NEJM | Clinician

Guideline Watch Roundup

Summaries and highlights of the most important new clinical guidelines to inform your practice

Guideline Watch Roundup

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AHA/ACC Guideline on Pulmonary Embolism

Behnood Bikdeli, M.D., M.S., reviewing **Journal of the American College of Cardiology** 2026 Mar 17.

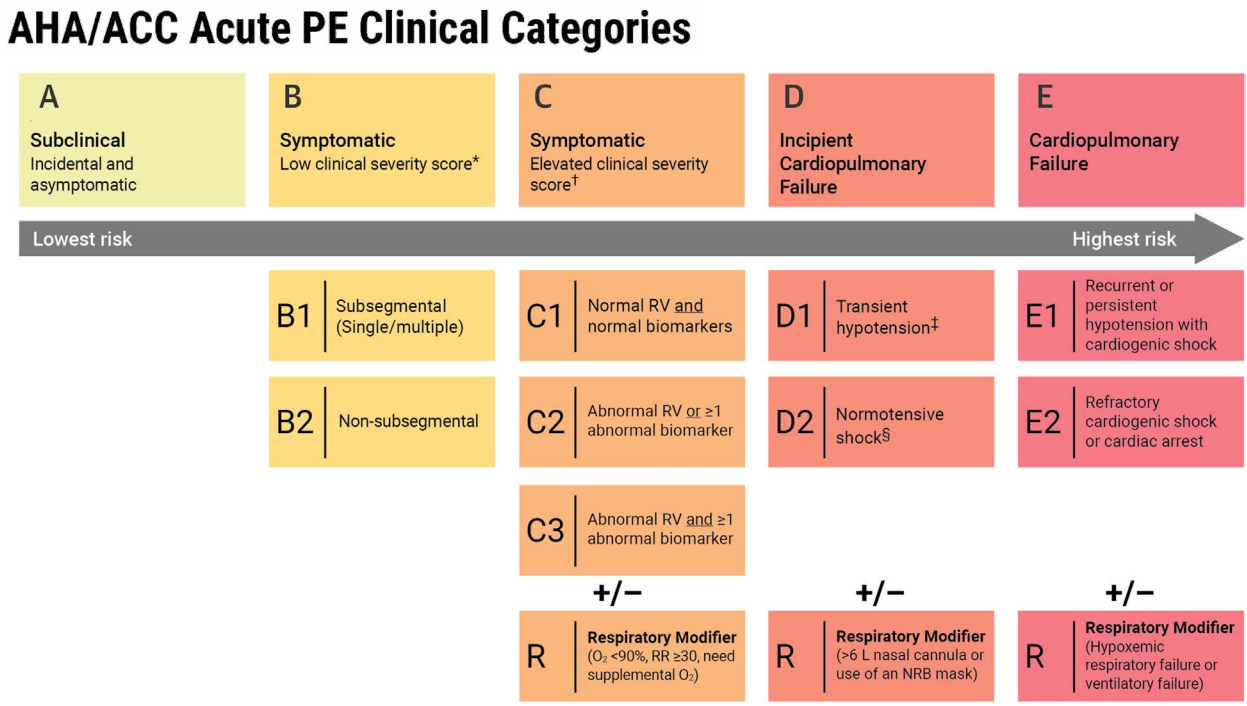
Clinical Takeaway: ***The guideline offers a new system for classifying PE and provides management recommendations for each category.***

An overview of the 2026 AHA/ACC/ACCP/ACEP/CHEST/SCAI/SHM/SIR/SVM/SVN Guideline for the Evaluation and Management of Acute Pulmonary Embolism in Adults: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines

Background

In February 2026, the American Heart Association (AHA) and American College of Cardiology (ACC) released their first-ever guideline on pulmonary embolism (PE). Created in collaboration with other professional societies, the guideline provides an evidence-based framework for evaluating and treating PE across diverse clinical settings.

Central to the guideline is a new system for clinically classifying PE — the AHA/ACC Clinical Categories (see Figure). Historically, PE has been classified into three categories: low risk, submassive, or massive (per the AHA) or low, intermediate, or high risk (per the European Society of Cardiology). The new system expands this framework to five categories, ranging from asymptomatic (incidentally identified) PE to hemodynamically unstable PE, with several subcategories. In the more-severe categories, clinicians can further classify patients by whether they have prominent respiratory abnormalities, using a "respiratory



When patients meet the respiratory modifier status criteria, then add "R" to the category description (e.g., C3R, D2R).

*Low Clinical Severity Score includes PESI ≤85 or sPESI =0 or Bova ≤4.

†Elevated Clinical Severity Score includes PESI >85 or sPESI ≥1 or Bova >4.

‡Systolic blood pressure <90 or decrease >40 mm Hg lasting <15 min or responding to IV fluids.

§Any: Lactate >2 mmol/L, acute kidney injury, urine output <0.5 mL/kg/hr, mental status change, cardiac index <2.2 L/min/m^2, mean arterial pressure <60 mm Hg, increased shock score/stage (SCAI stage, CPES score).

NRB indicates nonrebreather; RR, respiratory rate; and RV, right ventricle.

2026 Adults With Acute Pulmonary Embolism

modifier." These modifiers — a first for any major guideline — acknowledge that PE can be severe even when systolic blood pressure is preserved.

