

### 500 Cities: Local Data for Better Health

### Prevention

#### Current lack of health insurance among adults aged 18-64 years

Demographic group	All resident adults aged 18–64 years.
Numerator	Respondents aged 18–64 years who report having no current health insurance coverage.
Denominator	Respondents aged 18–64 years who report having current health insurance or having no current health insurance (excluding those who refused to answer, had a missing answer, or answered "don't know/not sure").
Measures of frequency	Annual prevalence: crude and age adjusted (standardized by the direct method to the year 2000 standard U.S. population, distribution 22 [1]) with 95% confidence intervals and by demographic characteristics when feasible.
Time period of case definition	Current.
Background	In 2012, approximately 15.4% of U.S. residents did not have health insurance (2). Lack of health insurance varies substantially by income, education, age, race, and ethnicity (2).
Significance	Lack of health insurance remains a major determinant of access to necessary health services, including preventive care. Certain socioeconomic conditions, including a lack of health insurance coverage and poverty, are associated with poor health status and chronic disease (3,4).
Limitations of indicator	Covered health-care procedures and services can vary across insurance and other health plans. Required payments and copayments by patients can vary across insurance and other health plans, thereby affecting the financial ability of patients to receive services. Because individual persons might move in and out of health insurance, this indicator might underestimate the prevalence of a lack of health insurance. All persons aged ≥65 years are eligible for Medicare.

Data resources	Behavioral Risk Factor Surveillance System (BRFSS).
Limitations of data resources	As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage, nonresponse, or measurement bias. In an effort to address noncoverage issues related to phone use, BRFSS began including cell phone interviews in the 2011 data collection. Due to changes in sampling and weighting methodology, 2011 is a new baseline for BRFSS, and comparisons with prior year data are inappropriate.
Related recommendations	Healthy People 2020 objective AHS-1: Increase the proportion of persons with health insurance.

- 1. Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Healthy people 2010 statistical notes, no. 20. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2001. Available at https://www.cdc.gov/nchs/data/statnt/statnt20.pdf ...
- 2. DeNavas-Walt C, Proctor BD, Smith JC; Income, poverty, and health insurance coverage in the United States: 2012. Current Population Reports, P60–245. Washington, DC: US Census Bureau; 2013.
- 3. Weissman JS, Stern R, Fielding SL, Epstein AM. Delayed access to health care: risk factors, reasons, and consequences. Ann Intern Med 1991;114:325–31.
- 4. CDC. Health insurance coverage and receipt of preventive health services—United States, 1993. MMWR 1995;44:219–25.

## Visits to doctor for routine checkup within the past year among adults aged ≥18 years

Demographic group	Resident adults aged ≥18 years.
Numerator	Respondents aged ≥18 years who report having been to a doctor for a routine checkup (e.g., a general physical exam, not an exam for a specific injury, illness, condition) in the previous year.
Denominator	Respondents aged ≥18 years who report or do not report having been to a doctor for a routine checkup (e.g., a general physical exam, not an exam for a specific injury, illness, condition) in the previous year (excluding those who refused to answer, had a missing answer, or answered "don't know/not sure").
Measures of frequency	Biennial prevalence (even years): crude and age adjusted (standardized by the direct method to the year 2000 standard U.S. population, distribution 9 [1]) with 95% confidence intervals and by demographic characteristics when feasible.

Time period of case definition	Previous year.
Background	In 2011, approximately two-thirds of US adults reported having been to a doctor for a routine general physical examination. ( <i>2</i> )
Significance	Accessing preventive healthcare services, such as getting routine physical checkups, receiving recommended vaccinations on appropriate schedules, and checking blood pressure and cholesterol and maintaining them at health levels, can reduce morbidity and mortality from chronic diseases.
Limitations of indicator	None.
Data resources	Behavioral Risk Factor Surveillance System (BRFSS).
Limitations of data resources	As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage, nonresponse, or measurement bias. In an effort to address noncoverage issues related to phone use, BRFSS began including cell phone interviews in the 2011 data collection. Due to changes in sampling and weighting methodology, 2011 is a new baseline for BRFSS, and comparisons with prior year data are inappropriate.
Related recommendations	None.

