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Ohio Cardiovascular and Diabetes Health Collaborative

SCHOOL OF MEDICINE
CASE WESTERN RESERVE UNIVERSITY

In partnership with:

THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER

COLLEGE OF MEDICINE AND LIFE SCIENCES THE UNIVERSITY OF TOLEDO

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OHIO COLLEGES OF MEDICINE GOVERNMENT RESOURCE CENTER

Ohio Department of Medicaid

Project ECHO®

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Cardi-OH ECHO

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

November 11, 2021

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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.
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  - 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.”

Flanagin A et al., 2021, JAMA; Dickinson JK et al., Diabetes Care, 2017; American Psychological Association, 2021; ODM, 2021.

Cardiovascular Risks in Diabetes

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Learning Objectives

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1. Describe an approach to managing lipids, blood pressure, and chronic kidney disease in patients with type 2 diabetes.
2. Describe an approach to managing type 2 diabetes in patients with established heart disease (secondary prevention).
3. Describe a brief, evidence-based approach to smoking cessation among smokers with type 2 diabetes.

Risk of Cardiovascular Events and Death

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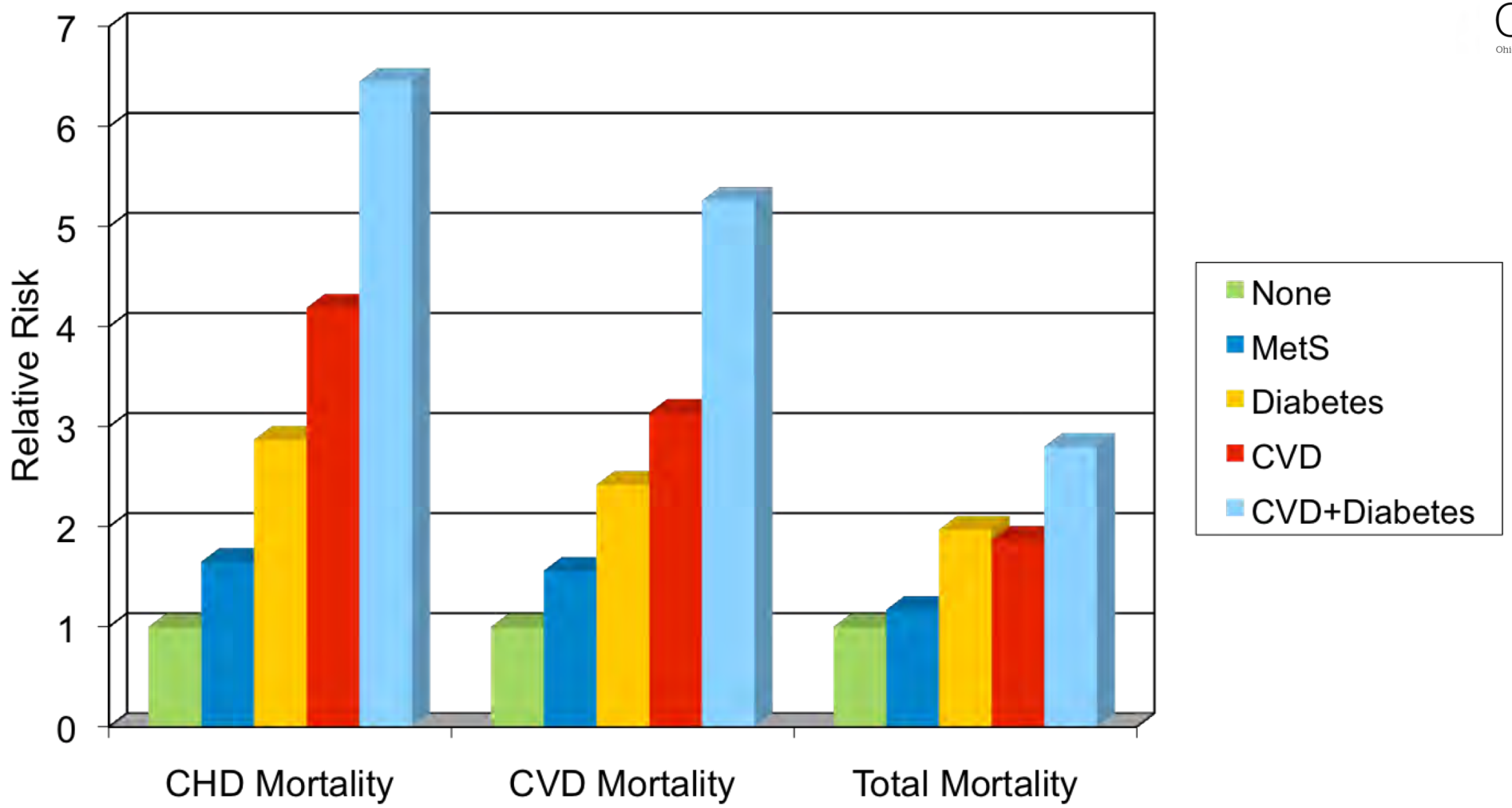

