

## Complete Summary

---

### GUIDELINE TITLE

Routine aspirin and non-steroidal anti-inflammatory drug (NSAID) prophylaxis for colorectal cancer prevention.

### BIBLIOGRAPHIC SOURCE(S)

Calonge N, Petitti DB, DeWitt TG, Gordis L, Gregory KD, Harris R, Kizer KW, LeFevre ML, Loveland-Cherry C, Marion LN, Moyer VA, Ockene JK, Sawaya GF, Siu AL, Teitsch SM, Yawn BP, U.S. Preventive Services Task Force. Routine aspirin or nonsteroidal anti-inflammatory drugs for the primary prevention of colorectal cancer: U.S. Preventive Services Task Force recommendation statement. Ann Intern Med 2007 Mar 6;146(5):361-4. [33 references] [PubMed](#)

### GUIDELINE STATUS

This is the current release of the guideline.

## 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  
 DISCLAIMER

## SCOPE

### DISEASE/CONDITION(S)

Colorectal cancer

### GUIDELINE CATEGORY

Prevention

### CLINICAL SPECIALTY

Family Practice  
Geriatrics  
Internal Medicine  
Nursing  
Preventive Medicine

## **INTENDED USERS**

Advanced Practice Nurses  
Allied Health Personnel  
Health Care Providers  
Nurses  
Physician Assistants  
Physicians

## **GUIDELINE OBJECTIVE(S)**

To summarize the U.S. Preventive Services Task Force recommendations and supporting scientific evidence on routine use of aspirin and nonsteroidal anti-inflammatory drugs for the primary prevention of colorectal cancer

## **TARGET POPULATION**

Asymptomatic adults at average risk for colorectal cancer, including those with a family history of colorectal cancer

**NOTE:** This guideline does not apply to individuals with familial adenomatous polyposis, hereditary nonpolyposis colon cancer syndromes (Lynch I or II), or a history of colorectal cancer or adenomas.

## **INTERVENTIONS AND PRACTICES CONSIDERED**

*Note: The following was considered, but not recommended:*

Routine use of aspirin and nonsteroidal anti-inflammatory drugs

## **MAJOR OUTCOMES CONSIDERED**

**Key Question 1A:** Does aspirin/nonsteroidal anti-inflammatory drug (NSAID) use in healthy adults (>18 years of age) decrease colorectal cancer (CRC) mortality and/or all-cause mortality?

**Key Question 1B:** Does aspirin/NSAID use in healthy adults (>18 years of age) decrease CRC incidence?

**Key Question 2:** What is the magnitude of decreased colorectal adenoma (CRA) incidence due to aspirin/NSAID chemoprevention in healthy adults?

**Key Question 3:** What is the magnitude of decreased CRA incidence on CRC in healthy adults?

**Key Question 4:** What is the magnitude of harms of aspirin/NSAID use in healthy adults (i.e., increased major gastrointestinal [GI] bleeding, hemorrhagic stroke, or nephropathy)?

## METHODOLOGY

### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

**Note from the National Guideline Clearinghouse (NGC):** A focused systematic review of the literature funded by the Centers for Disease Control and Prevention for the Agency for Healthcare Research and Quality was prepared by the University of Ottawa Evidence-based Practice Center (EPC) for use by the U.S. Preventive Services Task Force (USPSTF) (see the "Availability of Companion Documents" field).

#### Data Sources

To review the effectiveness of aspirin/nonsteroidal anti-inflammatory drugs (ASA/NSAIDs) Medline 1966 to November week 3, 2004, Embase 1980 to week 47 2004, and CENTRAL, The Cochrane Collaboration's registry of clinical trials (Issue 4, 2004) were searched. To identify recent systematic reviews of NSAIDs that address harms, Medline (2003 to November Week 3 2004), the Cochrane Database of Systematic Reviews (CDSR), and DARE (Cochrane Library, 3rd Quarter 2004) were searched. Additional material potentially relevant to the economic analysis question was sought in Medline (1966 to November Week 3 2004), HealthStar (1987 to November 2004), Embase (1980 to 2004 Week 50), NHS EED, and HTA databases of The Cochrane Library (4th Quarter 2004). The TRIP ([www.tripdatabase.com](http://www.tripdatabase.com)) database was also searched (December 14, 2004).

