KENTUCKY DIABETES NETWORK
www.kydiabetes.net

# Overcoming Implicit Bias in Diabetes Care


**Shana Nicholson, MSN, RN**
Certified Diabetes Care and Education Specialist
Master Licensed Diabetes Educator
Certified Lifestyle Coach
Progressive Care Certified Nurse

# Disclosure to Participants

- Notice of Requirements For Successful Completion
  - Please refer to learning goals and objectives
  - Learners must attend the full activity and complete the evaluation in order to claim continuing education credit/hours
- Conflict of Interest (COI) and Financial Relationship Disclosures:
  - I have no COIs to report
- Non-Endorsement of Products:
  - Accredited status does not imply endorsement by AADE, ANCC, ACPE or CDR of any commercial products displayed in conjunction with this educational activity
- Off-Label Use:
  - Participants will be notified by speakers to any product used for a purpose other than for which it was approved by the Food and Drug Administration.

KDN
KENTUCKY DIABETES NETWORK
www.kydiabetes.net

# Learning Objectives

***After completion of this activity, participants should be able to:***

1. Summarize implicit biases influence on the healthcare environment
2. Self-reflect, assess, acknowledge, and overcome internal implicit bias in patient care
3. Estimate implicit bias influence on technology offerings in diabetes care
4. Evaluate implicit bias and weight stigma in diabetes care
5. Apply use of validated tools to overcome implicit bias and promote diabetes care

KDN
KENTUCKY DIABETES NETWORK
www.kydiabetes.net

# Where does this person live?









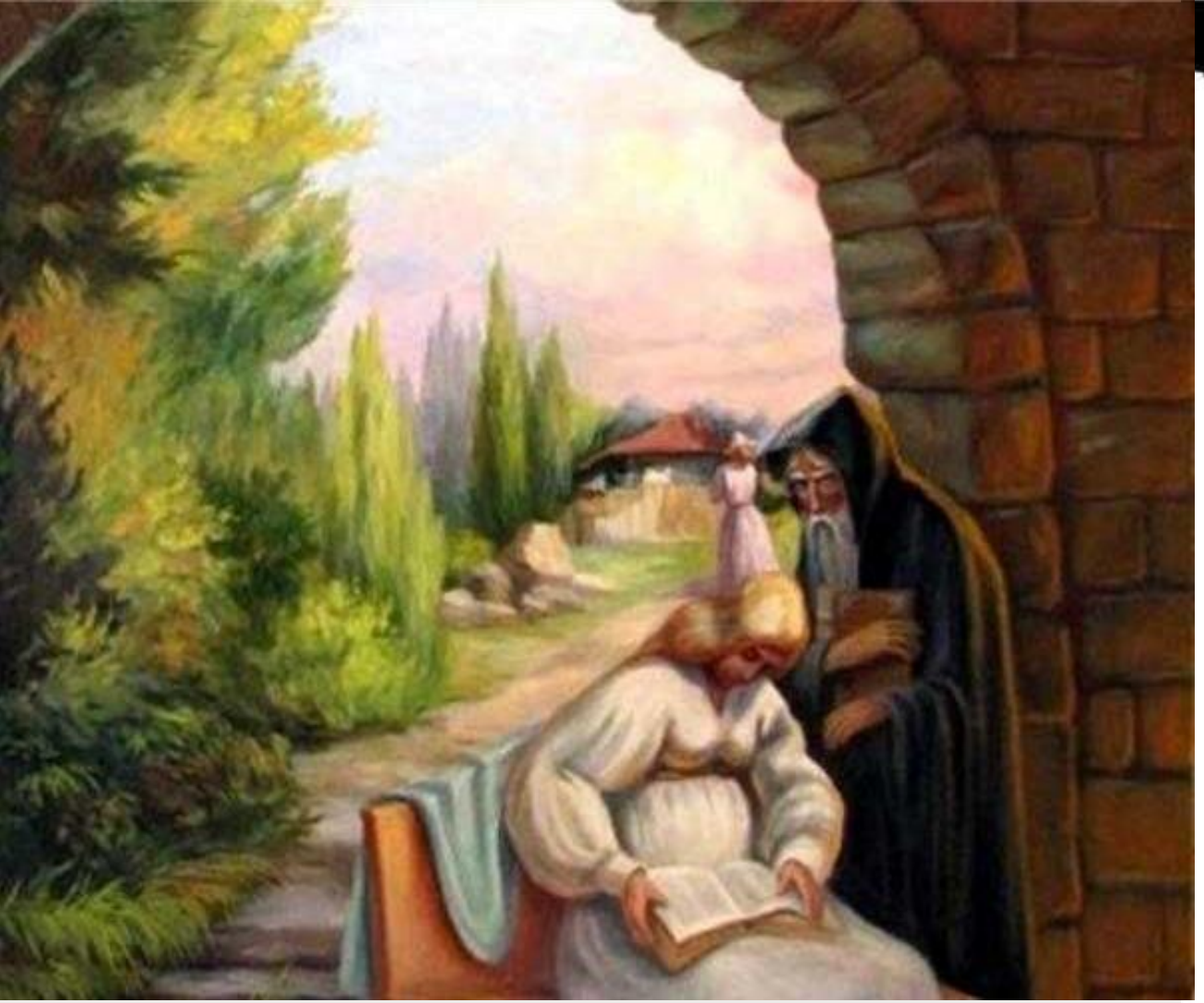
# Where does this person live?













