Community Health Needs Assessment

Greater Cincinnati Tri-State Region

2024 Report

THE HEALTH COLLABORATIVE

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Acknowledgments

The Health Collaborative (THC) contracted with the Health Policy Institute of Ohio (HPIO) to facilitate development of the Regional Community Health Needs Assessment (CHNA). THC and HPIO sincerely thank all partners for contributing their ideas and expertise to this work (Appendix A contains a full list of partner organizations). Facilitating a comprehensive Regional CHNA process and creating a high-quality report was made possible by their generous commitment of their time and expertise.

Overview

Regional vision: Every individual and community in the region should have equitable access and support to achieve their desired health outcomes. Achieving this vision requires that communities have what they need to be healthy and that our policies, systems, and environments advance health for every individual and family. The Regional Community Health Needs Assessment (CHNA) moves towards this vision by assessing the most significant health needs in the region and defining priorities for collective action.

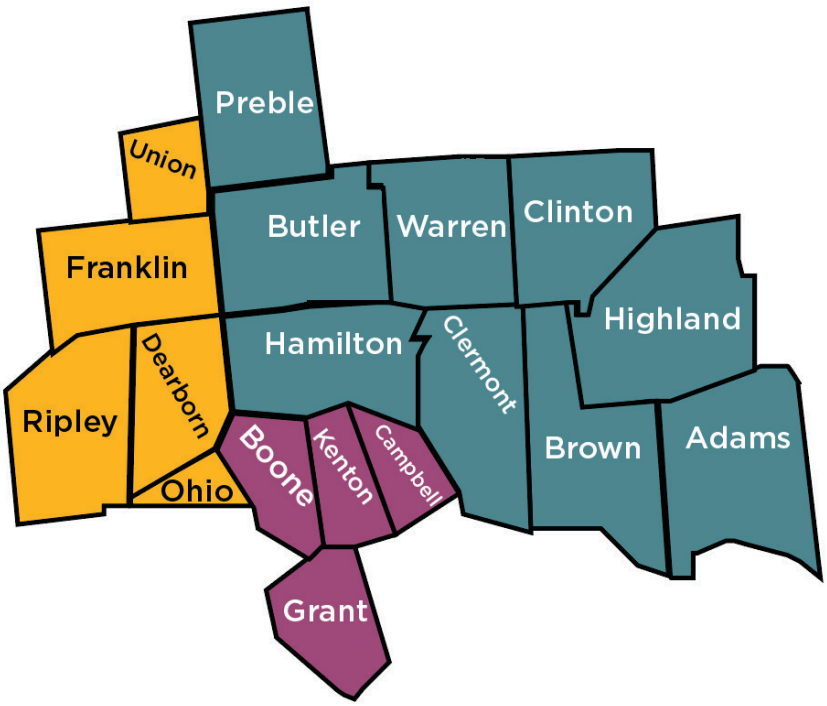
What is the Regional CHNA?

Every three years, the Greater Cincinnati Tri-State Region conducts a Regional CHNA to evaluate the health and well-being of its 18-counties and identify opportunities for collective action. The Regional CHNA is a resource that can be used by partners across sectors, including policymakers, to increase access to data, guide health improvement, and advance equity.

The Regional CHNA informs the 2025-2027 Collective Health Agenda, a Regional Community Health Improvement Plan (CHIP) and roadmap to advance health and equity in the region. It builds upon progress and lessons learned from the **2021 Regional CHNA** and the **2022-2024 Regional CHIP**.

The Regional CHNA report:

- Defines regional health priorities
- Describes the factors that shape the region's health and well-being
- Lists the region's significant health needs
- Describes progress made since the previous Regional CHNA and CHIP



The framework for collective action (figure 1) lays out a comprehensive approach to achieving the region's vision. The approach advances collective action by addressing the factors that shape our health and well-being, measuring if health is improving, and mobilizing community assets and resources.

Figure 1. **Framework for collective action**

How was the Regional CHNA developed?

1. Planned the Regional CHNA approach and methodology based on listening sessions, feedback, and input from the community
2. Formed Regional CHNA Advisory Committee, Special Populations Task Force, and Public Health Task Force
3. Compiled and analyzed primary and secondary data on:
   a. Systems of power, privilege, and oppression
   b. Social determinants of health
   c. Health outcomes and behaviors
4. Launched the Community Partnership Network pilot (see page 47 for details)
5. Hosted a session to review, explore, and interpret the analyzed data
6. Conducted a pre-prioritization survey to identify alignment among partners' priorities
7. Identified 17 significant health needs
8. Prioritized 3 health needs for collective action
9. For each prioritized health need, identified:
   a. Populations who face the greatest barriers
   b. Resources and assets that could be mobilized in the region

The Regional CHNA by the numbers:

- Compiled 49 secondary, quantitative data metrics from 34 different sources
- Analyzed 18 Ohio Hospital Association data metrics
- Reviewed seven other primary and secondary regional data sources such as community surveys, data from 2-1-1 calls, and recent community reports
- Disaggregated 32 metrics by characteristics such as race, ethnicity, age, and income
- Hosted 12 Advisory Committee meetings and six Task Force meetings, which included 45 total partner organizations

For more detail: Appendix A describes the Regional CHNA advisory structure, Appendices C and D describe the data collection and analysis methodology, and Appendix E describes the prioritization process.

Aligning on principles for collective action

The Regional CHNA's conceptual framework (figure 1) outlines three principles for collective action: equity, collaboration, and community voice. The Regional CHNA put these principles into practice by:

Equity

- Identifying opportunities to foster systems, policies, and beliefs that dismantle systems of power, privilege, and oppression
- Disaggregating data by characteristics such as race, ethnicity, age, and income to identify disparities and inequities
- Defining populations who face the greatest barriers for regional priorities with the goal of eliminating disparities across the region

Collaboration

- Building partnerships across health and non-health-specific sectors to lead the Regional CHNA process
- Leaning on alignment and shared decision-making to drive health improvement strategies

Community voice

- Analyzing primary data, including community surveys and focus groups, to center lived experiences and perspectives
- Engaging grassroots organizations and others who work directly with marginalized populations in the advisory structure to guide the Regional CHNA process
- Launching the Community Partnership Network pilot to spark bidirectional communication between Regional CHNA partners and community members

Community Partnership Network

The Health Collaborative launched the Community Partnership Network (CPN) in July 2024 to center equity and community voice in the assessment and planning process, increase bidirectional communication on progress, and minimize the burden of "new" data collection. The CPN leverages existing community meetings, momentum, and assets to strengthen connective tissue and partnership to advance shared goals for community health. Currently in an initial pilot phase, existing community partnerships are co-designing a framework for actionability and sustainability of the CPN.

More information on how collaboration and community voice were used to develop the Regional CHNA is provided in Appendix B.

How can I use the Regional CHNA?

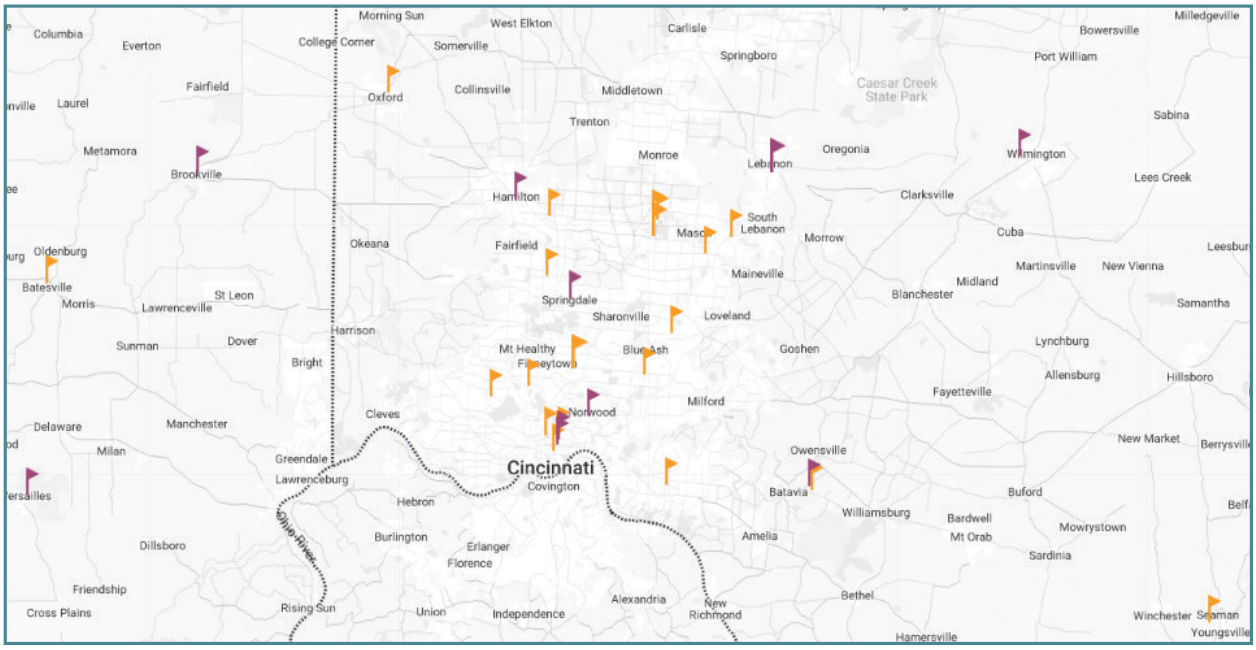
Partners across the region can use the Regional CHNA to:

1. **Share data and information**. Post graphics on social media, share data and information in community presentations, and forward the report to partners and community members.
2. **Align health improvement efforts.** Partner and collaborate across and within sectors to improve outcomes in the region.
3. **Advocate for funding and policy change.** Reference the Regional CHNA in research and grant applications and use it in conversations with state and local policymakers.
4. **Advance equity.** Target resources and tailor evidence-based practices to meet the needs of populations who face the greatest barriers outlined in the Regional CHNA. Measure progress towards eliminating disparities and inequities in health and well-being across the region using the data provided in the Regional CHNA report.
5. **Inform community investment.** Funders can allocate funding and resources and provide technical assistance related to the priorities outlined in the Regional CHNA.

About the region

The region for the CHNA includes 18 counties across Ohio, Indiana, and Kentucky with a variety of health department and hospital partners (displayed in figure 2).

Figure 2. **Greater Cincinnati Tri-State region hospital and health department partners**



Hospitals Local health departments

Regional hospitals, health departments, and other partner organizations are listed in Appendix A.

Population trends and demographics

The region's population grew by 5% between 2008 and 2022 to 2,404,540 people. The region has also become more racially and ethnically diverse, with a 1,062% increase in the Hispanic/Latino population, a 120% increase in the population that is two or more races (non-Hispanic), and 56% increase in the Asian (non-Hispanic) population during that same time. Figure 3 shows an overview of data on the region's demographics.

Figure 3. **CHNA region demographics, 2018-2022**

Total population	**2,404,540**
Age	
0-17	**23%**
18-24	**9%**
25-64	**51%**
65 years and over	**16%**
Race/Ethnicity	
White, non-Hispanic	**79%**
Black/African American, non-Hispanic	**11%**
Asian, non-Hispanic	**3%**
Two or more races, non-Hispanic	**3%**
Hispanic/Latino	**4%**
Household income	
0-$29,999	**19%**
$30,000-$59,999	**21%**
$60,000-$99,999	**23%**
$100,000-$149,999	**18%**
$150,000+	**19%**
Language	
Speaks only English at home	**94%**
Speaks a language other than English at home	**6%**
Immigration status	
U.S. citizen	**97%**
Not a U.S. citizen	**3%**
Other characteristics	
Uninsured	**6%**
Veteran population	**7%**
Population with disabilities	**13%**

Source: U.S. Census Bureau, 2018-2022 American Community Survey 5-year estimates

Regional health priorities

Every neighbor and community in the region deserves dignity, health, and well-being. However, the resources and environments that support health are not equally — or fairly — available to all people. Many groups and communities face barriers to health where they live, work, and play.

To improve health, address community conditions that undermine health, and tackle the systems that prevent some of our neighbors from living long and healthy lives, CHNA partners selected the following three priorities for collective action:

Mental health treatment and prevention

Homelessness prevention and housing stability

Heart disease and stroke prevention and treatment

Regional priorities, informed by data and community voice, were selected by CHNA partners using the following criteria:

1. **Capacity and feasibility:** Does our region have the ability to address this health need?
2. **Connection between factors and outcomes:** To what degree do the prioritized structural/social determinants contribute to prioritized health outcomes?
3. **Equity:** Would addressing this health need significantly address health disparities?
4. **Burden and severity:** Would addressing this health need have an impact on the greatest number of community members?
5. **Ability to track progress:** Are there indicators that can be used to measure progress over time?

More information on how these priorities were selected is available in Appendix E.

Some groups and areas in the region face barriers to health that are rooted in inequities like economic injustice and racism. This can lead to disparities, or systematic differences in outcomes, experienced across populations and communities. Each of the three priority sections that follow include information on **populations who face the greatest barriers** related to that topic.

Each of the three priority sections also contains an inventory of **regional resources and assets** related to that topic. The assets and resources listed are meant to foster connection and guide collaboration across the region, but they are not exhaustive. While this list may serve as a starting point, when embarking on specific efforts across the region, it is important to take stock of local resources and assets that pertain to that effort and geography. If you have recommendations to add, please email **communityhealth@healthcollab.org**.

Priority 1

Mental health treatment and prevention

Mental health treatment and prevention are crucial for our health and the health of our communities. Mental health is closely linked to physical health and can be impacted by factors such as relationships, access to employment and economic opportunities, and the environment in which people live in.[1] Lack of timely and affordable access to mental health services can contribute to poor mental health, while connected, supportive communities with access to quality employment, housing, and education can promote positive mental health.[2]

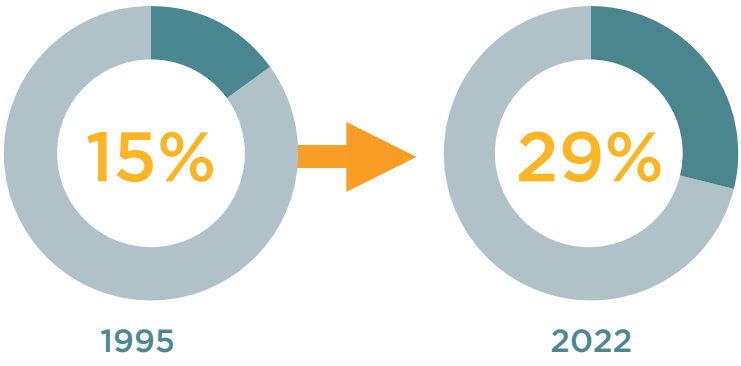
Key insights on mental health outcomes in the region

Regional data on mental health shows:

- The percentage of adults with depression in the region has risen by 93% over the last 27 years and an estimated 1 in 5 adults (17%) report frequent mental distress.[3]
- The number of deaths due to suicide in the region is approximately 10% higher than the national average and 20% higher than the national Healthy People 2030 benchmark.[4]
- Community members often do not have a way to find needed services and to identify trusted mental health providers.[5]
- Barriers to accessing treatment include stigma, lack of insurance coverage, limited availability of providers, and a lack of culturally responsive mental health services.[6]
- As of 2023, only about 18% of residents in the region had heard about the 988 National Suicide Prevention Lifeline.[7]

The percentage of adults in the Greater Cincinnati region with depression nearly doubled since 1995 (displayed in figure 4).

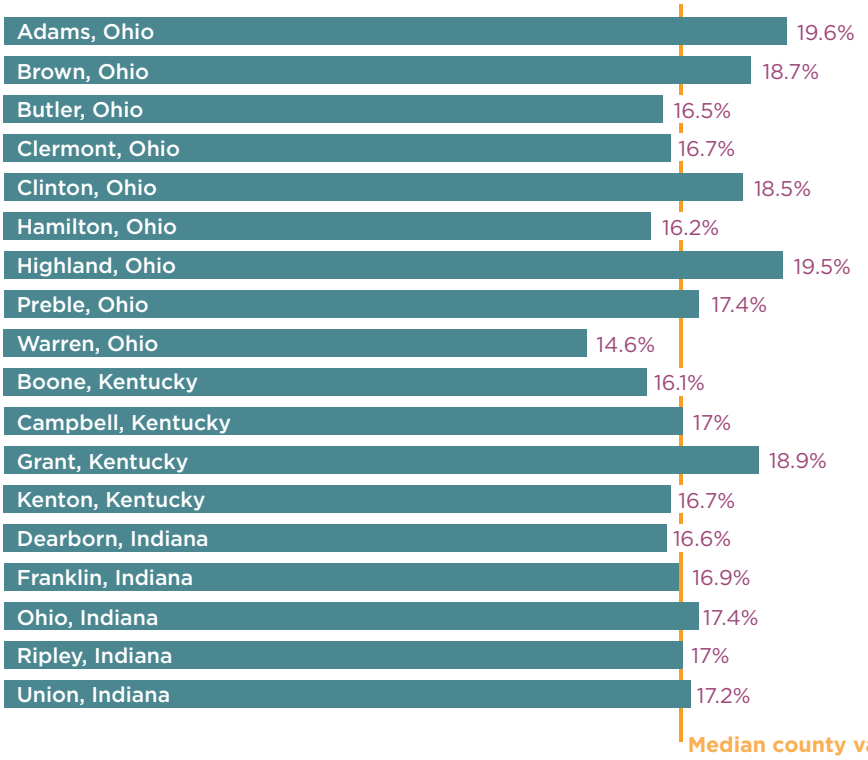
Figure 4. **Depression, 1995 and 2022**



Note: The region measured by Interact for Health includes 22 counties across Ohio, Kentucky, and Indiana.
Source: Interact for Health, Our Health, Our Opportunity Report

About 1 in 5 adults (17%) in the region report experiencing 14 or more days of poor mental health per month (exhibited by figure 5).

Figure 5. **Frequent mental distress, by county, 2021**

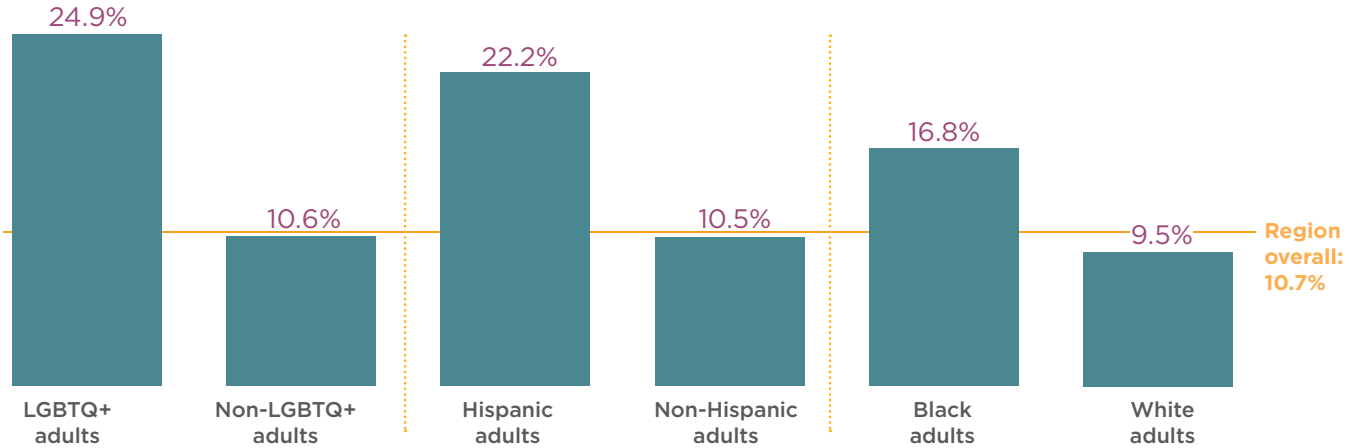


Source: Behavioral Risk Factor Surveillance System, as compiled by County Health Rankings and Roadmaps

There are notable disparities in access to mental health treatment by sexual orientation, gender identity, race, and ethnicity in the region. LGBTQ+ survey respondents reported higher rates of not receiving counseling or therapy when they needed it compared to non-LGBTQ+ residents. Hispanic and Black residents also reported not receiving needed treatment at higher rates than non-Hispanic and white residents, respectively (presented in figure 6).

Figure 6. **Access to mental health treatment, by race, ethnicity, sexual orientation, and gender identity, 2022**

Percent of adults who reported that there was a time in the past 12 months when they thought they needed counseling or therapy but did not get it



Note: The region measured by Interact for Health includes 22 counties across Ohio, Kentucky, and Indiana.
Source: Interact for Health and University of Cincinnati Institute for Policy Research, 2022 Community Health Status Survey

Voices from the community

In focus groups, community members noted difficulty accessing mental health treatment, particularly for marginalized populations.

"For kids not born in [the] U.S., they don't have the support to get to mental health. For one reason is the free mental health services, there are not enough appointments. Most of the professionals that give mental health don't accept anybody without insurance..."

"A lot of times, veterans don't necessarily have access to the mental health services they may need. It's not necessarily because it's not available, it's because of not knowing or not being able to connect."
— 2021 focus group participants

How does the region compare to the nation?

The region performs worse than the U.S. overall on measures of frequent mental distress (i.e., the percent of adults who reported 14 or more days of poor mental health per month) and suicide deaths as displayed in figure 7.

Figure 7. **National benchmarks for mental health***

	Regional value	U.S. overall	Healthy People 2030 benchmark	Region compared to U.S.	Region compared to Healthy People 2030 benchmark
Frequent mental distress (2021)	**17.0%****	**14.6%**	**N/A**	**Worse**	**N/A**
Suicide deaths (2017-2021)	**15.5**	**14** (2021)	**12.8**	**Worse**	**Worse**

*Benchmark comparisons are a calculation of the difference between the regional value, the value for the U.S. overall, and available national Healthy People 2030 benchmarks. In the Regional CHNA report, metrics that have less than 10% difference between the regional and benchmark values are classified as performing the "same." Metrics that have a difference of 10% or greater are classified as "better" or "worse."
Data note: Regional values ** are the median of all available counties.
Sources: Information on regional values can be found in the data appendix spreadsheet. Data for the U.S. overall value for frequent mental distress is from the **CDC BRFSS**. U.S. overall data for suicide deaths is from the **National Institute of Mental Health**.

There is significant alignment between the regional CHNA and **Cincinnati Children's Community Health Needs Assessment**, including in areas such as child and youth mental health and child and youth chronic disease.