- 1. Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Healthy people 2010 statistical notes, no. 20. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2001. Available at https://www.cdc.gov/nchs/data/statnt/statnt20.pdf
- 2. Xu F, Mawokomatanda T, Flegel D, Pierannunzi D, Garvin W, Chowdhury P, Salandy S, Crawford C, Town M. Surveillance for certain health behaviors among states and selected local areas Behavioral Risk Factor Surveillance System, United States, 2011. MMWR 2014;63(No. SS-9):1-150.

#### Visits to dentist or dental clinic among adults aged ≥18 years

Demographic group	Resident adults aged ≥18 years.
Numerator	Respondents aged ≥18 years who report having been to the dentist or dental clinic in the previous year.

Denominator	Respondents aged ≥18 years (exclude unknowns and refusals).
Measures of frequency	Biennial prevalence (even years): crude and age adjusted (standardized by the direct method to the year 2000 standard U.S. population, distribution 9 [1]) with 95% confidence intervals and by demographic characteristics when feasible.
Time period of case definition	Previous year.
Background	Most oral diseases are preventable in part with regular visits to the dentist. In 2008, 70% (median) of adults aged≥18 years in the United States reported having a dental visit in the past year (BRFSS) (2). The rate has remained essentially unchanged over the past decade. Access to oral health care is associated with various socio-demographic characteristics and geographic location. To address these determinants to reduce health disparities and improve the oral health outcomes, HP2020 chose utilization of oral health services as a Leading Health Indicator.
Significance	Regular use of the oral health-care delivery system leads to better oral health by providing an opportunity for clinical preventive services and early detection or oral diseases (3). Infrequent use of dental services has been associated with poor oral health among adults (3,4).
Limitations of indicator	Indicator does not convey reason for visit or whether dental care was actually received.
Data resources	Behavioral Risk Factor Surveillance System (BRFSS).
Limitations of data resources	As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage, nonresponse, or measurement bias. In an effort to address noncoverage issues related to phone use, BRFSS began including cell phone interviews in the 2011 data collection. Due to changes in sampling and weighting methodology, 2011 is a new baseline for BRFSS, and comparisons with prior year data are inappropriate.
Related recommendations	Healthy People 2020 objective OH-7: Increase the proportion of children, adolescents, and adults who used the oral health care system in the past 12 months (LHI).

- 1. Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Healthy people 2010 statistical notes, no. 20. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2001. Available at https://www.cdc.gov/nchs/data/statnt/statnt20.pdf
- 2. National Institute of Dental and Craniofacial Research (NIDCR) and the CDC's. (CDC). NIDCR/CDC Dental, Oral, and Craniofacial Data Resource Center–Data Query System. Available at http://drc.hhs.gov/dqs.htm 🖸 .
- 3. Institute of Medicine, National Research Council. Improving Access to Oral Health Care for Vulnerable and Underserved Populations. 2011.
- 4. Cook J, Owen P, Bender B, et al. Dental service use and dental insurance coverage-United States, Behavioral Risk

Factor Surveillance System, 1995. MMWR 1997;46:1199–203.

# Taking medicine for high blood pressure control among adults aged $\geq$ 18 years with high blood pressure

Demographic group	Resident adults aged ≥18 years.
Numerator	Respondents aged ≥18 years who report taking medicine for high blood pressure.
Denominator	Respondents aged ≥18 years who report having been told by a doctor, nurse, or other health professional of having high blood pressure other than during pregnancy (excluding those who refused to answer, had a missing answer, or answered "don't know/not sure").
Measures of frequency	Biennial (odd years) prevalence: crude and age adjusted (standardized by the direct method to the year 2000 standard U.S. population, distribution 9 [1]) with 95% confidence intervals and by demographic characteristics when feasible.
Time period of case definition	Previous year.
Background	CDC showed that approximately half (47%) of persons with high blood pressure have their condition under control ( <i>2</i> ). Improving the control rate to reduce the risk for heart attack and stroke is very important ( <i>3</i> ). Studies showed that 46,000 deaths might be averted each year if 70% of patients with high blood pressure were treated according to goals established in current clinical guidelines ( <i>3</i> ). Reducing average population systolic blood pressure by only 12–13 mmHg could reduce stroke by 37%, coronary heart disease by 21%, cardiovascular disease deaths by 25%, and deaths from all causes by 13% ( <i>3</i> ).
Significance	Approximately 20%–30% of coronary heart disease and 20%–50% of strokes in the United States are attributable to uncontrolled hypertension ( <i>3</i> ). Blood pressure–related cardiovascular complications can occur before the onset of established hypertension. Lifestyle risk factors for hypertension include high sodium intake, excessive caloric intake, physical inactivity, excessive alcohol consumption, and deficient potassium intake ( <i>3</i> ). Lifestyle changes and medications can be used to reduce blood pressure ( <i>3</i> ).
Limitations of indicator	Indicator does not measure the proportion of adults with diagnosed hypertension who have their blood pressure successfully controlled. In addition, the indicator does not include persons with hypertension who have their blood pressure successfully controlled through lifestyle changes and without medication. Indicator only measures those aware of being told they have high blood pressure and not those who have been told they have hypertension.
Data resources	Behavioral Risk Factor Surveillance System (BRFSS).