#### Methods

Randomized controlled trials (RCTs), case-control and cohort studies were sought for the effectiveness of ASA, NSAIDs, and COX-2 inhibitors to prevent colorectal adenomas (CRAs), colorectal cancer (CRC), and mortality. Systematic reviews were sought for the harms of these agents, and cost-effectiveness analyses were sought for each of the agents. Multilevel screening by two independent reviewers was conducted to identify studies to be included based on predefined inclusion criteria.

See Chapter 2 in the evidence report (see the "Availability of Companion Documents" field) for further details of the literature search and strategy and study selection methods, including inclusion and exclusion criteria.

### NUMBER OF SOURCE DOCUMENTS

The literature search yielded 1,788 citations. Screening yielded 362 potentially relevant articles that were obtained in full for further review. Of these, 66 studies

met the eligibility criteria and were included in the evidence report. More than half of these articles (n=39) were companion or duplicate articles., and nineteen of these were excluded on that basis, as well as two of four studies from different authors with overlapping patient populations. Although excluded, the duplicate and companion articles were used to fill in any missing data not reported in the articles that were used. One study was also excluded because the patient population encompassed a significant proportion of subjects with a personal history of colorectal cancer (CRC). The final study sample included 39 unique studies of effectiveness and five economic evaluations.

## **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 grades the **quality of the overall evidence** for a service on a 3-point scale (good, fair, 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 the 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.

## **METHODS USED TO ANALYZE THE EVIDENCE**

Review of Published Meta-Analyses  
Systematic Review

### **DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE**

**Note from the National Guideline Clearinghouse (NGC):** A focused systematic review of the literature funded by the Centers for Disease Control and Prevention for the Agency for Healthcare Research and Quality was prepared by the University of Ottawa Evidence-based Practice Center (EPC) for use by the U.S.

Preventive Services Task Force (USPSTF) (see the "Availability of Companion Documents" field).

Data from included studies was abstracted and their quality assessed. Included studies were grouped based on an *a priori* defined hierarchy, and statistical pooling was only conducted if clinically and statistically appropriate.

## **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 service 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 at 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 the 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, I) reflecting the strength of evidence and magnitude of net benefit (benefits minus harms):

### **A**

The 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 USPSTF recommends that clinicians provide [this service] to eligible patients. The USPSTF found at least fair evidence that [the service] improves important health outcomes and concludes that benefits outweigh harms.

### **C**

The 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 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 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**

### **Cost Effectiveness**

In average-risk populations, and in the context of regular endoscopic screening for colorectal cancer (CRC), nonsteroidal anti-inflammatory drug (NSAID) chemoprevention is presently not cost effective because of the relatively large costs associated with their adverse effects, as well as their relative inefficacy compared with colonoscopy. To be cost-effective, daily aspirin (ASA) use would have to decrease the cardiovascular (CV) mortality by 0.1% or more, and it would have to decrease CRC mortality by at least 30%. Additionally, chemoprevention with COX-2 inhibitors, independent of their newly recognized cardiotoxicity, is expensive and their use as an adjunct to colonoscopy is economically acceptable (i.e., incremental cost-effectiveness ratio [ICER] less than \$100,000/life year [LY] saved) if they can prevent CRC mortality by at least 60% and their cost be reduced by at least 75%.

In higher-risk groups, the use of COX-2 inhibitors for chemoprevention of CRC is both less effective and considerably more costly than screening protocols, which are in themselves cost effective by all criteria—their use as an adjunct to screening is economically acceptable if their current cost is considerably reduced and if their efficacy as chemopreventive agents is of at least 50%. These results do not account for any potential CV harms of COX-2 inhibitor use.

## **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 regarding the use of aspirin or nonsteroidal anti-inflammatory drug (NSAID) use for prevention of colorectal cancer from the following groups were discussed: The American Cancer Society, the American Gastroenterological Association, the American College of Gastroenterology, the American College of Physicians, the American Medical Association, and the National Institutes of Health.

## RECOMMENDATIONS

### MAJOR RECOMMENDATIONS

***Note from the U.S. Preventive Services Task Force (USPSTF):*** The USPSTF is redesigning its recommendation statement in response to feedback from primary care clinicians. The USPSTF plans to release, early in 2007, a new, updated recommendation statement that is easier to read and incorporates advances in USPSTF methodology. The recommendation statement below is an interim version that combines existing language and elements with a new format. Although the definitions of grades remain the same, other elements have been revised.

