

Despite Insurance Coverage, At-Risk People Not Getting Life-Saving Lung Cancer Screenings

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The U.S. Preventive Services Task Force (USPSTF) recommends that patients eligible for lung cancer screening receive a low-dose CT scan to screen for lung cancer each year.¹ Our study includes 381,849 patients eligible for lung cancer screening per USPSTF guidelines who have insurance coverage for a CT lung cancer screening through Medicaid or Medicare. We found 87.1% of eligible patients were not screened, despite having insurance coverage. We did not see large variability between Medicaid and Medicare screening rates as shown in Figure 1.

Lung Cancer Screening Rates for Eligible Patients with Coverage Through Medicaid or Medicare

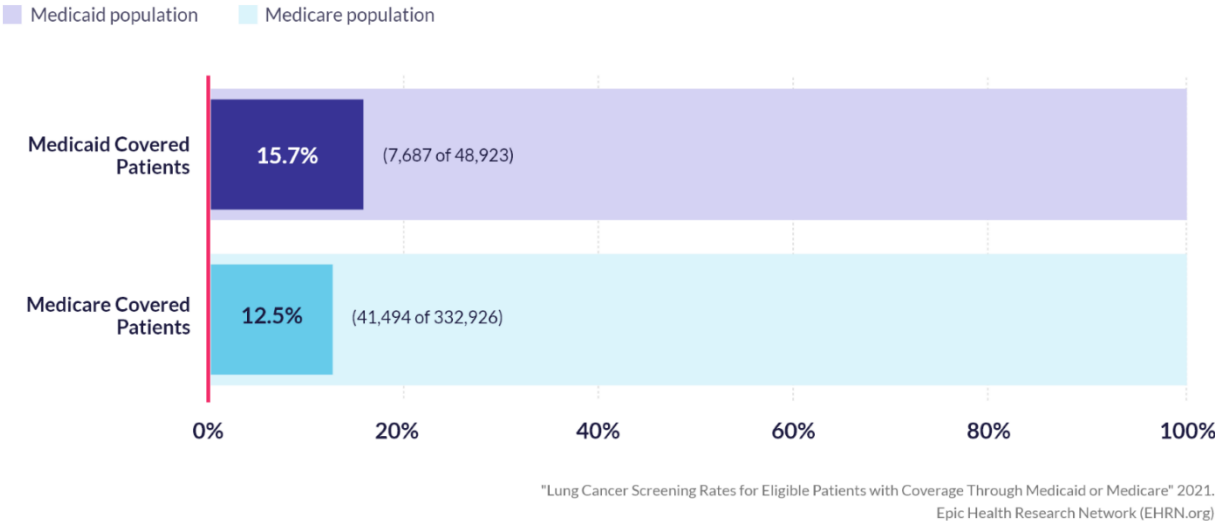
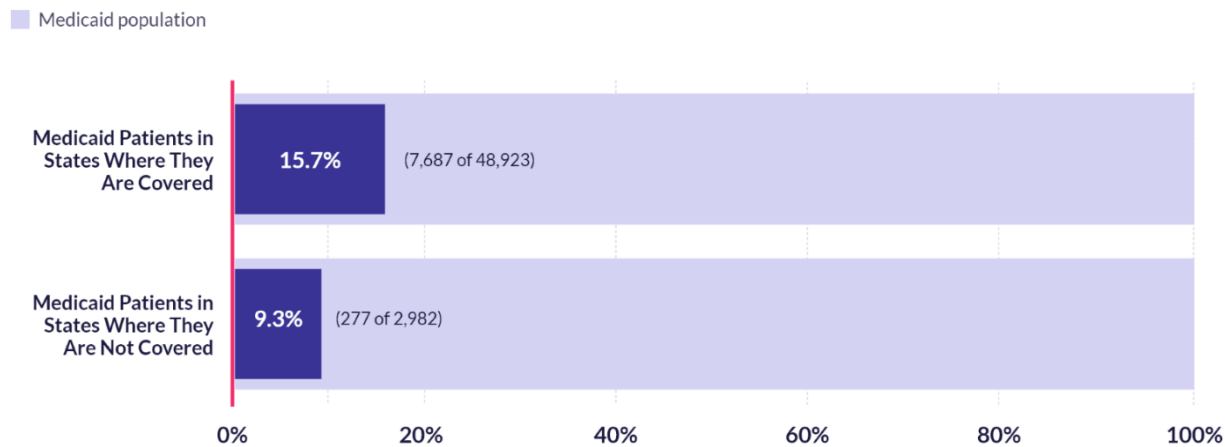


