typically diagnosed by age 15
- 5% of overall diabetes diagnoses
- Requires insulin injections in order to maintain safer blood glucose levels



Type 2 Diabetes













- People with type 2 diabetes are resistant to the insulin that they do produce
- This leads to glucose (sugar) building up in the person's blood.
- Does not typically require insulin injections
- Instead requires a combination of dietary changes, medication, and exercise to manage blood glucose



Type 2 Diabetes

- Unlike type 1 diabetes, type 2 diabetes results from a combination of biological, environmental, and behavioral factors
- Risk factors include
 - Obesity
 - Sedentary lifestyle
 - Family history of diabetes
 - History of gestational diabetes
 - Race or ethnicity

Diabetes Symptoms in Daily Life

HYPOGLYCEMIA SYMPTOMS	HYPERGLYCEMIA SYMPTOMS
 SWEATING	 DRY MOUTH
 PALLOR	 INCREASED THIRST
 IRRITABILITY	 WEAKNESS
 HUNGER	 HEADACHE
 LACK OF COORDINATION	 BLURRED VISION
 SLEEPINESS	 FREQUENT URINATION

- In addition to these symptoms, extremely high or low blood sugar can lead to loss of consciousness, or diabetic coma
- This is life-threatening and requires immediate medical attention
- Other illnesses such as cold or flu can also affect people with diabetes by boosting their blood sugar

Long-Term Complications

- Greater risk of heart disease and stroke
- Nerve damage
- Sores and infections
- Diabetic eye disease
- Kidney damage

Prediabetes

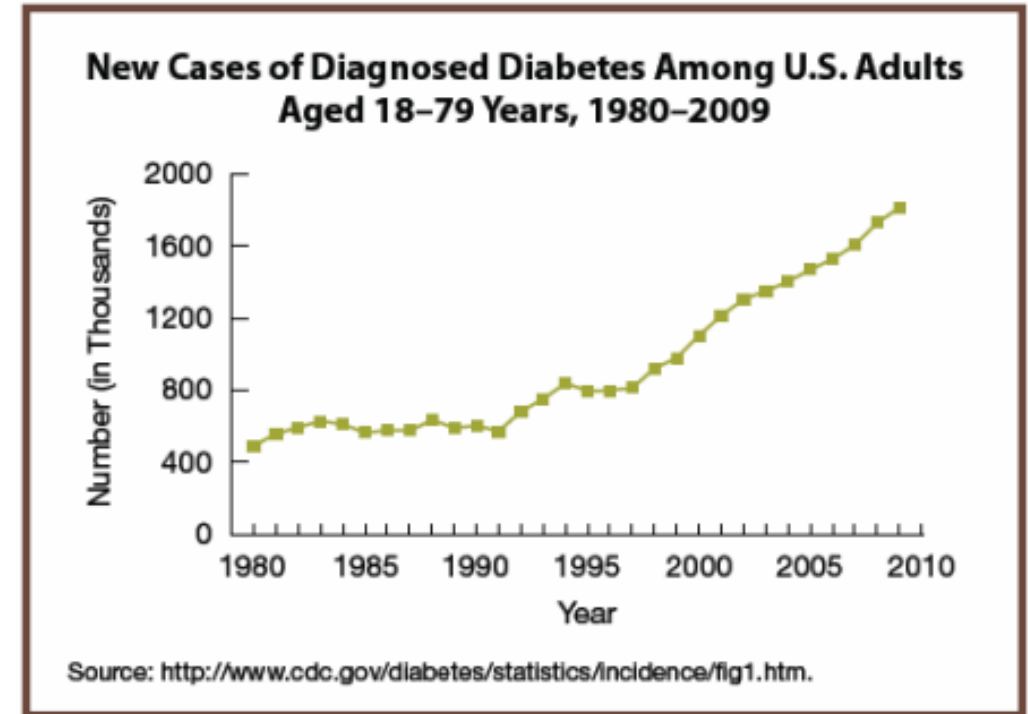
- People with blood sugar that is higher than normal but still not high enough to receive a diabetes diagnosis
- Up to 70% of people with prediabetes go on to develop type 2 diabetes
- However, people who lose 5 to 10 percent of their body weight have been shown to significantly lower their chance of developing diabetes

