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White Paper

Head and Neck Cancer Awareness Month Spotlight: an Overview of US Patient Distributions by Geography, Age, Race, Gender, and Income

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April 2025

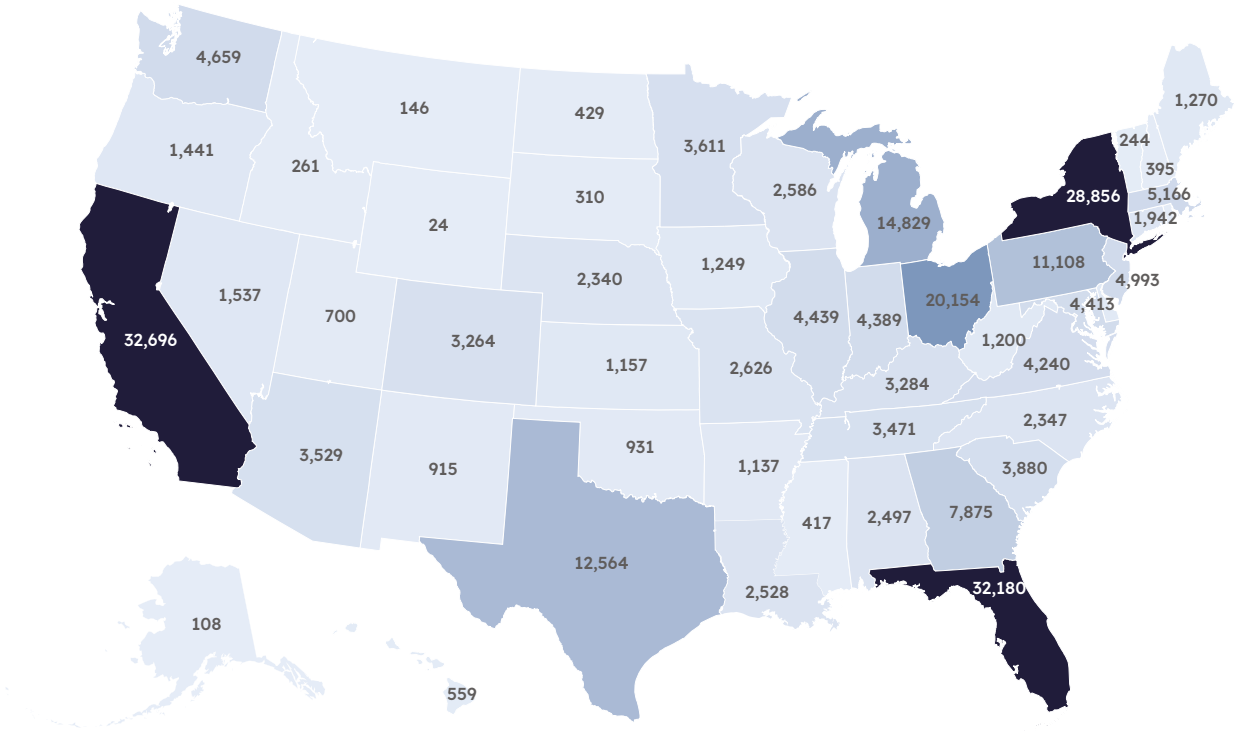
National patient overview

Head and neck cancer (HNC) comprises various malignancies, most frequently originating in the squamous cells lining the oral cavity, pharynx, larynx, or nasal cavity, and less commonly in the non-squamous cells of the salivary glands, sinuses, or muscles/nerves in the head and neck. Smoking and alcohol consumption, advanced age, and infectious diseases like HPV are established risk factors for HNC.

Per Datamonitor Healthcare, HNC was responsible for 3.7% of new US cancer cases in 2020, and the National Cancer Institute estimated that of the 71,100 Americans diagnosed with the major types of HNC in 2024, 16,110 would die from the condition.

Figure 1 shows the HNC patient count heatmap for the 5,378 US organizations with HNC clinical trial experience that submitted medical claims in the last 24 months for 247,280 patients. Of the 50 US states and the District of Columbia (DOC), California, Florida, and New York treated the most patients and accounted for 38% of total patients.

Figure 1. HNC patient count heatmap



Organization and patient counts are based on identified sites in Sitetrove

Source: Sitetrove, March 2025

The overwhelming majority of those treated by these institutions are adults, with children representing only 1% of this population. Ohio, California, and New York contain 42% of pediatric patients, and 11 states have no organizations that have treated children for HNC in the last 24 months.

