

HEALTH EQUITY IN DIABETES

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Working toward a world
where everyone can attain
their highest level of health.

OBJECTIVE

- Review Health Outcomes & Diabetes Disparities
- Define Health Equity & Tools to Inform Strategy
- Identify Strategies to Improve Health Equity

DIABETES DISPARITIES

Mortality

from conditions that are treatable with timely access to high-quality health care

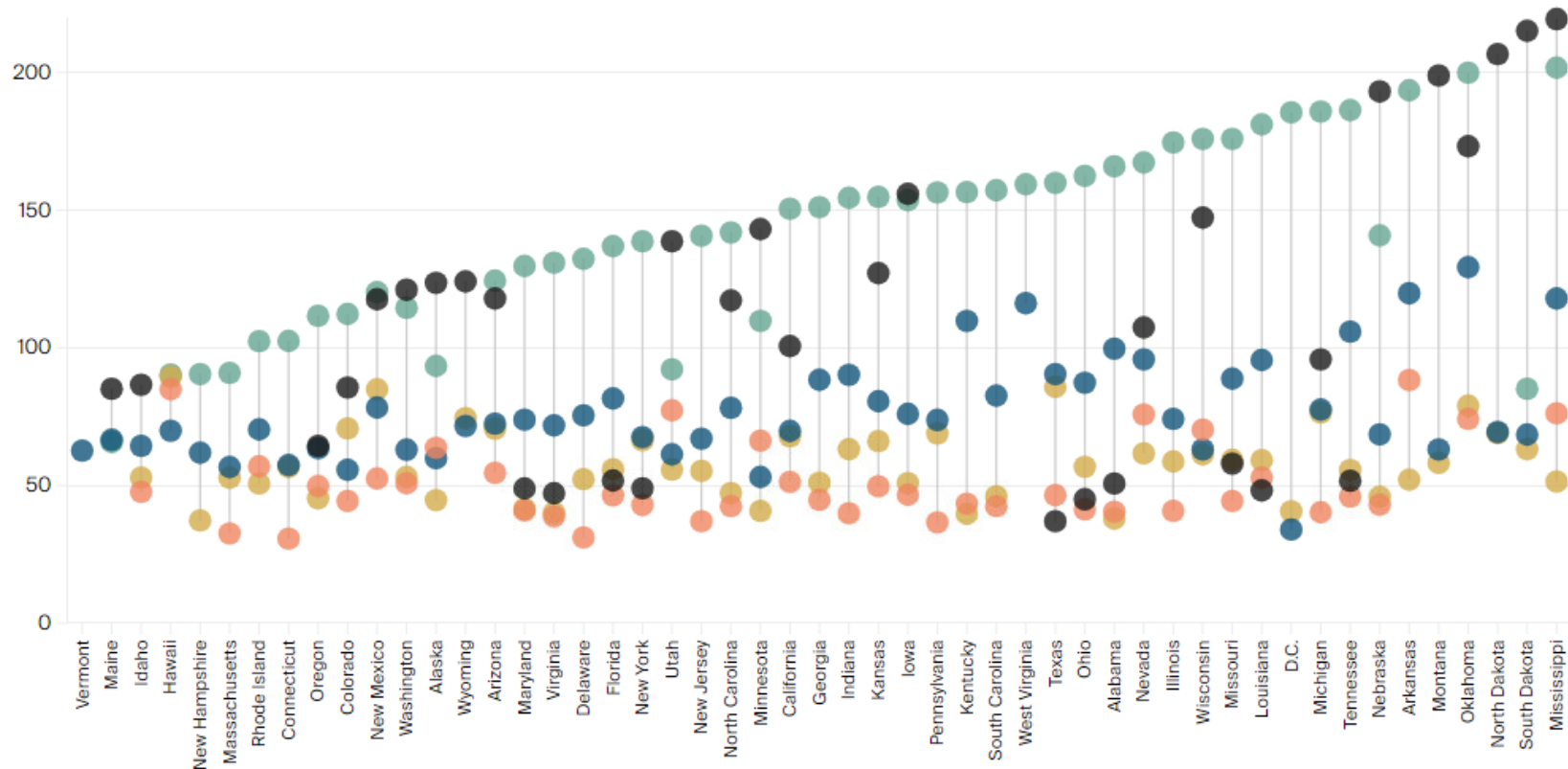
EXHIBIT 2

In most states where data are available, Black people and AIAN people are more likely than white people to die early in life from conditions that are treatable with timely access to high-quality health care.

Mortality amenable to health care, deaths per 100,000 population, by state and race/ethnicity

All ▾

Race/Ethnicity ● Black ● Latinx/Hispanic ● White ● AANHPI ● AIAN



Notes: States arranged in rank order based on highest rate in each state. Missing dots for a particular group indicate that there are insufficient data for that state. AANHPI = Asian American, Native Hawaiian, and Pacific Islander; AIAN = American Indian/Alaska Native.

Data: CDC, 2018 and 2019 National Vital Statistics System (NVSS), All-County Micro Data, Restricted Use Files.

Source: David C. Radley et al., *Achieving Racial and Ethnic Equity in U.S. Health Care: A Scorecard of State Performance* (Commonwealth Fund, Nov. 2021).

DIABETES BY RACE & ETHNICITY

Percentage of US Adults 18 or Older With Diagnosed Diabetes, by Race and Ethnicity, 2018–2019

Race and Ethnicity	Percentage
American Indian or Alaska Native	14.5
Asian, non-Hispanic	9.5
Black, non-Hispanic	12.1
Hispanic, overall	11.8
White, non-Hispanic	7.4

Data sources: 2018–2019 National Health Interview Survey, except the American Indian and Alaska Native data, which are from the Indian Health Service National Data Warehouse (2019 data only).

Mortality

from complications of Diabetes

- In Kansas Black (40.9) and Latinx/Hispanic people (34.4) are more likely to die from complication of diabetes than white people (21.9)

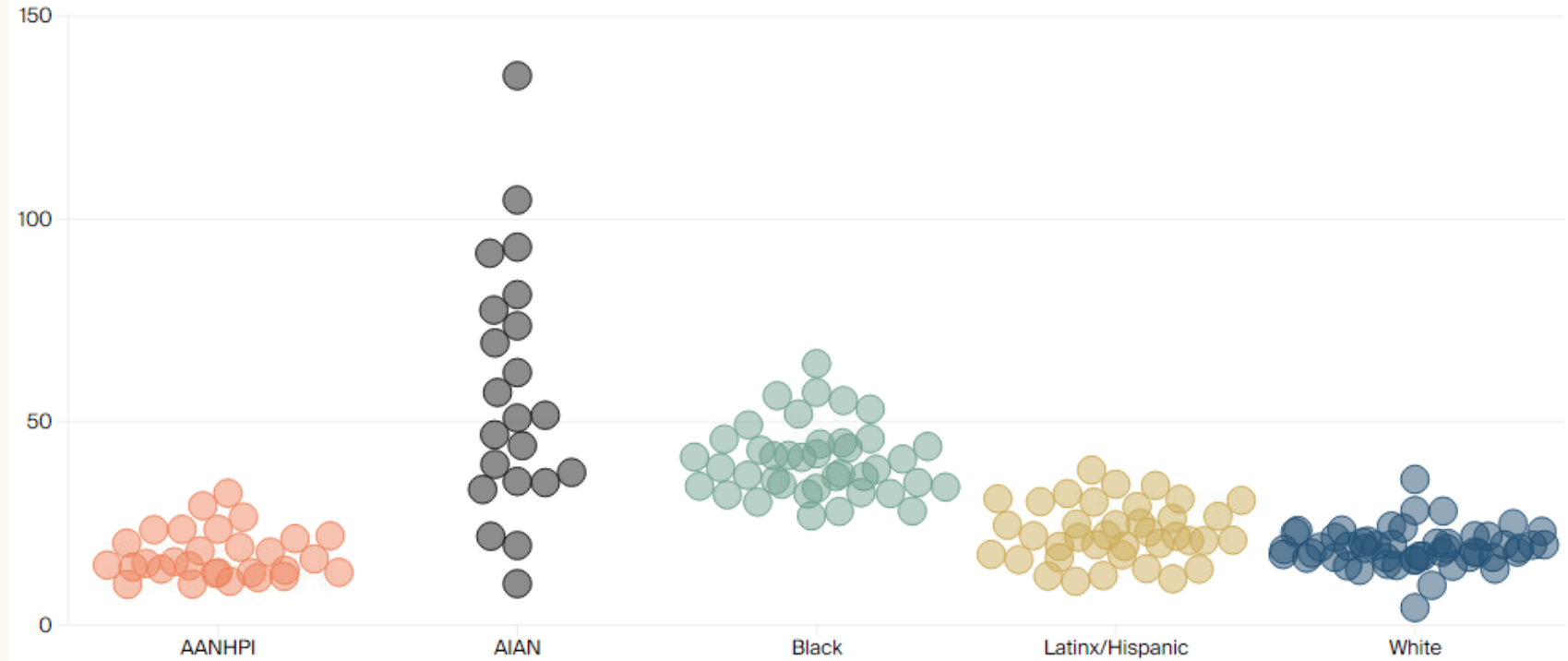
EXHIBIT 3

In nearly all the states where data are available, Black people and AIAN people are more likely than AANHPI, Latinx/Hispanic, and white people to die from complications of diabetes.

