MERCYHEALTH

2022 Community Health Needs Assessment

Mercy Health – Cincinnati

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Mercy Health Cincinnati

Adopted by the Mercy Health Cincinnati Board of Trustees, October 4, 2022

(Includes The Jewish Hospital – Mercy Health, Mercy Health – Anderson Hospital, Mercy Health – Clermont Hospital, Mercy Health – Fairfield Hospital, and Mercy Health – West Hospital)

As a ministry of which Mercy Health – Cincinnati is a member, Bon Secours Mercy Health has been committed to the communities it serves for nearly two centuries. This long standing commitment has evolved intentionally, based on our communities' most pressing health needs.

Every three years we evaluate those needs through a comprehensive Community Health Needs Assessment (CHNA) process. The most recent assessments, completed by Mercy Health – Cincinnati and community partners include quantitative and qualitative data that guide both our community investment, community benefit, and strategic planning. The following document is a detailed CHNA for Mercy Health – Cincinnati

Mercy Health – Cincinnati is dedicated to our Mission of extending the compassionate ministry of Jesus by improving the health and well-being of our communities and by bringing good help to those in need, especially people who are poor, dying, and underserved.

Mercy Health – Cincinnati has identified the greatest needs in our community by listening to the voices of the community. This ensures our resources for outreach, prevention, education, and wellness are directed towards opportunities where the greatest impact can be realized.

Written comments regarding the health needs that have been identified in the current CHNA should be directed to Gina Hemenway, Executive Director of Community Health, email RAHemenway@mercy.com.

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Executive Summary

Overview

The 2022 Community Health Needs Assessment (CHNA) is a comprehensive, data-driven, and actionable review of the health of our region. Specifically, this regional, collaborative CHNA provides a summary of the most prevalent health conditions in our community and conditions for which people most commonly did not receive treatment in the past year, the social determinants of health (SDOH) that impact health outcomes, and systemic barriers that influence health disparities and inequities in our community.

Presented within this Mercy Health-Cincinnati CHNA is a summation of the work completed through the regional CHNA collaboration facilitated by The Health Collaborative (THC), in partnership with the Greater Dayton Area Hospital Association (GDAHA) which includes partnership with 36 hospitals, 22 health departments, across 26 counties in Greater Cincinnati and the Greater Dayton Area, southeast Indiana, and northern Kentucky. Mercy Health-Cincinnati services the Greater Cincinnati area through its five hospitals, with an emphasis on communities immediately surrounding its care sites.

Data collection, analysis, and synthesis were conducted by Measurement Resources Company and subcontractor Scale Strategic Solutions. A comprehensive, inclusive, and balanced mixed-method approach was used in data collection to ensure a representative sample of community members, specifically the voices of marginalized populations and the inclusion of providers across health and social services sectors. The entire process was overseen by an Advisory Committee of 42 members of the community, representing hospitals, public health departments, federally qualified health centers, community-based organizations, public health professional associations, funders, and hospital associations resulting in:

- 8,321 online community survey respondents
- 859 health and social service provider survey respondents
- 38 interviews with system leaders
- 51 targeted focus groups
- Extensive review of current literature and existing community data

Significant Health Needs

Utilizing multiple data sources, including self-report regional CHNA survey results, hospital utilization data and county level Centers for Disease Control (CDC) data, the most prevalent and/or untreated health conditions were identifed and these were deemed the significant health needs of the region:

- Cardiovascular-related Conditions
- Mental Health
- Dental
- Arthritis
- Lung/Respiratory Health
- Prevention-related Health Needs
- Vision
- Allergy

Additionally, five categories of SDOH were identified as key drivers of health in this region, and were likewise deemed significant health needs. The SDOH include economic stability, neighborhood and built environment, education access and

quality, social and community connectiveness, and healthcare access and quality. Likewise, an analysis of survey, interview and focus group data revealed several systemic and structural barriers exist which negatively impact overall health outcomes and the region's ability to address health disparities. These barriers were identified as: structural racism, the structural divide of holistic health care, and America's high-cost healthcare system.

Prioritized Health Needs

Through a series of stakeholder meetings, the collected data was further refined into a list of data-driven, actionable recommended priorities/needs:

- Increase access to services in order to improve equitable outcomes for the region's top health needs: behavioral health, cardiovascular disease, dental and vision.
- Address access to and use of resources for food security and housing, with a focus on the development and strengthening of partnerships between providers and community-based organizations.
- Strengthen workforce pipeline and diversity, including cultural competence within the healthcare ecosystem.

Resources Available

The regional CHNA process highlighted existing assets and concrete strategies to address health and social service care delivery challenges. Assets included established agencies and organizations with expertise in a priority area, and models or best practices that community members agree would address prioritized needs if implemented. The list is limited to the perceptions and ideas of those who were interviewed, engaged in a focus group, and/or completed the provider survey.

Below are the organizations, programs and strategies identified within the CHNA process as regional assets which link the CHNA to concrete action steps to address prioritized needs.

Food Security: Good Food Purchasing Program; Mobile Food and Basic Needs Truck; Greater Cincinnati Regional Food Policy Council, an initiative of Green Umbrella Regional Sustainability Alliance; Housing our Future (strategy guide developed via a collaborative effort of community stakeholders).

Access to Care: City Planning Agencies to support bringing health centers to communities; Health and Cultural Fairs; School-based Healthcare Model; LGBTQ+ affirming care practices; Peer Supporter Model; Charitable Pharmacy Model; Coordinated advocacy efforts; Doula model; Community Health Worker Model and On-site Social Workers; Screening for SDOH-related needs/supports.

Workforce Diversity/Cultural Competency: Culturally competent design in healthcare spaces; Investment in future healthcare workforce through partnering with schools and Career Stat; National Fund for Workforce Solutions.

Feedback

Written comments regarding the health needs that have been identified in the current CHNA should be directed to: Gina Hemenway, Executive Director, Community Health
Mail to: – RAHemenway@mercy.com

Feedback can also be submitted via a survey link for Mercy Health Hospitals at https://www.mercy.com/about-us/mission/giving-back/community-health-needs-assessment.

Our Mission

Our mission is to extend the compassionate ministry of Jesus by improving the health and well-being of our communities and bring good help to those in need, especially people who are poor, dying and underserved.

Our Vision

Inspired by God's hope for the world, we will be a ministry where associates want to work, clinicians want to practice, people seek wellness and communities thrive.

Our Values

Human Dignity

We commit to upholding the sacredness of life
and being respectful and inclusive of everyone.

Integrity

We commit to acting ethically and modeling right relationships
in all of our individual and organizational encounters.

Compassion

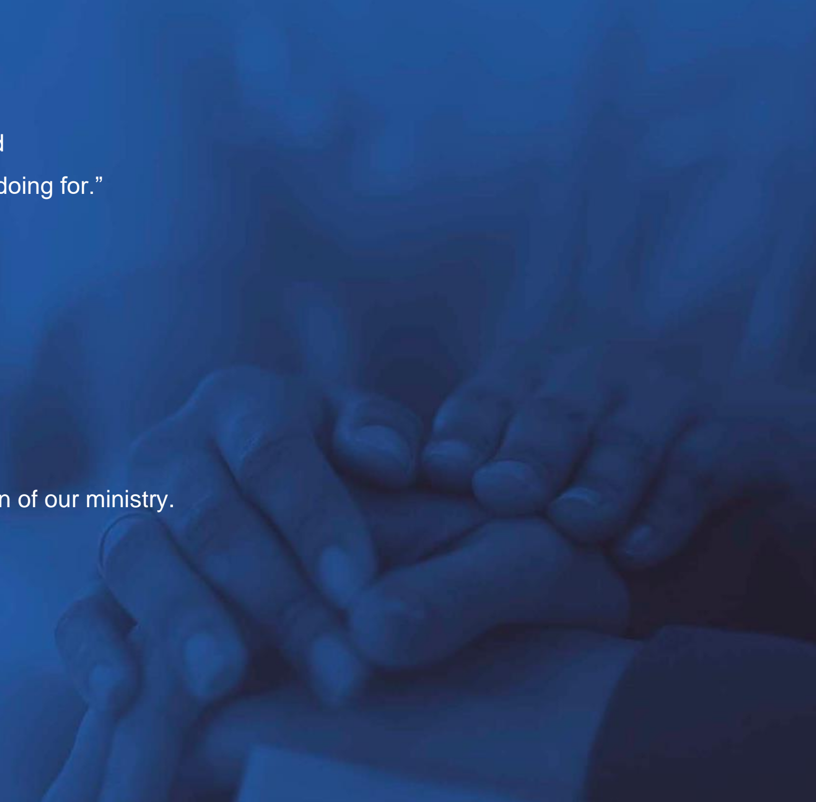
We commit to accompanying those we serve with mercy and
tenderness, recognizing that "being with" is as important as "doing for."

Stewardship

We commit to promoting the responsible use of all human
and financial resources, including Earth itself.

Service

We commit to providing the highest quality in every dimension of our ministry.



Facilities Description

Mercy Health Cincinnati services the Greater Cincinnati area through its five hospitals with an emphasis on communities immediately surrounding its care sites. It strives to ensure all community residents have access to the care they need, when they need it, regardless of financial capacity and social circumstance.

- The Jewish Hospital – Mercy Health located in ZIP code 45236, predominately serves residents of the same and contiguous ZIP code areas, which include portions of Hamilton, Warren, Butler and Clermont counties and surrounding areas.
- Mercy Health - Anderson Hospital, located in ZIP code 45255, predominately serves residents of the same and contiguous ZIP code areas, which include portions of Hamilton, Clermont, and Brown Counties and surrounding areas.
- Mercy Health - Clermont Hospital, located in ZIP code 45103, predominately serves residents of the same and contiguous ZIP code areas, which include Adams, Brown, Clermont, Hamilton, and Highland counties and surrounding areas.
- Mercy Health - Fairfield Hospital, located in ZIP code 45104, predominately serves residents of the same and contiguous ZIP code areas, which include portions of Butler and Hamilton counties and surrounding areas.
- Mercy Health - West Hospital, located in ZIP code 45211, predominately serves residents of the same and surrounding ZIP codes which includes Hamilton County and surrounding areas.

Community Served by the Hospital

Mercy Health Cincinnati participated alongside regional health partners and hospitals to develop the 2022 Community Health Needs Assessment (CHNA). Hospital members of the Health Collaborative and Greater Dayton Area Hospital Association (GDAHA) joined the collaboration which resulted in a robust portrait of the larger Southwest Ohio region. The regional report covers Greater Dayton and Greater Cincinnati, additionally including Northern Kentucky and Southeastern Indiana.

Joint CHNA

This is a joint CHNA report, within the meaning of Treas. Reg. §1.501(r)-3(b)(6)(v), by and for Mercy Health Cincinnati (including The Jewish Hospital - Mercy Health, Mercy Health – Anderson Hospital, Mercy Health - Clermont Hospital, Mercy Health – Fairfield Hospital, and Mercy Health – West Hospital). This report reflects the hospitals' collaborative efforts to assess the health needs of the community they serve. Each of the hospitals included in this joint CHNA report define its community to be the same as the other included hospitals. The assessment included is seeking and receiving input from that community.

Process and Methods

Process and methods to conduct the community health needs assessment

Photo credit: Lyons Photography, Inc.

The Health Collaborative (THC), in partnership with the Greater Dayton Area Hospital Association (GDAHA), facilitated the 2021 Regional Community Health Needs Assessment (CHNA). Data collection, analysis, and synthesis were conducted by Measurement Resources Company (MRC) and subcontractor Scale Strategic Solutions.

In this regional CHNA, health encompasses physical, mental, and social conditions. Health care is inclusive of hospitals and emergency rooms, primary care, behavioral health, specialty care (i.e., vision, dental, chiropractic, etc.), and social services that support health or link community members to health care.

Comprehensive Data Collection

The CHNA process would not be possible without a collaborative, regional approach from a variety of stakeholders across the community. Specifically, this collaboration was built on the Mobilizing Action through Planning and Partnerships (MAPP) Circle of Involvement Framework, including the Core Circle (THC, GDAHA, and consulting organizations) and the Circle of Engagement (the Advisory Committee). A total of 42 individuals were part of the advisory committee representing hospitals, health departments, and community partners in southwest Ohio and the Greater Dayton area, southeast Indiana, and northern Kentucky. The advisory committee met monthly with THC, GDAHA, MRC and Scale Strategic Solutions to oversee the work and keep THC accountable to the inclusive process.