Distribution of HNC patients by race

As per Table 1, over seven of 10 US patients who listed their race on their claim and were treated for HNC in the last 24 months were white. Black patients account for the second-largest racial group at 10%.

Table 1. Percentages of HNC patients by race compared to the US Census

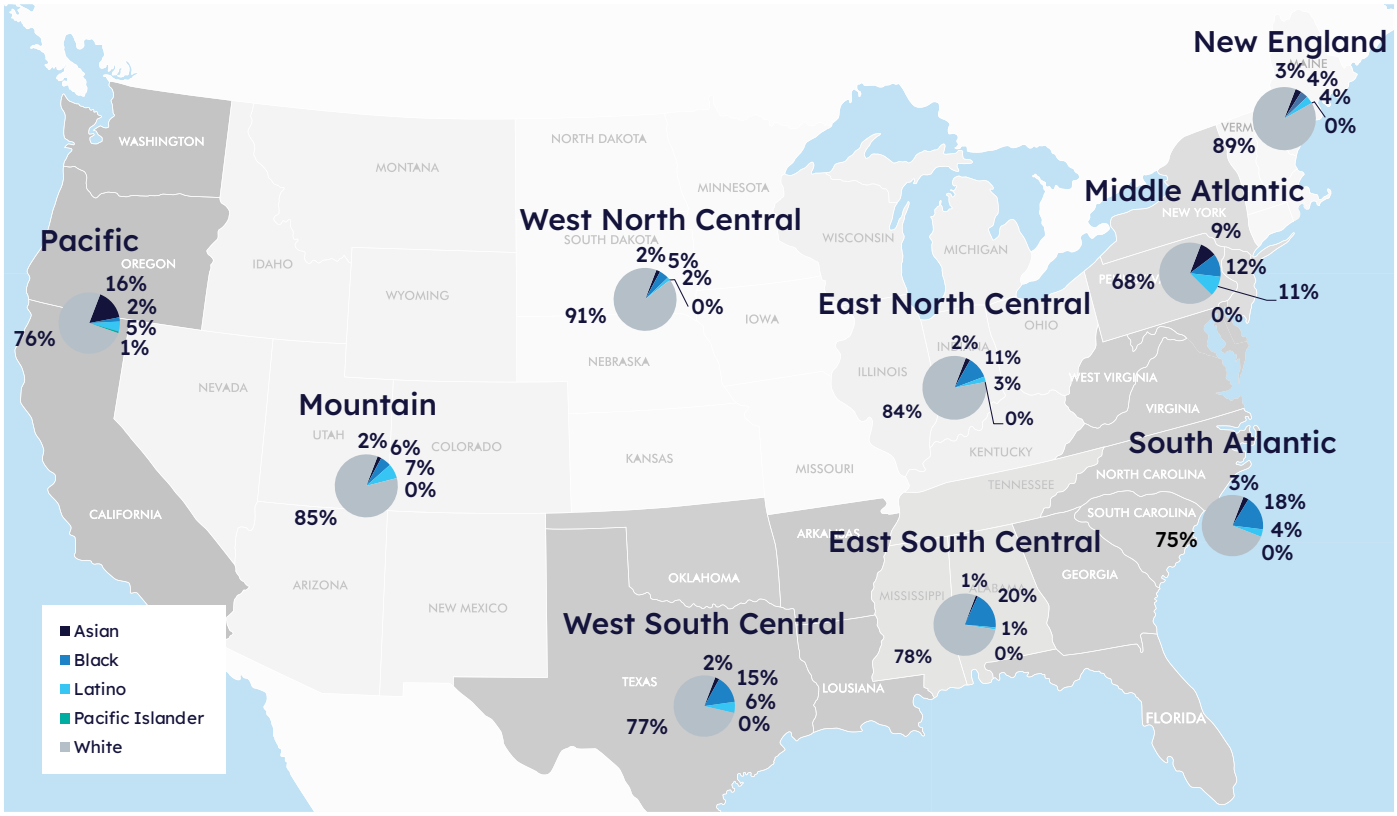
Race	Average percent for HNC patients	US census race percentage
White	75.9%	75.3%
Black	10.1%	13.7%
Latino/Hispanic	7.8%	19.5%
Asian	6.1%	6.4%
Pacific Islander	0.02%	0.3%

Native American data excluded

Source: Sitetrove, March 2025; US Census

The racial distribution of HNC patients across the nine US Census Bureau divisions is revealed in Figure 2, where white patients represent the majority. The Pacific division holds the most Asian (16%) and Pacific Islander patients (1%). East South Central has the largest percentage of Black patients at 20% and the Middle Atlantic division has the highest percent of Latino patients (11%). West North Central is the least diverse with more than 10 percent more white patients than Table 1's HNC national average.

