Comparing Dyslipidemia Recommendations: Evidence Supporting USPSTF vs ACC/AHA Guidelines

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The American College of Cardiology/American Heart Association (ACC/AHA) has released a major update to its 2018 dyslipidemia guideline stating that healthy lifestyle counseling, statins for patients with a 10-year risk greater than 10% for major adverse cardiovascular events, and intensive lipid-lowering therapy for secondary prevention should continue to be part of routine care.[1,2]

The 2026 guideline also introduces several significant changes. It recommends performing universal lipid screening between 9 and 11 years of age and using the PREVENT (Predicting Risk of Cardiovascular Disease Events) equation instead of the Pooled Cohort Equations to assess risk.[1] It proposes new risk categories (low risk [less than 3%], borderline risk [3% to less than 5%], intermediate risk [5% to less than 10%], and high risk [10% or higher]); lower thresholds to initiate statin therapy; a return to reduced low-density lipoprotein cholesterol (LDL-C) treatment goals; measurement of lipoprotein (a) for everyone once; and use of coronary artery calcium, apolipoprotein B, and high-sensitivity C-reactive protein to guide treatment decisions[1] (Table 1[1,3-8]).

Implementing these recommendations in primary care would substantially increase screening, diagnostic testing, and use of lipid-lowering therapy among lower-risk populations. A recent analysis estimated that following these new guidelines would result in statins being prescribed for an additional 21.5 million individuals in the United States.[9]

By expanding more intensive lipid-lowering therapies to include lower-risk populations, the absolute benefits become progressively smaller, and the treatment burden remains lifelong. Harms are also compounded over a longer lifetime treatment period. However, the ACC/AHA guideline does not consider harms (except for the increased risk of diabetes) or patient acceptance. In a 2026 survey, less than one-quarter of adults said they would take a statin if it reduced their 10-year risk of developing clinical atherosclerotic cardiovascular disease (ASCVD) from 10% to 7.5%, which is the actual effect of statins.[10]

The ACC/AHA guideline process uses a different approach from the US Preventive Services Task Force (USPSTF) and US Department of Veterans Affairs/US Department of Defense (VA/DoD).[1,8,11] Several of the new recommendations were supported by only one randomized controlled trial, extrapolated care beyond directly studied populations, relied largely on surrogate outcomes rather than improved health outcomes, and were primarily driven by biologic rationale and professional opinion. Notably, the 33-member panel did not include any primary care physicians.[1]

By contrast, the USPSTF generally requires randomized controlled trials demonstrating improved health outcomes (ie, improved length or quality of life) and does not replace evidence with opinion.[12] A 2022 USPSTF systematic review of 22 primary prevention trials found that myocardial infarction, stroke, and composite cardiovascular outcomes were significantly reduced in adults with cardiovascular risk factors who were randomized to a moderate-intensity statin vs placebo.[3] Considering this evidence, the USPSTF recommended statin therapy for primary prevention in adults 40 to 75 years of age with a 10-year risk of a major adverse cardiovascular event of 10% or greater and shared decision-making for those with 7.5% to less than 10% risk. The USPSTF concluded that evidence is insufficient to recommend routine lipid screening in children and adolescents or to add nontraditional risk markers to traditional cardiovascular risk assessment.[1,3-8] Other guidelines (eg, VA/DoD, National Institute for Health and Care Excellence) recommend a statin when 10-year risk is greater than 10% and shared decision-making when it is 5% to 10% and do not recommend lipoprotein (a), coronary artery calcium, apolipoprotein B, or high-sensitivity C-reactive protein to guide treatment.[11,13-15] The Canadian PEER (Patients Experience Evidence Research) guideline, developed by family physicians,

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Author Disclosure: No relevant financial relationships.

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See related editorial on page 449 and article on page 484.

