KETTERING BEHAVIORAL MEDICINE CENTER

Community Health Needs Assessment 2016

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Executive Summary

Kettering Behavioral Medicine Center's Community Health Needs Assessment (CHNA) utilizes some of the data collected for other hospitals in the Greater Dayton area. Kettering Behavioral Medicine Center (KBMC) has a separate CHNA due to its unique nature as a behavioral health hospital.

The collaborative CHNA for 13 Dayton area hospitals was organized by The Health Collaborative in Cincinnati, Ohio and the Greater Dayton Area Hospital Association in Dayton, Ohio. The Health Collaborative assembled a highly-qualified team which included a consultant with prior CHNA experience and members of the graduate program of Xavier University's Department of Health Services Administration. A Senior Vice President at The Health Collaborative provided executive oversight. Staff of the Greater Dayton Area Hospital Association coordinated the community-based focus groups.

Consistent sources of comparable data were available only at the state and county level, and therefore each participating hospital identified which counties contained their services areas. Service areas spanned eight counties in Ohio, and data were included from two adjacent counties. Results in this report include data from a structured survey, qualitative data from multiple focus groups, an analysis of available secondary data, and findings from health department interviews and surveys.

The CHNA Team collected 106 measures from publicly available sources, starting with the County Health Rankings. Criteria for inclusion included availability of trend data at the county level and ease of comparison and updating. Specifically added for Kettering Behavioral Medicine Center were data regarding underserved areas and ratios of mental health providers.

The Community Need Index analytic tool identified ZIP Codes where residents are likely to experience barriers to care and not receive needed services. Twenty-two ZIP Codes, or 17.9% of the total 123 ZIP Codes, had high scores indicating a likelihood of disparities in health care for some ZIP Codes in: Butler, Clark, Darke, Greene, Miami, and Montgomery Counties.

Primary data collection involved interviews of public health officials; online and paper surveys; and community focus groups. There were four distinct stakeholder groups with separate analysis for comparison: 1) consumers and organizations which attended focus group meetings, 2) individuals surveyed, 3) organizations surveyed, and 4) health departments. All respondents answered questions about serious health issues, issues handled well, issues not addressed enough, and barriers to care.

Hospitals invited nonprofit agencies and organizations serving the medically underserved, low-income, and minority populations to attend meetings and complete surveys. Sixty-seven organizations sent 83 representatives to participate in focus groups. Meeting attendees shared the names of the individuals representing each organization. Survey respondents also identified the types of vulnerable populations served. Participating organizations provided the name of—and areas served by—their organization.

Fourteen representatives of local health departments attended focus group meetings, including nine health commissioners.

The CHNA Team compared the secondary data to what each of the four stakeholder groups identified as priorities or the most serious health issues facing the community. For the secondary data, the criteria for determining priorities included presence of health issues in multiple counties, worsening trends, and rates worse than the state and national rates. For the primary data, the CHNA Team tabulated the votes at the community focus groups and how often phrases and themes recurred in survey and interview responses. Primary input included identification of underserved populations and unmet needs. There were 104 people who voted for their top three priorities in a focus group, and 469 individual consumers whose survey responses were combined to determine the priorities mentioned most frequently. The CHNA Team also analyzed responses from 94 agencies and 11 health departments to identify their consensus on priorities. In total, 629 people provided input for the regional Community Health Needs Assessment process.

One of the counties served by KBMC had a high number of measures with worsening trends: Montgomery (with 15 issues). The combined priorities across the region reflected the top issues from all four primary sources plus secondary data. Two areas of concern to the community were also important to KBMC's experience and expertise.

- All five sources of input identified as Substance abuse as a priority.
- Three sources of input identified Mental health as a priority.

The data and comments reflect similar concerns across a large and diverse region. Prioritization and collaboration are both important, because no one entity can effect dramatic change in these serious areas within the three-year timeframe of the CHNA process.

COMMUNITY HEALTH NEEDS ASSESSMENT

Chapter 1. CHNA Team

Kettering Behavioral Medicine Center (KBMC) is utilizing the data and conclusions of the CHNA Team what produced Dayton's Collaborative CHNA. The project manager of that team is also the author of this CHNA.

The CHNA Team involved four entities working closely together: The Health Collaborative (lead agency); GDAHA (coordination of communications and relationship management); Gwen Finegan (project manager); and Xavier University (secondary data collection). The Health Collaborative contracted with Gwen Finegan to conduct a comprehensive and collaborative assessment for the healthcare systems and hospitals and hired two graduate student interns from Xavier University to assist her.

The information below describes the process of the collaborative CHNA, on which much of KBMC's CHNA is based.

ROLES AND RESPONSIBILITIES

Hospitals

The hospitals agreed to the following:

- Identify a single point-of-contact as a representative on the CHNA Committee;
- Attend 1-2 CHNA meetings and weekly conference calls, or designate a representative;
- Participate in planning and provide feedback;
- Create a diverse and inclusive invite list for community meetings;
- Distribute invitations (by mail, email, in person, social media, and/or on bulletin boards) two weeks in advance of scheduled meeting;
- In counties with only one hospital, the hospital would identify an accessible and central location;
- Coordinate timing of community events with GDAHA and The Health Collaborative; and
- In counties with multiple hospitals, the hospitals agreed to collaborate with GDAHA and other hospitals as needed for joint meetings in neutral meeting spaces.

Partners

The partner organizations each agreed to share information and expertise with the CHNA Team throughout the process; identify a single point-of-contact as its representative on the CHNA Committee; and attend CHNA Committee meetings.

The Health Collaborative

Dora Anim, MPA
Senior Vice President, Programs and Services

The Health Collaborative is a nonprofit organization serving the Greater Cincinnati area. It works with its member hospitals on health care improvement projects, shares best practices, and gains exclusive access to comprehensive data. In late 2014 Ms. Dora Anim contacted its member hospitals to determine their interest in sharing the cost and services of a consultant. They agreed to pursue a collaborative regional approach for Greater Cincinnati, and, for the second time, The Health Collaborative served as the convenor and conduit for conducting a regional Community Health Needs Assessment (CNHA).

Ms. Anim contracted with consultant Gwen Finegan, who had been responsible for the 2013 CHNAs for six Mercy Health hospitals. At the same time Dr. Edmond Hooker, from Xavier University, contacted Ms. Anim. The three of them agreed to work together and determined that Dr. Hooker's graduate students would assist with data collection. They also decided to include in the project budget the cost to cover two interns. The team is described in more detail below.

Dora Anim was the executive sponsor of this initiative at The Health Collaborative. Ms. Anim convened member hospitals, managed the contractual agreements, provided executive oversight, and reported results to the board and other community stakeholders. In the summer of 2015, The Health Collaborative and the Greater Dayton Area Hospital Association agreed to apply the same process, with the same team, to collaborate on a regional approach for Greater Dayton.

Greater Dayton Area Hospital Association

Shawn Imel
Practice Integration Specialist

The Greater Dayton Area Hospital Association (GDAHA) is a nonprofit organization serving the Greater Dayton area. It works with its member hospitals on health care improvement projects, shares best practices, and gains exclusive access to comprehensive data. Mr. Imel contacted community organizations, arranged for meeting spaces and refreshments, provided meeting handouts, scribed at focus group meetings, and served as liaison with local health departments and the Dayton community.

Gwen Finegan

Gwen Finegan is a consultant who works for corporations, small businesses, and nonprofits, writing and consulting in the areas of strategic planning, organizational development, board retreats, and meeting facilitation. She has extensive experience in initiating and completing large-scale projects and engaging community participation at neighborhood and regional levels.

Past experience includes her role as the Regional Director, Community Outreach for Mercy Health, where she was responsible for developing the 2013 CHNA reports for six Mercy Health hospitals serving urban, suburban, and rural areas. She shared best practices with hospital members of the

Greater Cincinnati Health Council (now known as The Health Collaborative, or THC), and she served on a statewide committee of Catholic Health Partners to understand and implement the new IRS regulations for Community Health Needs Assessments. THC hired her to produce the 2016 Greater Cincinnati CHNA for 10 healthcare systems and their 20 hospitals in 23 counties as well as the 2016 Greater Dayton CHNA for 3 healthcare systems and their 10 hospitals in ten counties. She teaches the Health Data Management course for the Department of Health Services Administration at Xavier University, drawing from her ten years of experience with Mercy Health.

Her role involved the following activities:

- Day-to-day management of operations
- Identifying and vetting data resources
- Liaison with community organizations
- Process design and implementation (including but not limited to timeline creation; creation of marketing materials; creation of survey questions; meeting design; and overall approach and methodology)
- Quality control
- Supervision of interns
- Support for hospital representatives (including presentations to hospital stakeholders, meeting facilitation, communication by phone and email, consideration of hospital-specific requests, and sharing best practices)
- Writing and formatting report and creating report's appendices

Xavier University

Edmond A. Hooker, MD, DrPH
Associate Professor, Department of Health Services Administration
Xavier University

Edmond Hooker, MD, DrPH, is an Associate Professor of Epidemiology at Xavier University and an active Emergency Medicine physician. He offered his graduate students to perform the preliminary collection of secondary data and to update it annually. In past years, Xavier University had published an annual report, titled "Indicators of Healthy Communities," based on data compilation by its Health Services Administration students. Ms. Finegan had served as one of their community resource experts for this project in 2012, when she was Mercy's Advocacy & Public Affairs Officer.

Dr. Hooker supervised the graduate students' data collection and facilitated the process of recruiting interns for this project. Going forward, he has agreed to have his graduate students provide annual data updates to the information collected for the CHNA.

James Horne
Graduate Student | Master of Health Services Administration '17

Mr. Horne had prior experience in research with the Dean of Economics at the University of Dayton and in management information systems through his internships with LexisNexis and Teradata Corporation. Mr. Horne took a lead role with contacting health departments, scheduling meetings and refreshments, and managing RSVPs for community meetings.

Zachary Oglesby
Graduate Student | Master of Health Services Administration ‘17

Mr. Oglesby has data analysis and presentation experience as a research assistant for Dr. Eileen Alexander, Assistant Professor of Health Services Administration at Xavier University. He also had prior work experience training physicians on use of the electronic medical record. Mr. Oglesby took a lead role on design and layout of charts, maps, reports, surveys, and tables.

Both interns shared the following responsibilities:

- Data collection, verification, proofreading, interpretation, analysis, and compilation
- Evaluation of and tracking data sources
- Evaluation and analysis of GIS mapping resources
- Production of marketing materials
- Compilation and analysis of survey results
- Compilation of responses and qualifications of health departments
- Communications with Ohio Department of Health staff and other experts
- Facilitating and scribing community meetings
- Creation of resource list
- Contributions to written report

Chapter 2. Communities Served

DESCRIPTION

KBMC reviewed the standard method of evaluating a geographic service area, for example where 75% or more of their patients live. They also considered geographic areas where vulnerable and under-served populations live – both within the service area (in a 'doughnut hole') or in areas immediately adjacent to the service area traditionally considered for marketing or statistical purposes. This approach recognizes that people may live in or next to a service area but encounter financial or other barriers that keep them from seeking hospital care.

DEFINITION

KBMC identified Montgomery and Warren Counties as the geographic areas served by its hospitals.

Chapter 3. Process and Methods

For the third time, The Health Collaborative (THC) convened nonprofits hospitals to participate in a regional CHNA. THC kept the elements that worked well from Greater Cincinnati for 2013 and 2016 and incorporated the collective learning from those efforts.

What worked well was the collaborative nature of the project that included hospital representatives as active participants in regular meetings. This time, THC asked for the hospital representatives to take a more active role with process design and encouraged continuous feedback for ongoing improvement. GDAHA coordinated with hospital representatives to make arrangements for focus group meetings.

Focus groups, stakeholder interviews, and surveys served to solicit primary data. Comments and discussion from 11 community-based focus groups informed the report and provided a context for the secondary data. Focus group participants numbered 106, and they represented 41 ZIP Codes (one-third of all ZIP Codes in the 10-county region). GDAHA, THC, and hospitals distributed links to surveys for both individuals and organizations serving vulnerable populations, most of which were completed online. Forty-five agencies and 469 individuals completed surveys.

Eleven health departments participated at the local and county level, responding to surveys or agreeing to interviews. In addition, nine health commissioners attended meetings in person, and five health department staff attended.

The involvement of Xavier University's graduate students in Health Services Administration made possible more robust secondary data collection. Dr. Hooker's students in Spring 2015 collected five years' worth of county-level data for the counties using County Health Rankings. THC hired two of the graduate students as interns from May 2015 to January 2016, and the interns added considerably to the data sources, completed the data compilation, researched the best approach for some elusive data and data comparisons, and contacted the Ohio Department of Health to fill in the blanks and help validate the data.

PRINCIPLES

The approach to designing a regional and community-oriented CHNA started with five key attributes:

Collaborative – The hospitals were active participants in contributing to the design and execution of the CHNA. THC and GDAHA worked well together to represent their respective hospital members and convened their representatives at regular intervals to obtain input and feedback.

Inclusive – THC and hospitals cast the net widely to include agencies serving vulnerable populations. Choices of meeting spaces took into consideration access, transportation, welcoming environment, and location in areas where underserved people live.

Participatory – Forty-five minutes to an hour of each focus group was devoted to hearing from the people who arrived to share their ideas and experiences.

Reproducible – Facilitators asked the same questions at focus groups, interviews, and in surveys. If people could not attend a focus group, they had the opportunity to respond to the same questions via survey. Facilitators asked consistent questions in urban areas, rural areas, large counties, and small counties.

Transparent – Interns created 'County Snapshots' from secondary data to share at community meetings. Each County Snapshot was one page. Attached to the Snapshot was a Community Need Index (CNI) map for all the ZIP Codes per county. In order to avoid influencing the top-of-mind concerns of focus group participants, the facilitators asked the first question about 'most serious health issues' before sharing the Snapshot and CNI map. Then participants had the same information that the meeting facilitators had. At each meeting, facilitators shared THC's and GDAHA's websites where the final report will be available to the region, as well as on hospitals' websites.

Healthcare Equity and Disparity

The CNI identifies the severity of health disparity based on specific barriers known to limit health care access. Catholic Healthcare West and Solucient developed the original CNI maps more than 10 years ago. They conducted validation testing on this standardized approach to create a high-level assessment of relative need.

The validation testing affirmed the link between community need, access to care, and preventable hospitalizations. A comparison of CNI scores to hospital utilization showed a strong correlation between high need and high use. Admission rates were more than 60% higher for communities with the highest need (CNI score = 5) compared to communities with the lowest need (CNI score = 1).[1]

For ambulatory sensitive conditions, the highest need ZIP Codes had hospital admission rates 97% higher than the lowest need ZIP Codes – almost twice as high. These are conditions that can be successfully treated in an outpatient setting and would not usually require hospital admission.

The CNI is an objective and unbiased assessment of community need and socioeconomic barriers to health care. A high CNI score is a warning sign. It announces: 'Look here! People living in this ZIP Code are more likely to have a disadvantage in accessing care, affording care, preventing and managing disease, obtaining an early diagnosis, having access to health information, and understanding medication and doctors' instructions.'

Scores were based on the barriers shown in Table 2 on the next page.

> "Higher early/premature death, preventable chronic diseases, and poor social conditions"
>
> -Montgomery County resident

[1] Roth, R., Presken, P., and Pickens G. (2004). "A Standardized National Community Needs Index for the Objective High-Level Assessment of Community Health Care." San Francisco: Catholic Healthcare West. www.dignityhealth.org/stellent/groups/public/@xinternet_con_sys/documents/webcontent/084757.pdf.

TABLE 1. COMMUNITY NEED INDEX - BARRIERS

Barrier	Description	Reason for Inclusion
Income	Percentage of elderly, children, and single parents living in poverty	Patients may be less able to pay for insurance and/or health expenses
Cultural/ Language	Percentage Caucasian/ non-Caucasian and percentage of adults over the age of 25 with limited English proficiency	Barrier can contribute to increased prevalence of disease and lower recruitment into government health programs. Patients may not understand medical instructions or be able to read prescription labels.
Education	Percentage without high school diploma	It is an indicator of poor health and increased likelihood of poverty and lack of insurance. Patients may not recognize early disease symptoms or understand medical information.
Insurance	Percentage uninsured and percentage unemployed	Patients may delay or forego treatment, resulting in hospitalization for chronic conditions.
Housing	Percentage renting houses	Rental housing is more likely to be sub-standard and be located in areas with higher crime rates, lower quality schools, limited healthy food choices, and fewer recreational opportunities. It is associated with transitory lifestyles that may deter health prevention.

The CNI is a starting point for looking at geographic areas with a fresh perspective. Hospitals cannot always know about the barriers experienced by people who don't come to the hospital. This is a foundation on which to layer specialized knowledge, local context, and information about emerging trends. Addressing the underlying causes of health inequity and disparity of care can also achieve the Triple Aim of improved care for individuals, improved health of the community, and reduced costs associated with unnecessary hospitalizations and diseases discovered only at a late stage.

The Centers for Disease Control and Prevention has published two reports on health disparities and inequalities in 2011 and 2013.[2] A summary of their findings in included as Appendix A. The summary describes 32 areas where disparity and inequality has been documented within the categories of Social Determinants of Health; Environmental Hazards; Health-Care Access and Preventive Health Services; Mortality; Morbidity; and Behavioral Risk Factors.

The poverty rate for Montgomery County is 19.7%, and it is 5.8% for Warren County.[3] The poverty rate for Ohio is 14.8%.[4]

> "Care solutions designed for people who may not fit traditional care model."
>
> -Community-based organization

[2] CDC Health Disparities & Inequalities Report – 2013. MMWR / November 22, 2013 / Vol. 62.
CDC Health Disparities & Inequalities Report – 2011. MMWR / January 14, 2011 / Vol. 60.
[3] Persons in poverty, percent. 2014 Small Area Income and Poverty One-Year Model-based Estimate (for County level comparison), U.S. Census Quick Facts. http://www.census.gov/quickfacts/
[4] 2014 American Community Survey – 5-year estimate.

COLLABORATIVE DESIGN

In the summer of 2015 THC and GDAHA convened representatives from the participating hospitals for an initial meeting. The group agreed on the process. Dr. Edmond Hooker offered his expertise and guidance through the data collection process, providing assistance on the significance of medical indicators. In the fall of 2015 the group met again via conference call to review initial data collection and to refine strategies for publicizing the focus groups. Wilson Health developed a press release to share with partners for consistent regional messaging about the focus groups. Healthcare partners, THC, and GDAHA posted survey links on their websites. The partners met again at the conclusion of the primary data gathering to review the preliminary results at the regional level and to agree on the Table of Contents for the CHNA report.

METHODS

For the collaborative design, the process for gathering primary data, and the process for identifying, collecting and analyzing secondary data, the CHNA team depended on a variety of methods. Here is a brief description of the activities and tools utilized most often.

