PRELIMINARY LOUISIANA AND NEW ORLEANS HYPERTENSION PREVALENCE AND CONTROL ESTIMATES

Report Date: Summer 2023

Surveillance information assessed as of August 2022

NATIONAL ASSOCIATION OF
CHRONIC DISEASE DIRECTORS
Promoting Health. Preventing Disease.

MENDS
MULTI-STATE EHR-BASED NETWORK
FOR DISEASE SURVEILLANCE

More information about the MENDS network

What This Report Adds

What's New? This report provides adjusted estimates of hypertension prevalence and control using electronic health record (EHR) data collected from August 2020 to August 2022 and accessed through the Multi-State EHR-Based Network for Disease Surveillance (MENDS). For the first time, Louisiana and New Orleans public health agencies can study and share statewide and local information about hypertension control.

These estimates of hypertension prevalence and control have been weighted to adjust for bias in age, sex, and racial ethnic representativeness, as well as uneven geographic distribution. The underlying data were robust enough to generate estimates for most parishes across the state and five-digit ZIP codes in New Orleans.

Access to timely chronic disease data creates an opportunity to improve population health. This report provides users with the data needed to identify communities with the greatest burden of hypertension and to evaluate the impact of hypertension prevention efforts in near-real time. Repeated cross-sectional measures, which can be reproduced throughout the year, can monitor disease burden and hypertension control at the community level over time.

The collaboration that inspired this report highlights the value of partnerships among health systems, organizations that aggregate clinical data, and public health departments, each of which stands to benefit from the knowledge that collaborative data sharing brings.

More information about the MENDS network
https://chronicdisease.org/page/mendsinfo/

Table of Contents

This report includes the following sections.

Section 1: Background and Methods

Section 1: Background and Method

Hypertension Basics

High blood pressure (BP), also known as hypertension, increases an individual's risk for heart disease and stroke, two leading causes of death. Hypertension can be controlled through medications and lifestyle modifications. Control of hypertension can reduce an individual's risk of experiencing hypertension-related health outcomes.[1]

Surveillance of hypertension prevalence and control can identify populations with the highest burden and opportunities to improve hypertension control. The National Health and Nutrition Examination Survey (NHANES) is the primary source for national hypertension surveillance information.

NHANES estimates that roughly half (48%) of U.S. adults (≥18 years of age) have hypertension.[1] An analysis of 2017–2020 NHANES data shows that 48% of adults with hypertension have controlled hypertension. Control in this report is defined as <140/90 mmHg.[2]

Existing Surveillance Data

In Louisiana, heart disease was the leading cause of death in 2019 and occurs at a higher rate compared with the rest of the United States.[3] Hypertension is a risk factor for heart disease.

The 2021 Behavioral Risk Factor Surveillance System (BRFSS) survey estimated 37% of Louisiana adults age 18 years or older had ever been told that they had high BP or hypertension.[4]

Using 2019 BRFSS survey data, the CDC PLACES tool estimates that 39% of New Orleans adults had high bp.[5]

Hypertension control estimates are not available for Louisiana or New Orleans.

It is worth noting that a gold standard does not exist for comparing hypertension estimates. These established public health surveillance data sources often differ considerably from each other due to differences in methodology.

Related Links:

1. Facts about Hypertension (CDC): https://www.cdc.gov/bloodpressure/facts.htm
2. Muntner, P., Miles, M. A., Jaeger, B. C., Hannon Iii, L., Hardy, S. T., Ostchega, Y., ... & Schwartz, J. E. (2022). Blood pressure control among US adults, 2009 to 2012 through 2017 to 2020. Hypertension, 79(9), 1971-1980. https://www.ahajournals.org/doi/full/10.1161/HYPERTENSIONAHA.122.19222
3. Louisiana State Health Assessment: https://dashboards.mysidewalk.com/louisiana-state-health-assessment/medical-conditions
4. Behavioral Risk Factor Surveillance System: https://www.cdc.gov/brfss/brfssprevalence/index.html
5. CDC PLACES Tool: https://www.cdc.gov/places/

Surveillance Population

This report uses EHR data from REACHnet[1] that includes data from multiple healthcare delivery systems operating across Louisiana and considers outpatient care encounters only.

Hypertension prevalence and control are estimated using outpatient data from August 2020 to August 2022 for adults (ages 20–84 years) residing in Louisiana who had ≥1 healthcare encounter that included a BP measure during that time period. Adults ages 18-19 years and those >84 years were excluded in order to align the surveillance population with census age groups for the purposes of adjustment.

Race and ethnicity are combined into one variable for weighting, and patients with an unknown or missing race and ethnicity had to be excluded (Table 1). Patients with a missing sex or location were also excluded.

After exclusions, data were available from 756,324 adults, representing 23% of the 3,349,100 Louisiana adults ages 20–84 years.[2]

Surveillance Population Exclusions

Table 1: Counts of REACHnet Patient Population and Exclusions*

Starting REACHnet Patient Population	777,569
Patients with missing sex	99
Patients with unknown race	14,708
Patients without matching American Community Survey data	159
Surveillance Population	**756,324**

Related Links:
1. REACHnet https://reachnet.org/
2. 2021 American Community Survey Data: https://data.census.gov/table/ACSST1Y2021.S0101?q=Louisiana+age+and+sex

Definitions

Hypertension Prevalence

A hypertension case (*numerator*) was defined as an adult having any combination of (a) diagnosed hypertension (based on diagnosis codes), (b) prescription for an antihypertensive drug (with or without a diagnosis code), or (c) potentially undiagnosed hypertension (based on two or more BP readings above 140/90 in 1 year) in the preceding 2 years.[1] Hypertension diagnostic codes included 401.x and 405.x ICD-9 codes and I10 and I15 ICD-10 codes for essential and secondary hypertension.

Patients are included in the hypertension prevalence *denominator* if they had at least one outpatient medical encounter with measured BP in the past 2 years.

The hypertension prevalence percentage is calculated as the number of adults meeting the criteria for a hypertension case divided by the total number of adults in the denominator.

Notably, MENDS recognizes that many conditions other than hypertension may cause an increase in BP such that not all patients with elevated BP have hypertension. However, evidence[2] shows a substantial number of individuals with undiagnosed hypertension, and the inclusion of these individuals is important to public health surveillance.

Related Links:
1. MENDS hypertension algorithm:
   https://public.3.basecamp.com/p/WNt21XSim7prLbG59estg6v3
2. Wall HK, Hannan JA, Wright JS. Patients with undiagnosed hypertension: hiding in plain sight. JAMA. 2014 Nov 19;312(19):1973-4. https://doi.org/10.1001/jama.2014.15388

While hypertension is more prominent among older adults, it is not simply a condition of the elderly. All ages are impacted, and early identification and long-term control can preserve cardiovascular health now and into the future.

Dr. Jerome Adams

Surgeon General's Call to Action to Control Hypertension

Definitions

Diagnosed Hypertension Control

Hypertension control *(numerator)* is defined as individuals with diagnosed essential hypertension whose latest BP measure (post diagnosis) during the surveillance time period was <140/90 mm Hg, as denoted in the Centers of Medicare & Medicaid Services electronic clinical quality measure (eCQM).[1]

Applying the same age and observation period criteria from hypertension prevalence, patients were included in the hypertension control *denominator* if they were identified with diagnosed essential hypertension, a subset of all hypertension cases. Patients with only elevated BPs, secondary hypertension, or only hypertension medications were excluded from the hypertension control denominator.

