U.S. Preventive Services Task Force: Overview and Topic Referral to the Discretionary Advisory Committee on Heritable Disorders in Newborns and Children

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Goals

- Improve understanding of the U.S. Preventive Services Task Force (USPSTF or Task Force)
- Explain the connection between the USPSTF & the Agency for Healthcare Research and Quality (AHRQ)
- Describe how the Task Force develops recommendations
- Discuss the process for topic referral to other organizations



Overview

The U.S. Preventive Services Task Force...

- Makes recommendations on clinical preventive services to primary care clinicians
 - The USPSTF scope for clinical preventive services include:
 - screening tests
 - counseling
 - preventive medications
 - Recommendations address only services offered in the <u>primary care</u> setting or services <u>referred by a primary care clinician</u>.
 - Recommendations apply to adults & children with <u>no signs or symptoms</u>



Overview, cont'd.

The U.S. Preventive Services Task Force...

- Makes recommendations based on rigorous review of existing peerreviewed evidence
 - Does not conduct the research studies, but reviews & assesses the research
 - Evaluates <u>benefits & harms</u> of each service based on factors such as age & sex
- Is an independent panel of non-Federal experts in prevention & evidenced-based medicine



USPSTF Members

- The 16 volunteer members represent disciplines of primary care including family medicine, internal medicine, nursing, obstetrics/gynecology, pediatrics, and behavioral medicine
- Led by a Chair & Vice Chairs
- Serve 4-year terms
- Appointed by AHRQ Director with guidance from Chair & Vice Chairs
- Current members include deans, medical directors, practicing clinicians, and professors
 - http://www.uspreventiveservicestaskforce.org/members.htm



AHRQ's Support of the Task Force

- AHRQ's Mission: to produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable, and to work within the U.S. Department of Health and Human Services and with other partners to make sure that the evidence is understood and used.
- AHRQ provides administrative, scientific, technical, and dissemination support to the USPSTF
- AHRQ's Director, with guidance from the USPSTF Chair & Vice Chairs, appoints USPSTF members
- While AHRQ provides support to the USPSTF, it is important to note that the USPSTF is an independent entity



Topic Nomination

- How are topics nominated for review?
 - Anyone can nominate a topic for the USPSTF to consider via its Web site http://www.uspreventiveservicestaskforce.org/tftopicnon.htm
 - The public may:
 - Suggest a new preventive service topic
 - Recommend reconsideration of an existing topic due to:
 - Availability of new evidence
 - Changes in the public health burden of the condition
 - Availability of new screening tests supported by new evidence
 - Topic nominations are accepted all year round and are considered by the USPSTF at its three annual meetings



Create Research Plan

Develop Evidence Review and Recommendation Statement

Disseminate Recommendation







Create Research Plan

Develop Evidence Review and Recommendation Statement

Draft Evidence Review:

Using the final Research Plan, the research team at the EPC independently gathers and reviews the available published evidence and creates a draft Evidence Review.

then

Draft Recommendation Statement:

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

Opportunity for Public Comment:

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

Finalize Evidence Review:

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

then

Finalize Recommendation Statement:

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

Disseminate Recommendation



Create Research Plan

Develop Evidence Review and Recommendation Statement

Disseminate Recommendation

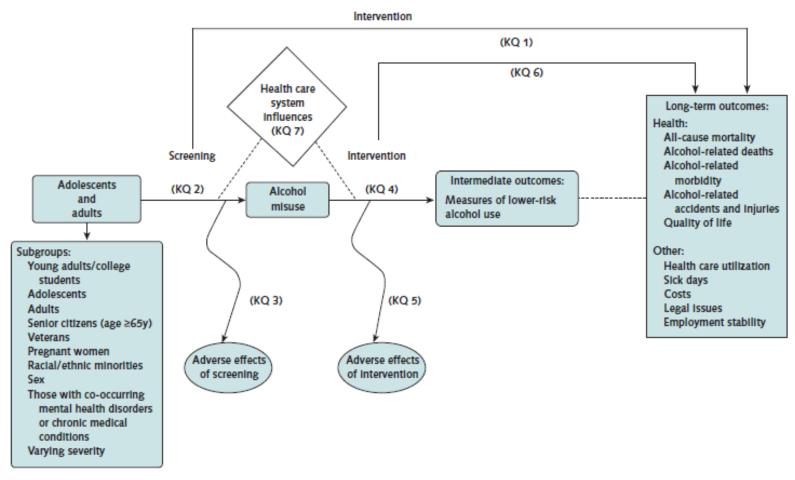
Publish and Disseminate Final Recommendation Statement:

The final Recommendation Statement and supporting final Evidence Review, are posted on the USPSTF Web site at www.uspreventiveservicestaskforce.org. Final Recommendations are also made available through electronic tools, peer-reviewed journals, and consumer guides. In addition, a final Evidence Summary is published in a peer-reviewed journal, outlining the evidence the Task Force reviewed.



Sample Analytic Framework:

Screening and Behavioral Counseling to Reduce Alcohol Misuse





USPSTF's Steps to a Recommendation

- Assessing the adequacy of evidence at the key question levels
- Assessing the adequacy of evidence at the linkage levels
- Estimating the magnitude of benefits and harms of the preventive service
- Evaluating the certainty of the evidence for net benefit for the preventive service
- Estimating the magnitude of the net benefit of the preventive service
- Developing a recommendation grade for the preventive service in the relevant population, based on the above parameters.