**What do you see?**

**How do you feel?**

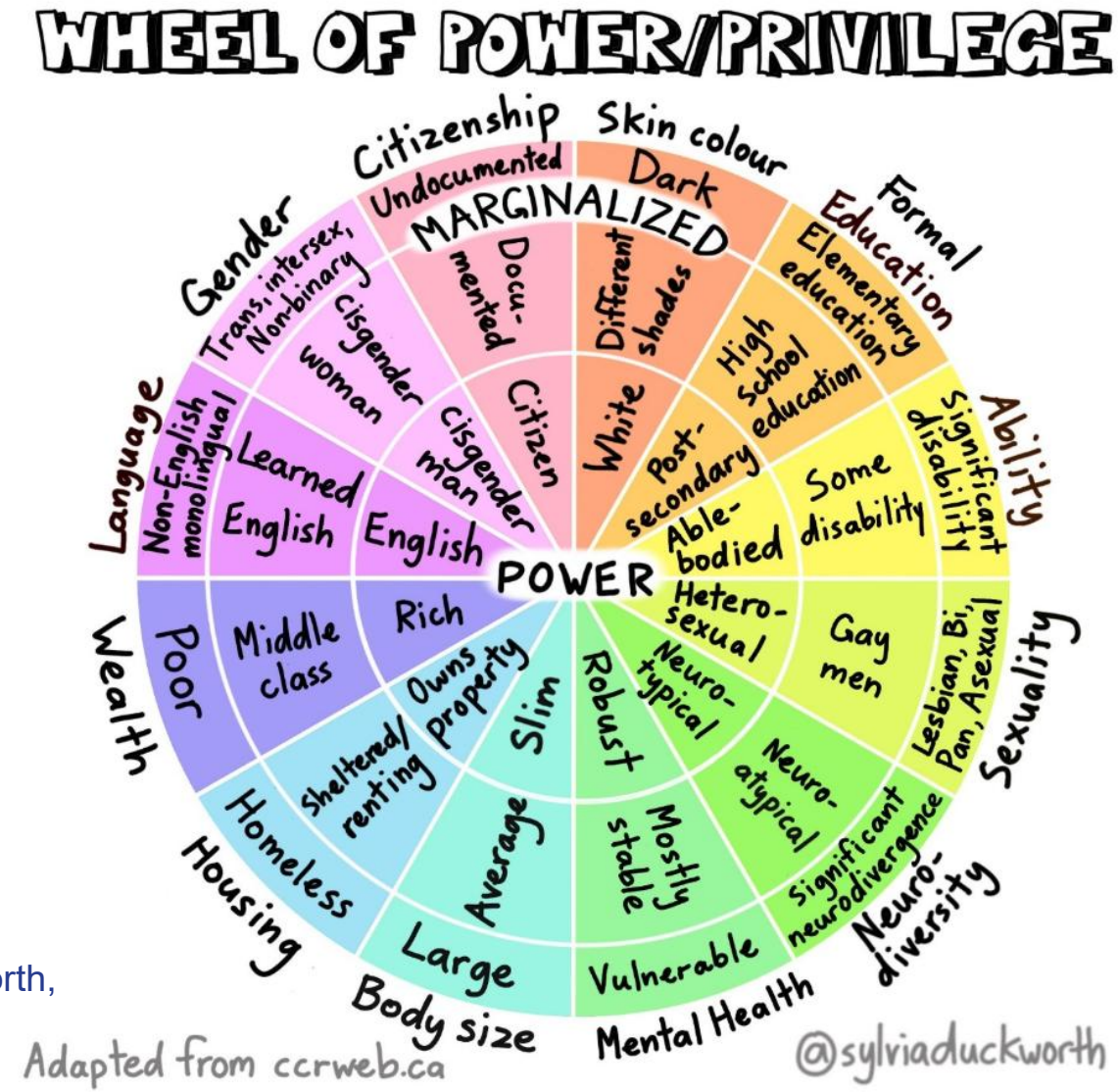
# What is BIAS?

Attitudes, behaviors, and actions that are prejudiced in favor of or against a person or group of people compared to another

# Who is at risk?

- ✓Patients
- ✓Health Care Professionals (HCPs)
- ✓Health Care Systems

# Who Are Most Vulnerable




- The wheel is in constant motion
- A person and/or group can move up or down the wheel
- The unconscious and systematic promotion or demotion of a subgroup influences the wheel
- Depression of one group causes an elevation of another group

(Duckworth, 2020)

# Where Do You Fall on the Wheel?

| Identity Categories | Most Power | Neither the most powerful nor the least powerful | Least Power |
|---|---|---|---|
| Citizenship | Citizen | Documented | Undocumented |
| Skin colour | White | Different shades | Dark |
| Formal Education | Post-Secondary | High school | Elementary |
| Ability | Able-Bodied | Some disability | Significant disability |
| Sexuality | Heterosexual | Gay men | Lesbian, bi, pan, asexual |
| | | | |
| Neurodiversity | Neurotypical | Some neurodivergence | Significant neurodivergence |
| Mental health | Robust | Mostly stable | Vulnerable |
| Body size | Slim | Average | Large |
| Housing | Owns property | Sheltered/renting | Homeless |
| Wealth | Rich | Middle Class | Poor |
| Language | English | Learned English | Non-English monolingual |
| Gender | Cisgender man | Cisgender woman | Trans, intersex, nonbinary |

(Duckworth, 2020)

