U.S. Preventive Services Task Force Methods to Communicate and Disseminate Clinical Preventive Services Recommendations

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The U.S. Preventive Services Task Force (USPSTF) issues evidence-based screening and prevention recommendations, and key to this task is dissemination and implementation of these recommendations. The Task Force has recommendations for more than 84 topics; each USPSTF Recommendation Statement includes a letter grade, a topline summary to guide clinician interpretation in practice, and a summary of gaps in evidence to help catalyze clinically relevant research. The USPSTF aims to update existing topics regularly and considers new topics to add each year. Clearly communicating and disseminating each recommendation is a critical task to ensure maximum benefit from use of the recommendations. The primary USPSTF audience is primary care clinicians. Over time, other audiences have become interested in the USPSTF and these entities have broad and diverse needs, necessitating a range of communication platforms and approaches. This includes engagement with and input from topic experts, primary care and federal partners, and the public to help shape the development of the recommendations. It also includes engagement of partners to disseminate USPSTF recommendations to help ensure that the primary care workforce remains up-to-date on USPSTF recommendations. This paper outlines the approaches used by the USPSTF to both solicit input (e.g., public comment periods), as well as to facilitate dissemination of its recommendations to help improve the health of all Americans (e.g., web-based and mobile application tools, journal publications, and annual reports to Congress).

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INTRODUCTION

The U.S. Preventive Services Task Force (USPSTF) works to improve the health of all Americans by making and disseminating evidence-based recommendations about screening tests, counseling services, and preventive medications. Accurate interpretation and implementation of USPSTF recommendations is critical to improving the health and well-being of primary care patients. This is important, as it has been reported that Americans receive only half of recommended preventive services known to reduce mortality, morbidity, and improve quality of life.1,2 If there is unclear communication about whether the Task Force recommends or does not recommend a preventive service, individuals may not benefit from appropriate care or may be harmed by inappropriate care.3,4

The USPSTF’s main audience is primary care clinicians. Over the years, a broader audience has paid attention to USPSTF recommendations, including patients, advocacy groups, insurers, researchers, and health policymakers. Prior research has demonstrated that it is important to make recommendations easy to understand for patients in order to improve the quality of preventive care and uptake of preventive services.5,6 In response, the USPSTF expanded the ways in which it collaborates in developing and communicating recommendations to this increasingly diverse audience.

The USPSTF recommendations, on more than 84 preventive health services topics, are based on a systematic review of the evidence and a determination of the net balance of benefits and harms (Figure 1 provides the USPSTF recommendation grades). The USPSTF aims to update and revise each recommendation regularly and considers new topics to add each year.

Grades alone do not always convey the full information, as nuances in how and with which patients to implement a given recommendation are detailed in the rest of the Recommendation Statement. Conveying this complex information in a user-friendly format can be challenging and sometimes can be misunderstood. For example, an “I” statement indicates a lack of sufficient evidence for the USPSTF to adequately assess the balance of benefits and harms. The USPSTF communicates in the Recommendation Statement details about the evidence gaps that led to the I recommendation and information about how clinicians might put the recommendation into practice in a section titled, “Suggestions for Practice Regarding the I Statement.” A “C” recommendation connotes that there is at least moderate certainty of a small net benefit and the preventive service should be selectively offered. The Recommendation Statement provides additional details for clinicians to help them decide when the service should be selectively offered.

The USPSTF recognizes the importance of the National Academy of Sciences/National Academy of Medicine standards for clinical recommendation development, including having diversity within the recommendation development group, managing and vetting conflicts of interest,7 ensuring transparency with the recommendation development process, obtaining public input, and clearly articulating the recommendation.8 These standards are incorporated into the USPSTF’s methods. Additional guiding principles that the USPSTF follows when developing recommendations include basing recommendations on rigorous systematic reviews and, where applicable, meta-analyses of peer-reviewed research; involvement of a multidisciplinary team of primary care experts (physicians, advanced practice registered nurses, and public health and behavioral science experts) to develop the recommendations; and reviewing recommendation comments prior to distribution.9,10

This paper describes the key steps taken by the USPSTF to ensure transparency, clarity, and effective distribution of its recommendations. It outlines the methods that the USPSTF uses to engage topic experts, primary care and federal partners, the public, and others in developing, communicating, and disseminating recommendations. Challenges and opportunities around dissemination and effective implementation of evidence-based preventive services are discussed in the last section.

