LC

DIABETES IN SPECIAL & VULNERABLE POPULATION:
Learning Collaborative

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

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

Welcome!
We will begin in a few minutes

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:

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

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Diabetes Continuum of Care: Effective Service Delivery Approaches to Improve Health Literacy

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CSH

NCHPH
National Center for Health in Public Housing

MHP Salud
OUTCOMES-DRIVEN
EXPERIENCED
INNOVATIVE

Diabetes Continuum of Care: Effective Service Delivery Approaches to Improve Health Literacy

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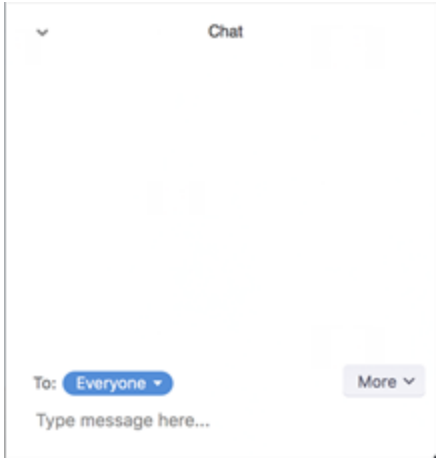
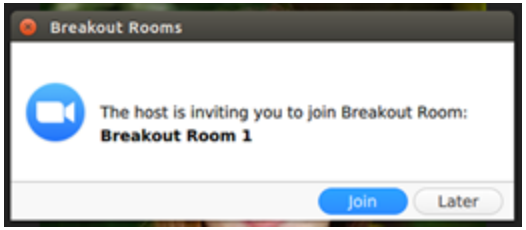
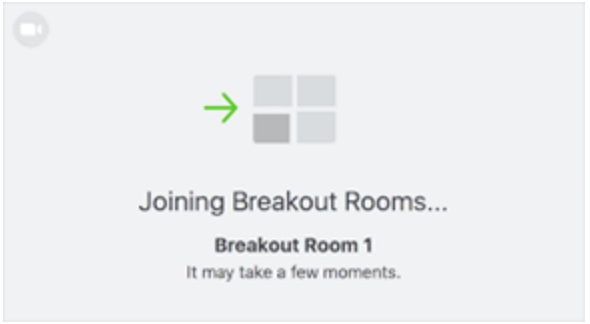
Zoom Features







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Learning Collaborative Overview

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Diabetes Continuum of Care: Communication Strategies to Bridge the Diabetes Health Literacy Gap

Overview of the LC & Timeline

- 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: Communication Strategies to Bridge the Diabetes Health Literacy Gap

Overview of the LC & Timeline

Session #1: Overview of the impact of Health Literacy on Diabetes- **Feb. 2nd, 2021**

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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NTTAP Overviews

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MHP Salud is a national nonprofit organization with over 35 years of experience developing, implementing, and evaluating community-based, culturally tailored Community Health Worker (CHW)/Promotor(a) de Salud programs and promoting the CHW model through training and consultation services.

Mission

MHP Salud promotes the Community Health Worker(CHW) profession nationally as a culturally appropriate strategy to improve health and implements CHW programs to empower underserved Latino communities

Vision

Our populations and their communities will enjoy health without barriers.

Training and Technical Assistance (T/TA)

MHP Salud provides T/TA to FQHCs and other healthcare organizations wishing to start or strengthen their CHW Programs

- Virtual and on-site trainings for CHWs, Program Supervisors and Professions Working with CHWs
- Technical Assistance/Consulting on design, evaluation, and optimization to support the various stages of the implementation process of a CHW program

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

CSH is a national non-profit organization with a mission to advance housing solutions that promote integration among public service systems to deliver three powerful outcomes:

- Improve the lives of vulnerable people
- Maximize public and private resources
- Build strong, healthy communities across the country

Our lines of business include program consultation, training, technical assistance and lending as a community development finance institution.

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

Our Mission:
NCHPH provides training and technical assistance to strengthen the capacity of federally-funded health centers to increase access to health care, eliminate health disparities, and enhance health care delivery for the millions of residents of public and assisted housing.

