Complete Summary

GUIDELINE TITLE

Prevention of dental caries in preschool children: recommendations and rationale.

BIBLIOGRAPHIC SOURCE(S)

Calonge N. Prevention of dental caries in preschool children: recommendations and rationale. Am J Prev Med 2004 May;26(4):326-9. PubMed

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)

Dental disease including dental caries

GUIDELINE CATEGORY

Prevention

CLINICAL SPECIALTY

Dentistry
Family Practice
Pediatrics
Preventive Medicine

INTENDED USERS

Advanced Practice Nurses
Dentists
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

- To summarize the U.S. Preventive Services Task Force (USPSTF) recommendations on the primary care clinician's role in the prevention of dental disease among preschool children based on the USPSTF's examination of evidence specific to dental disease in young children.
- To update the 1966 recommendations contained in the Guide to Clinical Preventive Services, Second Edition.

TARGET POPULATION

Preschool children (older than 6 months of age and up to age 5) seen in primary care settings

INTERVENTIONS AND PRACTICES CONSIDERED

1. Prescribing oral fluoride supplementation at currently recommended doses
2. Routine risk assessment for dental disease (considered but not recommended)

MAJOR OUTCOMES CONSIDERED

Key Question No 1: How accurate is primary care clinician (PCC) screening in identifying children ages 0 to 5 years who:

a. have dental caries requiring referral to a dentist?
b. are at elevated risk of future dental caries?

Key Question No 2: How effective is PCC referral of children ages 0 to 5 years to dentists in terms of the proportion of referred children making a dental visit?

Key Question No 3: How effective is PCC prescription of supplemental fluoride in terms of:

a. appropriateness of supplementation decision?
b. parental adherence to the dosage regimen?
c. Prevention of dental caries?

Key Question No 4: How effective is PCC application of fluoride in terms of:

a. appropriateness of application decision?
b. achieving parental agreement for the application?
c. prevention of dental caries?

Key Question No 5: How effective is PCC counseling for caries-preventive behaviors as measured by:

a. adherence to the desired behavior?
b. prevention of dental caries?

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 Research Triangle Institute (RTI) International - University of North Carolina at Chapel Hill (RTI-UNC) 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).

Search Strategy

EPC staff developed an analytic framework of dental caries prevention components, with key questions, and eligibility criteria.

Studies Involving Primary Care Clinicians

EPC staff searched the English language literature in MEDLINE from 1966 to October 2001. They used combinations of (1) terms defining primary care providers or primary care sites and (2) terms defining the dental topics embodied by the individual questions. These searches included terms capturing a wide range of research designs, from randomized controlled trials (RCTs) through questionnaire surveys. They then added any studies identified in the Cochrane Controlled Trials Register and those identified through review of the references in papers found by the searches and through personal knowledge.

Studies in the Dental Literature

Because of the small number of studies identified that involved primary care clinicians, EPC staff pursued their planned strategy of using a combination of existing reviews and new searches in the dental literature to provide necessarily collateral evidence of effectiveness for 3 questions: studies relating to supplemental fluoride, applied fluoride, and counseling for caries-preventive behaviors. They identified recent systematic reviews that addressed the effectiveness of applied fluoride and counseling. The existing review on applied fluoride was updated by searching MEDLINE from the date of the most recent publication in the review.

EPC staff could not identify an appropriate review for the effectiveness of prescribed supplemental fluoride for caries prevention in primary teeth, regardless of who made the prescription. Although reviews on the topic were numerous, none included the collection of studies that was thought pertinent to the key question. Therefore, a modified systematic review for this question was performed

wherein all possible studies were identified by searching for and examining reviews of the topic and then searching forward from the most recent review.

EPC staff included controlled prospective studies in English in which the intervention began before 5 years of age and outcomes were assessed for primary teeth and/or permanent teeth. They accepted the absence of baseline caries prevalence data when initiation of supplementation occurred before eruption of the primary teeth. The controlled, prospective study criterion excluded more than half of the English language studies traditionally cited in support of the effects of fluoride supplementation in primary teeth, which employed retrospective or cross-sectional designs with no assignment or baseline examination.

EPC staff used a separate recent systematic review of fluorosis associated with fluoride supplements to assess the harms associated with their use, as most of the included studies did not address this outcome.

NUMBER OF SOURCE DOCUMENTS

Key Question No 1: Accuracy of screening = 2 studies

Key Question No 2: Referral effectiveness = 1 study

Key Questions No 3-4: Fluoride supplementation and fluoride application = 12 studies

Key Question No 5: Counseling for caries preventive behaviors = 1 study

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 Research Triangle Institute (RTI) International - University of North Carolina at Chapel Hill (RTI-UNC) 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).

Data Extraction and Synthesis

For each of the resulting 4 sets of papers, 2 EPC reviewers independently reviewed each abstract to identify those studies eligible for full review. Criteria for this level of review were simply that the study addressed the key question, reported original data, and involved primary care practitioners. Papers undergoing full review for inclusion were subjected to the same set of criteria. When studies were identified, EPC staff prepared abbreviated evidence tables that summarized their content.