# Marginalized Populations in Health Care

## ✓Racial and Ethnic Minorities

- Stereotypes lead to perceptions of less than
  - Less intelligence
  - Less motivation
  - Less health interest

## ✓Patients with Obesity

- Weight bias influencing
  - Physical examination procedures
  - Medical equipment appropriateness
  - Perceptions of motivation

(Caballero et al., 2024)

# Healthcare Impact of Biases

## Contributes to

- Verbal and nonverbal disrespect
- Questioning
- Stereotyping
- Refusal of care
- Disparities in empathy, adherence, and quality of care

## Influences

- Patient-clinician communication
- Clinical decision making
- Institutionalized practices

(Caballero et al., 2024)

# Three Main Types of Bias



- Explicit Bias
- Microaggressions
- Implicit Bias



## Explicit Bias

- Conscious belief
- Deliberate preference and attitude
  - Outward, identified and communicated

## Stereotype

- Fixed set of attributes or characteristics associated with a group of people

# Implicit Bias



Implicit Bias

# Implicit Bias

- **Unconscious**
  - Unconscious mental process leading to association, attitude and/or belief that adversely influences the perception of a person or a group of people
- **Automatic**
  - Implicit biases are formed when you make subconscious generalizations that attribute certain characteristics to specific groups of people.

Overall, the unconscious thought process is a cognitive strategy intended to make quick judgements to act on.  Over time and with repeated reinforcement, these thought processes become involuntary and significantly impact decision making

# Microaggressions



Microaggressions

# Microaggressions

## 1. Microinvalidations

**Most prevalent microaggression consisting of comments that reject or refute the person's lived experience**

- "Anyone can be successful if they just work hard enough"
- "You don't look ….."

## 2. Microinsults

**Insults that are often indirect and/or unintentional**

- "Wow, your English is great"
- "You are great with numbers for a girl"

## 3. Microassults

**Slights or insults that are deliberate in nature and induces hurt and harm**

- "Immigrants are taking all of our jobs"
- "Why don't they go back to their own country"

(López González,

# Effects of Microaggressions on Physical and Mental Wellbeing

- Chronic stress
- High BP
- GI issues
- Sleeping problems
- Anxiety
- Depression

- PTSD
- OCD
- Substance use disorder
- Low self-esteem
- Suicide

(López González, 2024)

# Implicit Bias in Diabetes Care

- Outside of conscious awareness
- Negatively impacts perceptions of individual patients or groups of patients
- Influences patient interactions
- Influences treatment recommendations
- Undermines patient outcomes

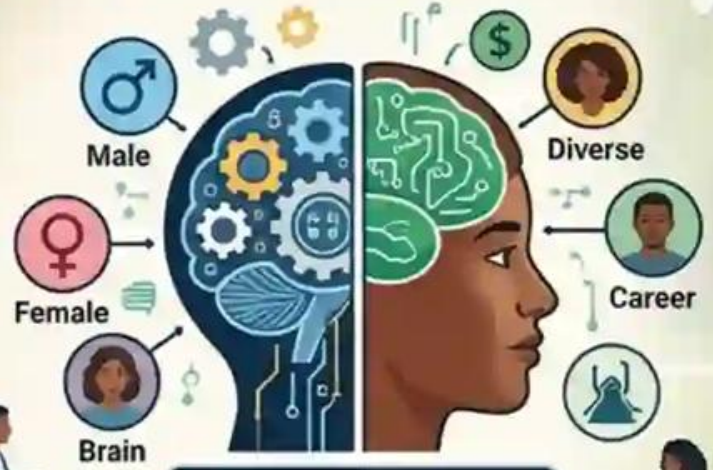
# Implications

- Studies show disparities in empathy and quality care are highly correlated in marginalized populations
  - ✓ **Race**
  - ✓ **Ethnicity**
  - ✓ **Obesity**

(Caballero et al., 2024)

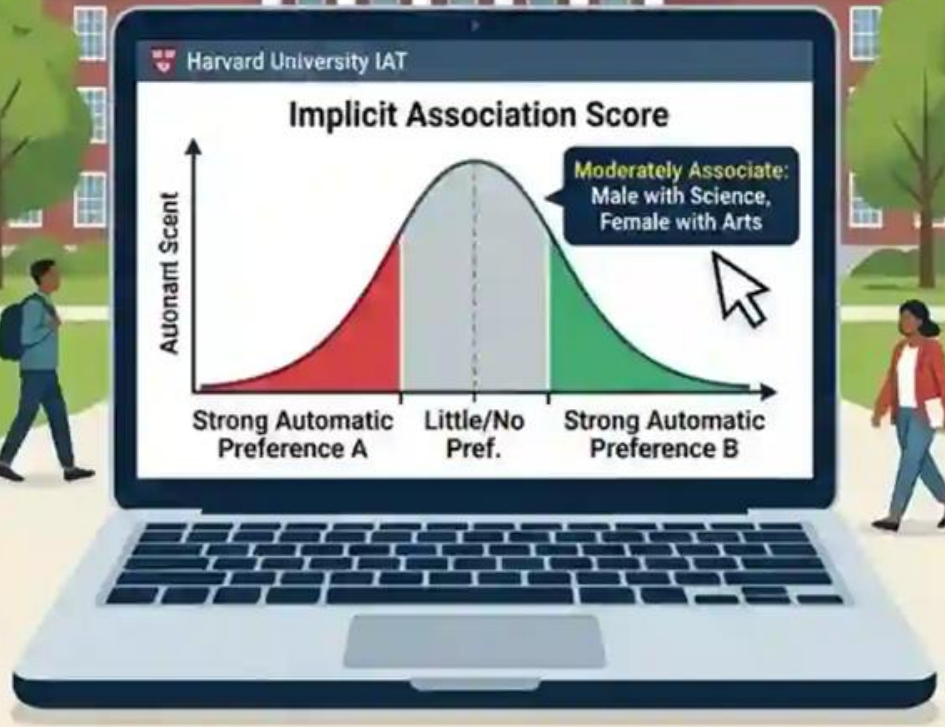
# HARVARD IMPLICIT BIAS TEST EXPLAINED

## 1. MEANING




- Unconscious Stereotypes & Attitudes
- **Automatic Associations** we make
- **Implicit Association Test (IAT)** measures response speed