The goal is to increase the capacity and improve the performance of HRSA supported health center programs and other safety net providers in meeting the specialized health care needs of the public housing residents. The National Center for Health in Public Housing has developed materials for training and education, disseminated best practices and mentored new grantees.

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Session 1 Learning Objectives

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

LEARNING OBJECTIVES

1. Review what health literacy is
2. Identify high-risk groups for Low Literacy
3. Identify the Effects of Low Health Literacy on Patient with Diabetes

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Basics on Health Literacy

What is Health Literacy?

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

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

Low Health Literacy

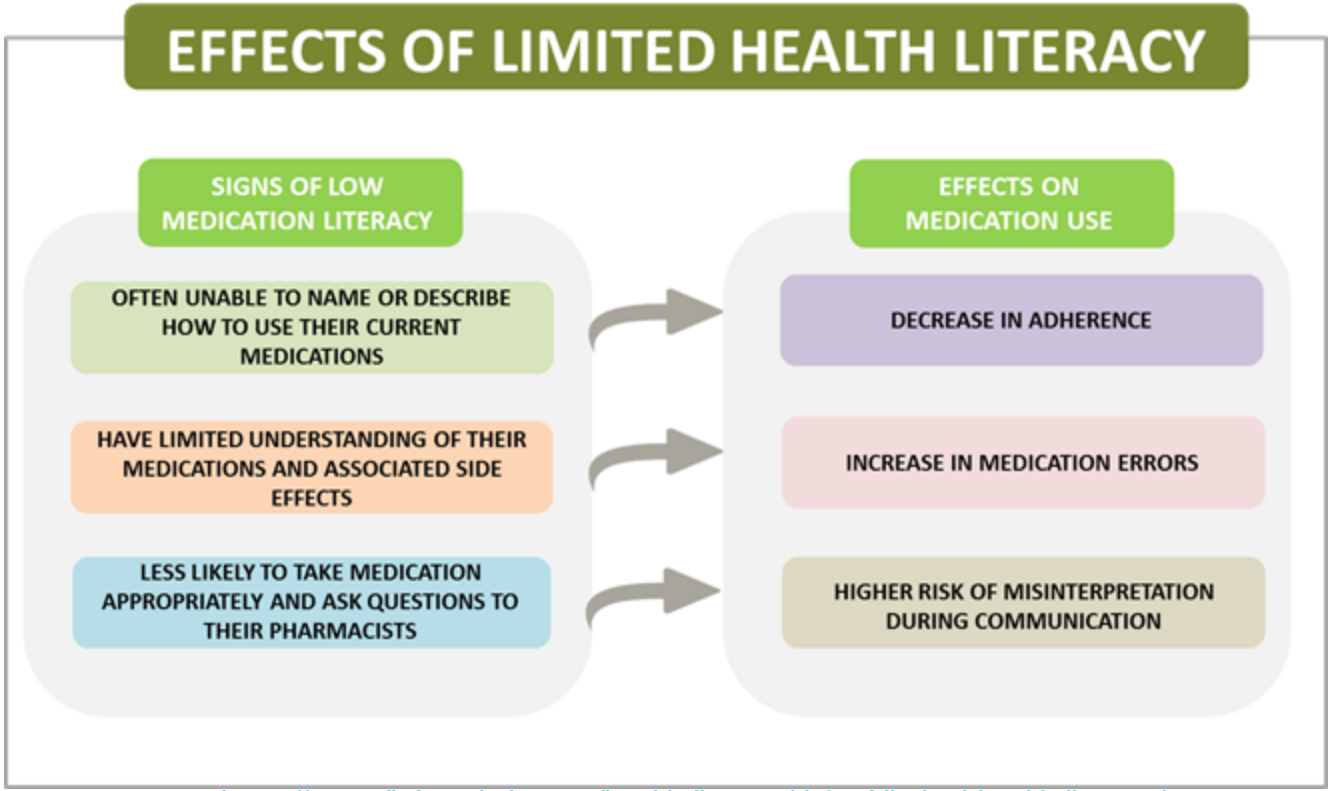
Low health literacy is a barrier to effective patient care

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**

https://www.ahrq.gov/health-literacy/quality-resources/tools/literacy-toolkit/tool3a/index.html

