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High-Priority Evidence Gaps for Clinical Preventive Services

SUBMITTED BY:

Dr. Susan J. Curry, Chair
Dr. Alex H. Krist, Vice Chair
Dr. Douglas K. Owens, Vice Chair

**ON BEHALF OF THE
U.S. PREVENTIVE SERVICES
TASK FORCE**

EIGHTH ANNUAL
REPORT TO CONGRESS



EXECUTIVE SUMMARY

The U.S. Preventive Services Task Force (USPSTF or Task Force) is an independent, volunteer panel of national experts in prevention, primary care, and evidence-based medicine. The Task Force makes evidence-based recommendations about clinical preventive services to improve the health of all Americans. The Task Force comprehensively assesses the potential benefits and harms of preventive services, including screening tests, behavioral counseling, and preventive medications.

The USPSTF is charged by Congress to provide an annual report that identifies gaps in the scientific evidence base and recommends areas for future research. In some cases, clinical preventive services have been well studied for the general population, but there are important evidence gaps that prevent the USPSTF from making recommendations for specific populations and age groups. In each annual Report to Congress, the Task Force calls for more research in those areas where evidence for specific populations or age groups is lacking.

This is the eighth annual report, which covers 2017 to 2018.

Clinical Preventive Services Where More Research Is Needed

The USPSTF has identified seven high-priority recent research gaps related to cancer prevention and cardiovascular health where more research is needed.

Cancer Prevention

1. Screening for Cervical Cancer, Especially Among Diverse Populations
2. Screening for Prostate Cancer, Especially Among African American Men and Men With a Family History
3. Screening and Behavioral Counseling for Skin Cancer

Cardiovascular Health

1. Screening for Atrial Fibrillation With Electrocardiography
2. Screening for Cardiovascular Disease Risk With Electrocardiography
3. Risk Assessment for Cardiovascular Disease With Nontraditional Risk Factors
4. Screening for Peripheral Artery Disease and Cardiovascular Disease Risk Assessment With the Ankle-Brachial Index

Examples of research needed within these topics include: how providing preventive services affects health outcomes; identifying tools that can accurately assess people's risk for a specific disease; and the effectiveness of treatments for people who are found to have a disease through screening. Future research in these areas can help fill these gaps and may result in important new recommendations that will help to improve the health of Americans.

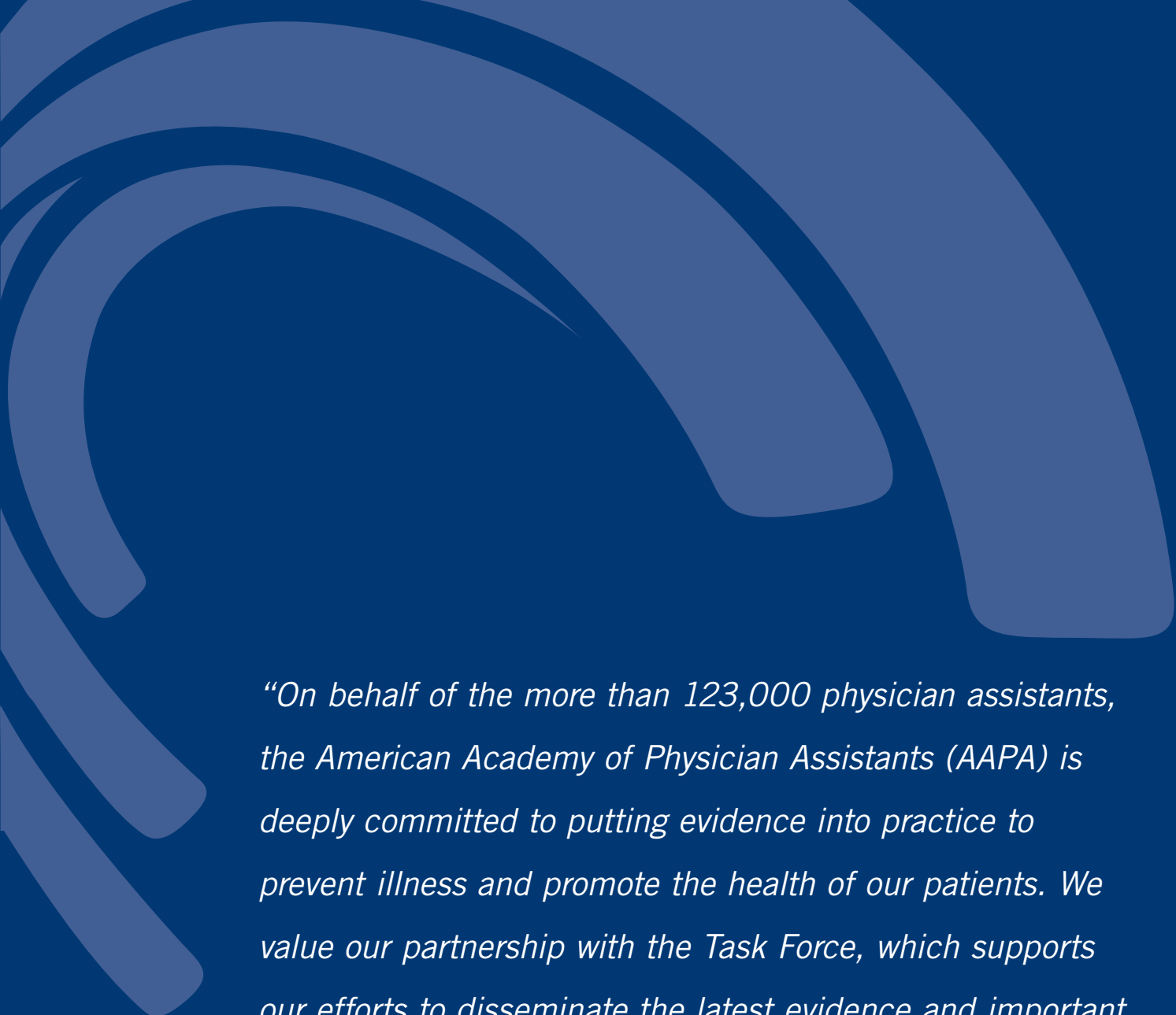
The USPSTF hopes that identifying evidence gaps and highlighting them as priority areas for research will inspire public and private researchers to collaborate and target their efforts to generate new knowledge and address important health priorities.

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“On behalf of the more than 123,000 physician assistants, the American Academy of Physician Assistants (AAPA) is deeply committed to putting evidence into practice to prevent illness and promote the health of our patients. We value our partnership with the Task Force, which supports our efforts to disseminate the latest evidence and important resources on preventive services. We join the Task Force in its call for additional research on vital evidence gaps and hope that, by addressing these gaps, we can continue to work together to provide the best preventive health care to all patients.”

Jonathan E. Sobel, PA-C, MBA, DFAAPA, FAPACVS
President and Chair of the Board
American Academy of Physician Assistants

I. INTRODUCTION

The U.S. Preventive Services Task Force (USPSTF or Task Force) is an independent, volunteer group of national experts in prevention, primary care, and evidence-based medicine. Since its inception in 1984, the Task Force has made evidence-based recommendations about clinical preventive services to improve the health of all Americans (e.g., by improving quality of life and prolonging life). These recommendations include screening tests, behavioral counseling, and preventive medications.

The mission of the USPSTF is to improve the health of all Americans by making evidence-based recommendations about clinical preventive services.

The purpose of this report is to update Congress and the research community about high-priority evidence gaps in clinical preventive services identified by the Task Force from 2017 to 2018.

II. BACKGROUND

Clinical preventive services have tremendous value in improving the health of the Nation. When provided appropriately, they can identify diseases at earlier stages when they are more treatable, or reduce a person's risk for developing a disease. However, some clinical preventive services can fail to provide the expected benefit or even cause harm. To make informed decisions, health care professionals, patients, and families need access to trustworthy, objective information about the benefits and harms of clinical preventive services.

The Task Force makes recommendations to help primary care clinicians, patients, and families decide together whether a particular preventive service is right for an individual's needs. Task Force recommendations:

- Apply only to people without signs or symptoms of the disease or health condition
- Focus on screening to identify disease early and other interventions to prevent the onset of disease
- Address services offered in the primary care setting or services to which patients can be referred by primary care professionals

Since 1998, the Agency for Healthcare Research and Quality has been authorized by Congress to convene the Task Force and to provide ongoing scientific, administrative, and dissemination support. The Agency funds Evidence-based Practice Centers (EPCs), which are academic or research organizations that work with the Task Force to develop research plans and conduct the evidence reviews that the Task Force uses to inform its recommendations.

Who Serves on the Task Force?

The Task Force is an independent group of national experts in prevention and evidence-based medicine who represent the diverse disciplines of primary care, including behavioral health, family medicine, geriatrics, internal medicine, nursing, obstetrics and gynecology, and pediatrics. It is made up of 16 volunteer members who are appointed to serve 4-year terms, led by a chair and two vice chairs (see **Appendix A** for current members).

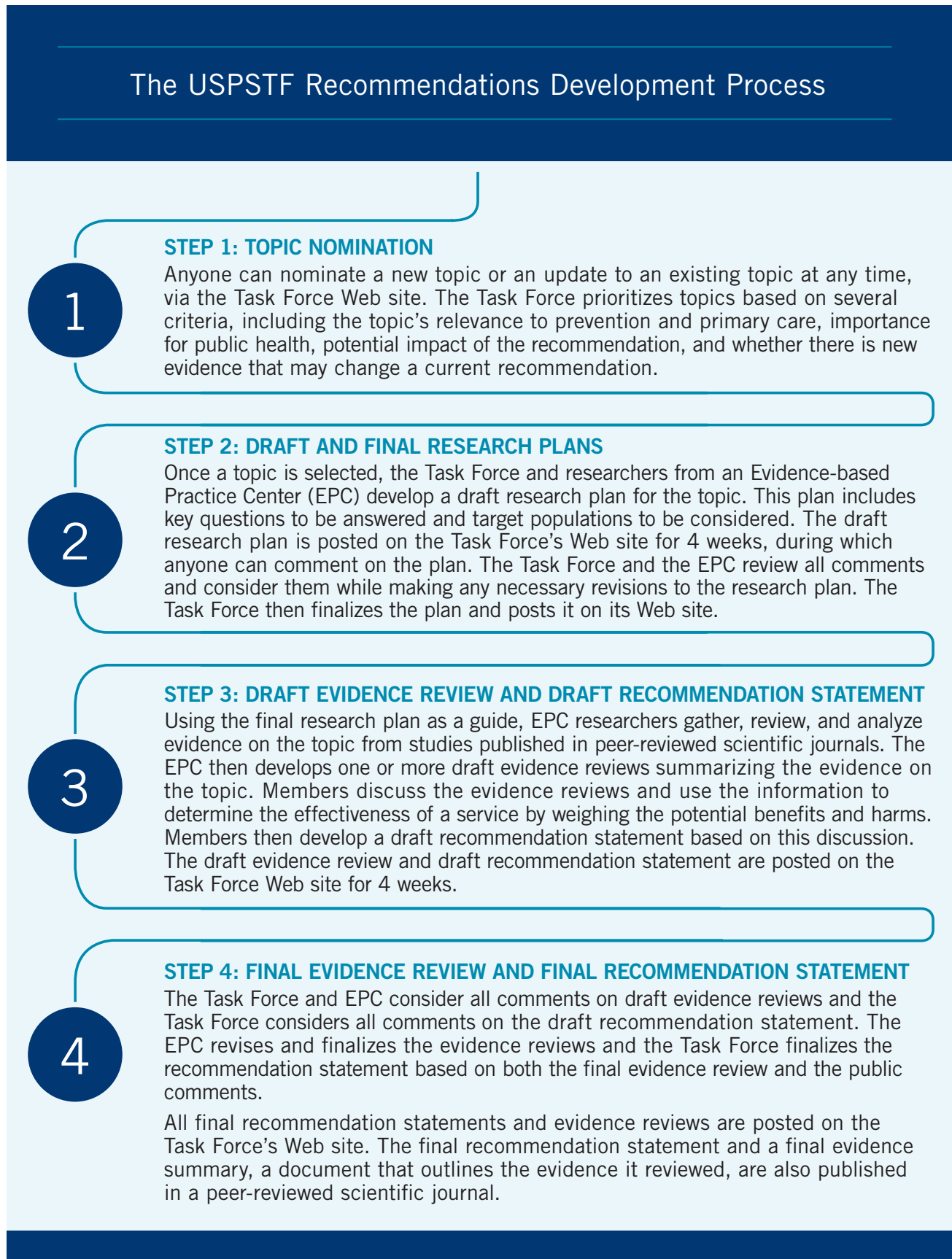
How Does the Task Force Minimize Potential Conflicts of Interest?

To ensure that USPSTF recommendations are balanced, independent, and objective, the USPSTF has a long-standing and rigorous conflict of interest assessment and disclosure process.¹ The process for each member begins prior to appointment, and potential conflicts of interest are reviewed at least three times each year for all members.

How Does the Task Force Make Recommendations?

The Task Force's recommendations are based on a review of the best available research on the potential benefits and harms of the preventive service. The Task Force does not conduct research studies, but rather reviews and assesses published research. It follows a multistep process when developing each of its recommendations and obtains public input throughout the recommendation development process (see **Figure 1**).

Figure 1. Steps the USPSTF Takes to Make a Recommendation



When the Task Force reviews the evidence, it considers the benefits and harms of the preventive service. Potential benefits of preventive services can include helping people stay healthy throughout their lifetime, improving quality of life, preventing disease, and prolonging life. Potential harms can include inaccurate test results, harms from invasive followup tests, harms from treatment of a disease or condition, diagnosis of a condition that would never have caused symptoms or issues in a person’s lifetime (also known as “overdiagnosis”), or receiving treatment when it is not needed or may not actually improve health (also known as “overtreatment”).