Key Recommendations

- For patients with suspected PE and a clinical pretest probability <50%, PE can be excluded using an age-adjusted D-dimer level, the YEARS criteria, or both.
- Computed tomography (CT) pulmonary angiography is preferred for diagnosis, but if it's contraindicated, ventilation–perfusion single-photon emission CT should be considered.
- To determine a patient's clinical category, clinicians should consider symptoms, clinical scores of severity (such as the simplified PE Severity Index), thrombus location (whether confined to subsegmental vessels), troponin levels, imaging markers of right ventricular dysfunction, transient or normotensive shock (elevated lactate or low cardiac index), overt hemodynamic instability, and respiratory status.
- For patients with incidental PE or no markers of severe disease (categories A–B), home treatment or early discharge with a direct-acting oral anticoagulant is reasonable.
- In most hospitalized patients (categories C1–E1), low-molecular-weight heparin is preferred over unfractionated heparin.
- Recanalization strategies (including mechanical thrombectomy and catheter-directed fibrinolysis) are reasonable in patients with hemodynamic instability (category E1), but their usefulness in patients with less-severe illness (categories C2–D2) remains uncertain.
- In patients with refractory cardiogenic shock (category E2), extracorporeal membrane oxygenation can be considered.
- Inferior vena cava filters are reasonable in patients with an absolute contraindication to anticoagulation.
- Whether to continue anticoagulation long-term (beyond 3–6 months) should be informed by presence of cancer, transient or persistent risk factors, and bleeding risk
- Patients with ALI should undergo emergent evaluation and therapy, including revascularization (if possible) and anticoagulation.

COMMENT

Although the guideline appropriately emphasizes acute PE, it also delves into postacute management, including the use and intensity of anticoagulation, management of residual symptoms, return to activity, and coping with anxiety — areas not addressed in some prior guidelines. Considering that several ongoing studies, including at least three major trials of recanalization (HI-PEITHO, PRAGUE-26, and PEITHO-3), are likely to be presented or published in the coming months, risk stratification, therapeutics, and care for post-PE syndromes may continue to evolve.

Creager MA, et al. AHA/ACC/ACCP/ACEP/CHEST/SCAI/SHM/SIR/SVM/SVN guideline for the evaluation and management of acute pulmonary embolism in adults: A report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. **J Am Coll Cardiol** *2026 Feb 19; 2026:19; [e-pub]. DOI: 10.1016/j.jacc.2025.11.005.*

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Guidance for Managing Diabetes

Molly S. Brett, M.D., reviewing **Diabetes Care** 2026 Feb 17.

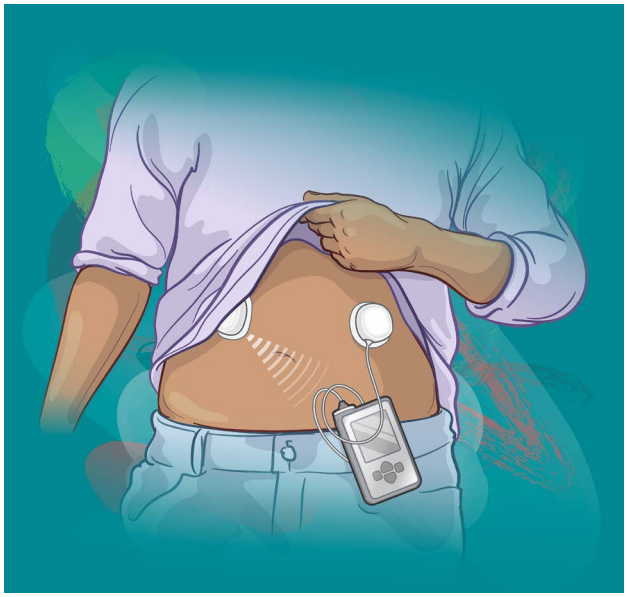
Clinical Takeaway: ***The American Diabetes Association recommends earlier and broader use of diabetes technology.***

An overview of Standards of Care in Diabetes — 2026 from the American Diabetes Association

Background

The American Diabetes Association annually updates its comprehensive guidance for caring for patients with diabetes. In this wide-ranging document, authors discuss diabetes management in patients with type 1 and 2 diabetes, special populations such as children and pregnant people, and patients with comorbidities. Here are the updates, mostly from Section 7 (Diabetes Technology), that are most relevant to generalists.

Key Recommendations



- The authors recommend early initiation of devices in people with type 1 or type 2 diabetes (see Figure).
  - Use continuous glucose monitors (CGM) at diagnosis for most patients using insulin and any other patient for whom "CGM helps in management."
  - Consider automated insulin delivery systems, traditionally used for patients with type 1 diabetes, for patients with type 2 diabetes who don't achieve glycemic goals with basal insulin.
- Glycemic targets now incorporate CGM metrics in addition to glycosylated hemoglobin (HbA_{1c}) levels. Most adults should target HbA_{1c} <7% and time in range >70%, with less stringent goals for older adults with complex health status. The authors specify targets for time in range, time below range, and time above range in various clinical scenarios.
- Pharmacologic therapy should be guided by comorbid conditions rather than by HbA_{1c} levels. Differences from prior guidelines include more emphasis on glucagon-like peptide-1 (GLP-1) receptor agonists for patients who have heart failure with preserved ejection fraction and metabolic dysfunction–associated steatohepatitis.
- The authors recommend systolic blood pressure (BP) goals of <120 mm Hg for people with diabetes who are at high risk for cardiovascular or kidney disease. For most other adults with diabetes, they recommend targeting BP <130/80 mm Hg when that level can be achieved safely.

COMMENT

As a generalist, I'd say that the most notable change in this guideline is earlier integration of diabetes technology, including more use of automated insulin delivery devices and CGM in managing type 2 diabetes. Clinicians will need to familiarize themselves with local practice patterns for prescribing these devices and develop comfort with assessing glycemic control using CGM metrics. As in prior guidelines, this one recommends selection of diabetes medications guided by comorbidities, often independent of HbA_{1c} level.

American Diabetes Association Professional Practice Committee for Diabetes. Standards of care in diabetes — 2026. **Diabetes Care** *2026 Jan; 49:Suppl 1:S1. DOI: 10.2337/dc26-S001.*

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Guidance on Treating Acute Allergic Reactions

David J. Amrol, M.D., reviewing **Journal of Allergy and Clinical Immunology** 2026 Feb 10.

