



Complete Summary

GUIDELINE TITLE

Aspirin for the primary prevention of cardiovascular events: recommendations and rationale.

BIBLIOGRAPHIC SOURCE(S)

Berg AO, et al. Aspirin for the primary prevention of cardiovascular events: recommendations and rationale. Ann Intern Med 2002 Jan 15;136(2):157-60. [15 references]

COMPLETE SUMMARY CONTENT

SCOPE

METHODOLOGY - including Rating Scheme and Cost Analysis

RECOMMENDATIONS

EVIDENCE SUPPORTING THE RECOMMENDATIONS

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

QUALIFYING STATEMENTS

IMPLEMENTATION OF THE GUIDELINE

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT

CATEGORIES

IDENTIFYING INFORMATION AND AVAILABILITY

SCOPE

DISEASE/CONDITION(S)

Cardiovascular disease, including coronary heart disease, stroke and peripheral vascular disease

GUIDELINE CATEGORY

Assessment of Therapeutic Effectiveness
Prevention

CLINICAL SPECIALTY

Cardiology
Family Practice
Internal Medicine
Preventive Medicine

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Nurses
Physician Assistants
Physicians
Students

GUIDELINE OBJECTIVE(S)

- To summarize the third U.S. Preventive Services Task Force (USPSTF) recommendations on the use of aspirin for the primary prevention of cardiovascular events and the supporting evidence
- To update the 1995 recommendations contained in the Guide to Clinical Preventive Services, Second Edition

TARGET POPULATION

Adults who are at increased risk of coronary heart disease

INTERVENTIONS AND PRACTICES CONSIDERED

Aspirin prophylaxis

MAJOR OUTCOMES CONSIDERED

- Cardiovascular events, including myocardial infarction, stroke, sudden death
- Mortality rates

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

A MEDLINE search was performed for the period 1966 to May 2001 to identify studies that examined the ability of aspirin to prevent cardiovascular events and its likelihood of causing adverse effects.

Search Strategy

The following MeSH (medical subject heading) concepts were used: for the beneficial effects of aspirin: aspirin AND cardiovascular disease AND (randomized controlled trial or controlled clinical trial or randomized controlled trials or random allocation or double blind method or single blind method); for the adverse effects of aspirin: aspirin AND (gastrointestinal bleeding or cerebral hemorrhage). The basic search strategies were supplemented by examining bibliographies from other relevant articles, systematic reviews, and by seeking the advice of content experts.

Inclusion Criteria

For studies examining the benefits of aspirin chemoprevention, randomized trials of at least 1 year's duration that met the following criteria were included: (1) compared aspirin with placebo or no aspirin; (2) included patients with no previous history of cardiovascular disease, including myocardial infarction, stroke, angina, transient ischemic attack, or peripheral vascular disease (trials in which more than 10% of participants had known vascular disease were excluded); and (3) measured the outcomes of myocardial infarction, stroke, and mortality.

For harms data, the following were examined: case-control studies, randomized trials, and systematic reviews or meta-analyses of randomized trials that examined rates of hemorrhagic stroke or gastrointestinal bleeding from aspirin use.

Data Extraction and Definition of Outcomes

Two reviewers examined all abstracts and excluded those that they agreed were clearly outside the scope of the review. The same reviewers then examined the full articles for the remaining studies and determined final eligibility by consensus. Two independent reviewers abstracted the included studies. Disagreements were resolved by consensus. Potentially beneficial outcomes examined were the efficacy of aspirin versus placebo in reducing the following events: (1) nonfatal acute myocardial infarction or death due to coronary heart disease, including fatal acute myocardial infarction or death due to other ischemic heart disease; (2) fatal or nonfatal stroke; (3) total cardiovascular events (nonfatal acute myocardial infarction, death due to coronary heart disease, fatal or nonfatal stroke); and (4) all-cause mortality. Major harms examined were hemorrhagic stroke and major gastrointestinal bleeding.

