



Complete Summary

GUIDELINE TITLE

Counseling to prevent skin cancer: recommendations and rationale.

BIBLIOGRAPHIC SOURCE(S)

Counseling to prevent skin cancer: recommendations and rationale of the U.S. Preventive Services Task Force. MMWR Recomm Rep 2003 Oct 17;52(RR-15):13-7. [27 references] [PubMed](#)

GUIDELINE STATUS

This is the current release of the guideline.

This release updates a previously published guideline: U.S. Preventive Services Task Force. Screening for skin cancer-including counseling to prevent skin cancer. In: Guide to clinical preventive services. 2nd ed. Baltimore (MD): Williams & Wilkins; 1996. p. 141-52.

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)

Skin cancer:

- Malignant melanoma
- Basal cell carcinoma
- Squamous cell carcinoma

GUIDELINE CATEGORY

Counseling
Prevention

CLINICAL SPECIALTY

Dermatology
Family Practice
Internal Medicine
Pediatrics

INTENDED USERS

Advanced Practice Nurses
Nurses
Physician Assistants
Physicians
Public Health Departments

GUIDELINE OBJECTIVE(S)

- To summarize the current U.S. Preventive Services Task Force (USPSTF) recommendation on counseling to prevent skin cancer and the supporting scientific evidence
- To update the 1996 recommendation contained in the *Guide to Clinical Preventive Services*, Second Edition

TARGET POPULATION

General population, including adults and children, seen in primary care settings

INTERVENTIONS AND PRACTICES CONSIDERED

Counseling/Prevention

1. Behavioral counseling regarding skin protection measures, including:
 - Reducing sun exposure
 - Wearing protective clothing
 - Using sunscreen
 - Avoiding sunlamps and tanning equipment
 - Practicing skin-self examination

MAJOR OUTCOMES CONSIDERED

Key Question No. 1: Is reducing sun exposure effective in reducing melanoma?

Key Question No. 2: Does the use of sunlamps and tanning beds increase risk for melanoma?

Key Question No. 3: Is the use of sunscreen effective in preventing nonmelanoma skin cancer and melanoma?

Key Question No. 4: Do sun protection behaviors have significant adverse effects?

Key Question No. 5: Is skin self-examination effective in reducing the incidence of melanoma?

Key Question No. 6: Does counseling by a primary care clinician increase sun protective behaviors?

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Note from the National Guideline Clearinghouse (NGC): A systematic evidence review was prepared by the Oregon Health & Science University Evidence-based Practice Center 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).

For questions 1 to 4 (see the "Major Outcomes Considered" field), MEDLINE was searched by combining the MeSH term "melanoma" (with the subheadings "prevention & control," "epidemiology," "etiology," or "genetics") together with the terms "sun exposure," "sunscreening agents" (subheadings: "adverse effect," "therapeutic use," and "toxicity"), or "tanning." This combination of terms was then limited to human studies published in English. In addition, to identify systematic reviews related to questions 1 to 4, the Database of Abstracts of Reviews of Effects (DARE), the Cochrane Database of Systematic Reviews, and ACP Journal Club were searched using the terms "skin cancer," "melanoma," "basal cell carcinoma," and "squamous cell carcinoma."

For question 5 (see the "Major Outcomes Considered" field), a previous search conducted for a systematic review of skin cancer screening identified 1 case-control study. A supplemental search (1996 to August 2002) using the text word "self-examination" and the MeSH term "skin neoplasms" revealed several studies about the accuracy of skin self-examination and the prevalence of its use, but yielded no additional studies about its efficacy.

To find controlled trials of counseling (question 6 - see the "Major Outcomes Considered" field), MEDLINE was searched using the terms "skin neoplasms" or "sunburn" (both with the subheading "prevention & control") and combined this set with "counseling" or "health education" or "behavior therapy" or any term beginning with "counsel." This combination of terms was then limited to human studies published in English.