The Task Force assigns each of its recommendations a letter grade (A, B, C, or D) or issues an “I statement” based on the certainty of the evidence and the balance of benefits and harms of the preventive service (see **Table 1**).

Table 1. Meaning of USPSTF Grades

Grade	Definition
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

How Does the Task Force Engage the Public, Primary Care and Federal Partners, Stakeholders, and Topic Experts in Developing Recommendations?

For each topic, the USPSTF actively seeks input from the public, its partners, stakeholders, and topic experts, including medical specialists. This ensures a focus on important clinical prevention topics for practicing clinicians and that the evidence relevant to each recommendation is considered.² At each step of the recommendation development process, the USPSTF solicits and reviews input. Anyone—the public, USPSTF partners, stakeholders, and topic experts—can nominate a new topic or an update to an existing topic, as well as submit comments on all Task Force draft materials (research plans, evidence reviews, and recommendation statements).

- **The Public.** All draft materials are posted on the Task Force Web site for a 4-week public comment period. The Task Force reviews and considers all comments as it finalizes the materials.
- **Partners.** The Task Force works with national organizations that represent primary care clinicians, consumers, and other primary care stakeholders and health-related federal agencies. These organizations and agencies provide input on the recommendations as they are being developed and help the Task Force disseminate the final recommendations (see **Appendices B** and **C** for a list of partners).
- **Stakeholders.** The Task Force identifies relevant stakeholder groups for each topic and contacts leadership, inviting them to comment on the drafts during the public comment periods. Stakeholder groups include national primary care, specialty, patient, advocacy, and other organizations with expertise and interest in a specific topic.
- **Topic Experts.** The Task Force seeks input from different types of topic experts, including medical specialists such as radiologists, oncologists, cardiologists, and surgeons. In addition, the EPC team that conducts the evidence reviews for each topic always includes content experts, who work with the EPC during the systematic evidence review. Expert reviewers provide input on the evidence supporting the draft recommendation statement.

Where Can I Find More Information About the Task Force?

The Task Force Web site (www.uspreventiveservicestaskforce.org) contains more information about the Task Force and its methods for developing recommendations, including engaging with experts, partners, and the public. In particular, more details are available on the “About the USPSTF” and “Methods and Processes” pages.

III. CLINICAL PREVENTIVE SERVICES WHERE MORE RESEARCH IS NEEDED: RECENT RESEARCH GAPS RELATED TO CANCER PREVENTION AND CARDIOVASCULAR HEALTH

The Task Force's evidence-based recommendations about clinical preventive services are intended to help improve the health of all Americans. In order to develop recommendations, the USPSTF needs quality evidence about the benefits and harms of the service and about the ways specific populations are impacted. For some preventive services and for certain populations, significant gaps in the scientific evidence limit the ability of the Task Force to make recommendations.

Congress has specifically charged the Task Force with identifying and reporting each year on areas where current evidence is insufficient to make a recommendation on the use of a clinical preventive service, with special attention to those areas where evidence is needed to make recommendations for specific populations and age groups.

There are two ways that the USPSTF highlights evidence gaps in its recommendation statements:

- **Issuing an “I statement.”** The USPSTF issues “I statements” when the current evidence is lacking, of poor quality, or conflicting. When the evidence is insufficient, the USPSTF is unable to assess the balance of benefits and harms of the preventive service.
- **Describing the “Research Needs and Gaps.”** In all recommendation statements, the USPSTF points out where gaps in the evidence remain in a section called “Research Needs and Gaps.”

The USPSTF has established methods that guide how it issues recommendations for specific populations.³ While many clinical preventive services have large bodies of evidence for the general population, important evidence gaps persist which prevent the USPSTF from making recommendations for specific populations and age groups. This is often because these groups are not well represented in health research. Examples of such groups are older adults, children, and racial/ethnic minority groups. Greater inclusion of these populations in research will help the USPSTF issue recommendations that can be used to improve the quality of preventive care for these groups and to eliminate disparities in health care.

For this 2018 annual report, the USPSTF reviewed final recommendations released from October 2017 through September 2018^a and calls attention to high-priority research gaps from recommendations related to cancer prevention and cardiovascular health (see **Table 2**). Future research in these areas can help fill the gaps and may result in important new recommendations that will help to improve the health of Americans.

^aMost research gaps are from final recommendation statements published during this time period, except for Screening for Skin Cancer, which was released in 2016 and has been included because of its relevancy to the skin cancer counseling recommendation.

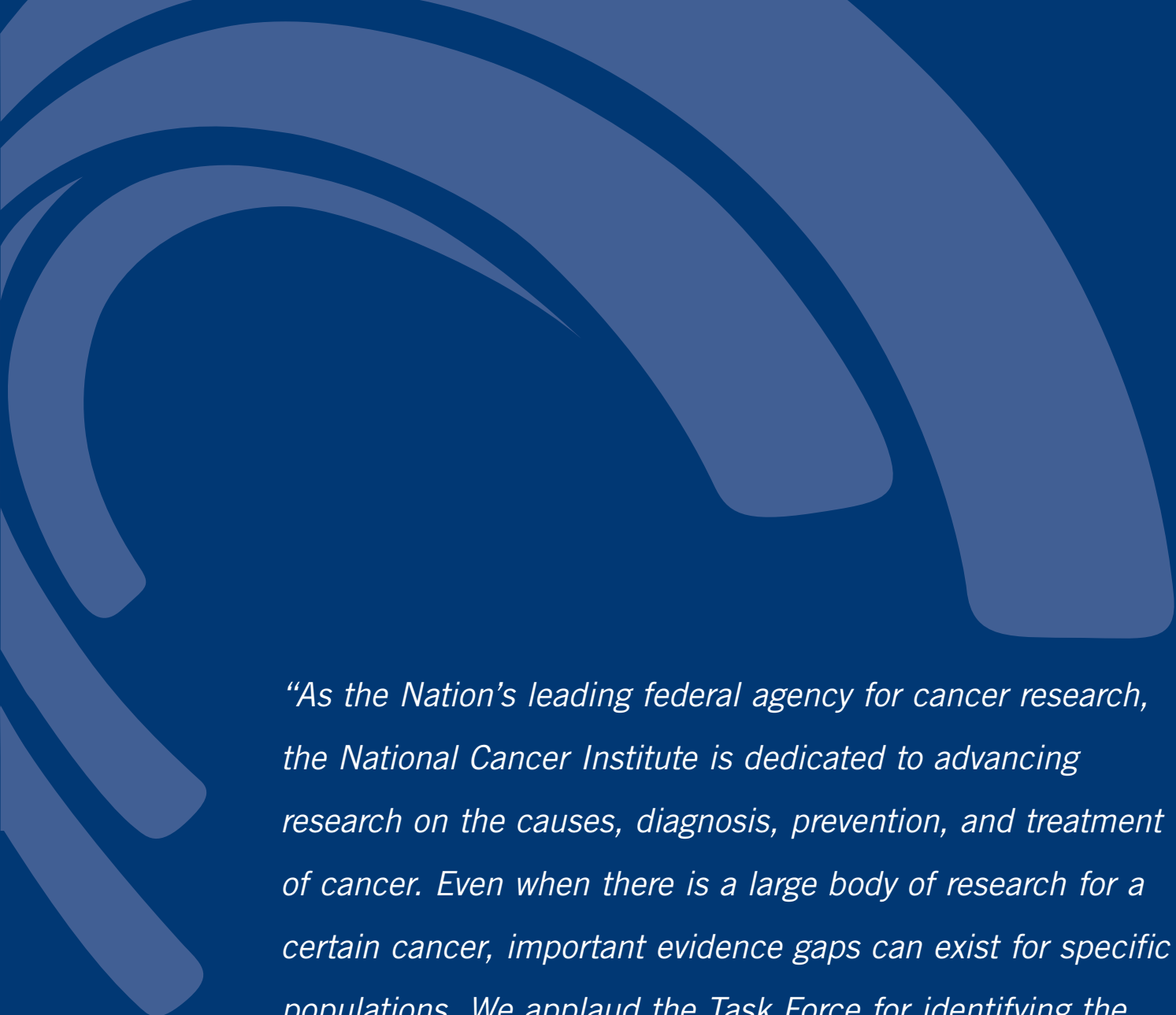
Table 2. Key Research Gaps for Clinical Preventive Services

Clinical Preventive Services	Gaps Where Research Is Needed
Cancer Prevention	
<p>Screening for Cervical Cancer, Especially in Diverse Populations</p>	<ul style="list-style-type: none"> • Identify and evaluate effective strategies to reach unscreened and inadequately screened women • Evaluate whether different screening tests and followup strategies could play a part in reducing mortality rates from cervical cancer in all women and in diverse populations such as African American, American Indian/Alaska Native, Asian, and Hispanic women, as well as women living in Appalachia • Determine whether screening after age 65 years has a different balance of benefits and harms in different subpopulations, including racial/ethnic minority groups • Examine the benefits and harms of screening women who have received the HPV (human papillomavirus) vaccination
<p>Screening for Prostate Cancer, Especially in African American Men and Men With a Family History</p>	<ul style="list-style-type: none"> • Develop and validate tools or tests that can distinguish between prostate cancer that is slow growing and unlikely to cause harm in a man’s lifetime vs. prostate cancer that will grow quickly and affect quality or length of life • Examine the best techniques for informed decisionmaking that incorporate the values and preferences of men and their families about screening, and how to adapt this to a range of diverse patient populations • Provide data on the benefits and harms of screening and treatment of prostate cancer in African American men and men with a family history of the disease
<p>Screening and Behavioral Counseling for Skin Cancer</p>	<ul style="list-style-type: none"> • Provide evidence on the effectiveness of screening for skin cancer with the clinical visual skin examination, including possible harms • Provide more evidence on the benefits and harms of counseling adults older than age 24 years with fair skin types about minimizing their exposure to ultraviolet radiation to reduce risk of skin cancer
Cardiovascular Health	
<p>Screening for Atrial Fibrillation With Electrocardiography (ECG)</p>	<ul style="list-style-type: none"> • Assess the benefits and harms of screening for atrial fibrillation with ECG in people without signs or symptoms compared with usual care, which includes checking pulse and listening to the heart • Evaluate the benefits and harms of newer technologies, such as consumer devices, for assessing pulse and heart rhythm as potential screening strategies

Clinical Preventive Services	Gaps Where Research Is Needed
Screening for Cardiovascular Disease Risk With ECG	<ul style="list-style-type: none"> • Examine whether adding ECG (resting or exercise ECG) testing to standard cardiovascular disease risk assessment tools, such as the Pooled Cohort Equations, can better predict which people without signs or symptoms are most likely to have a heart attack or stroke
Risk Assessment for Cardiovascular Disease With Nontraditional Risk Factors	<ul style="list-style-type: none"> • Measure the effect of adding the ankle-brachial index, high-sensitivity C-reactive protein, or coronary artery calcification score to the traditional risk factors on clinical decision thresholds and the effects of those changes on preventing cardiovascular events (specifically, heart attacks and strokes) • Evaluate the use of nontraditional risk factor assessment in diverse populations to help address the shortcomings of traditional risk models, particularly for women, racial/ethnic minority groups, and those with lower socioeconomic status
Screening for Peripheral Artery Disease and Cardiovascular Disease Risk With the Ankle-Brachial Index	<ul style="list-style-type: none"> • Determine whether screening for peripheral artery disease with the ankle-brachial index can lead to preventing heart attacks, strokes, or other complications among people at increased risk of peripheral artery disease who are not already receiving treatment for it based on other risk factors • Assess the effectiveness of screening with the ankle-brachial index and interventions to stop disease progression in the lower limbs in diverse populations (e.g., women, racial/ethnic minority groups, and people with lower socioeconomic status) and in populations at high risk (e.g., people with diabetes) • Assess the accuracy of the ankle-brachial index as a screening tool for peripheral artery disease in patients without any signs or symptoms

For studies to adequately address these gaps, researchers need to use methods that are consistent with the USPSTF’s criteria for assessing study quality, validity, and applicability. Studies addressing these gaps should do the following:

- Examine preventive services conducted in the **primary care setting** or that are referable from primary care
- Compare outcomes for a **screened versus unscreened** population
- Include populations **without obvious signs or symptoms** of the condition
- Adopt a **rigorous study design** appropriate for the question, such as a randomized, controlled trial or a high-quality observational study
- Be **free of potential sources of bias**, such as high dropout rates among participants or biased assessment of outcomes



“As the Nation’s leading federal agency for cancer research, the National Cancer Institute is dedicated to advancing research on the causes, diagnosis, prevention, and treatment of cancer. Even when there is a large body of research for a certain cancer, important evidence gaps can exist for specific populations. We applaud the Task Force for identifying the critical evidence gaps in cancer screening and prevention, especially in diverse populations that may be disproportionately affected. We hope future research can fill these gaps in the evidence and improve the prevention, detection, and treatment of cancer for all individuals.”

Barnett S. Kramer, M.D., M.P.H.
Director, Division of Cancer Prevention
National Cancer Institute

Cancer Prevention

Cancer is the second most common cause of death in the United States.⁴ Cancer occurs when some of the body's cells grow and divide continuously without stopping. They overcrowd normal cells and make it hard for the body to do what it is supposed to do.⁵ This report focuses on research gaps related to three types of cancer recently reviewed by the Task Force: cervical cancer, prostate cancer, and skin cancer.