Diabetes-related age-adjusted deaths per 100,000 population, by state and race/ethnicity

All

Race/Ethnicity ● AANHPI ● AIAN ● Black ● Latinx/Hispanic ● White



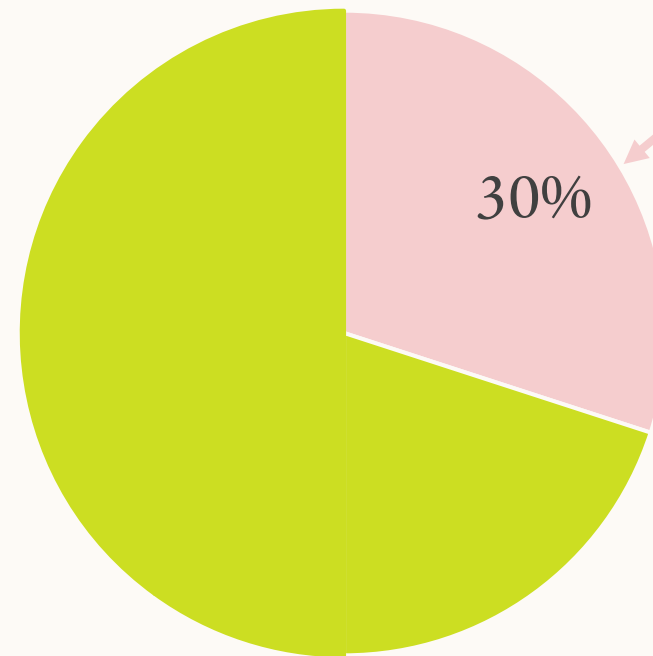
Note: Dots represent states. Missing dots for a particular group indicate that there are insufficient data for that state. AANHPI = Asian American, Native Hawaiian, and Pacific Islander; AIAN = American Indian/Alaska Native.

Data: CDC, 2018 and 2019 National Vital Statistics System (NVSS).

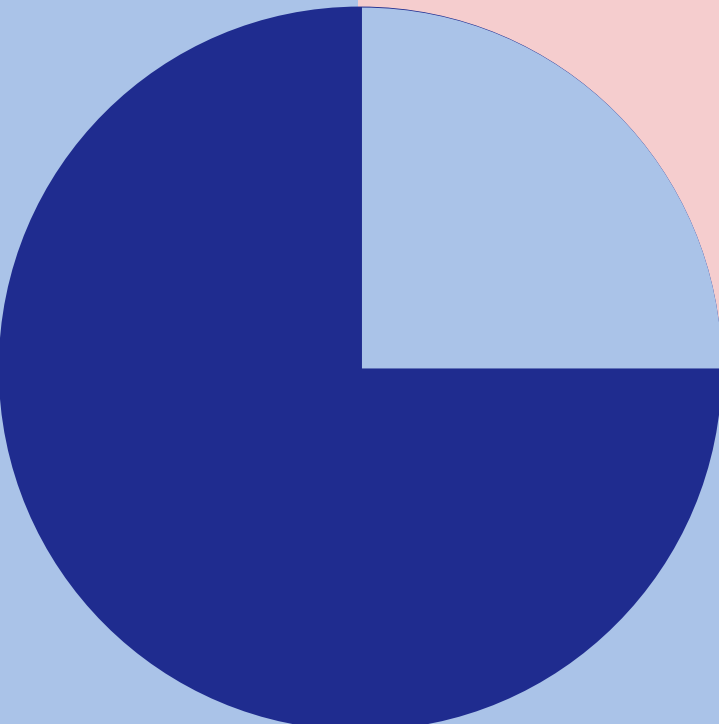
Source: David C. Radley et al., *Achieving Racial and Ethnic Equity in U.S. Health Care: A Scorecard of State Performance* (Commonwealth Fund, Nov. 2021).

WHAT HAS THE GREATEST IMPACT⁷ ON HEALTH OUTCOMES?

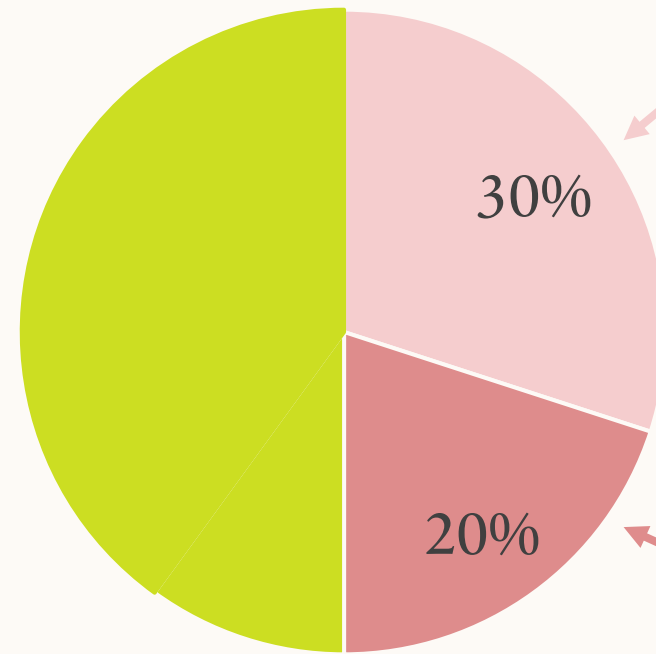
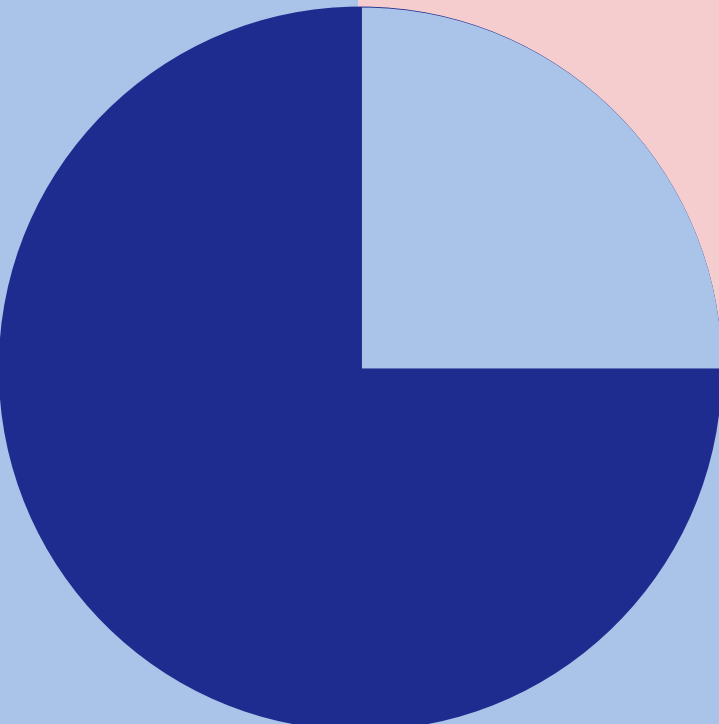
- Tobacco Use
- Diet & Exercise
- Alcohol & Drug Use
- Sexual Activity



■ Health Behaviors



WHAT HAS THE GREATEST IMPACT⁸ ON HEALTH OUTCOMES?