Diagnostic criteria for type 2 diabetes

Blood Glucose Parameter	HbA1c	FPG	PPPG
Normal	< 6.5%	< 100 mg/dl	< 140 mg/dl
Pre-diabetes	≥ 6.5 - 7%	100-125 mg/dl (IFG)	140-199 mg/dl (IGT)
Diabetes	≥ 7%	126 mg/dl or above	200 mg/dl or above

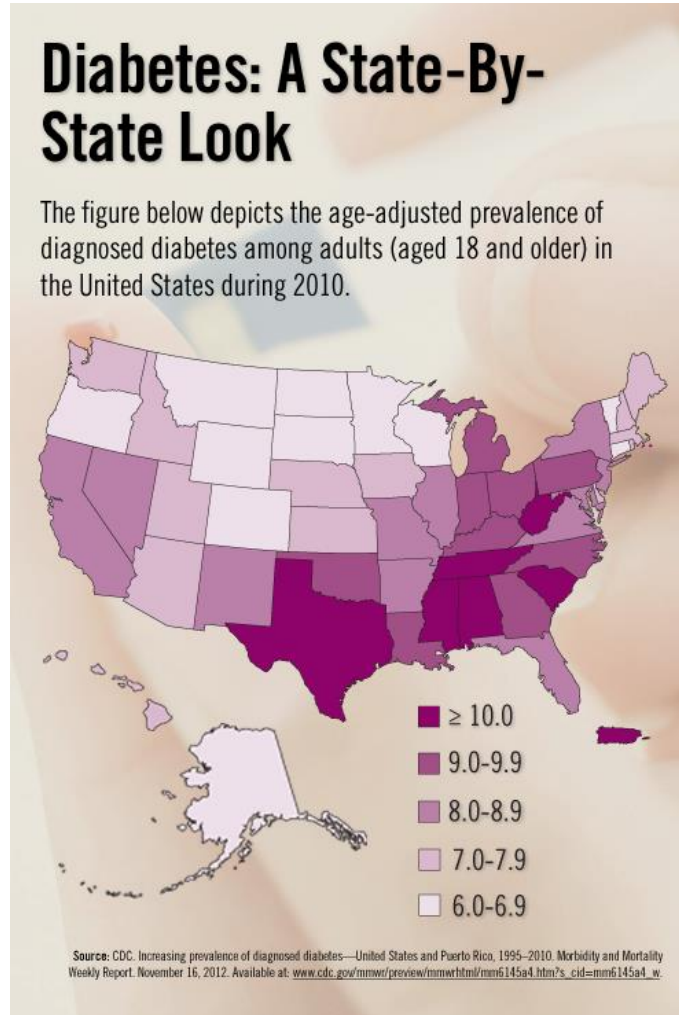
Statistics

- Nearly 10% of Americans had diabetes in 2015
- Diabetes is the 7th leading cause of death in the United States
- The rate of diabetes among American adults over 65 is 25%
- The rate of diabetes is 12.7% among African Americans, and 12.1% among Hispanics



Diabetes in Iowa

- Over 300,000 people in Iowa have diabetes
- An estimated 75,000 are undiagnosed
- The rate of diabetes in Iowa is slightly higher than the national average
- The rate of diabetes rose by 84% in Iowa between 1991 and 2009



Key Appointments and Healthcare Team Members

- Healthcare Team
 - Primary Care Provider
 - Endocrinologists
 - Podiatrists
 - Pharmacists
 - Optometrists
- Periodic Checkups
 - Annual Eye Exam
 - Annual Foot Assessment
 - Annual Flu Vaccine
 - Pneumonia Vaccine

Diabetes Self-Management

- While medical care is crucial for people with diabetes, the most important aspect of care is the essential activities that people with diabetes perform in their lives.
- These activities include:
 - Planning and maintaining a healthy diet
 - Exercising regularly
 - Monitoring blood glucose
 - Taking medications as prescribed