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TABLE 1

2026 ACC/AHA Dyslipidemia Guidelines: Do They Address USPSTF-Identified Evidence Gaps?

USPSTF recommendations[3-8]	ACC/AHA recommendations[1]	Deficiencies in ACC/AHA recommendations
Insufficient evidence to screen for lipid disorders in children and adolescents (grade I)	Screen children 9-11 years of age to identify familial hypercholesterolemia and other significant lipid disorders* Lifestyle management for children and adolescents with lipid abnormalities Initiate lipid-lowering therapy in people ≥ 8 years with persistent LDL-C ≥ 160 mg/dL (4.14 mmol/L)†	No direct evidence that screening asymptomatic children prevents CVD in adults, reduces mortality, or improves quality of life better than screening and lipid-lowering therapy later in life Treatment evidence primarily extrapolates from populations with familial hypercholesterolemia Long-term harms of childhood screening, labeling, cascade testing, and decades of pharmacologic treatment are not addressed
Prescribe a statin for primary prevention of CVD in adults 40-75 years of age with one or more risk factors and an estimated 10-year risk of a cardiovascular event ≥ 10% (grade B); selectively offer statin if risk is 7.5% to < 10% (grade C)	In adults 30-79 years of age without CVD, calculate PREVENT equation score as low (< 3%), borderline (3% to < 5%), intermediate (5% to < 10%), or high (≥ 10%) for a 10-year risk of a cardiovascular event* Borderline risk: shared decision-making for moderate-intensity statin therapy Intermediate risk: prescribe moderate-intensity statin therapy or high-intensity for patients at higher risk‡ High risk: prescribe high-intensity statin therapy‡ Established CVD: lipid-lowering therapy, including high-intensity statin‡ LDL-C goals†: < 100 mg/dL (2.59 mmol/L) for borderline or intermediate risk < 70 mg/dL (1.81 mmol/L) for high risk < 55 mg/dL (1.42 mmol/L) for CVD Add ezetimibe, bempedoic acid (Nexletol), or PCSK9 monoclonal antibodies as needed to achieve LDL-C goals†	LDL-C threshold recommendations extrapolate findings from higher-risk primary prevention populations to lower-risk primary prevention groups, without primary prevention trials for people at lower risk LDL-C threshold findings from one RCT of people with severe CVD were applied to all people with CVD No direct evidence from RCTs comparing treat-to-target vs fixed-dose statin therapy for primary prevention No direct evidence from RCTs comparing higher- vs lower-intensity statins for health outcomes in lower-risk primary prevention populations Primary prevention trials did not include adults < 40 years or initiation of lipid-lowering therapy in people > 75 years No trials comparing earlier vs delayed initiation of statins based on lifetime risk Lower cost of ezetimibe and lack of evidence that PCSK9 monoclonal antibodies are superior are not addressed Harms are minimally considered; patient preferences are not considered

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ACC/AHA = American College of Cardiology/American Heart Association; CAC = coronary artery calcium; CT = computed tomography; CVD = cardiovascular disease; LDL-C = low-density lipoprotein cholesterol; LOE = level of evidence; PCSK9 = proprotein convertase subtilisin/kexin type 9; PREVENT = Predicting Risk of Cardiovascular Disease Events; RCT = randomized controlled trial; USPSTF = US Preventive Services Task Force.

*—LOE B-NR = moderate-quality evidence from nonrandomized trials.

†—LOE B-R = moderate-quality evidence from one or more RCTs.

‡—LOE A = high-quality evidence from one or more RCTs.

TABLE 1 (continued)

2026 ACC/AHA Dyslipidemia Guidelines: Do They Address USPSTF-Identified Evidence Gaps?

USPSTF recommendations[3-8]	ACC/AHA recommendations[1]	Deficiencies in ACC/AHA recommendations
Insufficient evidence to add the ankle-brachial index, high-sensitivity C-reactive protein level, or CAC score to traditional risk assessment (grade I)	For all adults, measure lipoprotein (a) at least once* Consider measuring risk enhancers (CAC, high-sensitivity C-reactive protein, apolipoprotein B) to individualize risk assessment and guide decisions about starting lipid-lowering therapy for people at borderline risk* If CAC score = 0 and no higher-risk condition is present, it is reasonable to defer therapy and repeat CAC testing in 3-7 years* If CAC score > 0, lipid-lowering therapy is recommended, particularly when CAC score ≥ 100 Agatston units or ≥ 75th percentile for people of the same age, sex, and race or ethnicity* Use CAC score to guide the decision to intensify lipid-lowering therapy in people at intermediate or high risk* If incidental CAC identified on noncardiac CT, treat with lipid-lowering therapy as though the patient has CVD*	No RCTs show that identifying elevated lipoprotein (a) or lowering lipoprotein (a) improves health outcomes No RCTs directly compare traditional risk assessment alone with traditional risk assessment plus lipoprotein (a) or risk enhancers Cited evidence demonstrates association, discrimination, calibration, or risk reclassification, without demonstration of improved health outcomes No consideration of harms (eg, radiation exposure, incidental findings, downstream imaging or invasive procedures, anxiety, labeling, cost, overtreatment, adverse effects) from intensified lipid-lowering therapy

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*—LOE B-NR = moderate-quality evidence from nonrandomized trials.