Limitations of data resources	As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage, nonresponse, or measurement bias. In an effort to address noncoverage issues related to phone use, BRFSS began including cell phone interviews in the 2011 data collection. Due to changes in sampling and weighting methodology, 2011 is a new baseline for BRFSS, and comparisons with prior year data are inappropriate.
Related recommendations	Healthy People 2020 objective HDS-11: Increase the proportion of adults with hypertension who are taking prescribed medications to lower their blood pressure.

- 1. Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Healthy people 2010 statistical notes, no. 20. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2001. Available at https://www.cdc.gov/nchs/data/statnt/statnt20.pdf ...
- 2. CDC. Vital signs: awareness and treatment of uncontrolled hypertension among adults—United States, 2003–2010. MMWR 2012;61:703–9.
- 3. Go AS, Mozaffarian D, Roger VL, et al. Heart disease and stroke statistics—2013 update: a report from the American Heart Association. Circulation 2013;127:e6–245.

#### Cholesterol screening among adults aged ≥18 years

Demographic group	Resident adults aged ≥18 years.
Numerator	Respondents aged ≥18 years who report having their cholesterol checked within the previous 5 years.
Denominator	Respondents aged ≥18 years who report having their cholesterol checked within the past 5 years (excluding those who refused to answer, had a missing answer, or answered "don't know/not sure").
Measures of frequency	Biennial (odd years) prevalence: crude and age adjusted (standardized by the direct method to the year 2000 standard U.S. population, distribution 9 [1]) with 95% confidence intervals and by demographic characteristics when feasible.
Time period of case definition	Previous 5 years.
Background	25% of adults aged $\geq$ 18 years still have not had their cholesterol checked within the past 5 years (2). Among those who had ever been screened for high blood cholesterol, the percentage who reported ever being told by a health-care provider their blood cholesterol was high was 35.0% in 2009 (2).

Significance	Elevated levels of serum cholesterol can lead to development of atherosclerosis (3). Approximately 30%–40% of coronary heart disease and 10%–20% of strokes in the United States are attributable to elevated serum cholesterol (3). Elevated cholesterol has been associated with physical inactivity, high fat intake, smoking cigarettes, diabetes, and obesity (3). Lifestyle changes and medications can reduce cholesterol and prevent heart disease among persons with elevated serum cholesterol (3).
Limitations of indicator	Validity and reliability of this indicator can be low because patients might not be aware of the specific tests conducted on their blood samples collected in clinical settings.
Data resources	Behavioral Risk Factor Surveillance System (BRFSS).
Limitations of data resources	As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage, nonresponse, or measurement bias. In an effort to address noncoverage issues related to phone use, BRFSS began including cell phone interviews in the 2011 data collection. Due to changes in sampling and weighting methodology, 2011 is a new baseline for BRFSS, and comparisons with prior year data are inappropriate.
Related recommendations	Healthy People 2020 objective HDS-6: Increase the proportion of adults who have had their blood cholesterol checked within the preceding 5 years.

- 1. Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Healthy people 2010 statistical notes, no. 20. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2001. Available at https://www.cdc.gov/nchs/data/statnt/statnt20.pdf
- 2. CDC. Prevalence of cholesterol screening and high blood cholesterol among adults—United States, 2005, 2007, and 2009 MMWR 2012;61;697–702.
- 3. National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III). Third report of the National Cholesterol Education Program (NCEP) expert panel on detection, evaluation, and treatment of high blood cholesterol in adults (Adult Treatment Panel III) final report. Circulation 2002;106:3143–421.

