# AUTHORS

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# EXECUTIVE SUMMARY

This chartbook uses data from the 2019 Ohio Medicaid Assessment Survey (OMAS), the 2019 Ohio Medicaid Released Enrollees Study (OMRES), and the 2018 Behavioral Risk Factor Surveillance System (BFRSS) to analyze the health and well-being of Ohioans based on their racial or ethnic identity. The sample size of the 2019 OMAS allowed racial and ethnic breakdowns between those who identified as White, Black or African American, and Hispanic. The sample size was too small to analyze other races or ethnic groups.

**Key Findings**

**Chronic Health Disparities.** Racial and ethnic health disparities in Ohio were persistent and pervasive. In general, be it diabetes, high blood pressure, obesity, or asthma, Black or African Americans and Hispanics experienced chronic health conditions more frequently than whites. For example, Black or African Americans' rate of death from diabetes was 75% higher than that of whites.

**Subpopulation Chronic Concerns.** Some disparities were especially apparent among certain subgroups within the state. For example, obesity disproportionately affected Black or African American and Hispanic women and young adults.

Middle-aged Black or African Americans (45-64) had much higher heart-related challenges compared to similarly aged whites and Hispanics.

**Access to Care.** Racial and ethnic health disparities in access to care were persistent and substantial. Among all Ohio adults, Black or African Americans and Hispanics were more likely than whites to have unmet health care needs and to have frequent ER visits. Among lower-income uninsured adults, Hispanics' usual source of care was markedly lower, compared to both whites and Black or African Americans.

**Substance Use Disparities.** Substance use disorder is a profound challenge in Ohio, and there were marked differences between racial and ethnic subgroups. Smoking tobacco and marijuana use were highest among Black or African Americans, particularly among Black or African American men. Binge drinking of alcohol was highest among Hispanic men. Regarding more immediate mortality risk, opioid deaths were highest among whites, regardless of gender (Ohio Department of Health Vital Statistics (2018 - 2019).

# EXECUTIVE SUMMARY

**Economic Challenges.** With the nation's ninth largest race wage gap, in Ohio, whites' median income was <u>84% higher</u> than that of Black or African Americans. These wage differences have economic and health consequences including housing burden and food insecurity, which are associated with many negative health outcomes. Among all Ohio adults, the Black or African American housing burden was twice that of whites, and food insecurity was nearly three times that of whites. Taken together, these economic social determinants have many individual, household, and community consequences that intensify health disparities.

**Incarceration Differences.** Incarceration is also associated with poor health outcomes including infectious disease, hypertension, cancer and mortality.[12] Among Ohio men, Black or African Americans were more than six times as likely to be incarcerated compared to whites. For both women and men, previously incarcerated whites were more likely to be employed, to have less difficulty finding work, and had greater confidence in Medicaid being helpful to them staying out of prison in the future.

**Health Disparities and Social Determinants.** While not all factors that contribute to race/ethnic health disparities are known or understood, these analyses show that they exist in large part because of disparities in social determinants of health, such as wealth, education, housing, and criminal justice participation.

**Fewer Disparities Among Medicaid Affiliates.** For most health measures, Medicaid enrollment was associated with smaller racial and ethnic disparities. For example, among Medicaid enrollees, there were comparable race/ethnic levels of usual source of care, and interracially similar levels of diabetes and heart disease. This suggests that Medicaid was associated with smaller chronic health disparities.

**COVID-19 Comorbidity Relationships.** Black or African Americans and Hispanics are overrepresented among COVID-19 cases, associated hospitalizations, and deaths. Black/African-American Ohioans are overrepresented in COVID-19 cases (25.5%), hospitalizations (30.4%) and deaths (16.5%) compared to their percent of the state population (13%).[17] Though varying over time, COVID-19 was the <u>fourth leading cause of death</u> for Black or African Americans in Ohio, outranking death from stroke, diabetes, and hypertension.[17] Regarding comorbidities associated with COVID-19, Black or African Americans had much higher rates of obesity, high blood pressure and diabetes.

Visit **grc.osu.edu/OMAS** for additional information about OMAS, including public use files, codebooks, and methods

# CONTENTS

# BACKGROUND

For over a century, researchers have documented how health outcomes vary for different race/ethnic population groups in the United States.[1, 2] This chartbook describes what these health disparities are, explains how they matter to Ohio, and considers explanations for why they persist. Health disparities refer to preventable differences in disease or injury experienced by disadvantaged populations.[3,4]

Black or African Americans, Hispanics, and others experience a greater burden of disease and injury across a wide range of outcomes. Multiple explanations can help us understand these differences. Recent discussions about social determinants of health, consider circumstances in which people are born, grow up, work, and play, as factors that may have various effects on health. These discussions consider differences in quality of care, service provider biases, neighborhood inequality, or criminal justice differences. Other explanations include racial or ethnic differences in access to health care, insurance coverage or having a usual source of care. Another explanation includes behavior differences like smoking or exercise. Each explanation contributes to our understanding of these differences.

In the U.S., compared to whites, Black or African Americans are more likely to have asthma, obesity, high blood pressure, frequent mental health distress, and no usual source of care. They also have higher age-adjusted rates of mortality from heart disease, diabetes, and homicide.[5] In Ohio, Black or African Americans have a 45% higher heart disease death rate and

have a 77% higher age-adjusted death rate from diabetes, compared to whites.

These differences are largely explained by social determinants of health. They reflect structural inequities between whites, Black or African Americans, and Hispanics in our society. These social determinants of health include but are not limited to: inadequate access to quality health care, low socioeconomic status, limited educational attainment, institutionalized racism, food insecurity, and limited policy coordination. Considering the patterns of social determinants of health among certain groups is central to research in health disparities and the potential means for addressing them.

Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including lack of access to health care. It means reducing and ultimately eliminating disparities in health and its determinants that negatively affect marginalized groups.[18]

This chartbook focuses only on Black or African American, Hispanic, and White populations. Though Ohio has many residents of other race/ethnic groups, the OMAS was unable to sample enough of them to provide reliable estimates for other groups.

# BACKGROUND

The content of this chartbook examines race/ethnic disparities by sex, age group, and insurance status to help pinpoint where disparities were greatest, understand why they exist, and consider how these disparities are being addressed. They include factors that help explain these relationships including minority stress, resilience, and potential links between racial and ethnic status and health disparities.[6] These and others have been identified in public health research.

Previous research suggested that disparities are not inevitable, that they vary, and that understanding the variations could lead to new strategies to reduce disparities. This could include leveraging successful programs or policies from places with small disparities to places where disparities are larger.[7] Reversing them will likely require policies that focus on structural and clinical and programmatic changes.

Decades of surveillance and research in the US have documented health disparities in morbidity and mortality among racial and ethnic minority groups and those of lower socioeconomic status. It is estimated that in recent years, the cost of health inequities and premature death in the US totaled $1.24 trillion. Despite national initiatives such as Healthy People 2000, 2010, and 2020, and the National Partnership to End Health Disparities, many remain.

The average differences in health care quality for Blacks, Hispanics, and Asians compared with whites ranks Ohio in the worst quartile of the U.S.[8] Our report contributes to an understanding of the presence and size of health disparities related to these differences in Ohio. Previous research has noted that health equity means that everyone has a fair and just opportunity to be as healthy as possible.[9] By considering these findings in relation to social determinants of health, our report contributes to pathways toward achieving health equity.

Note that this chartbook reports self-reported health behaviors, events, and chronic conditions. With the chronic conditions, the questions ask if a health care professional or provider had ever informed the respondent that they had a specific condition. Accordingly, these statistics may vary from medical records, vital statistic, or other data sources in terms of time reference and reoccurring diagnosis.

OMAS
Ohio Medicaid Assessment Survey

# OBJECTIVES

The purpose of this chartbook is to provide a detailed report on differences in health and well-being statuses between whites, Black or African Americans, and Hispanics as measured in the Ohio Medicaid Assessment Survey. Our objectives were to:

1. Present estimates of health indicators, chronic conditions, health care access and services, substance use, and economic constraints among Ohioans, and what, if any, differences there were among them.

2. Estimate the health and health disparities across status characteristics including: gender, age, race/ethnicity, and insurance status.

3. Consider these estimates and race/ethnic differences in relation to socioeconomic inequalities associated with them, consistent with a social determinants of health perspective.

4. Determine whether Medicaid coverage affected racial and ethnic disparities.

# METHODS

**Description of Data Sources**

- The 2019 Ohio Medicaid Assessment Survey (OMAS) is the primary data source for this chartbook. Earlier OMAS surveys from 2010, 2012, 2015, and 2017 were also used for trending. Additional data used were from the 2019 Ohio Medicaid Released Enrollees Study (OMRES), and the 2018 Behavioral Risk Factor Surveillance System (BFRSS).

- OMRES data are from the Ohio Medicaid Pre-Release Enrollment (MPRE) program. In 2014, the Ohio Department of Medicaid (ODM), in collaboration with the Ohio Department of Rehabilitation and Correction (ODRC), initiated MPRE which enrolls incarcerated individuals in Medicaid prior to release from prison. The 2019 Ohio Medicaid Released Enrollees Study (OMRES) is an evaluation of the MPRE program and a follow-up to the 2018 OMRES.

**Further Details on the 2019 OMAS**

- The 2019 OMAS is an Ohio-specific assessment that provides health status and health system-related information about residential Ohioans at the state, regional and county levels, with a concentration on Ohio's Medicaid, potentially Medicaid-eligible, and non-Medicaid populations.

- This multi-mode study collected data through a sample of landline and cellular phones in Ohio through random digit dialing, as well as by web-based or paper versions through address-based sampling (ABS).

- A total of 31,558 surveys of Ohioans 19 years of age and older and proxy interviews for 7,404 children 18 years of age and younger were completed by researchers in 2019: 30,068 by phone, 950 by web, and 540 by mail-in paper survey.

- The 2019 OMAS is the eighth iteration of the survey. For details, please see the OMAS methods at **grc.osu.edu/OMAS**.

- More information on the findings and methodology of the survey is accessible at: https://grc.osu.edu/OMAS/2019Survey.

**Variable Definitions**

- Adults were 19-64 years-old as identified in the OMAS.

- Adults identified in the survey as having Medicaid health insurance coverage were assigned to the Medicaid sub-population. Adults without Medicaid but at or below 138% of the Federal Poverty Level (FPL; $17,609 for a single person) were assigned to the Potentially Medicaid-Eligible sub-population. The Insured Potentially Medicaid-Eligible sub-population had Medicare only, Employer-Sponsored or Other/Private Insurance. The Uninsured Potentially Medicaid-Eligible sub-population had no known insurance.

- *Race/ethnicity* was self-reported in the OMAS using the U.S. Census Bureau short form question: "Which one or more of the following would you say is your race? Are you: White, Black or African American, American Indian, or Alaskan Native, Native Hawaiian or Pacific Islander, or some other race I have not mentioned?" The category other indicated a racial category not listed or self-reported unknown. When multiple race was reported, the respondent was asked to determine their primary race, which was used for analyses.

- *Poor/Fair Health* status combined the mutually exclusive self-reported health categories of Poor and Fair as recorded in the OMAS.

- *Mental Health Impairment (MHI) wa*s defined as at least 14 days in the past 30 days where mental health prevented work or day-to-day activities as recorded in the OMAS.

- *Frequent ER visits* was a count of having visited an ER three or more times in the previous 12 months

# METHODS

**Variable Definitions** (*cont.*)

- *Binge Drinking* was defined as at least one instance of drinking 4 or more or 5 or more alcoholic beverages for adult women or men, respectively, in the past 30 days as recorded in the OMAS.
- *Unmet Needs wa*s at least one unmet dental, mental health, prescriptions, or other needs within the past 12 months as recorded in the OMAS.
- *Housing Burden wa*s defined as having a monthly rent/mortgage that exceeds 40% of the monthly income as recorded in the OMAS.
- *Food Insecurity wa*s defined as running out of food before getting money to buy more within the last 12 months.
- *Heart disease* was those diagnosed as having a heart attack, coronary heart disease or congestive heart failure.
- Those who were *Currently Smoking* have smoked at least 100 cigarettes during their lifetime and currently smoke some days or every day.

**Analyses**

- Descriptive statistics are reported in the trending figures and bar charts that follow. The trending figures compared nine subgroups (i.e., three different insurance groups, among each of three ethnic/racial groups).
- For the 2019 data, significant differences were denoted between bracketed groups by an asterisk (*).  A significant difference was a nonzero 95% confidence interval for the difference between the two bracketed groups.

- Survey question estimates available in 2019 were presented with those for earlier years, or for 2019 only, but always where the data were sufficient for calculating and presenting reliable estimates. Reliable estimates were defined as one where the size of the unweighted subpopulation of interest was greater than 30 individuals and the coefficient of variation for the estimate was less than 0.3. Otherwise, estimates were replaced by double asterisks (**).  Application of these rules resulted in the exclusion of several OMAS survey questions or particular subgroups from this chartbook.

# CHARACTERISTICS OF OHIO ADULTS

This section overviews characteristics of Ohio's Potentially Medicaid-eligible, working-aged adults, 19-64 years old. Race/ethnic, age and insurance status differences are featured.

# Key Findings: Characteristics of Ohio Adults

- When considering the findings that follow, it is important to keep two compilations of OMAS data in mind. First, the total OMAS is an Ohio-specific assessment that provides health status and health system-related information about all residential Ohioans. Second, our core OMAS subset was working aged, lower-income OMAS adults (i.e., at <138% of the poverty level). All figures were labelled to identify which of the two OMAS data sources the findings refer to. When considering the lower-income OMAS respondents, we distinguished among three subgroups of potentially Medicaid-eligible Ohio adults who: (1) Were enrolled in Medicaid, (2) had some other form of insurance, or (3) were uninsured. Doing so more effectively detailed the experiences of health and health disparities in Ohio.

- When comparing these three insurance categories, there were notable age differences between those who were Medicaid enrolled, those with other insurance, and the uninsured. Compared to Medicaid enrolled adults, the uninsured were younger, while those with other insurance were older.

- There were race/ethnic differences among the three insurance categories. Compared to Medicaid enrollees, the uninsured were less likely to be White and Black or African Americans and 4 times more likely to be Hispanic. Those with other insurance were less likely to be Black or African American and Hispanic.

- Among all potentially Medicaid-eligible adults in Ohio, Black or African Americans and whites were similar in age. Similar to the general population, Hispanics were much younger. Additionally, racial/ethnic diversity also differed by age. Among young adults, those identifying as Other race/ethnicity were more than twice the percentage of older adults who did so.

# Figure 1. Age Distribution among Working-aged, Lower-income Adults by Race/Ethnicity
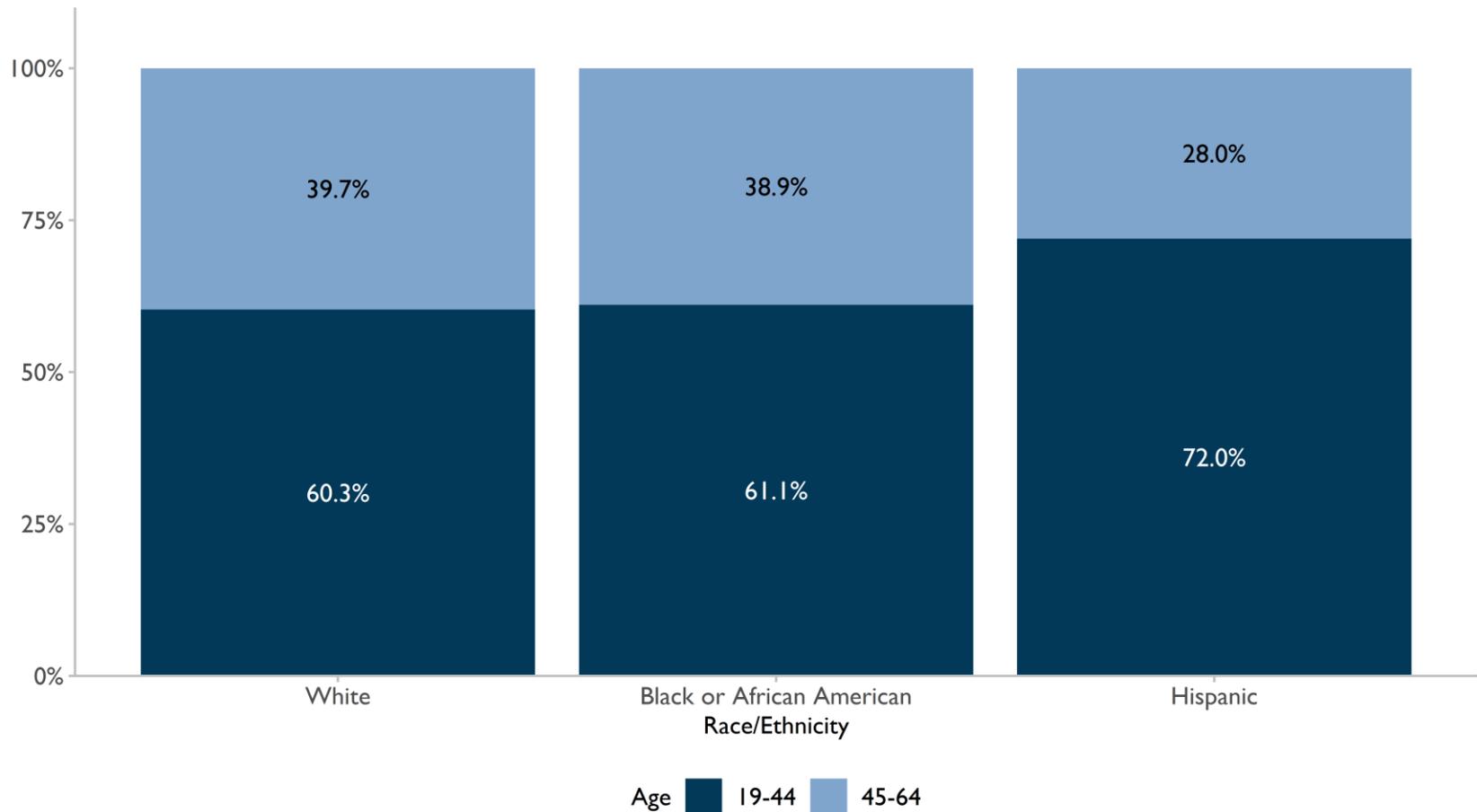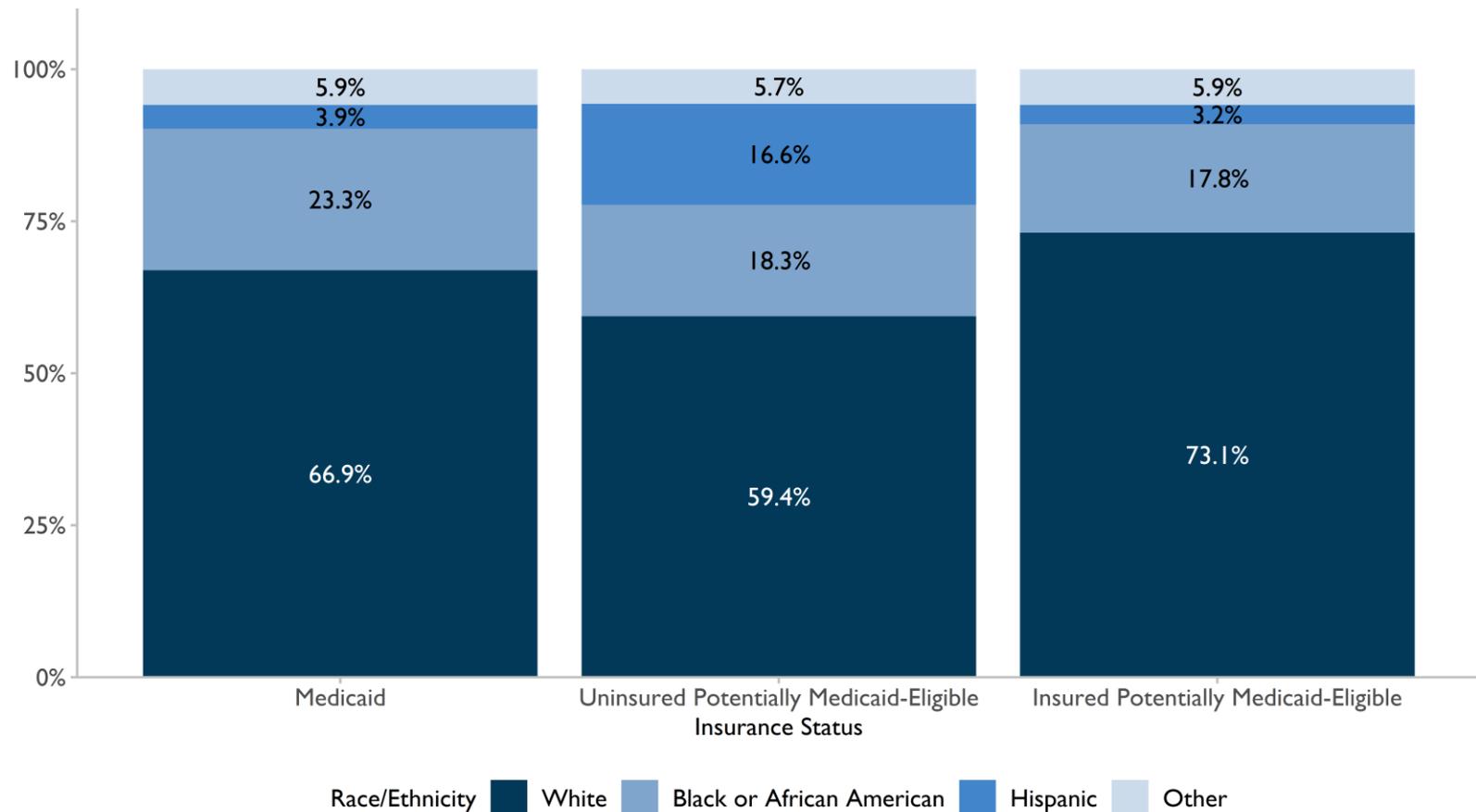


Among working-aged, lower-income adults in Ohio, the populations of Black or African Americans and whites were similar in age, while the population of Hispanic adults was much younger.