†—LOE B-R = moderate-quality evidence from one or more RCTs.

‡—LOE A = high-quality evidence from one or more RCTs.

Information from references 1 and 3-8.

emphasizes shared decision-making and recommends fixed doses of statins, depending on risk.[16]

The ACC/AHA recommendation to replace the Pooled Cohort Equations with the PREVENT equation is supported by evidence that directly addresses an evidence gap identified by the USPSTF.[1,8] The PREVENT equation was derived and validated in contemporary cohorts of millions of US adults and demonstrates improved calibration across diverse populations.[17] The ACC/AHA reduced treatment thresholds from 5% to 3% for shared decision-making and from 7.5% to 5.0% for recommendation of statins because the PREVENT equation generally calculates lower risks than the Pooled Cohort Equations.[1] However, initiating statin therapy at lower thresholds would simply treat a lower-risk population and result in higher numbers needed to treat (NNTs). For example, to prevent one major adverse cardiovascular event over 10 years, the NNT is 120 for 3% baseline risk, 71 for 5% risk, and 36 for 10% risk.

Recommendations for childhood lipid screening are based on the biologic rationale that atherosclerosis begins early and that statins reduce LDL-C in children with familial hypercholesterolemia. However, no evidence supports that screening children reduces adult cardiovascular events or mortality, and no studies have assessed the optimal age to initiate statins that balance benefits with cost and long-term harms of lifelong treatment.[18] Additionally, screening will identify substantially more children with multifactorial dyslipidemia (approximately 8% prevalence) rather than familial hypercholesterolemia (approximately 0.3% prevalence).[5] The benefits of treating multifactorial dyslipidemia are substantially lower, making the relative harms, cost, and burden greater.

The ACC/AHA uses LDL-C targets and expanded use of nonstatin therapies to base its recommendations for lower treatment thresholds on meta-regression analyses showing that greater LDL-C reduction is associated with greater benefit.[1] However, these recommendations extrapolate findings from higher-risk populations to individuals at substantially lower risk. The Ez-PAVE trial randomized patients at high risk with known CVD to LDL-C targets of 55 mg/dL (1.42 mmol/L) and 70 mg/dL (1.81 mmol/L); it showed lower rates of nonfatal myocardial infarction (NNT = 111 over 3 years) and percutaneous angioplasty but no reduction in cardiovascular mortality.[19] This single study is the basis for lowering the LDL-C target to 55 mg/dL for all people with CVD.[1] Similarly, rather than fixed-intensity statin strategies, the ACC/AHA recommends lowering LDL-C treatment goals for people without CVD at borderline or intermediate risk to less than 100 mg/dL (2.59 mmol/L) and those at high risk to less than 70 mg/dL.[1] This recommendation is extrapolated from studies of people with CVD (ie, not primary prevention) that compare outcomes for higher- vs lower-intensity statins to find the overall average LDL-C.

The ACC/AHA cites studies showing that measuring lipoprotein (a), coronary artery calcium, apolipoprotein B, and high-sensitivity C-reactive protein improves risk prediction.[1] However, no studies demonstrate that adding these tests to traditional risk assessment changes clinical decisions in ways that improve health outcomes.[8,20]

Recommendations for CVD prevention deserve the highest standard of evidence to avoid increasing costs, harms, and burdens without adequate benefit. Unlike the 2026 ACC/AHA guideline, future dyslipidemia guidelines should be grounded in rigorous systematic reviews that demonstrate improved health outcomes.

The dismantling of the USPSTF threatens one of the few truly independent, evidence-based voices in preventive care in the United States.[21] Now more than ever, we need its scientific rigor, transparency, and willingness to let evidence—not opinion—guide recommendations.

Editor's Note: Dr. Ebell is cofounder and editor-in-chief of Essential Evidence Plus.