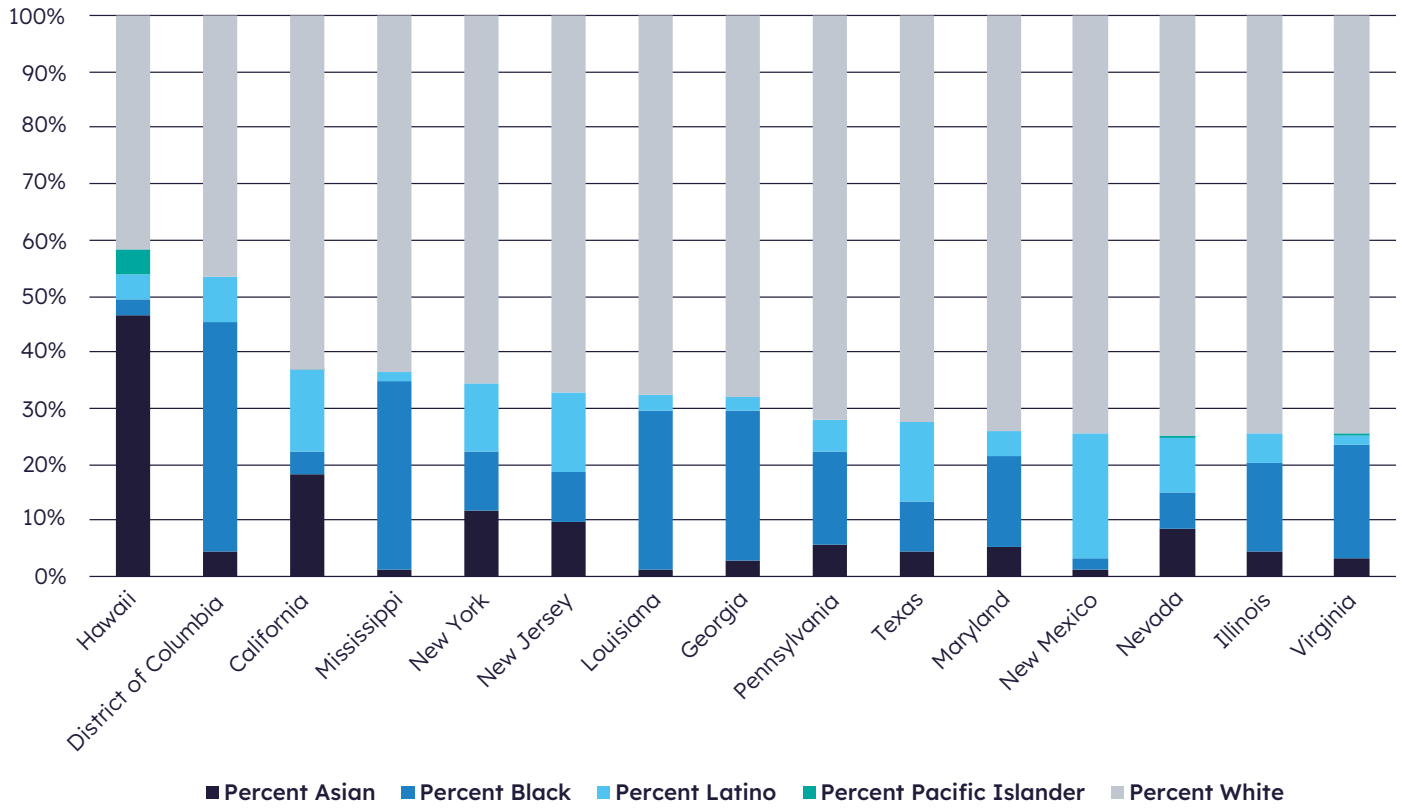
Figure 2. Racial distribution of HNC patients by division



Source: Sitetrove, March 2025

At the state level, only Hawaii and the District of Columbia have a combined majority of non-white patients. Of all states, the DOC and Mississippi have the highest proportion of Black patients, Hawaii and California the most Asian, Hawaii and Nevada the most Pacific Islander, Maine and North Dakota (data not shown) the most white, and New Mexico, California, and Texas the most Latino.

