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WHITE PAPER

Chronic Conditions in the United States

A Study of Commercial Claims

February 2, 2026

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Summary

Chronic diseases or conditions are the leading cause of illness, disability and death in the United States. FAIR Health Atlas, an epidemiological reporting platform to be launched in 2026, uses FAIR Health's repository of commercial healthcare claim records—the largest in the nation—to measure prevalence and costs associated with chronic conditions. This study of common chronic conditions in the commercially insured population in the United States in 2024 draws on that platform. The study focuses on prevalence, co-occurring conditions, costs, geography and correlation of prevalence rates to the poverty rate. The key findings, all from 2024, include the following:

- Of 44 common chronic conditions studied, hyperlipidemia, or high cholesterol, was the most common in the commercially insured population, with a crude prevalence[1] of 21.2 percent.
- Some chronic conditions frequently co-occur. In the commercially insured population, 33.4 percent of patients had hyperlipidemia, hypertension, obesity or some combination of these, and 4.3 percent had all three. Half the patients with any one of these conditions had more than one.
- The majority (57.5 percent) of commercially insured patients had at least one chronic condition. Many patients had more than one chronic condition. For example, 11.5 percent of patients had two conditions, and 9.1 percent had three.
- The number of chronic conditions per commercially insured patient per year drives healthcare spending. The average allowed amount[2] for a patient with no chronic conditions was $1,590, while the average allowed amount for a patient with one chronic condition was $3,039. The average allowed amount continued to rise per number of chronic conditions, reaching $21,730 for 10 or more chronic conditions—13.7 times higher than for a patient with no chronic conditions.
- Chronic conditions vary in their median and average number of co-occurring chronic conditions and average allowed amount per year. Of the 44 chronic conditions studied in the commercially insured population, lung cancer had the highest average allowed amount per year ($22,740) and ADHD the lowest ($4,175).[3] Acute myocardial infarction, non-Alzheimer's dementia and Alzheimer's disease had the highest median number of comorbidities (six) and pneumonia and autism the lowest (one). Acute myocardial infarction had the highest average number of co-occurring chronic conditions (6.19) and autism the lowest (1.63).
- When analyzed in pairs, the crude prevalence rates of hypertension, hyperlipidemia, obesity and diabetes[4] had a moderate to strong positive correlation.[5] The prevalence rates of hypertension and diabetes had the strongest positive correlation (86.0 percent); those of obesity and hyperlipidemia had the weakest (45.0 percent).

[1] Crude prevalence is the proportion of the commercially insured population receiving medical services who had a specific condition at a given time, not adjusted for factors such as age and gender.
[2] An allowed amount (also known as an eligible expense) is the maximum amount an insurance plan will pay for a covered healthcare service before application of deductibles or coinsurance. This study includes both in- and out-of-network allowed amounts.
[3] The average allowed amount for a condition, such as lung cancer, is based on the overall spending for all the treatments received by patients with that condition, not just spending for the individual condition.
[4] "Diabetes" in this paper includes both type 1 and type 2 diabetes.
[5] A correlation is positive when one variable increases as the other increases; it is negative when one decreases as the other increases. In this paper, a correlation is regarded as strong if it is 60 percent or higher in either the positive or negative direction, moderate if it is 40 to 59 percent and weak if it is 39 percent or lower. Complete absence of correlation is zero percent. See "11. Correlation and Regression," *BMJ*, accessed December 2, 2025, https://www.bmj.com/about-bmj/resources-readers/publications/statistics-square-one/11-correlation-and-regression.

- The poverty rate (the percentage of the population below the federal poverty level) and the hypertension crude prevalence rate had a moderate positive correlation at 53.5 percent. The number of chronic conditions had a weak positive correlation with the poverty rate (30.9 percent).
- Some clusters of chronic conditions—such as the cluster of hypertension, diabetes, obesity, chronic kidney disease and hyperlipidemia—are more strongly correlated to the poverty rate than others. The prevalence rates of all of the conditions in the cluster just mentioned had a positive correlation to the county-level poverty rate. By contrast, the cancers studied all had negative correlations to the poverty rate, with breast cancer showing a -24.3 percent correlation.

Background

Chronic diseases or conditions are the leading cause of illness, disability and death in the United States.[6] Defined as conditions that last one year or longer and require ongoing medical attention or limit activities of daily living or both,[7] chronic diseases include such conditions as obesity, hypertension, high cholesterol, coronary heart disease, chronic obstructive pulmonary disease, asthma, chronic kidney disease, diabetes, cancer and depression.[8] Patients with chronic conditions have higher inpatient and outpatient utilization compared to patients without them, which accounts in part for the higher costs associated with these conditions.[9] Ninety percent of the nation's healthcare expenditures in 2014 were for the 60 percent of people with one or more chronic conditions, including mental health conditions.[10]

Traditionally, measurement of prevalence of chronic conditions has relied on such sources as survey data or Medicare and Medicaid claims.[11] The Behavioral Risk Factor Surveillance System (BRFSS) from the Centers for Disease Control and Prevention, for example, uses a system of telephone surveys to collect data about health-related risk behaviors, chronic health conditions and use of preventive services,[12] while the Dartmouth Atlas Project used Medicare and Medicaid data to provide information and analysis about national, regional and local healthcare markets, as well as variation in utilization, quality and costs.[13,14]

Traditional measures of prevalence of chronic conditions have often been limited by restricted geographic resolution and long reporting delays.[15,16] FAIR Health Atlas, an epidemiological reporting platform to be

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[6] "About Chronic Diseases," Centers for Disease Control and Prevention (CDC), October 4, 2024, https://www.cdc.gov/chronic-disease/about/index.html.
[7] "About Chronic Diseases," CDC.
[8] Gabriel A. Benavidez, Whitney E. Zahnd, Peiyin Hung and Jan M. Eberth, "Chronic Disease Prevalence in the US: Sociodemographic and Geographic Variations by Zip Code Tabulation Area," *Preventing Chronic Disease* 21 (February 29, 2024): 230267, http://dx.doi.org/10.5888/pcd21.230267.
[9] "Health Care Utilization: The Cost Equation Driving Prices Up," Highmark, accessed August 5, 2025, https://www.highmark.com/employer/thought-leadership/health-insurance-cost-management/health-care-cost-equation.
[10] Christine Buttorff, Teague Ruder and Melissa Bauman, *Multiple Chronic Conditions in the United States*, RAND Corporation, May 26, 2017, https://www.rand.org/pubs/tools/TL221.html.
[11] Institute of Medicine (US) Committee on a National Surveillance System for Cardiovascular and Select Chronic Diseases, "Existing Surveillance Data Sources and Systems," Chapter 5 in *A Nationwide Framework for Surveillance of Cardiovascular and Chronic Lung Diseases* (National Academies Press, 2011), https://www.ncbi.nlm.nih.gov/books/NBK83157/.
[12] "Behavioral Risk Factor Surveillance System," CDC, last reviewed June 4, 2025, https://www.cdc.gov/brfss/index.html.
[13] Kristen K. Bronner and David C. Goodman, "The Dartmouth Atlas of Health Care—Bringing Health Care Analyses to Health Systems, Policymakers, and the Public," *Research in Health Services & Regions* 1, no. 6 (2022), https://doi.org/10.1007/s43999-022-00006-2.
[14] "About," Dartmouth Atlas Project, accessed August 6, 2025, https://www.dartmouthatlas.org/about/.
[15] Institute of Medicine (US) Committee, "Existing Surveillance Data Sources and Systems."
[16] Ruth Ann Jajosky and Samuel L. Groseclose, "Evaluation of Reporting Timeliness of Public Health Surveillance Systems for Infectious Diseases," *BMC Public Health* 4, no. 29 (2004), http://dx.doi.org/10.1186/1471-2458-4-29.

launched in 2026, is nationally representative with local geographic resolution, and presents data as recent as one year old. This platform uses FAIR Health's repository of commercial healthcare claim records—the largest in the nation—to measure prevalence and costs associated with chronic conditions. This study of common chronic conditions in 2024 draws on that platform. The study focuses on prevalence, co-occurring conditions, costs, geography and correlation of prevalence rates to the poverty rate.

