NOVEMBER 2015

High-Priority Evidence Gaps For Clinical Preventive Services

IMPROVING THE HEALTH OF WOMEN THROUGH RESEARCH

SUBMITTED BY:
Dr. Albert L. Siu, Chair
Dr. Kirsten Bibbins-Domingo, Vice Chair
Dr. David Grossman, Vice Chair
ON BEHALF OF THE
U.S. PREVENTIVE SERVICES
TASK FORCE

FIFTH ANNUAL REPORT
TO CONGRESS

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 infants, 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 previous four 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 previous annual reports would have been addressed by research. 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 women. Research in these areas would generate much needed evidence for important new recommendations to improve the health and health care of women in the United States.

Prioritized Evidence Gaps for Improving the Health of Women Through Research on Clinical Preventive Services:

1. Screening for Intimate Partner Violence, Illicit Drug Use, and Mental Health Conditions
2. Screening for Thyroid Dysfunction
3. Screening for Vitamin D Deficiency, Vitamin D and Calcium Supplementation to Prevent Fractures, and Screening for Osteoporosis
4. Screening for Cancer
5. Implementing Clinical Preventive Services

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.

TABLE OF CONTENTS

I. Introduction 3

II. Background 3

III. Major Activities of the USPSTF in 2014–2015 7

IV. Focusing on the Health of Women 8

V. High-Priority Evidence Gaps for Clinical Preventive Services: Focus on Women 10

- Screening for Intimate Partner Violence, Illicit Drug Use, and Mental Health Conditions 14
- Screening for Thyroid Dysfunction 15
- Screening for Vitamin D Deficiency, Vitamin D and Calcium Supplementation to Prevent Fractures, and Screening for Osteoporosis 15
- Screening for Cancer 16
- Implementing Clinical Preventive Services 17

VI. Next Steps for the USPSTF in 2016 20

VII. Conclusion 20

Appendices

A. Summary of Fourth Annual Report to Congress on High-Priority Evidence Gaps for Clinical Preventive Services 23

B. Summary of Third Annual Report to Congress on High-Priority Evidence Gaps for Clinical Preventive Services 24

C. Summary of Second Annual Report to Congress on High-Priority Evidence Gaps for Clinical Preventive Services 25

D. Summary of First Annual Report to Congress on High-Priority Evidence Gaps for Clinical Preventive Services 26

E. 2015 Members of the USPSTF 27

F. USPSTF Dissemination and Implementation Partner Organizations 30

G. Federal Liaisons to the USPSTF 31

H. Child and Maternal Health Workgroup Members 31

I. Complete Listing of All USPSTF Recommendations as of October 2015 32

"The American College of Obstetricians and Gynecologists (ACOG) is the nation's leading organization of women's health professionals, with more than 58,000 members. ACOG is dedicated to advancing the quality of women's health care, and recognizes the important role that research plays in the development of recommendations that guide the care we provide. We applaud the Task Force for focusing this year's report on critical evidence gaps in women's health, and we look forward to the new research that will be conducted as a result of this report."

– American College of Obstetricians and Gynecologists
Mark S. DeFrancesco, MD, MBA, FACOG, President

I. INTRODUCTION

The U.S. Preventive Services Task Force (USPSTF or Task Force) is an independent body of national experts in prevention and evidence-based medicine. Since its inception more than 25 years ago, 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 include 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 and the research community about key evidence gaps in clinical preventive services.

II. BACKGROUND

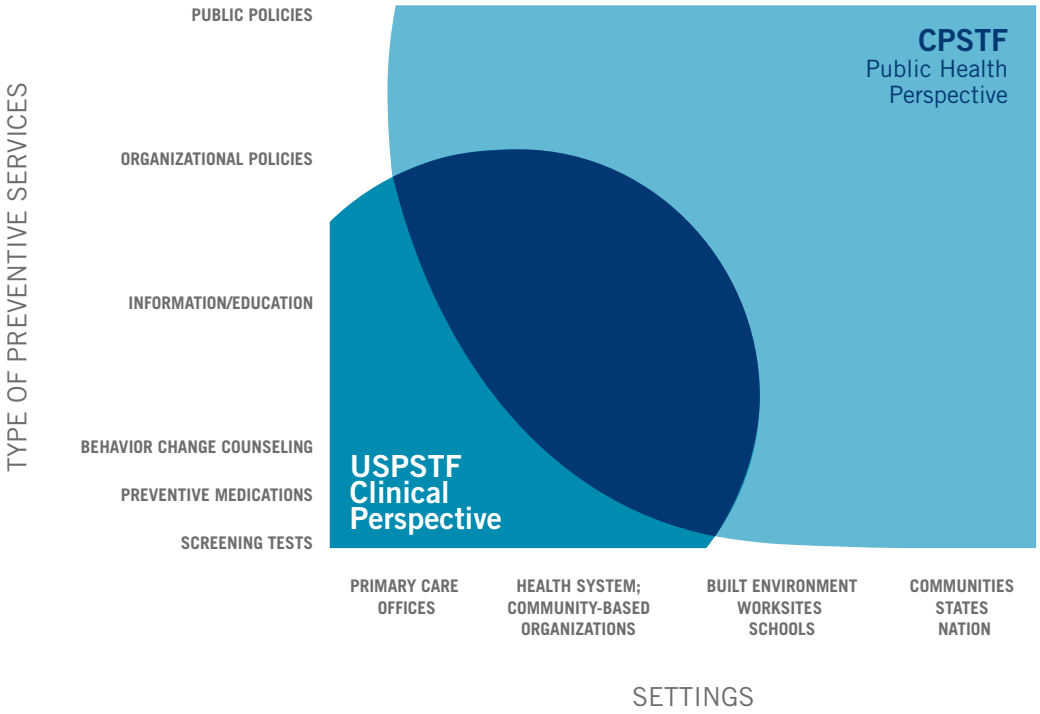
Clinical preventive services can have tremendous value in improving the health of the Nation. When provided appropriately, they can identify diseases at earlier stages when they are more treatable, or reduce a person's risk for developing a disease altogether. However, some clinical preventive services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

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

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

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, led by a chair and two vice chairs (see **Appendix E** 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.

Primary care specializes in understanding and delivering the full spectrum of a patient's preventive needs.

USPSTF members are appointed by the Director of the Agency for Healthcare Research and Quality. 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 reviews and assesses published research. The USPSTF follows a multistep process when developing each of its recommendations (see **Figure 2**).

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, which is then reviewed by external subject matter experts. In 2013, the Task Force began posting draft evidence reports for public comment for 4 weeks, during which time scientists, researchers, health care professionals, and members of the general public are able to comment. All comments related to the draft evidence report are reviewed by the researchers at the EPC, and the evidence report is revised as necessary.

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.