## 2. RESULTS & INTERPRETATION




- IAT Score indicates strength of unconscious bias
- Compares reaction times to different pairings
- Reflects **deep-seated cultural associations**

## 3. REAL-WORLD IMPACT




**Workplace:** Unconscious bias in hiring, performance reviews



**Justice System:** Impact on legal decisions, sentencing



**Healthcare:** Differences in patient care & treatment




**Understanding and Reducing Bias**

https://implicit.harvard.edu/implicit/takeatest.html

# Research Study Influence on Patient Care

## Implicit Association Test (IAT)

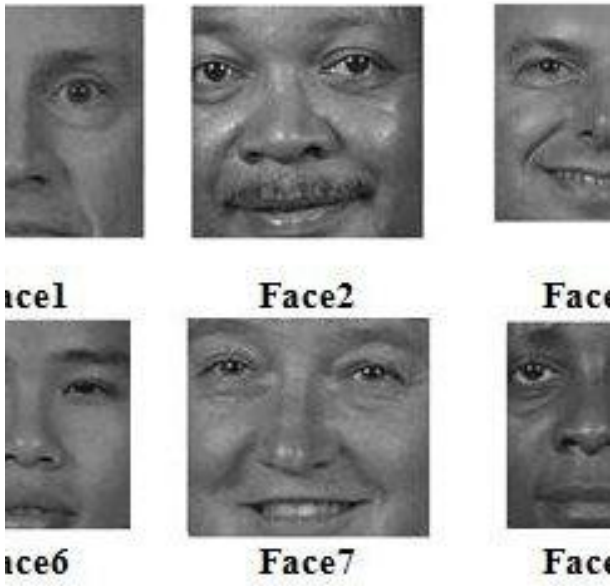
- Originally developed in 1998
- Measures implicit bias and stereotypes across social categories

