

## HIGH-PRIORITY EVIDENCE GAPS FOR CLINICAL PREVENTIVE SERVICES

## THIRD ANNUAL REPORT TO CONGRESS

**NOVEMBER 2013** 



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

### **EXECUTIVE SUMMARY**

The U.S. Preventive Services Task Force (USPSTF or Task Force) is an independent, volunteer panel of national experts in prevention and evidence-based medicine. The Task Force works to improve the health of all Americans by making evidence-based recommendations about clinical preventive services and health promotion. The Task Force comprehensively assesses evidence and makes recommendations about the effectiveness of screening tests, counseling about healthful behaviors, and preventive medications for children, adolescents, adults, older adults, and pregnant women.

The Patient Protection and Affordable Care Act of 2010 charges the USPSTF with making an annual report to Congress that identifies gaps in the evidence base and recommends priority areas that deserve further examination. In its first and second annual reports to Congress, the Task Force identified screening tests, behavioral interventions, and preventive medications with significant evidence gaps deserving further research. Given the expected pace of research, it is too soon to expect that many of the gaps identified in the Task Force's first two annual reports would have been addressed. The Task Force, therefore, encourages Congress to continue promoting research to address these gaps.

In this annual report, the USPSTF has prioritized evidence gaps related to the care of older adults. More research in these areas would likely result in important new recommendations that will help improve the health and health care of older Americans.

#### Priorities for Improving the Health of Older Adults Through Research on Clinical Preventive Services:

- 1. Screening for Cognitive Impairment and Dementia
- 2. Screening for Physical and Mental Well-Being of Older Adults
- 3. Preventing Falls and Fractures
- 4. Screening for Vision and Hearing Problems
- 5. Avoiding the Unintended Harms of Medical Procedures and Testing in Older Adults

The USPSTF will continue to independently evaluate the evidence on clinical preventive services to empower health care professionals, health care systems, and the American people to make informed decisions about their health and health care.

The USPSTF believes 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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AARP is committed to improving the quality and delivery of health care services for seniors and is pleased to be a Dissemination and Implementation Partner of the USPSTF. We provide our members with up-to-date, high quality health information to help them decide with their physicians which services are right for them. We appreciate the Task Force's work on evidence-based recommendations for older adults and look forward to additional research in the many high-priority areas that are highlighted in this report so that we can continue to improve the lives of older Americans.

> Dr. Debra B. Whitman, Executive Vice-President, Policy, Strategy, and International Affairs, AARP

### I. INTRODUCTION

The U.S. Preventive Services Task Force (USPSTF or Task Force) is an independent, volunteer panel of national experts in prevention and evidence-based medicine. Since its inception in 1984, the Task Force has worked to improve the health of all Americans by making evidence-based recommendations about clinical preventive services and health promotion. These recommendations for adults and children address screening tests, counseling about healthful behaviors, 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 and health promotion.

The Patient Protection and Affordable Care Act, Sec. 4003 (F), describes the duties of the USPSTF, which include:

"The submission of yearly reports to Congress and related agencies identifying gaps in research such as preventive services that receive an insufficient evidence statement, and recommending priority areas that deserve further examination, including areas related to populations and age groups not adequately addressed by current recommendations."

The USPSTF has prepared this report in response to this requirement to update Congress about key evidence gaps in clinical preventive services.

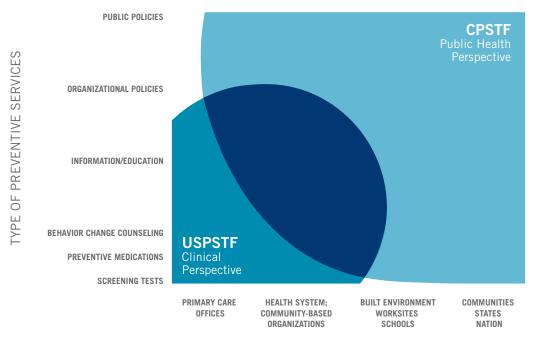
### **II. BACKGROUND**

Certain clinical preventive services can have tremendous public health importance. When provided appropriately, they can identify diseases at earlier stages when they are more treatable or reduce a person's risk of developing a disease altogether. However, clinical preventive services also can fail to provide the expected benefit or may even cause harms. To make informed decisions, health care professionals and patients need access to trustworthy, objective information about the benefits and harms of clinical preventive services.

Task Force recommendations focus on interventions to prevent disease, and they apply only to people without signs or symptoms of the disease or condition under consideration. USPSTF recommendations address services offered in the primary care setting or services referred by primary care professionals. The Task Force makes recommendations to help primary care clinicians and patients decide together whether a preventive service is right for an individual's needs.

Since 1998, the Agency for Healthcare Research and Quality (AHRQ) has been authorized by Congress to convene the Task Force and to provide ongoing scientific, administrative, and dissemination support.

Complementing the work of the USPSTF, preventive services at the community level are addressed by the Community Preventive Services Task Force (CPSTF), which was established in 1996 by the U.S. Department of Health and Human Services. The CPSTF assists agencies, organizations, and individuals at all levels (national, State, community, school, worksite, and health care system) by providing evidence-based recommendations about community prevention programs and policies that are effective in increasing longevity and improving the quality of life of all Americans. The work of the CPSTF is supported by the Centers for Disease Control and Prevention. A diagram outlining the complementary domains of the USPSTF and the CPSTF is shown in **Figure 1**. **Figure 1.** Complementary Work of the U.S. Preventive Services Task Force and the Community Preventive Services Task Force





#### Who Serves on the Task Force?

The Task Force is made up of 16 independent, nonfederal members who serve 4-year terms and is led by a chair and two vice chairs (see **Appendix C** for current members). Members are nationally recognized experts in prevention and evidence-based medicine and represent the diverse disciplines of primary care, including behavioral health, family medicine, geriatrics, internal medicine, nursing, obstetrics and gynecology, and pediatrics. These prevention specialists provide important insights because Task Force recommendations are addressed to primary care clinicians and apply to individuals who visit them. All members volunteer their time to serve on the USPSTF. Most Task Force members are active clinicians who see patients regularly; many are respected researchers and distinguished professors, and all are dedicated to improving the health of Americans.

USPSTF members are appointed by the Director of AHRQ. Members are screened to ensure that they have no substantial conflicts of interest that could impair the scientific integrity of the work of the Task Force. For each preventive service under review and consideration, the financial, professional, and intellectual activities of Task Force members are evaluated to identify any real or potential conflicts of interest. In the unusual case where a conflict is identified for a member regarding a specific topic, the member is recused from participating in the development of the recommendation for that topic.

#### How the Task Force Makes Recommendations

The Task Force makes recommendations based on a rigorous review of existing peer-reviewed evidence. It does not conduct research studies, but rather it reviews and assesses published research. The USPSTF follows a multistep process when developing each of its recommendations (see **Figure 2**).

# Steps the USPSTF Takes to Make a Recommendation

#### **Create Research Plan**

#### **Draft Research Plan**

The Task Force works with researchers from an Evidence-based Practice Center (EPC) and creates a draft Research Plan that guides the review process.

#### Invite Public Comments The draft Research Plan is posted on the USPSTF Web site for public comment.

#### **Finalize Research Plan**

The Task Force and EPC review all comments and address them as appropriate, and the Task Force creates a final Research Plan.

#### **Develop Evidence Report and Recommendation Statement**

#### **Draft Evidence Report**

Using the final Research Plan, the EPC independently gathers and reviews the available published evidence and creates a draft Evidence Report.

# Draft Recommendation Statement

The Task Force discusses the draft Evidence Report and the effectiveness of the service. Based on the discussion, the Task Force creates a draft Recommendation Statement.

#### Invite Public Comments

The draft Evidence Report and draft Recommendation Statement are posted simultaneously on the USPSTF Web site for public comment.

#### **Finalize Evidence Report**

The EPC reviews all comments on the draft Evidence Report, addresses them as appropriate, and creates a final Evidence Report.

#### — then —

#### **Finalize Recommendation Statement**

The Task Force discusses the final Evidence Report and any new evidence. The Task Force then reviews all comments on the draft Recommendation Statement, addresses them as appropriate, and creates a final Recommendation Statement.

### **Disseminate Recommendation Statement**

#### **Publish and Disseminate Final Recommendation Statement**

The final Recommendation Statement and supporting materials, including the final Evidence Report, are posted on the USPSTF Web site at www.uspreventiveservicestaskforce.org. At the same time, the final Evidence Report and final Recommendation Statement are published together in a peer-reviewed journal. The final Recommendation Statement is also made available through electronic tools and a consumer guide. The process starts with the USPSTF and researchers from an Evidence-based Practice Center (EPC) developing a research plan for the topic. The research plan includes key questions to be answered and target populations to be considered. The draft research plan is posted on the USPSTF Web site for public comment for 4 weeks, during which time anyone can comment on the plan, including stakeholders and members of the general public. The USPSTF and the EPC review all comments and consider them in revising the research plan.

Using the final research plan as a guide, EPC researchers gather, review, and analyze evidence on the topic from studies published in peer-reviewed scientific journals. The EPC summarizes this evidence in a comprehensive evidence report. External subject matter experts review the draft evidence report. In 2013, the Task Force began posting the draft evidence report for public comment for 4 weeks, during which time scientists, researchers, health care professionals, and members of the general public are able to comment.

Task Force members use the evidence report as the basis for their assessment of the effectiveness of the preventive service under consideration. They balance both the potential benefits and harms in making their recommendations.

Potential benefits of clinical preventive services include reduction of risk factors to prevent disease, early identification of disease leading to earlier treatment, and, ultimately, improved health outcomes such as quality of life and length of life. Harms of preventive services can include adverse effects of the service itself as well as the harms of inaccurate test results that may lead to a cascade of additional followup tests (some of which are invasive and could cause harm) and unnecessary treatments. Potential harms also include side effects or complications of treatments. When appropriate and when evidence exists, the Task Force evaluates the benefits and harms based on age, sex, and risk factors for the disease.

The Task Force makes its recommendations based on its assessment of the effectiveness of each clinical preventive service. The Task Force does not explicitly consider costs in its appraisal of the effectiveness of a service. The USPSTF recognizes that insurance coverage decisions involve additional considerations beyond a scientific assessment of the clinical benefit and harms.

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 on the balance of benefits and harms of the preventive service (see **Table 1**). Clinical preventive services graded "A" and "B" are those services for which the USPSTF has determined that the benefits of the service substantially outweigh its harms. The Task Force recommends that clinicians offer and patients consider taking advantage of these services. For services assigned a "C" grade, the net benefit is small. The USPSTF recommends that health care professionals selectively offer these services to individual patients based on professional judgment and patient preferences and values. Services with a grade of "D" are those for which there is no overall benefit, or the harms outweigh the benefits. The Task Force recommends that clinicians not promote these services and that patients consider avoiding them. The Task Force issues "I" statements when the evidence is insufficient to determine the balance of benefits and harms.

