

Top 20 Research Studies of 2023 for Primary Care Physicians

Roland Grad, MD, MSc, and Mark H. Ebell, MD, MS

This article summarizes the top 20 research studies of 2023 identified as POEMs (patient-oriented evidence that matters) and the most highly rated guidelines. A large randomized controlled trial found that the time antihypertensive medications are taken has no effect on important outcomes. A fixed-dose approach to statin prescribing is not inferior to a treat-to-target strategy for management of lipid levels. Blood pressure measurements using 24-hour ambulatory monitoring are better than office measurements for predicting mortality. In patients 80 years and older with atrial fibrillation, direct oral anticoagulants have fewer harms than vitamin K antagonists and similar benefits. In people at high risk of cardiovascular disease, the Mediterranean and low-fat diets are the better options among seven dietary programs. An observational study of people with acute COVID-19 in the Omicron phase showed that nirmatrelvir/ritonavir was effective in reducing hospitalizations and death. The diagnosis of urinary tract infection requires a higher optimal cutoff to define pyuria on automated microscopy than was thought. A new regimen has been found using one of the most effective treatments for toenail onychomycosis. Dextromethorphan, honey, and inhaled ipratropium do not appear to be effective for acute cough. Serotonin-norepinephrine reuptake inhibitors are effective for some types of pain syndromes. In a 6-week trial, adults with acute, nonspecific low back or neck pain treated with opioids had similar pain relief as those treated with placebo. In patients with knee osteoarthritis who want to participate in sports and recreation, 70 to 90 minutes of exercise produces better results than 20 to 30 minutes three times per week. Healthy behaviors are associated with a lower risk of developing type 2 diabetes mellitus. In patients 50 years and older with type 2 diabetes, cumulative glycemic control with A1C levels of greater than 9% is associated with an increased risk of dementia. Sodium-glucose cotransporter-2 inhibitors and glucagon-like peptide-1 receptor agonists are best for improving patient-oriented outcomes for type 2 diabetes. Mindfulness-based stress reduction is not inferior to escitalopram in adults with anxiety disorders. Framing depression as an adaptation to current circumstances can lead to better patient outcomes. People labeled as having a penicillin allergy can complete an amoxicillin oral provocation challenge in the primary care office and, following a negative result, have this label removed. A 5-year surveillance interval can be safely reconsidered in many older patients with colon polyps. Nonprescription hearing aids can be effective without a fitting by an audiologist. We wrap this up with the top guidelines of the year as determined by POEM readers.

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For the past 25 years a team of six clinicians has reviewed more than 100 medical journals each month to find research that is most likely to change and improve primary

care practice. The team includes experts in family medicine, pharmacology, hospital medicine, and women's health.^{1,2}

The goal of this process is to identify POEMs (patient-oriented evidence that matters). A POEM must report at least one patient-oriented outcome, such as improvement in symptoms, morbidity, or mortality. It should also be free of important methodologic bias, making the results valid and trustworthy. Finally, if applied in practice, the results would change what some physicians do by adopting a new practice or discontinuing an old one. Of more than 20,000 research studies published in 2023 in journals reviewed by the POEMs team, 247 met criteria for validity, relevance, and practice change. These POEMs are emailed daily to subscribers of Essential Evidence Plus (Wiley-Blackwell, Inc).

The Canadian Medical Association purchases a POEMs subscription and thousands of its members receive the daily POEM. These physicians can rate each one using a validated questionnaire.³ In 2023, we received nearly 219,000 POEMs

ROLAND GRAD, MD, MSc, is an associate professor in the Department of Family Medicine at McGill University, Montreal, Quebec, Canada.

MARK H. EBELL, MD, MS, is a professor in the Department of Epidemiology at the University of Georgia, Athens.

Author disclosure: No relevant financial relationships.