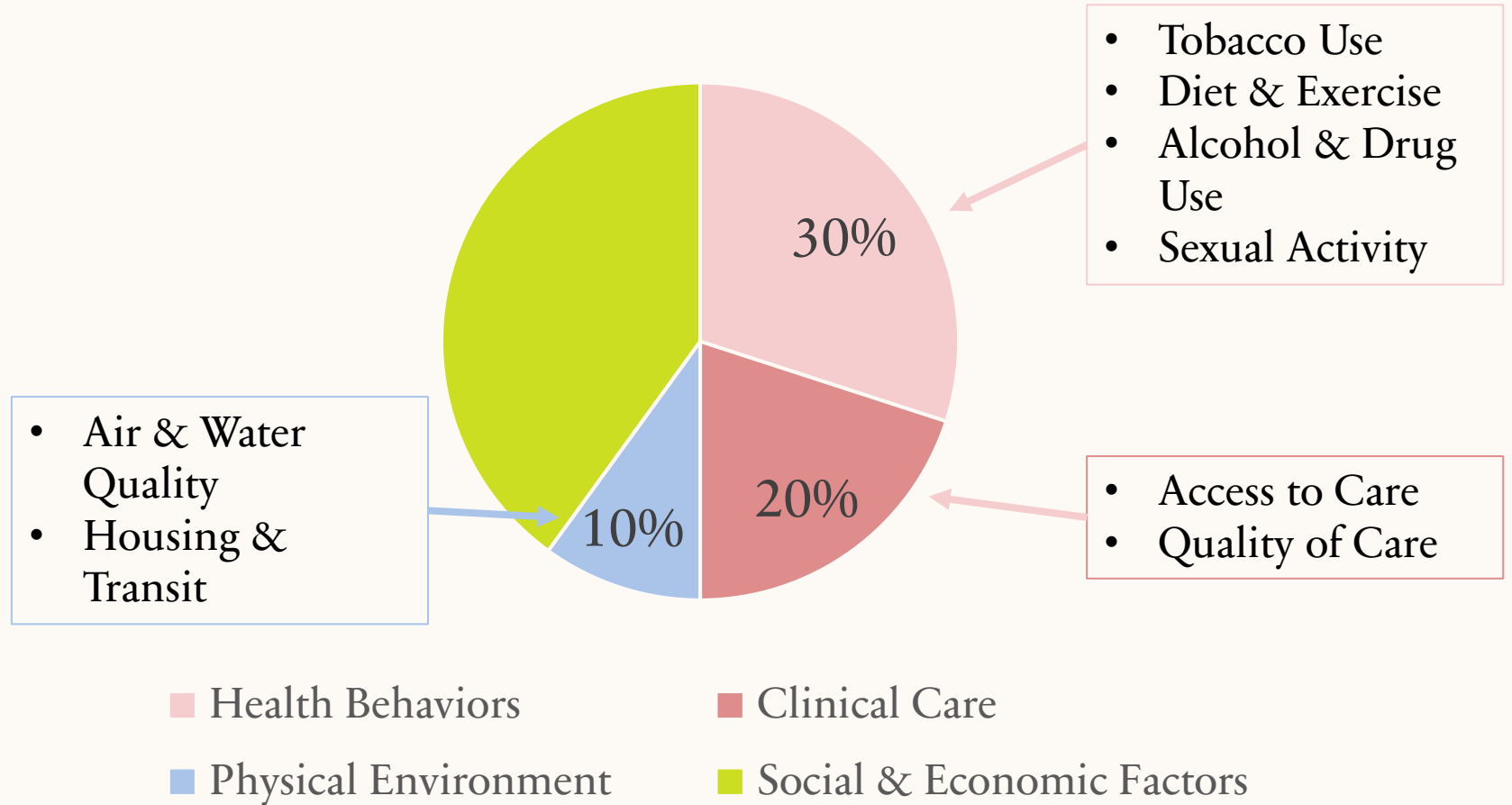
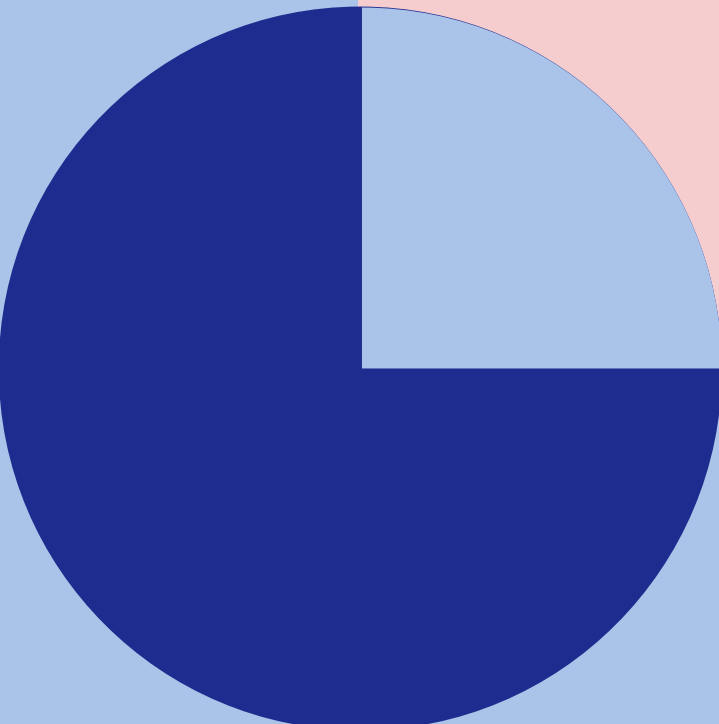


- Tobacco Use
- Diet & Exercise
- Alcohol & Drug Use
- Sexual Activity

- Access to Care
- Quality of Care

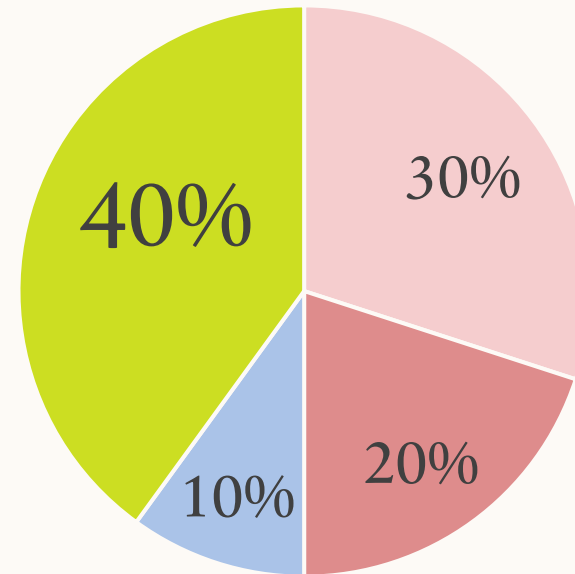
■ Health Behaviors ■ Clinical Care

WHAT HAS THE GREATEST IMPACT⁹ ON HEALTH OUTCOMES?



WHAT HAS THE GREATEST IMPACT¹⁰ ON HEALTH OUTCOMES?

- Education
- Employment
- Income
- Family & Social Support
- Community Safety



Health Behaviors

Clinical Care

Physical Environment

Social & Economic Factors

DIABETES BY EDUCATION & INCOME LEVEL

- Those who earn less than \$30,000 per year are three times as likely to have diabetes than those who make over \$80,000
- Approximately 20% of Americans with diabetes do not have adequate access to healthy foods
- Walkable neighborhoods are associated with lower diabetes incidence & prevalence
- People in low-income communities living with diabetes face higher rates of diabetes complications such as kidney disease, vision loss, and amputations

Percentage of US Adults 18 or Older With Diagnosed Diabetes, by Education Level, 2018–2019

Education Level	Percentage
Less than high school	13.4
High school	9.2
More than high school	7.1

Data source: 2018–2019 National Health Interview Survey.

By Income Level

Adults with a family income below the federal poverty level (FPL) have the highest prevalence of diabetes.