After carefully considering the evidence presented in the draft evidence report, the USPSTF develops a draft recommendation statement based upon the potential benefits and harms of the clinical preventive service. The Task Force posts the draft recommendation statement along with the draft evidence report for public comment for 4 weeks. The Task Force requests feedback on the completeness of the evidence, its interpretation of the evidence, and the clarity and usefulness of the draft recommendation statement. All comments related to the draft evidence report are reviewed by the researchers at the EPC and

the evidence report is revised as necessary. Members of the Task Force review all comments received on the draft recommendation statement and then revise the recommendation statement. The final recommendation statement is posted on the USPSTF Web site along with the final evidence report and supporting materials. The recommendation statement and a manuscript based on the full evidence review are often published in a peer-reviewed medical journal. To ensure that stakeholders and the public are informed about the recommendations and understand them, the Task Force also develops plain language fact sheets on each draft and final recommendation statement and works with partner organizations on dissemination and implementation activities.

Table 1. Meaning of USPSTF Grades

Grade	Definition
Α	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.
В	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.
С	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.
l 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.

### **III. MAJOR ACTIVITIES OF THE USPSTF IN 2012–2013**

#### Making USPSTF Work Transparent

Over the past 3 years, the Task Force has focused on making its work as transparent as possible so that stakeholders and the public better understand and have more confidence in the approach of the Task Force. This also ensures that its work is open, credible, independent, and unbiased, and is recognized as such. By expanding opportunities for the public and stakeholders to engage in the process, the Task Force believes that its recommendations will be more accurate and relevant.

In 2013, the USPSTF introduced a new process to expand opportunity for public comment by posting draft evidence reports for review. With the implementation of this new process, the Task Force now offers a third opportunity for the public to provide feedback on its recommendation. Three draft evidence reports were posted in 2013, and the public comments were used to refine and finalize the reports.

As a result of these efforts, stakeholders and the public can:

- Nominate new members to serve on the Task Force
- Nominate new topics for Task Force consideration or request an update of an existing topic
- Provide comments on all draft research plans
- Provide comments on all draft evidence reports
- Provide comments on all draft recommendation statements

#### Working on a Wide Range of Topics

Over the past year, the members of the Task Force continued working on a full portfolio of topics. The current USPSTF library includes 150 specific recommendations (see **Appendix F** for a complete listing of all current USPSTF specific recommendations). Between October 2012 and September 2013, the Task Force:

- Posted 14 draft research plans for public comment
- Posted 13 draft recommendation statements for public comment
- Published 10 final recommendation statements in peer-reviewed journals (see Table 2)

"The VHA is dedicated to providing the best support possible to our Nation's veterans, and we count on USPSTF recommendations to help meet our core goals of providing patient-centered and evidence-based health care. Based on high-quality evidence reviews, USPSTF recommendations are critical to enhancing the quality and effectiveness of care for those who served our country."

Dr. Linda Kinsinger, Chief Consultant for Preventive Medicine, Veterans Health Administration (VHA)

#### **Engaging With Stakeholders and Subject Matter Experts**

The Task Force continued efforts to disseminate its recommendations by working with a group of standing dissemination and implementation partner organizations (see **Appendix D**). These partner organizations represent primary care clinicians, consumer organizations, and other stakeholders involved in delivering primary care. These partners help ensure that Task Force recommendations are meaningful to the groups they represent. Partners are also a powerful vehicle for ensuring that America's primary care workforce remains up to date on USPSTF recommendations.

The Task Force also continued to convene Topic Groups for Stakeholders (TOPS). TOPS membership includes national organizations representing health professionals, the health care industry, business and manufacturing, and consumer and patient advocates. Through this process, national groups with interest and expertise in a specific topic are encouraged to provide feedback at key points in the recommendation process. TOPS help the USPSTF build trust and confidence in its recommendations among the broad health care community while ensuring that the Task Force's recommendations are based on the most current evidence.

In addition, through liaisons with Federal agencies (see **Appendix E**), the Task Force has access to a wide range of experts in prevention. This helps ensure that its recommendations are comprehensive and reflect the best available science.

#### **Explaining Task Force Recommendations to Consumers**

The Task Force produces plain language fact sheets for each of its recommendations at the draft and final stage. These fact sheets for the draft and final recommendation statements are available on the USPSTF Web site.

At the draft recommendation stage, the fact sheets break down the main points of each recommendation and explain how people can offer the Task Force feedback about the recommendation. At the final recommendation stage, the fact sheets help consumers understand what the recommendation means for them. They also highlight that evidence-based recommendations are only one part of informed decisionmaking, and they encourage people to consider Task Force recommendations within the context of their health status, their values and preferences for health and health care, and advice from a trusted health care professional. The fact sheets contain links to resources for learning more about each topic and encourage people to have informed discussions about clinical preventive services with their doctor or nurse.

In addition, this year, the Task Force created two new short videos featuring Task Force members about the role the Task Force plays in preventive medicine (http://www.uspreventiveservicestaskforce.org/video/overview/overview/overview/otentiveservicestaskforce.org/video/recommendations/tfrecvid.htm).

**Table 2.** Final Recommendation Statements Published by the USPSTF, October 2012 to September 2013

Торіс	Recommendation
Alcohol Misuse: Screening and Behavioral Counseling Interventions	The USPSTF recommends that clinicians screen adults age 18 years or older for alcohol misuse and provide persons engaged in risky or hazardous drinking with brief behavioral counseling interventions to reduce alcohol misuse. (Grade B) 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. (I Statement)
Breast Cancer in Women: Medications for Risk Reduction	The USPSTF recommends that clinicians engage in shared, informed decision- making 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. (Grade B) 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. (Grade D)
Child Maltreatment: Primary Care Interventions	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. This recommendation applies to children who do not have signs or symptoms of maltreatment. (I Statement)

Торіс	Recommendation
Glaucoma: Screening	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. (I Statement)
Hepatitis C: Screening	The USPSTF recommends screening for hepatitis C virus (HCV) infection in persons at high risk for infection. The USPSTF also recommends offering one-time screening for HCV infection to adults born between 1945 and 1965. (Grade B)
HIV: Screening	The USPSTF recommends that clinicians screen 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. (Grade A) The USPSTF recommends that clinicians screen all pregnant women for HIV, including those who present in labor who are untested and whose HIV status is unknown. (Grade A)
Intimate Partner Violence and Elderly Abuse and Neglect: Screening	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. (Grade B) The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening all elderly or vulnerable (physically or mentally dysfunctional) adults for abuse and neglect. (I Statement)
Peripheral Artery Disease and Cardiovascular Disease Risk Assessment: Screening With the Ankle–Brachial Index	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 assessment with the ankle–brachial index in adults. (I Statement)
Tobacco: Primary Care Interventions to Prevent Use in Children and Adolescents	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. (Grade B)
Vitamin D and Calcium: Preventing Fractures	The USPSTF concludes that the current evidence is insufficient to assess the balance of the benefits and harms of combined vitamin D and calcium supplementation for the primary prevention of fractures in premenopausal women or in men. (I Statement) The USPSTF concludes that the current evidence is insufficient to assess the balance of the benefits and harms of daily supplementation with greater than 400 IU of vitamin $D_3$ and greater than 1,000 mg of calcium for the primary prevention of fractures in noninstitutionalized postmenopausal women. (I Statement) The USPSTF recommends against daily supplementation with 400 IU or less of vitamin $D_3$ and 1,000 mg or less of calcium for the primary prevention of fractures in noninstitutionalized postmenopausal women. (Grade D)

### **IV. FOCUSING ON THE HEALTH OF OLDER AMERICANS**

"The USPSTF provides reliable, independent, evidence-based recommendations that help ACP's 137,000 members provide high-quality and patient-centered care every day. The USPSTF work highlights the critical need for more research on preventive services for older adults. As the Nation's largest medical specialty group, ACP knows they can trust the science and integrity behind the USPSTF recommendations because of its dedication and high standards."

Dr. Amir Qaseem, Director of the Department of Clinical Policy, American College of Physicians (ACP)

By 2040, one in five Americans will be older than age 65 and one in 13 will be older than age 85. Furthermore, the proportions of older adults from diverse racial/ethnic backgrounds are increasing. By 2050, it is estimated that about 40 percent of older adults will be nonwhite (Vincent and Velkoff, 2010). The Task Force has long recognized and acknowledged the growth of the older adult population in the United States and has changed its processes to better inform effective and safe preventive care for older Americans. This focus comes with several challenges, including the limited number of research studies that include older adults and a limited understanding of how to use evidence from research in younger adults to tailor preventive services for older individuals.

In the face of these challenges, the Task Force has undertaken a number of efforts over the past decade to improve its recommendations for older adults. These efforts include understanding the specific health challenges of older adults, prioritizing older adult issues in its processes for topic selection, and rethinking its methods for reviewing evidence and making recommendations. This report summarizes some of this work and highlights key research gaps in knowledge about how to help older Americans live longer, happier, and healthier lives.

#### Understanding Specific Prevention Challenges in Older Americans

Over the past several years, the USPSTF has worked hard to improve its understanding of the issues related to older adults and prevention. Prevention serves an especially important role as people age, especially from ages 50 to 80 and beyond. Older adults are at higher risk for potentially preventable conditions such as falls and fractures. They also differ considerably from one another in terms of life expectancy, risk for harms, values and preferences for care, and their desire and ability to participate in decisionmaking. The opportunity to positively affect health outcomes in older populations is shaped by both the specific vulnerabilities of older age and scientific knowledge about how to best prevent or modify disease and thereby reduce suffering and disability. Compared to preventive health services for younger adults, the goals of preventive services for older persons may shift to remaining independent and safe in their daily lives.

To decrease disability and improve quality of life for older persons, we need to understand both the benefits and harms of interventions among older individuals, keeping in mind that they are especially vulnerable to serious adverse events from medication side effects, infections, anesthesia, and invasive procedures. However, preventive services rarely have an immediate impact on health, and often take years to show an effect on an individual's well-being. This poses particular challenges in assessing the benefits of preventive services in older adults. For example, the number of falls significantly decreases about a year after starting vitamin D, and it takes 10 years after colon cancer screening to see a reduction in deaths. One quarter of women age 80 will live to be

93 or more, whereas another quarter will die before age 85. Many women age 80 may benefit from vitamin D, but some will not live long enough to benefit from colonoscopy. Improving the understanding of the differential impact of age on the potential benefit from prevention is crucial to tailoring preventive care to an individual's needs and to making sure that patients are not harmed by interventions that are intended to help them. Understanding the benefits and harms of preventive practices also involves careful consideration of older patients' values and preferences in decisions about medical care that may affect their health, mobility, function, and ability for independent living.