- Analysis of priorities to identify areas of consensus, from all data sources, by geographic area
- Categorization and analysis of key phrases and key words in all collected responses
- Community Need Index
- Comparison of most frequent health issues by geographic area and by secondary or primary data source (i.e., individual, agency, meeting, health department)
- Consultation with physicians and public health experts (e.g., regarding heroin, Sexually Transmitted Diseases, environmental health)
- Design and feedback meetings with hospital representatives (8/5 &12/11 in person; conference calls on 10/12, 10/19, 10/26 & 11/2/2015)
- Facilitated brainstorming with individuals and agencies serving vulnerable populations
- Focus group meetings that included a ‘3-dot’ process to identify the top three priorities
- Geographic Information System (GIS) mapping programs to identify compelling data and represent data visually
- Initial data entry by graduate students in Xavier University’s Department of Health Services Administration
- Marketing materials for hospitals to use or adapt to their needs
- Online databases for researching accurate and reliable data
- Personal interviews with health commissioners (some preferred responding by survey)
- Phone calls with local and state health departments
- Proofreading of secondary data entry for accuracy and consistency by graduate student interns
- Regular communication with hospital representatives
- Review of reports and publications on health, and health-related, topics
- Shared data in form of County Snapshots and Community Need Index maps
- Standard set of stakeholder questions (for individual, agency, focus group, health department)
- SurveyMonkey (Gold) for tracking responses at meetings, from interviews, or on surveys
- Tabulation of responses by geographic area and region-wide
- Trained scribes to record every meeting comment and ‘dot’ priorities
- Word cloud creation to identify top broad categories
- Word count to determine frequent categories and to identify dominant topic within a category (e.g., how many times ‘heroin’ was mentioned within ‘Substance abuse’ category)

None of the hospitals reported receiving written comments from the public regarding the 2013 CHNA or subsequent Implementation Plan.

SECONDARY DATA

Data Collection and Entry

Dr. Hooker at Xavier University offered the services of his graduate students in the Department of Health Services Administration to collect data for the CHNA. Ms. Finegan designed a data collection worksheet and instructed students in two class meetings. Initially, the County Health Rankings (CHR) formed the foundation for data collection with its county-level focus on health outcomes, health factors, health behaviors, quality of life, clinical care, physical environment, and socioeconomic factors.

The Health Collaborative hired two of the graduate students as interns for nine months. They verified the data and ensured consistent formatting. Mr. Horne and Mr. Oglesby identified and collected supplemental data. They accessed the interactive CNI tool on the Dignity Health website to create county-level maps and ZIP Code tables.[5] The interns also monitored periodic data updates on the CHR and CNI websites and revised the data worksheets until September 2015.

Data Sources

The standards for researching and including data were:

- Comparable (measures that could be compared, across all counties, to benchmarks or state/national rates)
- County-level data (ZIP Code level preferred but rare)
- Focus on health outcome data (preferred over subjective survey data when both were available)
- Reproducible (new update available in three years or every three years)
- Reputable source
- Trend data available (more than one data point; five years preferred)

These standards are consistent with and extend the measurement principles of the Institute for Healthcare Improvement's Triple Aim.[6] The CHR was an excellent starting point, but the CHNA Team discovered additional sources with more recent data as well as indicators for measures not collected by CHR. The prevalence of certain cancers, the rapid increase of heroin overdose deaths in the region, and additional mortality data are examples of supplemental data. Many excellent sources of information did not have a breakdown below the state level or did not include the entire region. The CHNA Team contacted the state health department, local health departments, and local experts when there was confusion about wording or collection of data that varied by county.

The CHR measures and the supplemental measures are listed below. More detail is available in: Appendix B. List of Data Sources, which lists each measure and the years covered, and Appendix C. Explanation of Measures and Trends, which describes the meaning of each trend.

[5] www.dignityhealth.org/cm/content/pages/community-health.asp.

[6] Stiefel M. and Nolan K. (2012). A Guide to Measuring the Triple Aim: Population Health, Experience of Care, and Per Capita Cost. IHI Innovation Series white paper, p. 3. Cambridge MA.

County Health Rankings

(2015 and preceding years – drawn from the following sources)

- Behavioral Risk Factor Surveillance Survey (BRFSS)
- Bureau of Labor Statistics
- Business Analyst - ESRI (aka Environmental Systems Research Institute)
- Centers for Disease Control and Prevention (CDC) - Diabetes Interactive Atlas
- Centers for Disease Control and Prevention - WONDER mortality data
- Centers for Medicare and Medicaid Services (CMS) - National Provider Identification File
- County Business Patterns
- Dartmouth Atlas of Health Care
- Data.gov
- Delorme Map Data
- Federal Bureau of Investigation (FBI) - Uniform Crime Reporting
- Feeding America - Map the Meal Gap
- Health Indicators Warehouse (HIW)
- Health Resources and Services Administration (HRSA) - Area Health Resource File/American Medical Association
- Health Resources and Services Administration - Area Health Resource File/National Provider Identification File
- National Center for Education Statistics
- National Center for Health Statistics
- National Center for HIV/AIDS, Viral Hepatitis, STD, and TB prevention
- National Highway Traffic Safety Administration (NHTSA) - Fatality Analysis Reporting System
- United States Census - American Community Survey
- United States Census - Population Estimates
- United States Census – Small Area Income and Poverty Estimates
- United States Census - Tigerline Files
- United States Department of Agriculture (USDA) - Food Environment Atlas

Supplements to County Health Rankings

- Centers for Disease Control and Prevention - WONDER Mortality Data - Cause of Death & Underlying Causes of Death
- Community Commons (mapping based on County Health Rankings, 2014)
- Community Need Index (maintained by Dignity Health and Trueven Analytics)
- Environmental Protection Agency (EPA)
- Greater Cincinnati Community Health Status Survey (GCCHSS) – for Butler and Warren Counties
- Health Indicators Warehouse (HIW)
- Healthy Ohio - Ohio Department of Health (ODH)
- New York Times - Enroll America and Civis Analytics
- Ohio Department of Mental Health and Addiction
- Pride Student Drug Use Survey (administered in Butler and Warren Counties by PreventionFIRST!)
- Health Resources and Services Administration (HRSA) – Shortage Designations

Data Challenges and Gaps

The first and most persistent challenge was the lag time from when data was first recorded to the time when it became publicly available in an easy-to-use format. For many measures, the CHNA Team counted it as a major victory if it discovered data as recent as 2013 – the year of the previous CHNA. For example, the most recent "Summary of Notifiable Diseases," published by the *Morbidity and Mortality Weekly Report* was dated September 19, 2014 and reported on 2012 data. There are many such examples. Finding the actual dates of the information can require reading tiny footnotes or searching several levels deep in a website. Some excellent reports have been discontinued, are published irregularly, or have long multi-year gaps between updates.

For counties with small populations, mortality and disease statistics are sometimes suppressed to preserve confidentiality and privacy, have numbers too small to be reliable, or the reported data are not actual but based on a state average (which can be misleading for a small rural county). Due to the time lag between incidence and online data retrieval, emerging problems such as the heroin epidemic in the region are difficult to quantify accurately. For example, a heroin drug overdose might be characterized as drug poisoning. One intern found a cause of death listed as drug poisoning caused by multiple drugs. The fine print described the multiple drugs as heroin and caffeine. Comments at the local level, by individuals and by agencies, indicate a much bigger problem than demonstrated by the available data.

Another challenge was the inconsistent measuring and reporting of infectious disease. States vary in what and how they report. For example, HIV and AIDS in Ohio are not listed in Class A (report immediately) or Class B or C (report by end of next business day). These diseases and related conditions are to be reported "in a manner prescribed by the Director." There is mandatory and voluntary reporting, but standards are not consistent among states. Mandatory reporting includes personal identification, and each state decides what is reportable. The regulations can also change over time. Some diseases are considered voluntarily notifiable (without personal identification) at the national level, but a state may choose not to report it.[7]

The CHNA Team was not able to use Hepatitis C data, which is on the increase in the region, because the Centers for Disease Control and Prevention (CDC) consider it to be unreliable based on the geographic variations in testing methods. According to the CDC,[8]

> Disease reporting is likely incomplete, and completeness might vary depending on the disease and reporting state. The degree of completeness of data reporting might be influenced by the diagnostic facilities available, control measures in effect, public awareness of a specific disease, and the resources and priorities of state and local officials responsible for disease control and public health surveillance. Finally, factors such as changes in methods for public health surveillance, introduction of new diagnostic tests, or discovery of new disease entities can cause changes in disease reporting that are independent of the actual incidence of disease.

[7] National Notifiable Disease Surveillance System. "Data collection and reporting." http://wwwn.cdc.gov/nndss/data-collection.html.

[8] www.cdc.gov/mmwr/PDF/wk/mm6153.pdf

Analysis of Secondary Data

After assembling data worksheets for a total of 106 measures for each county, the CHNA team applied the following criteria to determine the most significant health needs for a one-page summary, titled a County Snapshot. The criteria for inclusion on a County Snapshot and potential use as a 'call-out' were:

- Top causes of death
- Worsening trend
- Lagging national and state rates
- Falling behind a Healthy People 2020 target
- County in the bottom quartile for a measure (compared to other counties in the state)

The analysis included identifying key data points to use as 'call-outs' to make it easy for people at community meetings to see, at a glance, some of the large problems facing their community. For this reason, the CHNA team collected and analyzed the secondary data in advance of the meetings in order to share county-level data with people and agencies in the community.

Some measures were retained for a County Snapshot, even if not critically important, when the measure was relevant to an adjacent county or for the whole region. Other considerations for inclusion were if a measure represented a risk factor for serious disease (e.g., smoking) or conditions easily treated or prevented (e.g., sexually transmitted disease).

The CHNA Team also kept track of measures mentioned in the previous CHNA and priorities identified at the state level. After reviewing the data at the county level, the County Snapshots and CNI maps helped the CHNA Team to identify regional issues that affected multiple counties. HealthLandscape created maps for the data reflecting significant regional issues.

HRSA Shortage Designations revealed where there were Health Professional Shortage Areas for mental health providers.[9]

> "People still go without their meds and lab work."
>
> -Montgomery County resident

[9] An area is eligible to be designated as a Mental Health HPSA if there are 30,000 or more people per one psychiatrist. As of June 19, 2014, there were approximately 4,000 Mental Health HPSAs in the United States. http://www.hrsa.gov/shortage/

PRIMARY DATA

Primary data were obtained, with a uniform set of questions, via the following:

- Interviews with, or surveys submitted by, 11 local and county public health commissioners (or their delegates) to identify critical health needs and identify community resources to meet the needs;
- Focus group meetings, held in 10 counties – with 104 representatives of community organizations and/or members of medically underserved and vulnerable populations – to identify serious issues, identify barriers (financial and non-financial), give input for current needs assessment, prioritize issues, and identify resources to address health and health-related issues; and
- Online surveys throughout the region of individuals (469) and agencies (45) serving vulnerable populations.

Community Invitations

Hospitals chose a variety of ways to invite stakeholders to participate. They used mailed letters, emails, newsletters, and flyers. The CHNA Team created marketing materials for a communications toolkit that hospitals could use or adapt for their purposes. Materials provided were:

- Choice of two flyers to publicize community focus groups – with space to insert date, time, location, and hospital name(s)
- Key messages (talking points) - to be used internally or externally
- Purpose of community meetings - for internal use
- Draft letter of invitation - adaptable for hospital use to invite people to attend community meetings (sent out two+ weeks before a scheduled meeting)
- Sign-in sheet for community meetings
- Paragraph for newsletter - primarily intended for external audience that includes community organizations with which hospitals partner

The CHNA Team also provided suggestions of the types of community partners to contact, both for inviting to a community meeting but also to invite people to take the survey if they couldn't attend a meeting. Nonprofit agencies were asked to share the survey links with staff and clients and to post flyers about focus group meetings in public areas. Wilson Health developed a news release that Premier Health and Kettering Health Network customized for their communities.

Recommended Invitation List

Local and county Health Departments

Organizations that represent the interests of low-income, underserved, minority, and/or ethnic populations

- Community Action Agency
- Senior Services
- Council on Aging
- St. Vincent de Paul
- Salvation Army
- Other nonprofit human services agencies

Other community partners or potential partners:

- Business
- Civic groups
- Community health centers
- Community health workers
- Community leaders (not otherwise represented)
- Cultural centers
- Employers
- Faith-based organizations
- Federally qualified health centers
- General public
- Higher education
- K-12 schools
- Local foundations
- Local government
- Local health board(s)
- Local or regional committee focused on health issue(s)
- Mental health providers
- Patient advocates and navigators
- Policy makers
- Religious leaders
- Transportation
- United Way
- YMCA

Focus Groups

The purpose of the focus group meetings was to solicit primary input. The objectives were to:

- Gather diverse people to share their ideas -- general public and/or community leaders
- Receive input from agencies that represent vulnerable populations
- Hear concerns and questions about existing health/health-related issues
- Obtain evidence of financial and non-financial barriers
- Identify resources available locally to address issues
- Obtain insight into local conditions from local people
- Discover health and health-related priorities of attendees

In advance of each meeting, Ms. Finegan developed a standard script and trained Mr. Imel, Mr. Horne, and Mr. Oglesby in active listening as scribes. The interns had the opportunity to rehearse the facilitation of a meeting. Each intern was capable of performing, and did perform, both roles – facilitator and scribe. Ms. Finegan did most of the facilitation, and Mr. Imel did most of the transcribing.

Each focus group followed the same format and agenda. Refreshments were served, and nametags were used to generate a welcoming atmosphere. Locations were selected for convenience, access, and trusted reputation in the community. The CHNA Team first shared state-level health and health-related data to provide context. The survey questions were used, but the first question – about most serious health issues – was asked separately. This technique was intended to capture first thoughts

without an opportunity to be influenced by the more specific county-level data or by other attendees. All responses were captured verbatim or shortened only with the approval of the speaker.

After the first question, the CHNA Team (comprising at least two people per focus group) shared the County Snapshot and the CNI Map for the county or counties invited to the meeting. Then the remaining questions were asked and transcribed. Most meetings lasted 70 to 75 minutes; the longest was 90 minutes. The brainstorming with focused questions lasted typically 45 to 60 minutes, and discussion involved the whole group. At the end, each person was given 3 colored dots. They walked around the room and placed the dots next to issues they prioritized as most important. People regularly voted for other people's ideas.

Each focus group concluded with the facilitator answering any questions, giving information about next steps, thanking them for their time and ideas, and providing survey links to take home or to work for family, friends, and colleagues to participate.

The CHNA Team provided the following types of support to hospitals, as needed:

- Invited additional organizations that represent vulnerable populations
- Arranged for neutral and central meeting locations in shared service areas
- Customized and disseminated flyers
- Collected and reported RSVPs daily (by phone & email)

A total of 104 people (unduplicated) attended 11 focus groups. Of these, 83 people attended who represented 67 organizations. The organizations served the following populations: children; court-involved population; elderly; ethnic minorities; homeless people; LGBTQ; low-income people; people with dementia; people with disabilities; people with mental illness and/or substance abuse disorders; pregnant women; racial minorities; refugees; rural residents; and the uninsured. Community advocates and representatives of faith-based organizations attended. Fourteen representatives of local public health departments attended, including nine health commissioners. In Appendix D is the full list of focus group meeting attendees with their organizational affiliations. There is also a separate list in Appendix E that shows all organizations that participated, either by sending someone to a meeting or completing a survey.

Surveys

The CHNA Team developed three types of surveys. It used SurveyMonkey to collect responses, tabulate data, analyze results, and create categories to track key words and phrases.

Survey Development

Three versions of the survey were customized for: consumer, agency, and health department. The hospital representatives on the CHNA Committee provided valuable feedback. See Appendix F for examples.

Health departments had a choice of how to respond. Many submitted an online survey, but some health commissioners preferred an in-person or phone interview. If the interview method was chosen, then the interns transcribed their responses into SurveyMonkey soon after the interview.

Survey Administration

The CHNA Team and the healthcare systems all helped distribute the survey. At focus groups, a handout provided the survey link, and the links were written on an easel pad at the front of the room. Agencies and hospitals were encouraged to circulate the links and post on their websites. THC and GDAHA also posted the links on their websites.

The focus group responses were transcribed into SurveyMonkey for ease of categorizing, sorting, and comparing data. Each meeting was treated as a single response in order to keep one community's responses together in a survey.

The process produced:
- 469 Individual Consumer Surveys
- 45 Agency Surveys
- 11 Health Department Surveys

Appendix G contains the list of the 12 Health Departments in the region and who responded from each department. Only one Health Department did not respond, although its Director of Nursing participated actively in a focus group. Several Health Commissioners completed the survey in collaboration with, or after obtaining input from, senior staff members.

Analysis of Primary Data

The CHNA Team identified most serious health issues and top priorities by method of collection (focus group or survey) and by type of respondent. Team members counted and identified most frequent key words and phrases recurring at both the county level and at the regional level. Common themes emerged across counties and respondents. Whenever possible, the CHNA Team respected the word choices of each respondent, and so there is some variation in terms. For example, access to care could include barriers such as lack of transportation or affordability as well as lack of providers or specialists in a rural area. When a specific type of access problem or challenge was repeated by many people, then the subordinate idea was also captured in its own right. So in some instances transportation became its own category because people felt so strongly about its importance to the health of the community.

For focus groups, the '3-dot' voting system identified the top priorities of those in attendance. For agencies and health departments, the respondents were asked to identify their priorities in a separate survey question. For individual consumer surveys, the CHNA Team tabulated the most frequently cited 'serious issues' to determine priority areas. Each County Profile contains a "Consensus on Priorities" described by the different types of stakeholders.

Chapter 4. Regional Summary

OVERVIEW OF SIGNIFICANT HEALTH NEEDS

While collecting primary and secondary data, the CHNA Team noticed that Substance abuse remained a priority from the 2013 CHNAs and still concerned residents and organizations in the region. See Appendix H. The most striking difference in the intervening three years is the increased awareness and severity of the heroin and prescription drug abuse problem in the region. On surveys and in focus groups, heroin was mentioned in rural counties and in urban counties, in large counties and in small counties. Substance abuse and addiction were issues raised at focus groups and by health departments, individuals, and agencies responding by survey. Related diseases like Hepatitis C, HIV, and sexually transmitted disease were also mentioned. Access to care, Cancer in general, Chronic disease, Mental health, and Obesity emerged in 2016 as higher priorities than they did in 2013.

Unmet Needs

One of the survey questions, 'What important health issues are not being addressed enough,' revealed perceived gaps related to important health issues. The focus group responses were transcribed from the community focus group meetings. The consumers' and agencies' responses were tabulated from online surveys. The Health Department responses were a mixture of personal interview notes, phone interview notes, and online surveys. All primary sources placed Access to care/services in their top three. Mental health and Substance abuse were also among the top three concerns of agencies, individual consumers, and people who attend focus groups.

TABLE 2. PRIORITIZED UNMET NEEDS IN THE 10-COUNTY REGION

Focus Groups	Consumers	Agencies	Health Depts.
Mental health	Substance abuse	Mental health	Access to
Access to care/services	Access to care/services	Substance abuse	Environmental issues
Substance abuse	Mental health	Access to care/Services	Smoking
Wellness/Prevention	Obesity	Healthy food/Nutrition	Obesity
Care for elderly	Healthy food/ Nutrition	Wellness	Socioeconomic factors
Health education	Opportunity for	Dental	Substance abuse
Healthy food/Nutrition	Cancer & Health education	Health education	
Provider shortage	Care for elderly & Diabetes	Obesity	
Socioeconomic factors	Socioeconomic factors	Infant mortality	
Dental & Smoking	Hospital care & Smoking	Poverty	

Barriers

On the next two pages are comparisons of the financial and non-financial barriers to health care identified by the various groups that provided their feedback.