US Adults 18 or Older With Diagnosed Diabetes, by Family Income Level, 2018–2019

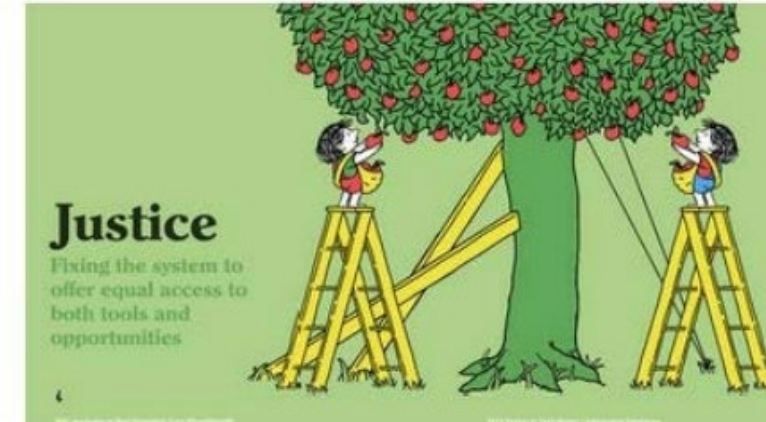
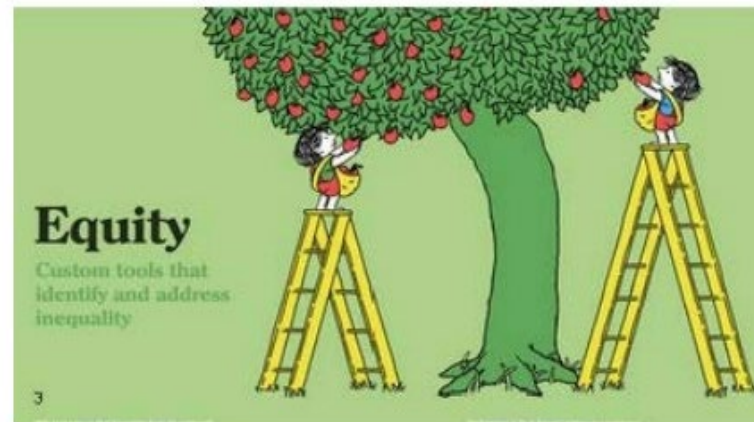
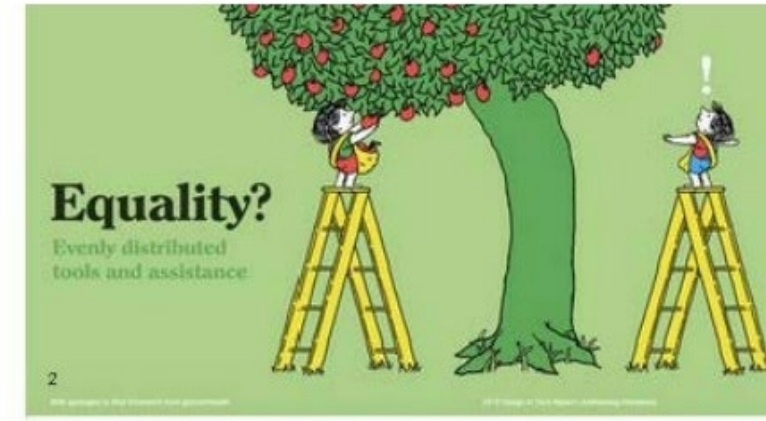
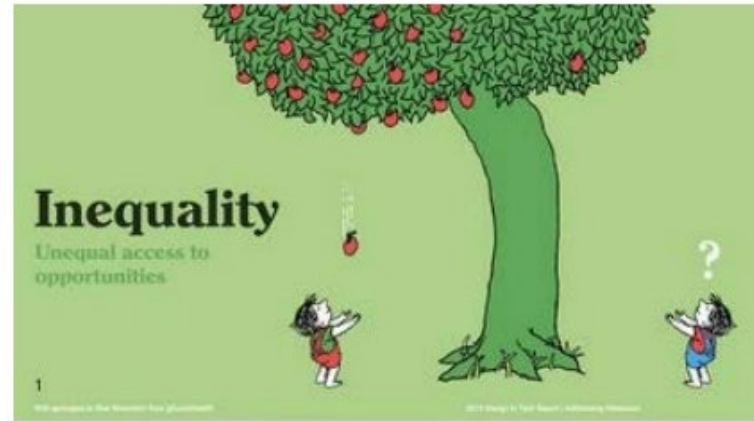
Family Income Level	Percentage
Less than 100% FPL	14.1
100%–299% FPL	10.8
300%–499% FPL	7.8
500% FPL or more	5.6

Data source: 2018–2019 National Health Interview Survey.

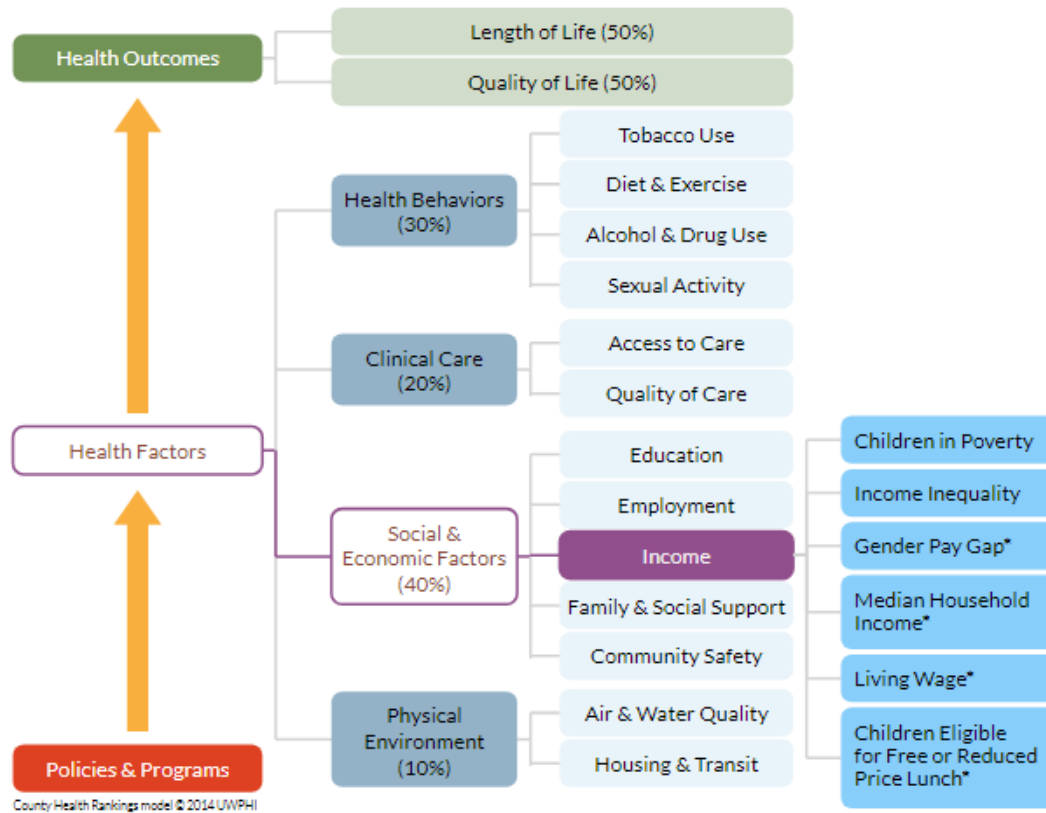
HEALTH EQUITY

WORLD HEALTH ORGANIZATION

- **Equity** is the absence of unfair, avoidable or remediable differences among groups of people, whether those groups are defined socially, economically, demographically, or geographically or by other dimension of inequality (e.g. sex, gender, ethnicity, disability, or sexual orientation).
- **Social Determinants of Health** are the circumstances in which people are born, grow up, live, work and age, and the systems put in place to deal with illness



Health equity is achieved when everyone can attain their full potential for health & well-being

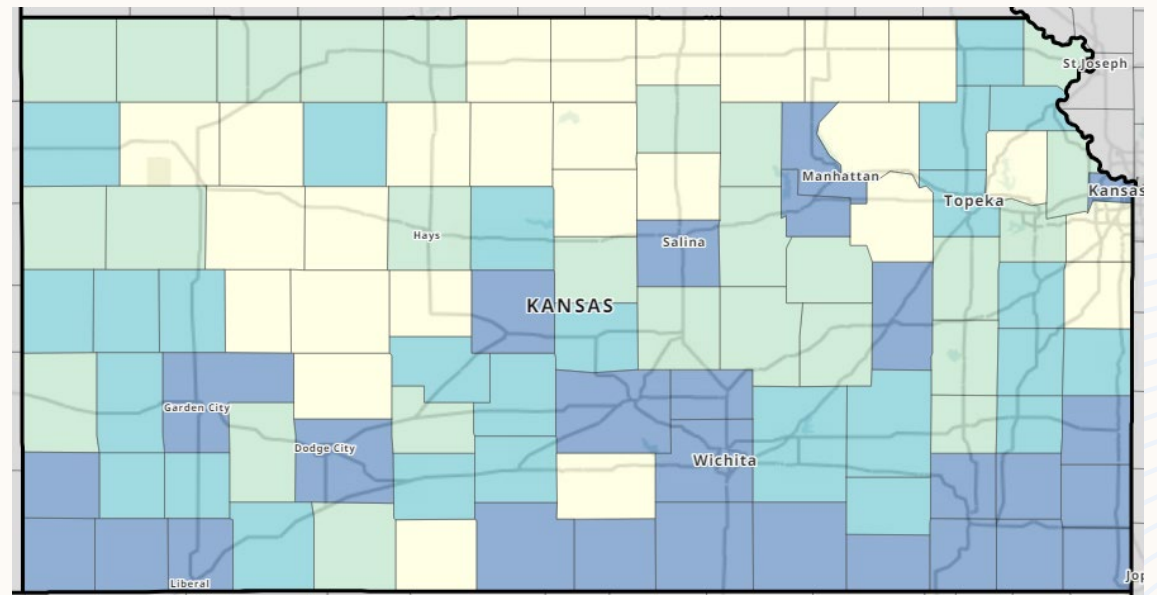
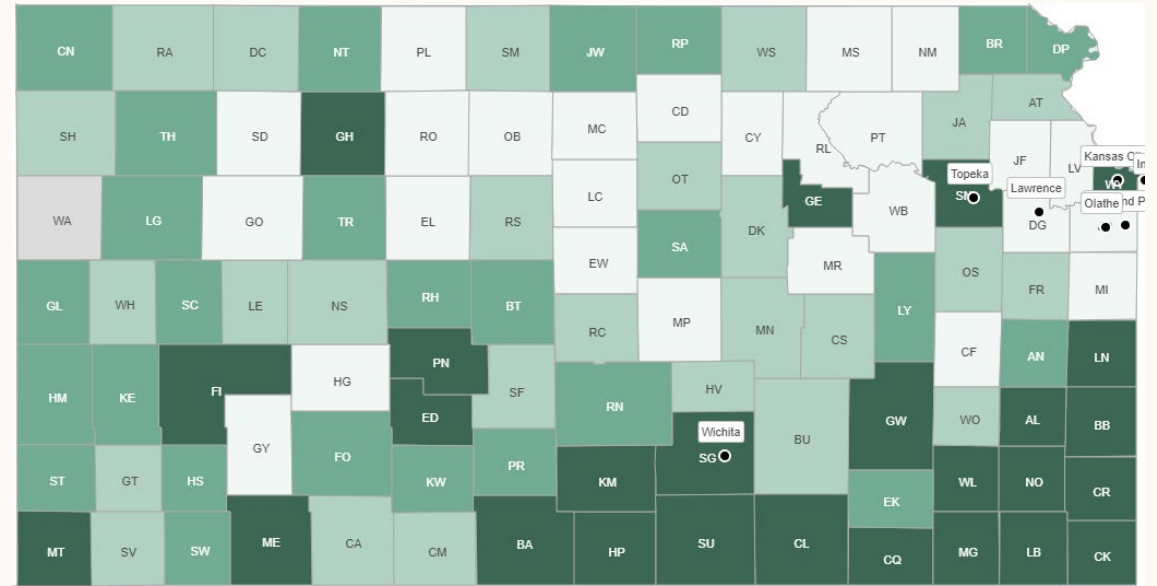