### Table 1

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<thead>
<tr>
<th>Grade</th>
<th>Definition</th>
<th>Suggestions for practice</th>
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<tbody>
<tr>
<td>A</td>
<td>USPSTF recommends the service. High certainty that net benefit is substantial.</td>
<td>Offer or provide.</td>
</tr>
<tr>
<td>B</td>
<td>USPSTF recommends. High certainty that net benefit is moderate or moderate certainty that net benefit is moderate to substantial.</td>
<td>Offer or provide.</td>
</tr>
<tr>
<td>C</td>
<td>USPSTF recommends selectively offering this service to individual patients based on professional judgment and patient preferences. At least moderate certainty that the net benefit is small.</td>
<td>Offer or provide for selected patients depending on individual circumstances.</td>
</tr>
<tr>
<td>D</td>
<td>USPSTF recommends against. Moderate or high certainty this service has no net benefit or that harms outweigh benefits.</td>
<td>Discourage use of this service.</td>
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<tr>
<td>I</td>
<td>USPSTF concludes that current evidence is insufficient to assess balance of benefits and harms. Evidence is lacking, of poor quality, or conflicting, and balance of benefits and harms cannot be determined.</td>
<td>Read clinical considerations version of Recommendation Statement. If service is offered, patients should understand uncertainty about balance of benefits and harms.</td>
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Figure 1. Interpreting U.S. Preventive Services Task Force (USPSTF) recommendations.

U.S. PREVENTIVE SERVICES TASK FORCE ENGAGES THE PUBLIC, PARTNERS, AND EXPERTS TO SHAPE RECOMMENDATIONS

The USPSTF maintains relationships with a variety of stakeholders to ensure a focus on important clinical prevention topics and to ensure that the research relevant
to each recommendation is considered. At each step of the recommendation development process—from topic nomination to finalizing an evidence review and Recommendation Statement—the USPSTF solicits and reviews input from the public, partners, and experts (Table 1).

Engaging the Public
The USPSTF engages the public in the development of recommendations in multiple ways. Members of the public can nominate a topic and make comments on the draft research plans, evidence reviews, and Recommendation Statements via the USPSTF website. All drafts are posted on the USPSTF website for a 4-week public comment period. All nominations and public comments are carefully reviewed and final research plans and Recommendation Statements include a brief summary of public comments and how the Task Force addressed them. Public comments have resulted in clarifications from draft to final stage of the research plans, evidence reviews, and Recommendation Statements. For example, based on public comments, the USPSTF clarified the Screening for Prostate Cancer research plan to be explicit that the evidence review would consider the evidence on benefits and harms for screening and treatment among African-American men and other men at high risk for prostate cancer.

To keep the public informed about USPSTF news, the Task Force sends notifications when draft materials are posted for public comment, when final materials are posted or published, and about other Task Force activities. These notifications are sent out through the USPSTF listserv (more than 44,000 individuals are on the listserv currently). To encourage listserv registration, at the start of each topic the Task Force sends an email to national primary care, specialty, patient, advocacy, and other stakeholder organizations with expertise and interest in the topic. The USPSTF lets these organizations know that a relevant topic is underway, they can submit comments, and they can register for the listserv to continue to get updates throughout the Recommendation Statement development process.