Clinical Takeaway: ***An expert panel offers guidance on when patients should use epinephrine and when they should seek emergency medical care.***

An overview of the 2025 Epinephrine and Emergency Medical Services Activation Recommendations during Acute Allergic Reactions in Community Settings: International Consensus Report

Background

Most patients and clinicians recognize self-administered epinephrine as the gold standard, first-line treatment for anaphylaxis; however, uncertainty remains about which symptoms warrant its use and when medical attention is necessary (see Figure). To address this gap, an international panel developed scenario-based recommendations for managing acute allergic reactions at home or in other community settings.

Key Recommendations

Administer epinephrine if the patient has:

- Any cardiovascular or neurological symptoms, such as altered responsiveness, dizziness, or loss of consciousness.
- Moderate/severe gastrointestinal symptoms, such as vomiting more than once or abdominal pain.
- Any respiratory symptoms, such as cyanosis, cough, dyspnea, or hoarseness.

Activate emergency services if epinephrine is required *and* the patient is:

- Alone or more than 30 minutes from a hospital.
- Requiring multiple epinephrine doses or lacking multiple backup doses.
- Experiencing severe cardiorespiratory symptoms or residual cardiorespiratory symptoms after epinephrine.

Epinephrine is not required if the patient has:

- Isolated, mild skin symptoms, such as mild hives or swelling.
- Mild mucosal symptoms, such as rhinorrhea, mild mouth/throat itching.
- Mild gastrointestinal involvement, such as vomiting once, mild abdominal pain, or nausea.

COMMENT

We have no randomized trials supporting the use of epinephrine in allergic reactions, so expert opinion is the best we have. I try to reassure my patients that epinephrine (injection or nasal) is

safe and effective and can make them feel better quickly. Many allergic reactions can be managed at home with another caregiver present, though I do have several patients who wait outside the emergency department after administering epinephrine — for peace of mind without the copay.

Dribin TE, et al. Epinephrine and emergency medical services activation recommendations during acute allergic reactions in community settings: International consensus report. **J Allergy Clin Immunol** *2026 Feb; 157:429. DOI: 10.1016/j.jaci.2025.11.008.*

Dr. Amrol is an Associate Professor of Clinical Internal Medicine and Director of the Division of Allergy and Immunology at the University of South Carolina School of Medicine in Columbia.

ACP Breast Cancer Screening Recommendations

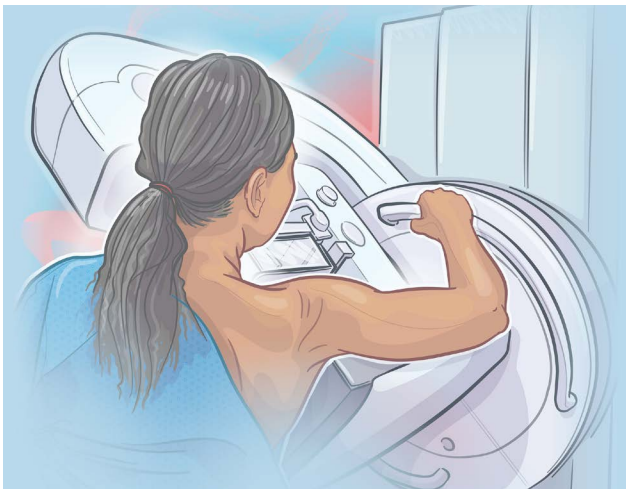
Marie Claire O'Dwyer, M.B. B.Ch. B.A.O., M.P.H., reviewing **Annals of Internal Med** 2026 Apr 28.

Clinical Takeaway: ***The ACP endorses biennial mammography for women 50 to 74 years of age, with shared decision-making for younger and older women.***

Overview of the 2026 document: Screening for Breast Cancer in Asymptomatic, Average-Risk Adult Females: A Guidance Statement from the American College of Physicians (Version 2)

Background

In 2024, the U.S. Preventive Services Task Force (USPSTF) recommended biennial mammography (Figure) beginning at age 40, based on rising breast cancer incidence in women younger than 50 and new modeling of benefits and harms. Notably, the Grade B recommendation triggered expanded insurance coverage. The American College of Physicians (ACP)'s latest guidance, synthesizing systematic reviews used by the USPSTF along with Canadian and European guideline-issuing organizations, reaffirms the ACP's 2019 recommendation to start screening at age 50.



Key Recommendations

All recommendations had low-to-moderate–certainty evidence and apply to all people assigned female at birth and at average risk.

- Biennial screening mammography is recommended for women 50 to 74 years of age, with moderate certainty of net benefit in lowering breast cancer–related mortality.
- For women who are 40 to 49, shared decision-making is recommended. Those uncertain after counseling should defer; those who choose to screen should do so biennially.
- For women who are 75 and older, clinicians should discuss discontinuing screening, given uncertain mortality benefit and risk for overdiagnosis.
- For women with dense breasts, supplemental digital breast tomosynthesis (DBT) should be considered. Supplemental screening with MRI or ultrasound is not recommended.

COMMENT

For average-risk women, the ACP has persisted with the later starting date and biennial screening, in contrast to most other U.S. organizations. The ACP also takes a more definitive stance on dense breasts (an independent breast cancer risk factor, present in 40%–50% of women, that does not confer "high-risk" status), endorsing DBT while recommending against MRI and ultrasound.

The broader context of contested guidelines — differing ages, intervals, modalities — and the modeling limitations underlying them have been well characterized. In my view, guidelines from

the American College of Radiology, which recommend annual screening, are particularly consequential. Patients counseled toward biennial screening who then receive an imaging report recommending return in 1 year will reasonably question which guidance to follow. Helping patients navigate evolving, sometimes contradictory recommendations — often across rounds of portal messages — is increasingly part of our work.