COUNTY HEALTH RANKING MODEL

“model demonstrates how different elements affect health outcomes”

A View of Kansas: County Health Ranking & CDC/ATSDR Social Vulnerability Index (SVI)

- County Health Ranking
 - 10% of adults in Kansas have a diagnosis of diabetes compared to 9% in the United States
 - Wyandotte county Has the highest prevalence of Diabetes at 14%
 - Ranked #103 out of 104 counties
- Social Vulnerability Index
 - Socioeconomic status
 - Household Characteristics
 - Racial & Ethnic Minority Status
 - Housing Type/ Transportation

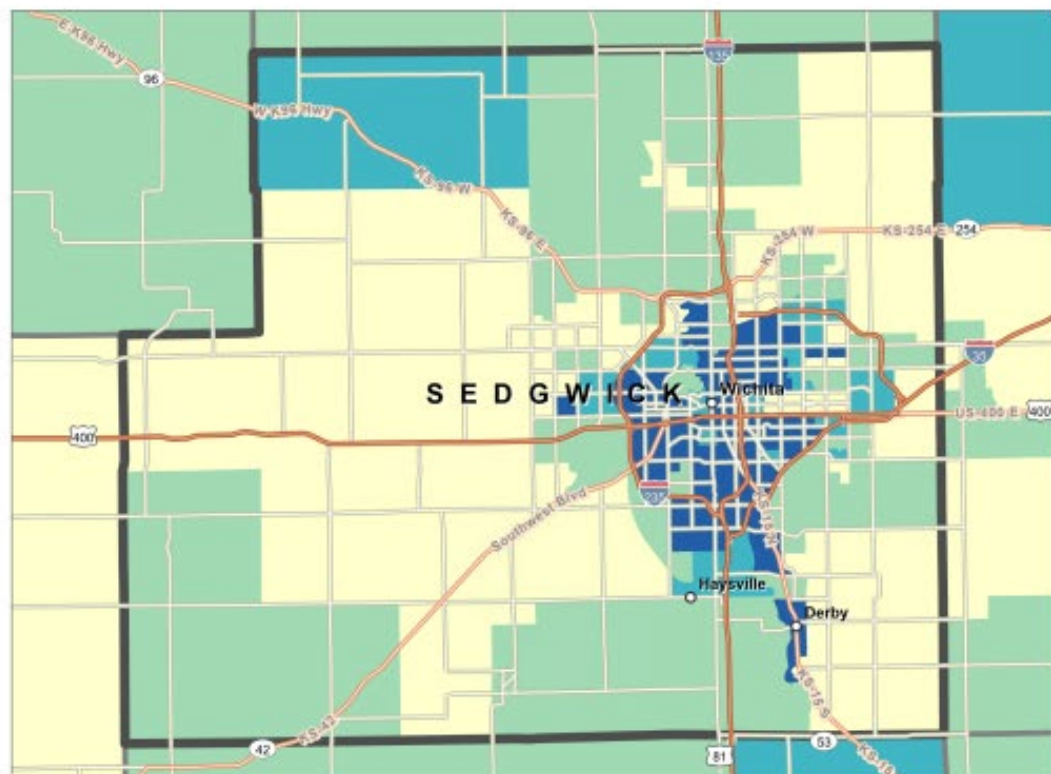


<https://www.countyhealthrankings.org/explore-health-rankings/kansas?year=2023>

<https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>

Presentation title

Overall Social Vulnerability¹



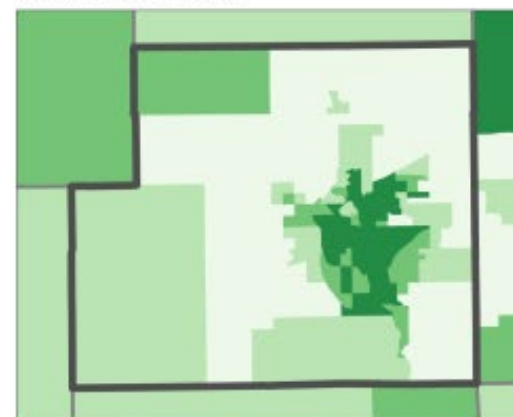
Social vulnerability refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills. The **CDC/ATSDR Social Vulnerability Index (CDC/ATSDR SVI 2020)⁴ County Map** depicts the social vulnerability of communities, at census tract level, within a specified

county. CDC/ATSDR SVI 2020 groups **sixteen census-derived factors** into **four themes** that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. Overall Social Vulnerability combines all the variables to provide a comprehensive assessment.