# Figure 2. Race/Ethnicity within Age Groups among Working-aged, Lower-income Adults
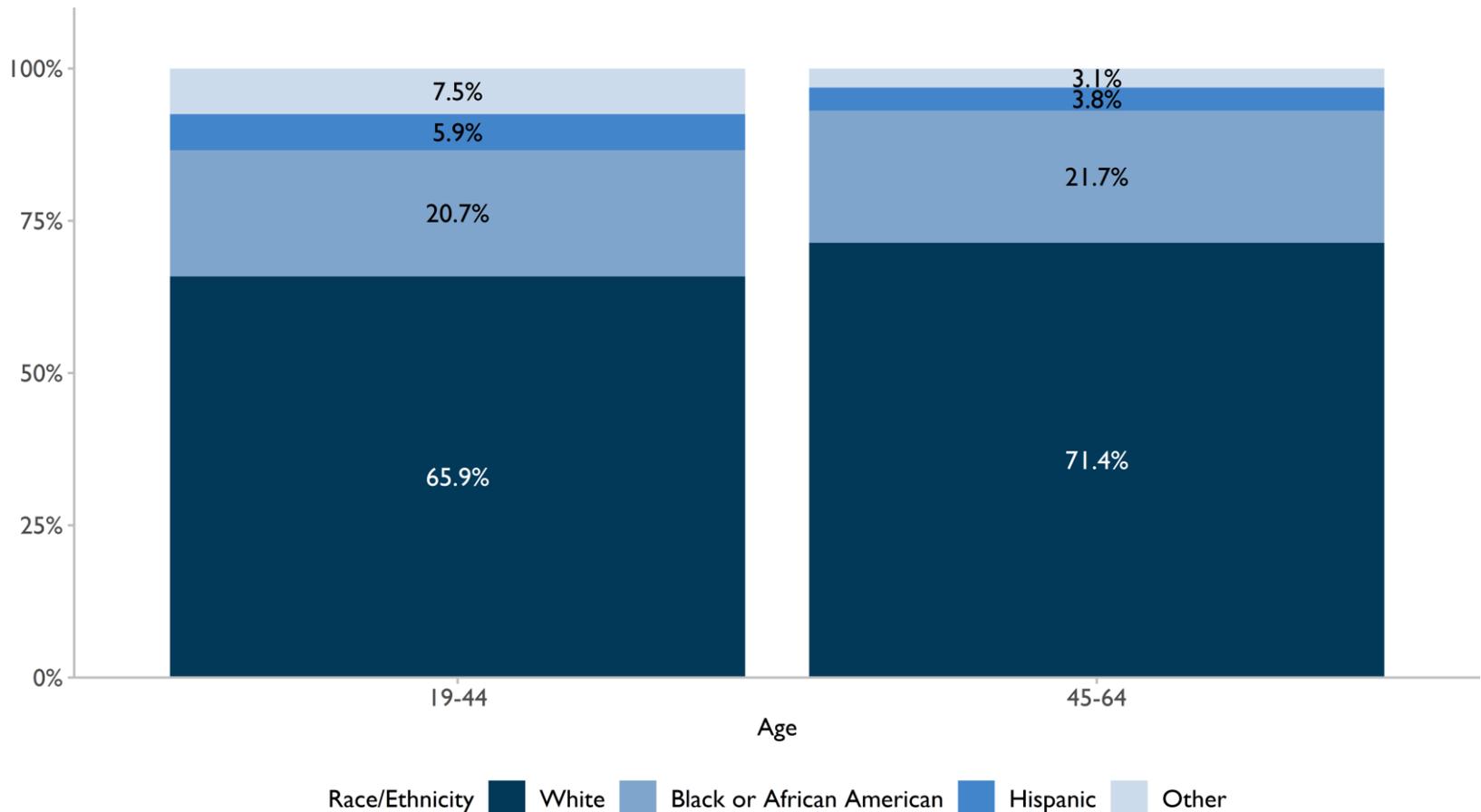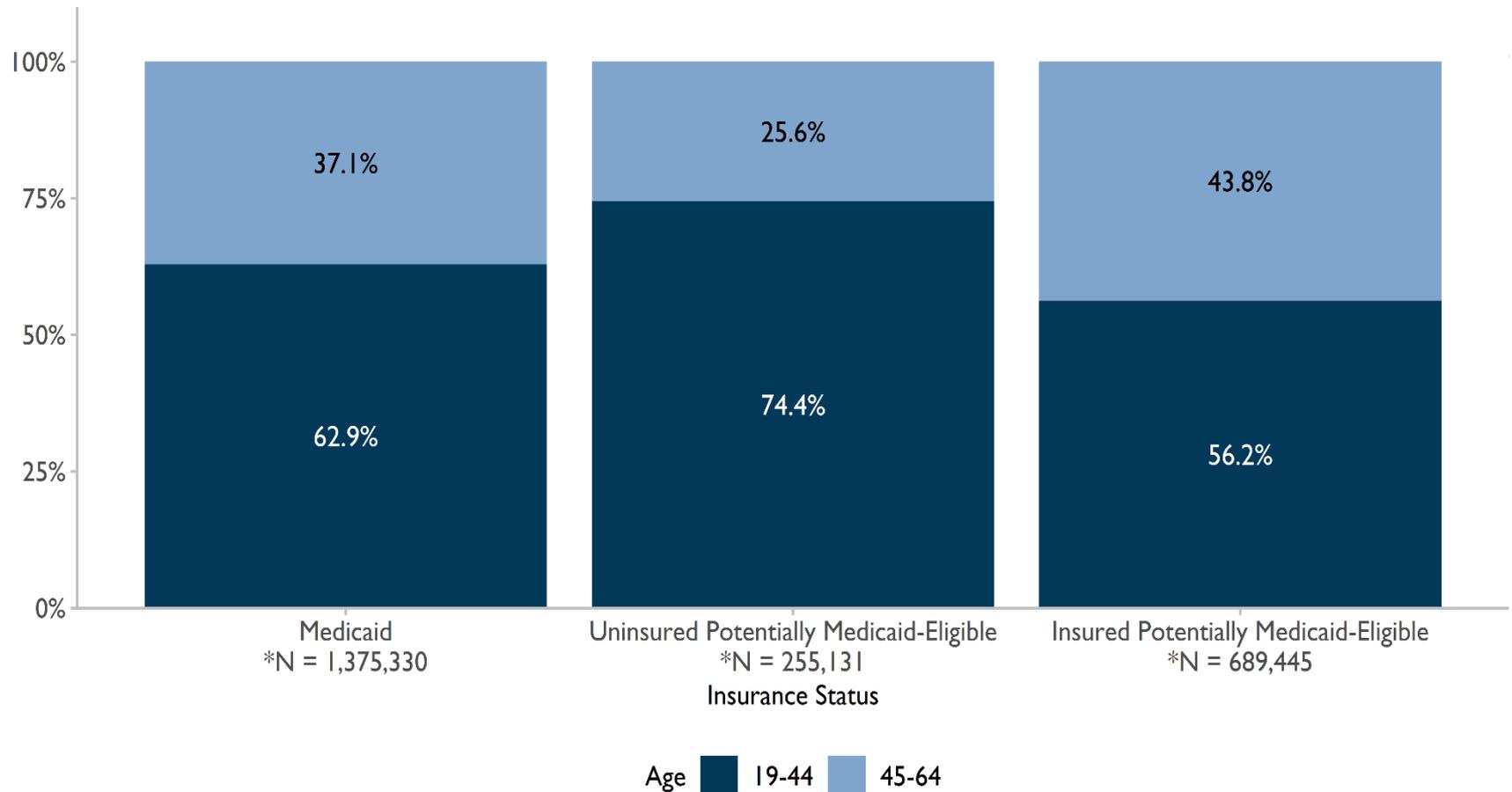


Among working-aged, lower-income adults, Black or African Americans made up a similar percentage of the population in both age groups, whites made up a larger portion of older adults, while Hispanics and others made up the smallest portion of older adults. Among young adults, those identifying as Other were the third largest race/ethnic subgroup.

# Figure 3. Race/Ethnicity by Insurance Status among Working-aged, Lower-income Adults



Among working-aged adults in Ohio, compared to those enrolled in Medicaid, the uninsured had fewer whites and Black or African Americans, and more than four times as many Hispanics. Those with other insurance, had more whites, less Black or African Americans, and fewer Hispanics.

Minority Health in Ohio, 2019 OMAS

# Figure 4. Age Group by Insurance Status among Working-aged, Lower-income Adults



Among working-aged, lower-income adults in Ohio, the uninsured population was much younger compared to the populations of Medicaid enrollees and those with other insurance (i.e., had a far higher percentage of 19-44 year olds).

* Estimates are weighted to reflect the population.

# HEALTH CARE ACCESS

The following section provides an overview of prevalence and trends in health care services for various racial and ethnic subgroups of Ohio residents. Focus was placed on having a usual source of care, emergency room visits, and the level of unmet need. The data on each outcome were not mutually exclusive, as some people may experience multiple health service challenges.

# Key Findings: Health Care Access

- Many of the policies in the Affordable Care Act (ACA) are important because of improved health care access and reduced health disparities associated with improved access. Among Medicaid enrollees, having a usual source of care has steadily been at, or above 90% since 2010, with very few differences by race/ethnicity.

- Consistent with high levels of a usual source of care, over time unmet health care needs among Medicaid enrollees have been relatively stable. Among adults with Medicaid, Black or African Americans reported having fewer unmet needs compared to both whites and Hispanics. Not surprisingly, when comparing insurance groups among lower-income Ohio adults, the highest levels of unmet need were among those uninsured, with more than half of uninsured whites having unmet health care needs

- When considering all OMAS respondents, regardless of income, there were sizable unmet health care need differences by race and ethnicity, with African Americans having a much higher level of unmet need than whites. Yet, Hispanics had the highest level of unmet need.

- Among Medicaid enrollees, three trajectories of frequent ER visits emerged: (1) While White rates have been stable, those of African Americans have slightly increased over time, and despite limited data, Hispanic frequent ER visits are declining; (2) when considering all OMAS respondents, marked race/ethnic differences include African Americans having the highest level of frequent ER visits; and (3) this ER frequency finding was also true when comparing the experiences of Medicaid enrollees.
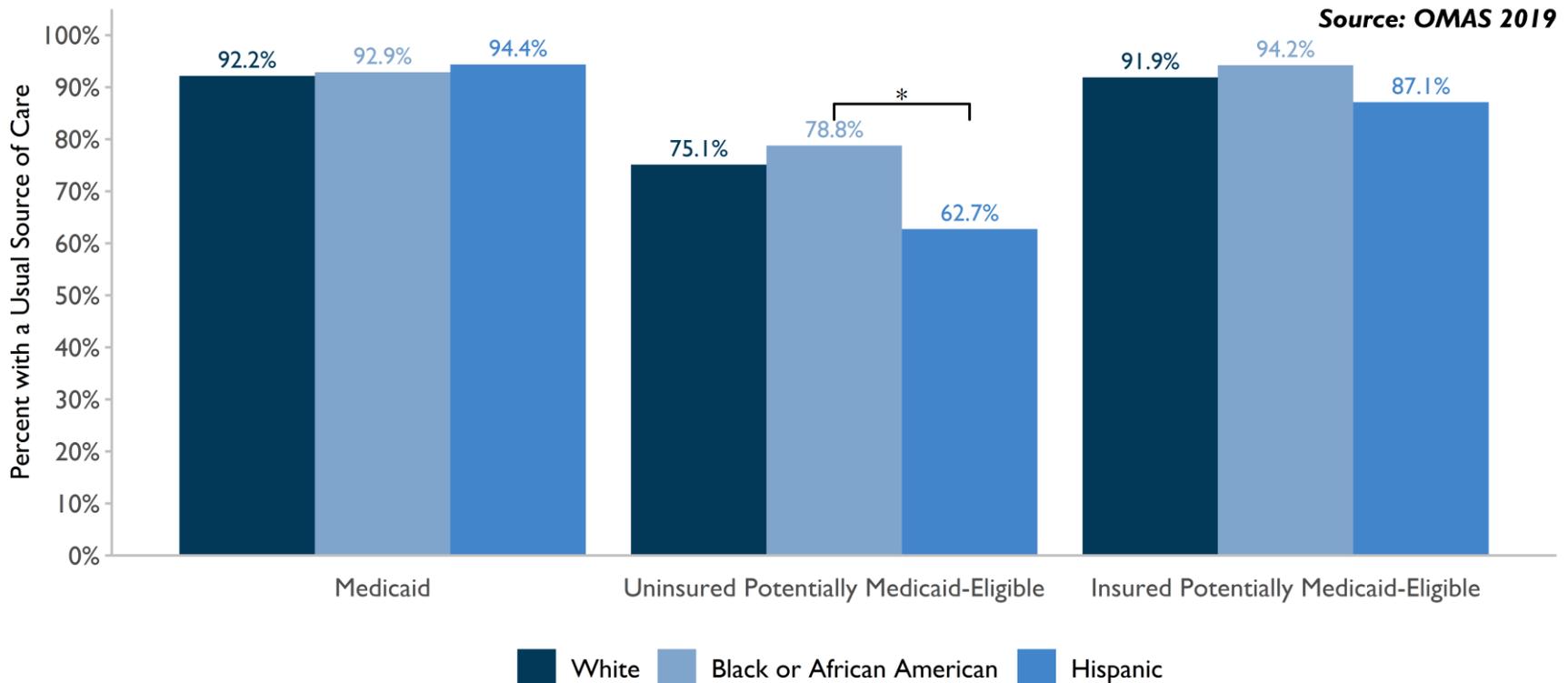
# **Figure 5.** Usual Source of Care by Race/ Ethnicity and Insurance Status among Working-aged, Lower-income Adults
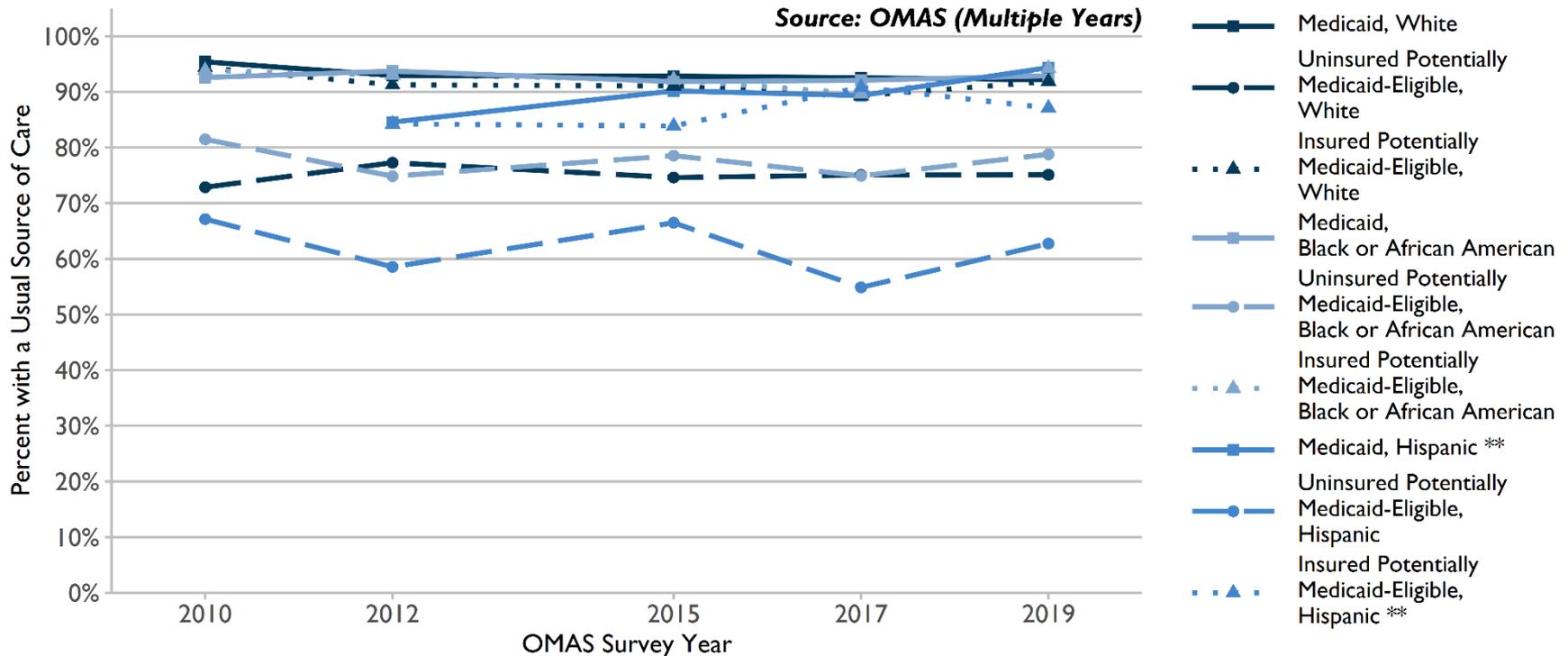


Among working-aged, lower-income adults in Ohio, Medicaid enrollees (the solid lines) have had a high level of usual source of care, with little race/ethnic difference over time. The uninsured (the dashed lines) have consistently been the least likely to have a usual source of care, especially among Hispanics.

# Figure 6. Usual Source of Care by Race/Ethnicity and Insurance Status among Working-aged, Lower-income Adults



Among working-aged lower-income adults, for Medicaid enrollees there were no significant race/ethnic differences in having a usual source of care.

# Figure 7. Unmet Health Care Needs by Race/Ethnicity and Insurance Status over Time among Working-aged, Lower-income Adults



Source: OMAS (Multiple Years)

Legend:
- Medicaid, White
- Uninsured Potentially Medicaid-Eligible, White
- Insured Potentially Medicaid-Eligible, White
- Medicaid, Black or African American
- Uninsured Potentially Medicaid-Eligible, Black or African American
- Insured Potentially Medicaid-Eligible, Black or African American
- Medicaid, Hispanic **
- Uninsured Potentially Medicaid-Eligible, Hispanic
- Insured Potentially Medicaid-Eligible, Hispanic **
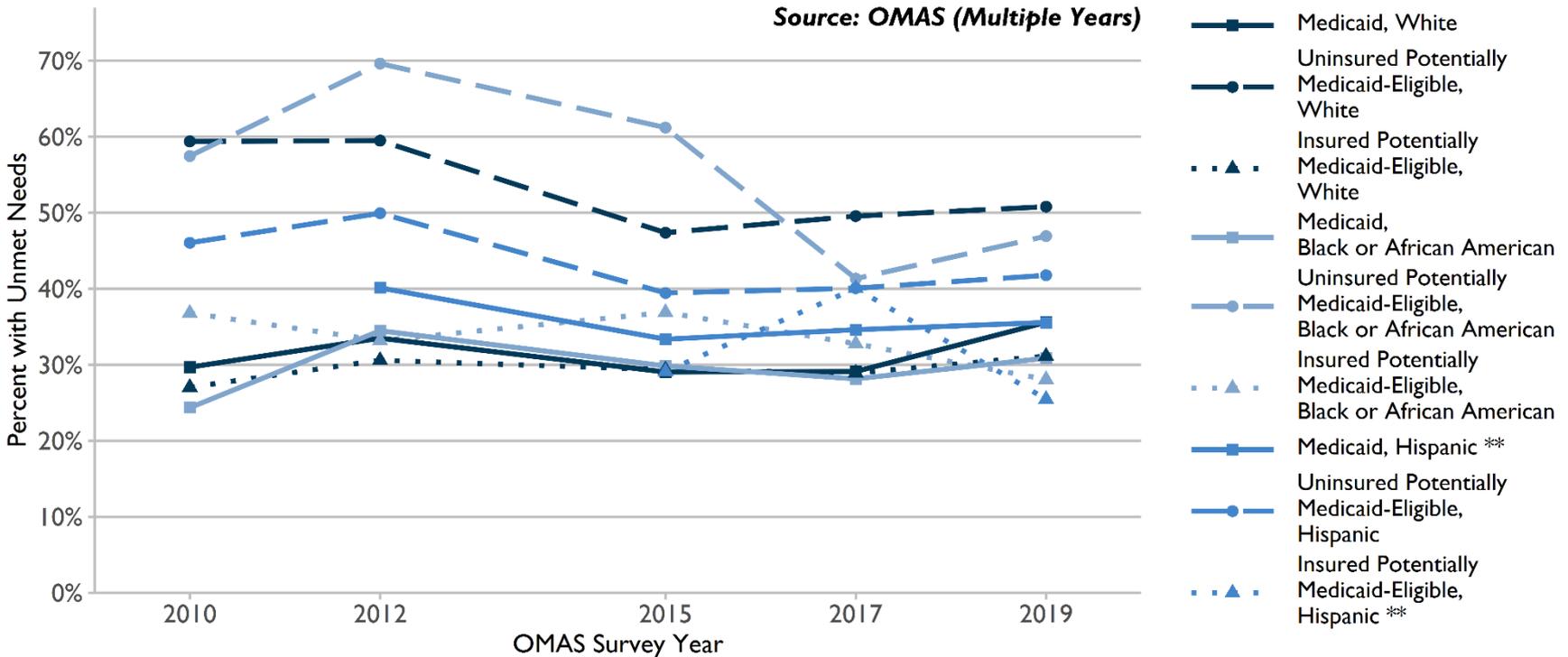
** Low-precision estimates for subgroup omitted from plot.

Among working-aged lower-income adults in Ohio, Medicaid enrollees (the solid lines) have had a low level of unmet health care needs over time, with few race/ethnic differences. Among Medicaid enrollees, in 2010 and last year, Black or African Americans had the lowest level of unmet need (low-precision estimate for Hispanics 2010 prevents their presentation).