NUMBER OF SOURCE DOCUMENTS

Beneficial Effects: Initial MEDLINE search yielded 1,282 articles; 1,274 excluded on abstract review as not meeting inclusion criteria; 5 final trials included in review

Harmful Effects: Initial MEDLINE search yielded 587 articles; 556 excluded on abstract review; 31 full articles reviewed; 8 articles included in final paper plus 9 articles identified through search for benefits yielded 17 final articles on adverse effects.

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

The U.S. Preventive Services Task Force (USPSTF) grades the quality of the overall evidence on a 3-point scale (good, fair, or poor).

Good

Evidence includes consistent results from well-designed, well-conducted studies in representative populations that directly assess effects on health outcomes.

Fair

Evidence is sufficient to determine effects on health outcomes, but the strength of the evidence is limited by the number, quality, or consistency of the individual studies; generalizability to routine practice; or indirect nature of evidence on health outcomes.

Poor

Evidence is insufficient to assess the effects on health outcomes because of 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.

Note: See the companion document titled "Current Methods of the U.S. Preventive Services Task Force: a Review of the Process" (Am J Prev Med 2001 Apr; 20[3S]: 21-35) for a more detailed description of the methods used to assess the quality and strength of the evidence for the three strata at which the evidence was reviewed.

METHODS USED TO ANALYZE THE EVIDENCE

Meta-Analysis
Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Note from the National Guideline Clearinghouse (NGC): A systematic evidence review was prepared by the Research Triangle Institute-University of North Carolina Evidence-based Practice Center (EPC) for the Agency for Healthcare Research and Quality (AHRQ) for use by the U.S. Preventive Services Task Force (USPSTF) (see the "Companion Documents" field).

Statistical Analyses

For individual trials, estimates of unadjusted odds ratios with 95% confidence intervals were calculated. Because the trials did not all present their outcomes using the same means of categorization, in some cases the investigators were contacted to determine the actual numbers of certain events and summary measures were recalculated to improve comparability.

Meta-analysis using the DerSimonian and Laird random effects model in RevMan was performed. Heterogeneity was assessed using graphs of the outcomes and the Mantel-Haenszel chi-squared test.

Modeling

Best estimates of the beneficial and harmful effects of aspirin chemoprevention were used to model its impact on populations of patients with different levels of coronary heart disease risk. Estimates of beneficial effects were derived by using the odds ratios calculated from the meta-analyses; estimates of harmful effects were derived from other systematic reviews, supplemented by studies identified in the literature searches. Estimates were based on 1,000 people receiving aspirin for a 5-year period. 95% confidence intervals were used from the meta-analyses to produce plausible ranges around the point estimates. How these effects may differ for the elderly, women, and patients with hypertension or diabetes were examined.

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Balance Sheets
Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

When the overall quality of the evidence is judged to be good or fair, the U.S. Preventive Services Task Force (USPSTF) proceeds to consider the magnitude of net benefit to be expected from implementation of the preventive service. Determining net benefit requires assessing both the magnitude of benefits and the magnitude of harms and weighing the two.

The USPSTF classifies benefits, harms, and net benefits on a 4-point scale: "substantial," "moderate," "small," and "zero/negative."

"Outcomes tables" (similar to 'balance sheets') are the USPSTF's standard resource for estimating the magnitude of benefit. These tables, prepared by the topic teams for use at USPSTF meetings, compare the condition specific outcomes expected for a hypothetical primary care population with and without use of the preventive service. These comparisons may be extended to consider only people of specified age or risk groups or other aspects of implementation. Thus, outcomes tables allow the USPSTF to examine directly how the preventive services affects benefits for various groups.

When evidence on harms is available, the topic teams assess its quality in a manner like that for benefits and include adverse events in the outcomes tables. When few harms data are available, the USPSTF does not assume that harms are small or nonexistent. It recognizes a responsibility to consider which harms are likely and judge their potential frequency and the severity that might ensue from implementing the service. It uses whatever evidence exists to construct a general confidence interval on the 4-point scale (e.g., substantial, moderate, small, and zero/negative).