Figure 3. Top 15 most diverse states by race



Source: Sitetrove, March 2025

As referenced in Table 2, in 71% of US states, the percentage of white patients exceeds the HNC white national average (Table 1), making this group the most predominantly represented. In the 19 states where Black patients are overrepresented, the group averages 9.2% more patients above the Black HNC national average. This is significant because a study that reviewed the National Cancer Database found that Black patients have decreased HNC survival rates when compared to their white counterparts. Asians are the minority ethnic group with the highest rate above their group's national average in the nine states where their patient percentage was larger than average.

Table 2. Overrepresentation of race compared to HNC national averages

Race	Total states overrepresented	Average percent overrepresented	Top 3 states most overrepresented
Asian	9	9.5%	Hawaii, California, New York
Black	19	9.2%	DOC, Mississippi, Louisiana
Pacific Islander	9	0.1%	Hawaii, Washington, Nevada
Latino	9	5.6%	New Mexico, California, Texas
White	36	11.6%	Maine, North Dakota, Idaho

The third column holds the average percent a patient ethnic group exceeds its race's HNC national average in overrepresented states

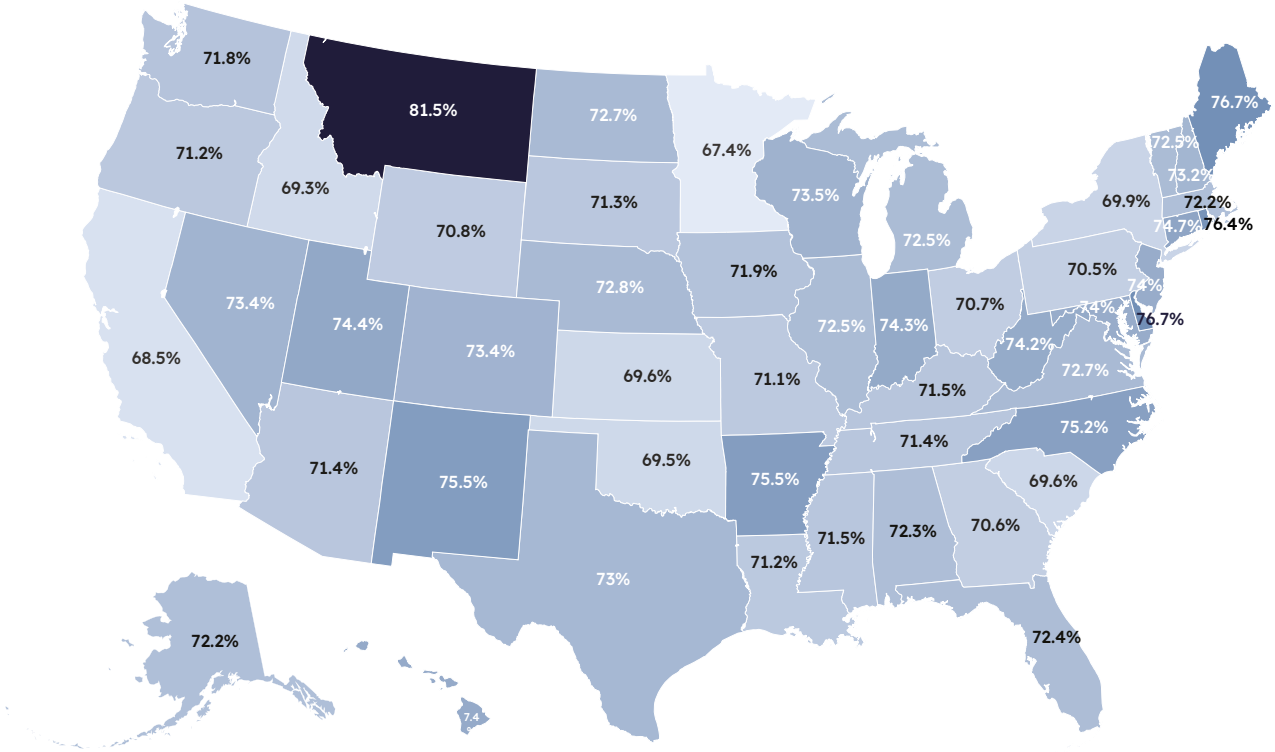
Source: Sitetrove, March 2025

Gender outlook of HNC patients

Over seven in 10 HNC patients are male and, as shown in Figure 4, each state has a higher percentage of male patients. Specifically, Montana has the highest proportion of males followed by Delaware, Maine, and Rhode Island.

