

Appropriate Treatment of Selected Diabetes Comorbidities in Adults

The purpose of this intervention is to determine opportunities for improving the quality and safety of drug therapy for patients with diabetes mellitus (DM) following the American Diabetes Association (ADA) 2024 clinical practice recommendations. The National Diabetes Statistics Report for 2021 estimated that 38.1 million adults in the United States have diabetes (approximately 14.7% of the adult population) with the number of newly diagnosed cases rising to 1.2 million (approximately 5.9 per 1,000 people). Many atherosclerotic cardiovascular disease (ASCVD) risk factors and comorbidities are associated with a diagnosis of diabetes, including smoking, obesity, hypertension, hyperlipidemia, and low physical activity. Combined, these lead to significant morbidity, such as kidney failure, nontraumatic lower extremity amputations, blindness, heart disease, and stroke. In 2020, the following incidences of hospitalization were reported for patients with diabetes: ischemic heart disease – 15.7 per 1,000 adults, stroke – 13.7 per 1,000 adults, lower-extremity amputation – 6.8 per 1,000, hyperglycemia – 9.9 per 1,000 adults. As of 2021, diabetes is the eighth leading cause of death in the U.S., and in 2022 diabetes had a total direct estimated cost of \$307 billion.

To help mitigate these risk factors, the American Diabetes Association (ADA) published 2024 guidelines on updated cardiovascular disease risk management. These include targeting a blood pressure of <130/80 mmHg in patients with diabetes and initiating first-line antihypertensive therapies for patients with hypertension, particularly ACE-I or ARBs if albuminuria or coronary artery disease is present. For primary ASCVD prevention, the ADA recommends the following treatments: patients 40-75 years old – moderate-intensity statin, patients 20-39 years old with additional ASCVD risk factors – any statin therapy, patients 40-75 years old with ASCVD risk factors – high-intensity statin. For secondary ASCVD prevention, the ADA recommends patients of all ages to have high-intensity statin therapy.

Guidelines:

[American Diabetes Association Standards of Care in Diabetes \(2024\) - Cardiovascular Disease and Risk Management](#)

Intervention Summary

The following table shows a summary of the proposed intervention topics and the number of potential patients that may be targeted by each intervention. The number of potential patients is based on the most recent ICER. The actual number of targeted patients for each intervention will be based on the ICER for the month the intervention is performed.

Outcomes assessment will be completed 180 days after the intervention is performed.

Proposed Intervention Topic	MCO	FFS – Adult	FFS – Pediatric (Age <18 years)
1. All patients 40 to 75 years with a claim for an antidiabetic agent (oral, non-insulin injectable, and insulin) for 90 days in the last 180 days and a diagnosis of diabetes mellitus in the last 180 days.	7083	218	N/A
2. All patients 20 to 39 years of age with a claim for an antidiabetic agent (oral, non-insulin injectable, and insulin) for 90 days in the last 180 days and with a diagnosis of family history of atherosclerotic	1070	24	N/A

Proposed Intervention Topic	MCO	FFS – Adult	FFS – Pediatric (Age <18 years)
cardiovascular disease (ASCVD) AND diabetes mellitus in the last 180 days.			
3. All patients ≥18 years old with a claim for an antidiabetic agent (oral, non-insulin injectable, and insulin) for 90 days in the last 180 days and with a diagnosis of diabetes mellitus AND a diagnosis of hypertension or diabetic nephritis in the last 180 days.	8300	92	N/A
4. All patients ≥18 years old with a diagnosis of diabetes mellitus in the last 180 days AND without an eye exam in the last 730 days.	9979	277	N/A

Criteria Recommendations

1. Hyperlipidemia Treatment and ASCVD Risk Prevention in 40-75 Year Olds

Alert Message: The ADA Guideline on the Management of Blood Cholesterol recommends the use of at least a moderate-intensity statin therapy as primary prevention to reduce the risk of atherosclerotic cardiovascular disease in diabetic patients **40 to 75 years** of age unless contraindicated. If adult diabetic patients who have multiple ASCVD risk factors or previous ASCVD events, it is reasonable to prescribe high-intensity statin therapy with the aim to reduce LDL-C levels by 50% or more. Refer to the AHA/ACC or ADA guidelines for agents and dosage.