Address correspondence to Roland Grad, MD, MSc, at roland.grad@mcgill.ca.

ratings. These ratings address the domains of clinical relevance, cognitive impact, use in practice, and expected health benefits.⁴ The POEMs CME program in Canada ended on November 30, 2023. Consequently, the authors identified one additional top POEM from December 2023.

This article, the 13th installment of our annual series, summarizes the 20 most clinically relevant POEMs of 2023 for primary care physicians. In addition to the 20 research studies, the top five clinical practice guidelines of the year are also included.

The full POEMs from this article are available at <https://www.aafp.org/pubs/afp/content/top-poems/2023.html>. A collection of top 20 research studies from 2011 to 2022 is available at <https://www.aafp.org/pubs/afp/content/top-poems.html>.

CARDIOVASCULAR DISEASE

The first POEM addresses the question of when to take anti-hypertensive medication and whether timing affects patient-oriented outcomes⁵ (Table 1⁵⁻⁹). This was the most highly rated

TABLE 1

Cardiovascular Disease

Clinical question	Bottom-line answer
1. Does bedtime administration of blood pressure medications improve outcomes? ⁵	Antihypertensive medication: Take it at a time that you are most likely to remember. In contrast with the problematic Hygia Chronotherapy Trial, this equally large TIME study found that it did not matter when patients took their blood pressure medications. Because medications are ineffective while still in the bottle, patients should take their antihypertensive medication when it suits them best.
2. Is a strategy of treat-to-target statin dosing noninferior to high-intensity dosing in adults with CAD? ⁶	Take a fixed-dose approach to lipid management. This study found that statin dosing based on a treat-to-target LDL cholesterol level of 50 to 70 mg per dL (1.29 to 1.81 mmol per L) is noninferior to a high-intensity strategy for reducing adverse events in adults with established CAD. Although the authors see this as an advantage that allows a tailored approach for individual dosing variability, it also serves as some of the best evidence yet that we can manage these patients with a high-intensity strategy and avoid the costs and burdens of repeated LDL cholesterol measurements.
3. Are ambulatory blood pressure readings better than clinic readings for predicting mortality? ⁷	Ambulatory blood pressure monitoring is better than office measurements. This study demonstrated that 24-hour ambulatory blood pressure monitoring was more informative than clinic readings for predicting mortality outcomes.
4. What is the optimal strategy for preventing strokes in adults 80 years or older who have atrial fibrillation? ⁸	In older adults with atrial fibrillation, DOACs have a better net clinical benefit compared with vitamin K antagonists. In this network meta-analysis that included lower-quality studies, DOACs provided a better balance of benefits (i.e., preventing stroke or systemic emboli) and harms (i.e., major bleeding) than vitamin K antagonists in adults 80 years or older with atrial fibrillation. The conclusions are consistent with findings from other analyses of DOACs that have demonstrated fewer harms and comparable benefits.
5. In patients at high risk of cardiovascular disease, what is the effect of specific diets on mortality and cardiovascular events? ⁹	Mediterranean and low-fat diets minimally decrease mortality. This meta-analysis, which did not include low-carbohydrate/high-fat diets or intermittent fasting because of the lack of research, found that the Mediterranean diet (i.e., increased fish, fruit, vegetable, and olive oil intake) and a low-fat diet were associated with a small benefit of reducing mortality and cardiovascular disease in patients with at least two risk factors. The small net benefit makes it unclear whether physicians should devote so much time to asking about and trying to affect diet, even in patients at high risk of adverse cardiovascular outcomes.

CAD = coronary artery disease; DOAC = direct oral anticoagulant; LDL = low-density lipoprotein.

Information from references 5-9.