The regional CHNA methodology and results were generated through an inclusive, comprehensive, and balanced data collection strategy for answering research questions. Additionally, the needs assessment utilized a mixed-method approach to data collection including secondary quantitative data and primary quantitative (Regional CHNA community and provider surveys) and qualitative (focus groups and interviews) data. Secondary data collection began in January 2021, followed by the population and provider surveys which were conducted beginning in April 2021. One-on-one stakeholder meetings were completed in September and October 2021, with all data collection completed by November 2021.

Each data collection strategy adhered to a recruitment plan to ensure a representative sample of community members, voices of marginalized populations, and providers across the health and social service sectors were captured. All results are summarized for the region which includes the Cincinnati Metropolitan Statistical Area (MSA),[1] Dayton-Kettering MSA (to include Clark County which is not part of the Dayton MSA but is similar in that it borders the Dayton MSA and is not a rural county),[2] and other rural

[1] Includes the following counties: Grant, Butler, Clermont, Hamilton, Warren, Dearborn, Kenton, Boone, Campbell, Brown, Ohio, Union, and Franklin.
[2] Includes the following counties: Clark, Montgomery, Miami, and Greene.

counties in the geographic service area that are predominately rural and not included in other MSAs.[3]

Overall, the scope of data collection was robust and informed the results of this Regional CHNA. This includes:

8,321 community surveys available in five languages. Within this sample, representation was seen across 26 counties, males, females, ages 18-65+, Black/African American, Multiracial, Asian, American Indian, Alaskan Native, White, and Hispanic/Latino populations.

859 provider surveys inclusive of behavioral health, educations, emergency medical services, faith-based organizations, federally qualified health centers, justice/corrections, medical care (adult, geriatric, pediatric), oral health, organizations addressing health related social needs and social determinants of health, pharmaceutical, and public health departments.

- Providers also represented administration, direct patient care, academic, support staff, and supervisors/management.
- Providers reported servicing a variety of populations including children/youth, people with disabilities, ethnic minorities, people experiencing homelessness, people involved in the justice system, veterans, young adults, low-income populations, and LGBTQ+ populations.

51 focus groups with 234 people were held, representing all three MSAs. Specifically, recruitment for these focus groups were based on advisory committee identification of populations who are traditionally underrepresented, marginalized, or experience greatest health disparities.

- Populations represented in these focus groups include adult men, those experiencing foster care or foster parenting, youth and adults with disabilities, ethnic, cultural and language minorities, first and second-generation immigrants, people experiencing homelessness, those involved in the justice system, low-income families and individuals, parents, veterans, older adults, community members with lived experience of mental health and/or addiction, and first responders.

38 stakeholder interviews were held across health and social service providers, specifically with the following being represented: mental health and substance use disorder (SUD), public health, hospital systems, Federally Qualified Health Centers (FQHCs), transportation, housing, food access, healthcare access and policy, school-based health and children's healthcare, maternal and infant care, LGBTQ+ healthcare, pharmacy access, and healthcare workforce development.

Data collection was also comprehensive in that community members, social service providers and healthcare professionals were not only asked "what could be better," but also "what is working." As a result, this Regional CHNA includes a collection of assets and recommended policy and practice initiatives identified by the community that directly tie to system barriers.

[3] Includes the following counties: Clinton, Highland, Adams, Preble, Shelby, Darke, Auglaize, and Champaign.

External sources

Secondary data sources were used to capture community-level data on health conditions, healthcare access and risk factors. The secondary data collection, which began in January of 2021, sought to understand the greatest health conditions of the region, including prevalence and impact on community members. These results informed the creation of survey items that were organized around a set of co-created research questions. Data sources are cited throughout the report. Large secondary data sources include the American Community survey (ACS), National Center for Health Statistics, CDC's Behavioral Risk Factor Surveillance System, and Ohio Hospital Association (OHA) and Health Information Exchange (HIE) hospital and emergency department utilization data. Other secondary data regarding social determinants of health were pulled from 2021 County Health Rankings National Data (CHR), CDC Wonder: Births Data Summary, and CDC.gov.

Collaborating partners

The hospital collaborated with the following organizations as part of the process of conducting the needs assessment:

- 36 hospitals and 22 health departments across 26 counties in Southwest Ohio, and the Greater Dayton Area, southeast Indiana, and northern Kentucky.

Hospitals/Health Systems

Mercy Health - Cincinnati

- The Jewish Hospital – Mercy Health
- Mercy Health - Anderson Hospital
- Mercy Health – Clermont Hospital
- Mercy Health - Fairfield Hospital
- Mercy Health - West Hospital

Cincinnati Children's Hospital

- Cincinnati Children's Burnet Campus
- Cincinnati Children's Liberty Campus
- Cincinnati Children's College Hill Campus

The C&F Lindner Center of HOPE

The Christ Hospital, Mt. Auburn

TriHealth

- TriHealth Good Samaritan Hospital
- TriHealth Good Samaritan Evendale Hospital
- TriHealth Bethesda North Hospital
- TriHealth Bethesda Butler Hospital
- TriHealth McCullough Hyde Memorial Hospital

UC Health

- UC Health University of Cincinnati Medical Center
- UC Health West Chester Hospital
- UC Health Drake Center for Post-Acute Care

Greater Dayton Area Hospital Association (GDAHA)

- Kettering Medical Center
- Sycamore Medical Center
- Kettering Behavioral Medical Center
- Grandview Medical Center
- Southview Medical Center
- Soin Medical Center
- Greene Memorial Hospital
- Fort Hamilton Hospital

Premier

- Miami Valley Hospital
- Atrium Medical Center
- Upper Valley Medical Center
- Miami Valley Hospital South
- Miami Valley Hospital North

Wilson Memorial Health

Wayne Healthcare

Mercy Health Springfield Regional Medical Center

Mercy Health Urbana Hospital

Adams County Regional Medical Center

Margaret Mary Health

Local Health Departments

City

- Cincinnati
- Hamilton
- Norwood
- Piqua
- Springdale

County

- Adams
- Auglaize
- Brown
- Butler
- Champaign
- Clark
- Clermont
- Clinton
- Darke
- Greene
- Hamilton
- Highland
- Miami
- Montgomery
- Preble
- Shelby
- Warren

The following were members of the Advisory Committee (in addition to representation from regional hospitals and public health).

Advisory Committee

- All In Cincinnati
- bi3
- CoHear
- Crossroads Center
- HealthCare Access Now (HCAN)
- Southwest Association of Ohio Health Commissioners (AOHC)
- Healthcare Connection
- Interact for Health
- West Central Association of Ohio Health Commissioners (AOHC)
- YMCA Cradle to Career

Other sources

A collaborative effort of broad coalition stakeholders across Cincinnati and Hamilton County have developed a housing strategy guide – Housing our Future – that focuses on the need to preserve and produce affordable housing, protect existing residents, and make system changes that increase access to home ownership, production of housing units, preservation of existing affordable housing, equitable zoning policies, and resources and financing to meet goals. Led by the Local Initiatives Support Corporation (LISC) of Greater Cincinnati, this report leveraged comprehensive data collection and local expertise to show the full scope of housing needs within Greater Cincinnati. The data collection included an in-depth community engagement process that gathered input from hundreds of residents, neighborhood groups, advocates, and for- and non-profit developers. The process included three public meetings attended by over 200 individuals; meetings with 20 stakeholder groups with nearly 500 attendees; 50-plus interviews with local stakeholders; and the engagement of 50-plus 'Everyday Experts'—residents who directly confront housing affordability challenges in their everyday lives—through these meetings and independent focus groups.

Link to full report is included in the Appendix.

Community Input

Population Survey

The primary goal of the population survey was to gather a wide range of voices to share their experiences and insights with health conditions, risk factors, and structural barriers. The electronic survey was open from April 2021 to June 2021 and available in Arabic, English, French, Nepali, and Spanish. Paper surveys were provided when requested. To improve response rates, there were two drawings for a $100 Amazon gift card. An overview of the sampling and analysis strategies for the population survey are provided below.

Sampling

To ensure a representative sample of THC's geographic service area, three separate stratified sampling strategies were developed to reflect the age, race, and gender of Cincinnati Metropolitan Statistical Area (MSA),[4] Dayton-Kettering MSA (to include Clark County which is not part of the Dayton MSA but is similar in that it borders the Dayton MSA and is not a rural county),[5] and other rural counties in the geographic service area that are predominately rural and not included in other MSAs.[6] Over 11,000 individuals responded to an online survey with 8,321 valid responses.[7] The table below provides a description of the valid sample represented in the results.

[4] Includes the following counties: Grant, Butler, Clermont, Hamilton, Warren, Dearborn, Kenton, Boone, Campbell, Brown, Ohio, Union, and Franklin.

[5] Includes the following counties: Clark, Montgomery, Miami, and Greene.

[6] Includes the following counties: Clinton, Highland, Adams, Preble, Shelby, Darke, Auglaize, and Champaign.

[7] 11, 615 total responses were gathered from our survey results. From here, 2,343 respondents were dropped from analysis due to listing their zip code as one clearly outside of our regions of interest. An additional 38 respondents were dropped based on unreliable reporting of needing treatment for five major diseases in the past year. 198 individuals were dropped due to their written selection for race being uninformative or unreliable. An additional 333 respondents were dropped for low question response rate (15 or less answered questions). 139 respondents were dropped for likely duplicate entries. Finally, those who did not have complete responses for MSA, age, sex, and race were dropped from analysis, resulting in 8,321 valid responses.

Percent of Population Survey Respondents by Region

Demographic	Cincinnati		Dayton-Kettering		Other Rural Counties	
	MSA n=1,646,873	Sample n=4,415	MSA n= 729,904	Sample n=2,543	MSA n=257,910	Sample n=1,363
Age	%	%	%	%	%	%
18-24	12%	8%	12%	6%	11%	7%
25-34	18%	30%	17%	20%	14%	30%
35-44	16%	16%	15%	22%	15%	16%
45-64	35%	29%	34%	44%	37%	33%
65+	19%	17%	22%	9%	23%	13%
Race						
Black or African American	12%	8%	14%	8%	1%	2%
Multiracial	1%	4%	2%	3%	1%	2%
Asian, American Indian/Alaskan Native, Native Hawaiian or Pacific Islander or another race that is not White or Black or Multiracial	5%	12%	4%	7%	2%	10%
White or Caucasian	82%	76%	80%	83%	96%	85%
Ethnicity						
Hispanic or Latino	2%	4%	2%	3%	1%	5%
Not Hispanic or Latino	98%	96%	98%	97%	99%	95%
Gender						
Male	48%	34%	48%	20%	49%	30%
Female	52%	66%	52%	80%	51%	70%

As shown in the tables above, as is often the case, the sample characteristics do not perfectly align to the population within the Health Collaborative's region. In order to make population-level conclusions and observations from our data, a survey data weighting method was applied to ensure the sample distribution of demographics align with the population distribution. The method of survey weighting used in this analysis is called raking. This method is also used by Pew Research Center, and the CDC also uses raking in their Behavioral Risk Factor Surveillance System (BRFSS) data.

Analysis

For overall perceptions and experiences, frequency and descriptive analyses were conducted using survey response weighting described above. To assess for differences in perceptions and experiences related to health, logistic and multiple regression analyses were conducted. Because much of the needs assessment was focused on determining which individuals and in which regions individuals are experiencing the greatest health needs or gaps, reference groups were selected based on the literature and previous research which inform groups of individuals who are most likely to be negatively impacted relative to majority or historically not-underrepresented groups (e.g., White individuals, individuals from higher socioeconomic statuses, individuals without disabilities); choice of reference group does not change the reliability or validity of the statistics or model, but rather provides targeted insights into group differences.

Focus Groups

The goal of focus groups was to document the unique health needs and experiences of community members known to experience health disparities or that do not tend to participate in online surveys. Focus group discussions centered around the following three broad questions:

- How do health needs differ across communities and community members?
- What are the personal experiences, local contexts, and social conditions (e.g., SDOH and root causes) driving the greatest health needs in and across community groups?
- How can healthcare providers better reach community members?

Focus groups were conducted in May and June 2021 by researchers from MRC, Scale Strategic Solutions, and a team of University of Cincinnati (UC) faculty and students, with MRC facilitating the collaborative effort. Researchers collaborated with community champions in order to identify community members to participate. Focus groups lasted one hour and each participant received a $25 grocery gift card (Amazon, Walmart, or Kroger) for their expertise in the focus group. An overview of the recruiting process and analysis strategies for the focus groups is provided below.

