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Preventive services: The good, the bad, and the unproven

Latest recommendations from the USPSTF reinforce some long-standing advisories and contradict others.

The past 12 months have been busy ones for the United States Preventive Services Task Force (USPSTF), which issued 34 new recommendations since our last Practice Alert on the group's activity a year ago. Some recommendations address controversial topics, such as cholesterol screening, and several others—on topics such as prostate cancer screening and acceptable tests for detecting colorectal cancer—differ from those of such prominent groups as the American Cancer Society (ACS).

TABLE 1 provides a breakdown of the 5 categories of USPSTF recommendations (A, B, C, D, I). We'll start with recent D recommendations (TABLE 2), services

the Task Force recommends against, to emphasize that some preventive measures—even if they are widely touted—either provide no benefit or cause more harms than benefits.

What not to do

The most notable new D recommendations advise against screening men ≥ 75 years of age for prostate cancer and against screening for colorectal cancer after age 85. The Task Force also recommends against routine screening for colorectal cancer after age 75, although individual patient considerations may influence your decision about this screen

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TABLE 1

USPSTF recommendation categories

A Recommendation: The Task Force recommends the service. There is high certainty that the net benefit is substantial.

B Recommendation: The Task Force recommends this service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.

C Recommendation: The Task Force recommends against routinely providing the service. There may be considerations that support providing the service in an individual patient. There is at least moderate certainty that the net benefit is small.

D Recommendation: The Task Force recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.

I Statement: The Task Force concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

for patients between ages 76 and 85. Bear in mind that the benefits of early detection of colon cancer decline after age 75 because of the time lag between early intervention and benefit and because of competing causes of morbidity and mortality.¹

Cancer screening controversies. The recommendations for an age cutoff for prostate and colon cancer screening differ from those of the ACS, which lists no age cutoff for screening for either condition.² In fact, the Task Force does not recommend screening for prostate cancer at all. Its rationale is that before age 75, the evidence is insufficient to evaluate benefits and harms, and after 75 there is good evidence that screening does more harm than good. The ACS no longer recommends routine prostate cancer screening, but does say that when a patient leaves the decision to the physician, screening should be performed.

Thumbs down on these, too. The Task Force now recommends against using spirometry to screen for chronic obstructive pulmonary disease and against using aspirin for preventing stroke in women <55 years and myocardial infarction (MI) in men <45 years. (See below for a fuller discussion of aspirin as a preventive measure.) The Task Force also recommends against screening for asymptomatic bacteriuria in men and nonpregnant women.

■ Recommended interventions

Now for the preventive interventions the USPSTF advises you to perform. They include:

Prescribing low-dose aspirin. The most complicated positive recommendations are those for low-dose aspirin to prevent MI in men and stroke in women. Aspirin is effective in preventing these conditions, but carries the risk of major gastrointestinal (GI) bleeding and cerebral hemorrhage. For younger patients, as we've seen in the previous section, the

TABLE 2

The USPSTF recommends AGAINST

- Using aspirin to prevent stroke in women <55 years of age and to prevent myocardial infarction in men <45 years.
- Screening for asymptomatic bacteriuria in men and nonpregnant women.
- Screening adults for chronic obstructive pulmonary disease using spirometry.
- Screening for colorectal cancer in adults >85 years of age.
- Routine screening for colorectal cancer in adults ages 76 to 85 years. There may be individual considerations that support screening in individual patients.
- Screening for prostate cancer in men ≥75 years of age.

Task Force finds the risks of prophylactic low-dose aspirin therapy outweigh the benefits. But for older patients (men between the ages of 45 and 79 years and women ages 55-79), aspirin *is* recommended when the potential benefit of reducing the incidence of MI in men and stroke in women outweigh the harms. To assist clinicians in weighing the potential benefits and harms, the USPSTF provides a link to a coronary heart disease risk calculator, as well as several tables comparing numbers of prevented heart attacks for men and strokes for women by age and risk category, as well as risks of bleeding complications.³

Screening for hypercholesterolemia. The Task Force's recommendations for dyslipidemia screening differ markedly from those of the American Heart Association and the Final Report of the National Cholesterol Education Program (NCEP) Expert Panel, which recommend routine screening for all adults starting at age 20 with no age cutoff.⁴ The USPSTF recommends deferring screening until patients are older, except for those at increased risk of coronary heart disease. This controversy was described in a 2008 Practice Alert.⁵

FAST TRACK

The USPSTF recommends against screening for prostate cancer in men ≥75 years. In younger men, the evidence is insufficient to make a recommendation.

CONTINUED

TABLE 3

The USPSTF recommends FOR

CARDIOVASCULAR DISEASE PREVENTION

- Using aspirin for men 45 to 79 years of age when the potential benefit due to a reduction in myocardial infarctions outweighs the potential harm due to an increase in gastrointestinal hemorrhage (A).
- Using aspirin for women 55 to 79 years of age when the potential benefit of a reduction in ischemic strokes outweighs the potential harm of an increase in gastrointestinal hemorrhage (A).
- Screening men ≥ 35 years of age for lipid disorders (A).
- Screening men 20 to 35 years of age for lipid disorders if they are at increased risk for coronary heart disease (CHD) (B).
- Screening women ≥ 45 of age for lipid disorders if they are at increased risk for CHD (A).
- Screening women 20 to 45 years of age for lipid disorders if they are at increased risk for CHD (B).
- Asking all adults about tobacco use and providing tobacco cessation interventions for those who use tobacco products (A).
- Screening for type 2 diabetes in asymptomatic adults with sustained blood pressure (either treated or untreated) $> 135/80$ mm Hg (B).