Methodology

This study included de-identified patients whose claims in the FAIR Health commercial claims database had diagnosis codes in 2024 matching the diagnosis codes that define chronic conditions in the Centers for Medicare & Medicaid Services (CMS) Chronic Conditions Data Warehouse (CCW).[17] FAIR Health included all the chronic conditions in the main CCW list, *30 CCW Chronic Conditions Algorithms*; also included were selected conditions of interest—the most common and significant ones—from the second of two CCW lists, *Other Chronic Health, Mental Health, and Potentially Disabling Chronic Conditions Algorithms*.

FAIR Health used a "nearest neighbors" model[18] to calculate the prevalence of chronic conditions for each zip code, and then took a population-weighted average[19] for county and state estimates. The total number of patients in each service zip code were first counted, as well as the number of patients with each chronic condition in each service zip code. Because the populations in individual zip codes were not large enough to calculate prevalences, a circular disk was drawn around each service zip code and expanded in one-mile increments until it contained at least 100,000 observed patients. The prevalence of each chronic condition for each disk could then be found by dividing the number of patients with each chronic condition by the total population of the disk. This represented an estimate of the prevalence of a chronic condition in a zip code. County- and state-level prevalence estimates were then calculated using population-weighted averages. National prevalence was constructed in the same way as county prevalence, except the zip code population weights for the entire country were used.

The average allowed amount in this paper is the population-weighted average of the total annual allowed amount for all services received by and reported in the data for each person in a particular geography in 2024. The 90th percentile is the 90th percentile of the total annual allowed amount for each person in a particular geography in 2024.

The denominator for the crude prevalence rates in this study consists of the total number of commercially insured people in the data who received medical services. The FAIR Health database was projected so that it was nationally representative with respect to age, sex and geography; the prevalence was then calculated for the projected observations.

Correlations were calculated between county-level prevalence rates, and between county-level prevalence rates and the poverty rate in each county. Data about the poverty rate—the fraction of the population under the federal poverty level—came from the US Census Bureau's American Community Survey.

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[17] Chronic Conditions Warehouse, *30 CCW Chronic Conditions Algorithms: MBSF_CHRONIC_{YYYY} File*, revised August 2025; and Chronic Conditions Warehouse, *Other Chronic Health, Mental Health, and Potentially Disabling Chronic Conditions Algorithms: MBSF_OTCC_{YYYY} File*, revised August 2025, https://www2.ccwdata.org.
[18] Lance A. Waller and Carol A. Gotway, *Applied Spatial Statistics for Public Health Data* (Wiley-Interscience, 2004), https://alameed.edu.iq/DocumentPdf/Library/eBook/7148.pdf.
[19] Population-weighted mean.

Limitations

The data used in this report comprise claims data for commercially insured patients who are covered by insurers and third-party administrators who voluntarily participate in FAIR Health's data contribution program. Medicare Advantage (Medicare Part C) enrollees are not included, nor are participants in Medicare Parts A, B and D.[20] In addition, data from Medicaid, CHIP and other state and local government insurance programs are not included, nor are data collected regarding uninsured patients.

This is an observational report based on the data FAIR Health receives from commercial payors regarding care rendered to covered patients.[21]

The report was not subject to peer review.

[20] FAIR Health receives the entire collection of claims for traditional Medicare Parts A, B and D under the CMS Qualified Entity Program, but those data are not a source for this report.
[21] Prevalence estimates reflect a nationally representative projection of the observed patient population, with respect to age, sex and geography.

Results

Prevalence

Of 44 common chronic conditions studied, hyperlipidemia, or high cholesterol, was the most common in the commercially insured population in 2024, with a crude prevalence of 21.2 percent (table 1). It was followed by hypertension, or high blood pressure (20.0 percent); anxiety disorders (14.6 percent); obesity (13.2 percent); and mental illness (10.5 percent).[22]

Table 1. Crude prevalence of chronic conditions in the commercially insured population, 2024

Chronic Condition	Percent	Chronic Condition	Percent
Hyperlipidemia	21.2	Heart Failure	1.7
Hypertension	20.0	Bipolar Disorder	1.6
Anxiety Disorders	14.6	Osteoporosis	1.5
Obesity	13.2	Post-Traumatic Stress Disorder (PTSD)	1.3
Mental Illness	10.5	Alcohol Use Disorders	1.1
Arthritis	9.3	Breast Cancer	1.0
Depressive Disorders	8.8	Stroke	1.0
Diabetes	8.4	Autism	0.7
Hypothyroidism	5.6	Prostate Cancer	0.7
Asthma	5.6	Personality Disorders	0.6
Anemia	5.0	Opioid Use Disorder	0.5
Attention-Deficit/Hyperactivity Disorder (ADHD)	4.9	Non-Alzheimer's Dementia	0.5
Cataract	4.2	Leukemia and Lymphoma	0.4
Tobacco Use Disorders	4.2	Acute Myocardial Infarction	0.4
Ischemic Heart Disease	3.6	Schizophrenia	0.4
Chronic Kidney Disease	3.1	Colorectal Cancer	0.3
Chronic Obstructive Pulmonary Disease (COPD)	2.8	Lung Cancer	0.2
Glaucoma	2.5	Alzheimer's Disease	0.2
Benign Prostatic Hyperplasia (BPH)	2.4	Parkinson's Disease	0.2
Pneumonia	2.3	Hip Fracture	0.2
Atrial Fibrillation	2.0	Urologic Cancer	0.2
Drug Use Disorders[23]	1.8	Endometrial Cancer	0.1

[22] The diagnosis codes that define mental illness overlap with those defining depressive disorders, bipolar disorder, personality disorders and schizophrenia. They do not overlap with those defining anxiety disorders, ADHD, autism and PTSD.
[23] The diagnosis codes defining drug use disorders overlap with those defining opioid use disorder.

Some chronic conditions frequently co-occur. In the commercially insured population in 2024, 33.4 percent of patients had hyperlipidemia, hypertension, obesity or some combination of these, and 4.3 percent had all three (figure 1).[24] Half the patients with any one of these conditions had more than one. This is consistent with other research showing that hypertension and dyslipidemia (which includes hyperlipidemia) are the leading comorbidities in patients with obesity.[25]

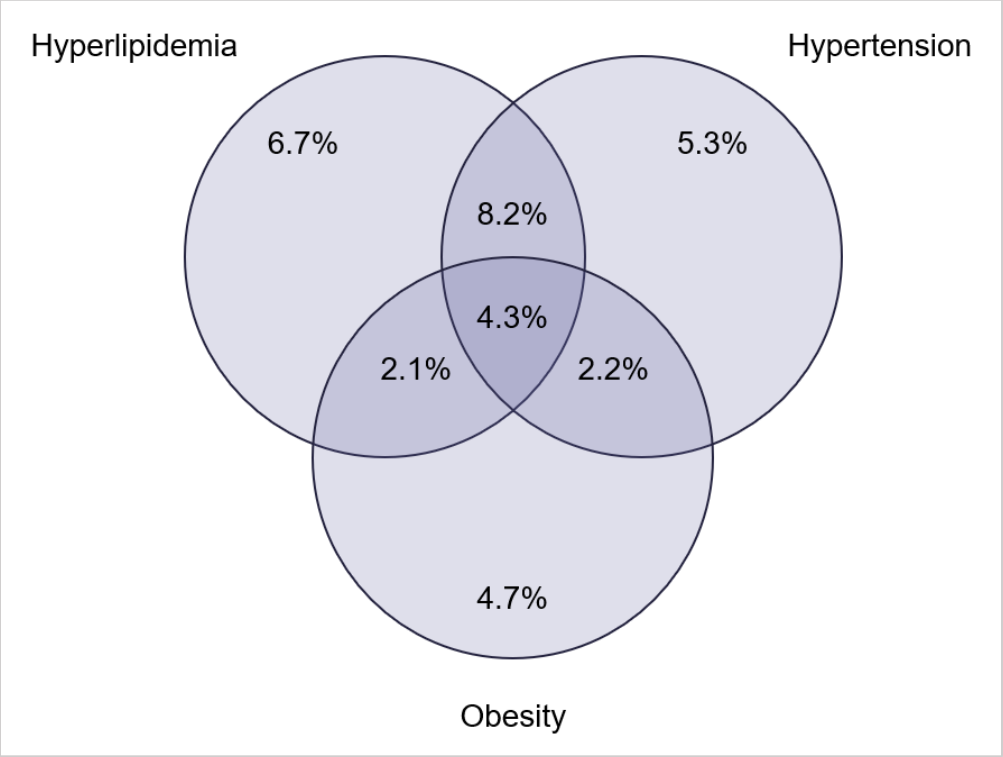

Figure 1. Crude prevalence of hyperlipidemia, hypertension and obesity in the commercially insured population, 2024