Diagnosed hypertension cases for which a BP measurement to determine control is not available and control status is unknown are considered not controlled.

Related Links:
1. Electronic clinical quality measure definition for controlling high blood pressure: https://ecqi.healthit.gov/ecqm/ec/2023/cms165v11

While hypertension is more prominent among older adults, it is not simply a condition of the elderly. All ages are impacted, and early identification and long-term control can preserve cardiovascular health now and into the future.

Dr. Jerome Adams

Surgeon General's Call to Action to Control Hypertension

Definition Summary

Hypertension Prevalence

Numerator
Patients with ≥1 diagnostic codes for essential hypertension (diagnosed)

Patients with ≥1 diagnostic codes for secondary hypertension (diagnosed)

Patients with ≥1 order for hypertension treatment medications (treated)

Patients with ≥2 BP measures >140/90 mm Hg (potentially undiagnosed hypertension)*

Denominator
Adults 20-84 years of age who had ≥1 encounter with a BP measure in 2 years

Diagnosed Hypertension Control (eCQM)**

Numerator
Patients whose latest BP measure in the surveillance time period is <140/90 mm Hg

Denominator***
Patients with ≥1 diagnostic codes for essential hypertension (diagnosed)

*Including patients with only elevated BP may introduce some false positives.
**The CMS 165 eCQM is limited to patients with diagnosed essential hypertension (ICD-10-CM I10)
*** Exclusions include pregnancy and end-stage renal disease

Methods

The goal of weighting is to minimize bias in EHR data and improve precision of estimates by accounting for systemic differences between the MENDS patient population and the underlying geographic population using the 2021 American Community Survey data.

Because the distribution of data at the county and city levels differ, models to generate weighted estimates were built for Louisiana and New Orleans and fit independently to generate the best estimates. Thus, small differences in the methods at the county and city levels exist. Continuous refinements of the model and updates to the estimates are expected as the data are updated.

Models were adjusted for differences in age, sex, race/ethnicity, and geographic distribution for the surveillance population versus the target population.

Adjusted estimates were assessed for stability and fit. Five-digit ZIP Code adjusted estimates with a standard error greater than 5% are suppressed due to inadequate precision. Estimates for geographies with <125 individuals are also suppressed.

Hypertension control estimates are derived using subgroup analysis, where the estimates of control are derived based on patients with an essential hypertension diagnosis.

To determine the statistical significance of differences between groups, please reference the tables available in the appendices and the overlap of confidence intervals.

Because these data have been weighted, the resulting adjusted estimates do not carry a risk that patients could be re-identified. This report is a de-identified product.

Weighting methods evolve as new information emerges and more data become available. Additional details describing these methods are available upon request.

Section 2: Hypertension Prevalence in Louisiana

Hypertension Prevalence in Louisiana

Overall, 45% of Louisiana adults 20–84 years of age have hypertension.

- Adults ages 65–84 years (70%) have a significantly higher prevalence compared with other age groups.

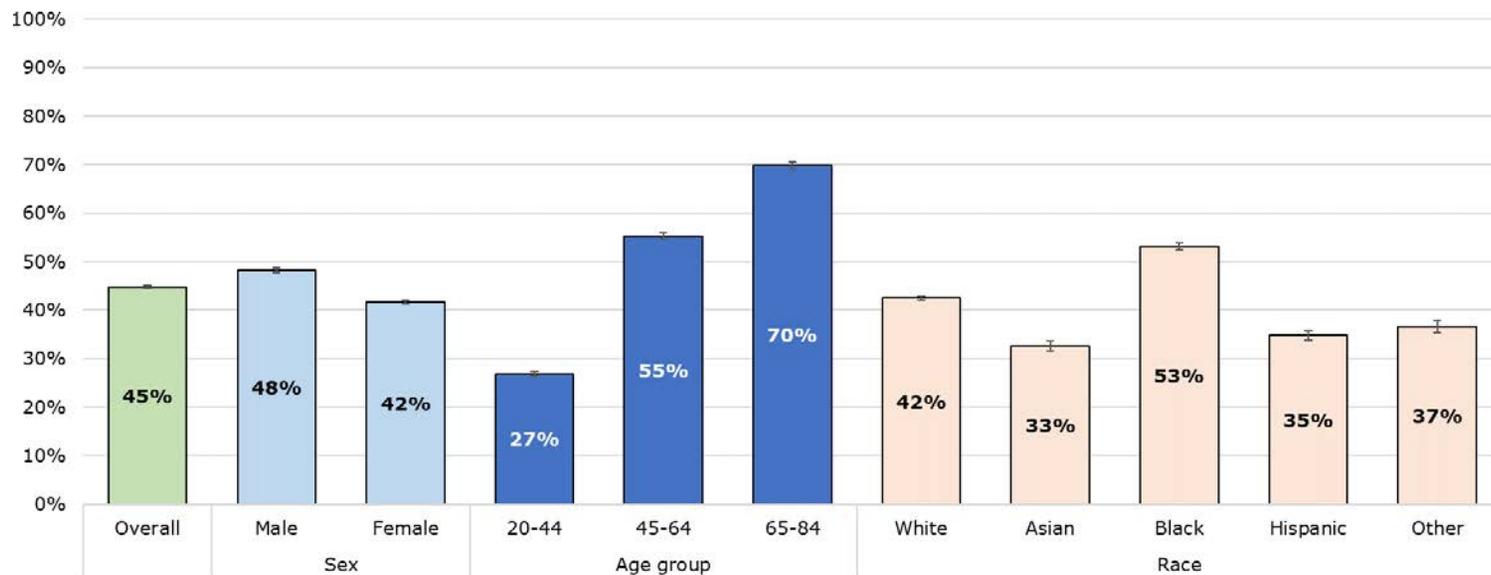- Black adults (53%) have a significantly higher prevalence compared with other racial/ethnic groups.

Figure 1: Hypertension Prevalence in Louisiana by Sex, Age Group, and Race/Ethnicity—August 2022

Surveillance population used to create estimates: 756,324 adults 20–84 years of age.

Hypertension Prevalence in Louisiana

By insurance type, Medicare recipients have the highest hypertension prevalence (72%), which likely reflects that Medicare recipients are significantly older than other payer categories.