Populations who face the greatest barriers to mental health treatment and prevention

The following groups and communities in the region often experience policies, practices, and environments that create barriers to mental health treatment and prevention:

- Appalachian and rural communities
- People of color
- LGBTQ+ residents
- People with disabilities
- People with less educational attainment
- People with lower incomes
- Women/female residents
- Youth and young adults

Regional resources and assets to address mental health

The following resources and assets are available across the region to impact mental health treatment and prevention:

General/prevention

- 1n5
- All-In Cincinnati
- Beech Acres Parenting Center
- Best Point Education & Behavioral Health
- BIPOC Mental and Behavioral Health Provider Directory
- Butler Behavioral Health
- Catholic Charities Southwestern Ohio
- Center for Healing the Hurt
- Centerpoint Health
- Central Clinic Behavioral Health
- Child Focus (Norwood, Eastgate, Mt. Orab)
- Child Mind Institute
- Envision Partnerships
- Federally Qualified Health Centers (FQHCs)
- FindHelpNowKY.org
- Greater Cincinnati Behavioral Health Services
- Greater Cincinnati Foundation
- GreenLight Fund
- Haile Foundation
- Hamilton County Addiction Response Coalition (ARC)
- Hamilton County African American Engagement Workgroup
- HealthSource of Ohio
- HEY! (Hopeful Empowered Youth) Cincinnati
- Hospitals and health systems
- Joe Burrow Foundation
- Lebanon Counseling Center
- Lighthouse Youth Services
- Mental Health America of Northern Kentucky and Southwest Ohio
- Mental Health and Addiction Advocacy Coalition (MHAC)
- Mental Health and Addiction Services Recovery Boards
- Middletown Counseling Center
- Millstone Fund
- MindPeace
- Modern Psychiatry and Wellness
- NAMI Southwest Ohio
- NeighborHub Health
- NewPath Child and Family Solutions
- Preston Brown Foundation
- PreventionFIRST!
- Public Health Departments
- State departments of mental and behavioral health
- Talbert House
- Tristate Trauma Network
- UMADOP of Cincinnati
- Urban League Greater Southwestern Ohio
- Hotlines:
  - 2-1-1 resource hotline
  - Central Clinic/ Connections (513) 558-8888
  - Consumer Warmline (513) 931-WARM
  - Mental Health Hotline (513) 281-CARE

Crisis

- Central Clinic (Mental Health Access Point – MHAP)
- Charlie Health
- Freestanding Inpatient Psychiatric Units
- Georgetown Behavioral Hospital
- Mercy Health — Clermont Clinic
- Mobile Response and Stabilization Services (MRSS) Ohio
- Psychiatric Emergency Services (PES) at UC Health
- Suicide prevention coalitions
- Summit Behavioral Healthcare
- SUN Behavioral Health
- Women Helping Women
- Hotlines:
  - 9-8-8
  - Mobile Crisis Team (Mental Health Crisis) (513) 574-5098
  - Substance Abuse Crisis Response AIM (513) 620-RING (7464)
  - Veterans Hotline (513) 281-VETS (8387)

Additional information

- **Mental Health Data and Statistics, Centers for Disease Control and Prevention**. A list of data resources that provide up-to-date statistics on mental health.
- **Trends in State Mental Health Policy, National Alliance on Mental Illness**. A report on mental health challenges and various policy options for prevention in the United States.

Priority 2

Homelessness prevention and housing stability

Safe and stable housing is vital for our health and well-being. This includes affordable rent, adequate space for household members, and avoiding frequent moves within short periods. High housing costs can limit financial resources for basic needs like child care, nutritious food, and health care.[8] Additionally, poor-quality housing can cause chronic stress, leading to health issues such as high blood pressure and worse mental health.[9]

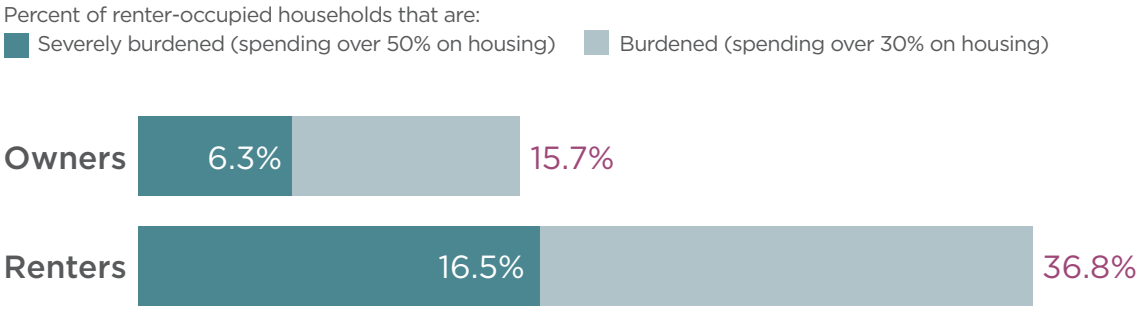
Key insights on housing and homelessness in the region

Regional data on housing and homelessness finds:

- Housing cost burden (spending 30% or more of income on housing costs) in the region is approximately 45% higher than the Healthy People 2030 benchmark.[10]
- There are stark disparities in housing outcomes across the region. For example, Black residents and residents with low incomes are more likely to face challenges with housing stability such as homelessness, eviction, and housing cost burden.[11]
- There is a need for homelessness and housing support services, particularly for Black residents, men, and people who have been incarcerated.[12]
- Gentrification has increased housing costs and displaced those seeking affordable housing.[13]
- Households under 150% of the federal poverty level (FPL) were less likely to experience housing stability than households above 150% FPL.[14]

Sixteen percent of homeowners and 37% of renters in the region are housing cost burdened. Of those who are housing cost burdened, approximately 6% of homeowners are estimated to be housing cost burdened and 17% of renters are severely housing cost burdened (spending over 50% of their income on housing) (displayed in figure 8). Sixty percent of households in the region making less than $50,000 annually are housing cost burdened.[15]

Figure 8. **Housing cost burden, by severity and household type, 2018-2022**

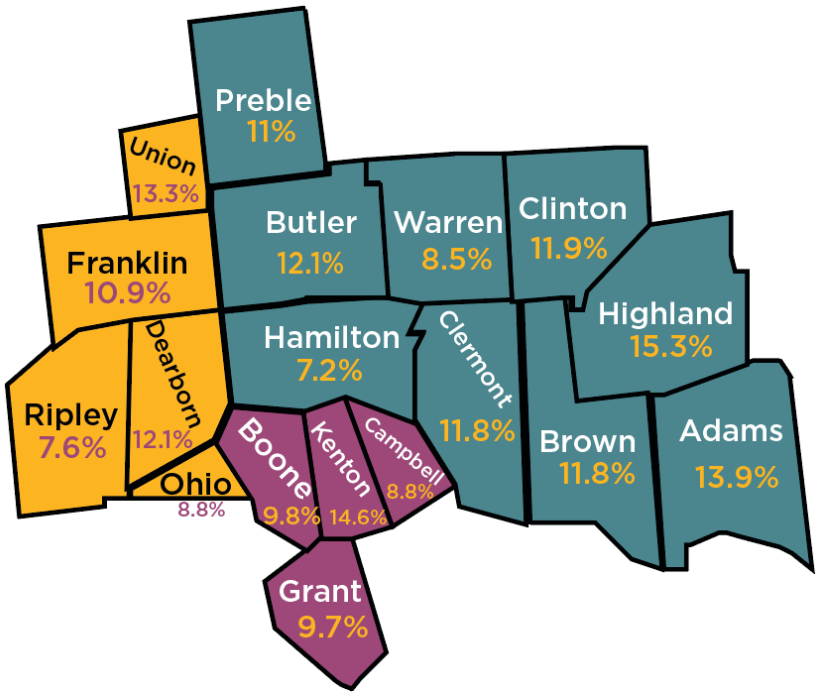


Data note: Regional values are the median of all available counties.
Source: U.S. Census Bureau, American Community Survey 5-year estimates, as compiled by PolicyMap

Approximately 11% of households in the region have one or more of the following problems: overcrowding, high housing costs, or lack of kitchen and/or plumbing facilities (highlighted in figure 9). Households in Highland County, Ohio were 30% more likely to experience these problems than the region overall.

Figure 9. **Percent of homes with severe housing problems, by county, 2016-2020**

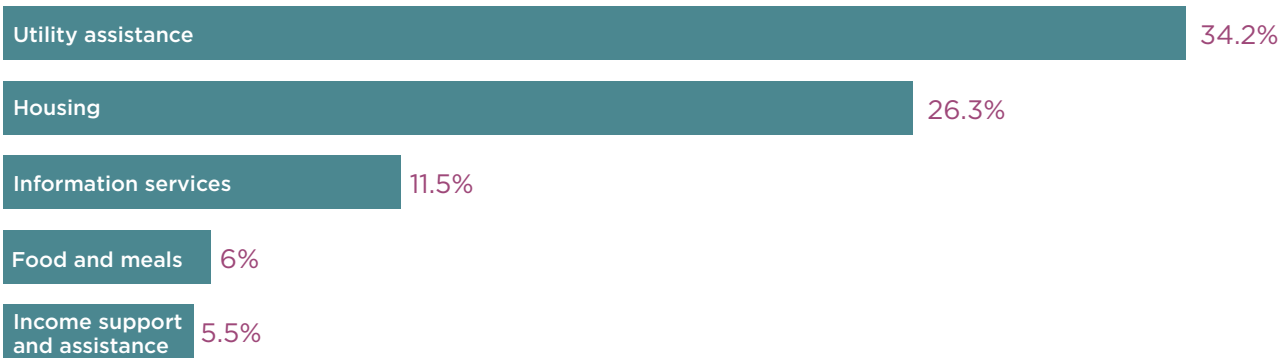
Percent of households who had at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing facilities



Source: Comprehensive Housing Affordability Strategy (CHAS) data, as compiled by County Health Rankings and Roadmaps

While there is a relatively low cost of living in Cincinnati (4% lower than the national average)[16], figure 10 shows that utility assistance and housing are the top two most frequent categories of need in 2-1-1 calls for assistance, making up 35% and 26% of requests respectively in 2023.[17]

Figure 10. **Top categories of need in 2-1-1 calls, 2023**



Source: United Way of Greater Cincinnati and Indiana Family and Social Services Administration

Voices from the community

Regardless of race, over 70% of respondents to one survey of Greater Cincinnati area residents expressed dissatisfaction with affordable housing options.[18]

"They are moving people out of their homes and communities, who cannot afford the replacements."

"Rent is more expensive than mortgages, and homeownership is nearly unattainable for the middle class."

— **2024 Inclusion Survey via State of Black Cincinnati report**

How does the region compare to the nation?

Although the region performs better than the nation overall on metrics related to severe housing problems and housing cost burden, significant issues remain (highlighted in figure 11). For example, housing cost burden in the region is 45% higher than the Healthy People 2030 benchmark.

Figure 11. **National benchmarks for housing and homelessness***

	Regional value	U.S. overall	Healthy People 2030 benchmark	Region compared to U.S.	Region compared to Healthy People 2030 benchmark
Severe housing problems (2016-2020)	**11.4%****	**16.7%**	**N/A**	**Better**	**N/A**
Housing cost burden (2018-2022)	**36.8%****	**46.5%**	**25.5%**	**Better**	**Worse**

*Benchmark comparisons are a calculation of the difference between the regional value, the value for the U.S. overall, and available national Healthy People 2030 benchmarks. In the Regional CHNA report, metrics that have less than 10% difference between the regional and benchmark values are classified as performing the "same." Metrics that have a difference of 10% or greater are classified as "better" or "worse."
Data note: Regional values ** are the median of all available counties.
Sources: Information on regional values can be found in the data appendix spreadsheet. Data for the U.S. overall value for severe housing problems and housing cost burden is from the U.S. Department of Housing and Urban Development "**Comprehensive Housing Affordability Strategy**."

Populations who face the greatest barriers to homelessness prevention and housing stability

The following groups and communities in the region often experience policies, practices, and environments that create barriers to homelessness prevention and housing stability:

- Appalachian communities
- Older adults
- Families with children
- Immigrants and refugees
- People of color
- People who were formerly incarcerated
- People with lower incomes
- Women/female residents

Regional resources and assets to address housing and homelessness

The following resources and assets are available across the region to impact homelessness prevention and housing stability:

Housing stability

- Adams County Economic and Community Development
- Brighton Center
- Caracole
- Cincinnati-Hamilton County Community Action Agency
- Community Development Corporations
- Community Matters
- Council on Aging
- County Departments of Job and Family Services
- Habitat for Humanity
- Housing Opportunities Made Equal (HOME)
- Independence Alliance
- Local Metropolitan Housing Authorities
- Northern Kentucky Community Action Commission (NKCAC)
- Ohio Valley Residential Services
- People Working Cooperatively
- People Working Cooperatively
- Seven Hills Neighborhood Houses
- Shelterhouse
- Talbert House
- The Community Builders
- Warren County Community Services
- Women Helping Women
- Working In Neighborhoods

Homelessness prevention

- Adams County Shelter for the Homeless
- Bethany House
- Central Access Point (CAP) Helpline (513-381-SAFE)
- City Gospel Mission
- Clermont County Community Services
- Emergency Shelter of Northern Kentucky
- Family Promise of Buttler and Warren Counties
- Greater Cincinnati Homeless Coalition
- Healthcare for the Homeless
- Highland County Homeless Shelter
- Homeless Coalition of Southern Indiana
- County Departments of Job and Family Services
- New Life Mission
- Shelterhouse
- St. Vincent de Paul
- Strategies to End Homelessness
- Talbert House
- Tender Mercies
- Welcome House
- Wilmington Hope House
- Women Helping Women
- Working In Neighborhoods
- YWCA Greater Cincinnati

Shared

- 2-1-1 resource hotline
- Coalition on Homelessness and Housing in Ohio
- Federally Qualified Health Centers (FQHCs)
- Greater Cincinnati Foundation
- Hospitals and health systems
- Legal Aid
- LISC Greater Cincinnati
- Public Health Departments
- United Way of Greater Cincinnati

Additional information

- **The Gap: A Shortage of Affordable Homes**, **National Low Income Housing Coalition**. A report that includes data measuring the availability of rental housing units available to extremely low-income householders and other income groups. Data is available at the state and metropolitan statistical area (major cities and their surrounding communities) levels.
- **Out of Reach: The High Cost of Housing**, **National Low Income Housing Coalition**. A report that calls attention to the disparity between wages and the cost of rental housing in the United States. Data is available at the state, metropolitan statistical area (major cities and their surrounding communities), and county levels.
- **Cincinnati Housing Stakeholders, LISC Greater Cincinnati**. An inventory of key actors organized by the role they play in Cincinnati's housing ecosystem.

Priority 3

Heart disease and stroke prevention and treatment

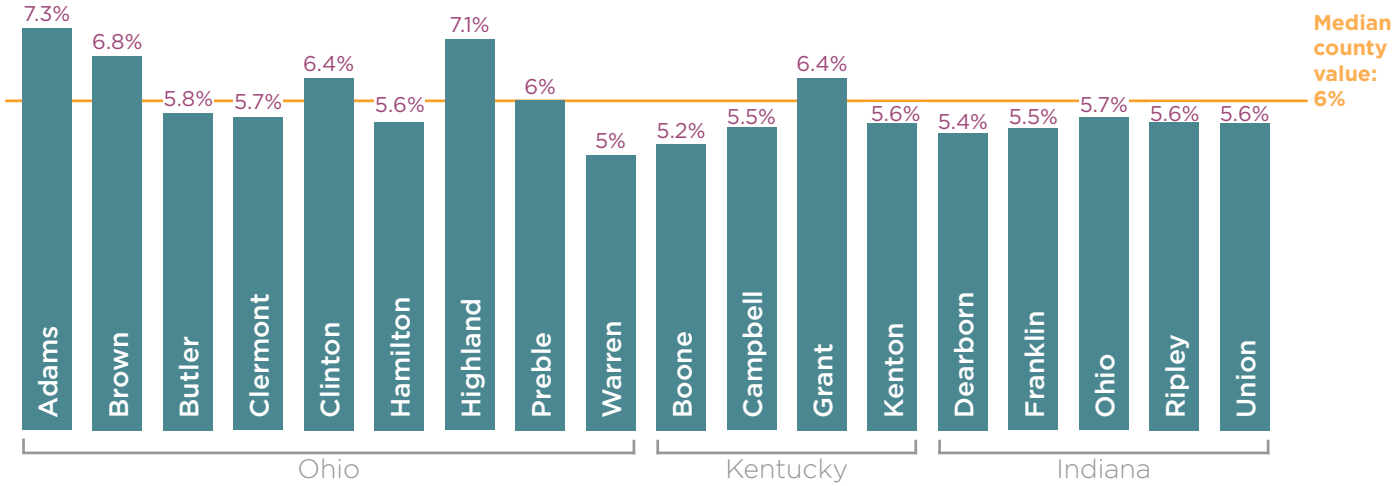
Chronic high blood pressure, also known as hypertension, can lead to other heart conditions such as heart disease and stroke. Heart disease and stroke are serious health conditions that both result from and can worsen our overall health and well-being. They are linked to factors such as inadequate housing and mental health challenges.[19] These conditions rank among the leading causes of death and the most frequent diagnoses in emergency departments in the region.

Key insights on heart disease and stroke in the region

- Of the leading causes of death in the region, heart disease is ranked first, and stroke is ranked fifth. [20]
- Of the top emergency room diagnoses in the region, heart disease is ranked second, heart attack is ranked fifth, and stroke is ranked sixth. [21]
- The rate for heart disease deaths in the region is more than double the benchmark set by Healthy People 2030, and the region's rate for stroke and cerebrovascular disease (conditions that affect the blood flow to your brain, including stroke, brain bleed and carotid artery disease)[22] death is over 75% greater than the benchmark.
- Roughly 33% of adults in the region report being told by a doctor or nurse that they had high blood pressure. There are also sizeable racial disparities in hypertension.[23]

In the region, approximately 6% of adults in 2021 had heart disease and an estimated 3% have had a stroke. The rate of heart disease varied across the region (as shown in figure 12), with Adams County, Ohio having a rate over 25% higher than the region overall.

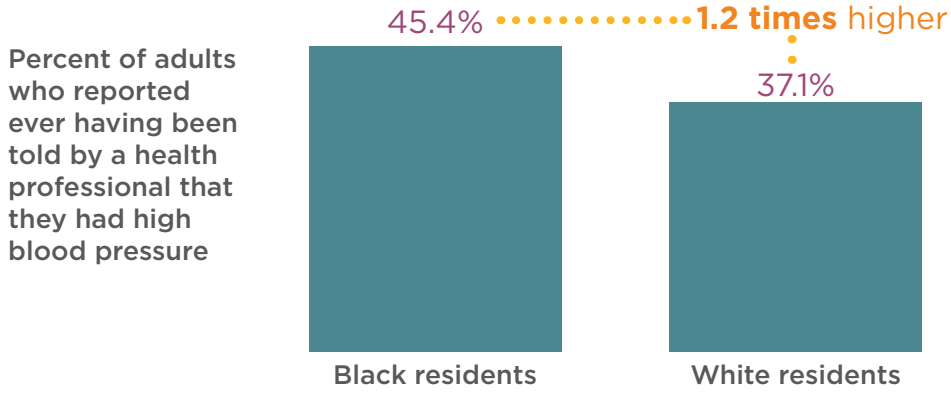
Figure 12. **Heart disease prevalence, by county, 2021**



Source: Behavioral Risk Factor Surveillance System, as compiled by CDC PLACES

Forty-five percent of Black/African American residents in the Greater Cincinnati area report having been diagnosed with high blood pressure (i.e., hypertension) by a healthcare provider, compared to 37% of white residents (displayed in figure 13).

Figure 13. **High blood pressure, by race, 2022**

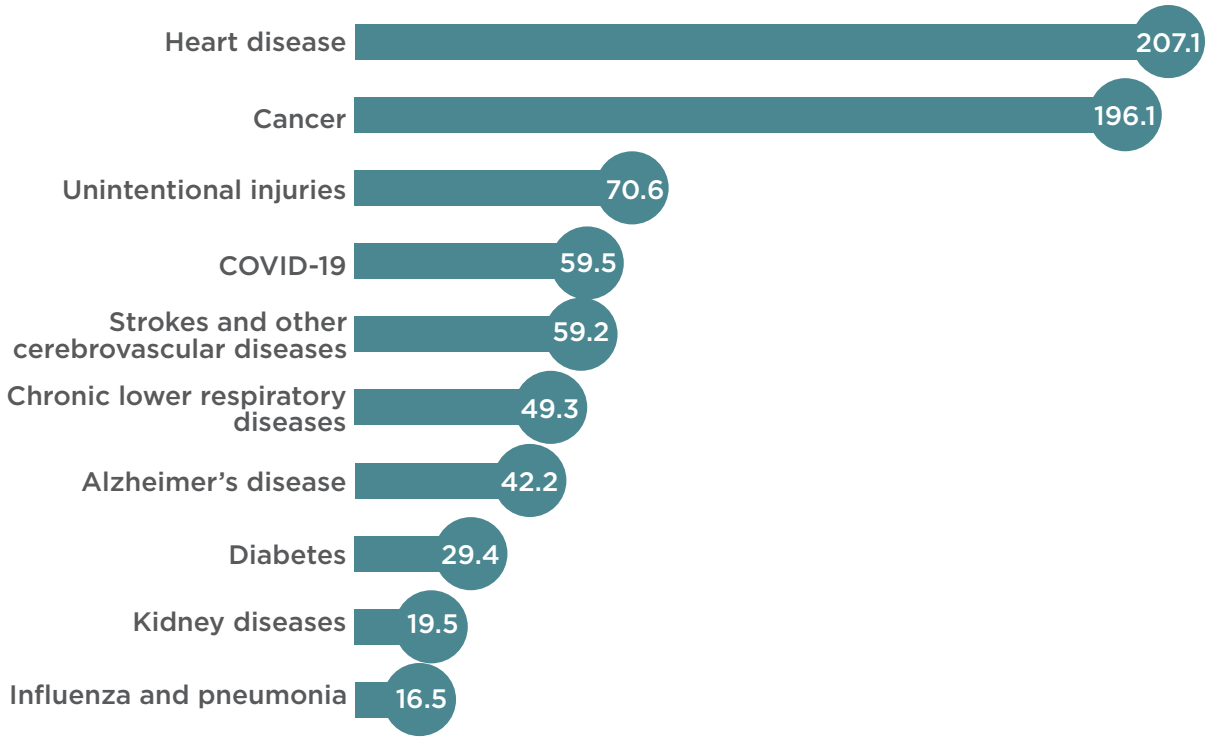


Note: The region measured by Interact for Health includes 22 counties across Ohio, Kentucky, and Indiana.
Source: Interact for Health and University of Cincinnati Institute for Policy Research, 2022 Community Health Status Survey

Figure 14 lists the leading causes of death in the region. Heart disease and stroke were among the leading causes of death from 2018 to 2022.

Figure 14. **Leading causes of death in the region, 2018-2022**

Number of deaths per 100,000 population among the leading causes of death in the region (2018-2022)



Note: Unintentional injuries include overdose deaths and motor vehicle accidents.
Source: Centers for Disease Control and Prevention, Wide-ranging Online Data for Epidemiologic Research (WONDER)

Voices from the community

A focus group participant mentioned being concerned about current health issues leading to heart disease.

"[I am a] diabetic, [and I] have to make sure I have insulin and have a healthy diet and that could lead to heart problems, so I need to make sure I take care of that."
— **2021 focus group participant**

How does the region compare to the nation?

The region has similar estimated rates of hypertension and stroke compared to the nation but an estimated 50% higher rate of heart disease than the U.S. overall (displayed in figure 15). When looking at rates of death, the region's stroke and cerebrovascular disease death rate is approximately 25% greater than the nation's, and the region's heart disease death rate is more than double the Healthy People 2030 target.

Figure 15. **National benchmarks for heart disease and stroke***

	Regional value	U.S. overall	Healthy People 2030 benchmark	Region compared to U.S.	Region compared to Healthy People 2030 benchmark
Heart disease prevalence (2021)	**5.7%****	**3.8%**	**N/A**	**Worse**	**N/A**
Hypertension prevalence (2021)	**32.6%****	**32.4%**	**N/A**	**Same**	**N/A**
Stroke prevalence (2021)	**2.8%****	**3%**	**N/A**	**Same**	**N/A**
Heart disease deaths (2018-2022)	**207.1** per 100,000 population	**206.6** per 100,000 population	**71.1** per 100,000 population (age-adjusted)	**Same**	**Worse**
Stroke and cerebrovascular disease deaths (2018-2022)	**59.2** per 100,000 population	**47.7** per 100,000 population	**33.4** per 100,000 population (age-adjusted)	**Worse**	**Worse**

*Benchmark comparisons are a calculation of the difference between the regional value, the value for the U.S. overall, and available national Healthy People 2030 benchmarks. In the Regional CHNA report, metrics that have less than 10% difference between the regional and benchmark values are classified as performing the "same." Metrics that have a difference of 10% or greater are classified as "better" or "worse."
Data note: Regional values ** are the median of all available counties.
Sources: Information on regional values can be found in the data appendix spreadsheet. Data for the U.S. overall value for heart disease prevalence, hypertension prevalence, and stroke prevalence is from the **CDC BRFSS**. U.S. overall data for heart disease deaths and stroke and cerebrovascular disease deaths is from **CDC WONDER**.