Recruiting

Based on the population groups the advisory committee identified as experiencing health disparities or being underrepresented in community data, MRC designed a recruitment strategy to ensure all the population groups were included. A total of 51 focus groups were conducted, with a total of 234 community members (65% female,

31% male). The table below identifies some of the unique populations represented in the focus groups.

Population Representation in Focus Groups by Region

Population Category	Cincinnati MSA	Dayton-Kettering MSA	Other Rural Counties
Adult Men	✓	✓	✓
Experience in Foster Care, or Foster Care Parent	✓		
Disabled Youth and Adults	✓	✓	
Ethnic, Cultural and Language Minorities	✓	✓	✓
First-and-Second Generation Immigrants	✓	✓	
Homeless Community Members	✓	✓	
Justice-involved Individuals	✓		✓
Low-income Families/Individuals	✓	✓	✓
Older Adults	✓	✓	✓
Parents	✓	✓	✓
Veterans	✓	✓	
Young Adults (18-30 years)	✓	✓	✓
Youth (high school)	✓	✓	✓
Community Members with lived experience of mental health and/or addiction (including Peer Supporters)	✓	✓	

Analysis

Focus group discussions were transcribed, and content analyzed for common clusters of similar statements, organized by categories of clusters, and then analyzed for larger themes that summarized the global and unique perspectives of focus group participants.

Interviews

The goal of the interviews were to assess the current state of system barriers to providing health care, address the greatest health needs of the community, and identify solutions to overcoming system and SDOH-related barriers. Interviews were designed around the following broad questions:

- What are the system barriers providers face in addressing the needs of the community groups?
- What recommendations or best practices can be recommended to overcome system barriers to addressing the health needs of the community?
- What are the historical traumas, local contexts, and social conditions (e.g., SDOH and root causes) driving the greatest health needs of your communities?
- What specific action steps can be taken by various providers to address root causes to health disparities and achieve more equitable health outcomes?

Interviews were conducted via phone or virtually. MRC, Scale Strategic Solutions, and the UC research teams conducted interviews, each lasting approximately 45 minutes. An overview of the sampling and analysis strategies for the interviews are provided below.

Recruiting

MRC and UC worked with the Advisory Team to identify system experts and organizational-level stakeholders representing governmental, Regional CHNA partners, healthcare providers, and community-based leaders. A total of 38 interviews were conducted, representing experience from the following health and social service sectors shown in the table below.

System Representation in Interviews by Region

Provider Category	Cincinnati MSA	Dayton-Kettering MSA	Rural Counties
Community Health Centers and Federally Qualified Health Centers	✓	✓	
Public Health and County Health Departments	✓	✓	✓
Hospital Systems	✓	✓	
Mental and SUD Health Care	✓	✓	✓
Medical Health -Geriatric		✓	
SDOH-Housing		✓	
SDOH-Economic Disparity	✓	✓	✓
SDOH-Transportation		✓	✓
LGBTQ+ Health Care	✓		
Emergency Health Care	✓		
Healthcare Access and Policy Experts	✓	✓	✓
SDOH-Food Access	✓	✓	✓
Pharmacy Access Experts	✓	✓	✓
Healthcare Workforce Development Experts	✓	✓	✓
Correctional Facility-based Health Care			✓
School-based and Children’s Health Care	✓	✓	✓

Analysis

All individual stakeholder responses are confidential. Interviews were transcribed and content analyzed for common clusters of similar statements, organized by categories of clusters, and then analyzed for larger themes that summarize the global and unique perspectives of interview participants.

This comprehensive and inclusive data collection strategy resulted in a balanced representation across all three regions of the Regional CHNA. The success of the data collection is due largely to the advisory committee, community partners, and community champions.

2019 Community Health Needs Assessment

No comments or feedback were received on the 2019 CHNA for consideration or inclusion in this report.

Information and Data Considered in Identifying Potential Need

Provider Survey

The primary goal of the provider survey was to assess the current state of system barriers to providing health care and to address the greatest health needs of the community and identify solutions to overcoming system and SDOH-related barriers. The online survey was open from April 2021 to May 2021. Below outlines the sampling and analysis strategy for the provider survey.

Sampling

A total of 859 provider surveys were included in the analysis.[8] Across the three regions, the representation of providers from different fields were relatively equal with the exception of Dayton-Kettering MSA where there was much higher representation from Medical Health professionals (general population; 29%) compared to Cincinnati MSA (10%) and Rural Counties (14%). Among healthcare professionals, more than half in each region provide direct patient care. Among social service professionals, the most common roles among respondents were in Administration/Senior Management. Providers also reported serving the Regional CHNA target populations with 50% or more service children/youth, disabled, ethnic minority, homeless, low-income, parent/caretaker and older adult populations.

[8] 974 individuals began and/or completed the provider survey, with 113 responses removed due to incompleteness (i.e., did not provide answers to questions beyond the counties they serve and their role). Another two responses were removed because the individuals did not work within the region.

Percent of Survey Respondents from Each Region by Provider Type

Provider Type	Cincinnati MSA (n=596)	Dayton-Kettering MSA and Clark County (n=300)	Rural Counties (n=335)
Behavioral Health, Non-School Based	7%	8%	10%
Behavioral Health, School-Based	10%	5%	7%
Education: College/University	9%	6%	7%
Education: Early Childhood	6%	2%	4%
Education: K-12	3%	2%	4%
Emergency Medical Services/First Responder	5%	6%	6%
Faith-Based Organization	4%	3%	5%
Federally Qualified Health Center	3%	1%	2%
Justice or Corrections	2%	4%	3%
Medical Health – Adult	8%	12%	8%
Medical Health – General Population	10%	29%	14%
Medical Health – Geriatric	2%	2%	2%
Medical Health – Pediatric	3%	2%	2%
Oral Health	7%	5%	6%
Other organizations addressing social determinants of health	5%	6%	5%
Pharmaceutical	4%	2%	5%
Public Health Department	7%	3%	6%
Other	5%	4%	4%

Percent of Survey Respondents from Each Region by Provider Role

Provider Roles / Health-Related	Cincinnati MSA (n=596)	Dayton-Kettering MSA and Clark County (n=300)	Rural Counties (n=334)
Administration	33%	23%	37%
Provide direct patient care	59%	68%	54%
Academic	7%	4%	6%
Other Role	2%	4%	3%
Social Service-Related			
Administrative Support Staff	14%	9%	11%
Administrator/Senior Management	52%	47%	64%
Direct Service Provider	21%	28%	17%
Manager or Supervisor	10%	14%	5%
Other Role	3%	1%	3%

Percent of Survey Respondents from Each Region by Populations Served

Populations Served	Cincinnati MSA (n=594)	Dayton-Kettering MSA and Clark County (n=300)	Rural Counties (n=335)
All Residents	43%	56%	48%
Children/Youth	28%	22%	24%
Disabled	20%	22%	19%
Ethnic Minorities	22%	25%	21%
Homeless	19%	22%	20%
Justice-Involved Individuals	9%	13%	11%
Language Minorities	10%	13%	7%
LGBTQ+	11%	18%	11%
Low-Income Populations	22%	25%	19%
Older Adults	26%	32%	30%
Parents/Caretakers	16%	19%	17%
Veterans	8%	15%	10%
Young Adults	13%	17%	10%
Another Population	2%	4%	2%

Public health departments	Date of data/information
Adams County Health Department	Public Health Departments participated/were represented within the Advisory Committee which met monthly, as well as through the Provider Survey (conducted April 2021 to May 2021) and Interviews
Auglaize County Health Department	
Brown County Health Department	
Butler County Health Department	
Champaign Health District	
City of Cincinnati Health Department	
Clark County Combined Health District	
Clermont County Public Health	
Clinton County Health Department	
Darke County Health Department	
Fayette County Health Department	
Greene County Health Department	
City of Hamilton Health Department	
Hamilton County Public Health	
Highland County Health Department	
Miami County Health Department	
Montgomery County Health Department	
City of Norwood Health Department	
City of Piqua Health Department	
Preble County Public Health	
Public Health Dayton Montgomery County	
Shelby County Health Department	
City of Springdale Health Department	
Warren County Health Department	

At-risk populations	Date of data/information
Males	At-risk populations participated/were represented through the Provider Survey (April 2021 to May 2021), Population Survey (April 2021 to June 2021), Focus Groups, and Collaborative Data Collection
Black, Multiracial, Asian, and American Indian/Alaskan Native	
Younger Individuals	
LGBTQ+ Individuals	
Maternal Age Women	
Veterans and Active Military	
Individuals with Disabilities	
Caregivers of Individuals with Disabilities	
Individuals without Private Insurance	
Individuals with Lower Educational Attainment	
Women with Past Traumas	
Incarcerated community members and community members transitioning back into the community	
Community members in addiction recovery	
Older adults and youth	

Community and Stakeholder Input	Date of data/information
Community Health Centers and Federally Qualified Health Centers	April 2021 to May 2021 A total of 859 provider surveys and 38 interviews were included in the analysis.
Public Health and County Health Departments	
Hospital Systems	
Mental and SUD Health Care	
SDOH-Housing	
SDOH-Economic Disparity	
SDOH-Transportation	
LGBTQ+ Health Care	
Emergency Health Care	
Healthcare Access and Policy Experts	
SDOH-Food Access	
Pharmacy Access Experts	
Healthcare Workforce Development Experts	
Correctional Facility-based Health Care	
School-based and Children's Health Care	
Faith-based Organizations	
Oral Health	
Education (K-12, Early Childhood, College/University)	
Medical Health (Pediatric, Adult, Geriatric and General Population	

Organizations providing input

Organization providing input	Nature and extent of input	Medically under-served, low-income or minority populations represented by organization
All In Cincinnati	Advisory Committee and one-on-one stakeholder meeting (conducted September 27, 2021 to October 31, 2021)	Minority populations, specifically the Black community
bi3	Advisory Committee and one-on-one stakeholder meeting (conducted September 27, 2021 to October 31, 2021)	Healthcare innovation and equity for population at large
CoHear	Advisory Committee and one-on-one stakeholder meeting (conducted September 27, 2021 to October 31, 2021)	Community engagement and strategy for population at large
Crossroads Center	Advisory Committee and one-on-one stakeholder meeting (conducted September 27, 2021 to October 31, 2021)	Individuals with behavioral health needs
HealthCare Access Now (HCAN)	Advisory Committee and one-on-one stakeholder meeting (conducted September 27, 2021 to October 31, 2021)	Medically underserved
Southwest Association of Ohio Health Commissioners (AOHC)	Advisory Committee and one-on-one stakeholder meeting (conducted September 27, 2021 to October 31, 2021)	Population at large
Healthcare Connection	Advisory Committee and one-on-one stakeholder meeting (conducted September 27, 2021 to October 31, 2021)	Population at large; medically underserved
Interact for Health	Advisory Committee and one-on-one stakeholder meeting (conducted September 27, 2021 to October 31, 2021)	Population at large
West Central Association of Ohio Health Commissioners (AOHC)	Advisory Committee and one-on-one stakeholder meeting (conducted September 27, 2021 to October 31, 2021)	Population at large
YMCA Cradle to Career	Advisory Committee and one-on-one stakeholder meeting (conducted September 27, 2021 to October 31, 2021)	Children
The Health Collaborative	Advisory Committee and one-on-one stakeholder meeting (conducted September 27, 2021 to October 31, 2021)	Population at large

Significant Community Identified Health Needs

Social Determinants of Health – Community Level Needs that Impact Health and Wellbeing

Only a part of an individual's health status depends on their genetics and behaviors. Social Determinants of Health (SDOH) are the structural and social conditions that affect a wide range of health, functioning, and quality-of-life outcomes and risks.[i] In line with Healthy People 2030 SDOH framework, five categories of Social Determinants of Health were identified as key drivers of health in this Region (not in rank order):

- Economic stability
- Neighborhood and built environment
- Education access and quality
- Social and community connectiveness
- Healthcare access and quality

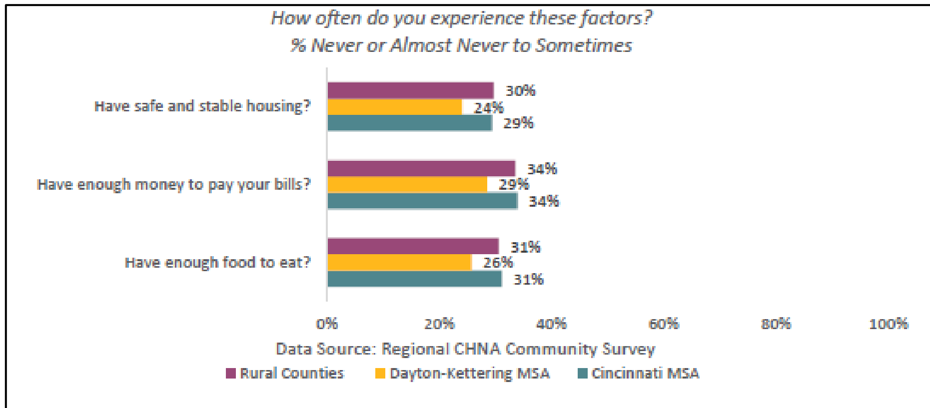
Economic Stability

To assess the impact of economic stability on health in the region, community members were asked the extent to which they agreed they have enough money to pay bills, enough money to eat, and safe and stable housing. These three variables were turned into a scale score. A higher scale score reflects greater economic stability; a lower scale score reflects lower economic stability.