Qaseem A, et al. Screening for breast cancer in asymptomatic, average-risk adult females: A guidance statement from the American College of Physicians (version 2). Ann Intern Med 2026 Apr 17; [e-pub]. DOI: 10.7326/ANNALS-25-05116.

Dr. O'Dwyer is a principal residency faculty member at the University of Michigan Medical School and serves as the Director of Resident Scholarship for the Family Medicine Residency.

Anemia in Chronic Kidney Disease: A New Guideline from KDIGO

Christopher W. Goodman, M.D., reviewing **Kidney International** 2026 Jan 28.

Clinical Takeaway: ***This updated guidance is welcome although clinical evidence remains limited.***

An overview of the Kidney Disease: Improving Global Outcomes (KDIGO) 2026 Clinical Practice Guideline for the Management of Anemia in Chronic Kidney Disease (CKD)

Background

The last guideline from KDIGO on anemia in chronic kidney disease (CKD) was published more than a decade ago. In this updated guideline, the authors give "practice points" (i.e., expert opinion) alongside clinical recommendations based on systematic reviews with evidence appraisal. When applicable, these ratings are noted in parentheses below.

Key Recommendations

Diagnosis and evaluation:

- Screen all patients for anemia with complete blood count (CBC), reticulocytes, ferritin, and transferrin saturation (TSAT) — at least annually for stage 3 CKD, twice a year for stage 4 CKD, and every 3 months for stage 5 CKD.
- The definition of anemia remains the same as in the prior guideline: <12 g/dL for women and <13 g/dL for men with age-specific thresholds for children under 15 years of age.
- When ferritin is <45 ng/mL or microcytic anemia is present, consider evaluating for sources of blood loss.

Iron deficiency and supplementation:

- For patients on hemodialysis (HD), start iron therapy if ferritin ≤500 ng/mL and TSAT ≤30%; intravenous iron therapy is preferred (weak recommendation, "very low" certainty).
- For patients not on HD, start iron therapy if (1) ferritin <100 ng/mL *and* TSAT <40% or (2) ferritin 100–300 ng/mL *and* TSAT <25% (weak recommendation, "very low" certainty).
- For patients on iron therapy, monitor CBC, ferritin, and TSAT every 1–3 months for patients on HD and every 3 months for patients not on HD.
- Consider suspending iron therapy during systemic infections.

Medications for anemia:

- Consider erythropoiesis-stimulating agents (ESAs) for patients receiving HD or peritoneal dialysis when hemoglobin is ≤9–10 g/dL (weak recommendation, "very low" certainty).
- ESAs are favored over newer hypoxia-inducible factor–prolyl hydroxylase inhibitors (weak recommendation, "very low" certainty).
- For patients not on dialysis, treatment should be individualized based on symptoms and harm-benefit balance (weak recommendation, "very low" certainty).
- If medications are used, maintain hemoglobin levels <11.5 g/dL due to stroke risk (strong recommendation, "very low" certainty).

- Consider suspending ESAs during hospitalizations when thromboembolic risk is a concern, such as during acute stroke.

COMMENT

Nearly all of these recommendations were based on expert opinion or low-certainty evidence. Nevertheless, this guideline will be a useful resource given how common anemia is in patients with CKD. Based on this guidance, I plan to be more diligent in considering iron supplementation for patients with CKD although I am a bit wary of these high cutoffs of ferritin and transferrin saturation. Applied too strictly, these cutoffs would subject many patients to unnecessary supplementation. Clinical judgment including careful consideration of patient symptoms will be necessary to guide treatment decisions.

Babitt JL, et al. Executive summary of the KDIGO 2026 Clinical Practice Guideline for the management of anemia in chronic kidney disease (CKD). **Kidney Int** *2026 Jan; 109:44. DOI: 10.1016/j.kint.2025.06.005.*

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Diagnosing and Managing Peripheral Artery Disease in Adults with Diabetes

Molly S. Brett, M.D., reviewing **Journal of the American College of Cardiology** 2026 Feb 10.

Clinical Takeaway: ***The American College of Cardiology recommends broad screening for PAD in these high-risk patients.***

An overview of the Management of peripheral artery disease in adults with diabetes: 2025 ACC scientific statement

Background

Peripheral artery disease (PAD) often goes undiagnosed among patients with diabetes until complications arise. In 2018, the U.S. Preventive Services Task Force cited insufficient evidence to recommend PAD screening in asymptomatic adults; in contrast, the 2024 American College of Cardiology/American Heart Association guideline on PAD recommended screening certain high-risk groups. Now, in a scientific statement, the ACC provides additional recommendations for diagnosing and managing PAD in patients with diabetes.

Key Recommendations

- Perform comprehensive foot exams, including palpation for pulses, at least once annually.
- Screen asymptomatic adults with diabetes and risk-enhancing factors* using ankle–brachial index (ABI) testing, which can reveal PAD before clinical manifestations appear. ABI ≤0.9 suggests PAD, whereas >1.4 indicates noncompressible arteries and should be followed with toe–brachial index testing.
- For patients with exertional leg symptoms who have borderline or normal ABI results, consider an exercise treadmill ABI to detect PAD.
- For all patients with PAD, prioritize tobacco cessation and aggressive risk factor management; target systolic blood pressure <120 mm Hg (if safely achievable) and LDL cholesterol <55 mg/dl.
- Refer symptomatic patients to supervised exercise therapy, which improves functional status and quality of life.
- Prioritize use of sodium–glucose cotransporter-2 inhibitors and glucagon-like peptide-1 receptor agonists for overall cardiovascular and kidney benefits. Semaglutide prevents some adverse limb events and improves functional status in symptomatic patients.
- Consider rivaroxaban (2.5 mg twice daily) plus low-dose aspirin to prevent adverse cardiac and limb events in symptomatic patients; the authors note this regimen appears to be particularly beneficial in patients with diabetes. For patients at high bleeding risk, consider antiplatelet monotherapy instead.