Engaging Partners
The USPSTF works with dissemination and implementation partner organizations that represent primary care clinicians, specialty societies, consumer organizations, and others involved in the delivery of preventive services. It also engages with a number of federal agencies and institutions, including NIH, Centers for Disease Control and Prevention, Department of Defense, Department of Veterans Affairs, and Centers for Medicare & Medicaid Services. By encouraging their members and staff to provide comments on all draft materials, these entities provide useful feedback about the primary care communities represented by the groups. Their feedback during the development of the recommendations also helps the recommendations be more useful in practice once they are finalized. Through ongoing discussions with the USPSTF, these organizations also keep the USPSTF apprised of major research initiatives that may produce new evidence. The USPSTF also encourages partners to nominate new topics for the USPSTF to consider.

Engaging Experts
The USPSTF routinely invites the input of topic experts, including subspecialists (e.g., oncologists, radiologists, cardiologists, and urologists), with specific expertise in the topics being reviewed. Clinical and professional organizations, especially organizations that have a recommendation or guideline on a topic, are notified that a topic is beginning and there will be opportunities for

<table>
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<th>Step</th>
<th>Input sources</th>
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<tr>
<td>Step 1: Topic nomination and prioritization</td>
<td>Anyone, including topic experts, partners, and the public, can nominate a new topic, or suggest an update to an existing topic, at any time via the USPSTF website.</td>
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<tr>
<td>Step 2: Draft and final research plans</td>
<td>Anyone, including topic experts, partners, and the public, can submit public comments. Topic experts help the USPSTF develop the analytic framework and serve as reviewers to provide guidance on key questions, populations of concern, and the research approach. Topic experts can also comment on draft research plan during the public comment period.</td>
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<tr>
<td>Step 3: Draft evidence review and draft Recommendation Statement</td>
<td>Anyone, including topic experts, partners, and the public can submit public comments. Topic experts work with team that conducts the systematic evidence review. Topic experts serve as reviewers and provide input on evidence behind draft recommendation.</td>
</tr>
<tr>
<td>Step 4: Final evidence review and final Recommendation Statement</td>
<td>Partners help disseminate final recommendations. Anyone can access all recommendations on USPSTF website and subscribe to email notifications.</td>
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USPSTF, U.S. Preventive Services Task Force.
them to submit comments throughout the process. The Evidence-based Practice Centers that conduct evidence reviews for the USPSTF include clinical specialists on their research teams, and seek peer review and input from topic experts relevant to the clinical topic being examined during the course of their systematic review or modeling work. These external experts are often nationally and internationally recognized leaders in the field; many of whom have led some of the relevant research on the topic.

U.S. PREVENTIVE SERVICES TASK FORCE COMMUNICATES ABOUT ITS RECOMMENDATIONS TO A BROAD AUDIENCE

USPSTF recommendations have a wide audience—primary care clinicians, patients, consumers, advocacy groups, insurers, researchers, and health policymakers. The Recommendation Statement is the culmination of the Task Force’s deliberations, designed for use by the main target audience of primary care clinicians. Each recommendation has a summary or “topline” synopsis of the recommendations to succinctly state the main message. For busy clinicians, the “topline” synopsis and the USPSTF letter grade help highlight the key preventive actions to enact. The full Recommendation Statement also contains sections such as Rationale, Clinical, and Other Considerations. Researchers and policymakers can use some of these sections to examine gaps in evidence that inform future research needs.

The USPSTF is strongly committed to providing information in its Recommendation Statements that support their effective use by clinicians. Although the USPSTF is unable to directly support recommendation implementation within primary care practices and health systems, whenever possible, it provides information in its Recommendation Statements about factors that may affect implementation. More specifically, it does this in the Implementation section of Other Considerations and Clinical Considerations of its Recommendation Statements. For example, the 2016 Screening for Syphilis Infection in Nonpregnant Adults and Adolescents includes an extensive Clinical Considerations section that describes how to implement the recommendation in a variety of different settings, depending on the patient population.11 In addition, the 2016 USPSTF Latent Tuberculosis Infection Screening recommendation discussed lab requirements and scheduling issues related to use of the two types of available screening tests.12