Data from the Regional CHNA community survey revealed that people in the region with lower economic stability are more likely to need treatment for heart conditions, [9] which is consistent with the literature. Additionally, people in the region with lower economic stability are more likely to report needing treatment for lung conditions, (i.e., Asthma, Chronic Obstructive Pulmonary Disease [COPD], Emphysema, Chronic Bronchitis, or other similar conditions).[10] This may be somewhat explained by the COVID-19 pandemic and the higher health risk people with low economic stability face with COVID-19[ii] and lung conditions in general.[iii] Additionally, individuals with lower economic stability were more likely to need treatment for maternal complications than community members with higher economic stability. Economic instability is present in communities across the region. Approximately 3 out of 10 community members in the Regional CHNA community survey self-reported having low economic stability. From the regional CHNA community survey, low economic stability is most prevalent in rural counties and the Cincinnati MSA (figure 1).

[9] As economic mean scale score increases by one point, the odds of needing treatment for a heart condition decrease by 5%, adjusting for sex, age, race, ethnicity, frequency of preventive care, healthcare quality scale score, and MSA. ($b=0.05$, $p<0.05$)
[10] As economic mean scale score increases by one point, the odds of needing treatment for a lung condition decrease by 6%, adjusting for sex, age, race, ethnicity, MSA, frequency of preventive care, healthcare quality scale score, and education mean scale score. ($b=0.06$, $p<0.05$)

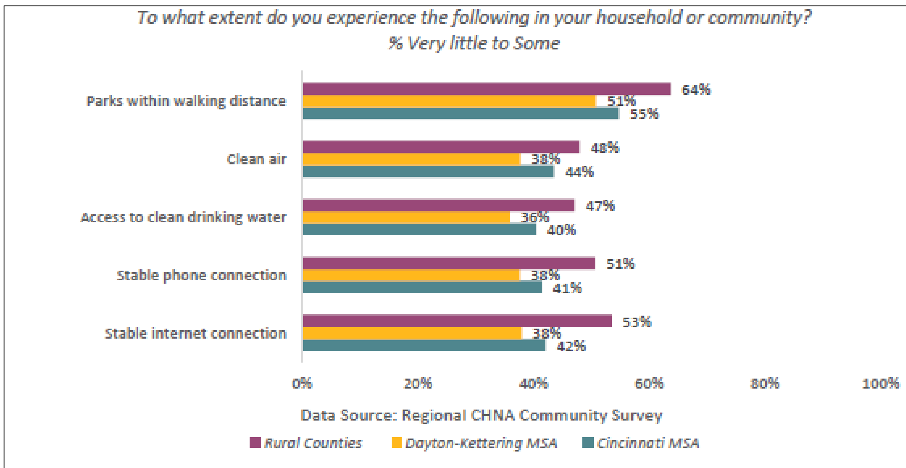
Figure 1: Economic Instability



Neighborhood and Built Environment

To assess the impact of the neighborhood and built environment on health in the region, community members were asked the extent to which they agree that they have stable internet, stable phone, clean water, clean air, access to parks, and reliable transportation. These six variables were turned into a scale score. A higher scale score reflects higher perceptions of the neighborhood and built environment; a lower scale score reflects lower perceptions of the neighborhood and built environment. According to results from the regional CHNA community survey, low perceptions of the neighborhood and built environment were most prevalent in rural counties and the Cincinnati MSA, as shown in the figure below.

Figure 2: Neighborhood and Built Environment

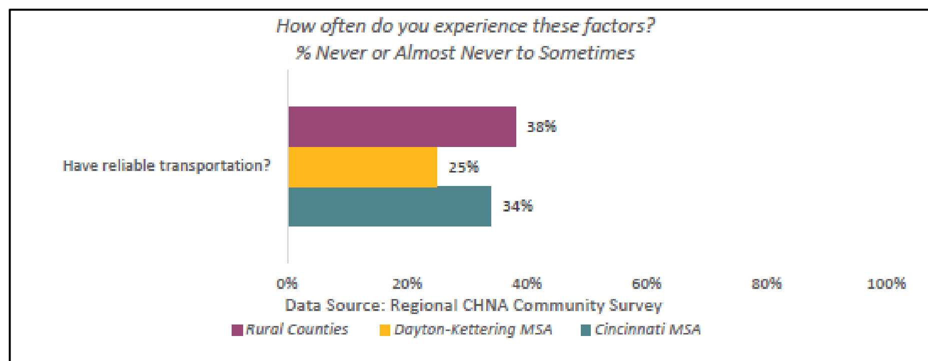


Transportation was also identified as a significant barrier in focus groups and interviews. Transportation is a long-standing barrier. Based on qualitative data, it is specifically a barrier for older adults, families with children, people with disabilities and

anyone needing to access care from multiple locations. This transportation barrier causes people to be late or miss appointments. In interviews, it was identified that many clinics have policies related to missed appointments to offset costs to the provider. However, the unintended effect is that families "bounce" between providers, thus undermining any opportunity for consistent care.

Results from the regional CHNA showed that community members in rural counties and the Cincinnati MSA report the highest percentage of issues with reliable transportation, as show in Figure 3 below.

Figure 3: Transportation



Education Access and Quality

To access the impact of education access and quality on health in the region, community members were asked the extent to which they had access to quality childcare and were in close distance to quality schools. These two variables were turned into a scale score. A higher scale score reflects greater education access and quality; a lower scale score reflects lower education access and quality.

Data from the Regional CHNA community survey showed that people in the region with lower education access and quality are more likely to need treatment for mental health, [11] which is consistent with the literature. Additionally, people in the region with lower education access and quality are more likely to report needing treatment for vision. [12] This is also consistent with other literature in that vision care may not be prioritized due to barriers to heath care in general.[iv]

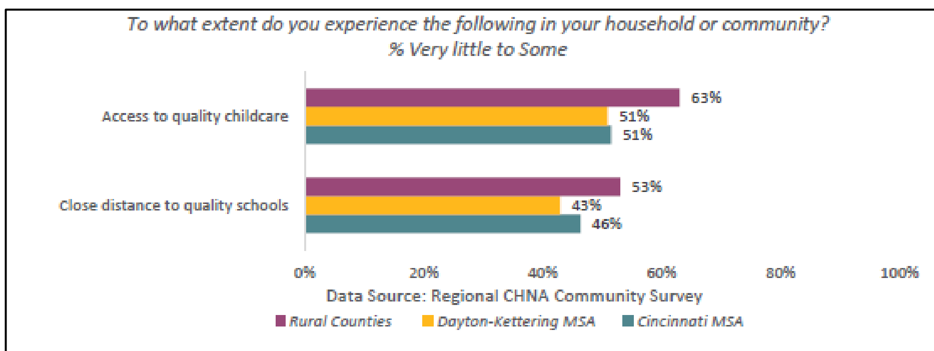
Over half of the region's community members who completed the survey reported low access to quality childcare and about half reported low access to quality schools. Without access to quality childcare, families not only struggle with maintaining employment and assuring child safety, they may also struggle to prioritize health care.

[11] As education mean scale score increases by one point, the odds of needing treatment for a mental health need decreased by 5%, adjusting for sex, age, race, ethnicity, healthcare quality scale score, MSA, environment mean scale score, economic mean scale score, and social connectivity mean scale score. ($b=-0.05$, $p<0.05$).

[12] As education mean scale score increases by one point, the odds of needing treatment for vision need decreases by 5%, adjusting for sex, age, race, ethnicity, MSA, frequency of preventive care, healthcare quality scale score, environment mean scale score, and social connectivity mean scale score. ($b=-0.05$, $p<0.05$)

Over half of the region's community members who completed the survey reported low access to quality childcare and about half reported low access to quality schools (figure

Figure 4: Education Access and Quality



4). Without access to quality childcare, families not only struggle with maintaining employment and assuring child safety, they may also struggle to prioritize health care.

Social and Community Connectiveness

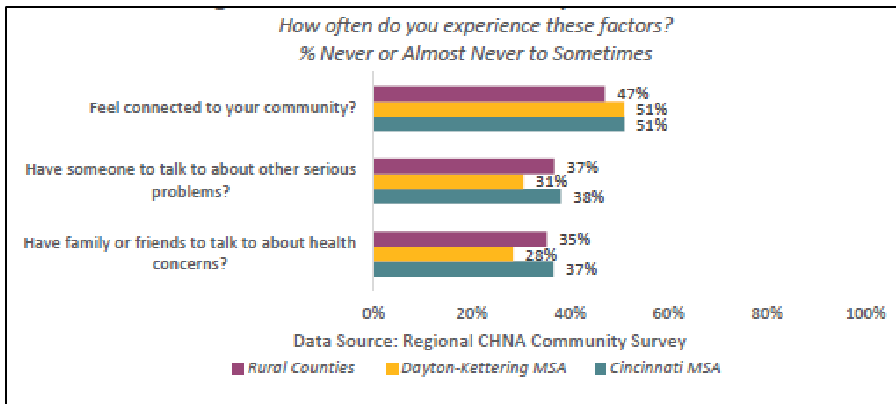
To assess the impact of social and community connectiveness on health in the region, community members were asked in the survey how often they have family or friends to talk to about health concerns, have someone to talk to about other serious problems, and feel connected to their community. These three variables were turned into a scale score. A higher scale score reflects greater social and community connectiveness; a lower scale score reflects lower social and community connectiveness.

In the Regional CHNA community survey, data showed that individuals who had greater social and community connectiveness were less likely to report needing treatment for mental health and vision concerns. These results are consistent with other literature demonstrating that relationships are an important factor of mental health and finding solutions for a range of health concerns, including vision.

Across all focus groups and interviews, community members spoke to the loss of connectiveness due to the COVID-19 pandemic. In particular, youth and older adults spoke to the negative impact social distancing and fear of the pandemic has had on their overall well-being. Black community members, both youth and adults, expressed a need for building stronger community connectiveness in order to protect against the additional stresses of racism, media coverages and campaigns related to social justice, and the social impacts of COVD-19. Additionally, Asian community members spoke to the challenges of being geographically dispersed throughout the region, making it difficult to build cultural community connectiveness, especially for older adults in the community.

From Regional CHNA community survey data, we see that about half of the community members living in the region "never or almost never" or "sometimes" feel connected to their community. About 3 in 10 community members report "never or almost never" or "sometimes" having someone to talk to about problems or health concerns as reflected in the figure below.

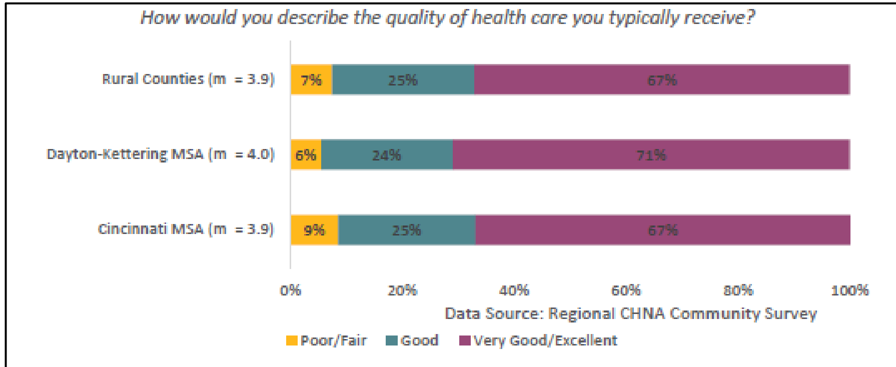
Figure 5: Social and Community Connectiveness



Healthcare Access and Quality

To determine if access to quality health care was driving any specific health conditions in the region, health quality was assessed based on the response to the question, *Overall, how would you describe the quality of health care you typically receive?* Community members rated the quality of health care as poor, fair, good, very good, or excellent. The majority of community members in the rural counties and MSAs perceive the quality of health care to be "very good" or "excellent", as reflected in the figure below.

