



CARDI•OH

Ohio Cardiovascular and Diabetes Health Collaborative



In partnership with:



Cardi-OH ECHO

Your Patient with Diabetes at Risk for Heart Disease: A Series of Case Discussions

September 30, 2021

Cardi-OH ECHO Team and Presenters



FACILITATOR

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Laura Marsan, NP

Crossroad Health Center

Fall 2021 Cardi-OH ECHO Participant Sites



- 1 MetroHealth Bedford Internal Medicine**
Bedford, OH
- 2 MetroHealth Broadway Family Medicine Clinic**
Cleveland, OH
- 3 University Hospitals MacDonald Women's Hospital**
Cleveland, OH

- 4 SRMC Internal Medicine Center**
Salem, OH
- 5 Heart of Ohio Family Health**
Whitehall, OH
- 6 Crossroad Health Center**
Harrison, OH
- 7 Crossroad Health Center**
Cincinnati, OH

- 8 Five Rivers Family Health Center**
Dayton, OH
- 9 University of Toledo General Internal Medicine**
Toledo, OH
- 10 University of Toledo Comprehensive Clinics**
Toledo, OH

Structure of ECHO Clinics

Duration	Item
5 minutes	Introductions and announcements
10 minutes	Didactic presentation, followed by Q&A
40 minutes (20 minutes per case)	Patient case study presentations and discussions
5 minutes	Reminders and Post-Clinic Survey

Disclosure Statements



- The following planners, speakers, and/or content experts of the CME activity have financial relationships with commercial interests to disclose:
 - Marilee Clemons reports receiving consulting fees from Novo Nordisk.
 - Kathleen Dungan, MD, MPH reports receiving consulting fees from Eli Lilly, Novo Nordisk and Boehringer, research support from Sanofi, , Viacyte, and Abbott and presentation honoraria from UpToDate, Elsevier, ACHL, and CMHC.
 - Adam T. Perzynski, PhD reports being co-owner of Global Health Metrics LLC, a Cleveland-based software company and royalty agreements for book authorship with Springer Nature publishing and Taylor Francis publishing.
 - Christopher A. Taylor, PhD, RDN, LD, FAND reports grant funding for his role as a researcher and presenter for Abbott Nutrition and grant funding for research studies with both the National Cattleman's Beef Association and the American Dairy Association Mideast.
 - Jackson T. Wright, Jr., MD, PhD reports receiving fees for serving as an advisor to Medtronic.
 - These financial relationships are outside the presented work.
- All other planners, speakers, and/or content experts of the CME activity have no financial relationships with commercial interests to disclose.

Person-Centered Language Recommendations



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The ADA and the APA recommend language that emphasizes inclusivity and respect:

- **Gender**: Gender is a social construct and social identity; use term “gender” when referring to people as a social group. Sex refers to biological sex assignment; use term “sex” when referring to the biological distinction.
- **Race**: Race is a social construct that is broadly used to categorize people based on physical characteristics, behavioral patterns, and geographic location. Race is not a proxy for biology or genetics. Examining health access, quality, and outcome data by race and ethnicity allows the healthcare system to assist in addressing the factors contributing to inequity and ensure that the health system serves the needs of all individuals.
- **Sexual Orientation**: Use the term “sexual orientation” rather than “sexual preference” or “sexual identity.” People choose partners regardless of their sexual orientation; however, sexual orientation is not a choice.
- **Disability**: The nature of a disability should be indicated when it is relevant. Disability language should maintain the integrity of the individual. Language should convey the expressed preference of the person with the disability.
- **Socioeconomic Status**: When reporting SES, provide detailed information about a person’s income, education, and occupation/employment. Avoid using pejorative and generalizing terms, such as “the homeless” or “inner-city.”

Literacy, Numeracy and Diabetes



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Objectives

1. Describe the scope and impact of poor health literacy upon self-management of type 2 diabetes.
2. Define patient numeracy.
3. Describe the impact of poor patient numeracy in the self-management of type 2 diabetes.