Screening for Cervical Cancer, Especially Among Diverse Populations

Overall, deaths from cervical cancer have been decreasing since the start of widespread cervical cancer screening.⁶ The burden of new cases and cervical cancer deaths falls disproportionately on racial/ethnic and sexual/gender minority groups, women with disabilities, low-income women, and women living in isolated or medically underserved locations. For example, Asian women have lower screening rates than the U.S. average, especially among women who have recently immigrated to the United States and may have language or cultural barriers to screening.⁷ African American, American/Indian Alaska Native, and Hispanic women and women living in Appalachia are more likely to die of cervical cancer than the average woman living in the United States.^{8,9} Some of the reasons for the differences in deaths may include lower screening rates, inadequate followup after screening, and inadequate treatment.¹⁰

In 2018, the USPSTF noted important gaps in cervical cancer screening.¹¹ To fill these gaps, the USPSTF needs well-designed studies that do the following:

- Identify and evaluate effective strategies to reach unscreened and inadequately screened women
- Evaluate whether different screening tests and followup strategies could play a part in reducing mortality rates in all women and in diverse populations such as African American, American Indian/Alaska Native, Asian, and Hispanic women, as well as women living in Appalachia
- Determine whether screening after age 65 years has a different balance of benefits and harms in different subpopulations, including women with limited access to care and women from certain racial/ethnic minority groups
- Examine the benefits and harms of screening women who have received the HPV (human papillomavirus) vaccination; an increasing number of women and men of screening age are being vaccinated and the effects on screening are unknown

Screening for Prostate Cancer, Especially Among African American Men and Men With a Family History

Prostate cancer is one of the most common cancers to affect men. In some men, prostate cancer is slow growing and does not cause problems in their lifetime, but for others, the cancer is more aggressive and may lead to death. Two important risk factors for the development of prostate cancer include African American race and family history of prostate cancer.

In the United States, African American men are more likely to develop prostate cancer than white men and they are also more than twice as likely as white men to die of prostate cancer.¹² The higher death rate is due in part to an earlier age at cancer onset, more advanced cancer stage at diagnosis, and higher rates of more aggressive cancer (i.e., higher tumor grade). The disparity in death from prostate cancer may also be the result of African American men being less likely to receive high-quality care.

Men with a family history of prostate cancer are more likely to develop prostate cancer. According to one study, men who have at least one first-degree relative with prostate cancer are 30 percent more likely to be diagnosed with prostate cancer than men without a family history.¹³

In 2018, the USPSTF noted important gaps in the research for prostate cancer screening, including for African American men and men with a family history.¹⁴ To fill these gaps, the USPSTF needs well-designed studies that do the following:

- Develop and validate tools or tests that can distinguish between prostate cancer that is slow growing and unlikely to cause harm in a man's lifetime versus prostate cancer that will grow quickly and affect quality or length of life
- Examine the best techniques for informed decisionmaking that incorporate the values and preferences of men and their families about screening and how to adapt this to a range of diverse patient populations
- Provide data on the benefits and harms of screening and treatment of prostate cancer in African American men and men with a family history:
 - Does screening result in similar or greater reductions in prostate cancer deaths for African American men and men with a family history compared with men in the general population?
 - Does screening and diagnostic testing result in similar or greater harms for African American men and men with a family history compared with men in the general population?
 - Does beginning screening before age 55 years provide more benefits for African American men and men with a family history compared with men in the general population?
 - What is the optimal frequency for screening African American men and men with a family history?
 - How can disparities in access to high-quality care be eliminated in African American men?

Screening and Behavioral Counseling for Skin Cancer

Skin cancer is the most common type of cancer in the United States, affecting millions of people every year.¹⁵ It is an abnormal growth of cells that begins in the outermost (epidermal) layer of the skin. Significant exposure to ultraviolet radiation (UV rays) during childhood and adolescence, especially sunburns, increases the risk of skin cancer later in life. However, less is known about the association between UV exposure during adulthood and skin cancer risk.

The USPSTF identified research gaps for adult populations in its screening (2016)¹⁶ and counseling (2018)¹⁷ to prevent skin cancer recommendations. To fill these gaps, the USPSTF needs well-designed studies to do the following:

- Provide evidence on the effectiveness of screening for skin cancer with the clinical visual skin examination, including possible harms (e.g., overdiagnosis and overtreatment)
- Provide more evidence on the benefits and harms of counseling adults older than age 24 years with fair skin types about minimizing their exposure to UV rays to reduce risk of skin cancer, including examination of long-term benefits and harms
 - Evaluate the association between UV exposure during adulthood and skin cancer risk

Cardiovascular Health

Cardiovascular disease is the most common cause of death among adults in the United States.⁴ It is a group of disorders of the heart and the blood vessels supplying the heart, brain, and the arms and legs (coronary heart disease, cerebrovascular disease, and peripheral artery disease, respectively). Cardiovascular disease can be caused by a buildup of plaque in arteries, leading to chest pain, heart attacks, and strokes. Many patients do not have any symptoms of cardiovascular disease before having a serious event, such as a heart attack or stroke.

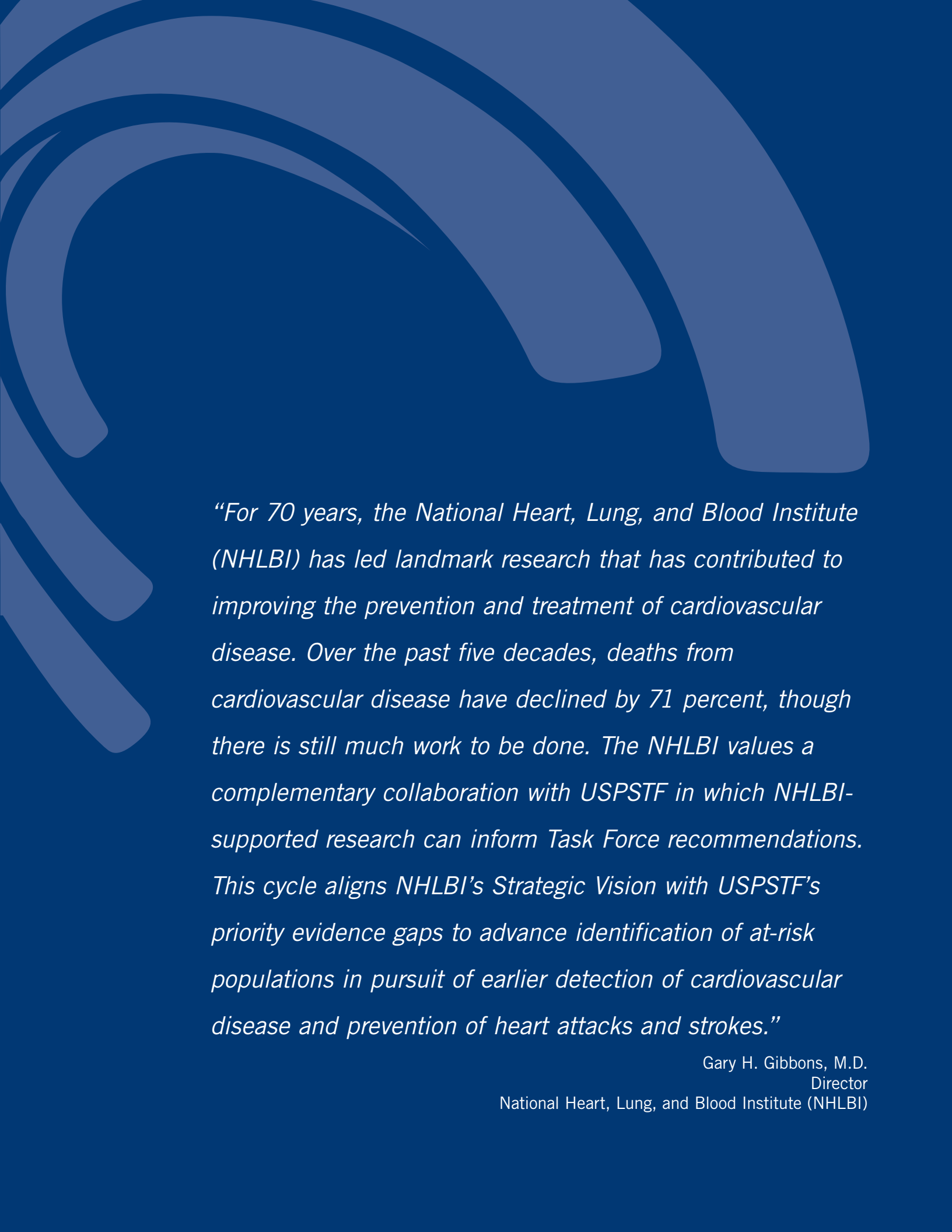
Clinicians check for someone's risk of cardiovascular disease by using risk assessment tools such as the Framingham Risk Score or the Pooled Cohort Equations, which look for traditional risk factors of cardiovascular disease, including age, sex, race/ethnicity, blood pressure readings, smoking habits, cholesterol level, and presence of diabetes. Recently, the Task Force looked at additional ways to assess risk and found important evidence gaps.

Screening for Atrial Fibrillation With Electrocardiography

Atrial fibrillation is the most common type of irregular heartbeat.¹⁸ It occurs when the two upper chambers of the heart beat rapidly and irregularly and don't move all of the blood to the lower chambers of the heart. When this happens, a blood clot can form in the heart, which may move to the brain, causing a stroke. Since atrial fibrillation is often not identified until a stroke occurs, there is interest in finding ways to identify it before there are signs or symptoms. One potential way is to screen with electrocardiography, also known as ECG. ECG is a test that records the heart's electrical activity through soft, sticky patches called electrodes, which are taped to the skin. It is used to see whether the heart is beating and functioning normally and can show irregular heart rhythms, such as atrial fibrillation.

In 2018, the USPSTF identified important research gaps for screening for atrial fibrillation with ECG.¹⁹ To fill these gaps, the USPSTF needs well-designed studies to better understand the following key issues:

- Assess the benefits and harms of screening for atrial fibrillation with ECG in people without signs or symptoms compared with usual care, which includes checking pulse or listening to the heart
- Evaluate the benefits and harms of newer technologies, such as devices that consumers can use, for assessing pulse and heart rhythm as potential screening strategies



“For 70 years, the National Heart, Lung, and Blood Institute (NHLBI) has led landmark research that has contributed to improving the prevention and treatment of cardiovascular disease. Over the past five decades, deaths from cardiovascular disease have declined by 71 percent, though there is still much work to be done. The NHLBI values a complementary collaboration with USPSTF in which NHLBI-supported research can inform Task Force recommendations. This cycle aligns NHLBI’s Strategic Vision with USPSTF’s priority evidence gaps to advance identification of at-risk populations in pursuit of earlier detection of cardiovascular disease and prevention of heart attacks and strokes.”

Gary H. Gibbons, M.D.
Director
National Heart, Lung, and Blood Institute (NHLBI)

Screening for Cardiovascular Disease Risk With ECG

The Task Force reviewed evidence on whether adding ECG to the standard ways cardiovascular disease risk is measured can improve risk assessment and help prevent heart attack or stroke in people without signs or symptoms of cardiovascular disease.

In 2018, the USPSTF identified important research gaps for screening with ECG to prevent cardiovascular disease.²⁰ To fill these gaps, the USPSTF needs well-designed studies to better understand the following key issues:

- Examine whether adding ECG testing (resting or exercise ECG) to standard risk assessment tools, such as the Pooled Cohort Equations, can better predict which people without signs or symptoms are most likely to have a heart attack or stroke
 - If adding ECG testing improves risk prediction among this population, whether it ultimately leads to better cardiovascular outcomes

Risk Assessment for Cardiovascular Disease With Nontraditional Risk Factors

The Task Force looked at whether adding three nontraditional risk factors of cardiovascular disease to the traditional risk factors for assessing risk would help to prevent heart attack or stroke. These nontraditional risk factors are:

- A way of taking the blood pressure using readings from both the ankle and the arm to determine risk of blocked blood vessels in the leg (ankle-brachial index)
- An elevated amount of a specific protein in the blood (high-sensitivity C-reactive protein)
- An elevated amount of calcium in the coronary arteries (coronary artery calcification score)

In 2018, the USPSTF identified important research gaps for risk assessment for cardiovascular disease with these nontraditional risk factors.²¹ To fill these gaps, the USPSTF needs well-designed studies to better understand the following key issues:

- Measure the effect of adding the ankle-brachial index, high-sensitivity C-reactive protein, or coronary artery calcification score to traditional risk factors on clinical decision thresholds, and the effect of those changes on preventing cardiovascular disease events (specifically, heart attacks and strokes)
- Evaluate the use of nontraditional risk factor assessment in diverse populations to help address the shortcomings of traditional risk models, particularly for women, racial/ethnic minority groups, and people with lower socioeconomic status
 - Traditional risk factor assessments are not as predictive for these populations; research is needed to understand whether nontraditional assessments could allow for a better ability to predict cardiovascular disease events, closer to the prediction level of traditional risk factor assessments for the general population

Screening for Peripheral Artery Disease and Cardiovascular Disease Risk Assessment With the Ankle-Brachial Index

Peripheral artery disease is when blood flow to the limbs, especially the legs, is reduced. It is caused by narrowing and hardening of the arteries. People with peripheral artery disease can suffer from conditions related to reduced blood flow, including pain with walking, and loss of limbs. They are also more likely to have a heart attack or stroke.²² The goal of screening for peripheral artery disease is to identify and treat the disease earlier, before there are signs or symptoms and before a heart attack or stroke.

The Task Force looked at current evidence to determine if screening people without signs or symptoms using the ankle-brachial index can prevent heart attack, stroke, or other complications. The ankle-brachial index is a way of taking the blood pressure using readings from both the ankle and the arm to determine presence of blocked blood vessels in the leg.