#### Mammography use among women aged 50-74 years

Demographic group	Resident females aged 50–74 years.
Numerator	Female respondents aged 50–74 years who report having had a mammogram within the previous 2 years.
Denominator	Female respondents aged 50–74 years who report ever having or never having had a mammogram (excluding unknowns and refusals)

Measures of frequency	Prevalence, crude and age adjusted (standardized by the direct method to the year 2000 standard U.S. population [1]) with 95% confidence intervals and by demographic characteristics when feasible.
Time period of case definition	Past 2 years.
Background	In 2010, 20% of women aged 50–74 years had not had a mammogram with the previous 2 years ( <i>2</i> ). Breast cancer is the most common cancer among women. In 2010, female breast cancer caused approximately 41,000 deaths ( <i>3</i> ). Approximately 207,000 new cases of invasive female breast cancer are diagnosed annually ( <i>3</i> ).
Significance	Strong evidence shows that mammography screening can reduce breast cancer deaths by 17% among women aged 50–69 years ( <i>4</i> ). The USPSTF recommends biennial screening for women aged 50–74 years ( <i>5</i> ). Evidence supporting mammography among women aged 40–49 years is lower but with higher false positives that result in less net benefit ( <i>5</i> ).
Limitations of indicator	Recommendations for mammography screening are not always consistent among national groups.
Data resources	Behavioral Risk Factor Surveillance Survey (BRFSS).
Limitations of data resources	As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage, nonresponse, or measurement bias. In an effort to address noncoverage issues related to phone use, BRFSS began including cell phone interviews in the 2011 data collection. Due to changes in sampling and weighting methodology, 2011 is a new baseline for BRFSS, and comparisons with prior year data are inappropriate.
Related recommendations	Healthy People 2020 objective C-17: Increase the proportion of women who receive breast cancer screening based on the most recent guidelines.

- 1. Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Healthy people 2010 statistical notes, no. 20. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2001. Available at https://www.cdc.gov/nchs/data/statnt/statnt20.pdf ...
- 2. CDC. Breast cancer screening among adult women—Behavioral Risk Factor Surveillance System, United States, 2010. MMWR 2012;61(Suppl; June 15, 2012):45–50.
- 3. US Cancer Statistics Working Group. United States cancer statistics: 1999–2010 incidence and mortality web-based report. Atlanta, GA: US Department of Health and Human Services, CDC; National Cancer Institute; 2013. Available at https://www.cdc.gov/uscs.
- 4. Mandelblatt JS, Cronin KA, Bailey S, et al. Effects of mammography screening under different screening schedules: model estimates of potential benefits and harms Ann Intern Med 2009;151:738–47.
- 5. US Preventive Services Task Force. Screening for breast cancer: U.S. Preventive Services Task Force recommendation

statement. Ann Intern Med 2009;151:716-26.

### Papanicolaou smear use among adult women aged 21-65 years

Demographic group	Resident females aged 21–65 years without a hysterectomy.
Numerator	Female respondents aged 21–65 years who do not report having had a hysterectomy and who report having had a Papanicolaou (Pap) smear within the previous 3 years
Denominator	Female respondents aged 21–65 years who do not report having had a hysterectomy and who report ever having or never having had a Pap smear (excluding unknowns and refusals)
Measures of frequency	Prevalence, crude and age adjusted (standardized by the direct method to the year 2000 standard U.S. population [1]) with 95% confidence intervals and by demographic characteristics when feasible.
Time period of case definition	Past 3 years
Background	In 2010, 87% of women aged 21–65 years had a Papanicolaou (Pap) test within the past 3 years (2). In 2010, cancer of the cervix caused approximately 4,000 deaths, and approximately 11,800 new cases are diagnosed annually (3). Black women have higher incidence of and mortality from cervical cancer than do white women (3).
Significance	Approximately 40%–60% of cervical cancer deaths can be prevented by increased use of the Pap test (especially among women never screened) and effective, timely treatment (4). The dramatic decrease in cervical cancer incidence and mortality during the past 50 years is mainly the result of the widespread use of the Pap test (2).
Limitations of indicator	Recommendations for screening frequency vary by risk factor and a 3-year interval might not be appropriate for some women.
Data resources	Behavioral Risk Factor Surveillance Survey (BRFSS).
Limitations of data resources	As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage, nonresponse, or measurement bias. In an effort to address noncoverage issues related to phone use, BRFSS began including cell phone interviews in the 2011 data collection. Due to changes in sampling and weighting methodology, 2011 is a new baseline for BRFSS, and comparisons with prior year data are inappropriate.  National recommendations also include use of human papillomavirus (HPV) testing along with Pap testing for cervical cancer screening. BRFSS does not contain questions about HPV status or testing.