POEM of 2023. It reported on the TIME study, a new trial that did not replicate earlier trial findings. A top POEM of 2019, the Hygia Chronotherapy Trial studied bedtime dosing of antihypertensive medication and found that there was a large mortality reduction over 6 years compared with morning dosing, but the quality of evidence was later questioned.¹⁰ The TIME study showed that the time antihypertensives are taken had no effect on patient-oriented outcomes. Evidence reversals such as this are uncommon in POEMs from randomized controlled trials.¹¹

To prevent cardiovascular events using statins, some clinical guidelines recommend a treat-to-target strategy. The second POEM in this section showed that a treat-to-target strategy is more burdensome and no more effective than a simpler approach that uses a high-intensity statin (i.e., rosuvastatin,

20 mg, or atorvastatin, 40 mg) in patients with coronary artery disease.⁶ The LODESTAR study included 4,400 patients with coronary artery disease. One-half of the patients were randomized to achieve a low-density lipoprotein cholesterol target of 50 to 70 mg per dL (1.29 to 1.81 mmol per L); the other half were given 20 mg of rosuvastatin or 40 mg of atorvastatin without a dose adjustment. After 3 years of follow-up, there was no difference between groups for the primary end point of a composite outcome of death, myocardial infarction, stroke, and revascularization. In the treat-to-target group, lipid levels were checked at least seven times in 3 years and the statin dose was not changed in 73% of patients. These findings provide evidence against adjusting treatment to a target low-density lipoprotein cholesterol value.

TABLE 2

Infectious Disease

Clinical question	Bottom-line answer
6. In the Omicron phase of the COVID-19 pandemic, is nirmatrelvir/ritonavir (Paxlovid) still effective at reducing hospitalizations and death in outpatients? ¹⁴	Nirmatrelvir/ritonavir is still effective for the Omicron phase of COVID-19. This well-done propensity score–matched study showed that nirmatrelvir/ritonavir continues to provide a clinically meaningful reduction in hospitalizations and death (number needed to treat = 62), especially in those who have received fewer vaccines and in adults older than 70 years. This is the third methodologically sound study with this conclusion. In the absence of randomized trials, this represents our best available evidence.
7. What is the optimal leukocyte cutoff for diagnosing UTI in older women? ¹⁵	Use a higher leukocyte cutoff to define pyuria in older women. For women 65 years and older, a much higher cutoff for pyuria should be used before diagnosing UTI to avoid overtreating asymptomatic bacteriuria. The optimal cutoff for automated microscopy was a leukocyte level of greater than 264 per μL (0.26×10^9 per L), which was 88% sensitive and 88% specific. A limitation of this diagnostic case-control design is that it tends to overestimate the accuracy of a test; therefore, a follow-up study using a cohort design that includes women with clinically suspected UTI should be done.
8. What is the best oral monotherapy for toenail onychomycosis in adults? ¹⁶	Terbinafine for 12 weeks, followed by a period of no therapy, and then a 4-week booster is best for treating toenail onychomycosis. Based on effectiveness, safety, and cost, a regimen of terbinafine, 250 mg once daily for 12 weeks, followed by a 12-week period of no therapy, and then a 4-week booster of terbinafine, 250 mg, was preferred for onychomycosis in adults for the outcome of complete cure at 1 year. Terbinafine had fewer harms and a much lower cost than newer agents, such as oteseconazole (Vivjoa) and posaconazole (Noxafil), which can cost \$1,000 or more.
9. Are dextromethorphan, honey, or inhaled ipratropium (Atrovent) better than usual care for symptom relief in patients with acute cough? ¹⁷	Antitussives, honey, and anticholinergics are ineffective for cough. Overall, patients had an additional 6.3 days of moderate or worse cough after enrollment, ranging from 5.9 to 7.1 days, with no significant difference between groups. This primary care study was underpowered but adds to the literature that fails to find significant benefit to these agents. If someone wants to avoid opioids, honey seems like the safest ineffective alternative (except for in children younger than 12 months).

UTI = urinary tract infection.

Information from references 14–17.

