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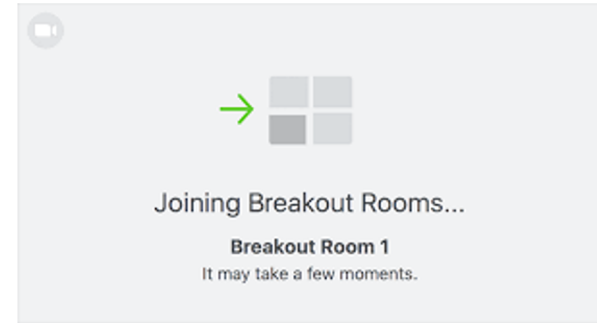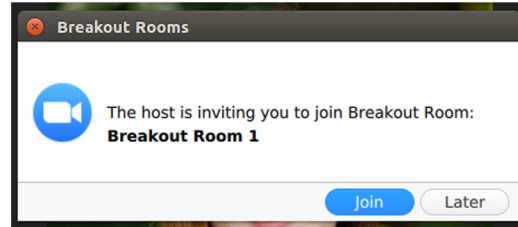**DIABETES IN SPECIAL & VULNERABLE POPULATION:**
Learning Collaborative

Diabetes Continuum of Care: Association between Health Literacy, diabetes knowledge, and self-care behaviors

Tuesday, February 16th,2021
8 am HT / 11 am PT / 1 pm CT / 2 pm ET

Welcome!
We will begin in a few minutes

Zoom Features
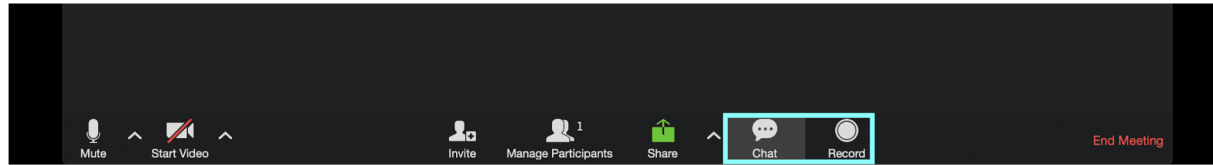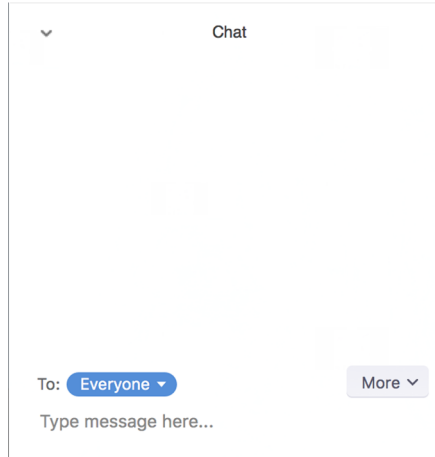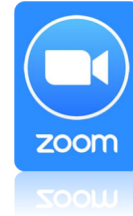
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Diabetes Continuum of Care: Association between Health Literacy, diabetes knowledge, and self-care behaviors

Dinamica/Ice breaker

ABOUT THE LEARNING COLLABORATIVE

Diabetes affects more than 34 million people in the United States. Multi-tiered efforts to prevent, treat and manage diabetes are critical in reducing the burden of diabetes, particularly for special and vulnerable populations, which have unique characteristics that affect culturally and linguistically competent health care access and utilization. According to 2018 Uniform Data System (UDS), diabetes poses a unique challenge for the HRSA Health Center Program because 1 of 7 patients has diabetes and nearly 1 in 3 of those has uncontrolled diabetes.

To elevate the national conversation around diabetes, **14 National Training and Technical Assistance Partner (NTTAP) organizations** formed the Special and Vulnerable Populations Diabetes Task Force to engage health centers, Primary Care Associations (PCAs), and Health Center Controlled Networks (HCCNs) to increase knowledge of effective strategies that address diabetes among people experiencing homelessness, residents of public housing, migratory and seasonal agricultural workers, school-aged children, older adults, Asian Americans, Native Hawaiians and Pacific Islanders, LGBTQIA+ people, and other health center patients.