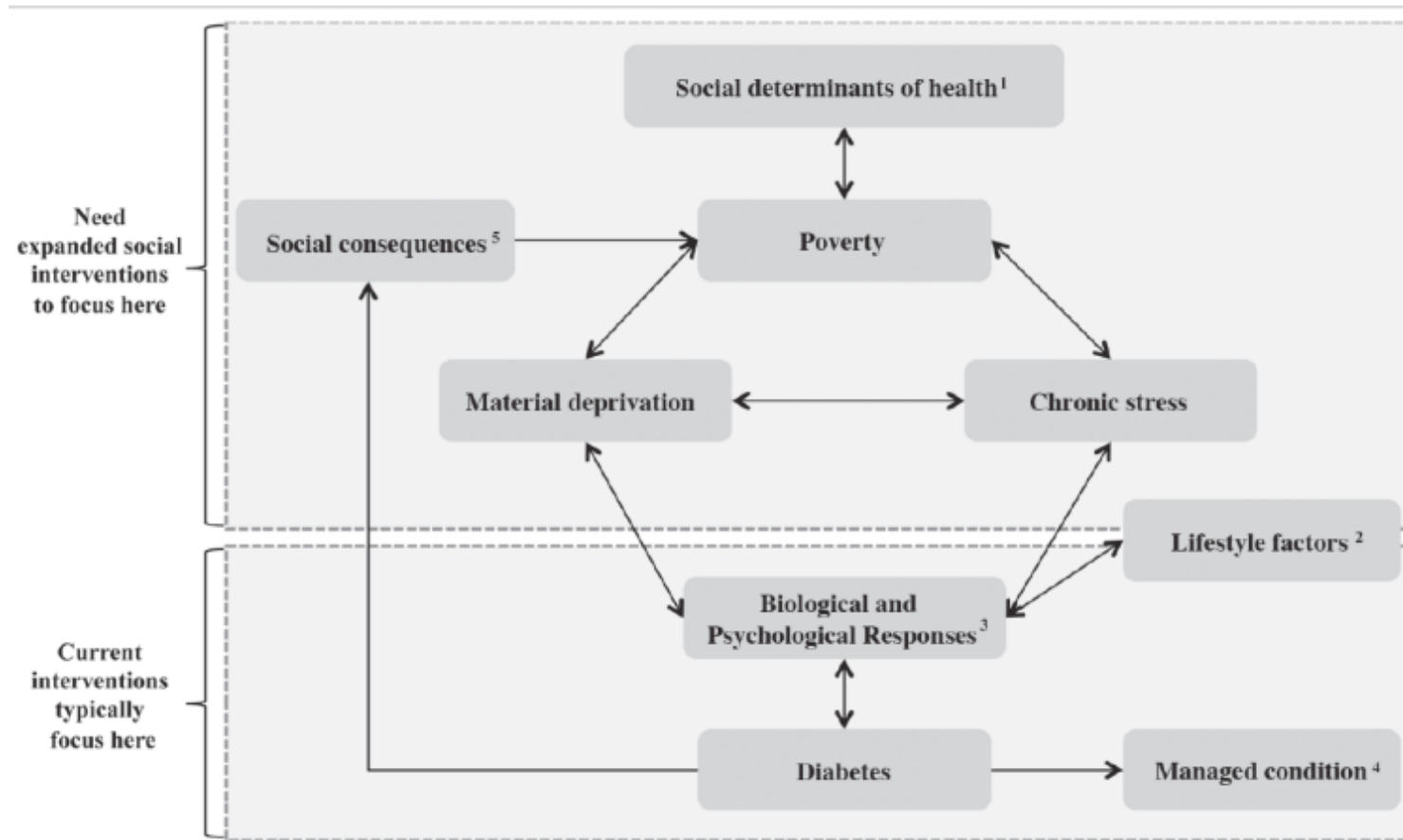
Social Determinants of Health

"Type 2 diabetes is part of a cyclical process: it both results from and contributes to adverse outcomes"