[24] Patients can have additional chronic conditions beyond these three.
[25] Jay P. Bae, David R. Nelson, Kristina S. Boye and Kieran J. Mather, "Prevalence of Complications and Comorbidities Associated with Obesity: A Health Insurance Claims Analysis," *BMC Public Health* 25, no. 273 (2025), https://doi.org/10.1186/s12889-024-21061-z.

The majority (57.5 percent) of commercially insured patients in 2024 had at least one of the 44 chronic conditions included in the study; 42.5 percent had none (figure 2). Many patients had more than one chronic condition. For example, 11.5 percent of patients had two conditions, and 9.1 percent had three. For those with at least one chronic condition, the average number of conditions was three.

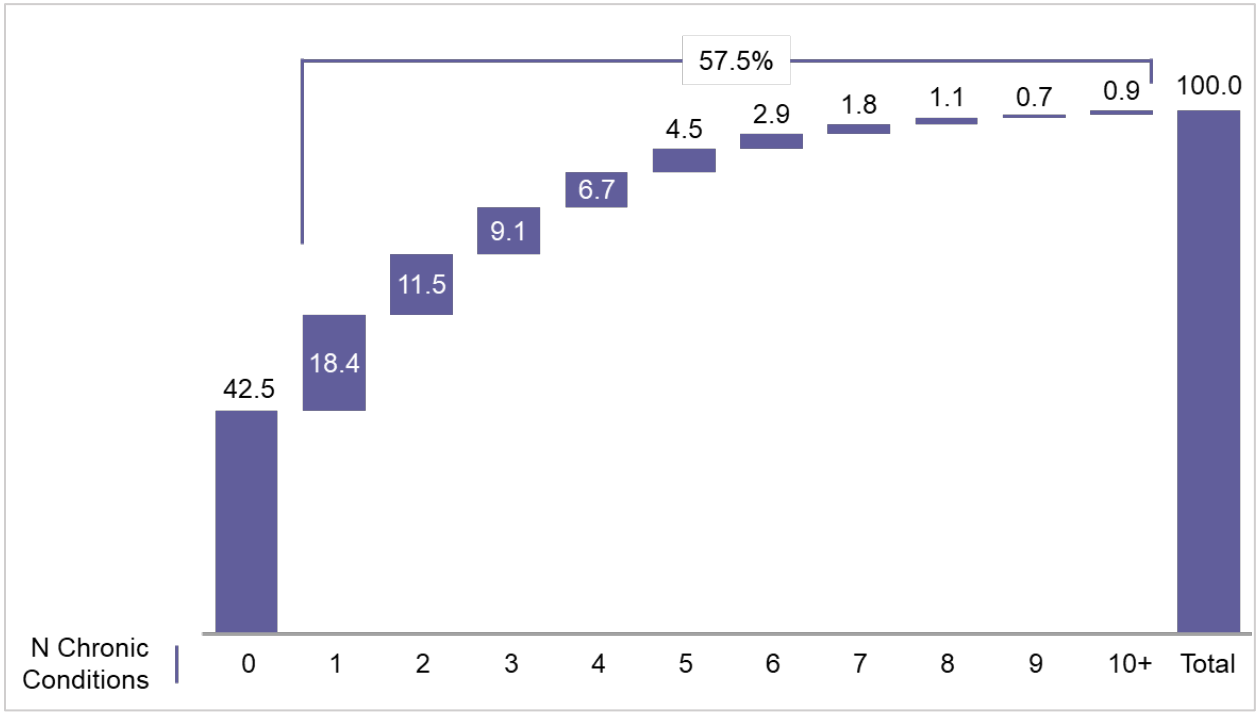

Figure 2. Percent of commercially insured patients with zero or more chronic conditions, 2024

Costs

Figure 3 shows how the number of chronic conditions per commercially insured patient per year drives healthcare spending. The average allowed amount for a patient with no chronic conditions in 2024 was $1,590, while the average allowed amount for a patient with one chronic condition was $3,039 and for a patient with two chronic conditions was $4,116. The average allowed amount continued to rise per number of chronic conditions, reaching $21,730 for 10 or more chronic conditions—13.7 times higher than for patients with no chronic conditions.

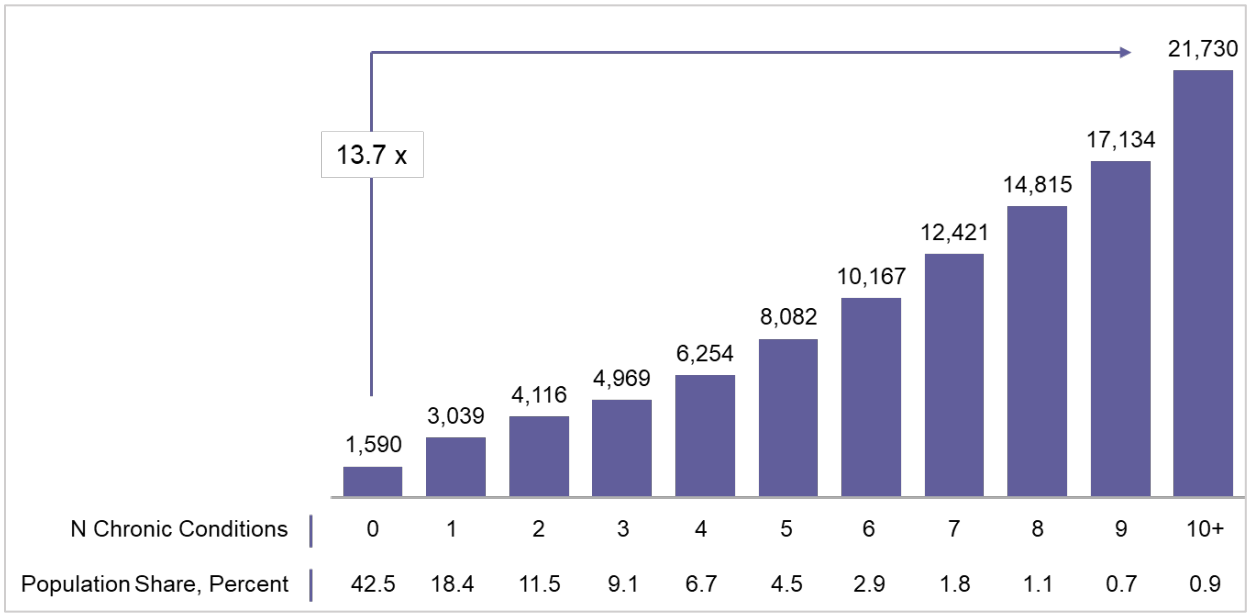

Figure 3. Average allowed amount per commercially insured patient per year by number of chronic conditions, 2024

Although figure 3 shows the average allowed amount for commercially insured patients with a given number of chronic conditions, the average allowed amount for patients with that number of conditions can be considerably higher depending on the specific conditions. For example, as shown in figure 3, the average allowed amount for patients with three chronic conditions in 2024 was $4,969. But, as figure 4 shows, if the three conditions were hyperlipidemia, hypertension and obesity—three frequently co-occurring conditions (figure 1)—the average allowed amount in 2024 was about twice as high, at $9,690. The average allowed amount for patients without any of these three conditions was $2,547.