Value judgments are involved in using the information in an outcomes table to rate either benefits or harms on the USPSTF's 4-point scale. Value judgments are also needed to weigh benefits against harms to arrive a rating of net benefit.

In making its determinations of net benefit, the USPSTF strives to consider what it believes are the general values of most people. It does this with greater confidence for certain outcomes (e.g., death) about which there is little disagreement about undesirability, but it recognizes that the degree of risk people are willing to accept to avert other outcomes (e.g., cataracts) can vary considerably. When the USPSTF perceives that preferences among individuals vary greatly, and that these variations are sufficient to make trade-off of benefits and harms a 'close-call', then it will often assign a C recommendation (see the "Recommendation Rating Scheme" field). This recommendation indicates the decision is likely to be sensitive to individual patient preferences.

The USPSTF uses its assessment of the evidence and magnitude of net benefit to make recommendations. The general principles the USPSTF follows in making recommendations are outlined in Table 5 of the companion document cited below. The USPSTF liaisons on the topic team compose the first drafts of the recommendations and rationale statements, which the full panel then reviews and edits. Recommendations are based on formal voting procedures that include explicit rules for determining the views of the majority.

From: Harris RP, Helfand M, Woolf SH, Lohr KN, Mulrow, CD, Teutsch SM, Atkins D. Current methods of the U.S. Preventive Services Task Force: a review of the process. Methods Work Group, Third U.S. Preventive Services Task Force. Am J Prev Med 2001 Apr;20(3S):21-35.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

The U.S. Preventive Services Task Force (USPSTF) grades its recommendations according to one of five classifications (A, B, C, D, or I), reflecting the strength of evidence and magnitude of net benefit (benefits minus harms).

A

The U.S. Preventive Services Task Force (USPSTF) strongly recommends that clinicians provide [the service] to eligible patients. (The USPSTF found good evidence that [the service] improves important health outcomes and concludes that benefits substantially outweigh harms.)

B

The U.S. Preventive Services Task Force (USPSTF) recommends that clinicians provide [the service] to eligible patients. (The USPSTF found at least fair evidence that [the service] improves health outcomes and concludes that benefits outweigh harms.)

C

The U.S. Preventive Services Task Force (USPSTF) makes no recommendation for or against routine provision of [the service]. (The USPSTF found at least fair evidence that [the service] can improve health outcomes but concludes that the balance of benefits and harms is too close to justify a general recommendation.)

D

The U.S. Preventive Services Task Force (USPSTF) recommends against routinely providing [the service] to asymptomatic patients. (The USPSTF found at least fair evidence that [the service] is ineffective or that harms outweigh benefits.)

I

The U.S. Preventive Services Task Force (USPSTF) concludes that the evidence is insufficient to recommend for or against routinely providing [the service]. (Evidence that [the service] is effective is lacking, of poor quality, or conflicting and the balance of benefits and harms cannot be determined.)

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Comparison with Guidelines from Other Groups
External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Peer Review: Before the U.S. Preventive Services Task Force makes its final determinations about recommendations on a given preventive service, the Evidence-based Practice Center and the Agency for Healthcare Research and Quality send a draft systematic evidence review to 4 to 6 external experts and to federal agencies and professional and disease-based health organizations with interests in the topic. They ask the experts to examine the review critically for accuracy and completeness and to respond to a series of specific questions about the document. After assembling these external review comments and documenting the proposed response to key comments, the topic team presents this information to the Task Force in memo form. In this way, the Task Force can consider these external comments and a final version of the systematic review before it votes on its recommendations about the service. Draft recommendations are then circulated for comment from reviewers representing professional societies, voluntary organizations and Federal agencies. These comments are discussed before the whole U.S. Preventive Services Task Force before final recommendations are confirmed.

Recommendations of Others: Recommendations related to aspirin for primary prevention of heart disease from the following groups were discussed: the Canadian Task Force on Preventive Health Care, the American Diabetes Association, the American Heart Association, and the European Society of Cardiology.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The U.S. Preventive Services Task Force (USPSTF) grades its recommendations (A, B, C, D, or I) and the quality of the overall evidence for a service (good, fair, poor). The definitions of these grades can be found at the end of the "Major Recommendations" field.