Patients living in completely rural areas have a slightly higher hypertension prevalence (49%) than those in mostly rural or mostly urban areas.
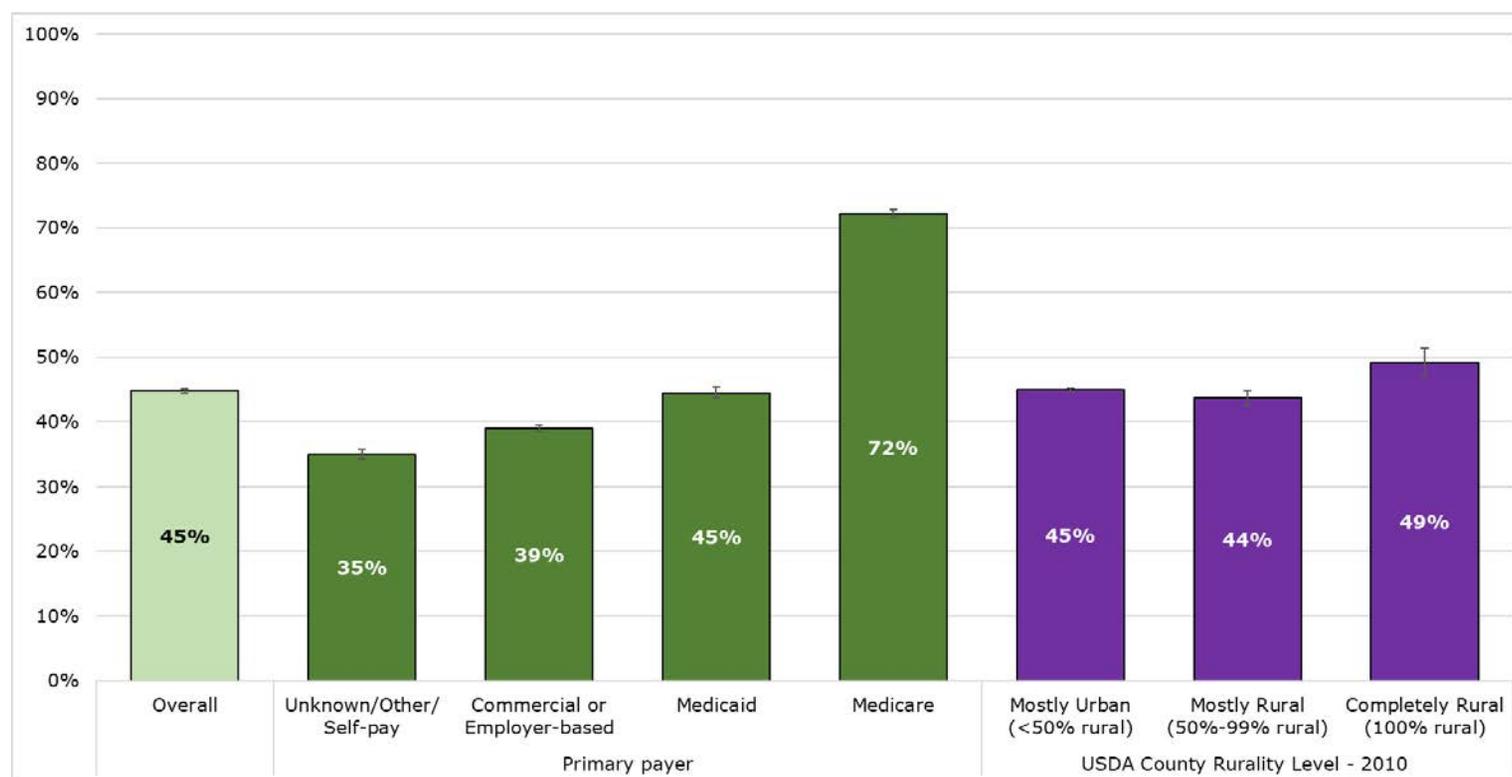

Figure 2: Hypertension Prevalence in Louisiana by Primary Payer and Rurality—August 2022

Surveillance population used to create estimates: 756,324 adults 20–84 years of age.

Hypertension Prevalence in Louisiana

Geographic Patterns by Parish

This map displays adult hypertension prevalence for 49 (77%) of Louisiana's 64 parishes. Prevalence varies in these 49 parishes from 28% to 60%.

Parishes with high hypertension prevalence (dark blue) indicate a negative health outcome, while areas with low hypertension prevalence (light blue) represent a lower burden of illness.

Hypertension prevalence is highest in the southeastern part of the state, and communities in the southwest have the lowest burden of hypertension.

The northern part of the state has 15 parishes (23%) with insufficient data, which indicates that data from healthcare providers in this area are not available through this data source.
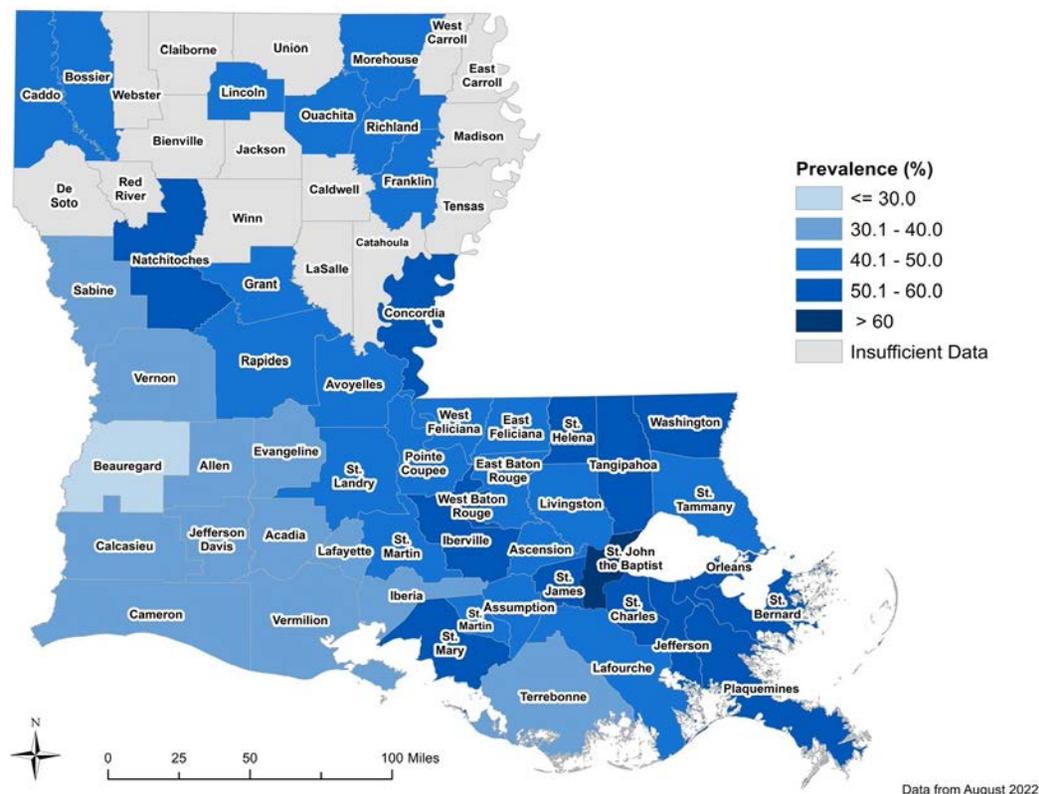

Prevalence (%)
- <= 30.0
- 30.1 - 40.0
- 40.1 - 50.0
- 50.1 - 60.0
- > 60
- Insufficient Data

Data from August 2022

Figure 3: Hypertension Prevalence in Louisiana by Parish—August 2022

Surveillance population used to create estimates: 756,324 adults 20–84 years of age.

Data are suppressed where the population is less than 125 people or where the standard error is larger than 5%.

Summary of Hypertension Prevalence Findings

Demographic and Socioeconomic Patterns

Nearly half (45%) of Louisiana adults ages 20-84 years have hypertension.

By age, hypertension is most common in adults ages 65–84 years old (70%).