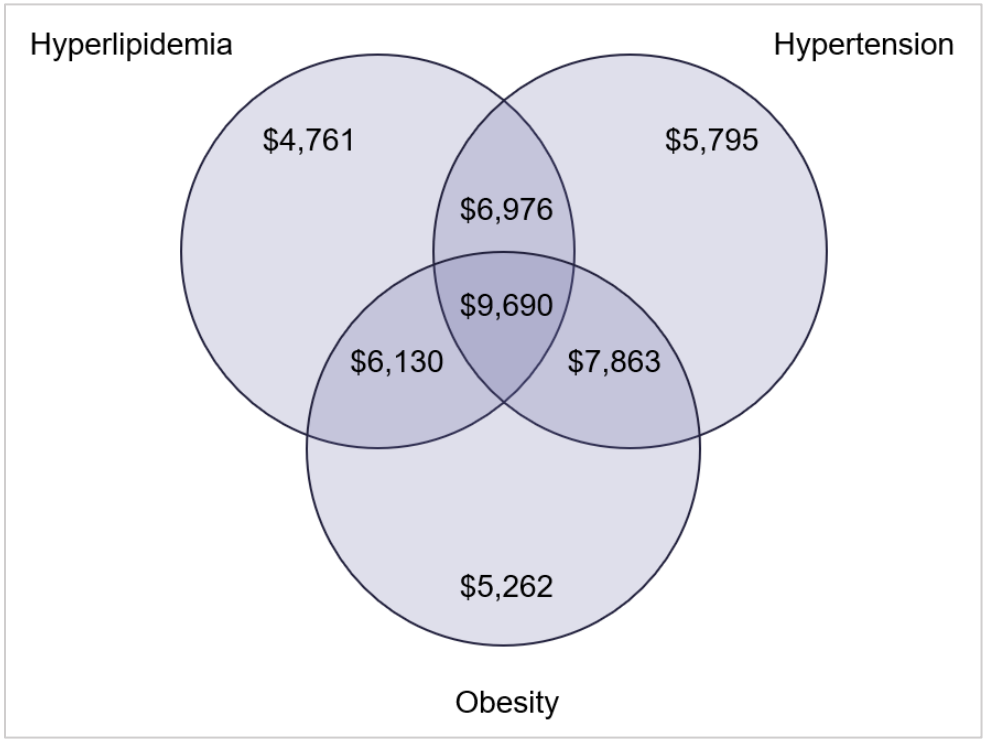

Figure 4. Average allowed amount per commercially insured patient with hyperlipidemia, hypertension or obesity per year, 2024

Chronic conditions vary in their median and average number of co-occurring chronic conditions (comorbidities) and average allowed amount per year (table 2). Of the 44 chronic conditions studied in the commercially insured population, lung cancer had the highest average allowed amount per year ($22,740) and ADHD the lowest ($4,175). Acute myocardial infarction, non-Alzheimer's dementia and Alzheimer's disease had the highest median number of comorbidities (six) and pneumonia and autism the lowest (one). Acute myocardial infarction had the highest average number of comorbidities (6.19) and autism the lowest (1.63).

Table 2. Median and average number of co-occurring chronic conditions (comorbidities) and average allowed amount per year by chronic condition in the commercially insured population, 2024

	Number of Comorbidities				Number of Comorbidities		
Chronic Condition	Median	Average	Average Allowed Amount ($)	Chronic Condition	Median	Average	Average Allowed Amount ($)
Lung Cancer	5	4.88	22,740	PTSD	4	4.33	8,079
Urologic Cancer	4	4.65	15,806	Tobacco	3	3.31	8,042
Endometrial Cancer	4	3.92	15,714	BPH	3	3.92	7,867
Colorectal Cancer	3	3.79	15,563	Osteoporosis	3	3.96	7,604
Acute Myocardial Infarction	6	6.19	14,837	Parkinson's Disease	4	5.01	7,440
Leukemia and Lymphoma	3	3.67	13,682	Autism	1	1.63	7,420
Breast Cancer	3	3.33	13,625	Bipolar Disorder	4	4.2	7,258
Stroke	4	5.13	12,370	Personality Disorders	4	4.71	7,147
Heart Failure	5	5.97	11,728	Depressive Disorders	3	4.02	6,642
Hip Fracture	4	5.03	11,256	Cataract	3	3.59	6,599
Prostate Cancer	3	3.88	10,880	Hypothyroidism	3	3.44	6,455
Opioid Use Disorder	4	4.77	10,502	Asthma	2	2.42	6,435
Anemia	3	3.8	10,314	Mental Illness	3	3.74	6,427
Heart Disease	4	5.05	9,929	Obesity	2	2.99	6,400
Atrial Fibrillation	4	5.04	9,719	Diabetes	3	3.81	6,298
Pneumonia	1	3.54	9,712	Hypertension	3	3.31	6,255
Alcohol Use Disorders	4	3.83	9,403	Anxiety Disorders	2	2.84	6,041
Arthritis	3	3.43	8,990	Non-Alzheimer's Dementia	6	5.99	6,002
Drug Use Disorders	4	4.08	8,892	Hyperlipidemia	3	3.15	5,798
Schizophrenia	5	4.97	8,826	Glaucoma	3	3.54	5,745
Chronic Kidney Disease	4	5.11	8,756	Alzheimer's Disease	6	6.15	4,798
COPD	3	4.38	8,635	ADHD	2	2.05	4,175

While the average allowed amount gives some indication of the costs of chronic conditions, costs can range much higher. As shown in figure 5, the 90th percentile allowed amount per patient per year for patients with one chronic condition in 2024 was $7,286, more than double the average allowed amount of $3,039 for such patients (figure 3).[26] For patients with 10 or more chronic conditions, the 90th percentile allowed amount per patient per year was $61,170, close to triple the average allowed amount of $21,730.

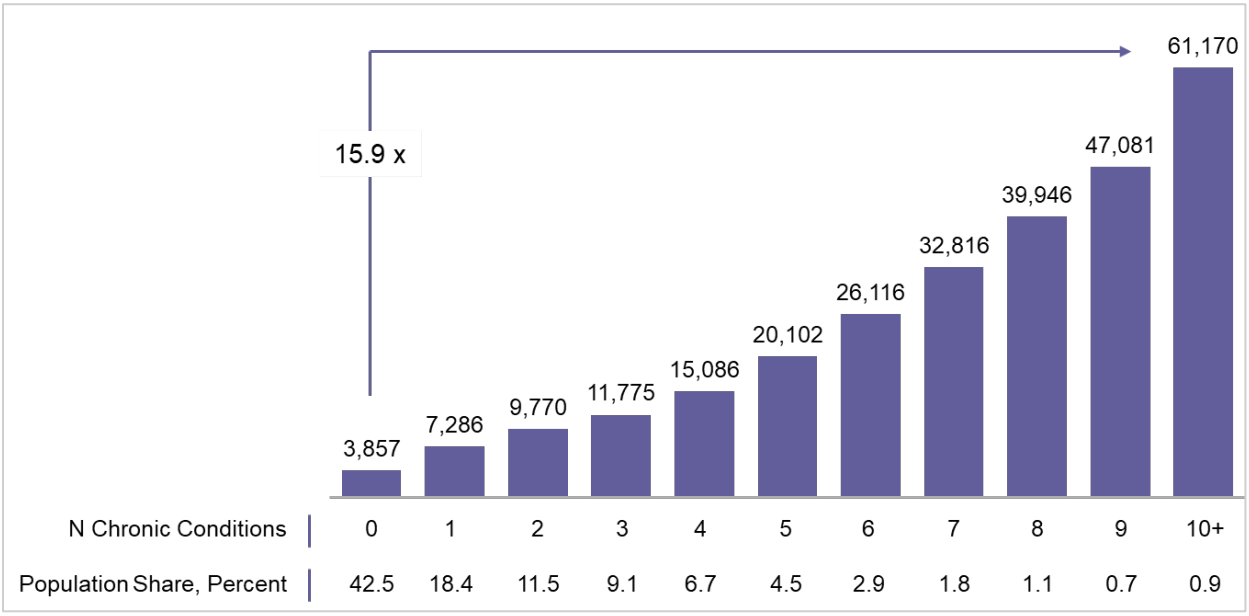

Figure 5. Ninetieth percentile allowed amount per commercially insured patient per year by number of chronic conditions, 2024

[26] A percentile is a position in a distribution of values below which a specified percentage of the values fall. For example, in a distribution of 100 values, 90 percent of the values are equal to or below the value in the 90th position—the 90th percentile.