#### **Prioritizing Older Adult Issues**

Recognizing the unique health challenges faced by aging populations, the USPSTF has issued 31 recommendations since 2008 that consider issues relevant to older adults. These recommendations have included specific questions or clinical considerations about whether preventive services should differ for older adults compared to younger adults. When appropriate, the USPSTF has made age-specific recommendations (e.g., cervical cancer screening), indicated age-specific clinical considerations for application of general adult recommendations in older adults (e.g., HIV screening), and issued general recommendations for adults regardless of age (e.g., depression screening) when currently available evidence suggests these are also the most appropriate current recommendation for older adults.

In addition, the USPSTF has begun to focus on racial/ethnic subpopulations of older adults. Using insights gained from this work, the Task Force has begun to refine and adapt its processes for considering evidence and making recommendations so as to improve its recommendations for the changing demographics of America.

#### **Revising Methods to Develop Recommendations for Older Adults**

In addition to gaining a better understanding of the specific health challenges faced by older adults and prioritizing topics to address these vulnerabilities, the USPSTF has advanced its methods of reviewing evidence and making recommendations for older adults. Two critical issues the USPSTF addressed when making recommendations on preventive services in older adults were: 1) How do multiple chronic conditions affect whether an older adult will benefit from a preventive service, and 2) What goals do older adults have when considering preventive services? These may include prolonging life and reducing illness or maintaining independence, improving quality of life, and limiting impact on caregivers.

The USPSTF incorporated these issues in revising its methodology for developing recommendations while continuing its commitment to use evidence-based processes to make recommendations that ensure that age is not a barrier to the provision of preventive services. The USPSTF has worked to make recommendations on services that have the potential to benefit older adults specifically, while avoiding harms particularly associated with older age. These efforts have resulted in publications on the methodological challenges to producing evidence-based recommendations for older adults (Leipzig, Whitlock, Wolff, et al., 2010) and ways to measure quality of life (Feeny, Eckstrom, Whitlock, Perdue, 2013) and function (Lin, Whitlock, Eckstrom, et al., 2012) in research studies.

In addition, the Task Force commissioned three reports to clarify issues related to prevention and older adults (see **Table 3**). The first report summarized what is known about older adults' values and preferences related to the benefits and harms of preventive services (Butler, Talley, Burns, et al., 2011). The second report synthesized the evidence on common syndromes in older adults (e.g., dementia, frailty, and malnutrition) and provides information on how the presence of these syndromes may affect the overall benefit from preventive interventions (Kane, Talley, Shamliyan, Pacala, 2011). The third report addressed the challenges of individualizing cancer screening decisions in older adults with multiple chronic conditions that may decrease additional life expectancy (Eckstrom, Feeny, Walter, et al., 2013). The USPSTF plans to use these reports and other ongoing work to further refine its recommendations for older adults and preventive services. Work in progress includes a report that will focus on ways to incorporate evidence about diverse racial/ethnic groups into the USPSTF recommendations.

#### **USPSTF Recommendations Relevant to Older Adults**

The following topics either include specific recommendations for adults age 65 years and older or target preventive services primarily provided to older adults, diseases that carry a higher burden for older adults, or diseases that generally occur in older adults.

- Abdominal Aortic Aneurysm Screening
- Aspirin for Primary Prevention of Cardiovascular Disease
- Breast Cancer Preventive Medications
   for Risk Reduction
- Breast Cancer Screening
- Carotid Artery Stenosis Screening
- Cervical Cancer Screening
- Chronic Obstructive Pulmonary
   Disease Screening
- Cognitive Impairment/Dementia Screening
- Colorectal Cancer Screening
- Coronary Heart Disease Screening
- Depression Screening
- Diabetes Screening
- Falls Prevention in Older Adults
- Glaucoma Screening
- Healthy Diet and Physical Activity to Prevent Cardiovascular Disease
- Hearing Loss Screening in Older Adults
- Hepatitis C Screening
- HIV Screening
- Intimate Partner Violence and Elderly Abuse Screening

- Lipid Disorder Screening
- Menopausal Hormone Therapy
- Obesity Screening and Counseling
- Osteoporosis Screening
- Ovarian Cancer Screening
- Peripheral Artery Disease Screening
- Prostate Cancer Screening
- Skin Cancer Screening
- Suicide Risk Screening
- Thyroid Disease Screening
- Vision Screening in Older Adults
- Vitamin D and Calcium Supplementation to Prevent Fractures

Table 3. Task Force Commissioned Papers on the Health and Health Care of Older Adults

Title	Overview
Report on common syndromes in older adults related to prevention Kane RL, Talley KM, Shamliyan T, Pacala JT. Common Syndromes in Older Adults Related to Primary and Secondary Prevention. Evidence Report/Technology Assessment No. 87. AHRQ Publication No. 11-05157-EF-1. Rockville, MD: Agency for Healthcare Research and Quality; July 2011.	This review addresses: 1) the definition and prevalence of common syndromes in older adults in the United States; 2) the prevalence of common syndromes in specific population subgroups; 3) the association among common syndromes and morbidity, mortality, quality of life, independent living, hospitalization, and activities of daily living; and 4) available tools that help explain morbidity or mortality associated with common geriatric syndromes.
Report on values of older adults related to the benefits and harms of preventive services Butler M, Talley KM, Burns R, Ripley A, Rothman A, Johnson P, Kane RA, Kane RL. Values of Older Adults Related to Primary and Secondary Prevention. Evidence Synthesis No. 84. AHRQ Publication No. 11-05154-EF-1. Rockville, MD: Agency for Healthcare Research and Quality; March 2011.	This review addresses: 1) how older adults value the potential benefits of clinical preventive services, 2) the attitudes of older adults about potential harms of clinical preventive services, 3) the value that older adults place on receiving clinical preventive services, 4) how older adults understand the balance of risks and benefits of clinical preventive services, and 5) how clinicians should engage in shared decisionmaking related to clinical preventive services in older adults.
Report on interventions to prevent functional decline in older adults Lin JS, Whitlock EP, Eckstrom E, Fu R, Perdue LA, Beil TL, Leipzig RM. Challenges in Synthesizing and Interpreting the Evidence From a Systematic Review of Multifactorial Interventions to Prevent Functional Decline in Older Adults. Evidence Synthesis No. 94. AHRQ Publication No. 12-05169-EF-1. Rockville, MD: Agency for Healthcare Research and Quality; October 2012.	This review addresses: 1) multifactorial assessment and management interventions to prevent functional decline in older adults, and 2) the methodological challenges in synthesizing and interpreting these findings.
Review on and research framework for individualizing cancer screening in older adults Eckstrom E, Feeny DH, Walter LC, Perdue LA, Whitlock EP. Individualizing cancer screening in older adults: a narrative review and framework for future research. <i>J Gen Intern Med.</i> 2013; 28: 292-8.	This report addresses the challenges of individualizing cancer screening decisions in older adults with multiple chronic conditions that may decrease additional life expectancy. A comprehensive cancer screening framework encompassing chronic illness, functional status, and health-related quality of life must consider three major challenges: 1) individual differences, 2) appropriate benefits and harms, and 3) patient preferences.
A primer for systematic reviewers on the measurement of functional status and health-related quality of life in older adults Feeny DH, Eckstrom E, Whitlock EP, Perdue LA. A Primer for Systematic Reviewers on the Measurement of Functional Status and Health-Related Quality of Life in Older Adults. AHRQ Publication No. 13-EHC128-EF. Rockville, MD: Agency for Healthcare Research and Quality; September 2013.	This paper provides an overview of the methods for assessing function and health-related quality of life, and evidence on the properties of prominent measures. The paper also highlights several challenges in synthesizing this evidence in older adults.

For future work in this area, please visit http://www.uspreventiveservicestaskforce.org/tfolderfocus.htm#current.

"Adults have special health care needs as they age. The U.S. Preventive Services Task Force has recognized the specific needs of this population by addressing age-specific conditions such as falls, by articulating the issues such as tradeoffs across conditions and life expectancy that must be considered in recommending preventive services, and by identifying critical research needs. Additional research in these targeted areas will inform high-quality, evidence-based care, enhancing the health, independence, and quality of life of older adults."

Dr. Mary Tinetti, Professor, Medicine and Public Health; Chief, Section of Geriatrics; Yale University School of Medicine

### V. HIGH-PRIORITY EVIDENCE GAPS FOR CLINICAL PREVENTIVE SERVICES: FOCUS ON OLDER ADULTS

The Task Force issues evidence-based recommendations about clinical preventive services in order to improve the health of all Americans. When implemented appropriately and effectively, Task Force recommendations can improve the health of the Nation. However, significant gaps in key areas of knowledge limit the full realization of these health benefits.

By requiring this annual report, Congress has recognized the opportunity for new research to provide the necessary evidence base upon which the USPSTF can build more extensive 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.

In 2011 and 2012, the Task Force prepared for Congress reports on critical evidence gaps in the field of clinical preventive services (see **Appendix A** and **B**). Given the expected pace of research, it may be too soon to expect that these gaps will have been addressed. The Task Force, therefore, encourages Congress to continue promoting research in these areas.

In this annual report, the USPSTF has prioritized evidence gaps related to the care of older adults. Targeted research in the following five areas will likely result in important new recommendations about clinical preventive services that will improve the health and health care of older Americans.

#### Screening for Cognitive Impairment and Dementia

Dementia (cognitive impairment that is severe enough to affect social or occupational functioning) affects approximately 2.4 to 5.5 million Americans. Milder forms of cognitive impairment are even more common and may affect as many as 15 to 25 percent of older Americans. Severe cognitive decline is often accompanied by symptoms that include depression, aggression, and personality changes. These challenging symptoms affect not only the individual but families and caregivers as well.

The Task Force has found several important gaps in the evidence on screening for cognitive impairment. Although some evidence exists on screening tools and medications, little is available on the impact of screening on decisionmaking or planning by patients, clinicians, and caregivers. Given the aging of America and the increasing number of Americans affected by dementia, this is a serious gap. Research is critically needed on how early recognition of cognitive impairment can help clinicians and families make better health care decisions, anticipate problems, and plan for the future. Also needed is more research on interventions to help family members and others who have the responsibility of caring for a person with cognitive impairment.

#### Screening for Physical and Mental Well-Being of Older Adults

Each year, an estimated 10 to 15 percent of community-dwelling older adults experience neglect; financial exploitation; or physical, psychological, or sexual abuse. However, the Task Force has found that current evidence is lacking to make a recommendation on whether to screen all older adults for abuse or neglect. Currently, clinicians have little to no evidence to guide them in identifying possible abuse, and it is unclear whether high-risk patients can even be identified. Randomized, controlled studies focusing on both screening and interventions are critically needed. Research studies should include patients who have dementia or other cognitive impairments, given their prevalence in the older adult population and the potential vulnerability to abuse in persons with severe cognitive impairment.