# Figure 8. Unmet Health Care Needs by Race/Ethnicity and Gender among All Adults



Source: OMAS 2019
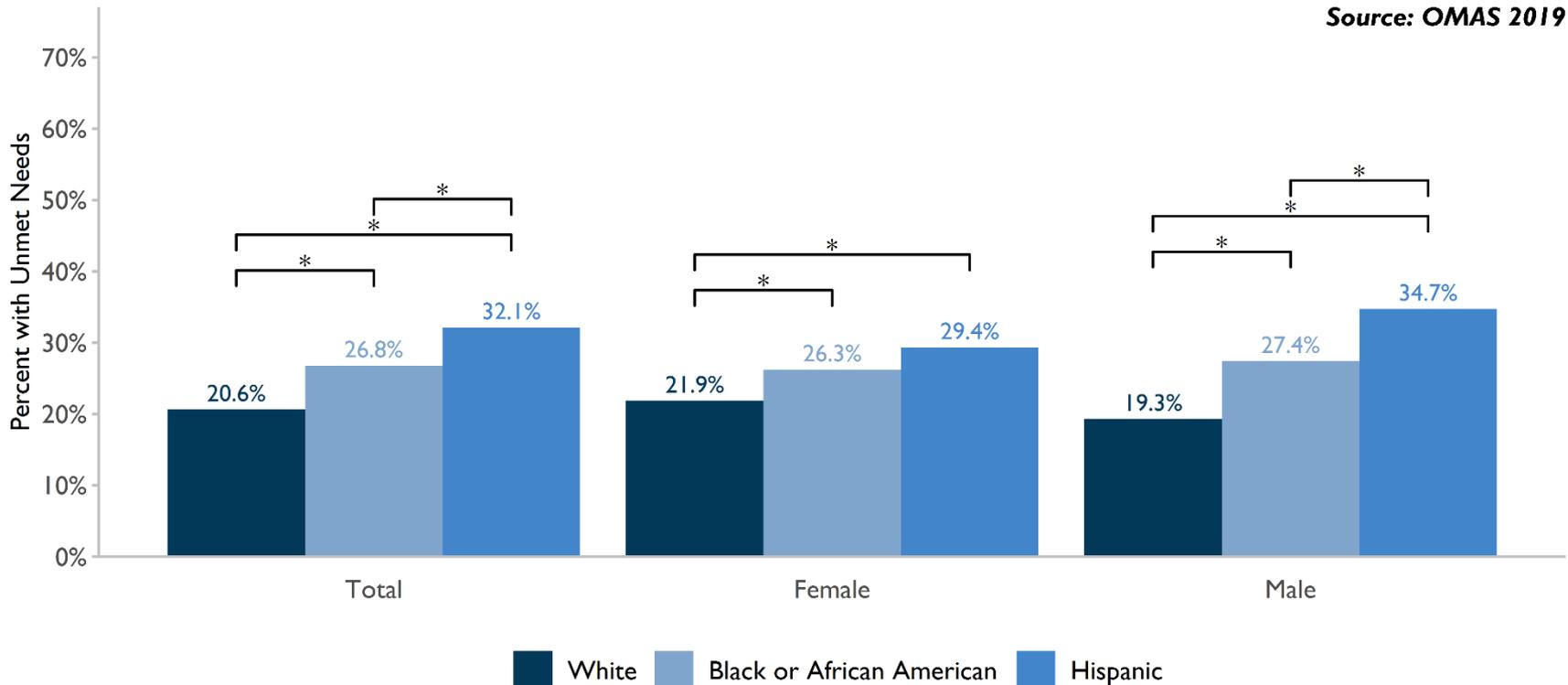
* Significant Difference

Among all adults in Ohio, compared to whites, Black or African Americans and Hispanics had higher rates of unmet health care needs overall, and for both women and men. Hispanics had the highest level of unmet health care needs.

# Figure 9. Unmet Health Care Needs by Race/Ethnicity and Insurance Status among Working-aged, Lower-income Adults
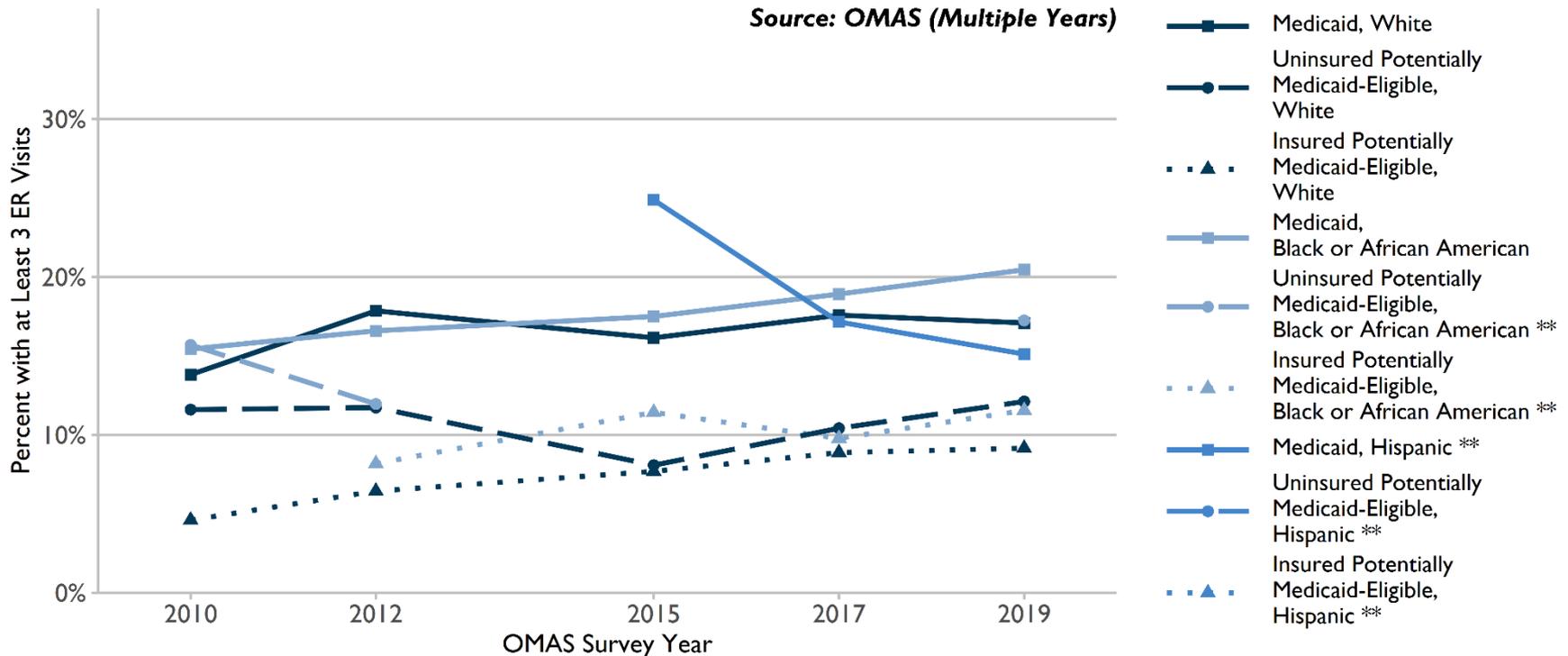


Source: OMAS 2019
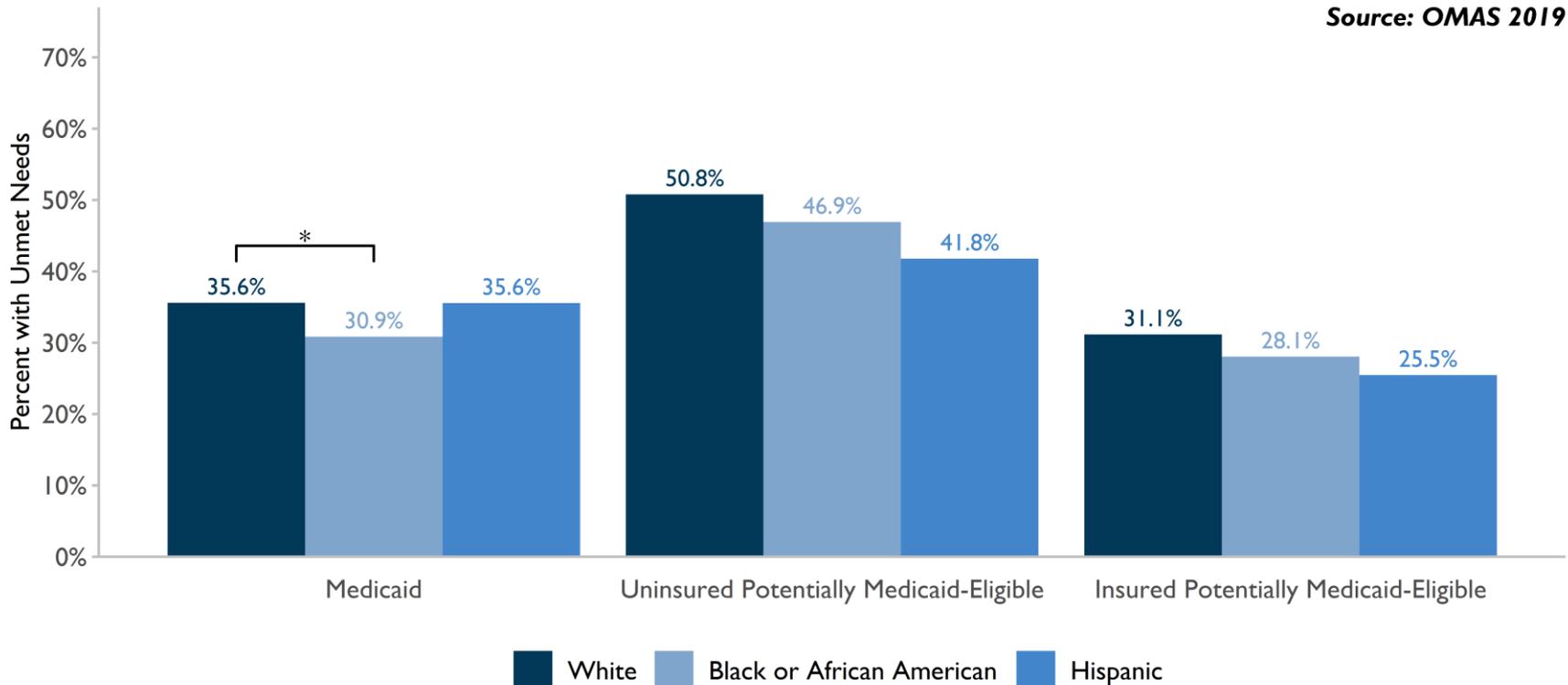
Among working-aged, lower-income adults, for Medicaid enrollees, whites and Hispanics had similar percentages of unmet health care needs, with Black or African Americans having the lowest percentage. For all three race/ethnic groups, unmet needs were highest among the uninsured.

# Figure 10. Frequent ER Visits by Race/Ethnicity and Insurance Status among Working-aged, Lower-income Adults



Source: OMAS (Multiple Years)

Legend:
- Medicaid, White
- Uninsured Potentially Medicaid-Eligible, White
- Insured Potentially Medicaid-Eligible, White
- Medicaid, Black or African American
- Uninsured Potentially Medicaid-Eligible, Black or African American **
- Insured Potentially Medicaid-Eligible, Black or African American **
- Medicaid, Hispanic **
- Uninsured Potentially Medicaid-Eligible, Hispanic **
- Insured Potentially Medicaid-Eligible, Hispanic **

** Low-precision estimates for subgroup omitted from plot.

Among working-aged lower-income adults in Ohio, Medicaid enrollees (the solid lines) have been more likely to frequently visit an ER compared to those with other insurance and compared to the uninsured. Relative stability among Medicaid enrolled whites, and a steep recent decline among Hispanics both differ from the slow, steady increase among Black or African Americans.

# Figure 11. Frequent ER Visits by Race/Ethnicity and Gender among All Adults
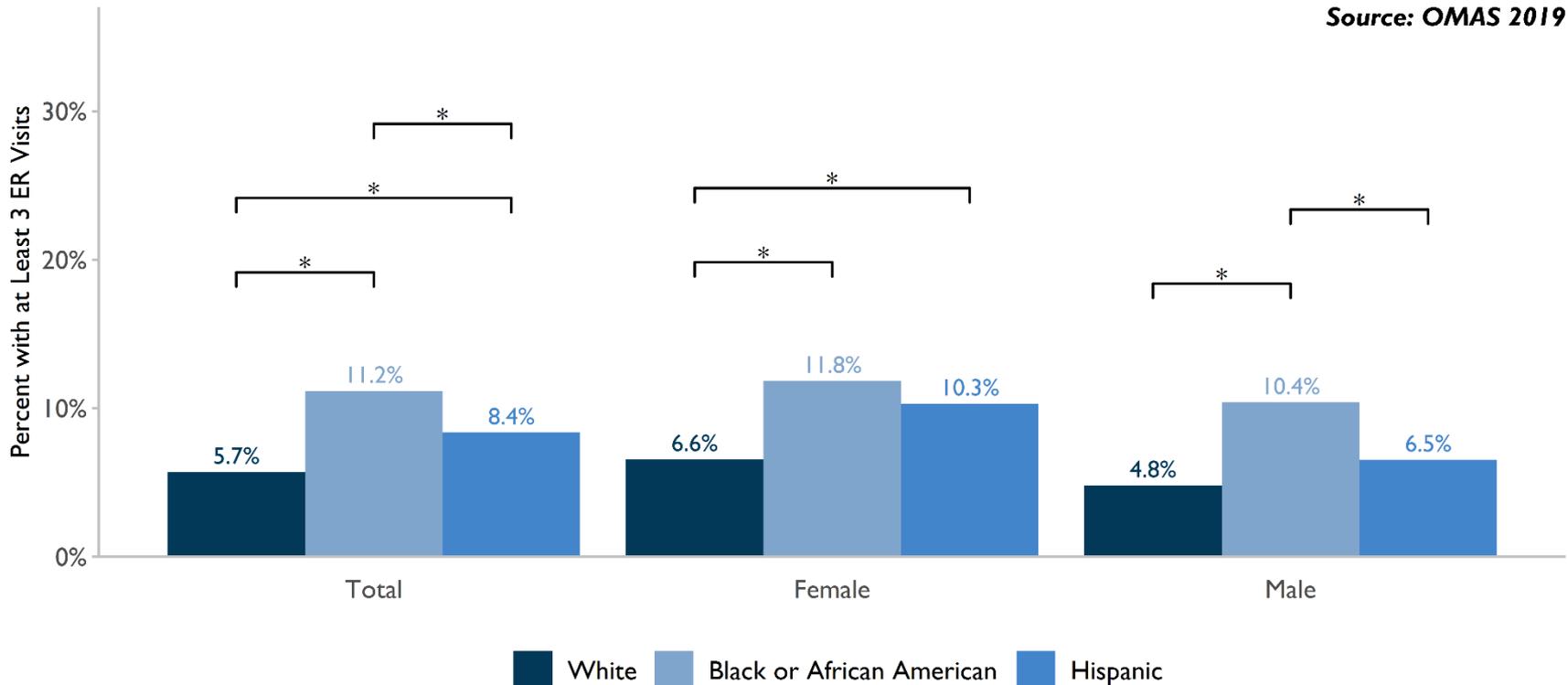


Source: OMAS 2019

Across all adults in Ohio, compared to whites, Black or African Americans and Hispanics had higher rates of frequent ER visits overall, and for both women and men. African Americans had the highest level of frequent ER visits.

# Figure 12. Frequent ER Visits by Race/Ethnicity and Insurance Status among Working-aged, Lower-income Adults



Source: OMAS 2019
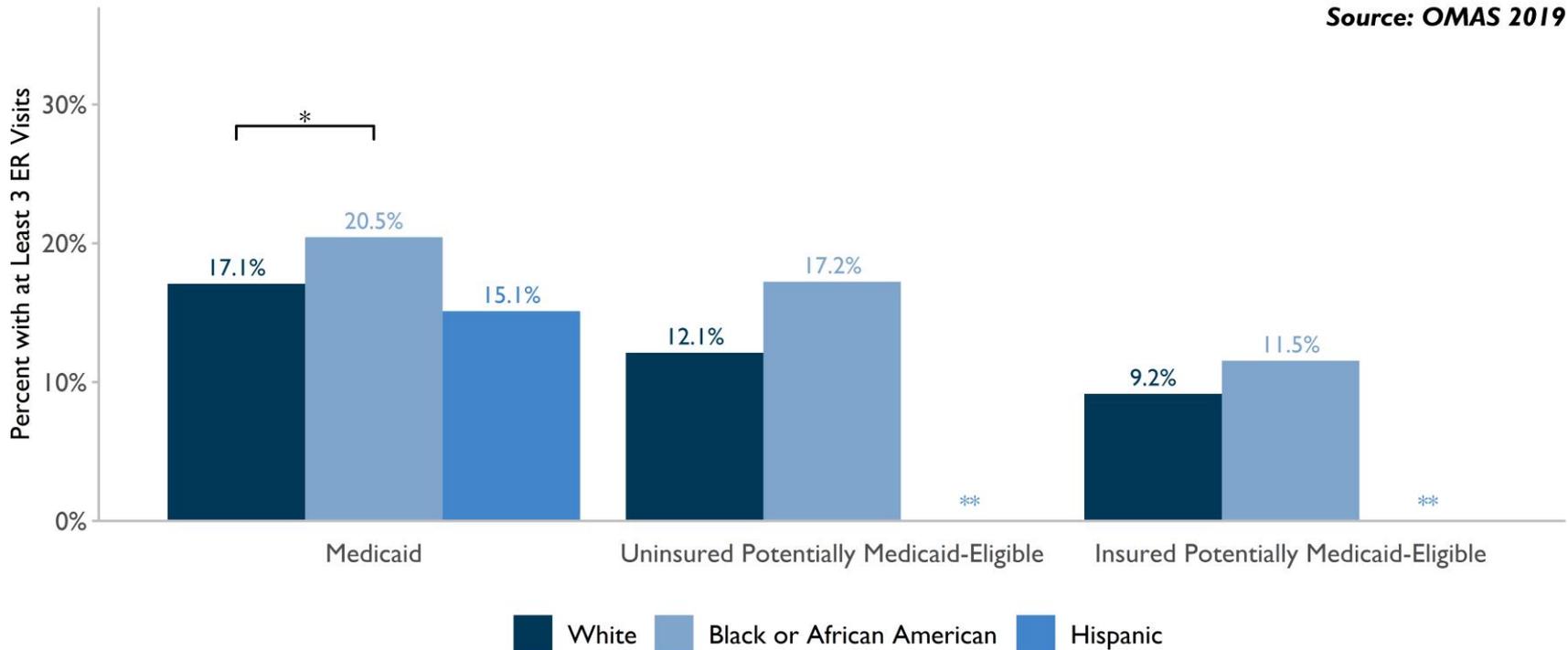
** Low-precision estimate omitted for subgroup.

* Significant Difference

Among working-aged lower-income adults, race/ethnic differences in ER visit frequency were less for the Medicaid enrolled compared to race/ethnic differences among all adults in Ohio (Fig. 11).
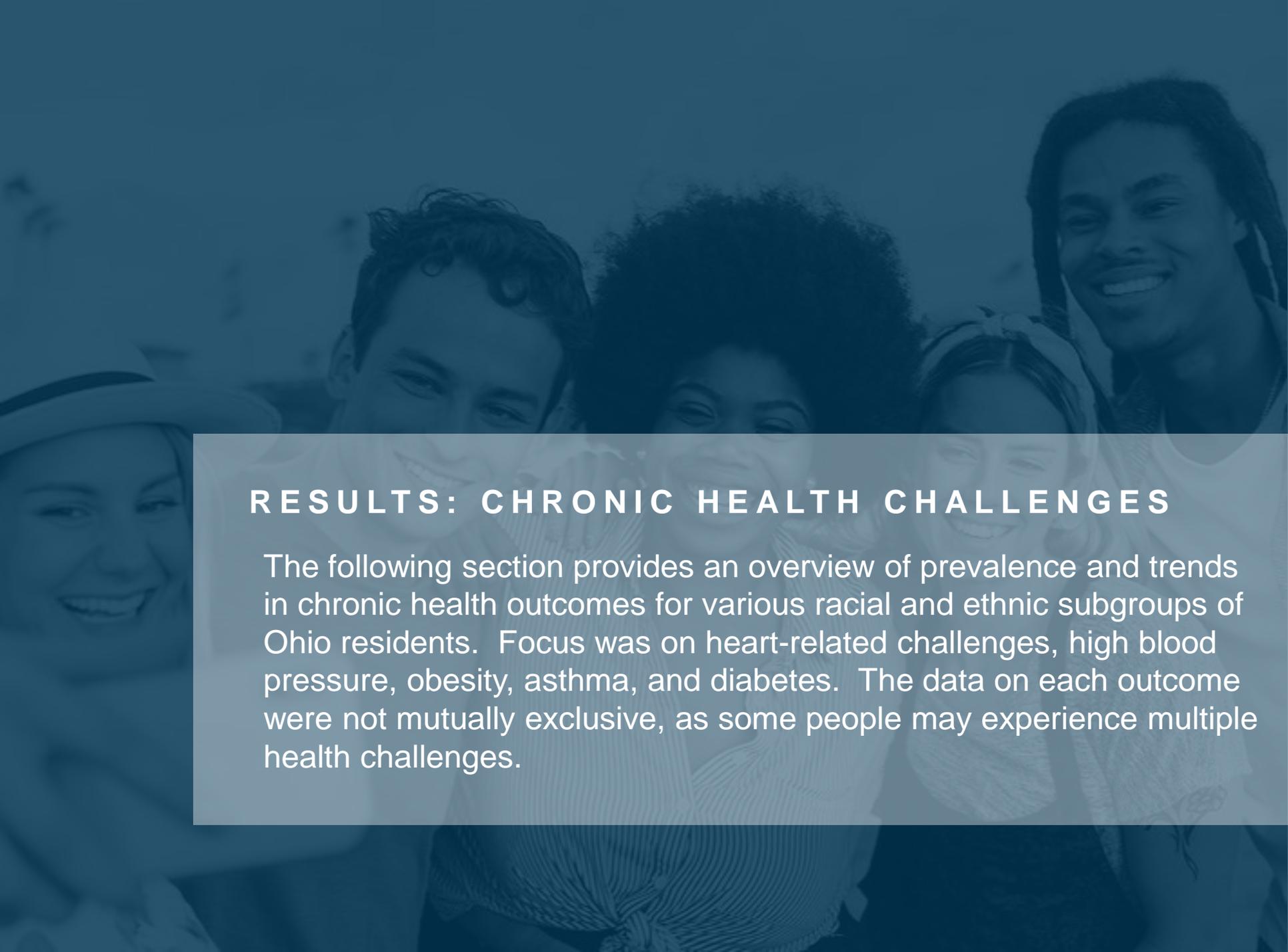
# RESULTS: CHRONIC HEALTH CHALLENGES