A slightly higher proportion of men have hypertension compared with women (48% versus 42%).

Hypertension prevalence is highest in Black adults (53%) compared with White, Hispanic, Asian, or individuals of other races or ethnicities.

Medicare recipients (who are mostly older adults) have the highest hypertension prevalence (72%) by insurance type.

Geographic Patterns

Among the 49 parishes with hypertension prevalence estimates, hypertension prevalence varies by 32 percentage points.

Twenty-eight parishes (57%) have a prevalence greater than or equal to the state prevalence of 45%.

Rural residents have higher prevalence (49%) than other geographies.

MENDS Louisiana hypertension prevalence (45%) is greater than the 2021 BRFSS estimates (37%).

Differences between MENDS and BRFSS estimates may reflect differences in population, with MENDS reflecting a healthcare-seeking population or differences in awareness of hypertension.

Prevalence estimates are unavailable in the north for 15 of 64 parishes (23%); this is likely a reflection of areas where access to care is challenging and where MENDS data have low population coverage. Recruiting more data from these communities could improve the accuracy of these estimates and tell a different story.

Section 3: Hypertension Control in Louisiana

Hypertension Control in Louisiana

Sixty-nine percent of Louisiana adults with diagnosed hypertension have controlled hypertension.

- Hypertension control is similar for males (69%) and females (70%).

- Across age groups, hypertension control is lowest in ages 20–44 (67%).

- Asian adults (75%) have the highest hypertension control by race/ethnicity.
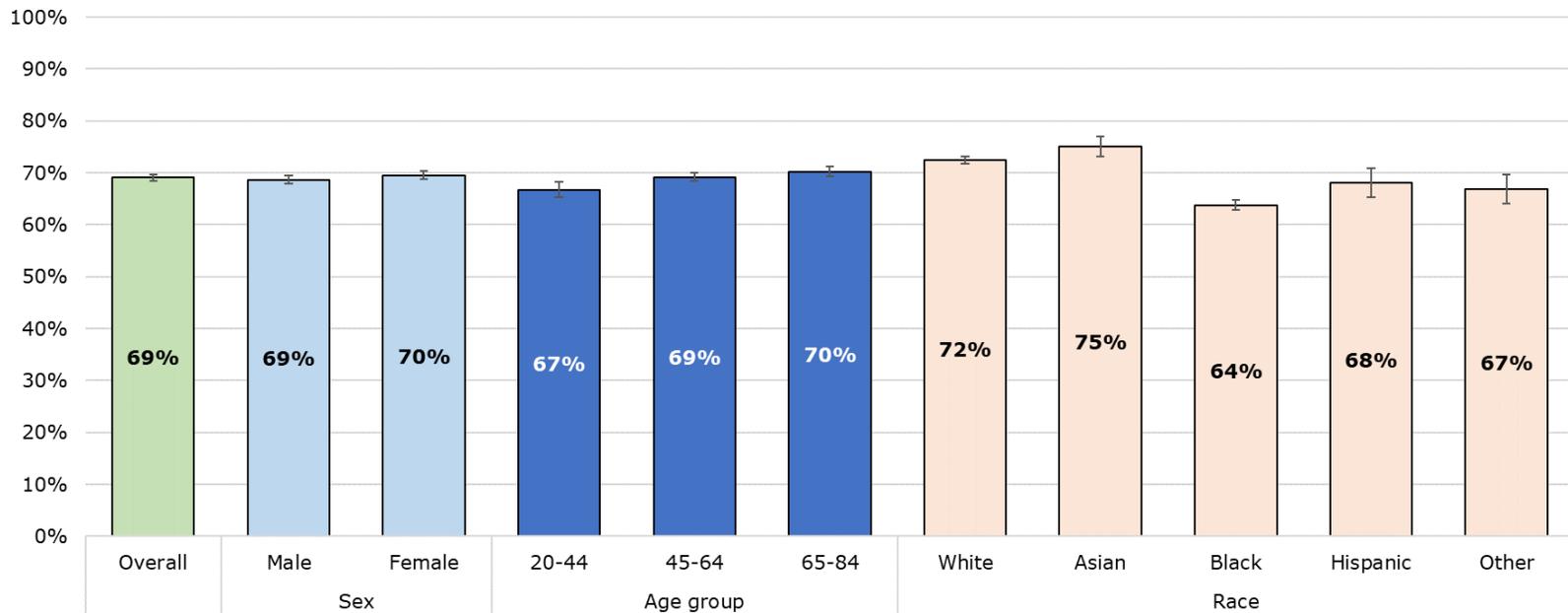

Figure 4: Hypertension Control in Louisiana by Sex, Age Group, and Race/Ethnicity—August 2022

Surveillance population used to create estimates: 267,774 adults 20–84 years of age with diagnosed hypertension.

Hypertension Control in Louisiana

Sixty-nine percent of Louisiana adults with diagnosed hypertension have controlled hypertension.

- Hypertension control is highest for patients on Medicare or those who have commercial/employer-based insurance (72%).

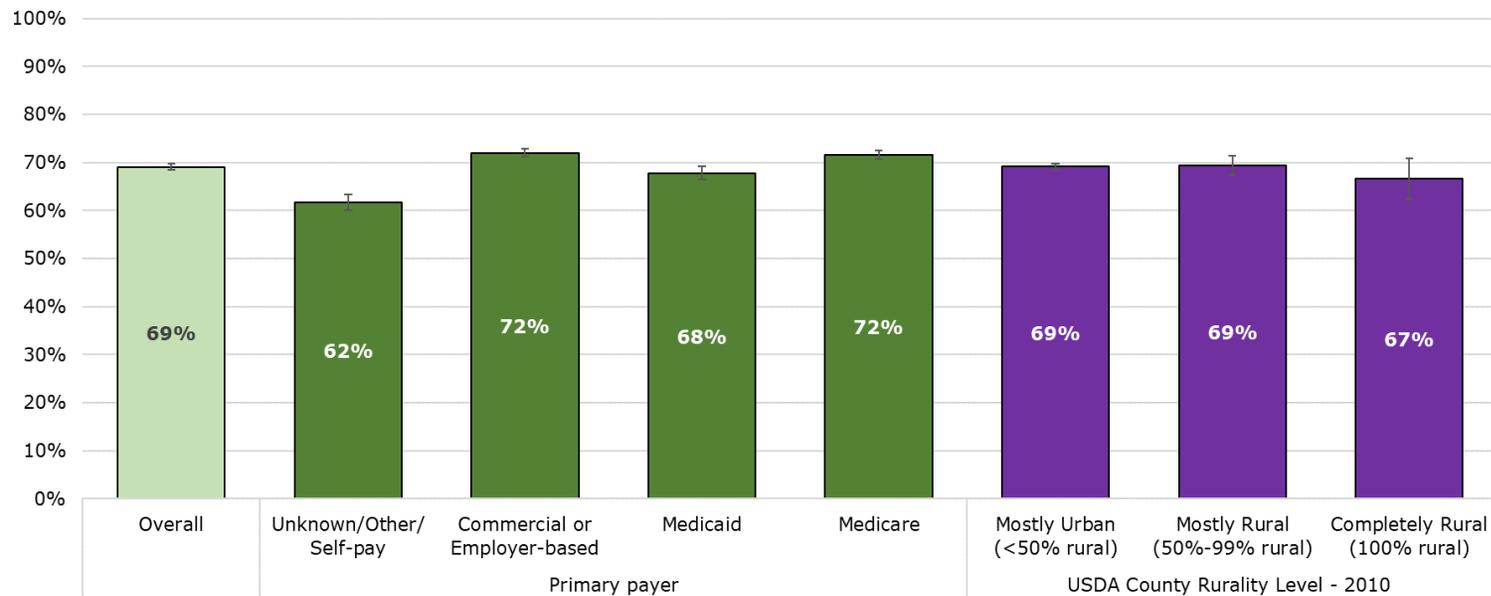- Hypertension control is lowest in completely rural geographies (67%).

