

## Demographic factors affecting hypertension control in Medicaid populations in Louisiana

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**Background:** Uncontrolled hypertension is a highly prevalent disease state in Louisiana and is known to lead to increased long-term health risks, such as stroke, heart failure, vision loss, and kidney disease. By investigating associations between populations with and without controlled hypertension, we can emphasize long-term health outcomes for at risk populations, consider external factors that may be protective for groups with improved control rates, and investigate disparities that reduce access to care and education. This study aims to evaluate the associations between factors such as age, gender, race, provider visits, and urban-rural location, and their impact on blood pressure management in Medicaid patients.

**Methods:** Using 2022 member data from Amerihealth Caritas, one of the 6 Medicaid managed care organizations in Louisiana, we evaluated the rates of individuals between 18 and 65 years of age who had a diagnosis of hypertension and adequate control (<140/90mmHg) during the measurement year. We also assessed the relationship between adequate control and the number of provider visits per year as well as stratifying the data by age, race, and patients' geographic location to assess for disparities.

**Results:** Of the 15,363 patients investigated, the majority of patients had uncontrolled hypertension (68.9%) compared to controlled patients (31.1%). The two groups had similar averages for office visits per year, with uncontrolled patients having a slightly lower average (3.1) than controlled patients (3.3). Younger individuals, aged 18-24, had a lower rate of controlled hypertension (25.4%) and fewer visits (2.8), compared to older individuals, aged 55-64, who were controlled (34.6%) and had a higher average of office visits (3.3). Males had a lower rate of controlled hypertension (29.3%) compared to females (32.1%), although both genders averaged the same number of office visits (3.2). Regarding race, Asian Americans had the highest percentage of controlled hypertension (race: Asian American [41%, N= 149], White [32%, N=5,547], Black or African American [30%, N=8,603], American Indian or Alaskan Native [30%, N=127]). Urban parishes had better rates of hypertension control (34%) than rural parishes (25%). The total average number of office visits were similar between urban (3.12) and rural parishes (3.18), however, following the removal of outliers, rural parish average visits decreased (2.99).

**Conclusions:** Variations in blood pressure control between populations suggest the presence of specific underlying factors such as age, gender, race, and geographic location that contribute to an individual's success in achieving controlled hypertension. To address the issue of uncontrolled blood pressure, we recommend the utilization of social media and other accessible platforms to educate and emphasize the long-term risks associated with uncontrolled hypertension to younger, at-risk populations. Although a small subset, further investigation of factors contributing to the success rates of Asian Americans can be identified and applied to at-risk populations. Additionally, by recognizing factors that decrease education and accessibility to treatment in rural areas, we can combat this gap.

1. Health threats from high blood pressure. American Heart Association. <https://www.heart.org/en/health-topics/high-blood-pressure/health-threats-from-high-blood-pressure>. Accessed Nov. 12, 2023.
2. Hypertension. Louisiana Department of Health. <https://ldh.la.gov/page/hypertension>. Accessed Nov. 12, 2023.