COMMENT

Going forward, I will screen most patients with diabetes for PAD, although more clarity on optimal screening intervals would be welcome. I'll also consider broader use of rivaroxaban plus aspirin in symptomatic patients (after individualized decision-making about bleeding risk). Alongside

*Age ≥65, smoking, diabetes duration ≥10 years, any microvascular disease, foot complications, or other end-organ damage

tobacco cessation and aggressive risk factor management, these strategies might help us prevent vascular complications in patients with diabetes.

Das SR, et al. Management of peripheral artery disease in adults with diabetes: 2025 ACC scientific statement: A report of the American College of Cardiology. **J Am Coll Cardiol** *2025 Dec 17; [e-pub]. DOI: 10.1016/j.jacc.2025.11.027.*

Dr. Brett is an Assistant Professor of Clinical Medicine at the University of Colorado.

A Comprehensive and Updated Hypertension Guideline

Jennifer L. Cluett, M.D., reviewing **Hypertension** 2025 Sep 25.

Clinical Takeaway: ***These AHA guidelines emphasize benefits of earlier and more-aggressive blood pressure lowering for most patients.***

Sponsoring Organizations: *American Heart Association (AHA) and American College of Cardiology (ACC), along with 11 other professional societies.*

Background

This multisociety guideline replaces the 2017 AHA/ACC high blood pressure (BP) guideline that redefined hypertension as >130/>80 mm Hg (down from >140/>90 mm Hg). Although these BP definitions initially were controversial, lower BP treatment targets have been reinforced by additional high-quality randomized trials.

Key Recommendations

Definitions:

- BP thresholds remain the same, with normal BP defined as systolic BP <120 mm Hg and diastolic BP <80 mm Hg, elevated BP defined as 120–129 mm Hg and <80 mm Hg, stage 1 hypertension defined as BP 130–140 mm Hg or 80–90 mm Hg, and stage 2 hypertension defined as >140 mm Hg or >90 mm Hg.
- Out-of-office BP measurements are encouraged to confirm a diagnosis of hypertension.

Diagnostic evaluation and risk assessment:

- For new hypertension diagnoses, urine albumin-to-creatinine ratio and glycosylated hemoglobin (HbA_{1c}) are suggested, in addition to other basic testing (complete blood count, electrolytes, kidney function, lipids, thyroid-stimulating hormone, urinalysis, and electrocardiogram).
- Primary aldosteronism screening is recommended strongly in higher-risk subpopulations (i.e., patients with resistant hypertension, hypokalemia, obstructive sleep apnea, adrenal nodules, or early stroke [age, <40]); screening for all patients with stage 2 hypertension (BP >140/>90 mm Hg) received a weaker endorsement.
- The PREVENT calculator replaces the pooled cohort equation (PCE) risk assessment tool; the PREVENT calculator should be used to inform treatment decisions in patients with stage 1 hypertension.

Treatment:

- Lifestyle interventions include weight loss, healthful diet, reduced sodium intake, regular exercise, tobacco cessation, alcohol moderation or abstinence, and stress reduction through meditation or breathing exercises.
- Three to 6 months of lifestyle management is recommended for select low-risk patients, including adults without diabetes or chronic kidney disease who have stage 1 hypertension and a 10-year cardiovascular disease (CVD) risk of <7.5%. Otherwise, pharmacologic treatment is recommended.
- The treatment goal for most patients is <130/<80 mm Hg with encouragement to achieve systolic BP <120 mm Hg. This is a strong recommendation for those with ≥7.5% 10-year CVD risk and a weaker recommendation for those with a 10-year CVD risk <7.5%.

- Home BP monitoring for diagnosis and medication titration (using validated oscillometric BP monitors) is emphasized; cuffless BP devices (e.g., smartwatches, rings) are not recommended.
- For adults with stage 2 hypertension, initiating two first-line agents in a single-pill, fixed-dose combination is preferred.

Other clinical scenarios: Additional recommendations are included for pregnant people, those with severe hypertension, and those with specific comorbidities (e.g., diabetes, chronic kidney disease, recent strokes).

COMMENT

These guidelines move the needle toward earlier recognition, confirmation, and treatment of hypertension with a wider range of lifestyle and pharmacologic options. Using PREVENT for predicting overall CVD risk (i.e., heart attack, stroke, and heart failure), rather than the PCE calculator, is a substantial change but provides a more accurate assessment based on updated inputs that have been validated in large contemporary cohorts. Some clinicians (and patients) have remained cautious about lower BP targets, perhaps due to the inherent variability of BP readings and skepticism about benefits of achieving diastolic BP <80 mm Hg in otherwise healthy people. In my view, the evidence highlighted in these guidelines reinforces that achieving <130/<80 mm Hg should be the standard for most patients, albeit with flexibility to individualize care in select circumstances.

Jones DW, et al. 2025 AHA/ACC/AANP/AAPA/ABC/ACCP/ACPM/AGS/AMA/ASPC/NMA/PCNA/SGIM 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 Joint Committee on Clinical Practice Guidelines. **Hypertension** *2025 Oct; 82:e212. DOI: 10.1161/HYP.0000000000000249.40811516.*

Dr. Cluett is an Assistant Professor of Medicine at Harvard Medical School in Boston.

ACC/AHA Guideline on Lipid Management and ASCVD Prevention

Karol E. Watson, M.D., Ph.D., F.A.C.C., reviewing **Journal of the American College of Cardiology** 2026 Apr 2.