Synthesis and Judgment of the Overall Strength of evidence

- <u>Convincing</u>: Well-designed, well-conducted studies in representative populations that directly assess effects on health outcomes
- Adequate: Sufficient evidence to determine effects on health outcomes, but evidence is limited by number, quality, or consistency of studies; generalizability to routine practice; or indirect nature of the evidence
- Inadequate: Evidence insufficient due to limited number or power of studies, important flaws in their design or conduct, gaps in the chain of evidence, or lack of information on important health outcomes



Assessment of Net Benefit

- Assesses the likelihood of whether net benefit of a preventive service is correct
 - The USPSTF assigns a certainty level based on the nature of the overall evidence available to assess the net benefit of a preventive service
 - Net benefit is defined as *benefit minus harm* of the preventive service as implemented in a primary care population



Assessment of Certainty

- High Certainty: Evidence includes consistent results from well-designed, well-conducted studies in representative primary care populations, using health outcomes. Conclusion unlikely to be strongly affected by the results of future studies.
- Moderate Certainty: Evidence is sufficient to determine the effects on health outcomes, but confidence in the estimate is constrained by limitations in the research. As more information becomes available, magnitude or direction of the observed effect could change, and change may be large enough to alter the conclusion.
- <u>Low Certainty:</u> Available evidence is insufficient to assess effects on health outcomes.



USPSTF Recommendation Grid—Grading

| | Magnitude of Net Benefit | | | |
|--------------------------|--------------------------|----------|-------|--------------------|
| Certainty of Net Benefit | Substantial | Moderate | Small | Zero / Negative |
| High | Α | В | O | D |
| Moderate | В | В | O | D |
| Low | Insufficient | | | |

^{*}A, B, C, D, and Insufficient represent the letter grades of recommendation or statement of insufficient evidence assigned by the U.S. Preventive Services Task Force after assessing certainty and magnitude of net benefit of the service.



Recommendation Grades

Letter grades are assigned to each recommendation statement. These grades are based on the strength of the evidence on the harms and benefits of a specific preventive service. http://www.uspreventiveservicestaskforce.org/uspstf/grades.htm

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



- Why are topics nominated for referral?
 - The recommendations for some topics in the USPSTF library may be referred to another organization that the Task Force believes is in a better position to make an accurate and timely evidence-based recommendation
 - This practice avoids redundancy of resource use by the USPSTF
 - Advisory Committee on Immunization Practices (ACIP), a non-Federal panel of immunization experts convened by the CDC
 - The Task Force has referred recommendations on immunizations to the ACIP



- How are topics nominated for referral?
- Process for designating a topic for referral:
 - The Topic Prioritization Workgroup identifies a potential outside organization that makes evidence-based recommendations and decides to consider the topic for referral
 - AHRQ staff reviews the previous Task Force recommendation statement and evidence report
 - AHRQ staff reviews the recommendations and review methods of other Federal agencies and professional organizations



- Process for designating a topic for referral:
 - AHRQ staff prepares a brief summary of why the topic has been chosen for referral
 - The Topic Prioritization Workgroup decides whether to proceed with a full Task Force discussion.
 - If the Topic Prioritization Workgroup decides to proceed, the AHRQ summary is presented at a Task Force meeting for general discussion; the Task Force then votes on the decision to refer the topic to the specific organization
 - AHRQ staff adds a single summary paragraph to the USPSTF Web site that includes a link to the organization's recommendation



- How are topics nominated for referral?
- The criteria for referring to another organization's recommendation are:
 - The organization has been identified by the USPSTF as an appropriate source
 - The organization has a process for updating recommendations in a timely manner
 - The organization has a written and available evidence-based methodology, including the use of systematic reviews that assess benefits and harms, that the Task Force judges to be adequate for the topic



| Newborn Topics | Grade | Туре | Year Published |
|---|---|--------------------------|----------------|
| Hyperbilirubinemia to Prevent Chronic Bilirubin Encephalopathy | I statement (infants) | Screening | 2009 |
| Newborn Hearing | B recommendation | Screening | 2008 |
| Gonococcal Ophthalmia Neonatorum | A: recommends prophylactic ocular topical medication for all newborns | Preventive Medication | 2011 |
| Congenital Hypothyroidism | A (newborns) | Screening | 2008 |



| Newborn Topics | Grade | Туре | Year Published |
|---|--------------|-----------|----------------|
| Screening for Sickle Cell Disease in Newborns | A (newborns) | Screening | 2007 |
| Phenylketonuria | A (newborns) | Screening | 2008 |



USPSTF Child and Maternal Health Workgroup

Recommendations to the Topic Prioritization Workgroup:

- To refer newborn screening topics to the Discretionary Advisory Committee on Heritable Disorders in Newborns and Children (DACHDNC)
 - Refer the following topics: sickle cell disease, congenital hypothyroidism, PKU
- USPSTF criterion for referral: whether or not a newborn screening test is obtained via dried blood spots
- Topic Prioritization Workgroup decided to proceed with a full Task Force discussion



- The recommendation was presented at a 2014 Task Force meeting for general discussion
- USPSTF accepted the recommendation and voted to refer newborn screening topics to the Discretionary Advisory
 Committee on Heritable Disorders in Newborns and
 Children (pending acceptance by the DACHDNC)
- Letter sent to the DACHDNC requesting participation as a partner organization



Thank you for your interest www.USPreventiveServicesTaskForce.org