REFERENCES

1. Blumenthal RS, Morris PB, Gaudino M, et al. 2026 ACC/AHA/AACVPR/ABC/ACPM/ADA/AGS/APhA/ASPC/NLA/PCNA guideline on the management of dyslipidemia: a report of the American College of Cardiology/American Heart Association joint committee on clinical practice guidelines. *J Am Coll Cardiol*. 2026;87(19):2624-2757.
2. 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: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *Circulation*. 2019;139(25):e1082-e1143.
3. Chou R, Cantor A, Dana T, et al. Statin use for the primary prevention of cardiovascular disease in adults: updated evidence report and systematic review for the US Preventive Services Task Force. *JAMA*. 2022;328(8):754-771.
4. Barry MJ, Nicholson WK, Silverstein M, et al. Screening for lipid disorders in children and adolescents: US Preventive Services Task Force recommendation statement. *JAMA*. 2023;330(3):253-260.
5. Guirguis-Blake JM, Evans CV, Coppola EL, et al. Screening for lipid disorders in children and adolescents: updated evidence report and systematic review for the US Preventive Services Task Force. *JAMA*. 2023;330(3):261-274.
6. Curry SJ, Krist AH, Owens DK, et al. Risk assessment for cardiovascular disease with nontraditional risk factors: US Preventive Services Task Force recommendation statement. *JAMA*. 2018;320(3):272-280.
7. Lin JS, Evans CV, Johnson E, et al. Nontraditional risk factors in cardiovascular disease risk assessment: updated evidence report and systematic review for the US Preventive Services Task Force. *JAMA*. 2018;320(3):281-297.
8. Mangione CM, Barry MJ, Nicholson WK, et al. Statin use for the primary prevention of cardiovascular disease in adults: US Preventive Services Task Force recommendation statement. *JAMA*. 2022;328(8):746-753.
9. Anderson TS, Wilson LM, Sussman JB. Implications of the 2026 dyslipidemia guideline for primary prevention statin therapy. *JAMA*. 2026;336(7):557-564.
10. Luo Y, Kawakami H, Funada S, et al. Measuring public preferences for statin therapy using the smallest worthwhile difference. *JAMA Intern Med*. 2026;186(4):488-490.
11. U.S. Department of Veterans Affairs. VA/DOD clinical practice guidelines: lipids management for cardiovascular disease risk reduction (2025). Accessed September 22, 2026. https://www.healthquality.va.gov/guidelines/CD/lipids/index.asp
12. Wolff TA, Krist AH, LeFevre M, et al. Update on the methods of the U.S. Preventive Services Task Force: linking intermediate outcomes and health outcomes in prevention. *Am J Prev Med*. 2018;54(1S1):S4-S10.
13. Cardiovascular disease: risk assessment and reduction, including lipid modification. NICE clinical guidelines, no. 238. National Institute for Health and Care Excellence (NICE); 2023. Accessed September 22, 2026. https://www.ncbi.nlm.nih.gov/books/NBK602380
14. Taylor F, Huffman MD, Macedo AF, et al. Statins for the primary prevention of cardiovascular disease. *Cochrane Database Syst Rev*. 2013;(1):CD004816.
15. Vincent YM, Gocko X, François C, et al. Calcium score: what do the most reliable guidelines recommend? An analysis using the G-TRUST tool. *Fam Pract*. 2025;42(6):cmaf079.
16. Kolber MR, Klarenbach S, Cauchon M, et al. PEER simplified lipid guideline 2023 update: prevention and management of cardiovascular disease in primary care. *Can Fam Physician*. 2023;69(10):675-686.
17. Khan SS, Coresh J, Pencina MJ, et al. Novel prediction equations for absolute risk assessment of total cardiovascular disease incorporating cardiovascular-kidney-metabolic health: a scientific statement from the American Heart Association. *Circulation*. 2023;148(24):1982-2004.
18. Wolf ER, Schroeder AR, Haskell H, et al. Universal lipid screening in children and adolescents: pros and cons. Lown Right Care. *Am Fam Physician*. 2026;113(6):601-603.
19. Lee YJ, Lee SJ, Kim JW, et al.; Ez-PAVE Investigators. Intensive LDL cholesterol targeting in atherosclerotic cardiovascular disease. *N Engl J Med*. 2026;394(14):1365-1375.
20. Kolata G. Another heart drug fails, shocking cardiologists. September 4, 2026. Accessed September 17, 2026. https://www.nytimes.com/2026/09/04/science/heart-drug-fails-novartis-pelacarsen.html
21. Wong JB, Davis EM, Silverstein M. Imminent threats to the US Preventive Services Task Force. Viewpoint. *JAMA*. 2026;336(10):825-826.