Clinical Takeaway: ***The guideline emphasizes use of the PREVENT risk calculator to facilitate earlier, more intensive LDL cholesterol lowering.***

An overview of the 2026 ACC/AHA/AACVPR/ABC/ACPM/ADA/AGS/APhA/ASPC/NLA/PCNA Guideline on the Management of Dyslipidemia

Background

For the first time since 2018, the American College of Cardiology and the American Heart Association have released an updated guideline on lipid management and the prevention of atherosclerotic cardiovascular disease (ASCVD). The new guideline reframes lipid management as a lifelong strategy, moving beyond traditional 10-year ASCVD risk estimation to an emphasis on lifetime risk, cumulative LDL cholesterol exposure, and subclinical atherosclerosis. Central to this shift is adoption of the PREVENT risk calculator, which can be used in patients as young as 30 and can predict both 10-year and 30-year ASCVD risk. The guideline also supports individualized decision-making, with expanded use of coronary artery calcium (CAC) scoring and biomarkers such as lipoprotein(a) and apolipoprotein B.

The guideline addresses both primary and secondary prevention, but here we focus mainly on primary prevention.

Key Recommendations

Primary prevention:

- Primary prevention is now anchored in 10-year ASCVD risk based on the PREVENT calculator, with categories defined as:
  - Low risk (<3%)
  - Borderline risk (3% to <5%)
  - Intermediate risk (5% to <10%)
  - High risk (≥10%)
- Statins remain first-line therapy and are strongly recommended for patients at high risk. For those at intermediate risk, statin therapy is generally recommended after clinician–patient discussion, and in borderline-risk patients, therapy can be considered — particularly in the presence of risk enhancers or a positive CAC score.
- In individuals under age 60, a low 10-year risk may underestimate lifetime risk, so if 30-year risk is elevated (≥10%), earlier treatment may be reasonable.
- Lipoprotein(a) should be measured at least once in a lifetime to identify inherited risk.

Treatment targets and intensification:

- LDL cholesterol is the primary treatment target, with defined goals of:
  - <100 mg/dl for borderline- or intermediate-risk primary prevention

  - <70 mg/dl for high-risk primary prevention
  - <55 mg/dl or <70 mg/dl for secondary prevention, with the specific target depending on the degree of cardiovascular risk
- If treatment goals are not reached, stepwise intensification with nonstatin agents should be considered. Such agents include ezetimibe, proprotein convertase subtilisin–kexin type 9 (PCSK9) inhibitors, inclisiran, and bempedoic acid.

COMMENT

This guideline represents a clear shift toward lifelong, target-driven LDL cholesterol reduction, prioritizing earlier intervention and more intensive therapy. The integration of the PREVENT calculator, CAC, and biomarkers reflects an effort to better align treatment with long-term atherosclerotic burden rather than estimated short-term risk alone. However, several key recommendations — particularly those involving CAC-guided therapy and aggressive LDL cholesterol targets — rely more on observational data than randomized trials. I would prefer that most class I recommendations be supported by randomized controlled trial data. And finally, some clinicians may question lowering the treatment threshold to 3%; it follows PREVENT's lower risk estimates, but whether that alone should open the door to earlier treatment is fair to question. Still, the direction of this new guideline is unmistakable: LDL exposure is cumulative, earlier treatment improves outcomes, and lower LDL levels are better — together marking a paradigm shift that will meaningfully reshape primary prevention.

Blumenthal RS, 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 Mar 13; [e-pub]. DOI: 10.1016/j.jacc.2025.11.016.*

Dr. Watson is a Professor of Medicine/Cardiology in the David Geffen School of Medicine at the University of California Los Angeles.

Guidance on Diagnosing and Treating Subacromial Pain Syndrome

Thomas L. Schwenk, M.D., reviewing **Acta Orthop** 2026 Mar 5.

Clinical Takeaway: ***A new Dutch guideline includes recommendations useful for primary care clinicians, including the use of imaging, nonoperative approaches to care, and indications for surgery.***

An overview of the 2026 Guideline Update for Diagnosis and Treatment of Subacromial Pain Syndrome: A Multidisciplinary Review by the Dutch Orthopedic Association

Background

Most patients with subacromial pain syndrome (SAPS) are managed nonoperatively by primary care clinicians, especially now that we know subacromial decompression surgery has little value. SAPS, previously referred to as "shoulder impingement syndrome," is defined as nontraumatic, nonrheumatologic shoulder pain that occurs primarily when the arm is elevated above the shoulder. It includes pathologic diagnoses such as supraspinatus tendinosis, calcific tendinitis, and degenerative supraspinatus tears.

The latest guidance on diagnosing and managing SAPS comes from the Dutch Orthopedic Association, which convened a panel of experts from all relevant disciplines, including primary care. The panel reviewed the available literature (scant in this case) and provided consensus recommendations, including several that are useful in the primary care setting.

Key Recommendations

- Testing during physical examination might be slightly more accurate with a combination of tests than with any single test. Among individual tests, the empty-can test and resisted external rotation have the highest positive predictive values.
- Ultrasound is the preferred imaging modality for assessing possible rotator cuff tears; magnetic resonance imaging should be used only if ultrasound is unavailable.
- Exercise is recommended for long-term resolution of SAPS. Nonsteroidal anti-inflammatory drugs (NSAIDs) and subacromial corticosteroid injections can be used short-term to facilitate pain-free exercise but should not be considered for long-term use.
- Patients should be informed that unhealthy lifestyle factors, including smoking, obesity, and poor physical condition, can negatively affect tissue regeneration and healing. They should also be educated about limiting exacerbating movements, including forward flexion, abduction above the shoulder, and internal and external rotation.
- Patients with calcifying tendinitis should be treated with corticosteroid injections. If this is not successful, the next recommended step is ultrasound-guided barbotage, a technique that involves needling, breaking up, irrigating, and aspirating calcium deposits in the rotator cuff tendons.
- Suprascapular nerve block can be used when all other nonoperative approaches have failed.
- For patients with isolated, nontraumatic supraspinatus tendon tears, surgical treatment should be considered only if 3 to 6 months of nonoperative treatment has been ineffective.