For focus group attendees, the most frequent concerns were the limitations and restrictions of insurance coverage. The next most common barrier was the high deductible amounts for many insurance plans. The high deductible is an issue that has emerged with this CHNA and was not a concern in 2013. The biggest non-financial barrier was access to care and/or services. Lack of transportation and a shortage of local providers were the second and third most cited barriers. Most counties had no public transportation. In some places with limited transportation for medical appointments, there was a long waiting time and/or the hours of operations were not sufficient to meet the need. Focus group discussions identified some barriers not mentioned in survey responses.

For individual survey respondents, the number one barrier was the co-pay. Next came the cost of prescriptions, and then the inability to take time off from work to seek care. Another significant financial barrier was a past due bill with a federally qualified health center, which can make a person ineligible for an appointment until the balance is paid. Having no insurance was in fifth place. The biggest non-financial barrier was finding a local physician who would accept the type of insurance and/or was included in the health plan. Not having a local choice of doctor and having instead to drive to Dayton for care was described in comments as a barrier.

Agencies place having no car as the top financial barrier for the people they serve. Not being able to afford a co-pay or prescribed medications followed closely, in second and third place. Having no insurance was in fourth place. The greatest variation was in their view of non-financial barriers. They identified health literacy, the need for childcare, and mental disability as the top three non-financial barriers they have observed.

For health departments that responded, no insurance and no car were in first and second place as financial barriers, followed by not being able to afford prescriptions, co-pay, or medical equipment. Health literacy was the top non-financial barrier. Tied in second place were: Don’t know where to go for help; Provider doesn’t take insurance; Childcare; and Don’t speak English.

TABLE 3. 10-COUNTY REGION: FINANCIAL BARRIERS

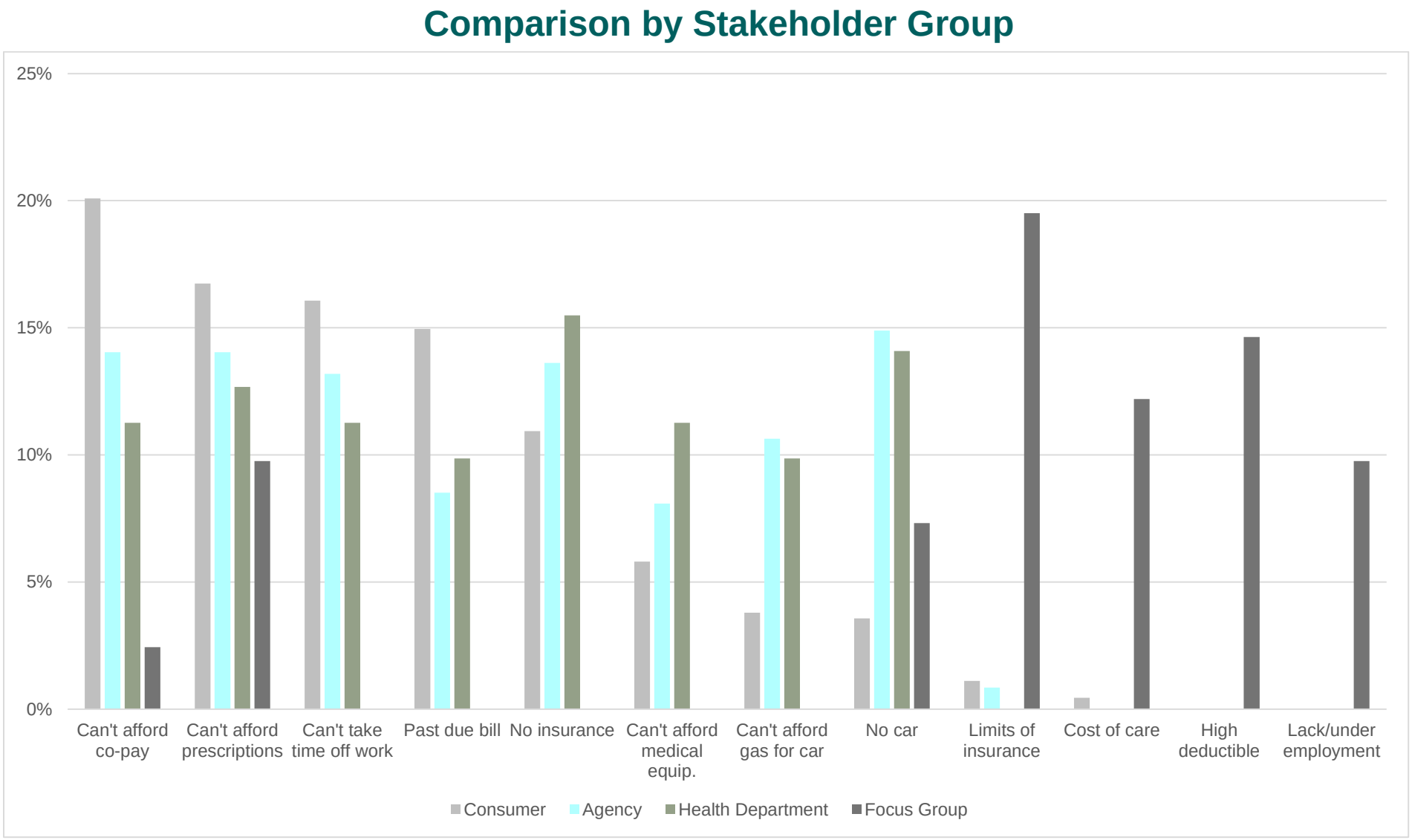
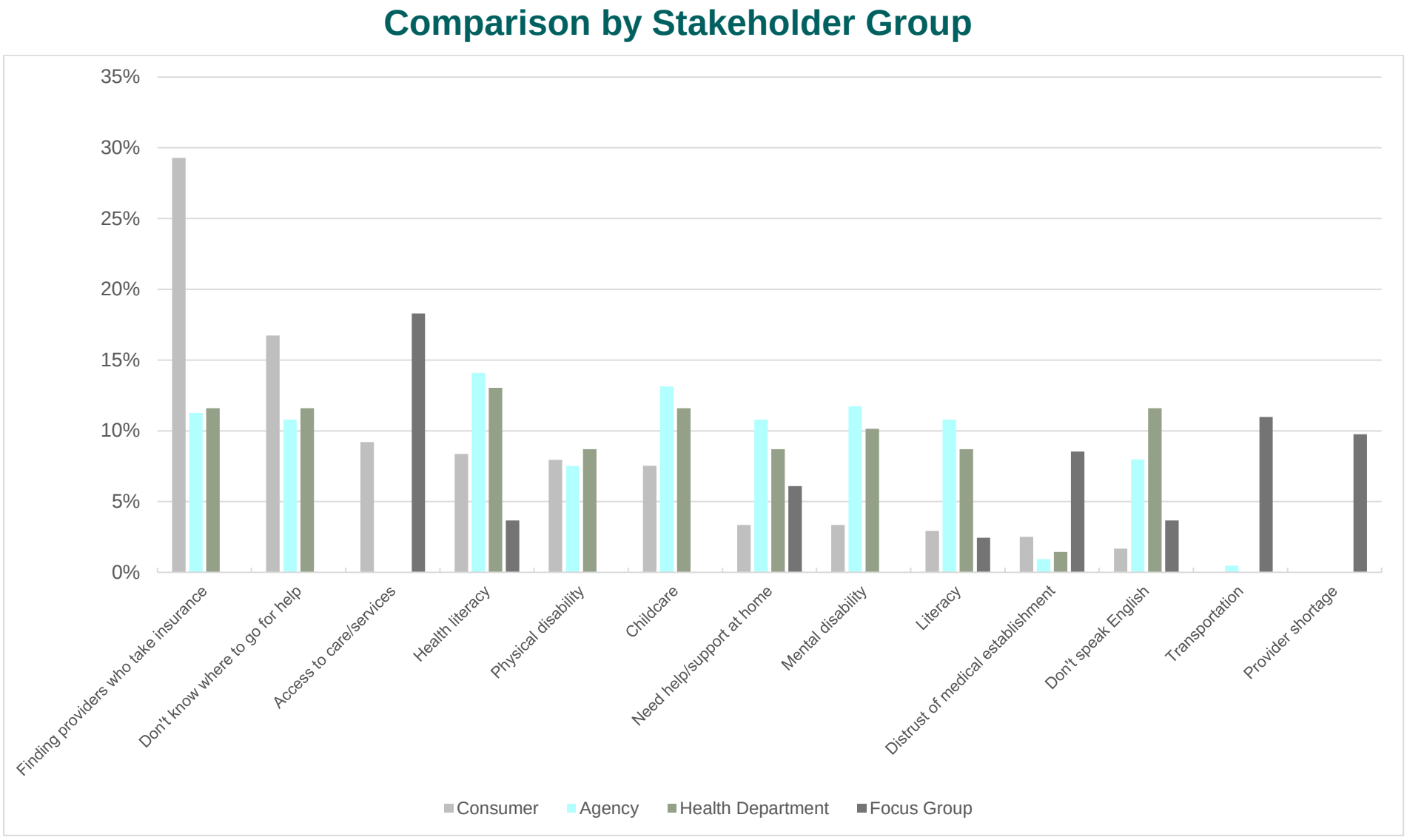


TABLE 4. 10-COUNTY REGION: NON-FINANCIAL BARRIERS



Focus Group Meetings

At the community focus group meetings, each attendee received three brightly colored dots to apply next to the issues deemed most serious or important, based on their knowledge and experience and the discussion during the focus group. All the comments, from all questions, were posted on the walls. People gave the process a great deal of thought and often voted for someone else's idea, instead of their own. Percentages represent how many dots an issue received divided by the number of total votes.

FIGURE 1. 10-COUNTY REGION: PRIORITY VOTING AT FOCUS GROUP MEETINGS

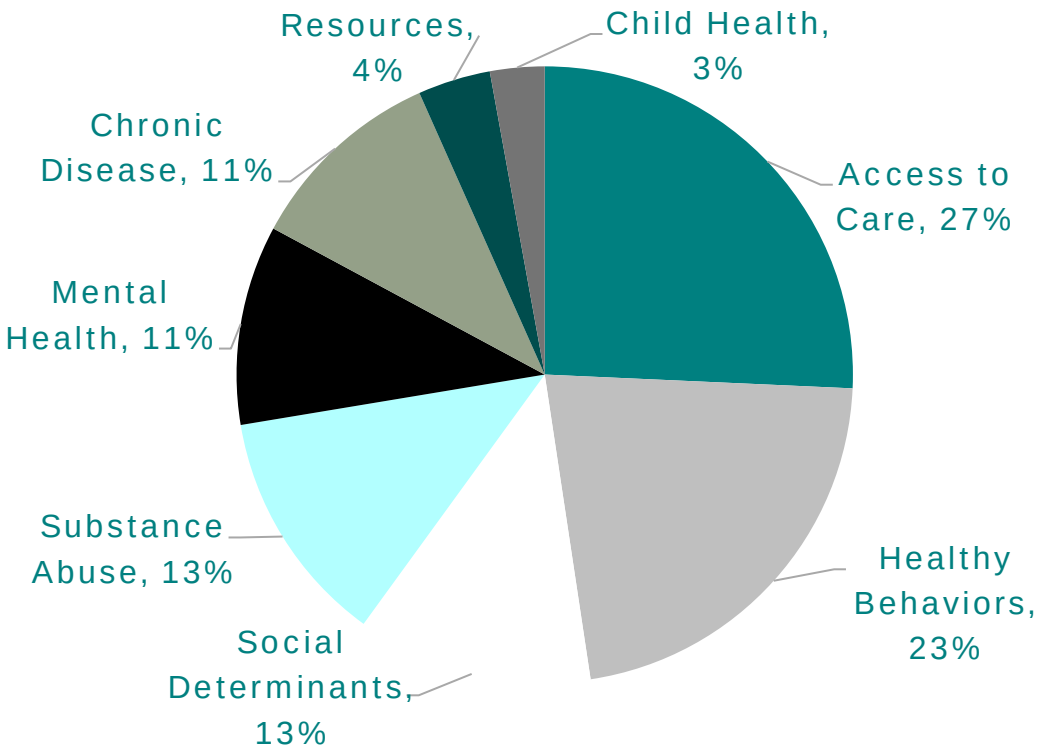


TABLE 1. 10-COUNTY REGION: TOP FOCUS GROUP ISSUES BY COUNTY

Top Issues (by # of voters)	Counties
Access to care	Butler, Clark, Darke, Greene, Montgomery, Shelby
Healthy behaviors	Butler, Darke, Greene, Miami, Montgomery
Social determinants	Montgomery, Shelby
Substance abuse	Auglaize, Butler, Greene, Montgomery, Preble, Shelby, Warren
Mental health	Butler, Clark, Darke, Montgomery, Shelby, Warren

FIGURE 2. 10-COUNTY REGION: BREAKDOWN OF TOP PRIORITIES FROM FOCUS GROUP MEETINGS

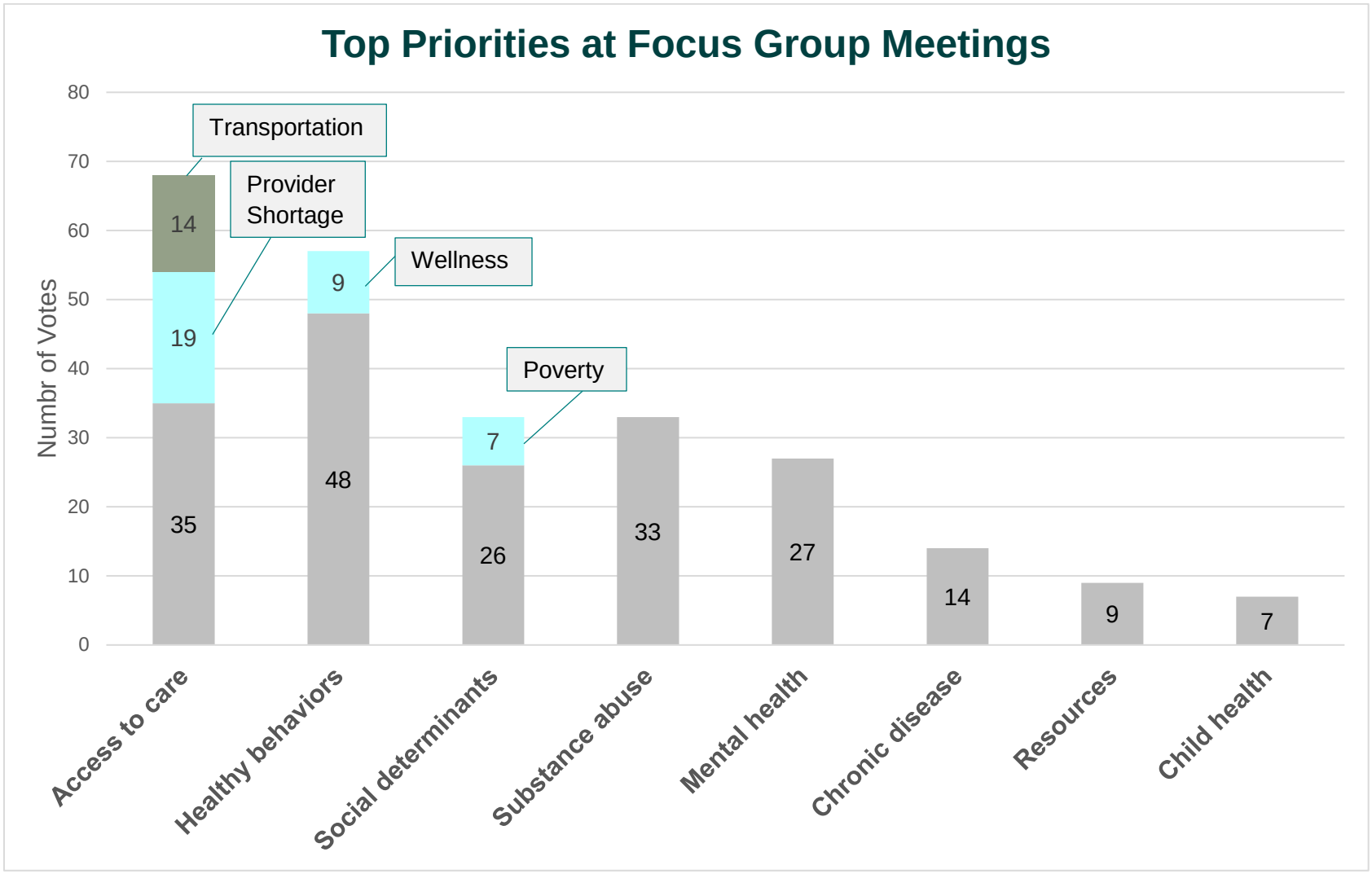


TABLE 6. 10-COUNTY REGION: COMMUNITY PRIORITIES AT FOCUS GROUP MEETINGS
(in descending order by number of votes)

Auglaize	Butler	Clark	Darke	Greene	Miami	Montgomery	Preble	Shelby	Warren
Substance Abuse	Health Behaviors	Poverty	Provider Shortage	Healthy Behaviors	Healthy Behaviors	Social Determinants of Health	Lack Services/ Providers	Social Factors	Healthy Behaviors
Provider Shortage	Mental Health/ Addiction	Mental Health	Strong Community Partnerships	Access to Care		Access to Care	Child Health	Access to Care	Access to Care
	Trans-portation		Access to Care	Chronic Diseases		Mental Health	Funding	Chronic Diseases	Substance Abuse
	Access to Care		Mental Health			Substance Abuse	Substance Abuse	Mental Health	Mental Health
	Child Health		Poverty			Resources	Chronic Health Issues	Wellness	
	Resources		Social Skills Lacking			Healthy Behaviors		Centralize Case Management	
	Dementia							Substance Abuse	

Sixty-seven organizations, serving vulnerable populations, sent 83 representatives to focus groups. The populations, for whom they advocated, included:

- Children
- Elderly
- Ethnic minorities
- Low-income people
- People who are homeless
- People with dementia
- People with mental illness and/or substance abuse disorders
- Pregnant women
- Racial minorities
- Recent immigrants
- Refugees
- Rural
- Unemployed
- Uninsured

Consumer Surveys

Below are the key words and phrases repeated most often by individual consumers who completed a survey between June 15 and November 30, 2015. There were 469 people who participated. In response to the question, 'What are the most serious health issues facing your community,' they offered 837 answers about what they perceived as the most serious health or health-related issues.

TABLE 7. 10-COUNTY REGION: CONSUMER – MOST SERIOUS HEALTH ISSUES

Most Serious Health Issues	# Mentions	% Mentions
Substance abuse	225	26.9%
Chronic diseases *(includes all mentions of cancer, chronic disease, diabetes, heart disease, hypertension, & respiratory disease combined)*	203	24.3%
Obesity	101	12.1%
Diabetes	68	8.1%
Access to care/services	59	7.0%
Heart	48	5.7%
Cancer	45	5.4%
Mental health	40	4.8%
Care for elderly	27	3.2%
Healthy food/Nutrition	24	2.9%
Smoking	20	2.4%

Other issues receiving more than 1% of all mentions were: Respiratory disease; Hypertension; Infectious disease; Poverty; Opportunity for exercise; Wellness/Prevention; and Violence.

One of the questions asked on the survey was, 'Which important health issues are being handled well in your community?' This question generated 457 answers.