The next POEM reveals that 24-hour ambulatory systolic blood pressure monitoring is an average of 19 mm Hg lower than the average of two office-based measurements taken 5 minutes apart. More importantly, blood pressure readings from a 24-hour device predict all-cause mortality more effectively than readings taken in the office.⁷ This 2023 cohort study confirms that there is an advantage in clinical decision-making for 24-hour ambulatory blood pressure monitoring in select patients.

Another POEM is a network meta-analysis that sought to identify the optimal strategy for anticoagulation to prevent stroke in adults 80 years or older with atrial fibrillation.⁸ Compared with patients taking vitamin K antagonists, those taking direct oral anticoagulants had fewer cardiovascular events (i.e., stroke or systemic emboli) and slightly fewer episodes of major bleeding. Aspirin was no more effective than placebo and caused more major bleeding. For net clinical benefit—a balance between benefits and harms—apixaban (Eliquis) had the best profile. This finding is consistent with a top POEM of 2019, which reported that apixaban had the lowest bleeding risk,¹² and the most recent American Geriatrics Society Beers Criteria.¹³

Finally, a meta-analysis of randomized controlled trials compared the effects of seven popular dietary programs on cardiovascular events and overall mortality in patients with at least

two risk factors for cardiovascular disease. In studies with at least 9 months of follow-up, programs involving the Mediterranean or low-fat diets were associated with a small decrease in all-cause mortality (absolute risk reduction = 1.7% and 0.9%, respectively).⁹ The meta-analysis showed moderate-certainty evidence; therefore, these structured dietary programs are a reasonable approach, but the overall effects are small.

INFECTIOUS DISEASE

The only POEM related to COVID-19 is a well-done observational study of 177,545 patients with acute COVID-19 in the Omicron phase¹⁴ (Table 2¹⁴⁻¹⁷). Of those patients, 8,876 were given nirmatrelvir/ritonavir (Paxlovid). Each patient who received the medication was matched with one who did not, but they were similar in terms of age, sex, COVID vaccine status, and comorbidities. Patients receiving nirmatrelvir/ritonavir were significantly less likely to be hospitalized (2.1% vs. 3.7%; number needed to treat = 62) and had lower mortality, especially patients older than 70 years and those who had received fewer vaccines.

The next POEM looked at an important question in primary care: how do we define pyuria in women 65 years and older? The study compared a case group (women with a culture that was positive for a uropathogen and at least two lower urinary tract symptoms) with a control group (a mix of

TABLE 3

Musculoskeletal

Clinical question

Bottom-line answer

10. Which antidepressant classes are effective for pain syndromes?¹⁸

Among antidepressants, only SNRIs are effective for some types of pain syndromes.

This umbrella review summarized the results of the most comprehensive systematic reviews on the use of antidepressants for treatment of various pain syndromes. It found that the only good evidence supported the use of SNRIs (e.g., duloxetine [Cymbalta], venlafaxine) to treat some types of pain, including back, postoperative, and neuropathic pain and fibromyalgia. Based on moderate- and low-quality evidence, antidepressants in other classes were not effective for pain.

11. Are opioids effective in alleviating pain in adults with acute, nonspecific low back or neck pain?¹⁹

Opioids are not more effective than placebo for acute back or neck pain.

This rigorously conducted study showed that from week to week over a 6-week period, adults with acute, nonspecific low back or neck pain randomized to opioids had similar pain relief to those treated with placebo.

12. In patients with pain and function loss due to knee osteoarthritis, does high-dose medical exercise therapy improve pain and functioning scores more than low-dose exercise?²⁰

Exercise therapy improves pain and function in osteoarthritis.

Tailored exercise therapy of at least 20 to 30 minutes three times per week improves pain and function scores in approximately one-half of patients with painful knee osteoarthritis. For patients interested in sports and recreation, high-dose exercise therapy (70 to 90 minutes three times per week) produces better results.

SNRI = serotonin-norepinephrine reuptake inhibitor.