Figure 6: Quality of Health Care



In several different logistic regression analyses looking at treatment need for disease, an increase (improvement) in quality of health care was associated with a decrease in odds of needing treatment for mental health, [13] heart conditions,[14] arthritis,[15] and lung

[13] A one-unit improvement in quality of health care scale score is associated with a 9% decrease in the odds of needing treatment for mental health, adjusting for sex, age, race, ethnicity, MSA, social built environment mean scale score, education mean scale score, economic mean scale score, and social connectivity scale score. ($b = -0.09$, $p < 0.05$)

[14] A one-unit improvement in quality of health care scale score is associated with a 15% decrease in the odds of needing treatment for heart conditions, adjusting for sex, age, race, ethnicity, MSA, economic mean scale score, and frequency of preventive care. ($b = -0.15$, $p < 0.05$)

[15] A one-unit improvement in quality of health care scale score is associated with a 29% decrease in the odds of needing treatment for arthritis, adjusting for sex, age, race, ethnicity, MSA, economic mean scale score, and frequency of preventive care. ($b = -0.35$, $p < 0.001$)

disease.[16] Analysis also showed that for an increase of one unit in perception of quality health care, the odds of having unmet needs related to vision,[17] dental,[18] and allergy[19] concerns also decreased.

To determine who is impacted by low heath care access and quality, the regional CHNA looked at the differences in quality perceptions based on demographic characteristics using logistic regression. The box below shows the populations who are significantly more likely to report lower health care access and quality compared to other community members.[20] Significant predicators seen below are adjusting for all other significant predictors as well as age, sex, ethnicity, race, and MSA.

Populations Reporting Significantly Lower Quality Health Care Experiences than their Counterparts
Black or Asian, American Indian/Alaskan Native, Native Hawaiian or Pacific Islander or identified as another race individuals relative to White individuals
Individuals with disabilities relative to those without disabilities
Individuals with lower education relative to those with higher education
Individuals who are younger relative to those who are older
Individuals without private insurance relative to those with private insurance
Individuals who care for a disabled individual relative to those who do not

Multiple barriers to a healthy life and to health care were identified by community members who participated in the regional CHNA community survey, interviews and focus groups, as listed below:

Information accessibility and service availability, described as:

[16] A one-unit improvement in quality of health care scale score is associated with a 19% decrease in the odds of needing treatment for lung disease, adjusting for sex, age, race, ethnicity, MSA, education mean scale score, economic mean scale score, and frequency of preventive care. ($b = -0.21$, $p < 0.05$)

[17] A one-unit improvement in quality of health care scale score is associated with a 14% decrease in the odds of having unmet vision treatment needs, adjusting for sex, age, race, ethnicity, MSA, social built environment mean scale score, education mean scale score, social connectivity scale score, and preventive care frequency. ($b = -0.16$, $p < 0.001$)

[18] A one-unit improvement in quality of health care scale score is associated with a 24% decrease in the odds of having unmet dental treatment needs, adjusting for sex, age, race, ethnicity, MSA, social connectivity scale score, and preventive care frequency. ($b = -0.28$, $p < 0.001$)

[19] A one-unit improvement in quality of health care scale score is associated with a 16% decrease in the odds of having unmet allergy treatment needs, adjusting for sex, age, race, ethnicity, MSA, and social connectivity scale score. ($b = -0.18$, $p < 0.001$)

[20] As age increases by one year, the odds of rating one's health care experience as good to excellent increases by 4%. ($b=-0.04$, $p<0.05$); The odds of rating one's health care experience as fair or poor for those with less than a high school education and those with some high school education are 2.15 (no high school) and 1.58 (some high school) times that of high school graduates. ($b=0.77$, $p<0.05$), ($b=0.46$, $p<0.05$); Black individuals have 61% higher odds of rating their health care experience fair/poor relative to White individuals. ($b=0.48$, $p<09.05$); Individuals who identify as Asian, American Indian/Alaskan Native, Native Hawaiian or Pacific Islander or another race that is not Black, White or multiracial have 62% higher odds of rating their health care quality fair/poor than White people. ($b=0.48$, $p<0.05$); Individuals with a disability have 51% higher odds of rating their health care fair/poor than those without a disability. ($b=0.42$, $p<0.001$); Those with private insurance have 28% lower odds of rating their health care fair/poor compared to those without private insurance. ($b=-0.32$, $p<0.05$); Those caring for a disabled person have 81% higher odds of rating their health care quality as fair/poor compared to those not caring for a disabled person. ($b=0.59$, $p<0.001$).

- A lack of centralized, up-to-date information on healthcare services and providers
- A limited or lack of access to culturally and/or LGBTQ+ competent healthcare professionals
- A limited number of service appointments and appointment times

Affordability and health insurance, described as:

- A limited or lack of financial resources to pay for health care service
- Limited or lack of transportation
- Limited or lack of technology resources to receive health care
- Limited experience navigating health insurance systems

Feeling unsafe and having negative past experiences, described as:

- Perceptions that health care providers care more about money
- Feeling unsafe in receiving care
- Experiences of discrimination when receiving care
- Fear of judgement

According to community members, to have accessible health care is to have confidence that, when needed, community members will know what services are available, where to find then, will not have cause to fear seeking them, and will not suffer social stigmatization or economic debt for using them. To have accessible health care is to be able to receive physical, mental, and spiritual support in order to live a holistically healthy life.

Societal Systemic Barriers to Improving Overall Health of Community Members

Without interventions, community members experiencing health-related risk factors like economic instability, social isolation, low healthcare access, and/or ACEs (e.g., SDOH-related risk factors) are at greater risk of poor health and limited to no access to the quality of health care they need. SDOH-related risk factors discussed in this report are rooted in various social, political, and economic structures. Based on analysis of survey, interview, and focus group data, three such structures stand out as key barriers to addressing the region's health disparities and overall health outcomes according to the region's stakeholders. These structures include:

- Structural racism
- America's high-cost healthcare system
- The structural divide of holistic health care

These structural barriers are driving disparity in access to health care, quality of health care, health-related behaviors (such as not seeking care) and disparities in health conditions (see above sections) and SDOH. The following sections summarize these barriers to improve health and quality health care in the region.

Structural Racism

Based on the thematic analysis of focus group, interview, and survey data, it could be determined that structural racism drives barriers related to lack of culturally relevant health care, diversity in the workforce, and a divided healthcare system.

Community members and providers identified a lack of culturally relevant health care and a lack of diversity in the workforce among health care professionals. These shortages are rooted in structural racism that drives K-12 education disparities in Black and Hispanic communities, lowering the number of minorities prepared to pursue higher level healthcare professions. In turn, there is a shortage of healthcare professionals who themselves are Black and/or Hispanic and/or female. The lack of diversity going into healthcare professions further perpetuates a medical/clinical education curriculum that lack an equity lens and insufficient training in culturally relevant health care and cultural sensitivity. Even more, leadership in healthcare institutions in the region are lacking in the implementation of Diversity, Equity, and Inclusion (DEI) best practices.

Structural racism is also a cause for distrust in the healthcare system among Black community members. Lived experiences of racism can also influence a community member's perception of the health care they receive. For example, the data shows that the "15-minute appointment" medical professionals' schedule drives perceptions of low healthcare quality across community groups. However, for Black community members with lived experiences of racism, these short appointments can be internalized as a disregard for their health and leading to demotivation to continue to seek health care.

America's High Cost Healthcare System

Community members in focus groups agree that the high cost, in particular the unknown cost, of health care is a major reason why they do not seek health care even if they think they need it. The fear of "surprise" medical bills and medical debt is not unfounded, with an average of 19% of community members in the region reporting medical debt collection in 2020. The cost of health care not only limits access to health care, but it also drives what treatment or health care is provided. Many community members in focus groups agreed that healthcare professionals are more likely to prescribe a treatment plan that is more profitable over a treatment plan that is most beneficial to a patient. On the other hand, healthcare professionals feel limited too, at times feeling the treatment plan is restricted by what a patient can afford, rather than research-based best practices.

The Structural Divide of Holistic Health Care

Overall, community members need physicians, clinicians, hospitals, etc. to be in better coordination with holistic wellness programs and social services. Social services and culturally based holistic wellness programs can help community members overcome barriers to accessing quality health care and decrease risk factors. Few healthcare professionals reported having caseworkers on-site to directly connect patients to social services. Social workers are increasingly being made available in emergency departments and some emergency response units. However, social workers are not in health care offices and clinics.

The barrier providers face is the historical division between the healthcare system, holistic wellness providers, and social service providers. Between social, holistic, and healthcare systems, providers do not know what services are provided, the benefits of those services, or how to advise community members to access services outside their own system. Furthermore, healthcare providers are reporting limited screening of patients for needed social services. Overall, public transportation providers and social service providers identified the opportunity for healthcare providers/professionals to be a better partner in the coordination of care by initiating contact with community-based and social service organizations that address barriers to healthcare access.

Capacity and Adequacy of Service Levels

As identified through the Regional Community Survey, SDOH are experienced differently depending on specific groups of people and places (table below). For many groups, current service levels are inadequate to meet needs in these areas, thus contributing to health inequity.

People Impacted Most by SDOH

Sex	Economic Stability	Neighborhood and Built Environment	Education Access and Quality	Social and Community Connectedness	Healthcare Access and Quality
Males	X			X	X
Females			X		
Age					
Younger Individuals	X				X
Older Adults	X	X			
Race and Ethnicity					
Asian, American Indian/Alaskan Native, Native Hawaiian or Pacific Islander or another race that is not White or Black or Multiracial	X	X	X		X
Black Individuals	X	X	X	X	X
Multiracial Individuals	X			X	
White					
Hispanic					
Non-Hispanic		X		X	

Military Status	Economic Stability	Neighborhood and Built Environment	Education Access and Quality	Social and Community Connectedness	Healthcare Access and Quality
Active Military	X	X		X	
Military Veterans	X	X		X	
Not in Military			X		
Employment Status					
Unemployed and Not Looking for Work	X				
Disabled and Not Able to Work	X				
Working Part Time			X		
Working Full Time	X				
Specific Populations					
Individuals without children in home			X		
LGBTQ+ individuals				X	
Individuals with disabilities	X		X	X	X
Individuals with lower education	X	X	X		X
Individuals without private insurance	X			X	X
Individuals not fluent in English	X				

X Data Source: Regional CHNA Community Survey

Places Most Impacted by SDOH

Military Status	Economic Stability	Neighborhood and Built Environment	Education Access and Quality	Social and Community Connectedness	Healthcare Access and Quality
Cincinnati MSA	X	X		X	
Dayton MSA					
Rural Counties		X			
X Data Source: Regional CHNA Community Survey					

Current Service Providers or Resources

Providers and resources to address social determinants of health vary for individuals by place. Current providers and resources available within the region include, but are not limited to, Cincinnati Works, Clermont County Safety Net Alliance, Community Action Agency, Freestore Food Bank, Greater Cincinnati Regional Food Policy Council, Health Care Access Now (HCAN), Housing Opportunities Made Equal, Interparish Ministries, LISC Greater Cincinnati, Mercy Care Clinic, Mercy Neighborhood Ministries, Mercy Health Partnership Program, Produce Perks Midwest, St. Vincent de Paul, and Talbert House.

Social Health Need – Individual Level Non-Clinical Needs

Food Insecurity

As previously stated, food security is part of the economic stability equation. In the primary analysis for this Regional CHNA, food security was specifically defined as having enough money to buy food and data were collected from the Regional CHNA community survey. In focus groups and interviews, community health members spoke about food in several different ways. When asked what it means to be healthy, young adults, older adults, parents and Black and Hispanic youth were the community members that most often identified having enough healthy food as a key part of being healthy. Youth and young adults in particular spoke to the challenges of overcoming habits of eating junk food or meals of lower nutritional quality they learned throughout childhood. According to community members, primary barriers to overcoming unhealthy eating habits include perceptions that unhealthy foods/foods with less nutritional value are commonly the most affordable to buy, available to find, and convenient to prepare; challenges associated with overcoming taste preferences of high fat/high sugar foods formed as a child/adolescent; and community member’s limited cooking skills and knowledge.