Figure 5: Hypertension Control in Louisiana by Primary Payer and Rurality—August 2022

Surveillance population used to create estimates: 267,774 adults 20–84 years of age with diagnosed hypertension.

Hypertension Control in Louisiana

Geographic Patterns by Parish

This map displays the percentage of Louisiana adults with diagnosed hypertension who have their hypertension controlled for 38 of Louisiana's 64 parishes (59%).

Because the denominator for hypertension control is patients with diagnosed hypertension, many more parishes have insufficient data, compared with the map of hypertension prevalence.

Parishes with high hypertension control (light green) are a positive health outcome while areas with low hypertension control (dark green) represent a population with elevated risk for negative outcomes, such as heart attacks and strokes.

For the data shown, hypertension control ranges from 56% to 76%. Hypertension control estimates are more available for southeastern Louisiana.
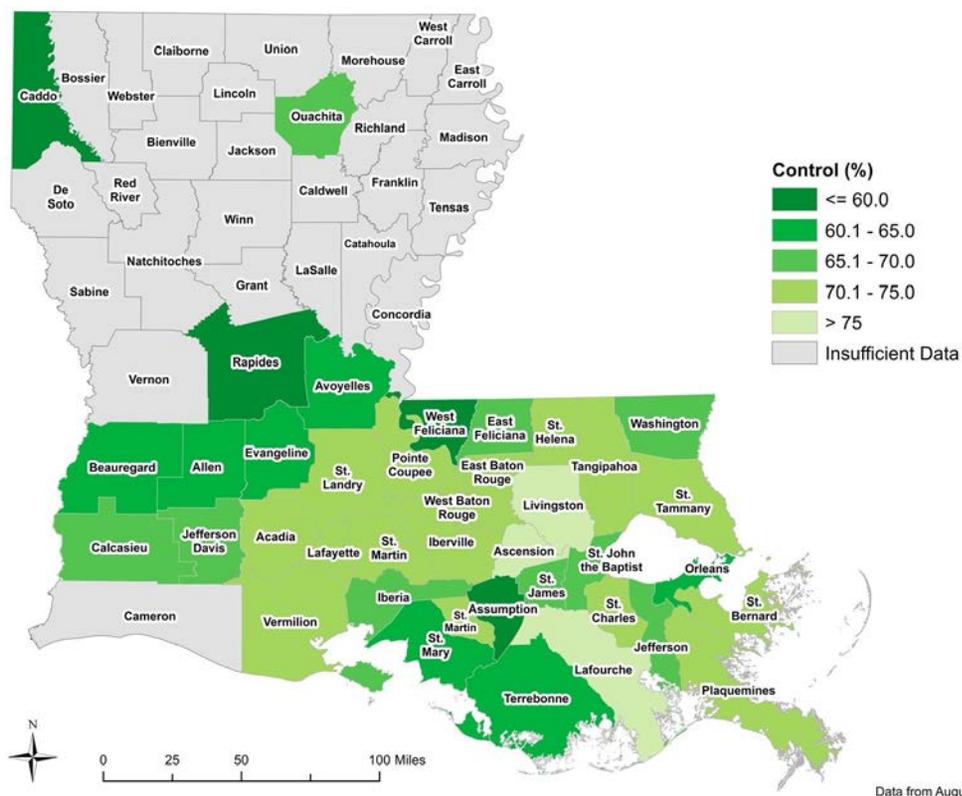

Figure 6: Hypertension Control in Louisiana by Parish—August 2022

Surveillance population used to create estimates: 267,774 adults 20–84 years of age with diagnosed hypertension

Data are suppressed where the population is less than 125 people or where the standard error is larger than 5%.

Summary of Hypertension Control Findings

Demographic and Socioeconomic Patterns

Among 267,774 adults 20–84 years of age in Louisiana with diagnosed hypertension, 69% have controlled hypertension, which is higher compared with the national estimate of 48% from NHANES.

Hypertension control did not differ by sex.

Asian adults have higher hypertension control (75%) compared with other races.

By age group, ages 20–44 years have the lowest hypertension control (67%).

Patients whose primary payer is Medicare or commercial/employer-based insurance have the highest hypertension control (72%) compared with other payer types.

Geographic Patterns

Hypertension control has some variability by Louisiana parish, with a range of 20 percentage points (56%–76%).

Many parishes in northern Louisiana had insufficient data to estimate hypertension control.

Hypertension control estimates are more available for the southeastern part of the state, where MENDS population coverage is highest.

Patients in completely rural areas have the lowest hypertension control (66%) compared with other geographies.

Hypertension affects a wide swath of Louisiana residents and, when left uncontrolled, it can have serious implications on quality and length of life. Understanding the prevalence of hypertension and hypertension control in our community is key to designing interventions that will reduce premature morbidity and mortality in Louisiana communities.

Jeanie Donovan
New Orleans Health Department

Section 4: Local Spotlight
New Orleans

Section 4 examines hypertension prevalence and control in Orleans Parish, which comprises the city of New Orleans.

MENDS provides data from 141,245 New Orleans residents, representing 49% of the 288,488 adults 20–84 in New Orleans (2021 American Community Survey).[1]

Hypertension prevalence and control maps feature adjusted estimates derived for each five-digit ZIP Code.

Related Links:
2021 American Community Survey:
https://data.census.gov/table/ACSST5Y2021.S0101?q=New+Orleans+city,+Orleans+Parish,+Louisiana

Hypertension Prevalence in New Orleans

Overall, 50% of New Orleans adults 20–84 years of age have hypertension.

- Adults ages 65–84 years (84%) have a significantly higher hypertension prevalence compared with other age groups.