Figure 1. The percentage of patients whose Medicaid or Medicare coverage includes lung screening exams who received a lung cancer screening exam, had a documented pack-year value of at least 30, and had at least one office visit or telemedicine encounter in 2019 and 2020.

With such low rates of lung cancer screening, we wondered how insurance coverage affects screening rates. We analyzed screening rates for eligible Medicaid patients in states where lung cancer screenings are covered and compared them to patients with Medicaid in states where these screenings are not covered.² Patients whose insurance covered the procedure had modestly higher screening rates (15.7% vs. 9.3%).

Lung Cancer Screening Rates for Eligible Patients with and Without Exam Coverage



"Lung Cancer Screening Rates for Eligible Patients with and Without Exam Coverage" 2021.
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Figure 2. The percentage of Medicaid patients who received a lung cancer screening exam with coverage and without coverage for lung screening exams.

In our data, 42% of current smokers and 53% of former smokers did not have a documented pack-year history, which means we were unable to confirm their eligibility for lung cancer screening. Patients without a documented pack-year history were excluded from our screening rate results but may also be eligible for screening.

Our findings suggest that while insurance coverage is a factor in screening rates for lung cancer, it is not the only factor preventing eligible populations from being screened. Patients with a current or prior smoking history need to have their pack-year history documented so their eligibility for lung cancer screening can be assessed. Patients eligible for lung cancer screening may not be aware of their eligibility and whether the screening CT exam is covered by their insurance.

These data come from Cosmos, a HIPAA Defined Limited Data Set of more than 109 million patients from Epic customers. This study was completed by two teams each comprised of a clinician and two research scientists who worked independently analyzing the data for lung cancer screening rates. The two teams came to similar conclusions. Data are pooled from 103 healthcare organizations spanning 39 states. This includes 28,530 Medicaid patients between the ages of 55 and 65 and 332,926 Medicare patients who were eligible for lung cancer screening.

References

1. U.S. Preventive Services Task Force. Final Recommendation Statement -Lung Cancer: Screening. March 2021. <https://uspreventiveservicestaskforce.org/uspstf/recommendation/lung-cancer-screening>
2. American Lung Association. State Lung Cancer Screening Coverage Toolkit. May 2021. <https://www.lung.org/lung-health-diseases/lung-disease-lookup/lung-cancer/saved-by-the-scan/resources/state-lung-cancer-screening>

Term	Definition
Active patients	Patients who had an office visit or telehealth encounter during the study period.
Pack-year history	A pack-year history describes a person's lifetime smoking history by indicating number of years that a person has smoked a pack of cigarettes per day. If a person has smoked half a pack a day for 20 years, they have a pack-year history of 10 years. In this analysis, the pack-year history most recently documented in the EHR was assigned to each patient in the study.
Lung cancer screening	Documentation of a procedure with HCPCS code G0297 during the study period.
Eligible for lung cancer screening	Patients aged between 55 to 77 at any point during the study time period with a documented pack-year history of 30 pack years or more.
Medicaid population	Active patients who had at least one encounter during the study period during which they were covered by Medicaid and were under the age of 65 throughout the study period (and therefore not eligible for Medicare).
Medicare population	Active patients over the age of 65.
Covered states	The following states and Washington, D.C., covered lung cancer screening under Medicaid during the study window: Arizona, California, Colorado, Connecticut, Delaware, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nevada, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Vermont, Virginia, West Virginia, Washington, Wisconsin
Not covered states	The following states did not cover lung cancer screening under Medicaid during the study window: Alabama, Alaska, Florida, Mississippi, Nebraska, North Dakota, Texas, Utah, Wyoming