For interested readers, the guidelines also provide recommendations on various surgical topics.

COMMENT

These guidelines provide a stepped approach to diagnosing and managing patients with SAPS non-operatively, which is key given the lack of benefit from subacromial decompression surgery. Clinicians can make an efficient diagnosis with a few physical examination maneuvers plus ultrasound if indicated and then progress to a stepped program of education, physical therapy, short-term NSAID use, and corticosteroid injections if needed.

Lambers Heerspink FO, et al. Update of guideline for diagnosis and treatment of subacromial pain syndrome: a multidisciplinary review by the Dutch Orthopedic Association Part 1: preventive measures, diagnostics, and non-surgical treatment of subacromial pain syndrome. **Acta Orthop** *2026 Feb 16; 97:91. DOI: 10.2340/17453674.2026.45365.*

Lambers Heerspink FO, et al. Update of guideline for diagnosis and treatment of subacromial pain syndrome: a multidisciplinary review by the Dutch Orthopedic Association Part 2: Operative considerations and treatment of various conditions related to subacromial pain syndrome. **Acta Orthop** *2026 Feb 16; 97:99. DOI: 10.2340/17453674.2026.45410.*

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A Veterans Affairs Guideline on Primary Care Management of Asthma

David J. Amrol, M.D., reviewing **Annals of Internal Medicine** 2026 Mar 10.

Clinical Takeaway: ***Updated guidelines now align with the Global Initiative for Asthma and stress maintenance and reliever therapy.***

An overview of the 2025 U.S. Department of Veterans Affairs and U.S. Department of Defense clinical practice guideline for the primary care management of asthma

Background

In 2025 the U.S. Departments of Veterans Affairs and Defense updated their guideline for the treatment of asthma in primary care settings, and an easy-to-read synopsis was published in February 2026. The guideline does not address management of severe asthma with biologics, which are best managed by asthma specialists.

Key Recommendations

- This guideline aligns with the Global Initiative for Asthma (GINA), encouraging the use of inhaled corticosteroids (ICS) along with a rapid-onset long-acting beta agonist (e.g., formoterol) over albuterol monotherapy for rescue.
- Patients can use ICS/formoterol as a reliever alone in mild asthma or as both maintenance and reliever therapy (MART) with variable ICS doses in moderate to severe asthma.
- If asthma is not controlled using a medium to high dose of MART, then add a long-acting antimuscarinic antagonist (LAMA).
- For patients well controlled for 3 months, consider step-down therapy.
- Address obesity and symptomatic gastroesophageal reflux disease.
- In patients with exercise-induced bronchoconstriction, the authors suggest pre-exertional short-acting beta-agonists.

COMMENT

This is another strong endorsement for maintenance-and-reliever therapy with ICS/formoterol for every adolescent and adult with asthma. Once again, it is time to retire albuterol monotherapy as an asthma rescue medication. If ICS/formoterol is not available, then patients should use ICS/albuterol as a rescue medication.

For exercise-induced bronchoconstriction, this guideline recommends using albuterol prior to exercise. For patients with persistent asthma on ICS/formoterol, I prefer they use ICS/formoterol prior to exercise. For those with no asthma symptoms except with exercise, either albuterol or ICS/formoterol should be fine.

Sharafkhaneh A, et al. A synopsis of the 2025 U.S. Department of Veterans Affairs and U.S. Department of Defense clinical practice guideline for the primary care management of asthma. **Ann Intern Med** *2026 Feb 17; [e-pub]. DOI: 10.7326/ANNALS-25-03080.*

Krings JG. A new approach to reliever therapy in asthma: Implications of the U.S. Department of Veterans Affairs and U.S. Department of Defense clinical practice guideline. **Ann Intern Med** *2026 Feb 17; [e-pub]. DOI: 10.7326/ANNALS-25-05637.*

Dr. Amrol is an Associate Professor of Clinical Internal Medicine and Director of the Division of Allergy and Immunology at the University of South Carolina School of Medicine in Columbia.

Acute Coronary Syndromes in Premenopausal Women

Karol E. Watson, M.D., Ph.D., F.A.C.C., reviewing **Circulation** 2026 Apr 9.

Clinical Takeaway: ***The American Heart Association has published a scientific statement on recognizing and managing the distinct etiologies and risk factors in this population.***

Overview of the 2026 Acute Coronary Syndromes in Premenopausal Women: A Scientific Statement from the American Heart Association

Background

Premenopausal women with acute coronary syndromes (ACS) represent a distinct, understudied population with unique etiologies. Nonobstructive and nonatherosclerotic causes are more common in premenopausal women than in older populations, and female-specific factors (e.g., pregnancy-related conditions, hormonal influences) play a major role. These differences contribute to diagnostic challenges, treatment uncertainty, and underrepresentation in clinical trials. Management requires cause-specific treatment, attention to female-specific risks, and more-aggressive lifetime prevention strategies.