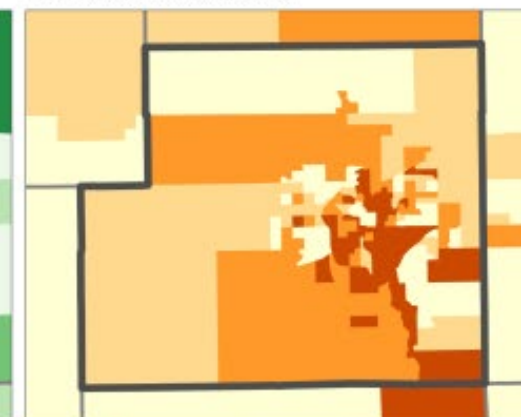
CDC/ATSDR SVI Themes



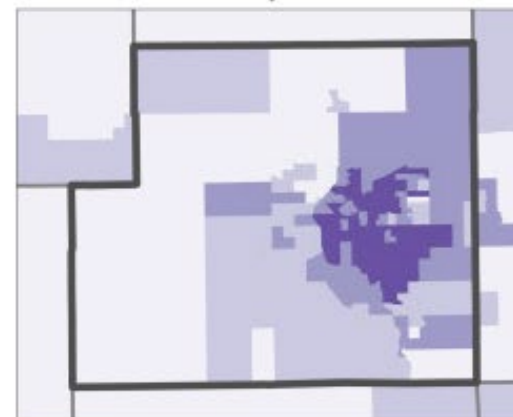
Socioeconomic Status⁵



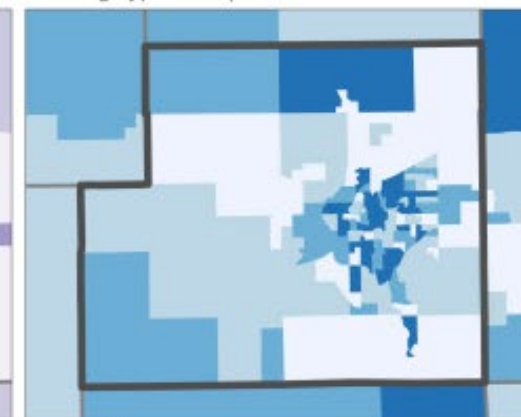
Household Characteristics⁶



Racial and Ethnic Minority Status⁷



Housing Type/Transportation⁸



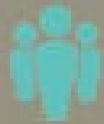
Data Sources: ¹CDC/ATSDR/GRASP, U.S. Census Bureau, Esri® StreetMap™ Premium.
Notes: ²Overall Social Vulnerability: All 16 variables. ³Census tracts with 0 population. ⁴The CDC/ATSDR SVI combines percentile rankings of US Census American Community Survey (ACS) 2016-2020 variables, for the state, at the census tract level. ⁵Socioeconomic Status: Below 150% Poverty, Unemployed, Housing Costs Burden, No High School Diploma, No Health Insurance. ⁶Household Characteristics: Aged 65 and Older, Aged 17 and Younger, Civilian with a Disability, Single-Parent Household, English Language Proficiency. ⁷Race/Ethnicity: Hispanic or Latino (of any race); Black and African American, Not Hispanic or Latino; American Indian and Alaska Native, Not Hispanic or Latino; Asian, Not Hispanic or Latino; Native Hawaiian and Other Pacific Islander, Not Hispanic or Latino; Two or More Races, Not Hispanic or Latino; Other Races, Not Hispanic or Latino. ⁸Housing Type/Transportation: Multi-Unit Structures, Mobile Homes, Crowding, No Vehicle, Group Quarters.
Projection: Kansas Custom Lambert NAD83 (EIH).
References: Flanagan, B.E., et al. A Social Vulnerability Index for Disaster Management. *Journal of Homeland Security and Emergency Management*, 2011. 8(1).
 CDC/ATSDR SVI web page: <https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>.

**STRATEGIES TO
IMPROVE
HEALTH EQUITY
IN DIABETES
PREVENTION &
MANAGEMENT**

PAVING THE ROAD TO HEALTH EQUITY

Health Equity

is when everyone has the opportunity to be as healthy as possible



Programs

Successful health equity strategies



Measurement

Data practices to support the advancement of health equity



Policy

Laws, regulations, and rules to improve population health



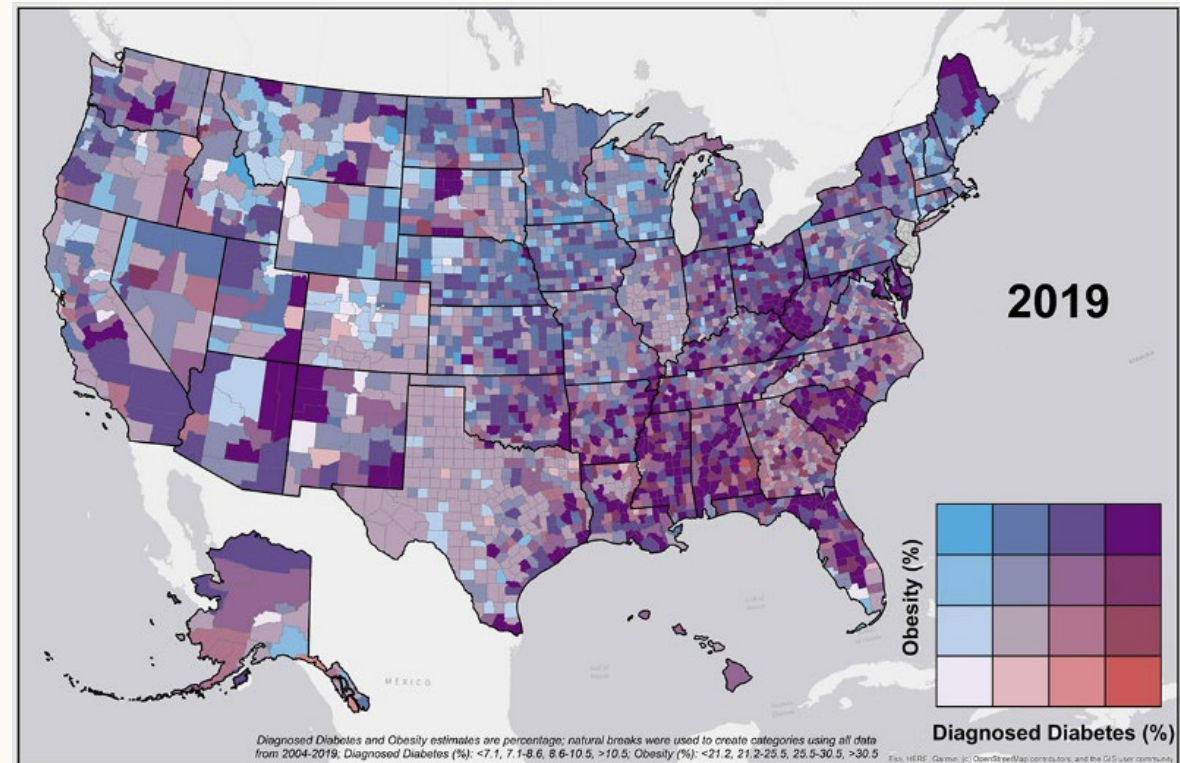
Infrastructure

Organizational structures and functions that support health equity

MEASUREMENT

Start with
the Data
you have!

- Leverage Needs Assessments & Various tools
- Screen for Social Determinants of Health
- Identify & Prioritize Meaningful Outcomes for the Practice & Community
 - Screening Rates
 - Program Participation Rates
 - Clinical Target Rates





1 in 5

37.3 million Americans have diabetes, and 1 in 5 don't know it.

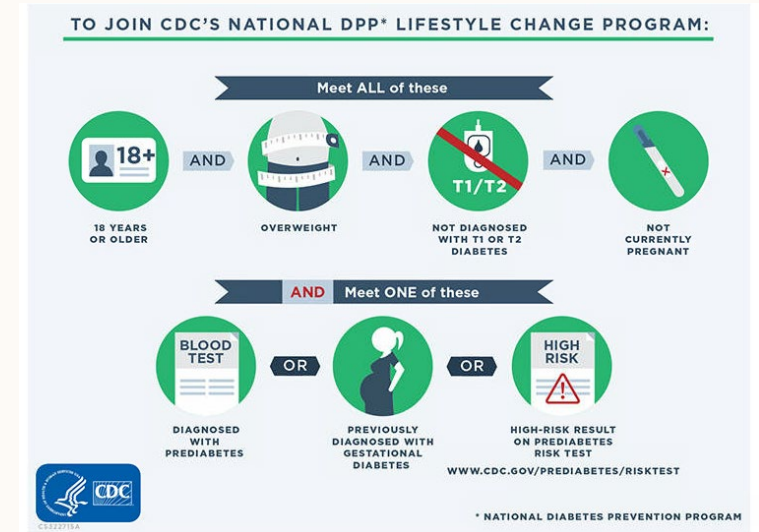
PROGRAMS: PREVENTING TYPE 2 DIABETES

20

CDC's Division of Diabetes Translation (DDT) is working to reduce and one day eliminate health disparities for all Americans living with or at risk for type 2 diabetes

National Diabetes Prevention Program (National DPP)- partnership of public and private organizations to deliver an affordable, evidence-based lifestyle change program to help people with prediabetes prevent or delay type 2 diabetes

- Trained Lifestyle Coach- better food choices, more physical activities, & skills to cope with problems & stress
- Cut risk of developing diabetes by up to 58%
- Nationwide availability but enrollment is low among some groups at higher risk of type 2 diabetes
- Telehealth holds promise to expand access and engage more at-risk individuals.