### Findings show disparities in:

- Empathy
- Treatment Recommendations
- Adherence Expectations

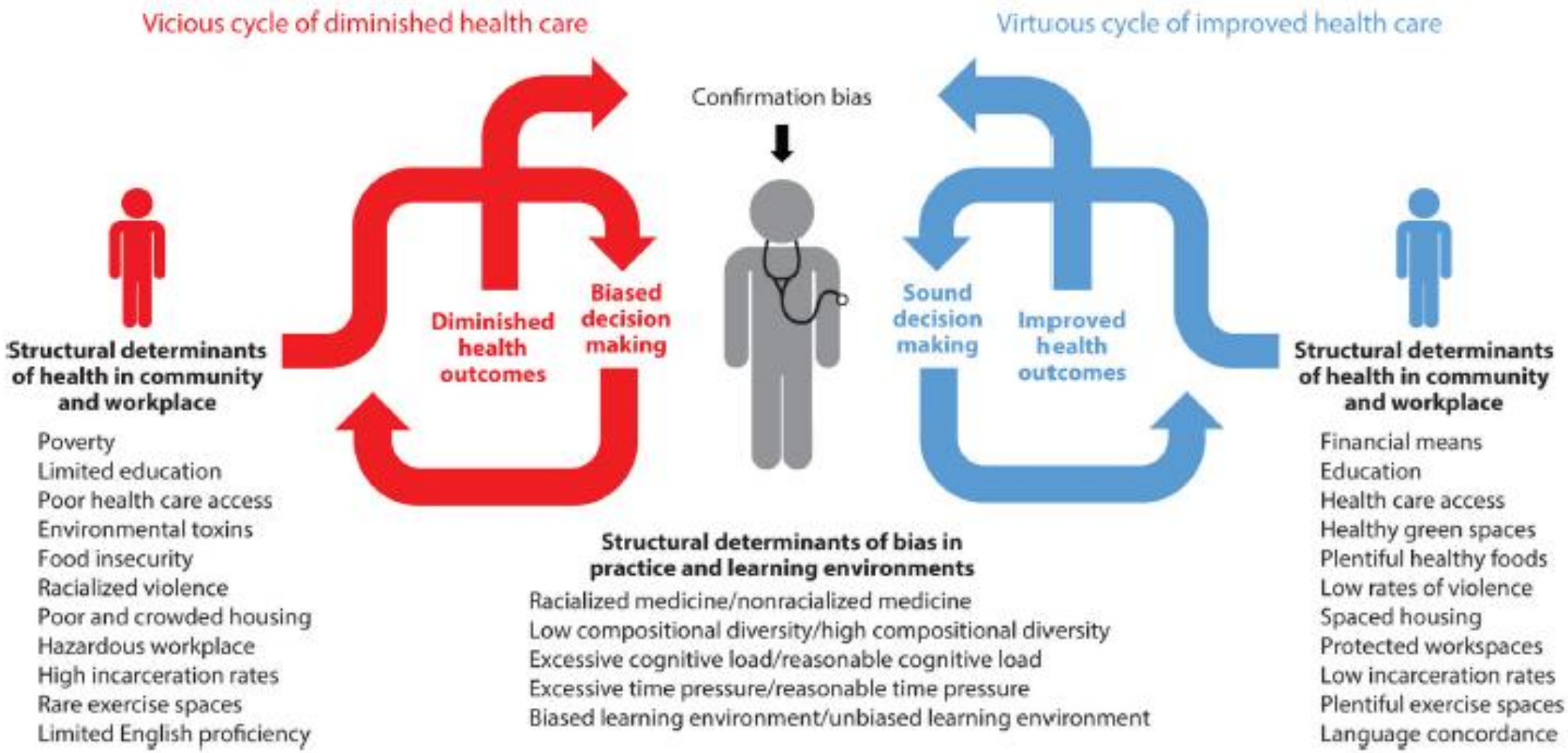
### Outcomes

- Fewer patient-centered interactions
- Verbal dominance by the HCP
- Decrease in patient self decision making
- Less intensive lifestyle modification approaches
- Less pharmacological approaches




(Vela et al., 2022)

# Structural Determinants & Provider Implicit Bias




(Vela, et al., 2022)

# Patient Bias towards HCP

Language or Behaviors Towards Clinicians

- Refusal of care
- Explicitly biased remarks
- Questioning the role of the clinician
- Inquiries into background
- Flirtatious remarks



# Bias Implications

- Burnout
- Emotional burden
- Withdrawal from roles
- Decrease in clinical learning

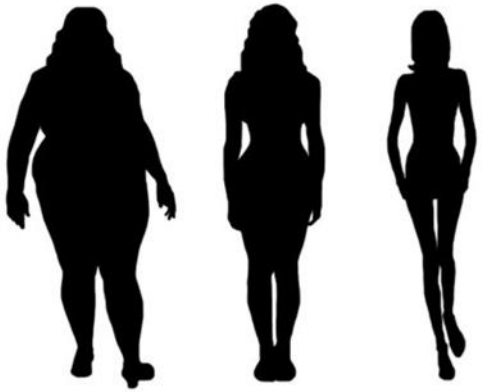
(Caballero et al., 2024)



Obese patient - Search Images

# Weight Bias in Health Care

# Weight Bias in Healthcare



## Weight Stigma

- Impaired quality of life
- Poor mental health outcomes
- Elevated risk of physiological stress, eating disorders, depression and anxiety

## Weight-related Self-Stigma also known as Weight Bias internalization (WBI)

- Psychological distress
- Adverse health outcomes
- Avoidance of health-seeking behaviors including physical activity and routine check-ups leading to clinical attrition
- Body image dissatisfaction

(Sims et al., 2025)

# Research Findings



## Subjective and objective physical assessment

- Lack of sensitivity leading to patient feelings of shame and embarrassment
- Gowns and medical equipment that are not appropriately sized
- Perceptions of motivation

## Survey of 2,449 overweight or obese people 69% reported feeling a weight bias by the physician

- 46% reported feeling a weight bias by the nurse
- 37% reported feeling a weight bias by the registered dietitian
- 21% reported feeling a weight bias by other HCPs

## Healthcare Provider Findings

- Weight loss specialists identified as having significant pro-thin, anti-fat implicit bias on AIT
- Survey of 1,227 patients with Type 2 Diabetes reported weight stigma and diabetes self-stigma leading to diabetes distress, decreased diabetes self-management, decreased self-efficacy and decreased glycemic control
- Marginalized patients with T2D had an increased risk of being labeled “noncompliant”