In 2018, the USPSTF identified important research gaps for screening for peripheral artery disease and cardiovascular disease risk with the ankle-brachial index.²³ To fill these gaps, the USPSTF needs well-designed studies to better understand the following key issues:

- Determine whether screening for peripheral artery disease with the ankle-brachial index can help prevent heart attacks, strokes, or other complications among people at increased risk of peripheral artery disease who are not already receiving treatment for it based on other risk factors (this is the population most likely to benefit from additional screening)
- Assess the effectiveness of screening with the ankle-brachial index and interventions to stop disease progression in the lower limbs in more diverse populations (e.g., women, racial/ethnic minority groups, and people with lower socioeconomic status) and in populations at high risk (e.g., people with diabetes)
- Assess the accuracy of the ankle-brachial index as a screening tool for patients without any signs or symptoms

IV. THE USPSTF IN 2018 AND OTHER HIGHLIGHTS

Over the past year, the members of the Task Force continued working on a full portfolio of topics. The current USPSTF library includes 83 preventive service recommendation statements, with 133 specific recommendation grades (see **Appendix D** for a complete listing of all current USPSTF recommendations). Many recommendation statements include multiple recommendation grades for different subpopulations. From October 1, 2017, to September 30, 2018, the Task Force accomplished the following:

- Received 15 nominations for new topics and 6 nominations to reconsider or update existing topics
- Posted 11 draft research plans for public comment
- Posted 13 draft recommendation statements and 13 draft evidence reports for public comment
- Published 15 final recommendation statements with 29 recommendation grades in medical journals; posted 18 final evidence reports

For a listing of all final USPSTF recommendations released since the last report, see **Appendix E**.

In addition, in January 2018, the USPSTF published 11 articles in a special issue of the *American Journal of Preventive Medicine* entitled, “Advancing the U.S. Preventive Services Task Force Methods: Important Considerations in Making Evidence-Based Guidelines.”²⁴

Efforts to Fill USPSTF Research Gaps

The National Institutes of Health (NIH) reviews the research gaps identified by the USPSTF and uses this information when developing future funding opportunities. NIH has also funded research that has helped move prior USPSTF I statements to A, B, C, or D recommendations that provide clinicians with guidance on what they should do or not do.

USPSTF Research Gaps Stimulate New NIH Research

In 2016, the USPSTF concluded that there was insufficient evidence to assess the balance of benefits and harms of screening for autism spectrum disorder in young children for whom no concerns of autism had been raised by a parent or clinician. With its I statement, the USPSTF encouraged the scientific community to conduct more research on the benefits and harms of autism screening. Since then, NIH has awarded over \$700 million in research funding to address autism spectrum disorder.²⁵ Research funding examples include:

- In 2017, NIH released three funding opportunity announcements to encourage research on autism spectrum disorders
- NIH also awarded nine research grants for the Autism Centers of Excellence, a program that supports large research projects aimed at understanding, screening for, and developing interventions for autism spectrum disorder
 - One of these projects²⁶ includes a randomized, controlled trial of 8,000 toddlers to determine if screening lowers the average age of autism spectrum disorder diagnosis, leads to earlier interventions, and improves outcomes

NIH Funding Has Filled USPSTF-Identified Research Gaps

NIH helped generate new research to fill the gaps identified in prior recommendations. For example, in 2004, the USPSTF issued an I statement on screening for lung cancer. Nine years later—in 2013—the USPSTF issued a B recommendation, advising that clinicians screen for lung cancer in high-risk adults with low-dose computed tomography. NIH’s research contributed to the USPSTF being able to make a recommendation on this topic, which will help prevent deaths from lung cancer.

During 2015–2017, the National Institutes of Health (NIH) was the single largest funder of research included in systematic reviews that informed USPSTF recommendations.²⁸

- Of the four studies that the Task Force considered on the benefits of screening for lung cancer, NIH sponsored the largest trial, the National Lung Screening Trial²⁷
- NIH also supported many of the studies that were used by the USPSTF to assess the harms of screening for lung cancer

V. THE USPSTF IN 2019

In the coming 12 months, it is expected that the USPSTF will continue to:

Develop and Release New Recommendation Statements

- Work on more than 30 topics that are in progress
- Work on 3 new topics nominated for consideration through the public topic nomination process
- Post 10 draft research plans and 10 draft recommendation statements and evidence reports for public comment
- Publish 10 final recommendation statements

Coordinate With Partners to Develop and Disseminate Recommendations

- Coordinate with the USPSTF Dissemination and Implementation Partners and Federal Liaisons to solicit input and disseminate the recommendations to primary care providers and other stakeholders

Address Research Gaps

- Coordinate closely with NIH's Office of Disease Prevention to identify areas that might warrant expanded research efforts to fill evidence gaps
- Prepare a ninth annual report for Congress on high-priority evidence gaps

The USPSTF appreciates the opportunity to report on its activities, to highlight critical evidence gaps, and to recommend important new areas for research in clinical preventive services. The members of the Task Force look forward to their ongoing work to improve the health of all Americans.

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APPENDICES

APPENDIX A: 2018 MEMBERS OF THE USPSTF



Susan J. Curry, Ph.D., Chair

Dr. Curry is interim executive vice president and provost of the University of Iowa, where she also serves as a distinguished professor of health management and policy in the College of Public Health. She is also a member of the National Academy of Medicine. Dr. Curry's many professional activities include past service as dean of the University of Iowa College of Public Health from 2008 to 2017, vice chair of the board of directors of the Truth Initiative, and member of the National Cancer Institute's Board of Scientific Advisors.



Alex H. Krist, M.D., M.P.H., Vice Chair

Dr. Krist is a professor of family medicine and population health at Virginia Commonwealth University and an active clinician and teacher at the Fairfax Family Practice Residency. He is co-director of the Virginia Ambulatory Care Outcomes Research Network and director of community-engaged research at the Center for Clinical and Translational Research.



Douglas K. Owens, M.D., M.S., Vice Chair

Dr. Owens is a general internist and investigator at the Center for Innovation to Implementation at the Veterans Affairs (VA) Palo Alto Health Care System. He is the Henry J. Kaiser, Jr., professor at Stanford University, where he is also a professor of medicine, health research and policy (by courtesy), and management science and engineering (by courtesy). Dr. Owens is director of the Center for Primary Care and Outcomes Research in the Stanford University School of Medicine and the Center for Health Policy in the Freeman Spogli Institute for International Studies.



Michael J. Barry, M.D., Member

Dr. Barry is director of the Informed Medical Decisions Program in the Health Decision Sciences Center at Massachusetts General Hospital. He is also a professor of medicine at Harvard Medical School and a clinician at Massachusetts General Hospital.



Aaron B. Caughey, M.D., M.P.P., M.P.H., Ph.D., Member

Dr. Caughey is a professor in and chair of the Department of Obstetrics and Gynecology and the associate dean for Women's Health Research and Policy at Oregon Health & Science University. He is the founder and chair of the Oregon Perinatal Collaborative, funded by the Centers for Disease Control and Prevention, which aims to improve outcomes for women and infants through guidelines and policies, working with all the health systems in the state.



Karina W. Davidson, Ph.D., M.A.Sc., Member

Dr. Davidson is a vice dean and professor in the Departments of Medicine, Cardiology, and Psychiatry and the director of the Center for Behavioral Cardiovascular Health at Columbia University Medical Center. She is also a psychologist in the Department of Psychiatry at New York Presbyterian Hospital/ Columbia University Medical Center.



Chyke A. Doubeni, M.D., M.P.H., Member

Dr. Doubeni is the Harrison McCrea Dickson, M.D., and Clifford C. Baker, M.D., Presidential professor in the Department of Family Medicine and Community Health at the University of Pennsylvania School of Medicine. He is an associate professor of epidemiology, a senior scholar at the Center for Clinical Epidemiology and Biostatistics, and a senior fellow in the Leonard Davis Institute of Health Economics at the University of Pennsylvania. He previously served as interim associate vice provost for diversity at the University of Massachusetts Medical School.



John W. Epling, Jr., M.D., M.S.Ed., Member

Dr. Epling is a professor of family and community medicine at the Virginia Tech Carilion School of Medicine in Roanoke, VA. He is the medical director of research for family and community medicine, is the medical director of employee health and wellness for the Carilion Clinic, and maintains an active clinical primary care practice.



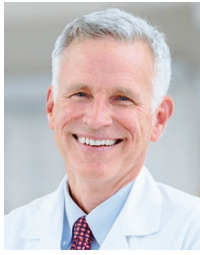
Alex R. Kemper, M.D., M.P.H., M.S., Member

Dr. Kemper is a board-certified pediatrician and chief of the Division of Ambulatory Pediatrics at Nationwide Children's Hospital. Dr. Kemper is also the deputy editor of *Pediatrics*.



Martha Kubik, Ph.D., R.N., Member

Dr. Kubik is the director of the Department of Nursing at the Temple University College of Public Health and the David R. Devereaux endowed professor in nursing. From 2015 to 2018, Dr. Kubik was a standing member of the National Institutes of Health's Community-Level Promotion Study Section. Dr. Kubik is also a fellow in the American Academy of Nurses.



C. Seth Landefeld, M.D., Member

Dr. Landefeld is the chair of the Department of Medicine and the Spencer chair in medical science leadership at the University of Alabama at Birmingham (UAB) School of Medicine. Dr. Landefeld also serves on the board of directors of the American Board of Internal Medicine, the UAB Health System, and the University of Alabama Health Services Foundation.



Carol M. Mangione, M.D., M.S.P.H., Member

Dr. Mangione is the chief of the Division of General Internal Medicine and Health Services Research and the Barbara A. Levey, M.D., and Gerald S. Levey, M.D., endowed chair in medicine at the David Geffen School of Medicine at the University of California, Los Angeles (UCLA). She is a professor of public health at the UCLA Fielding School of Public Health, director of the UCLA Resource Center for Minority Aging Research/Center for Health Improvement of Minority Elderly, and associate director of the UCLA Clinical Translational Science Institute.



Michael Silverstein, M.D., M.P.H., Member

Dr. Silverstein is a professor of pediatrics, director of the Division of General Academic Pediatrics, and vice chair of research for the Department of Pediatrics at the Boston University School of Medicine. He is also associate chief medical officer for research and population health at Boston Medical Center.



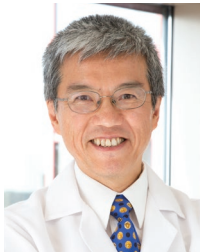
Melissa A. Simon, M.D., M.P.H., Member

Dr. Simon is the George H. Gardner professor of clinical gynecology, the vice chair of clinical research in the Department of Obstetrics and Gynecology, and professor of preventive medicine and medical social sciences at the Northwestern University Feinberg School of Medicine. She is the founder of the Chicago Cancer Health Equity Collaborative and a member of the Robert H. Lurie Comprehensive Cancer Center.



Chien-Wen Tseng, M.D., M.P.H., M.S.E.E., Member

Dr. Tseng is the Hawaii Medical Service Association endowed chair in health services and quality research, a professor, and the associate research director in the Department of Family Medicine and Community Health at the University of Hawaii John A. Burns School of Medicine. She is also a physician investigator with the nonprofit Pacific Health Research and Education Institute.



John B. Wong, M.D., Member

Dr. Wong is chief of the Division of Clinical Decision Making and a primary care clinician in the Department of Medicine at Tufts Medical Center and a professor of medicine at the Tufts University School of Medicine. He is also the director of comparative effectiveness research for the Tufts Clinical Translational Science Institute and a professor of medicine in the Tufts University Sackler School of Graduate Biomedical Sciences.

APPENDIX B: 2018 USPSTF DISSEMINATION AND IMPLEMENTATION PARTNER ORGANIZATIONS

AARP

American Academy of Family Physicians

American Academy of Pediatrics

American Academy of Physician Assistants

American Association of Nurse Practitioners

American College of Obstetricians and Gynecologists

American College of Physicians

American College of Preventive Medicine

American Medical Association

American Osteopathic Association

American Psychological Association

America's Health Insurance Plans

Canadian Task Force on Preventive Health Care

Community Preventive Services Task Force

National Association of Pediatric Nurse Practitioners

National Business Group on Health

National Committee for Quality Assurance

Patient-Centered Outcomes Research Institute

APPENDIX C: 2018 FEDERAL LIAISONS TO THE USPSTF

Centers for Disease Control and Prevention

Centers for Medicare & Medicaid Services

Department of Defense Military Health System

Department of Veterans Affairs Center for Health Promotion and Disease Prevention

Health Resources and Services Administration

Indian Health Service

National Cancer Institute

National Institutes of Health

Office of the Assistant Secretary for Health, Office of Disease Prevention and Health Promotion

Substance Abuse and Mental Health Services Administration

U.S. Food and Drug Administration

APPENDIX D: COMPLETE LISTING OF ALL USPSTF RECOMMENDATIONS AS OF OCTOBER 2018

Grade	Title
A	<p>Asymptomatic Bacteriuria: Screening in Pregnant Women</p> <p>The USPSTF recommends screening for asymptomatic bacteriuria with urine culture in pregnant women at 12 to 16 weeks of gestation or at their first prenatal visit, if later.</p>
A	<p>Cervical Cancer: Screening in Women Ages 21 to 65 Years</p> <p>The USPSTF recommends screening for cervical cancer every 3 years with cervical cytology alone in women ages 21 to 29 years. For women ages 30 to 65 years, the USPSTF recommends screening every 3 years with cervical cytology alone, every 5 years with high-risk human papillomavirus (hrHPV) testing alone, or every 5 years with hrHPV in combination with cytology (cotesting).</p> <p>This recommendation applies to individuals who have a cervix, regardless of their sexual history or HPV vaccination status. This recommendation does not apply to individuals who have been diagnosed with a high-grade precancerous cervical lesion or cervical cancer, individuals with in utero exposure to diethylstilbestrol, or those who have a compromised immune system (eg, women living with HIV).</p>
A	<p>Colorectal Cancer: Screening in Adults Ages 50 to 75 Years</p> <p>The USPSTF recommends screening for colorectal cancer starting at age 50 years and continuing until age 75 years. The risks and benefits of different screening methods vary.</p>
A	<p>Folic Acid to Prevent Neural Tube Defects: Preventive Medication in Women Planning or Capable of Pregnancy</p> <p>The USPSTF recommends that all women who are planning or capable of pregnancy take a daily supplement containing 0.4 to 0.8 mg (400 to 800 µg) of folic acid.</p>
A	<p>Gonococcal Ophthalmia Neonatorum: Preventive Medication in Newborns</p> <p>The USPSTF recommends prophylactic ocular topical medication for all newborns for the prevention of gonococcal ophthalmia neonatorum.</p>
A	<p>Hepatitis B Virus: Screening in Pregnant Women</p> <p>The USPSTF recommends screening for hepatitis B virus infection in all pregnant women at their first prenatal visit.</p>
A	<p>High Blood Pressure: Screening in Adults</p> <p>The USPSTF recommends screening for high blood pressure in adults age 18 years and older. The USPSTF recommends obtaining measurements outside of the clinical setting for diagnostic confirmation before starting treatment.</p>
A	<p>HIV: Screening in Adolescents and Adults Ages 15 to 65 Years</p> <p>The USPSTF recommends screening for HIV infection in adolescents and adults ages 15 to 65 years. Younger adolescents and older adults who are at increased risk should also be screened.</p>