Populations who face the greatest barriers to heart disease and stroke prevention

The following groups and communities in the region often experience policies, practices, and environments that create barriers to heart disease and stroke prevention:

- Appalachian and rural communities
- Black residents
- Older adults
- People with less educational attainment
- People with lower incomes

Regional resources and assets to address heart disease and stroke

The following resources and assets are available across the region to impact heart disease and stroke prevention and treatment:

Regionally based

- American Heart Association (AHA) Greater Cincinnati
- Christ Hospital Preventive Cardiology Program
- Federally Qualified Health Centers (FQHCs)
- HealthPath Foundation
- Heart to Heart Home Healthcare
- Hospice of Cincinnati Cardiac Care Program
- Hospitals and health systems
- Mercy Health – The Heart Institute
- Premier Health HeartWorks
- ProjectADAM
- Public Health Departments
- St. Vincent DePaul Charitable Pharmacy
- The Center for Closing the Health Gap
- TriHealth Heart and Vascular Institute
- University of Cincinnati Heart, Lung and Vascular Institute
- WiseWoman
- Women's Heart Center at The Christ Hospital

State based

- American Heart Association chapters
- Cardi-OH
- State departments of health

Additional information

- **Strategic Plan and Map 2024-2028**, **Kentucky Heart Disease and Stroke Prevention Task Force.** This strategic plan outlines the vision, mission, values, goals, and desired outcomes of the Task Force.
- **Cardi-OH**. A statewide collaborative of healthcare professionals focused on improving health outcomes while eliminating disparities. It offers tools such as monthly newsletters, clinical tips, podcasts, and virtual clinics.

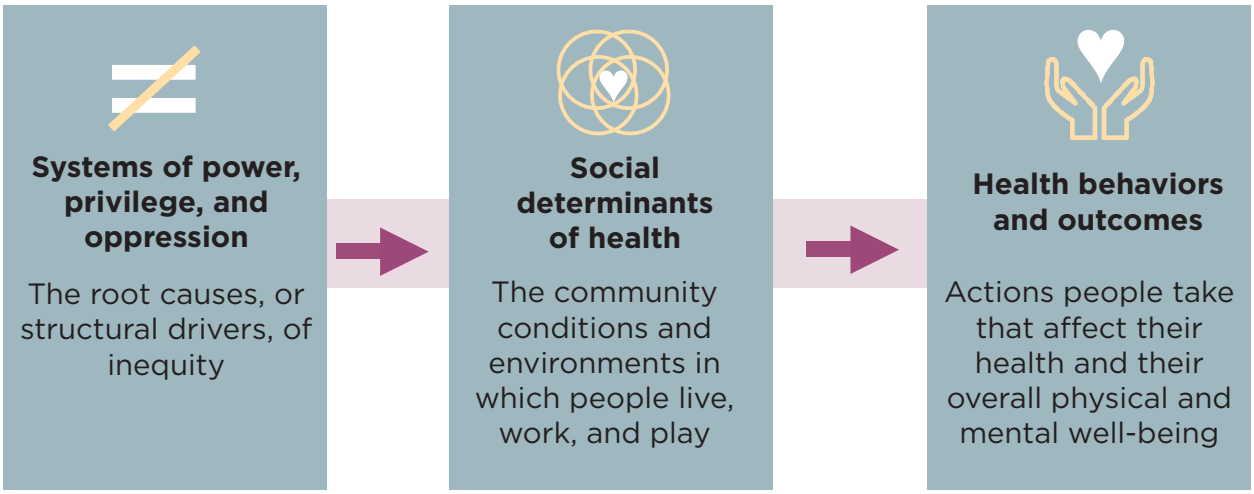
What shapes the region's health and well-being?

Many factors lie at the root of the three regional priorities — and our overall health and well-being. One of the biggest factors is related to the conditions of our communities.[24] Also called the social determinants of health, community conditions—like educational opportunities and housing — support our ability to be healthy and make healthy choices.

Those conditions are shaped by systems of power, privilege, and oppression that can unfairly distribute resources and opportunities across groups and communities (as displayed in figure 16).

The assessment process for the Regional CHNA was organized and based on these domains using the National Association of County and City Health Officials' (NACCHO) **Mobilizing for Action through Planning and Partnerships (MAPP 2.0)** framework. The following sections outline key findings from each of these domains.

Figure 16. **Regional CHNA domains: The root causes of health outcomes and inequities**



Source: Adapted from the NACCHO "Health Equity Action Spectrum"

Systems of power, privilege, and oppression

At the foundation of our health and well-being are systems, such as policies, laws, institutions, and values that shape the communities in which we live. When rooted in inequity, these structures can create persistent hierarchies of privilege and oppression. For example, discriminatory policies and practices, like redlining and housing discrimination, have shaped where people of color live and whether they have access to safe neighborhoods free from harmful conditions.

Systems of power, privilege, and oppression measures[25]

Racism and discrimination

As displayed in figure 17, more than a third of Black adults in Hamilton County, Ohio reported experiencing racism in 2022. Racism unfairly and unequally distributes resources, power, and opportunity, resulting in disparities experienced by Black residents and people of color.

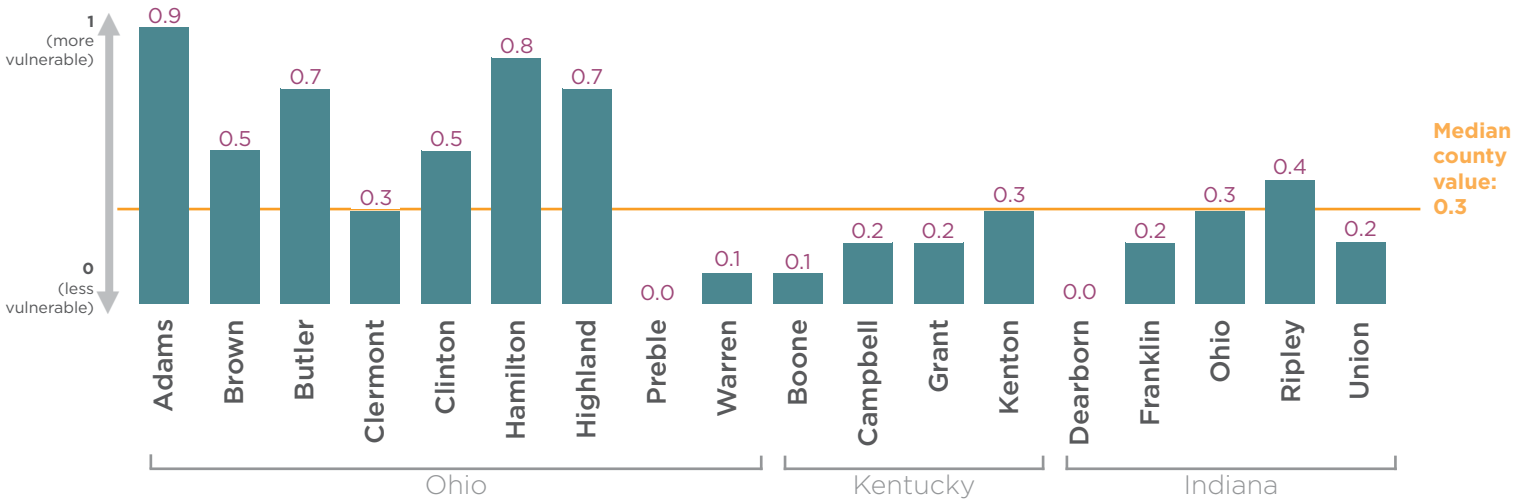
Figure 17. **Experiences of racism, by black adults, 2022**
Percent of adults who were treated worse, in general, than other races in the past year

Source: Analysis by HPIO of Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, data provided by the Ohio Department of Health upon request

Underinvestment and unequal access to resources needed for health

Communities near urban centers and in the most rural areas of the region are less likely to have adequate access to the resources needed for health, like stable housing and employment opportunities, increasing their vulnerability to health and economic challenges (highlighted by figure 18).

Figure 18. **Social vulnerability, by county, 2022**



Source: Centers for Disease Control and Prevention and Agency for Toxic Substances and Disease Registry, Social Vulnerability Index

Systems of power, privilege, and oppression unfairly distribute resources and opportunity based on factors such as race, ethnicity, income, sexual orientation, sex and gender identity, age, and geography. As a result, this creates higher risk of exposure to unhealthy environments and poor health outcomes for marginalized communities.

Systems of power, privilege, and oppression: Other findings

- Black residents in the region face inequities in financial discrimination, incarceration, housing discrimination, and health insurance coverage, among others, driven by systems, institutions, and policies.[26]
- Communities in rural areas and with low incomes have fewer systems and supports that create a foundation for good health, like transportation and living-wage jobs.[27]
- LGBTQ+ residents, despite having higher rates of mental health challenges, face greater barriers to accessing mental health care than others in the region.[28]

Social determinants of health

Power, privilege, and inequality play a large role in shaping our health and the factors that affect it, like education, access to healthcare, financial stability, community environment, and social relationships. These factors, called the social determinants of health, influence the conditions we experience throughout life, where we're born, live, learn, work, play, worship, and age, which in turn impact our quality of life and overall well-being.

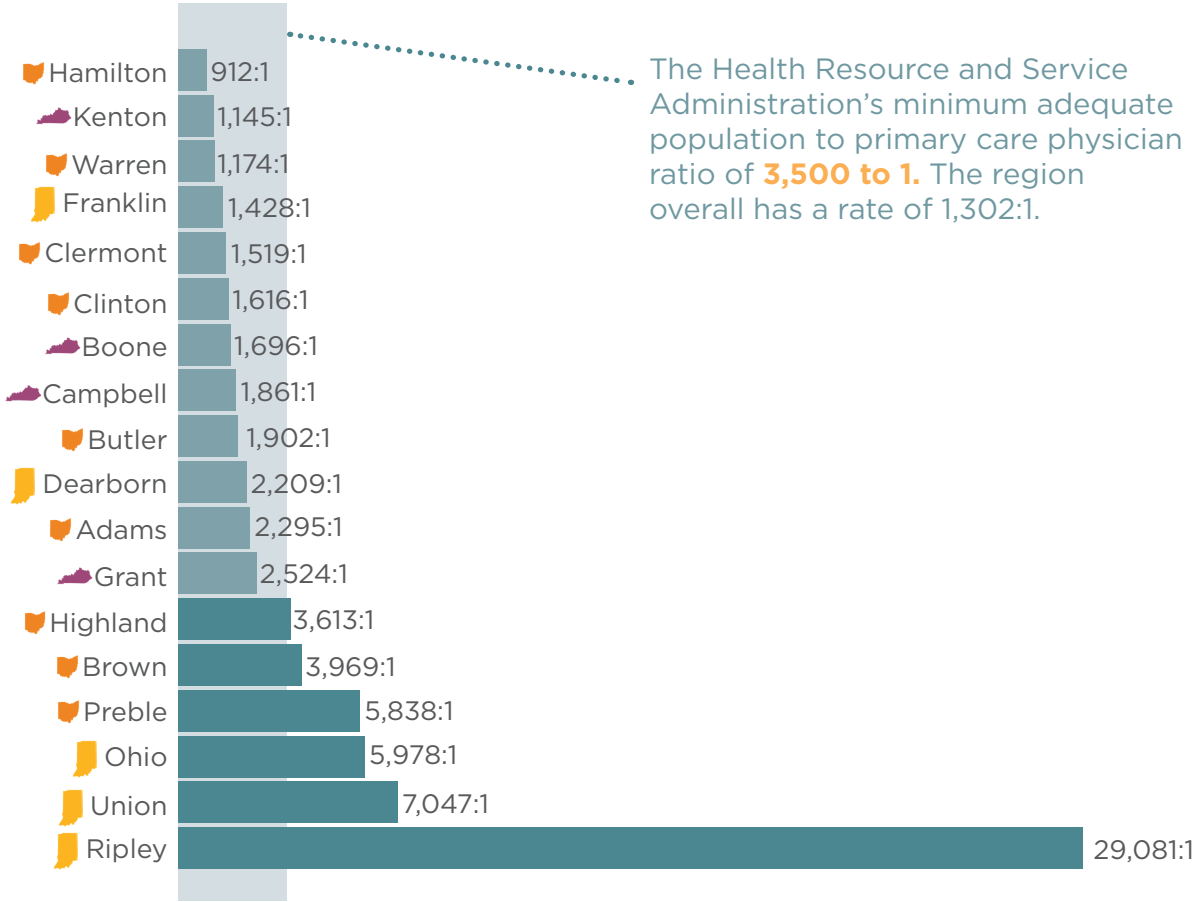
Social determinants of health measures[29]

Access to affordable, timely, and quality health care

The region has one primary care physician for every 1,302 residents (highlighted in figure 19). While the region falls within the Health Resource and Service Administration's minimum adequate population to primary care physician ratio of 3,500 to 1, several counties are well above this ratio.[30]

Figure 19. **Primary care physicians, by county, 2021**

Ratio of population to primary care physicians



Source: Area Health Resource File/American Medical Association, as compiled by County Health Rankings and Roadmaps

Poverty and economic stability

In the region, an estimated one in four people are employed, but cannot afford to meet their basic needs, including housing, food, child care, health care, transportation, and basic technology (exhibited in figure 20).

Figure 20. **ALICE households, 2022**

Percent of households who were below the ALICE (asset limited, income constrained, and employed) threshold. This includes households earning incomes below and above the federal poverty level, but not enough to afford the basics where they live.

Regionally, approximately **one in four** (36.8%) community members are not able to afford basic needs.

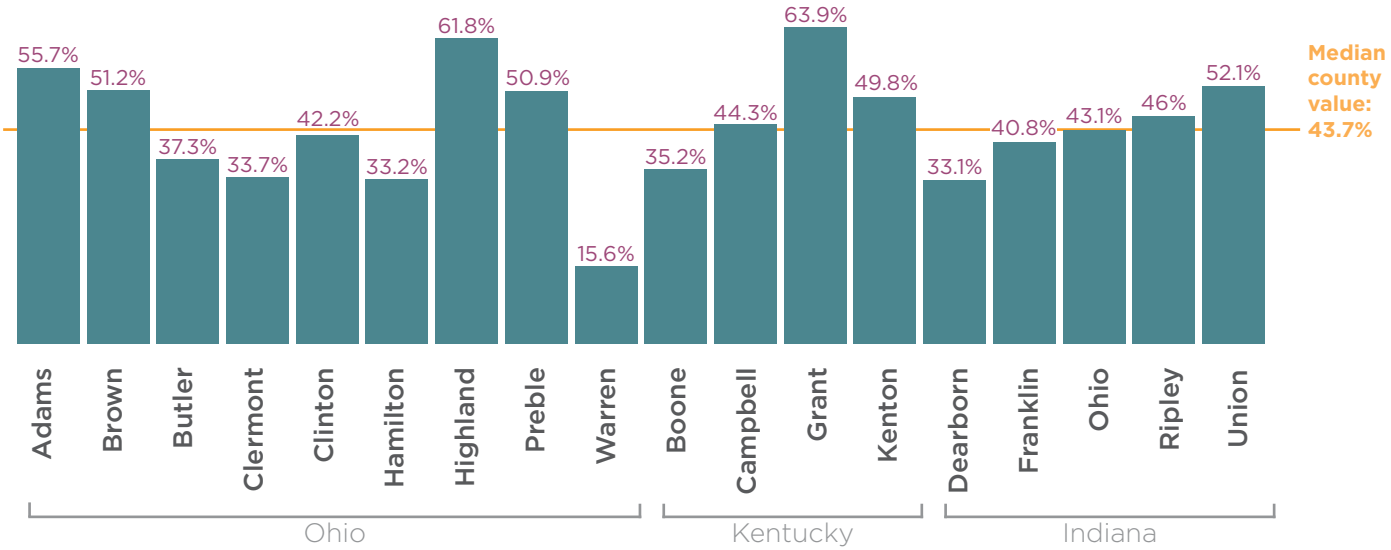
Source: ALICE Threshold and U.S. Census Bureau, American Community Survey as compiled by United for ALICE

Food access and insecurity

In 2019-2020, approximately 44% of children in the region were eligible for free- or reduced-price lunch, meaning that their families are not earning enough to afford school lunch at full price (shown in figure 21). Additionally, 8% of people in the region were estimated to have limited access to healthy food.[31]

Figure 21. **Children eligible for free or reduced-price lunch, by county, 2019-2020 school year**

Percent of children enrolled in public schools that were eligible for free or reduced price lunch



Source: National Center for Education Statistics, as compiled by County Health Rankings and Roadmaps

Social determinants of health: Other findings

- In eight counties in the region, nearly one in three adults reported delaying or avoiding medical care due to cost, lack of transportation, or limited provider availability.[32]
- Rural areas often lack access to living-wage jobs.[33]
- Nearly one in six children live below the FPL.[34]
- LGBTQ+ residents are 1.7 times more likely than non-LGBTQ+ residents to have incomes below the FPL.[35]
- Many people who are food insecure are likely not eligible for the Supplemental Nutrition Assistance Program (SNAP).[36]

Health behaviors and outcomes

Systems of power, privilege, and oppression and the social determinants of health impact health outcomes and behaviors within our communities. Health outcomes reflect the physical and mental well-being of community members, while health behaviors are actions that can affect our health, such as physical activity, smoking, and substance use. Our health behaviors are either supported, or inhibited, by the environments in which we live and the systems that shape them, including access to parks, green space, and healthy foods.

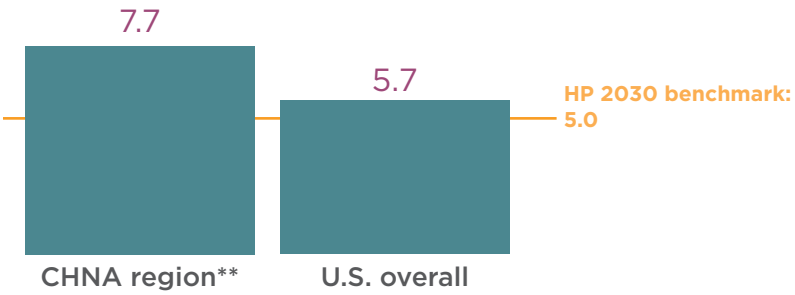
Health behaviors and outcomes measures[37]

Maternal and infant health

The infant mortality rate in the CHNA region is estimated to be higher than the rest of the country and the national target established by Healthy People 2030 (displayed in figure 22).

Figure 22. **Infant mortality, 2015-2021**

Number of infant deaths per 1,000 live births



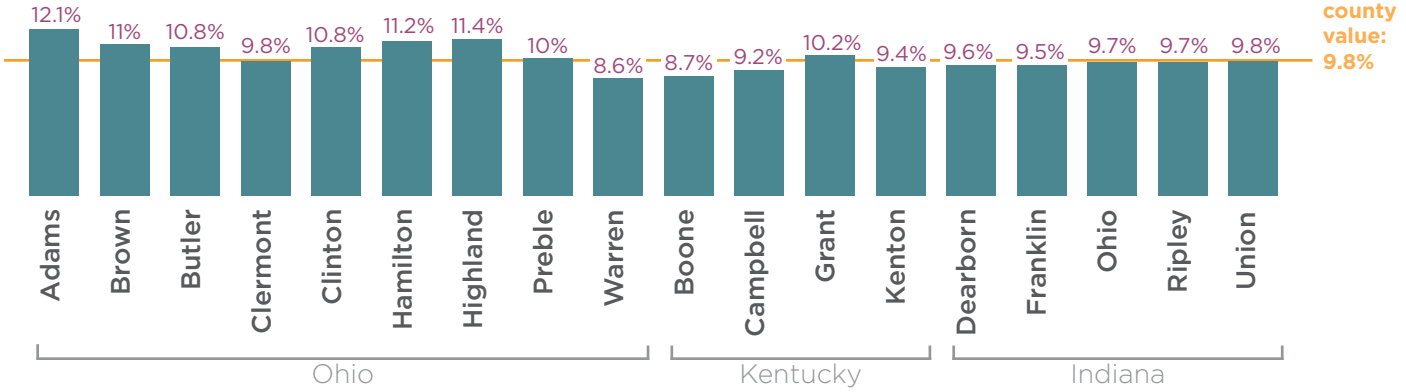
** The median of all available counties
Source: CDC WONDER and National Center for Health Statistics, as compiled by County Health Rankings and Roadmaps

Diabetes

Diabetes is the eighth leading cause of death in the region, and approximately 10% of adults have been diagnosed with diabetes. Figure 23 shows that people in Ohio counties across the region generally have higher rates of diabetes than people in Indiana or Kentucky counties.

Figure 23. **Diabetes, by county, 2021**

Percent of adults, ages 20 and older, who were diagnosed with diabetes



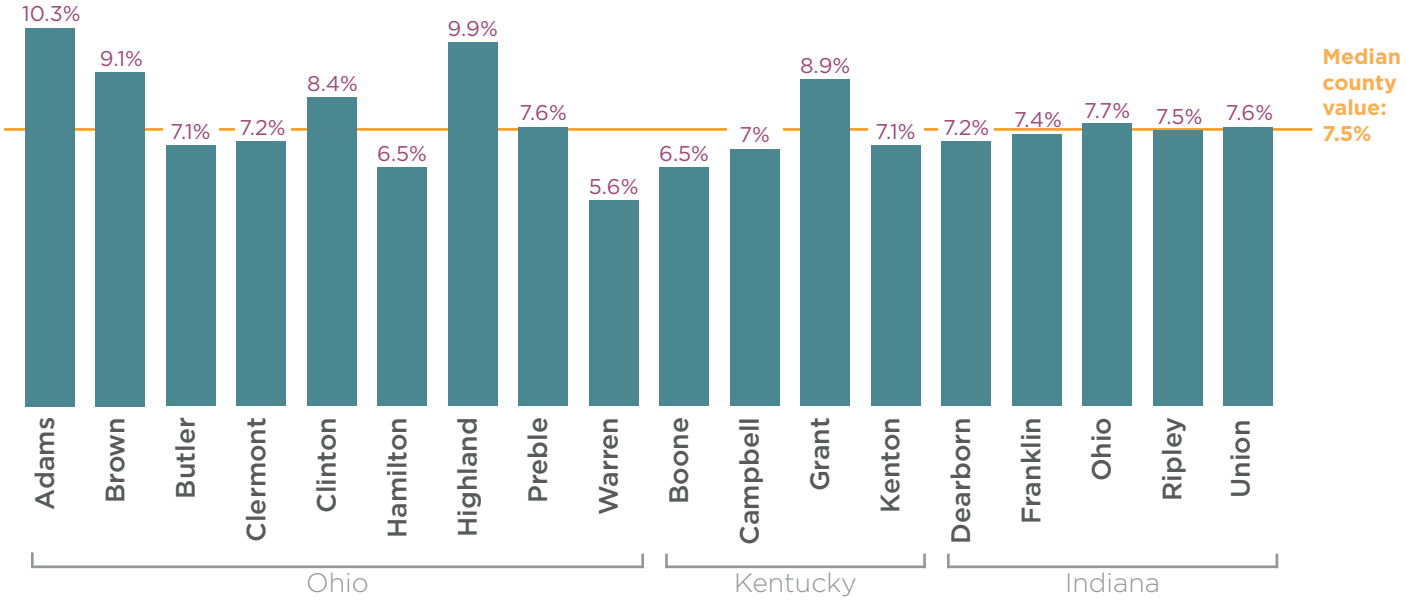
Source: Behavioral Risk Factor Surveillance System, as compiled by County Health Rankings and Roadmaps

Respiratory health

An estimated 8% of adults in the CHNA region have chronic lung disease, which includes COPD, emphysema, and chronic bronchitis (shown in figure 24).