In contrast, the states with the highest proportion of female patients are the District of Columbia, Minnesota, and California.

Figure 4. The percent of male patients by state

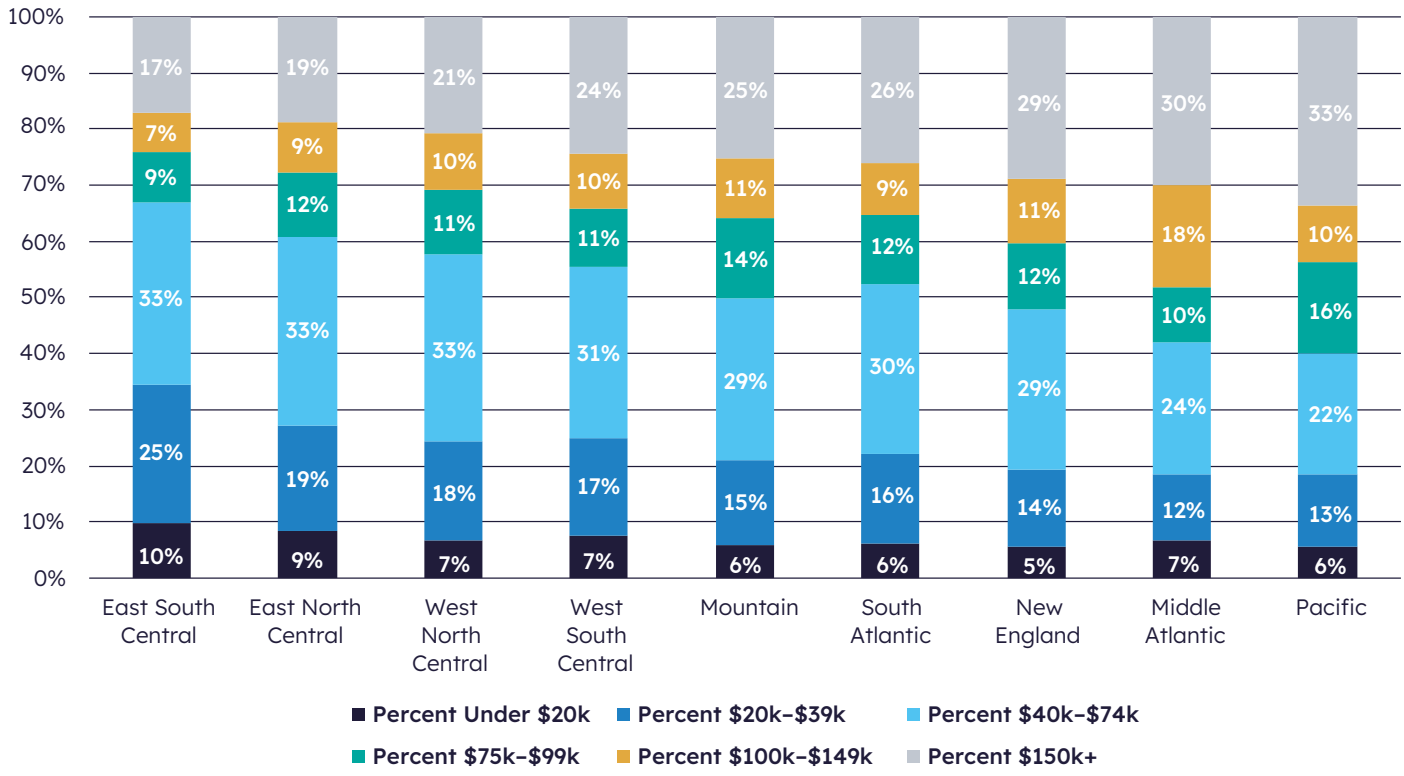


Source: Sitetrove, March 2025

Patient income and social determinants of health overview

Close to one in three patients has an income of $40k to $74k. The second-largest average income group is patients making over $150k annually. As can be seen in Figure 5, the highest income group represents the largest proportion of patients in the Pacific and Middle Atlantic divisions.