TABLE 8. 10-COUNTY REGION: CONSUMER - IMPORTANT ISSUES BEING HANDLED WELL

Important Issues Being Handled Well	# Mentions	% Mentions
Access to care/services	54	11.8%
Heart	39	8.5%
Substance abuse	38	8.3%
Cancer (20 mentions = breast cancer)	35	7.7%
Wellness/Prevention (9 mentions = immunization)	35	7.7%
Hospital	22	4.8%
Infectious disease (12 mentions = flu)	22	4.8%
Diabetes	21	4.6%
Care for elderly	17	3.7%
Increased awareness (10 mentions = breast cancer)	16	3.5%
Health education	15	3.3%
Opportunity for exercise	11	2.4%
Stroke	11	2.4%

Other responses receiving more than 1% of total mentions were: Emergency care; Smoking cessation; Child health; Hypertension; Obesity; Healthy food/Nutrition; Mental health; Respiratory disease; Breast health; Clinic; Public safety; and Quality of care.

The next question on the survey was: 'Which important health issues are not being addressed enough in your community?' The individual consumers gave 520 replies.

TABLE 9. 10-COUNTY REGION: CONSUMER - IMPORTANT ISSUES NOT BEING ADDRESSED ENOUGH

Important Issues Not Being Addressed Enough	# Mentions	% Mentions
Substance abuse	97	18.7%
Access to care/services	70	13.5%
Mental health	45	8.7%
Obesity	36	6.9%
Healthy foods/Nutrition	29	5.6%
Opportunity for exercise	22	4.2%
Wellness/Prevention	22	4.2%
Cancer	15	2.9%
Health education	15	2.9%
Care for elderly	14	2.7%
Diabetes	14	2.7%
Socioeconomic factors	10	1.9%
Hospital	9	1.7%
Smoking	9	1.7%

Although Substance abuse and Access appear at the top of both tables ('handled well' and 'not addressed enough'), the number of mentions for these two issues are much higher in the table for 'Important Issues Not Being Addressed Enough.' Substance abuse came up most often during the question about 'Most Serious Health Issues.' In some communities, efforts to address heroin, for example, were recognized, but survey respondents acknowledged the scope of the problem.

Other issues receiving more than 1% of mentions were: Child health; Community outreach; Quality of care; Chronic disease; Dental; Heart; and Infectious disease.

'What can you do to improve your health?' generated the most responses: 1,635. People chose multiple ways they could improve their health, and many of the people who answered 'Eat healthier' also chose 'Exercise more.' Most of them knew what to do, and many expressed the desire to do more or do better. Only three respondents (0.6%) said they were happy with their behavior and just wanted to maintain their current health status.

TABLE 10. 10-COUNTY REGION: CONSUMER - WHAT CAN YOU DO TO IMPROVE YOUR HEALTH?

Health Improvement Activity	# Mentions	% Mentions
Exercise more	322	19.7%
Eat healthier	272	16.6%
Lose weight	210	12.8%
Drink more water	148	9.1%
Cope better with stress	142	8.7%
Get enough sleep	140	8.6%
Practice self-care	108	6.6%
Make better lifestyle choices	86	5.3%
Received regular checkups	59	3.6%
Take prescribed medications	39	2.4%

The two other responses with more than 1% of mentions were: Follow doctor's instructions and Get information.

See Appendix D for the full list of focus group participants.

> "Laugh More."
>
> -Individual from Montgomery County

Agency Surveys

A total of 45 agencies and organizations completed the survey online. They served one or more counties. All 10 counties were included in at least one organization's service area. A few organizations had more than one person from the agency respond. Twenty-four organizations provided their names. They represent a good cross-section of sectors and geographic areas. Appendix E lists the self-identified organizations responding to the survey.

Below is a table showing the percentage of responding agencies serving different vulnerable populations. Most agencies served more than one at-risk population. In the 'Other' category were included the uninsured; LGBTQ community; court-involved population; people who are homeless; people with dementia; people with mental illness and/or substance abuse disorders; pregnant women; and refugees.

TABLE 11. VULNERABLE POPULATIONS SERVED BY AGENCIES

Populations Served	% Agencies
Low-income	95.2%
Racial minorities	88.1%
People with disabilities	88.1%
Children	88.1%
Ethnic minorities	81.0%
Elderly	76.2%
Rural	57.1%
Other people at risk	40.5%

Forty-five organizations provided 126 responses for the question, 'What are the most serious health issues facing your community?'

TABLE 12. 10-COUNTY REGION: AGENCY – MOST SERIOUS HEALTH ISSUES

Most Serious Health Issues	# Mentions	% Mentions
Substance abuse	26	23.9%
Chronic diseases *(includes all mentions of cancer, chronic disease, diabetes, hypertension, & respiratory disease combined)*	16	14.7%
Obesity	15	13.8%
Mental health	13	11.9%
Infant mortality	10	9.2%
Access to care/services	8	7.3%
Diabetes	8	7.3%
Healthy food/Nutrition	6	5.5%
Hypertension	4	3.7%
Smoking	4	3.7%

The following issues each received 2.8% of mentions: Infectious disease; Dental; Poverty; and Respiratory disease. The other issues that received more than 1% of mentions were Cancer and Teen pregnancy.

For the question, 'Which important health issues are being handled well in your community?' there were 65 responses.

TABLE 13. 10-COUNTY REGION: AGENCY - IMPORTANT ISSUES BEING HANDLED WELL

Important Issues Being Handled Well	# Mentions	% Mentions
Access to care/services	11	15.3%
Wellness/Immunization	7	9.7%
Infant mortality	5	6.9%
Health education	4	5.6%
Healthy food/Nutrition	4	5.6%
Opportunity for exercise	3	4.2%
Prenatal care	3	4.2%
Substance abuse	3	4.2%
Cancer	2	2.8%
Care for children	2	2.8%
Health Department	2	2.8%

Table 13 contains every suggestion that received more than one vote.

Organizations gave 80 mentions for the next question: 'Which important health issues are not being addressed enough in your community?'

TABLE 14. 10-COUNTY REGION: AGENCY - IMPORTANT ISSUES NOT BEING ADDRESSED ENOUGH

Important Issues Not Being Addressed Enough	# Mentions	% Mentions
Mental health	12	14.0%
Substance abuse	11	12.8%
Access to care/services	9	10.5%
Healthy food/Nutrition	5	5.8%
Wellness	5	5.8%
Dental	4	4.7%
Health education	4	4.7%
Obesity	4	4.7%
Infant mortality	3	3.5%
Poverty	3	3.5%

Receiving two mentions each were: Care for elderly; Collaboration/coordination; Communicable diseases; Opportunity for exercise; and Reproductive health.

As with the consumer surveys, the question that prompted the most responses (316) was: 'What can the people you serve do to improve their health?'

TABLE 15. 10-COUNTY REGION: AGENCY - WHAT CAN THE PEOPLE YOU SERVE DO TO IMPROVE THEIR HEALTH?

Health Improvement Activity	# Mentions	% Mentions
Eat healthier	32	10.1%
Exercise more	29	9.1%
Make healthy lifestyle choices	29	9.1%
Quit smoking	27	8.5%
Get regular medical check-ups	23	7.3%
Practice self-care	23	7.3%
Cope with stress	22	6.9%
Follow doctor's instructions	22	6.9%
Drink less alcohol	21	6.6%
Drink more water	21	6.6%
Lose weight	21	6.6%
Take prescribed medications	21	6.6%
Get enough sleep	19	6.0%

One answer received four mentions: Be responsible.

TABLE 16. 10-COUNTY REGION: AGENCY – TOP PRIORITIES

Top Priorities	# Mentions	% Mentions
Substance abuse	18	16.2%
Access to care/services	15	13.5%
Mental health	14	12.6%
Obesity	11	9.9%
Healthy food/Nutrition	6	5.4%
Infant mortality	5	4.5%
Care for children	4	3.6%
Diabetes	4	3.6%

There were 111 responses to the question, 'Given the health and health-related issues facing the community, which ones would be your top priorities?' Compared to the responses for 'most serious health issues,' Access to care/services moved up in level of importance.

Health Departments

The Health Commissioners for the cities of Hamilton and Middletown both completed surveys and also attended the Butler County meeting. All 10 county health departments completed the survey and/or attended a focus group meeting. The CHNA Team first contacted the Health Commissioners, some of whom answered the questions on their own or with their senior leaders. Others delegated the survey to a member of their staff. Only one did not respond, despite contact by phone and email, but sent a representative to the focus group. The results of 11 surveys are provided below. The CHNA Team received the responses between July 7 and October 20, 2015.

TABLE 17. 10-COUNTY REGION: HEALTH DEPARTMENT – MOST SERIOUS HEALTH ISSUES

Most Serious Health Issues	# Mentions	% Mentions
Obesity	8	15.4%
Substance abuse (including heroin)	7	13.5%
Infant mortality and low birth weight	5	9.6%
Chronic disease (tied for 4th place)	4	7.7%
Mental health (tied for 4th place)	4	7.7%
Diabetes (tied for 5th place)	3	5.8%
Heart disease (tied for 5th place)	3	5.8%
Respiratory disease (tied for 6th place)	2	3.8%
Smoking/tobacco (tied for 6th place)	2	3.8%

Three-fourths of the health departments mentioned Obesity. In the category of Substance abuse, heroin was mentioned specifically in three different surveys. In the category of Respiratory disease, COPD and lung disease were each mentioned once by separate respondents.

One of the questions asked on the survey was, 'Which important health issues are being handled well in your community?'

TABLE 18. 10-COUNTY REGION: HEALTH DEPARTMENT - IMPORTANT ISSUES BEING HANDLED WELL

Important Issues Being Handled Well	# Mentions	% Mentions
Infant mortality	4	18.2%
Access to care	3	13.6%

Half the health departments answered that the Substance abuse issue was being handled well, and three surveys cited the existence and activity of community-based coalitions formed to combat the rise in heroin. All other suggestions received only one mention each.

The next question was, 'Which important health issues are not being addressed enough in your community?'

TABLE 19. 10-COUNTY REGION: HEALTH DEPARTMENT - IMPORTANT ISSUES NOT BEING ADDRESSED ENOUGH

Important Issues Not Being Addressed Enough	# Mentions	% Mentions
Access to care	6	25.0%
Environmental issues (tied for 2nd place)	3	12.5%
Smoking (tied for 2nd place)	3	12.5%
Obesity (tied for 3rd place)	2	8.3%
Socioeconomic factors/Social determinants (tied for 3rd place)	2	8.3%
Substance abuse (tied for 3rd place)	2	8.3%

Within the category, Access to care, Transportation received two mentions, and there were two mentions related to provider availability. There was one mention each for the need for more dental care and the need for more primary care physicians.

Comments about Environmental health issues included: enforcement, blight, living conditions, and safety.

The next question concerned the people served by public health departments: 'What can they do to improve their health?'

TABLE 20. 10-COUNTY REGION: HEALTH DEPARTMENT - WHAT CAN PEOPLE DO TO IMPROVE THEIR HEALTH?

Health Improvement Activity	# Mentions	% Mentions
Get regular checkups	9	9.9%
Eat healthier (tied for 2nd place)	7	7.7%
Exercise more (tied for 2nd place)	7	7.7%
Get quality information (tied for 2nd place)	7	7.7%
Make better lifestyle choices (tied for 2nd place)	7	7.7%
Cope better with stress (tied for 3rd place)	6	6.6%
Drink less alcohol (tied for 3rd place)	6	6.6%
Drink more water (tied for 3rd place)	6	6.6%
Follow doctor's instructions (tied for 3rd place)	6	6.6%
Lose weight (tied for 3rd place)	6	6.6%
Practice self-care (tied for 3rd place)	6	6.6%
Quit smoking (tied for 3rd place)	6	6.6%
Get enough sleep (tied for 4th place)	5	5.5%
Take prescribed medications (tied for 4th place)	5	5.5%

Most of the responses could easily be categorized as specific details about the type of 'better lifestyle choices' that local residents might make.

In addition to asking health departments about the most serious issues, the CHNA Team wanted to know their top priorities for their communities.

TABLE 21. 10-COUNTY REGION: HEALTH DEPARTMENT – TOP PRIORITIES

Top Priorities	# Mentions	% Mentions
Substance abuse	6	18.8%
Chronic disease (diabetes, heart)	5	15.6%
Obesity	5	15.6%
Infant mortality (premature births; prenatal care	3	9.4%
Child health	2	6.3%
Immunizations	2	6.3%

Four of the top priorities address the highly ranked 'most serious issues' of Substance abuse, Obesity, Infant mortality, and Chronic disease. In the category of Chronic disease, Diabetes and Heart disease were specifically cited. The category of Infant mortality includes Premature birth and Prenatal care. The priorities tied for fourth place, Child health and Immunizations, were not mentioned earlier as 'serious health issues.'

See Appendix G for the list of Health Department respondents and their qualifications.

> "Focus limited resources on prevention of disease as opposed to using precious resources for treatment of the disease."
>
> -Health Commissioner

SECONDARY DATA

County Health Rankings and Supplemental Data

Xavier University graduate students collected data for more than 100 measures. The CHNA Team narrowed the number of measures per county to create one-page 'Snapshots.' For each county, the CHNA Team tracked the health and health-related issues that were the most serious.

Four of the 10 counties (40%) had multiple issues that lagged state and national rates and for which the trend was worsening. The major categories, where worsening and lagging trends appeared, were: Health outcomes; Health behaviors; Substance abuse/Mental health; Access to care; and Socioeconomic/ Demographic.

The counties with the most health issues were:

- Montgomery County had 15 worsening/lagging trends, distributed across all the categories.
- Clark County had 13 trends, distributed across all the categories.
- Shelby County had 12 trends in all categories except Socioeconomic/Demographic.
- Darke County had 8 trends in all categories except Socioeconomic/Demographic.

Among these measures, the health and health-related issues with worsening trends, and also lagging state and national rates, were:

- Cancer mortality (worsening/lagging in 8 counties; breast cancer in 5 counties)
- Substance abuse (7 counties)
- Diabetes (6 counties)
- Access to care (5 counties)
- Accidents (5 counties)
- Respiratory disease (5 counties)
- Heart disease (Shelby County)

> "Gap for people too poor to afford care and not eligible for Medicaid"
>
> -Warren County focus group participant

GIS Mapping

A regional map, based on CNI scores for each ZIP Code, is shown on the next page. As discussed earlier, the CNI is a validated high-level assessment of the risk of health disparities. In Montgomery County, 40% of its ZIP Codes were considered high risk areas.

Two Substance abuse measures were GIS mapped to illustrate the scope of the regional health challenges. These measures are worsening over time and lagging state and national rates in one to five counties. A map for each measure follows the CNI map.

Below is a description of the significance of each map.

CNI

Twenty-two out of 123 regional ZIP Codes, or 17.9%, have CNI scores of 3.4 or higher. High scores indicate a likelihood of disparities in health care. Six of the ten counties (60%) had at least one high CNI score. Darke and Miami Counties each had one high-scoring ZIP Code, or 9.1% of their total ZIP Codes. Butler and Greene Counties had two high-scoring ZIP Codes, for respective rates of 16.7% and 15.4% of total ZIP Codes. Four of Clark County's 11 ZIP Codes, or 36.4%, had high scores. Montgomery County had the highest percentage with 40%, or 12 of its 30 ZIP Codes, reflecting likely healthcare disparities

Drug poisoning deaths

The HP 2020 target is 11.3 deaths per 100,000. Auglaize is the only county below this target. Montgomery (26), Preble (20), Butler (19.3), and Clark (18.5) had the highest rates per 100,000. This map is provided in addition to the heroin map, because heroin is not always identified as the cause of the overdose. Drug poisoning also includes prescription opioid overdose deaths. *(The Warren County number is from 2013; the other counties' data is from 2015.)*

Heroin poisoning overdose deaths

The age-adjusted rate for heroin-poisoning deaths nearly quadrupled from 0.7 deaths per 100,000 in 2000 to 2.7 deaths per 100,000 in 2013.[10] Butler (15.9) had the highest rates in the region, followed by Montgomery (10), Darke (9.5), Preble (9.5), and Clark (9.4). Only Auglaize and Shelby Counties had rates lower than the rate calculated by the National Vital Statistics System.

.

[10] Hedegaard H. and Kochanek KD (2015). Drug-poisoning deaths Involving heroin: United States, 2000–2013. NCHS data brief, no. 190, March. Hyattsville, MD: National Center for Health Statistics. www.cdc.gov/nchs/data/databriefs/db190.htm