Low Health Literacy

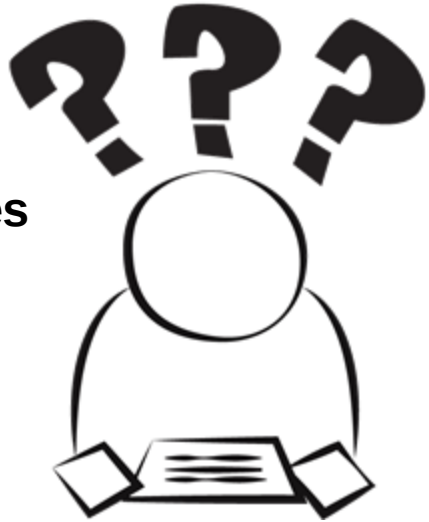


https://www.fipfoundation.org/health-literacy/risk-of-limited-health-literacy/

Low Health Literacy

Individuals with low health literacy are more likely to :

- **To visit an emergency room (ER)**
- **Inappropriately or infrequently use health care services**
- **Face difficulty following medical instructions**
- **Have worse physical and mental health, and have a shorter life expectancy.**



https://clinical.diabetesjournals.org/content/28/4/171

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/

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/

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Health Literacy Impact on Special and Vulnerable Populations Battling Diabetes

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Health Quality and Disparity Report.

2019 National Healthcare Quality and Disparities Report

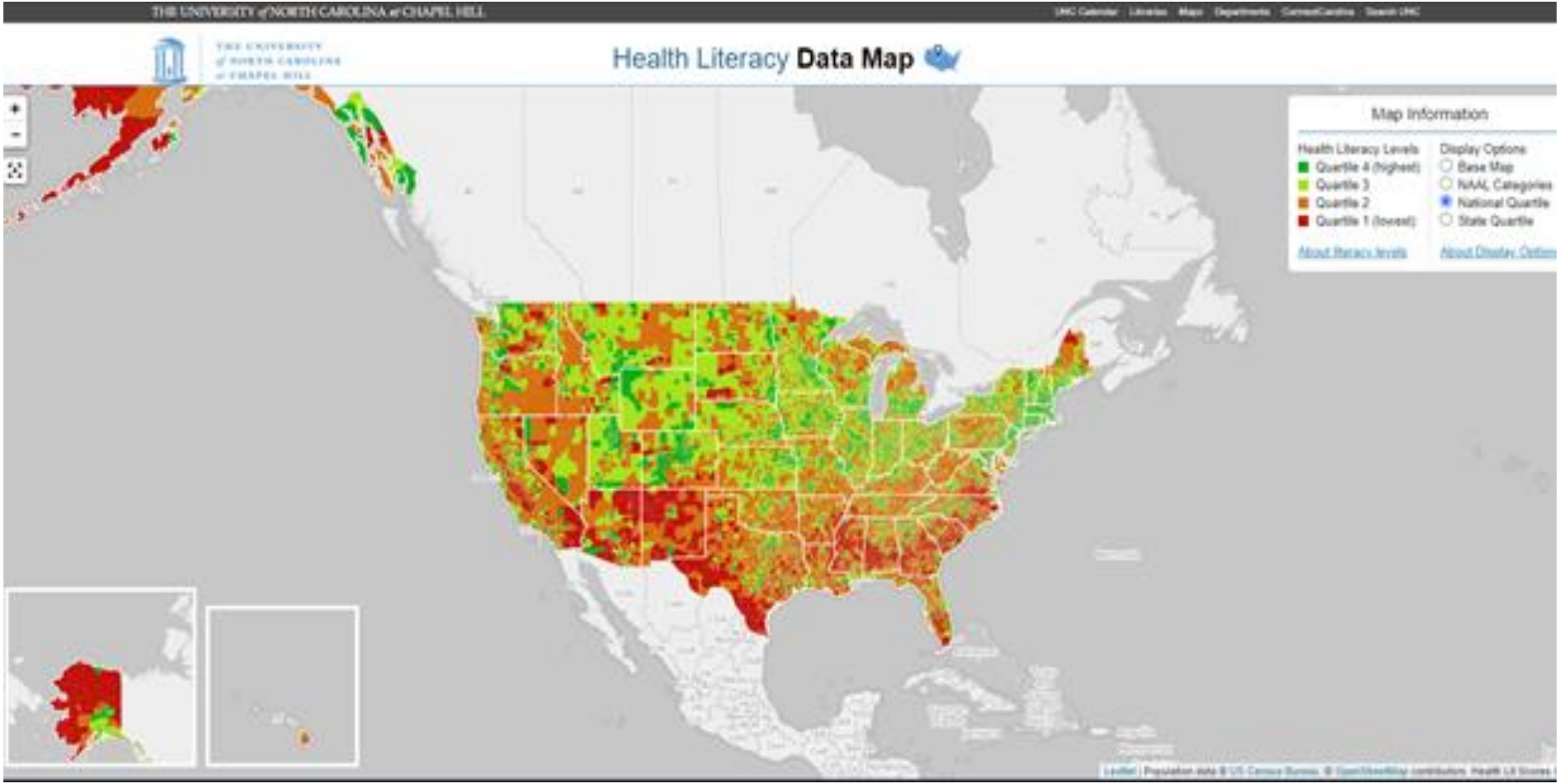
Sub-Area	Measure Title (Data Source)	Baseline Rate and Year	Current Rate and Year	AAPC	P Value
Health Literacy	Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never explained things in a way they could understand (MEPS)	9.0% in 2002	7.4% in 2017	-3.3	0
Health Literacy	Adults who had a doctor's office or clinic visit in the last 12 months whose health providers sometimes or never spent enough time with them (MEPS)	15.3% in 2002	11.0% in 2017	-3.1	0