NUMBER OF SOURCE DOCUMENTS

Key Questions 1 to 4 (see the "Major Outcomes Considered" field): A MEDLINE search identified 172 citations. In addition, a search of the Database of Abstracts of Reviews of Effects (DARE), the Cochrane Database of Systematic Reviews, and American College of Physicians (ACP) Journal Club returned 70 citations. Additional citations from the preliminary searches mentioned above and from the reference lists of review articles were also identified.

Key Question 5 (see the "Major Outcomes Considered" field): A previous search identified 1 case-control study. A supplemental search (1996 to August 2002) yielded no additional studies.

Key Question 6 (see the "Major Outcomes Considered" field): This search (1966 to August 2002) returned 367 citations. Of these, 10 were reports of randomized trials. All but 1 of these trials were excluded because they did not involve primary care providers.

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 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 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 Oregon Health & Science University Evidence-based Practice Center (OHSU 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).

Synthesis of the Literature

For questions 1 and 2 (see the "Major Outcomes Considered" field), the results of the major recent systematic reviews and meta-analyses were summarized, highlighting investigations (case-control and other epidemiologic studies) that are particularly important or not included in previous reviews. For questions 3 and 4 (see the "Major Outcomes Considered" field), controlled trials of sunscreen as well as systematic reviews of observational studies of the effect of sunscreen on the risk for skin cancer were reviewed. For questions 5 and 6 (see the "Major Outcomes Considered" field), the quality of each controlled study was rated and its main findings in the text summarized. For all the systematic reviews and original scientific articles included in this report, the methods developed by the USPSTF were used to rate study quality. The results of randomized controlled trials (questions 3 and 6) were summarized in an Evidence Table. Throughout the review, the authors worked closely with the USPSTF liaisons assigned to this topic.

Preparation of the Summary of Evidence Report

To help the Task Force update their recommendations about sunscreen use and counseling by primary care clinicians, the OHSU EPC conducted a preliminary review of the literature. Project staff from the OHSU EPC presented the results of the preliminary review to USPSTF members and AHRQ staff in February 2000. Based on the results, the Task Force and AHRQ requested that the OHSU EPC conduct a Systematic Evidence Review (SER) of important new evidence published since 1996 addressing the key questions. AHRQ staff edited a draft of the SER and suggested changes. The comments of the AHRQ staff were taken into account in developing the final version of the SER.

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 (USPSTF) 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 USPSTF before final recommendations are confirmed.

Recommendation of Others. Recommendations for counseling to prevent skin cancer from the following groups were discussed: the American Cancer Society, the American Academy of Dermatology, the American Medical Association, the American Academy of Pediatrics, the American College of Obstetricians and Gynecologists, a National Institutes of Health consensus panel, the American Academy of Family Physicians, the American College of Preventive Medicine, and the International Agency for Research on Cancer.

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 USPSTF concludes that the evidence is insufficient to recommend for or against routine counseling by primary care clinicians to prevent skin cancer. **I recommendation.**

The USPSTF found insufficient evidence to determine whether clinician counseling is effective in changing patient behaviors to reduce skin cancer risk. Counseling parents may increase the use of sunscreen for children, but there is little evidence to determine the effects of counseling on other preventive behaviors (such as wearing protective clothing, reducing excessive sun exposure, avoiding sun lamps/tanning beds, or practicing skin self-examination) and little evidence on potential harms.

Clinical Considerations

- Using sunscreen has been shown to prevent squamous cell skin cancer. The evidence for the effect of sunscreen use in preventing melanoma, however, is mixed. Sunscreens that block both ultraviolet A (UV-A) and ultraviolet B (UV-B) light may be more effective in preventing squamous cell cancer and its precursors than those that block only UV-B light. However, people who use sunscreen alone could increase their risk for melanoma if they increase the time they spend in the sun.

