

Appendix:

Data Sources on Use of 25 Clinical Preventive Services for General State or National Populations

Service ¹	Description ²	Data Source Available and Consistent with the USPSTF or ACIP Recommendation ³
Aspirin chemoprophylaxis	Discuss daily aspirin use with men age 50 and older, postmenopausal women, and others at increased risk for heart disease to prevent cardiovascular events	No ⁴
Childhood immunizations	Immunize children against diphtheria, tetanus, pertussis, measles, mumps, rubella, inactivated polio virus, Haemophilus influenza type b, varicella, pneumococcal conjugate, influenza	NIS
Smoking cessation advice, delivery of effective counseling, and use of medications	Screen adults for tobacco use, provide brief counseling, offer medication and referral for more intensive counseling	BRFSS ⁵
Alcohol screening and brief counseling	Screen adults routinely to identify those whose alcohol use places them at increased risk and provide brief counseling with follow-up	No
Colorectal cancer screening	Screen adults age 50 and older routinely with FOBT, sigmoidoscopy or colonoscopy	NHIS ⁶
Hypertension screening and treatment	Measure blood pressure routinely in all adults and treat with anti-hypertensive medication to prevent the incidence of cardiovascular disease	NHIS, BRFSS, NHANES
Influenza immunization	Immunize adults age 50 and older against influenza annually	NHIS, BRFSS
Vision screening	Screen adults age 65 and older routinely for diminished visual acuity with the Snellen visual acuity chart	No
Cervical cancer screening	Screen women who have been sexually active and have a cervix within three years of onset of sexual activity or age 21 routinely with cervical cytology (Pap smears)	NHIS, BRFSS
Cholesterol screening and treatment	Screen routinely for lipid disorders among men age 35 and older and women age 45 and older and treat with lipid-lowering drugs to prevent the incidence of cardiovascular disease	NHIS, BRFSS, NHANES
Pneumococcal immunization	Immunize adults age 65 and older against pneumococcal disease with one dose for most in this population	NHIS, BRFSS, NHANES

Breast cancer screening	Screen women age 50 and older routinely with mammography alone or with clinical breast examination and discuss screening with women ages 40-49 to choose an age to initiate screening	NHIS, BRFSS
Chlamydia screening	Screen sexually active women under age 25 routinely	No
Discuss calcium supplementation	Counsel adolescent and adult women to use calcium supplements to prevent fractures	No
Vision screening — children	Screen children under age 5 routinely to detect amblyopia, strabismus, and defects in visual acuity	NHIS, MEPS ⁷
Discuss folic acid supplements	Counsel women of childbearing age routinely on the use of folic acid supplements to prevent birth defects	No ⁸
Obesity screening	Screen all adults routinely for obesity and offer obese patients high-intensity counseling about diet, exercise, or both together with behavioral interventions for at least one year	No ⁹
Depression screening	Screen adults for depression in clinical practices with systems in place to assure accurate diagnosis, treatment and follow-up	No
Hearing screening	Screen for hearing impairments in adults age 65 and older and make referrals to specialists for treatment	No ¹⁰
Injury prevention counseling	Assess the safety practices of parents of children under age 5 and provide counseling on child safety seats, window/stair guards, pool fence, poison control, hot water temperature, and bicycle helmets	No ¹¹
Osteoporosis screening	Screen routinely women age 65 and older and age 60 and older at increased risk for osteoporosis and discuss the benefits and harms of treatment options	No ¹²
Cholesterol screening in high-risk groups	Screen men ages 20-35 and women ages 20-45 routinely for lipid disorders if they have other risk factors for coronary heart disease and treat with lipid-lowering drugs to prevent the incidence of cardiovascular disease	NHIS, BRFSS, NHANES
Diabetes screening	Screen for diabetes in adults with hypertension or high cholesterol and treat with a goal of lowering levels below target values	No
Diet counseling	Offer intensive behavioral dietary counseling to adult patients with hyperlipidemia and other known risk factors for cardiovascular and diet-related chronic disease	No ⁹
Tetanus-diphtheria booster	Immunize adults every 10 years	NHIS ¹³