Social isolation, spousal bereavement, and functional impairment are common issues among older adults, and they all may increase the likelihood of depression. Depression is a leading cause of disability, and it adversely affects individuals, families, and society. The Task Force recommends screening older adults for depression when accurate diagnosis, effective treatment, and followup can be ensured. However, significant gaps in the evidence exist, including whether screening improves depression care management, how often depression is missed in primary care, and the severity of missed cases. Information is also needed on the effectiveness, tolerability, and safety of antidepressants in older patients, with particular attention to medication interactions. Results of these studies could be used to target depression treatments more effectively to increase benefits and reduce adverse effects in older adults.

The factors that predispose older adults to depression also increase their risk for suicide. Suicide is more common in older men than in women, and rates among men increase at age 75 and older. More research is needed on the screening and treatment for suicide risk for all adults, especially older men.

#### **Preventing Falls and Fractures**

Falls are the leading cause of injury in adults age 65 and older: about one in three older adults fall in a given year. Falls can cause fractures, especially among older adults with osteoporosis, and these fractures can lead to chronic pain and disability, loss of independence, decreased quality of life, and death. The bulk of current evidence on fractures and osteoporosis is focused on older white women, and little is known about these problems in other populations of older adults. This is an important gap because although hip fractures are less common in men than in women, more than one third of men who experience a hip fracture die within 1 year. Studies are needed on the long-term benefits of screening and treatment of osteoporosis in men, as are studies on the frequency of fractures due to osteoporosis in nonwhite populations in the United States. Further research on the benefits and harms of vitamin D and calcium supplementation to prevent fractures is also needed.

Currently, the Task Force recommends exercise or physical therapy and vitamin D supplementation to prevent falls in older adults who are at increased risk. More research is needed to develop and validate practical tools that can be used in primary care to better identify older adults who are at substantial risk for falls. Clinical trials are also needed on the effectiveness of interventions such as vision correction, medication withdrawal, protein supplementation, education and counseling, and home hazard modification for the prevention of falls.

#### **Screening for Vision and Hearing Problems**

Approximately 2.5 million older adults have vision impairment, and approximately 28 million older adults have hearing loss. While vision and hearing impairments are common in older adults, older adults may underreport them because symptoms may progress slowly and therefore go unnoticed. Moreover, older adults may also have difficulty recognizing or reporting these symptoms because of other health conditions, such as cognitive impairment.

Vision impairment is consistently associated with decreased functional capacity and quality of life in older persons, including the ability to live independently. Causes of impaired vision include age-related macular degeneration (AMD), refractive error, cataracts, and open-angle glaucoma. The goal of screening programs is to identify and treat these conditions before vision impairment develops. However, the visual acuity tests usually conducted in primary care settings do not accurately diagnose important underlying conditions, such as AMD, refractive error, cataracts, or glaucoma. More studies are needed to evaluate whether vision screening in older adults leads to earlier diagnosis, effective treatment, and improved function, quality of life, and independence. More studies are also needed to evaluate the natural history of glaucoma, including the link between optic nerve damage and long-term visual disability. Randomized, controlled trials of routine or targeted screening for glaucoma with long-term followup would provide much needed evidence on the benefits and harms of screening for this condition in asymptomatic adults.

Hearing impairment is associated with increased social isolation and emotional dysfunction among older adults and can negatively affect quality of life and independent living. However, the benefits of screening asymptomatic adults compared to only testing and treating those who seek treatment for hearing loss are unknown. Additional studies are needed to evaluate the effect of screening and diagnosing older adults with hearing impairment before they present with symptoms.

#### Avoiding the Unintended Harms of Medical Procedures and Testing in Older Adults

Screening tests and preventive measures have potential harms as well as benefits. Although not every person benefits from a screening test or preventive service, everyone exposed to these tests or services has the potential for harm. For example, aspirin used to prevent heart disease or cancer can also increase the risk of serious bleeding problems, and colonoscopy to detect colorectal cancer can puncture a hole in the colon and lead to emergency surgery.

These harms generally become more common and more serious as a person ages. For example, the risk of bleeding complications in patients taking low-dose aspirin to reduce the risk of heart attacks is 4 times higher in people older than age 70 compared to those younger than age 60. More research is needed to understand these harms in different age groups and to identify factors associated with these harms. More research on enhancing shared decisionmaking with older adults is needed. This will ensure that individuals have access to the clinical preventive services most likely to provide them benefit and have the option to decline services that they do not want. More research is needed to identify effective strategies for including patient and caregiver preferences and values in clinical decisionmaking and how to improve shared decisionmaking, especially for caregivers and patients with cognitive impairment.

### VI. NEXT STEPS FOR THE USPSTF IN 2014

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

- Continue its work on over 30 topics that are in progress
- Begin work on four new topics, including topics nominated for consideration through the public topic nomination process
- Increase transparency by enhancing the design and functionality of its Web site
- Post 12 draft research plans, 12 draft evidence reports, and 15 draft recommendation statements for public comment
- Publish 14 final recommendation statements
- Continue to coordinate closely with the CPSTF to improve the Nation's ability to benefit from the full spectrum of prevention
- Prepare a fourth annual report for Congress on high-priority evidence gaps in the field of clinical preventive services

### **VII. CONCLUSION**

Older adults are an important and growing proportion of the U.S. population. They are increasingly diverse in their racial/ethnic backgrounds, and their health issues are different from those of younger individuals. Prevention can play an important role in keeping older adults healthy and living independently. The USPSTF appreciates the opportunity to report on its activities, to highlight critical evidence gaps related to older adults, and to recommend important new areas for research in clinical preventive services. The volunteer members of the Task Force look forward to their ongoing work to improve the health of all Americans.

#### References

Feeny DH, Eckstrom E, Whitlock EP, Perdue LA. A Primer for Systematic Reviewers on the Measurement of Functional Status and Health-Related Quality of Life in Older Adults. AHRQ Publication No. 13-EHC128-EF. Rockville, MD: Agency for Healthcare Research and Quality; September 2013.

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# APPENDICES

### APPENDIX A: SUMMARY OF SECOND ANNUAL REPORT TO CONGRESS ON HIGH-PRIORITY EVIDENCE GAPS FOR CLINICAL PREVENTIVE SERVICES

The Patient Protection and Affordable Care Act of 2010 charged the USPSTF with making an annual report to Congress that identifies gaps in the evidence base and recommends priority areas that deserve further examination.

In its second annual report, issued November 2012, the USPSTF identified specific topics from its previous year of work as having important evidence gaps that may be addressed through research. More research in these areas would likely result in important new recommendations that will help to improve the health of Americans.

#### **Clinical Preventive Services That Deserve Further Research:**

- 1. Screening for Chronic Kidney Disease
- 2. Screening for Cervical Cancer With Human Papillomavirus (HPV) Tests
- 3. Screening for Prostate Cancer

In the Affordable Care Act, Congress also requested that the USPSTF identify evidence gaps that prevent it from making recommendations for specific populations or age groups. In this report, the USPSTF highlighted three key areas.

## Evidence Gaps Relating to Specific Populations and Age Groups That Deserve Further Research:

- 1. Screening for Chronic Kidney Disease in African American Adults
- 2. Screening for Prostate Cancer in African American Men
- 3. Counseling About Sun-Protective Behaviors in Families With Children Under Age 10 to Reduce the Risk for Skin Cancer

The USPSTF believes that identifying these evidence gaps and prioritizing these areas for research will inspire public and private researchers to collaborate and target their efforts to generate new knowledge and fill current evidence gaps.

To view the full report, visit: http://www.uspreventiveservicestaskforce.org/annlrpt2/index.html.

### APPENDIX B: SUMMARY OF FIRST ANNUAL REPORT TO CONGRESS ON HIGH-PRIORITY EVIDENCE GAPS FOR CLINICAL PREVENTIVE SERVICES

The Patient Protection and Affordable Care Act of 2010 charged the USPSTF with making an annual report to Congress to identify gaps in the evidence base and recommend priority areas that deserve further examination. The first annual report from the USPSTF was delivered to Congress in October 2011. In this report, the USPSTF identified the following high-priority evidence gaps that can be addressed through targeted research:

#### Screening Tests That Deserve Further Research:

- 1. Screening for Coronary Heart Disease With New and Old Technologies
- 2. Screening for Colorectal Cancer With New Modalities
- 3. Screening for Hepatitis C
- 4. Screening for Hip Dysplasia in Newborns

#### Behavioral Intervention Research Topics That Deserve Further Research:

- 1. Moderate- to Low-Intensity Counseling for Obesity
- 2. Interventions in Primary Care to Prevent Child Abuse and Neglect
- 3. Screening for Illicit Drug Use in Primary Care

In the Affordable Care Act, Congress also requested that the USPSTF identify evidence gaps that prevent it from making recommendations that target specific populations or age groups. In its 2011 report, the USPSTF highlighted the following key areas.

## **Evidence Gaps Relating to Specific Population and Age Groups That Deserve Further Research:**

- 1. Screening for Osteoporosis in Men
- 2. Screening and Treatment for Depression in Children
- 3. Screening and Counseling for Alcohol Misuse in Adolescents
- 4. Aspirin Use to Prevent Heart Attacks and Strokes in Adults Age 80 and Older

By identifying these evidence gaps and prioritizing these areas for research, the USPSTF hopes to have inspired public and private researchers to focus their efforts in these areas so that the USPSTF can develop definitive recommendations on these important topics in the near future.

To view the full report, visit: http://www.uspreventiveservicestaskforce.org/annlrpt/index.html.

### **APPENDIX C: 2013 MEMBERS OF THE USPSTF**

#### Virginia A. Moyer, M.D., M.P.H. (Chair)

Dr. Moyer is the Vice President for Maintenance of Certification and Quality at the American Board of Pediatrics. She is also a member of the steering committee for the Cochrane Collaboration Child Health Field and a past member of the American Academy of Pediatrics steering committee on quality improvement and management. Her areas of expertise include health services research, diagnostic testing, and evidence-based medicine.

#### Michael L. LeFevre, M.D., M.S.P.H. (Co-Vice Chair)

Dr. LeFevre is vice chair in the Department of Family and Community Medicine at the University of Missouri School of Medicine, Columbia, Missouri. He is the medical director for family medicine at University of Missouri Health Care and served as the chief medical information officer for the Missouri University Health Care during the decade-long complete implementation of an inpatient and outpatient electronic health record. He has served on the Commission on Clinical Policies and Research of the American Academy of Family Physicians. Dr. LeFevre is a researcher, a published author and consultant, and has been invited to give many presentations across the country.