- UV exposure increases the risk for skin cancer among people with all skin types, but especially fair-skinned people. Those who sunburn readily and tan poorly, namely those with red or blond hair and fair skin that freckles or burns easily, are at highest risk for developing skin cancer and would benefit most from sun protection behaviors. The incidence of melanoma among whites is 20 times higher than it is among blacks; the incidence of melanoma among whites is about 4 times higher than it is among Hispanics.
- Observational studies indicate that intermittent or intense sun exposure is a greater risk factor for melanoma than chronic exposure. These studies support the hypothesis that preventing sunburn, especially in childhood, may reduce the lifetime risk for melanoma.
- Other measures for preventing skin cancer include avoiding direct exposure to midday sun (between the hours of 10:00 AM and 4:00 PM) to reduce exposure to UV rays and covering skin exposed to the sun (by wearing protective clothing such as broad-brimmed hats, long-sleeved shirts, long pants, and sunglasses).
- The effects of sunlamps and tanning beds on the risk for melanoma are unclear due to limited study design and conflicting results from retrospective studies.
- Only a single case-control study of skin self-examination has reported a lower risk for melanoma among patients who reported ever examining their skin over 5 years. Although results from this study suggest that skin self-examination may be effective in preventing skin cancer, these results are not definitive.

Definitions

The Task Force grades its **recommendations** according to one of 5 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.

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 provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

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

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Effectiveness of Available Interventions

Preventive strategies include reducing sun exposure (e.g., by wearing protective clothing and using sunscreen regularly), avoiding sunlamps and tanning equipment, and practicing skin self-examination. There is little direct evidence, however, that any of these interventions reduce skin cancer morbidity or mortality.

Reducing Sun Exposure

Avoiding direct sunlight by staying indoors or in the shade or by wearing protective clothing is the most effective measure for reducing exposure to ultraviolet light, but there are no randomized trials of sun avoidance to prevent skin cancer. In numerous observational studies, increased sun exposure in childhood and adolescence is associated with increased risk for non-melanoma skin cancer, which usually occurs in sun-exposed areas such as the face.

Recent studies provide a more complex picture of the relationship between sun exposure and melanoma, however. While melanoma incidence is higher in regions near the equator where ultraviolet exposure is most intense, melanoma often occurs in areas of the body not exposed to the sun. In observational studies, intermittent or intense sun exposure was associated with increased risk for melanoma; chronic exposure was associated with lower risk, as was the ability to tan.

Sunlamp and Tanning Bed Avoidance

Six of 19 case-control studies found a positive association between use of sun lamps and melanoma risk, but most did not adjust for recreational sun exposure or for the dosage and timing of sunlamp exposure. Among 9 studies that examined the duration, frequency, or timing of sunlamp or tanning bed exposure, 4 found a positive association, particularly if the dose of exposure was high and if it caused burning.

Sunscreen Use

Daily sunscreen use on the hands and face reduced the total incidence of squamous cell cancer in a randomized trial of 1,621 residents in Australia (rate ratio [RR] 0.61, 95% confidence interval [CI] 0.46-0.81). Sunscreen had no effect on basal cell cancer. Based on this trial, 140 people would need to use sunscreen daily for 4.5 years to prevent 1 case of squamous cell cancer. An earlier randomized trial demonstrated that sunscreen use reduced solar keratoses, precursors of squamous cell cancers. There are no direct data about the effect of sunscreen on melanoma incidence. An unblinded randomized trial showed children at high risk for skin cancers who used sunscreen developed fewer nevi than those who did not. Several epidemiologic studies have found higher risk for melanoma among users of sunscreens than among non-users. A recent meta-analysis of population-based case-control studies found no effect of sunscreen use on risk for melanoma. The conflicting results may reflect the fact that sunscreen use is more common among fair-skinned persons, who are at higher risk for melanoma, than it is among darker-skinned persons; or, this finding may reflect the fact that sunscreen use could be harmful if it encourages longer stays in the sun without protecting completely against cancer-causing radiation.

Skin Self-Examination

The only evidence for the effectiveness of skin self-examination comes from a single case-control study. After adjustment for other risk factors, skin self-examination was associated with lower incidence of melanoma (odds ratio [OR] 0.66, 95% CI 0.44-0.99) and lower mortality from melanoma (OR 0.37, 95% CI 0.16-0.84), although the definition of "self-examination" was limited. This study did not provide sufficient evidence that skin self-examination would reduce the incidence of melanoma or improve outcomes of melanoma.