The 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.

#### Summary of Recommendation

The USPSTF recommends against the routine use of aspirin and nonsteroidal anti-inflammatory drugs (NSAIDs) to prevent colorectal cancer in individuals at average risk for colorectal cancer. This is a **grade D** recommendation.

#### Clinical Considerations

This recommendation applies to asymptomatic adults at average risk for colorectal cancer, including those with a family history of colorectal cancer, and not to individuals with familial adenomatous polyposis, hereditary nonpolyposis colon cancer syndromes (Lynch I or II), or a history of colorectal cancer or adenomas.

Clinicians should continue to discuss aspirin chemoprophylaxis with patients who are at increased risk for coronary heart disease, but there is good evidence that low-dose aspirin used to prevent coronary heart disease (CHD) events in those at increased risk for CHD does not lead to a reduced incidence of colorectal cancer. Aspirin use by patients at increased risk for coronary heart disease has been shown to reduce all-cause mortality. The evidence and recommendation statements from the USPSTF for aspirin chemoprophylaxis can be found on the Agency for Healthcare Research and Quality (AHRQ) Web site ([www.preventiveservices.ahrq.gov](http://www.preventiveservices.ahrq.gov)).



More than 80% of colorectal cancers arise from adenomatous polyps. However, most adenomatous polyps will not progress to cancer. Age represents a major risk factor for colorectal cancer, with approximately 90% of cases occurring after age 50 years. Thirty to fifty percent of Americans older than age 50 will develop adenomatous polyps. Between 1% and 10% of these polyps will progress to cancer in 5 to 10 years. The risk for a polyp developing into cancer depends on the villous architecture, degree of cytologic dysplasia, size, and total number of polyps.

All persons older than age 50 who are at average risk for colorectal cancer should be screened for colorectal cancer regardless of their aspirin or NSAID use. The USPSTF recommendation on screening for colorectal cancer can be accessed at [www.preventiveservices.ahrq.gov](http://www.preventiveservices.ahrq.gov).

### **Definitions:**

### **Strength of Recommendations**

The USPSTF grades its **recommendations** according to one of five classifications (A, B, C, D, I) reflecting the strength of evidence and magnitude of net benefit (benefits minus harms):

#### **A**

The 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 USPSTF recommends that clinicians provide [this service] to eligible patients. The USPSTF found at least fair evidence that [the service] improves important health outcomes and concludes that benefits outweigh harms.

#### **C**

The 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 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 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.

### **Strength of Evidence**

The USPSTF grades the **quality of the overall evidence** for a service on a 3-point scale (good, fair, 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 the 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.

### **CLINICAL ALGORITHM(S)**

None available

## **EVIDENCE SUPPORTING THE RECOMMENDATIONS**

### **TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS**

The type of evidence supporting the recommendations is not specifically stated.

## **BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS**

### **POTENTIAL BENEFITS**

#### **Benefits of Aspirin and Nonsteroidal Anti-inflammatory Drug (NSAID) Use**

- There is fair to good evidence that aspirin and NSAIDs, taken in higher doses for longer periods, reduces the incidence of adenomatous polyps.
- There is good evidence that low-dose aspirin does not lead to a reduction in the incidence of colorectal cancer.

- There is fair evidence that aspirin used in doses higher than those recommended for prevention of cardiovascular disease and NSAIDs may be associated with a reduction in the incidence of colorectal cancer.
- There is fair evidence that aspirin used over longer periods may be associated with a reduction in the incidence of colorectal cancer.
- There is poor-quality evidence that aspirin and NSAID use leads to a reduction in colorectal cancer-associated mortality.

## **POTENTIAL HARMS**

### **Harms of Aspirin and Nonsteroidal Anti-inflammatory Drug (NSAID) Use**

- There is good evidence that aspirin increases the incidence of gastrointestinal bleeding in a dose-related manner and fair evidence that aspirin increases the incidence of hemorrhagic stroke.
- There is good evidence that NSAIDs increase the incidence of gastrointestinal bleeding and renal impairment, especially in the elderly.
- There is good evidence that cyclooxygenase-2 inhibitors, a class of NSAID, increase the incidence of renal impairment. Cyclooxygenase-2 inhibitors appear to be associated with an increased risk for cardiovascular events.
- Overall, there is good evidence of at least moderate harms associated with aspirin and NSAIDs.