Figure 24. **Chronic lung disease, by county, 2021**

Percent of adults who reported ever having been told by a health professional that they had COPD, emphysema or chronic bronchitis



Source: Behavioral Risk Factor Surveillance System, as compiled by CDC PLACES

Health behaviors and outcomes: Other findings

- Cancer is the second leading cause of death in the region and the colorectal screening rate is low".[38]
- Unintentional injuries, including drug overdose, are the third leading cause of death in the region. "Deaths of despair," which include alcohol-related liver disease, homicide, overdose, and suicide have tripled in the region in the past two decades, driven mostly by increases in overdose.[39]
- There are large disparities in maternal and infant health, such as timely prenatal care, maternal morbidity, gestational diabetes, gestational depression, and pre-eclampsia hospital encounters, across geography, race/ethnicity, and insurance status.[40]

Additional information

Guides to access additional resources, programs, and services in the region:

- **2-1-1 Resources, United Way Greater Cincinnati**
- **Community Characteristics & Resources, HealthSource of Ohio**
- **Homeless & Low-Income Resource Guide, Cincinnati VA Medical Center**
- **Member Directory, Human Services Chamber of Hamilton County**
- **Resource Guide: Brown and Adams County, YWCA Greater Cincinnati**

Significant health needs in the region

The health needs of the region were identified through a robust review of primary and secondary data. Significant health needs are those that rose to the top based on review of the data when looking at prevalence, unmet need, impact, and inequity (listed in figure 25). Appendix E includes more detail on how significant health needs were identified and used in the prioritization process.

Figure 25. **Significant health needs in the region**

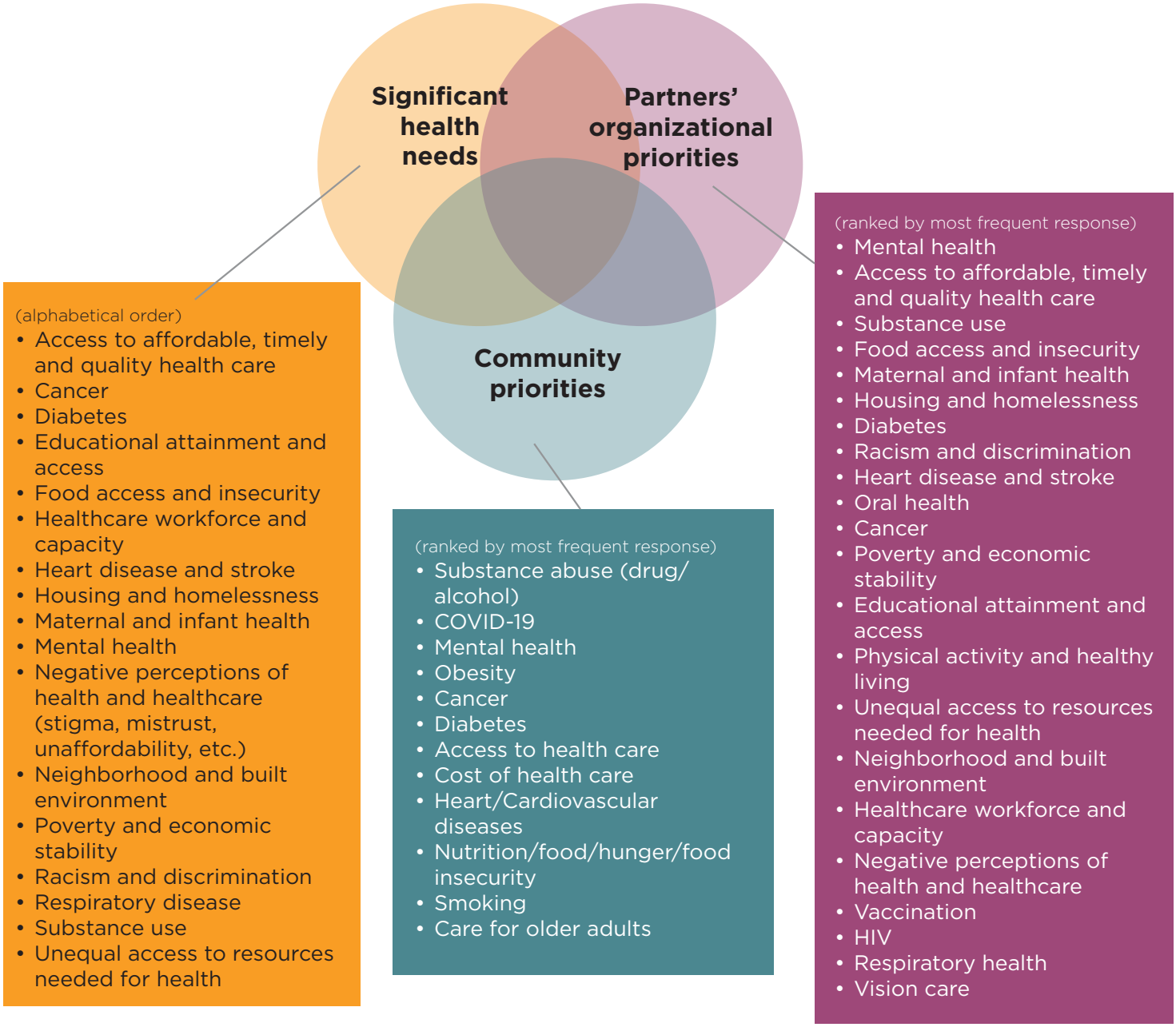
	Healthy People 2030	Ohio SHIP	Kentucky SHIP	Indiana SHIP
Systems of power, privilege, and oppression				
Negative perceptions of health and healthcare (stigma, mistrust, unaffordability, etc.)		■	■	■
Racism and discrimination		■		
Unequal access to resources needed for health	■	■	■	
Social determinants of health				
Access to affordable, timely and quality health care	■	■	■	■
Educational attainment and access	■	■	■	■
Food access and insecurity	■	■	■	■
Healthcare workforce and capacity	■	■	■	■
Housing and homelessness	■	■	■	■
Neighborhood and built environment	■	■		■
Poverty and economic stability	■	■	■	■
Health behaviors and outcomes				
Cancer	■	■	■	■
Diabetes	■	■	■	■
Heart disease and stroke	■	■	■	■
Maternal and infant health	■	■	■	■
Mental health	■	■	■	■
Respiratory disease	■	■	■	■
Substance use	■	■	■	■

Note: Icons indicate alignment with State Health Improvement Plans (SHIPs) and Healthy People 2030

Alignment with community priorities

There is meaningful alignment between the region's significant health needs, the priorities of community members, and the organizational priorities of Regional CHNA partners. Many people and groups across the region are already taking action to address these challenges and improve health. Figure 26 demonstrates how the region's significant health needs, partner priorities, and community priorities are aligned.

Figure 26. **Alignment between significant health needs and partners' and community priorities**



Source: Significant health needs: As defined during the Regional CHNA process; Partners' organizational priorities: "2024 Regional CHNA Pre-Prioritization Survey" administered to Regional CHNA Advisory Committee, Task Forces, and community partners online from September 3 to October 15, 2024; Community priorities: Interact for Health and University of Cincinnati Institute for Policy Research, 2022 Community Health Status Survey

Progress made in previous cycle

Introduction and context

During the 2021 Regional CHNA, three regional priorities and goals were defined and included a focus on access to care for top needs, workforce diversity, and access to resources for food and housing. Specific goals can be found in the Regional Community Health Improvement Plan (CHIP). The information below provides an overview of key initiatives taking place within these three priority areas that are seeking to advance the goals. Within the Regional CHIP, strategies were developed by a cross-sector partnership of stakeholders with suggested timelines and leadership for implementation.

Although The Health Collaborative (THC) oversees the Regional CHNA, we are only part of the ecosystem needed to address problems in our community like healthcare workforce diversity and cardiovascular disease. THC is a unique organization that sits at the intersection of many stakeholders, and therefore cross-cutting strategies and some featured strategies identified within the Regional CHIP sit squarely in our sphere of implementation, and those are documented below. With that in mind, readers are encouraged to review the CHIPs and strategic plans of our partners in this process for more detailed information on specific initiatives different sectors have implemented, all in alignment to our regional goals.

Progress in this document is organized by the three priority areas and includes a summary of reflections and lessons from the COVID-19 pandemic. Community outcomes are provided in Appendix H.

Note: *The regional CHIP was the first of its kind for our community, and therefore progress on these measures, including processes and frameworks for evaluating progress, are still in development. Each measure was identified as a key indicator to monitor over time, however there is not yet a centralized place to track these metrics.*

Goal 1 **Everyone in the region has access to health care when they need it, specifically for the region's top needs: behavioral health, oral health, vision care, and cardiovascular care**

Cross Cutting Strategy 1.0.1: Coordinate, strengthen, and expand behavioral health services in the region.

The Health Collaborative convenes a regional Behavioral Health Continuity of Care committee of hospitals, community mental health providers, freestanding inpatient hospitals, and mental health and recovery boards. While originating from COVID, this group has found value in meeting to address communication and care transitions for the last several years. The establishment of access to health services as a regional priority further amplified the need for cross-sector collaboration among providers

in our region. To date, THC has launched the Behavioral Health Provider Directory, where providers from across hospitals and community mental health organizations can access critical contact information for each other regarding admissions or discharges for shared patients. Through this directory, THC maintains a listing of contacts at each organization to facilitate real-time and direct communication across organizations for patient care. We do this as a service to our members in recognition of the multi-stakeholder partnership that is needed to provide coordinated and efficient care across the continuum. It provides an up-to-date listing of our network of behavioral health providers throughout the region.

Additional momentum is growing for addressing mental and behavioral health in our region with the **creation of several key initiatives among partners**, outlined below.

- **HEY! Cincinnati** is a diverse coalition of community groups, healthcare providers, educators, policymakers, families, and young people themselves, working collaboratively to create a community that supports the well-being of all youth from ages 0-24 in Greater Cincinnati, especially those facing the greatest barriers and disparities. Developed with the Youth Fellowship, HEY! ensures this collaborative effort feels accessible and relevant to youth in our community.
- **Mental Health and Addiction Advocacy (MHAC) Behavioral Health Workforce Coalition** is a coalition led by the Southwest Regions MHAC, a statewide organization that unifies diverse local voices to advocate for the goals of increasing awareness of issues and advancing policies for Ohioans affected by mental illnesses and addiction disorders.
- **New Crisis Center** will open in 2025. The Hamilton County Crisis Center will be a centralized location providing addiction and mental health crisis and stabilization services and treatment services. The facility will also include a primary care clinic to address the overall health care needs of the clients. Several existing programs will be moving to this new location, and new programs will be established.

Featured Strategy: 1.2.1 Support ongoing efforts to reduce hypertension and stroke in the region through preventive services.

Like many other conditions, heart disease is often best treated as early as possible through preventive measures. These efforts at education and self-care can help avoid more deadly progressions of heart disease. In our community, many healthcare institutions and community-based organizations are stepping up to address hypertension and cardiovascular diseases among many populations. To assist in the opportunity for collaboration on this health outcome, THC has partnered with the Cincinnati Health Department to research and review local efforts to address heart disease and present a potential opportunity for a Cardiovascular Collaborative. With funding from the city of Cincinnati, this planning period includes extensive listening sessions with key stakeholders across healthcare and community, learning from other communities who are doing this work well, and better understanding data at the neighborhood level to create strategies for intervention and community engagement. This project, called HEAL (Health Equity and Attainable Life Expectancy) showcases a cross-sector partnership to address a critical healthcare challenge that is faced by our entire region, where solutions span sector.

Goal 2: The health care education pipeline and workforce are strong, reflect the diversity of our region, and deliver equitable care to everyone

Priority 2.1: Expand and diversify the healthcare workforce pipeline through education and hiring opportunities.
Highlighted Program: The Health Collaborative, in partnership with Cincinnati State, developed a program to support and grow medical assistants, with a focus on diversity within the cohorts.
- Medical Assistant Apprenticeship Program with diversity in each of the 10 cohorts ranging from 25-60%.
- Cohort 11 launched in January 2025.

Other key activities related to this priority include the following, and more information can be found on **The Health Collaborative's website for Workforce Innovation**.

Convening

The Health Collaborative convenes over 50 affinity groups throughout the year. Through our Workforce Innovation team, the following key stakeholders are brough together to discuss challenges and opportunities for collective action and collaboration.
- Workforce Advisory Council
- Ohio Healthcare Education and Workforce Leaders
- Ohio Healthcare Workforce Collaborative
- Ohio Healthcare Industry Sector Partnership Leaders
- Regional Career Exploration Collaboration
- Hospital Chief Nursing Officers
- Hospital Chief Human Resources Officers

The Health Collaborative also hosts Healthcare SuccessBound, an annual event hosted in partnership with TechPrep.

Advocating for Systems Change

Workforce Innovation at The Health Collaborative has been collaborating with organizations state-wide to "uncrimp" Ohio's nursing pipeline over the past year by obtaining:
- Approval of Ohio's first-ever Industry Transfer Assurance Guide (ITAG) for individuals with active LPN credentials, guaranteeing them college credit at Ohio-funded state colleges and universities.
- Ohio legislative support for changing LPN instructor requirements (Ohio House Bill 583)
- Ohio Department of Health support implementing STNA rule changes for instructor requirements, program delivery, passing test score, and more.

To ensure the quality and availability of healthcare to people in Southwest Ohio, and across the CHNA region, Workforce Innovation continues to lead and support collaboration with regional partners. We remain committed and steadfast to

advocating for smart regulations, sharing innovative practices, and pursuing resources to reduce the nursing shortage.

Career Exploration

The Health Collaborative offers numerous options for students and job seekers to explore healthcare careers and for employers to engage in initiatives to build their future workforce.

- TapHealth Programs (TapMD, Tap Remote)
- You Belong in Healthcare TAP Event
- Tap Health Summer Academy
- HealthFORCE annual event — the region's largest healthcare career expo to give high school students an opportunity to explore a range of careers in healthcare!

Launch of HealthFORCE Boost! — a new event of HealthFORCE specifically designed for adult job seekers. This new healthcare careers fair & hiring event allows adult job seekers to explore numerous job opportunities, college and training programs, and resources. In 2024, **this event saw**:

- 5 healthcare industry panelists
- 858 high school students from 26 regional high schools
- Over 50 high school educators
- 120 healthcare employer exhibitors & volunteers with 45 tables

Workforce Innovation is dedicated to being a good partner and representing our members' interests throughout Greater Cincinnati. To achieve this, we actively participate in many healthcare and workforce advisory councils, boards, committees, and planning groups, including the following:

- Catholic Inner-City Schools Education (CISE) Business Advisory Council
- Cincinnati Public School's Healthcare Advisory Groups and Business Advisory Council
- Cincinnati State's Nursing Advisory Council
- Cincinnati & Hamilton County Public Library's Community Advisory Council
- Great Oaks' Healthcare Advisory Council
- Greater Cincinnati Business Advisory Council
- Mental Health and Addiction Advocacy Coalition
- NKY Works (formerly GROW NKY)
- Northern Kentucky College & Career Counselor Network
- Ohio Workforce Council's Leadership Committee
- River City School District Network
- Scarlet Oaks Healthcare Advisory Council
- Sinclair Community College's Strategic Planning Group
- SW Ohio Tech Prep's Strategic Planning Group
- The Talent Collaborative's Steering Committee and Founding Member
- UC's Allied Health Colleges Diversity Liaison Committee
- Warren County's Workforce Strategic Planning
- Workforce Council of SW Ohio Board of Directors

Priority 2.2: Track and consistently publish ongoing workforce data and statistics in a regional dashboard, including class sizes, vacancy rates, and diversity percentages at a regional level, publishing these results annually.
Published in 2023, this dashboard houses key data from JobsEQ across 10 key positions, including diversity data. All detailed information can be found on The Health Collaborative's jobs dashboard located here: **https://workforce.healthcollab.org/data/**. The most recent available data is from 2023 and was updated in February 2025.

Other Key Activities:

- **Increasing participation and diversity in healthcare pipeline**: Tap Health programs saw an overall increase in student participation and an increase in students from a variety of backgrounds (i.e., diversity in students participating) over the last 3 years. For information about our most recent TAP Health Summer Academy, including photos and interesting statistics, please click here: **https://taphealth.healthcollab.org/wp-content/uploads/2024/11/THSA-WRAP-UP-PRESENTATION-1.pdf**
- **Increasing Diversity in Supply Chain**: The Health Collaborative and Cincinnati Children's began to partner on an event in 2023 and 2024 to connect local and underrepresented suppliers to healthcare leaders and professionals in the region. This event and program is called **DirectConnect**, an event providing opportunities to share knowledge and connect with suppliers while hearing from local healthcare leaders about ways that diverse-owned businesses can set themselves up for success. There is also exposure for suppliers to community resources in the areas of funding, certifications, business advisors, and more. In 2024, over 150 people attended the event and there were 20 exhibitors at the vendor fair.
- **Strengthening culturally competent care:**
  - The Health Collaborative and Greater Dayton Area Hospital Association have joined efforts to complete an **Anti-Human Trafficking Toolkit** to be utilized in a hospital setting. The Health Collaborative attended the Southwest Ohio Human Trafficking Conference, where they were featured as a panelist in a multi-professional discussion about all things human trafficking. We are grateful to be a part of work that helps professionals across the state unite to combat trafficking and to serve survivors.
  - The Emergency Preparedness and Response team at The Health Collaborative leads and manages the TriState Disaster Preparedness Coalition (TSDPC). TSDPC's mission is to promote and enhance healthcare entities' emergency preparedness and response capabilities, which includes prioritizing plan equity and inclusion in regional and local preparedness plan development. In 2024, the TSDPC **launched a new Health Equity in Emergency Preparedness (HEEP) Taskforce** to center the voices of those living with disabilities, or those working with people with disabilities, to create more equitable strategies for assisting people in times of emergencies.

Goal 3

Everyone in the region has access to healthy, affordable food and quality, affordable housing

Cross Cutting Strategies:
3.0.1 Improve coordination between health care systems and social service agencies by establishing a shared mechanism to screen, refer, and follow up on patients' health related social needs (e.g. housing, legal issues, food insecurity).
The Health Collaborative served as a bridge organization for clinical teams and community navigators during a large federal funding opportunity called Accountable Health Communities (AHC). The Health Collaborative administered and monitored this pilot program from 2017-2023. The **AHC Model** addressed a critical gap between clinical care and community services in the current health care delivery system by testing whether systematically identifying and addressing the health-related social needs (HRSNs) of Medicare and Medicaid beneficiaries' through screening, referral, and community navigation services will impact health care costs and reduce health care utilization.

In 2022, THC wrote for an extension to our funding to support another 12 months of work with our partners at hospital sites, federally qualified health centers, community pathways hub, and health plans. A critical policy change was enacted at the federal level in 2023, requiring all hospitals to screen all patients who were admitted for HRSNs, following the standards of the AHC model. These HRSNs include food, housing, interpersonal violence, utilities, and transportation. During our grant extension period (2022-2023), The Health Collaborative began to bring together key hospital partners to build a sustainability plan for this work after the grant period. As a result of that funding, The Health Collaborative has a unique view of the challenges and opportunities our region faces when seeking to better connect patients in medial settings to resources to meet their needs in social settings, and we are dedicated to continuing to support stakeholders in this endeavor.

Over the last three years (2022-2024) The Health Collaborative has continued to support hospital members and community partners in this space, convening hospitals around alignment and opportunities for collaboration on the operationalizing of the screening requirements, and ensuring key community partners in care coordination (e.g., Council on Aging, United Way, Healthcare Access Now) are informed about the developments in federal requirements for hospitals. In the last year alone, we have brought together hospital leadership to discuss and collaborate more than 10 times and care coordination partners over 20 times. We also recently received funding as a subgrantee to Xavier University to assist in the development of a pilot program utilizing students to serve as navigators, and AmeriCorps members, for connecting patients to resources. This planning grant comes from ServeOhio and is in partnership with TriHealth and CareSource.

3.0.2 Increase the number of Community Health Workers to connect individuals to resources and programs addressing food and housing needs.
To accurately track the number of CHWs in our region, a data source is required. Over the last 3 years, THC has explored possible data sources to document progress on this strategy. This research as returned the following results as possible data sources:

- JobsEQ data source
- Local Hospital employees
- The community pathways HUB Healthcare Access Now (HCAN)
- Community Based Organizations employees

While there are possible sources for this data, there is no clear alignment of definitions of the CHW role across these institutions, or clear data sharing agreements to aggregate the information. There are standard definitions for CHWs through the credentialing and licensing of CHWs at the Board of Nursing for the state of Ohio. Moreover, THC continues to learn from the recently established CHW Center for Excellence in Columbus, Ohio.

Reflections on the COVID-19 Pandemic

The COVID-19 pandemic was a generational event that impacted our state, our country, and the world in profound ways. The Health Collaborative is proud to have worked and be part of the solution that helped put an end to the pandemic for Ohioans. During the efforts to put together a comprehensive post-pandemic playbook, we realized that crisis response is far more than the medical and logistical plan, but also the human factor that unites us, builds trust, and strengthens our communities during the most challenging of times. Reflections from community members across sector showcase that the best problems are solved together through **humility**, **trust,** and **empowerment**.

Humility

The weight of expectation is a heavy burden for healthcare professionals. But the willingness to encourage, accept, and implement ideas from a wide array of subject matter experts guided our response and now provides a standard to move the needle in times of crisis. How we each come to the table provides the capability of collaboration. Organizations, coalitions, and committees from across the state came humbly and openly together and thus tackled the COVID-19 pandemic collaboratively.

Trust

Because so many came to the table humbly and openly, trust was quickly built amongst members of the Collaborative. The experts associated with the pandemic response expended an immeasurable amount of time and effort to work through the unprecedented challenge. The trust amongst all parties, the idea that everyone could be counted on to do their part, pulled everyone onward and forward. As a result, mutual solidarity was evident to the communities we serve, and the public was able to trust what they were being told.

Empowerment

With trust and solidarity, we could focus on ensuring that our communities could feel supported and informed. There was a strong focus on making sure those

that were underrepresented and vulnerable to COVID-19 exposure and illness received particular care and attention. Communities of color, older adults, and people experiencing homelessness all had advocates that kept them included in the response. The result was empowerment through critical data, information, and knowledge. The Health Collaborative made it a mission to collect and share high quality data with the understanding that letting our communities make informed decisions would empower them and include them in the response efforts, bringing us closer together at a time when it was desperately needed.

The Health Collaborative spearheaded response efforts to align the COVID-19 response and collected invaluable data that will allow us to better understand and respond to extreme public health events going forward. We also learned and experienced the innate human factors that allowed us to come together, to move in coordination, and solve problems that were truly only ever going to be best solved together. As we heed the words of those that were leading the way, we know now that it is the spirit, the resolve, and the determination of humans that rise to the level of equal importance as the data we so diligently collected and of the future preparedness plans that we have cultivated, and of the scientific advances that we have made.