Grade	Title
A	<p>HIV: Screening in Pregnant Women</p> <p>The USPSTF recommends screening for HIV infection in all pregnant women, including those who present in labor who are untested and whose HIV status is unknown.</p>
A	<p>Rh(D) Incompatibility: Screening in All Pregnant Women</p> <p>The USPSTF strongly recommends Rh(D) blood typing and antibody testing for all pregnant women during their first visit for pregnancy-related care.</p>
A	<p>Syphilis: Screening in Nonpregnant Adolescents and Adults</p> <p>The USPSTF recommends screening for syphilis infection in persons who are at increased risk for infection.</p>
A	<p>Syphilis: Screening in Pregnant Women</p> <p>The USPSTF recommends early screening for syphilis infection in all pregnant women.</p>
A	<p>Tobacco Smoking Cessation: Behavioral and Pharmacotherapy Interventions in Nonpregnant Adults</p> <p>The USPSTF recommends that clinicians ask all adults about tobacco use, advise them to stop using tobacco, and provide behavioral interventions and U.S. Food and Drug Administration–approved pharmacotherapy for cessation to adults who use tobacco.</p>
A	<p>Tobacco Smoking Cessation: Behavioral Interventions in Pregnant Women</p> <p>The USPSTF recommends that clinicians ask all pregnant women about tobacco use, advise them to stop using tobacco, and provide behavioral interventions for cessation to pregnant women who use tobacco.</p>
B	<p>Abdominal Aortic Aneurysm: Screening in Men Ages 65 to 75 Years Who Have Ever Smoked</p> <p>The USPSTF recommends one-time screening for abdominal aortic aneurysm with ultrasonography in men ages 65 to 75 years who have ever smoked.</p>
B	<p>Abnormal Blood Glucose and Type 2 Diabetes Mellitus: Screening in Adults</p> <p>The USPSTF recommends screening for abnormal blood glucose as part of cardiovascular risk assessment in adults ages 40 to 70 years who are overweight or obese. Clinicians should offer or refer patients with abnormal glucose to intensive behavioral counseling interventions to promote a healthful diet and physical activity.</p> <p>This recommendation applies to adults ages 40 to 70 years who are seen in primary care settings and do not have obvious symptoms of diabetes. Persons who have a family history of diabetes, have a history of gestational diabetes or polycystic ovarian syndrome, or are members of certain racial/ethnic groups (i.e., African Americans, American Indians or Alaskan Natives, Asian Americans, Hispanics or Latinos, or Native Hawaiians or Pacific Islanders) may be at increased risk for diabetes at a younger age or at a lower body mass index. Clinicians should consider screening earlier in persons with one or more of these characteristics.</p>

Grade	Title
B	<p>Alcohol Misuse: Screening and Behavioral Counseling Interventions in Adults</p> <p>The USPSTF recommends screening for alcohol misuse in adults age 18 years and older and providing persons engaged in risky or hazardous drinking with brief behavioral counseling interventions to reduce alcohol misuse.</p>
B	<p>Aspirin to Prevent Cardiovascular Disease and Colorectal Cancer: Preventive Medication in Adults Ages 50 to 59 Years</p> <p>The USPSTF recommends initiating low-dose aspirin use for the primary prevention of cardiovascular disease (CVD) and colorectal cancer in adults ages 50 to 59 years who have a 10% or greater 10-year CVD risk, are not at increased risk for bleeding, have a life expectancy of at least 10 years, and are willing to take low-dose aspirin daily for at least 10 years.</p>
B	<p>Aspirin to Prevent Morbidity and Mortality From Preeclampsia: Preventive Medication in Pregnant Women</p> <p>The USPSTF recommends the use of low-dose aspirin (81 mg/day) as preventive medication after 12 weeks of gestation in women who are at high risk for preeclampsia.</p>
B	<p>BRCA-Related Cancer: Risk Assessment, Genetic Counseling, and Genetic Testing in Women at Increased Risk</p> <p>The USPSTF recommends screening in women who have family members with breast, ovarian, tubal, or peritoneal cancer with one of several screening tools designed to identify a family history that may be associated with an increased risk for potentially harmful mutations in breast cancer susceptibility genes (<i>BRCA1</i> or <i>BRCA2</i>). Women with positive screening results should receive genetic counseling and, if indicated after counseling, BRCA testing.</p>
B	<p>Breast Cancer: Preventive Medication in Women at Increased Risk</p> <p>The USPSTF recommends that clinicians engage in shared, informed decisionmaking with women who are at increased risk for breast cancer about medications to reduce their risk. For women who are at increased risk for breast cancer and at low risk for adverse medication effects, clinicians should offer to prescribe risk-reducing medications, such as tamoxifen or raloxifene.</p>
B	<p>Breast Cancer: Screening With Mammography in Women Ages 50 to 74 Years*</p> <p>The USPSTF recommends biennial screening mammography in women ages 50 to 74 years. This recommendation applies to asymptomatic women age 40 years and older who do not have preexisting breast cancer or a previously diagnosed high-risk breast lesion and who are not at high risk for breast cancer because of a known underlying genetic mutation (such as a <i>BRCA1</i> or <i>BRCA2</i> gene mutation or other familial breast cancer syndrome) or a history of chest radiation at a young age.</p>

*The Department of Health and Human Services, in implementing the Affordable Care Act under the standard it sets out in revised Section 2713(a)(5) of the Public Health Service Act and Section 9(h)(v)(229) of the 2015 Consolidated Appropriations Act, utilizes the 2002 USPSTF recommendation on breast cancer screening (available at <https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/breast-cancer-screening-2002>).

Grade	Title
B	<p>Breastfeeding: Interventions in Pregnant Women and New Mothers</p> <p>The USPSTF recommends providing interventions during pregnancy and after birth to support breastfeeding.</p>
B	<p>Chlamydia: Screening in Women</p> <p>The USPSTF recommends screening for chlamydia in sexually active women age 24 years and younger and in older women who are at increased risk for infection.</p>
B	<p>Dental Caries: Preventive Medication in Children Age 5 Years and Younger</p> <p>The USPSTF recommends that primary care clinicians apply fluoride varnish to the primary teeth of all infants and children starting at the age of primary tooth eruption.</p>
B	<p>Dental Caries: Preventive Medication in Children Age 5 Years and Younger</p> <p>The USPSTF recommends that primary care clinicians prescribe oral fluoride supplementation starting at age 6 months for children whose water supply is deficient in fluoride.</p>
B	<p>Depression: Screening in Children and Adolescents Ages 12 to 18 Years</p> <p>The USPSTF recommends screening for major depressive disorder in adolescents ages 12 to 18 years. Screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate followup.</p>
B	<p>Depression: Screening in Adults</p> <p>The USPSTF recommends screening for depression in the general adult population, including pregnant and postpartum women. Screening should be implemented with adequate systems in place to ensure accurate diagnosis, effective treatment, and appropriate followup.</p>
B	<p>Falls Prevention in Community-Dwelling Older Adults: Interventions in Adults Age 65 Years and Older at Increased Risk for Falls</p> <p>The USPSTF recommends exercise interventions to prevent falls in community-dwelling adults age 65 years and older who are at increased risk for falls.</p> <p>This recommendation applies to community-dwelling adults not known to have osteoporosis or vitamin D deficiency.</p>
B	<p>Gestational Diabetes Mellitus: Screening in Pregnant Women After 24 Weeks of Gestation</p> <p>The USPSTF recommends screening for gestational diabetes mellitus in asymptomatic pregnant women after 24 weeks of gestation.</p>
B	<p>Gonorrhea: Screening in Women</p> <p>The USPSTF recommends screening for gonorrhea in sexually active women age 24 years and younger and in older women who are at increased risk for infection.</p>

Grade	Title
B	<p>Healthful Diet and Physical Activity to Prevent Cardiovascular Disease: Behavioral Counseling Interventions in Adults With Risk Factors</p> <p>The USPSTF recommends offering or referring adults who are overweight or obese and have additional cardiovascular risk factors to intensive behavioral counseling interventions to promote a healthful diet and physical activity for cardiovascular disease prevention.</p>
B	<p>Hepatitis B Virus: Screening in Adolescents and Adults at High Risk</p> <p>The USPSTF recommends screening for hepatitis B virus infection in persons who are at high risk for infection.</p>
B	<p>Hepatitis C Virus: Screening in Adults at High Risk</p> <p>The USPSTF recommends screening for hepatitis C virus infection in adults at high risk for infection. The USPSTF also recommends offering one-time screening for hepatitis C virus infection to adults born between 1945 and 1965.</p>
B	<p>Intimate Partner Violence: Screening in Women of Childbearing Age</p> <p>The USPSTF recommends that clinicians screen women of childbearing age for intimate partner violence, such as domestic violence, and provide or refer women who screen positive to intervention services.</p>
B	<p>Latent Tuberculosis Infection: Screening in Adults</p> <p>The USPSTF recommends screening for latent tuberculosis infection in populations at increased risk.</p>
B	<p>Lung Cancer: Screening in Adults Ages 55 to 80 Years</p> <p>The USPSTF recommends annual screening for lung cancer with low-dose computed tomography in adults ages 55 to 80 years who have a 30 pack-year smoking history and currently smoke or have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery.</p>
B	<p>Obesity-Related Morbidity and Mortality: Behavioral Weight Loss Interventions in Adults</p> <p>The USPSTF recommends that clinicians offer or refer adults with a body mass index of 30 kg/m² or higher to intensive, multicomponent behavioral interventions.</p>
B	<p>Obesity: Screening in Children and Adolescents Age 6 Years and Older</p> <p>The USPSTF recommends that clinicians screen for obesity in children and adolescents age 6 years and older and offer or refer them to comprehensive, intensive behavioral interventions to promote improvements in weight status.</p>
B	<p>Osteoporosis to Prevent Fractures: Screening in Postmenopausal Women Younger Than Age 65 Years at Increased Risk of Osteoporosis</p> <p>The USPSTF recommends screening for osteoporosis with bone measurement testing to prevent osteoporotic fractures in postmenopausal women younger than age 65 years who are at increased risk of osteoporosis, as determined by a formal clinical risk assessment tool.</p>

Grade	Title
B	<p>Osteoporosis to Prevent Fractures: Screening in Women Age 65 Years and Older</p> <p>The USPSTF recommends screening for osteoporosis with bone measurement testing to prevent osteoporotic fractures in women age 65 years and older.</p>
B	<p>Preeclampsia: Screening in Pregnant Women</p> <p>The USPSTF recommends screening for preeclampsia in pregnant women with blood pressure measurements throughout pregnancy.</p>
B	<p>Rh(D) Incompatibility: Screening in Unsensitized Rh(D)-Negative Pregnant Women</p> <p>The USPSTF recommends repeated Rh(D) antibody testing for all unsensitized Rh(D)-negative women at 24 to 28 weeks of gestation, unless the biological father is known to be Rh(D)-negative.</p>
B	<p>Sexually Transmitted Infections: Behavioral Counseling Interventions in Adolescents and Adults at Increased Risk</p> <p>The USPSTF recommends intensive behavioral counseling for all sexually active adolescents and for adults who are at increased risk for sexually transmitted infections.</p>
B	<p>Skin Cancer Prevention: Behavioral Counseling in Persons Ages 6 Months to 24 Years</p> <p>The USPSTF recommends counseling young adults, adolescents, children, and parents of young children about minimizing exposure to ultraviolet radiation for persons ages 6 months to 24 years with fair skin types to reduce their risk of skin cancer.</p>