- The U.S. Preventive Services Task Force strongly recommends that clinicians discuss aspirin chemoprevention with adults who are at increased risk of coronary heart disease (see the section titled "Clinical Considerations," below). Discussions with patients should address both the potential benefits and harms of aspirin therapy. [A recommendation]

The U.S. Preventive Services Task Force found good evidence that aspirin decreases the incidence of coronary heart disease in adults who are at increased risk for heart disease. They also found good evidence that aspirin increases the incidence of gastrointestinal bleeding and fair evidence that aspirin increases the incidence of hemorrhagic strokes. The U.S. Preventive Services Task Force concluded that the balance of benefits and harms is most favorable in patients at high risk of coronary heart disease (5-year risk of greater than or equal to 3%) but is also influenced by patient preferences.

Clinical Considerations

- Decisions about aspirin therapy should take into account overall risk of coronary heart disease. Risk assessment should include asking about the presence and severity of the following risk factors: age, sex, diabetes, elevated total cholesterol levels, low levels of high-density lipoprotein (HDL) cholesterol, elevated blood pressure, family history (in younger adults), and smoking. Tools that incorporate specific information on multiple risk factors provide more accurate estimation of cardiovascular risk than categorizations based simply on counting the numbers of risk factors (see the original guideline document for further references to an available coronary heart disease risk calculator).
- Men over age 40, postmenopausal women, and younger persons with risk factors for coronary heart disease (e.g., hypertension, diabetes, or smoking) are at increased risk of heart disease and may wish to consider aspirin therapy. The following table shows how estimates of the type and magnitude of benefits and harms associated with aspirin therapy vary with an individual's underlying risk of coronary heart disease. Although balance of benefits and harms is most favorable in high-risk persons (5-year risk greater than 3%), some persons at lower risk may consider the potential benefits of aspirin to be sufficient to outweigh the potential harms.

Table. Estimates of benefits and harms of aspirin therapy given for 5 years to 1000 individuals with various levels of baseline risk for coronary heart disease*

Benefits and Harms	Baseline Risk for Coronary
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	Disease Over 5 Years [#]		
	1%	3%	5%
Total mortality	No effect	No effect	No effect
Coronary heart disease events [#]	1-4 avoided	4-12 avoided	6-20 avoided
Hemorrhagic strokes ^{**}	0-2 caused	0-2 caused	0-2 caused
Major gastrointestinal bleeds ⁺⁺	2-4 caused	2-4 caused	2-4 caused

* These estimates are based on relative risk reduction of 28% for coronary heart disease events in aspirin-treated patients. They assume risk reductions do not vary significantly by age.

[#] Nonfatal acute myocardial infarction and fatal coronary heart disease. Five-year risks of 1%, 3% and 5% are equivalent to 10-year risks of 2%, 6%, and 10%, respectively.

^{**} Data from secondary prevention trials suggest that increases in hemorrhagic stroke may be offset by reduction in other types of stroke in patients at very high risk of cardiovascular disease (greater than or equal to 10% 5-year risk).

⁺⁺ Rates of gastrointestinal bleeds may be 2 to 3 times higher in persons older than 70.

(See Hayden M, Pignone M, Phillips C, Mulrow C. Aspirin for the primary prevention of cardiovascular events: a summary of the evidence. *Ann Intern Med* 2002 Jan 15; 136[2]: 161-72.)