The following section provides an overview of prevalence and trends in chronic health outcomes for various racial and ethnic subgroups of Ohio residents.  Focus was on heart-related challenges, high blood pressure, obesity, asthma, and diabetes.  The data on each outcome were not mutually exclusive, as some people may experience multiple health challenges.
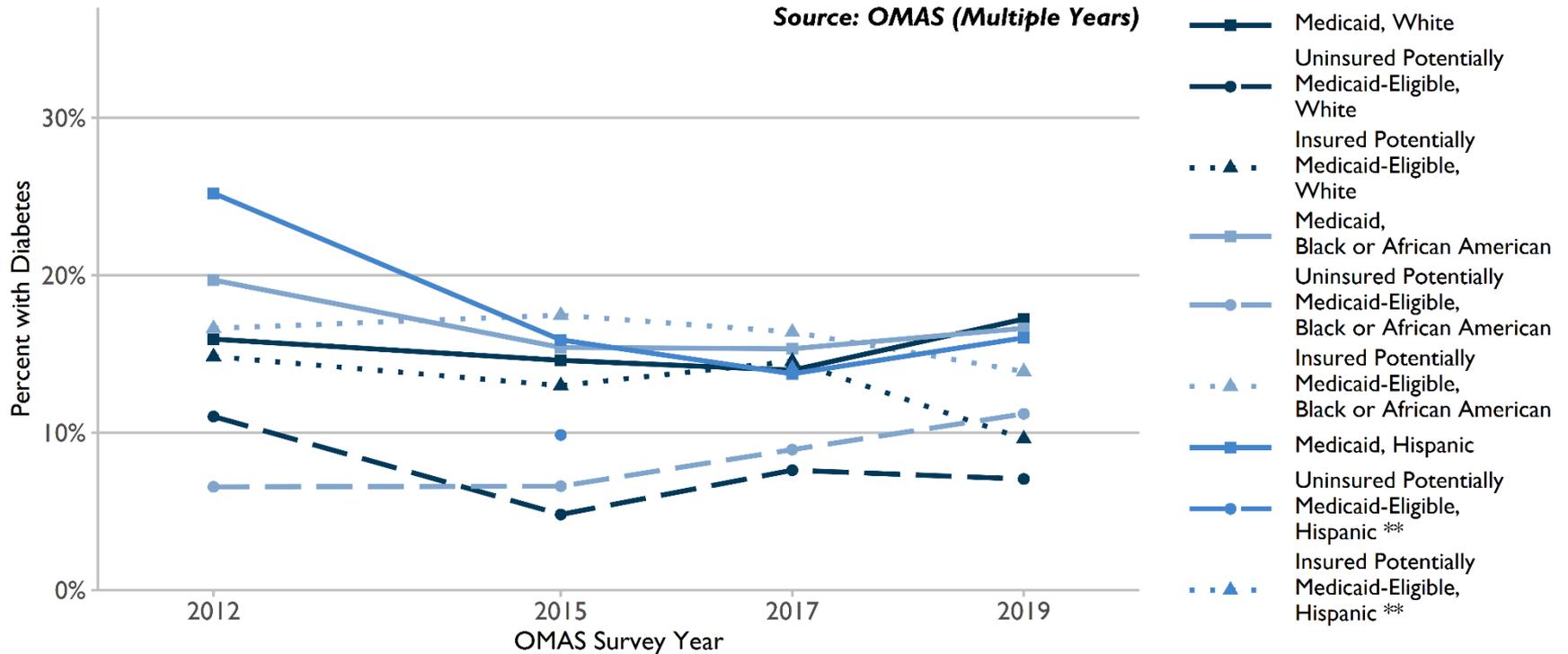
# Key Findings: Chronic Conditions

- Recent increases in diabetes contrasted with the decline among all Medicaid enrollees, 2012-2017 OMAS results. Among Medicaid enrolled Ohio adult diabetes rates were quite similar by race/ethnicity in 2019. When considering diabetes among all OMAS respondents there were notable race/ethnic differences. Regardless of gender, Black or African Americans had higher rates of diabetes.

- Compared to other race/ethnic groups, African Americans most frequently had high blood pressure, regardless of income, gender, and type of insurance.

- Ohio is the 11th most obese state in the U.S.[10] Regardless of race/ethnicity, Medicaid enrolled adults were more obese compared to their potentially Medicaid-eligible counterparts. Since 2015, for all insurance groups and regardless of race/ethnicity, rates among potentially Medicaid-eligible adults are in the obese range.  Still, obesity differs by race and ethnicity among Ohio adults, with African Americans having consistently been more obese over time.  However, due to a marked increase in recent years, Hispanics had the highest obesity in 2019.  While there was very little race/ethnic difference in obesity among men, among Medicaid enrollees there were marked race/ethnic differences among women.  Nearly 60% of uninsured African American women were obese.

- Among those enrolled in Medicaid, heart disease is similar among whites and Hispanics. When considering all OMAS respondents, middle-aged African Americans had the highest prevalence of heart-related challenges, compared to middle-aged whites and Hispanics.

- Among all OMAS respondents, asthma was much more common among African Americans and Hispanics. Compared to other insurance groups, asthma rates were notably higher among those on Medicaid, regardless of race/ethnicity.

*Source: OMAS (Multiple Years)*

Legend:
- Medicaid, White
- Uninsured Potentially Medicaid-Eligible, White
- Insured Potentially Medicaid-Eligible, White
- Medicaid, Black or African American
- Uninsured Potentially Medicaid-Eligible, Black or African American
- Insured Potentially Medicaid-Eligible, Black or African American
- Medicaid, Hispanic
- Uninsured Potentially Medicaid-Eligible, Hispanic **
- Insured Potentially Medicaid-Eligible, Hispanic **
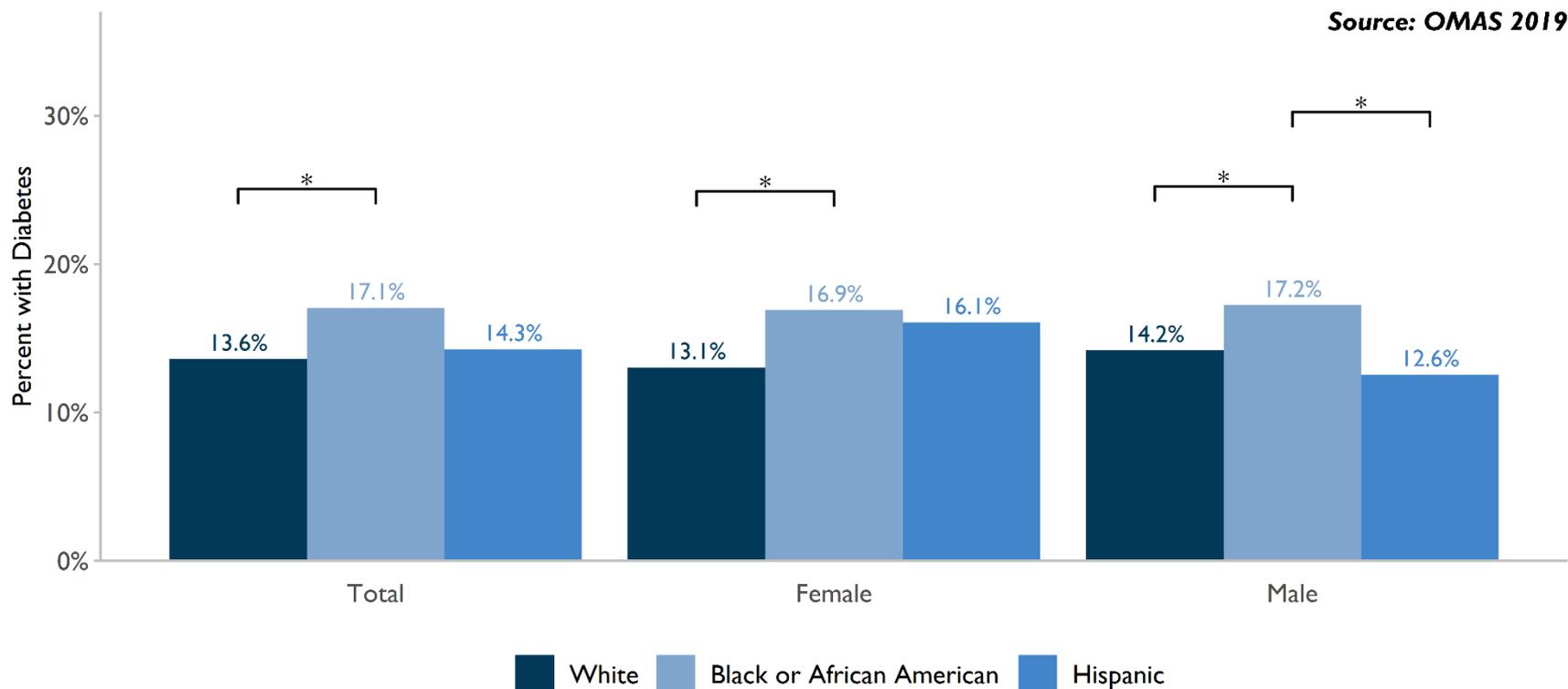
*** Low-precision estimates for subgroup omitted from plot.*

Among working-aged lower-income adults in Ohio, Medicaid enrollees' (the solid lines) rates of diabetes have declined from 2012 to 2015, leveling in 2017. In 2019 there was a slight increase among Medicaid enrollees, and mixed gains and loses among non-Medicaid race/ethnic groups.

# Figure 14. Diabetes by Race/Ethnicity and Gender among All Adults



*Source: OMAS 2019*

Percent with Diabetes

**Total**
- White: 13.6%
- Black or African American: 17.1% *
- Hispanic: 14.3%

**Female**
- White: 13.1%
- Black or African American: 16.9% *
- Hispanic: 16.1%

**Male**
- White: 14.2%
- Black or African American: 17.2% *
- Hispanic: 12.6% *

Legend: ■ White ■ Black or African American ■ Hispanic

*\* Significant Difference*

Across <u>all</u> adults (i.e., in the total OMAS sample), compared to whites, Black or African Americans had higher rates of diabetes overall, for both women and men.

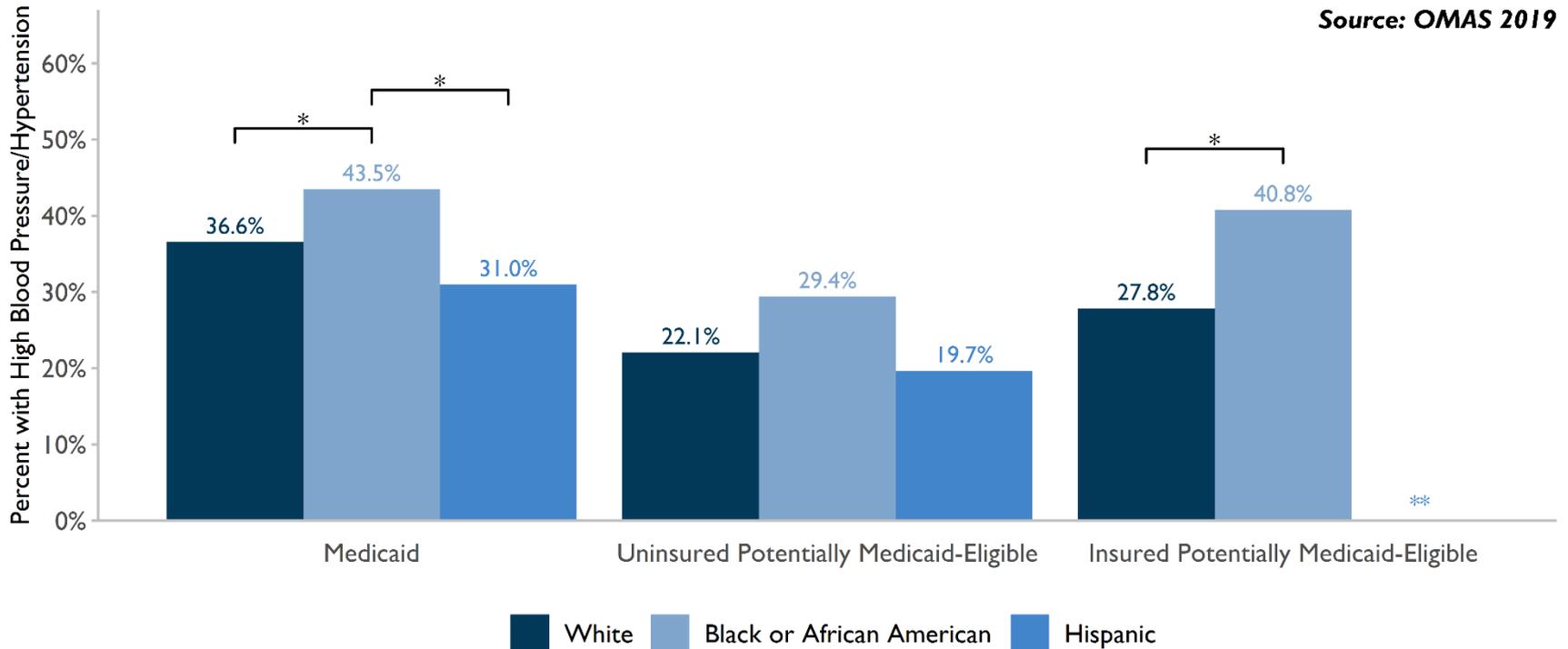# Figure 15. Diabetes by Race/Ethnicity and Insurance Status among Working-aged, Lower-income Adults



Source: OMAS 2019
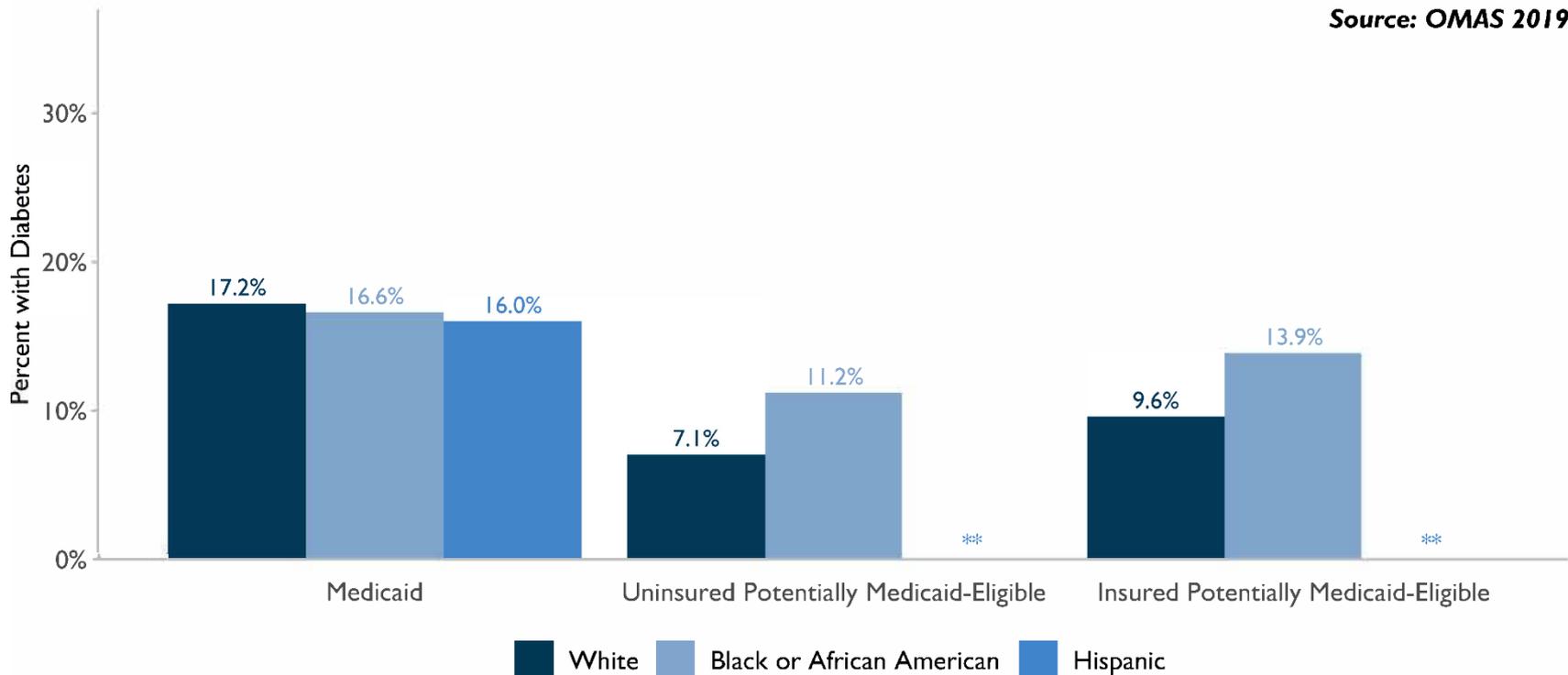
** Low-precision estimate omitted for subgroup.

Among working-aged lower-income adults, for Medicaid enrollees, there were few race/ethnic differences in diabetes prevalence. And race differences in diabetes were less among Medicaid enrollees, when compared to those among all adults in Ohio (Fig. 14).

# Figure 16. High Blood Pressure/ Hypertension by Race/Ethnicity and Insurance Status among Working-aged, Lower-income Adults
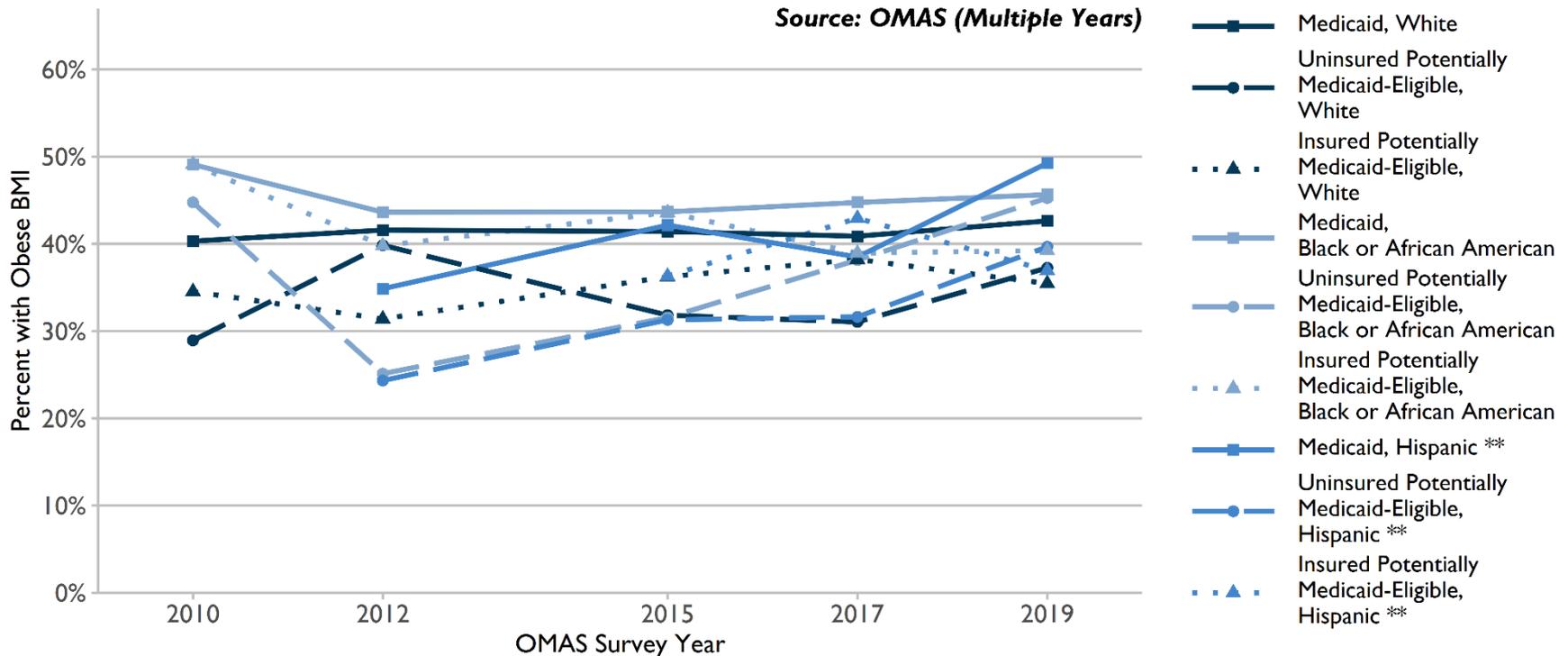


*Source: OMAS 2019*

** *Low-precision estimate omitted for subgroup.*

* *Significant Difference*

Among working-aged lower-income adults, regardless of insurance type, Black or African Americans were more likely to have high blood pressure, compared to whites and Hispanics.