Related recommendations

*Healthy People 2020* objective C-15: Increase the proportion of women who receive a cervical cancer screening based on the most recent guidelines.

- 1. Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Healthy people 2010 statistical notes, no. 20. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2001. Available at https://www.cdc.gov/nchs/data/statnt/statnt20.pdf
- 2. Jemal A, Simard EP, Dorell C, et al. annual report to the nation on the status of cancer, 1975–2009, featuring the burden and trends in human papillomavirus (HPV)–associated cancers and HPV vaccination coverage levels. J Natl Cancer Inst 2013;105:175–201.
- 3. US Cancer Statistics Working Group. United States cancer statistics: 1999–2010 incidence and mortality web-based report. Atlanta, GA: US Department of Health and Human Services, CDC; National Cancer Institute; 2013. Available at https://www.cdc.gov/uscs.
- 4. American College of Obstetricians and Gynecologists. Screening for cervical cancer. Practice Bulletin No. 131. Obstet Gynecol 2012;120:1222–38.

# Fecal occult blood test, sigmoidoscopy, or colonoscopy among adults aged 50-75 years

Demographic group	Resident adults aged 50–75 years.
Numerator	Respondents aged 50–75 years who report having had 1) a fecal occult blood test (FOBT) within the past year, 2) a sigmoidoscopy within the past 5 years and a FOBT within the past 3 years, or 3) a colonoscopy within the past 10 years.
Denominator	Respondents aged 50–75 years who report ever having or never having an FOBT, sigmoidoscopy, or colonoscopy (excluding those who refused to answer, had a missing answer, or answered "don't know/not sure").
Measures of frequency	Prevalence, crude and age adjusted (standardized by the direct method to the year 2000 standard U.S. population [1]) with 95% confidence intervals and by demographic characteristics when feasible.
Time period of case definition	Past year for FOBT alone, both past 5 years for sigmoidoscopy and past 3 years for FOBT, past 10 years for colonoscopy.
Background	In 2010, 35% of adults aged 50–75 years had not received a recommended colorectal cancer screening test within the appropriate time interval (2). Among adults aged 50–75 years, 60% reported having had colonoscopy within 10 years as their most recent colorectal cancer

	screening test ( <i>2</i> ). In 2010, colorectal cancer caused approximately 52,000 deaths ( <i>3</i> ). Approximately 131,600 cases are diagnosed annually ( <i>3</i> ).
Significance	Colorectal cancer screening can both prevent the occurrence of cancer by detecting and removing precancerous lesions, and detect colorectal cancer early when treatment is more effective (4). Colorectal cancer screening has been shown to significantly reduce deaths from the disease (4).
Limitations of indicator	National colorectal cancer screening guidelines vary regarding the choice of screening test, the appropriate screening interval, and the age at which screening should occur.
Data resources	Behavioral Risk Factor Surveillance Survey (BRFSS).
Limitations of data resources	As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage, nonresponse, or measurement bias. In an effort to address noncoverage issues related to phone use, BRFSS began including cell phone interviews in the 2011 data collection. Due to changes in sampling and weighting methodology, 2011 is a new baseline for BRFSS, and comparisons with prior year data are inappropriate.
Related recommendations	Healthy People 2020 objective C-16: Increase the proportion of adults who receive a colorectal cancer screening based on the most recent guidelines.

- 1. Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Healthy people 2010 statistical notes, no. 20. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics; 2001. Available at https://www.cdc.gov/nchs/data/statnt/statnt20.pdf
- 2. CDC. Prevalence of colorectal cancer screening among adults—Behavioral Risk Factor Surveillance System, United States, 2010. MMWR 2012;61(Suppl; June 15, 2012):51–56.
- 3. US Cancer Statistics Working Group. United States cancer statistics: 1999–2010 incidence and mortality web-based report. Atlanta, GA: US Department of Health and Human Services, CDC; National Cancer Institute; 2013. Available at https://www.cdc.gov/uscs.
- 4. Whitlock EP, Lin JS, Liles E, et al. Screening for colorectal cancer: a targeted systematic review for the U.S. Preventive Services Task Fnorce. Ann Intern Med 2008;149:638–58.