FIGURE 3. COMMUNITY NEED INDEX - RISK OF HEALTH DISPARITIES

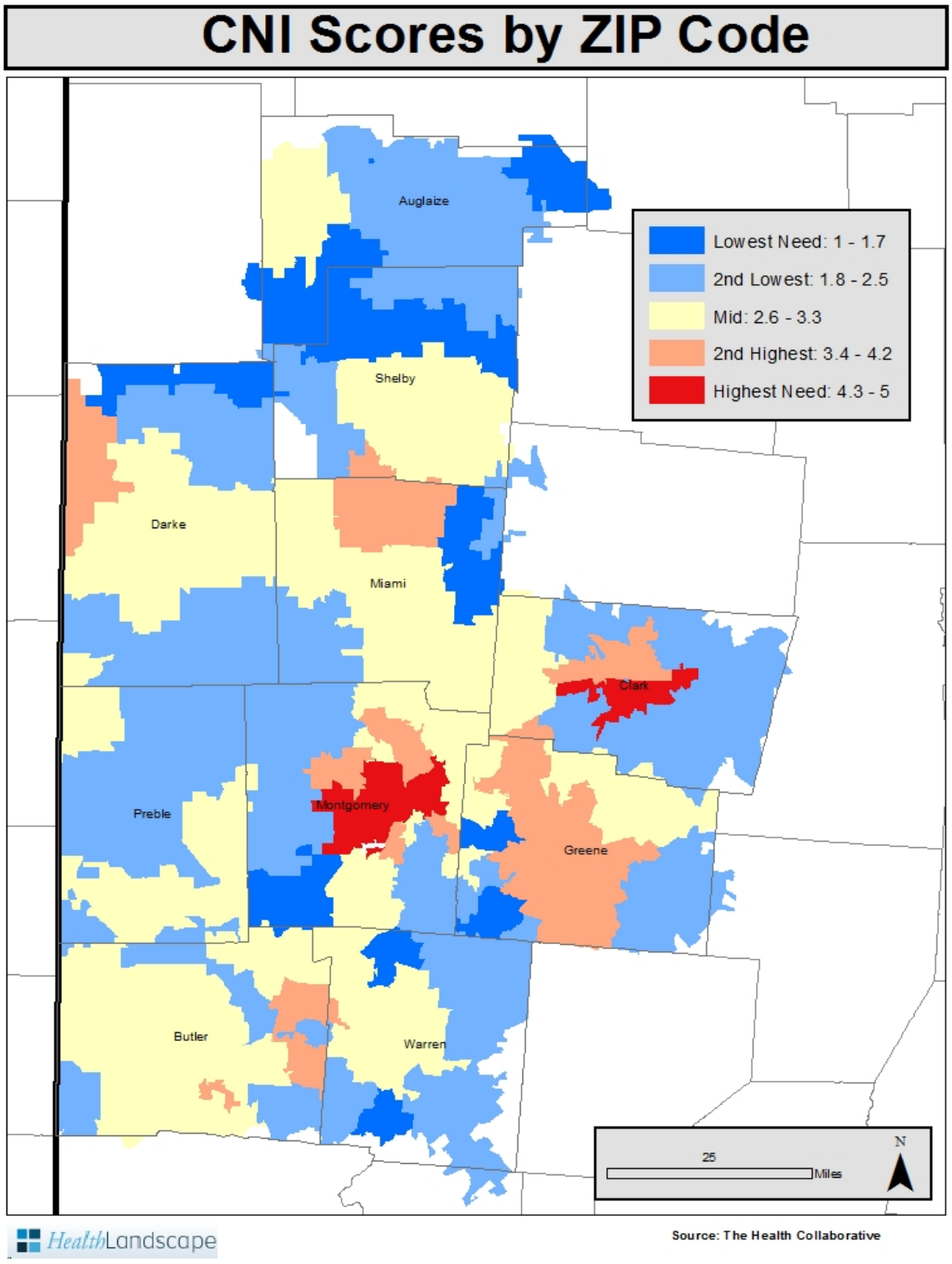


FIGURE 4. DRUG POISONING DEATHS

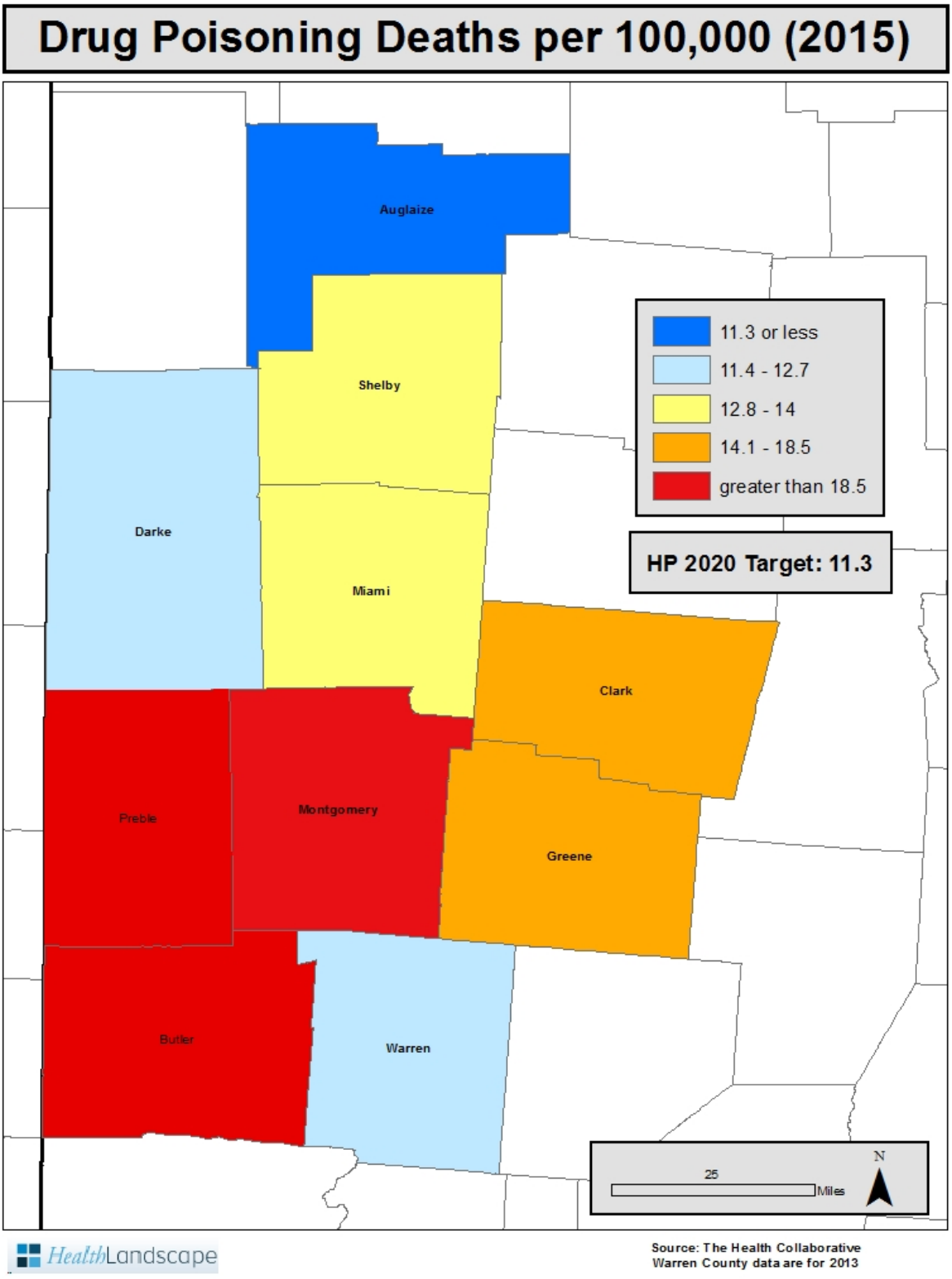
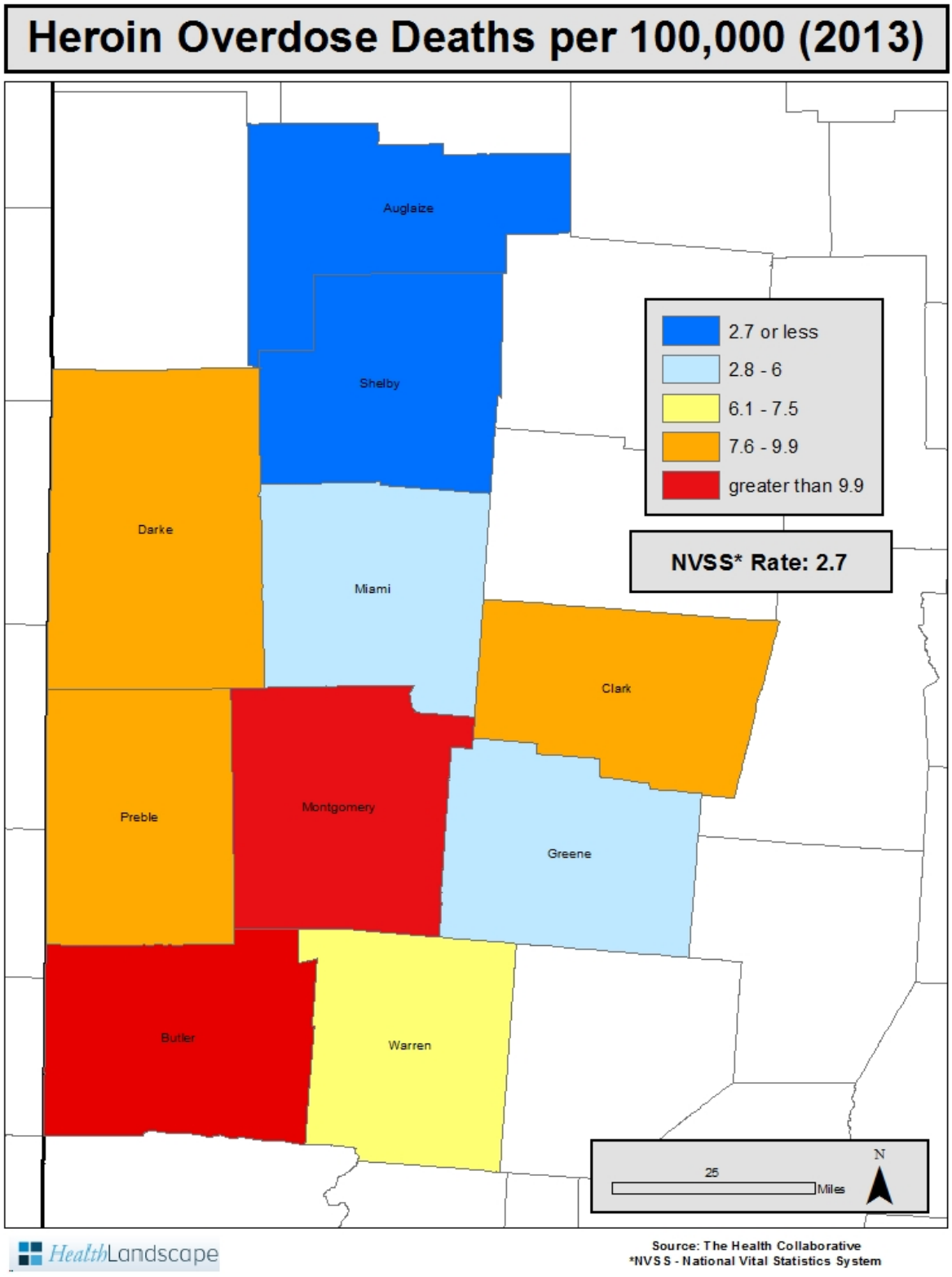


FIGURE 5. DEATHS FROM HEROIN OVERDOSE



Causes of Death

Based on 2014 mortality data from CDC Wonder, the CDC's "15 Causes of Death" combines similar diagnoses to demonstrate the impact of a specific disease type. For example heart disease and cancer are the top two causes of death in the United States; together they account for 50% of all deaths in the country. Table 22 shows the 15 causes of death with combined diagnostic codes. For the region's population of 1,721,781, Accidents accounted for 1,147 deaths in 2014. Flu and pneumonia were responsible for 337 deaths, and Suicide accounted for 234 deaths.

TABLE 22. 15 LEADING CAUSES OF DEATH

15 Leading Causes of Death in 2014
Diseases of heart
Malignant neoplasms
Accidents (unintentional injuries)
Chronic lower respiratory diseases
Cerebrovascular diseases
Alzheimer's disease
Diabetes mellitus
Influenza and pneumonia
Septicemia
Nephritis, nephrotic syndrome and nephrosis
Intentional self-harm (suicide)
Chronic liver disease and cirrhosis
Essential hypertension and hypertensive renal disease
Parkinson's disease
Pneumonitis due to solids and liquids

See Appendix I for the accompanying diagnostic codes that comprise each of the above composite causes of death in the 10-county area.

State Health Priorities

The CHNA Team researched and kept in mind the priorities established by the State of Ohio.[11] Most of these priorities were reflected in the input provided by various stakeholders.

TABLE 23. STATE HEALTH PRIORITIES

State of Ohio Health Priorities
Access to Care
Infant Mortality / Preterm Births
Chronic Disease
Injury and Violence
Infectious Disease
Integration of Physical and Behavioral Health
Public Health System Funding
Electronic Health Records / Health Information Exchange / Data Warehouse
Workforce Development

REGIONAL PRIORITIES

Criteria were applied to determine which health and health-related issues were regional priorities:

- County in bottom quartile for measure(s)
- Easily treated or prevented
- Emerging trend
- High risk to life
- Local rates not meeting national targets of Healthy People 2020
- Measure is a state priority
- Regional rates lagging state and/or national rates
- Risk factor for serious disease
- Worsening trend

The table on the next page shows the combined regional priorities from all five data sources: Focus groups, consumer surveys, agency surveys, health departments, and secondary data.

> "People are in denial about drugs, homelessness, and teen pregnancy."
>
> - Focus group participant

[11] *Ohio 2012 – 2014 State Health Improvement Plan*. Columbus, Ohio October, 2012.

TABLE 24. 10-COUNTY REGION: COMBINED TOP PRIORITIES

Focus Groups	Consumers	Agencies	Health Departments	Secondary Data
Healthy behaviors	Substance abuse	Substance abuse	Substance abuse	Cancer (esp. Breast & Lung)
Access to care	Chronic disease (cancer, diabetes, heart)	Access to care/services	Chronic diseases (diabetes, heart)	Substance abuse
Substance abuse	Obesity	Mental health	Obesity	Diabetes
Mental health	Diabetes	Obesity	Infant mortality; premature births; prenatal care	Accidents
Social determinants	Access to care/services	Healthy food/Nutrition	Child health	Access to care
Provider shortage	Heart	Infant mortality	Immunizations	Respiratory disease
Chronic diseases	Cancer	Care for children		Heart disease
Transportation	Mental health	Diabetes		

Priorities were determined from the 'dot' exercise at focus groups; from the 'most serious issues' in consumer surveys; from 'top priorities' on agency and health department surveys; and worsening trends or causes of death that affected at least 50% of counties.

- All five sources of input identified as a regional priority: Substance abuse.
- Three sources of input identified as priorities: Chronic diseases; Diabetes; Mental health; and Obesity.

Mental health was a significant issue cited by Warren County focus Group participants, surveyed consumers, and surveyed nonprofit agencies. In Montgomery County, mental health was a priority for all these groups as well as the public health department that serves Dayton and Montgomery County.

In Warren County, Substance abuse was identified as a top priority for focus group participants, surveyed consumers, surveyed nonprofit agencies, and the county health department. For Montgomery County, it was cited by focus group participants, surveyed consumers, and surveyed nonprofit agencies. In both counties, concern about Substance abuse was primarily focused on heroin.

Chapter 5. Community Profiles

For each county, the community profile includes results from the community focus group meeting, consumer surveys, agency surveys, health department responses, Snapshot of secondary data, and the CNI map with ZIP Code scores. When the Snapshots were created, only 2013 Cause of Death data were available. The Snapshots were used at the focus group meetings. For each county, the 2014 data has been added as an update in the narrative preceding the Snapshot.

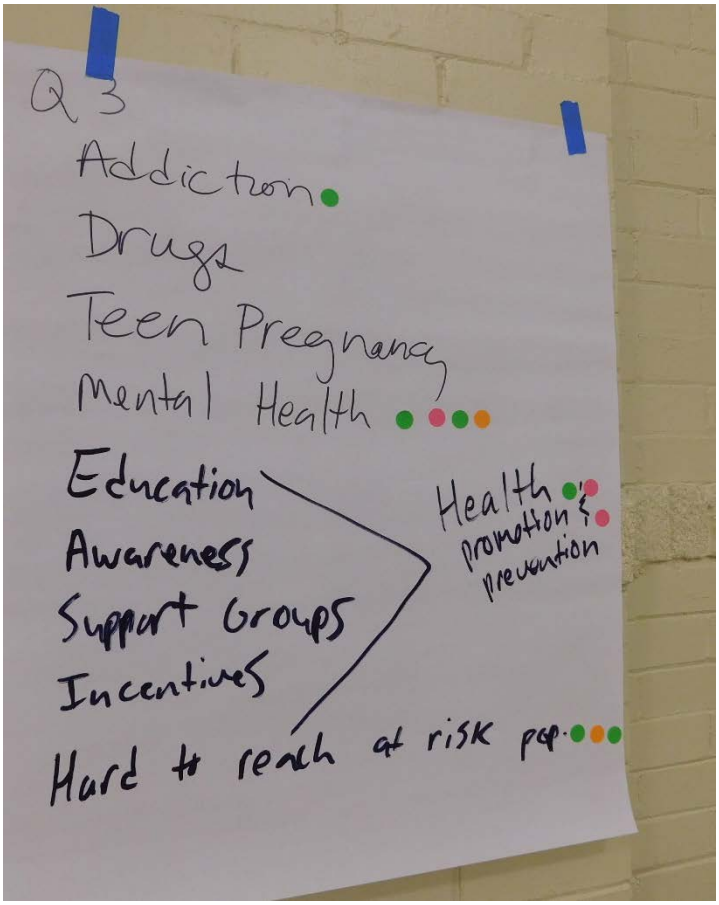


FIGURE 6. VOTING BY DOTS

MONTGOMERY COUNTY

The City of Dayton is the County Seat. The Dayton Metropolitan Statistical Area (MSA) encompasses Montgomery County as well as Greene, Miami, and Preble Counties. Montgomery County is the fifth most populous county in Ohio, and Dayton is the fourth-largest MSA in the state. Its poverty rate is 19.7%. Twelve of its 30 ZIP Codes had high CNI scores.

Montgomery County has been successful in improving the ratio of residents to mental health provider. The state average is 1,023 residents per mental health provider, and it is 705:1 for Montgomery County. Four organizations are designated Mental Health HPSAs, based on the number of psychiatrists. One of these is a correctional institution.

Montgomery County experienced multiple trends that were showing signs of worsening. They were:

- Access to care due to cost
- Birth outcomes (low birthweight and preterm births)
- Cancer of the Breast, Lung, and Prostate
- Childhood poverty
- Chlamydia incidence
- Chronic Lower Respiratory Disease
- Diabetes prevalence
- Heart disease
- Heroin poisoning overdose deaths
- HIV prevalence
- Injury deaths

Consensus on Priorities

Mental health was mentioned prominently in the focus group meeting, in consumer surveys, in agency surveys, and by Public Health. Chronic diseases were mentioned directly in the focus group and by Public Health, while specific chronic diseases were described in the consumer and agency surveys (diabetes and hypertension in both places; cancer and heart also in consumer surveys). Infant mortality was important to the focus group participants, the agencies, and Public Health. Substance abuse was mentioned, specifically in the context of heroin addiction, by people at the focus group, and in both consumer and agency surveys. Access to care was mentioned in the meeting and in consumer and agency surveys.

Top Causes of Death

For 2014, the top causes of death were:

- Lung cancer
- Heart disease
- Alzheimer’s disease
- Dementia
- COPD

The causes of death were identical in order in 2012. The only change in 2013 was Heart attack instead of COPD in fifth place.

Priorities from Community Meeting on October 22, 2015

The largest category for comments at the focus group was 'Social determinants of health.' The comments receiving multiple votes within this category were: lack of opportunity in impoverished neighborhoods; education; housing; poverty; and unemployment. 'Access to care' was in second place. Within the Access category, limitations of insurance and transportation received the most votes.

TABLE 25. MONTGOMERY COUNTY MEETING PRIORITIES

Priority	# Votes	% Votes
Social determinants of health	16	25.8%
Access to care	12	19.4%
Mental health	11	17.7%
Substance abuse (specifically addiction)	7	11.3%
Resources	6	9.7%
Healthy behaviors	5	8.1%
Chronic diseases	3	4.8%
Infant mortality	2	3.2%

Survey Priorities

By survey, 154 individual consumers provided 192 responses to answer the question about 'most serious health issues.' Substance abuse received the most dots in the voting process.

TABLE 26. MONTGOMERY COUNTY: CONSUMER – MOST SERIOUS HEALTH ISSUES

Most Serious Health Issues	# Mentions	% Mentions
Substance abuse	62	18.1%
Obesity	44	12.9%
Diabetes	40	11.7%
Access to care/Services	19	5.6%
Cancer	19	5.6%
Heart	19	5.6%
Mental health	18	5.3%
Healthy food/Nutrition	14	4.1%
Care for elderly	13	3.8%
Hypertension	10	2.9%

If all the chronic diseases mentioned were combined into one category, it would be the largest category and at the top of the list. The total votes combined for cancer, heart, hypertension, and diabetes equals 88 mentions.

Other issues mentioned frequently, with at least 2% of all mentions, were: Infectious disease, Smoking, and Opportunity for exercise.

Seventeen agencies serving Montgomery County provided their feedback.

FIGURE 7. VOTING IN MONTGOMERY COUNTY

TABLE 27. MONTGOMERY COUNTY: AGENCY – MOST SERIOUS HEALTH ISSUES

Most Serious Health Issues	# Mentions	% Mentions
Infant mortality	8	15.7%
Substance abuse	8	15.7%
Obesity	6	11.8%
Diabetes	5	9.8%
Mental health	5	9.8%
Healthy Food/Nutrition	4	7.8%
Hypertension	3	5.9%

When agencies were asked for their 'top priorities,' all of the above issues were included with the addition of 'Access to care.'