Geography

In the following figures, the prevalence rates of obesity (figure 6), hyperlipidemia (figure 7), hypertension (figure 8) and diabetes (figure 9) in the commercially insured population in 2024 are mapped by county across the United States. The similarity of the maps—with the Southeast, for example, appearing darker (showing higher prevalence) than much of the rest of the country—is consistent with the known associations among these chronic conditions. Other research has shown that obesity, hyperlipidemia and hypertension are risk factors for type 2 diabetes.[27] Past research has also shown that these four conditions are particularly prevalent in the Southeast.[28]

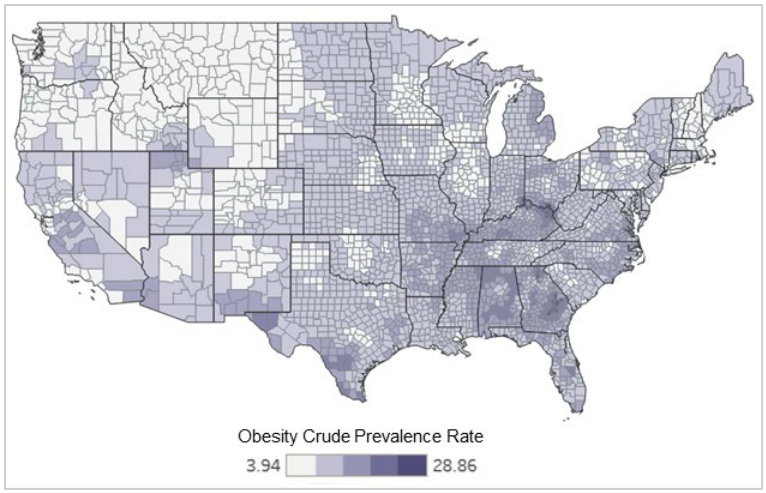

Figure 6. Crude prevalence of obesity in the commercially insured population by county, 2024

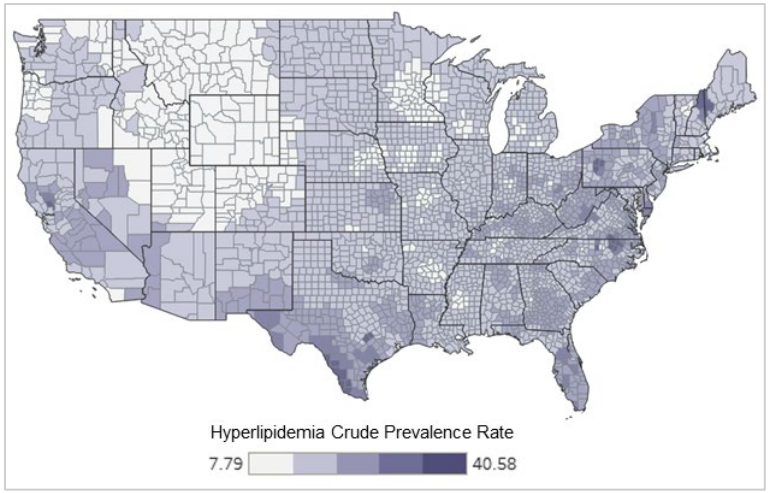

Figure 7. Crude prevalence of hyperlipidemia in the commercially insured population by county, 2024

[27] Leila Ismail, Huned Materwala and Juma Al Kaabi, "Association of Risk Factors with Type 2 Diabetes: A Systematic Review," *Computational and Structural Biotechnology Journal* 19 (March 10, 2021): 1759-85, https://doi.org/10.1016/j.csbj.2021.03.003.

[28] Vibhu Parcha, Rajat Kalra, Sarabjeet S. Suri et al., "Geographic Variation in Cardiovascular Health Among American Adults," *Mayo Clinic Proceedings* 96, no. 7 (2021): P1770-81, https://doi.org/10.1016/j.mayocp.2020.12.034.

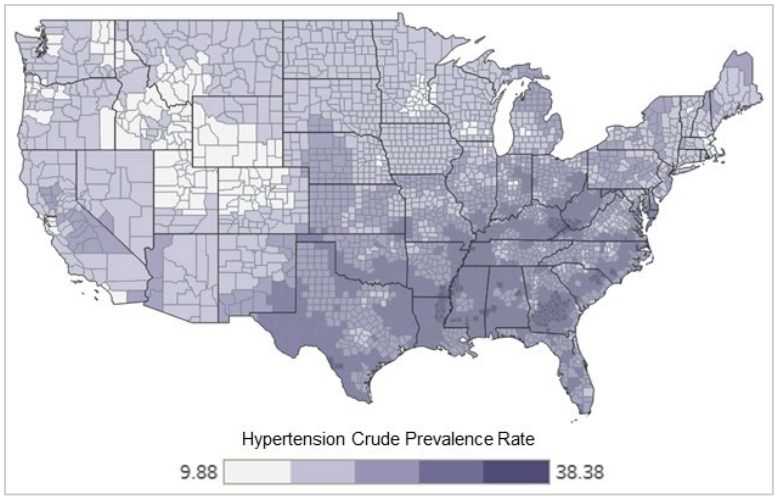

Figure 8. Crude prevalence of hypertension in the commercially insured population by county, 2024

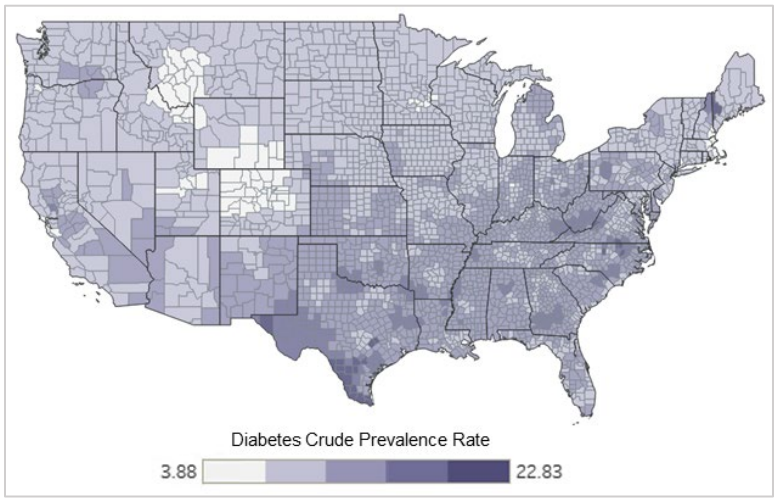

Figure 9. Crude prevalence of diabetes in the commercially insured population by county, 2024

The relationship between the prevalence rates of hypertension and diabetes by county in the commercially insured population in 2024 is measured in figure 10, with each dot representing a county. The prevalence rates of hypertension and diabetes had a strong positive correlation by county at 86.0 percent.

