

## CLINICAL PREVENTIVE SERVICES: WHAT WORKS, WHAT DOESN'T

IN THE MID-1980s, the U.S. Department of Health and Human Services convened a task force to review a panoply of the preventive medical services then offered. Their 1989 report, *A Guide to Clinical Preventive Services*, marked the first time that many of these programs and services had been subjected to critical, scientific review, and was widely praised. This group, the U.S. Preventive Services Task Force, has now published a thoroughly updated and expanded report.<sup>1</sup> This compendium\* is a basic reference on the effectiveness of routine clinical preventive services, including screening tests, immunizations, and risk reduction counseling for various behaviors. It is intended to provide clinicians with evidence-based recommendations about preventive services.

In this issue we provide a synopsis of the Task Force's evaluation of routine services for adults (excluding those at high risk or pregnant) relevant to the prevention or early diagnosis of chronic diseases and certain communicable diseases. Medical science is not static, of course, and practice recommendations are subject to change as new information becomes available. Guidelines published in the second edition were current in 1995—and none are known to be obsolete yet. Interested readers should consult the *Guide* for detailed discussions on specific recommendations, including references for the information sources considered.

### REVIEW CRITERIA

The Task Force evaluated the effectiveness of the service, and whether receipt of the service affects the health outcome. (Effective screening for and early detection of a particular disease, such as lung cancer, does not necessarily lead to an improved or altered course of the disease.) The cost of recommended services was not considered. Those interested in the cost-effectiveness of specific services must, on their own, incorporate the impact of costs and potential savings

into their considerations.

The Task Force did not recommend an optimal schedule for the provision of the recommended preventive services, nor did they attempt to prioritize recommendations according to which are the most important to offer. In addition, the Task Force did not consider those "preventive" services that lead to reduced morbidity from diseases already diagnosed (i.e., secondary and tertiary prevention). Thus, some clinically important preventive services, such as regular foot examinations for patients with diabetes mellitus, were not considered.

After assessing the available evidence, the Task Force classified these services into several categories. Making the "A" list were those proven effective in well-designed studies that provide "good evidence to support the recommendation for" including these services in a periodic health exam. Those that have demonstrated consistent benefit in several studies of weaker design, were ranked as "B" recommendations, with "fair evidence to support" including them. If there was insufficient evidence to make an objective determination of effectiveness in improving outcomes, practices were given a "C" grade. Note that having insufficient evidence to make a recommendation for or against is *not* equivalent to having evidence of ineffectiveness. Several procedures were put on the thumbs-down "D" list: those *not* shown to be effective and carrying a known risk of harm to the patient. Consequently, there is "fair evidence to recommend against" including D-list services in periodic health exams.

### WHAT'S NEW IN 1996?

The chart (*verso*) shows how many widespread preventive services were rated. Several recommendations are noteworthy because they have changed from the previous edition. Most noteworthy, perhaps, is the downgrading of routine screening for prostate cancer to the "D" category—not recommended.

### Tobacco

Counseling tobacco users to quit has been added to the "A" list. In view of the disappointing long term "quit rate" of any smoking cessation intervention, this may seem surprising. However, simple physician counseling is one of the most effective methods for getting patients addicted to tobacco to quit—even better with appropriate use of nicotine patches or gum as an adjunct. Although quit rates after counseling are low (5-10%),<sup>2</sup> the potential payoff is so large that this is a no-brainer. Recently published guidelines<sup>3</sup> for tobacco use assessment and counseling detail how primary care providers can effectively implement this service.

### Colorectal Cancer

Both routine fecal occult blood testing and routine sigmoidoscopy in persons  $\geq 50$  years old are now considered "B" category recommendations. Each is now judged to be effective in reducing the risk of death from colorectal cancer. In contrast, routine digital rectal exam for colorectal cancer was awarded an agnostic "C" grade.