Information from references 18-20.

women with asymptomatic bacteriuria, a culture that grew mixed flora, or a negative culture).¹⁵ The optimal cutoff for automated microscopy and flow cytometry was a leukocyte level of 264 per μL (0.26×10^9 per L), far higher than the threshold that many physicians were taught to use. At this cutoff, the positive and negative likelihood ratios were 7.2 and 0.14, respectively.

Toenail fungus is commonly encountered in primary care practice. Not everyone desires treatment, but for those who do, the next POEM provides guidance.¹⁶ This network meta-analysis included 21 randomized trials and used the most relevant patient-oriented outcome of complete clinical cure at 1 year. The most effective regimen was terbinafine, 250 mg once daily for 12 weeks, followed by 12 weeks of no treatment, and then 4 more weeks of terbinafine. Newer, much more expensive drugs such as oteseconazole (Vivjoa) and posaconazole (Noxafil) were no more effective than terbinafine and had a greater likelihood of harms.

The last POEM in this section compared dextromethorphan, honey, and inhaled ipratropium (Atrovent) with usual care in adults with moderate or worse acute cough. Although the drop-out rate was concerning, there was no difference between the groups in duration of cough.¹⁷

MUSCULOSKELETAL

Antidepressants have long been recommended for the treatment of pain conditions. The next POEM is an umbrella review, which is essentially a review of other systematic reviews (Table 3¹⁸⁻²⁰). It found that only serotonin-norepinephrine reuptake inhibitors, such as duloxetine (Cymbalta) and venlafaxine, were effective for pain and only for specific types of pain, including back, postoperative, and neuropathic pain and fibromyalgia.¹⁸

In a study of 347 patients with acute, nonspecific low back or neck pain, patients were randomized to receive oxycodone, 5 mg (titratable to 10 mg), plus naloxone, 2.5 mg twice daily, or placebo.¹⁹ Patients also received guideline-recommended care that included early mobilization and nonopioid pain medications. There was no difference in pain scores between groups.

The final musculoskeletal POEM identified 189 therapy-naive adults with knee osteoarthritis that was associated with pain and loss of function. They were randomized to low-dose therapy (five exercises for 20 to 30 minutes) or high-dose therapy (11 exercises for 70 to 90 minutes), with each group instructed to perform the exercises three times per week for 12 weeks. About one-half of patients in both groups improved, with the only difference being improved function in sports and recreation in the high-dose group at 6 months.²⁰

TABLE 4

Diabetes Mellitus

Clinical question	Bottom-line answer
13. Are healthful behaviors associated with a lower likelihood of developing type 2 diabetes? ²¹	Healthful behaviors reduce the risk of developing type 2 diabetes. Exhibiting healthful behaviors—maintaining a healthy body weight, eating a healthy diet, exercising regularly, smoking abstinence or cessation, and limiting alcohol consumption—is associated with a lower likelihood of developing type 2 diabetes. This is an association; it does not mean that counseling people to follow these behaviors will lessen their likelihood of developing type 2 diabetes. It simply gives motivation to people who are following these healthy habits to keep doing them.
14. What is the association between long-term glycemic control and dementia in adults with type 2 diabetes? ²²	Very poor glycemic control is associated with dementia risk. In this large population-based cohort, adults 50 years and older with type 2 diabetes whose cumulative glycemic control was greater than 9% were at an increased risk of developing dementia over 6 years of follow-up (adjusted hazard ratio = 1.31 to 1.74).
15. What treatments for type 2 diabetes decrease the likelihood of adverse patient-oriented outcomes? ²³	SGLT-2 inhibitors and GLP-1 receptor agonists are best at improving patient-oriented outcomes for type 2 diabetes. This study further separates the effect of diabetes treatments on blood glucose levels and important outcomes. SGLT-2 inhibitors and GLP-1 receptor agonists reduce all-cause and cardiovascular mortality and other cardiac-related problems. Older treatments, including insulin, do not affect long-term outcomes. Metformin was not found to be more effective than standard treatment to prevent important outcomes, which echoes previous findings. ²⁴

GLP-1 = glucagon-like peptide-1; SGLT-2 = sodium-glucose cotransporter-2.