Source: Malik S et al. *Circulation* 2004;110:1245-1250

Resurgence in Diabetes-Related Complications

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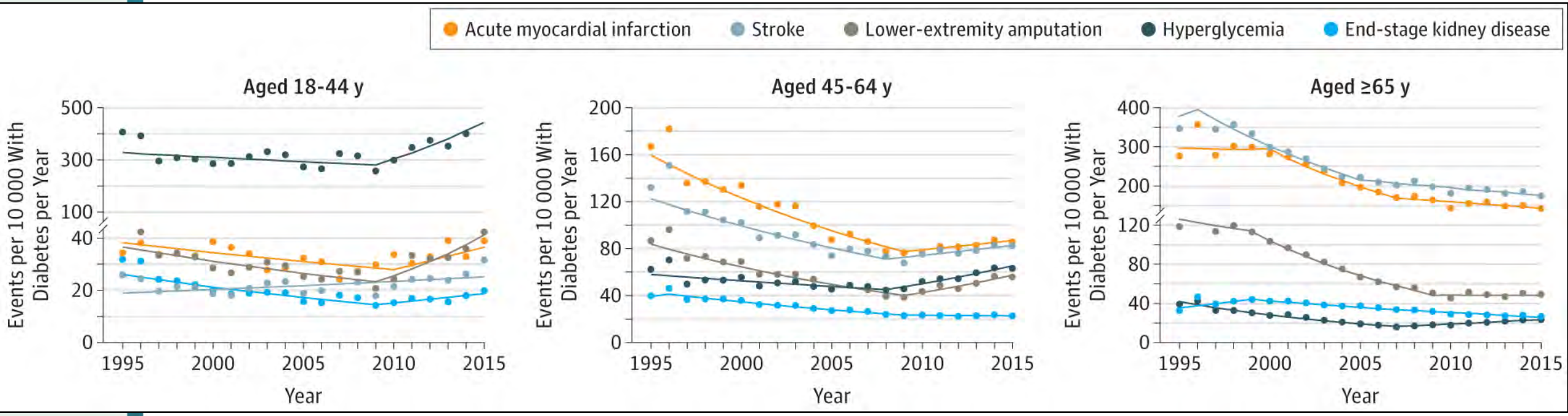
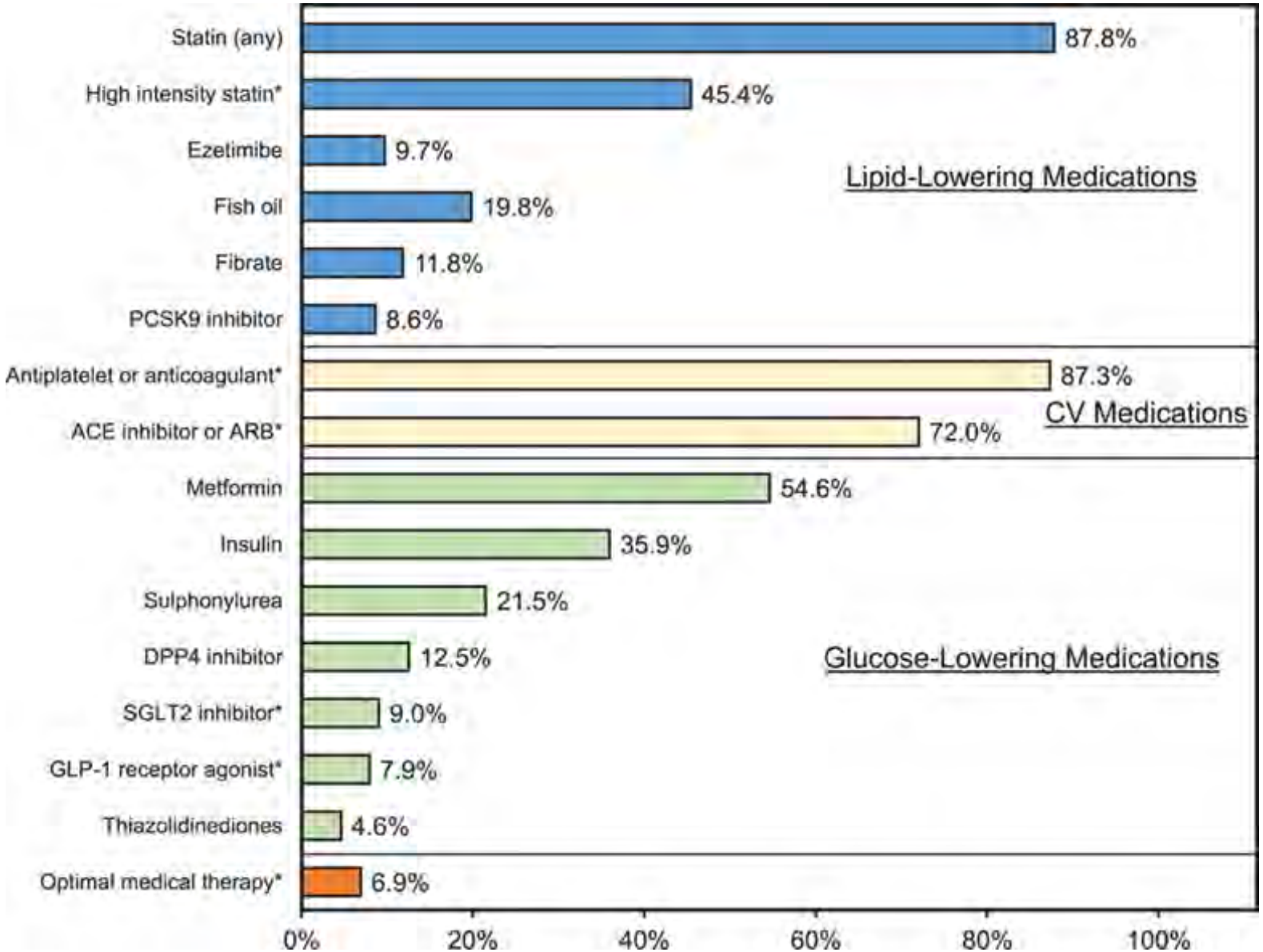