This Fall's national learning series is **sponsored by HRSA** and will take a deeper dive into issues related to patient health literacy, community engagement, and team-based care.

For information about the Diabetes National Learning Series, visit **chcdiabetes.org** today.

Special and Vulnerable Populations Task Force Members:

AAPCHO — Association of Asian Pacific Community Health Organizations

CSH

FARMWORKER JUSTICE

Health Outreach Partners — HEALTHY PEOPLE. EQUITABLE COMMUNITIES.

MHP Salud

MIGRANT CLINICIANS NETWORK — MCN

National Center FOR EQUITABLE CARE FOR ELDERS

NCFH — National Center for Farmworker Health, Inc. — MIGRANT HEALTH

NCHPH — National Center for Health in Public Housing

NATIONAL HEALTH CARE for the HOMELESS COUNCIL

NATIONAL LGBT HEALTH EDUCATION CENTER — A PROGRAM OF THE FENWAY INSTITUTE

NNOHA — National Network for Oral Health Access

NATIONAL NURSE-LED CARE CONSORTIUM — a PHMC affiliate

SCHOOL-BASED HEALTH ALLIANCE — Redefining Health for Kids and Teens

For more information on our NTTAP Partners, visit chcdiabetes.org

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Overview of the LC

- Participants are expected to attend all sessions. Everyone will have access to the slides, and resources. An email will be sent out shortly after the first session
- CME/CNE credits are available. You need to attend all sessions to qualify for CMEs/CNEs.
- After each session, participants will be provided with reflection questions to prepare for the next session.
- You will receive a reminder for the next session the Friday before
- Learning collaborative sessions will be 1.5 hours with opportunity for small group discussion

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Diabetes Continuum of Care: Association between Health Literacy, diabetes knowledge, and self-care behaviors

Timeline

Session #2: Association between Health Literacy, Diabetes Knowledge, and Self-care Behaviors- **Feb. 16th, 2021**

Session #3: Health Literacy: Diabetes Prevention and Self-management **-March 2nd, 2021**

Session #4: Opportunities for Technology: Internet and Telehealth**- March 16th, 2021**

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Association between Health Literacy, diabetes knowledge, and self-care behaviors

Impact of Health Literacy on Patients' Diabetes Management and Self-Care

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LEARNING OBJECTIVES

1. Understand health literacy, self-care, and the impact on diabetes
2. Identify barriers for health literacy, and self-care
3. Provide tools for assessing diabetes

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Diabetes

Numbers according to the Center for Disease Control and Prevention (CDC)

➢ **34.2 million US adults have diabetes, and 1 in 5 of them don't know they have it**
➢ **More than 88 million US adults (over 1 out of 3) have pre-diabetes, and more than 84% of them don't know it**
➢ **Diabetes is the #1 cause of kidney failure, lower limb amputations and adult blindness**
➢ **In the last 20 years, the number of adults diagnosed with diabetes has more than doubled**
➢ **African Americans, Hispanics, American Indians, and some Pacific Islanders and Asian American have higher risk of developing diabetes**

Costs of having Diabetes according to the CDC

➢ **Medical costs and lost work and wages for people with diagnosed diabetes total $327 billion yearly.**
➢ **Medical costs for people with diabetes are twice as high as for people who don't have diabetes**

https://www.aarp.org/health/healthy-living/info-2018/role-of-race-in-diabetes.html#:~:text=African%20Americans%2C%20Hispanics%2C%20American%20Indians,American%20Diabetes%20Association%20(ADA).
https://www.cdc.gov/diabetes/basics/quick-facts.html

Diabetes Continuum of Care: Association between Health Literacy, diabetes knowledge, and self-care behaviors

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What is Diabetes?