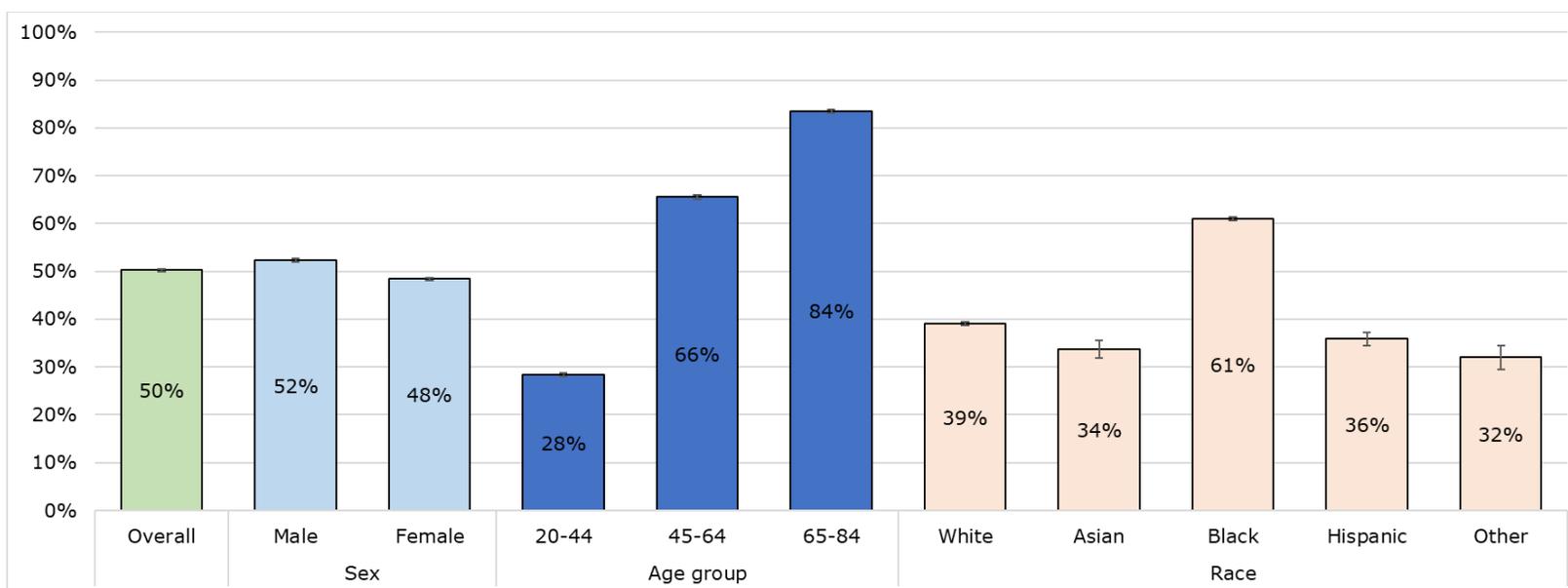- Black adults (61%) have a significantly higher hypertension prevalence compared with other racial/ethnic groups.

Figure 7: Hypertension Prevalence in New Orleans by Sex, Age Group, and Race/Ethnicity—August 2022

Surveillance population used to create estimates: 141,245 adults 20–84 years of age.

Hypertension Prevalence in New Orleans

Orleans Parish has 19 residential five-digit ZIP Codes (PO Box ZIP Codes were excluded), of which 18 have data available. Overall, hypertension prevalence across Orleans Parish is estimated to be 50% and varies by five-digit ZIP Code within the parish from 38% to 58%.

Modeled Hypertension Prevalence Estimate (%)
- <= 40.0
- 40.1 - 45.0
- 45.1 - 50.0
- 50.1 - 55.0
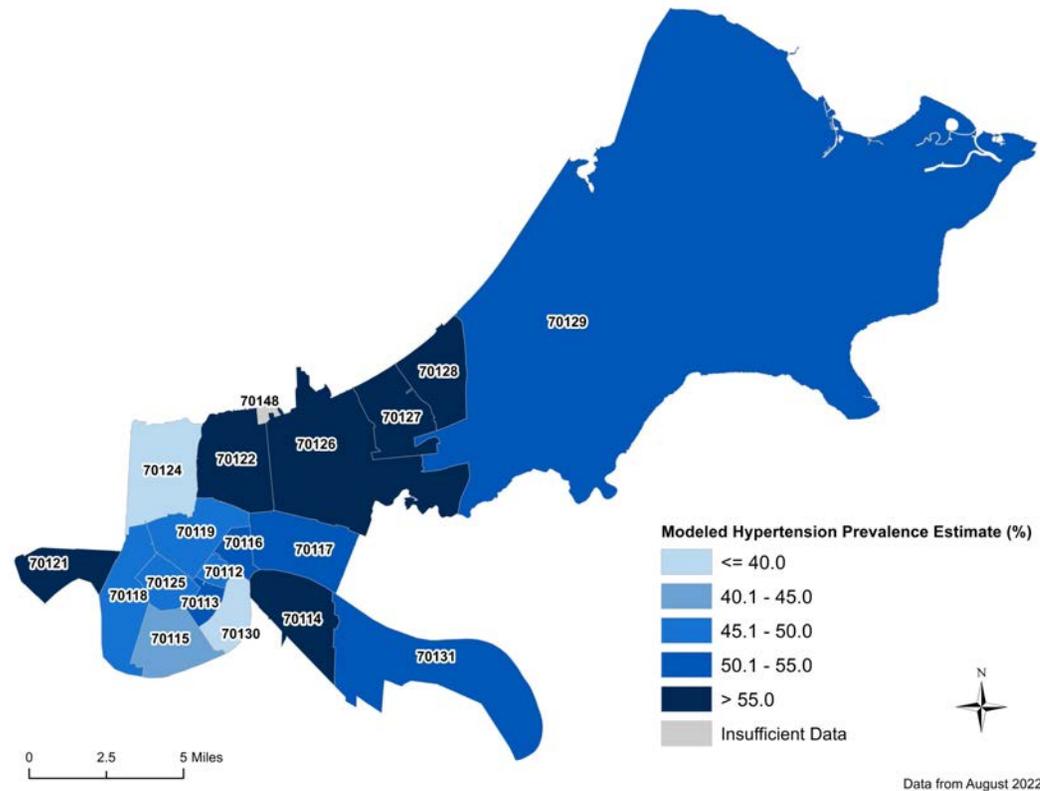- > 55.0
- Insufficient Data

Data from August 2022

Figure 8: Hypertension Prevalence in New Orleans by Five-Digit ZIP Code—August 2022

Surveillance population used to create estimates: 141,245 adults 20–84 years of age.

Data are suppressed where the population is less than 125 people or where the standard error is larger than 5%.

Hypertension Control in New Orleans

Overall, 63% of New Orleans adults 20–84 years of age have their diagnosed hypertension controlled.

- Adults ages 65–84 years (66%) have significantly higher hypertension control compared with other age groups.