(Caballero et al.,



# Diabetes Tech Bias

Diabetes Tech Bias - Search Images

# Technology Bias in Diabetes Care

## Do you make preconceived treatment decisions regarding diabetes technology based on:

- Chart review
- Patient appearance
- Insurance status

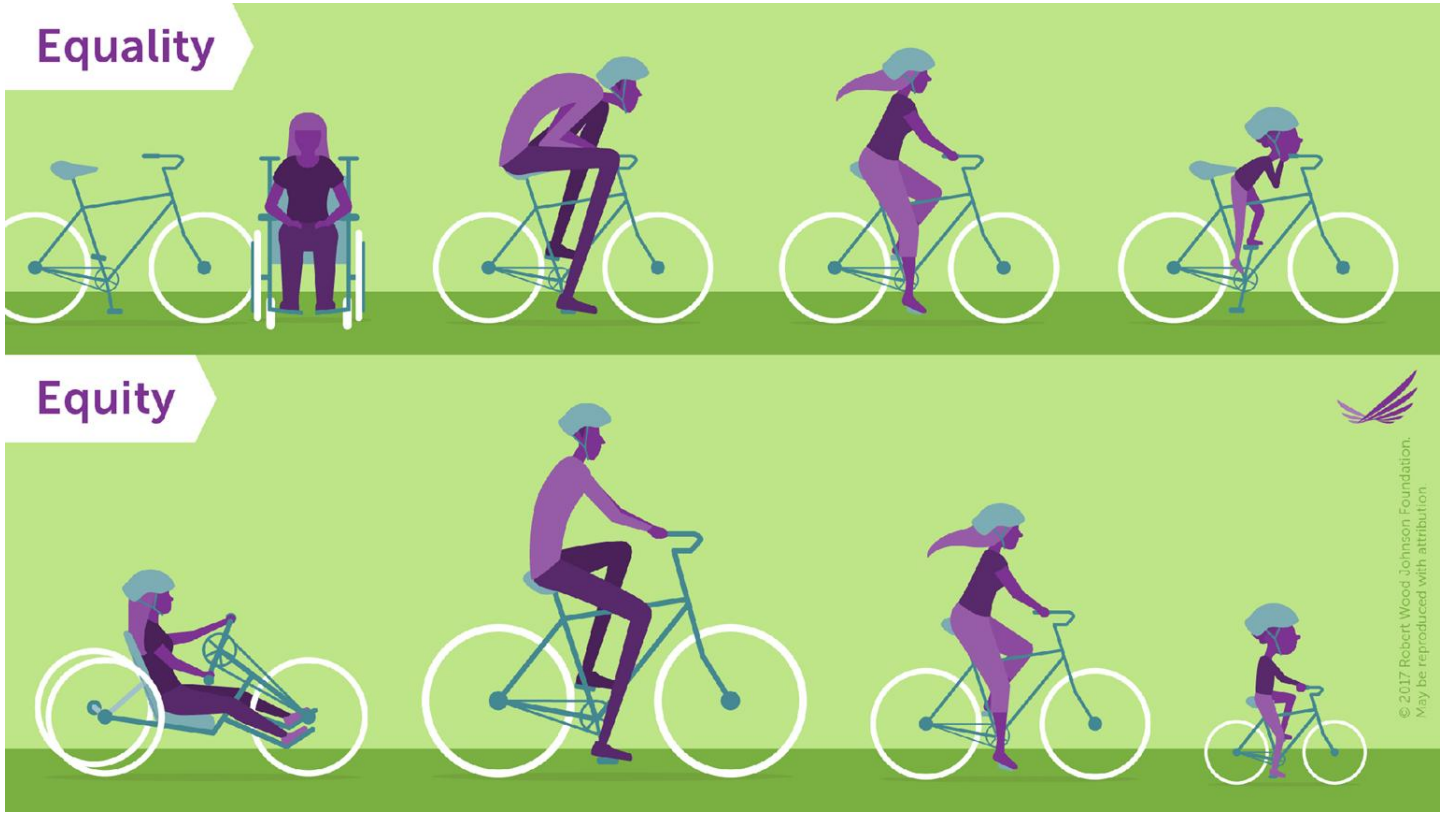
- Statements such as, “There is no way the patient can handle this technology” is bias

# Diabetes Tech Bias Research Findings

- Technology use increase in privately insured vs public insurance
- Study in 2019 by the T1D Exchange showed barriers to tech adoption included
  - Implicit bias/institutional racism
  - HCP preference
  - SDOH, cost, access, geography, education, culture, health literacy leading to significant disparities of care
- Blacks and Hispanics had lowest tech utilization even with adjustments for age, sex, study site, insurance type, ed level, neighborhood poverty level

(Caballero et al., 2024)

# Diabetes Tech
# Equality vs Equitable Healthcare




https://www.rwjf.org/en/insights/our-research/infographics/visualizing-health-equity.html

- Technology alone does not fix patient bias
- All patients prescribed the same diabetes tech would increase equality, but would decrease equity
- One size does not fit all – individualized care is the answer

(Alladina,

# Tools to Help Eliminate Implicit Bias

## 2-Minute Prescribing Check to Ensure Fair Equitability

- ✓Insurance
- ✓Patient Input
- ✓Cost
- ✓Framing – did you present the patient with all options
- ✓Consistency check – would you make the same recommendation for other patients

## Tools to help

- ✓Danatech (2-Minute Offering Diabetes Tech Consistently Checklist I danatech)
- ✓Panther (Device Comparison Chart)
- ✓DiabetesWise (Home » DiabetesWise)

(Danatech, 2026)

# How Do We Move Health Care Systems Forward

## ✓Training

- ✓ Multilevel healthcare interventions including interdisciplinary care teams, POC  labs for quick turnaround, and enhanced f/u via home visits, tele appointments, or mail
- ✓ Cultural and health literacy centered interventions to improving diabetes outcomes for marginalized populations
- ✓ Individual vs group interactions with a focus on behavior-related tasks
- ✓ Incorporating treatment algorithms
- ✓ Education on how to respond respectfully to bias

## ✓Workforce Diversity

# Intervention to Reduce System Bias

## Culturally and Linguistically Appropriate Services (CLAS) Standards

### Intervention based on standards to reduce Bias in Health Care Systems

- ✓ Collection of demographics to monitor disparities and tailor interventions
- ✓ Implementation of culturally tailored, multilevel interventions aimed at improving diabetes outcomes focused on marginalized populations
- ✓ Invest in rapid POC testing, dedicated support staff, and ongoing follow-up with an aim to improve quality of care
- ✓ Policies to prevent discrimination and promote respectful communication
- ✓ Creating grievance processes to address conflict
- ✓ Promotion of community engagement to improve trust

### Outcome Focus

- ✓ Improved department climate
- ✓ Improved diversity in hiring

(Caballero et al., 2024)