- ➢ **Scientific name- Diabetes Mellitus**
- ➢ **Commonly known as "la azucar" or "sugar"**
- ➢ **Your body has trouble moving glucose (sugar) from your blood into your cells**
- ➢ **Your cells use glucose as fuel**
- ➢ **Your body doesn't make enough insulin or can't use its own insulin**
- ➢ **This leads to high levels of glucose in the blood and not enough for your cells**
- ➢ **It is the seventh cause of death in the USA**

\- **<link>**

https://www.cdc.gov/diabetes/basics/diabetes.html - about diabetes
https://www.youtube.com/watch?v=wmOW091P2ew - Youtube video

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Types of Diabetes

❖ **Type 1- Juvenile diabetes or insulin dependent diabetes**
- It is inherited- appears in children and young adults
- Less common than type 2 diabetes
- 5 – 10 % of people with diabetes have type 1

➢ **Risk Factors**
- Genetics-if you are from a high risk race/ethnicity
- Your body produces very little or no insulin
- The pancreas is attacked by your immune system

➢ **Symptoms**
- Frequent urination
- Extreme hunger, thirst or fatigue
- Unintended weight loss or weight gain

➢ **Treatment**
- Take insulin shots/wear insulin pump
- Manage blood sugar levels
- Exercise/ be physically active
- Manage stress

❖ **Type 2- Insulin resistance**
- More than 34 million Americans have diabetes (1 out 10)
- 90 – 95% of people with diabetes have type 2
- Usually suffered by older people

➢ **Risk Factors/ Causes**
- Obesity is the prime risk factor
- Results of poor lifestyle, dietary and exercise habits
- Your body becomes resistant to your insulin

➢ **Symptoms**
- Symptoms can take years to manifest
- Blurred vision
- Poor wound healing

➢ **Treatment**
- Medication to help manage blood sugar, cholesterol and blood pressure levels
- Exercise/ be physically active
- Manage stress
- May get insulin prescribed

https://www.cdc.gov/diabetes/basics/type1.html
https://www.cdc.gov/diabetes/basics/type2.html

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Types of Diabetes

❖ **Pre-Diabetes- impaired glucose tolerance**
- ■ If left untreated, can turn to type 2 diabetes
- ■ 1 out of 3 Americans suffer of it
- ■ Approximately 88 million people in the USA have it,

➤ **Risk Factors/ Causes**
- ■ Being overweight
- ■ Parent or sibling has type 2 diabetes
- ■ If you are from a high risk race/ethnicity
- ■ Your body becomes resistant to your insulin

➤ **Symptoms**
- ■ Same symptoms as type 2 diabetes
- ■ Frequent urination
- ■ Extreme hunger, thirst or fatigue
- ■ Unintended weight loss or weight gain

➤ **Treatment**
- ■ It is reversible
- ■ Eating healthy foods
- ■ Exercising/ at least 3 times a week
- ■ Lose weight

❖ **Gestational diabetes**
- ■ Appears in pregnant women
- ■ Usually in the 3rd trimester
- ■ 50% of women with gestational diabetes go on to develop type 2 diabetes

➤ **Risk Factors/ Causes**
- ■ High levels of glucose due to insulin resistance

➤ **How it affects your baby**
- ■ Being very large (9 pounds or more)
- ■ Induce early child birth
- ■ Increases the chances your child will develop type 2 diabetes later in life

➤ **Symptoms**
- ■ Doesn't have any symptoms, a test is needed

➤ **Treatment**
- ■ Attend all your prenatal appointments
- ■ Check your blood sugar
- ■ Follow a healthy eating plan
- ■ Be active
- ■ May get insulin prescribed

https://www.mayoclinic.org/diseases-conditions/prediabetes/symptoms-causes/syc-20355278
https://www.cdc.gov/pregnancy/diabetes-gestational.html

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Risk of having diabetes

➢ Long term damage or failure to your body's:
   ○ Heart
   ○ Kidney
   ○ Feet
   ○ Nerve
   ○ Eye diseases
➢ Can lead to amputations
➢ Some studies show it doubles the risk of depression

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Good news! It can be managed

➤ With the right care people can live long and healthy lifes
  ○ Regular follow-up with health care provider
  ○ Develop or maintain healthy life habits
  ○ Manage stress
  ○ Take medicine
  ○ Stop smoking/tobacco problems
  ○ Health literacy
  ○ Self-care

It isn't just about controlling the sugar levels but preventing complications, amputations, loss of sight, etc. .