Figure 5. Proportion of patient income groups by US division

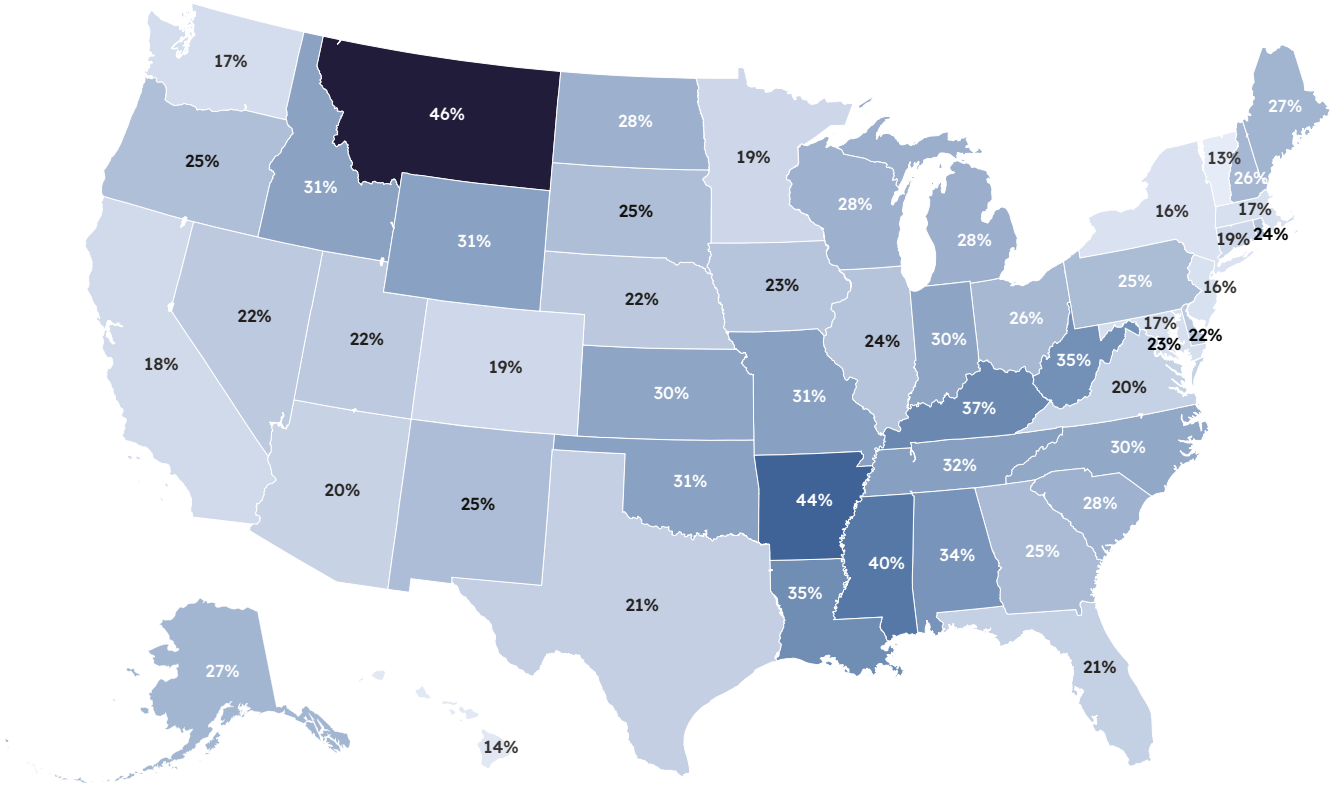


Patients who listed their income on their medical claim as unknown were excluded.

Source: Sitetrove, March 2025

Over one in five patients has an income of ≤$20k–$39k. As can be seen in Figure 6, Montana, Arkansas, and Mississippi have the highest percentage of low-income patients.