#### Albert L. Siu, M.D., M.S.P.H. (Co-Vice Chair)

Dr. Siu is the Ellen and Howard C. Katz chair and professor of the Brookdale Department of Geriatrics and Palliative Medicine at the Icahn School of Medicine at Mount Sinai. He is also director of the Geriatric Research, Education, and Clinical Center at the James J. Peters Veterans Affairs (VA) Medical Center and has served as deputy commissioner of the New York State Department of Health. Dr. Siu serves as a senior associate editor of *Health Services Research*. His research focuses on the measurement and improvement of functional outcomes in the elderly.

#### Linda Ciofu Baumann, Ph.D., R.N., A.P.R.N.

Dr. Baumann is professor emerita at the University of Wisconsin-Madison School of Nursing, affiliate faculty at the University of Wisconsin School of Medicine and Public Health, and a past president of the Society of Behavioral Medicine. A certified adult nurse practitioner, Dr. Baumann is an experienced researcher and consultant, and has spoken at medical conferences across the country and around the world. She is also a widely-published author, and has co-authored two books, one of which—"Advanced Assessment and Clinical Diagnosis in Primary Care"—received the *American Journal of Nursing's* Book of the Year award in advanced practice nursing in 2003. Dr. Baumann's areas of expertise are global public health, chronic disease management, and behavioral health promotion.

#### Kirsten Bibbins-Domingo, Ph.D., M.D.

Dr. Bibbins-Domingo is the Lee Goldman, M.D., endowed chair in medicine and professor of medicine and of epidemiology and biostatistics at the University of California, San Francisco (UCSF). She is a general internist and attending physician at San Francisco General Hospital and the director of the UCSF Center for Vulnerable Populations at San Francisco General Hospital. Dr. Bibbins-Domingo's research has focused on the epidemiology of cardiovascular diseases; race, ethnic, and income disparities in health; and clinical and public health interventions aimed at chronic disease prevention.

#### Adelita Gonzales Cantu, Ph.D., R.N.

Dr. Cantu is an assistant professor of family and community health systems at the University of Texas Health Science Center at San Antonio. She serves on the board of directors for the National Association of Hispanic Nurses. Dr. Cantu's research interests include cultural competency in nursing, health disparities among the Hispanic population, physical activity in older Hispanic women, and the recruitment and mentoring of Hispanic nursing students.

#### Susan J. Curry, Ph.D.

Dr. Curry is the dean of the College of Public Health and distinguished professor of health management and policy at the University of Iowa. She is currently vice chair of the American Legacy Foundation's board of directors. Among Dr. Curry's past professional activities are membership on the National Cancer Institute's board of scientific advisors and associate editor for clinical practice for the *American Journal of Preventive Medicine*. Dr. Curry's research focuses on disease prevention and behavioral risk factor modification with a primary focus on tobacco use. Dr. Curry's research in tobacco includes studies of motivation to quit smoking, randomized trials of promising smoking cessation and prevention interventions, evaluations of the use and cost effectiveness of tobacco cessation treatments under different health insurance plans, and health care costs and utilization associated with tobacco cessation.

#### Mark Ebell, M.D., M.S.

Dr. Ebell is an associate professor of epidemiology and biostatistics at The University of Georgia with a background in family medicine. An author of more than 290 peer-reviewed publications and author and co-editor of seven books, Dr. Ebell is currently editor-in-chief of *Essential Evidence* and the deputy editor of *American Family Physician*. His expertise and research interests include primary care research, point-of-care decision support, health information technology for the primary care setting, evidence-based medicine, and systematic reviews of screening and diagnostic tests.

#### Glenn Flores, M.D.

Dr. Flores is a professor of pediatrics, clinical sciences, and public health at the University of Texas (UT) Southwestern and director of the Division of General Pediatrics at UT Southwestern and Children's Medical Center Dallas. He was the recipient of the 2012 Research Award from the Academic Pediatric Association, and is on the editorial board of the *Journal of Health Care for the Poor and Underserved*. Dr. Flores research focuses on community-based interventions for improving the health and health care of underserved children; providing access to health care for uninsured children; language, culture, and health care; racial/ethnic disparities in children's health and health care; and testing innovative interventions for chronic disease management.

#### Francisco A.R. García, M.D., M.P.H.

Dr. García is the director and chief medical officer of the Pima County Department of Health in Tucson, AZ. He is a fellow of the American Congress of Obstetricians and Gynecologists and a diplomat of the American Board of Obstetrics and Gynecology. Dr. García is also the distinguished outreach professor of public health at the University of Arizona. He is a member of the Institute of Medicine Roundtable on Health Equity and the Elimination of Health Disparities. Prior to joining the Pima County Department of Health, Dr. García served in a variety of roles at the University of Arizona, including director of the Arizona Center of Excellence in Women's Health, the Arizona Hispanic Center of Excellence, and the Cancer Disparities Institute of the Arizona Cancer Center. He was also chair of the Section of Family and Child Health and director of the Division of Gynecology and Obstetrics.

#### Jessica Herzstein, M.D., M.P.H.

Dr. Herzstein, a boardcertified specialist in preventive medicine and internal medicine, is currently the global medical director at Air Products. In this position, Dr. Herzstein develops medical programs for 20,000 workers worldwide. She is also a consultant in occupational and environmental health and a lecturer at the University of Pennsylvania School of Medicine. In addition to preventing disease and injury in the workplace, her work focuses on chronic disease prevention and health risk communication. Dr. Herzstein has more than 20 years of experience in teaching, research, patient care, and health care program design and evaluation.

#### David C. Grossman, M.D., M.P.H.

Dr. Grossman, a board-certified pediatrician recognized for his research on injury prevention and Native American health, is a senior investigator at the Group Health Research Institute in Seattle, WA. He is also a professor of health services and adjunct professor of pediatrics at the University of Washington. He serves on the Community Preventive Services Task Force and recently concluded several terms on the Board of Scientific Counselors for the Centers for Disease Control and Prevention's National Center for Injury Prevention and Control. Dr. Grossman has been awarded numerous awards for his research and advocacy on behalf of Native American children, oral health, and injury prevention. His current research focuses on innovations to improve the uptake and delivery of clinical preventive services in primary care.

#### Wanda Nicholson, M.D., M.P.H., M.B.A.

Dr. Nicholson, a board-certified obstetrician-gynecologist and perinatal epidemiologist, is an associate professor in the Department of Gynecology and Obstetrics at the University of North Carolina, Chapel Hill School of Medicine. She is the director of the Diabetes and Obesity Core at the Center for Women's Health Research. She is currently a member of the American Congress of Obstetricians and Gynecologists' Committee on Health Care for Underserved Women and is a standing member of a National Institutes of Health Study Section. She is also an examiner for the American Board of Obstetrics and Gynecology's oral boards. Dr. Nicholson's research focuses on the epidemiology of chronic conditions in women, including gestational diabetes, type 2 diabetes, obesity, and depression and the use of technologies and social media to develop new models of care for these conditions.

#### Douglas K. Owens, M.D., M.S.

Dr. Owens is associate director of the Center for Innovation to Implementation at the Department of Veterans Affairs (VA) Palo Alto Health Care System. He is the Henry J. Kaiser, Jr., professor and director of the Center for Health Policy in the Freeman Spogli Institute for International Studies, and director of the Center for Primary Care and Outcomes Research in the School of Medicine at Stanford University. He is a general internist and a senior investigator at the VA Palo Alto Health Care System. Dr. Owens' research focuses on guideline development, technology assessment, cost-effectiveness analysis, evidence synthesis, and methods for clinical decisionmaking.

#### William R. Phillips, M.D., M.P.H.

Dr. Phillips is the Theodore J. Phillips endowed professor in family medicine and clinical professor of health services at the University of Washington (UW). Dr. Phillips directs the UW Primary Care Research Fellowship and is senior associate editor of the *Annals of Family Medicine*. He is past president of the North American Primary Care Research Group and past chair of the American Academy of Family Physicians Commission on Clinical Policies and Research. His work focuses on care, communication, and clinical preventive services.

#### Michael P. Pignone, M.D., M.P.H.

Dr. Pignone is a professor of medicine at the University of North Carolina Department of Medicine and chief of the university's Division of General Internal Medicine. He also serves as director of the university's Institute for Healthcare Quality Improvement, a member of the Lineberger Cancer Center, senior research fellow at the Cecil Sheps Center for Health Services Research, and a lecturer at the University of North Carolina's Gillings School of Global Public Health. Dr. Pignone's research expertise is in chronic disease prevention and treatment, as well as in physician-patient communication and decisionmaking in primary care settings. His primary clinical areas of interest include heart disease prevention, colorectal cancer screening, and management of common chronic conditions, such as diabetes and heart failure.

### APPENDIX D: 2013 USPSTF DISSEMINATION AND IMPLEMENTATION PARTNER ORGANIZATIONS

#### AARP

America's Health Insurance Plans American Academy of Family Physicians American Academy of Nurse Practitioners American Academy of Pediatrics American Academy of Physician Assistants American College of Obstetricians and Gynecologists American College of Physicians American College of Preventive Medicine American Osteopathic Association Canadian Task Force on Preventive Health Care Community Preventive Services Task Force National Association of Pediatric Nurse Practitioners National Committee for Quality Assurance

### **APPENDIX E: 2013 FEDERAL LIAISONS TO THE USPSTF**

Centers for Disease Control and Prevention Centers for Medicare & Medicaid Services Department of Defense/Military Health System Food and Drug Administration Health Resources and Services Administration Indian Health Service National Cancer Institute National Institutes of Health Office of Disease Prevention and Health Promotion Office of the Surgeon General Substance Abuse and Mental Health Services Administration Veterans Health Administration