Information from references 21-24.

DIABETES MELLITUS

The first diabetes POEM is a meta-analysis of cohort studies looking at the association between healthy behaviors (maintaining a healthy body weight, eating a healthy diet, exercising, not smoking, and limiting alcohol consumption) and the likelihood of developing type 2 diabetes²¹ (Table 4²¹⁻²⁴). The meta-analysis found that in 30 studies with more than 1.6 million people,

4.5% of patients developed diabetes. People who adhered to at least three of the healthy behaviors had a relative risk for diabetes of 0.20 (95% CI, 0.17 to 0.23). Although observational studies cannot establish causality, in this case, the magnitude of benefit, a clear dose-response effect (relative risk for diabetes was 0.7 with one healthy behavior vs. 0.15 with five), and biological plausibility support the validity of these findings.

TABLE 5

Miscellaneous

Clinical question

Bottom-line answer

16. Is mindfulness-based stress reduction noninferior to escitalopram for the treatment of anxiety disorders in adults?²⁶

Stress reduction training is a reasonable treatment option for adults with anxiety.

This study found that standard mindfulness-based stress reduction is noninferior to pharmacotherapy with escitalopram for the treatment of anxiety disorders in adults. The primary outcome measurement occurred at 8 weeks from baseline. At 6 months, the anxiety scores remained improved, despite only 52% and 28% of patients in the escitalopram and mindfulness-based stress reduction groups, respectively, continuing treatment.

17. Does framing depression as an adaptation to one's environment, rather than a disease, result in better patient outcomes?²⁷

Framing depression as an adaptation can lead to better patient outcomes.

Explaining to patients that their depressive symptoms are an adaptation to their current circumstances, rather than a disease, may produce less stigma and greater patient acceptance and self-efficacy. It may be time we start thinking of depression as a signal that something in a patient's life needs more attention and not as something endogenous; this approach opens the toolbox. The chemical imbalance explanation of depression, if true at all, may be the effect and not the cause.²⁸

18. Is an amoxicillin oral provocation challenge safe and accessible for distinguishing an erroneous penicillin allergy label from a true one in adults and children?²⁹

People labeled as penicillin allergic can be safely challenged in primary care.

This study reports the outcome of an amoxicillin oral provocation challenge in 99 adults and children who were initially labeled as having a penicillin allergy and were subsequently identified by their history to be at low risk of a true allergy. A total of 96 patients (97%) completed the oral provocation challenge with no reaction, resulting in the removal of the erroneous allergy label. The three reactions were all mild and required minimal intervention (i.e., no epinephrine). Having primary care physicians use this method to identify the millions of adults and children who are incorrectly labeled as having a penicillin allergy may result in significant health care savings from the use of less effective, more expensive, or less safe alternative antibiotics.

19. What is the rate of development of colorectal cancer in older patients with colon polyps?³⁰

Recommendations for a 5-year surveillance interval in older adults with previous polyps should trigger a discussion.

In a population of older patients (65 years and older) with colon polyps identified by colonoscopy, few (0.2%) will develop colon cancer. It may be time to reevaluate the current recommendations for 5-year surveillance in older patients with previously identified polyps, especially for patients with a calculated shorter life expectancy.

20. Can nonprescription hearing aids be effective without a fitting by an audiologist?³¹

Consider a do-it-yourself approach for hearing loss.

Hearing aids are now available in many countries without the need for a fitting by an audiologist. This study found that participants reported a higher benefit with a self-fitted nonprescription hearing aid than with a hearing aid fitted by an audiologist. The hearing aid used in the study requires the use of a smartphone app.

Information from references 26-31.