Gregg et al. JAMA 2019

Less Than 10% of Patients with T2D are on Optimal Therapy



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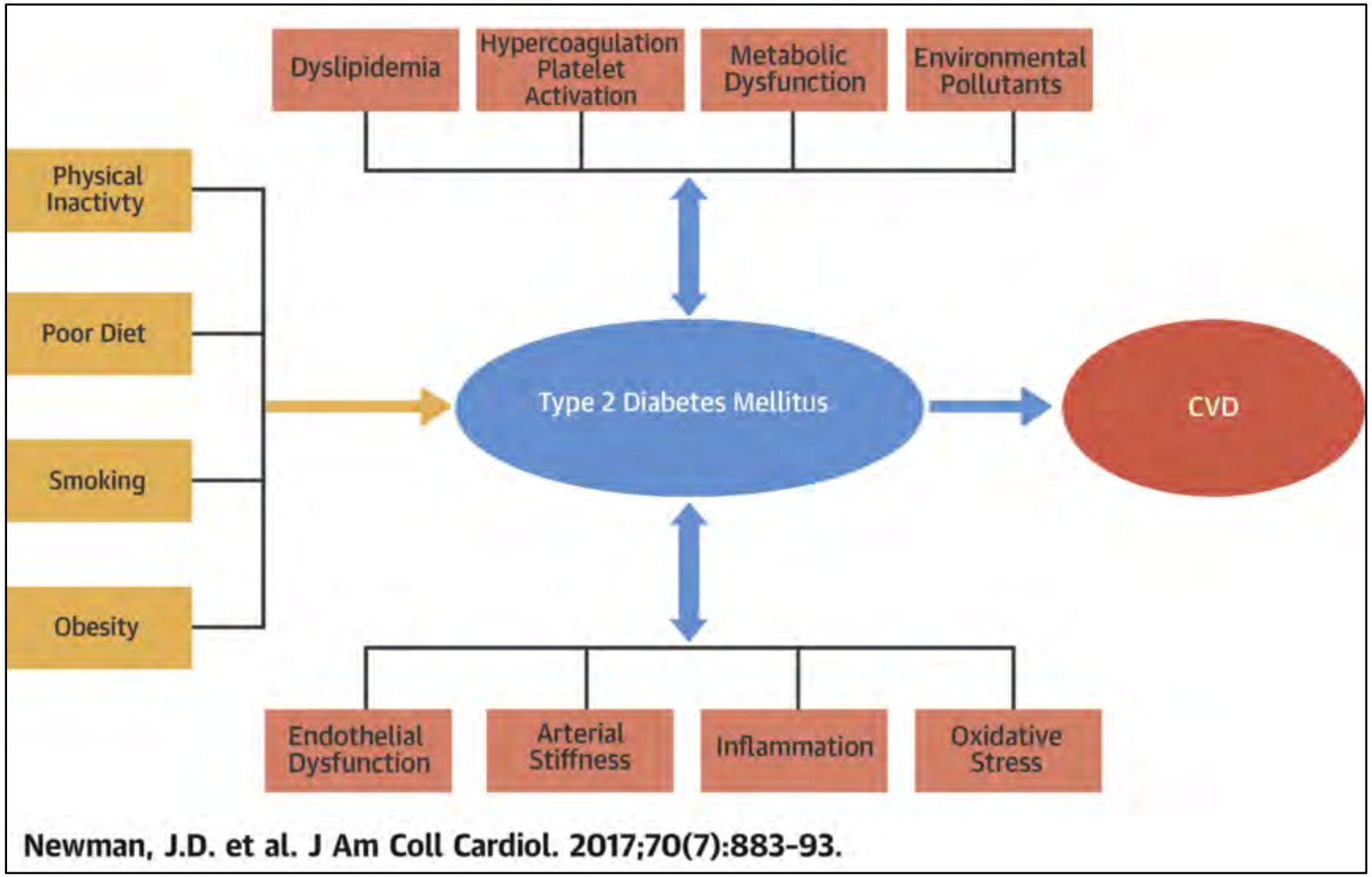
Arnold et al. Circulation 2019

Pathways Linking T2D with CVD



Newman, J.D. et al. J Am Coll Cardiol. 2017;70(7):883-93.

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TABLE 1 Guideline-Based Care for CVD Prevention for Patients With Diabetes Mellitus