The USPSTF recognizes that prevention approaches that incorporate behavioral counseling can be more difficult to implement with fidelity and consistency, particularly in busy clinical settings with large numbers of patients and limited time.13 For these services, specific guidance may be helpful.14 In the 2015 recommendation on Tobacco Smoking Cessation in Adults, Including Pregnant Women: Behavioral and Pharmacotherapy Interventions, the USPSTF provided a table summarizing the key components of effective counseling interventions for this topic.15 The USPSTF is exploring the utility of the Template for Intervention Description and Replication16 framework, which outlines details involved in delivering a counseling intervention, including type of provider, training, intervention intensity, delivery mode, content, and expected outcomes. The USPSTF will continue to seek ways to communicate evidence-based implementation methods like this to assist clinicians in practice.

Recognizing the importance of widely disseminating its recommendations, the USPSTF communicates with the public and media to better convey recommendations and processes. Also, USPSTF members speak about the Task Force work by giving talks and engaging with practicing clinicians, subspecialty societies, and advocacy groups.

U.S. PREVENTIVE SERVICES TASK FORCE USES MULTIPLE METHODS TO DISSEMINATE

The USPSTF has its own Dissemination and Implementation Workgroup that focuses on dissemination methods, developing tools to support recommendation implementation, and new trends in dissemination strategies. The USPSTF Dissemination and Implementation Workgroup is currently exploring theoretical frameworks that it can tailor to the Task Force and use consistently to guide and assess the impact of its work in the future.

Final recommendations and associated materials are posted on the USPSTF website (www.uspreventiveservicestaskforce.org) and are published in the Journal of the American Medical Association (JAMA). Previously, they were published in Annals of Internal Medicine and Pediatrics. The USPSTF also uses a variety of web-based and mobile application tools, annual reports to Congress, and engages with partners to disseminate its recommendations.

Web Tools and Resources

The USPSTF Recommendation Statements, Evidence-based Practice Centers—generated evidence reports, and other supporting materials are posted on the USPSTF website. The website provides information on the Task
Force itself, its members, and Task Force methodologies. The USPSTF also disseminates news bulletins as well as clinical summaries on its website (Figure 2).

The USPSTF develops dedicated materials for patients and consumers to help increase the uptake of its recommended preventive services. For draft Recommendation Statements, the USPSTF disseminates a consumer guide to describe the recommendation in plain language and to let consumers know there is an opportunity to submit public comments. For final Recommendation Statements, JAMA publishes a similar plain-language summary on its patient page for each recommendation. Clinicians can share these materials with their patients to encourage uptake of recommended clinical preventive services.

The USPSTF recommendations are also distributed via listservs and onto a primary care screening app known as the Electronic Preventive Services Selector (ePSS), available for phones and mobile devices at http://epss.ahrq.gov. The ePSS application (web and mobile versions) helps primary care clinicians identify clinical preventive services that are appropriate for their patients, and includes a search and browse feature of all Task Force recommendations (Figure 2). The USPSTF ePSS website receives around 2.7 million visits per year. In 2016, the mobile app was downloaded to 73,768 smartphones or iPads. More than 55 vendors use ePSS to access and use the data within their own applications, including electronic health record vendors and others. For consumers, www.healthfinder.gov is an interactive online tool based on USPSTF recommendations that describes the recommendations in plain language and helps people determine which preventive services they may need based on age, sex, and pregnancy status.

Journal Publication
All final Recommendation Statements and evidence summaries published directly in JAMA are made available to nonsubscribers free of charge by visiting and downloading from the JAMA or USPSTF websites. The 2016 recommendations published on the JAMA website have received an average of nearly 55,000 views (range, 16,000–192,000). JAMA develops supplemental
materials, including editorials, pages for patients/consumers, and podcast interviews, for all final Recommendation Statements. Podcast views in 2016 ranged from approximately 1,200 to 9,500. For some recommendations, JAMA produces additional explanatory materials, including videos and whiteboard animations.