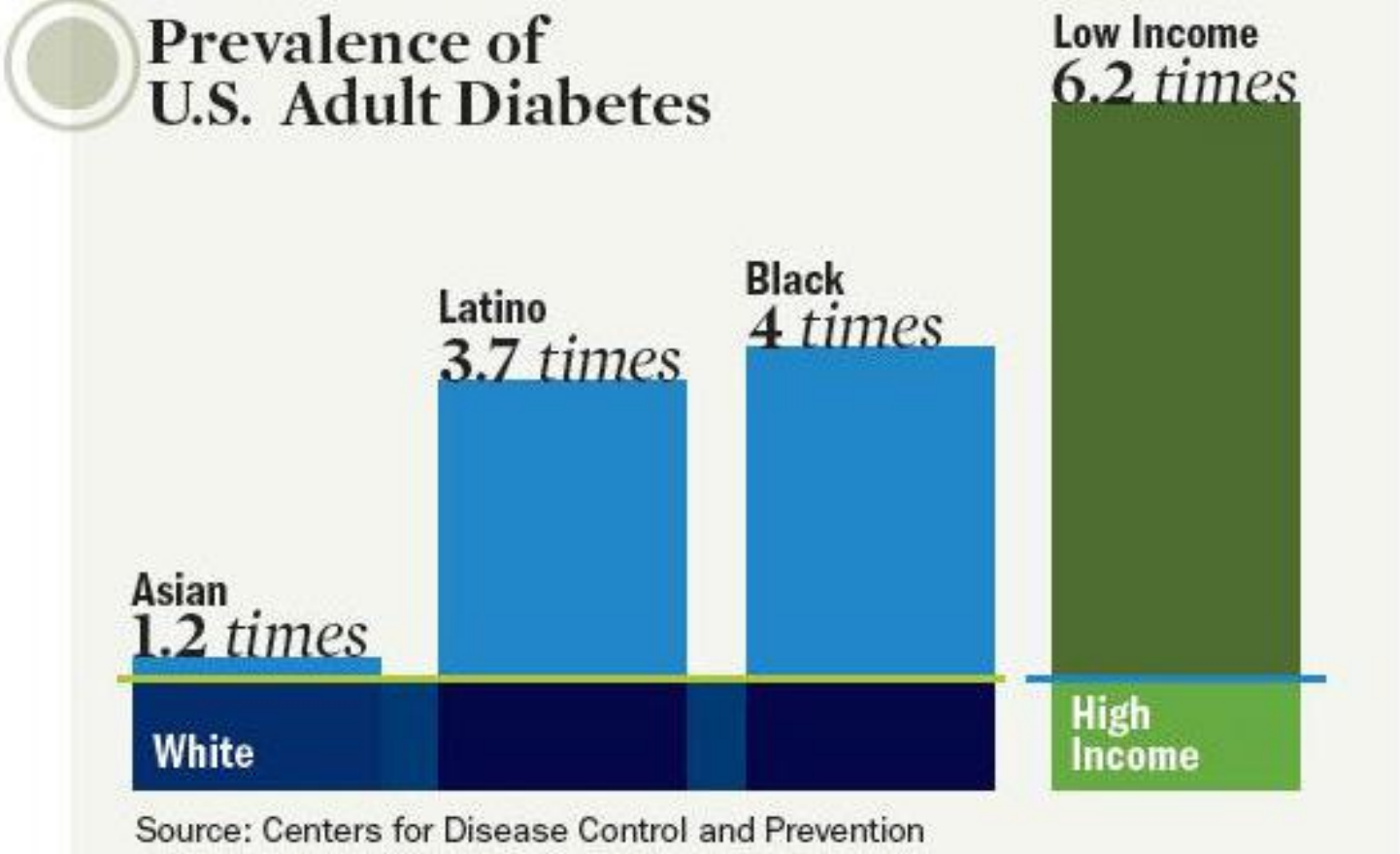
- A person's ability to manage their diabetes is not just a choice, but a product of barriers and supports around them



Socio-Biologic Cycle of Diabetes



Demographic Differences



Built Environment Factors and Nutrition Access

- Food Deserts
- Urban Sprawl
- Sedentary Jobs
- Neighborhood Safety
- Transportation



Economic Factors

- Food insecurity
 - Pressure to buy low-cost, high calorie processed foods
 - Hunger-binging cycle
 - Difficulty maintaining
- Problems paying for medications
- Housing and utilities
- Uncertainty and stress



