Do the Updated Lung Cancer Screening Guidelines Expand Eligibility?

The revised 2021 recommendations might not dramatically improve access to screening for minorities.

November 9, 2021 By Sukanya Charuchandra

Whether the updated 2021 U.S. Preventive Services Task Force (USPSTF) recommendations for lung cancer screening will improve equity for women and racial and ethnic minorities remains unclear. Two different studies reported divergent findings on the expansion of eligibility for lung cancer screening. While 54% more people will become eligible for screening, questions remain about the benefit afforded to minority groups.

“In a country that is so diverse and has patients in so many different circumstances, I feel as though we need new solutions to adequately reflect lung cancer risk for our patients and reduce lung cancer disparities in racial/ethnic minorities,” Anand Narayan, MD, PhD, of the University of Wisconsin at Madison, said in a press release.

The 2021 USPSTF lung cancer screening guidelines lowered the screening age from 55 to 50 years and the smoking history threshold from 30 to 20 pack-years. The updated recommendations were meant to expand eligibility and improve access for minority communities and women.

In a study published in JAMA Network Open, Debra Ritzwoller, PhD, of the Kaiser Permanente Colorado Institute for Health Research, and colleagues presented findings from a cohort study using data from five community health care systems between January 2010 and September 2019. People with known smoking histories who were engaged with the health care system for at least a year were included in this study.

The study population included 341,163 people between ages 50 and 80 years with a current or past smoking history. Of this population, 34,528 people were eligible for screening based on the earlier USPSTF recommendations, issued in 2013. With the revision, screening was expanded to include 18,533 individuals—a 54% increase. Some 32% of this additional cohort were between ages 50 and 54 years, 52% were women and more were minority individuals.

With the new recommendations, the relative increases in eligible individuals were 61% for Asians, Native Hawaiians and or Pacific Islanders; 67% for Latinos; 70% for Blacks; and 49% for whites. More women were eligible than before; indeed, the relative increase was 14% higher than for men.

Those with lower socioeconomic status saw a 61% relative increase in eligibility. Furthermore, the updated recommendations gave rise to a 30% increase in lung cancer diagnoses.

“While more research must be done, we know from this study [that] we can break down existing barriers in lung cancer screening by expanding eligibility for those who fit the recommended guidelines,” Ritzwoller said in a press release.

In a different study published in Radiology, Narayan and colleagues used data from 20 states taken from the 2019 Behavioral Risk Factor Surveillance System survey. While 11% of the 67,567 respondents were eligible for lung cancer screening under the 2013 guidelines, 14% of 77,689 respondents were eligible based on the revised recommendations.

“We’ve long known that some racial/ethnic minorities face a higher risk of lung cancer, and that level of risk is not adequately reflected in the new guidelines,” said Narayan.

With the change in 2021, Black and Latino respondents were not much more eligible for lung cancer screening compared with the previous guidance. Further, they continued to be less likely to be eligible than their white counterparts. With the revision, 14.7% of whites were eligible, compared with 9.1% of Blacks, 4.5% of Latinos and 5.2% of Asians and Pacific Islanders.

“If we put social determinants of health into our model, then we can more accurately reflect risk,” said Narayan. “It can give us tools to direct our resources toward patients in terms of how much risk they are experiencing and how much care they actually need. We can then target high-risk patients for more intensive screening and diagnostic services.”

Click here to read the study in JAMA Network Open.

Click here to read the study abstract in Radiology.

Click here to learn more about cancer screening.