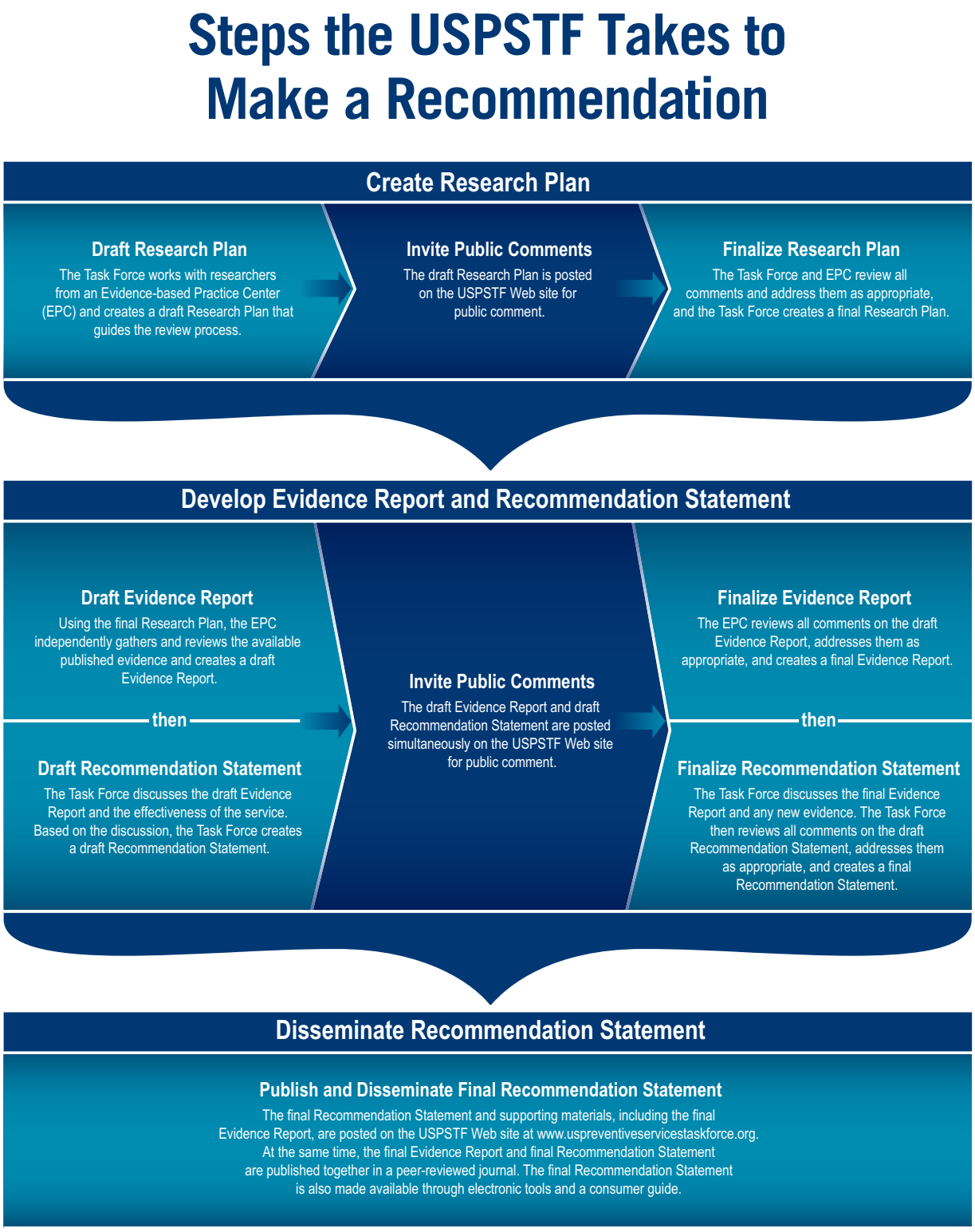
Potential benefits of clinical preventive services include reduction of risk factors to prevent disease, early identification of disease leading to earlier treatment, and, ultimately, improved health outcomes such as quality of life and length of life. Harms of preventive services can include adverse effects of the service itself, as well as the harms of inaccurate test results that may lead to a cascade of additional follow-up 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 consider costs in its appraisal of the effectiveness of a service. The USPSTF also 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 the balance of benefits and harms of the preventive service (see **Table 1**). Clinical preventive services assigned a grade of "A" or "B" are those 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 patients based on professional judgment and patient preferences. Services assigned a "D" grade 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 avoid them. The Task Force issues an "I" statement 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. Members of the Task Force review all comments received on the draft recommendation statement and then revise the recommendation statement.

Figure 2. Steps the USPSTF Takes to Make a Recommendation



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 recommendation statement and works with partner organizations on dissemination and implementation activities.

Table 1. Meaning of USPSTF Grades

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

III. MAJOR ACTIVITIES OF THE USPSTF IN 2014–2015

Over the past 4 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 are more accurate and relevant.

The Task Force has an open process to solicit input from the public, experts, professional organizations, and policymakers for all of its recommendations.

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

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 I** for a complete listing of all current USPSTF recommendations). Between October 2014 and October 2015, the Task Force:

- Received 19 nominations for new topics and 2 nominations to reconsider or update existing topics
- Posted 15 draft research plans for public comment
- Posted 15 draft recommendation statements and draft evidence reports for public comment
- Published 12 final recommendation statements on 8 topics in peer-reviewed journals (see **Table 2**)

The Task Force continued efforts to disseminate its recommendations by working with a group of partner organizations (see **Appendix F**) representing 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. This year, the Task Force added the Consumers Union, the American Psychological Association, and the American Medical Association as new dissemination and implementation partners.

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

In order to help the public understand what Task Force recommendations mean, the Task Force continued to produce plain language fact sheets for each of its recommendations. The fact sheets highlight that evidence-based recommendations are only one part of informed decisionmaking, and 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. The fact sheets are available on the USPSTF Web site.

The USPSTF Web site is a major vehicle for disseminating its work. This year, the Task Force launched a redesigned Web site. The Web site now features easier access to information for health professionals and consumers and to topics in progress, as well as enhanced searching capability.

IV. FOCUSING ON THE HEALTH OF WOMEN

Significantly improving the health of women and girls presents a unique set of challenges and opportunities for how we think about prevention and wellness in the clinical care setting. The most obvious difference is that women and girls have unique health care needs throughout their lifespan that are related to reproductive and biological differences, and may present with unique symptom constellations, findings, and needs in the primary care setting. This complexity is compounded because many of the diverse factors that "shape the health and well-being of women fall outside the realm of clinical services" (Institute of Medicine, 2011). These include such issues as the impact of the home and work environment on reproductive health and health behaviors, the role of poverty and access to economic opportunity, and the degree of women's self-efficacy and self-empowerment to address their own and their family's health and wellness needs.

The field of women's health research has greatly expanded in scope from a primary focus on reproductive health to a multifaceted area of research. Health outcomes are influenced by biological sex, gender identity, as well as developmental, cultural, environmental, and socioeconomic factors.

— NATIONAL INSTITUTES OF HEALTH

Table 2. Final Recommendation Statements Published by the USPSTF, October 2014 to October 2015

Topic	Recommendation
Abnormal Blood Glucose and Type 2 Diabetes Mellitus: Screening in Adults	The USPSTF recommends screening for abnormal blood glucose as part of cardiovascular risk assessment in adults ages 40 to 70 years who are overweight or obese. Clinicians should offer or refer patients with abnormal glucose to intensive behavioral counseling interventions to promote a healthful diet and physical activity. (Grade B)
Hypertension: Screening in Adults	The USPSTF recommends screening for high blood pressure in adults age 18 years and older. The USPSTF recommends obtaining measurements outside of the clinical setting for diagnostic confirmation before starting treatment. (Grade A)
Iron: Screening and Supplementation in Pregnant Women	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of routine iron supplementation for pregnant women to prevent adverse maternal health and birth outcomes. (I statement) The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for iron deficiency anemia in pregnant women to prevent adverse maternal health and birth outcomes. (I statement)
Iron Deficiency Anemia: Screening in Children Ages 6 to 24 Months	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for iron deficiency anemia in children ages 6 to 24 months. (I statement)
Speech and Language Delay and Disorders: Screening in Children Age 5 Years and Younger	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for speech and language delay and disorders in children age 5 years and younger. (I statement)
Thyroid Dysfunction: Screening in Nonpregnant Adults	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for thyroid dysfunction in nonpregnant, asymptomatic adults. (I statement)
Tobacco Smoking Cessation: Behavioral and Pharmacotherapy Interventions for Adults, Including Pregnant Women	The USPSTF recommends that clinicians ask all adults about tobacco use, advise them to stop using tobacco, and provide behavioral interventions and U.S. Food and Drug Administration–approved pharmacotherapy for cessation to adults who use tobacco. (Grade A) The USPSTF recommends that clinicians ask all pregnant women about tobacco use, advise them to stop using tobacco, and provide behavioral interventions for cessation to pregnant women who use tobacco. (Grade A) The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of pharmacotherapy interventions for tobacco cessation in pregnant women. (I statement) The USPSTF concludes that the current evidence is insufficient to recommend electronic nicotine delivery systems for tobacco cessation in adults, including pregnant women. The USPSTF recommends that clinicians direct patients who smoke tobacco to other cessation interventions with established effectiveness and safety. (I statement)
Vitamin D: Screening in Adults	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for vitamin D deficiency in asymptomatic adults. (I statement)

The experience of disease and disability among women has unique transgenerational implications not only for themselves but for their children, their parents, their spouses, and even their communities.

Our medical and scientific understanding of women's health has evolved tremendously in the last century. Historically, the focus has been almost exclusively on pregnancy and childbirth, and subsequently on the health and function of the female reproductive tract. The more recent conceptualization advanced by women's advocates, the National Institutes of Health, and researchers in this area has focused on diseases or conditions that are unique to women, more prevalent in women, and more serious in women, as well as those for which the risk factors or interventions are different for women (Kirchstein, 1991). More recent and comprehensive definitions include consideration of mental well-being, as well as social and economic contextual considerations (Office of Research on Women's Health, 2010).