# Figure 17. Obesity by Race/Ethnicity and Insurance Status over Time among Working-aged, Lower-income adults



Source: OMAS (Multiple Years)

Legend:
- Medicaid, White
- Uninsured Potentially Medicaid-Eligible, White
- Insured Potentially Medicaid-Eligible, White
- Medicaid, Black or African American
- Uninsured Potentially Medicaid-Eligible, Black or African American
- Insured Potentially Medicaid-Eligible, Black or African American
- Medicaid, Hispanic **
- Uninsured Potentially Medicaid-Eligible, Hispanic **
- Insured Potentially Medicaid-Eligible, Hispanic **

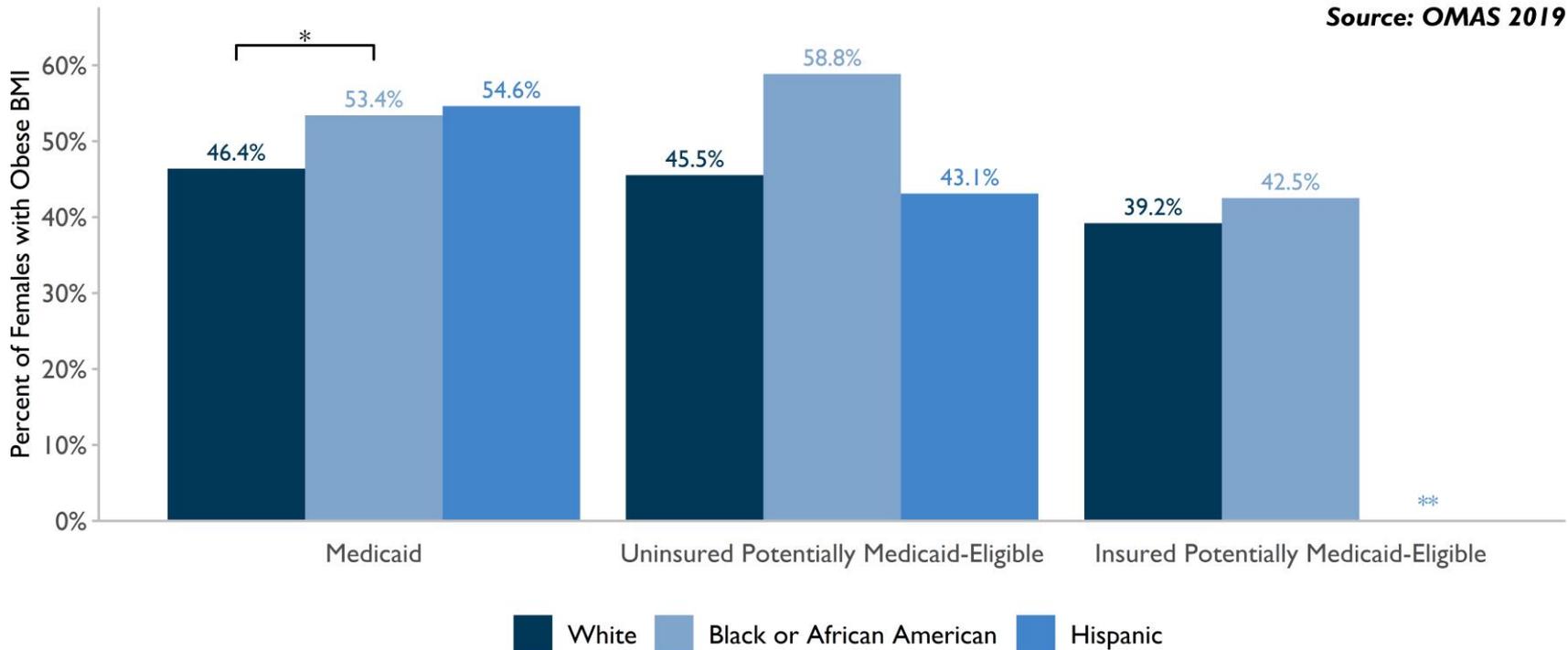** Low-precision estimates for subgroup omitted from plot.

Among working-aged lower-income adults in Ohio, Medicaid enrollees' (the solid lines) rates of obesity for Black or African Americans and whites, have remained relatively stable, while those of Hispanics have varied. This stability being at or above 40% is cause for concern, as is the rather severe increase among Hispanics, leading them to have the highest obesity rate in 2019.

# Figure 18. Obesity among Women by Race/Ethnicity and Insurance Status among Working-aged, Lower-income Adults



Source: OMAS 2019

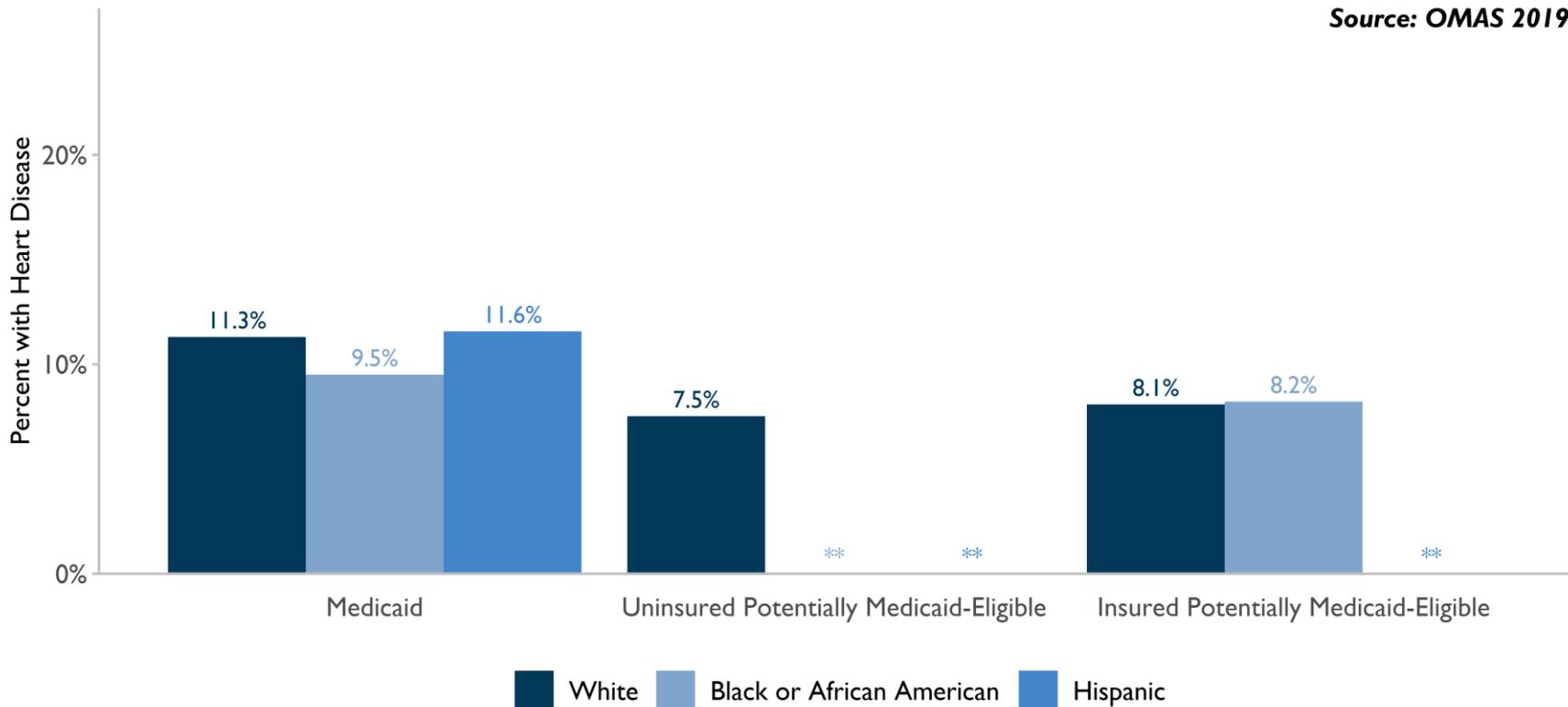Among working-aged lower-income adult women, for Medicaid enrollees, Black or African American and Hispanic women were more obese, compared to White women. Nearly three of every five uninsured African American women were obese.
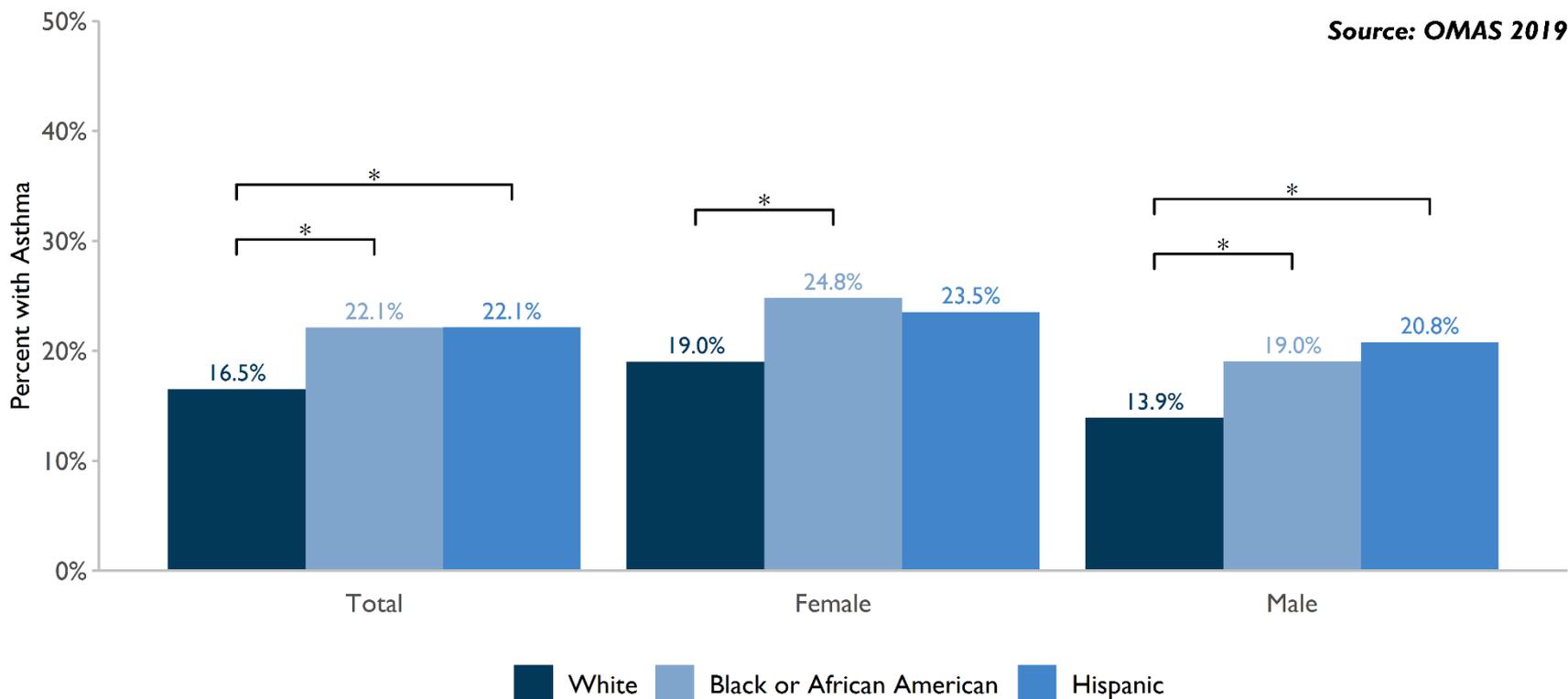
# Figure 19. Heart Disease by Race/Ethnicity and Insurance Status among Working-aged, Lower-income Adults



Source: OMAS 2019

** Low-precision estimate omitted for subgroup.

Among working-aged, lower-income adults, for Medicaid enrollees, there were only small race/ethnic differences in heart disease prevalence.

# Figure 20. Asthma by Race/Ethnicity and Gender among All Adults



*Source: OMAS 2019*

Percent with Asthma

- Total
  - White: 16.5%
  - Black or African American: 22.1%
  - Hispanic: 22.1%
- Female
  - White: 19.0%
  - Black or African American: 24.8%
  - Hispanic: 23.5%
- Male
  - White: 13.9%
  - Black or African American: 19.0%
  - Hispanic: 20.8%

Legend: White | Black or African American | Hispanic

* Significant Difference

Across all adults in Ohio (i.e., in the total OMAS adult sample), compared to whites, Black or African Americans and Hispanics had higher rates of asthma overall, and among both women and men.

# Figure 21. Asthma by Race/Ethnicity and Insurance Status among Working-aged, Lower-income Adults



Source: OMAS 2019

** Low-precision estimate omitted for subgroup.    * Significant Difference
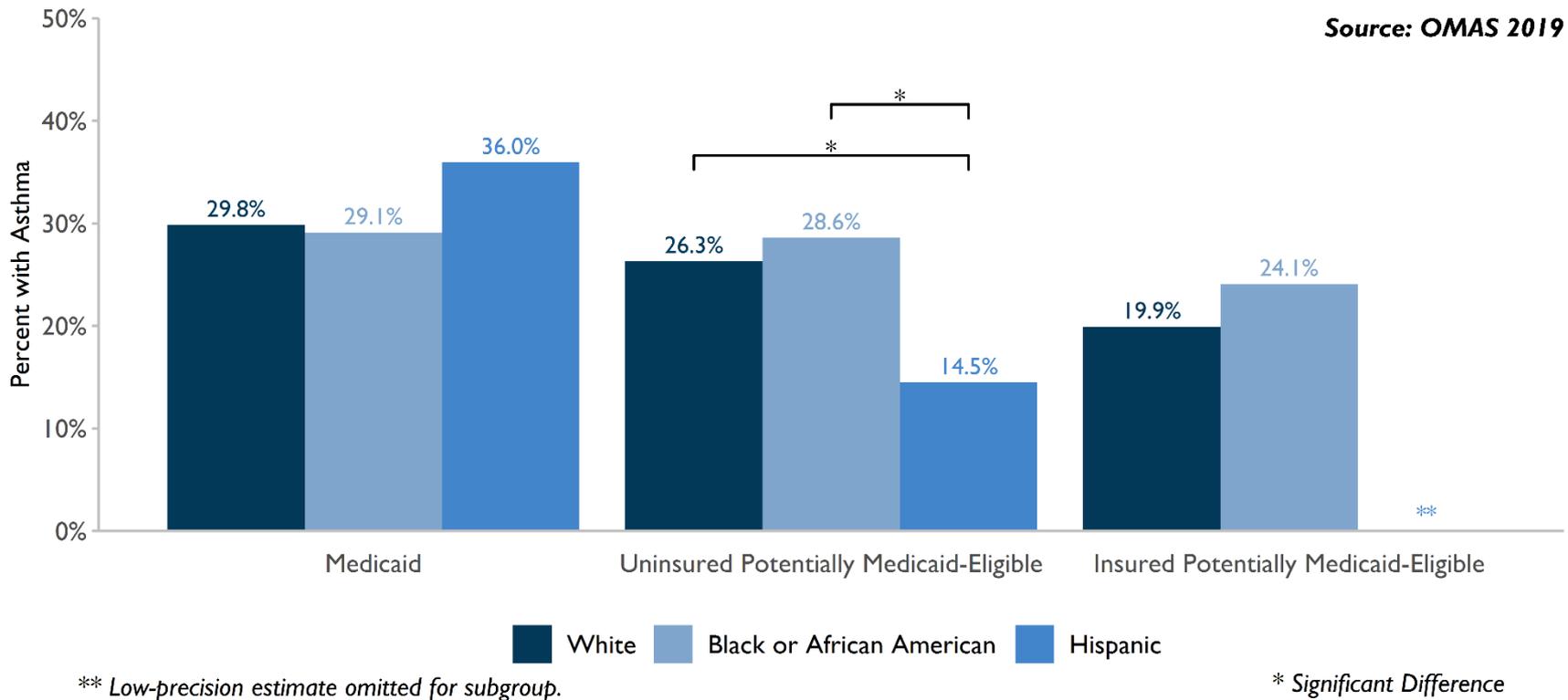
Among working-aged, lower-income adults, for Medicaid enrollees, race differences in asthma were less when compared to race differences among all adults in Ohio (Fig. 20). Hispanic Medicaid enrollees had the highest asthma rates.

# OTHER HEALTH OUTCOMES

The following section provides an overview of prevalence and trends in diverse health outcomes among Black or African American, Hispanic and White Ohio residents. Focus is on self-rated health and behavioral/mental health impairment. The data on each outcome were not mutually exclusive, as some people may experience multiple health challenges, and the data come from multiple data sources.
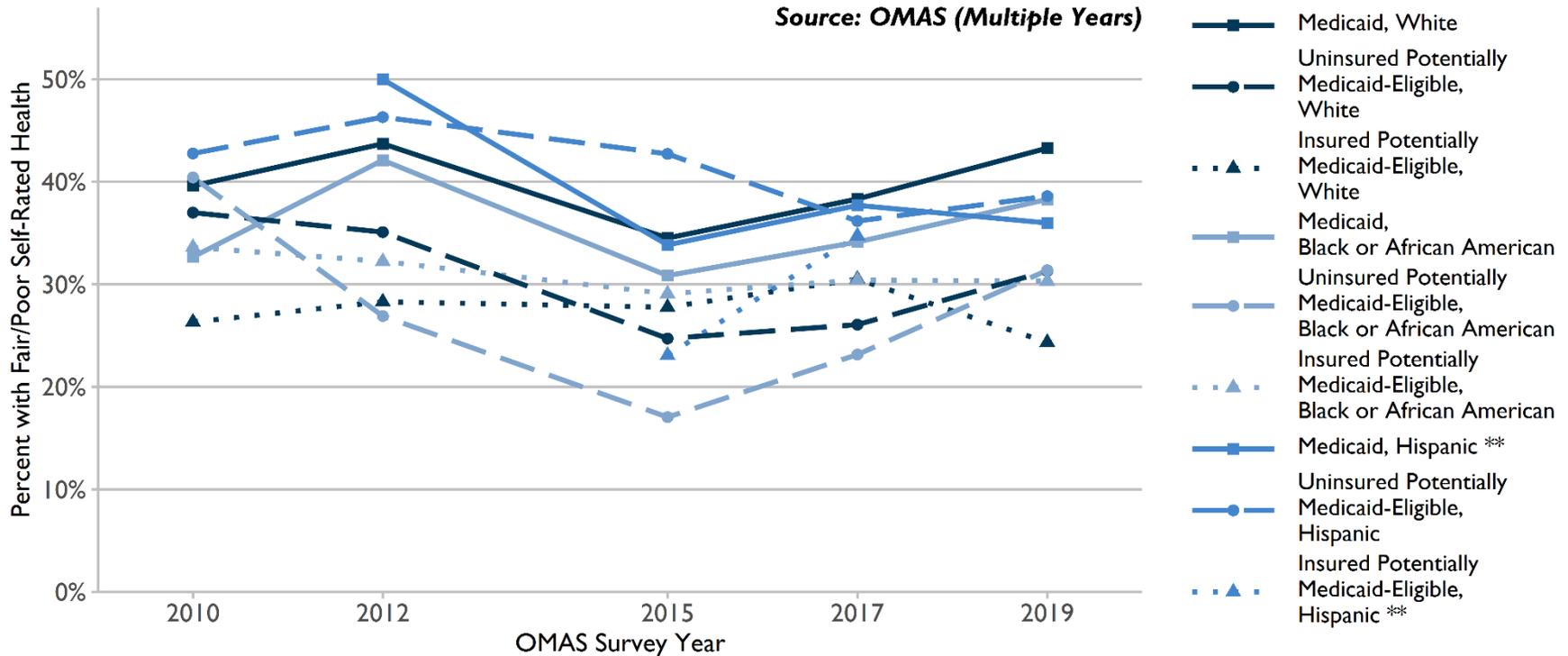
# Key Findings: Other Health Outcomes

- In general, the highest level of self-rated health (i.e., smallest percentages of fair/poor health), occurred in 2015, shortly after Medicaid expansion. Exceptions were among generally much younger uninsured Hispanics, and whites with other insurance.

- Among Medicaid recipient adults, over time, Black or African Americans were the least likely to self-rate their health as fair or poor. Among all working-aged lower-income adults, African Americans and whites had similar levels of fair/poor self-rated health over time.

- Recent declines in self-rated health (i.e., the trend of increasing fair/poor health) among Medicaid enrollees regardless of race/ethnicity, warrants continued assessment.

- Among working-aged, lower-income adults, regardless of insurance type, whites were most likely to experience mental health impairment, though differences among the uninsured were negligible.