Parents in focus groups were concerned that students are not eating healthy food even in school, sometimes due to access to healthy foods and sometimes due to students' taste preferences. Teachers and school-based healthcare providers also spoke about children being the most impacted by food insecurity and to the challenges their schools can have getting food to children in need due to stigma of receiving food assistance.

Community members identified a need for improving the quality of food provided in hospitals. In particular, opportunities were identified to improve hospital meals for diabetic patients, children, older adults, and new mothers. Asian and African community members recommend looking at postnatal food traditions of their cultures for ideas of how new mothers can be better supported with nutrition as they wait to return home from the hospital.

Healthy eating habits are an important element of food security. Community members expressed a sentiment that while they know making nutritional/diet changes require self-discipline of their own, they also identified a need for providers to provide more strategies or supports for community members to be successful with making diet changes. Community members identified a desire to make diet changes before turning to medications, when possible, but that they needed help to break negative eating habits.

Capacity and Adequacy of Service Levels

The capacity and adequacy of the food system varies by geography. Secondary data was used to identify specific counties that may benefit from prioritized intervention. The data show that Adams and Highland, both considered rural counties, in Ohio have the largest percentage of the population who are food insecure. Boone County, KY and Warren County, OH, both in the Cincinnati MSA, have the lowest percentage of food insecure households. Child food insecurity is particularly high in Adams County, OH with more than 1 in 4 children living in households that experience food insecurity

The Supplemental Nutrition Assistance Program (SNAP), provides some relief for many families. However, according to Feeding America's "Map the Meal Gap," in each county of the region there are significant percentages of the population who are food insecure but do not qualify for SNAP. Warren County, OH has the highest percentage of population that is food insecure, but not eligible for SNAP at 75%.

In comparing counties, each MSA in the region has counties that show high and low food insecurity across measures. This highlights an opportunity for a regional approach to addressing food insecurity. However, Adams, OH, Highland, OH, Brown, OH and Clinton, OH all rank above the regional average for food security. This may suggest a unique opportunity in these counties for economic stability interventions to improve health outcomes. Further, counties in Cincinnati MSA fall on both the high and low ends of economic stability suggesting a wider economic gap and a need to target interventions based on micro conditions.

Current Service Providers or Resources

Current providers and resources available within the region include, but are not limited to, Clermont County Safety Net Alliance, Greater Cincinnati Regional Food Policy Council, Interparish Ministries, Produce Perks Midwest, and Shared Harvest.

Housing Stability

Over the last decade, Cincinnati and Hamilton County have seen a reversal of historic trends, transitioning from population loss of more than 3,000 residents per year between 1970 and 2010, to gains of over 1,500 people per year since 2010. Housing production has also increased; Hamilton County local governments, including the City of Cincinnati, collectively issued permits for over 780 new residential buildings in 2018. This is an increase of almost 80% since the height of the Great Recession, when only 350-450 permits were issued per year.

Despite the growing housing stock, housing prices have gone up rather than down. Over 95% of residential building permits were for single family homes, whose median sales prices have increased by more than 45% since 2010. New rental units also tended to enter the market at the high end of the price spectrum.[21]

Rents are rising across the board in Hamilton County and have risen especially quickly in certain areas.[22] Rents have increased by more than 25% in the last five years in Downtown Cincinnati and in nearby neighborhoods including Pendleton and the West End. Meanwhile, incomes have stagnated. The median Hamilton County household earns less today than they did a decade ago.[23] Only one of the five most common occupations in Hamilton County pays workers enough to allow them to afford the average Hamilton County home.

Capacity and Adequacy of Service Levels

The combination of rising housing costs and stagnating incomes is creating unprecedented housing affordability challenges, with nearly one-third of Hamilton County residents paying more than 30% of their income for housing. Housing cost burdens are even more dire among low-income households. Nearly half of Hamilton County's 82,300 extremely low-income households are considered severely housing cost burdened.[24] Cincinnati and Hamilton County now have a deficit of at least 40,000 units affordable and available to extremely low-income households.[25]

Affordable housing is a widespread issue across the region; however, the capacity and adequacy of the local housing system varies. According to 2020 Census data, economic instability, as defined by the percent of total households who are housing cost burdened (paying more than 30% of income on housing costs), is most prevalent in Hamilton, Campbell, Grant, and Butler Counties in Cincinnati MSA and least

[21] Capstone Apartment Partners reports that in 2019, most new multi-family developments in the Cincinnati metro area are "high-end projects with chic ultra-modern aesthetics." Average rent for these "Class A" apartments is around $1,700. Source: Capstone Apartment Partners.Ohio Markets Report. Cincinnati: 1st Quarter, 2019.

[22] Median rent for Hamilton County is $775 as of 2017, compared with $735 in 2010 (adjusting for inflation).

[23] The median Hamilton County household earns substantially less today ($52,389) than it did in 2000 ($60,458, in 2017 inflation-adjusted dollars) or 2010 ($54,346), adjusting for inflation.

[24] Extremely low-income households are those earning 30% or less of area median income (in Hamilton County, this includes all households earning less than $16,500/year). Severe housing cost burden occurs when housing costs consume more than 50% of households' income.

[25] See LISC Greater Cincinnati and Community Building Institute. Housing Affordability in Hamilton County. February 2017.

prevalent in Ohio County, IN (within Cincinnati MSA) and Auglaize County, OH which is a rural county.

Current Service Providers or Resources

Current providers and resources available within the region include, but are limited to, Community Action Agency, Housing Opportunities Made Equal, LISC Greater Cincinnati, People Working Cooperatively, St. Vincent de Paul, and Talbert House.

Significant Clinical Health Needs

Most Prevalent Health Conditions in the Region

Greatest health needs across the region were identified utilizing multiple data sources, including self-report Regional CHNA community survey results, hospital utilization data, and county-level Center for Disease Control (CDC) leading cause of death data. In review of these varying data sources, the most prevalent health conditions across the region include:

- Cardiovascular-related conditions (i.e., high blood pressure and/or high cholesterol)
- Mental Health-related conditions (i.e., depression and anxiety disorder)
- Arthritis or osteoporosis
- Lung/respiratory-related conditions, including asthma
- Oral/Dental disease
- Maternal health complications
- Prevention services

In the Regional CHNA community survey, community members were asked to identify their unmet health needs, i.e., the health conditions for which they needed health care but did not receive care/treatment in the past year. To investigate health needs further, community members were also asked what other conditions they had and needed treatment for but did not get treatment in the past year. These other conditions were not identified in the original list of health conditions but were included in the survey based on the understanding that these conditions were also prevalent in the community. In addition to oral/dental disease, mental health-realted conditions, arthritis or osteoporosis, cardiovascular-related conditions, and maternal health complications named as most prevalent, vision concerns and allergies complete the unmet healthcare needs list. These are acknowledged as areas where the adequacy or capacity of the system to support the need was lacking.

Cardiovascular-related conditions (i.e., high blood pressure and/or high cholesterol)

Approximately three in ten residents from the Regional CHNA community survey report needing treatment for high blood pressure and/or high cholesterol. As cardiovascular-related conditions, including high blood pressure/high cholesterol are the leading health needs among residents and are major risk factors for health disease, [26] it is of no

[26] https://www.cdc.gov/heartdisease/risk_factors.htm

surprise that diseases of the heart, particularly major cardiovascular disease, was the leading cause of death in 2019, with an average age-adjusted rate of 251 per 100,000 individuals.[27]

Adequacy and capacity of service levels

Not only are high blood pressure/high cholesterol the leading health needs in the region, but these conditions are also an unmet health need among the priority health conditions surveyed. Specifically, among residents who reported needing treatment for high blood pressure/high cholesterol, approximately one in ten did not receive it.

Current Service Providers or Resources

The Region has 36 hospitals, 22 health departments, multiple primary care/specialty care providers, and several federally qualified health centers serving the clinical needs of residents throughout the Greater Cincinnati/Greater Dayton service area. Other resources available to address access to care and the underlying issues driving unmet treatment needs are included within each prioritized need area.

Mental Health-related conditions (i.e., depression and anxiety disorders)

Across the region, approximately two in ten residents from the Regional CHNA community survey report needing treatment to support their mental health (i.e., depression, anxiety, etc.). This is consistent with national rates.[v] Further, according to hospital utilization data, among emergency room and inpatient hospital visits in the region from January 2019 through June 2020, three percent (or 22,112) of the visits were due to primary diagnoses of mood/affective and anxiety/stress-related disorders (after removing visits due to symptoms, signs, and abnormal clinical and laboratory findings).

Adequacy and Capacity of Service Levels

Among the priority health conditions surveyed, mental health treatment was an unmet need across the region. Specifically, among residents who reported needing treatment for mental health, nearly one in three indicated that they did not receive it**.**

Current Service Providers or Resources

The region has 36 hospitals, 22 health departments, multiple ambulatory and specialty care providers, several federally qualified health centers serving the clinical needs of residents throughout the Greater Cincinnati/Greater Dayton service area, Talbert House, Brightview Treatment Center, and Greater Cincinnati Behavioral Health. Other resources available to access to care and the underlying issues driving unmet treatment needs are included within each prioritized need area**.**

[27] Age-adjusted rates were obtained from CDC Wonder, Underlying Cause of Death (https://wonder.cdc.gov/wonder/help/DataExprot.html#Excel) and averaged across all counties within the region (with exception of Ohio and Union Counties due to limited data), ranging form 189.8 on Ripley County to 325.4 in Adams County.

Arthritis or osteoporosis

Across the region, approximately one in ten residents from the Regional CHNA community survey report needing treatment for arthritis or osteoporosis. This is slightly lower than national trends with an estimated two in ten U.S. residents having been diagnosed with arthritis.[vi] Further, among emergency room and inpatient hospital visits in the region from January 2019 through June 2020, on percent (or 10,498) of the visits were due to primary diagnoses of osteoarthritis and osteoporosis (after removing visits due to symptoms, signs and abnormal clinical and laboratory findings) according to hospital utilization data.

Capacity and Adequacy of Service Levels

Among the priority health conditions surveyed, treatment for arthritis or osteoporosis was an unmet need across the region. Specifically, among residents who reported needing treatment for arthritis or osteoporosis, one in three or more (in Cincinnati MSA and rural counties) indicated that they did not receive it.

Current Service Providers and Resources

The Region has 36 hospitals, 22 health departments, multiple ambulatory and specialty care providers, and several federally qualified health centers serving the clinical needs of residents throughout the Greater Cincinnati/Greater Dayton service area. Other resources available to access to care and the underlying issues driving unmet treatment needs are included within each prioritized need area.

Lung/respiratory-related conditions, including asthma

Across the region, approximately one in ten residents from the Regional CHNA community survey report they needed treatment for lung health conditions (including asthma, COPD, emphysema, chronic bronchitis) and, similarly, for COVID-19. This is higher than national trends. Across the U.S., approximately 8% of adults have asthma and 4.6% have chronic obstructive pulmonary disease (COPD). In terms of the Regional CHNA community survey, need for treatment prevalence for lung-related conditions ranked fifth in terms of the conditions surveyed, however, hospital data reveals that it is among the leading reasons (among the priority health conditions) why people visit the ER or are hospitalized as inpatient. From January 2019 through June 2020, 11 percent (or 111,301) of the visits were due to primary diagnoses of diseases of the respiratory system[28] (after removing visits due to symptoms, signs, and abnormal clinical and laboratory findings).

Capacity and Adequacy of Service Levels

While the prevalence of lung/respiratory related conditions was higher than the national average, it was not an area identified by community respondents as an unmet treatment need.

[28] Based on ICD10 codes provided in the hospital data, we were unable to determine if this accounts for COVID-19.

Current Service Providers and Resources

The region has 36 hospitals, 22 health departments, multiple ambulatory and specialty care providers, and several federally qualified health centers serving the clinical needs of residents throughout the Greater Cincinnati/Greater Dayton service area. Other resources available to access to care and the underlying issues driving unmet treatment needs are included within each prioritized need area.