### APPENDIX F: COMPLETE LISTING OF ALL USPSTF RECOMMENDATIONS AS OF OCTOBER 2013

Grade	Title
A	Aspirin to Prevent Myocardial Infarction: Men Ages 45 to 79 Years The USPSTF recommends the use of aspirin for men ages 45 to 79 years when the potential benefit of a reduction in myocardial infarctions outweighs the potential harm of an increase in gastrointestinal hemorrhage.
A	Aspirin to Prevent Ischemic Stroke: Women Ages 55 to 79 Years The USPSTF recommends the use of aspirin for women ages 55 to 79 years when the potential benefit of a reduction in ischemic strokes outweighs the potential harm of an increase in gastrointestinal hemorrhage.
A	Asymptomatic Bacteriuria: Screening in Pregnant Women The USPSTF recommends screening for asymptomatic bacteriuria with urine culture in pregnant women at 12 to 16 weeks' gestation or at the first prenatal visit, if later.
A	<b>Cervical Cancer: Screening in Women Ages 21 to 65 (Pap Smear) or 30 to 65 (With HPV Testing)</b> The USPSTF recommends screening for cervical cancer in women ages 21 to 65 years with cytology (Pap smear) every 3 years or, for women ages 30 to 65 years who want to lengthen the screening interval, screening with a combination of cytology and human papillomavirus (HPV) testing every 5 years.
A	<b>Chlamydia: Screening in Women Age 24 Years and Younger or Older Women at Increased Risk</b> The USPSTF recommends screening for chlamydial infection in all sexually active, nonpregnant women age 24 years and younger and in older nonpregnant women who are at increased risk.
A	<b>Colorectal Cancer: Screening in Adults Ages 50 to 75 Years</b> The USPSTF recommends screening for colorectal cancer using fecal occult blood testing, sigmoidoscopy, or colonoscopy in adults, beginning at age 50 years and continuing until age 75 years. The risks and benefits of these screening methods vary.
A	Congenital Hypothyroidism: Screening in Newborns The USPSTF recommends screening for congenital hypothyroidism in newborns.
A	<b>Folic Acid: Supplementation in Women Planning or Capable of Pregnancy</b> The USPSTF recommends that all women planning or capable of pregnancy take a daily supplement containing 0.4 to 0.8 mg (400 to 800 μg) of folic acid.
A	HIV: Screening in Adolescents and Adults Ages 15 to 65 Years The USPSTF recommends that clinicians screen 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.
A	HIV: Screening in Pregnant Women The USPSTF recommends that clinicians screen all pregnant women for HIV, including those who present in labor who are untested and whose HIV status is unknown.
A	Hepatitis B Virus: Screening in Pregnant Women The USPSTF recommends screening for hepatitis B virus infection in all pregnant women at their first prenatal visit.

Grade	Title
Α	High Blood Pressure: Screening in Adults Age 18 Years and Older The USPSTF recommends screening for high blood pressure in adults age 18 years and older.
Α	Lipid Disorders in Adults: Screening in Men Age 35 Years and Older The USPSTF recommends screening men age 35 years and older for lipid disorders.
A	Lipid Disorders in Adults: Screening in Women Age 45 Years and Older at Increased Risk for Coronary Heart Disease The USPSTF recommends screening for lipid disorders in women age 45 years and older if they are at increased risk for coronary heart disease.
A	Ocular Prophylaxis for Gonococcal Ophthalmia Neonatorum: Preventive Medication for All Newborns The USPSTF recommends prophylactic ocular topical medication for all newborns for the prevention of gonococcal ophthalmia neonatorum.
A	Phenylketonuria: Screening in Newborns The USPSTF recommends screening for phenylketonuria in newborns.
А	<b>Rh(D) Blood Typing: Screening in Pregnant Women at First Pregnancy-Related Visit</b> The USPSTF recommends Rh(D) blood typing and antibody testing for all pregnant women during their first visit for pregnancy-related care.
Α	Sickle Cell Disease: Screening in Newborns The USPSTF recommends screening for sickle cell disease in newborns.
Α	Syphilis: Screening in Pregnant Women The USPSTF recommends that clinicians screen all pregnant women for syphilis infection.
Α	Syphilis: Screening in Adults at Increased Risk The USPSTF recommends that clinicians screen for syphilis infection in adults at increased risk.
А	<b>Tobacco Use: Counseling and Interventions for Adults</b> The USPSTF recommends that clinicians ask all adults about tobacco use and provide tobacco cessation interventions for those who use tobacco products.
А	<b>Tobacco Use: Counseling and Interventions for Pregnant Women</b> The USPSTF recommends that clinicians ask all pregnant women about tobacco use and provide augmented, pregnancy-tailored counseling for those who smoke.
В	Abdominal Aortic Aneurysm: Screening in Men Ages 65 to 75 Years Who Smoke The USPSTF recommends one-time screening for abdominal aortic aneurysm by ultrasonography in men ages 65 to 75 years who have ever smoked.
В	Alcohol Misuse: Screening and Behavioral Counseling Interventions in Primary Care for Adults The USPSTF recommends that clinicians screen adults age 18 years or older for alcohol misuse and provide persons engaged in risky or hazardous drinking with brief behavioral counseling interventions to reduce alcohol misuse.

Grade	Title
В	<b>BRCA Mutation Testing for Breast and Ovarian Cancer: Women at Increased Risk</b> The USPSTF recommends that women whose family history is associated with an increased risk for deleterious mutations in breast cancer susceptibility gene <i>BRCA1</i> or <i>BRCA2</i> be referred for genetic counseling and evaluation for BRCA testing.
В	<b>Breast Cancer: Preventive Medications for Women at Increased Risk</b> 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.
В	<b>Breast Cancer: Screening With Mammography in Women Ages 50 to 74 Years*</b> The USPSTF recommends biennial screening mammography for women ages 50 to 74 years. <i>*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, utilizes the 2002 USPSTF recommendation on breast cancer screening. This recommendation states, "The USPSTF recommends screening mammography, with or without clinical breast examination (CBE), every 1–2 years for women age 40 and older (B recommendation)."</i>
В	Breastfeeding: Primary Care Interventions to Promote Its Use in All Pregnant Women and New Mothers The USPSTF recommends interventions during pregnancy and after birth to promote and support breastfeeding.
В	Chlamydia: Screening in Pregnant Women Age 24 Years and Younger or Older Pregnant Women at Increased Risk The USPSTF recommends screening for chlamydial infection in all pregnant women age 24 years and younger and in older pregnant women who are at increased risk.
В	<b>Dental Caries: Oral Fluoride Supplementation in Preschool Children Age 6 Months and Older</b> The USPSTF recommends that primary care clinicians prescribe oral fluoride supplementation at currently recommended doses to preschool children age 6 months and older whose primary water source is deficient in fluoride.
В	<b>Depression: Screening in Adolescents Ages 12 to 18 Years in Clinical Practices With Systems of Care</b> The USPSTF recommends screening for major depressive disorder in adolescents (ages 12-18 years) when systems are in place to ensure accurate diagnosis, psychotherapy (cognitive-behavioral or interpersonal), and followup.
В	<b>Depression: Screening in Adults When Staff-Assisted Depression Care Supports Are in Place</b> The USPSTF recommends screening for depression in adults (age 18 years and older) when staff-assisted depression care supports are in place to assure accurate diagnosis, effective treatment, and followup.
В	Falls Prevention: Exercise or Physical Therapy for Community-Dwelling Adults Age 65 Years or Olderat Increased Risk for FallsThe USPSTF recommends exercise or physical therapy to prevent falls in community-dwelling adults age65 years or older who are at increased risk for falls.
В	Falls Prevention: Vitamin D Supplementation for Community-Dwelling Adults Age 65 Years or Older at Increased Risk for FallsThe USPSTF recommends vitamin D supplementation to prevent falls in community-dwelling adults age 65 years or older who are at increased risk for falls.

Grade	Title
В	<b>Gonorrhea: Screening in Pregnant Women and Women at Increased Risk</b> The USPSTF recommends that clinicians screen all sexually active women, including those who are pregnant, for gonorrhea infection if they are at increased risk for infection (that is, if they are young or have other individual or population risk factors).
В	Hepatitis C: Screening in Adults at High Risk and Adults Born Between 1945 and 1965 The USPSTF recommends screening for hepatitis C virus (HCV) infection in persons at high risk for infection. The USPSTF also recommends offering one-time screening for HCV infection to adults born between 1945 and 1965.
В	Healthy Diet: Counseling for Adults With Hyperlipidemia and Other Risk Factors for Cardiovascular Disease The USPSTF recommends intensive behavioral dietary counseling for adults with hyperlipidemia and other known risk factors for cardiovascular and diet-related chronic disease. Intensive counseling can be delivered by primary care clinicians or by referral to other specialists, such as nutritionists or dietitians.
В	Hearing Loss in Newborns: Universal Screening in Newborns The USPSTF recommends screening for hearing loss in all newborn infants.
В	Intimate Partner Violence: Screening Women of Childbearing Age 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.
В	<b>Iron Deficiency Anemia: Iron Supplementation in Asymptomatic Children Ages 6 to 12 Months at Increased Risk</b> The USPSTF recommends routine iron supplementation for asymptomatic children ages 6 to 12 months who are at increased risk for iron deficiency anemia.
В	Iron Deficiency Anemia: Screening in Asymptomatic Pregnant Women The USPSTF recommends routine screening for iron deficiency anemia in asymptomatic pregnant women.
В	Lipid Disorders in Adults: Screening in Men Ages 20 to 34 Years at Increased Risk for Coronary Heart Disease The USPSTF recommends screening for lipid disorders in men ages 20 to 35 years if they are at increased risk for coronary heart disease.
В	Lipid Disorders in Adults: Screening in Women Ages 20 to 44 Years at Increased Risk for Coronary Heart Disease The USPSTF recommends screening for lipid disorders in women ages 20 to 45 years if they are at increased risk for coronary heart disease.
В	<b>Obesity: Screening in Children and Adolescents Ages 6 to 17 Years</b> The USPSTF recommends that clinicians screen for obesity in children age 6 years and older and offer them or refer them to comprehensive, intensive behavioral interventions to promote improvement in weight status.
В	<b>Obesity: Screening and Management for All Adults</b> The USPSTF recommends screening all adults for obesity. Clinicians should offer or refer patients with a body mass index of 30 kg/m <sup>2</sup> or higher to intensive, multicomponent behavioral interventions.
В	<b>Osteoporosis: Screening in Women Age 65 Years and Older and Younger Women at Increased Risk</b> The USPSTF recommends screening for osteoporosis in women age 65 years or older and in younger women whose fracture risk is equal to or greater than that of a 65-year-old white woman who has no additional risk factors.