# Figure 22. Fair/Poor Self-rated Health by Race/Ethnicity and Insurance Status over Time among Working-aged, Lower-income Adults



Source: OMAS (Multiple Years)

Legend:
- Medicaid, White
- Uninsured Potentially Medicaid-Eligible, White
- Insured Potentially Medicaid-Eligible, White
- Medicaid, Black or African American
- Uninsured Potentially Medicaid-Eligible, Black or African American
- Insured Potentially Medicaid-Eligible, Black or African American
- Medicaid, Hispanic **
- Uninsured Potentially Medicaid-Eligible, Hispanic
- Insured Potentially Medicaid-Eligible, Hispanic **

** Low-precision estimates for subgroup omitted from plot.

Among working-aged lower-income adults in Ohio, Medicaid enrollees' (the solid lines) rates of fair/poor health were lowest in 2015. Among Medicaid enrollees, since 2015, rates of fair/poor health have increased among African Americans and whites. Self-rated health is influenced by many social determinants, risks and protective factors. Declines in self-rated health (i.e., increases in fair/poor health) are associated with increased economic uncertainty,

# Figure 23. Fair/Poor Self-rated Health by Race/Ethnicity and Insurance Status among Working-aged, Lower-income Adults
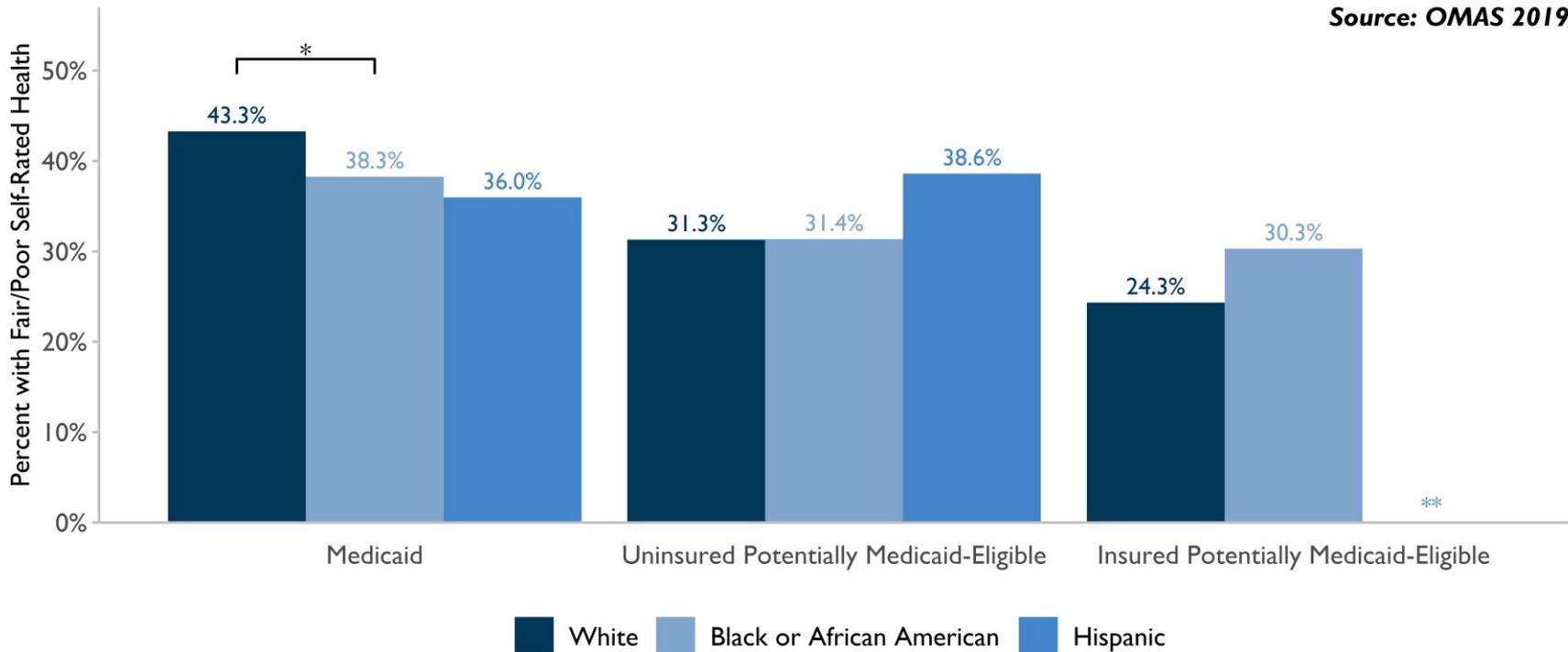


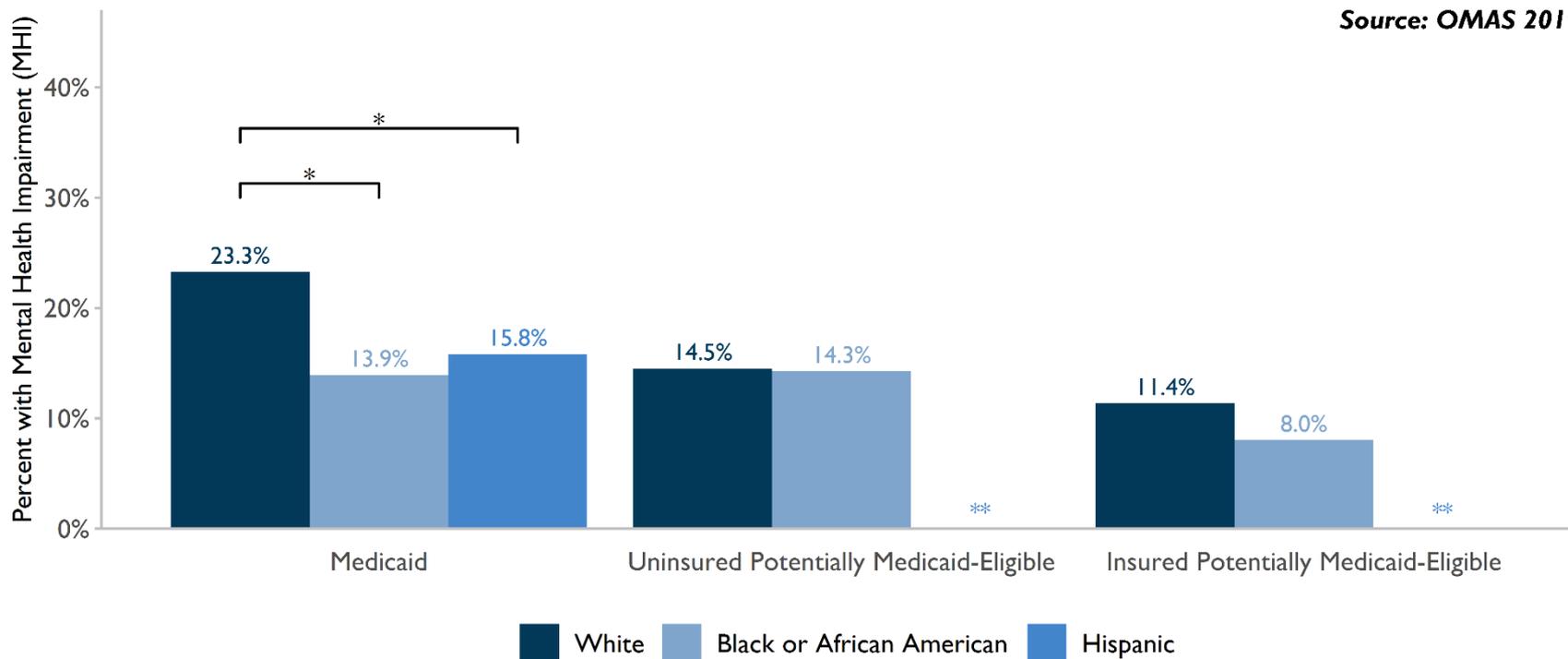Among working-aged lower-income adults, for Medicaid enrollees, more whites rated their health as fair/poor compared to Black or African Americans and Hispanics.

# Figure 24. Mental Health Impairment by Race/Ethnicity and Insurance Status among Working-aged, Lower-income Adults



*Source: OMAS 2019*

** *Low-precision estimate omitted for subgroup.*

* *Significant Difference*

Among working-aged lower-income adults, for Medicaid enrollees, Black or African Americans and Hispanics were far less likely to experience mental health impairment, compared to whites. Whites are more likely to use psychiatric inpatient services, and mental health services overall. These race/ethnic reported impairment differences may have been partially a product of differing experiences of resilience, and of race/ethnic disparities in mental health services and quality of care.
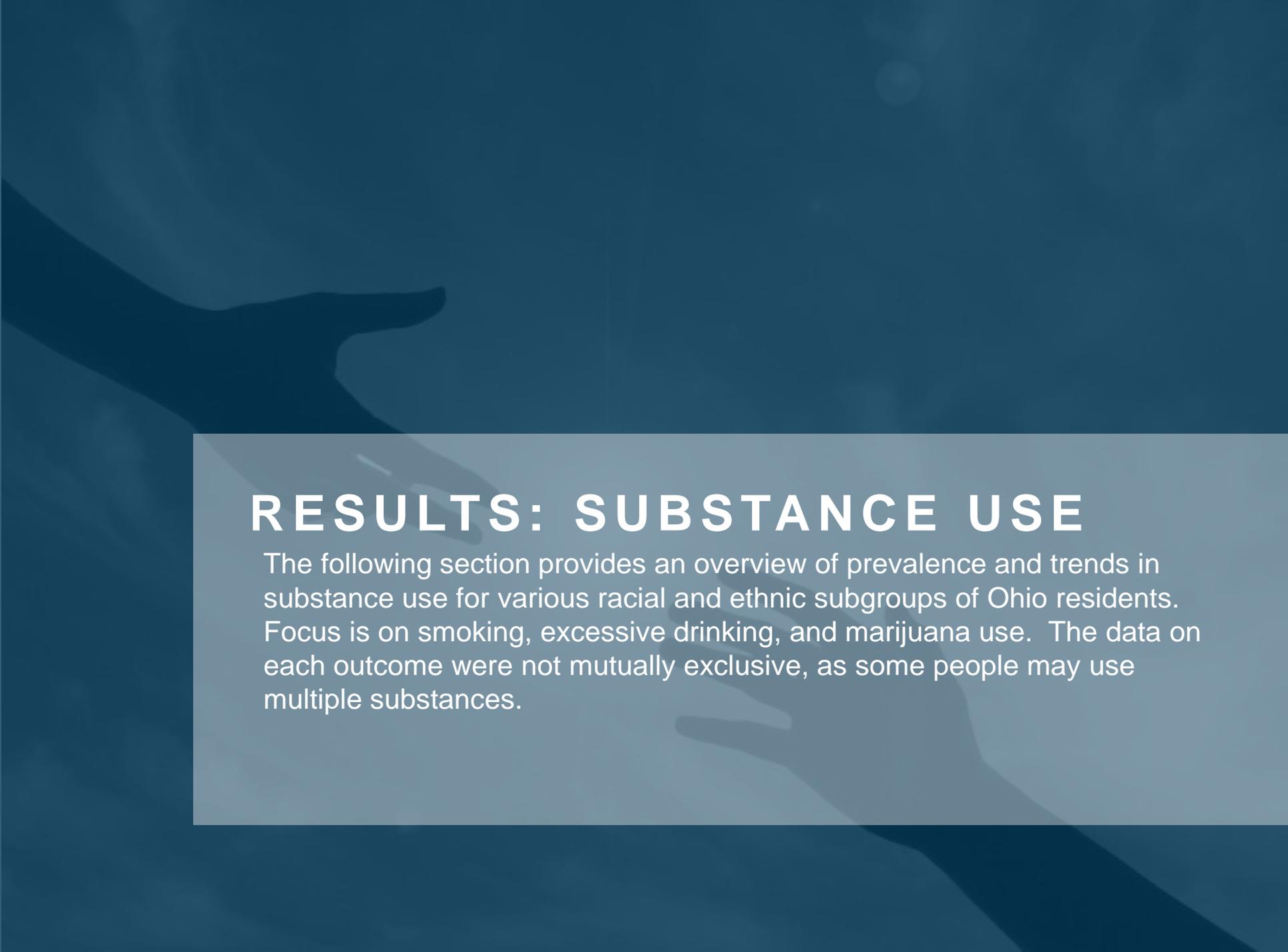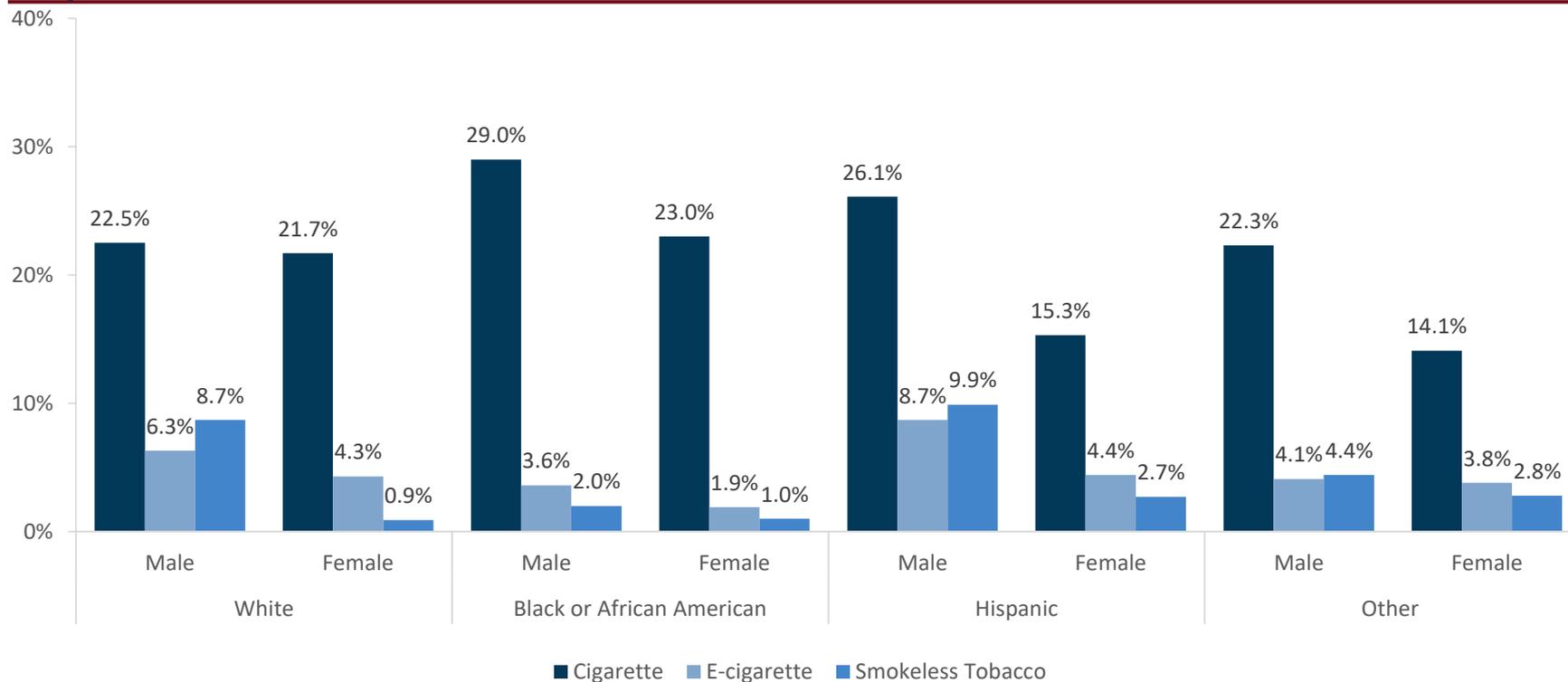
# RESULTS: SUBSTANCE USE

The following section provides an overview of prevalence and trends in substance use for various racial and ethnic subgroups of Ohio residents. Focus is on smoking, excessive drinking, and marijuana use. The data on each outcome were not mutually exclusive, as some people may use multiple substances.

# Key Findings: Substance Use

- Ohio ranks 7th among states of the U.S. in adult smoking percentage. Among all OMAS respondents, across all tobacco products, Black or African American men had the highest percentage of tobacco consumers, with Hispanic men having the next highest percentage. Among Medicaid enrollees, 49.3% of whites, 38.6% of African Americans, and 32.1% of Hispanic adults currently smoked.

- Among Ohioans, African American and Hispanic men have the highest percentages of marijuana consumption. African American men were almost twice as likely to smoke marijuana compared to White men. However, over time, these consumption differences and related health risks may be changing. Among young adults there were very small race/ethnic differences for both cigarettes and marijuana.

- Regarding excessive drinking, among adults with Medicaid Hispanics were more likely to binge drink than either whites or African Americans. However, among working-aged lower-income adults, uninsured African Americans were most likely to binge drink. When considering all OMAS respondents, Hispanic men had the highest percentage of excessive drinking

- United States Centers for Disease Control and Preventive data show that Ohio has the 19th highest opioid dispensing rate yet has the 4th highest overdose death rate in the U.S. whites had the highest overdose death rates, followed by African Americans and Hispanics.[11]

# Figure 25. Adult Prevalence of Current* Cigarette, E-cigarette, and Smokeless Tobacco Use by Race/Ethnicity, Overall and by Gender



Source: OMAS 2019

Across all adults, cigarette smoking was the most prevalent substance use behavior. Among males, Black or African Americans had the highest prevalence of cigarette smoking, followed by Hispanics, whites, and Other males (who had similar prevalence). Among women, African Americans had the highest prevalence of cigarette smoking, followed by white women. E-cigarette use was highest among Hispanic males and females compared to other race/ethnicity groups. Smokeless tobacco use was most prevalent among Hispanic males, followed by white males.

*Current smoking = smoking at least 100 cigarettes in a lifetime and now smoking some days or every day.  Current e-cigarette or smokeless tobacco use = every day or some day use.

# Figure 26. Current Smoker by Race/Ethnicity and Insurance Status among Working-aged, Lower-income Adults
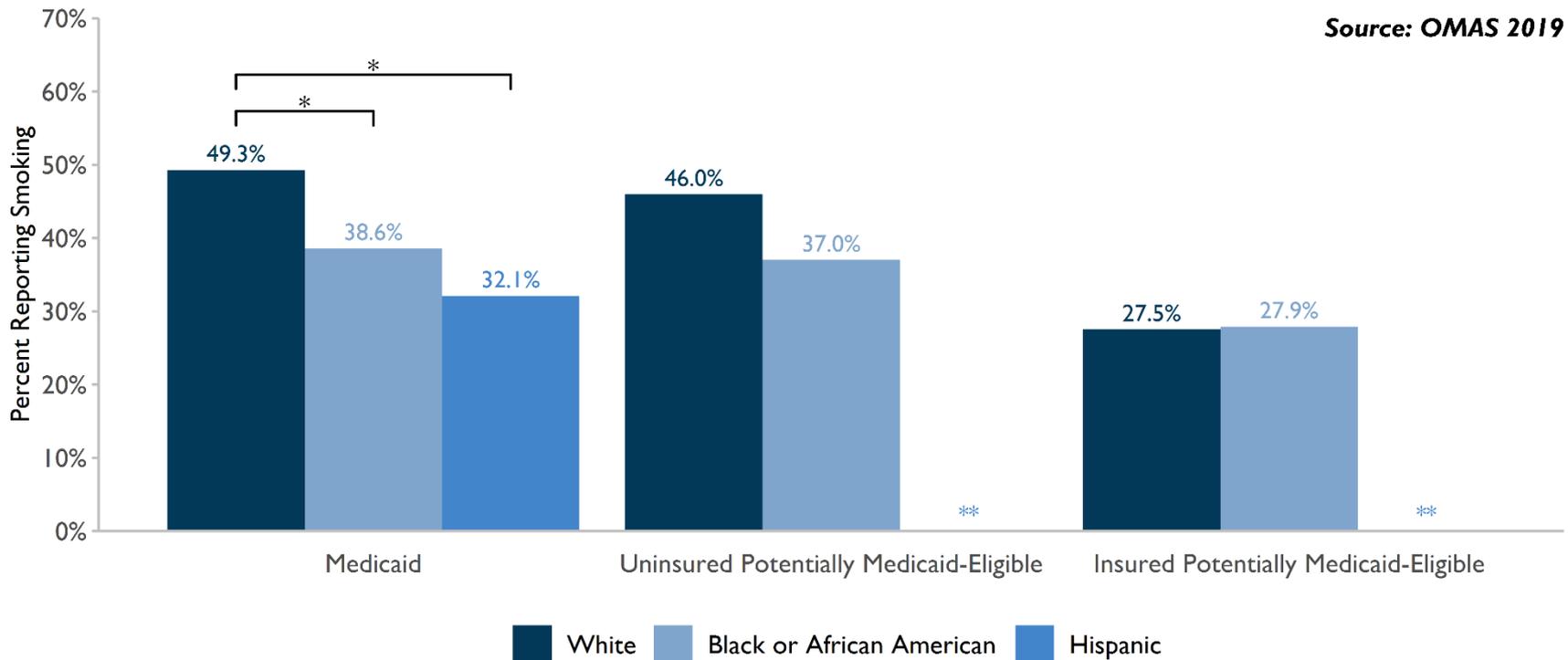


Source: OMAS 2019

Percent Reporting Smoking

**Medicaid:** White 49.3%, Black or African American 38.6%, Hispanic 32.1%

**Uninsured Potentially Medicaid-Eligible:** White 46.0%, Black or African American 37.0%, Hispanic **

**Insured Potentially Medicaid-Eligible:** White 27.5%, Black or African American 27.9%, Hispanic **

Legend: White | Black or African American | Hispanic

** *Low-precision estimate omitted for subgroup.*

* *Significant Difference*

Among working-aged lower-income adults, for Medicaid enrollees, whites smoked tobacco products more frequently than Black or African Americans and Hispanics.

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# Figure 27. Adult Prevalence of Past-30-day Marijuana Use by Race/Ethnicity, Overall and by Gender among All Adults



*Source: OMAS 2019*

Across all adults in Ohio (i.e., in the total OMAS adult sample), the prevalence of past-30-day marijuana use was highest among Black or African Americans overall, and for both women and men, followed by Hispanics. African American men had the highest prevalence among race/ethnic gender subgroups.