Oral/Dental disease

Across all communities, there is a need for access to dental services. Because dental services are not under the system's 'healthcare' umbrella, dental care often requires supplemental insurance. In focus groups, dental services were identified as an unmet need across many community members.

Capacity and Adequacy of Service Levels

Similar to unmet vision needs, community members are presented with barriers that lead to unmet dental needs. Approximately two in ten community members reported needing treatment for dental concerns but not receiving it within the past year.

Current Service Providers or Resources

The region has the Cincinnati Dental Society, health departments and several federally qualified health centers serving the dental needs of residents throughout the Greater Cincinnati/Greater Dayton service area. Other resources available to access to care and the underlying issues driving unmet treatment needs are included within each prioritized need area.

Maternal health complications

Maternal health complications were a priority health area for women. Across the region, less than one in ten residents reported they needed treatment for maternal health complications (a lower rate relative to other conditions is to be expected given this can only apply to pregnant women; Figure 1). Further, among emergency room and inpatient hospital visits in the region from January 2019 through June 2020, three percent (or 30,363) of the visits were due to primary diagnoses of pregnancy, childbirth, and the and certain conditions originating in the perinatal period.

Capacity and Adequacy of Service Levels

Maternal health is a priority for the region. Among pregnant women who need/needed treatment for maternal health complications, more than half report an unmet need in the Regional CHNA community survey results. Further, across Dayton and Cincinnati MSAs in 2019, approximately six percent of pregnant women received late (care started in the third trimester) or no prenatal care during their pregnancy.

Current Service Providers or Resources

The region has 36 hospitals, health departments, multiple specialty care providers, and several federally qualified health centers serving the clinical needs of residents throughout the Greater Cincinnati/Greater Dayton service area, as well as community based organizations such as AMEN and BOOBS breastfeeding support groups, Cradle Cincinnati, Health Care Access Now (HCAN), Healthy Moms and Babes, Me&She Doulas, and Mercy Health Perinatal Outreach. Other resources available to access to care and the underlying issues driving unmet treatment needs are included within each prioritized need area.

Prevention services

While community members reported needing treatment for the above specific conditions, when asked in focus groups and interviews, community members and providers alike identified the need for prevention services in the region. Prevention services are needed across the life span, with community members highlighting the need for more mental health and addiction prevention programs for youth, adults, and older adults (e.g., mindfulness); preventative reproductive health care for youth and adults; nutritional education; programs that promote social connectivity; and programs that promote exercise and coping with stress.

Capacity and Adequacy of Service Levels

While the need for prevention services was noted by community members across the Region, it was not an area respondents identified as an unmet treatment need.

Current Service Providers or Resources

The Region has 36 hospitals, 22 health departments and several federally qualified health centers serving the clinical needs of residents throughout the Greater Cincinnati/Greater Dayton service area. Other resources available to access to care and the underlying issues driving unmet treatment needs are included within each prioritized need area.

Other Unmet Needs

Vision Concerns

When asked what other health conditions community members needed treatment for but did not get, the most common condition was vision concerns, with approximately two in ten community members indicating this.

Allergies

Unmet health needs for allergies are also present throughout the region with approximately two in ten residents reporting needing but not receiving care for this health condition.

Underserved Populations

There is a myriad of factors that can explain why individuals have unmet health needs (defined as needing treatment for a condition and not receiving it), ranging from individual factors (e.g., choosing not to seek out health care due to the assumption symptoms will improve on their own), family/personal responsibilities (e.g., prioritizing caregiving responsibilities over one's own health needs), and system-level factors (e.g., lack of availability or accessibility to care). Regardless of the reason why individuals have unmet needs, understanding for whom unmet health needs are most prevalent are critical to inform targeted interventions and/or outreach efforts to ensure residents throughout the region understand when, where, and how to get treatment. The following lists for whom unmet needs are most common based on the regional CHNA survey:

Populations most likely to have unmet needs among the largest unmet health conditions in the regions

	Vision	Dental	Allergy-related	Mental Health	Arthritis/ Osteoporosis	Cardio-vascular	Maternal Complications
Male	X	X		X			
Younger individuals		X	X	X	X	X	
Older individuals	X						
Black individuals		X	X	*			*
Multiracial individuals		X					
Asian, American Indian/ Alaskan Native, Native Hawaiian or Pacific Islander or another race that is not White or Black or Multiracial			X	X			
Active Military				X	X	X	
Military veterans				X			
Individuals without private insurance		X		X		X	
Individuals with disabilities	X	X	X				
Individuals with lower education	X	X				X	
Individuals caring for a disabled individual	X	X	X	X	X		
LGBTQ+ individuals				*		*	
Cincinnati MSA			X				
Dayton MSA						X	

Data Source: Regional CHNA Community Survey

Note: “X” indicates significant, negative effects (i.e., greater likelihood of having an unmet need relative to the reference, such as males compared to females or Black/African American compared to White) from logistic regression analyses. Each unmet health condition was a separate analysis with the same predictors across all models: gender, age, race, ethnicity, education, military/veteran status, disability status, private insurance, sexual orientation, and caregiver of an individual with a disability.

Thus, all negative effects are after controlling for all other variables in the model"*" indicates an additional theme gathered from interviews/focus groups or secondary data, not effects from regression analysis.

Places With Unmet Needs

Differences between subregions were not very common with respect to unmet health needs (i.e., after accounting for individual demographic differences, there were often not meaningful differences by subregion). However, two themes emerged.

- Relative to Dayton MSA, individuals in Cincinnati MSA are significantly more likely to have unmet allergy needs.[29]
- Relative to individuals living in Cincinnati MSA, individuals living in Dayton MSA are significantly more likely to have unmet cardiovascular-related needs.[30]

[29]The odds of having an unmet allergy need for individuals living in Cincinnati MSA are 1.7 times as large as it is for those living in Dayton MSA, adjusting for age, sex, race, ethnicity, education level, military status, disability status, and caring for a disabled person. ($b = .29$, $p < .001$).

[30] The odds of having an unmet cardiovascular need for individuals living in Cincinnati MSA are .66 times as large (i.e., less likely) as it is for those living in Dayton MSA, adjusting for age, sex, race, ethnicity, education level, military status, private insurance or lack thereof, caring for a disabled person, and sexual orientation. ($b = -.42$, $p < .05$).

Prioritization of Health Needs

The health needs of this region were identified through a series of robust quantitative and qualitative data collection methods across community members, healthcare and social service providers, subject matter experts in hospitals, health departments, community-based organizations, and through review of secondary data and an extensive literature review.

A total of 25 one-on-one stakeholder meetings were conducted from September 27, 2021 to October 31, 2021 by The Health Collaborative to review results of the robust data collection process and prioritize the significant health needs using a list of data-driven, actionable recommended priorities.[31] Prioritization of these needs began with a list of recommended priorities that were data driven and action focused. Using a set of five criteria, the top priorities were finalized.

The criteria for prioritization included:

1. **Burden and Severity:** Are the health conditions the greatest burden for our region, across prevalence, those most often gone untreated, and those that were most impacted by social determinants of health? Would addressing this have an impact on the greatest number of community members?
2. **Equity:** Does the health condition/social determinants of health have extreme health disparities across prevalence and qualitative data for our community members? Would addressing this priority significantly address health disparities?
3. **Value to Stakeholders:** Are the health conditions, social determinants of health, and/or systemic root causes important to address across stakeholders? Would addressing this be a high priority for stakeholders/organizations for the community members they serve?
4. **Capacity and Feasibility:** Does our region have the ability to address the need, through partnerships, resources, community will, and funding opportunities?
5. **Alignment:** The level of alignment of the recommended priority. Does the priority align with:
    - Internal strategic plans at stakeholder organizations?
    - The Ohio State Health Assessment (SHA) and Ohio State Health Improvement Plan (SHIP)?
    - national goals through Healthy People 2030?

Each meeting was documented with qualitative data of comments, feedback, concerns, and ideas for prioritizing needs for the region. Additionally, quantitative data was collected on the recommended priorities list by asking each stakeholder to name their top three priorities using a series of strategic questions from the list below.

Strategic Questions:

1. Based on your subject matter expertise, what should the top three priorities be for the region?

[31] THC and the CHNA Advisory Team reviewed the Regional CHNA Report and data-driven recommendations (Appendix F) drafted by MRC. From the report and data-driven recommendations, THC and the Advisory Committee completed the prioritization methodology outlined in the chapter.

2. Based on your expertise within your organization, and as a representative of your organization, what should the top three priorities be for the region?
3. To move the needle on advancing health and reducing health disparities for our community, what should the top three priorities be for the region?

Based on all of the above information and processes, the prioritized health needs of the community served by the hospital are listed below.

Prioritized Social Determinant of Health Need: Workforce Pipeline and Diversity

Strengthen workforce pipeline and diversity, including cultural competence, within the healthcare ecosystem.

Survey data from health and social service providers as well as qualitative data from interviews and focus groups highlight a lack of diversity in the healthcare provider and management workforce. According to the community, lack of workforce diversity negatively impacts the cultural relevancy of health care and health care accessibility. Additionally, healthcare system experts and community members attribute the lack of diversity among healthcare professionals to be an outcome of structural racism, unwelcoming workplace cultures, and disparity in pursuing healthcare careers across community groups.

Prioritized Social Health Need: Food Security and Housing

Address access to resources for food security and housing with a focus on the development and strengthening of partnerships between providers and community-based organizations.

In regression analysis, economic stability was the SDOH most commonly associated with prevalence of health conditions and rates of unmet health needs. Though average economic stability indicators were relatively more positive compared to other factors in the survey data, the disparity in economic stability is driving the significant results. It is generally understood that food and housing are largely outside of the healthcare system. However, they are a key driver of health. In interviews and focus groups, the community identified many ways for health systems to partner with community providers in delivering collaborative interventions.

Prioritized Clinical Health Needs: Access to Services

Increase access to services in order to improve equitable outcomes for the region's top health needs: behavioral health, cardiovascular disease, dental, and vision.

Across the region, cardiovascular conditions and mental health have the highest prevalence and among the highest rate of unmet needs as compared to the other priority conditions. Among other health conditions, dental and vision concerns have the highest rate of unmet needs and that rate is more than double the rate of unmet needs for other conditions.

Resources Available to Meet Prioritized Needs

Below are the organizations, programs, and strategies identified as existing regional assets and resources specific to the prioritized health needs identified throughout the report. This is not an exhaustive list; rather, it is limited to the input provided by those involved in the CHNA process, including survey respondents, individuals who were interviewed, and focus group participants. Additional resources will be added as they are identified, creating a more robust and expansive list of partners and programs engaged in addressing the identified needs in the region.

Prioritized Social Determinants of Health Needs - Workforce Pipeline and Diversity

Workforce Diversity/Cultural Competency

Assets and Resources to Inform Strategies:

- Culturally competent design of healthcare spaces
- Investment in future healthcare workforce through partnering with schools and Career Stat Network Hospitals
- National Fund for Workforce Solutions

Prioritized Social Health Needs - Food Security and Housing

Food Security and Housing

Assets and Resources Available to Inform Strategies:

- Good Food Purchasing Program
- Mobile Food and Basic Needs Truck model
- Greater Cincinnati Regional Food Policy Council, an initiative of Green Umbrella Regional Sustainability Alliance
- LISC Greater Cincinnati's *Housing Our Future* Strategy Guide

Prioritized Clinical Health Needs - Access to Services

Access to Care

Assets and Resources Available to Inform Strategies:

- City planning agencies to support bringing health centers to communities
- Public transportation agencies/transit authorities, both in urban and rural communities
- Local Health and Cultural Fairs
- School-based Healthcare Model
- LGBTQ+ affirming care practices based on Human Rights Campaign's Healthcare Equality Index
- Peer Supporter Model
- Charitable pharmacy model and effective communication strategies between healthcare providers and pharmacies
- Increasingly accessible technologies to leverage for a centralized resource for community members to find services, providers that meet needs/preferences, and healthcare cost transparency across the region
- Coordinated advocacy efforts
- Best practices (and failed practices to avoid) learned from regional collaboration during COVID-19 pandemic and in Opioid epidemic.
- Doula Model
- Community Health Worker Model and On-site Social Workers
- Models for a regional approach to screening for health and SDOH-related needs/supports
- Models for safety and prevention interventions across lifespan

Conclusion

Community providers desire to take a regional approach to ensuring everyone has the opportunity to be healthy. Most of these health conditions align to the priorities set in the Ohio, Indiana, and Kentucky Health Improvement Plans (HIPs) and conditions already prioritized in the community.

