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Should you screen—or not? The latest recommendations

While USPSTF recommendations on hypertension and sickle cell disease have stayed the same, those for *Chlamydia* and carotid artery stenosis have changed

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Not enough time and too many potential tests to do. This is the problem faced daily by family physicians. We want to practice up-to-date preventive medicine, but there's little time to analyze the latest studies. Thankfully, we can rely on the United States Preventive Services Task Force, the organization with the most rigorous evidence-based approach, to do the legwork for us.[1]

Last year, and in the early part of this year, the Task Force issued a number of recommendations on topics ranging from hypertension screening to screening for illicit drug use. (See **TABLE 1** for a breakdown of the 5 categories of recommendations.)

While some of these recommendations (**TABLE 2**) were reaffirmations of past recommendations, others included some changes.

The Task Force has:

- **dropped** the age for routine screening for *Chlamydia* in sexually active women from 25 years and younger to 24 and younger.
- **added** a recommendation against the use of aspirin or other nonsteroidal anti-inflammatory drugs (NSAIDs) to prevent colorectal cancer (CRC).
- **changed** its recommendation on screening for carotid artery stenosis. In 1996, the Task Force noted that the evidence was insufficient to make a recommendation; in 2007 it recommended against such routine screening.
- **added** recommendations on counseling patients about drinking and driving, as well as on screening for illicit drug use. In both cases, the Task Force says the evidence is insufficient to recommend for or against.

Continue to screen for HTN, sickle cell, *Chlamydia*

The latest A and B recommendations from the Task Force largely reaffirm previous recommendations. These recommendations cover hypertension, sickle cell disease, and *Chlamydia*.

Hypertension. Screening and treatment of hypertension in adults leads to lower morbidity and mortality from cardiovascular disease and is still recommended.[2]

Sickle cell disease. Screening newborns for sickle cell disease and treating those affected with oral prophylactic penicillin prevents serious bacterial infections. It also remains a recommended service.[3]

***Chlamydia*.** Following a review of the evidence, the Task Force reconfirms the

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TABLE 1

USPSTF recommendation categories

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

B Recommendation: The Task Force recommends the 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 Recommendation: 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.

benefits of screening for *Chlamydia* in sexually active young women, but it has changed the age cutoff. In 2001, the Task Force indicated that sexually active women who were 25 years of age and younger should be screened. In 2007, the Task Force dropped the age to 24 and younger.

The latest recommendation reaffirms the need to screen women (above the cutoff) who are at risk—that is, women who have previously had a sexually transmitted infection (STI), those who have a new or multiple sex partners, and those who exchange sex for money or drugs.[4] Screening is recommended annually; nucleic acid amplification tests are acceptable, allowing testing of urine or vaginal swabs.

Screening during pregnancy is recommended for the same groups—women who are 24 and younger and older women at risk—at the first prenatal visit and again in the third trimester if risk continues. *Chlamydia* is the most common bacterial STI, and screening and treatment prevents pelvic inflammatory disease in women and leads to improved pregnancy outcomes.

FAST TRACK

For more on the rigor behind the recommendations, go to www.ahrq.gov/clinic/uspstf/grades.htm

Interventions that are not recommended

Chemopreventon of colorectal cancer. For the first time, the Task Force issued a recommendation on the use of aspirin or other NSAIDs to prevent CRC. The Task Force does not recommend the routine use of these agents.[5] The dosage needed to prevent CRC is higher than that which prevents cardiovascular disease and can cause significant harm.

Aspirin use is associated with gastrointestinal bleeding and hemorrhagic stroke; NSAID use is associated with gastrointestinal bleeding and renal impairment. The Task Force concludes that in the general adult population, potential harms exceed potential benefits.

Screening for carotid artery stenosis. In 1996, the Task Force found insufficient evidence to recommend for or against routine screening for carotid artery stenosis. In 2007, the Task Force made a recommendation against routine screening for carotid artery stenosis.[6] Screening with duplex ultrasonography results in frequent false positives. Confirmatory testing with angiography is associated with a 1% rate of stroke. Endarterectomy itself has a death or stroke rate of about 3%.

In the general population, close to 8700 adults would need to be screened to prevent 1 disabling stroke. The Task Force indicates that primary care physicians would have better outcomes by concentrating on optimal management of risk factors for cerebral artery disease.

