

Supplementary Table 2. Comparison of recommendations from the USPSTF, the ACIP and the HRSA with questions regarding ten recommended clinical preventive services—BRFSS, United States, 2018

Clinical preventive service (age group [yrs])	Recommendation	Reference	Question(s) to BRFSS participants	Key distinctions for this analysis of use of recommended services
Colon cancer screening (50-75)	Screening for colorectal cancer is recommended for adults beginning at age 50 years and continuing until age 75 years using fecal occult blood testing, FIT-DNA, sigmoidoscopy, a colonoscopy, or virtual colonoscopy/CT colonography. The recommended screening interval varies by screening method: annual high-sensitivity fecal occult blood testing; sigmoidoscopy every five years combined with high-sensitivity fecal occult blood testing; once every 10 years with colonoscopy; FIT-DNA screening every 3 years; screening every 5 years with CT colonography.	https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/colorectal-cancer-screening	<p>A blood stool test is a test that may use a special kit at home to determine whether the stool contains blood. Have you ever had this test using a home kit? 1=Yes; 2=No; 7=Don't know/ not sure; 9=Refused.</p> <p>How long has it been since you had your last blood stool test using a home kit? 1=Within the past year (anytime less than 12 months ago); 2=Within the past 2 years (1 year but less than 2 years ago); 3=Within the past 3 years (2 years but less than 3 years ago); 4=Within the past 5 years (3 years but less than 5 years ago); 5=5 or more years ago; 7=Don't know / Not sure; 9=Refused.</p> <p>Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams? 1=Yes; 2=No; 7=Don't know/ not sure; 9=Refused.</p> <p>For a sigmoidoscopy, a flexible tube is inserted into the rectum to look for problems. A colonoscopy is similar, but uses a longer tube, and you are usually given medication through a needle in your arm to make you sleepy and told to have someone else drive you home after the test. Was your most recent exam a sigmoidoscopy or a colonoscopy? 1=Sigmoidoscopy; 2=Colonoscopy; 7=Don't know / Not sure; 9=Refused.</p> <p>How long has it been since you had your last sigmoidoscopy or colonoscopy? 1=Within the past year (anytime less than 12 months ago); 2=Within the past 2 years (1 year but less than 2 years ago); 3=Within the past 3 years (2 years but less than 3 years ago); 4=Within the past 5 years (3 years but less than 5 years ago); 5=Within the past 10 years (5 years but less than 10 years ago); 6=10 or more years ago; 7=Don't know / Not sure; 9=Refused.</p>	This analysis did not include people who used FIT-DNA or CT colonography.
Cervical cancer screening (women, 21-65)	Screening with cytology (Pap smear) is recommended every 3 years for women age 21 to 65 years, or for women age 30 to 65 years who want to lengthen the screening interval, by screening with a combination of cytology and human papillomavirus (HPV) testing every 5 years.	https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/cervical-cancer-screening	<p>Have you ever had a Pap test? 1=Yes; 2=No; 7=Don't know/ not sure; 9=Refused.</p> <p>How long has it been since you had your last Pap test? 1=Within the past year (anytime less than 12 months ago); 2=Within the past 2 years (1 year but less than 2 years ago); 3=Within the past 3 years (2 years but less than 3 years ago); 4=Within the past 5 years (3 years but less than 5 years ago); 5=5 or more years ago; 7=Don't know / Not sure; 9=Refused.</p> <p>An H.P.V. test is sometimes given with the Pap test for cervical cancer screening. Have you ever had an H.P.V. test? 1=Yes; 2=No; 7=Don't know/ not sure; 9=Refused.</p> <p>How long has it been since you had your last H.P.V. test? 1=Within the past year (anytime less than 12 months ago); 2=Within the past 2 years (1 year but less than 2 years ago); 3=Within the past 3 years (2 years but less than 3 years ago); 4=Within the past 5 years (3 years but less than 5 years ago); 5=5 or more years ago; 7=Don't know / Not sure; 9=Refused.</p>	The recommendation aligns with the analysis.
Breast cancer screening (women, 50-74)	Screening every two years via mammography is recommended for all women aged 50-74 years.	https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/breast-cancer-screening1	<p>Have you ever had a mammogram? 1=Yes; 2=No; 7=Don't know/ not sure; 9=Refused.</p> <p>How long has it been since you had your last mammogram? 1=Within the past year (anytime less than 12 months ago); 2=Within the past 2 years (1 year but less than 2 years ago); 3=Within the past 3 years (2 years but less than 3 years ago); 4=Within the past 5 years (3 years but less than 5 years ago); 5=5 or more years ago; 7=Don't know / Not sure; 9=Refused.</p>	The recommendation aligns with the analysis.
HIV testing (18-65)	Screening is recommended in adolescents and adults aged 15 to 65 years. Screening is also recommended for all pregnant women for each pregnancy. The evidence is insufficient to determine optimum time intervals for screening among all adults.	https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/human-immunodeficiency-virus-hiv-infection-screening	<p>Have you ever been tested for H.I.V.? Do not count tests you may have had as part of a blood donation. Include testing fluid from your mouth. 1=Yes; 2=No; 7=Don't know/ not sure; 9=Refused.</p>	This analysis focuses on adults aged 18 years to 65 years.
Pneumococcal vaccination (≥65)	Pneumococcal vaccination is recommended for all persons aged ≥65 years and for	https://www.cdc.gov/vaccines/vpd/pneum	<p>Have you ever had a pneumonia shot also known as a pneumococcal vaccine? 1=Yes; 2=No; 7=Don't know/ not sure; 9=Refused.</p>	This analysis focuses on adults aged ≥65 years.