Sub-Area	Measure Title (Data Source)	Baseline Rate and Year	Current Rate and Year	AAPC	P Value
Health Literacy	Adults who had a doctor's office or clinic visit in the last 12 months whose health providers always asked them to describe how they would follow the instructions (MEPS)	24.4% in 2011	26.6% in 2017	-0.9	0.135
Health Literacy	Adults who had a doctor's office or clinic visit in the last 12 months whose health providers always offered help in filling out forms (MEPS)	14.8% in 2011	15.4% in 2017	-0.3	0.214

Table 3. Home Health Care Measures

Among 9 home health care measures, 4 were improving over time. The 4 outcome measures that improved pertained to adults reporting on how they engaged with their home health providers. Five measures showed no change.

Sub-Area	Measure Title (Data Source)	Baseline Rate and Year	Current Rate and Year	AAPC	P Value
Pain	Adults who reported that home health providers talked about pain in the last 2 months of care (HHCAHPS)	87.5% in 2012	89.8% in 2018	-3.3	0
Caregiving	Adults who reported being told what care and services they would get when they first started getting home health care (HHCAHPS)	88.2% in 2012	89.4% in 2018	-1.5	0.001
Health Literacy	Adults who reported that home health providers always explained things in a way that was easy to understand in the last 2 months of care (HHCAHPS)	82.3% in 2012	83.6% in 2018	-1.3	0


THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL
Health Literacy Data Map
Map Information
Health Literacy Levels
Quartile 4 (highest)
Quartile 3
Quartile 2
Quartile 1 (lowest)
Display Options
Base Map
NAAL Categories
National Quartile
State Quartile

Objective Overview

Add to Custom List

Status: Research

Learn more about our data release schedule

Increase the health literacy of the population

Summary

This objective currently has research status, meaning it is a high-priority public health issue that doesn't yet have evidence-based interventions developed to address it. It may or may not have reliable baseline data available. If both baseline data and evidence-based interventions become available, this objective may become a core Healthy People 2030 objective.