The USPSTF recognizes the complexity of women's health and acknowledges the larger impact of preventive interventions on the health and well-being of women and girls. For the purpose of this report, we take a broader view of women's health, focusing in particular on the prevention of diseases or conditions not related to pregnancy and reproductive health. We highlight important evidence gaps for high-priority issues affecting women and girls for which the Task Force has issued an I statement or for which there are substantial gaps in the data to inform clinical practice. These areas, identified through a deliberative process of expert opinion, represent unique opportunities to improve the health of women and girls by advancing the science that underpins the Task Force's recommendations. Although there are many important evidence gaps that affect other populations, addressing these notable unanswered questions in women's health has a broader population impact, and in so doing, can advance the health of the Nation.

V. HIGH-PRIORITY EVIDENCE GAPS FOR CLINICAL PREVENTIVE SERVICES: FOCUS ON WOMEN

While women have traditionally enjoyed longer life expectancy and better health compared with men, this may be changing for the worse. Between 1992 and 2006, 42.8 percent of U.S. counties had increased mortality rates among women compared with only 3.2 percent among men. These increases were more common among non-Hispanic white women with less education living in the South and West. This growing disadvantage in women's health has implications not only for women but for their families as well.

The Task Force makes evidence-based recommendations about clinical preventive services to improve the health of all Americans. However, significant evidence gaps in key areas of women's health limit the full realization of these population health benefits, and limit the Task Force's ability to make definitive, science-based recommendations.

By requesting this annual report, Congress has recognized the opportunity for new research to provide the necessary evidence base on which the USPSTF can better focus its 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.

Since 2011, the Task Force has prepared for Congress an annual report on critical evidence gaps in the field of clinical preventive services (see **Appendices A, B, C, and D**). The Task Force encourages Congress to continue promoting research in the areas in which these evidence gaps remain. In 2013, the report focused on prevention in older adults. In 2014, the USPSTF focused on the evidence gaps related to the care of children and adolescents. In this report, the USPSTF has prioritized evidence gaps in clinical preventive services for women (see **Table 3**).

"The American Academy of Family Physicians (AAFP) represents more than 120,900 physicians and students who are committed to caring for all people, across the entire life span. Over the years, we've seen more and more research that addresses the specific health care needs of women, but evidence gaps still exist. The AAFP is proud to support the USPSTF in its efforts to highlight these issues in this report."

– American Academy of Family Physicians (AAFP)
Robert Wergin, MD, President

Table 3. Key Evidence Gaps for Clinical Preventive Services in Women

Condition	Key Research Gaps
Intimate Partner Violence	1. Newer screening approaches, such as computerized screening and audio questionnaires 2. Development and validation of an accepted definition for standard of abuse 3. Screening and intervention trials focused on the prevention of abuse in elderly, vulnerable, and middle-aged women
Illicit Drug Use	1. Treatment outcomes for pregnant women 2. Accuracy and clinical usefulness of screening questionnaires designed for primary care practice settings 3. Effectiveness of screening in screen-detected patients 4. Effectiveness of treatment on social and legal problems, long-term health outcomes, and morbidity
Major Depressive Disorder	1. Optimal screening intervals 2. Optimal timing for screening in pregnant and postpartum women 3. Effectiveness of treatment (psychotherapy vs. psychotherapy combined with antidepressants) in pregnant and postpartum women
Suicide Risk	1. Development of a risk assessment tool to better identify people at risk for suicide 2. Effectiveness of tailored therapies in people at high risk 3. Linkages between clinical and community resources to help people at risk for suicide
Thyroid Dysfunction	1. Understanding the natural history of untreated, asymptomatic thyroid dysfunction 2. Effectiveness and harms of treating thyroid dysfunction in adults without symptoms 3. Treatment trials of watchful waiting using health outcomes, such as cardiovascular-related morbidity and mortality
Vitamin D Deficiency	1. Determining the level that defines vitamin D deficiency and the optimal method of measurement in different populations 2. Benefits and harms of screening for and treatment of vitamin D deficiency 3. Benefits of early treatment in specific vitamin D–deficient populations, such as nonwhite racial groups

Condition	Key Research Gaps
Vitamin D and Calcium Supplementation	1. Benefits of daily supplementation with higher doses of vitamin D and calcium in reducing the risk of fractures in postmenopausal women 2. Effectiveness of different preparations of vitamin D or different calcium formulations 3. Effectiveness of vitamin D supplementation in diverse populations
Osteoporosis	1. Effects of screening on outcomes during menopause 2. Incidence of major osteoporosis-related fractures in nonwhite women 3. Optimal screening intervals 4. Accuracy of risk assessment tools for predicting fractures in younger postmenopausal women
Breast Cancer	1. Effects of new technology (3-D mammography) on improving long-term health outcomes 2. Long-term health outcomes in women with dense breasts who receive additional testing beyond mammography 3. Improving the accuracy and reliability of breast density assessment
Ovarian Cancer	1. Effectiveness of new screening methods and treatment strategies on improving benefits and reducing harms
Cervical Cancer	1. Optimal approach to screening using new technologies 2. Harms of different screening and treatment options, including long-term risks to future pregnancies 3. Effect of human papillomavirus vaccination on cervical cancer screening

Screening for Intimate Partner Violence, Illicit Drug Use, and Mental Health Conditions

Intimate Partner Violence

Intimate partner violence and abuse is common in the United States but often remains undetected and underreported. Nearly 31 percent of women report experiencing some form of intimate partner violence in their lifetime. In addition to its immediate effects, such as injury and death, there are other health consequences, including sexually transmitted diseases, other reproductive disorders, and unintended pregnancy. Women who experience intimate partner violence suffer pain and can develop gastrointestinal problems, severe headaches, and other physical problems. It can lead to mental health problems such as depression, posttraumatic stress disorder, anxiety, alcohol and drug abuse, and suicidal behavior.

The USPSTF recognizes the importance of this health problem and has identified several areas that should be prioritized for research. Evidence is needed on the use of newer screening approaches, such as computerized screening and audio questionnaires, with a focus on the accuracy, efficiency, and acceptability of these methods. The broad and inconsistent definitions of abuse present challenges for creating new screening tools. Further research on the development and validation of an accepted definition or standard of abuse would help with a more accurate assessment of performance measures and allow screening tools to be more readily compared with each other. Good-quality randomized, controlled trials focusing on both screening and interventions to prevent the abuse of elderly, vulnerable, and middle-aged women are needed.

Illicit Drug Use

Illicit drug use and abuse are serious problems that lead to significant health consequences, such as death, overdose, infection (e.g., HIV or hepatitis), and addiction, as well as poor health outcomes during pregnancy for both the mother and her baby. Social consequences of illicit drug use include decreased economic productivity, child abuse, family violence, and crime. In the United States, it ranks among the 10 leading preventable risk factors for years of healthy life lost to death and disability.

The most significant research gap identified by the USPSTF is whether patients identified by screening as using illicit drugs may respond differently to treatment than patients with a drug misuse problem who seek treatment on their own. For example, there may be differences in the motivation for treatment, previous consequences of substance use, or severity of substance use problems. In addition, studies are needed to more clearly establish the effect of treatment on social and legal problems, long-term health outcomes, and reducing deaths. More studies are needed that specifically assess treatment outcomes for pregnant women. Finally, additional research is needed to evaluate the accuracy and clinical usefulness of questionnaires designed to screen for illicit drug use/misuse in primary care practice settings.

Depression

Major depressive disorder is a common and significant health care problem. From 2009 to 2012, approximately 7 percent of the U.S. population met the criteria for having a current depressive disorder. It is a leading cause of disability among adults in the United States and is often associated with a loss of productivity at work, impairment in relationships and social functioning, and an impaired ability to manage other health conditions. It is also a major risk factor for suicide. Depression rates are higher in women of reproductive age (10.9%).

There are several important gaps in the evidence regarding depression in the primary care setting, where many patients are identified and treated. For example, there is a lack of information from large-scale randomized, controlled trials on screening older women in settings that are applicable to the U.S. population. In addition, more research is needed on the choice between psychotherapy alone and psychotherapy combined with antidepressant treatment in pregnant and postpartum women. Studies are needed to better clarify the best timing for screening in pregnant and postpartum women. For all populations, there is a need for more research to identify how often clinicians should screen for depression.