Response from Health Department

Public Health - Dayton and Montgomery County identified its 'top priorities' as:

- Chronic disease prevention
- Infant mortality reduction
- Behavioral health - care coordination

> "Stop prescriptions of heavy paid meds for minor issues."
>
> -Montgomery County consumer

Montgomery County Health Snapshot

Population: 535,846

Health Outcomes

Alzheimer's disease or related disorders Medicare beneficiaries (%)	11.1	↓	10.2	9.8
Cancer mortality, Lung (rate per 100,000)	53.8	↓	54.1	44.9
Cancer mortality, Overall (rate per 100,000)	186.6	↓	182	166.4
Cancer mortality, Prostate (rate per 100,000)	25.3	↑	19.2	19.6
Child mortality (rate per 100,000)	62.5	↑	59.1	50.7
Chronic Lower Respiratory Disease (CLRD) deaths age 65+ (rate per 100,000)	356.2	↑	332.9	284.5
Diabetes (%)	13	↑	11.2	8.5
Diabetes deaths (rate per 100,000)	31.6	↓	25.4	21.2
Heart disease deaths (rate per 100,000)	176.6	↑	187.9	169.8
Infant mortality (rate per 1,000 live births)	7.6	-	7.8	6
Injury deaths (rate per 100,000)	87	↑	62	58.8
Low birthweight (%)	9.2	↑	8.6	8
Poor or fair health (%)	16	-	15	9.5
Total preterm live births (%)	13.8	↑	3.7	3.9

Health Behaviors

Adult obesity (%)	30	-	30	34.9
Adult smoking (%)	21	-	21	18.2
Alcohol-impaired driving deaths (%)	38	-	36	31
Chlamydia incidence (rate per 100,000)	546	↑	470.2	453.3
HIV prevalence (rate per 100,000)	245	↑	178	18.3
Teen births (rate per 1,000 aged 15 - 19)	43	↓	36	26.5

Substance Abuse/Mental Health

Drug poisoning deaths (rate per 100,000)	26	-	15	NA
Heroin poisoning overdose deaths (rate per 100,000)	10	↑	8.5	NA
Naloxone administration rate (rate per 10,000)	22.3	-	13.9	NA
Suicide (rate per 100,000)	15.1	-	12.9	12.6

Access to Care

Could not see doctor due to cost (%)	14	↑	13	NA
Diabetic monitoring (% diabetic Medicare enrollees 65 -75 that receive HbA1c monitoring)	82	↓	84	NA
Mammography screening (%)	58.5	↓	60	72.4
Preventable hospital stays (rate per 1,000 Medicare enrollees)	57	↓	78	NA
Uninsured (%)	10	↓	9.4	16.9

Socio-Economic/Demographic

Children eligible for free lunch (%)	43	↑	38
Children in poverty (%)	29	↑	23
Homicide (rate per 100,000)	9	-	5
Percent African American	20.7	-	12.2
Percent Hispanic	2.5	-	3.4
Percentage of population that is 65 and older	16.2	-	15.1
Percentage of population that is below 18 years of age	22.4	-	22.9
Rural population (%)	4.3	-	22.1
Violent crime (rate per 100,000)	421	↓	307

Top Causes of Death

Lung Cancer
Dementia
Alzheimer's

Cancer Mortality

(when compared to state rates)

Overall: 32% higher

Breast: 8% higher

Low mammogram rate

Alzheimer's %

More than triple the state figure

Diabetes

Diabetes % is high and increasing

Diabetes deaths 24% higher than state rate

IV Drug Use

(High rates and worsening)

Heroin poisoning overdose deaths

HIV prevalence: 38% higher than state rate

Child Health

(High rates and worsening)

Child mortality rate
&
Children in poverty

Community Need Index

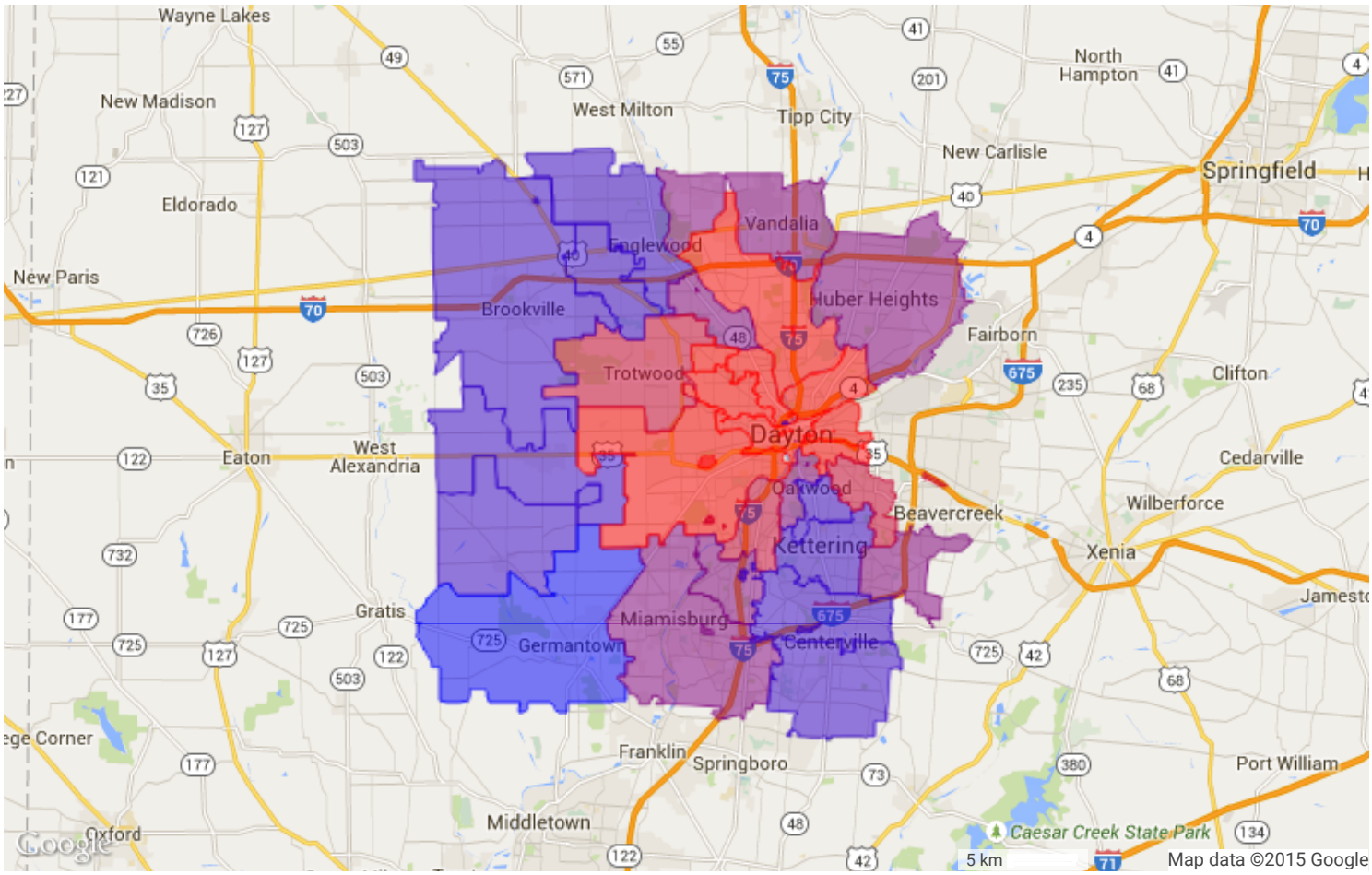
A high CNI score (3.4 to 5.0) is an indicator for socioeconomic variation, barriers to care, and increased need for health care services. 12 of the County's 30 ZIP Codes exceed a score of 3.4.

Source data range: 2010-2015

Dignity Health.

Lowest Need — Highest Need

1 - 1.7 Lowest | 1.8 - 2.5 2nd Lowest | 2.6 - 3.3 Mid | 3.4 - 4.1 2nd Highest | 4.2 - 5 Highest



Mean(zipcode): 3.3 / Mean(person): 3.3 | CNI Score Median: 3.1 | CNI Score Mode: 2.4,4.6

Zip Code	CNI Score	Population	City	County	State
45322	2.4	21778	Englewood	Montgomery	Ohio
45325	2	2575	Farmersville	Montgomery	Ohio
45327	1.6	9034	Germantown	Montgomery	Ohio
45342	3.2	38272	Miamisburg	Montgomery	Ohio
45345	2.4	6500	New Lebanon	Montgomery	Ohio
45377	3	14731	Vandalia	Montgomery	Ohio
45402	5	11612	Dayton	Montgomery	Ohio
45403	4.6	14890	Dayton	Montgomery	Ohio
45404	4.8	10127	Dayton	Montgomery	Ohio
45405	4.6	18187	Dayton	Montgomery	Ohio
45406	4.6	20949	Dayton	Montgomery	Ohio
45409	2.8	9843	Dayton	Montgomery	Ohio
45410	4.6	15699	Dayton	Montgomery	Ohio
45414	4.2	21327	Dayton	Montgomery	Ohio
45415	3	12404	Dayton	Montgomery	Ohio
45417	5	31028	Dayton	Montgomery	Ohio
45419	2.2	15611	Dayton	Montgomery	Ohio
45424	2.8	50500	Dayton	Montgomery	Ohio
45426	3.8	15514	Dayton	Montgomery	Ohio
45429	2.4	25534	Dayton	Montgomery	Ohio
45439	3.6	11226	Dayton	Montgomery	Ohio

45440	2.8	21059	Dayton	Montgomery	Ohio
45449	3.2	18622	Dayton	Montgomery	Ohio
45458	2.2	31562	Dayton	Montgomery	Ohio
45459	2.4	27127	Dayton	Montgomery	Ohio
45469	3.2	3570	Dayton	Montgomery	Ohio
45315	2	5016	Clayton	Montgomery	Ohio
45420	3.4	23751	Dayton	Montgomery	Ohio
45309	2.2	12300	Brookville	Montgomery	Ohio
45416	4.4	5513	Dayton	Montgomery	Ohio

TRUVEN HEALTH ANALYTICS

WARREN COUNTY, OHIO

Warren County is one of the fastest growing counties in Ohio, both in residential population and in commercial growth. The majority of its residents enjoy the prosperity and stability that accompanies growth. The Ohio Department of Health considers Warren County to be a rural non-Appalachian county. Its poverty rate is 5.8%. None of its ZIP Codes had a high CNI score, but the county is not immune to the growing heroin epidemic. Heroin addiction has reached wealthy suburbs as well as less affluent areas. As a result the HIV prevalence rate has increased, and it exceeded the national rate.

Warren County has been successful in improving the ratio of residents to mental health provider. The state average is 1,023 residents per mental health provider, and it is 687:1 for Warren County. Three organizations are designated Mental Health HPSAs, based on the number of psychiatrists, and two of these are correctional institutions.

Consensus on Priorities

Substance abuse, specifically of heroin, was addressed by all four sources of input. Obesity was also consistent across all four sources. Access to care/services, Diabetes, Mental health, and Smoking were also significant issues for individuals and agencies at the focus group and those completing surveys. Individual and agency survey responses agreed with the Health Department that obesity was an issue. The Health Department identified Chronic diseases as a priority, and Cancer, Heart disease, and Respiratory disease were each mentioned twice by individuals at the meeting and those who responded by survey.

Top Causes of Death

- Lung cancer
- Dementia
- Heart disease
- Alzheimer's
- COPD

Priorities from Community Meetings on July 7 and October 1, 2015

The CHNA Team held two meetings in Warren County – one in the County Seat of Lebanon and one in Franklin – to solicit opinions representing all segments of the population. Substance abuse received the most votes in the 'dot' process. At both meetings, Substance abuse, Obesity, and Access to care were the top three issues in descending order.

TABLE 28. WARREN COUNTY MEETING PRIORITIES

Priority	# Votes	% Votes
Substance abuse	36	28.3%
Obesity	16	12.6%
Access to care/services	10	7.9%
Cancer	8	6.3%
Smoking	7	5.5%
Diabetes	6	4.7%
Heart	6	4.7%
Mental health	6	4.7%
Respiratory disease	5	3.9%
Care for elderly	4	3.1%

Survey Priorities

Below are the most common responses from individual consumers, living in Warren County, who completed a survey between August 3 and November 3, 2015. Seventy-eight people answered the question, 'What are the most serious health issues facing your community?' They mentioned 127 health and/or health-related issues of particular concern to them.

TABLE 29. WARREN COUNTY: CONSUMER – MOST SERIOUS HEALTH ISSUES

Most Serious Health Issues	# Mentions	% Mentions
Substance abuse	31	27.9%
Obesity	12	10.8%
Cancer	8	7.2%
Access to care/services	7	6.3%
Heart	6	5.4%
Mental health	5	4.5%
Respiratory disease	5	4.5%
Smoking	5	4.5%
Care for elderly	4	3.6%
Diabetes	4	3.6%

Ten organizations, serving Warren County, answered the survey. Substance abuse received the most votes.

TABLE 30. WARREN COUNTY: AGENCY – MOST SERIOUS HEALTH ISSUES

Most Serious Health Issues	# Mentions	% Mentions
Substance abuse	6	18.8%
Access to care/services	4	12.5%
Obesity	4	12.5%
Infant mortality	3	9.4%
Mental health	3	9.4%
Diabetes	2	6.3%
Healthy food/Nutrition	2	6.3%
Smoking	2	6.3%

Response from Health Department

The Warren County Health Commissioner would like to know the reasons why county residents go to the hospital. This would give him useful information for planning how best to address their health needs. He identified as the County's most serious health issues:

- Chronic disease
- Heroin
- Obesity
- Getting discharge information from hospitals

Other Community Priorities

A consultant, who attended the Lebanon meeting, was working with the Warren County Health Department on its Community Health Assessment (CHA). She explained that many of the same issues were being discussed at both the CHNA and the CHA focus groups. The only difference was that the barrier of transportation had been emphasized more heavily in the Health Department focus groups.

Warren County Health Snapshot

Population: 219,169

Measure/Indicator	County	Trend	State	National
Health Outcomes				
Alzheimer's disease or related disorders Medicare beneficiaries (%)	10.6	↓	10.2	9.8
Cancer mortality, Breast (rate per 100,000)	23	-	22.6	21.3
Cancer mortality, Lung (rate per 100,000)	57.5	↑	54.1	44.9
Child mortality (rate per 100,000)	46.5	↑	59.1	50.7
Chronic Lower Respiratory Disease (CLRD) deaths age 65+ (rate per 100,000)	310.4	↓	332.9	284.5
Infant mortality (rate per 1,000 births)	6.3	↑	7.8	6
Poor or fair health (%)	11	-	15	9.5
Stroke deaths (rate per 100,000)	37.5	↓	39.9	36.2
Health Behaviors				
Adult obesity (%)	26	↓	30	34.9
Adult smoking (%)	14	↓	21	18.2
Alcohol-impaired driving deaths (%)	32	-	36	31
HIV prevalence (rate per 100,000)	70	↑	178	18.3
Teenage alcohol use (%)	15.1	↑	NA	NA
Teenage marijuana use (%)	9.5	↑	NA	NA
Substance Abuse/Mental Health				
Excessive Drinking	19	-	18	28.2
Heroin poisoning overdose deaths (rate per 100,000)	6.5	↑	8.5	NA
Naloxone administration rate (rate per 10,000)	10.4	↑	13.9	NA
Access to Care				
Mammography screening (%)	61.8	↓	60	72.4
Uninsured (%)	6	↓	9.4	16.9
Socio-Economic/Demographic				
Percent African American	3.4	-	12.2	
Percent Hispanic	2.5	-	3.4	
Percentage of population that is 65 and older	12.5	-	15.1	
Percentage of population that is below 18 years of age	26.3	-	22.9	
Rural population (%)	17.3	-	22.1	
Violent crime (rate per 100,000)	80	↑	307	

Top Causes of Death

Dementia
Lung Cancer
Heart Attack (AMI)

CLRD Deaths

-Nearly 10% higher than national rate

-Risk factor for lung cancer

Mammography Screening Low

-Below the national rate

-Rate is decreasing

-Breast Cancer rates are above state and national

HIV Prevalence

-Rate is increasing

-Exceeds national rate

Community Need Index

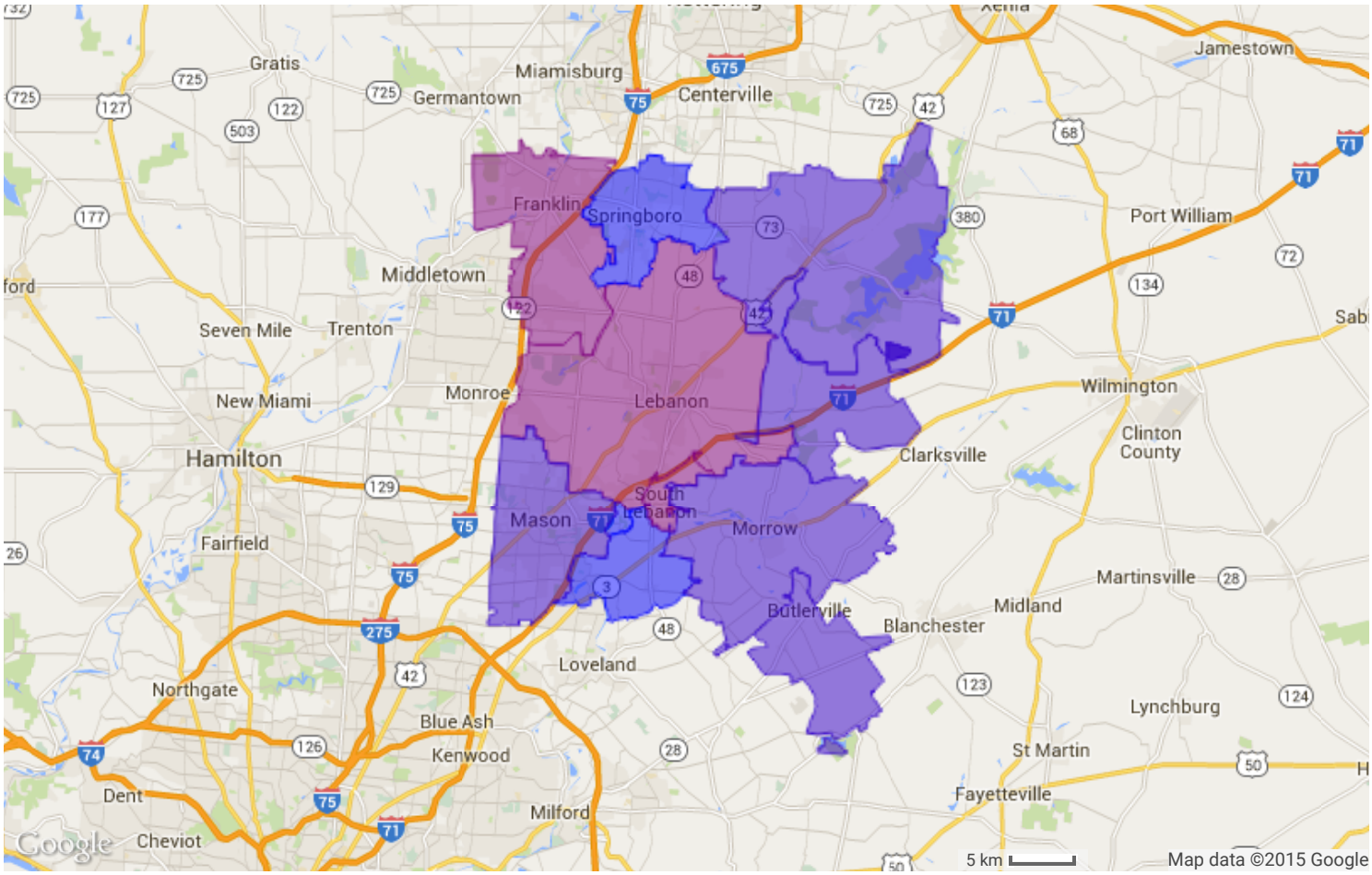
A high CNI score (3.4 to 5.0) is an indicator for socioeconomic variation, barriers to care, and increased need for health care services. None of the County's ZIP Codes exceed a score of 3.4.