- Asian adults (71%) have a higher hypertension control compared with other racial/ethnic groups, although the differences are not statistically significant.
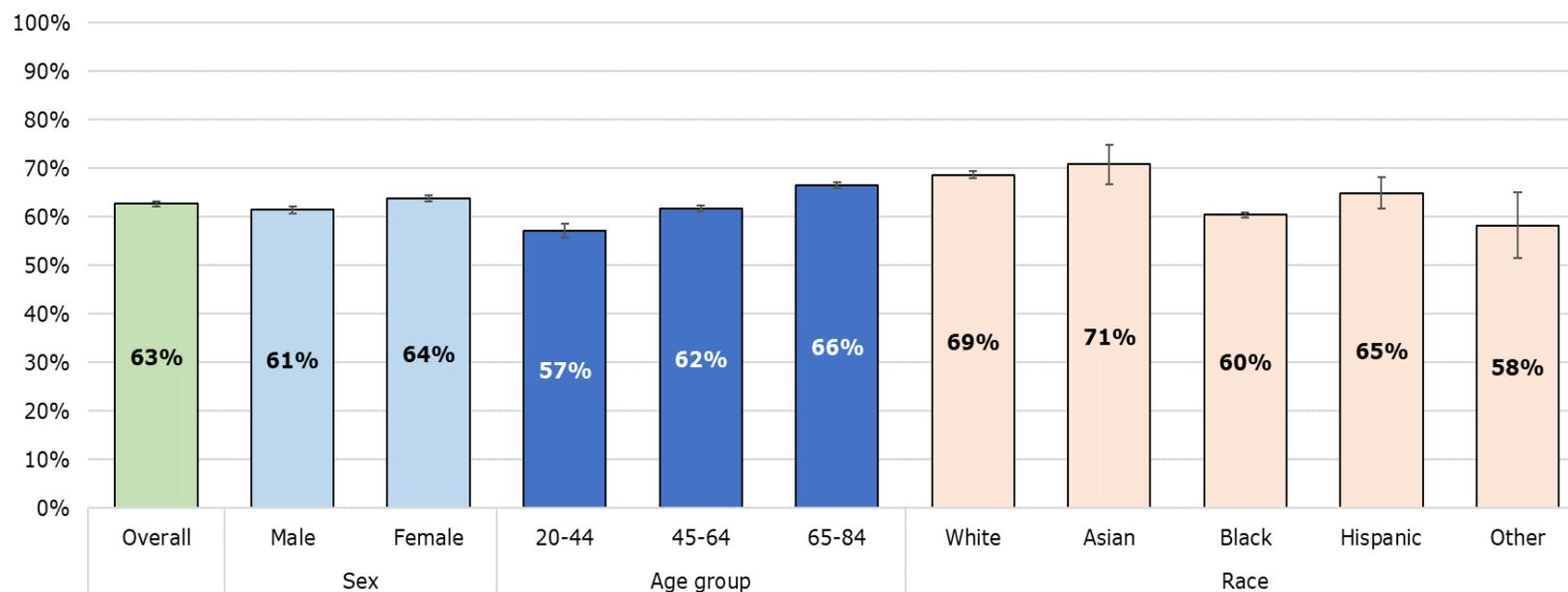

Figure 9: Hypertension Control in New Orleans by Sex, Age Group, Race/Ethnicity—August 2022

Surveillance population used to create estimates: 50,184 adults 20–84 years of age.

Hypertension Control in New Orleans

Overall, hypertension control among New Orleans adults with diagnosed hypertension is 63%. A comparison across five-digit ZIP Codes shows modest variation in New Orleans, ranging from 55% to 70%, for a difference of 15 percentage points.
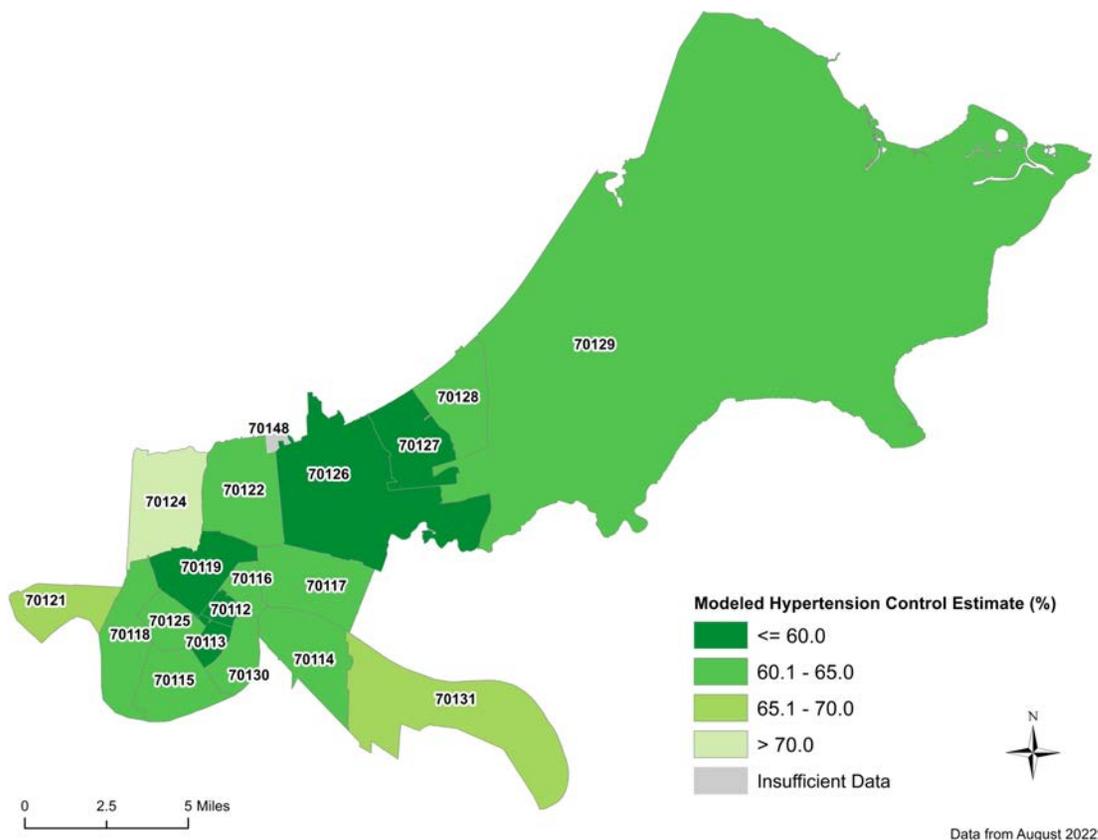

Figure 10: Hypertension Control in New Orleans by Five-Digit ZIP Code—August 2022

Surveillance population used to create estimates: 50,184 adults 20–84 years of age with diagnosed hypertension.

Section 5: Conclusions and Limitations

Preliminary Conclusions

Hypertension prevalence:

- Forty-five percent of Louisiana adults, ages 20–84 years, have hypertension.

- Fifty percent of New Orleans adults, ages 20–84 years, have hypertension.

- Prevalence varies across the state by 32 percentage points (28% to 60%) and within New Orleans by 20 percentage points (38% to 58%).

- The MENDS estimated Louisiana adult hypertension prevalence (45%) is higher than the 2021 BRFSS hypertension prevalence estimate (37%) due to differences in methodology and sample population.

- The MENDS estimated New Orleans adult hypertension prevalence (50%) is higher than the CDC PLACES hypertension prevalence estimate (39%) due to differences in methodology and sample population.

Diagnosed hypertension control:

- Sixty-nine percent of Louisiana adults (20-84 years of age) with diagnosed hypertension have their hypertension controlled.

- Sixty-three percent of New Orleans adults (20-84 years of age) with diagnosed hypertension have their hypertension controlled.

- Hypertension control varies across the state by 20 percentage points (56% to 76%) and within New Orleans by just 15 percentage points (55% to 70%).

Limitations of Weighted Estimates

Data used in this report have several limitations.

EHR data are collected for clinical and administrative purposes, and using these data for public health is a secondary use.

Adjusted estimates are derived from healthcare-seeking patients alone. These patients are not a random selection of the state population but rather a specific subset. Findings in this report may not be representative of the general population.

Missing data is a known EHR data quality challenge. Patients who do not report a value needed for weighting could not be included in this analysis.

Notably, race and ethnicity are distinct concepts that are transformed into one variable; this limits the ability to see the interaction of race and ethnicity on health.