➤ Screening and diagnosing
  ○ Through measuring levels of sugar in the blood
  ○ Fasting glucose test
  ○ Oral glucose
  ○ HbA1c
  ○ C-peptid
  ○ Gestational diabetes

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3599009/

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What are normal sugar levels?

BLOOD GLUCOSE CHART

Mg/DL	Fasting	After Eating	2-3 hours After Eating
Normal	80-100	170-200	120-140
Impaired Glucose	101-125	190-230	140-160
Diabetic	126+	220-300	200 plus

Target Blood Sugar Levels for Diabetes

Age 6-12		Age 13-19	
Fasting	80-180	Fasting	70-150
Before Meal	90-180	Before Meal	90-130
Before Exercise	at least 150 (depends on intensity and duration)	Before Exercise	at least 150 (depends on intensity and duration)
Bedtime	100-180	Bedtime	90-150

Amounts shown above mg/dL

A1c	less than or around 8.0%	A1c	less than or around 7.5%

These are general medical guidelines. Please follow your doctor's instructions.

WebMD

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What is health literacy?

The capacity to *obtain, process,* and *understand* basic health information and services needed to make appropriate health decisions.

https://www.pennmedicine.org/news/internal-newsletters/system-news/2017/november/penn-medicine-tackles-low-health-literacy
https://www.cdc.gov/healthliteracy

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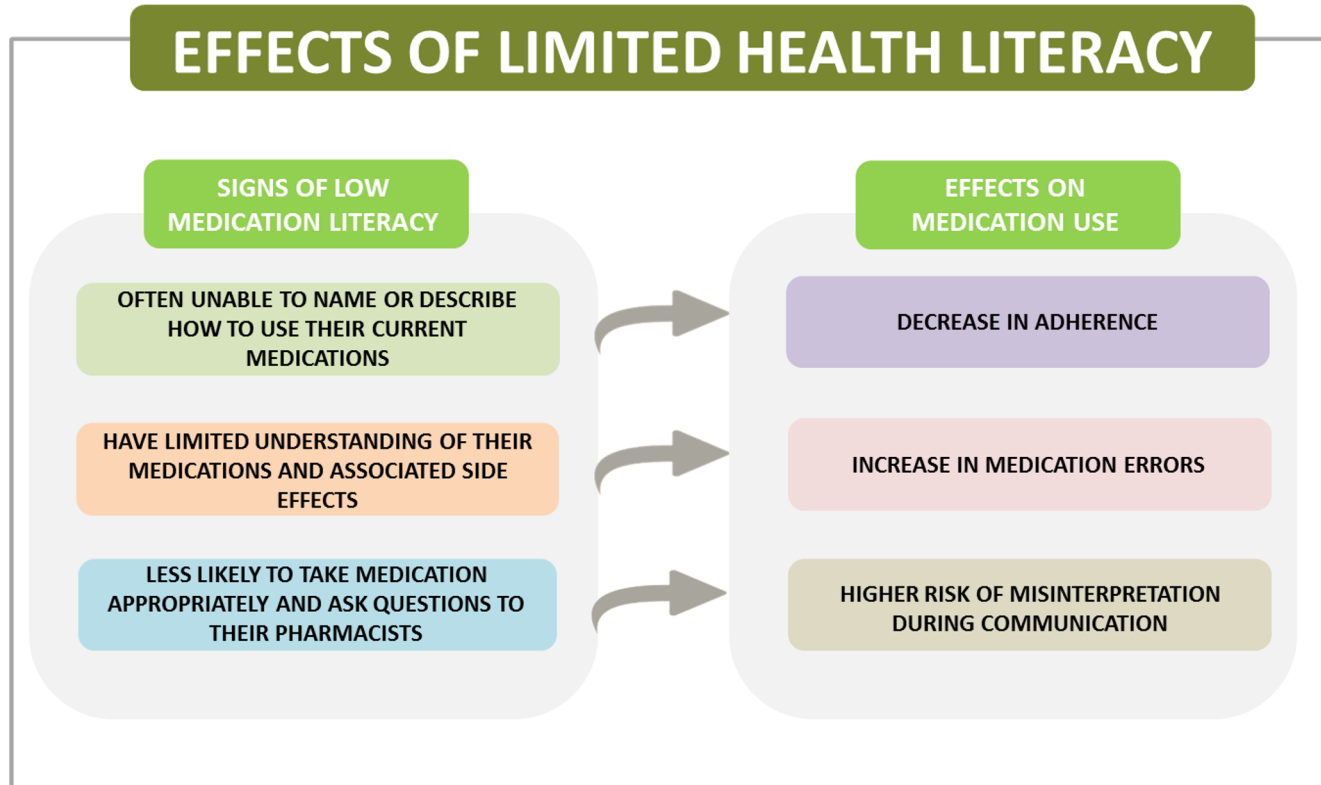
Low health literacy