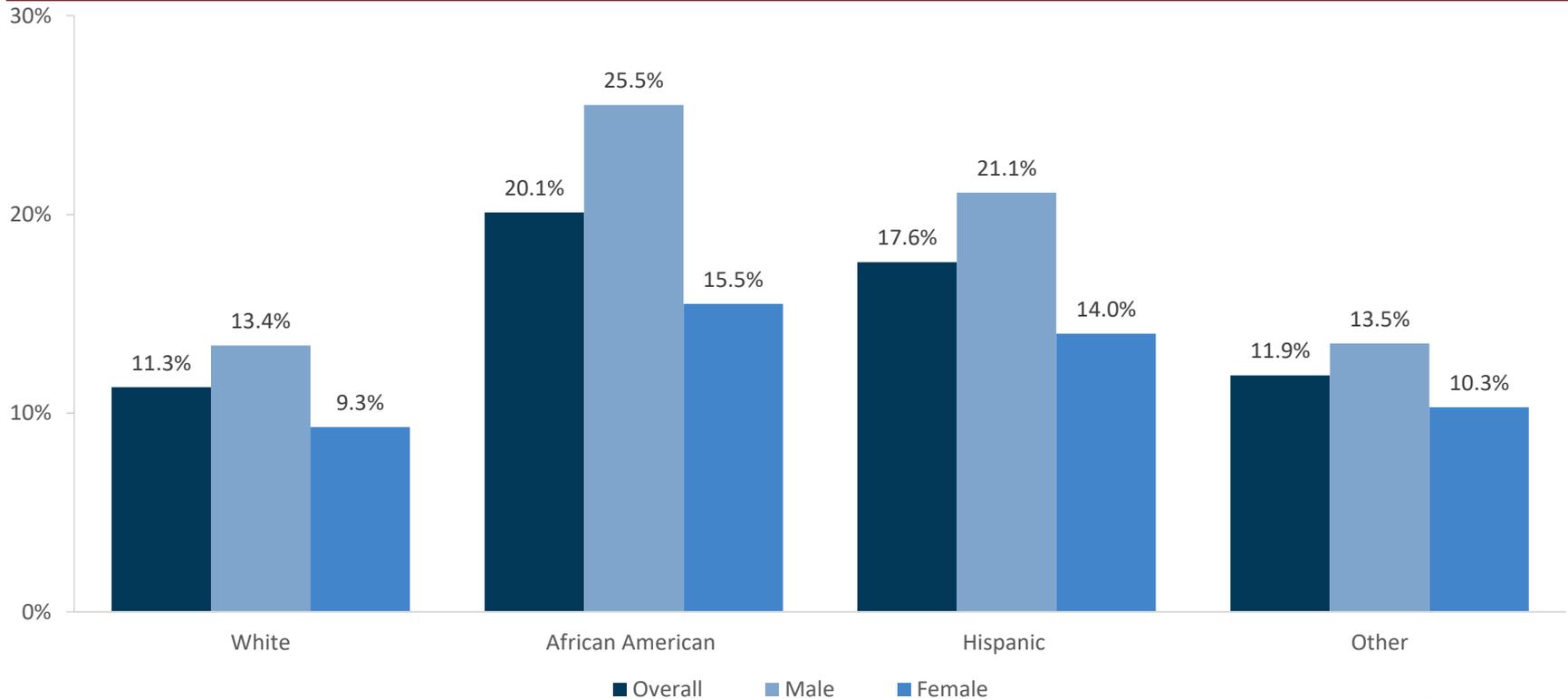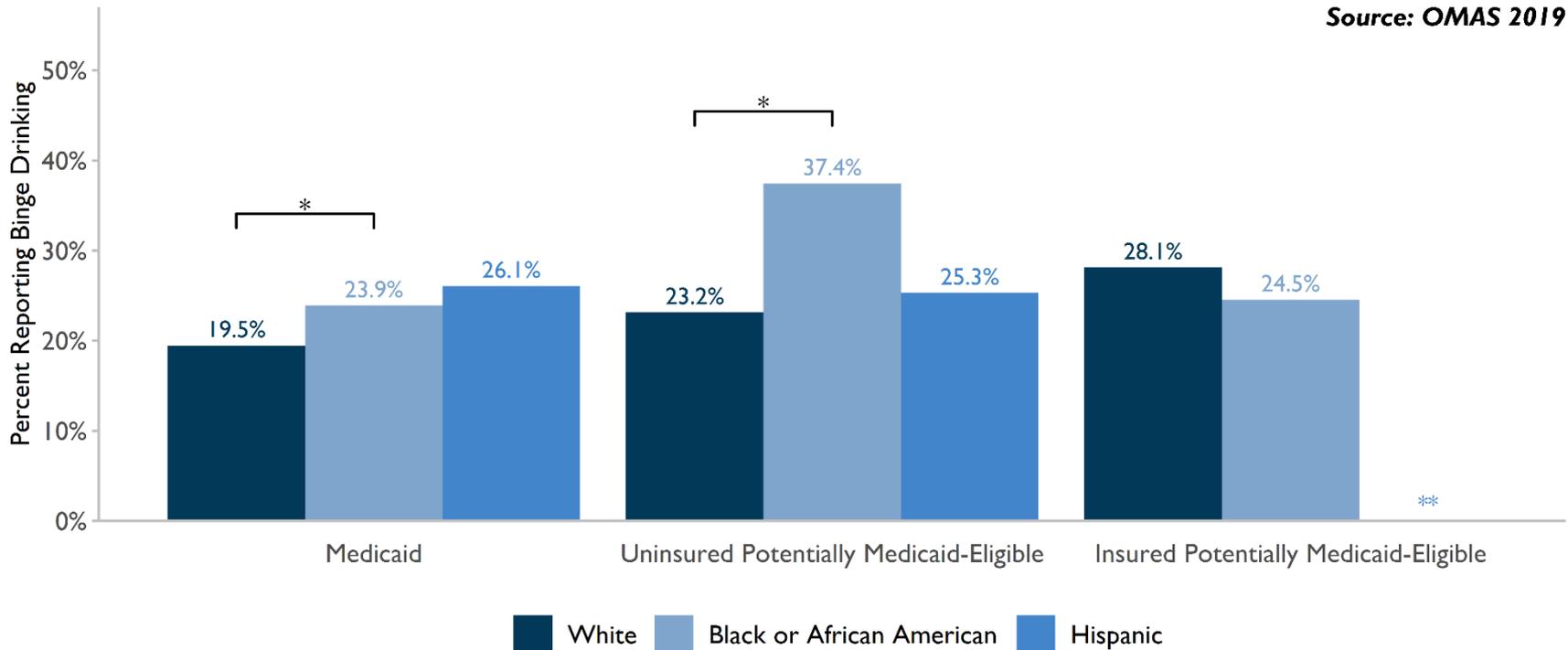# Figure 28. Binge Drinking by Race/Ethnicity and Insurance Status among Working-age, Lower-income Adults
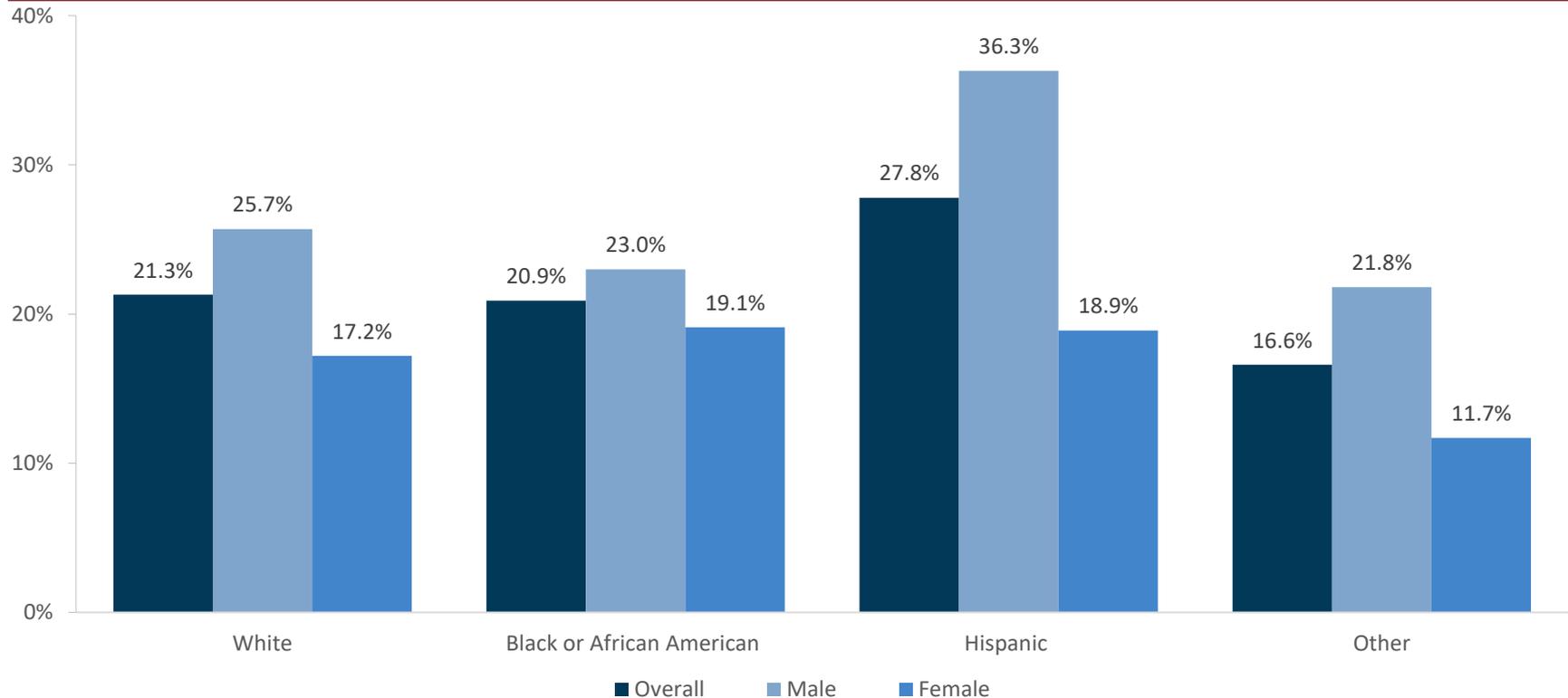


Source: OMAS 2019

** Low-precision estimate omitted for subgroup.

* Significant Difference

Among working-aged lower-income adults, for Medicaid enrollees, Black or African Americans and Hispanics binge drank more frequently than whites. Among the uninsured, more than a third of African Americans binge drank.

# Figure 29. Prevalence of Past-30-day Binge Drinking by Race/Ethnicity, Overall and by Gender among All Adults



*Source: OMAS 2019*

Across all adults, the prevalence of past-30-day binge drinking was highest among Hispanic men. Prevalence was also highest among Hispanics overall (around 28%), followed by White and Black or African American adults, and those reporting another race/ethnicity.

*Binge drinking = consuming 5 or more drinks in a sitting for men, and 4 or more drinks in a sitting for women in the past month.

# RESULTS: ECONOMIC CHALLENGES

This section provides an overview of prevalence and trends in the experience of economic challenges as a social determinant of health for various racial and ethnic subgroups of Ohio residents. Focus was placed on housing burden, food insecurity, and incarceration. Data on each outcome were not mutually exclusive, as some people may experience simultaneous economic challenges.
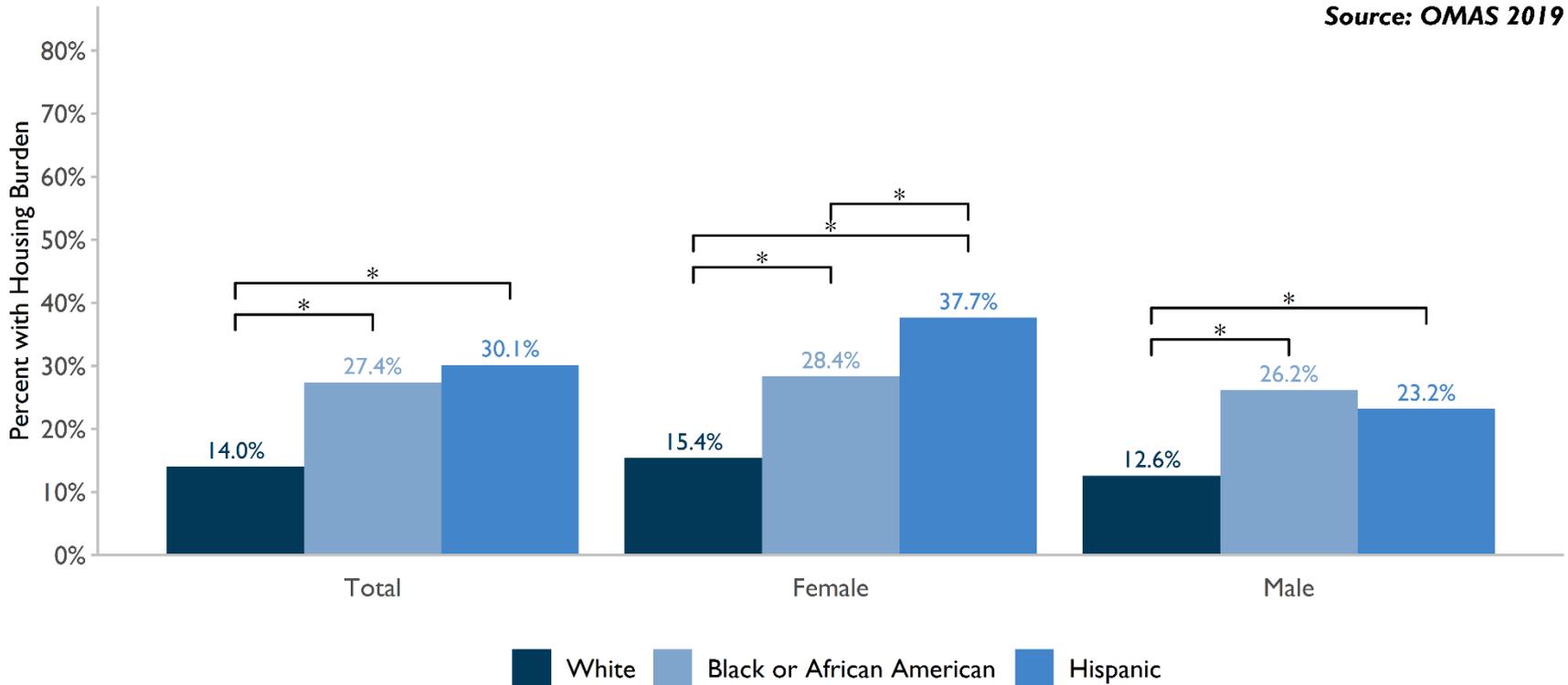
# Key Findings: Economic Challenges

- In terms of housing, Black or African Americans and Hispanics were twice as likely as whites to experience housing burdens – defined as frequent moving due to economic circumstances, inadequate structure, or a lack of water, heating, stove, etc..

- Overall, Hispanics adults experienced housing burden at 215% of the White rate; Hispanic females were at 244% of the White female rate.  Among men, Blacks or African Americans had the highest housing burden at 212% of White men's rate. These race and ethnic differences held among those with Medicaid. The largest percentage of housing burden was with uninsured Hispanics (60%).

- Black or African Americans (3x greater) and Hispanics (2.5x greater) reported higher rates of food insecurity than whites. More than half of uninsured African Americans ages 19 to 64 were food insecure – these ethnic and racial disparities were smaller among the Medicaid enrolled.

- Because housing burden and food insecurity are associated with economic disadvantage and higher likelihood of "food deserts", those experiencing these challenges have poorer diets and less activity spaces. Accordingly, Blacks or African Americans and Hispanics were less likely than whites to consume daily vegetables and were less likely to be physically active.

- Blacks or African Americans are disproportionately incarcerated, in part due to differences in their exposure to criminal justice sanction. Each sanctioning stage (i.e., from arrest disparities, forward) are associated with intensified health disparities. For instance, having an incarcerated family member harms the mental and physical health of non-incarcerated family members. Those returning to community from Ohio prisons disproportionately returned to households and neighborhoods of concentrated disadvantage (i.e., local places with fewer beneficial resources).

# Figure 30. Housing Burden by Race/Ethnicity and Gender among All Adults

*Source: OMAS 2019*

Percent with Housing Burden

**Total**
- White: 14.0%
- Black or African American: 27.4%
- Hispanic: 30.1%

**Female**
- White: 15.4%
- Black or African American: 28.4%
- Hispanic: 37.7%

**Male**
- White: 12.6%
- Black or African American: 26.2%
- Hispanic: 23.2%
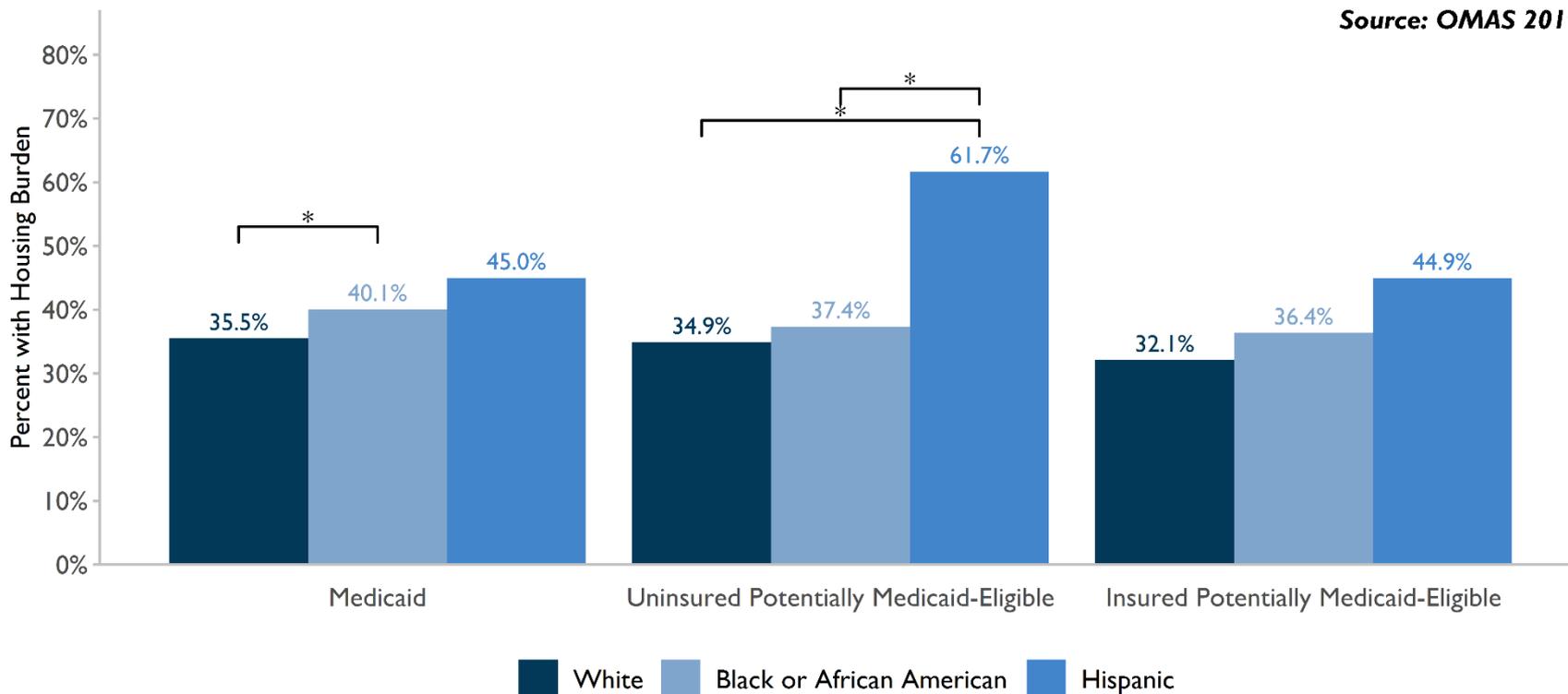
Legend: White ■ Black or African American ■ Hispanic ■

* Significant Difference

Across all adults, housing burden was far higher among Black or African Americans and Hispanics, compared to whites. Hispanic women had the highest prevalence, with nearly two of every five being burdened.

# Figure 31. Housing Burden by Race/Ethnicity and Insurance Status among Working-age, Lower-income Adults



Source: OMAS 2019
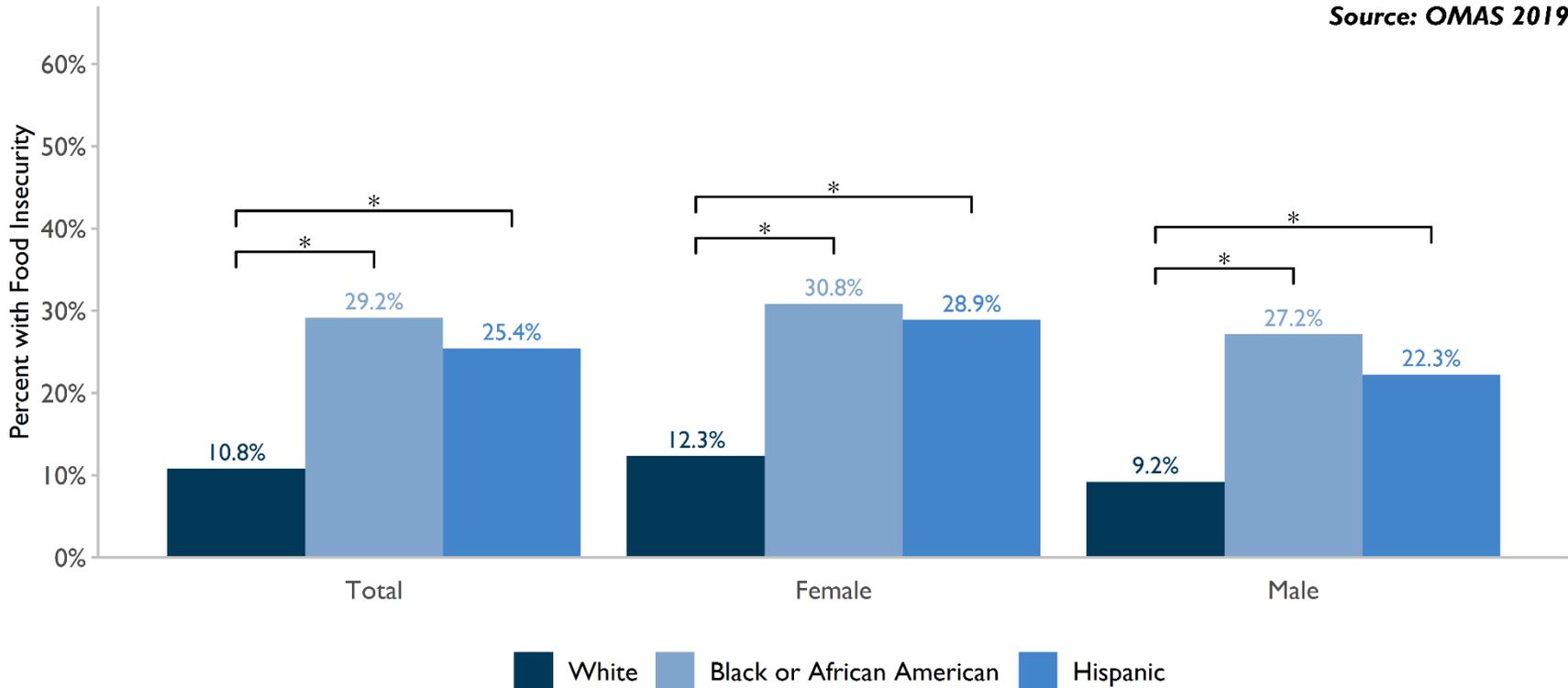
Among working-aged lower-income adults, for Medicaid enrollees, race/ethnic differences were far smaller compared to those for all adults in Ohio (Fig. 30). Ethnic differences were greatest among the uninsured, where more than three of every five uninsured Hispanic adults experienced housing burden.