### Prostate Cancer Screening

The Task Force firmly recommended *against* any routine screening for prostate cancer. Nationally, the policy regarding prostate screening is under debate. There is, of course, no question that digital rectal exam, PSA and transrectal sound can lead to the discovery of asymptomatic prostate malignancies. Nonetheless, indirect evidence suggests that the discovery does not lead to a reduction in morbidity or mortality from prostate cancer. Both the American Cancer Society and the American Urological Association continue to recommend screening for prostate cancer, while the Canadian Task Force on the Periodic Health Examination recommends against the use of both PSA and transrectal ultrasound as routine screening procedures. The recommendations of the American College of Physicians and the American Academy of Family Physicians are under review. The authors of the new *Guide* comment:

\*now available in paperback

“(t)he lack of evidence regarding the benefits of prostate screening and the considerable risks of adverse effects [stemming from evaluation of positive findings] make it important for clinicians to inform patients who express an interest in screening about the consequences of

testing before they consent to screening.... (T)he need for informed consent is especially important for prostate cancer screening because of current uncertainty about its effectiveness and because the proper choice for an individual is highly dependent on personal preferences.”

**REFERENCES**

1. U.S. Preventive Task Force. *Guide to Clinical Preventive Services*, 2nd edition. 1996; Williams & Wilkens, Baltimore.
2. Kottke TE, Battista RN, et al. Attributes of successful smoking cessation interventions in medical practice; a meta-analysis of 39 controlled trials. *JAMA* 1988;259:2883-2889.
3. Consensus Statement: The Agency for Health Care Policy and Research. Smoking cessation clinical practice guideline. *JAMA*. 1996;275:1270-1280.

**Selected Recommendations for Routine Clinical Preventive Services**  
 (for usual risk, adult, nonpregnant populations)

**A**

[Good evidence to recommend including routinely in a periodic health exam.]

1. Periodic blood pressure measurement in persons 21 years or older
2. Mammograms every 1-2 years for women 50-69 years
3. Regular Pap testing in women who are or have been sexually active
4. Folic acid (0.4-0.8 mg) daily for women planning pregnancy
5. Clinician counseling of all patients who use tobacco to reduce or stop use
6. Tetanus-diphtheria immunizations in adults every 10 years
7. Hepatitis B immunizations in young adults

**B**

[Fair evidence to support including routinely in a periodic health exam.]

1. Measurement of total serum/ blood cholesterol in men 35-65 and women 45-65 years
2. Fecal occult blood testing of persons ≥50 years old
3. Routine sigmoidoscopy in persons ≥50 years old

4. Periodic height and weight measurements, screening for obesity
5. Influenza immunization for persons ≥65 years old
6. Pneumococcus immunization for persons aged ≥65 years old
7. Rubella vaccination without screening in women of childbearing age<sup>†</sup>
8. Rubella serology or vaccination history in women of childbearing age<sup>†</sup>
9. Snellen visual acuity testing in elderly persons
10. Periodic questioning of older adults about their hearing (**ABOUT THEIR HEARING!**)
11. Interview or standardized questionnaire to detect problem drinking
12. Counseling problem drinkers to reduce their alcohol consumption
13. Counseling by specially trained educators to change dietary habits
14. Counseling patients to use lap/shoulder belts in motor vehicles
15. Counseling peri-and postmenopausal women about the risks and benefits of hormone prophylaxis

<sup>†</sup>Both approaches are effective. The choice may depend on the relative expense of the screening tests.

**C**

[Insufficient evidence to recommend for or against offering routinely.]

1. Digital exam for colorectal cancer
2. Mammograms every 1-2 years for women 40-49 years
3. Physician testis exam for testicular cancer
4. HIV screening
5. Tonometry for glaucoma
6. Screening for postmenopausal osteoporosis
7. Counseling by primary care clinicians to change dietary habits

**D**

[Fair evidence to recommend against including routinely in a periodic health exam.]

1. Digital rectal exam for prostate cancer
2. PSA or other serum tumor markers for prostate cancer
3. Transrectal ultrasound screening for prostate cancer
4. Chest X-ray or sputum cytology for lung cancer
5. Urine dipstick or microscopy
6. Thyroid function tests