Suicide Risk

In 2010, suicide was the 10th leading cause of death among all ages in the United States, and each year about 37,000 people die from suicide. In fact, many people who die from suicide saw a health care professional in the month before their death. The greatest risk factor for suicide is having a mental health disorder, such as depression, schizophrenia, posttraumatic stress disorder, or drug or alcohol abuse. Other risk factors for suicide include childhood trauma; a history of being bullied; a family history of suicide; being discriminated against because of being lesbian, gay, bisexual, or transgender; having a chronic health condition; and having the means to kill oneself.

The USPSTF has identified several key areas of research that are needed to improve the evidence base for screening for suicide risk in primary care. More research is needed on determining who is at greatest risk for suicide. Additional research is needed to evaluate currently available screening tests and to develop better methods to identify those at risk for suicide. Research comparing the benefits of screening the entire population versus targeted screening of specific high-risk populations would be helpful. Studies are needed to understand the effects of treatment on people of all ages who have been identified through screening. Studies of high risk persons may help determine whether tailored therapies are more effective in these populations. Finally, investigating ways to link clinical and community resources may also lead to other ways of helping people at risk for suicide.

Screening for Thyroid Dysfunction

Thyroid problems are common, and women are 8 times more likely to develop thyroid dysfunction than men. Thyroid disease has been associated with cardiovascular disease, osteoporosis, and infertility. Although a test can accurately identify a person's thyroid stimulating hormone level, clinicians do not always agree about what level is "abnormal," because abnormal levels can differ in different groups. Abnormal levels can also return to normal. This means that many people without symptoms but with silent changes in laboratory values may receive long-term drug therapy, with limited evidence about whether clinicians are helping them by doing so.

The USPSTF has identified several research gaps about screening for thyroid dysfunction. Long-term observational studies are needed to better understand the natural history of untreated, asymptomatic thyroid dysfunction. Large clinical screening trials are needed to provide evidence on the potential benefits and harms of detecting and treating thyroid dysfunction in adults without symptoms. However, before conducting screening trials, it may be more feasible for researchers to conduct well-designed treatment trials of watchful waiting using health outcomes, such as cardiovascular-related morbidity and mortality, as the end points of interest.

Screening for Vitamin D Deficiency, Vitamin D and Calcium Supplementation to Prevent Fractures, and Screening for Osteoporosis

Vitamin D Deficiency

Vitamin D deficiency occurs when people don't eat enough vitamin D–rich foods, if their body is unable to absorb or use vitamin D, or if they have limited sun exposure. Symptoms of vitamin D deficiency are often subtle and can include bone pain and muscle weakness. It is unknown exactly how many people in the United States have vitamin D deficiency because experts disagree about its definition. Due to the varying definitions of deficiency, estimates of the percentage of people with vitamin D deficiency vary widely, from 19 to 77 percent. In general, people with dark skin or obesity have lower levels of vitamin D compared with other groups.

There are many tests that measure blood vitamin D levels. However, it is not clear how accurate these tests are. A critical gap in the evidence is the lack of an accurate screening strategy to identify vitamin D deficiency, especially in important subpopulations such as African Americans. Uncertainty about how to define vitamin D deficiency with a blood test may result in people being diagnosed as vitamin D deficient and being treated when they are, in fact, healthy. Therefore, further research is needed to determine the level that defines vitamin D deficiency and the best way to measure vitamin D levels in different populations. Given the uncertainty about how to measure and define

vitamin D deficiency, the evidence is also unclear on whether treatment of vitamin D deficiency identified through screening provides an overall health benefit. More studies are needed to evaluate how early treatment could provide health benefits in specific vitamin D–deficient populations, such as non-white racial groups. In addition, further studies are needed to evaluate the harms of screening for and treatment of vitamin D deficiency.

Vitamin D and Calcium Supplementation

Nearly half of all women older than age 50 years will have an osteoporosis-related fracture during their lifetime. Fractures are associated with chronic pain, disability, and decreased quality of life. Hip fractures, in particular, are associated with increased risk for death. Vitamin D and calcium are nutrients that work together to keep bones strong and healthy and may be given as supplements to prevent fractures.

Research is needed to determine whether daily supplementation with higher doses of vitamin D and calcium reduces the risk for fractures in postmenopausal women. The effectiveness of different preparations of vitamin D (e.g., D2 vs. D3) or different calcium formulations should also be evaluated. Prospective studies are needed on the potential benefits of vitamin D and calcium supplementation in women who have not yet gone through menopause on fracture risk later in life. Studies are needed to evaluate the effects of vitamin D supplementation in diverse populations, beyond the traditional focus on white women (who have the greatest risk for osteoporosis-related fractures).

Osteoporosis

As many as one in two postmenopausal women are at risk for an osteoporosis-related fracture. Osteoporosis is common in all racial groups but is most common in whites and Asians. Rates of osteoporosis increase with age, with elderly people being particularly susceptible to fractures.

All women should be screened for osteoporosis starting at age 65 years. For women ages 50 to 64 years, the need for screening is based on their risk for having an osteoporosis-related fracture over the next 10 years. If their risk is equal to or greater than that of an average 65-year-old woman, they should be screened. However, evidence gaps remain. Trials are needed of long-term health outcomes, such as reduced fractures and death, in both screened and nonscreened populations. Research to evaluate the outcomes of screening women during periods of rapid bone loss (menopause) is needed. The USPSTF recommends further research that would help clinicians in their decisionmaking about screening for osteoporosis, including studies to establish parameters for using quantitative ultrasound as a primary screening test; studies that establish the true incidence of major osteoporosis-related fractures in nonwhite women; studies on clarifying optimal screening intervals; and studies that evaluate the accuracy of risk assessment tools for predicting fractures in younger postmenopausal women and the effectiveness of these instruments in improving fracture outcomes.

Screening for Cancer

Breast Cancer

Breast cancer is one of the most common cancers in women, and is most common in women ages 55 to 64 years. In 2015, it is estimated that about 232,000 women will be diagnosed with breast cancer and 40,000 will die from it. Breast cancer is often detected by mammography.

Women who have dense breasts are at increased risk for developing breast cancer. Having dense breasts also reduces the ability of mammography to find and accurately identify breast cancer. Unfortunately, the evidence is limited on how additional screening, such as with ultrasound or MRI (magnetic resonance imaging), may help women with dense breasts. Therefore, additional research in this area would be valuable. Long-term randomized trials or longitudinal cohort studies are needed that examine health outcomes in women with dense breasts who are not otherwise at increased risk for breast cancer who receive additional testing compared with women who do not receive additional testing. These studies should assess important outcomes, such as breast cancer stage at

diagnosis, breast cancer recurrence rates, overdiagnosis rates, and breast cancer mortality. Research is also needed to improve the accuracy and reliability of breast density assessment. Three-dimensional mammography is a promising new technology for the detection of breast cancer. However, research is needed to determine whether this technology results in improved health outcomes among screened women.

Ovarian Cancer

Ovarian cancer is the fifth-leading cause of cancer-related death among women in the United States. Risk factors associated with ovarian cancer include a *BRCA1* or *BRCA2* genetic mutation, Lynch syndrome (hereditary nonpolyposis colon cancer), and a family history of ovarian cancer or combined ovarian and breast cancer. No screening method for ovarian cancer has been shown to be effective in reducing deaths.

Screening results in many false-positive test results, and consequently this may result in serious and unnecessary harms, such as major surgery. As a result, research is needed to develop new screening methods and treatment strategies for ovarian cancer that are effective in improving benefits and reducing harmful outcomes.

Cervical Cancer

Cervical cancer incidence and mortality have declined significantly in the United States since the introduction of screening with the Pap smear in the 1950s and 1960s. However, cervical cancer still remains a substantial public health issue. About 12,000 new cases of cervical cancer and 4,000 deaths from the disease occurred in 2010. Incidence rates vary by age, race, and ethnicity. Hispanic and African American women have the highest rates, and women ages 35 to 55 years are most likely to have a cancer diagnosis.

In 2012, the USPSTF found convincing evidence that screening for cervical cancer with a Pap smear every 3 years in women ages 21 to 65 years prevents cervical cancer and related deaths. In addition, for the first time, the USPSTF stated that women ages 30 to 65 years could have similar benefit with less frequent screening (every 5 years) if they added a test for HPV (human papillomavirus) to the traditional Pap smear.

However, more research is needed to more fully understand the optimal approach to screening for cervical cancer using new technologies, especially the use of HPV testing alone as a screening method. More data are needed on the potential harms of different screening and treatment options, including long-term risks to future pregnancies. Furthermore, research is needed to understand whether current cervical cancer screening recommendations should change as young women become routinely immunized against HPV. Research in these areas would allow the USPSTF to provide more information to clinicians and women as they make decisions together about the best approach to screening for cervical cancer.