# Figure 32. Food Insecurity by Race/Ethnicity and Gender among All Adults



*Source: OMAS 2019*

Percent with Food Insecurity

**Total**
- White: 10.8%
- Black or African American: 29.2%
- Hispanic: 25.4%

**Female**
- White: 12.3%
- Black or African American: 30.8%
- Hispanic: 28.9%

**Male**
- White: 9.2%
- Black or African American: 27.2%
- Hispanic: 22.3%

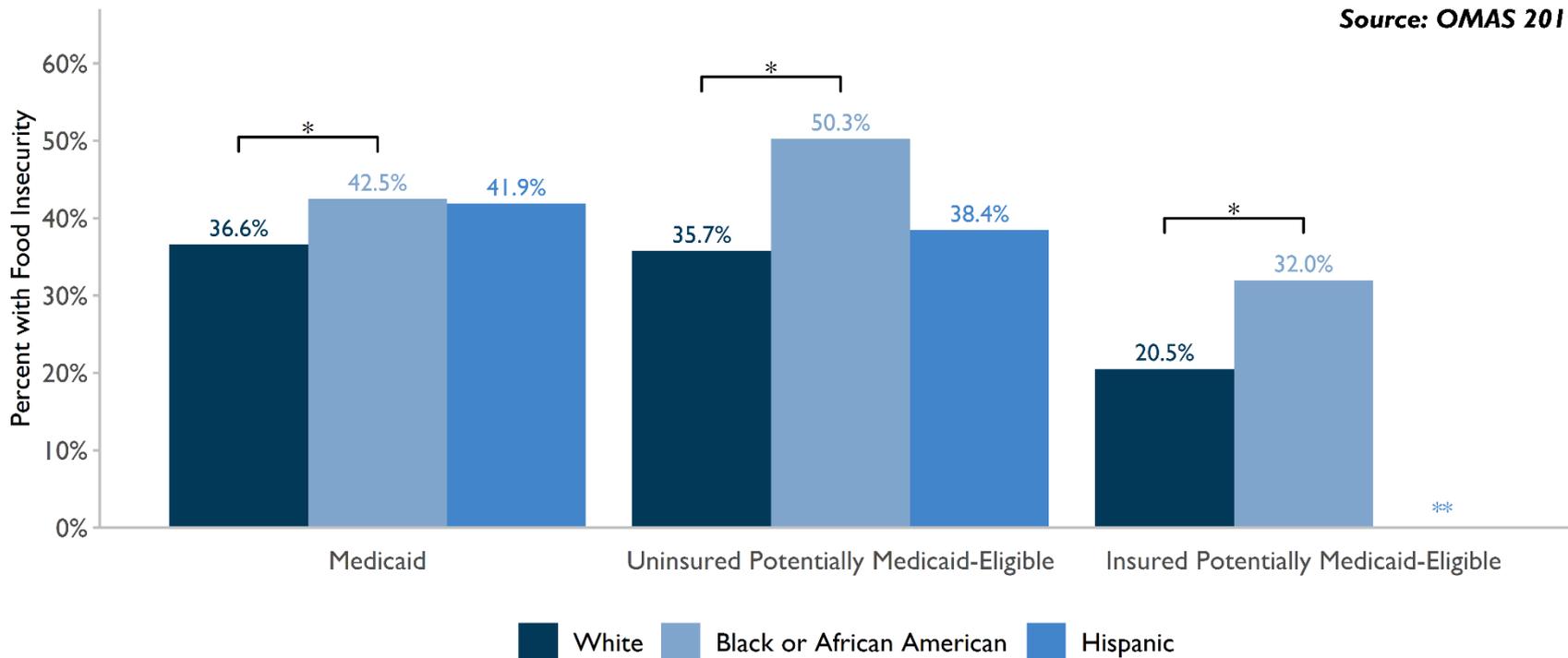Legend: White | Black or African American | Hispanic

\* Significant Difference

Across all adults, food insecurity was far higher among Black or African Americans and Hispanics compared to whites, with African Americans experiencing nearly three times the food insecurity of whites. Overall, and among women and men, they were the most food insecure, with African American women having the highest prevalence at over 30%.

# Figure 33. Food Insecurity by Race/Ethnicity and Insurance Status among Working-age, Lower-income Adults



Source: OMAS 2019

Percent with Food Insecurity

**Medicaid**
- White: 36.6%
- Black or African American: 42.5%
- Hispanic: 41.9%
- *

**Uninsured Potentially Medicaid-Eligible**
- White: 35.7%
- Black or African American: 50.3%
- Hispanic: 38.4%
- *

**Insured Potentially Medicaid-Eligible**
- White: 20.5%
- Black or African American: 32.0%
- **
- *

Legend: White | Black or African American | Hispanic

** *Low-precision estimate omitted for subgroup.*     * *Significant Difference*

Among working-aged lower-income adults, for Medicaid enrollees, race/ethnic differences in food insecurity were far smaller compared to those for all adults in Ohio (Fig. 32). Still, differences remained, especially among the uninsured. More than half of uninsured Black or African Americans were food insecure.
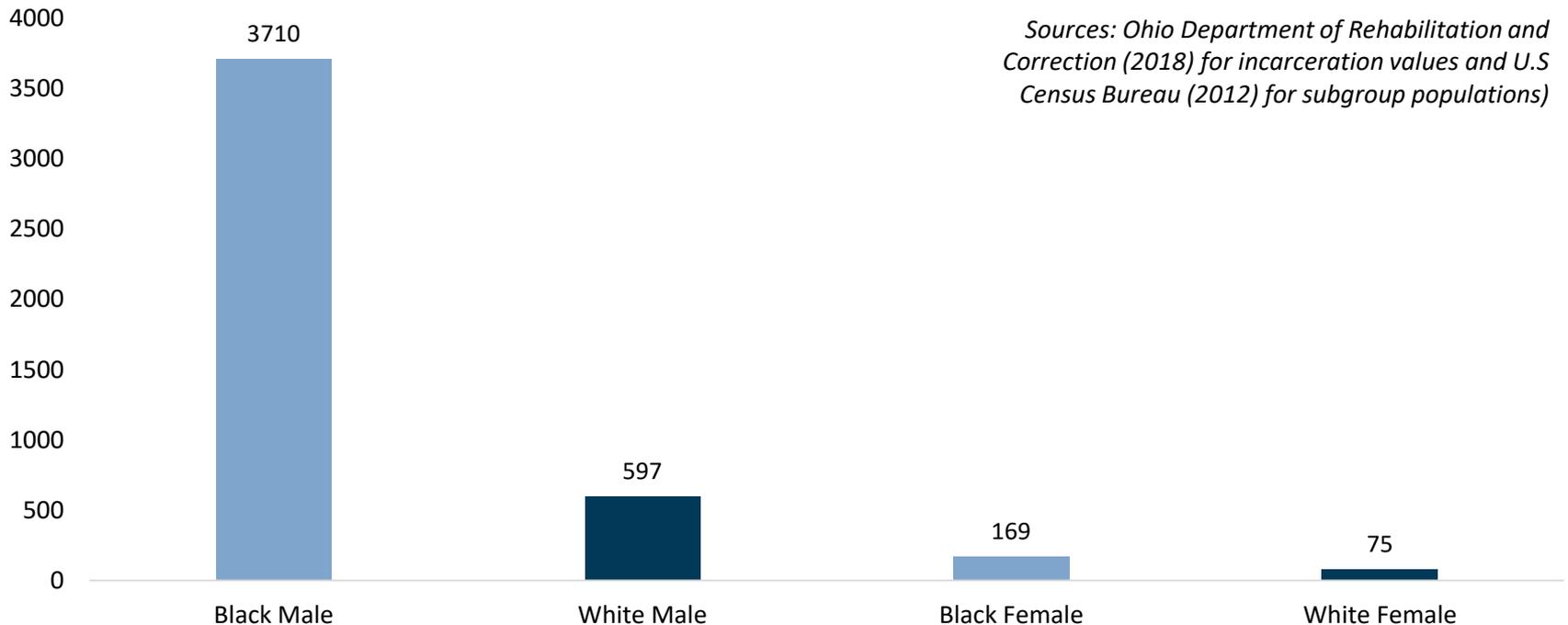
# Figure 34. Vegetable Consumption & Physical Activity by Race/Ethnicity among All Adults (BFRSS)

|  | White | Black or African American | Hispanic |
|---|---|---|---|
| **Consumed vegetables >1 time per day** | 82.5% | 72.6% | 77.6% |
| **Participated in 150 minutes or more of Aerobic Physical Activity per week** | 48.5% | 43.0% | 46.2% |

According to the BFRSS, consistent with our OMAS food insecurity findings (Figures 32 and 33), there were notable race/ethnic differences in the quality of food being consumed among Ohio adults. Whites were more likely to consume vegetables multiple times a day. Whites were also more likely to be physically active in any given week. This is in part a product of race/ethnic differences in neighborhood environment.

# Figure 35. Incarceration by Race and Gender in Ohio (2018, ODRC).

## Incarceration Rate among Ohioans by Race and Gender
### (Number of individuals per 100,000 population, ages 15 and above)

*Sources: Ohio Department of Rehabilitation and Correction (2018) for incarceration values and U.S Census Bureau (2012) for subgroup populations)*



| | Black Male | White Male | Black Female | White Female |
|---|---|---|---|---|
| Rate | 3710 | 597 | 169 | 75 |

According to the Ohio Department of Rehabilitation and Correction (ODRC), the rate at which citizens of Ohio are incarcerated varies a great deal by race and gender. Black or African American men were incarcerated more than six times as frequently, compared to White men. Though at a far lower rate, African American women were imprisoned more than twice as often as White women. Racial incarceration disparities are associated with increased racial health disparities.[12]

# Figure 36. Post-Incarceration Experiences by Race and Gender in Ohio (2019 OMRES)
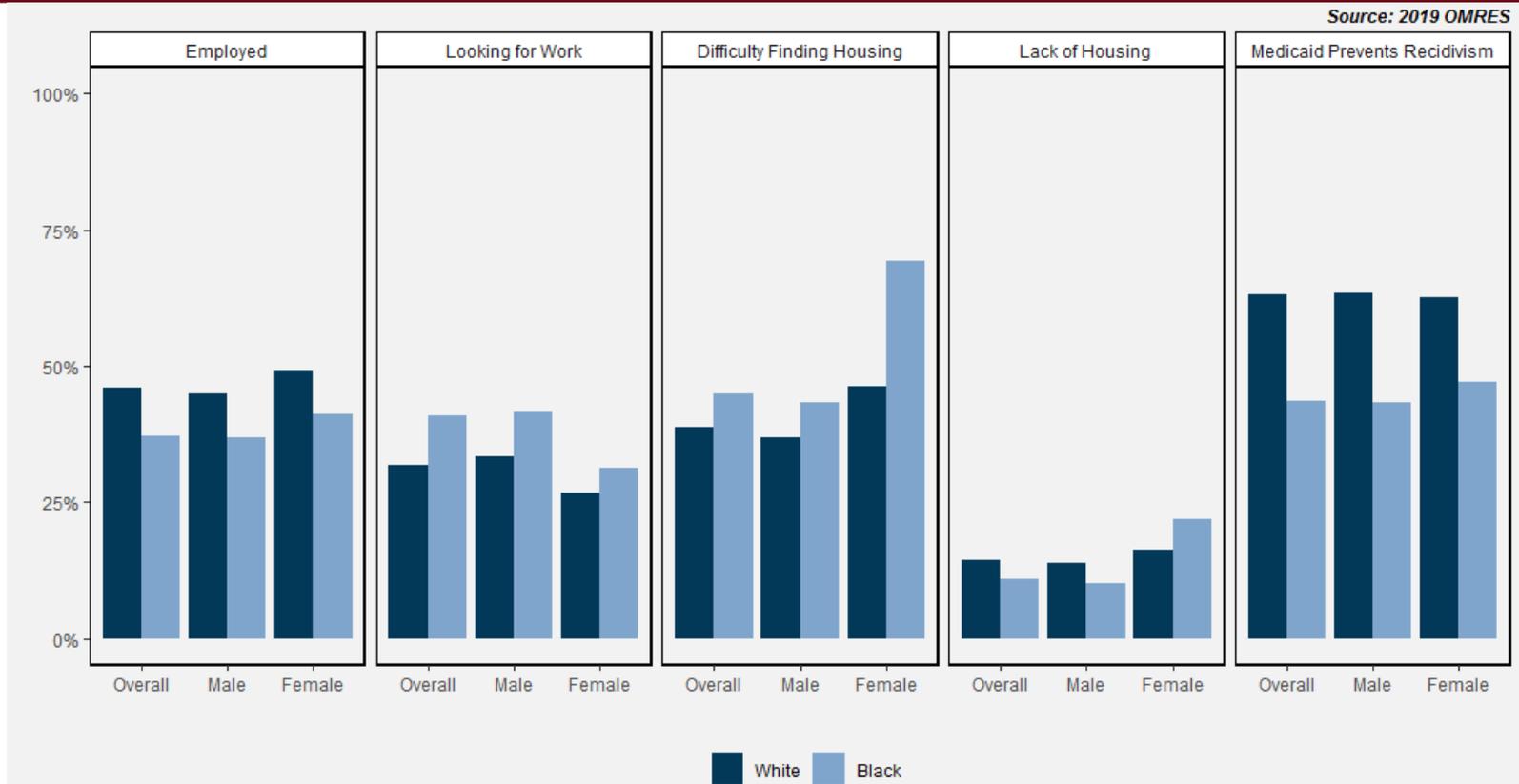


After being released from prison, post-release life experiences in Ohio vary. Black or African American women and men are less likely to have a job, and are more likely to be looking for work and to experience difficulty finding work. While whites overall, and White men in particular, are more likely to lack housing, Black or African American women lack housing more often than their White counterparts. In view of these and other challenges, African Americans have much less confidence in Medicaid helping to prevent their return to prison.

# **Figure 37.** Neighborhood Disadvantage by Frequency of Residential Return among Returning Citizens (2019 OMRES)



Source: 2019 OMRES
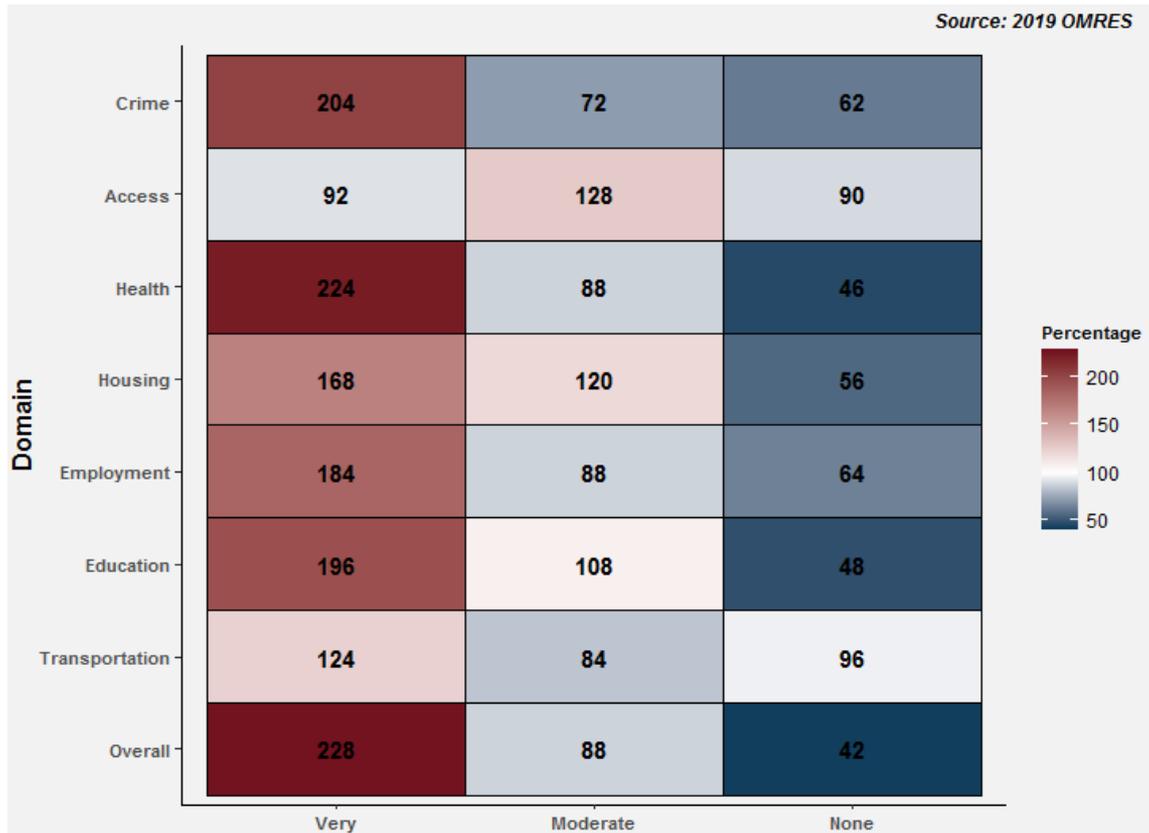
This figure is from the Ohio Medicaid Pre-Release Enrollment (MPRE) program. 2019 MPRE enrollees typically return to neighborhoods that are very disadvantaged, with far fewer employment opportunities, higher crime, and poorer housing and health. Overall, MPRE enrollees were 2.3 times more likely than the average Ohioan to live in a very disadvantaged neighborhood, which was defined as being one of the 25% most disadvantaged neighborhoods in Ohio according to the Ohio Opportunity Index.

# RELATIONSHIP TO PRIOR RESEARCH

The following section considers the key findings of the Executive Summary in relation to prior research.

# SUMMARY OF RESULTS

**Social Determinants of Health & Chronic Conditions.** Race/ethnic health disparities in Ohio are persistent and pervasive. For example, for heart disease mortality, Blacks have a 45% death rate compared to whites at 25%. Black or African Americans die at a 77% higher age adjusted death rate than whites from diabetes. Yet, for some aspects of health, whites fair worse than Blacks/African Americans (e.g., mental health, current smokers among Medicaid recipients). While some disparities are partly explained by differences in health behavior (e.g., diet, exercise), they are largely associated with social determinants, perhaps as much as 50%. Reducing inequities in health requires renewed attention to the underlying systems that may initiate and sustain differences that drive inequities.

Race/ethnic health disparities and behavioral differences exist because of disparities in social determinants of health such as wealth, education, housing, and criminal justice exposure. Once racial/ethnic differences in the social determinants of health are accounted for, many disparities largely disappear.

**Structural Inequality.** Poor access to supermarkets has been associated with increased obesity and neighborhoods with increased walkability have been associated with lower obesity. "Better" neighborhoods are associated with better insulin sensitivity and decreased diabetes risk. "Lesser" neighborhoods are associated with increased smoking, physical inactivity and higher blood pressure.[13] Thus, many health disparities are grounded in community disparities, a long history of structural inequality, and policy practices that reinforcing disparities.

**Access to Care.** Consistent with the findings of this chartbook, a great deal of prior research has demonstrated that U.S. racial and ethnic minorities are: (1) Less likely to receive preventive medical treatments than whites; (2) more likely to receive lower-quality care; (3) often disparately targeted for tobacco and alcohol consumption; and, (4) more likely to experience negative outcomes from these dynamics that increase race/ethnic health disparities.[8, 14]

Even after taking into account relevant individual and social determinants including income, neighborhood, comorbid illnesses, and health insurance type, many African American and Hispanics health outcomes are still worse than those of whites.[4, 14]

Public policy can make helpful contributions to the reduction of health inequities, including those related to health care training in racial/ethnic equity, improving the culturally sensitivity of public health outreach, and mandating racial/ethnic equity as a strategic priority.

Visit **grc.osu.edu/OMAS** for additional information about OMAS, including public use files, codebooks, and methods

# POLICY CONSIDERATIONS

**Access to care.** Many of the policies in the Affordable Care Act (ACA) are important because of improved health care access and reduced health disparities associated with improved access. As noted by the U.S. Department of Health and Human Services, the ACA has substantially reduced the level of uninsured whites, African Americans and Hispanics. Expanded access is among the policy means to reduce disparities [4, 9]

**Health monitoring**. Sustaining funding for the detailed measurement of health and health disparities within institutions and providers can contribute to evidence-based strategies of action for change and health care improvements dependent on thorough evidence

**Housing.** Strengthening initiatives that can reduce the severe housing burden experienced by so many, and the food insecurity often associated with it are important. Reducing housing burden through vouchers or other subsidies would allow housing burdened households to spend resources on other things besides sustaining reliable residence. This could indirectly contribute to various health and well-being outcomes [7, 14]

**Medicaid.** Medicaid coverage is associated with reduced race/ethnic disparities in various health outcomes. Broadening Medicaid resources and reach can make many beneficial contributions. Disparities in the comorbidities of COVID risk

(e.g., obesity, hypertension) have made the need for broadening these resources more apparent to contribute to a healthier Ohio.

**Structural barriers.** Focusing on policy interdependencies could be useful, since addressing social determinants of health will require tackling issues that are beyond the health care system's capacity to address. These include resource deficiencies to meet social needs, such as affordable housing, and structural and institutional biases and racism [14]

Visit **grc.osu.edu/OMAS** for additional information about OMAS, including public use files, codebooks, and methods

# POLICY CONSIDERATIONS
## *Prior Research*

Consistent with our chartbook findings, prior research suggests that:

- Policy strategies that address health care disparities and expand organizational capacity to address racism can include equipping health care professionals with cultural and linguistic competency skill and initiating implicit bias training. diversifying the health care workforce and boards

- Education is a foundational resource that drives health seeking behaviors and informs health outcomes. Policy efforts to increase graduation rates to impact health status, increase access to affordable housing and increased employment opportunities can impact health equity. Policy strategies can focus on building and investing in healthy, affordable and walkable communities. In addition, policy can focus on decreasing the wealth gap. As individuals transition off Medicaid, being able to sustain affordable health care is essential for improving health outcomes

- Addressing racial and ethnic equity as a strategic priority may drive improved health outcomes for Ohioans. Any policy initiative may benefit from considering its tangible impact on greater equity.

- Policy strategies can include incentivizing providers to make regular examination of health outcomes by race/ethnicity and implementing disparity reduction efforts,

- Expanding and diversifying the health care workforce to increase access to culturally and linguistically appropriate care also underpin efforts to address disparities.[14] This includes provisions within the ACA that can enhance capacity of the health care workforce, and making permanent those provisions that are time-limited;

- As suggested by a noted Harvard professor, one of the most respected researchers in this area, "new research is needed to identify the optimal strategies to build political will and support to address social inequities in health. This will include initiatives to…build empathy and support for addressing [structural] inequities, enhance the capacity of individuals and communities to actively participate in reduc[ing] racial prejudice, ideologies, and stereotypes that undergird policy preferences that initiate and sustain inequities" [14]

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