Partnering to Disseminate U.S. Preventive Services Task Force Recommendations
The USPSTF works to increase awareness of its recommendations with the partners described previously, including federal agencies and national organizations representing primary care clinicians, consumers, and other stakeholders. The USPSTF asks partners to disseminate its recommendations to their members so that the primary care workforce remains up-to-date on USPSTF recommendations. For example, the American Academy of Family Physicians publishes USPSTF recommendations in their journal, American Family Physician, along with companion “Putting Prevention into Practice” articles, often with continuing education credits.

Reports to Congress
The USPSTF prepares, submits, and distributes an Annual Report to the U.S. Congress that identifies gaps in the scientific evidence base and recommends priority areas for future research. Themed reports have addressed older adults (2013), children and adolescents (2014), and women’s health (2015).

The USPSTF also shares these reports with NIH and other partners. NIH examines the research gaps identified by the USPSTF and discusses opportunities for funding to address these gaps. The USPSTF also communicates to other funders of clinical research, such as the Patient-Centered Outcomes Research Institute.

Dissemination Beyond the USPSTF Efforts
Although outside the purview of the USPSTF, there are Agency for Healthcare Research and Quality—supported efforts that help with implementation of USPSTF recommendations. An example of this is the John M. Eisenberg Center for Clinical Decisions and Communications Science, which translates evidence reviews produced by Agency for Healthcare Research and Quality’s Effective Health Care Program into plain language summaries and tools that can be used by consumers, clinicians, and policymakers. For example, the Eisenberg Center has developed a Lung Cancer toolkit based on the 2013 USPSTF recommendation on Screening for Lung Cancer. MedScape, an online source for medical news, also reports on USPSTF recommendations and often includes reaction to the USPSTF recommendations from clinical leaders and specialists in the topical area.

Dissemination partners that have specific ties to communities that may be harder to reach also helps assure broad dissemination, including to providers and individuals in communities that might be subject to health disparities. Given the limited resources of the USPSTF, the ripple effect of these partners’ dissemination work is valuable.

Dissemination and Implementation Opportunities
The Task Force is interested in understanding how the target audience uses recommendations, factors that affect the usability, and how USPSTF recommendation implementation may be improved. There is a large and growing literature on lessons learned around implementation of clinical recommendations. Although beyond the direct scope of the USPSTF, several studies have assessed some of the issues facing clinicians when implementing Task Force–recommended screenings and preventive services in primary care settings. A report done in 2009 examined factors related to USPSTF recommendation dissemination, adoption, integration, and delivery within health systems. A more recent report on large health systems identified that USPSTF recommendations are highly trusted, though the Task Force is only one of several sources of recommendations that systems and practicing providers have to consider. Some common approaches and internal and external factors in health system implementation of USPSTF recommendations were identified.

CONCLUSIONS
The goal of the USPSTF dissemination work is to effectively communicate evidence-based screening and prevention recommendations to primary care clinicians and health systems in the U.S.; to stimulate research and discourse; and to communicate to stakeholders about evidence-based screening and prevention in primary care. Successful implementation of recommendations can help improve clinical preventive practices and ultimately improve patient and population health. This depends upon effective recommendation development, distribution, communication, and uptake by clinicians, patients, and healthcare systems, among other factors. This paper has described the principles, procedures, and partnerships that the USPSTF uses throughout its process to enhance the development of the recommendations, as well as dissemination and communication of its recommendations and their ultimate implementation in patient care. These methods and principles have evolved over time, as has the audience for USPSTF recommendations. Ever-improving methods to not only develop but also to effectively disseminate—and
ultimately implement—recommendations are critical for researchers, clinicians, and health systems. They are crucial to ensure that USPSTF recommendations are not only trusted, but are used, to improve morbidity and mortality among all Americans.

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