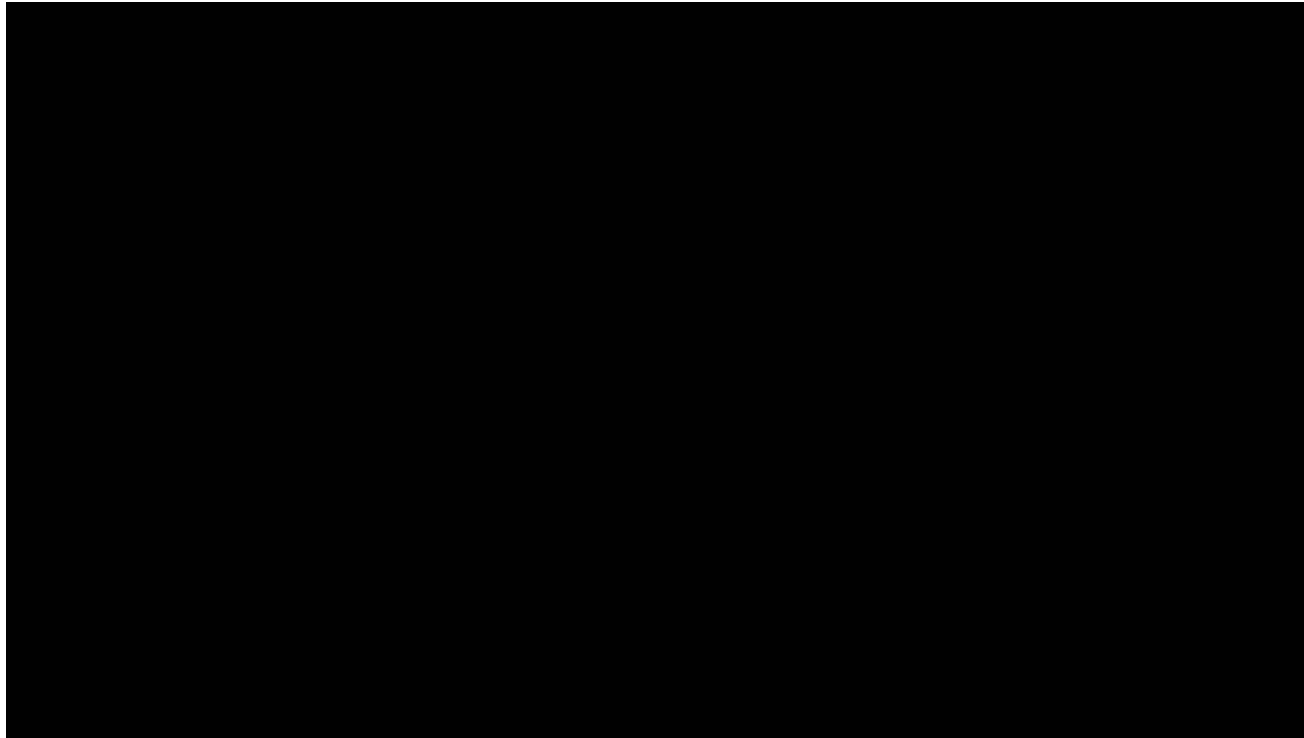
Cultural Factors

- Health education that is not culturally competent
- Cultural norms that encourage dietary choices that boost blood sugar
- Cultural barriers to asking for help

The Role of Community Health Workers

- Because most of diabetes care occurs outside of hospital settings, CHWs can be an excellent resource to help people address the many barriers to diabetes self-management
- CHWs can be particularly helpful by:
 - Acting as a bridge between the client and medical personnel
 - Monitoring symptoms
 - Helping the client create and carry out goals related to diabetes self-management
 - Providing emotional support

Video: Developing an Action Plan with a Client with Diabetes



Takeaways from the Video

- Telling is not enough
- Seek input from the client whenever possible
- Explore a variety of options
- Work to come to an agreement on specific and attainable goals

Acting as a Bridge

- Sometimes information delivered by health professionals can be difficult to understand or apply
- Similarly, it can be difficult to express a number of concerns during a short appointment with a physician



Acting as a bridge: Examples

Planning Questions

CHW: Your appointment with the doctor is on Tuesday. Are there any questions you might want to ask her about?

Client: I'll probably just listen to what the doctor has to say.

CHW: That's good, but I remember your feet were bothering you the other day. Maybe you want to ask about whether diabetic shoes might help you be more comfortable?