Grade	Title
B	<p>Statins to Prevent Cardiovascular Disease: Preventive Medication in Adults Ages 40 to 75 Years at Moderate Risk</p> <p>The USPSTF recommends that adults without a history of cardiovascular disease (CVD) use a low- to moderate-dose statin for the prevention of CVD events and mortality when all of the following criteria are met: 1) they are ages 40 to 75 years; 2) they have one or more CVD risk factors (dyslipidemia, diabetes, hypertension, or smoking); and 3) they have a calculated 10-year risk of a cardiovascular event of 10% or greater. Identification of dyslipidemia and calculation of 10-year CVD event risk requires universal lipids screening in adults ages 40 to 75 years.</p> <p><i>Considerations for Implementation:</i> To determine whether a patient is a candidate for statin therapy, clinicians must first determine the patient's risk of having a future CVD event. However, clinicians' ability to accurately identify a patient's true risk is imperfect, because the best currently available risk estimation tool, which uses the Pooled Cohort Equations from the 2013 American College of Cardiology/American Heart Association guidelines on the assessment of cardiovascular risk, has been shown to overestimate actual risk in multiple external validation cohorts. The reasons for this possible overestimation are still unclear. The Pooled Cohort Equations were derived from prospective cohorts of volunteers from studies conducted in the 1990s and may not be generalizable to a more contemporary and diverse patient population seen in current clinical practice. Furthermore, no statin clinical trials enrolled patients based on a specific risk threshold calculated using a CVD risk prediction tool; rather, patients had one or more CVD risk factors other than age and sex as a requirement for trial enrollment.</p> <p>Because the Pooled Cohort Equations lack precision, the risk estimation tool should be used as a starting point to discuss with patients their desire for lifelong statin therapy. The likelihood that a patient will benefit from statin use depends on his or her absolute baseline risk of having a future CVD event, a risk estimation that is imprecise based on the currently available risk estimation tool. Thus, clinicians should discuss with patients the potential risk of having a CVD event and the expected benefits and harms of statin use. Patients who place a higher value on the potential benefits than on the potential harms and inconvenience of taking a daily medication may choose to initiate statin use for reduction of CVD risk. The USPSTF has made several other recommendations relevant to the prevention of CVD in adults.</p> <p><i>Patient Population Under Consideration:</i> These recommendations apply to adults age 40 years and older without a history of CVD who do not have current signs and symptoms of CVD (i.e., symptomatic coronary artery disease or ischemic stroke). Some individuals in this group may have undetected, asymptomatic atherosclerotic changes; for the purposes of this recommendation statement, the USPSTF considers these persons to be candidates for primary prevention interventions. These recommendations do not apply to adults with a low-density lipoprotein cholesterol level greater than 190 mg/dL or known familial hypercholesterolemia; these persons are considered to have very high cholesterol levels and may require statin use.</p>

Grade	Title
B	<p>Tobacco Use: Behavioral Counseling Interventions in Children and Adolescents</p> <p>The USPSTF recommends that primary care clinicians provide interventions, including education or brief counseling, to prevent initiation of tobacco use in school-aged children and adolescents.</p>
B	<p>Visual Impairment: Screening in Children Ages 3 to 5 Years</p> <p>The USPSTF recommends vision screening at least once in all children ages 3 to 5 years to detect amblyopia or its risk factors.</p>
C	<p>Abdominal Aortic Aneurysm: Screening in Men Ages 65 to 75 Years Who Have Never Smoked</p> <p>The USPSTF recommends selectively offering screening for abdominal aortic aneurysm in men ages 65 to 75 years who have never smoked rather than routinely screening all men in this group.</p>
C	<p>Aspirin to Prevent Cardiovascular Disease and Colorectal Cancer: Preventive Medication in Adults Ages 60 to 69 Years</p> <p>The decision to initiate low-dose aspirin use for the primary prevention of cardiovascular disease (CVD) and colorectal cancer in adults ages 60 to 69 years who have a 10% or greater 10-year CVD risk should be an individual one. Persons who are not at increased risk for bleeding, have a life expectancy of at least 10 years, and are willing to take low-dose aspirin daily for at least 10 years are more likely to benefit. Persons who place a higher value on the potential benefits than the potential harms may choose to initiate low-dose aspirin.</p>

Grade	Title
C	<p>Breast Cancer: Screening With Mammography in Women Ages 40 to 49 Years*</p> <p>The decision to start screening mammography in women prior to age 50 years should be an individual one. Women who place a higher value on the potential benefit than the potential harms may choose to begin biennial screening between the ages of 40 and 49 years.</p> <p>For women who are at average risk for breast cancer, most of the benefit of mammography results from biennial screening during ages 50 to 74 years. Of all of the age groups, women ages 60 to 69 years are most likely to avoid breast cancer death through mammography screening. While screening mammography in women ages 40 to 49 years may reduce the risk for breast cancer death, the number of deaths averted is smaller than that in older women and the number of false-positive results and unnecessary biopsies is larger. The balance of benefits and harms is likely to improve as women move from their early to late 40s.</p> <p>In addition to false-positive results and unnecessary biopsies, all women undergoing regular screening mammography are at risk for the diagnosis and treatment of noninvasive and invasive breast cancer that would otherwise not have become a threat to their health, or even apparent, during their lifetime (known as “overdiagnosis”). Beginning mammography screening at a younger age and screening more frequently may increase the risk for overdiagnosis and subsequent overtreatment.</p> <p>Women with a parent, sibling, or child with breast cancer are at higher risk for breast cancer and thus may benefit more than average-risk women from beginning screening in their 40s.</p> <p>This recommendation applies to asymptomatic women age 40 years and older who do not have preexisting breast cancer or a previously diagnosed high-risk breast lesion and who are not at high risk for breast cancer because of a known underlying genetic mutation (such as a <i>BRCA1</i> or <i>BRCA2</i> gene mutation or other familial breast cancer syndrome) or a history of chest radiation at a young age.</p>
C	<p>Colorectal Cancer: Screening in Adults Ages 76 to 85 Years</p> <p>The decision to screen for colorectal cancer in adults ages 76 to 85 years should be an individual one, taking into account the patient’s overall health and prior screening history.</p> <p>Adults in this age group who have never been screened for colorectal cancer are more likely to benefit.</p> <p>Screening would be most appropriate among adults who 1) are healthy enough to undergo treatment if colorectal cancer is detected and 2) do not have comorbid conditions that would significantly limit their life expectancy.</p>

*The Department of Health and Human Services, in implementing the Affordable Care Act under the standard it sets out in revised Section 2713(a)(5) of the Public Health Service Act and Section 9(h)(v)(229) of the 2015 Consolidated Appropriations Act, utilizes the 2002 USPSTF recommendation on breast cancer screening (available at <https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/breast-cancer-screening-2002>).

Grade	Title
C	<p>Falls Prevention in Community-Dwelling Older Adults: Interventions in Adults Age 65 Years and Older at Increased Risk for Falls</p> <p>The USPSTF recommends that clinicians selectively offer multifactorial interventions to prevent falls to community-dwelling adults age 65 years and older who are at increased risk for falls. Existing evidence indicates that the overall net benefit of routinely offering multifactorial interventions to prevent falls is small. When determining whether this service is appropriate for an individual, patients and clinicians should consider the balance of benefits and harms based on the circumstances of prior falls, presence of comorbid medical conditions, and the patient’s values and preferences.</p> <p>This recommendation applies to community-dwelling adults who are not known to have osteoporosis or vitamin D deficiency.</p>
C	<p>Healthful Diet and Physical Activity to Prevent Cardiovascular Disease: Behavioral Counseling Interventions in Adults Without Risk Factors</p> <p>The USPSTF recommends that primary care professionals individualize the decision to offer or refer adults without obesity who do not have hypertension, dyslipidemia, abnormal blood glucose levels, or diabetes to behavioral counseling to promote a healthful diet and physical activity. Existing evidence indicates a positive but small benefit of behavioral counseling for the prevention of cardiovascular disease in this population. Persons who are interested and ready to make behavioral changes may be most likely to benefit from behavioral counseling.</p>
C	<p>Prostate Cancer: Screening in Men Ages 55 to 69 Years</p> <p>For men ages 55 to 69 years, the decision to undergo periodic prostate-specific antigen (PSA)–based screening for prostate cancer should be an individual one. Before deciding whether to be screened, men should have an opportunity to discuss the potential benefits and harms of screening with their clinician and to incorporate their values and preferences in the decision. Screening offers a small potential benefit of reducing the chance of death from prostate cancer in some men. However, many men will experience potential harms of screening, including false-positive results that require additional testing and possible prostate biopsy; overdiagnosis and overtreatment; and treatment complications, such as incontinence and erectile dysfunction. In determining whether this service is appropriate in individual cases, patients and clinicians should consider the balance of benefits and harms on the basis of family history, race/ethnicity, comorbid medical conditions, patient values about the benefits and harms of screening and treatment-specific outcomes, and other health needs. Clinicians should not screen men who do not express a preference for screening.</p>
C	<p>Skin Cancer Prevention: Behavioral Counseling in Adults Older Than Age 24 Years</p> <p>The USPSTF recommends that clinicians selectively offer counseling to adults older than age 24 years with fair skin types about minimizing their exposure to ultraviolet radiation to reduce risk of skin cancer. Existing evidence indicates that the net benefit of counseling all adults older than age 24 years is small. In determining whether counseling is appropriate in individual cases, patients and clinicians should consider the presence of risk factors for skin cancer.</p>

Grade	Title
C	<p>Statins to Prevent Cardiovascular Disease: Preventive Medication in Adults Ages 40 to 75 Years at Low Risk</p> <p>Although statin use may be beneficial for the primary prevention of cardiovascular disease (CVD) events in some adults with a 10-year CVD event risk of less than 10%, the likelihood of benefit is smaller, because of a lower probability of disease and uncertainty in individual risk prediction. Clinicians may choose to offer a low- to moderate-dose statin to certain adults without a history of CVD when all of the following criteria are met: 1) they are ages 40 to 75 years; 2) they have one or more CVD risk factors (dyslipidemia, diabetes, hypertension, or smoking); and 3) they have a calculated 10-year risk of a cardiovascular event of 7.5% to 10%.</p> <p><i>Considerations for Implementation:</i> To determine whether a patient is a candidate for statin therapy, clinicians must first determine the patient’s risk of having a future CVD event. However, clinicians’ ability to accurately identify a patient’s true risk is imperfect, because the best currently available risk estimation tool, which uses the Pooled Cohort Equations from the 2013 American College of Cardiology/American Heart Association guidelines on the assessment of cardiovascular risk, has been shown to overestimate actual risk in multiple external validation cohorts. The reasons for this possible overestimation are still unclear. The Pooled Cohort Equations were derived from prospective cohorts of volunteers from studies conducted in the 1990s and may not be generalizable to a more contemporary and diverse patient population seen in current clinical practice. Furthermore, no statin clinical trials enrolled patients based on a specific risk threshold calculated using a CVD risk prediction tool; rather, patients had one or more CVD risk factors other than age and sex as a requirement for trial enrollment.</p> <p>Because the Pooled Cohort Equations lack precision, the risk estimation tool should be used as a starting point to discuss with patients their desire for lifelong statin therapy. The likelihood that a patient will benefit from statin use depends on his or her absolute baseline risk of having a future CVD event, a risk estimation that is imprecise based on the currently available risk estimation tool. Thus, clinicians should discuss with patients the potential risk of having a CVD event and the expected benefits and harms of statin use. Patients who place a higher value on the potential benefits than on the potential harms and inconvenience of taking a daily medication may choose to initiate statin use for reduction of CVD risk. The USPSTF has made several other recommendations relevant to the prevention of CVD in adults.</p> <p><i>Patient Population Under Consideration:</i> These recommendations apply to adults age 40 years and older without a history of CVD who do not have current signs and symptoms of CVD (i.e., symptomatic coronary artery disease or ischemic stroke). Some individuals in this group may have undetected, asymptomatic atherosclerotic changes; for the purposes of this recommendation statement, the USPSTF considers these persons to be candidates for primary prevention interventions. These recommendations do not apply to adults with a low-density lipoprotein cholesterol level greater than 190 mg/dL or known familial hypercholesterolemia; these persons are considered to have very high cholesterol levels and may require statin use.</p>

Grade	Title
D	<p>Abdominal Aortic Aneurysm: Screening in Women Who Have Never Smoked</p> <p>The USPSTF recommends against routine screening for abdominal aortic aneurysm in women who have never smoked.</p>
D	<p>Asymptomatic Bacteriuria: Screening in Men and Nonpregnant Women</p> <p>The USPSTF recommends against screening for asymptomatic bacteriuria in men and nonpregnant women.</p>
D	<p>Bacterial Vaginosis: Screening in Pregnant Women at Low Risk for Preterm Delivery</p> <p>The USPSTF recommends against screening for bacterial vaginosis in asymptomatic pregnant women who are at low risk for preterm delivery.</p>
D	<p>Beta-Carotene or Vitamin E to Prevent Cancer and Cardiovascular Disease: Preventive Medication in Adults</p> <p>The USPSTF recommends against the use of beta-carotene or vitamin E supplements for the prevention of cardiovascular disease or cancer.</p>
D	<p>BRCA-Related Cancer: Risk Assessment, Genetic Counseling, and Genetic Testing in Women Not at Increased Risk</p> <p>The USPSTF recommends against routine genetic counseling or BRCA testing in women whose family history is not associated with an increased risk for potentially harmful mutations in the <i>BRCA1</i> or <i>BRCA2</i> genes.</p>
D	<p>Breast Cancer: Preventive Medication in Women Not at Increased Risk</p> <p>The USPSTF recommends against the routine use of medications, such as tamoxifen or raloxifene, for risk reduction of primary breast cancer in women who are not at increased risk for breast cancer.</p>
D	<p>Carotid Artery Stenosis: Screening in Adults</p> <p>The USPSTF recommends against screening for asymptomatic carotid artery stenosis in the general adult population.</p>
D	<p>Cervical Cancer: Screening in Women Older Than Age 65 Years</p> <p>The USPSTF recommends against screening for cervical cancer in women older than age 65 years who have had adequate prior screening and are not otherwise at high risk for cervical cancer.</p> <p>This recommendation applies to individuals who have a cervix, regardless of their sexual history or human papillomavirus (HPV) vaccination status. This recommendation does not apply to individuals who have been diagnosed with a high-grade precancerous cervical lesion or cervical cancer, individuals with in utero exposure to diethylstilbestrol, or those who have a compromised immune system (eg, women living with HIV).</p>