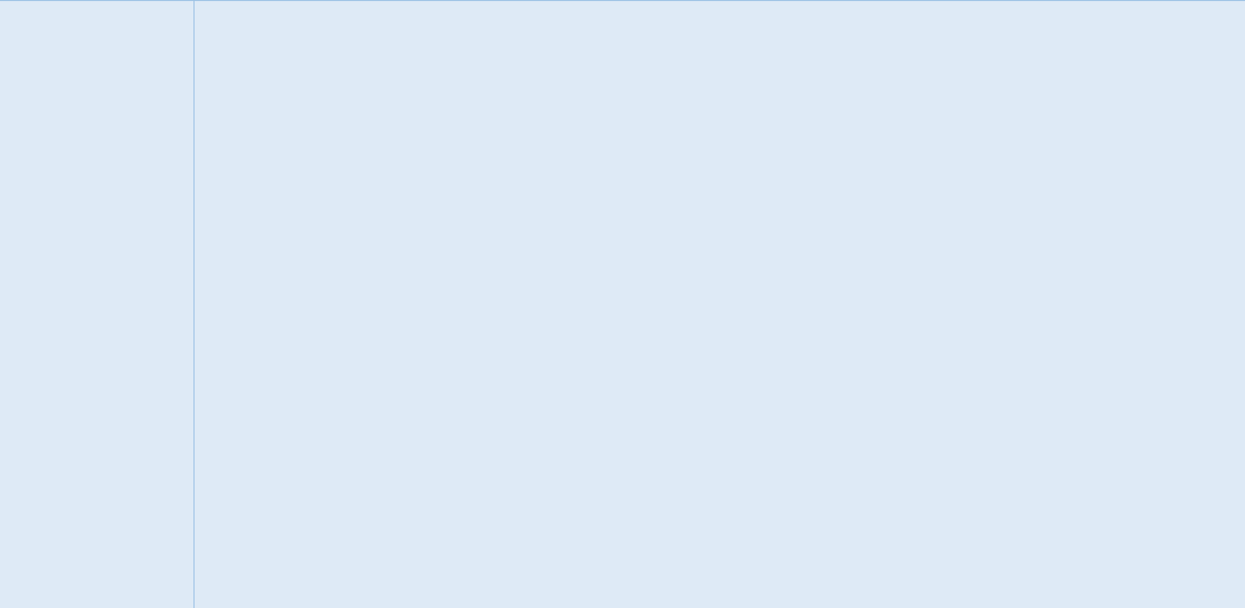
Community members have communicated a desire for a regional health system that is more supportive of prevention and wellness. The research conducted in this Community Health Needs Assessment shows the interconnectedness of structural barriers (policies and programs that govern the community) and community factors (SDOH) that put community members at greater risk for health conditions.

The region has come together around a common goal to use a regional approach to improving the health of the community. Data from this Regional CHNA clearly supports comprehensive strategies including addressing SDOH that are driving health needs, a health equity lens that considers how strategies will remove disparities, and mutually reinforcing action at the practice and policy levels.

Progress on Health Priorities Identified in the 2019-2021 Community Health Needs Assessment

Substance Abuse

Initiative	Impact
Mercy Serves AmeriCorps Program	Mercy Serves and Americorps partnered to build Mercy Serves, a diverse, energetic, volunteer corps serving in Mercy Health Emergency Departments across the Cincinnati Market to prevent and reduce substance use. As part of the broader opioid epidemic response, Mercy Serves members provide patient education, substance use risk screening, emotional support, and referrals to treatment and social services for Mercy Health Emergency Department patients. Members work alongside nurses, providers, and social workers to ensure that patients receive necessary support and resources to make healthy choices and encourage behavior change. Over the course of the 2020-2022 CHIP, Mercy Health – Cincinnati supported 3 Mercy Serves cohorts with another scheduled to launch September 2022. **Mercy Serves Class of 2019-2020 (September 2019 – August 2020)** 7.5 Members, 100% Retention Rate 1972 patients served 49% of patients with current/former substance use identified an action step toward treatment/recovery **Mercy Serves Class of 2020-2021 (September 2020 – August 2021)** *Redeployed to support Mercy Health – Cincinnati's COVID response.* 5 Members, 100% Retention Rate 830 wellness checks conducted 18 Ohio Home Relief Fund applications completed 755 COVID vaccine outreach calls 29 vaccination events **Mercy Serves Class of 2021-2022 (September 2021 – August 2022):** 1876 patients provided information about substance use or referrals for treatment 94 patients admitted into local treatment programs 959 referrals for other SDOH such as housing, food, and insurance coverage



Mental Health

Initiative	Impact
Mercy Health Partnership Program (MHPP)	The Mercy Health Partnership Program provides supportive services for uninsured/underinsured patients or those at risk for losing their coverage. It helps individuals maintain their care through prescription benefits and co-pay support while providing case management and community connections to help move clients from a state of crisis to self-sufficiency. Three LSWs serve the Cincinnati Region and take referrals from ambulatory and acute providers. Over the course of the 2020-2022 CHIP, Mercy Health Partnership has maintained steady support of these vulnerable paitents despite significant need and challenging circumstances associated with the COVID-19 pandemic. **Client encounters:** 2020 total client encounters: 2480 2021 total client encounters: 2900 2022 YTD (data through Q2): 1362

Community Health Worker Program	Community Health Workers provide support for socially complex and medically underserved patients who struggle to get the support they need to get and stay healthy. Mercy Health piloted a Community Health Worker intervention to address unnecessary utilization often attributed to social and financial circumstance. The team partnered with Healthcare Access Now (HCAN) to deploy evidence-based pathways that help patients navigate a complex matrix of services and find their way through to better health. Over the course of the 2020 – 2022 CHIP, Mercy Health successfully conducted and completed this pilot project. **Pilot statistics:** 21 complex clients referred from the Mercy Health Emergency Department 8 clients enrolled (38%) Avg 2 visits/enrolled client

Access To Care

Initiative	Impact
School-Based Health Centers	School-Based Health Centers are strategically placed within medical deserts and open to the community to help support the broader primary care needs. 75% of those served have Medicaid coverage and another 4% have no insurance coverage at all. The school-based health team works alongside school leadership, community organizations and families to ensure children and adolescents have the resources they need to thrive in the classroom and beyond. Mercy Health – Cincinnati school-based health centers saw a disruption in service due the COVID-19 pandemic. Services resumed in August 2021 and have continued to provide critical health services to school families and the surrounding community. **Service statistics for 2020-2021 school year:** 2,298 total visits 401 well child checks (17.44% of total, increase of 13.5% in prior school year) 61.4% of users between ages 3-20 had a BMI screening
Community Clinics	Mercy Health community clinics provide critical primary care access to uninsured and underinsured patients in underserved communities. There are two clinical locations in the Mercy Health – Cincinnati service area, located with Mercy Health – Anderson Hospital and Mercy Health – Clermont Hospital. Over the course of the 2020-2022 CHIP, Mercy Health Care Clinics maintained services and provided steady support for vulnerable patients despite significant need and challenging circumstances associated with the COVID-19 pandemic. **Service statistics 2020:** 734 patients served at the Anderson Care Clinic 281 patients served at the Clermont Care Clinic **Service statistics 2021:** 629 patients at the Anderson Care Clinic 308 patients at the Clermont Care Clinic **Service statistics 2022 YTD (data through Q2):** 304 patients served at the Anderson Care Clinic 147 patients served at the Clermont Care Clinic

Mobile Mammography Program	The Mobile Mammography Program has two mobile units offering screening mammograms at various locations throughout the Greater Cincinnati region ensuring everyone has access to the preventative care they need for early cancer detection and intervention. Mobile Mammography saw a disruption in service due the COVID-19 pandemic with limited service provision in 2020. Services resumed in 2021 and have continued to provide critical health services women and communities throughout Greater Cincinnati. **Screenings conducted:** 2020 total screenings conducted: 54 2021 total screenings conducted: 3,347 2022 total screenings conducted YTD (data through Q2):1306

Chronic Disease and Healthy Behaviors

Initiative	Impact
The Healthy Neighborhoods program	The Heathy Neighborhoods program includes robust assessment of the local food systems in neighborhoods surrounding our primary care offices and school-based health centers, especially those serving high numbers of Medicaid patients. It also provides healthy food vouchers, nutrition incentives and supportive programming to families seen by participating Mercy Health PCPs. Mercy Health Cincinnati secured the Bon Secours Mercy Health Impact grant to help fund and resource this program/strategy. Over the course of the 2020-2022 CHIP, the healthy neighborhoods initiative introduced new and expanded programming serving patients and families throughout Greater Cincinnati. **Program highlights 2020:** 231% increase in Produce Perks incentives 201 families enrolled in the TANF Fruit &Vegetable program in target zips 91 participants enrolled in nutrition prescription programming **Program highlights 2021:** 211 individuals served in nutrition prescription programs $45,269 worth of produce delivered to patients and their households. 60 expectant mothers served 29 adults with diet-related disease served 30 adults with diabetes served **Program highlights 2022 YTD (data through July 2022):** 106 patients active in nutrition prescription programming 47 expectant mothers active 16 adults with diet-related disease active 43 adults with diabetes active $17,041 worth of produce delivered to patients and their households

Infant Mortality

Initiative	Impact
Perinatal Outreach Program	Mercy Health's Perinatal Outreach Program is part of Mercy Health's larger response to addressing infant mortality in Greater Cincinnati. The Perinatal Outreach Team consists of two certified Community Health Workers (CHWs) and a Licensed Social Worker/Program Manager dedicated to serving at-risk moms in Mercy Health's hospital service areas. The team helps remove obstacles while providing education, advocacy and support to ensure a healthy pregnancy and birth for both mom and baby. Over the course of the 2020-2022 CHIP, Mercy Health launched its Perinatal Outreach Program and hired two Certified Community Health Workers to provide ongoing support for high-risk pregnant women in target zip codes. The team has steadily increased enrollments despite significant challenges and service delivery changes due to the COVID-19 pandemic. **Program higlights 2020:** 57 clients enrolled 164 education and service pathways completed **Program highlights 2021:** 114 clients enrolled 40 babies born with healthy birth weight (93% of births) **Program highlights 2022 YTD (data through Q2):** 89 clients enrolled

Appendix A

2021 Regional Community Health Needs Assessment, available here: https://healthcollab.org/community-health-needs-assessment/

Strategy Guide, Housing Our Future, May 202, available here: https://lisc.org/greater-cincinnati/what-we-do/housing-our-future/

Board Approval

The Mercy Health – Cincinnati Market 2022 Community Health Needs Assessment was approved by the Mercy Health – Cincinnati Board of Trustees on October 4, 2022.

Board Signature: Edward J. Babbitt

Date: 10/4/22

For further information or to obtain a hard copy of this Community Health Needs Assessment (CHNA) please contact: Gina Hemenway, Executive Director of Community Health, Mercy Health – Cincinnati

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Mercy Health – Cincinnati CHNA Website: https://www.mercy.com/about-us/mission/giving-back/community-healht-needs-assessment

Endnotes

[i] Healthy People 2030, U.S. Department of Health and Human Services, Offices of Disease Prevention and Health Promotion. Retrieved on 2/19/20 form https://health.gov/healthypeople/objectives-and-data/social-determinants-health

[ii] Abrams, E.M., & Szefler, S.J. (2020). COVID-19 and the impact of social determinants of health. *The Lancet. Respiratory medicine, 8(7),* 659-661. https://doi.org/10/1016/S2213-2600(20)30234-4

[iii] Raju, S., Keet, C., Paulin, L., Matsui, E., Peng, R., Hansel, N., McCormack, M., (2018) Rural residence and poverty are independent risk factors of chronic obstructive pulmonary disease in the United States. *American Journal of Respiratory and Critical Care Medicine*, 8(199), 961-969. https://doi.org/10.11634/rccm.201807-1374OC

[iv] Elam, A.R., & Lee, P.P. (2014). Barriers to and Suggestions on Improving Utilization of Eye Care in High-Risk Individuals: Focus Group Results. *International scholarly research notices, 2014*, 527831. https://doi.org/10.1155/2014/527831

[v] National Institute of Mental Health. https://qqq.nimh.nih.gov/health/statistics/mental-illness

[vi] Centers for Disease Control, Arthritis Data and Statistics. https://www.cdc.gov/arthritis/data_statistics/national-statistics.html