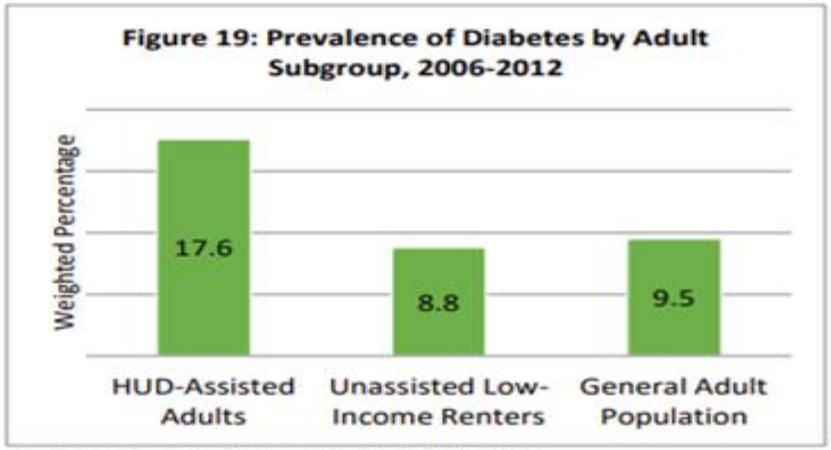
Topics: Health Communication, Social and Community Context

Workgroup: Health Communication and Health Information Technology Workgroup

Other objectives you may be interested in

- Increase the proportion of adults who talk to friends or family about their health — HC/HIT-04
- Decrease the proportion of adults who report poor communication with their health care provider — HC/HIT-02
- Increase the number of state health departments that use social marketing in health promotion programs — HC/HIT-D01
- Increase the proportion of adults whose health care provider checked their understanding — HC/HIT-01
- Increase the proportion of adults whose health care providers involved them in decisions as much as they wanted — HC/HIT-03

Diabetes in HUD-Assisted Facilities



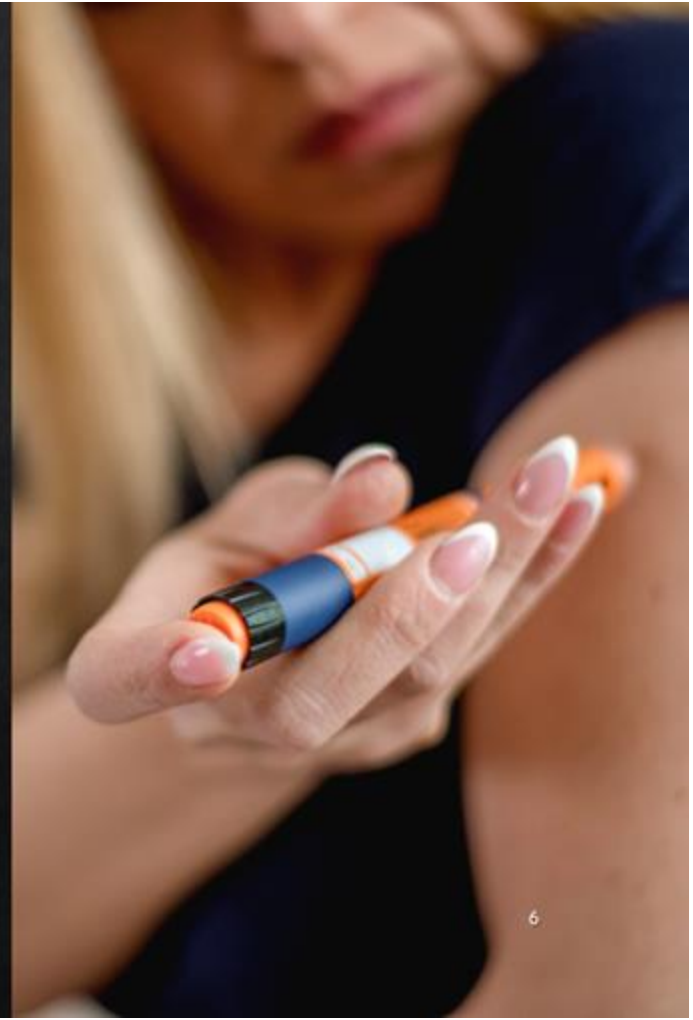
SOURCE: Authors' tabulations of NHIS-HUD Linked Data

Diabetes in Health Centers

A little over 15% of health center (HC) patients have diabetes

32% of HC patients have Poorly Controlled Hemoglobin A1c (HbA1c > 9%)

9% of Public Housing Grantee patients have diabetes



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High-Risk Groups for Low Health Literacy