For more information on reflections, lessons, and key learnings of COVID, please see the following resources:

- **Learning From COVID-19 To Overcome System Hesitancies In Public Health Preparedness And Response**
- **A regional learning health system of congregate care facilities for COVID-19 response**

Regional CHNA report authorship

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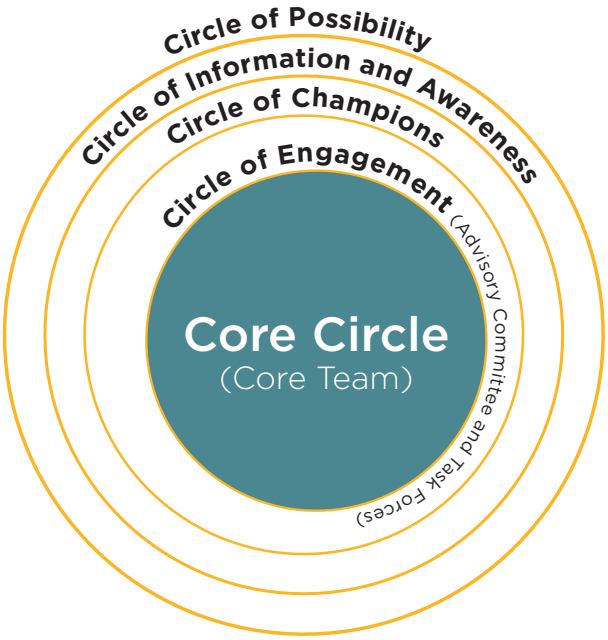
Appendices

Appendix A. Regional CHNA advisory structure

The advisory structure for the Regional Community Health Needs Assessment (CHNA) was built using the Mobilizing Action through Planning and Partnerships 2.0 (MAPP) Circle of Involvement Framework. This includes the:



Core Circle

The Core Circle (Core Team) met regularly, hosted and facilitated meetings, were responsible for deliverables, and managed day-to-day operations of the project.

Core Team
The Health Collaborative
Butler County General Health District
Health Policy Institute of Ohio

Circle of Engagement

The Circle of Engagement (Advisory Committee and Task Forces) kept the Core Circle accountable for progress, provided expertise on each step of the Regional CHNA including data collection and analysis, reviewed results and report drafts, and approved the final Regional CHNA report. Across the 45 participating organizations in the Advisory Committee and Task Forces, diverse populations were represented that include medically underserved people, Black and African American residents, immigrants and refugees, mothers and babies, Hispanic/Latino residents, people experiencing homelessness, people experiencing mental health challenges, people experiencing food insecurity, people with disabilities, and other marginalized populations.

Advisory Committee
Hospitals and health systems
Adams County Regional Medical Center (ACRMC)
Christ Hospital
Cincinnati Children's
Lindner Center of Hope
Margaret Mary Health
Mercy Health Cincinnati
TriHealth
UC Health
Public health
Butler County General Health District and Southwest Association of Ohio Health Commissioners
Cincinnati Health Department
Clermont County Public Health
Hamilton County Public Health
Community-based organizations
Center for Closing the Health Gap
Hamilton County Human Services Chamber
United Way of Greater Cincinnati
Urban League of Greater Southwestern Ohio
Philanthropy
bi3
Interact for Health
Federally Qualified Health Centers
The HealthCare Connection
HealthSource of Ohio
Payor
CareSource

Task Forces
Public Health Task Force:
Butler County General Health District, Ohio
Cincinnati Health Department, Ohio
Norwood City Board of Health, Ohio
City of Springdale Health Department, Ohio
Clermont County Public Health, Ohio
Clinton County Health District, Ohio
Franklin County Health Department, Indiana
Hamilton County Public Health, Ohio
Ripley County Health Department, Indiana
Warren County Health District, Ohio
Special Populations Task Force:
All-In Cincinnati
Black Women Cultivating Change
Cincinnati Compass
Clermont County Board of Developmental Disabilities
Community Builders
Cradle Cincinnati
Foodbank of Dayton
Freestore Foodbank
Greater Cincinnati Behavioral Health Services
Greater Cincinnati Regional Food Policy Council
Healthcare Access Now
Housing Opportunities Made Equal (HOME)
NAMI Southwest Ohio
Refugee Connect
Santa Maria Community Services
Shared Harvest Food Bank
Su Casa
United Way of Greater Cincinnati

Circles of Champions, Information and Awareness, and Possibility

The Circle of Champions and the Circle of Information and Awareness provided high-level review and oversight of the work on behalf of their organizations.

Finally, the Circle of Possibility represents all the community organizations and community members who can be included in actionable strategies for implementation of the Collective Health Agenda and Community Health Improvement Plans.

Appendix B. Community engagement

Development of the Greater Cincinnati Tri-State Region Community Health Needs Assessment (CHNA) was informed by the Advisory Committee and Public Health and Special Populations Task Forces (Appendix A contains a list of Advisory Committee and Task Force member organizations). Advisory Group and Task Force members were engaged in the process because of their close ties to the communities they live in and serve. They were a valuable source of data and information throughout the assessment process.

Community engagement was brought to the forefront of the Regional CHNA process by building the assessment and telling the community story, coming to consensus around shared regional priorities, and launching a Community Partnership Network to build infrastructure for ongoing, bi-directional communication.

The Health Policy Institute of Ohio (HPIO) and The Health Collaborative (THC) provided regular updates to both the Advisory Committee and Task Forces, including monthly meetings with the Advisory Committee and six meetings with the Task Forces.

Organized through the Circles of Involvement framework from MAPP (described in Appendix A), THC actively engaged with partners in specific circles with key outcomes and activities. THC, in partnership with HPIO and a local public health commissioner, led the Regional CHNA Core Team. The Advisory Committee represents the circle of engagement and were part of the decision-making processes throughout the Regional CHNA process. The Public Health and Special Populations task forces sit between the circle of engagement and circle of champions and include organizations who represent key populations in the region. Next, the circle of information and awareness includes a key partner list with whom we engage and communicate when key milestones are reached throughout the process. Finally, the circle of possibility represents those organizations, leaders, or decision makers who are not regularly involved or may not see their role in the Regional CHNA.

Defining community engagement

For the regional CHNA, engagement with community began with clearly defining the community and then establishing intentional, thoughtful, and co-created ways to engage with partners and build trust. Facilitated by THC, community is defined as the 18 county region of southwest Ohio, Northern Kentucky, and Southeast Indiana, and

inclusive of health systems and hospitals, public health departments that serve those jurisdictions, and all community-based organizations serving community members. Through specific activities built for a variety of audiences within this community, THC engages partners throughout all phases of the Collective Health Agenda cycle (including the regional CHNA) with convening, stakeholder listening sessions, one-on-one meetings, and in alignment with principles of community based participatory research.

Building the assessment and telling the community story

To minimize the burden on community members who report being over-surveyed and assessed, the Advisory Committee decided to leverage recent, existing sources of primary and secondary community data, rather than collecting new primary data. Advisory Committee and Task Force members were invited to share any data they have collected to be included in the Regional CHNA, with a focus on sources that filled data gaps (described in Appendix C). Seven additional sources of community data were identified and included in the Regional CHNA.

Coming to consensus around shared regional priorities

Throughout the Regional CHNA process, THC emphasized the shared values and principles of collective action for the Advisory Committee and Task Force members. This invited alignment from partners on the significant health needs, potential priorities, and final priorities described in Appendix E.

To inform the prioritization process, HPIO developed a pre-prioritization survey to be completed by hospitals, local health departments, and other community partners. Of the 47 partners who responded, the largest proportion represented community-based organizations (28%), highlighting the inclusion of community voices through the prioritization process.

More information on the results of the pre-prioritization survey can be found in Appendix E.

Launching a Community Partnership Network

The Health Collaborative developed the Community Partnership Network (CPN) to build ongoing community engagement into the work of the Regional CHNA and Collective Health Agenda. The CPN was created based on feedback THC received from partners that the Regional CHNA process for the last several cycles felt very circular, asking the same questions repeatedly to the same communities, with little to no action on issues that arise. Communities and organizations across the region and across sectors expressed concern around the repeated data collection processes, citing the burden it has on community members to discuss problems without seeing any solutions or actions to address community needs.

The CPN will create an opportunity for more regular community engagement, to center community voice and equity in the Regional CHNA, provide space for bidirectional communication between health systems and the community, and reduce "new" data collection (e.g., focus groups and community health needs surveys). The purpose of the CPN is to leverage existing community meetings, momentum, and

assets to strengthen connections between partners, including the community, and advance shared goals for community health.

The following community-based organizations have agreed to participate in the CPN:
- Cincinnati Compass
- Clermont County Healthy Partners (through the health department)
- Hamilton County Suicide Prevention Coalition
- Black Women Cultivating Change
- Hamilton County Human Services Chamber (HSC)
- Center for Closing the Health Gap

The CPN has met these milestones:
- Attended five meetings to date with CPN partners, with a goal of six meetings. These meetings have include five preparatory meetings and one follow-up.
- Contracted with academic experts to create an infrastructure for THC in partnership with CPN pilot partners.
- Created and co-designed drafts for key CPN infrastructure.

Appendix C. Data collection and analysis methodology

The Health Collaborative contracted with the Health Policy Institute of Ohio (HPIO) to develop the Regional Community Health Needs Assessment (CHNA). The analysis was guided by a set of research questions, and consisted of:
- Secondary, quantitative data compilation and analysis
- Additional primary and secondary community data analysis

Research questions

The Health Collaborative and HPIO developed the following research questions, based on Public Health Accreditation Board (PHAB) and Internal Revenue Service (IRS) requirements, to guide development of this Community Health Needs Assessment:
1. What are the most significant health needs in the region?
2. What populations are experiencing inequities and disparities across health, socio-economic, environmental and quality-of-life outcomes?
3. What are the systems and structures that drive the identified health needs?
4. What strengths and resources does the region have that can address the region's most significant health needs? What resources and assets exist to support communities experiencing inequities and disparities?
5. What progress have partners made on the priorities identified in the last CHNA?

Secondary, quantitative data analysis methodology

How were metrics selected?

HPIO reviewed a wide range of publicly available data sources, including national- and state-based population health surveys, vital statistics, and administrative data from state and federal agencies, among other sources. Using these sources,

HPIO compiled a list of 264 metrics for consideration in the Regional CHNA. From this inventory of metrics, The Health Collaborative and HPIO recommended 67 secondary, quantitative metrics using the following criteria approved by the Advisory Committee.

Metric selection criteria

Goal: Identify the **most important** metrics needed to describe the region's significant health needs, including social and structural drivers of health

- **Data availability** — Data available at the county-level that can be assessed for long-term trend (change over time), compared to performance of the U.S. or the state overall, and can be disaggregated to look at disparities and inequities (e.g., by race, ethnicity, household income)
- **Source integrity** — Metrics are recognized as valid and reliable, and data is gathered from reputable sources
- **Face value** — Metrics are easily understood by the public
- **Alignment** — Metrics align with relevant state and local plans
- **Data quality and recency** — Data for the metric is complete, accurate, and most-recent data is from the past three years

Figure C.1 displays how the 67 metrics are organized in the Regional CHNA. These metrics were organized based on the domains in the Mobilizing for Action through Planning and Partnership (MAPP 2.0) **framework**.

Figure C.1. **Regional CHNA metric information**

Domain	Total metrics	Metric disaggregated (i.e., broken out by race, ethnicity, age, income or other factor)
Demographics	3	3
Systems of power, privilege, and oppression	3	1
Social determinants of health	26*	10
Health behaviors and outcomes	35*	18
Total	**67**	**32**

*These domains each include a metric that has one or more additional, underlying metrics. These metrics were only counted once for the purpose of these totals. All metrics and associated data are provided in the **data appendix spreadsheet**.

Data years vary by metric based on the data source. HPIO compiled the most recent year of available data for the Regional CHNA. The **data appendix spreadsheet** contains complete information for each metric included in the Regional CHNA, including metric names, descriptions, sources, regional and county-level data, and disaggregated data.

Quantitative data analysis methodology

The use of rates, percentages and numbers. To demonstrate the frequency of an event, incident or condition, the Regional CHNA report often uses rates, which are calculated as the "number of incidences, per population." Rates provide standardized measurement for comparison across different groups (e.g., white, compared to Black) or different geographic locations (e.g., Hamilton County as compared to Franklin County). Percentages are often used to represent parts of a whole or express proportions, and are helpful for understanding relative values, or changes over time (e.g., 25% of the total population was impacted). Numbers, which describe absolute values or quantities, are useful for planning purposes but have limitations when comparing across groups of different sizes.

Regional values. Regional data values in this report were calculated one of two ways. If the data source provided a numerator and denominator for all 18 counties in the region, a true regional value was calculated. When a data source did not provide numerators and denominators and/or up to one-third of available counties were missing from the data source, a median value was calculated for the region to serve as the regional value. The median county value in the region was used as a proxy measure for the region overall value when a regional overall value could not be calculated. These are noted in the tables where they occur, graphics, and in the data appendix spreadsheet. Cases where counties in the region are missing from the data calculations are also noted in the **data appendix**.

Benchmark analysis. Benchmarks, including national data and Healthy People 2030 targets, were identified for all potential priorities (described in Appendix E). The regional value for each potential priority was then compared to the value of the U.S. overall and to applicable national Healthy People 2030 targets, when available. For the Regional CHNA's three priority areas, benchmarks were analyzed to determine if the region performs better, worse, or the same as the rest of the nation and the Healthy People 2030 benchmarks. Metrics that had less than 10% difference between the regional and benchmark values were classified as performing the "same." Metrics that had a difference of 10% or greater were classified as "better" or "worse."

Analysis of populations who face the greatest barriers. The magnitude of disparities across population characteristics such as race and ethnicity, age, and county type were assessed for 12 metrics related to the Regional CHNA's three priorities using disparity ratios. Disparity ratios were calculated by dividing the outcome of each comparison group by the outcome of the rest of the region. The prevalence estimates for each disaggregated metric were calculated for each comparison group. The prevalence for the rest of the region is then re-calculated for each additional breakout group.

When data availability limited the ability to calculate the magnitude of difference between a group and the rest of the region, a median regional value was used. The following measures had missing counties:

- Suicide deaths
- Mental health providers
- Mental health-related hospital encounters
- Depression-related hospital encounters
- Suicide attempt-related hospital encounters

These are denoted as asterisks in the **data appendix spreadsheet**.

To analyze potential disparities in rural areas, the USDA **Economic Research Service (ERS)** Metropolitan (Metro) and Nonmetropolitan (non-Metro) county type classification was used.

To analyze potential disparities in Appalachian areas, the **Appalachian Regional Commission's** county type classification was used.

When possible, race and ethnicity data were disaggregated, or separated, into the following groups: white (non-Hispanic), Black (non-Hispanic), Asian and/or Pacific Islander (non-Hispanic), Other (non-Hispanic), and Hispanic. When data was not available to classify based on these groups, different racial and ethnic classifications were used based on the data source and data availability.

Once disparity ratios were calculated, any ratio that was at least 10% worse than the rest of the region was elevated as a population who faces the greatest barriers. Because this analysis was limited to metrics with available disaggregated data, the Advisory Committee and Task Forces were consulted to identify other groups experiencing disparities and inequities that were not identifiable in the analyzed data.

Ohio Hospital Association (OHA) data analysis. The Health Collaborative and HPIO analyzed 18 Ohio Hospital Association data metrics on hospital encounters in the region. The methodology used for that data set is available in Appendix D.

Supplemental primary and secondary community data analysis methodology

In analyzing the secondary, quantitative data described above, the following gaps emerged:

- Lack of data for smaller counties, including rural and Appalachian communities
- Lack of data for specific groups, including certain racial and ethnic populations and members of the LGBTQ+ community
- Lack of data on certain social and systemic drivers of health

Seven additional sources of primary and secondary data were identified by THC, HPIO, and the Advisory Committee and Task Forces to fill those data gaps and center community voices and perspectives.

HPIO analyzed the seven sources listed below, which include surveys, focus groups

and reports. Key findings from the sources were then themed based on the domains in the MAPP 2.0 **framework**.

The seven sources focused on the Greater Cincinnati Tri-State region, with variation in area of focus, as noted below. Some of these sources included secondary data. Analysis of this data was limited to available information and not based on the underlying data source.

Sources analyzed include:

- **2-1-1 data.** United Way of Greater Cincinnati and Indiana Family and Social Services Administration, 2024. Area of focus: counties in the greater Cincinnati region, including Ohio, Kentucky and Indiana
- **State of Black Cincinnati report.** Urban League of Greater Southwestern Ohio, 2024. Area of focus: Cincinnati
- **Our Health, Our Opportunity report.** Interact for Health, 2024. Area of focus: Greater Cincinnati region
- **Community Health Status Survey.** Interact for Health and the University of Cincinnati Institute for Policy Research, 2022. Area of focus: 22 counties in the Greater Cincinnati region
- **2021 CHNA provider survey results.** The Health Collaborative and Measurement Resources Company, 2021. Area of focus: 26 counties in the Greater Cincinnati region
- **2021 CHNA focus group results.** The Health Collaborative and Measurement Resources Company, 2021. Area of focus: 26 counties in the Greater Cincinnati region

Figure C.2. **Source and theme matrix**
The table below summarizes which sources had key themes in each domain of the Regional CHNA.

	Community strengths and organizational capacities	Systems of power, privilege and oppression	Social determinants of health	Health behaviors and outcomes
2-1-1 data		✓	✓	
State of Black Cincinnati report	✓	✓	✓	✓
Our Health, Our Opportunity report	✓	✓	✓	✓
Community Health Status Survey	✓		✓	✓
2021 CHNA provider survey			✓	
2021 CHNA focus groups			✓	

Limitations of the assessment

The Regional CHNA includes data from a variety of data sources, including publicly available and requested data. It includes survey results, birth records, and administrative data. While care was taken to compile data from credible sources, each source has its own set of limitations, such as self-reported conditions and potential changes in methodology from year to year.

There are several limitations that emerged:

- **Population focus.** The Regional CHNA is focused on adults, ages 18 and over, and families living in the Greater Cincinnati Tri-State Region. Other partners in the region are assessing the health and well-being of children. Only one metric is child-specific (child poverty).
- **County-level data.** HPIO's main level of analysis for secondary, quantitative data analysis for the Regional CHNA was at the county-level. When metrics are disaggregated by county, the sample sizes of the populations can become too small, creating data reliability and suppression issues. In these cases, data values for certain counties could not be reported.
- **Disaggregated data.** Very few data sources allowed for disaggregation of data by county and other demographic categories, such as income, age, or race and ethnicity. In addition, not all sources use mutually exclusive racial and ethnic categories (e.g., Black non-Hispanic and Hispanic, all races) for the disaggregation of data by race and ethnicity. When metrics could be disaggregated by county and another demographic characteristic, the sample sizes of the population groups often became too small, creating data reliability and suppression issues. In these cases, data values could not be reported. Many data sources often have limited categories for disaggregation and lack the necessary information to break data down by groups such as LGBTQ+ individuals or veterans.
- **Data years**. HPIO provided the most recent year of data for which data was available for the most counties in the region. The **data appendix spreadsheet** includes data years for all secondary, quantitative data included in the Regional CHNA. For data points in the Additional Primary and Secondary Community Data Analysis, consult those sources for more information on their methodology.
- **Access to underlying data for supplemental data analysis.** For the supplemental primary and secondary data analysis (described on pages 51 and 52), HPIO was provided with final reports or summary documents often without access to the underlying data (e.g., sample sizes or raw data values to conduct additional data analysis). Data from those sources are presented as is from the source. For further information on the methodology used by those reports and summaries, please consult the sources listed in figure C2 above.

Appendix D. Ohio Hospital Association data analysis methodology

The Health Collaborative analyzed 18 Ohio Hospital Association (OHA) data metrics on hospital encounters in the region. The methodology used for that data analysis is included below.

Methodology for Creating Hospital-Based Healthcare Utilization Measures for the Community Health Needs Assessment

This document specifies the methodology for a project to capture hospital utilization measures from The Health Collaborative's databases containing the patient encounter data for health systems located in eighteen counties in Greater Cincinnati, Ohio.

Date: 12/20/2024

Audience: Created for Health Policy Institute of Ohio

Created by: The Health Collaborative

Key Contacts:

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Objective

The objective of this methodology paper is to clearly and transparently explain the methods and procedures used to create specific hospital-based utilization measures from patient encounter data provided by 38 hospitals in the Greater Cincinnati, Ohio region for use in the Community Health Needs Assessment. The Health Collaborative conducts the Community Health Needs Assessment (CHNA) on behalf of our members and partners to better understand the specific health needs of the communities served, and then develop meaningful, measurable responses. CHNA is an Internal Revenue Service (IRS) compliance requirement for nonprofit hospitals and local public health departments. (Internal Revenue Service, 2024)

Target Population

The population observed in these data are limited to patients who received healthcare services at any of 38 hospital facilities (hospital facilities identified in *Table 1: Hospitals Contributing Data*) where the patient reported a physical home address within the 18 county CHNA region at the start or admission date of the encounter between January 1, 2019 and December 31, 2023. *Table 2: Hospital Encounters per Year* displays a count of the total hospital encounters, rounded to the nearest ten thousand, that were studied for these hospital-based utilization measures.

> *Note: Hospital encounters are not equivalent to unique patients as a single patient may have received multiple hospital-based services within a single calendar year.*

Table 1: Hospitals Contributing Data

Hospital Facility Name
Adams County Regional Medical Center
Atrium Medical Center
Bethesda Arrow Springs
Bethesda Butler Hospital
Bethesda North Hospital
Cincinnati Children's
Clinton Memorial Hospital Regional Health System
Daniel Drake Center for Post-Acute Care
St. Elizabeth Dearborn County Hospital
Fort Hamilton Hospital
Good Samaritan Hospital - Cincinnati
Good Samaritan Western Ridge
Highland District Hospital
Kettering Health Network Emergency - Middletown
Lindner Center of HOPE
Margaret Mary Hospital
McCullough-Hyde Memorial Hospital
Mercy Health - Anderson Hospital
Mercy Health - Clermont Hospital
Mercy Health - Fairfield Hospital
Mercy Health - Harrison Medical Center
Mercy Health - Mt. Orab Medical Center
Mercy Health - Queen City Medical Center
Mercy Health - Rookwood Medical Center
Mercy Health - West Hospital
St. Elizabeth Covington
St. Elizabeth Edgewood
St. Elizabeth Florence
St. Elizabeth Fort Thomas
St. Elizabeth Grant
St. Elizabeth Owen
The Christ Hospital
The Christ Hospital Medical Center - Liberty Township
The Jewish Hospital - Mercy Health
TriHealth Evendale Hospital
University of Cincinnati Medical Center
West Chester Hospital

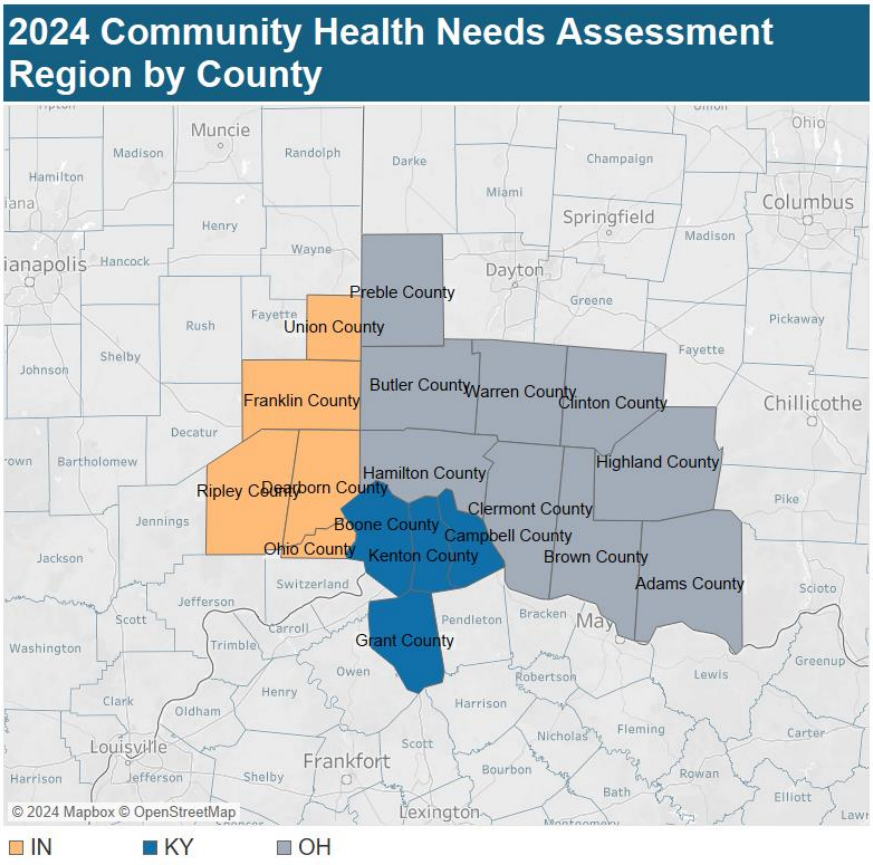
Table 2: Hospital Encounters per Year

Calendar Year	Hospital Encounters (millions)
2019	4.65
2020	4.29
2021	5.00
2022	4.91
2023	5.00

Geographical Coverage

Only patients with a home address at the time of encounter within the following county/state combinations were included. Counties in Indiana include Dearborn, Franklin, Ohio, Ripley, and Union. Counties in Kentucky include Boone, Campbell, Grant, and Kenton. Counties in Ohio include Adams, Brown, Butler, Clermont, Clinton, Hamilton, Highland, Preble, and Warren.