Grade	Title
В	<b>Rh(D) Blood Typing: Antibody Testing in Unsensitized Rh(D)-Negative Pregnant Women</b> The USPSTF recommends repeated Rh(D) antibody testing for all unsensitized Rh(D)-negative women at 24–28 weeks' gestation, unless the biological father is known to be Rh(D)-negative.
В	Sexually Transmitted Infections: Behavioral Counseling for Sexually Active Adolescents and Adults at Increased Risk The USPSTF recommends high-intensity behavioral counseling to prevent sexually transmitted infections (STIs) for all sexually active adolescents and for adults at increased risk for STIs.
В	Skin Cancer: Behavioral Counseling for Children, Adolescents, and Young Adults Ages 10 to 24 The USPSTF recommends counseling children, adolescents, and young adults ages 10 to 24 years who have fair skin about minimizing their exposure to ultraviolet radiation to reduce risk for skin cancer.
В	<b>Tobacco Use: Primary Care Interventions to Prevent Tobacco Use in Children and Adolescents</b> 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.
В	<b>Type 2 Diabetes Mellitus: Screening in Adults With Sustained Blood Pressure of 135/80 mm Hg or Higher</b> The USPSTF recommends screening for type 2 diabetes in asymptomatic adults with sustained blood pressure (either treated or untreated) greater than 135/80 mm Hg.
В	<b>Visual Impairment: Screening in All Children at Least Once Between Ages of 3 and 5 Years</b> The USPSTF recommends screening for vision impairment in all children at least once between the ages of 3 and 5 years, to detect the presence of amblyopia or its risk factors.
С	Abdominal Aortic Aneurysm: Screening in Men Ages 65 to 75 Years Who Do Not Smoke The USPSTF makes no recommendation for or against screening for abdominal aortic aneurysm in men ages 65 to 75 years who have never smoked.
С	<b>Breast Cancer: Screening With Mammography in Women Ages 40 to 49 Years*</b> The decision to start regular, biennial screening mammography before the age of 50 years should be an individual one and take patient context into account, including the patient's values regarding specific benefits and harms. <i>*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, utilizes the 2002 USPSTF recommendation on breast cancer screening. This recommendation states, "The USPSTF recommends screening mammography, with or without clinical breast examination (CBE), every 1–2 years for women age 40 and older (B recommendation)."</i>
С	<b>Chlamydia: Screening in Women Age 25 Years and Older Not at Increased Risk</b> The USPSTF recommends against routine screening for chlamydial infection in women age 25 years and older, whether or not they are pregnant, if they are not at increased risk.
С	Colorectal Cancer: Screening in Adults Ages 76 to 85 Years The USPSTF recommends against routine screening for colorectal cancer in adults ages 76 to 85 years. There may be considerations that support colorectal cancer screening in an individual patient.

Grade	Title
С	<b>Depression: Screening in Adults When Staff-Assisted Depression Care Supports Are Not in Place</b> The USPSTF recommends against routine screening for depression in adults (age 18 years and older) when staff-assisted depression care supports are not in place. There may be considerations that support screening for depression in an individual patient.
С	Falls Prevention: Multifactorial Risk Assessment With Comprehensive Management of Identified Risks for Community-Dwelling Adults Age 65 or Older The USPSTF does not recommend automatically performing an in-depth multifactorial risk assessment in conjunction with comprehensive management of identified risks to prevent falls in community-dwelling adults ages 65 years or older because the likelihood of benefit is small. 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 the circumstances of prior falls, comorbid medical conditions, and patient values.
С	Healthful Diet and Physical Activity: Counseling to Prevent Cardiovascular Disease for All Adults (Without a Known Diagnosis of Hypertension, Diabetes, Hyperlipidemia, or Cardiovascular Disease) Although the correlation among healthful diet, physical activity, and the incidence of cardiovascular disease is strong, existing evidence indicates that the health benefit of initiating behavioral counseling in the primary care setting to promote a healthful diet and physical activity is small. Clinicians may choose to selectively counsel patients rather than incorporate counseling into the care of all adults in the general population.
С	Lipid Disorders in Adults: Screening in Men Ages 20 to 35 Years Not at Increased Risk for Coronary Heart Disease The USPSTF makes no recommendation for or against routine screening for lipid disorders in men ages 20 to 35 years who are not at increased risk for coronary heart disease.
с	Lipid Disorders in Adults: Screening in Women Age 20 Years and Older Not at Increased Risk for Coronary Heart Disease The USPSTF makes no recommendation for or against routine screening for lipid disorders in women age 20 years and older who are not at increased risk for coronary heart disease.
D	Abdominal Aortic Aneurysm: Screening in Women The USPSTF recommends against routine screening for abdominal aortic aneurysm in women.
D	Aspirin to Prevent Myocardial Infarction: Men Younger Than Age 45 Years The USPSTF recommends against the use of aspirin for myocardial infarction prevention in men younger than age 45 years.
D	Aspirin to Prevent Ischemic Stroke: Women Younger Than Age 55 Years The USPSTF recommends against the use of aspirin for stroke prevention in women younger than age 55 years.
D	Asymptomatic Bacteriuria: Screening in Men and Nonpregnant Women The USPSTF recommends against screening for asymptomatic bacteriuria in men and nonpregnant women.
D	<b>BRCA Mutation Testing for Breast and Ovarian Cancer: Women at Low Risk</b> The USPSTF recommends against routine referral for genetic counseling or routine breast cancer susceptibility gene (BRCA) testing for women whose family history is not associated with an increased risk for deleterious mutations in <i>BRCA1</i> or <i>BRCA2</i> .

Grade	Title
D	Bacterial Vaginosis in Pregnancy: Screening in Asymptomatic Pregnant Women at Low Risk for Preterm Delivery The USPSTF recommends against screening for bacterial vaginosis in asymptomatic pregnant women who are at low risk for preterm delivery.
D	Blood Lead Levels: Screening in Children Ages 1 to 5 Years at Average Risk The USPSTF recommends against routine screening for elevated blood lead levels in asymptomatic children ages 1 to 5 years who are at average risk.
D	Blood Lead Levels: Screening in Pregnant Women The USPSTF recommends against routine screening for elevated blood lead levels in asymptomatic pregnant women.
D	Breast Cancer: Preventive Medications for Women Not At Increased Risk 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.
D	<b>Breast Cancer: Teaching Breast Self-Examination*</b> The USPSTF recommends against teaching breast self-examination. *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, utilizes the 2002 USPSTF recommendation on breast cancer screening. The full 2002 recommendation may be accessed at http://www.uspreventiveservicestaskforce.org/uspstf/uspsbrca2002.htm.
D	Carotid Artery Stenosis: Screening in Adults The USPSTF recommends against screening for asymptomatic carotid artery stenosis in the general adult population.
D	<b>Cervical Cancer: Screening With HPV Testing in Women Younger Than Age 30 Years</b> The USPSTF recommends against screening for cervical cancer with HPV testing, alone or in combination with cytology, in women younger than age 30 years.
D	<b>Cervical Cancer: Screening in Women Younger Than Age 21 Years</b> The USPSTF recommends against screening for cervical cancer in women younger than age 21 years.
D	<b>Cervical Cancer: Screening in Women Older Than Age 65 Years Who Have Had Adequate Prior Screening</b> 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.
D	<b>Cervical Cancer: Screening in Women Who Have Had a Hysterectomy</b> The USPSTF recommends against screening for cervical cancer in women who have had a hysterectomy with removal of the cervix and who do not have a history of a high-grade precancerous lesion (cervical intraepithelial neoplasia [CIN] grade 2 or 3) or cervical cancer.
D	Chronic Obstructive Pulmonary Disease: Screening Using Spirometry in Adults The USPSTF recommends against screening for chronic obstructive pulmonary disease using spirometry in adults.

Grade	Title
D	<b>Colorectal Cancer: Screening in Adults Older Than Age 85 Years</b> The USPSTF recommends against screening for colorectal cancer in adults older than age 85 years.
D	<b>Coronary Heart Disease: Screening With Electrocardiography in Adults at Low Risk</b> The USPSTF recommends against screening with resting or exercise electrocardiography (ECG) for the prediction of coronary heart disease (CHD) events in asymptomatic adults at low risk for CHD events.
D	Genital Herpes: Screening in Asymptomatic Adolescents and Adults The USPSTF recommends against routine serological screening for herpes simplex virus in asymptomatic adolescents and adults.
D	Genital Herpes: Screening in Asymptomatic Pregnant Women The USPSTF recommends against routine serological screening for herpes simplex virus (HSV) in asymptomatic pregnant women at any time during pregnancy to prevent neonatal HSV infection.
D	Gonorrhea: Screening in Adults at Low Risk The USPSTF recommends against routine screening for gonorrhea infection in men and women who are at low risk for infection.
D	Hemochromatosis: Screening in Asymptomatic Adults The USPSTF recommends against routine genetic screening for hereditary hemochromatosis in the asymptomatic general population.
D	Hepatitis B: Screening in Asymptomatic Adults The USPSTF recommends against routine screening for chronic hepatitis B virus infection in the asymptomatic general population.
D	Idiopathic Scoliosis: Screening in Asymptomatic Adolescents The USPSTF recommends against routine screening for idiopathic scoliosis in asymptomatic adolescents.
D	Menopausal Hormone Therapy for the Primary Prevention of Chronic Conditions: Preventive Medication— Combined Estrogen and Progestin The USPSTF recommends against the use of combined estrogen and progestin for the prevention of chronic conditions in postmenopausal women.
D	Menopausal Hormone Therapy for the Primary Prevention of Chronic Conditions: Preventive Medication—Estrogen Only The USPSTF recommends against the use of estrogen for the prevention of chronic conditions in postmenopausal women who have had a hysterectomy.
D	<b>Ovarian Cancer: Screening in Women</b> The USPSTF recommends against screening for ovarian cancer in women. This recommendation applies to asymptomatic women. Women with known genetic mutations that increase their risk for ovarian cancer (for example, BRCA mutations) are not included in this recommendation.
D	Pancreatic Cancer: Screening in Asymptomatic Adults The USPSTF recommends against routine screening for pancreatic cancer using abdominal palpation, ultrasonography, or serologic markers in asymptomatic adults.

Grade	Title
D	Prostate Cancer: Prostate-Specific Antigen (PSA)-Based Screening in All Men The USPSTF recommends against PSA-based screening for prostate cancer.
D	Routine Aspirin or NSAID Use for the Primary Prevention of Colorectal Cancer: Preventive Medication for Adults at Average Risk The USPSTF recommends against the routine use of aspirin or nonsteroidal anti-inflammatory drugs (NSAIDs) to prevent colorectal cancer in adults who are at average risk for colorectal cancer.
D	<b>Syphilis: Screening in Asymptomatic Men and Women</b> The USPSTF recommends against routine screening for syphilis infection in asymptomatic men and women who are not at increased risk for syphilis infection.
D	<b>Testicular Cancer: Screening in Adolescent and Adult Males</b> The USPSTF recommends against screening for testicular cancer in adolescents or adults.
D	<b>Vitamin D and Calcium: Low-Dose Preventive Medications to Prevent Fractures</b> The USPSTF recommends against daily supplementation with 400 IU or less of vitamin $D_3$ and 1,000 mg or less of calcium for the primary prevention of fractures in noninstitutionalized postmenopausal women.
D	Vitamin Supplementation to Prevent Cancer and Cardiovascular Disease: Preventive Medication—Beta–Carotene The USPSTF recommends against the use of beta-carotene supplements, either alone or in combination, for the prevention of cancer or cardiovascular disease.
I	Alcohol Misuse: Screening and Behavioral Counseling Interventions in Primary Care for Adolescents 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.
I	Aspirin to Prevent Cardiovascular Disease: Adults Age 80 Years or Older The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of aspirin to prevent cardiovascular disease in adults age 80 years or older.
I	Bacterial Vaginosis in Pregnancy: Screening in Asymptomatic Pregnant Women at High Risk for Preterm Delivery 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.
I	<b>Bladder Cancer: Screening in Adults</b> 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.
I	<b>Blood Lead Levels: Screening in Children Ages 1 to 5 Years at Increased Risk</b> 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.

