

Supplementary

Table S1 Performance of simplified criteria in identifying individual's United States Preventive Services Task Force lung cancer screening eligibility among population aged 50–80 years, stratified by sex

Criteria	Sensitivity		Specificity		PPV		NPV		Accuracy		AUC	
	M	W	M	W	M	W	M	W	M	W	M	W
Ever smoker	1.00	1.00	0.55	0.71	0.37	0.33	1.00	1.00	0.65	0.75	0.76	0.86
Current smoker or former smoker quitting smoking <15 years	1.00	1.00	0.85	0.88	0.63	0.54	1.00	1.00	0.88	0.90	0.91	0.93
Current smoker	0.52	0.61	0.91	0.92	0.60	0.52	0.88	0.94	0.83	0.89	0.71	0.75
Current smoker >0.5 packs per day	0.44	0.47	>0.99	>0.99	0.98	0.96	0.87	0.93	0.88	0.93	0.71	0.71
Current smoker >1 pack per day	0.10	0.05	1.00	1.00	1.00	1.00	0.81	0.88	0.82	0.88	0.54	0.52

PPV, positive predictive value; NPV, negative predictive value; AUC, area under the curve; M, men; W, women.

Table S2 Performance of simplified criteria in identifying individual's United States Preventive Services Task Force lung cancer screening eligibility among population aged 50–80 years, stratified by race/ethnicity

Criteria	Sensitivity		Specificity		PPV		NPV		Accuracy		AUC	
	NHW	NHB	NHW	NHB	NHW	NHB	NHW	NHB	NHW	NHB	NHW	NHB
Ever smoker	1.00	1.00	0.64	0.58	0.37	0.27	1.00	1.00	0.71	0.64	0.81	0.78
Current smoker or former smoker quitting smoking <15 years	1.00	1.00	0.89	0.75	0.66	0.38	1.00	1.00	0.91	0.78	0.94	0.88
Current smoker	0.56	0.59	0.93	0.81	0.65	0.33	0.91	0.93	0.87	0.78	0.74	0.69
Current smoker >0.5 packs per day	0.47	0.36	>0.99	>0.99	0.97	0.95	0.90	0.91	0.90	0.91	0.73	0.67
Current smoker >1 pack per day	0.09	0.03	1.00	1.00	1.00	1.00	0.84	0.87	0.84	0.87	0.55	0.51

PPV, positive predictive value; NPV, negative predictive value; AUC, area under the curve; NHW, non-Hispanic White; NHB, non-Hispanic Black.

Table S3 Performance of simplified criteria in identifying individual's United States Preventive Services Task Force lung cancer screening eligibility among population aged 50–80 years, stratified by education

Criteria	Sensitivity		Specificity		PPV		NPV		Accuracy		AUC	
	HS	C	HS	C	HS	C	HS	C	HS	C	HS	C
Ever smoker	1.00	1.00	0.58	0.68	0.39	0.31	1.00	1.00	0.67	0.72	0.80	0.83
Current smoker or former smoker quitting smoking <15 years	1.00	1.00	0.82	0.89	0.60	0.57	1.00	1.00	0.86	0.91	0.91	0.94
Current smoker	0.61	0.50	0.89	0.94	0.60	0.53	0.89	0.93	0.83	0.88	0.72	0.72
Current smoker >0.5 packs per day	0.49	0.41	>0.99	>0.99	0.98	0.95	0.88	0.92	0.89	0.92	0.71	0.69
Current smoker >1 pack per day	0.09	0.07	1.00	1.00	1.00	1.00	0.80	0.88	0.80	0.88	0.54	0.53

PPV, positive predictive value; NPV, negative predictive value; AUC, area under the curve; HS, high school or less; C, college or above.