## **QUALIFYING STATEMENTS**

### **QUALIFYING STATEMENTS**

The U.S. Preventive Services Task Force recommendations are independent of the U.S. government. They do not represent the views of the Agency for Healthcare Research and Quality (AHRQ), the U.S. Department of Health and Human Services, or the U.S. Public Health Service.

## **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.

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 materials and adapt them for their local needs. Online access to U.S. Preventive Services Task Force products also opens up new possibilities for the appearance of the annual, pocket-size *Guide to Clinical Preventive Services*.

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.

## IMPLEMENTATION TOOLS

- Foreign Language Translations
- Patient Resources
- Personal Digital Assistant (PDA) Downloads
- Pocket Guide/Reference Cards
- Tool Kits
- Wall Poster

For information about [availability](#), see the "Availability of Companion Documents" and "Patient Resources" fields below.

## 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)**

Calonge N, Petitti DB, DeWitt TG, Gordis L, Gregory KD, Harris R, Kizer KW, LeFevre ML, Loveland-Cherry C, Marion LN, Moyer VA, Ockene JK, Sawaya GF, Siu AL, Teitsch SM, Yawn BP, U.S. Preventive Services Task Force. Routine aspirin or nonsteroidal anti-inflammatory drugs for the primary prevention of colorectal cancer: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med* 2007 Mar 6;146(5):361-4. [33 references] [PubMed](#)

#### **ADAPTATION**

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

#### **DATE RELEASED**

2007 Mar

#### **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 U.S. Preventive Services Task Force do not necessarily reflect policy of the U.S. Department of Health and Human Services (DHHS) or its agencies.

#### **SOURCE(S) OF FUNDING**

United States Government

#### **GUIDELINE COMMITTEE**

U.S. Preventive Services Task Force (USPSTF)

#### **COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE**

*Task Force Members\**: Ned Calonge, MD, MPH, Chair (Colorado Department of Public Health and Environment, Denver, Colorado); Diana B. Petitti, MD, MPH, Vice Chair (Kaiser Permanente Southern California, Pasadena, California); Thomas G. DeWitt, MD (Children's Hospital Medical Center, Cincinnati, Ohio); Leon Gordis, MD, MPH, DrPH (Johns Hopkins Bloomberg School of Public Health, Baltimore,

Maryland); Kimberly D. Gregory, MD, MPH (Cedars-Sinai Medical Center, Los Angeles, California); Russell Harris, MD, MPH (University of North Carolina School of Medicine, Chapel Hill, North Carolina); Kenneth W. Kizer, MD, MPH (National Quality Forum, Washington, D.C.); Michael L. LeFevre, MD, MSPH (University of Missouri School of Medicine, Columbia, Missouri); Carol Loveland-Cherry, PhD, RN (University of Michigan School of Nursing, Ann Arbor, Michigan); Lucy N. Marion, PhD, RN (Medical College of Georgia, Augusta, Georgia); Virginia A. Moyer, MD, MPH (University of Texas Health Science Center, Houston, Texas); Judith K. Ockene, PhD (University of Massachusetts Medical School, Worcester, Massachusetts); George F. Sawaya, MD (University of California, San Francisco, San Francisco, California); Albert L. Siu, MD, MSPH (Mount Sinai Medical Center, New York, New York); Steven M. Teutsch, MD, MPH (Merck & Company, Inc., West Point, Pennsylvania); and Barbara P. Yawn, MD, MSc (Olmsted Research Center, Rochester, Minnesota)

Steven M. Teutsch, MD, MPH, recused himself from voting on this topic.

*\*Members of the Task Force at the time this recommendation was finalized. For a list of current Task Force members, go to [www.preventiveservices.ahrq.gov](http://www.preventiveservices.ahrq.gov).*

## **FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST**

The U.S. Preventive Services Task Force has an explicit policy concerning conflict of interest. All members of the USPSTF disclose at each meeting if they have an important financial conflict for each topic being discussed. Depending on the nature of the conflict of interest, Task Force members may be recused from voting on recommendations about the topic in question.