Low health literacy is a barrier to effective patient care

➢ *Red Flags for Low Health Literacy:*
  ○ Frequently missed appointments
  ○ Incomplete registration forms
  ○ Non-compliance with medication
  ○ Unable to name or identify medications
  ○ Ask fewer questions to health professionals
  ○ Lack of follow-through on tests or referrals

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EFFECTS OF LIMITED HEALTH LITERACY

SIGNS OF LOW MEDICATION LITERACY

- OFTEN UNABLE TO NAME OR DESCRIBE HOW TO USE THEIR CURRENT MEDICATIONS
- HAVE LIMITED UNDERSTANDING OF THEIR MEDICATIONS AND ASSOCIATED SIDE EFFECTS
- LESS LIKELY TO TAKE MEDICATION APPROPRIATELY AND ASK QUESTIONS TO THEIR PHARMACISTS

EFFECTS ON MEDICATION USE

- DECREASE IN ADHERENCE
- INCREASE IN MEDICATION ERRORS
- HIGHER RISK OF MISINTERPRETATION DURING COMMUNICATION

https://www.fipfoundation.org/health-literacy/risk-of-limited-health-literacy/

Cognitive and Social Factors Influencing Diabetes Health Literacy

- **Communication Skills (Language Proficiency**
- **Reading/Literacy Level**
- **Knowledge of health, and health topics**
- **Culture**
- **Relationship between patient and provider**
- **Social Support**
- **Ability to navigate the healthcare and health insurance industries**
- **Situational Context**

https://www.erieniagaraahec.org/topic/factors-influencing-health-literacy/, https://mhpsalud.org/community-health-worker-resources/social-determinants-of-health/

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Self-care behaviors

➢ What is it?
  ○ Self-care is a commitment by the patient to avoid health complications in absence of a medical provider
    ■ Must individuals struggle with motivation and support
    ■ It is necessary to limit potential organ damage
    ■ Reduces the likelihood of hospitalizations
    ■ Lowers ER visits due to Diabetes complications
➢ A study conducted by the Journal of Diabetes & Metabolic Disorder discovered seven self care behaviors proven to help with diabetes:
    ■ Healthy eating
    ■ Being physically active
    ■ Monitoring blood sugar levels
    ■ Complying with medications
    ■ Using problem-solving skills
    ■ Developing healthy coping skills
    ■ Practicing risk reduction behaviors (nursing.usc)

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Self-care behaviors

➢ Other practices
  ○ Attending annual eye exam
  ○ Caring for feet
  ○ Reporting symptoms (numbness and tingling)
  ○ Practice good oral hygiene
  ○ Checking the skin
  ○ Reducing stress
  ○ Relying on social circles

https://nursing.usc.edu/blog/self-care-with-diabetes/

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CHW and how they can help

➢ How do CHW-led diabetes interventions positively impact individual patients?
  ○ Provide social support and education (family activities)
  ○ Improvements in A1C levels
  ○ Increased physical activity
  ○ Improved mental health and decreased diabetes distress
  ○ Greater patient understanding of their disease
➢ How do CHW-led diabetes interventions positively impact organizations and communities?
  ○ Reducing ER utilization and medical costs:
  ○ Improving patient/provider satisfaction and coordination
  ○ Reducing disparities:

https://2ow7t71bjuyu4dst8o28010f-wpengine.netdna-ssl.com/wp-content/uploads/2018/02/Community-Health-Workers-and-Diabetes-Interventions-A-Resource-for-Program-Managers-and-Administrators.pdf

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CHW and how they can help

How Has MHP Salud Addressed Diabetes through CHW Programs?

