

Real-World Cancer Screening Rates Lag Behind Recommendations

Summary of “Breast, Colorectal, Lung, Prostate, and Cervical Cancer Screening Prevalence in a Large Commercial and Medicare Advantage Plan, 2008-2020”
– Data published in *Preventive Medicine Reports*, 2022 –

Cancer is one of the leading causes of death in the US. Screening helps identify cancer before a patient has symptoms. Patients can then receive treatment before their cancer has spread. Early detection of cancer through screening can help reduce the number of deaths from cancer. This is why regular cancer screening is important. Currently, there are five cancer types with recommended screening tests: breast, colorectal, cervical, prostate, and lung. Doctors recommend cancer screening tests based on a number of risk factors such as age and gender. However, the number of people who receive recommended screening is unclear. Most of the data used in research on cancer screening rates are self-reported.^{1,2} This is a problem because self-reported data may be inaccurate. This study used real-world insurance claims data to assess cancer screening rates among those eligible for cancer screening in the US.

Researchers looked at insurance claims data from 2008 to 2020. First, the number of individuals eligible for a screening test was calculated based on their risk factors. Next, they identified the number of eligible individuals who had an insurance claim for that screening test. Those two numbers were used to calculate the proportion of eligible individuals who actually got a screening test. The results were further assessed by race and ethnicity, geographic region, and primary insurance type.

Real-world Cancer Screening Rates Remain Low

Across all five cancer types, the number of people who got screened for cancer was far below the number of people who were eligible (**Figure 1**). Screening rates were lowest for lung, followed by prostate, and colorectal cancer. Over time, rates of cancer screening remained

constant for breast and colorectal cancer. Rates remained low for lung cancer and varied for prostate and cervical cancer over time.

Screening rates were broken down by race and ethnicity group, including Asian, Black/African American, Hispanic, and White. The study found that trends in cancer screening rates were similar across races and ethnicities. For example, lung cancer screening rates were consistently low across racial and ethnic groups. Despite this, some groups have lower rates of screening compared to others. Cervical cancer screening rates were the most variable by race and ethnicity. Black/African American individuals had moderately low rates of cervical cancer screening, particularly compared to white individuals. Black/African American individuals also had among the highest breast and prostate cancer screening rates. Hispanic individuals had lower rates of breast and prostate cancer screening, compared to White and Black/African American individuals.

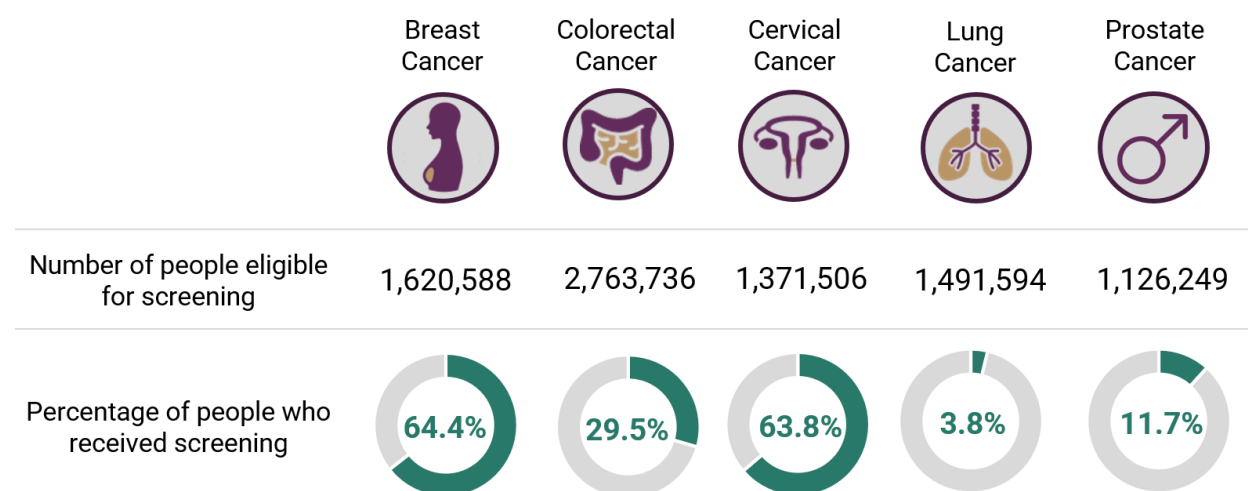
Screening rates were also evaluated by geographic region in the US: Northeast, South, West, Midwest, and multiple regions. Those residing in the Western part of the US had lower cancer screening rates for breast, cervical, lung, and prostate cancer. Similar findings were seen in other studies.^{6,7} Lower screening may be due to a large proportion of immigrants and families speaking languages other than English in the West, compared to other regions.⁸

The analysis focused on patients with commercial insurance or Medicare Advantage. Those with commercial insurance had lower screening rates for prostate cancer. Those with Medicare Advantage had lower screening rates for cervical cancer. Overall, however, insurance type had a limited effect on cancer screening rates.

This study revealed that only a fraction of those who are eligible actually receive cancer screening. Black/African American and Hispanic individuals had lower screening rates, compared to White individuals, for some cancers. Those residing in the Western US had relatively lower rates of cancer screening, compared to other US regions. Previous studies that used surveys showed higher rates of cancer screening. However, when using real-world

healthcare data, cancer screening rates were considerably lower. A limitation of this analysis is that it did not assess those with Fee for service Medicare, Medicaid, or no insurance. However, other studies have shown that uninsured individuals may be more likely to not receive cancer screening.⁹⁻¹⁰ This suggests that the gaps in screening rates may be even larger for the uninsured. As a result, there is a need for more accessible cancer screening. In particular, vulnerable populations may benefit more from better screening options.

Figure 1. Real-World Cancer Screening Rates Were Well Below Recommended Levels



Screening rates shown above were calculated as of February 2020.

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