Grade	Title
ı	<b>Breast Cancer: Screening Using Clinical Breast Examination in Women Age 40 Years and Older*</b> The USPSTF concludes that the current evidence is insufficient to assess the additional benefits and harms of clinical breast examination beyond screening mammography in women age 40 years or older. *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, utilizes the 2002 USPSTF recommendation on breast cancer screening. The full 2002 recommendation may be accessed at http://www.uspreventiveservicestaskforce.org/uspstf/uspsbrca2002.htm.
I	Breast Cancer: Screening Using Digital Mammography or Magnetic Resonance Imaging Instead of Film Mammography The USPSTF concludes that the current evidence is insufficient to assess the additional benefits and harms of either digital mammography or magnetic resonance imaging instead of film mammography as screening modalities for breast cancer.
ı	<ul> <li>Breast Cancer: Screening With Mammography in Women Age 75 Years and Older*</li> <li>The USPSTF concludes that the current evidence is insufficient to assess the additional benefits and harms of screening mammography in women age 75 years or older.</li> <li>*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, utilizes the 2002 USPSTF recommendation on breast cancer screening. The full 2002 recommendation may be accessed at http://www.uspreventiveservicestaskforce.org/uspstf/uspsbrca2002.htm.</li> </ul>
I	<b>Child Maltreatment: Primary Care Interventions</b> 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.
I	<b>Coronary Heart Disease: Risk Assessment Using Nontraditional Risk Factors in Asymptomatic Adults</b> The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of using nontraditional risk factors to screen asymptomatic adults with no history of coronary heart disease (CHD) to prevent CHD events. The nontraditional risk factors included in this recommendation are high-sensitivity C-reactive protein, ankle–brachial index, leukocyte count, fasting blood glucose level, periodontal disease, carotid intima-media thickness, coronary artery calcification score on electron-beam computed tomography, homocysteine level, and lipoprotein(a) level.
I	<b>Chlamydia: Screening in Men</b> The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for chlamydial infection in men.
I	<b>Chronic Kidney Disease: Screening in Asymptomatic Adults</b> The USPSTF concludes that the evidence is insufficient to assess the balance of benefits and harms of routine screening for chronic kidney disease in asymptomatic adults.
I	<b>Colorectal Cancer: Screening Using Computed Tomographic Colonography and Fecal DNA Testing</b> The USPSTF concludes that the evidence is insufficient to assess the benefits and harms of computed tomographic colonography and fecal DNA testing as screening modalities for colorectal cancer.

Grade	Title
I	<b>Coronary Heart Disease: Screening With Electrocardiography in Adults at Intermediate or High Risk of CHD Events</b> The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening with resting or exercise ECG for the prediction of CHD events in asymptomatic adults at intermediate or high risk for CHD events.
I	<b>Dementia: Screening in Older Adults</b> The USPSTF concludes that the evidence is insufficient to recommend for or against routine screening for dementia in older adults.
I	<b>Dental Caries: Routine Risk Assessment in Preschool Children Older Than Age 6 Months</b> The USPSTF concludes that the evidence is insufficient to recommend for or against routine risk assessment of preschool children by primary care clinicians for the prevention of dental disease.
I	<b>Depression: Screening in Children Ages 7 to 11 Years</b> The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for depression in children ages 7 to 11 years.
I	<b>Drug Use—Illicit: Screening in Adolescents, Adults, and Pregnant Women</b> The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening adolescents, adults, and pregnant women for illicit drug use.
I.	<b>Elder Abuse and Neglect: Screening of Elderly or Vulnerable Adults</b> The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening all elderly or vulnerable (physically or mentally dysfunctional) adults for abuse and neglect.
I	<b>Gestational Diabetes Mellitus: Screening in Pregnant Women Before or After 24 Weeks' Gestation</b> The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for gestational diabetes mellitus either before or after 24 weeks' gestation.
I	<b>Glaucoma: Screening in Adults</b> 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.
I	<b>Gonorrhea: Screening in Men at Increased Risk</b> The USPSTF found insufficient evidence to recommend for or against routine screening for gonorrhea infection in men at increased risk for infection.
I	<b>Gonorrhea: Screening in Pregnant Women Not at Risk</b> The USPSTF found insufficient evidence to recommend for or against routine screening for gonorrhea infection in pregnant women who are not at increased risk for infection.
I	Hearing Loss: Screening in Older Adults 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 or older.

Grade	Title
I	<b>Hip Dysplasia: Screening in Infants</b> The USPSTF concludes that the evidence is insufficient to recommend routine screening for developmental dysplasia of the hip in infants as a means to prevent adverse outcomes.
I.	Hyperbilirubinemia: Screening in Infants to Prevent Chronic Bilirubin Encephalopathy The USPSTF concludes that the evidence is insufficient to recommend screening for hyperbilirubinemia in infants to prevent chronic bilirubin encephalopathy.
I.	Iron Deficiency Anemia: Iron Supplementation in Asymptomatic Children Ages 6 to 12 Months at Average Risk The USPSTF concludes that the evidence is insufficient to recommend for or against routine iron supplementation in asymptomatic children ages 6 to 12 months who are at average risk for iron deficiency anemia.
I	Iron Deficiency Anemia: Iron Supplementation in Nonanemic Pregnant Women The USPSTF concludes that the evidence is insufficient to recommend for or against routine iron supplementation in nonanemic pregnant women.
I	Iron Deficiency Anemia: Screening in Asymptomatic Children Ages 6 to 12 Months The USPSTF concludes that the evidence is insufficient to recommend for or against routine screening for iron deficiency anemia in asymptomatic children ages 6 to 12 months.
I	Lipid Disorders: Screening in Children, Adolescents, and Young Adults Up to 20 Years The USPSTF concludes that the evidence is insufficient to recommend for or against routine screening for lipid disorders in infants, children, adolescents, or young adults (up to age 20 years).
I	<b>Low Back Pain: Counseling for Adults</b> The USPSTF concludes that the evidence is insufficient to recommend for or against the routine use of interventions to prevent low back pain in adults in primary care settings.
I	<b>Lung Cancer: Screening in Asymptomatic Adults</b> The USPSTF concludes that the evidence is insufficient to recommend for or against screening for lung cancer in asymptomatic adults with low-dose computerized tomography, chest x-ray, sputum cytology, or a combination of these tests.
I.	<b>Oral Cancer: Screening in Adults</b> The USPSTF concludes that the evidence is insufficient to recommend for or against routinely screening for oral cancer in adults.
I	<b>Osteoporosis: Screening in Men</b> The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for osteoporosis in men.
I	Peripheral Artery Disease and Cardiovascular Disease Risk Assessment With the Ankle–Brachial Index: Screening in Adults 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 assessment with the ankle–brachial index in adults.

Grade	Title
I	<b>Physical Activity: Behavioral Counseling in a Primary Care Setting</b> The USPSTF concludes that the evidence is insufficient to recommend for or against behavioral counseling in primary care settings to promote physical activity.
I	Prevention of Motor Vehicle Occupant Injuries: Counseling in a Primary Care Setting for Driving Under the Influence of Alcohol The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of routine counseling of all patients in the primary care setting to reduce driving while under the influence of alcohol or riding with drivers who are alcohol-impaired.
I	Prevention of Motor Vehicle Occupant Injuries: Counseling in a Primary Care Setting for Proper Use of Motor Vehicle Restraints The USPSTF concludes that the current evidence is insufficient to assess the incremental benefit, beyond the efficacy of legislation and community-based interventions, of counseling in the primary care setting to improve proper use of motor vehicle occupant restraints (child safety seats, booster seats, and lap-and-shoulder belts).
I	Sexually Transmitted Infections: Behavioral Counseling in Nonsexually Active Adolescents and Adults Not at Increased Risk The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of behavioral counseling to prevent sexually transmitted infections (STIs) in adolescents who are not sexually active and in adults who are not at increased risk for STIs.
I	Skin Cancer: Behavioral Counseling in Adults Older Than Age 24 Years The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of counseling adults older than age 24 years about minimizing risks to prevent skin cancer.
I	Skin Cancer: Screening in Men and Women The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of using a whole-body skin examination by a primary care clinician or patient skin self-examination for the early detection of cutaneous melanoma, basal cell cancer, or squamous cell skin cancer in the adult general population.
I	Speech and Language Delay: Screening in Preschool Children Using Brief, Formal Instruments The USPSTF concludes that the evidence is insufficient to recommend for or against the routine use of brief, formal screening instruments in primary care to detect speech and language delay in children age 5 years and younger.
I	Suicide Risk: Screening in Adults The USPSTF concludes that the evidence is insufficient to recommend for or against routine screening by primary care clinicians to detect suicide risk in the general population.
I	<b>Thyroid Disease: Screening in Men and Women</b> The USPSTF concludes that the evidence is insufficient to recommend for or against routine screening for thyroid disease in adults.
I	<b>Type 2 Diabetes Mellitus: Screening in Adults With Blood Pressure of 135/80 mm Hg or Lower</b> The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for type 2 diabetes in asymptomatic adults with blood pressure of 135/80 mm Hg or lower.

Grade	Title
I	Visual Acuity: Screening in Older Adults The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for visual acuity for the improvement of outcomes in older adults.
I	Visual Impairment: Screening in Children Younger Than Age 3 Years The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for vision impairment in children younger than age 3 years.
I	Vitamin D and Calcium: Preventive Medications to Prevent Fractures in Premenopausal Women or in Men The USPSTF concludes that the current evidence is insufficient to assess the balance of the benefits and harms of combined vitamin D and calcium supplementation for the primary prevention of fractures in premenopausal women or in men.
I	<b>Vitamin D and Calcium: High-Dose Preventive Medications to Prevent Fractures</b> The USPSTF concludes that the current evidence is insufficient to assess the balance of the benefits and harms of daily supplementation with greater than 400 IU of vitamin $D_3$ and greater than 1,000 mg of calcium for the primary prevention of fractures in noninstitutionalized postmenopausal women.
I	<b>Vitamin Supplementation to Prevent Cancer and Cardiovascular Disease: Vitamins A, C, and E and Multivitamins</b> The USPSTF concludes that the evidence is insufficient to recommend for or against the use of supplements of vitamins A, C, or E; multivitamins with folic acid; or antioxidant combinations for the prevention of cancer or cardiovascular disease.
	of vitamins A, C, or E; multivitamins with folic acid; or antioxidant combinations for the prevention of cancer or