Screening for bacterial vaginosis among low-risk pregnant women. The final D recommendation pertains to screening for bacterial vaginosis during pregnancy to prevent preterm delivery.[7] Pregnant women who have not had a previous preterm delivery are considered at low risk for preterm delivery and there is good evidence that this group does not benefit from screening for, or treatment of, asymptomatic bacterial vaginosis. (A similar recommendation was made in 2001, but it referred to women of "average" risk.)

Insufficient evidence to make a recommendation

Routinely screening men for *Chlamydia*. While it makes clinical sense to test and treat male partners of women with *Chlamydia* infection, the Task Force could not find evidence of the effectiveness of routinely screening men as a way to prevent infection in women.[4] That said, the Task Force points out that screening men is relatively inexpensive and has negligible harms.

Screening for hyperlipidemia in children. While 50% of children with hyperlipidemia continue to have this disorder as adults, the long-term benefits and harms of early detection and treatment with medications and lipid-lowering diets have not been studied.[8] This echoes the position the Task Force took in 1996, when it commented on children as part of an adult hyperlipidemia recommendation.

Physician counseling on drinking and driving. Motor vehicle crashes result in significant morbidity and mortality—especially among adolescents and young adults. Improved car and road design, as well as public health safety efforts, have led to significant improvements in motor vehicle safety. While avoidance of driving under the influence and proper use of occupant restraints are important public health goals, the Task Force, in this first recommendation on the subject, could find no evidence that physician counseling added benefit above those provided by community-wide efforts.[9]

Screening for bacterial vaginosis in pregnant women at high risk for preterm birth. As mentioned previously, screening low-risk pregnant women for bacterial vaginosis results in no benefit. The issue is less clear cut among women at high risk for a preterm delivery—that is, those who have had one previously.

The evidence regarding screening and treating asymptomatic bacterial vaginosis as a means of preventing preterm delivery in these women is mixed and the Task Force was unable to recommend for or

TABLE 2

Summary of new USPSTF recommendations

A RECOMMENDATIONS

The USPSTF *recommends* routinely:

- screening for high blood pressure in adults ≥18 years of age
- screening for sickle cell disease in newborns
- screening for chlamydial infection for all sexually active nonpregnant young women ≤24 years of age and for older nonpregnant women who are at increased risk.

B RECOMMENDATIONS

The USPSTF *recommends* routinely:

- screening for chlamydial infection for all pregnant women ≤24 years of age and for older pregnant women who are at increased risk.

C RECOMMENDATIONS

The USPSTF *recommends against* routine:

- screening for chlamydial infection for women ≥25 years of age, whether or not they are pregnant, if they are not at increased risk.

D RECOMMENDATIONS

The USPSTF *recommends against* routine:

- use of aspirin or other nonsteroidal anti-inflammatory drugs to prevent colorectal cancer in patients at average risk for colorectal cancer
- screening for asymptomatic carotid artery stenosis in the general adult population
- screening for bacterial vaginosis in asymptomatic pregnant women at low risk for preterm delivery.

I RECOMMENDATIONS

The USPSTF concludes that the current *evidence is insufficient* to recommend for or against routine:

- screening for chlamydial infection in men
- screening for lipid disorders in infants, children, adolescents, or young adults (up to age 20)
- counseling in the primary care setting to improve rates of proper use of motor vehicle occupant restraints (child safety seats, booster seats, and lap-and-shoulder belts) beyond the efficacy of legislation and community-based interventions
- counseling of all patients in the primary care setting to reduce driving while under the influence of alcohol or riding with drivers who are alcohol-impaired
- screening for bacterial vaginosis in asymptomatic pregnant women at high risk for preterm delivery
- screening adolescents, adults, and pregnant women for illicit drug use.

FAST TRACK

While 50% of children with hyperlipidemia continue to have the disorder as adults, the benefits of early detection are unknown

against this practice.[7] This reaffirms the Task Force's 2001 recommendation.

Screening for illicit drug use. The Task Force recognizes that illicit drug use is a major cause of illness and social problems. It would appear to have great potential for early detection and intervention. However, the Task Force, in this first-time recommendation, found that screening tools have not been well studied, nor have the long-term effects of different treatment strategies.[10] These are high priority areas for future research. ■

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