Figure 6. Percentage of patients making ≤$20k–$39k

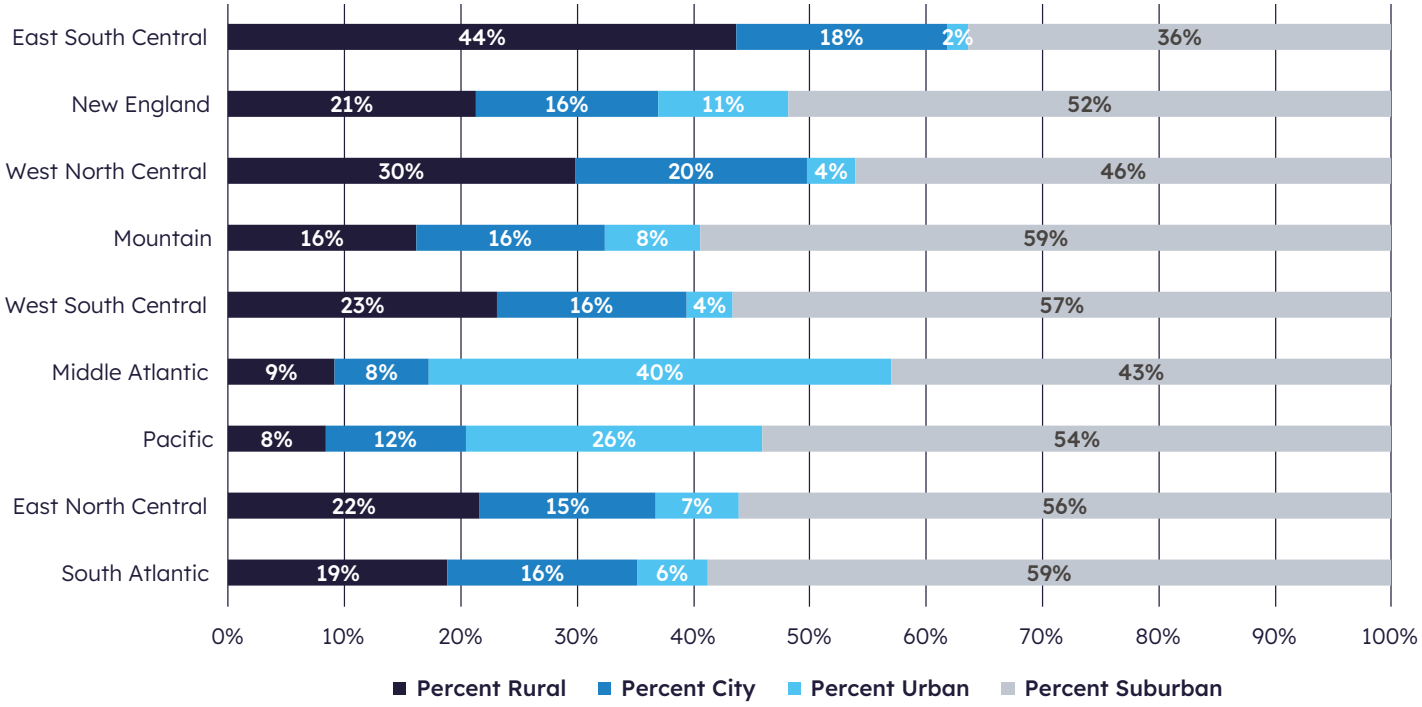


Source: Sitetrove, March 2025

Importantly, the previously mentioned NIH study[4] also found that rural patients have lower HNC survival when compared to urban peers. This issue is compounded when combined with race as Black patients in rural areas had the lowest survival compared to rural white and urban white or Black patients. Understanding the social determinants of health trends in US divisions can help sponsors address complexities and challenges of patient journeys, such as traveling logistics to treatment centers.

Figure 7 shows that most patients in all divisions except East South Central live in a suburban environment. In this division, a plurality of patients lives in rural areas, and, as seen in Figure 5, this division also has the highest proportion of low-income patients. The Middle Atlantic and Pacific divisions have the highest percentages of urban patients and share the largest rates of high-income patients.

Figure 7. Living Area Type Percentages per Division



Patients who listed their living type on their medical claim as unknown were excluded

Source: Sitetrove, March 2025

In conclusion, some consistent patterns are shared across most US HNC patients. However, regional and state differences heavily impact the distribution of patients based on race, income, and living environment. Improved awareness about all groups impacted by HNC can spur specialized strategies so that future clinical developments are inclusive of the diverse backgrounds in HNC patients.