Risk Factor	Specific Recommendation	Level of Evidence (Ref. #)
Physical activity	≥150 min/week moderate intensity (50%–70% MPHR) over ≥3 days/week with ≤2 consecutive days without exercise	ADA LOE: A (13)
Nutrition	Mediterranean style diet may improve glycemic control and CVD risk factors Consumption of fruits, vegetables, legumes, whole grains, and dairy in place of other carbohydrate sources Carbohydrate monitoring as an important strategy for glycemic control	ADA LOE: B (13)
Weight management	Counsel overweight and obese patients that lifestyle changes can lead to a sustained 3%–5% rate of weight loss and clinically meaningful health benefits	ACC/AHA Class I, LOE: A (20)
Cigarette Smoking	Advise all patients not to use cigarettes, other tobacco products, or e-cigarettes Include smoking cessation counseling and other forms of treatment as a routine component of care	ADA LOE: A (13)
Glycemic control	Lower HbA_{1c} ≤7% in most patients to reduce risk of microvascular disease	ADA LOE: B (13)
	Consider HbA_{1c} <6.5% for patients with diabetes of short duration, long life expectancy, and no significant CVD if can be achieved safely	ADA LOE: C (13)
	HbA_{1c} <8% or higher for patients with severe hypoglycemia, limited life expectancy, and/or comorbid conditions	ADA LOE: B (13)
Blood pressure	Achieve a goal of <140/90 mm Hg for most diabetic patients	ADA LOE: A, JNC-8 LOE: E (13,43)
	A goal of <130/80 mm Hg may be appropriate for younger diabetic patients with cerebrovascular disease or multiple CV risk factors,* assuming target can be safely achieved	ADA LOE: B/C (13)
	Pharmacotherapy should include either an ACE inhibitor or an ARB; if intolerant to one, substitute the other	ADA LOE: B/C (13,40)
Cholesterol	Diabetic patients 40–75 yrs of age with LDL 70–189 mg/dl should receive at least moderate-intensity statin†	ACC/AHA Class I, LOE: A; ADA LOE: A (13,54)
	If age 40–75 yrs with CV risk factors,* high-intensity statin‡ should be given	ACC/AHA Class IIa, LOE: B (54)
Antiplatelet therapy	Aspirin 75–162 mg is reasonable for diabetic patients ≥50 yrs of age with at least 1 CV risk factor§ without increased GI bleeding risk‖	ACC/AHA Class IIa, LOE: B; ADA LOE: C (1,13,30)
	Aspirin 75–162 mg might be reasonable for diabetic patients <50 yrs of age with 1 or more CV risk factors¶	ACC/AHA Class IIb, LOE: C; ADA LOE: E (1,13,30)

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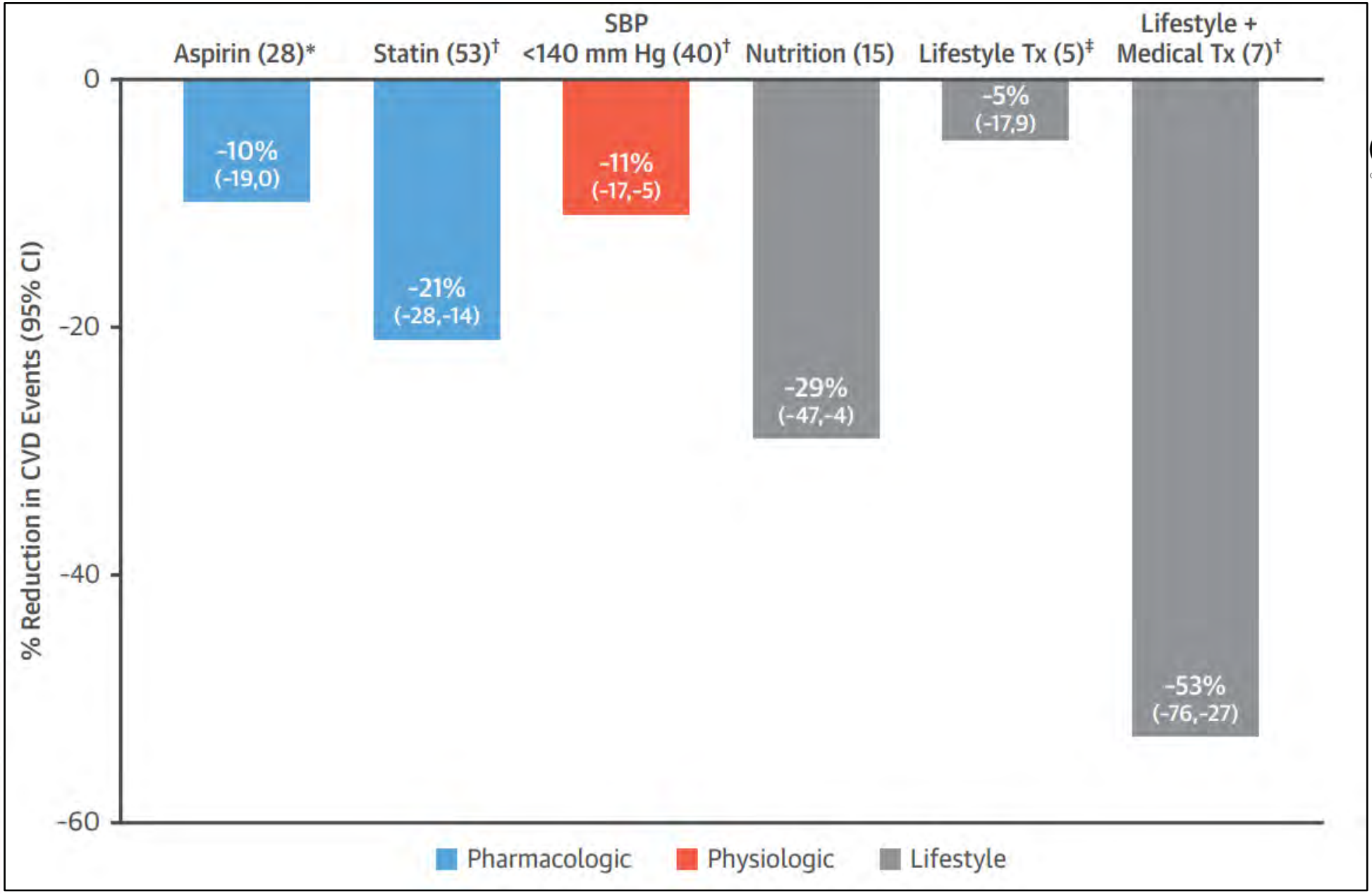