## **GUIDELINE STATUS**

This is the current release of the guideline.

## **GUIDELINE AVAILABILITY**

Electronic copies: Available from the [U.S. Preventive Services Task Force \(USPSTF\) Web site](http://www.preventiveservices.ahrq.gov). Also available from [Annals of Internal Medicine Online](http://www.annals.org).

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).

## **AVAILABILITY OF COMPANION DOCUMENTS**

The following are available:

Evidence Reviews:

- Rostom A, Dube C, Lewin G, Tsertsvadze A, Barrowman N, Code C, Sampson M, Moher D. The use of aspirin for primary prevention of colorectal cancer: a systematic review prepared for the U.S. Preventive Services Task Force. *Ann Intern Med* 2007 Mar 6;146(5):365-75. Electronic copies: Available in

Portable Document Format (PDF) from the [U.S. Preventive Services Task Force \(USPSTF\) Web site](#). Also available from [Annals of Internal Medicine Online](#).

- Rostom A, Dube C, Lewin G, Tsertsvadze A, Barrowman N, Code C, Sampson M, Moher D. Nonsteroidal anti-inflammatory drugs and cyclooxygenase-2 inhibitors for primary prevention of colorectal cancer: a systematic review prepared for the U.S. Preventive Services Task Force. *Ann Intern Med* 2007 Mar 6;146(5):376-89. Electronic copies: Available in Portable Document Format (PDF) from the [USPSTF Web site](#). Also available from [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 JS. 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 [U.S. Preventive Services Task Force \(USPSTF\) Web site](#).

The following is also available:

- The guide to clinical preventive services, 2006. Recommendations of the U.S. Preventive Services Task Force. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ), 2006. 228 p. Electronic copies available from the [AHRQ Web site](#).
- A step-by-step guide to delivering clinical preventive services: a systems approach. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ), 2002 May. 189 p. Electronic copies available from the [AHRQ Web site](#). See the related QualityTool summary on the [Health Care Innovations Exchange 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 [Electronic Preventive Services Selector \(ePSS\)](#), available as a PDA application and a web-based tool, is a quick hands-on tool designed to help primary care clinicians identify the screening, counseling, and preventive medication services that are appropriate for their patients. It is based on current recommendations of the USPSTF and can be searched by specific patient characteristics such as age, sex, and selected behavioral risk factors.

## PATIENT RESOURCES

The following is available:

- Aspirin or nonsteroidal anti-inflammatory drugs for the prevention of colorectal cancer: U.S. Preventive Services Task Force recommendations.

Electronic copies: Available in Portable Document Format (PDF) from the [Annals of Internal Medicine Online](#).

- 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).

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

## NGC STATUS

This NGC summary was completed by ECRI on February 27, 2007. The information was verified by the guideline developer on March 2, 2007.

## COPYRIGHT STATEMENT

Requests regarding copyright should be sent to: Gerri M. Dyer, Electronic Dissemination Advisor, Agency for Healthcare Research and Quality (formerly the Agency for Health Care Policy and Research), Center for Health Information Dissemination, Suite 501, Executive Office Center, 2101 East Jefferson Street, Rockville, MD 20852; Facsimile: 301-594-2286; E-mail: [gdyer@ahrq.gov](mailto:gdyer@ahrq.gov).

## DISCLAIMER

### NGC DISCLAIMER

The National Guideline Clearinghouse™ (NGC) does not develop, produce, approve, or endorse the guidelines represented on this site.



All guidelines summarized by NGC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public or private organizations, other government agencies, health care organizations or plans, and similar entities.

Guidelines represented on the NGC Web site are submitted by guideline developers, and are screened solely to determine that they meet the NGC Inclusion Criteria which may be found at <http://www.guideline.gov/about/inclusion.aspx>.

NGC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or clinical efficacy or effectiveness of the clinical practice guidelines and related materials represented on this site. Moreover, the views and opinions of developers or authors of guidelines represented on this site do not necessarily state or reflect those of NGC, AHRQ, or its contractor ECRI Institute, and inclusion or hosting of guidelines in NGC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding guideline content are directed to contact the guideline developer.

© 1998-2008 National Guideline Clearinghouse

Date Modified: 9/22/2008