References

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About the Author

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Angelina is a Sitetrove analyst specializing in oncology clinical trial site identification. Her deep understanding of client needs allows her to help clients optimize clinical trial site selection through the Ask the Analyst Service. With a B.A. in International Relations and a minor in Global Public Health from New York University, she leverages her analytical skills to visualize and interpret complex trial, patient, investigator, and drug data. Angelina has contributed to conference reports and white papers, particularly focusing on drug pipelines and non-small cell lung cancer.

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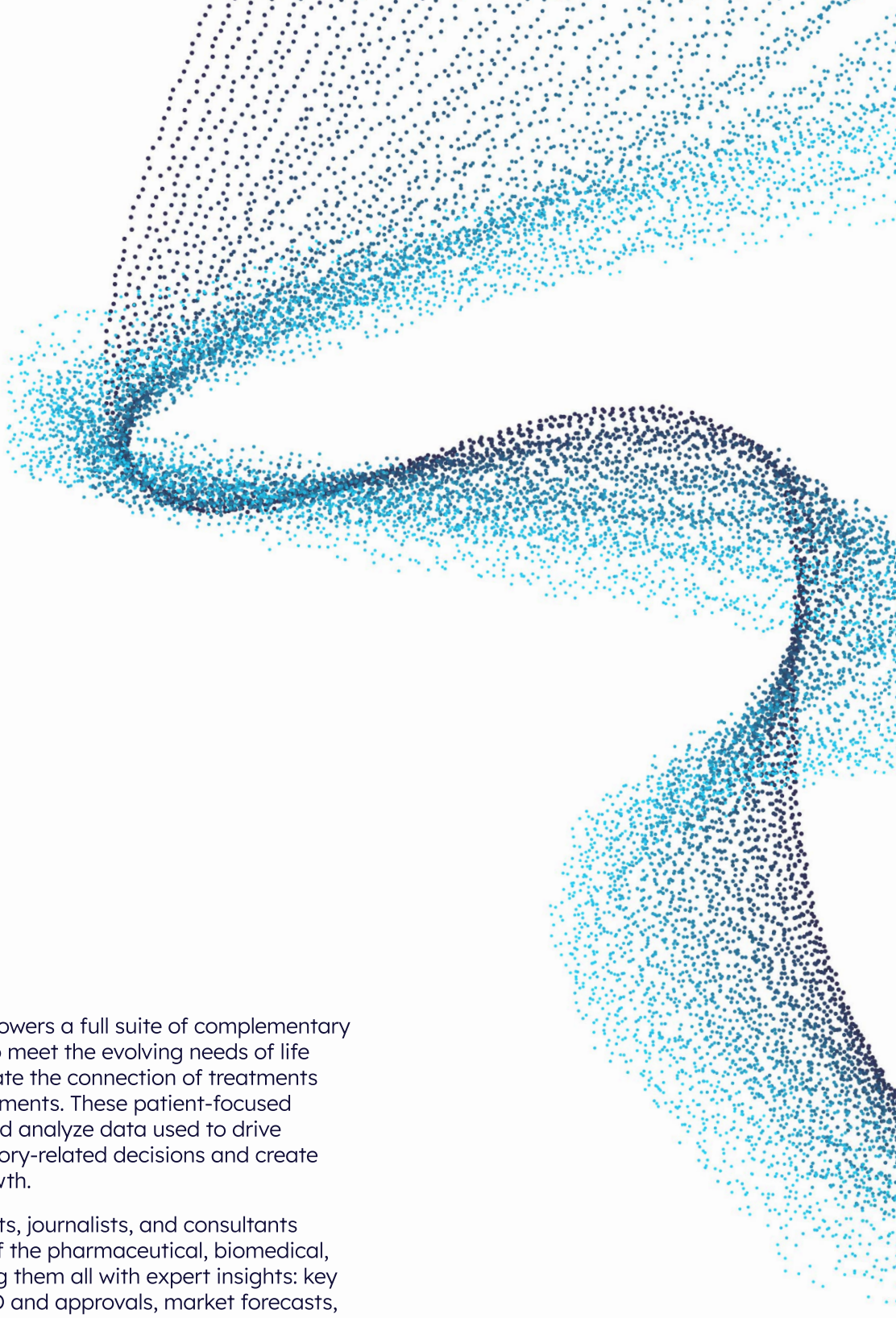

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