Johnson County Department of Health and Environment
6000 Lamar Mission, KS 66202
(913) 4...
[Visit Website](#)
View Details

Monitor MY Health, INC
800 E. 101st Ter. suite 350 Kansas City, MO 64131
(203) 6...
[Visit Website](#)
View Details

Wellness 4 Prevention, LLC
Showing 1 - 10 of 51 results
1 2 3 4 5 6

List of all CDC Recognized Organizations

PROGRAMS: PREVENTING COMPLICATION OF TYPE 2 DIABETES

Diabetes Self-Management Education and Support (DSMES) Programs for Underserved Populations/Communities

- DSMES improves outcomes and quality life, however utilization is low
 - A1c improvement is additive to lifestyle & drug therapy
 - Average A1c reduction of 0.45 – 0.57% when compared to usual care
 - Reduction in onset and/or worsening of diabetes-related complications and reduction of all-cause mortality
- Increasing access to DSMES programs
 - Pharmacy-based DSMES
 - Community Health Workers- can help find resources such as DMES and, also, address other social conditions affecting people’s overall health
 - Leverage Telehealth



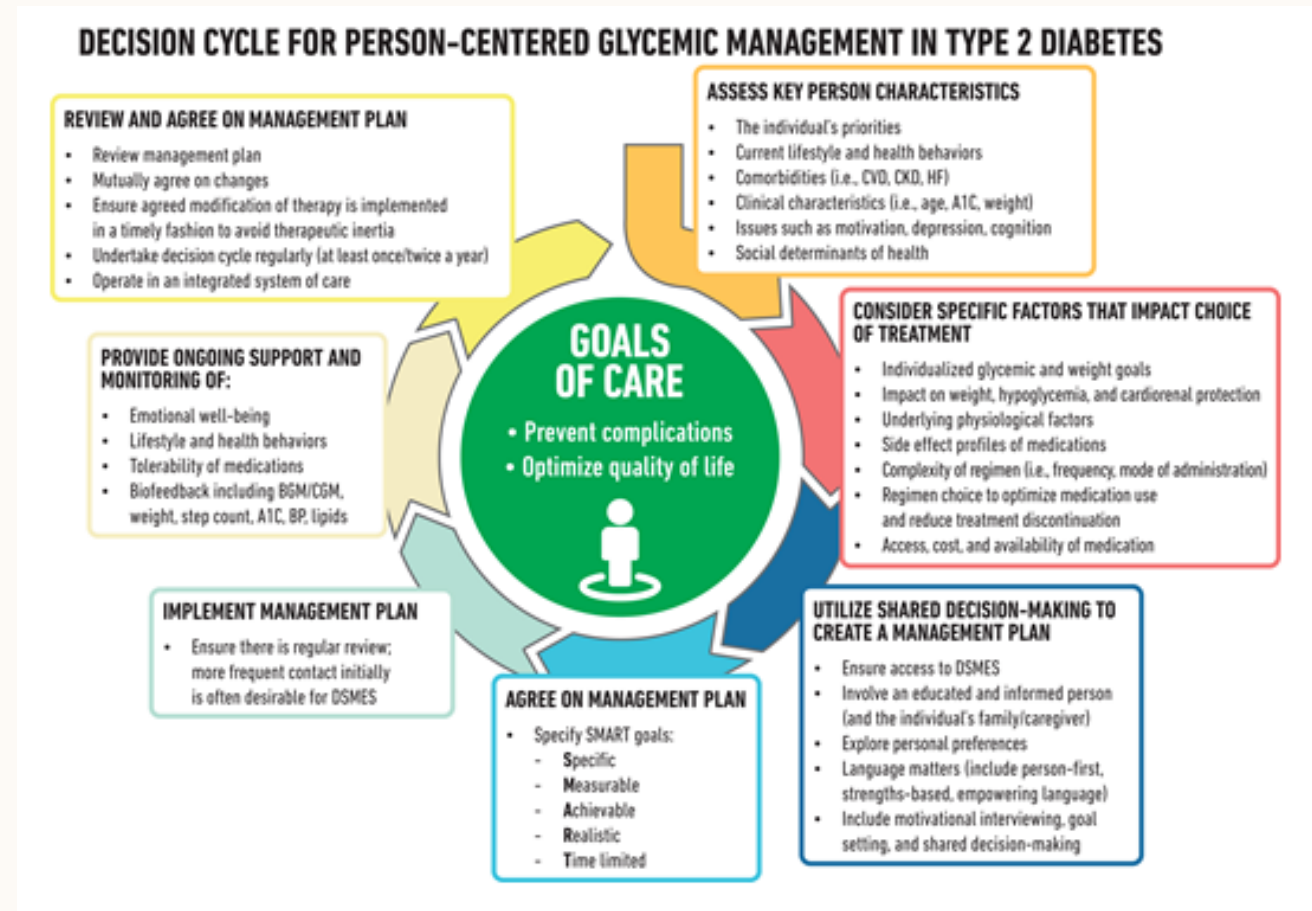
<https://www.cdc.gov/diabetes/pdfs/evaluation-resources/CDC-DSMES-Rapid-Evaluation-Practice-Based-Guide-508.pdf>

Diabetes Self-Management Education and Support (DSMES) Toolkit | Diabetes | CDC

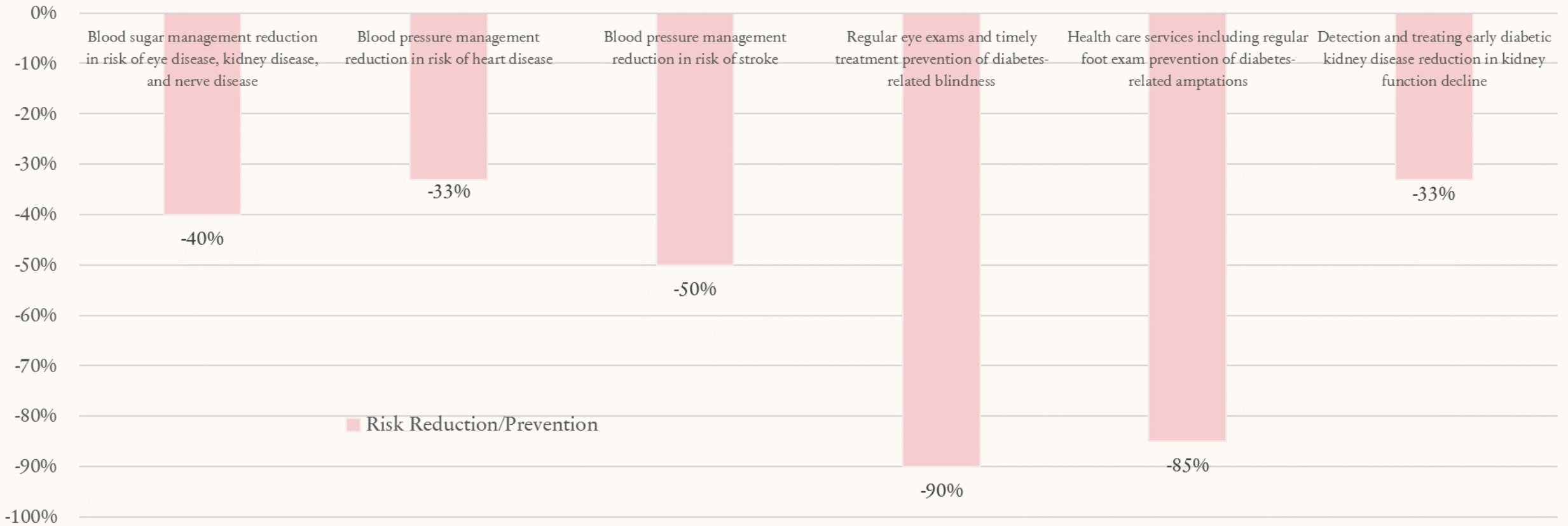
Diabetes Self-management Education and Support in Adults With Type 2 Diabetes: A Consensus Report of the American Diabetes Association, the Association of Diabetes Care & Education Specialists, the Academy of Nutrition and Dietetics, the American Academy of Family Physicians, the American Academy of PAs, the American Association of Nurse Practitioners, and the American Pharmacists Association | Diabetes Care | American Diabetes Association (diabetesjournals.org)

PERSON-CENTERED DIABETES CARE

- System Level:
 - Care Teams
 - Telehealth
 - Behaviors & Well-Being
- Individual Level
 - Tailoring Treatment for Social Context
 - Food insecurity, housing insecurity/homelessness, financial barriers, and social support with referral to appropriate local community resources
 - Ensure access to DSMES
 - Personal Preferences
 - Language Matters
 - Barriers to Care
 - It's not *if* a patient is non-adherent, but *why*?
 - Use Motivational Interviewing



PREVENTING DIABETES COMPLICATIONS





The ADA Health Equity Bill of Rights envisions Americans living with diabetes and prediabetes – no matter their race, income, ZIP Code, age, education, or gender – get equal access to the most basic of human rights: their health.

1. The right to access insulin and other drugs affordably.

One in four insulin-dependent people with diabetes say they ration their insulin. People with diabetes should be able to get the medication they need without having to choose between filling their prescription, paying rent, or putting food on the table

2. The right to healthy food.

The poorer you are in America, the less likely you are to have a grocery store within walking distance of your home. Diabetes rates are inversely related to income level, and nutrition is critical to diabetes prevention and management.

3. The right to insurance that covers diabetes management and future cures.

Diabetes is the most expensive chronic condition in the U.S., and people with diabetes incur medical costs nearly two and a half times higher than others. Costs skyrocket for Americans who have diabetes but who do not have insurance – they are hospitalized nearly 170% as often, compounding their risk for complications and leaving them medically worse off than if they sought care earlier.

4. The right not to face stigma or discrimination.

Children with diabetes have too often been refused treatment in school, and frontline workers too often refused the ability to manage their condition on the job.