Implementing Clinical Preventive Services

Although the USPSTF does not review the evidence for best practices in implementing clinical preventive services, there are critical research questions about how Task Force recommendations can best be implemented in primary care practice. More implementation and translational research in this area will increase the value of the USPSTF's work to population health. The following are a few examples of areas where implementation research is needed.

How Can We Help More Women Get Screened for Cervical Cancer?

Most cases of cervical cancer occur in women who have not been appropriately screened—they have never been screened, they have not been screened recently, or they did not have appropriate followup care for abnormal test results. Strategies that aim to ensure that all women are screened at appropriate intervals and receive adequate followup are most likely to be successful in further reducing cervical cancer and related deaths in the United States. More research is needed to understand what factors are associated with inadequate screening and how to help deliver the best screening and treatment to women in clinical settings.

How Can We Help More Women Talk to Their Doctors About Screening for Breast Cancer?

Mammography is an important tool in the fight against breast cancer. Evidence indicates that the value of mammography increases with age. Women ages 40 to 49 years should make their own decision whether to get a mammogram, in consultation with their clinicians. This decision should be based on their health history, family history, individual risk for breast cancer, and individual preferences.

In addition, women who are at increased risk for the BRCA gene mutation that causes breast and ovarian cancer should be identified for genetic counseling, and women at high risk for breast cancer should consider medications to prevent breast cancer. However, these decisions are complex. Research is needed to develop tools that help women and their clinicians make decisions about screening that are consistent both with the best evidence and with women's values and preferences.

How Can We Help Women Receive Integrated Screening and Support Services for Intimate Partner Violence, Substance Abuse, and Mental Health Conditions?

Timely identification of women who are suffering from intimate partner violence, illicit drug use, depression, and suicide risk is an important first step to addressing these important health conditions. Effective treatment requires intensive support from a multidisciplinary team that includes clinicians, mental health professionals, and social and public support services. Primary care clinicians need the support of the broader health care delivery system, community resources, and social support services. More evidence is needed to understand how to integrate screening and treatment for behavioral health conditions in health care settings and how entities can partner in a sustainable manner to support women's health.

"The American College of Nurse-Midwives (ACNM) sets the standard for excellence in education and practice of midwifery in the United States. As an organization, we are committed to strengthening research to support evidence-based care practices for women and their families. ACNM joins the Task Force in its call for more research on women's health."

– American College of Nurse-Midwives (ACNM)
Ginger Breedlove, PhD, CNM, APRN, FACNM, President

VI. NEXT STEPS FOR THE USPSTF IN 2016

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

- Continue its work on more than 40 topics that are in progress
- Continue work on several new topics nominated for consideration through the public topic nomination process
- Post 10 draft research plans and 10 draft recommendation statements and evidence reports for public comment
- Publish 10 final recommendation statements
- Continue to coordinate closely with the CPSTF to improve the Nation's ability to benefit from the full spectrum of prevention
- Prepare a sixth annual report for Congress on high-priority evidence gaps

VII. CONCLUSION

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

References

Institute of Medicine. Clinical Preventive Services for Women: Closing the Gaps. Washington, DC: National Academies Press; 2011.

Kirschstein RL. Research on women's health. *Am J Public Health*. 1991;81(3):291-3. PMID: 1994737.

Office of Research on Women's Health. Moving Into the Future With New Dimensions and Strategies for Women's Health Research: A Vision for 2020 for Women's Health Research. Bethesda, MD: National Institutes of Health; 2010.

APPENDICES

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

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 infants, 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 previous three 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 previous annual reports would have been addressed by clinical researchers. 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 children and adolescents. More research in these areas would likely result in important new recommendations that will help improve the health and health care of young Americans, with lasting benefits through adulthood.

Priorities for Improving the Health of Children and Adolescents Through Research on Clinical Preventive Services:

1. Mental Health Conditions and Substance Abuse
2. Obesity and Cardiovascular Health
3. Behavior and Development
4. Infectious Diseases
5. Cancer Prevention
6. Injury and Child Maltreatment
7. Vision Disorders

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.

To view the full report, visit: http://www.uspreventiveservicestaskforce.org/Page/Name/fourth-annual-report-to-congress-on-high-priority-evidence-gaps-for-clinical-preventive-services.

APPENDIX B: SUMMARY OF THIRD 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 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 USPSTF's first two annual reports would have been addressed. The USPSTF, therefore, encourages Congress to continue promoting research to address these gaps.

In the third annual report, issued in November 2013, the USPSTF 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.

High-Priority Evidence Gaps for Clinical Preventive Services: Focus on Older Adults

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 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/Page/Name/third-annual-report-to-congress-on-high-priority-evidence-gaps-for-clinical-preventive-services.

APPENDIX C: 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/Page/Name/second-annual-report-to-congress-on-high-priority-evidence-gaps-for-clinical-preventive-services.

APPENDIX D: 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/Page/Name/first-annual-report-to-congress-on-high-priority-evidence-gaps-for-clinical-preventive-services.

APPENDIX E: 2015 MEMBERS OF THE USPSTF

Albert L. Siu, M.D., M.S.P.H. (Chair)

Dr. Siu is the Ellen and Howard C. Katz Mount Sinai Health System 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 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.

Kirsten Bibbins-Domingo, Ph.D., M.D., M.A.S. (Co-Vice Chair)

Dr. Bibbins-Domingo is the Lee Goldman, MD, 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; racial, ethnic, and income disparities in health; and clinical and public health interventions aimed at chronic disease prevention.

David C. Grossman, M.D., M.P.H. (Co-Vice Chair)

Dr. Grossman is a board-certified pediatrician recognized for his research on clinical preventive services, injury prevention, and Native American health. He is a practicing pediatrician at Group Health, where he is medical director for population health strategy, and a senior investigator at the Group Health Research Institute in Seattle, WA. Dr. Grossman is also a professor of health services and adjunct professor of pediatrics at the University of Washington. He recently concluded service with 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.

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, a member of the 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. The book is now in its fifth edition. Dr. Baumann's areas of expertise are global public health, chronic disease management, and behavioral health promotion.

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

Dr. Davidson is a professor of medicine and psychiatry and the director of the Center for Behavioral Cardiovascular Health at Columbia University Medical Center. She is also a psychologist in the Department of Psychiatry at New York Presbyterian Hospital/Columbia University Medical Center. Dr. Davidson's research focuses on behavioral and biopsychosocial influences on cardiovascular disease.

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

Dr. Ebell is a professor of epidemiology and biostatistics at The University of Georgia and a family physician. An author of more than 300 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.

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. He is also the distinguished outreach professor of public health at the University of Arizona. Dr. García 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 University of 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.

Matthew W. Gillman, M.D., S.M.

Dr. Gillman is a professor and director of the Obesity Prevention Program in the Department of Population Medicine at Harvard Medical School and Harvard Pilgrim Health Care Institute. He is also a professor in the Harvard T.H. Chan School of Public Health Department of Nutrition. His research interests include early-life prevention of childhood and adult diseases, particularly obesity, diabetes, asthma, and cardiovascular disease; individual and policy-level interventions to prevent obesity and its consequences; and childhood cardiovascular risk factors. Formerly an internal medicine and pediatrics primary care physician, Dr. Gillman's current clinical work is in preventive cardiology in children at Boston Children's Hospital.

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

Dr. Herzstein, a board-certified specialist in preventive medicine and internal medicine, is an independent consultant in occupational, environmental, and preventive health. She teaches and conducts research in clinical preventive services, with special interest in risk communication, shared decisionmaking, and noncommunicable disease prevention. She is an advisor to a public-private partnership that aims to reduce obesity and change health risk behavior in Mexico. She previously directed occupational health and health programs in more than 50 countries for a Fortune 300 manufacturing company. Dr. Herzstein has more than 20 years of experience in teaching, research, patient care, health program administration, and health hazard assessment and risk communication.

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

Dr. Kemper is a board-certified pediatrician and professor of pediatrics at Duke University Medical School. He serves as the associate division chief for research in the Division of Children's Primary Care at Duke University. His clinical and research interests include improving the quality of care that children receive by strengthening the linkages between primary care, specialty care, and public health services. Dr. Kemper is also the deputy editor of *Pediatrics*.