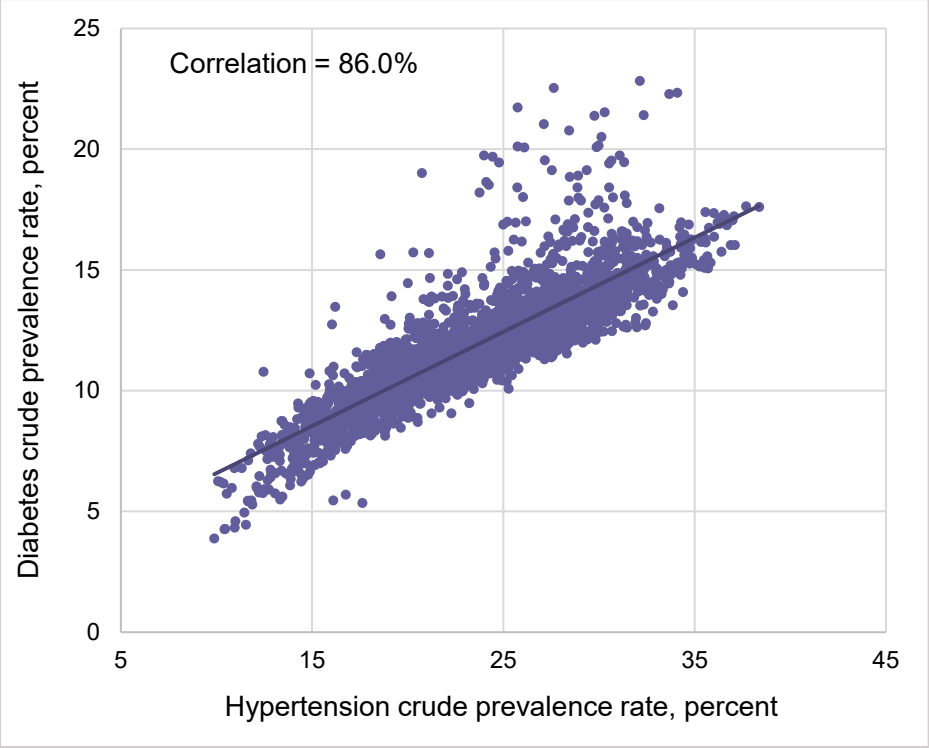

Figure 10. Correlation of hypertension crude prevalence rate with diabetes crude prevalence rate in the commercially insured population by county, 2024

The correlation of crude prevalence rates of hypertension, hyperlipidemia, obesity and diabetes in the commercially insured population in 2024 by the possible pairs among these conditions is shown in figure 11. The prevalence rates of hypertension and diabetes had the strongest positive correlation (86.0 percent; also shown in figure 10); those of obesity and hyperlipidemia had the weakest, though the correlation was still moderately positive (45.0 percent).

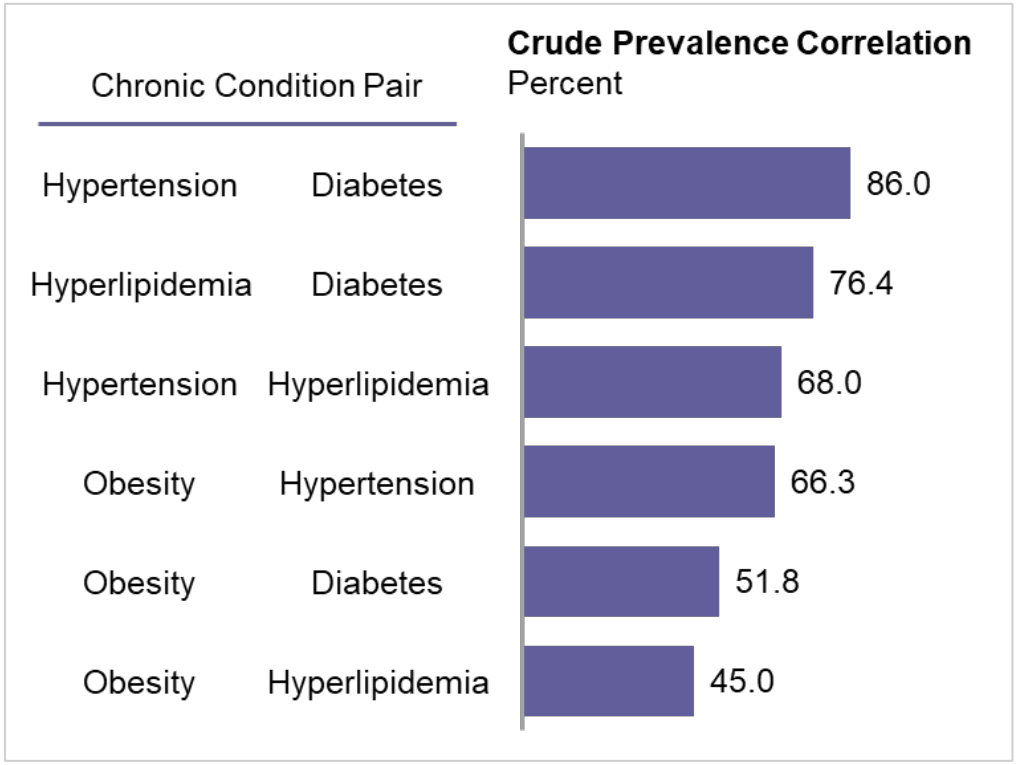

Figure 11. Correlation of crude prevalence rates of hypertension, hyperlipidemia, obesity and diabetes in the commercially insured population by pair, 2024

Poverty Rate

Maps can be used to show, county by county, how a specific chronic condition is related to socioeconomic risk factors such as poverty. Here the crude prevalence rate of hypertension in the commercially insured population (figure 12) is compared to the poverty rate (the percentage of the entire population below the federal poverty level; figure 13) in 2024. The similarity between the two maps is consistent with the association between higher hypertension prevalence and poverty, as established by other research.[29]

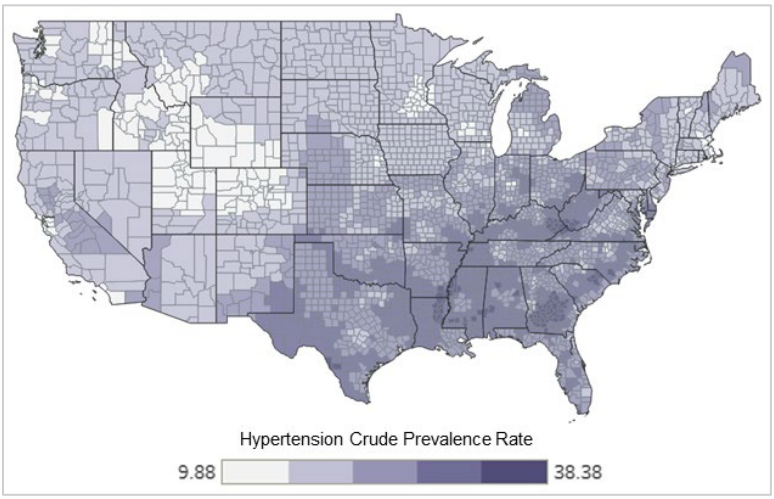

Figure 12. Crude prevalence of hypertension in the commercially insured population by county, 2024

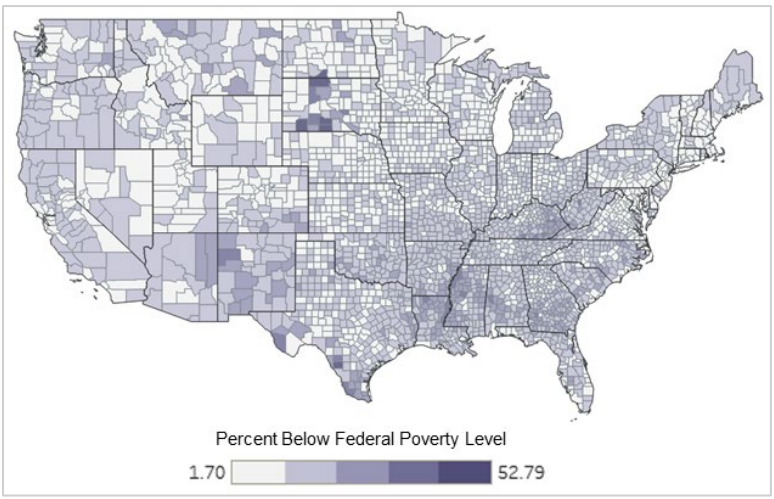

Figure 13. Poverty rate by county, 2024

[29] Faith E. Metlock, Thomas Hinneh, Chitchanok Benjasirisan et al., "Impact of Social Determinants of Health on Hypertension Outcomes: A Systematic Review," *Hypertension* 81, no. 8 (2024): 1675-1700, https://doi.org/10.1161/HYPERTENSIONAHA.123.22571.