5. The right to avoid preventable amputations.

Every 4 minutes in America, a limb is amputated due to diabetes – and most are avoidable. The risk of amputation rises among communities of color; African Americans suffer diabetes-related amputations more than twice as often as whites.

6. The right to participate in clinical trials without fear.

Though Americans of color are nearly twice as likely to have diabetes and related chronic diseases as whites, there is inadequate diversity in clinical trials to test drugs that people with diabetes need. Given the troubling history of mistreatment of minorities in medical research, every effort must be made not just to invite a diverse range of participants in drug trials, but to also ensure participants are protected by and in the process.

7. The right to stop prediabetes from becoming diabetes.

Diabetes care should not start at diagnosis – it should begin long before. Even though prediabetes and Type 2 diabetes are often preventable, low-income, minority, and historically underserved communities still see the highest incidence.

8. The right to a built environment that does not raise the risk of getting diabetes.

Historically underserved communities not only see the highest diabetes rates, but also face the greatest barriers to safe places to live and exercise, to clean air, and clean water – the things that mitigate diabetes onset and related risks for others.

9. The right to the latest medical advances.

Medical technologies like continuous glucose monitors, insulin pumps, and artificial pancreases can be instrumental in treating and managing diabetes. Still, many people with diabetes in the lowest income brackets do not have the same access to these life-saving technologies as do higher income peers.

10. The right to have your voice heard.

Every community should have a say in how their needs can best be addressed everywhere from the doctor's office to the ballot box.

POLICY

HELPING PATIENTS GET INSULIN

Find resources for diabetes care. Talk to your doctor or diabetes educator about your situation. They may be able to prescribe lower-cost medications or refer you to programs designed to help with prescription costs. **And if you need help affording your prescriptions, visit [InsulinHelp.org](https://www.insulinhelp.org) or call 1-800-DIABETES (800-342-2383).**

Community Connection

Easily find the diabetes program or resources in your area you've been looking for. Search for almost anything from medical care to education, to nutrition and health. Find resources in every zip code so you can get the help you need wherever you are.

- Describes what information is needed to get assistance
- Provides number to customer service department of insulin manufacturers
- Describes programs available to those without insurance and updates
- Also provide numbers for manufacturers of devices

[INSULIN HELP | ADA \(DIABETES.ORG\)](https://www.insulinhelp.org)



THANK YOU

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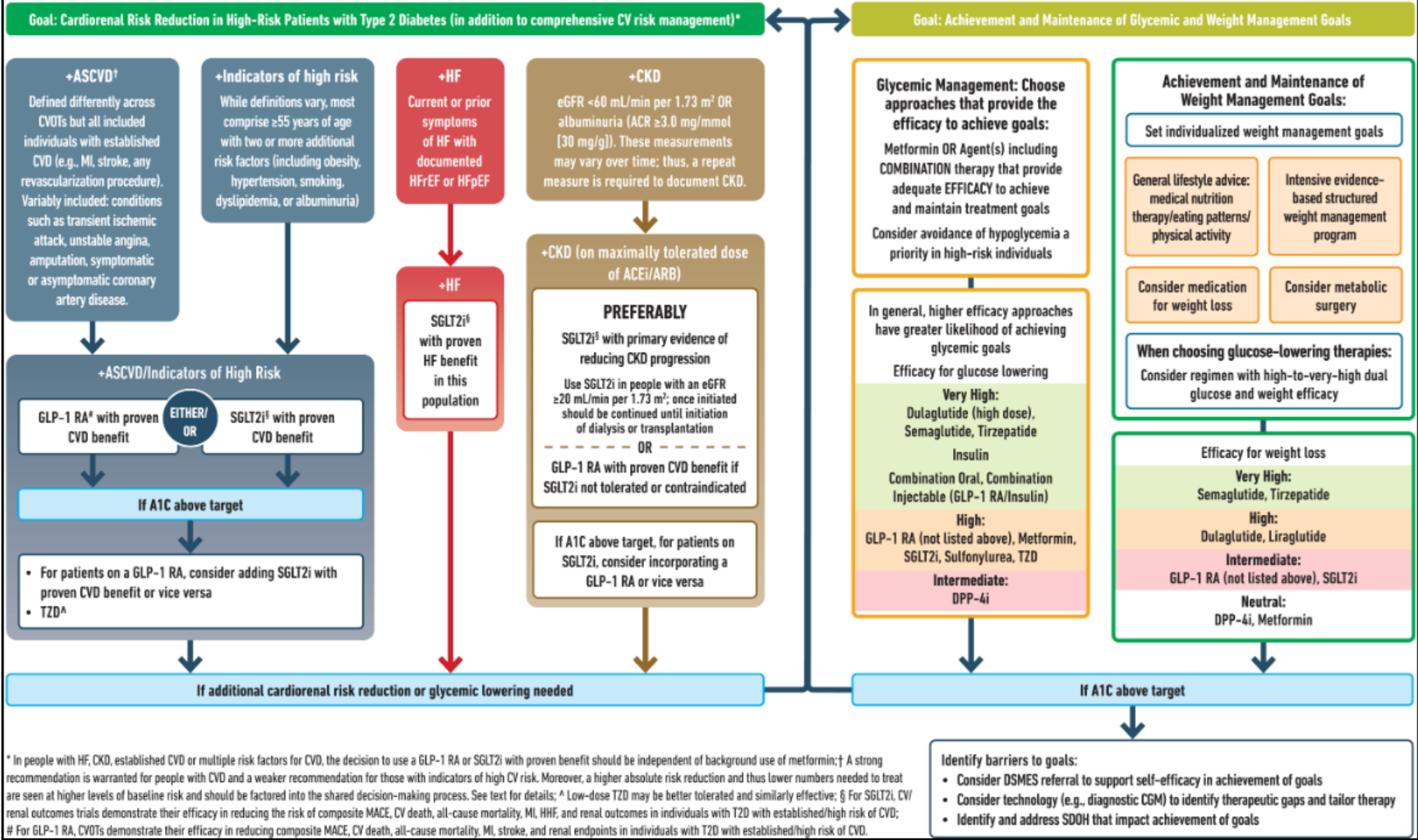
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- https://www.who.int/health-topics/health-equity#tab=tab_2
- [Standards of Care in Diabetes—2023 Abridged for Primary Care Providers | Clinical Diabetes | American Diabetes Association \(diabetesjournals.org\)](#)
- [https://www.cdc.gov/chronicdisease/programs-impact/pop/diabetes.htm#:~:text=%241%20out%20of%20every%20%244,caring%20for%20people%20with%20diabetes.&text=%24237%20billion%E2%80%A1\(a\)%20is,\(a\)%20on%20reduced%20productivity.&text=61%25%20of%20diabetes%20costs%20are,is%20mainly%20paid%20by%20Medicare.](https://www.cdc.gov/chronicdisease/programs-impact/pop/diabetes.htm#:~:text=%241%20out%20of%20every%20%244,caring%20for%20people%20with%20diabetes.&text=%24237%20billion%E2%80%A1(a)%20is,(a)%20on%20reduced%20productivity.&text=61%25%20of%20diabetes%20costs%20are,is%20mainly%20paid%20by%20Medicare.)
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- <https://www.nih.gov/news-events/news-releases/nih-funded-study-highlights-financial-toll-health-disparities-united-states>
- <https://www.atsdr.cdc.gov/placeandhealth/svi/index.html>
- https://www.cdc.gov/minorityhealth/publications/health_equity/index.html#:~:text=As%20defined%20by%20the%20U.S.,outcomes%20than%20individual%20level%20factors.

USE OF GLUCOSE-LOWERING MEDICATIONS IN THE MANAGEMENT OF TYPE 2 DIABETES



HEALTHY LIFESTYLE BEHAVIORS; DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT (DSMES); SOCIAL DETERMINANTS OF HEALTH (SDOH)



* In people with HF, CKD, established CVD or multiple risk factors for CVD, the decision to use a GLP-1 RA or SGLT2i with proven benefit should be independent of background use of metformin; † A strong recommendation is warranted for people with CVD and a weaker recommendation for those with indicators of high CV risk. Moreover, a higher absolute risk reduction and thus lower numbers needed to treat are seen at higher levels of baseline risk and should be factored into the shared decision-making process. See text for details; ‡ Low-dose TZD may be better tolerated and similarly effective; § For SGLT2i, CV/renal outcomes trials demonstrate their efficacy in reducing the risk of composite MACE, CV death, all-cause mortality, MI, HFrEF, and renal outcomes in individuals with T2D with established/high risk of CVD; ¶ For GLP-1 RA, CVOTs demonstrate their efficacy in reducing composite MACE, CV death, all-cause mortality, MI, stroke, and renal endpoints in individuals with T2D with established/high risk of CVD.