Population:

Inclusion: Patients 40-75 years old with a claim for an antidiabetic agent for ≥90 days in the last 180 days and a diagnosis of diabetes mellitus in the last 180 days.

Exclusion: Patients with a claim for a statin and/or ASCVD risk-lowering drug in the last 90 days.

MCO	FFS – Adult	FFS – Pediatric (Age <18 years)
7083	218	N/A

2. Hyperlipidemia Treatment and ASCVD Risk Prevention in 20-39 Year Olds

Alert Message: The patient may benefit from the addition of a statin to their drug regimen if no contraindications exist. The AHA/ACC Guideline on the Management of Blood Cholesterol states that it is reasonable to initiate statin therapy in patients **20 to 39 years** of age for primary prevention of atherosclerotic cardiovascular disease if the patient has a family history of premature ASCVD and LDL-C ≥ 160 mg/dL. Refer to the ACC/AHA or ADA guidelines for agents and dosage.

Population:

Inclusion: Patients 20-30 years old with a claim for an antidiabetic agent for ≥90 days in the last 180 days AND with a diagnosis of family history of ASCVD and a diagnosis of diabetes mellitus in the last 180 days.

Exclusion: Patients with a claim for a statin and/or ASCVD risk-lowering drug in the last 90 days.

MCO	FFS – Adult	FFS – Pediatric (Age <18 years)
1070	24	N/A

3. Hypertension Treatment

Alert Message: According to the ADA guidelines, the hypertension treatment goal for patients with diabetes is a blood pressure of <130/80 mm Hg. In order to achieve this goal, multiple antihypertensive agents may be required. Adding an ACEI or an ARB should be considered if no contraindications are present. These agents also have been shown to delay the progression of nephropathy in diabetic patients with microalbuminuria.

Population:

Inclusion: Patients ≥18 years old with a claim for an antidiabetic agent for ≥90 days in the last 180 days AND with a diagnosis of diabetes mellitus and a diagnosis of hypertension or diabetic nephritis in the last 180 days.

Exclusion: Patients with a claim for an ACE-I or ARB in the last 90 days.

MCO	FFS – Adult	FFS – Pediatric (Age <18 years)
8300	92	N/A

4. Diabetic Retinopathy Screening

Alert Message: According to the ADA guidelines, it is recommended for patients with diabetes mellitus to be screened initially for diabetic retinopathy within 5 years of a type 1 diabetes diagnosis and at the time of a type 2 diabetes diagnosis. For patients with established diabetes mellitus, it is recommended that eye exams should be performed at least every 2 years and at least annually for patients already diagnosed with diabetic retinopathy.

Population:

Inclusion: Patients ≥18 years old with a diagnosis of diabetes mellitus in the last 180 days AND without an eye exam in the last 730 days.

Exclusion: Patients with an eye exam within 730 days.

MCO	FFS – Adult	FFS – Pediatric (Age 18 and below)
9979	277	N/A

References:

- Centers for Disease Control and Prevention. (2024, May 15). *National Diabetes Statistics Report*. Centers for Disease Control and Prevention. <https://www.cdc.gov/diabetes/php/data-research/index.html>
- American Diabetes Association Professional Practice Committee; 10. Cardiovascular Disease and Risk Management: *Standards of Care in Diabetes—2024*. *Diabetes Care* 1 January 2024; 47 (Supplement_1): S179–S218. <https://doi.org/10.2337/dc24-S010>
- Whelton PK, Carey RM, Aronow WS, et al. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *Hypertension*. 2017 Nov. 13.

- 4.) Grundy SM, Stone NJ, Bailey AL, et al. 2018 AHA/ACC/AACVPR/AAPA/ABC/ACPM/ADA/AGS/APhA/ASPC/NLA/PCNA Guideline on the Management of Blood Cholesterol: Executive Summary: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *J Am Coll Cardiol* 2019;73:e285-350.
- 5.) Sharon D. Solomon, Emily Chew, Elia J. Duh, Lucia Sobrin, Jennifer K. Sun, Brian L. VanderBeek, Charles C. Wykoff, Thomas W. Gardner; Diabetic Retinopathy: A Position Statement by the American Diabetes Association. *Diabetes Care* 1 March 2017; 40 (3): 412–418. <https://doi.org/10.2337/dc16-2641>