The next POEM is also an observational study. It examined the association between type 2 diabetes and dementia.²² Patients were classified into groups based on the most common ranges for A1C levels observed during the study, and the analysis was adjusted for age, sex, race, comorbidities, and severe hypo- and hyperglycemic events. The study found a higher risk of dementia in those with the majority of A1C measurements at 9.0% to 10.0% (adjusted hazard ratio = 1.31; 95% CI, 1.15 to 1.51) or greater than 10.0% (adjusted hazard ratio = 1.74; 95% CI, 1.62 to 1.86).

The final diabetes POEM is an ambitious network meta-analysis of 816 randomized trials with 471,038 participants that compared two or more medications for type 2 diabetes.²³ The meta-analysis showed that sodium-glucose cotransporter-2 (SGLT-2) inhibitors and glucagon-like peptide-1 (GLP-1) receptor agonists were well tolerated and reduced cardiovascular-related death, the likelihood of nonfatal myocardial infarction,

hospitalizations for heart failure, and all-cause mortality. Metformin, insulin, and sulfonylureas did not have similar benefits, with the latter two associated with an increased risk of severe hypoglycemia. An important limitation is that the studies were relatively short, with a median duration of 6 months. The American Diabetes Association guidelines are increasingly reflecting these data, with recommendations for the earlier and broader use of GLP-1 receptor agonists and SGLT-2 inhibitors.²⁵

MISCELLANEOUS

Five top POEMs of the year fit best in a miscellaneous category (Table 5²⁶⁻³¹). The first two address chronic anxiety and depression. Although stress reduction can be effective for decreasing anxiety, it is unclear how mindfulness-based stress reduction training compares with standard pharmacotherapy in adults. A randomized controlled trial found that the outcomes from mindfulness-based stress reduction training over

TABLE 6

Guidelines

Clinical question	Bottom-line answer
What are the current recommendations from American and European professional societies for the treatment of type 2 diabetes mellitus? ³²	The management of type 2 diabetes continues to move away from glycemic goal chasing to a more holistic approach to patient care that also considers medications, weight management, attention to cardiovascular risk factors, and kidney protection. Metformin is recommended for most patients, although new classes of medications that affect the heart and kidneys should be considered for many patients. Sulfonylureas, thiazolidinediones, and insulin have little effect except to lower blood glucose levels and are distinctly de-emphasized.
What are the updated guidelines from the ACP for the treatment of acute depression? ³³	For patients in the acute phase of major depressive disorder, the ACP continues the trend away from drug therapy to talk therapy. CBT is recommended as first-line treatment for patients with moderate symptoms (conditional recommendation). The group recommends offering CBT, medication therapy, or a combination to patients with more profound symptoms based on evidence that up to 70% of patients with moderate to severe depression will not respond to a second-generation antidepressant.
When should screening for colorectal cancer begin, and how should it be done? ³⁴	This ACP guideline updates recommendations from a 2019 ACP guideline, based on the publication of two new guidelines from other groups. There are two new recommendations: (1) consider not screening for colorectal cancer in patients 45 to 49 years of age, and (2) do not use stool DNA, computed tomography colonography, capsule endoscopy, urine, or serum tests to screen for colorectal cancer.
What medications are problematic for older patients according to the AGS? ¹³	The 2023 AGS Beers list provides many resources to assist in the rational prescribing of medications for patients 65 years and older. The AGS panel properly encourages the use of these resources judiciously and their use in shared decision-making.
What are the latest evidence-based guidelines for the management of functional dyspepsia? ³⁵	These thoughtful, evidence-based guidelines provide a helpful framework for evaluating and treating dyspepsia. The guidance regarding imaging and the use of upper endoscopy is probably on the conservative side for U.S. physicians. The authors acknowledge that approximately half of the recommendations are based on low- or very low-quality evidence.

ACP = American College of Physicians; AGS = American Geriatrics Society; CBT = cognitive behavior therapy.