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

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

Table 1

Measures of Health Literacy and Numeracy in Diabetes

Measure	Items	Measurement Description	Sample	Findings		
				Internal Consistency Reliability	Construct Validity	Predictive Validity
General						
Brief Health Literacy Screen (BHLS[a])[17]	3	Respondents are asked to rate their confidence completing medical forms, state how often they have problems learning, and if they need help completing medical forms.	296 English and Spanish-speaking adults with T2DM[b] [17]	N/A	Each BHLS item and the BHLS summative score were associated health literacy (STOFHLA[c]) [17]	N/A
Brief Measures of Print Literacy and Numeracy[18]	3 (HL[d]), 4 (HN[e])	3 item HL screener adapted from Chew et al.[19] 4 item HN items adapted from Lipkus[20] and STOFHLA[c] [21]	3,033 American Indian and Alaska Natives[18]	α = 0.67 for HL[d] items[18]	Both HL[d] and HN[e] associated with key demographics (age, education level, income) and diabetes and other disease related knowledge[18]	N/A
Newest Vital Sign (NVS[f]) [22]	6	Respondents are asked to read and interpret a nutritional label.	205 adults with diabetes[22]	N/A	NVS associated with educational attainment and health literacy (STOFHLA[c], r =.54)[22]	N/A
Rapid Estimate of Adult Literacy in Medicine (REALM[g])[23]	66	Respondents read medical words, and a correct response is given for each correct pronunciation.	240 adults with diabetes[23]	N/A	REALM associated with health literacy (SKILLD[h])[23]	N/A
Rapid Estimate of Adult Literacy in Medicine - revised (REALM-R[i])[24]	8	Respondents read medical words, and a correct response is given for each correct pronunciation.	125 adults with T2DM[b]; 71% AA; 68% less than HS[24]	α=0.95; item-test correlations, r=0.78-0.91[24]	N/A	REALM-R[i] associated with diabetes knowledge, but not A1C[24]
Rapid Estimate of Adult Literacy in Medicine - short form (REALM-SF[j])[22]	7	Respondents read medical words, and a correct response is given for each correct pronunciation.	243 adults with diabetes[22]	N/A	REALM-SF associated with educational attainment and health literacy (STOFHLA[c], r =.48)[22]	N/A
Single-Item Literacy Screener (SILS[k])[25]	1	Respondents rate how often they need to have someone help them read instructions, pamphlets, or other written material from their doctor or pharmacy.[26]	225 adults with diabetes[25]	N/A	SILS was associated with health literacy (STOFHLA[c]) [25]	N/A
Short Estimate of Functional Health Literacy in Adults (STOFHLA[c])[17,22,25,27,28]	41	Respondents read two health-related passages, and complete 37 Cloze items and 4 numeracy items.	180 adolescents with asthma and diabetes[27]	N/A	N/A	STOFHLA[c] associated with intent to use online health resources[27]
			225 adults with diabetes[25]	N/A	Low scores on the STOFHLA[c] associated with black race, lower self-rated reading ability, lower educational attainment, and health literacy (SILS[k])[25]	N/A
			490 adults with diabetes[22]	N/A	STOFHLA[c] associated with educational attainment and health literacy (NVS[f] [n=205, r=.54] and REALM-SF[j] [n=240, r =.48])[22]	N/A