Health Literacy



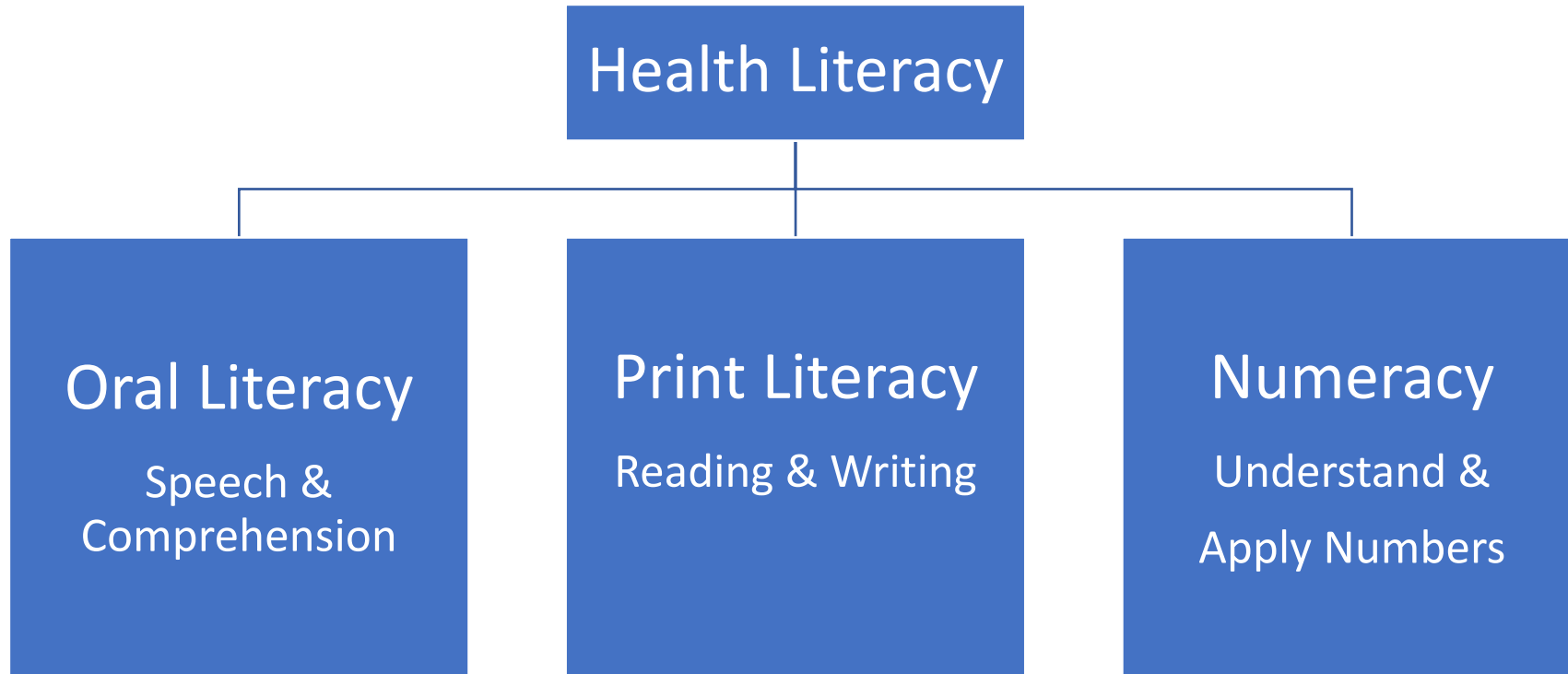
- The degree to which people have the capacity to obtain, process, and understand basic health information and services to make appropriate health decisions.
- Low health literacy in adults with type 2 diabetes:
 - Global prevalence: 34.3%
 - US prevalence: 28.9%
 - Education mediates the relationship between health literacy and health outcomes.

Impact on Type 2 Diabetes

- Lower health literacy associated with:
 - Less diabetes knowledge
 - Higher A1C levels
 - Decreased exercise and foot care*
 - Difficulty communicating and understanding medical terms
 - Less desire to participate in shared decision-making

*Significant in studies using self-report measures

Types of Health Literacy



Numeracy in its Various Forms



- Broadly:
 - the ability to understand and work with numbers
- Health numeracy:
 - Health numeracy is the degree to which individuals have the capacity to access, process, interpret, communicate, and act on numerical, quantitative, graphical, biostatistical, and probabilistic health information needed to make effective health decisions.

Physician/Health Professional Numeracy



> [Acad Med.](#) 2010 Nov;85(11):1794-9. doi: 10.1097/ACM.0b013e3181e7218c.

Physician numeracy as the basis for an evidence-based medicine curriculum

[Goutham Rao](#) ¹, [Steven L Kanter](#)

[Affiliations](#) + [expand](#)

PMID: 20671540 DOI: [10.1097/ACM.0b013e3181e7218c](#)

Common Numeracy Skills

- Skills:
 - Numeration/counting/hierarchy
 - Calculation (addition, subtraction, multiplication, division)
 - Understanding time/dates
 - Reading graphs/tables/figures/measurement
 - Using fractions/decimals/percentages/proportions
 - Understanding probability
 - Higher order mathematics (algebra, geometry, calculus, etc.)
- Applied (Contextual) Skills
 - Performing multi-step math problems
 - Estimation
 - Applying logic
 - Ability to interpret/infer mathematics from problem/situation, problem solving

Scope of the Problem



- Given a bus schedule, 32% of adults cannot figure out the duration of a ride. (110 million Americans)
- Low numeracy strongly associated with poor diabetes control

So What Should We Do?

- Awareness
- Assessment

Question 1

You are told to follow the sliding scale shown here. The sliding scale indicates the amount of insulin you take based upon your blood sugar levels.

If Blood sugar is:	Units of Insulin
130-180	0
181-230	1
231-280	2
281-330	3
331-380	4

How much insulin would you take for a blood sugar of 295?

ANSWER ____ units

Correct answer: 3 units

Percent answered correctly 85%



Thank you!

Questions/Discussion