- Discussions about aspirin therapy should focus on potential coronary heart disease benefits, such as prevention of myocardial infarction, and potential harms of gastrointestinal and intracranial bleeding. Discussions should take into account individual preferences and risk aversions concerning myocardial infarction, stroke, and gastrointestinal bleeding.
- Although the optimal timing and frequency of discussions related to aspirin therapy are unknown, reasonable options include every 5 years in middle-aged and older persons or when other cardiovascular risk factors are detected.
- Most participants in the primary prevention trials of aspirin therapy have been men between the ages of 40 and 75 years old. Current estimates of benefits and harms may not be as reliable for women and older men.
- Although older patients may derive greater benefits due to their higher risk of coronary heart disease and stroke, their risk of bleeding may be higher.
- Uncontrolled hypertension may attenuate the benefits of aspirin in reducing coronary heart disease.
- The optimum dose of aspirin for chemoprevention is not known. Primary and secondary prevention trials have demonstrated benefits of a variety of regimens including 75 mg per day, 100 mg per day, and 325 mg every other day. Doses of about 75 mg daily appear as effective as higher doses; whether doses below 75 mg daily are effective is not established. Enteric-coated or buffered preparations do not clearly reduce adverse gastrointestinal effects of

aspirin. Uncontrolled hypertension and concomitant use of other nonsteroidal anti-inflammatory agents or anticoagulants increase risk for serious bleeding.

Definitions:

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Poor

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CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence supporting each recommendation is identified in the "Major Recommendations" field.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Efficacy of Chemoprevention

Five trials have examined the effects of daily or every-other-day aspirin for the primary prevention of cardiovascular events over periods of 4 to 7 years. Most participants were over age 50 and male. Meta-analysis of pooled data from all of the studies showed that aspirin therapy reduced the risk of coronary heart disease by 28% (summary odds ratio 0.72, 95% Confidence Interval [CI] 0.60 to 0.87). Summary estimates showed no significant effects of aspirin on total mortality (odds ratio 0.93, 95% Confidence Interval 0.84 to 1.02) and stroke (odds ratio 1.02, 95% Confidence Interval 0.85 to 1.23).

POTENTIAL HARMS

Harms of Chemoprevention

The 5 primary prevention trials, and a larger number of secondary prevention randomized controlled trials enrolling patients with heart disease or stroke, demonstrate that aspirin increases rates of gastrointestinal bleeding. Estimated rates of major gastrointestinal bleeds are approximately 2 to 4 per 1000 middle-aged individuals (4 to 12 for older individuals) given aspirin for 5 years.

These controlled trials in primary and secondary prevention settings also suggest that aspirin increases rates of hemorrhagic strokes by a small amount (0 to 2 per 1000 individuals given aspirin for 5 years). Such estimates are less reliable than those of gastrointestinal bleeding because few strokes were reported in the trials.

Subgroups Most Likely to be Harmed:

Although older patients may derive greater benefits due to their higher risk of coronary heart disease and stroke, their risk of bleeding may be higher.

Uncontrolled hypertension and concomitant use of other nonsteroidal anti-inflammatory agents or anticoagulants increase risk for serious bleeding.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

The authors of this article are responsible for its contents, including any clinical or treatment recommendations. No statement in this article should be construed as an official position of the Agency for Healthcare Research and Quality, the Department of Defense or the U.S. Department of Health and Human Services. The question of whether gender modifies the effect of aspirin remains unclear. The Women's Health Study, a primary prevention trial that will test low-dose aspirin in approximately 40,000 subjects, is expected to clarify risks and benefits among women.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

The experiences of the first and second U.S. Preventive Services Task Force (USPSTF), as well as that of other evidence-based guideline efforts, have highlighted the importance of identifying effective ways to implement clinical recommendations. Practice guidelines are relatively weak tools for changing clinical practice when used in isolation. To effect change, guidelines must be coupled with strategies to improve their acceptance and feasibility. Such strategies include enlisting the support of local opinion leaders, using reminder systems for clinicians and patients, adopting standing orders, and audit and feedback of information to clinicians about their compliance with recommended practice.

In the case of preventive services guidelines, implementation needs to go beyond traditional dissemination and promotion efforts to recognize the added patient and clinician barriers that affect preventive care. These include clinicians' ambivalence about whether preventive medicine is part of their job, the psychological and practical challenges that patients face in changing behaviors, lack of access to health care or of insurance coverage for preventive services for some patients, competing pressures within the context of shorter office visits, and the lack of organized systems in most practices to ensure the delivery of recommended preventive care.