Source data range: 2010-2015

Dignity Health.

Lowest Need — Highest Need

1 - 1.7 Lowest | 1.8 - 2.5 2nd Lowest | 2.6 - 3.3 Mid | 3.4 - 4.1 2nd Highest | 4.2 - 5 Highest



Mean(zipcode): 2 / Mean(person): 2.1 | CNI Score Median: 2 | CNI Score Mode: 1.8

Zip Code	CNI Score	Population	City	County	State
45005	3	30211	Franklin	Warren	Ohio
45034	1.4	1082	Kings Mills	Warren	Ohio
45036	2.6	38492	Lebanon	Warren	Ohio
45039	1.4	24400	Maineville	Warren	Ohio
45040	1.8	53640	Mason	Warren	Ohio
45054	2	2203	Oregonia	Warren	Ohio
45065	3	5512	South Lebanon	Warren	Ohio
45066	1.6	24304	Springboro	Warren	Ohio
45068	1.8	11045	Waynesville	Warren	Ohio
45152	2	11618	Morrow	Warren	Ohio
45162	1.8	2725	Pleasant Plain	Warren	Ohio

TRUVEN HEALTH ANALYTICS

CONCLUSION

Just as having more data can improve the accuracy of a statistical model, so does the combination of secondary data with primary data from a variety of stakeholders inform and add value to the CHNA process. Although this 10-county area is diverse – spanning urban, suburban, and rural areas – its major issues are illuminated when viewed through a regional lens. Access to care, drug abuse, and obesity (among many other health determinants) are not limited by geopolitical boundaries.

Few issues arose in isolation, of concern to only one county. A vote here and a vote there added up when the CHNA team consolidated information from 629 different informants. At the same time each county, and its ZIP Codes, represents a unique culture and landscape.

Substance abuse emerged as a pressing concern in all counties and from all sources of data. Focus groups, nonprofit agencies, and surveyed consumers also prioritized Mental health as an issue. Even counties as disparate as Montgomery County and Warren County are experiencing the increase in heroin use and overdose deaths. Alcohol or drugs are often abused to self-medicate symptoms of depression or anxiety, and mental disorders frequently co-occur with substance use disorders.

Although the region is not medically underserved for Mental health providers and is making progress to improve the ratio of residents to psychiatrists, its ratios are nowhere close to the 90th percentile benchmark of 386:1. Successful future models of behavioral health care will need to address the need for more providers, including but not limited to psychiatrists.

This CHNA report highlights important issues that will be addressed according to the partnerships, priorities, and resources that can be harnessed at the local level.

Chapter 6. Community Resources

During the data collection and community input process, participants identified many specific community resources. They also identified types of resources that exist in many communities. Resources can include basic needs, emergency services, education, information, support, direct care, and/or social services. The following is the list of suggestions that were not limited to one specific location. These resources were mentioned in community focus groups, written in online surveys, or contributed by public health departments. Appendix J contains a list of the specific resource recommendations.

Types of Community Resources

- 2-1-1 information and referral phone line
- Alcoholics Anonymous
- Alzheimer's units in nursing homes
- American Cancer Society
- American Red Cross
- Behavioral health organizations
- Churches
- Churches – Pastoral counseling
- Churches providing assistance to people
- Clinics
- Community centers
- Community education programs
- Community food pantry
- Community groups
- Community health centers
- Community hospitals
- Community outreach
- Community services
- Community wellness organizations
- Community-based agencies
- County
- County resources
- Curves
- Dentists
- Department of Job and Family Services
- Doctors
- Emergency Medical Services (EMS)
- Emergency Rooms
- Faith-based centers
- Family
- Family doctor
- Farmer's market
- Federal programs
- Federally Qualified Health Centers (FQHCs)
- Fire Department
- Fitness center at work
- Fitness centers
- Food Banks
- Food pantries
- Free clinics
- Fresh fruit and vegetable vendors
- Friends
- Grocery stores
- Gyms
- Health Department
- Health events
- Health fairs
- Health food stores
- Health insurance company
- Healthy restaurants
- Holistic practices
- Hospice organizations
- Hospital website
- Hospitals
- Insurance companies
- Job & Family Services
- Job center
- Libraries
- Life skills providers
- Local businesses
- Local newspaper and inserts in paper
- Marriage counselors
- Medical offices
- Men's health providers
- Mental health agencies
- Mentor programs
- Mother
- Neighborhood

Community Resources, continued

- Neighbors
- Nonprofit organizations
- Organizations focused on youth health and family support
- Outpatient services at hospitals
- Outreach programs
- Parish Nursing/Health Ministries at local churches
- Parks and recreation
- Pastoral or church groups
- Pharmacies
- Physicians
- Police Department
- Police officers
- Primary care physicians
- Primary care provider
- Private physician
- Public Health Departments
- Radio
- Recreation centers
- Schools
- Social service agencies
- Support groups
- Support groups for stressed caregivers
- United Ways
- Urgent care facilities
- Vision care
- Voluntary outreach programs
- Web information online
- Wellness centers
- West Dayton
- WIC
- Women support groups
- Women, Infants, and Children (WIC) program
- Work web sites
- Workplace
- YMCA
- Youth mentors
- YWCA

Chapter 7: Prioritization of Community Health Needs

Criteria

Toby Taubenheim, Director, Behavioral Health, Kettering Behavioral Medicine Center, scored the community health needs identified in the CHNA by considering the following criteria established by Kettering Health Network:

- Cause of hospitalization/Emergency Department visits (based on hospital utilization data from the Ohio Hospital Association)
- Feasibility and effectiveness of interventions (per The Community Guide; CDC recommendations; and/or recommendations from hospital physicians and/or leaders)
- Hospital's ability to impact effectively (already positioned to make a difference; and/or addressing issue in strategic or community plan)
- Impact on other health outcomes (based on risk factors associated with issue)
- Importance placed by community (based on community priorities in CHNA report)
- Measurable outcome exists (based on CHNA's data sources)
- Opportunities for meaningful collaboration (with current or potential community partners)
- Severity and proportion of population impacted (per incidence rate of new cases; prevalence rate; mortality rate; and/or top cause of death)
- Significant health disparities (by geographic areas of disparity measured by Community Need Index score and/or health issues identified in 2011 and 2013 CDC reports)
- Societal burden (based on education, observation, and/or experience of person scoring)
- Trend: Issue worse over time (based on up to 5 years' trend data collected for CHNA)

Process

Kettering Health Network held three meetings with professional facilitation by a consultant, Gwen Finegan, for hospital leaders to convene, discuss, and determine the prioritization process. At a meeting on June 13, 2016, Toby Taubenheim scored, with the Sycamore Medical Center leaders, the health issues according to the above criteria. The criteria were approved by the consensus of leaders attending the first two meetings in April 2016.

In order to determine the most significant priorities among all the CHNA issues, hospital leadership used a grid with a scoring scale of 1 to 5. For the CHNA prioritization process, a low numerical score denoted that the criteria did not provide enough reasons to elevate an issue as a significant priority, while a high numerical score meant that the criteria gave evidence of an issue meriting 'high priority.' A blank scoring sheet is provided as an example.

Kettering Health Network's experience with both mental health and substance abuse also led their combination into one category, since mental health issues are a root cause for most substance abuse disorders. In the CHNA cancer, diabetes, heart disease, and obesity were mentioned individually as well as mentioned within the broader category of chronic disease. During the prioritization process, these were considered both together and separately.

Consideration of community input

Hospital leaders received detailed information about the health issues identified in Montgomery and Warren Counties by Health Commissioners, individual consumers, nonprofit agencies serving vulnerable populations, and focus group participants. The issues mentioned most often during the CHNA process were:

- Access to care/services
- Cancer
- Chronic disease
- Diabetes
- Heart disease
- Infant mortality
- Mental health
- Obesity
- Substance abuse

Top priority

The top priority for Kettering Behavioral Medicine Center was:

- Mental health

It was also ranked as one of the top priorities for the Sycamore Medical Center.

Sample Scoring Sheet

Criteria	Priorities							
	Access to care/services	Cancer	Chronic disease	Diabetes	Heart disease	Infant mortality	Mental health/ Substance abuse	Obesity
Feasibility and Effectiveness of Interventions								
Cause of Hospitalization/ED Visits								
Impact on Other Health Outcomes								
Importance Placed by Community								
Hospital's Ability to Impact Effectively								
Measurable Outcomes								
Opportunities for Meaningful Collaboration								
Severity & Proportion of Population Affected								
Significant Disparities								
Societal Burden								
Trends: Issue Getting Worse over Time								
TOTAL								

Low				High
1	2	3	4	5
Not a Priority	Low Priority	Mild Priority	Moderate Priority	High Priority

Appendix

A table of contents for the appendices is provided on the next page.

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Appendix A. CDC Healthcare Disparities and Inequalities

Excerpts from CDC Health Disparities and Inequalities Reports

United States – 2011[1] and 2013 supplement[2]

Social Determinants of Health

Education and Income — 2005 and 2009. Rates of mortality, morbidity, and poor health behaviors decrease with increasing levels of education and income. For example, the prevalence of adult diabetes is higher among adults without college degrees and those with lower household incomes. Prevalence of smoking is highest for persons aged ≥18 years who do not have high school diploma.

Access to Healthier Food Retailers — 2011. (Added in 2013 supplement) People living in rural areas were four times more likely to lack access to healthy food as persons in urban areas. Areas with a high percentage of non-Hispanic whites and those with a high percentage of seniors also had consistently worse access. Access to chain supermarkets was lower in census tracts with predominantly non-Hispanic black residents than in tracts with predominantly non-Hispanic white residents. Persons living in tracts in the Midwest with a higher proportion of youths were 1.2 times as likely to lack access as persons in tracts with a low proportion of youths.

Unemployment — 2006 and 2010. (Added in 2013 supplement) Unemployed persons tend to have higher annual illness rates, lack health insurance and access to health care, and have an increased risk for death. Poor health predisposes persons to a more uncertain position in the labor market and increases the risk for unemployment. In 2010, the unemployment prevalence both for males and females was twice as high in the black and Hispanic populations as in the white population.

Environmental Hazards

Inadequate and Unhealthy Housing, 2007 and 2009. Non-Hispanic blacks had the highest odds of householders living in inadequate housing (2.3), followed by Hispanics (2.0), American Indians/Alaskan Natives (1.9), and Asians/Pacific Islanders (1.1) when compared with non-Hispanic whites. A householder earning <$25,000/year was approximately 4 times more likely to live in an inadequate housing unit as a householder making ≥$75,000 a year but was only 1.3 times more likely to live in an unhealthy (vs. inadequate) home.) No change in data from 2011 report to 2013 supplement.

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[1] MMWR *2011; 60* (*January 14, 2011*).

[2] MMWR *2013; 62* (*Supplement*; *November 22*, *2013*). The new topics added in 2013 were: access to healthier food retailers, unemployment, nonfatal work-related injuries and illnesses, fatal work-related injuries, residential proximity to major highways, activity limitations due to chronic diseases, asthma attacks (replacing prevalence of asthma), health-related quality of life, periodontitis in adults, and tuberculosis.

Unhealthy Air Quality — 2006–2009. Minority groups, including Asians and Hispanics, were more likely to live in counties that have not met federal pollution standards for fine particulate matter and ozone. No change in data from 2011 report to 2013 supplement.

Nonfatal Work-Related Injuries and Illnesses — United States, 2010. (Added in 2013 supplement) The six high-risk occupations[3] in which more than 1 million workers were employed (in each occupation) accounted for 61% of private-sector workers employed in a high-risk job. The six high-risk occupations were: health aides; janitors and cleaners; maids and housekeepers; miscellaneous production workers; drivers: sales & trucks; and hand laborers: freight, stock, and material movers. Two demographic characteristics were statistically elevated in all six occupations: the proportion of non-Hispanic black workers and that of workers with a high school education or less.

Fatal Work-Related Injuries — 2005–2009. (Added in 2013 supplement) For every 100,000, 3.7 American workers died from an injury while at work. Hispanics and foreign-born workers had the highest work-related fatal injury rates (4.4 and 4.0 per 100,000 workers, respectively). Non-Hispanic blacks had either the highest or second highest fatality rate for every industry sector. About 10% of injury-related fatalities at work were homicides, which occurred most frequently during a robbery. Customer service workers who handled money and who often worked alone (e.g., cashiers and taxi drivers) were at highest risk. Black non-Hispanic workers were twice as likely as white non-Hispanic workers to be a homicide victim at work. Women were more likely to be the victim of a homicide perpetrated by a relative.

Residential Proximity to Major Highways (within 150 meters) — 2010. (Added in 2013 supplement) Minority populations (racial, ethnic, and foreign-born) and persons of lower socioeconomic status experienced higher residential exposure to traffic and traffic-related air pollution than non-minorities and persons of higher socioeconomic status.

Health-Care Access and Preventive Health Services

Health Insurance Coverage — 2004 and 2008 Health Insurance Coverage — 2008 and 2010 During 2010, among adults aged 18–64 years, approximately two out of five persons of Hispanic ethnicity and one out of four non-Hispanic blacks were classified as uninsured. Approximately half of uninsured adults were non-Hispanic whites. Those with less than a high school diploma and Hispanics were groups with the highest uninsured rates. Hispanics accounted for 29.3% of the uninsured population.

Seasonal Influenza Vaccination Coverage — 2009–10 and 2010–11. Coverage among non-Hispanic black and Hispanic children has improved, and is either similar to, or slightly higher than, coverage among non-Hispanic white children. Among adults aged ≥65 years, influenza vaccination coverage was lower among non-Hispanic blacks than all other racial/ethnic groups.

Colorectal Cancer Incidence and Screening — 2008 and 2010 Colorectal Cancer incidence and death rates were higher among older, male, and non-Hispanic populations. Non-Hispanic blacks have higher rates than other racial and ethnic groups.

[3] A high-risk occupation was defined as one with a 'day-away-from-work' rate of at least twice the national rate of 113.3 cases of injury and illness per 10,000 FTEs. Data exclude workers on farms with fewer than 11 employees, private household workers, and the self-employed.

Health Outcomes: Mortality

Infant Deaths — 2005–2008. In Ohio, 2006-2008, the overall rate was 7.74. For non-Hispanic white women, the rate was 6.25. For non-Hispanic black women, the rate was 15.03, and it was 6.88 for Hispanic women.

Motor Vehicle–Related Deaths — 2005 and 2009. The overall motor vehicle–related age-adjusted death rate was 11.7 deaths per 100,000 population. The death rate for males was 2.5 times that for females (16.8 vs. 6.8). Approximately 4.3% of all American Indian/Alaska Native deaths and 3.3% of all Hispanic deaths were attributed to crashes, whereas crashes were the cause of death for <1.7% of blacks, whites, and Asian/Pacific Islanders. Males who were American Indian or Alaska Native had a death rate of 33.6, two to five times the rates of other races/ethnicities. Black males had the second-highest death rate (18.5), followed by white males (17.3), female American Indian/Alaska Native (17.3), Hispanics (14.7), and Asian/Pacific Islanders (6.3).

Suicides — 2005–2009. Men are far more likely to commit suicide than women, regardless of age or race/ethnicity at a rate of about four to one. 83.5% of suicides were among non-Hispanic whites, 7.0% among Hispanics, 5.5% among non-Hispanic blacks, 2.5% among Asian/Pacific Islanders, and 1.1% among American Indians/Alaska Natives. Although American Indians/Alaska Natives represented the smallest proportion of suicides of all racial/ethnic groups, they shared the highest rates with whites. The burden of suicide among their youth is considerably higher than that among other racial/ethnic groups. The highest rates occurred among American Indians/Alaska Natives aged 15–34 years. Rates of suicide of non-Hispanic blacks were highest among adolescents and young adults and leveled off with age. Rates among non-Hispanic whites were highest among those aged 40–54 years.

Drug-Induced Deaths — 1999–2010. Deaths from drug overdose have increased sharply. From 1999 to 2010, the increase has been associated with overdoses of prescription opioid pain relievers, which have more than tripled in the past 20 years, escalating to 16,651 deaths in 2010. The highest rates were among American Indians/Alaska Natives (17.1) and non-Hispanic whites (16.6). The data reflect a change from the 1980s and 1990s, when drug-induced mortality rates were higher among blacks than whites.

Coronary Heart Disease and Stroke Deaths — 2009. Risk factors for cardiovascular disease include tobacco use, physical inactivity, poor diet, diabetes, obesity, hypertension, and dyslipidemia. Death rates from coronary heart disease and stroke are declining overall, but disparities still remain in the rates of death between racial/ethnic groups. The age-adjusted death rate per 100,000 population from coronary heart disease was higher among men than women (155.8 versus 86.2) and higher among non-Hispanic blacks (141.3) than among any other racial/ethnic group. The rate of premature death (death among persons aged <75 years) was higher among non-Hispanic blacks than their white counterparts (65.5 versus 43.2). The age-adjusted rate of stroke was 38.9 deaths per 100,000 population. The age-adjusted death rate per 100,000 population from stroke was higher among non-Hispanic blacks (73.6) than among any other racial/ethnic group. The rate of premature death (death among persons aged <75 years) from stroke was higher among non-Hispanic blacks than their white counterparts (25.0 versus 10.2).

Homicides — 2007 and 2009. The relative rate difference reported for males was at least 250% higher than that of females in both data years. In addition, the relative rate difference for non-Hispanic blacks was at least 650% higher than the rate reported for non-Hispanic whites. Non-Hispanic American Indians/Alaska Natives and Hispanics also had rates that far exceeded those of non-Hispanic whites in both years. Rates were highest among persons aged 15–29 years.

Health Outcomes: Morbidity

Expected Years of Life Free of Chronic Condition–Induced Activity Limitations — 1999–2008. (Added in 2013 supplement) Expected 'years-free-of-activity-limitations' caused by chronic conditions increased. Although disparities still existed between males and females as well as between whites and blacks, the extent of these disparities declined during the 10-year period.

Obesity — 1999–2010. The prevalence of obesity among non-Hispanic blacks (51%) was 10 percentage points higher than that among Mexican- Americans and 20 percentage points higher than that among non-Hispanic white women. High-priority groups for intervention are those with low levels of educational attainment, Mexican-American boys, and non-Hispanic black girls and women.

Periodontitis among Adults Aged ≥30 Years — 2009–2010. (Added in 2013 supplement) Chronic infections associated with periodontitis can increase the risk for aspiration pneumonia in older adults and has been implicated in the pathogenesis of chronic inflammation that impairs general health and quality of life. Smoking and some chronic diseases such as diabetes are important modifiable risk factors for periodontitis. Significant disparities exist in the prevalence of periodontitis by race/ethnicity, education, and poverty level. Data suggest that non-Hispanic blacks and Mexican-Americans have similar prevalence of periodontitis but higher prevalence than non-Hispanic whites.