Effectiveness of Counseling

Community and worksite educational interventions have demonstrated significantly increased use of skin protection measures, such as wearing hats and long-sleeve shirts and staying in the shade; however, evidence addressing the effectiveness of clinician counseling to prevent skin cancer is extremely limited. Most studies of counseling have examined intermediate outcomes such as knowledge and attitudes rather than changes in behavior. In a recent survey, 60% of pediatricians said that they usually or always counsel patients about skin protection, but advice to use sunscreen is more common than advice about wearing protective clothing or avoiding the midday sun.

Simple reminders and instructional materials for clinicians can overcome some of the barriers to regular counseling. A randomized trial of a community-based intervention involving 10 towns in New Hampshire suggests that office-based counseling by physicians may be an effective component of a multi-modal program to promote skin protection. The proportion of children with some sun protection increased in the intervention towns (from 78% to 87%) but not in control communities ($P = 0.029$). More parents reported receiving some sun protection information from a clinician in the intervention towns. However, most of the change was due to increased sunscreen use rather than to reduced sun exposure.

Subgroups Most Likely to Benefit:

UV exposure increases the risk for skin cancer among people with all skin types, but especially fair-skinned people. Those who sunburn readily and tan poorly, namely those with red or blond hair and fair skin that freckles or burns easily, are at highest risk for developing skin cancer and would benefit most from sun protection behaviors. The incidence of melanoma among whites is 20 times higher than it is among blacks; the incidence of melanoma among whites is about 4 times higher than it is among Hispanics.

POTENTIAL HARMS

There are limited data regarding potential harms of counseling or of specific skin protection behaviors. A possible result of skin cancer counseling that focuses on the use of sunscreen can lead to a false sense of security, which might lead to more time in the sun. For example, a randomized trial with young adults found that those who used sunscreen with a high sun protection factor (SPF) stayed longer in the sun than those who used sunscreen with a lower SPF. There has been some concern that use of a SPF of 15 results in vitamin D deficiency.

However, a randomized trial in people over 40 years of age found that sunscreen use over the summer had no effect on 25-hydroxyvitamin D3 levels. Concerns related to sun avoidance include reduced physical activity levels among children and negative effects on mental health. However, no studies have evaluated the effects of sun protection behaviors on these outcomes.

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

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

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Counseling to prevent skin cancer: recommendations and rationale of the U.S. Preventive Services Task Force. MMWR Recomm Rep 2003 Oct 17;52(RR-15):13-7. [27 references] [PubMed](#)

ADAPTATION

Not applicable: Guideline was not adapted from another source.

DATE RELEASED

1996 (revised 2003 Oct)

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: Alfred O. Berg, MD, MPH (Chair); Janet D. Allan, PhD, RN (Vice-chair); Paul 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

**Members of the Task Force at the time this recommendation was finalized.*

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. Screening for skin cancer-including counseling to prevent skin cancer.

In: Guide to clinical preventive services. 2nd ed. Baltimore (MD): Williams & Wilkins; 1996. p. 141-52.

GUIDELINE AVAILABILITY

Electronic copies: Available from the [U.S. Preventive Services Task Force \(USPSTF\) Web site](#). Also available from the [Centers for Disease Control \(CDC\) Web site](#) 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 (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 Review:

- Helfand M, Krages K. Counseling to prevent skin cancer. Summary of the evidence for the U.S. Preventive Services Task Force. Rockville, MD: Department of Health and Human Services, Agency for Healthcare Research and Quality. 2003. 17 p.

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

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.
- Whitlock EP, Orleans CT, Pender NJ, Allan J. Evaluating primary care behavioral counseling interventions: an evidence-based approach. *Am J Prev Med* 2002;22(4):267-84.

Electronic copies: Available from [U.S. Preventive Services Task Force \(USPSTF\) Web site](#).

The following are 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:

- 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](#). See the related QualityTool summary on the [Health Care Innovations Exchange 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 summary was completed by ECRI on July 23, 2003. The information was verified by the guideline developer on October 9, 2003.

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.

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: 10/13/2008