Neither the resources nor the composition of the U.S. Preventive Services Task Force equip it to address these numerous implementation challenges, but a number of related efforts seek to increase the impact of future U.S. Preventive Services Task Force reports. The U.S. Preventive Services Task Force convened representatives from the various audiences for the [Guide](#) ("Put Prevention Into Practice. A Step-by-Step Guide to Delivering Clinical Preventive Services: A Systems Approach") - clinicians, consumers and policy makers from health plans, national organizations and Congressional staff - about how to modify the content and format of its products to address their needs. With funding from the Robert Wood Johnson Foundation, the U.S. Preventive Services Task Force and Community Guide effort have conducted an audience analysis to further explore implementation needs. The [Put Prevention into Practice](#) initiative at the Agency for Healthcare Research and Quality (AHRQ) has developed office tools such as patient booklets, posters, and handheld patient mini-records, and a new implementation guide for state health departments.

Dissemination strategies have changed dramatically in this age of electronic information. While recognizing the continuing value of journals and other print formats for dissemination, the Agency for Healthcare Research and Quality will make all U.S. Preventive Services Task Force (USPSTF) products available through its [Web site](#). The combination of electronic access and extensive material in the public domain should make it easier for a broad audience of users to access U.S. Preventive Services Task Force (USPSTF) materials and adapt them for their local needs. Online access to U.S. Preventive Services Task Force (USPSTF) products also opens up new possibilities for the appearance of the third edition of the Guide to Clinical Preventive Services. Freed from having to serve as primary repository for all of U.S. Preventive Services Task Force work, the next Guide may be much slimmer than the almost 1000 pages of the second edition.

To be successful, approaches for implementing prevention have to be tailored to the local level and deal with the specific barriers at a given site, typically requiring the redesign of systems of care. Such a systems approach to prevention has had notable success in established staff-model health maintenance organizations, by addressing organization of care, emphasizing a philosophy of prevention, and altering the training and incentives for clinicians. Staff-model plans also benefit from integrated information systems that can track the use of needed services and generate automatic reminders aimed at patients and clinicians, some of the most consistently successful interventions. Information systems remain a major challenge for individual clinicians' offices, however, as well as for looser affiliations of practices in network-model managed care and independent practice associations, where data on patient visits, referrals and test results are not always centralized.

RELATED QUALITY TOOLS

- [Pocket Guide to Good Health for Adults](#)
- [A Step-by-Step Guide to Delivering Clinical Preventive Services: A Systems Approach](#)

- [Aspirin for the Primary Prevention of Cardiovascular Events. What's New from the USPSTF.](#)

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Berg AO, et al. Aspirin for the primary prevention of cardiovascular events: recommendations and rationale. *Ann Intern Med* 2002 Jan 15; 136(2): 157-60. [15 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

1996 (revised 2002 Jan 15)

GUIDELINE DEVELOPER(S)

United States Preventive Services Task Force - Independent Expert Panel

GUIDELINE DEVELOPER COMMENT

The U.S. Preventive Services Task Force (USPSTF) is a Federally-appointed panel of independent experts. Conclusions of the USPSTF do not necessarily reflect policy of the U.S. Department of Health and Human Services (DHHS) or DHHS agencies.

SOURCE(S) OF FUNDING

United States Government

GUIDELINE COMMITTEE

U.S. Preventive Services Task Force

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Task Force Members: Alfred O. Berg, MD, MPH, (Chair); Janet D. Allan, PhD, RN, CS, (Vice-chair); Paul S. Frame, MD; Charles J. Homer, MD, MPH; Mark S. Johnson, MD, MPH; Jonathan D. Klein, MD, MPH; Tracy A. Lieu, MD, MPH; Cynthia D. Mulrow, MD, MSc; C. Tracy Orleans, PhD; Jeffrey F. Peipert, MD, MPH; Nola J. Pender, PhD, RN; Albert L. Siu, MD, MSPH; Steven M. Teutsch, MD, MPH; Carolyn Westhoff, MD, MSc; Steven H. Woolf, MD, MPH.