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

Dr. Krist is an associate professor of family medicine and population health at Virginia Commonwealth University and active clinician and teacher at the Fairfax Family Practice residency. He is co-director of the Virginia Ambulatory Care Outcomes Research Network and director of community engaged research at the Center for Clinical and Translational Research. Dr. Krist's research focuses on implementation of preventive recommendations, patient-centered care, shared decisionmaking, cancer screening, and health information technology.

Ann E. Kurth, Ph.D., R.N., M.S.N., M.P.H.

Dr. Kurth is a professor in the New York University College of Nursing and the School of Medicine, Department of Population Health, as well as associate dean for research in the College of Global Public Health. As of January 2016, she will be the dean of the Yale School of Nursing. Dr. Kurth is a fellow of the American Academy of Nursing and the New York Academy of Medicine and an elected member of the Institute of Medicine/National Academy of Medicine. Dr. Kurth is a clinically-trained epidemiologist who studies approaches to improving HIV and sexually transmitted infection prevention, screening, and care; reproductive health; and global health workforce/system strengthening efforts.

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

Dr. Owens is a general internist at the Veterans Affairs Palo Alto Health Care System. He is the Henry J. Kaiser, Jr., professor at Stanford University, where he is also a professor of medicine, health research and policy (by courtesy), and management science and engineering (by courtesy), as well as senior fellow at the Freeman Spogli Institute for International Studies. Dr. Owens is director of the Center for Primary Care and Outcomes Research in the Stanford University School of Medicine and the Center for Health Policy in the Freeman Spogli Institute for International Studies. 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. William Phillips is the Theodore J. Phillips endowed professor in family medicine and clinical professor of health services and epidemiology at the University of Washington, Seattle. He teaches family medicine, primary care research, and preventive medicine to students from all health professions and related disciplines. Dr. Phillips 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.

Maureen G. Phipps, M.D., M.P.H.

Dr. Phipps is the department chair and Chace-Joukowsky professor of obstetrics and gynecology and assistant dean for teaching and research on women's health at the Warren Alpert Medical School of Brown University. She is also a professor of epidemiology in the School of Public Health at Brown University. In addition, she is the chief of obstetrics and gynecology at Women & Infants Hospital of Rhode Island and the executive chief of obstetrics and gynecology at Care New England. Her research focuses on improving health for vulnerable populations and her research interests include adolescent pregnancy, pregnancy outcomes, postpartum depression, prenatal care, contraception, and reducing disparities.

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

Dr. Michael 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, member of the Lineberger Cancer Center, senior research fellow at the Cecil Sheps Center for Health Services Research, and 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 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 F: 2015 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 Medical Association

American Osteopathic Association

American Psychological Association

Canadian Task Force on Preventive Health Care

Community Preventive Services Task Force

Consumers Union

National Association of Pediatric Nurse Practitioners

National Business Group on Health

National Committee for Quality Assurance

APPENDIX G: 2015 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 H: CHILD AND MATERNAL HEALTH WORKGROUP MEMBERS

U.S. Preventive Services Task Force

Francisco García (Chair), M.D., M.P.H.

Matthew Gillman, M.D., S.M.

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

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

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

Ann Kurth, Ph.D., R.N., M.S.N., M.P.H.

Maureen Phipps, M.D., M.P.H.

Evidene-Based Practice Centers

Roger Chou, M.D. (Pacific Northwest EPC)

Paula Lozano, M.D., M.P.H. (Kaiser Permanente Research Affiliates EPC)

Agency for Healthcare Research and Quality

Karen Lee, M.D., M.P.H.

Iris Mabry-Hernandez (Lead), M.D., M.P.H.

APPENDIX I: COMPLETE LISTING OF ALL USPSTF RECOMMENDATIONS AS OF OCTOBER 2015

Grade	Title
A	***Aspirin to Prevent Ischemic Stroke: Preventive Medication for 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	**Aspirin to Prevent Myocardial Infarction: Preventive Medication for 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	***Bacteriuria: Screening in Pregnant Women** The USPSTF recommends screening for asymptomatic bacteriuria with urine culture in pregnant women at 12 to 16 weeks of gestation or at the first prenatal visit, if later.
A	***Cervical Cancer: Screening in Women Ages 21 to 65 (Cytology) or 30 to 65 (Cytology With HPV Testing) Years** 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	***Colorectal Cancer: Screening in Adults Ages 50 to 75 Years** The USPSTF recommends screening for colorectal cancer with 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	***Folic Acid: Supplementation in Women Planning or Capable of Pregnancy** 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	**Gonococcal Ophthalmia Neonatorum: Preventive Medication for Newborns** The USPSTF recommends prophylactic ocular topical medication for all newborns for the prevention of gonococcal ophthalmia neonatorum.
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.
A	***HIV: Screening in Adolescents and Adults Ages 15 to 65 Years** The USPSTF recommends screening for HIV infection in adolescents and adults ages 15 to 65 years. Younger adolescents and older adults who are at increased risk should also be screened.
A	***HIV: Screening in Pregnant Women** The USPSTF recommends screening all pregnant women for HIV, including those in labor who are untested and whose HIV status is unknown.

*Recommendations related to health of women.

Grade	Title
A	***Hypertension: Screening in Adults** The USPSTF recommends screening for high blood pressure in adults age 18 years and older. The USPSTF recommends obtaining measurements outside of the clinical setting for diagnostic confirmation before starting treatment.
A	**Lipid Disorders: Screening in Men Age 35 Years and Older** The USPSTF recommends screening for lipid disorders in men age 35 years and older.
A	***Lipid Disorders: 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 who are at increased risk for coronary heart disease.
A	***Syphilis: Screening in Adults at Increased Risk** The USPSTF recommends screening for syphilis infection in adults who are at increased risk.
A	***Syphilis: Screening in Pregnant Women** The USPSTF recommends screening for syphilis infection in all pregnant women.
A	***Tobacco Smoking Cessation: Behavioral and Pharmacotherapy Interventions for Nonpregnant Adults** The USPSTF recommends that clinicians ask all adults about tobacco use, advise them to stop using tobacco, and provide behavioral interventions and U.S. Food and Drug Administration–approved pharmacotherapy for cessation to adults who use tobacco.
A	***Tobacco Smoking Cessation: Behavioral Interventions for Pregnant Women** The USPSTF recommends that clinicians ask all pregnant women about tobacco use, advise them to stop using tobacco, and provide behavioral interventions for cessation to pregnant women who use tobacco.
B	**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.
B	***Abnormal Blood Glucose and Type 2 Diabetes Mellitus: Screening in Adults** The USPSTF recommends screening for abnormal blood glucose as part of cardiovascular risk assessment in adults ages 40 to 70 years who are overweight or obese. Clinicians should offer or refer patients with abnormal glucose to intensive behavioral counseling interventions to promote a healthful diet and physical activity.
B	***Alcohol Misuse: Screening and Counseling for Adults** The USPSTF recommends screening in adults age 18 years or older for alcohol misuse and providing persons engaged in risky or hazardous drinking with brief behavioral counseling interventions to reduce alcohol misuse.
B	***Aspirin to Prevent Preeclampsia: Preventive Medication for Pregnant Women** The USPSTF recommends the use of low-dose aspirin (81 mg/day) as preventive medication after 12 weeks of gestation in women who are at high risk for preeclampsia.

*Recommendations related to health of women.

Grade	Title
B	***BRCA-Related Cancer: Risk Assessment, Genetic Counseling, and Genetic Testing in Women at Increased Risk** The USPSTF recommends screening in women who have family members with breast, ovarian, tubal, or peritoneal cancer with one of several screening tools designed to identify a family history that may be associated with an increased risk for potentially harmful mutations in breast cancer susceptibility genes (*BRCA1* or *BRCA2*). Women with positive screening results should receive genetic counseling and, if indicated after counseling, BRCA testing.
B	***Breast Cancer: Preventive Medications for Women at Increased Risk** 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.
B	***Breast Cancer: Screening With Mammography in Women Ages 50 to 74 Years†** The USPSTF recommends biennial screening mammography for women ages 50 to 74 years. † *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)."*
B	***Breastfeeding: Interventions for Pregnant Women and New Mothers** The USPSTF recommends interventions during pregnancy and after birth to promote and support breastfeeding.
B	***Chlamydia: Screening in Pregnant Women Age 24 Years and Younger or Older Pregnant Women at Increased Risk** The USPSTF recommends screening for chlamydia in sexually active women age 24 years and younger and in older women who are at increased risk for infection.
B	**Dental Caries: Preventive Medication for Children Age 5 Years and Younger** The USPSTF recommends that primary care clinicians prescribe oral fluoride supplementation starting at age 6 months for children whose water supply is deficient in fluoride. The USPSTF recommends that primary care clinicians apply fluoride varnish to the primary teeth of all infants and children starting at the age of primary tooth eruption.
B	***Depression: Screening in Adolescents Ages 12 to 18 Years in Clinical Practices With Systems of Care** The USPSTF recommends screening for major depressive disorder in adolescents (ages 12 to 18 years) when systems are in place to ensure accurate diagnosis, psychotherapy (cognitive behavioral or interpersonal), and followup.
B	***Depression: Screening in Adults When Staff-Assisted Depression Care Supports Are in Place** 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.
B	***Falls Prevention: Interventions for Community-Dwelling Adults Age 65 Years and Older at Increased Risk** The USPSTF recommends exercise or physical therapy to prevent falls in community-dwelling adults age 65 years and older who are at increased risk for falls.
B	***Falls Prevention: Vitamin D in Community-Dwelling Adults Age 65 Years and Older at Increased Risk** The USPSTF recommends vitamin D supplementation to prevent falls in community-dwelling adults age 65 years and older who are at increased risk for falls.