CANCER SCREENING

- Screening adults for colorectal cancer using fecal occult blood testing, sigmoidoscopy, or colonoscopy beginning at age 50 and continuing until 75 years of age (A).

PREGNANCY

- Screening for asymptomatic bacteriuria with urine culture for pregnant women at 12 to 16 weeks' gestation or at the first prenatal visit, if later (A).
- Advising all women planning on, or capable of, pregnancy to take a daily supplement containing 0.4 to 0.8 mg (400-800 mcg) of folic acid (A).
- Asking all pregnant women about tobacco use and providing augmented, pregnancy-tailored counseling for those who smoke (A).
- Intervening during pregnancy and after birth to promote and support breastfeeding (B).

NEWBORNS

- Screening for congenital hypothyroidism (A).
- Screening for phenylketonuria (A).
- Screening for hearing loss (B).

ADOLESCENTS

- Screening adolescents 12 to 18 years of age for major depressive disorder when systems are in place to ensure accurate diagnosis, psychotherapy (cognitive-behavioral or interpersonal), and follow-up (B).
- Providing high-intensity behavioral counseling to prevent sexually transmitted infections (STIs) for all sexually active adolescents and for adults at increased risk for STIs (B).

Screening for diabetes. The only asymptomatic patients the Task Force recommends screening for diabetes are those with a sustained blood pressure of more than 135/80 mm Hg, treated or untreated. The American Diabetes Association (ADA) would cast a wider net, recommending that you consider screening for prediabetes or diabetes in those ≥ 45 years of age, particularly in those with a body mass index of ≥ 25 kg/m², and in overweight patients < 45 years of age who have another risk factor for diabetes.⁶

Screening for colorectal cancer. The Task Force recommends screening adults starting at age 50 until age 75, using fecal occult blood testing, sigmoidoscopy, or colonoscopy. The ACS also recommends these screening modalities, but adds CT colonography and fecal DNA testing to the list of acceptable methods. The USPSTF found insufficient evidence to evaluate the benefits and harms of these newer tests and expressed concern over the high rate of incidental findings and the unknown long-term effects of radiation from CT colonography.

Screening adolescents. The Task Force is in favor of screening teenagers for major depressive disorder (MDD), as long as systems are in place to provide accurate diagnosis, therapy, and follow-up. High-intensity behavioral counseling for sexually active teens and adults at risk is also endorsed for the prevention of sexually transmitted infections. In both areas, however, the Task Force recognizes that adequately addressing these issues will require more than brief office- or clinic-based interventions.

Caring for pregnant women and newborns. According to the USPSTF, pregnant women should be screened for asymptomatic bacteriuria, advised to take a daily folic acid supplement, counseled about tobacco use, and encouraged to breastfeed. Newborns should be screened for congenital hypothyroidism, phenylketonuria, and hearing loss. These most recent A and B recommendations from the USPSTF are summarized in **TABLE 3**.

■ Not proven

When evidence is not available, some organizations are willing to issue guidelines based on expert opinion or consensus. Not so the USPSTF. When the Task Force members find current evidence is not sufficient to make a judgment, they put the intervention into Category I, for Insufficient. The new I recommendations range from aspirin to prevent MI and stroke in those ≥ 80 years to screening children for MDD and performing whole body skin examinations to detect early manifestations of skin cancer. The new I recommendations are listed in **TABLE 4**.

■ What's the take-home message?

All of these recent Task Force decisions add substantially to the full set of Task Force recommendations, which can be found at www.ahrq.gov/CLINIC/uspstfix.htm. Given the large number of level A and B recommendations from the Task Force, clinicians are faced with the dilemma of limited time to accomplish all the recommendations. It is reasonable to concentrate on the positive recommendations and avoid performing the interventions recommended against. The interventions in the “I” category are not as clear-cut and clinicians will continue to struggle with them, particularly when other professional organizations recommend them. ■

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TABLE 4

Evidence is INSUFFICIENT to recommend for or against

- Aspirin for cardiovascular disease prevention in men and women ≥ 80 years of age.
- Computed tomographic colonography and fecal DNA testing as screening modalities for colorectal cancer.
- Screening children 7 to 11 years of age for major depressive disorders.
- Screening for type 2 diabetes in asymptomatic adults with blood pressure $\leq 135/80$ mm Hg.
- Screening adolescents, adults, and pregnant women for illicit drug use.
- Routine screening for gestational diabetes.
- Prostate cancer screening in men < 75 years of age.
- Behavioral counseling to prevent sexually transmitted infections (STIs) in nonsexually active adolescents and in adults not at increased risk for STIs.
- Whole-body skin examination by a primary care clinician or patient skin self-examination for the early detection of cutaneous melanoma, basal cell cancer, or squamous cell skin cancer in the general adult population.

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