The average number of chronic conditions in the commercially insured population is also related to poverty. This can be seen by comparing a map of the average number of chronic conditions by county (figure 14) to that of the poverty rate by county (figure 15). The similarity between the two maps is consistent with the association between higher prevalence of chronic diseases and lower household income—particularly in the Southeast—found by other researchers.[30]

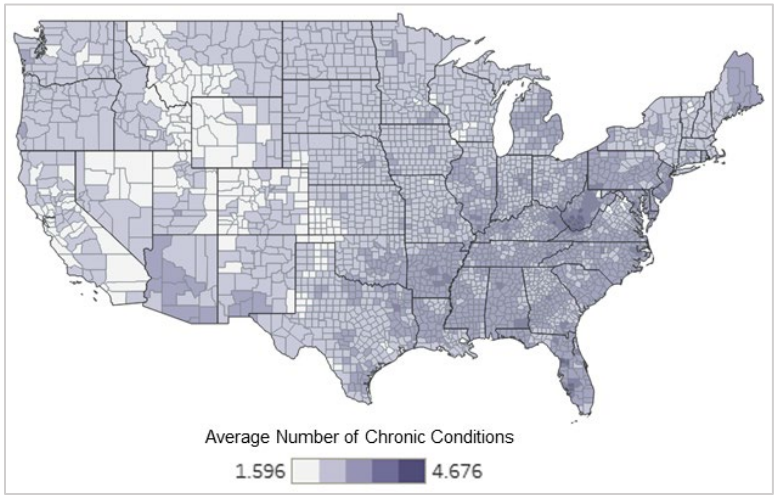

Figure 14. Average number of chronic conditions in the commercially insured population by county, 2024

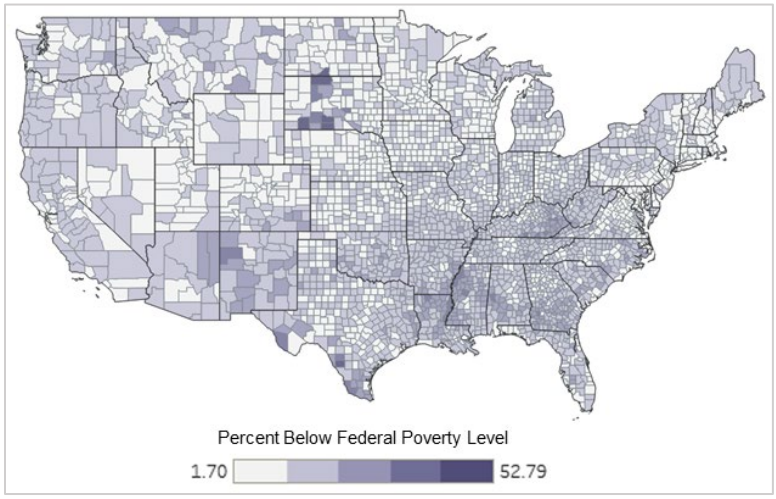

Figure 15. Poverty rate by county, 2024

[30] Benavidez et al., "Chronic Disease Prevalence in the US."

Figure 16 shows the correlation of the crude prevalence rate of hypertension in the commercially insured population with the poverty rate by county in 2024, with each dot representing a county. The hypertension prevalence rate and the poverty rate had a moderate positive correlation by county at 53.5 percent.

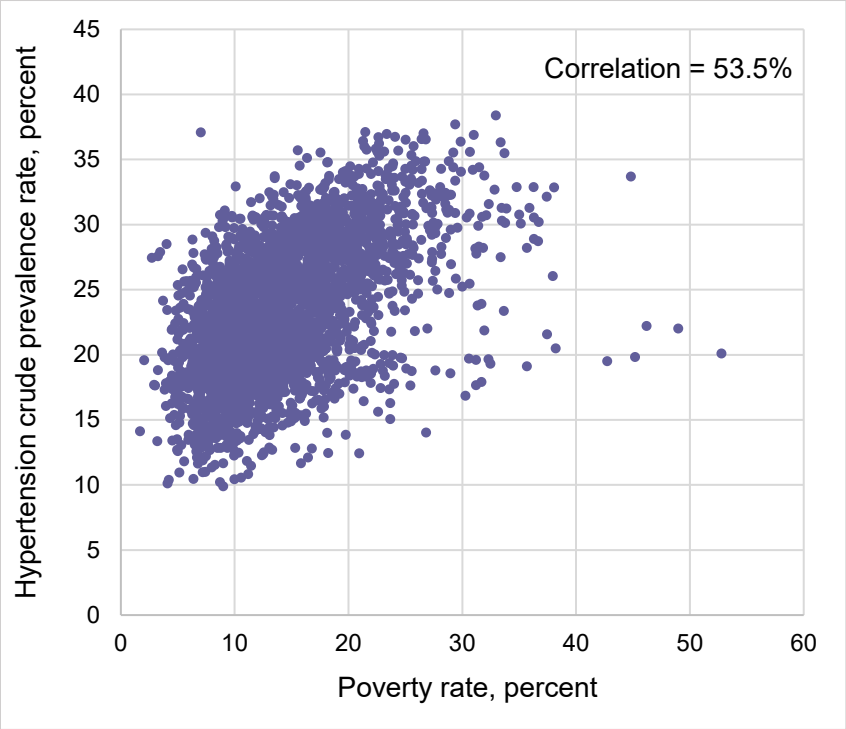

Figure 16. Correlation of hypertension crude prevalence rate in the commercially insured population with poverty rate by county, 2024

The correlation of crude prevalence rates of selected chronic conditions in the commercially insured population with the poverty rate in 2024 is shown in figure 17. These chronic conditions are related: As noted, diabetes is associated with hypertension, obesity and hyperlipidemia; it is also a risk factor for chronic kidney disease.[31] Of these conditions, hypertension had the strongest positive correlation with the poverty rate (a moderate correlation of 53.5 percent; also shown in figure 16), and hyperlipidemia the weakest (28.5 percent). The number of chronic conditions had a weak positive correlation with the poverty rate (30.9 percent).