Figure 1: Map of the 2024 Community Health Needs Assessment Region by County



Analytical Framework

Basic aggregation was employed as the foundational analytics framework for these measures. The intent of the aggregated data is to illustrate a high-level overview of the CHNA region and serve as a starting point for more complex analysis, enabling identification of trends, patterns, and outliers within the data.

Patient-level hospital encounters from 38 hospital facilities were compiled and summarized into a simpler form, allowing for easier interpretation and potentially further statistical analysis. Grouping data based on specific criteria (e.g., demographics, chronic health conditions, or time intervals), typically using functions like sum, average, count, minimum, and maximum, were used to extract key insights from the larger datasets. Additionally, 'rates per population' were calculated to allow for meaningful comparisons between different groups or areas with varying population sizes and compositions. Rates per 100,000 population are typically calculated as:

1) (Sum of the number of occurrences to be measured) divided by the (total population)
2) Multiply by 100,000

Risk adjustment

Patient-level encounter data was not risk-adjusted. Measure results and subsequent aggregations were compiled using the raw encounter data with no process to statistically account for differences in patient case mix that influence health care outcomes.

Limitations of applied framework

- Limited insights: Aggregations and 'per population' rates may not reveal complex relationships or interactions between variables within the data.
- Potential for bias: Improper grouping or aggregation criteria can lead to misleading results.

Output

Please see the Technical Specification for definitions and descriptions of measures and outputs.

Measures created:

Hospital encounters with a primary or admission diagnosis for alcohol
Hospital encounters with a primary or admission diagnosis for depression
Hospital encounters with a primary or admission diagnosis for gestational depression
Hospital encounters with a primary or admission diagnosis for gestational hypertension

Hospital encounters with a primary or admission diagnosis for marijuana
Hospital encounters with a primary or admission diagnosis for mental health
Hospital encounters with a primary or admission diagnosis for tobacco use
Hospital encounters with any diagnosis for live births
Hospital encounters with any diagnosis for overdose for population aged 11+ years
Hospital encounters with any diagnosis for suicide attempt
Hospital encounters with a primary or admission diagnosis for substance use disorder
Hospital encounters ranked by primary diagnosis by county
Hospital encounters with any diagnosis for acute myocardial infarction
Hospital encounters with any diagnosis for heart failure and nonischemic heart disease
Hospital encounters with any diagnosis for hypertension
Hospital encounters with any diagnosis for ischemic heart disease

Technical Specifications

HOSPITAL ENCOUNTERS WITH A PRIMARY OR ADMISSION DIAGNOSIS FOR ALCOHOL

Description

Rate per 100,000 hospital encounters where an ICD-10 diagnosis for alcohol was identified as the primary or admission diagnosis in the encounter data.

Numerator

Count of distinct inpatient or outpatient hospital encounters per calendar year for patients of any age where an ICD-10 code for alcohol was identified in the primary or admission diagnosis field.

Exclusions

Exclude any encounter:

- where encounter type (i.e., inpatient or outpatient) is null.
- where the ethnicity field is null.
- where the race field is null.
- where the patient's home address is null.
- where patient's home address is not within defined geography (e.g., 18 county CHNA region).

Denominator

All inpatient and outpatient hospital encounters where a patient's home address was within defined geography (e.g., eighteen county CHNA region) during the time of the encounter.

ICD-10 Code List*

Alcohol encounters:

F10	Alcohol related disorders
Z71.41	Alcohol abuse counseling and surveillance of alcoholic

*ICD-10 from International Classification of Diseases, Tenth Revision (Centers for Disease Control and Prevention (CDC), 2024)

HOSPITAL ENCOUNTERS WITH A PRIMARY OR ADMISSION DIAGNOSIS FOR DEPRESSION

Description

Rate per 100,000 hospital encounters where an ICD-10 diagnosis for depression was identified as the primary or admission diagnosis in the encounter data.

Numerator

Count of distinct inpatient or outpatient hospital encounters per calendar year for patients of any age where an ICD-10 code for depression was identified in the primary or admission diagnosis field.

Exclusions

Exclude any encounter:

- where encounter type (i.e., inpatient or outpatient) is null.
- where the ethnicity field is null.
- where the race field is null.
- where the patient's home address is null.
- where patient's home address is not within defined geography (e.g., 18 county CHNA region).

Denominator

All inpatient and outpatient hospital encounters where a patient's home address was within defined geography (e.g., eighteen county CHNA region) during the time of the encounter.

ICD-10 Code List*

Depression encounters:

F32	Depressive episode
F33	Major depressive disorder, recurrent

*ICD-10 from International Classification of Diseases, Tenth Revision (Centers for Disease Control and Prevention (CDC), 2024)

HOSPITAL ENCOUNTERS WITH A PRIMARY OR ADMISSION DIAGNOSIS FOR GESTATIONAL DEPRESSION

Description

Rate per 100,000 hospital encounters per calendar year where an ICD-10 diagnosis for gestational depression was identified as the primary or admission diagnosis in the encounter data.

Numerator

Count of distinct inpatient or outpatient hospital encounters for patients of any age where an ICD-10 code for gestational depression was identified in the primary or admission diagnosis field.

Exclusions

Exclude any encounter:

- where encounter type (i.e., inpatient or outpatient) is null.
- where the ethnicity field is null.
- where the race field is null.
- where the patient's home address is null.
- where patient's home address is not within defined geography (e.g., 18 county CHNA region).

Denominator

All inpatient and outpatient hospital encounters where a patient's home address was within defined geography (e.g., eighteen county CHNA region) during the time of the encounter.

ICD-10 Code List*

Gestational depression encounters:

O99.34	Other mental disorders that complicate pregnancy, childbirth, and the puerperium

*ICD-10 from International Classification of Diseases, Tenth Revision (Centers for Disease Control and Prevention (CDC), 2024)

HOSPITAL ENCOUNTERS WITH A PRIMARY OR ADMISSION DIAGNOSIS FOR GESTATIONAL HYPERTENSION

Description

Rate per 100,000 hospital encounters where an ICD-10 diagnosis for gestational hypertension was identified as the primary or admission diagnosis in the encounter data.

Numerator

Count of distinct inpatient or outpatient hospital encounters per calendar year for patients of any age where an ICD-10 code for gestational hypertension was identified in the primary or admission diagnosis field.

Exclusions

Exclude any encounter:

- where encounter type (i.e., inpatient or outpatient) is null.
- where the ethnicity field is null.
- where the race field is null.
- where the patient's home address is null.

- where patient's home address is not within defined geography (e.g., 18 county CHNA region).

Denominator
All inpatient and outpatient hospital encounters where a patient's home address was within defined geography (e.g., eighteen county CHNA region) during the time of the encounter.

ICD-10 Code List*
Gestational hypertension encounters:

O13	Gestational [pregnancy-induced] hypertension without significant proteinuria

*ICD-10 from International Classification of Diseases, Tenth Revision (Centers for Disease Control and Prevention (CDC), 2024)

HOSPITAL ENCOUNTERS WITH A PRIMARY OR ADMISSION DIAGNOSIS FOR MARIJUANA

Description
Rate per 100,000 hospital encounters where an ICD-10 diagnosis for marijuana was identified as the primary or admission diagnosis in the encounter data.

Numerator
Count of distinct inpatient or outpatient hospital encounters per calendar year for patients of any age where an ICD-10 code for marijuana was identified in the primary or admission diagnosis field.

Exclusions
Exclude any encounter:
- where encounter type (i.e., inpatient or outpatient) is null.
- where the ethnicity field is null.
- where the race field is null.
- where the patient's home address is null.
- where patient's home address is not within defined geography (e.g., 18 county CHNA region).

Denominator
All inpatient and outpatient hospital encounters where a patient's home address was within defined geography (e.g., eighteen county CHNA region) during the time of the encounter.

ICD-10 Code List*
Marijuana encounters:

F12	Cannabis related disorders

*ICD-10 from International Classification of Diseases, Tenth Revision (Centers for Disease Control and Prevention (CDC), 2024)

HOSPITAL ENCOUNTERS WITH A PRIMARY OR ADMISSION DIAGNOSIS FOR MENTAL HEALTH

Description

Rate per 100,000 hospital encounters where an ICD-10 diagnosis for mental health was identified as the primary or admission diagnosis in the encounter data.

Numerator

Count of distinct inpatient or outpatient hospital encounters per calendar year for patients of any age where an ICD-10 code for mental health was identified in the primary or admission diagnosis field.

Exclusions

Exclude any encounter:

- where encounter type (i.e., inpatient or outpatient) is null.
- where the ethnicity field is null.
- where the race field is null.
- where the patient's home address is null.
- where patient's home address is not within defined geography (e.g., 18 county CHNA region).

Denominator

All inpatient and outpatient hospital encounters where a patient's home address was within defined geography (e.g., eighteen county CHNA region) during the time of the encounter.

ICD-10 Code List*

Mental health encounters:

F01-F99	Mental, Behavioral and Neurodevelopmental disorders

*ICD-10 from International Classification of Diseases, Tenth Revision (Centers for Disease Control and Prevention (CDC), 2024)

HOSPITAL ENCOUNTERS WITH A PRIMARY OR ADMISSION DIAGNOSIS FOR TOBACCO USE

Description

Rate per 100,000 hospital encounters where an ICD-10 diagnosis for tobacco use was identified as the primary or admission diagnosis in the encounter data.

Numerator

Count of distinct inpatient or outpatient hospital encounters per calendar year for patients of any age where an ICD-10 code for tobacco use was identified in the primary or admission diagnosis field.

Exclusions

Exclude any encounter:

- where encounter type (i.e., inpatient or outpatient) is null.
- where the ethnicity field is null.
- where the race field is null.
- where the patient's home address is null.
- where patient's home address is not within defined geography (e.g., 18 county CHNA region).

Denominator

All inpatient and outpatient hospital encounters where a patient's home address was within defined geography (e.g., eighteen county CHNA region) during the time of the encounter.

ICD-10 Code List*

Tobacco use encounters:

F17	Nicotine dependence
Z72.0	Tobacco use

*ICD-10 from International Classification of Diseases, Tenth Revision (Centers for Disease Control and Prevention (CDC), 2024)

HOSPITAL ENCOUNTERS WITH ANY DIAGNOSIS FOR LIVE BIRTHS

Description

Rate per 100,000 hospital encounters where an ICD-10 diagnosis for live birth was identified in any diagnosis field in the encounter data or a CPT code for vaginal or Cesarean delivery was identified in any procedure field.

Numerator

Count of distinct inpatient or outpatient hospital encounters per calendar year for patients of any age where an ICD-10 code for live birth was identified in any diagnosis field* OR a CPT code for vaginal or Cesarean delivery was identified.

**Sixteen diagnosis fields were available within the encounter database from The Health Collaborative.*
***Twenty-five CPT fields were available within the encounter database from The Health Collaborative.*

Exclusions

Exclude any encounter:

- where encounter type (i.e., inpatient or outpatient) is null.
- where the ethnicity field is null.
- where the race field is null.
- where the patient's home address is null.

- where patient's home address is not within defined geography (e.g., 18 county CHNA region).

Denominator

All inpatient and outpatient hospital encounters where a patient's home address was within defined geography (e.g., eighteen county CHNA region) during the time of the encounter.

ICD-10 Code List*

Live birth encounters:

O80	Encounter for full-term uncomplicated delivery	Z37.59	Other multiple births, all liveborn
O82	Encounter for cesarean delivery without indication	Z37.60	Multiple births, unspecified, some liveborn
Z37.0	Single live birth	Z37.61	Triplets, some liveborn
Z37.2	Twins, both liveborn	Z37.62	Quadruplets, some liveborn
Z37.3	Twins, one liveborn and one stillborn	Z37.63	Quintuplets, some liveborn
Z37.50	Multiple births, unspecified, all liveborn	Z37.64	Sextuplets, some liveborn
Z37.51	Triplets, all liveborn	Z37.69	Other multiple births, some liveborn
Z37.52	Quadruplets, all liveborn	Z37.9	Outcome of delivery, unspecified
Z37.53	Quintuplets, all liveborn	Z39.0	Encounter for care and examination of mother immediately after delivery
Z37.54	Sextuplets, all liveborn		

CPT Code List*

59509	Vaginal delivery only (with or without episiotomy, and/or forceps)
59514	Cesarean delivery only

*ICD-10 and CPT codes defined by American College of Obstetricians and Gynecologists (Admon LK, 2023)

HOSPITAL ENCOUNTERS WITH ANY DIAGNOSIS FOR OVERDOSE FOR POPULATION AGED 11+ YEARS

Description

Rate per 100,000 emergency department hospital encounters where an ICD-10 diagnosis for a drug overdose was identified in any diagnosis field in the encounter data for patients aged 11-years and older at the start of the hospital encounter.

Numerator

Count of distinct inpatient or outpatient hospital encounters per calendar year for patients aged 11-years and older at the start of the hospital encounter where an ICD-10 code for a drug overdose was identified in any diagnosis field. Encounters are limited to admission type of "Emergency department."

**Sixteen diagnosis fields were available within the encounter database from The Health Collaborative.*

Exclusions

Exclude any encounter:

- where encounter type (i.e., inpatient or outpatient) is null.
- where patient's age is null
- where patient's age is less than 11 years at the start of the hospital encounter
- where admission type is not "emergency department"
- where the ethnicity field is null.
- where the race field is null.
- where the patient's home address is null.
- where patient's home address is not within defined geography (e.g., 18 county CHNA region).

Denominator

All inpatient and outpatient hospital encounters with an admission type of "emergency department" where patient's age is 11 years at the start of the hospital encounter AND the patient's home address was within defined geography (e.g., eighteen county CHNA region) during the time of the encounter.

ICD-10 Code List*

Overdose encounters:

T40.0X1A	Opium - accidental (unintentional)	T40.603A	Unspecified narcotics - assault
T40.0X2A	Opium - intentional self-harm	T40.604A	Unspecified narcotics – undetermined
T40.0X3A	Opium - assault	T40.691A	Other narcotics - accidental (unintentional)
T40.0X4A	Opium - undetermined	T40.692A	Other narcotics - intentional self-harm
T40.1X1A	Heroin - accidental (unintentional)	T40.693A	Other narcotics - assault
T40.1X2A	Heroin - intentional self-harm	T40.694A	Other narcotics - undetermined
T40.1X3A	Heroin - assault	T42.4X1A	Benzodiazepines - accidental (unintentional)
T40.1X4A	Heroin - undetermined	T42.4X2A	Benzodiazepines - intentional self-harm
T40.2X1A	Other opioids - accidental (unintentional)	T42.4X3A	Benzodiazepines - assault
T40.2X2A	Other opioids - intentional self-harm	T42.4X4A	Benzodiazepines - undetermined
T40.2X3A	Other opioids - assault	T43.601A	Unspecified psychostimulants - accidental (unintentional)
T40.2X4A	Other opioids - undetermined	T43.602A	Unspecified psychostimulants - intentional self-harm
T40.3X1A	Methadone - accidental (unintentional)	T43.603A	Unspecified psychostimulants - assault
T40.3X2A	Methadone - intentional self-harm	T43.604A	Unspecified psychostimulants - undetermined
T40.3X3A	Methadone - assault	T43.621A	Amphetamines - accidental (unintentional)

T40.3X4A	Methadone - undetermined	T43.622A	Amphetamines - intentional self-harm
T40.411A	Fentanyl or fentanyl analogs - accidental (unintentional)	T43.623A	Amphetamines - assault
T40.412A	Fentanyl or fentanyl analogs - intentional self-harm	T43.624A	Amphetamines - undetermined
T40.413A	Fentanyl or fentanyl analogs - assault	T43.631A	Methylphenidate - accidental (unintentional)
T40.414A	Fentanyl or fentanyl analogs - undetermined	T43.632A	Methylphenidate - intentional self-harm
T40.421A	Tramadol - accidental (unintentional)	T43.633A	Methylphenidate - assault
T40.422A	Tramadol - intentional self-harm	T43.634A	Methylphenidate - undetermined
T40.423A	Tramadol - assault	T43.691A	Other psychostimulants - accidental (unintentional)
T40.424A	Tramadol - undetermined	T43.692A	Other psychostimulants - intentional self-harm
T40.491A	Other synthetic narcotics - accidental (unintentional)	T43.693A	Other psychostimulants - assault
T40.492A	Other synthetic narcotics - intentional self-harm	T43.694A	Other psychostimulants - undetermined
T40.493A	Other synthetic narcotics - assault	T50.901A	Unspecified drugs - accidental (unintentional)
T40.494A	Other synthetic narcotics - undetermined	T50.902A	Unspecified drugs - intentional self-harm
T40.5X1A	Cocaine - accidental (unintentional)	T50.903A	Unspecified drugs - assault
T40.5X2A	Cocaine - intentional self-harm	T50.904A	Unspecified drugs - undetermined
T40.5X3A	Cocaine - assault	T50.991A	Other drugs - accidental (unintentional)
T40.5X4A	Cocaine - undetermined	T50.992A	Other drugs - intentional self-harm
T40.601A	Unspecified narcotics - accidental (unintentional)	T50.993A	Other drugs - assault
T40.602A	Unspecified narcotics - intentional self-harm	T50.994A	Other drugs – undetermined

*ICD-10 from Ohio Administrative Code Rule Final 3701-3-16 Appendix A (Ohio Legislative Service Commission, 2024)

HOSPITAL ENCOUNTERS WITH ANY DIAGNOSIS FOR SUICIDE ATTEMPT

Description

Rate per 100,000 hospital encounters where an ICD-10 diagnosis for a suicide attempt was identified in any diagnosis field in the encounter data.

Numerator

Count of distinct inpatient or outpatient hospital encounters per calendar year for patients where an ICD-10 code for a suicide attempt was identified in any diagnosis field.

**Sixteen diagnosis fields were available within the encounter database from The Health Collaborative.*

Exclusions

Exclude any encounter:

- where encounter type (i.e., inpatient or outpatient) is null.
- where patient's age is null
- where the ethnicity field is null.
- where the race field is null.
- where the patient's home address is null.
- where patient's home address is not within defined geography (e.g., 18 county CHNA region).

Denominator

All inpatient and outpatient hospital encounters where a patient's home address was within defined geography (e.g., eighteen county CHNA region) during the time of the encounter.

ICD-10 Code List*

Suicide attempt encounters:

T14.91	Suicide attempt

*ICD-10 from International Classification of Diseases, Tenth Revision (Centers for Disease Control and Prevention (CDC), 2024)

HOSPITAL ENCOUNTERS WITH A PRIMARY OR ADMISSION DIAGNOSIS FOR SUBSTANCE USE DISORDER

Description

Rate per 100,000 hospital encounters where an ICD-10 diagnosis for substance use disorder was identified as the primary or admission diagnosis in the encounter data.

Numerator

Count of distinct inpatient or outpatient hospital encounters per calendar year for patients where an ICD-10 code for a drug overdose was identified in the primary or admission diagnosis field.

**Sixteen diagnosis fields were available within the encounter database from The Health Collaborative.*

Exclusions

Exclude any encounter:

- where encounter type (i.e., inpatient or outpatient) is null.
- where the ethnicity field is null.
- where the race field is null.
- where the patient's home address is null.
- where patient's home address is not within defined geography (e.g., 18 county CHNA region).

Denominator

All inpatient and outpatient hospital encounters where a patient's home address was within defined geography (e.g., eighteen county CHNA region) during the time of the encounter.

ICD-10 Code List*

Substance use disorder:

F10	Alcohol related disorders	F15	Other stimulant related disorders
F11	Opioid related disorders	F16	Hallucinogen related disorders
F12	Cannabis related disorders	F17	Nicotine dependence
F13	Sedative, hypnotic, or anxiolytic related disorders	F18	Inhalant related disorders
F14	Cocaine related disorders	F19	Other psychoactive substance related disorders

*ICD-10 from International Classification of Diseases, Tenth Revision (Centers for Disease Control and Prevention (CDC), 2024)

HOSPITAL ENCOUNTERS RANKED BY PRIMARY DIAGNOSIS BY COUNTY

Description

Unique rank order by volume of hospital encounters for ICD-10 codes in the primary diagnosis field. Ranking of "1" indicates the most commonly occurring diagnosis. Higher numerical rank indicates fewer encounters for the specified ICD-10 diagnoses code. Rankings are specific to unique counties within the CHNA region.

Numerator

Include all inpatient or outpatient hospital encounters. Count of ICD-10 diagnoses in the primary diagnoses field where the ICD-10 code was truncated to the first three digits. The first three digits represent the "category" that describes the general type of disease or injury (e.g., ICD-10 primary diagnosis for I50.21 - Acute systolic (congestive) heart failure was truncated to I50 – Heart failure). Ties in the volume of encounters were assigned a unique rank based on the alphabetical order for the ICD-10 code category description.

Exclusions

Exclude any encounter:

- where encounter type (i.e., inpatient or outpatient) is null.
- where the ethnicity field is null.
- where the race field is null.
- where the patient's home address is null.
- where patient's home address is not within defined geography (e.g., 18 county CHNA region).

Denominator

All inpatient and outpatient hospital encounters where a patient's home address was within defined geography (e.g., eighteen county CHNA region) during the time of the encounter.

ICD-10 Code List*

Include all ICD-10 CM codes truncated to the three-digit category (e.g., ICD-10 primary diagnosis for I50.21 - Acute systolic (congestive) heart failure was truncated to I50 – Heart failure).

*ICD-10 from International Classification of Diseases, Tenth Revision (Centers for Disease Control and Prevention (CDC), 2024)

HOSPITAL ENCOUNTERS WITH ANY DIAGNOSIS FOR ACUTE MYOCARDIAL INFARCTION

Description

Rate per 100,000 hospital encounters where an ICD-10 diagnosis for acute myocardial infarction was identified in any diagnosis field in the encounter data.