¹ Services include those evaluated by the National Commission on Prevention Priorities for their 2006 rankings of clinical preventive services. Services in the same group were tied in the rankings, which was based on service's relative health benefits and cost effectiveness. For a complete description of the rankings see : Maciosek MV, Coffield AB, Edwards NM, Goodman MJ, Flottemesch TJ, Solberg LI. Priorities among effective clinical preventive services: results of a systematic review and analysis. *Am J Prev Med* 2006; 31(1):52-61. This article and other materials are available at www.prevent.org/ncpp.

² The description of each service is consistent with the recommendation of the U.S. Preventive Services Task Force (USPSTF) or in the case of immunizations, the Advisory Committee on Immunization Practices (ACIP).

³ We reviewed data sources that are high-quality, publicly accessible, and nationally representative. For clinical preventive services, these include the Behavioral Risk Factor Surveillance Survey (BRFSS), National Health Interview Survey (NHIS), National Health and Nutrition Examination Survey (NHANES), Medical Expenditure Panel Survey (MEPS), and National Immunization Survey (NIS). BRFSS is a household telephone survey conducted in each state, thus providing state-specific data. NHANES combines interviews with physical examinations. NIS combines a household telephone survey with a mailed survey to children's immunization providers. NHIS is a household telephone survey. MEPS is a nationally representative subsample of households that participated in the prior year's NHIS.

⁴ BRFSS (2005) and MEPS (2004) have asked survey respondents if they are taking aspirin daily or every other day. This does not tell us what doctors or other health care providers are doing to get patients to consider daily aspirin use.

⁵ NHIS (2005) has only asked if smokers were advised to quit. BRFSS (2005) has asked about advice to quit as well as whether providers discussed medications or other strategies to assist with quitting. It is also important to know if effective treatments are being used as recommended. CDC's voluntary state-based Adult Tobacco Survey has assessed methods used to quit smoking.

⁶ BRFSS (2005) and MEPS (2004) have also assessed the use of colorectal cancer screening, but do not allow researchers to discern whether the test was for screening or diagnostic purposes.

⁷ NHIS (2002) asked parents whether children's vision has been screened. MEPS assessed childhood vision screening in 2001, 2002, 2003 and 2004.

⁸ No survey has asked whether a health professional counseled about the benefits of using folic acid supplements. BRFSS (2004) has asked about use of multi-vitamins, including whether the vitamins or supplements contained folic acid. NHIS (2005) has asked about use of multi-vitamins, but not folic acid supplementation in particular.

⁹ BRFSS (2005) asked if a health professional has given advice about weight. NHANES (2004) asked if a health professional has ever told you that you were overweight. BRFSS, NHIS, and NHANES surveys from previous years asked if a health professional has ever offered advice about eating fewer high fat and high cholesterol foods and eating more fruits and vegetables. It is impossible to discern from these questions whether the counseling was brief advice or the intensive behavioral counseling recommended by the USPSTF.

¹⁰ NHANES (2003—2004) asked respondents how long it is has been since they last had their hearing tested. The USPSTF has recommended that health care providers periodically question older adults about their hearing and make referrals, not conduct hearing tests. The USPSTF recommendation is currently under review.

¹¹ MEPS (2004) asked if a health care provider had advised about child safety seats. NHIS (1999) asked if a health care provider had ever talked about injury prevention, such as safety belt use, helmet use or smoke detectors. This question was too general to assess consistency with the USPSTF recommendation.

¹² NHANES (2003—2004) asked respondents if a doctor ever told them they had osteoporosis. This does not provide data on screening history.

¹³ NHIS (1999) asked adults if they had a tetanus shot in the previous 10 years.