-Salud y Vida

https://2ow7t71bjuyu4dst8o28o10f-wpengine.netdna-ssl.com/wp-content/uploads/2018/02/Community-Health-Workers-and-Diabetes-Interventions-A-Resource-for-Program-Managers-and-Administrators.pdf

- The Road to Health Guided Implementation Project (RTH)

https://2ow7t71bjuyu4dst8o28o10f-wpengine.netdna-ssl.com/wp-content/uploads/2020/07/The-Road-to-Health-Guided-Implementation-Project.pdf

MHP Salud Resource

This guide provides organizations with an **overview of practical tools used to create and/or improve written materials.** It includes information, tips, and resources on readability, writing style, layout and design, and how to adapt writing documents to different audiences.
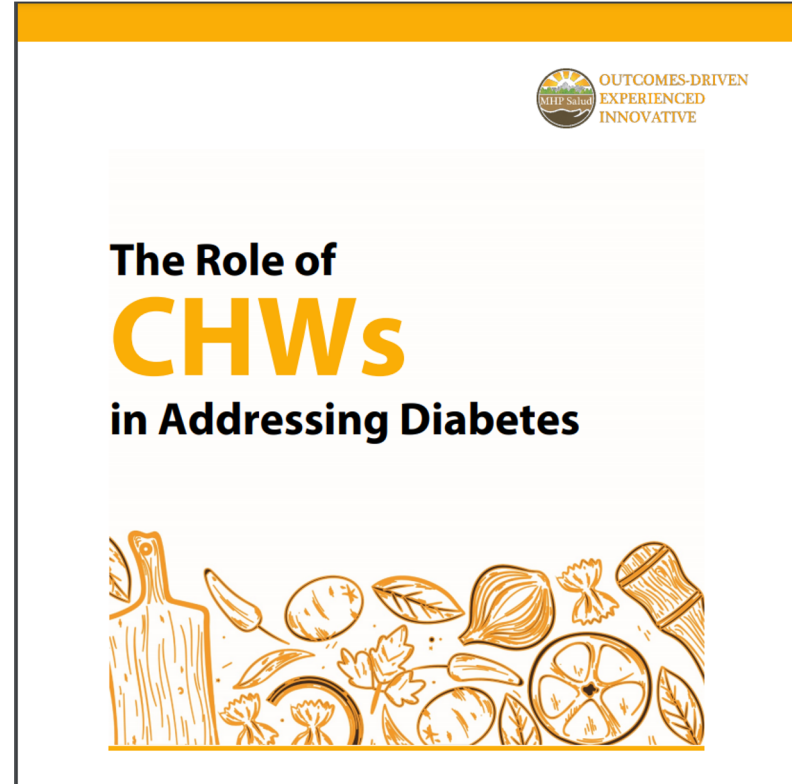
Link:https://mhpsalud.org/portfolio/a-guide-to-developing-easy-to-understand-materials-for-any-audience/