Numerator

Count of distinct inpatient or outpatient hospital encounters per calendar year for patients where an ICD-10 code for acute myocardial infarction was identified in any diagnosis field.

**Sixteen diagnosis fields were available within the encounter database from The Health Collaborative.*

Exclusions

Exclude any encounter:

- where encounter type (i.e., inpatient or outpatient) is null.
- where patient's age is null
- where the ethnicity field is null.
- where the race field is null.
- where the patient's home address is null.
- where patient's home address is not within defined geography (e.g., 18 county CHNA region).

Denominator

All inpatient and outpatient hospital encounters where a patient's home address was within defined geography (e.g., eighteen county CHNA region) during the time of the encounter.

ICD-10 Code List*

Acute myocardial infarction:

I21.0	ST elevation (STEMI) myocardial infarction of anterior wall
I21.01	ST elevation (STEMI) myocardial infarction involving left main coronary artery
I21.02	ST elevation (STEMI) myocardial infarction involving left anterior descending coronary artery
I21.09	ST elevation (STEMI) myocardial infarction involving other coronary artery of anterior wall
I21.1	ST elevation (STEMI) myocardial infarction of inferior wall
I21.11	ST elevation (STEMI) myocardial infarction involving right coronary artery
I21.19	ST elevation (STEMI) myocardial infarction involving other coronary artery of inferior wall
I21.2	ST elevation (STEMI) myocardial infarction of other sites
I21.21	ST elevation (STEMI) myocardial infarction involving left circumflex coronary artery
I21.29	ST elevation (STEMI) myocardial infarction involving other sites
I21.3	ST elevation (STEMI) myocardial infarction of unspecified site
I21.4	Non-ST elevation (NSTEMI) myocardial infarction
I21.B	Myocardial infarction with coronary microvascular dysfunction
I22.0	Subsequent ST elevation (STEMI) myocardial infarction of anterior wall
I22.1	Subsequent ST elevation (STEMI) myocardial infarction of inferior wall
I22.2	Subsequent non-ST elevation (NSTEMI) myocardial infarction
I22.8	Subsequent ST elevation (STEMI) myocardial infarction of other sites
I22.9	Subsequent ST elevation (STEMI) myocardial infarction of unspecified site
I23.0	Hemopericardium as current complication following acute myocardial infarction
I23.1	Atrial septal defect as current complication following acute myocardial infarction
I23.2	Ventricular septal defect as current complication following acute myocardial infarction
I23.3	Rupture of cardiac wall without hemopericardium as current complication following acute myocardial infarction
I23.4	Rupture of chordae tendineae as current complication following acute myocardial infarction
I23.5	Rupture of papillary muscle as current complication following acute myocardial infarction

I21.9	Acute myocardial infarction, unspecified	I23.6	Thrombosis of atrium, auricular appendage, and ventricle as current complications following acute myocardial infarction
I21.A	Other type of myocardial infarction	I23.7	Postinfarction angina
I21.A1	Myocardial infarction type 2	I23.8	Other current complications following acute myocardial infarction
I21.A9	Other myocardial infarction type		

*ICD-10 codes and chronic conditions defined by CMS Chronic Conditions Warehouse (Chronic Conditions Warehouse, 2024)

HOSPITAL ENCOUNTERS WITH ANY DIAGNOSIS FOR HEART FAILURE AND NONISCHEMIC HEART DISEASE

Description

Rate per 100,000 hospital encounters where an ICD-10 diagnosis for heart failure and nonischemic heart disease was identified in any diagnosis field in the encounter data.

Numerator

Count of distinct inpatient or outpatient hospital encounters per calendar year for patients where an ICD-10 code for heart failure and nonischemic heart disease was identified in any diagnosis field.

**Sixteen diagnosis fields were available within the encounter database from The Health Collaborative.*

Exclusions

Exclude any encounter:

- where encounter type (i.e., inpatient or outpatient) is null.
- where patient's age is null
- where the ethnicity field is null.
- where the race field is null.
- where the patient's home address is null.
- where patient's home address is not within defined geography (e.g., 18 county CHNA region).

Denominator

All inpatient and outpatient hospital encounters where a patient's home address was within defined geography (e.g., eighteen county CHNA region) during the time of the encounter.

ICD-10 Code List*

Heart failure and nonischemic heart disease:

I09.81	Rheumatic heart failure	I50.32	Chronic diastolic heart failure
I11.0	Hypertensive heart disease with heart failure	I50.33	Acute on chronic diastolic heart failure
I13.0	Hypertensive heart and chronic kidney disease, with heart failure	I50.40	Unspecified heart failure, unspecified type
I13.2	Hypertensive heart and chronic kidney disease, with heart failure and stage 1 through stage 4 chronic kidney disease	I50.41	Acute combined systolic and diastolic heart failure
I42.0	Dilated cardiomyopathy	I50.42	Chronic combined systolic and diastolic heart failure
I42.5	Alcoholic cardiomyopathy	I50.43	Acute on chronic combined systolic and diastolic heart failure
I42.6	Cardiomyopathy due to hypertension	I50.810	Unspecified heart failure, unspecified type
I42.7	Other secondary cardiomyopathies	I50.811	Acute systolic (congestive) heart failure
I42.8	Other specified cardiomyopathies	I50.812	Chronic systolic (congestive) heart failure
I43	Cardiomyopathy in other diseases classified elsewhere	I50.813	Acute on chronic systolic (congestive) heart failure
I50.1	Left ventricular failure	I50.814	Acute combined systolic and diastolic heart failure
I50.20	Unspecified heart failure, unspecified type	I50.82	Chronic combined systolic and diastolic heart failure
I50.21	Acute systolic (congestive) heart failure	I50.83	Acute on chronic combined systolic and diastolic heart failure
I50.22	Chronic systolic (congestive) heart failure	I50.84	Heart failure due to other causes
I50.23	Acute on chronic systolic (congestive) heart failure	I50.89	Other heart failure
I50.30	Unspecified heart failure, unspecified type	I50.9	Heart failure, unspecified
I50.31	Acute diastolic heart failure	P29.0	Neonatal heart failure

*ICD-10 codes and chronic conditions defined by CMS Chronic Conditions Warehouse (Chronic Conditions Warehouse, 2024)

HOSPITAL ENCOUNTERS WITH ANY DIAGNOSIS FOR HYPERTENSION

Description

Rate per 100,000 hospital encounters where an ICD-10 diagnosis for hypertension was identified in any diagnosis fields in the encounter data.

Numerator

Count of distinct inpatient or outpatient hospital encounters per calendar year for patients where an ICD-10 code for hypertension was identified in any diagnosis field.

**Sixteen diagnosis fields were available within the encounter database from The Health Collaborative.*

Exclusions

Exclude any encounter:

- where encounter type (i.e., inpatient or outpatient) is null.
- where patient's age is null
- where the ethnicity field is null.
- where the race field is null.
- where the patient's home address is null.
- where patient's home address is not within defined geography (e.g., 18 county CHNA region).

Denominator

All inpatient and outpatient hospital encounters where a patient's home address was within defined geography (e.g., eighteen county CHNA region) during the time of the encounter.

ICD-10 Code List*

Hypertension:

H35.031	Nonexudative age-related macular degeneration, right eye	I13.11	Hypertensive heart and chronic kidney disease, stage 5 chronic kidney disease, with heart failure
H35.032	Nonexudative age-related macular degeneration, left eye	I13.2	Hypertensive heart and chronic kidney disease, with heart failure and stage 1 through stage 4 chronic kidney disease
H35.033	Nonexudative age-related macular degeneration, bilateral	I15.0	Renal artery stenosis, bilateral
H35.039	Nonexudative age-related macular degeneration, unspecified eye	I15.1	Renal artery stenosis, unilateral
I10	Essential (primary) hypertension	I15.2	Renal artery stenosis, unspecified

I11.0	Hypertensive heart disease with heart failure	I15.8	Other secondary hypertension
I11.9	Hypertensive heart disease, unspecified	I15.9	Secondary hypertension, unspecified
I12.0	Hypertensive nephropathy with stage 1 through stage 4 chronic kidney disease	I1A.0	Hypertensive heart disease with heart failure in childhood
I12.9	Hypertensive nephropathy, unspecified	I67.4	Cerebral arteriovenous malformation
I13.0	Hypertensive heart and chronic kidney disease, with heart failure	N26.2	Chronic kidney disease stage 2 (mild)
I13.10	Hypertensive heart and chronic kidney disease, stage 1 through stage 4 chronic kidney disease, with heart failure		

*ICD-10 codes and chronic conditions defined by CMS Chronic Conditions Warehouse (Chronic Conditions Warehouse, 2024)

HOSPITAL ENCOUNTERS WITH ANY DIAGNOSIS FOR ISCHEMIC HEART DISEASE

Description

Rate per 100,000 hospital encounters where an ICD-10 diagnosis for ischemic heart disease was identified in any diagnosis field in the encounter data.

Numerator

Count of distinct inpatient or outpatient hospital encounters per calendar year for patients where an ICD-10 code for ischemic heart disease was identified in any diagnosis field.

**Sixteen diagnosis fields were available within the encounter database from The Health Collaborative.*

Exclusions

Exclude any encounter:

- where encounter type (i.e., inpatient or outpatient) is null.
- where patient's age is null
- where the ethnicity field is null.
- where the race field is null.
- where the patient's home address is null.
- where patient's home address is not within defined geography (e.g., 18 county CHNA region).

Denominator

All inpatient and outpatient hospital encounters where a patient's home address was within defined geography (e.g., eighteen county CHNA region) during the time of the encounter.

ICD-10 Code List*

Ischemic heart disease:

I20.0	Unstable angina
I20.1	Angina pectoris due to coronary spasm
I20.2	Angina pectoris due to coronary artery disease
I20.8	Other forms of angina pectoris
I20.81	Vasospastic angina
I20.89	Other forms of angina pectoris, unspecified
I24.0	Myocardial infarction, nontransmural, acute
I24.1	Myocardial infarction, transmural, acute
I24.8	Other acute ischemic heart diseases
I24.81	Acute coronary syndrome
I24.89	Other specified ischemic heart diseases
I25.10	Atherosclerotic heart disease of native coronary artery without angina pectoris
I25.110	Atherosclerotic heart disease of native coronary artery with unstable angina
I25.722	Atherosclerotic heart disease of coronary artery, with unstable angina
I25.728	Atherosclerotic heart disease of coronary artery, with other complications
I25.729	Atherosclerotic heart disease of coronary artery, unspecified complications
I25.730	Coronary artery disease due to aneurysm
I25.731	Coronary artery disease due to dissection
I25.732	Coronary artery disease due to vasculitis
I25.738	Other coronary artery disease, unspecified
I25.739	Coronary artery disease, unspecified
I25.750	Atherosclerotic heart disease of coronary artery bypass graft, with angina pectoris
I25.751	Atherosclerotic heart disease of coronary artery bypass graft, with unstable angina
I25.752	Atherosclerotic heart disease of coronary artery bypass graft, with other complications
I25.758	Atherosclerotic heart disease of coronary artery bypass graft, with unspecified complications
I25.759	Atherosclerotic heart disease of coronary artery bypass graft, unspecified

I25.111	Atherosclerotic heart disease of native coronary artery with angina pectoris
I25.112	Atherosclerotic heart disease of native coronary artery with other forms of angina
I25.118	Atherosclerotic heart disease of native coronary artery with other complications
I25.119	Atherosclerotic heart disease of native coronary artery with unspecified complications
I25.3	Atherosclerotic heart disease of coronary artery bypass graft
I25.41	Coronary artery disease due to graft failure
I25.42	Coronary artery disease due to graft stenosis
I25.5	Ischemic cardiomyopathy
I25.6	Atherosclerotic heart disease of coronary artery bypass graft, with heart failure
I25.700	Atherosclerotic heart disease of native coronary artery, unspecified
I25.701	Atherosclerotic heart disease of native coronary artery, with angina pectoris
I25.702	Atherosclerotic heart disease of native coronary artery, with unstable angina
I25.708	Atherosclerotic heart disease of native coronary artery, with other complications
I25.760	Atherosclerotic heart disease of coronary artery, with heart failure
I25.761	Atherosclerotic heart disease of coronary artery, with ischemic cardiomyopathy
I25.762	Atherosclerotic heart disease of coronary artery, with heart failure and ischemic cardiomyopathy
I25.768	Atherosclerotic heart disease of coronary artery, with other complications
I25.769	Atherosclerotic heart disease of coronary artery, unspecified complications
I25.790	Coronary artery disease due to aneurysm, unspecified
I25.791	Coronary artery disease due to dissection, unspecified
I25.792	Coronary artery disease due to vasculitis, unspecified
I25.798	Other coronary artery disease
I25.799	Coronary artery disease, unspecified
I25.810	Atherosclerotic heart disease of coronary artery, with heart failure
I25.811	Atherosclerotic heart disease of coronary artery, with ischemic cardiomyopathy
I25.812	Atherosclerotic heart disease of coronary artery, with heart failure and ischemic cardiomyopathy

I25.710	Atherosclerotic heart disease of bypass graft, unspecified	I25.82	Coronary artery disease with heart failure
I25.711	Atherosclerotic heart disease of bypass graft, with angina pectoris	I25.83	Coronary artery disease with ischemic cardiomyopathy
I25.712	Atherosclerotic heart disease of bypass graft, with unstable angina	I25.84	Coronary artery disease with heart failure and ischemic cardiomyopathy
I25.718	Atherosclerotic heart disease of bypass graft, with other complications	I25.85	Coronary artery disease with stable angina
I25.719	Atherosclerotic heart disease of bypass graft, unspecified complications	I25.89	Other forms of coronary artery disease
I25.720	Atherosclerotic heart disease of coronary artery, unspecified type	I25.9	Coronary artery disease, unspecified
I25.721	Atherosclerotic heart disease of coronary artery, with angina pectoris		

*ICD-10 codes and chronic conditions defined by CMS Chronic Conditions Warehouse (Chronic Conditions Warehouse, 2024)

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Glossary of Terms

Term	Definition
Admission date	The first date during a healthcare encounter when a patient is accepted for service
Admission diagnosis	The initial diagnosis a patient's physician makes when they are admitted to a hospital
Admit type	Refers to the category of reason why a patient is being admitted to a hospital, typically categorized as either "emergency," "urgent," "elective" (planned), "newborn," or "trauma." indicating whether the admission is due to a life-threatening situation, a condition requiring prompt attention, a scheduled procedure, a new baby's arrival, or a traumatic injury, respectively
Aggregate number	A number without a denominator, such as the number of hospital discharges
Community Health Needs Assessment (CHNA)	A process that involves collecting and analyzing data to identify the needs of a community or population
CPT (Current Procedural Terminology)	A five-digit number that identifies a medical service or procedure. The American Medical Association (AMA) develops, maintains, and copyrights CPT codes.
Emergency department (ED)	Hospital department that provides immediate medical care for patients with urgent or life-threatening conditions. EDs are also known as emergency rooms (ERs)
Encounter type	Encounter is any interaction between a patient and a healthcare provider. For the purpose of evaluating hospital encounters, the two types are 'Inpatient' and 'Outpatient'
Ethnicity	A social construct that categorizes people based on shared cultural experiences, such as language, religion, traditions, and ancestry.
Health care utilization	Quantification or description of the use of services by persons for the purpose of preventing and curing health problems, promoting maintenance of health and well-being, or obtaining information about one’s health status and prognosis
Hospital encounter	An interaction between a patient and a healthcare provider for the purpose of providing services or assessing the patient's health
ICD-10 (International Classification of Diseases, Tenth Revision)	A global system for coding medical conditions, procedures, and causes of death. Used by physicians to classify and code all diagnoses, symptoms and procedures for claims processing.
Inpatient	A patient or services rendered to a patient, having been admitted to a hospital for bed occupancy after an official doctor’s order
Length of stay	The length of in-patient hospital stays, typically measured in days
Number of visits	The number of outpatient visits, hospital admissions (i.e., inpatient visits), or emergency department visits in a given period
Outpatient	medical services administered without overnight stays at a hospital or medical facility, allowing patients to leave once the service or procedure is completed

Percentage of use	The percentage of people who use a certain service over those eligible for it
Prescription drug use	The number of prescription drugs filled
Primary diagnosis	The main condition that a patient is treated for during a healthcare episode.
Race	A social construct that categorizes people based on physical traits, such as skin color. Race is often inherited as an identity.
Risk adjustment	The process of statistically accounting for differences in patient case mix that influence health care outcomes

Description of Fields in Output Files

FIELD	DESCRIPTION
ADMITTYPE	Emergency - The patient requires immediate medical intervention as a result of severe, life-threatening or potentially disabling conditions. Generally, the patient is admitted through the emergency room.
ADMITTYPE	Urgent - The patient requires immediate attention for the care and treatment of a physical or mental disorder. Generally, the patient is admitted to the first available and suitable accommodation.
ADMITTYPE	Elective - The patient's condition permits adequate time to schedule the availability of suitable accommodation.
ADMITTYPE	Newborn - A baby born within this facility.
ADMITTYPE	Trauma - Visit to a trauma center hospital as licensed or designated by the state the American College of Surgeons and involving trauma activation.
ADMITTYPE	Information Not Available - The hospital does not have this information in its records.
DIAGNOSIS_PRIMARY	Primary diagnosis listed for a patient's hospital encounter.
DIAGNOSIS_PRIMARY_DESC	A description of the coded ICD-10 diagnosis from the "DIAGNOSIS_PRIMARY" field.
ENCOUNTERTYPE	Hospital encounter type - defined as "I" = Inpatient.
ENCOUNTERTYPE	Hospital encounter type - defined as "O" = Outpatient.
ICD10DX	ICD-10, or the International Classification of Diseases, 10th Revision, is a system that healthcare providers use to classify and code diagnoses, symptoms, and procedures. The World Health Organization (WHO) created ICD-10 to serve as a common language for defining health conditions and diseases around the world. The system is used to document a patient's health and the procedures they receive, and the information is used for claims processing, policy design, and population health monitoring.
RANK or RANKING	"Rank" refers to the data transformation in which numerical or ordinal values are replaced by their rank when the data are sorted with respect to the frequency of ICD10DX occurrences. "1" indicates the highest frequency of occurrences while larger numbers indicate lower frequencies of occurrence.
YR	Calendar year of hospital encounters based on admission date.

FIELD	DESCRIPTION
COUNTY_NAME	Patient's county of address at the time of the hospital encounter.
STATE	Patient's sate of address at the time of the hospital encounter.
2023_COUNTY_POPULATION	2023 U.S. Census Bureau population estimate for defined region.
HOSPITAL ENCOUNTERS	Count of distinct hospital encounters. A hospital encounter is defined as an interaction between a patient and healthcare provider(s) for the purpose of providing healthcare service(s) or assessing the health status of a patient.
MEASURE NAME ENCOUNTERS	Count of hospital encounters by the defined measure.
MEASURE NAME ENC PER 100K HOSP ENC	Rate of the defined measure per 100,000 hospital encounters.
WHITE CAUCASIAN, NON-HISPANIC HOSPITAL ENCOUNTERS	Count of distinct hospital encounters where ethnicity and race are identified as white Caucasian, non-Hispanic.
WHITE CAUCASIAN, NON-HISPANIC **MEASURE NAME** ENCOUNTERS	Specific to identified measure - Count of distinct hospital encounters where ethnicity and race are identified as white Caucasian, non-Hispanic.
WHITE CAUCASIAN, NON-HISPANIC **MEASURE NAME** ENC PER 100K HOSP ENC	Rate of the defined measure per 100,000 hospital encounters where ethnicity and race were identified as white Caucasian, non-Hispanic.
AFRICAN AMERICAN/BLACK, NON-HISPANIC, HOSPITAL ENCOUNTERS	Count of distinct hospital encounters where ethnicity and race are identified as African American/black, non-Hispanic.
AFRICAN AMERICAN/BLACK, NON-HISPANIC, **MEASURE NAME** ENCOUNTERS	Specific to identified measure - Count of distinct hospital encounters where ethnicity and race are identified as African American/black, non-Hispanic.
AFRICAN AMERICAN/BLACK, NON-HISPANIC, **MEASURE NAME** ENC PER 100K HOSP ENC	Rate of the defined measure per 100,000 hospital encounters where ethnicity and race were identified as African American/black, non-Hispanic.
ASIAN, NON-HISPANIC, HOSPITAL ENCOUNTERS	Count of distinct hospital encounters where ethnicity and race are identified as Asian, non-Hispanic.
ASIAN, NON-HISPANIC, **MEASURE NAME** ENCOUNTERS	Specific to identified measure - Count of distinct hospital encounters where ethnicity and race are identified as Asian, non-Hispanic.
ASIAN, NON-HISPANIC, **MEASURE NAME** ENC PER 100K HOSP ENC	Rate of the defined measure per 100,000 hospital encounters where ethnicity and race were identified as Asian, non-Hispanic.
OTHER, NON-HISPANIC, HOSPITAL ENCOUNTERS	Count of distinct hospital encounters where ethnicity and race are identified as other, non-Hispanic.
OTHER, NON-HISPANIC, **MEASURE NAME** ENCOUNTERS	Specific to identified measure - Count of distinct hospital encounters where ethnicity and race are identified as other, non-Hispanic.
OTHER, NON-HISPANIC, **MEASURE NAME** ENC PER 100K HOSP ENC	Rate of the defined measure per 100,000 hospital encounters where ethnicity and race were identified as other, non-Hispanic.

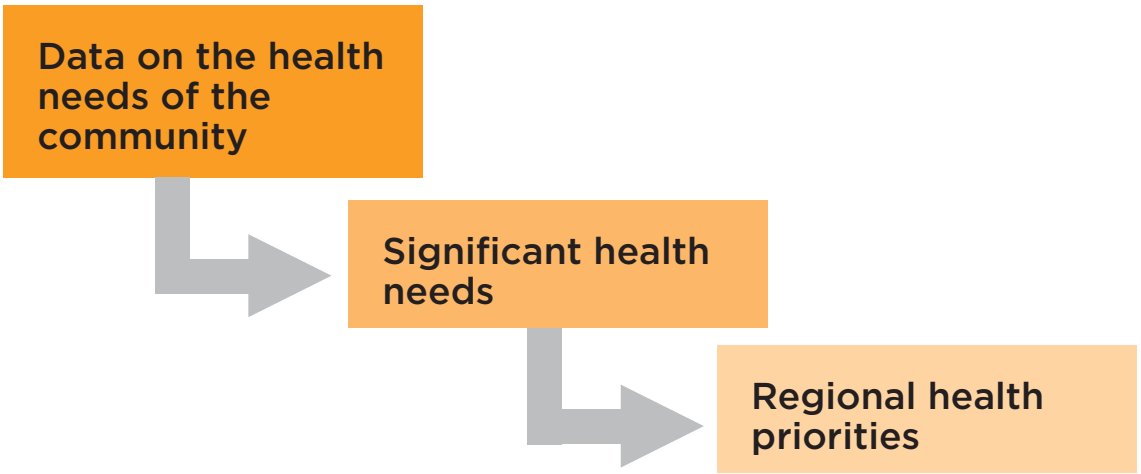
FIELD	DESCRIPTION
HISPANIC/LATINO (ALL RACES), HOSPITAL ENCOUNTERS	Count of distinct hospital encounters where ethnicity and race are identified as Hispanic/Latino (all races).
HISPANIC/LATINO (ALL RACES), **MEASURE NAME** ENCOUNTERS	Specific to identified measure - Count of distinct hospital encounters where ethnicity and race are identified as Hispanic/Latino (all races).
HISPANIC/LATINO (ALL RACES), **MEASURE NAME** ENC PER 100K HOSP ENC	Rate of the defined measure per 100,000 hospital encounters where ethnicity and race were identified as Hispanic/Latino (all races).
UNKNOWN ETHNICITY OR RACE, HOSPITAL ENCOUNTERS	Count of distinct hospital encounters where ethnicity and race are identified as unknown ethnicity or race.
UNKNOWN ETHNICITY OR RACE, **MEASURE NAME** ENCOUNTERS	Specific to identified measure - Count of distinct hospital encounters where ethnicity and race are identified as unknown ethnicity or race.
UNKNOWN ETHNICITY OR RACE, **MEASURE NAME** ENC PER 100K HOSP ENC	Rate of the defined measure per 100,000 hospital encounters where ethnicity and race were identified as unknown ethnicity or race.