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

The U.S. Preventive Services Task force has an explicit policy concerning conflict of interest. All members and evidence-based practice center (EPC) staff disclose at each meeting if they have an important financial conflict for each topic being discussed. Task Force members and EPC staff with conflicts can participate in discussions about evidence, but members abstain from voting on recommendations about the topic in question.

From: Harris RP, Helfand M, Woolf SH, Lohr KN, Mulrow, CD, Teutsch SM, Atkins D. Current methods of the U.S. Preventive Services Task Force: a review of the process. Methods Work Group, Third U.S. Preventive Services Task Force. Am J Prev Med 2001 Apr;20(3S):21-35.

GUIDELINE STATUS

This is the current release of the guideline.

This release updates a previously published guideline: U.S. Preventive Services Task Force. Aspirin prophylaxis for the primary prevention of myocardial infarction. In: Guide to clinical preventive services. 2nd ed. Baltimore (MD): Williams & Wilkins; 1996.

GUIDELINE AVAILABILITY

Electronic copies: Available from the [U.S. Preventive Services Task Force \(USPSTF\) Web site](#). Also available from the [Annals of Internal Medicine Online](#) and the [National Library of Medicine's Health Services/Technology Assessment Text \(HSTAT\) Web site](#).

Print copies: Available from the Agency for Healthcare Research and Quality Publications Clearinghouse. For more information, go to <http://www.ahrq.gov/news/pubsix.htm> or call 1-800-358-9295 (U.S. only).

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

Evidence Review:

- Hayden M, Pignone M, Phillips C, Mulrow C. Aspirin for the primary prevention of cardiovascular events: a summary of the evidence. *Ann Intern Med* 2002 Jan 15; 136[2]: 161-72.

Electronic copies: Available from the [USPSTF Web site](#) and the [Annals of Internal Medicine Online](#).

Background Articles:

- Woolf SH, Atkins D. The evolving role of prevention in health care: contributions of the U.S. Preventive Services Task Force. *Am J Prev Med* 2001 Apr; 20(3S): 13-20.
- Harris RP, Helfand M, Woolf SH, Lohr KN, Mulrow, CD, Teutsch SM, Atkins D. Current methods of the U.S. Preventive Services Task Force: a review of the process. Methods Work Group, Third U.S. Preventive Services Task Force. *Am J Prev Med* 2001 Apr; 20(3S): 21-35.
- Saha S, Hoerger TJ, Pignone MP, Teutsch SM, Helfand M, Mandelblatt. The art and science of incorporating cost effectiveness into evidence-based recommendations for clinical preventive services. Cost Work Group of the Third U.S. Preventive Services Task Force. *Am J Prev Med* 2001 Apr; 20(3S): 36-43.

Electronic copies: Available from the [USPSTF Web site](#).

Additional Implementation Tools:

- A step-by-step guide to delivering clinical preventive services: a systems approach. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ), 2001. 189 p. (Pub. No. APPIP01-0001). Electronic copies available from the [AHRQ Web site](#).

Print copies: Available from the Agency for Healthcare Research and Quality Publications Clearinghouse. For more information, go to <http://www.ahrq.gov/news/pubsix.htm> or call 1-800-358-9295 (U.S. only).

- The Preventive Services Selector, an application for Palm Pilots and other PDA's, is also available from the [AHRQ Web site](#).
- Aspirin for the primary prevention of cardiovascular events. What's new from the USPSTF. Rockville (MD): Agency for Healthcare Research and Quality; 2002 Jan. Electronic copies: Available from [USPSTF Web site](#).

PATIENT RESOURCES

The following is available:

- The Pocket Guide to Good Health for Adults. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2003.

Electronic copies: Available from the [U.S. Preventive Services Task Force \(USPSTF\) Web site](#). Copies also available in Spanish from the [USPSTF Web site](#).

Print copies: Available from the Agency for Healthcare Research and Quality (AHRQ) Publications Clearinghouse. For more information, go to <http://www.ahrq.gov/news/pubsix.htm> or call 1-800-358-9295 (U.S. only).

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NGC STATUS

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