# CLAS Standards

| CLAS Standard Category | Standard Elements |
|---|---|
| **Principal Standard** | 1. Provide effective, equitable, understandable, and respectful quality care and services that are responsive to diverse cultural health beliefs and practices, preferred languages, health literacy, and other communication needs. |
| **Governance, Leadership and Workforce** | 2. Advance and sustain organizational governance and leadership that promotes CLAS and health equity through policy, practices, and allocated resources.<br>3. Recruit, promote, and support a culturally and linguistically diverse governance, leadership, and workforce responsive to the service area population.<br>4. Educate and train governance, leadership, and workforce in culturally and linguistically appropriate policies and practices on an ongoing basis. |
| **Communication and Language Assistance** | 5. Offer language assistance to individuals who have limited English proficiency and/or other communication needs, at no cost to them, to facilitate timely access to all health care and services.<br>6. Inform all individuals of the availability of language assistance services clearly and in their preferred language, verbally and in writing.<br>7. Ensure the competence of individuals providing language assistance, recognizing that the use of untrained individuals and/or minors as interpreters should be avoided.<br>8. Provide easy-to-understand print and multimedia materials and signage in the languages commonly used by the populations in the service area. |
| **Engagement, Continuous improvement and Accountability** | 9. Establish culturally and linguistically appropriate goals, policies, and management accountability, and infuse them throughout the organization's planning and operations.<br>10. Conduct ongoing assessments of the organization's CLAS-related activities and integrate CLAS-related measures into assessment measurement and continuous quality improvement activities.<br>11. Collect and maintain accurate and reliable demographic data to monitor and evaluate the impact of CLAS on health equity and outcomes and inform service delivery.<br>12. Conduct regular assessments of community health assets and needs and use the results to plan and implement services that respond to the culturally and linguistic diversity of populations in the service area.<br>13. Partner with the community to design, implement, and evaluate policies, practices, and services to ensure cultural and linguistic appropriateness.<br>14. Create conflict- and grievance-resolution processes that are culturally and linguistically appropriate to identify, prevent, and resolve conflicts or complaints.<br>15. Communicate the organization's progress in implementing and sustaining CLAS to all stakeholders, constituents, and the community. |

# Intervention to Reduce Internal Bias

## Bias Reduction in Internal Medicine (BRIM) Program

### Intervention to reduce HCP bias focused on increasing awareness and promoting bias mitigation strategies

- ✓Recognizing stereotypes
- ✓Adopting a growth mindset
- ✓Perceiving variability
- ✓Perspective-taking and identifying role models

### Outcome Focus

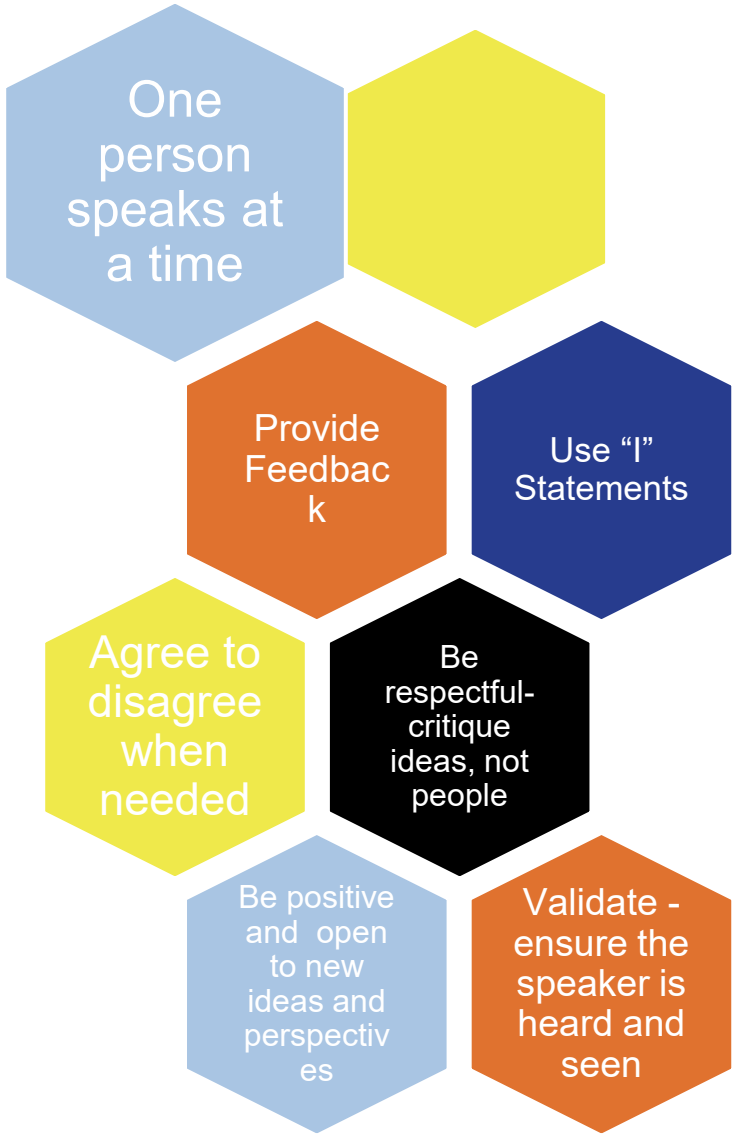
- ✓Improved self awareness

(Caballero et al., 2024)