Influenza vaccination (≥18)	persons with certain other risk factors aged <65 years Routine, annual influenza vaccination is recommended for all persons aged 6 months and older who do not have contraindications.	o/downloads/pneumo-vaccine-timing.pdf https://www.cdc.gov/mmwr/volumes/68/rr/rr6803a1.htm	During the past 12 months, have you had either a flu shot or a flu vaccine that was sprayed in your nose? 1=Yes; 2=No; 7=Don't know/ not sure; 9=Refused.	This analysis focuses on adults aged ≥ 18 years.
Diabetes screening (40-70)	USPSTF recommends screening for abnormal blood glucose as part of cardiovascular risk assessment in adults aged 40 to 70 years who are overweight or obese. Clinicians should offer or refer patients with abnormal blood glucose to intensive behavioral counseling interventions to promote a healthful diet and physical activity. The interval for the population is not specified.	https://www.uspreventiveservicestaskforce.org/Page/Name/uspstf-a-and-b-recommendations/	Have you had a test for high blood sugar or diabetes within the past three years? 1=Yes; 2=No; 7=Don't know/ not sure; 9=Refused.	The recommended screening interval (not specified) differs from the survey question timeframe (3 years).
HPV vaccination (18-26)	HPV vaccination is recommended for all persons at age 11 or 12 years and can be given as early as age 9 years. Catch-up vaccination is recommended for all women aged 13 years through 26 years, and for all men aged 13 years through 21 years who are not adequately vaccinated. Males aged 22 through 26 years may be vaccinated. ¹	https://www.cdc.gov/mmwr/volumes/65/wr/mm6549a5.htm	A vaccine to prevent the human papillomavirus or H.P.V. infection is available and is called the cervical cancer or genital warts vaccine, H.P.V. shot, [Fill: if female GARDASIL or CERVARIX; if male: GARDASIL]. Have you ever had an H.P.V. vaccination? 1=Yes; 2=No; 3=Doctor refused when asked; 7=Don't know/ not sure; 9=Refused. How many H.P.V. shots did you receive? __ Number of shots; 3=All shots; 77=Don't know / Not sure; 99=Refused.	This analysis focuses on adults aged 18 years to 26 years.
Zoster (shingles) vaccination (≥50)	It is recommended to give a recombinant zoster vaccine (RZV) for all immunocompetent adults aged 50 years or older. The recommended series is two doses, which should be administered intramuscularly, 2-6 months apart.	https://www.cdc.gov/mmwr/volumes/67/wr/mm6703a5.htm	Have you ever had the shingles or zoster vaccine? 1=Yes; 2=No; 7=Don't know/ not sure; 9=Refused.	The recommendation aligns with the analysis.
Tetanus vaccination (≥ 19)	It is recommended to give adults a single dose of Td every 10 years. For adults who have never received Tdap, a dose of Tdap can replace one of the 10-year Td booster doses. Vaccination is also recommended for pregnant women, receiving a single dose of Tdap for every pregnancy.	(1) https://www.cdc.gov/mmwr/volumes/67/rr/rr6702a1.htm ; (2) https://www.cdc.gov/vaccines/vpd/dtap-td/hcp/recommendations.html	Have you received a tetanus shot in the past 10 years? 1=Yes, received Tdap; 2=Yes, received tetanus shot, but not Tdap; 3=Yes, received tetanus shot but not sure what type; 4=No, did not receive any tetanus shot in the past 10 years; 7=Don't know/Not sure; 9=Refused.	The recommendation aligns with the analysis.

Abbreviations: BRFSS= Behavioral Risk Factor Surveillance System; HPV= human papillomavirus; USPSTF=US Preventive Services Task Force; ACIP=Advisory Committee on Immunization Practices; HRSA=Health Resources and Services Administration.

¹ In June 2019, ACIP updated the recommendation and recommended catch-up HPV vaccination for all persons through age 26 years. Routine recommendations for HPV vaccination of adolescents have not changed. Meites E, Szilagyi PG, Chesson HW, Unger ER, Romero JR, Markowitz LE. Human papillomavirus vaccination for adults: Updated recommendations of the Advisory Committee on Immunization Practices. American Journal of Transplantation. 2019 Nov;19(11):3202-6.