MHP Salud Resource

The purpose of this guide is to assist health centers and partners in identifying the roles of CHWs in addressing diabetes. This guide will provide access to information that will facilitate the identification of CHWs in their Health Centers and their roles in addressing diabetes self-management and prevention in their communities.
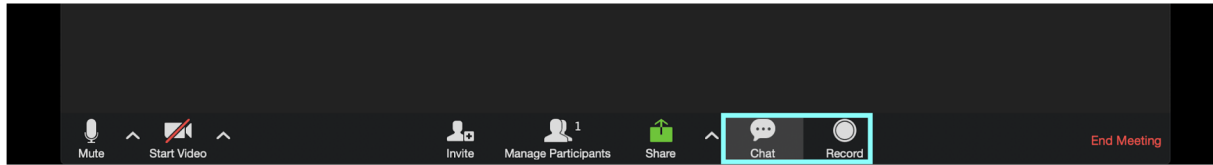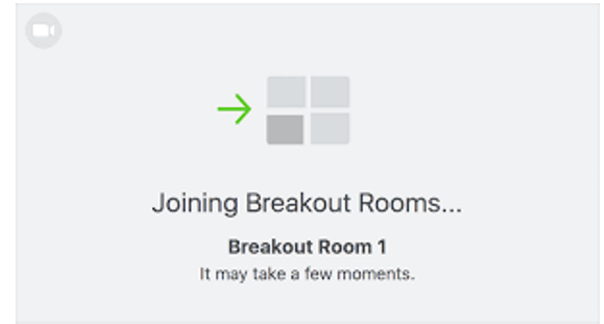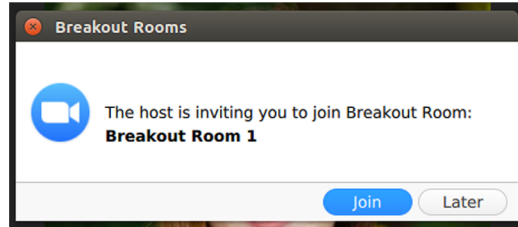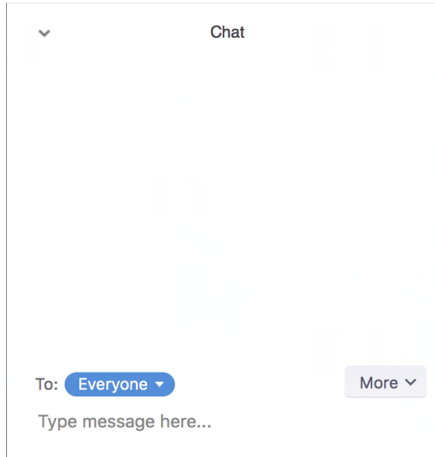
Link:https://mhpsalud.org/portfolio/the-role-of-community-health-workers-addressing-diabetes/

The Role of **CHWs** in Addressing Diabetes

OUTCOMES-DRIVEN
EXPERIENCED
INNOVATIVE

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Breakout Sessions

Zoom Features

Chat

To: Everyone ▾

More ▾

Type message here...

Breakout Rooms

The host is inviting you to join Breakout Room:
Breakout Room 1

Join   Later

Joining Breakout Rooms...

Breakout Room 1

It may take a few moments.

Mute   Start Video   Invite   Manage Participants   Share   Chat   Record   End Meeting
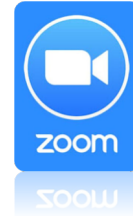
Impact of Health Literacy on Patients' Diabetes Management and Self-Care

Breakout Session Questions

➢ What are some self-care practices your organizations teaches?

➢ How do you obtain educational material for your organizations (federal, local health department, state health center, university, etc.)

➢ What are some tools you are using to combat diabetes?

➢ Do you all provide diabetes self-management or are they referred to a second party for service?

➢ Do you all provide self-monitoring devices to your patients?

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Take-home Questions

Impact of Health Literacy on Patients' Diabetes Management and Self-Care

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Reflection Questions

Between now and the next session (March 2nd), reflect on the following questions:

➢ What health literacy tools are you familiar with to assess diabetes knowledge among your patients?
➢ are you familiar with educational material for patients with prediabetes?
➢ What online resources do you use to educate your patients?

THANK YOU!

For information about the Special and Vulnerable Populations Diabetes Learning Collaborative, visit **chcdiabetes.org** today.

Feel free to contact our NTTAP collaborating partners and speakers from today's webinar:

Jose Leon- jose.leon@namgt.com
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Selenia Gonzalez- sgonzalez@mhpsalud.org
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At the end of this webinar, please complete the evaluation form. Your feedback is greatly appreciated