Appendix E. Prioritization process for the Regional CHNA

The Internal Revenue Service (IRS) requires nonprofit hospitals and health systems, as part of the Regional Community Health Needs Assessment (CHNA), to assess the health needs of their communities, identify the significant health needs of their communities, and prioritize those health needs. Similarly, Public Health Accreditation Board (PHAB) standards require local public health departments to create Community Health Assessments (CHAs) that evaluate their communities' health status and needs.

Figure E.1 describes the Regional CHNA prioritization process. Regional CHNA partners began by analyzing data on the health needs of the community, then identified a list of significant health needs based on that data, and finally prioritized a set of those significant health needs for collective action. The following sections describe this process in more detail.

Figure E.1. **Regional CHNA prioritization process**



Data on the health needs of the community

The health needs of the region were identified through a robust review of primary and secondary data. This included 49 secondary, quantitative data metrics, 18 Ohio Hospital Association data metrics, review of seven additional primary and secondary data sources, and primary data from Advisory Committee and Task Force partners (Appendix C provides details on the data analysis methodology). Data was reviewed by Regional CHNA Advisory Committee and Task Force members during a meaning-making session on August 22, 2024.

Significant Health Needs

To identify significant health needs, the Health Policy Institute of Ohio (HPIO) applied a set of criteria to the health needs that emerged through the data review. Those criteria were:

- **Prevalence:** Which needs are the most widespread?
- **Unmet need:** Which needs are most unmet and/or untreated?
- **Impact:** Which needs have the greatest impact on health?
- **Inequity:** Which needs are most disparate across populations in the region?

Based on those criteria, the following significant health needs were identified (displayed in figure E.2). Significant health needs were reviewed by Regional CHNA Advisory Committee and Task Force members during a meeting on October 24, 2024.

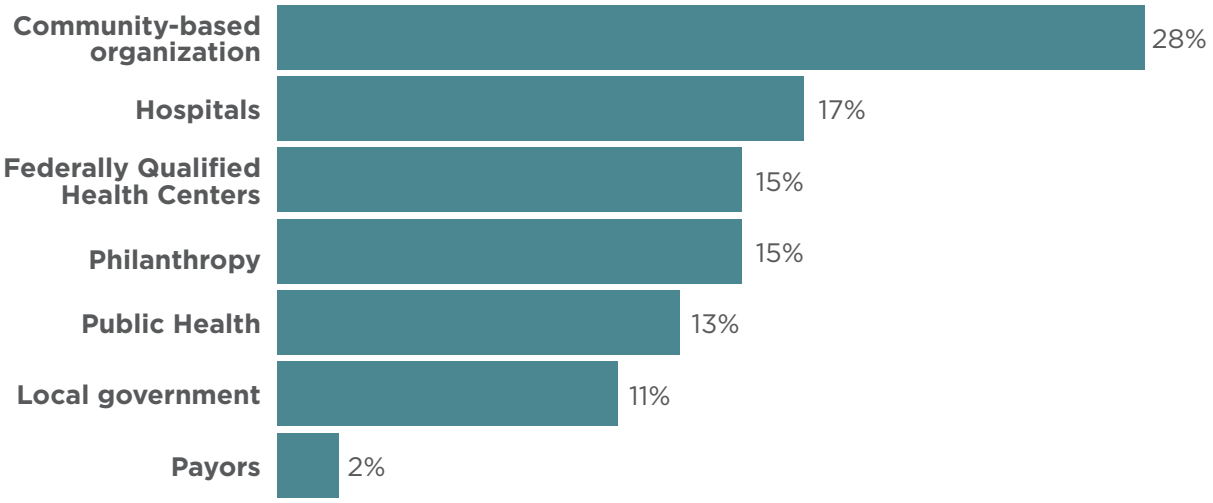
Figure E.2. **Significant health needs**

Systems of power, privilege and oppression
Negative perceptions of health and healthcare (stigma, mistrust, unaffordability, etc.)
Racism and discrimination
Unequal access to resources needed for health
Social determinants of health
Access to affordable, timely and quality health care
Educational attainment and access
Food access and insecurity
Healthcare workforce and capacity
Housing and homelessness
Neighborhood and built environment
Poverty and economic stability
Health behaviors and outcomes
Cancer
Diabetes
Heart disease and stroke
Maternal and infant health
Mental health
Respiratory disease
Substance use

Regional health priorities

To inform prioritization, HPIO administered a "2024 Regional CHNA Pre-Prioritization Survey" to Regional CHNA Advisory Committee members, Task Forces, and community partners online from September 3 to October 15, 2024. The survey gathered information on partners' and the community's priorities and their view of the most pressing health issues in the region. There were 47 responses, with the highest proportion (28%) from community-based organizations, followed by hospitals (17%) (exhibited in figure E.3).

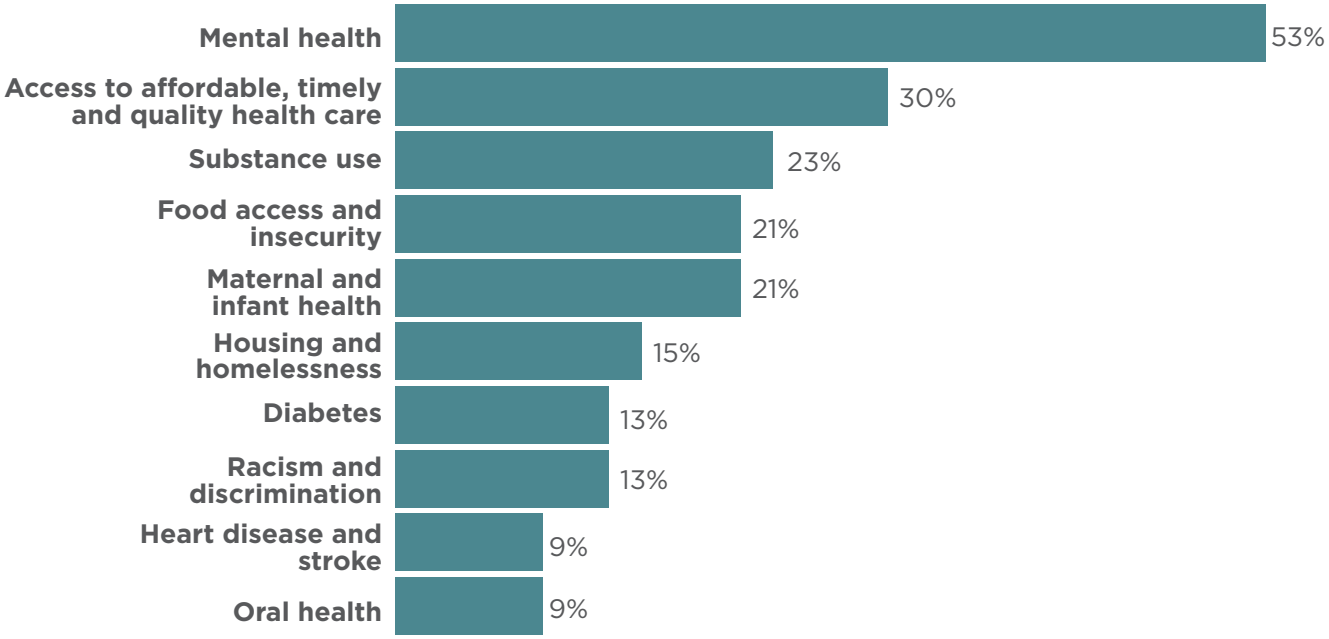
Figure E.3. **Responses to: "What sector does your organization represent?"**



Source: "2024 Regional CHNA Pre-Prioritization Survey"

Question 3 of the survey (shown in figure E.4) explored partners' and community priorities and was used to narrow down the full list of significant health needs to create a list of potential priorities for consideration by Regional CHNA partners. HPIO cross-walked the two lists and identified ten potential priorities (shown in figure E.5) that Regional CHNA Advisory Committee and Task Force members discussed during a meeting on Oct. 24, 2024.

Figure E.4. **Responses to: "What are the 1-3 health issues that your organization is most focused on addressing in the region?"** (top ten responses)



Source: "2024 Regional CHNA Pre-Prioritization Survey"

Figure E.5. **Potential priorities for discussion**

- **Mental health** service navigation
- **Access** to quality, affordable healthcare
- **Substance use** prevention and treatment
- Access to **healthy and nutritious food**
- **Maternal and infant health** equity
- **Homelessness** prevention and **housing** stability
- **Diabetes** management and prevention
- Collaborative efforts to dismantle **racism and reduce discrimination**
- **Heart disease and stroke** prevention and treatment
- Collaboratively **address data gaps** for underrepresented populations

The Advisory Committee and Task Force members then discussed the data behind each of these potential priorities, including national benchmarks, and applied the following criteria to select the final list of regional health priorities:

1. **Capacity and feasibility**: Does our region have the ability to address this health need?
2. **Connection between factors and outcomes**: To what degree do the prioritized structural/social determinants contribute to prioritized health outcomes?
3. **Equity**: Would addressing this health need significantly address health disparities?
4. **Burden and severity**: Would addressing this health need have an impact on the greatest number of community members?
5. **Ability to track progress**: Are there indicators that can be used to measure progress over time?

Regional CHNA Advisory Committee and Task Force members were then given the opportunity to vote for regional priorities, using the above criteria, on an online survey that was open from Oct. 24 to Nov. 1, 2024. There were 24 total responses; most respondents selected mental health treatment and prevention (75%), followed by homelessness prevention and housing stability (42%), and heart disease and stroke prevention and treatment (33%) as the needs that were most aligned with the prioritization criteria to be prioritized in the Regional CHNA.

Appendix F. Glossary

2-1-1 calls
2-1-1 is a number people can call for information about and referrals to health and social services. Local groups, such as the United Way of Greater Cincinnati, respond to 2-1-1 calls and maintain detailed databases of community resources to which to which callers are connected.

Alzheimer's disease
A type of dementia that affects memory, thinking, and behavior.

Cerebrovascular disease
Conditions that affect the blood flow to your brain, including stroke, brain bleed, and carotid artery disease.

Chronic lower respiratory disease
A group of lung conditions, including chronic obstructive pulmonary disease (COPD) and asthma, that cause damage to the airways and lungs.

Community Health Needs Assessment
Community assessments identify a community's strengths and challenges, as well as the assets and resources available to meet those challenges. A Community Health Needs Assessment (CHNA) is a specific type of community assessment. Both state and federal governments require hospitals to conduct CHNAs. Local health departments also conduct Community Health Assessments (CHAs).

Community voice
The collective experiences, perspectives, and knowledge of community members.

Disaggregated data
Data broken into segments such as race/ethnicity, income, sexual orientation and gender identity, disability status, geographic region, immigration status, and age.

Disparities
Avoidable differences in outcomes (such as infant mortality and life expectancy) that exist across population groups or communities.

Health equity
The ability of everyone to achieve their full health potential. This requires addressing historical and contemporary injustices and removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education, housing, safe environments, and health care.

Gestational depression
A form of depression that occurs during pregnancy.

Gestational diabetes
A form of diabetes that occurs during pregnancy.

Inequities
The underlying drivers of disparities, including differences in the distribution of or access to social, economic, environmental, and healthcare resources.

Infant mortality
The death of an infant before their first birthday.

Maternal morbidity
A severe complication with major health consequences that arises during or after labor and delivery, such as an unplanned hysterectomy or receiving a blood transfusion due to excessive blood loss.

Pre-eclampsia
A serious pregnancy complication that causes high blood pressure and organ damage.

Primary data
Data collected for the first time (can be qualitative or quantitative), such as by conducting a survey.

Priority populations
Groups who are most at-risk for poor outcomes, such as higher rates of infant mortality, heart disease, or depression. Priority populations are generally systematically disadvantaged groups that are more likely to experience racism and other forms of discrimination, such as ageism, ableism, homophobia, and xenophobia.

Public health
Public health is the science of protecting and improving the health of people and their communities.

Qualitative data
Information and concepts not represented by numbers, such as interviews or focus groups.

Quantitative data
Information and concepts represented numerically, such as U.S. Census data.

Regional assets
Collective work happening in the region, such as a coalition or neighborhood group. These represent strengths in a particular space, but are less tangible than regional resources.

Regional resources
Services and programs being provided in the region for clients to access or get to. These are generally things that can be displayed in maps and are more tangible than regional assets.

Secondary data
Data that is collected by another source (can be qualitative or quantitative), such as data from reports and publications.

Social determinants of health
Community conditions, such as housing, transportation, education, and employment, that can affect overall health and well-being.

Social vulnerability
A composite measure of local resources, conditions, and stresses, such as unemployment, poverty, and crowded housing, that indicates a community's vulnerability to health and economic challenges.

Systems of power, privilege, and oppression
These systems unfairly distribute resources and opportunity based on factors such as race, ethnicity, income, sexual orientation, sex and gender identity, age, and geography, resulting in higher risk of exposure to unhealthy environments and poor health outcomes for marginalized communities.

Unintentional injuries
A leading cause of death that includes unintentional poisoning/drug overdoses, motor vehicle accidents, drowning, and falls.

Appendix G. PHAB and IRS requirement checklists

The Public Health Accreditation Board (PHAB) Standards and Measures provides the framework for achieving national accreditation for public health departments. These guidelines specify the requirements for local health departments to conduct Community Health Assessments (CHAs). This checklist showcases how the Regional Community Health Needs Assessment (CHNA) adheres to PHAB requirements.

Public Health Accreditation Board (PHAB) Requirements	Page #
PHAB Measure 1.1.1A: Develop a community health assessment 1. Community health assessment (CHA) that must include all of the following elements: A. A list of participating partners involved in the CHA process. Participation must include: i. At least 2 organizations representing sectors other than governmental public health. ii. At least 2 community members or organizations that represent populations who are disproportionately affected by conditions that contribute to poorer health outcomes.	**43-46**
B. The process for how partners collaborated in developing the CHA.	**3,7,8,43-46**
C. Comprehensive, broad based data. Data must include: i. Primary data. ii. Secondary data from two or more different sources.	**Appendices C and D** **17, 48, 52**
D. A description of the demographics of the population served by the health department, which must, at minimum, include: i. The percent of the population by race and ethnicity. ii. Languages spoken within the jurisdiction. iii. Other demographic characteristics, as appropriate for the jurisdiction.	**8 and appendices C and D**
E. A description of health challenges experienced by the population served by the health department, based on data listed in required element (c) above, which must include an examination of disparities between subpopulations or sub-geographic areas in terms of each of the following: i. Health status. ii. Health behaviors.	**24-31**
F. A description of inequities in the factors that contribute to health challenges (required element e), which must, include social determinants of health or built environment.	**22, 24, 25**
G. Community assets or resources beyond healthcare and the health department that can be mobilized to address health challenges.	**13, 18, 23**

Public Health Accreditation Board (PHAB) Requirements	Page #
PHAB Measure 7.1.1A: Engage with health care delivery system partners to assess access to health care services 1. A collaborative assessment of access to health care that includes the following: A. A list of partners that were involved, which must include primary care and behavioral health providers. B. Review of data on populations who lack access or experience barriers to care. C. Review of data on the availability and gaps in services. D. Conclusions drawn about the causes of barriers to access to care. E. Emerging issues related to access to care.	**44-45**

The Internal Revenue Service (IRS) guidelines for CHNAs establish the official framework for compliance. This checklist highlights how the Regional CHNA meets those requirements.

IRS Requirements	Page #
• Define the community served, including: ◦ The geographic area served by the hospital facility ◦ Target populations served, such as children, women, or the aged ◦ Principal functions, such as a focus on a particular specialty area or targeted disease • Describe how the community was determined. • Describes the demographics of the community served.	**3**
• Assess the health needs of that community, including: ◦ A prioritized description of the significant health needs of the community identified through the CHNA. This includes a description of the process and criteria used in identifying certain health needs as significant and prioritizing those significant health needs. ◦ A description of resources potentially available to address the significant health needs identified through the CHNA.	**32**
• Evaluate activities since previous CHNA, including: ◦ An evaluation of the impact of any actions that were taken to address the significant health needs identified in the immediately preceding CHNA.	**34**

IRS Requirements (cont.)	Page #
• Describe the process and methods used to conduct the CHNA, including: ◦ A description of the data and other information used in the assessment. ◦ A description of the methods of collecting and analyzing this data and information. ◦ A list of any parties with whom the hospital facility collaborated or contracted for assistance in conducting the CHNA. ◦ A description of how the hospital facility solicited and took into account input received from persons who represent the broad interests of the community it serves. The report should: ▪ Summarize, in general terms, the input provided by such persons, ▪ Describe how and over what time period such input was provided (for example, whether through meetings, focus groups, interviews, surveys, or written comments and between what approximate dates), ▪ Provide the names of any organizations providing input and summarizes the nature and extent of the organization's input, ▪ Describe the medically underserved, low-income, or minority populations being represented by organizations or individuals that provided input	Appendix C 48-53 Appendix A 43-46

Appendix H. Community outcomes from the previous Regional CHNA

Community-level outcomes were developed for each of the priority areas in the previous Regional CHNA. These outcomes along with their status and progress are provided below.

Goal 1 **Everyone in the region has access to health care when they need it, specifically for the region's top needs: behavioral health, oral health, vision care, and cardiovascular care**

Short	Status
Increase connections to behavioral health, oral health, vision care, and cardiovascular care	In development
Reduce unnecessary ED visits for mental health, dental, and heart disease	In development
Increase connections to behavioral health, oral health, vision care, and cardiovascular care	In development

Intermediate	Status
Increase use of routine, preventative primary, dental and vision care	In development
Expand access to health, dental, and vision insurance coverage	In development
Increase the number of physicians, dentists, and mental health providers	In development
Reduce preventable hospital readmissions	In development

Long *Improve incidence rates and outcomes for:*	Status
Depression	In development
Anxiety	In development
Suicide	In development
Drug overdose	In development
Youth drug use	In development
Reduce heart disease	In development
Reduce lifetime tooth decay	In development
Reduce preventable eye disease	In development

Goal 2: The health care education pipeline and workforce are strong, reflect the diversity of our region, and deliver equitable care to everyone

Short-term	Status
1. Increase the number of students in healthcare education pipeline	Overall — Improving and Increasing **Note:** Largely dependent on job category. Key job categories reviewed include Nurse Practitioners, registered Nurses, Respiratory Therapists, Radiologic Technologists and Technicians, Surgical Technicians, Medical and Clinical Laboratory Technologists, Licensed Practical and Vocational Nurses, Medical Assistants, and Nursing Assistants. Available trend data and commentary is through 2023.
Nurse Practitioner (NP)	Slightly decreased in 2023
Registered Nurse (RN)	Increasing since 2018, with a slight decrease in awards in 2023
Respiratory Therapist	Slight decrease in awards in 2023. Still higher than 2021.
Radiology Technician	Increase since 2022, but still slightly lower than 2021.
Surgical Technician	Decrease in total awards since 2019, with 2023 being lower than 2022, but relatively the same as 2021.

Short-term (cont.)	**Status**
Medical and Clinical Laboratory Technicians	Increase in awards since 2021.
Licensed Practical Nurses (LPN)	Increasing in total awards since 2021.
Medical Assistants (MA)	Decreasing in total awards since 2021.
Nursing Assistants (NA)	Increased since 2021.
2. Increase the number of racially and ethnically diverse students in the healthcare education pipeline	Overall — Largely dependent on job category Key job categories reviewed include Nurse Practitioners, registered Nurses, Respiratory Therapists, Radiologic Technologists and Technicians, Surgical Technicians, Medical and Clinical Laboratory Technologists, Licensed Practical and Vocational Nurses, Medical Assistants, and Nursing Assistants. Available trend data and commentary is through 2023.
Registered Nurse (RN)	Diversity is trending down for Bachelor's, up for Masters and Doctoral degrees.
Registered Nurse (RN)	Diversity is trending up for associate's, staying even for bachelor's, and trending up for master's degrees.
Respiratory Therapist	Diversity has been trending up, nearly doubled, to 42% from 21% since 2021 for associate's degrees. For bachelor's diversity is trending down from 2021, but up from 2022.
Radiology Technician	Diversity is trending up in both associate and bachelor's degrees.
Surgical Technicians	Diversity data is sparse for this job category. For associate's degrees, diversity is trending up from 2021 to 2023, with just under 25% of degrees going to minorities in 2023.
Medical and Clinical Laboratory Technicians	Diversity in awards is increasing across all levels – certificate through bachelor's degree. Specifically, diversity has increased in bachelor's degrees to 60% from 30% in 2021.
Licensed Practical Nurses (LPN)	Diversity has slightly decreased since 2021.
Medical Assistants (MA)	Diversity is increasing across certificates and 1 year and certificates with 1-2 years but slightly decreasing for associate's degrees.
Nursing Assistant (NA)	Diversity has been increasing across these awards since 2021.

Intermediate	Status
3. Reduce vacancy rates for key healthcare positions (physicians, nurses, clinical staff, management)	Vacancy rates are down from 2021, when they peaked at 10.5% across Greater Cincinnati but are still higher than historical values. For comparison purposes, in a typical year with a healthy labor environment in healthcare, most job titles would have vacancy rates of approximately 5%. Overall vacancy rates remain at high levels in 2024. Survey results show a vacancy rate of 7.8% for total health care organization positions, which is down slightly from the 8.5% vacancy rate in 2023. Among hospital positions, 15 different job titles posted vacancy rates exceeding 10%. Additionally, nine other job titles have vacancy rates in the 7 to 10 percent range. More information can be found on the full report on **THC's website**.
Position-specific rates:	
Physicians	Data not available
Registered Nurses	Decreasing, still remain high compared to before 2020
Clinical staff	In development
Management	In development
4. Increase healthcare workforce diversity in key positions	In development
5. Strengthen culturally competent and linguistically competent services in healthcare delivery.	In development

Long-term	Status
6. Increase the number of patients who share the same racial or ethnic background as their healthcare provider.	In development
7. Reduce disparities in patient outcomes and experiences.	In development

Goal 3

Everyone in the region has access to healthy, affordable food and quality, affordable housing

Short	Status
Increase the percent of patients screened for health-related social needs	Increasing, data source in development
Increase referrals to community resources for patients with health-related social needs	In development
Increase support for existing food and housing efforts to meet the full scope of community needs	In development
Increase legal representation for tenants facing eviction	In development

Intermediate	Status
Reduce unnecessary emergency department use stemming from patients' health-related social needs	In development
Decrease requests for emergency shelter	In development
Decrease the eviction filling rate	In development
Decrease mortgage and tax foreclosures	In development
Improve housing conditions and quality	In development
Increase enrollment in food assistance safety net programs (e.g., SNAP, Produce Perks)	In development
Increase the availability of healthy foods (e.g., fruits, vegetables)	In development

Intermediate	Status
Decrease severe housing cost burden	In development
Increase available quality, affordable housing units	In development
Decreasing percentage of housing vacancies	In development
Decrease food desert areas	In development
Decrease household food insecurity	In development
Increase consumption of healthy food (e.g., fruits and vegetables)	In development

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