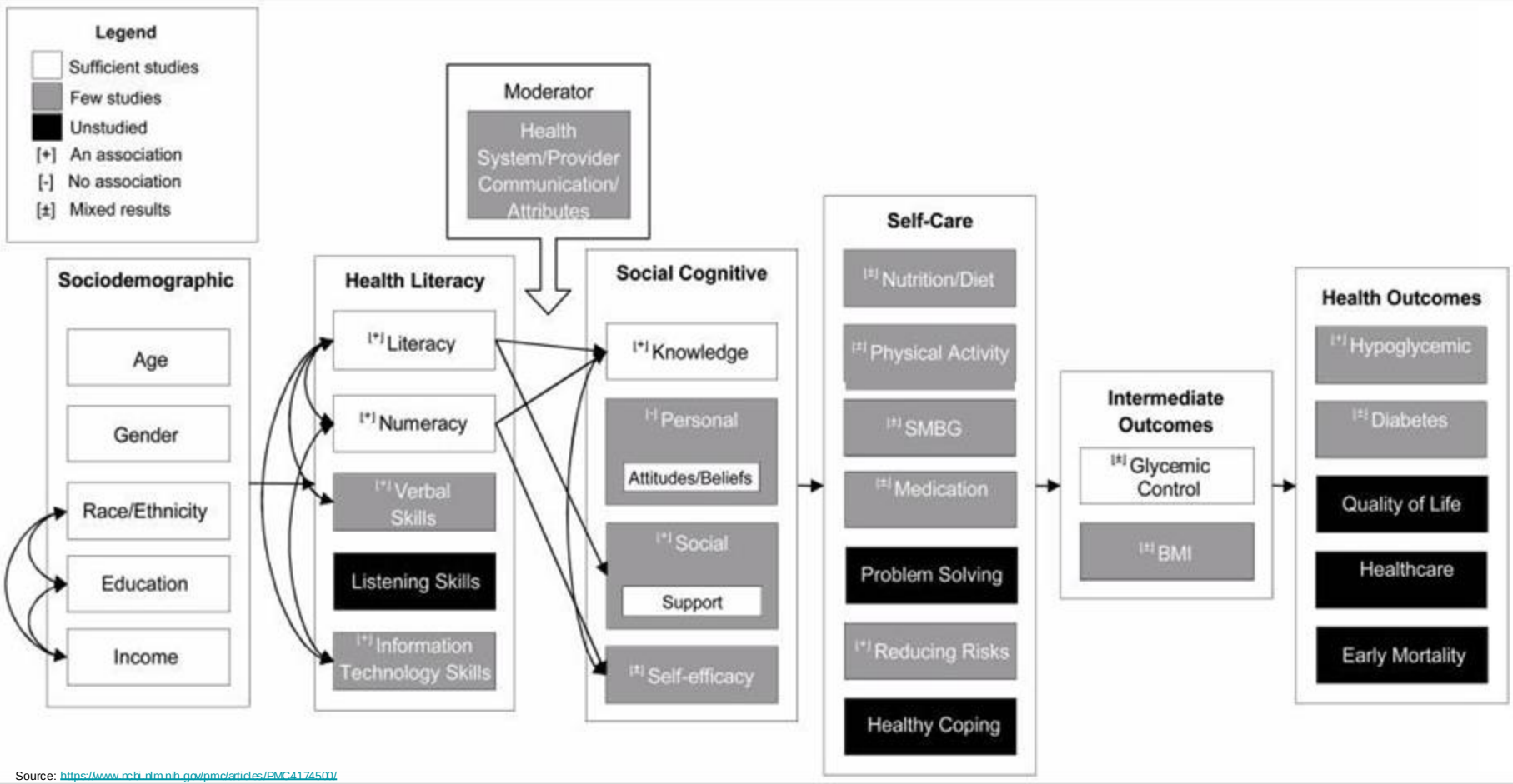
Source: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4174500/

Diabetes among vulnerable populations

According to a 2020 report released by the Centers for Disease Control and Prevention (CDC), diabetes cases are increasing rapidly in the United States.

- 34.2 million, or 10.5% of the adult US population has diabetes and 88 million Americans have prediabetes.
- For Hispanic/Latino adults, these numbers are even more alarming—prevalence of diabetes is 14.7% which is 2.8% higher than Non- Hispanic Whites (9.4%).
- Hispanics/Latinos are also more likely to develop this chronic disease at a younger age and experience more complications related to diabetes (e.g. vision loss, amputation, etc.).
- Diabetes is a prevalent health issue among Migrant and Seasonal Agricultural Workers.
- Approximately 51% of farmworkers are Hispanic/Latino and about 88% are of Mexican descent.
- This is significant because among Hispanic adults, Mexican Americans have the highest prevalence of diabetes (14.4%)

Effect of Health Literacy on Patients with Diabetes



Source: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4174500/

Case Study

SA, a 24-year-old woman with dyslipidemia, prediabetes and other obesity-related chronic conditions, presented to her local Medicaid clinic 3 weeks after beginning statin therapy. The clinic's nurse practitioner enthusiastically showed SA her most recent blood test results. "As you can see from the data," said the clinician, "your LDL-c concentration decreased from 172 mg/dL to 130 mg/dL, and your HDL-c concentration increased by 12%. Your statin is working, and we're getting closer to the NCEP ATP-III target levels for cholesterol. Let's see whether the levels continue to improve over the next month."