*Recommendations related to health of women.

Grade	Title
B	***Gestational Diabetes Mellitus: Screening in Pregnant Women After 24 Weeks of Gestation** The USPSTF recommends screening for gestational diabetes mellitus in asymptomatic pregnant women after 24 weeks of gestation.
B	***Gonorrhea: Screening in Women Age 24 Years and Younger and Older Women at Increased Risk** The USPSTF recommends screening for gonorrhea in sexually active women age 24 years and younger and in older women who are at increased risk for infection.
B	***Healthful Diet and Physical Activity for Cardiovascular Disease Prevention: Counseling for Adults With Cardiovascular Risk Factors** The USPSTF recommends offering or referring adults who are overweight or obese and have additional cardiovascular risk factors to intensive behavioral counseling interventions to promote a healthful diet and physical activity for cardiovascular disease prevention.
B	***Hepatitis B Virus: Screening in Nonpregnant Adolescents and Adults** The USPSTF recommends screening for hepatitis B virus infection in nonpregnant adolescents and adults who are at high risk for infection.
B	***Hepatitis C Virus: Screening in Adults at High Risk and Adults Born Between 1945 and 1965** The USPSTF recommends screening for hepatitis C virus infection in adults at high risk for infection. The USPSTF also recommends offering one-time screening for hepatitis C virus infection to adults born between 1945 and 1965.
B	***Intimate Partner Violence: Screening in 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.
B	**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 who are at increased risk for coronary heart disease.
B	***Lipid Disorders: Screening in Women Ages 20 to 45 Years at Increased Risk for Coronary Heart Disease** The USPSTF recommends screening for lipid disorders in women ages 20 to 45 years who are at increased risk for coronary heart disease.
B	***Lung Cancer: Screening in Adults** The USPSTF recommends annual screening for lung cancer with low-dose computed tomography in adults ages 55 to 80 years who have a 30 pack-year smoking history and currently smoke or have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery.
B	***Obesity: Screening and Management in Adults** The USPSTF recommends screening for obesity in all adults. Clinicians should offer or refer patients with a body mass index of 30 kg/m^2 or greater to intensive, multicomponent behavioral interventions.
B	***Obesity: Screening in Children and Adolescents Ages 6 to 17 Years** The USPSTF recommends that clinicians screen for obesity in children age 6 years and older and offer or refer them to comprehensive, intensive behavioral interventions to promote improvement in weight status.

*Recommendations related to health of women.

Grade	Title
B	***Osteoporosis: Screening in Women Age 65 Years and Older and Younger Women at Increased Risk** The USPSTF recommends screening for osteoporosis in women age 65 years and 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.
B	***Sexually Transmitted Infections: Counseling for Sexually Active Adolescents and Adults at Increased Risk** The USPSTF recommends intensive behavioral counseling for all sexually active adolescents and for adults who are at increased risk for sexually transmitted infections.
B	***Skin Cancer: Counseling for Children, Adolescents, and Young Adults Ages 10 to 24 Years** 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.
B	***Tobacco Use: Interventions for 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.
B	**Visual Impairment: Screening in Children Ages 3 to 5 Years** 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.
C	**Abdominal Aortic Aneurysm: Screening in Men Ages 65 to 75 Years Who Do Not Smoke** The USPSTF recommends selectively offering screening for abdominal aortic aneurysm in men ages 65 to 75 years who have never smoked rather than routinely screening all men in this group.
C	***Breast Cancer: Screening With Mammography in Women Ages 40 to 49 Years†** 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. † *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, every 1–2 years for women age 40 years and older (B recommendation)."*
C	***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.
C	***Depression: Screening in Adults When Staff-Assisted Depression Care Supports Are Not in Place** 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.
C	***Falls Prevention: Multifactorial Risk Assessment With Comprehensive Risk Management for Community-Dwelling Adults Age 65 Years and 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 age 65 years and 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.

*Recommendations related to health of women.

Grade	Title
C	***Healthful Diet and Physical Activity for Cardiovascular Disease Prevention: Counseling for Adults Without Cardiovascular Risk Factors** 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.
C	**Lipid Disorders: 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 women age 20 years and older who are not at increased risk for coronary heart disease.
C	***Lipid Disorders: 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 Who Have Never Smoked** The USPSTF recommends against routine screening for abdominal aortic aneurysm in women who have never smoked.
D	***Aspirin or NSAIDs to Prevent 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	***Aspirin to Prevent Ischemic Stroke: Preventive Medication for 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	**Aspirin to Prevent Myocardial Infarction: Preventive Medication for 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	***Bacterial Vaginosis: Screening in 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	***Bacteriuria: Screening in Men and Nonpregnant Women** The USPSTF recommends against screening for asymptomatic bacteriuria in men and nonpregnant women.
D	***Beta-Carotene and Vitamin E to Prevent Cancer and Cardiovascular Disease: Supplementation in Adults** The USPSTF recommends against the use of beta-carotene or vitamin E supplements for the prevention of cardiovascular disease or cancer.
D	***BRCA-Related Cancer: Risk Assessment, Genetic Counseling, and Genetic Testing in Women at Low Risk** The UPSTF recommends against routine genetic counseling or BRCA testing for women whose family history is not associated with an increased risk for potentially harmful mutations in the *BRCA1* or *BRCA2* genes.

*Recommendations related to health of women.

Grade	Title
D	***Breast Cancer: Preventive Medication 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	***Breast Cancer: Teaching Breast Self-Examination†** 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/Page/Document/UpdateSummaryFinal/breast-cancer-screening-2002.*
D	***Carotid Artery Stenosis: Screening in Adults** The USPSTF recommends against screening for asymptomatic carotid artery stenosis in the general adult population.
D	***Cervical Cancer: Screening in Women Older Than Age 65 Years Who Have Had Adequate Prior Screening** 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	***Cervical Cancer: Screening in Women Who Have Had a Hysterectomy** 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 grade 2 or 3) or cervical cancer.
D	***Cervical Cancer: Screening in Women Younger Than Age 21 Years** The USPSTF recommends against screening for cervical cancer in women younger than age 21 years.
D	***Cervical Cancer: Screening With HPV Testing in Women Younger Than Age 30 Years** The USPSTF recommends against screening for cervical cancer with human papillomavirus (HPV) testing, alone or in combination with cytology, in women younger than age 30 years.
D	***Chronic Obstructive Pulmonary Disease: Screening With Spirometry in Adults** The USPSTF recommends against screening for chronic obstructive pulmonary disease with spirometry in adults.
D	***Colorectal Cancer: Screening in Adults Older Than Age 85 Years** The USPSTF recommends against screening for colorectal cancer in adults older than age 85 years.
D	***Coronary Heart Disease: Screening With Electrocardiography in Adults at Low Risk** The USPSTF recommends against screening with resting or exercise electrocardiography for the prediction of coronary heart disease events in asymptomatic adults at low risk for such events.
D	***Genital Herpes: Screening in Adolescents and Adults** The USPSTF recommends against routine serological screening for herpes simplex virus in asymptomatic adolescents and adults.

*Recommendations related to health of women.