Information from references 13 and 32-35.

8 weeks (2.5-hour weekly classes, a day-long weekend retreat class, and 45-minute daily home practice exercises) were comparable to escitalopram, a first-line medication for patients with anxiety disorders.²⁶ This finding suggests that more than one reasonable option exists for the management of anxiety, and educating patients about their options, identifying their preferences, and coming to a collaborative decision would be a good use of our time.

The serotonin hypothesis of depression dates back to the 1960s. The next POEM describes a study that tested whether framing depression as an adaptation to one's environment resulted in better patient outcomes than the standard explanation that depression results from a chemical imbalance in the brain. Those with a history of depression and an average Patient Health Questionnaire-9 score of 10.5 (877 people) were randomized to view one of two descriptions of depression in a series of videos. One set described depression as a disease caused by a variety of factors, including a chemical imbalance in the brain. The other set of videos explained depression as a signal alerting an individual that something in their life needs more attention. Benefits to the "depression as a signal" explanation were that participants believed that they could overcome their depression and that depression is an adaptive response that could lead to new insights, and there is less stigma associated with mental illness.²⁷ The effect sizes for these statistically significant findings were small. One limitation in trying to apply the "depression as a signal" intervention is that not all patients with depression will identify social or environmental triggers for their feelings.

Many patients tell us that they have been allergic to penicillin since childhood and describe this as "some sort of a reaction" to an antibiotic. Less than 20% of these people are truly allergic, and referring all of them to an allergist is not practical. This POEM is a study in which 96 of 99 adults and children (97%) had their erroneous allergy label removed following a negative amoxicillin oral provocation challenge in the primary care office.²⁹ The protocol for this challenge test is well described, and using the PEN-FAST (penicillin allergy, five or fewer years ago, anaphylaxis/angioedema, severe, treatment) prediction rule (<https://www.aafp.org/pubs/afp/issues/2021/0615/p760.html>) helps to determine which adults are at low risk (about 5%) of having a true penicillin allergy.

Surveillance colonoscopy is commonly performed in people with polyps on endoscopy. But should this surveillance test be recommended every 5 years? In a sample of almost 10,000 people 65 years and older with colon polyps (83% were white, average age was 73 years), 8% had advanced polyps and 0.2% had colorectal cancer on follow-up endoscopy³⁰; therefore, subsequent colon cancer is rare in older patients with polyps. It can be difficult to stop performing endoscopic surveillance in older adults with a history of polyps, but this information should empower physicians to engage with select patients regarding the decision to stop this testing.

The final top POEM is a trial that asked: Are over-the-counter hearing aids effective without a fitting by an audiologist? This is

timely evidence because hearing aids are now available without a prescription. In this study, 64 adults with verified hearing loss and an average age of 63.6 years were randomized to be fitted by an audiologist or to self-fit a nonprescription hearing aid. The primary outcome of self-reported benefit was greater in the self-fitting group. No difference was found between groups for other outcomes, such as speech recognition in noise.³¹ This do-it-yourself approach seems particularly relevant for people with hearing loss and limited access to audiological resources.

GUIDELINES

POEMs include clinical practice guidelines in addition to primary research and systematic reviews. The five guidelines from 2023 that ranked highly for relevance to clinical practice are summarized in Table 6.^{13,32-35}

Editor's Note: This article was cowritten by Dr. Mark Ebell, deputy editor for evidence-based medicine for *AFP* and cofounder and editor-in-chief of Essential Evidence Plus, published by Wiley-Blackwell, Inc. Because of Dr. Ebell's dual roles and ties to Essential Evidence Plus, the concept for this article was independently reviewed and approved by a group of *AFP*'s medical editors. In addition, the article underwent peer review and editing by four of *AFP*'s medical editors. Dr. Ebell was not involved in the editorial decision-making process.

—Sumi Sexton, MD, Editor-in-Chief

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