A recent study found that among individuals diagnosed with common cancers, those patients covered by Medicaid and those without medical insurance were more likely to present with advanced disease and have shorter survival than patients with non-Medicaid insurance (J Clin Oncol. 2014;32:3118-3125).

The authors note that previous articles demonstrating similar findings have been mostly limited to certain populations with select cancers and are generally less comprehensive than their study. The current research was undertaken to give a broader understanding of the impact of insurance status on cancer diagnosis, treatment, and outcomes by including multiple common cancers and a larger population.

“The main finding of our study was that patients without insurance or with Medicaid present with more advanced cancer, are less likely to receive local treatment, and have worse cancer survival outcomes across a wide range of cancer types,” says corresponding author Usama Mahmood, MD, assistant professor in the department of radiation oncology at The University of Texas MD Anderson Cancer Center in Houston. “This study highlights the importance of insurance status as it relates to cancer presentation, treatment, and outcomes.”

Researchers identified 473,722 patients aged 18 to 64 years who were diagnosed between January 2007 and December 2010 with 1 of 10 malignancies (breast, prostate, lung, colorectal, head and neck, liver, pancreatic, ovarian, or esophageal cancer or non-Hodgkin lymphoma) from the National Cancer Institute’s Surveillance, Epidemiology, and End Results (SEER) database. Information on insurance coverage was initiated in 2007 for the SEER database. Patient characteristics including age, race, sex, marital status, urban or rural residence, insurance type, and cancer type and stage were collected. Receipt of radiation therapy (RT) and/or surgery was recorded, but not data regarding receipt of chemotherapy, because SEER does not collect such data. Cause-specific survival was defined as the time between diagnosis and death from cancer.

Of the entire cohort, 78.4% had non-Medicaid insurance, 11.6% had Medicaid, 4.7% had no insurance, and the insurance status of 5.2% was unknown. Patients with non-Medicaid coverage were less likely than those without insurance to present with distant disease (16.9% vs 34.7%) and were significantly more likely to present with localized disease (60.8% vs 40.3%; \( P < .001 \)). Among patients with Medicaid, the percentages of those presenting with distant (29.1%) and localized (42.2%) disease were between those for patients with non-Medicaid insurance and the uninsured.

“The study specifically documents lower rates of localized disease for screen-detectable cancers for which screening tests are widely utilized (breast, colorectal, and prostate) among both those with Medicaid and the uninsured compared to those with non-Medicaid insurance, indicating disparities in care prior to a diagnosis of cancer,” says Durado Brooks, MD, MPH, director of prostate and colorectal cancers at the American Cancer Society in Atlanta, Georgia.

Among patients with nonmetastatic cancer, those with non-Medicaid insurance were more likely to undergo surgery or RT directed at their cancer than those without insurance (79.6% vs 52.1%; \( P < .001 \)). The percentage of patients with Medicaid undergoing...
definitive cancer-directed surgery or RT was intermediate to that of uninsured patients and non-Medicaid insured patients (67.9%). In a logistic regression analysis adjusting for demographics, patients with nonmetastatic cancer who were uninsured or did not have insurance, with a hazard ratio of approximately 1.45 for both groups, compared with those with non-Medicaid coverage.

"This study raises questions regarding the potential impact of Medicaid expansion on cancer diagnosis, treatment, and survival," says Dr. Brooks. "While Medicaid coverage did appear to confer an advantage over being uninsured for some cancer-related factors and outcomes, these findings seem to indicate that Medicaid coverage alone is insufficient to eliminate the disparate cancer outcomes documented among the uninsured."

"The lack of survival difference between Medicaid and uninsured patients is troubling and may be due to the fact that many cancer patients enroll in Medicaid at the time of their diagnosis," adds Dr. Mahmood. "Moreover, it is not clear if such patients were correctly classified in the database we used. That said, we feel that further research is needed. It will be important to determine to what degree the poorer outcomes in Medicaid patients are due to individual patient, tumor, or treatment-related factors."

Implications

The authors found that the group with Medicaid had a slightly higher percentage of patients presenting with lower stage disease and receiving local treatment compared with patients with no insurance, but these differences were not significant. Furthermore, those patients with Medicaid did not have a survival advantage over those without any insurance. The authors note that previous work has shown improved self-reported health and reduced mortality with the expansion of Medicaid, suggesting that there may be different effects for cancer survival and non-cancer diseases.

Studies using the SEER database have inherent limitations given its design and the type of data reported. Information regarding patient income is not collected and therefore county-level income was used to estimate socioeconomic status in the current study. In addition, factors that affect outcomes such as comorbidities, performance status, staging workup, or use of systemic therapy are not available from the SEER database. Furthermore, patients aged older than 64 years could not be included because of the lack of specificity in Medicare designation in the SEER database.

"These results suggest that there may be persistent differences in access to care and in the quality of care provided to those with Medicaid coverage compared to those with non-Medicaid insurance," says Dr. Brooks. "Further research on the impact of different types of insurance on access to cancer screening/early detection services, and the quality of care provided for cancer patients based on insurance status, seems warranted."

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