Grade	Title
D	***Genital Herpes: Screening in Pregnant Women** The USPSTF recommends against routine serological screening for herpes simplex virus in asymptomatic pregnant women.
D	***Hormone Therapy With Combined Estrogen and Progestin: Preventive Medication for Postmenopausal Women** The USPSTF recommends against the use of combined estrogen and progestin for the prevention of chronic conditions in postmenopausal women.
D	***Hormone Therapy With Estrogen: Preventive Medication for Postmenopausal Women Who Have Had a Hysterectomy** The USPSTF recommends against the use of estrogen for the prevention of chronic conditions in postmenopausal women who have had a hysterectomy.
D	**Idiopathic Scoliosis: Screening in Adolescents** The USPSTF recommends against routine screening for idiopathic scoliosis in asymptomatic adolescents.
D	**Lead: 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	***Lead: Screening in Pregnant Women** The USPSTF recommends against routine screening for elevated blood lead levels in asymptomatic pregnant women.
D	***Ovarian Cancer: Screening in Women** The USPSTF recommends against screening for ovarian cancer in 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 Adults** The USPSTF recommends against routine screening for pancreatic cancer with abdominal palpation, ultrasonography, or serologic markers in asymptomatic adults.
D	**Prostate Cancer: Prostate-Specific Antigen-Based Screening in Men** The USPSTF recommends against prostate-specific antigen-based screening for prostate cancer.
D	***Syphilis: Screening in Adults** The USPSTF recommends against routine screening for syphilis infection in asymptomatic men and women who are not at increased risk for infection.
D	**Testicular Cancer: Screening in Adolescents and Adults** The USPSTF recommends against screening for testicular cancer in adolescents or adults.
D	***Vitamin D and Calcium to Prevent Fractures: Low-Dose Supplementation in Postmenopausal Women** The USPSTF recommends against daily supplementation with 400 IU or less of vitamin D and 1,000 mg or less of calcium for the primary prevention of fractures in noninstitutionalized, postmenopausal women.

*Recommendations related to health of women.

Grade	Title
I	***Abdominal Aortic Aneurysm: Screening in Women Ages 65 to 75 Years Who Have Ever Smoked** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for abdominal aortic aneurysm in women ages 65 to 75 years who have ever smoked.
I	***Abuse and Neglect: Screening in Elderly or Vulnerable Adults** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for abuse and neglect in all elderly or vulnerable (physically or mentally dysfunctional) adults.
I	**Alcohol Misuse: Screening and Counseling in 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: Preventive Medication for Adults Age 80 Years and 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 and older.
I	***Bacterial Vaginosis: Screening in 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	***Bladder Cancer: Screening in Adults** 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	***Breast Cancer: Screening in Women Age 40 Years and Older With Clinical Breast Examination†** 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 and 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/Page/Document/UpdateSummaryFinal/breast-cancer-screening-2002.*
I	***Breast Cancer: Screening in Women Age 75 Years and Older†** The USPSTF concludes that the current evidence is insufficient to assess the benefits and harms of screening mammography in women age 75 years and 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/Page/Document/UpdateSummaryFinal/breast-cancer-screening-2002.*
I	***Breast Cancer: Screening in Women With Digital Mammography or Magnetic Resonance Imaging†** 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. † *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/Page/Document/UpdateSummaryFinal/breast-cancer-screening-2002.*

*Recommendations related to health of women.

Grade	Title
I	**Child Maltreatment: Interventions for Primary Care** 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	**Chlamydia: Screening in Men** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for chlamydia in men.
I	***Chronic Kidney Disease: Screening in Adults** 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	***Cognitive Impairment: Screening in Older Adults** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for cognitive impairment.
I	***Colorectal Cancer: Screening With Computed Tomographic Colonography and Fecal DNA Testing** The USPSTF concludes that the evidence is insufficient to assess the benefits and harms of screening for colorectal cancer with computed tomographic colonography and fecal DNA testing.
I	***Coronary Heart Disease: Risk Assessment With Nontraditional Risk Factors in Adults** 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 to prevent such events. Nontraditional risk factors include 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	***Coronary Heart Disease: Screening With Electrocardiography in Adults at Intermediate or High Risk** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening with resting or exercise electrocardiography for the prediction of coronary heart disease events in asymptomatic adults who are at intermediate or high risk for such events.
I	**Dental Caries: Screening in Children Age 5 Years and Younger** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of routine screening for dental caries performed by primary care clinicians in children age 5 years and younger.
I	**Depression: Screening in Children Ages 7 to 11 Years** 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	***Drug Use: Screening in Adolescents, Adults, and Pregnant Women** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for illicit drug use in adolescents, adults, and pregnant women.

*Recommendations related to health of women.

Grade	Title
I	***Gestational Diabetes Mellitus: Screening in Pregnant Women Before 24 Weeks of Gestation** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for gestational diabetes mellitus in asymptomatic pregnant women before 24 weeks of gestation.
I	***Glaucoma: Screening in Adults** 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	**Gonorrhea: Screening in Men** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for gonorrhea in men.
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 and older.
I	**Hip Dysplasia: Screening in Infants** The USPSTF concludes that the evidence is insufficient to recommend routine screening for developmental dysplasia of the hip in infants.
I	**Hyperbilirubinemia: Screening in Infants** The USPSTF concludes that the evidence is insufficient to recommend screening for hyperbilirubinemia in infants to prevent chronic bilirubin encephalopathy.
I	***Hypertension: Screening in Children and Adolescents** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for primary hypertension in asymptomatic children and adolescents to prevent subsequent cardiovascular disease in childhood or adulthood.
I	***Iron: Supplementation in Pregnant Women** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of routine iron supplementation for pregnant women to prevent adverse maternal health and birth outcomes.
I	***Iron Deficiency Anemia: Screening in Pregnant Women** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for iron deficiency anemia in pregnant women to prevent adverse maternal health and birth outcomes.
I	**Iron Deficiency Anemia: Screening in Children Ages 6 to 24 Months** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for iron deficiency anemia in children ages 6 to 24 months.
I	**Lead: Screening in Children Ages 1 to 5 Years at Increased Risk** 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.

*Recommendations related to health of women.

Grade	Title
I	***Lipid Disorders: Screening in Children, Adolescents, and Young Adults Age 20 Years and Younger** 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 (age 20 years and younger).
I	***Multivitamins to Prevent Cardiovascular Disease and Cancer: Supplementation in Adults** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the use of multivitamins for the prevention of cardiovascular disease or cancer.
I	***Oral Cancer: Screening in Adults** The USPSTF concludes that the current evidence is screening for oral cancer in asymptomatic adults.
I	**Osteoporosis: Screening in Men** The USPSTF concludes that the current evidence is screening for osteoporosis in men.
I	***Peripheral Artery Disease and Cardiovascular Disease Risk Assessment: Screening With the Ankle-Brachial Index 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 cardiovscular disease risk assessment with the ankle-brachial index in adults.
I	***Skin Cancer: Counseling for 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 Adults** 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 Children Age 5 Years and Younger** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for speech and language delay and disorders in children age 5 years and younger.
I	***Suicide Risk: Screening in Adolescents, Adults, and Older Adults** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for suicide risk in adolescents, adults, and older adults in primary care.
I	***Thyroid Dysfunction: Screening in Nonpregnant Adults** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for thyroid dysfunction in nonpregnant, asymptomatic adults.
I	***Tobacco Smoking Cessation: Pharmacotherapy Interventions for Pregnant Women** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of pharmacotherapy interventions for tobacco cessation in pregnant women.

*Recommendations related to health of women.

Grade	Title
I	***Tobacco Smoking Cessation: Electronic Nicotine Delivery Systems for Adults, Including Pregnant Women** The USPSTF concludes that the current evidence is insufficient to recommend electronic nicotine delivery systems for tobacco cessation in adults, including pregnant women. The USPSTF recommends that clinicians direct patients who smoke tobacco to other cessation interventions with established effectiveness and safety.
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 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 Deficiency: Screening in Adults** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for vitamin D deficiency in asymptomatic adults.
I	***Vitamin D and Calcium to Prevent Fractures: High-Dose Supplementation in Postmenopausal Women** 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 and greater than 1,000 mg of calcium for the primary prevention of fractures in noninstitutionalized, postmenopausal women.
I	***Vitamin D and Calcium to Prevent Fractures: Supplementation in Premenopausal Women or 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	***Vitamins to Prevent Cardiovascular Disease and Cancer: Supplementation in Adults** The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the use of single- or paired-nutrient supplements (except beta-carotene and vitamin E) for the prevention of cardiovascular disease or cancer in adults.

*Recommendations related to health of women.


U.S. Preventive Services
TASK FORCE