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 affect 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 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 [the 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

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. The following groups' recommendations for prevention of dental caries in preschool children were discussed: The American Academy of Pediatrics; the Centers for Disease Control and Prevention; the American Dental Association; the Canadian Task Force on Preventive Health Care; and the American Academy of Family Physicians.

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 recommends that primary care clinicians prescribe oral fluoride supplementation at currently recommended doses to preschool children older than 6 months of age whose primary water source is deficient in fluoride. B recommendation.

The USPSTF found fair evidence that, in preschool children with low fluoride exposure, prescription of oral fluoride supplements by primary care clinicians leads to reduced dental caries. The USPSTF concluded that the benefits of caries prevention using oral fluoride supplementation outweigh the potential harms of dental fluorosis, which in the United States are primarily observed as a mild cosmetic discoloration of the teeth.

The USPSTF concludes that the evidence is insufficient to recommend for or against routine risk assessment of preschool children by primary care clinicians for the prevention of dental disease. I recommendation.

The USPSTF found no validated risk-assessment tools or algorithms for assessing dental disease risk by primary care clinicians and little evidence that primary care clinicians are able to systematically assess risk for dental disease among preschool-aged children. The USPSTF further found little evidence that either counseling of parents or referring high-risk children to dental care providers results in fewer caries or reduced dental disease. Thus, the USPSTF concluded there is insufficient evidence to determine the balance between the benefits and harms of routine risk assessment to prevent dental disease among preschool children.

Clinical Considerations

- Dental disease is prevalent among young children, particularly those from lower socioeconomic populations; however, few preschool-aged children ever visit a dentist. Primary care clinicians are often the first and only health professionals whom children visit. Therefore, they are in a unique position to address dental disease in these children.
- Fluoride varnishes, professionally applied topical fluorides approved to prevent dental caries in young children, are adjuncts to oral supplementation. Their advantages over other topical fluoride agents (mouth-rinse and gel) include ease of use, patient acceptance, and reduced potential for toxicity.
- Dental fluorosis (rather than skeletal fluorosis) is the most common harm of either oral fluoride or fluoride toothpaste use in children younger than 2 years in the United States. Dental fluorosis is typically very mild and only of aesthetic importance. The recommended dosage of fluoride supplementation was reduced by the American Dental Association in 1994, which is likely to decrease the prevalence and severity of dental fluorosis. The current dosage recommendations are based on the fluoride level of the local community's water supply and are available online at www.ada.org. The primary care clinician's knowledge of the fluoride level of his or her patients' primary water supply ensures appropriate fluoride supplementation and minimizes risk for fluorosis.

Definitions:

Strength of Recommendations

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 [the 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 provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

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

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Effectiveness of Oral Fluoride Supplementation

- Clinical trials that assess the effectiveness of oral fluoride supplementation started before the age of 5 in preventing dental caries have consistently found that fluoride supplementation prevents 32% to 81% of caries lesions in primary teeth or tooth surfaces. The smallest proportional reductions occurred in studies with the highest background water fluoride level, which is a level that is not currently considered appropriate for supplementation. Since these trials have several limitations, the overall strength of evidence is considered fair by the USPSTF, and these results should be generalized with caution. Although only 2 studies with mixed results have examined the effectiveness of fluoride supplementation on preventing caries in permanent teeth in preschool children, a larger body of evidence supports the effectiveness of fluoride supplementation in school-aged children to prevent caries in permanent teeth.
- Professional topical fluoride application is an adjunct to oral fluoride supplementation used for the prevention of dental caries. It offers the advantages of ease of use, patient acceptance, and reduced potential for toxicity. Adoption of fluoride varnish by primary care clinicians is in the early stages in the United States, although it is commonly used in dentistry in Europe. One study reported that only 22% of pediatricians were familiar with fluoride varnish. Four of 6 trials, including 3 randomized controlled trials, found statistically significant reductions in the number of tooth surfaces with cavitated lesions in children younger than 5 years who had fluoride varnish applied to their primary teeth, compared with untreated controls. These trials tested 2 fluoride varnishes: 2.3% F (Duraphat®) and 0.1% F (Fluor Protector®). Since only a small amount of varnish is applied, the total amount of active agent administered to the patient is markedly reduced compared with other fluoride applications, potentially decreasing the risk for dental fluorosis.

POTENTIAL HARMS

- Dental fluorosis is a potential harm of oral fluoride supplementation. A systematic review concluded that the use of fluoride supplements increases the risk for dental fluorosis, although the fluorosis is very mild (as classified by Dean's Fluorosis Index) in the large majority of children. A national survey in the United States found that the prevalence of fluorosis in the permanent teeth of children aged 5 to 17 years was nearly 24%; almost all cases were mild. About 13% and 28% of children who were continuous residents of nonfluoridated and fluoridated communities, respectively, had very mild fluorosis. The prevalence of dental fluorosis considered to be of some aesthetic consequence in children varies from 3% to 7%. One study estimated that nearly two-thirds of cases of dental fluorosis observed in communities in Massachusetts and Connecticut were attributable to supplementation using pre-1994 dosage schedules; the remaining cases were attributed to early use of fluoride toothpaste.
- Although the studies assessing the appropriateness of primary care clinicians' prescription of fluoride supplements have problems that compromise external and internal validity, they indicate that the majority of physicians, especially pediatricians, prescribe oral fluoride supplements to at least some of their patients. Since not all physicians report that they know the fluoride status of