Key Points

- Etiology and pathophysiology: Young women have higher prevalences of spontaneous coronary artery dissection (SCAD), MINOCA (myocardial infarction with nonobstructive coronary arteries), and coronary vasospasm than do older people. Traditional atherosclerosis still occurs but is less common than in older people.
- Diagnosis: Standard angiography can miss important causes (e.g., SCAD, plaque erosion), so intracoronary imaging and multimodality imaging often are required.
- Cause-specific treatment: Standard guideline-directed medical therapy is appropriate for young women with atherosclerotic ACS. Conservative management is preferred for SCAD (e.g., avoid routine percutaneous coronary intervention [PCI] and prolonged dual antiplatelet therapy [DAPT]); DAPT should be reserved for patients with PCI or evidence of plaque disruption and is not indicated routinely in patients with SCAD or vasospastic mechanisms. β-blockers sometimes can prevent recurrence in women with MINOCA.
- Risk factor management: Given the long lifetime risk in premenopausal women with ACS, aggressive risk factor modification is warranted, with consideration of LDL cholesterol target in the range of <55 to 70 mg/dl and systolic blood pressure target <120 mm Hg, if tolerated. Address both traditional and female-specific risk factors, such as preeclampsia, early menopause, and pregnancy-related complications.

COMMENT

This statement reframes ACS in premenopausal women as a distinct clinical entity, not simply "early atherosclerosis." The emphasis on nonatherosclerotic causes, tailored diagnostics, and individualized therapy is a major shift. Importantly, it pushes clinicians toward providing earlier and more-aggressive lifetime risk reduction (by lowering LDL cholesterol and blood pressure) and highlights major evidence gaps — especially for SCAD and MINOCA — where current

management remains largely empirical. I think we're missing the mark on appropriate treatment in many women, giving them a label of "noncardiac chest pain" and not considering these other causes regularly.

Kovacic JC, et al. Acute coronary syndromes in premenopausal women: A scientific statement from the American Heart Association. **Circulation** *2026 Feb 17; 153:e89. DOI: 10.1161/CIR.0000000000001416.*

Dr. Watson is a Professor of Medicine/Cardiology in the David Geffen School of Medicine at the University of California Los Angeles.

Updated Guidelines for Advanced Cardiac Life Support

Daniel D. Dressler, M.D., M.Sc., M.H.M., F.A.C.P., reviewing **Circulation** 2026 Feb 24.

Clinical Takeaway: ***Guideline changes were relatively minor, but a few important aspects are worth considering.***

An overview of Adult Advanced Life Support: 2025 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care

Background

At the end of 2025, the American Heart Association (AHA) updated its 2020 guidelines on cardiopulmonary resuscitation (CPR), advanced cardiac life support (ACLS), and emergency cardiovascular care. Although the AHA had no substantive additions, a few relevant changes are worth mentioning.

Key Changes

- Opioid overdose: Don't delay CPR, even when naloxone administration is being considered.
- CPR: Mechanical compression CPR devices are not recommended routinely for out-of-hospital cardiac arrest in adults. Manual CPR is recommended in most instances, except for rare circumstances (e.g., during transport).
- Vascular access: Intravenous (IV) devices (usually peripheral IV) are preferred over intraosseous devices for ACLS medication administration. An intraosseous device can be used if an IV device fails or is inaccessible.
- Defibrillation/Cardioversion
  - Start the first synchronized cardioversion shock at 200 joules (biphasic) for atrial fibrillation or flutter that requires cardioversion.
  - Don't use vector change and double sequential defibrillation for refractory ventricular fibrillation.
  - Immediately defibrillate patients with polymorphic ventricular tachycardia — an unstable rhythm.
- Point-of-care ultrasonography (POCUS): A clinician who is experienced with POCUS can consider using it to diagnose reversible causes of arrest (e.g., pneumothorax, cardiac tamponade) if it can be done *without interrupting* CPR.
- Postresuscitation care: After return of spontaneous circulation, maintain targeted temperature of 36°C for at least 36 hours.
- Education and Training
  - Children as young as 12 years can learn effective CPR and defibrillation (with an automated external defibrillator [AED]).
  - Cognitive aids (e.g., checklists, algorithms, smart device apps) are recommended *for health care professionals* — but not for lay rescuers — during resuscitation attempts. Lay rescuers should focus on CPR.

COMMENT

Although I'm happy that I don't need to learn any new medications or remember major algorithm changes, a few relevant nuances are emphasized in this update. POCUS can be valuable, particularly

in pulseless electrical activity and asystole arrests; however, I've seen it attempted by inexperienced clinicians or used while inappropriately withholding CPR, potentially to a patient's detriment. I'm especially glad to see the education and training recommendations, as I'll continue to encourage residents and hospitalists to use their smart devices during codes, and we should all encourage the teens (and anyone else) in our lives to get training in CPR and AED use.

Wigginton JG, et al. Part 9. Adult advanced life support: 2025 American Heart Association guidelines for cardiopulmonary resuscitation and emergency cardiovascular care. **Circulation** *2025 Oct 22; 152:suppl_2:S538. DOI: 10.1161/CIR.0000000000001376.*

Del Rios M, et al. Part 1. Executive summary: 2025 American Heart Association guidelines for cardiopulmonary resuscitation and emergency cardiovascular care. **Circulation** *2025 Oct 22; 152:suppl_2:S284. DOI: 10.1161/CIR.0000000000001372.*

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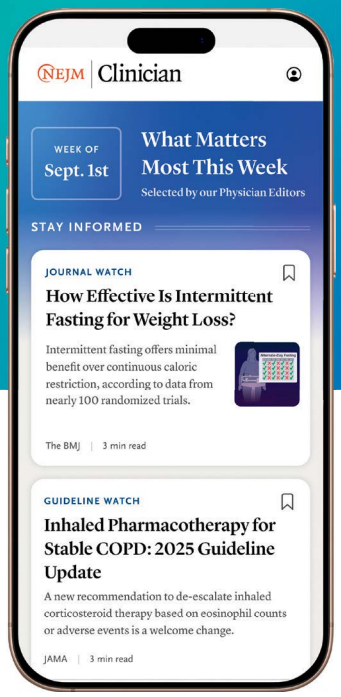

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