Making Information Accessible

Client: My doctor said my blood glucose is too high. She said I eat too many empty carbs.

CHW: I know you've been working hard to stick with your meal plan. Do you think there's anything you want to change in your diet?

Client: No, I ate plain chicken and rice 3 times last week.

CHW: Chicken is a great choice, but white rice can actually raise your levels. Maybe try another side you enjoy, like collard greens?

Monitoring Symptoms

- Blood glucose
 - Know the physicians instructions for how frequently blood glucose should be checked
 - Make sure your client has the necessary equipment to check their blood glucose
 - Have an action plan for when blood glucose is dangerously high or low
- Neuropathy
 - Numbness
 - Tingling or burning
 - Sharp Pains
- Weight gain/loss
- Medication side-effects
- Foot care
 - Make sure your client is checking their feet for spots and swelling daily.

Creating Goals

- Exercise
 - Help address access problems by finding safe and comfortable ways to exercise
- Diet
 - A weekly menu can help address both address nutritional and economic barriers by providing a chance to budget

WEEKLY MENU PLANNER ISSASARZA.COM

	BREAKFAST	LUNCH	DINNER	SNACKS
SUNDAY				
MONDAY				
TUESDAY				
WEDNESDAY				
THURSDAY				
FRIDAY				
SATURDAY				

Emotional Support

- Diabetes itself can be very stressful
 - Concern about complications
 - Feeling responsible for undesirable results
 - Feeling fatigued from constantly having to manage their diabetes
- This can lead to burnout, stress, or depression
- CHWs do not need to know everything about diabetes so much as they should be ready to be supportive, understanding, and sensitive to the challenges and setbacks in the lives of people with diabetes

An Eye on Prevention

- It is common for people to only receive education and support surrounding diet and exercise once they already have diabetes
- This kind of support could be helpful for anyone, and especially clients with prediabetes who want to lower their chances of developing type 2 diabetes

Additional Resources

- Statewide Diabetes Prevention Program (DPP) partners with local YMCAs and other organizations to offer physical activity programs
- Better Choices, Better Health workshops
- Over 90 outpatient diabetes self-management education programs in Iowa

City	Organization	City	Organization	City	Organization
Ames	Lincoln Center Hy-Vee Mary Greeley Medical Center	Estherville	Avera Holy Family Hospital	Onawa	Burgess Health Center*
Ankeny	YMCA of Greater Des Moines	Grundy Center	Grundy Family YMCA Grundy County Memorial Hospital	Sioux Center	Sioux Center Public Library
Burlington	Great River Medical Center	Iowa City	Mercy Iowa City	Sioux City	Norm Waitt Sr. YMCA Sunnybrook Medical Plaza
Carroll	St. Anthony Regional Hospital*	Iowa Falls	Hansen Family Hospital*	Tipton	Cedar County Public Health
Cedar Rapids	Cedar Rapids Metro YMCA Hy-Vee Johnson Ave.	Jefferson	Greene County Medical Center	Wapello	Louisa County Public Health
Chariton	Red Haw Family Medical Center	Lake City	Stewart Memorial Community Hospital*	Washington	Living Well Center
Council Bluffs	YMCA of Greater Omaha	Le Mars	Norm Waitt Sr. YMCA	Waterloo	Crossroads Hy-Vee Family YMCA of Black Hawk County
Davenport	Scott County Family YMCA	Marshalltown	Central Iowa Healthcare Marshalltown YMCA-YWCA	West Des Moines	JETT PHC West Lakes Hy-Vee
Des Moines	West Lakes Hy-Vee YMCA of Greater Des Moines	Mason City	Cerro Gordo County Department of Public Health	Winterset	Madison County Memorial Hospital*
Dubuque	Dubuque Community YMCA/YWCA* UnityPoint Health – Finley Hospital*	Muscatine	Trinity Muscatine*		

Thank you!

- Questions?
- For more information, contact us at the Iowa Chronic Care Consortium
 - Deb Kazmerzak: [515.554.3788](tel:515.554.3788)



COACHING | OUTREACH | RELATIONSHIP | ENGAGEMENT
Skills Development for Community Health Workers