their patients or the fluoridation level of their patients' water supplies, there is the possibility of inappropriate prescription of fluoride supplements that may lead to excessive fluoride intake.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- Recommendations made by the U.S. Preventive Services Task Force (USPSTF) are independent of the U.S. Government. They should not be construed as an official position of the Agency for Healthcare Research and Quality (AHRQ) or the U.S. Department of Health and Human Services.
- There are several gaps in evidence on the prevention of dental disease in young children. No relevant studies have examined the effectiveness of primary care clinicians in securing parental adherence to daily fluoride supplementation. No studies have been published on the risk for dental fluorosis resulting from the use of fluoride varnish. No relevant studies have assessed the accuracy of screening by primary care clinicians to identify children at elevated risk for dental caries. Little research (only 1 case study with substantial methodological problems) examines the effectiveness of primary care clinicians in referring children to a dentist. Limited evidence supports the effectiveness of oral health education or interventions designed to improve oral hygiene in the prevention of dental caries. No research assesses the effectiveness of a primary care clinician-supplied parental counseling intervention in preventing dental caries.

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 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 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

- Preventing Dental Caries in Preschool Children. 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)

Calonge N. Prevention of dental caries in preschool children: recommendations and rationale. Am J Prev Med 2004 May;26(4):326-9. PubMed

ADAPTATION

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

DATE RELEASED

1989 (revised 2004 Apr 8)

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, USPSTF (Professor and Chair, Department of Family Medicine, University of Washington, Seattle, WA); Janet D. Allan, PhD, RN, CS, Vice-chair, USPSTF (Dean, School of Nursing, University of Maryland, Baltimore); Paul Frame, MD (Tri-County Family Medicine, Cohocton, NY, and Clinical Professor of Family Medicine, University of Rochester, Rochester, NY); Charles J. Homer, MD, MPH (Executive Director, National Initiative for Children's Healthcare Quality, Boston, MA); Mark S. Johnson, MD, MPH (Professor of Family Medicine, University of Medicine and Dentistry of New Jersey - New Jersey Medical School, Newark, NJ); Jonathan D. Klein, MD, MPH (Associate Professor, Department of Pediatrics, University of Rochester School of Medicine, Rochester, NY); Tracy A. Lieu, MD, MPH (Associate Professor, Department of Ambulatory Care and Prevention, Harvard Pilgrim Health Care and Harvard Medical School, Boston, MA); C. Tracy Orleans, PhD (Senior Scientist, The Robert Wood Johnson Foundation, Princeton, NJ); Jeffrey F. Peipert, MD, MPH (Director of Research, Women and Infants' Hospital, Providence, RI); Nola J. Pender, PhD, RN (Professor Emeritus, University of Michigan, Ann Arbor, MI); Albert L. Siu, MD, MSPH (Professor and Chairman, Brookdale Department of Geriatrics and Adult Development, Mount Sinai Medical Center, New York, NY); Steven M. Teutsch, MD, MPH (Executive Director, Outcomes Research and Management, Merck & Company, Inc., West Point, PA); Carolyn Westhoff, MD, MSc (Professor of Obstetrics and Gynecology and Professor of Public Health, Columbia University, New York, NY); and Steven H. Woolf, MD, MPH (Professor, Department of Family Practice and Department of Preventive and Community Medicine and Director of Research Department of Family Practice, Virginia Commonwealth University, Fairfax, VA)

*Members of the Task Force at the time this recommendation was finalized. For a list of current Task Force members, go to www.ahrq.gov/clinic/uspstfab.htm.

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 updates a previously published guideline: U.S. Preventive Services Task Force. Counseling to prevent dental and periodontal disease. In: Guide to clinical preventive services, 2nd ed. Baltimore (MD): Williams & Wilkins; 1996. p. 711-22.

GUIDELINE AVAILABILITY

Electronic copies: Available from the U.S. Preventive Services Task Force (USPSTF) 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 Reviews:

- Bader JD, Rozier RG, Lohr KN, Frame PS. Physicians' roles in preventing dental caries in preschool children: a summary of the evidence for the U.S. Preventive Services Task Force. Am J Prev Med. 2004 May;26(4):315-25.
- Dental caries prevention: the physician's role in child oral health. Rockville (MD); Agency for Healthcare Research and Quality; 2004 Mar (Systematic Evidence Review No. 29).

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.

Electronic copies: Available from U.S. Preventive Services Task Force (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.
- Preventing dental caries in preschool children. What's new from the third USPSTF. Rockville (MD): Agency for Healthcare Research and Quality; 2004 Apr. 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).

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 June 30, 1998. The information was verified by the guideline developer on December 1, 1998. This NGC summary was updated by ECRI on April 1, 2004. The information was verified by the guideline developer on April 7, 2004.

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.

© 1998-2004 National Guideline Clearinghouse

Date Modified: 11/15/2004