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Newman et al. JACC 2017

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Evidence-based Approaches to Smoking Cessation

Teachable Moments

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- Health-related events such as a diabetes diagnosis, increasing disease severity, or hospitalization can[1]:
  - Increase patients' interest in smoking cessation
  - Trigger attempts to quit smoking
  - Improve rates of smoking cessation
- Fewer than 30% of patients use evidence-based methods to quit smoking[2]
  - 25% used only one method for quitting on most recent quit attempt
  - 15% tried cold turkey as their only method (~5% success rate)
  - 25% switched completely to e-cigarettes
  - 15% got assistance from a health professional

1. U.S. Department of Health and Human Services, 2020. Smoking Cessation. A Report of the Surgeon General.
2. Caraballo RS, et al. Quit Methods Used by US Adult Cigarette Smokers, 2014–2016. *Prev Chronic Dis* 2017; 14:160600.

Evidence for Behavioral Methods

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- ***Evidence is strongest for physician and nurse advice*** (8-13% cessation rates), telephone quit lines, and tailored self-help materials[1]
  - Brief in-person counseling (<10 min) by primary care providers increases the proportion of adults who quit smoking and remain abstinent for 1 year[2]
  - Even minimal interventions (<3 min) have been found to increase cessation rates[2]

1. Stead LF, et al. *Cochrane Database Syst Rev*. 2013;5:CD000165.
2. USPSTF Recommendations. *Ann Intern Med*. 2015;163:622-634. doi:10.7326/M15-2023

Screening, Brief Intervention & Referral to Treatment (SBIRT)

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- Brief integrated approach to treatment for people with substance use disorders and those at-risk (5-10 minutes)
- Used across diverse populations for tobacco, alcohol, substance use, & abuse of prescription meds
- Associated with increased likelihood of smoking quit attempts & increased satisfaction with care[1]
- Even low-intensity SBIRT may prompt quit attempts and decrease cigarette use[2,3] (3-5 minutes)

1. *Bernstein S. et al. J Emerg Med 2010, 38(4), e35-e40.*
2. *Rahm AK, et al. Subst Abus 2015;36(3):281-8.*
3. *Cunningham et al. Acad Emerg Med 2010, 16(11), 1078-1088.*

‘Opening the Door’ (+ SBIRT & MI)

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Screening

- Step 1: After establishing rapport, **Ask about tobacco use**
  - Clinician: Mrs. Williams, do you currently smoke or use tobacco?
  - Mrs. Williams: Yes, I smoke.
  - Optional: Assess usage patterns and dependence (eg., CAGE for smoking, 4 C’s, Fagerstrom)

Brief Intervention

- Step 2: **Express Concern:** I’m concerned about your smoking.
- Step 3: **Medicalize the concern**
  - Clinician: Smoking makes it harder to control diabetes. It also increases your risk of developing serious health problems from diabetes.
- Step 4: **Solicit mutual concern**
  - Clinician: Does this concern you as well?
  - Mrs. Williams: Well, yes it does.
- Step 5: **Collaborate**
  - Clinician: Would it be okay if we discuss this for a few minutes today?
  - Mrs. Williams: Yes, that would be fine.
- Step 6: **Assess Importance**
  - Clinician: “On a scale from 0 to 10, how important would you say it is for you to quit smoking?”