Grade	Title
D	<p>Cervical Cancer: Screening in Women Who Have Had a Hysterectomy</p> <p>The USPSTF recommends against screening for cervical cancer in women who have had a hysterectomy with removal of the cervix and do not have a history of a high-grade precancerous lesion (i.e., cervical intraepithelial neoplasia [CIN] grade 2 or 3) or cervical cancer.</p>
D	<p>Cervical Cancer: Screening in Women Younger Than Age 21 Years</p> <p>The USPSTF recommends against screening for cervical cancer in women younger than age 21 years.</p> <p>This recommendation applies to individuals who have a cervix, regardless of their sexual history or human papillomavirus (HPV) vaccination status. This recommendation does not apply to individuals who have been diagnosed with a high-grade precancerous cervical lesion or cervical cancer, individuals with in utero exposure to diethylstilbestrol, or those who have a compromised immune system (eg, women living with HIV).</p>
D	<p>Chronic Obstructive Pulmonary Disease: Screening in Adults</p> <p>The USPSTF recommends against screening for chronic obstructive pulmonary disease in asymptomatic adults.</p>
D	<p>Cardiovascular Disease Risk: Screening With Electrocardiography in Adults at Low Risk</p> <p>The USPSTF recommends against screening with resting or exercise electrocardiography to prevent cardiovascular disease (CVD) events in asymptomatic adults at low risk of CVD events.</p>
D	<p>Falls Prevention in Community-Dwelling Older Adults Age 65 Years and Older: Interventions</p> <p>The USPSTF recommends against vitamin D supplementation to prevent falls in community-dwelling adults age 65 years and older.</p> <p>This recommendation applies to community-dwelling adults not known to have osteoporosis or vitamin D deficiency.</p>
D	<p>Genital Herpes: Serologic Screening in Adolescents and Adults</p> <p>The USPSTF recommends against routine serologic screening for genital herpes simplex virus infection in asymptomatic adolescents and adults, including those who are pregnant.</p>
D	<p>Hormone Therapy With Combined Estrogen and Progestin in Postmenopausal Women: Primary Prevention of Chronic Conditions</p> <p>The USPSTF recommends against the use of combined estrogen and progestin for the primary prevention of chronic conditions in postmenopausal women.</p>

Grade	Title
D	<p>Hormone Therapy With Estrogen in Postmenopausal Women Who Have Had a Hysterectomy: Primary Prevention of Chronic Conditions</p> <p>The USPSTF recommends against the use of estrogen alone for the primary prevention of chronic conditions in postmenopausal women who have had a hysterectomy.</p>
D	<p>Lead: Screening in Children Ages 1 to 5 Years at Average Risk</p> <p>The USPSTF recommends against routine screening for elevated blood lead levels in asymptomatic children ages 1 to 5 years who are at average risk.</p>
D	<p>Lead: Screening in Pregnant Women</p> <p>The USPSTF recommends against routine screening for elevated blood lead levels in asymptomatic pregnant women.</p>
D	<p>Ovarian Cancer: Screening</p> <p>The USPSTF recommends against screening for ovarian cancer in asymptomatic women. This recommendation applies to asymptomatic women who are not known to have a high-risk hereditary cancer syndrome.</p>
D	<p>Pancreatic Cancer: Screening in Adults</p> <p>The USPSTF recommends against routine screening for pancreatic cancer in asymptomatic adults with abdominal palpation, ultrasonography, or serologic markers.</p> <p><i>Rationale:</i> The USPSTF found no evidence that screening for pancreatic cancer is effective in reducing mortality. There is a potential for significant harm due to the very low prevalence of pancreatic cancer, limited accuracy of available screening tests, the invasive nature of diagnostic tests, and the poor outcomes of treatment. As a result, the USPSTF concluded that the harms of screening for pancreatic cancer exceed any potential benefits.</p>
D	<p>Prostate Cancer: Screening in Men Age 70 Years and Older</p> <p>The USPSTF recommends against prostate-specific antigen (PSA)–based screening for prostate cancer in men age 70 years and older.</p>
D	<p>Testicular Cancer: Screening in Adolescents and Adults</p> <p>The USPSTF recommends against screening for testicular cancer in adolescent or adult men.</p>
D	<p>Thyroid Cancer: Screening in Adults</p> <p>The USPSTF recommends against screening for thyroid cancer in asymptomatic adults.</p>
D	<p>Vitamin D, Calcium, or Combined Supplementation for the Primary Prevention of Fractures in Community-Dwelling Adults: Low-Dose Preventive Medication in Postmenopausal Women</p> <p>The USPSTF recommends against daily supplementation with 400 IU or less of vitamin D and 1,000 mg or less of calcium for the primary prevention of fractures in community-dwelling, postmenopausal women.</p>

Grade	Title
I	<p>Abdominal Aortic Aneurysm: Screening in Women Ages 65 to 75 Years Who Have Ever Smoked</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for abdominal aortic aneurysm in women ages 65 to 75 years who have ever smoked.</p>
I	<p>Abuse and Neglect: Screening in Elderly or Vulnerable Adults</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening in all elderly or vulnerable (physically or mentally dysfunctional) adults for abuse and neglect.</p>
I	<p>Adolescent Idiopathic Scoliosis: Screening</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for adolescent idiopathic scoliosis in children and adolescents ages 10 to 18 years.</p>
I	<p>Alcohol Misuse: Screening and Behavioral Counseling Interventions in Adolescents</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening and behavioral counseling interventions in primary care settings to reduce alcohol misuse in adolescents.</p>
I	<p>Aspirin to Prevent Cardiovascular Disease and Colorectal Cancer: Preventive Medication in Adults Age 70 Years and Older</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of initiating aspirin use for the primary prevention of cardiovascular disease and colorectal cancer in adults age 70 years and older.</p>
I	<p>Aspirin to Prevent Cardiovascular Disease and Colorectal Cancer: Preventive Medication in Adults Younger Than Age 50 Years</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of initiating aspirin use for the primary prevention of cardiovascular disease and colorectal cancer in adults younger than age 50 years.</p>
I	<p>Atrial Fibrillation: Screening With Electrocardiography in Older Adults</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for atrial fibrillation with electrocardiography.</p>
I	<p>Autism Spectrum Disorder: Screening in Young Children</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for autism spectrum disorder in young children for whom no concerns of the disorder have been raised by their parents or a clinician.</p>

Grade	Title
I	<p>Bacterial Vaginosis: Screening in Pregnant Women at High Risk for Preterm Delivery</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for bacterial vaginosis in asymptomatic pregnant women who are at high risk for preterm delivery.</p>
I	<p>Bladder Cancer: Screening in Adults</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for bladder cancer in asymptomatic adults.</p>
I	<p>Breast Cancer: Adjunctive Screening in Women With Dense Breasts*</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of adjunctive screening for breast cancer using breast ultrasonography, magnetic resonance imaging, digital breast tomosynthesis, or other methods in women identified to have dense breasts on an otherwise negative screening mammogram.</p> <p>This recommendation applies to asymptomatic women age 40 years and older who do not have preexisting breast cancer or a previously diagnosed high-risk breast lesion and who are not at high risk for breast cancer because of a known underlying genetic mutation (such as a <i>BRCA1</i> or <i>BRCA2</i> gene mutation or other familial breast cancer syndrome) or a history of chest radiation at a young age.</p>
I	<p>Breast Cancer: Screening in Women Age 75 Years and Older*</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening mammography in women age 75 years and older.</p> <p>This recommendation applies to asymptomatic women age 40 years and older who do not have preexisting breast cancer or a previously diagnosed high-risk breast lesion and who are not at high risk for breast cancer because of a known underlying genetic mutation (such as a <i>BRCA1</i> or <i>BRCA2</i> gene mutation or other familial breast cancer syndrome) or a history of chest radiation at a young age.</p>
I	<p>Breast Cancer: Screening With Digital Breast Tomosynthesis*</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the benefits and harms of digital breast tomosynthesis as a primary screening method for breast cancer.</p> <p>This recommendation applies to asymptomatic women age 40 years and older who do not have preexisting breast cancer or a previously diagnosed high-risk breast lesion and who are not at high risk for breast cancer because of a known underlying genetic mutation (such as a <i>BRCA1</i> or <i>BRCA2</i> gene mutation or other familial breast cancer syndrome) or a history of chest radiation at a young age.</p>
I	<p>Celiac Disease: Screening in Children, Adolescents, and Adults</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for celiac disease in asymptomatic persons.</p>

*The Department of Health and Human Services, in implementing the Affordable Care Act under the standard it sets out in revised Section 2713(a)(5) of the Public Health Service Act and Section 9(h)(v)(229) of the 2015 Consolidated Appropriations Act, utilizes the 2002 USPSTF recommendation on breast cancer screening (available at <https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/breast-cancer-screening-2002>).

Grade	Title
I	<p>Child Maltreatment: Interventions in Primary Care</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of primary care interventions to prevent child maltreatment. The recommendation applies to children who do not have signs or symptoms of maltreatment.</p>
I	<p>Chlamydia and Gonorrhea: Screening in Men</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for chlamydia and gonorrhea in men.</p>
I	<p>Cognitive Impairment: Screening in Older Adults</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for cognitive impairment.</p>
I	<p>Cardiovascular Disease Risk: Screening With Electrocardiography in Adults at Intermediate or High Risk</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening with resting or exercise electrocardiography to prevent cardiovascular (CVD) events in asymptomatic adults at intermediate or high risk of CVD events.</p>
I	<p>Cardiovascular Disease: Risk Assessment With Nontraditional Risk Factors in Adults</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of adding the ankle-brachial index, high-sensitivity C-reactive protein level, or coronary artery calcium score to traditional risk assessment for cardiovascular disease (CVD) in asymptomatic adults to prevent CVD events.</p>
I	<p>Dental Caries: Screening in Children Age 5 Years and Younger</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of routine screening for dental caries performed by primary care clinicians in children age 5 years and younger.</p>
I	<p>Depression: Screening in Children Age 11 Years and Younger</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for major depressive disorder in children age 11 years and younger.</p>
I	<p>Drug Use, Illicit: Behavioral Interventions in Children and Adolescents</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of primary care–based behavioral interventions to prevent or reduce illicit drug or nonmedical pharmaceutical use in children and adolescents.</p> <p>This recommendation applies to children and adolescents who have not already been diagnosed with a substance use disorder.</p>

Grade	Title
I	<p>Drug Use, Illicit: Screening in Adolescents, Adults, and Pregnant Women</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for illicit drug use in adolescents, adults, and pregnant women.</p>
I	<p>Gestational Diabetes Mellitus: Screening in Pregnant Women Before 24 Weeks of Gestation</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for gestational diabetes mellitus in asymptomatic pregnant women before 24 weeks of gestation.</p>
I	<p>Glaucoma: Screening in Adults</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for primary open-angle glaucoma in adults.</p>
I	<p>Gynecological Conditions: Screening With the Pelvic Examination</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of performing screening pelvic examinations in asymptomatic women for the early detection and treatment of a range of gynecologic conditions.</p> <p>This statement does not apply to specific disorders for which the USPSTF already recommends screening (i.e., screening for cervical cancer with a Pap smear, screening for gonorrhea and chlamydia).</p>
I	<p>Hearing Loss: Screening in Adults Age 50 Years and Older</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for hearing loss in asymptomatic adults age 50 years and older.</p>
I	<p>High Blood Pressure: Screening in Children and Adolescents</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for primary hypertension in asymptomatic children and adolescents to prevent subsequent cardiovascular disease in childhood or adulthood.</p>
I	<p>Iron Deficiency Anemia: Preventive Medication in Pregnant Women</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of routine iron supplementation for pregnant women to prevent adverse maternal health and birth outcomes.</p>
I	<p>Iron Deficiency Anemia: Screening in Children Ages 6 to 24 Months</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for iron deficiency anemia in children ages 6 to 24 months.</p>
I	<p>Iron Deficiency Anemia: Screening in Pregnant Women</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for iron deficiency anemia in pregnant women to prevent adverse maternal health and birth outcomes.</p>

Grade	Title
I	<p>Lead: Screening in Children Ages 1 to 5 Years at Increased Risk</p> <p>The USPSTF concludes that the evidence is insufficient to recommend for or against routine screening for elevated blood lead levels in asymptomatic children ages 1 to 5 years who are at increased risk.</p>
I	<p>Lipid Disorders: Screening in Children and Adolescents Age 20 Years and Younger</p> <p>The USPSTF concludes that the evidence is insufficient to assess the balance of benefits and harms of screening for lipid disorders in children and adolescents age 20 years and younger.</p>
I	<p>Multivitamins to Prevent Cancer and Cardiovascular Disease: Preventive Medication in Adults</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the use of multivitamins for the prevention of cancer or cardiovascular disease.</p>
I	<p>Nutrient Supplements to Prevent Cancer and Cardiovascular Disease: Preventive Medication in Adults</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the use of single- or paired-nutrient supplements (except beta-carotene and vitamin E) for the prevention of cancer or cardiovascular disease.</p>
I	<p>Obstructive Sleep Apnea: Screening in Adults</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for obstructive sleep apnea in asymptomatic adults.</p>
I	<p>Oral Cancer: Screening in Adults</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for oral cancer in asymptomatic adults.</p>
I	<p>Osteoporosis to Prevent Fractures: Screening in Men</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for osteoporosis to prevent osteoporotic fractures in men.</p>
I	<p>Peripheral Artery Disease and Cardiovascular Disease Risk: Screening With the Ankle-Brachial Index</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for peripheral artery disease and cardiovascular disease risk with the ankle-brachial index in asymptomatic adults.</p>
I	<p>Skin Cancer Prevention: Behavioral Counseling About Skin Self-Examination in Adults</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of counseling adults about skin self-examination to prevent skin cancer.</p>