# Bias Reduction in Internal Medicine (BRIM) Program

| Strategies to Mitigate Bias | Description |
|---|---|
| Recognize, label, and challenge stereotypes (e.g., stereotype replacement) | **Challenge:**<br>▪ Expectancy bias: how group stereotypes lead to expectations about individual members of that group<br>▪ Prescriptive norms: cultural assumptions about how specific groups should and should not behave and the social penalties for violating these norms<br>▪ Role incongruity: not expecting certain groups to have certain roles in society<br>▪ Stereotype priming: ways in which even subtle reminders of group stereotypes can bias one's subsequent judgment of an individual |
| Recite a growth mindset and internal motivation messages | ▪ Growth mindset (vs. fixed mindset) - new behaviors can be learned<br>▪ Internal motivation (vs. external motivation) – belief that we have autonomy to pick which behaviors we engage in |
| Individuate and perceive variability | ▪ Individuate - view each patient as an individual rather than a generalization based on stereotypes<br>▪ Perceive variability - focus on the reality that multiple subgroups exist within any group |
| Practice perspective-taking | ▪ Be empathic - imagine what it would be like to walk in someone else's shoes and experience the world as they do |
| Identify counter-stereotypical examples | ▪ Increase opportunities to engage with individuals you have a bias to increase your ability to view the group more favorably |

# Breakout Guidance




- How do you respond to jokes that are demeaning or derogatory?
- In what ways can we support people with physical disabilities living with diabetes?
- When did you first become aware of racial or ethnic differences in diabetes care?
- Describe an important aspect of your identity.
- Describe a time you witnessed bias in diabetes.

# What do you do as HCPs?

- **Seek Feedback**
- **If an implicit bias or microaggression is brought to your attention:**
  - ✓Acknowledge your implicit bias or microaggression
  - ✓Seek feedback
  - ✓Say, “I am sorry”
  - ✓The impact of your actions and not your intent is what is important
  - ✓Ensure you thank the person giving feedback

(López González, 2024)

# Putting It All Together

- **Multifaceted approach to end bias in diabetes care**
  - ✓ Rally interdisciplinary stakeholders to share facts, promote cultural competency, and correct misconceptions by amplifying the voices and stories of those marginalized and discriminated against
  - ✓ Deliberate efforts to represent and portray marginalized groups in media and public information to correct misconceptions, myths, stereotypes and rumors
  - ✓ Support and encouragement to create new systematic, effective, and EB approaches to mitigating Implicit Bias
- **Promotion of diversity, cultural competency, and accurate media representation**
- **Systematic, evidence-based approaches are vital to eliminate disparities and improve diabetes care for marginalized groups**

# References


1. Addala, A. (2024, December). *Seeing the unseen: The data on implicit bias in diabetes* [Lecture, PowerPoint slides]. https://www.adces.org/practice/addressing-implicit-bias
2. Caballero, A.E., ElSayed, N.A., Golden, S.H., Bannuru, R.R. & Gregg, B. (2024, April 15). Implicit or unconscious bias in diabetes care. *Clin Diabetes, 42*(2), 308-312. https://diabetesjournals.org/clinical/article/42/2/308/153871/Implicit-or-Unconscious-Bias-in-Diabetes-Care
3. Danatech. (2026, May 5). Checklist: Offering diabetes tech consistently across patients. https://www.adces.org/education/danatech/glucose-monitoring/continuous-glucose-monitors-(cgm)/cgm-selection-training/offering-diabetes-tech-consistently-across-patients
4. Duckworth, S. (2020). *Wheel of power/privilege*. https://ecampusontario.pressbooks.pub/universaldesign/chapter/positionality-intersectionality/
5. López González, L. (2024, May 2). *Say what? Microaggressions, your health, and what to do about them*. https://psych.ucsf.edu/news/say-what-microaggressions-your-health-and-what-do-about-them
6. Sims, T.J., Kapoor, R., Chinthammit, C., & Spaepen, E. (2025). Relationship between weight bias internalization, diabetes stigma, and perceptions of healthcare interactions among people with type 2 diabetes. *Diabetes Ther, 16*, 2025-2044. https://pmc.ncbi.nlm.nih.gov/articles/PMC12474763/
7. Vela, M.B., Irondu, A.I., Smith, N.A., Peek, M.E., Woodruff, J.N., & Chin, M.H. (2022, April 5). Eliminating explicit and implicit bias in health care: Evidence and research needs. *Annu Rev Public Health, 43*, 477-501. https://pmc.ncbi.nlm.nih.gov/articles/PMC9172268/

# Thank you!

*Questions?*

**Shana.Nicholson@BHSI.com**

KENTUCKY DIABETES SYMPOSIUM 2026

# Thank you to our Sponsors and Exhibitors!

Abbott

xeris BIOPHARMA

arrowhead pharmaceuticals

Radio Eye

RECORDATI RARE DISEASES
Focused on the Few

TRIVIDIA HEALTH

Breakthrough T1D™
Formerly JDRF

CCS

TANDEM Diabetes Care

Beta Bionics

CeQur

kynect resources
Together for a better Kentucky.

Kentucky Coordinating Body

RIVER CITY RETINA CONSULTANTS

Madrigal

Wellstart

KSPAN Kentucky Safety & Prevention Alignment Network
Kentucky Safe Aging Coalition

KENTUCKY BEEF COUNCIL
KYBEEF.COM

minimed

# Thank you to our Platinum Sponsor

dexcom

KENTUCKY DIABETES SYMPOSIUM 2026

# Thank you to our Gold Sponsor

sanofi

KENTUCKY DIABETES SYMPOSIUM 2026

# Thank you to our Silver Sponsor

TOTAL MEDICAL SUPPLY

KENTUCKY DIABETES SYMPOSIUM 2026

# Thank you to our Bronze Sponsor

Insulet

KENTUCKY DIABETES SYMPOSIUM 2026

# Thank you to our Supporting Partner