# Older adults aged ≥65 years who are up to date on a core set of clinical preventive services by age and sex

Demographic group	All resident adults aged ≥65 years.
Numerator	Women: Number of women aged ≥65 years reporting having received all of the following: an influenza vaccination in the past year; a pneumococcal vaccination (PPV) ever; either a fecal

	occult blood test (FOBT) within the past year, a sigmoidoscopy within the past 5 years and a FOBT within the past 3 years, or a colonoscopy within the previous 10 years; and a mammogram in the past 2 years.  Men: Number of men aged ≥65 years reporting having received all of the following: an influenza vaccination in the past year; a PPV ever; and either a fecal occult blood test (FOBT) within the past year, a sigmoidoscopy within the past 5 years and a FOBT within the past 3 years, or a colonoscopy within the past 10 years.
Denominator	Women: Number of women aged ≥65 years.  Men: Number of men aged ≥65 years.
Measures of frequency	Annual prevalence with 95% confidence intervals and by demographic characteristics when feasible.
Time period of case definition	Calendar year.
Background	Older adults are among the fastest growing age groups, and the first baby boomers (adults born during 1946–1964) turned 65 in 2011 (1). In 2010, 68% of adults aged $\geq$ 65 years had multiple chronic conditions (2) (i.e., two or more chronic conditions) (3). For those aged $\geq$ 85 years, 83% had multiple chronic conditions (2). Older adults are at high risk for developing chronic illnesses and related disabilities. National experts agree on a set of recommended clinical preventive services for adults aged $\geq$ 65 years that can help detect many of these diseases and either delay their onset or identify them early in more treatable stages. These services include influenza vaccination, pneumococcal vaccination, colorectal cancer screening, and mammography screening for women (4). Colorectal cancer screening has been shown to significantly reduce mortality from the disease (5).
Significance	The up-to-date measure improves program transparency, accountability, and decision making by driving the coordination of disease-based prevention activities both in the clinical and public health settings. Because this is an all-or-none measure, it cannot increase unless multiple component activities (screenings and vaccinations) are delivered to the same person and thereby potentially increases the effectiveness of clinical preventive care.
Limitations of indicator	The indicator is limited to a select set of clinical preventive services by age and sex for which data are available in the Behavioral Risk Factor Surveillance System (BRFSS). Data on all services in the core set are not available every year given the rotating core questions on BRFSS. The indicator should not be assumed to cover all recommended clinical preventives services for this age group.
Data resources	Behavioral Risk Factor Surveillance System (BRFSS).
Limitations of data resources	As with all self-reported sample surveys, BRFSS data might be subject to systematic error resulting from noncoverage, nonresponse, or measurement bias. In an effort to address noncoverage issues related to phone use, BRFSS began including cell phone interviews in the 2011 data collection. Due to changes in sampling and weighting methodology, 2011 is a new

	baseline for BRFSS, and comparisons with prior year data are inappropriate.
Related recommendations	Healthy People 2020 objective OA-2: Increase the proportion of older adults who are up to date on a core set of clinical preventive services.

- 1. US Department of Health and Human Services. Healthy people 2020. Atlanta, GA: US Department of Health and Human Services, CDC. Available at http://www.healthypeople.gov/2020/default.aspx 🖸 .
- 2. Centers for Medicare and Medicaid Services. Chronic conditions among medicare beneficiaries, chartbook, 2012 edition. Baltimore, MD: Centers for Medicare and Medicaid Services; 2012. Available at http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/Downloads/2012Chartbook.pdf
- 3. US Department of Health and Human Services. Multiple chronic conditions—a strategic framework: optimum health and quality of life for individuals with multiple chronic conditions. Washington, DC: US Department of Health and Human Services; 2010.
- 4. US Preventive Services Task Force. USPSTF A and B recommendations: 2011. Rockville, MD: US Preventive Services Task Force; 2014. Available at https://www.uspreventiveservicestaskforce.org/Page/Name/uspstf-a-and-b-recommendations/
- 5. Whitlock EP, Lin JS, Liles E, Bell TL, et al. Screening for colorectal cancer: a targeted systematic review for the U.S. Preventive Services Task Force. Ann Intern Med 2008;149:638–58.

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