Grade	Title
I	<p>Skin Cancer: Screening in Adults</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of visual skin examination by a clinician to screen for skin cancer in adults.</p>
I	<p>Speech and Language Delay and Disorders: Screening in Children Age 5 Years and Younger</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for speech and language delay and disorders in children age 5 years and younger.</p>
I	<p>Statins to Prevent Cardiovascular Disease: Preventive Medication in Adults Age 76 Years and Older</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of initiating statin use for the primary prevention of cardiovascular disease events and mortality in adults age 76 years and older without a history of heart attack or stroke.</p> <p><i>Considerations for Implementation:</i> To determine whether a patient is a candidate for statin therapy, clinicians must first determine the patient’s risk of having a future CVD event. However, clinicians’ ability to accurately identify a patient’s true risk is imperfect, because the best currently available risk estimation tool, which uses the Pooled Cohort Equations from the 2013 American College of Cardiology/American Heart Association guidelines on the assessment of cardiovascular risk, has been shown to overestimate actual risk in multiple external validation cohorts. The reasons for this possible overestimation are still unclear. The Pooled Cohort Equations were derived from prospective cohorts of volunteers from studies conducted in the 1990s and may not be generalizable to a more contemporary and diverse patient population seen in current clinical practice. Furthermore, no statin clinical trials enrolled patients based on a specific risk threshold calculated using a CVD risk prediction tool; rather, patients had one or more CVD risk factors other than age and sex as a requirement for trial enrollment.</p> <p>Because the Pooled Cohort Equations lack precision, the risk estimation tool should be used as a starting point to discuss with patients their desire for lifelong statin therapy. The likelihood that a patient will benefit from statin use depends on his or her absolute baseline risk of having a future CVD event, a risk estimation that is imprecise based on the currently available risk estimation tool. Thus, clinicians should discuss with patients the potential risk of having a CVD event and the expected benefits and harms of statin use. Patients who place a higher value on the potential benefits than on the potential harms and inconvenience of taking a daily medication may choose to initiate statin use for reduction of CVD risk. The USPSTF has made several other recommendations relevant to the prevention of CVD in adults.</p> <p><i>Patient Population Under Consideration:</i> These recommendations apply to adults age 40 years and older without a history of CVD who do not have current signs and symptoms of CVD (i.e., symptomatic coronary artery disease or ischemic stroke). Some individuals in this group may have undetected, asymptomatic atherosclerotic changes; for the purposes of this recommendation statement, the USPSTF considers these persons to be candidates for primary prevention interventions. These recommendations do not apply to adults with a low-density lipoprotein cholesterol level greater than 190 mg/dL or known familial hypercholesterolemia; these persons are considered to have very high cholesterol levels and may require statin use.</p>

Grade	Title
I	<p>Suicide Risk: Screening in Adolescents, Adults, and Older Adults</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for suicide risk in adolescents, adults, and older adults in primary care.</p>
I	<p>Thyroid Dysfunction: Screening in Adults</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for thyroid dysfunction in nonpregnant, asymptomatic adults.</p>
I	<p>Tobacco Smoking Cessation: Electronic Nicotine Delivery Systems in Adults, Including Pregnant Women</p> <p>The USPSTF concludes that the current evidence is insufficient to recommend electronic nicotine delivery systems for tobacco cessation in adults, including pregnant women. The USPSTF recommends that clinicians direct patients who smoke tobacco to other cessation interventions with established effectiveness and safety.</p>
I	<p>Tobacco Smoking Cessation: Pharmacotherapy Interventions in Pregnant Women</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of pharmacotherapy interventions for tobacco cessation in pregnant women.</p>
I	<p>Visual Impairment: Screening in Older Adults</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for impaired visual acuity in older adults.</p>
I	<p>Visual Impairment: Screening in Children Younger Than Age 3 Years</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of vision screening in children younger than age 3 years.</p>
I	<p>Vitamin D, Calcium, or Combined Supplementation for the Primary Prevention of Fractures in Community-Dwelling Adults: High-Dose Preventive Medication in Postmenopausal Women</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of the benefits and harms of daily supplementation with doses greater than 400 IU of vitamin D and greater than 1,000 mg of calcium for the primary prevention of fractures in community-dwelling, postmenopausal women.</p>
I	<p>Vitamin D, Calcium, or Combined Supplementation for the Primary Prevention of Fractures in Community-Dwelling Adults: Preventive Medication in Men and Premenopausal Women</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of the benefits and harms of vitamin D and calcium supplementation, alone or combined, for the primary prevention of fractures in men and premenopausal women.</p>

Grade	Title
I	Vitamin D Deficiency: Screening in Adults The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for vitamin D deficiency in asymptomatic adults.

APPENDIX E: LISTING OF USPSTF FINAL RECOMMENDATIONS PUBLISHED OCTOBER 2017–SEPTEMBER 2018

Over the past year, the members of the Task Force continued working on a full portfolio of topics. It published 15 final recommendation statements with 29 recommendation grades in a peer-reviewed journal between October 1, 2017, and September 30, 2018. For a complete listing of all current USPSTF recommendations, see **Appendix D**.

Appendix E Table. Final Recommendation Statements Published by the USPSTF, October 1, 2017, to September 30, 2018

Topic	Recommendation
Adolescent Idiopathic Scoliosis: Screening	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for adolescent idiopathic scoliosis in children and adolescents ages 10 to 18 years. (I statement)
Atrial Fibrillation: Screening With Electrocardiography	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for atrial fibrillation with electrocardiography. (I statement)
Cardiovascular Disease: Risk Assessment With Nontraditional Risk Factors	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of adding the ankle-brachial index, high-sensitivity C-reactive protein level, or coronary artery calcium score to traditional risk assessment for cardiovascular disease (CVD) in asymptomatic adults to prevent CVD events. (I statement)
Cardiovascular Disease Risk: Screening With Electrocardiography	<p>The USPSTF recommends against screening with resting or exercise electrocardiography (ECG) to prevent cardiovascular disease (CVD) events in asymptomatic adults at low risk of CVD events. (Grade D)</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening with resting or exercise ECG to prevent CVD events in asymptomatic adults at intermediate or high risk of CVD events. (I statement)</p>

Topic	Recommendation
<p>Cervical Cancer: Screening</p>	<p>The USPSTF recommends screening for cervical cancer every 3 years with cervical cytology alone in women ages 21 to 29 years. For women ages 30 to 65 years, the USPSTF recommends screening every 3 years with cervical cytology alone, every 5 years with high-risk human papillomavirus (hrHPV) testing alone, or every 5 years with hrHPV in combination with cytology (cotesting). (Grade A)</p> <p>The USPSTF recommends against screening for cervical cancer in women older than age 65 years who have had adequate prior screening and are not otherwise at high risk for cervical cancer. (Grade D)</p> <p>The USPSTF recommends against screening for cervical cancer in women younger than age 21 years. (Grade D)</p> <p>The USPSTF recommends against screening for cervical cancer in women who have had a hysterectomy with removal of the cervix and do not have a history of a high-grade precancerous lesion (i.e., cervical intraepithelial neoplasia [CIN] grade 2 or 3) or cervical cancer. (Grade D)</p> <p>The first three recommendations apply to individuals who have a cervix, regardless of their sexual history or HPV vaccination status. These recommendations do not apply to individuals who have been diagnosed with a high-grade precancerous cervical lesion or cervical cancer, individuals with in utero exposure to diethylstilbestrol, or those who have a compromised immune system (e.g., women living with HIV).</p>
<p>Falls Prevention in Community-Dwelling Older Adults: Interventions</p>	<p>The USPSTF recommends exercise interventions to prevent falls in community-dwelling adults age 65 years and older who are at increased risk for falls. (Grade B)</p> <p>The USPSTF recommends that clinicians selectively offer multifactorial interventions to prevent falls to community-dwelling adults age 65 years and older who are at increased risk for falls. Existing evidence indicates that the overall net benefit of routinely offering multifactorial interventions to prevent falls is small. When determining whether this service is appropriate for an individual, patients and clinicians should consider the balance of benefits and harms based on the circumstances of prior falls, presence of comorbid medical conditions, and the patient's values and preferences. (Grade C)</p> <p>The USPSTF recommends against vitamin D supplementation to prevent falls in community-dwelling adults age 65 years and older. (Grade D)</p> <p>These recommendations apply to community-dwelling adults not known to have osteoporosis or vitamin D deficiency.</p>
<p>Hormone Therapy in Postmenopausal Women: Primary Prevention of Chronic Conditions</p>	<p>The USPSTF recommends against the use of combined estrogen and progestin for the primary prevention of chronic conditions in postmenopausal women. (Grade D)</p> <p>The USPSTF recommends against the use of estrogen alone for the primary prevention of chronic conditions in postmenopausal women who have had a hysterectomy. (Grade D)</p>

Topic	Recommendation
Obesity-Related Morbidity and Mortality: Behavioral Weight Loss Interventions in Adults	<p>The USPSTF recommends that clinicians offer or refer adults with a body mass index of 30 kg/m² or higher to intensive, multicomponent behavioral interventions. (Grade B)</p>
Osteoporosis to Prevent Fractures: Screening	<p>The USPSTF recommends screening for osteoporosis with bone measurement testing to prevent osteoporotic fractures in women age 65 years and older. (Grade B)</p> <p>The USPSTF recommends screening for osteoporosis with bone measurement testing to prevent osteoporotic fractures in postmenopausal women younger than age 65 years who are at increased risk of osteoporosis, as determined by a formal clinical risk assessment tool. (Grade B)</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for osteoporosis to prevent osteoporotic fractures in men. (I statement)</p>
Ovarian Cancer: Screening	<p>The USPSTF recommends against screening for ovarian cancer in asymptomatic women. (Grade D)</p> <p>This recommendation applies to asymptomatic women who are not known to have a high-risk hereditary cancer syndrome.</p>
Peripheral Artery Disease and Cardiovascular Disease Risk: Screening With the Ankle-Brachial Index	<p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for peripheral artery disease and cardiovascular disease risk with the ankle-brachial index in asymptomatic adults. (I statement)</p>
Prostate Cancer: Screening	<p>For men ages 55 to 69 years, the decision to undergo periodic prostate-specific antigen (PSA)-based screening for prostate cancer should be an individual one. Before deciding whether to be screened, men should have an opportunity to discuss the potential benefits and harms of screening with their clinician and to incorporate their values and preferences in the decision. Screening offers a small potential benefit of reducing the chance of death from prostate cancer in some men. However, many men will experience potential harms of screening, including false-positive results that require additional testing and possible prostate biopsy; overdiagnosis and overtreatment; and treatment complications, such as incontinence and erectile dysfunction. In determining whether this service is appropriate in individual cases, patients and clinicians should consider the balance of benefits and harms on the basis of family history, race/ethnicity, comorbid medical conditions, patient values about the benefits and harms of screening and treatment-specific outcomes, and other health needs. Clinicians should not screen men who do not express a preference for screening. (Grade C)</p> <p>The USPSTF recommends against PSA-based screening for prostate cancer in men age 70 years and older. (Grade D)</p>

Topic	Recommendation
Skin Cancer Prevention: Behavioral Counseling	<p>The USPSTF recommends counseling young adults, adolescents, children, and parents of young children about minimizing exposure to ultraviolet (UV) radiation for persons ages 6 months to 24 years with fair skin types to reduce their risk of skin cancer. (Grade B)</p> <p>The USPSTF recommends that clinicians selectively offer counseling to adults older than age 24 years with fair skin types about minimizing their exposure to UV radiation to reduce risk of skin cancer. Existing evidence indicates that the net benefit of counseling all adults older than age 24 years is small. In determining whether counseling is appropriate in individual cases, patients and clinicians should consider the presence of risk factors for skin cancer. (Grade C)</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of counseling adults about skin self-examination to prevent skin cancer. (I statement)</p>
Syphilis Infection: Screening in Pregnant Women	<p>The USPSTF recommends early screening for syphilis infection in all pregnant women. (Grade A)</p>
Vitamin D, Calcium, or Combined Supplementation for the Primary Prevention of Fractures in Community-Dwelling Adults: Preventive Medication	<p>The USPSTF concludes that the current evidence is insufficient to assess the balance of the benefits and harms of vitamin D and calcium supplementation, alone or combined, for the primary prevention of fractures in men and premenopausal women. (I statement)</p> <p>The USPSTF concludes that the current evidence is insufficient to assess the balance of the benefits and harms of daily supplementation with doses greater than 400 IU of vitamin D and greater than 1,000 mg of calcium for the primary prevention of fractures in community-dwelling, postmenopausal women. (I statement)</p> <p>The USPSTF recommends against daily supplementation with 400 IU or less of vitamin D and 1,000 mg or less of calcium for the primary prevention of fractures in community-dwelling, postmenopausal women. (Grade D)</p>

APPENDIX F: PRIOR ANNUAL REPORTS TO CONGRESS ON HIGH-PRIORITY EVIDENCE GAPS FOR CLINICAL PREVENTIVE SERVICES

The table below lists the prior annual Reports to Congress on High-Priority Evidence Gaps for Clinical Preventive Services. Electronic versions of each report are available on the USPSTF Web site at: <https://www.uspreventiveservicestaskforce.org/Page/Name/reports-to-congress>.

Appendix F Table. Prior Annual Reports to Congress

Year	Title	Theme
2017	Seventh Annual Report to Congress on High-Priority Evidence Gaps for Clinical Preventive Services	Recent evidence gaps
2016	Sixth Annual Report to Congress on High-Priority Evidence Gaps for Clinical Preventive Services	Recent evidence gaps
2015	Fifth Annual Report to Congress on High-Priority Evidence Gaps for Clinical Preventive Services	Women's health
2014	Fourth Annual Report to Congress on High-Priority Evidence Gaps for Clinical Preventive Services	Child and adolescent health
2013	Third Annual Report to Congress on High-Priority Evidence Gaps for Clinical Preventive Services	Older adult health
2012	Second Annual Report to Congress on High-Priority Evidence Gaps for Clinical Preventive Services	Recent evidence gaps
2011	First Annual Report to Congress on High-Priority Evidence Gaps for Clinical Preventive Services	Recent evidence gaps