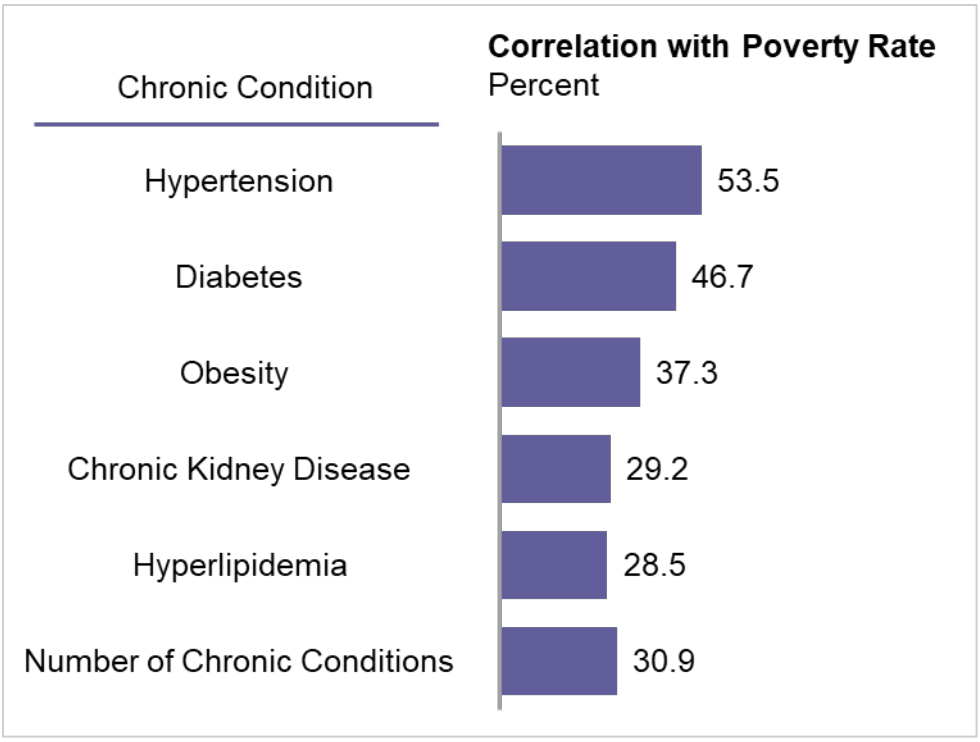

Figure 17. Correlation of crude prevalence rates of selected chronic conditions and number of chronic conditions in the commercially insured population with poverty rate, 2024

[31] CDC, "Risk Factors for Chronic Kidney Disease," May 15, 2024, https://www.cdc.gov/kidney-disease/risk-factors/index.html.

A cluster of chronic conditions is identified when two or more conditions co-occur more frequently than expected because of shared risk factors, causation of one condition by another or high prevalence rates.[32] Some clusters of chronic conditions—such as the cluster of hypertension, diabetes, obesity, chronic kidney disease and hyperlipidemia—are more strongly correlated to the poverty rate than others (table 3). The prevalence rates of all of the conditions in the cluster just mentioned had a positive correlation to the poverty rate in 2024, as did those in the cluster including heart failure, acute myocardial infarction, ischemic heart disease, stroke and atrial fibrillation. However, atrial fibrillation had a very weak positive correlation (0.2 percent), close to no correlation (0.0 percent). By contrast, the cancers shown in table 3 all had negative correlations to the poverty rate, with breast cancer showing a -24.3 percent correlation. This is consistent with other research showing that certain cancers, such as breast cancer,[33] are associated with lower poverty, particularly those in which early detection can find asymptomatic tumors that might otherwise remain undetected.[34] Parkinson's disease had a negative correlation to the poverty rate (-11.0 percent); two other conditions in its cluster—Alzheimer's disease (1.4 percent) and non-Alzheimer's dementia (12.2 percent)—had positive correlations.

Table 3. Selected clusters of chronic conditions showing correlation of crude prevalence rates in the commercially insured population with poverty rate, 2024

	Percent Correlation with Poverty Rate		Percent Correlation with Poverty Rate
Hypertension	53.5	Breast Cancer	-24.3
Diabetes	46.7	Endometrial Cancer	-17.2
Obesity	37.3	Leukemia and Lymphoma	-19.3
Chronic Kidney Disease	29.2	Prostate Cancer	-9.8
Hyperlipidemia	28.5	Urologic Cancer	-2.9
		Colorectal Cancer	-1.0
Heart Failure	28.4	Lung Cancer	-1.9
Acute Myocardial Infarction	20.9		
Ischemic Heart Disease	24.0	Parkinson's Disease	-11.0
Stroke	28.6	Alzheimer's Disease	1.4
Atrial Fibrillation	0.2	Non-Alzheimer's Dementia	12.2

[32] Cother Hajat and Sandeep P. Kishore, "The Case for a Global Focus on Multiple Chronic Conditions," *BMJ Global Health* 3, no. 3 (2018): e000874, https://doi.org/10.1136/bmjgh-2018-000874.
[33] Steven Lehrer, Sheryl Green and Kenneth E. Rosenzweig, "Affluence and Breast Cancer," *Breast Journal* 22, no. 5 (2016): 564-67, https://doi.org/10.1111/tbj.12630.
[34] Francis P. Boscoe, Christopher J. Johnson, Recinda L. Sherman, David G. Stinchcomb, Ge Lin and Kevin A. Henry, "The Relationship Between Area Poverty Rate and Site-Specific Cancer Incidence in the United States," *Cancer* 120, no. 14 (2014): 2191-98, https://doi.org/10.1002/cncr.28632.

Conclusion

This study of chronic conditions in the American commercially insured population in 2024 makes several noteworthy findings. Of 44 common chronic conditions studied, hyperlipidemia was the most common, with a crude prevalence of 21.2 percent. Some chronic conditions frequently co-occurred, such as hyperlipidemia, hypertension and obesity. The majority (57.5 percent) of patients had at least one chronic condition, and many patients had more than one. For example, 11.5 percent of patients had two conditions, and 9.1 percent had three.

The number of chronic conditions per patient per year drove healthcare spending. The average allowed amount for a patient with no chronic conditions was $1,590, while the average allowed amount for a patient with one chronic condition was $3,039. The average allowed amount continued to rise per number of chronic conditions, reaching $21,730 for 10 or more chronic conditions.

Chronic conditions varied in their median and average number of comorbidities and average allowed amount per year. Of the conditions studied, lung cancer had the highest average allowed amount per year ($22,740) and ADHD the lowest ($4,175). Acute myocardial infarction had the highest average number of comorbidities (6.19) and autism the lowest (1.63).

The crude prevalence rates of hypertension, hyperlipidemia, obesity and diabetes had a moderate to strong positive correlation when analyzed in pairs. The prevalence rates of hypertension and diabetes had the strongest positive correlation (86.0 percent); those of obesity and hyperlipidemia had the weakest (45.0 percent).

The poverty rate and the hypertension crude prevalence rate had a moderate positive correlation at 53.5 percent. The number of chronic conditions had a weak positive correlation with the poverty rate (30.9 percent). Some clusters of chronic conditions were more strongly correlated to the poverty rate than others. The prevalence rates of hypertension and all of the other conditions in its cluster (i.e., diabetes, obesity, chronic kidney disease and hyperlipidemia) had a positive correlation to the poverty rate. By contrast, the cancers studied all had negative correlations to the poverty rate, with breast cancer showing a -24.3 percent correlation.

The findings in this report have implications for stakeholders across the healthcare spectrum, including patients, providers, payors, policy makers and researchers. The report also demonstrates some of the capabilities of the forthcoming FAIR Health Atlas on which it is based. Among those capabilities are measuring chronic condition prevalence, comorbidities and costs in the commercially insured population; mapping the prevalence of chronic conditions; using correlations to measure how closely chronic condition prevalence rates are related; and using correlations to measure how closely chronic conditions are related to risk factors such as poverty.

About FAIR Health

FAIR Health's mission is to supply objective, unbiased information for all stakeholders to improve healthcare quality, access and affordability. It holds the nation's largest collection of commercial healthcare claims data, which is growing at a rate of about four billion claim records a year. A national Qualified Entity certified by CMS, FAIR Health also receives all claims for individuals enrolled in traditional Medicare Parts A, B and D. As a testament to its reliability and objectivity, FAIR Health's data products—including pricing benchmarks and custom analytics—are widely used by commercial insurers and self-insurers, providers, hospitals and healthcare systems, government, researchers and more. FAIR Health has been designated an official data source for state health programs, including workers' compensation and personal injury protection (PIP) programs, and surprise billing laws that protect consumers. FAIR Health's free consumer website and mobile app, available in English and Spanish, enable consumers to estimate and plan for their healthcare expenses and offer a rich educational platform on health insurance. The website has been honored by the White House Summit on Smart Disclosure, the Agency for Healthcare Research and Quality (AHRQ), URAC, the eHealthcare Leadership Awards, appPicker, *Employee Benefit News* and *Kiplinger's Personal Finance.* FAIR Health is a national, 501(c)(3) nonprofit organization. For more information on FAIR Health, visit fairhealth.org.

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