From the positive tone of the clinician's voice, SA knew that this was very good news. However, she did not understand the report's details or the nurse practitioner's messages about her cholesterol levels. Having dropped out of high school to work full-time for her family, SA had little prior exposure to health information. She did not own a computer, and she was not inclined to use Internet resources at her community's public library. In response to her mother's questions about her clinic visit, SA replied that her cholesterol was all better and that she didn't need to take her medicine anymore.

What strategies can clinicians follow to avoid this sort of miscommunication with patients?

Case Study Discussion - Strategies

- **Avoid overwhelming patients with information and technical jargon.**
- **Take a patient-centered approach to communication.**
- **Check for patient understanding.**
- **Use the "teach-back" strategy.**
- **Use multimedia teaching tools.**

Diabetes and Health Literacy

- Clinicians and diabetes care and education specialists should ensure they provide easy-to-understand information and reduce unnecessary complexity when developing care plans with patients.
- Interventions addressing low health literacy in populations with diabetes seem effective in improving diabetes outcomes, including ones focusing primarily on patient education, self-care training, or disease management.
- Combining easily adapted materials with formal diabetes education demonstrates effectiveness on clinical and behavioral outcomes in populations with low literacy.

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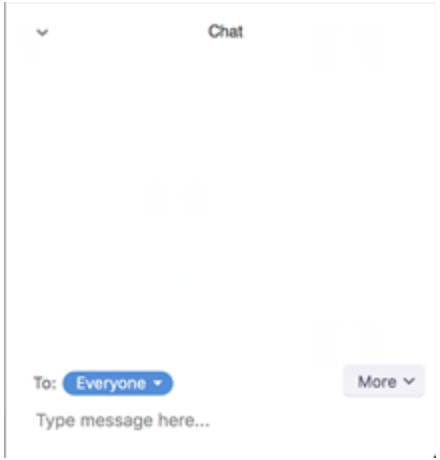
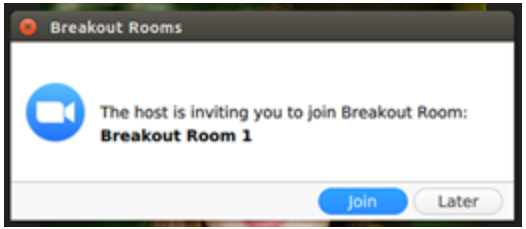
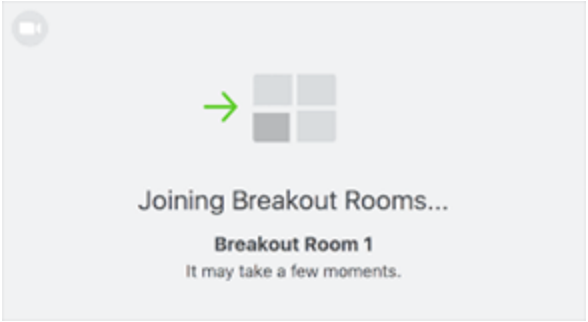
Breakout Sessions

Zoom Features







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

Breakout Session Questions

- What are your health center's needs and challenges?
- Do you have a health Literacy Assessment Plan?
- What type of diabetes initiatives/programs your health center currently perform? Successes and challenges?
- What special populations do you serve?
- Do you track racial disparities within your patient population? If so, are there any noticeable trends arounds these disparities? What interventions have been implemented to address these disparities?

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Take-home Questions

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

Reflection Questions

Between now and the next session (February 16th), reflect on the following questions:

- What role does health literacy play in self-care and glycemic control?
- Are you aware of the Rapid Estimate of Adult Literacy in Medicine (REALM)?
- What are strategies to combat language barriers?

+

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:

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At the end of this webinar, please complete the evaluation form. Your feedback is greatly appreciated