Options

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Referral for Treatment

- If patient is willing to consider quitting or is ready to quit, refer to the Ohio Tobacco Quit Line, Freedom from Smoking program, Smokefree.gov, or other resources

    - *Quitting tobacco is a process. Whether you are thinking about quitting, are not yet ready to quit, or have already quit, the Ohio Tobacco Quit Line can help you each step of the way.*
      -- https://ohio.quitlogix.org/en-US/

Ohio Tobacco Program
Quit Line: 1-800-QUIT-NOW

Ohio Tobacco Quit Line (1-800-Quit-Now)

Ohio Tobacco Program
Quit Line: 1-800-QUIT-NOW

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- **Phone + Online**
  Coaching over the telephone, plus email, text, chat, web-based materials, and quit progress tracking via website; English, Spanish, & translation service

- **Pharmacotherapy**
  NRT available to patients for up to 8 weeks (patch, lozenge, gum) for those who work with a coach; 2 weeks of NRT provided at a time

- **Phone Only**
  Coaching over the phone, plus materials, quit planning, and quit progress tracking

- **Online Only**
  Materials, quit planning, and quit progress tracking via website

Freedom from Smoking Program

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- American Lung Association
  www.lung.org/quit-smoking/join-freedom-from-smoking

- Helpline counselors, apps for quitting, ‘group clinics’ (8 week-long facilitated small groups)

- All participants are eligible for up to eight weeks of Nicotine Replacement Therapy (patches) at no cost.
  - https://www.lung.org/local-content/oh/ffs-cvs

SmokeFree.gov

smokefree.gov

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- Sponsored by the National Cancer Institute
- Telephone counseling 877-44U-QUIT (877-448-7848)
  - Trained counselors provide information and support for quitting in English and Spanish
- Texting, smartphone apps, social media
  - Planning to quit, withdrawal, cravings, stress, mood
  - Relapse prevention
  - Tailored texting, apps, & social media content for:
    - Women, teens, veterans, Spanish-speaking, over age 60
- NRT information for patients

Options

If not ready to consider quitting or make a quit attempt:

- Provide printed information about smoking risks & cessation methods
- Ask for permission to resume the discussion at a future visit

- During subsequent visits, provide brief motivational interviewing-based counseling to increase motivation and self-efficacy
  - Discuss health benefits, assess & build confidence, address concerns and barriers

Recap

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- Use the ‘Opening the Door’ technique plus SBIRT & MI
- Refer patients to the Ohio Tobacco Quit Line, Freedom from Smoking program, Smokefree.gov, or community resources
  - Care team members can implement referrals via EHR, online, or by fax
- For patients who are not ready, request permission to resume the discussion at a future visit
  - Brief MI-based conversations over multiple visits
  - Support the patient in moving through the stages of change

Resources for Quitting

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- Tobaccofree.org/
  - Point-of-care materials, patient-level information about how to quit, videos for schools, speakers, advocacy
- National Cancer Institute's free Smoking Quitline, 1-877-44U-Quit
- www.BecomeAnEx.org
  - For tobacco users who want to quit. Personalized quit plans, text messages, online support groups.
- Nicotine-anonymous.org
  - Group support using the Twelve Steps to achieve abstinence from nicotine. Five in-person meetings in Cleveland area, 56 Zoom support groups available.
- www.cdc.gov/tobacco/index.htm
  - Quit information, information and tools for healthcare providers
- Million Hearts
  - https://millionhearts.hhs.gov/files/Tobacco_Cessation_Change_Pkg.pdf
  - Guidance and tools for developing clinic- and system-level cessation programs

Thank you!

Questions/Discussion