MENDS' weighting does adjust for differences in age, race/ethnicity, and sex between the MENDS population and the state population, but adjusted estimates cannot adjust for all the factors that affect health.

The COVID-19 pandemic occurred during the time period for which data for this report was collected. COVID-19 disrupted healthcare delivery, and a decrease in screening for chronic disease, including hypertension, has been documented.

EHR data do not always have a consistent and normal distribution across geographic areas.

The MENDS hypertension algorithm is subject to misclassification that could lead to either over- or underestimation of prevalence. For example, some antihypertensive medications can be used to treat conditions other than hypertension, which could result in an overestimation of hypertension prevalence. The use of 140/90 as the threshold for diagnosis and control could result in the underestimation of hypertension prevalence compared to estimates based on a lower clinical threshold.

Related Links

More information about the MENDS network: https://chronicdisease.org/page/mendsinfo/

Facts about Hypertension (CDC): https://www.cdc.gov/bloodpressure/facts.htm

Muntner, P., Miles, M. A., Jaeger, B.C., Hannon, L., Hardy, S.T., Ostchega, Y., & Schwartz, J.E. (2022). Blood pressure control among US adults, 2009 to 2012 through 2017 to 2020. Hypertension, 79(9), 1971-1980. https://www.ahajournals.org/doi/full/10.1161/HYPERTENSIONAHA.122.19222

Louisiana State Health Assessment: https://dashboards.mysidewalk.com/louisiana-state-health-assessment/medical-conditions

2021 Louisiana Adjusted Estimates from Behavioral Risk Factor Surveillance System: https://www.cdc.gov/brfss/brfssprevalence/

CDC PLACES Tool: https://www.cdc.gov/places/index.html

ReachNet: https://reachnet.org/

2021 American Community Survey Data: https://data.census.gov/table/ACSST1Y2021.S0101?q=Louisiana+age+and+sex

MENDS Hypertension Algorithm: https://public.3.basecamp.com/p/WNt21XSim7prLbG59estg6v3

Electronic clinical quality measure definition for controlling high blood pressure: https://ecqi.healthit.gov/ecqm/ec/2023/cms165v11

Appendix A: Data Tables

Hypertension Prevalence in Louisiana
N, Estimates, Standard Errors, and Confidence Intervals

Patient group	Number of patients	Weighted (post-stratified) by sex, age group, race/ethnicity and parish		
		Prevalence	SE	95% Confidence Interval
Overall	756,324	45%	0.2%	(45%, 45%)
Sex				
Male	299,673	48%	0.3%	(48%, 49%)
Female	456,651	42%	0.2%	(41%, 42%)
Age group				
20-44	296,082	27%	0.2%	(26%, 27%)
45-64	266,049	55%	0.3%	(55%, 56%)
65-84	194,193	70%	0.4%	(69%, 71%)
Race				
White	459,938	42%	0.2%	(42%, 43%)
Asian	12,073	33%	0.6%	(31%, 34%)
Black	237,585	53%	0.3%	(52%, 54%)
Hispanic	37,298	35%	0.5%	(34%, 36%)
Other	9,430	37%	0.6%	(35%, 38%)
Primary payer				
Unknown/other/self-pay	183,335	35%	0.4%	(34%, 36%)
Commercial or employer-based	278,149	39%	0.3%	(39%, 40%)
Medicaid	120,724	45%	0.4%	(44%, 45%)
Medicare	174,116	72%	0.4%	(71%, 73%)
USDA County Rurality Level - 2010				
Mostly urban (<50% rural)	719,960	45%	0.2%	(45%, 46%)
Mostly rural (50%-99% rural)	31,456	44%	0.6%	(43%, 45%)
Completely rural (100% rural)	4,908	49%	1.1%	(47%, 51%)

Hypertension Control in Louisiana
N, Estimates, Standard Errors, and Confidence Intervals

Patient group	Number of patients	Weighted (post-stratified) by sex, age group, race/ethnicity and parish		
		Prevalence	SE	95% Confidence Interval
Overall	267,774	69%	0.3%	(69%, 70%)
Sex				
Male	122,329	69%	0.4%	(68%, 69%)
Female	145,445	70%	0.4%	(69%, 70%)
Age group				
20-44	32,314	67%	0.8%	(65%, 68%)
45-64	113,634	69%	0.4%	(68%, 70%)
65-84	121,826	70%	0.5%	(69%, 71%)
Race				
White	149,527	72%	0.4%	(72%, 73%)
Asian	2,900	75%	1.0%	(73%, 77%)
Black	103,525	64%	0.5%	(63%, 65%)
Hispanic	9,326	68%	1.4%	(66%, 71%)
Other	2,496	67%	1.4%	(64%, 70%)
Primary payer				
Unknown/other/self-pay	42,993	62%	0.8%	(60%, 63%)
Commercial or employer-based	80,607	72%	0.4%	(71%, 73%)
Medicaid	33,104	68%	0.7%	(66%, 69%)
Medicare	111,070	72%	0.4%	(71%, 73%)
USDA County Rurality Level – 2010				
Mostly urban (<50% rural)	255,413	69%	0.3%	(69%, 70%)
Mostly rural (50%-99% rural)	10,659	69%	1.0%	(67%, 71%)
Completely rural (100% rural)	1,702	67%	2.2%	(62%, 71%)

Hypertension Prevalence in Orleans Parish
N, Estimates, Standard Errors, and Confidence Intervals

Patient group	Number of patients	Weighted (post-stratified) by sex, age group, race/ethnicity and parish		
		Prevalence	SE	95% Confidence Interval
Overall	141,245	50%	0.1%	(50%, 51%)
Sex				
Male	56,754	52%	0.2%	(52%, 53%)
Female	84,491	48%	0.2%	(48%, 49%)
Age group				
20-44	61,946	28%	0.2%	(28%, 29%)
45-64	47,026	66%	0.2%	(65%, 66%)
65-84	32,273	84%	0.2%	(83%, 84%)
Race/Ethnicity				
White	59,312	39%	0.2%	(39%, 39%)
Asian	2,710	34%	0.9%	(32%, 36%)
Black	71,518	61%	0.2%	(61%, 61%)
Hispanic	6,046	36%	0.7%	(35%, 37%)
Other	1,659	32%	1.3%	(29%, 35%)

Hypertension Control in Orleans Parish
N, Estimates, Standard Errors, and Confidence Intervals

Patient group	Number of patients	Weighted (post-stratified) by sex, age group, race/ethnicity and parish		
		Prevalence	SE	95% Confidence Interval
Overall	50,184	63%	0.2%	(62%, 63%)
Sex				
Male	22,004	61%	0.4%	(61%, 62%)
Female	28,180	64%	0.3%	(63%, 64%)
Age group				
20-44	6,068	57%	0.7%	(56%, 59%)
45-64	21,832	62%	0.3%	(61%, 62%)
65-84	22,284	66%	0.3%	(66%, 67%)
Race/Ethnicity				
White	13,992	69%	0.4%	(68%, 70%)
Asian	622	71%	2.0%	(67%, 75%)
Black	33,946	60%	0.3%	(60%, 61%)
Hispanic	1,284	65%	1.6%	(62%, 68%)
Other	340	58%	3.5%	(51%, 65%)

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