Preterm Births — 2006 and 2010. Although decreases in preterm births occurred for each of the race/ethnicity groups, the 2010 preterm rate for black infants (17.1%) was approximately 60% higher than the rate for white infants. The greatest absolute difference by race/ethnicity in total preterm, early preterm, and late preterm birth rates was among black infants. Black infants have had the highest risk for preterm birth since 1981 when comparable data on gestational age became available.

Potentially Preventable Hospitalizations — 2001–2009. Although rates have been decreasing, the rates of all groups decreased at a similar pace. This means that disparities present in 2001 persisted through 2009. Non-Hispanic blacks and Hispanics had higher rates of hospitalizations than non-Hispanic whites, and Asian/Pacific Islanders had lower rates than non-Hispanic whites. Rates of hospitalizations were higher among residents of neighborhoods in the three lower income quartiles compared with residents of neighborhoods in the highest income quartile.

Asthma Attacks among Persons with Current Asthma — 2001–2010. Asthma attacks were more prevalent among females, children, the poor, persons of multiple races, and Puerto Ricans.

HIV Infection — 2008 and 2010. All racial/ethnic minorities, except Asians, continue to experience higher rates of HIV diagnoses than whites. Rates of HIV infection are increasing among men having sex with men (MSM), particularly young black/African American men.

Diabetes — 2006 and 2010. Diabetes is the principal cause of kidney failure, non-traumatic lower extremity amputation, and new cases of blindness, and it is a major cause of cardiovascular disease among U.S. adults. Obesity and lack of physical activity are major risk factors for diabetes. The groups with the lowest levels of education and income continued to experience the greatest socioeconomic disparity in age-standardized prevalence and incidence rate of diagnosed diabetes. Socioeconomic disparities in the incidence of diagnosed diabetes worsened among the groups with the lowest level of education and income. Significant improvements were noted for prevalence of diagnosed diabetes among non-Hispanic black women compared with non-Hispanic white women, among those with a high school diploma or some college compared with those with a college degree or higher, and among the poor and middle income groups.

Prevalence of Hypertension and Controlled Hypertension — 2007–2010. The prevalence of hypertension has remained consistent over the past 10 years, at approximately 30%. Disparities have persisted at least since 1960, with the prevalence remaining highest among non-Hispanic black adults. Among adults with hypertension, Mexican-American persons born outside the U.S. and persons without health insurance had lower rates of blood pressure control in 2005–2008. During 2007–2010, the prevalence of hypertension was highest among those aged ≥65 years (71.6%) and among non-Hispanic blacks (41.3%), two population groups known to be disproportionately affected. Non-Hispanic blacks and Hispanics continue to have lower prevalence of control than their non-Hispanic white counterparts.

Health-Related Quality of Life — 2006 and 2010. (Added in 2013 Supplement) Groups with higher percentages of self-reported fair or poor health and who report more physically unhealthy days and more mentally unhealthy days are usually women, older persons (with respect to physical health), younger persons (with respect to mental health), minority racial/ethnic groups (except for Asian/Pacific Islanders), those with less education, those who speak another language besides English at home, and those with a disability.

Tuberculosis (TB) — 1993–2010. (Added in 2013 supplement) In U.S.-born persons, the relative difference in TB rates compared with whites was 614% for blacks, 429% for Asians/Pacific Islanders, 286% for Hispanics, and 757% for American Indians/Alaska Natives. Among foreign-born persons in 2010, the relative difference in TB rates compared with whites was 2,271% for Asians/Pacific Islanders, 1,771% for blacks, and 836% for Hispanics.

Health Outcomes: Behavioral Risk Factors

Binge Drinking — 2011.[4] Binge drinking is a risk factor for many adverse health and social outcomes, including motor vehicle crashes; violence; suicide; hypertension; acute myocardial infarction; sexually transmitted diseases; unintended pregnancy; fetal alcohol syndrome; and sudden infant death syndrome. People who binge drink tend to do so frequently (average of four times per month) and with high intensity (average of eight drinks per occasion). Areas with the highest prevalence of binge drinking included states in the Midwest. In Ohio 20.5% to 25.1% are binge drinkers. States with the highest intensity of binge drinking were generally located in the Midwest (Ohio = 6.8 to 7 drinks on occasion). The groups at highest risk for binge drinking are persons aged 18–34 years, males, whites, non-Hispanics, and persons with higher household incomes. Binge drinkers aged ≥65 years reported the highest binge drinking frequency. The

[4] The survey instrument, Behavioral Risk Factor Surveillance System, did not collect responses from persons living in institutions, such as on college campuses.

intensity of binge drinking was highest among American Indians/Alaska Natives (8.4 drinks per occasion).

Pregnancy and Childbirth among Females Aged 10–19 Years — 2007–2010. Teenagers who give birth are much more likely than older women to deliver a low birthweight or preterm infant, and their babies are at higher risk for dying in infancy. Within each age group, pregnancy rates among non-Hispanic black and Hispanic females were two to three times higher than rates for non-Hispanic white females.

Cigarette Smoking — 2006-2008 and 2009-2010. Progress has been achieved in reducing disparities in cigarette smoking among certain racial/ethnic groups. However, little progress has been made in reducing disparities in cigarette smoking among persons of low socioeconomic status (SES) and low educational attainment. Among racial/ethnic groups, smoking prevalence was lowest among black and Asian youth aged 12–17 years. Smoking prevalence remained highest among American Indian/Alaska Native youth and adults. Prevalence of smoking is highest for persons aged ≥18 years who do not have high school diploma.

Expected Years of Life Free of Chronic Condition–Induced Activity Limitations — 1999–2008. Expected 'years-free-of-activity-limitations' caused by chronic conditions increased. Although disparities still existed between males and females as well as between whites and blacks, the extent of these disparities declined during the 10-year period.

Appendix B. List of Data Sources

Measure	Data Source(s)	Years
Demographics		
Percentage of population not proficient in English	CHR 2015 - American Community Survey	2009, 2007-2011, 2008-2012, 2009-2013
Percentage of population that is 65 and older	CHR 2015 - Census Population Estimates	2009, 2011, 2012, 2013
Percentage of population that is American Indian/Alaskan Native	CHR 2015 - Census Population Estimates	2009, 2011, 2012, 2013
Percentage of population that is Asian	CHR 2015 - Census Population Estimates	2009, 2011, 2012, 2013
Percentage of population that is below 18 years of age	CHR 2015 - Census Population Estimates	2009, 2011, 2012, 2013
Percentage of population that is Hispanic	CHR 2015 - Census Population Estimates	2009, 2011, 2012, 2013
Percentage of population that is Native Hawaiian/Other Pacific Islander	CHR 2015 - Census Population Estimates	2009, 2011, 2012, 2013
Percentage of population that is non-Hispanic African American	CHR 2015 - Census Population Estimates	2009, 2011, 2012, 2013
Percentage of population that is non-Hispanic white	CHR 2015 - Census Population Estimates	2011, 2012, 2013
Percentage of population that is rural	CHR 2015 - Census Population Estimates	2009, 2010
Population	CHR 2015 - Census Population Estimates	2009, 2011, 2012, 2013
Health Outcomes		
Child mortality (rate per 100,000)	CHR 2015 - CDC WONDER mortality data	2006-2010, 2007-2010, 2009-2012
Chronic lower respiratory disease deaths age 65+ (rate per 100,000)	Health Indicators Warehouse	2009-2011, 2010-2012, 2011-2013
Diabetes (%)	CHR 2015 - CDC Diabetes Interactive Atlas	2008, 2009, 2010, 2011
Diabetes deaths (rate per 100,000)	Health Indicators Warehouse	2011-2013
Heart disease deaths (rate per 100,000)	Health Indicators Warehouse	2009-2011, 2010-2012, 2011-2013
HIV incidence (rate per 100,000)	State Health Department	2011-2013
HIV prevalence (rate per 100,000)	CHR 2015 - National Center for HIV/AIDS, Viral Hepatitis, STD, and TB prevention	2007, 2008, 2009, 2010
Infant mortality (rate per 1,000 births) **	CHR 2015 - Health Indicators Warehouse	** 2006-2010, 2002-2008, 2004-2010
Causes of death	CDC Wonder - Cause of Death & Underlying Causes of Death	2011, 2012, 2013, 2014

List of Data Sources, continued

Premature age-adjusted mortality (rate per 100,000)	CHR 2015 - CDC WONDER mortality data	2008-2010, 2010, 2012
Stroke deaths (rate per 100,000)	Health Indicators Warehouse	2009-2011, 2010-2012, 2011-2013
Length of Life		
Years of potential life lost before age 75	CHR 2015 - National Center for Health Statistics	2005-2007, 2006-2008, 2008-2010, 2010-2012
Quality of life		
Alzheimer's disease or related disorders Medicare beneficiaries (%)	Health Indicators Warehouse	2011-2013
Low birthweight (%)	CHR 2015 - National Center for Health Statistics	2001-2007, 2002-2008, 2004-2010, 2005-2011, 2006-2012
Poor mental health days (in past 30 days)	CHR 2015 - BRFSS	2003-2009, 2004-2010, 2005-2011, 2006-2012, 2006-2013
Poor or fair health (%)	CHR 2015 - BRFSS	2003-2009, 2004-2010, 2005-2011, 2006-2012
Poor physical health days (in past 30 days)	CHR 2015 - BRFSS	2003-2009, 2004-2010, 2005-2011, 2006-2012
Suicide (rate per 100,000)	Health Indicators Warehouse	2011-2013
Total preterm live births (%)	Health Indicators Warehouse	2011-2013
Health Behaviors		
Access to exercise opportunities (%)	CHR 2015 - Business Analyst ESRI, Delorme map data, & US Census Tigerline Files	2010 & 2012, 2010 & 2013
Adult obesity (%)	CHR 2015 - CDC Diabetes Interactive Atlas	2008, 2009, 2010, 2011
Adult smoking (%)	CHR 2015 - BRFSS	2003-2009, 2004-2010, 2005-2011, 2006-2012
Alcohol-impaired driving deaths (%)	CHR 2015 - Fatality Analysis Reporting System	2008-2012, 2009-2013
Chlamydia incidence (rate per 100,000)	State Health Department	2013-2015
Drug poisoning deaths (per 100,000)	CHR 2015 - CDC WONDER mortality data	2006-2012
Excessive drinking (%)	CHR 2015 - BRFSS	2003-2009, 2004-2010, 2005-2011, 2006-2012
Food environment index	CHR 2015 - USDA Food Environment Atlas, Map the Meal Gap	2010 & 2011, 2012

List of Data Sources, continued

Food insecurity (%)	CHR 2015 - Map the Meal Gap	2011, 2012
Gonorrhea incidence (rate per 100,000)	State Health Department	2013-2015
Heroin poisoning overdose deaths (per 100,000)	State Health Department	2011-2013
Limited access to healthy foods (%)	CHR 2015 - USDA Food Environment Atlas, Map the Meal Gap	2012, 2010
Motor vehicle crash deaths (per 100,000)	CHR 2015 - National Center for Health Statistics	2004-2010, 2006-2012
Naloxone administration rate (per 10,000) Ohio Only	Ohio Dept. of Mental Health and Addiction	2011-2013
Physical inactivity (%)	CHR 2015 - CDC Diabetes Interactive Atlas	2009, 2010, 2011
Total syphilis (rate per 100,000)	State Health Department	2013-2015
Teen births (per 1,000 age 15-19)	CHR 2015 - National Center for Health Statistics	2001-2007, 2002-2008, 2004-2010, 2005-2011, 2006-2012
Student Drug Use (for Warren County)		
Alcohol	Pride Student Drug Use Survey	2012, 2014
Marijuana	Pride Student Drug Use Survey	2012, 2014
Prescription/OTC drugs abuse	Pride Student Drug Use Survey	2012, 2014
Tobacco	Pride Student Drug Use Survey	2012, 2014
Clinical Care		
Could not see doctor due to cost (%)	CHR 2015 - BRFSS	2004-2010, 2005-2011, 2006-2012
Dentists (ratio)	CHR 2015 - Area Health Resource File/National Provider Identification File	2007, 2011-2012, 2012, 2013
Diabetic screening (% HbA1c)	CHR 2015 - Dartmouth Atlas of Health Care	2006-2007, 2009, 2010, 2011, 2012
Health care costs (Medicare per enrollee)	CHR 2015 - Dartmouth Atlas of Health Care	2007, 2009, 2011, 2012
Mammography screening (%)	CHR 2015 - Dartmouth Atlas of Health Care	2006-2007, 2009, 2010, 2011, 2013
Mental health providers (ratio)	CHR 2015 - CMS, National Provider Identification File; HRSA Data Warehouse	2007, 2008, 2011-2012, 2013, 2014
NP, PA, CNS (ratio)	CHR 2015 - CMS, National Provider Identification file	2012, 2014
Preventable hospital stays (per 1,000 Medicare enrollees)	CHR 2015 - Dartmouth Atlas of Health Care	2006-2007, 2009, 2010, 2011, 2012
Primary care physicians (ratio)	CHR 2015 - Area Health Resource File/American Medical Association	2008, 2009, 2011-2012, 2011, 2012
Uninsured % (Total)	New York Times - Enroll America and Civis Analytics	2013-2014

List of Data Sources, continued

Social & Economic Factors		
Children eligible for free lunch (%)	CHR 2015 - National Center for Education Statistics	Data for 2012 and future estimates based on 2012
Children in poverty (%)	CHR 2015 - Small Area Income and Poverty Estimates	2008, 2010, 2011, 2012, 2013
Children in single-parent households (%)	CHR 2015 - American Community Survey	2012
High school graduation (%)	CHR 2015 - data.gov, supplemented w/ National Center for Education Statistics	2006-2007, 2008-2010, varies by state
Homicide rate (per 100,000)	CHR 2015 - National Center for Health Statistics	2001-2007, 2006-2012
Inadequate social support (%)	CHR 2015 - County Business Patterns	2005-2009, 2004-2010, 2005-2010, 2012
Injury deaths (per 100,000)	CHR 2015 - CDC WONDER mortality data	2006-2010, 2008-2012
Median household income ($)	CHR 2015 - Small Area Income and Poverty Estimates	2008, 2010, 2011, 2012, 2013
Some college (%)	CHR 2015 - American Community Survey	2005-2009, 2006-2010, 2007-2011, 2008-2012, 2009-2013
Unemployment (%)	CHR 2015 - Bureau of Labor Statistics	2009, 2010, 2011, 2012, 2013
Violent crime (per 100,000)	CHR 2015 - Uniform Crime Reporting - FBI	2006-2008, 2007-2009, 2008-2010, 2009-2011, 2010-2012
Physical Environment		
Annual average ambient concentrations of PM2.5 in mg/m3	CDC, EPA	2011-2013
Ozone - # of days with maximum 8-hour average ozone concentration over the NAAQS	CDC, EPA	2011-2013
Greater Cincinnati Community Health Status Survey	(for Warren County)	
Adults with hypertension or high blood pressure (% Yes)	GCHSS	2010 & 2013
Alcohol (% Heavy Drinking)	GCHSS	2012 & 2014
Cost affecting care access (% Yes)	GCHSS	2012 & 2014
Daily intake of vegetables	GCHSS	2012 & 2014
Depression (%)	GCHSS	2012 & 2014
Diabetes (%)	GCHSS	2012 & 2014
Insurance barrier - lack of (% Yes)	GCHSS	2012 & 2014
Insurance barrier - type of (% Yes)	GCHSS	2012 & 2014

List of Data Sources, continued

Obesity (% Moderately, Severely, Very Severely)	GCHSS	2012 & 2014
People with a usual primary care provider (%)	GCHSS	2012 & 2014
Physical exercise in the past month (% Yes)	GCHSS	2012 & 2014
Racial barriers to healthcare (% Yes)	GCHSS	2012 & 2014
Recreation facility use (% once a week or more) (Optional)	GCHSS	2012 & 2014
Smoking (% Current Smoker)	GCHSS	2012 & 2014
Cancer		
Cancer incidence, Breast (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer incidence, Colon (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer incidence, Kidney (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer incidence, Lung (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer incidence, Oro-pharyngeal (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer incidence, Overall (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer incidence, Prostate (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer incidence, Thyroid (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer incidence, Uterus (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer mortality, Breast (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer mortality, Colon (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer mortality, Kidney (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer mortality, Lung (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer mortality, Oro-pharyngeal (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer mortality, Overall (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer mortality, Prostate (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer mortality, Thyroid (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012
Cancer mortality, Uterus (rate per 100,000)	Healthy Ohio - Ohio Department of Health	2006-2012

** There is some overlap in the year span for data used in this measure, due to a change in the data provider. In the 2013 Rankings release year CHR used data from CDC WONDER Compressed Mortality File. In the 2014 and 2015 Rankings release years, CHR used data from the Health Indicators Warehouse (which used the Linked Birth/Infant Death Data Set).

Appendix C. Explanation of Measures & Trends

Measure	Trend	Explanation
Demographics		
Percentage of population not proficient in English	↑	Indicates that the percentage of people living in the county that is not proficient in English is going up
Percentage of population that is 65 and older	↑	Indicates that the percentage of people living in the county that is 65 and older is going up
Percentage of population that is American Indian/Alaskan Native	↑	Indicates that the percentage of people living in the county that is American Indian/Alaskan Native is going up
Percentage of population that is Asian	↑	Indicates that the percentage of people living in the county that is Asian is going up
Percentage of population that is below 18 years of age	↑	Indicates that the percentage of people living in the county that is 18 and younger is going up
Percentage of population that is Hispanic	↑	Indicates that the percentage of people living in the county that is Hispanic is going up
Percentage of population that is Native Hawaiian/Other Pacific Islander	↑	Indicates that the percentage of people living in the county that is Native Hawaiian/Other Pacific Islander is going up
Percentage of population that is non-Hispanic African American	↑	Indicates that the percentage of people living in the county that is non-Hispanic African American' is going up
Percentage of population that is non-Hispanic white	↑	Indicates that the percentage of people living in the county that is non-Hispanic white is going up
Percentage of population that is rural	↑	Indicates that the percentage of people living in rural areas in the county is going up
Population	↑	Indicates that the population of the county is going up
Health Outcomes		
Child mortality (rate per 100,000)	↑	Indicates that the amount of people dying 18 and younger has been going up in the county
Diabetes (%)	↑	Indicates that the amount of people with diabetes has been going up in this county
Diabetes deaths (rate per 100,000)	↑	Indicates that the amount of people dying from diabetes has been going up in the county
HIV incidence (rate per 100,000)	↑	Indicates that the amount of people acquiring HIV has been going up in the county
HIV prevalence (rate per 100,000)	↑	Indicates that the amount of people living with HIV has been going up in the county
Infant mortality (rate per 1,000 births)	↑	Indicates that the amount of infants dying before age 1 has been going up in the county
Premature age-adjusted mortality (rate per 100,000)	↑	Indicates that the number of deaths among county residents under the age of 75 is going up

Explanation, *continued*

Measure	Trend	Explanation
Length of Life		
Years of potential life lost before age 75	↑	Indicates that the amount of age adjusted years of potential life lost before age 75 is going up in the county
Quality of life		
Alzheimer's disease or related disorders Medicare beneficiaries (%)	↑	Indicates that the amount of Medicare beneficiaries with Alzheimer's disease or a related dementia disorder is going up in the county
Low birthweight (%)	↑	Indicates that the amount of babies born at a low birthweight is going up in the county
Poor mental health days (in past 30 days)	↑	Indicates that the amount of people replying to the survey question “Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" has been going up in the county
Poor or fair health (%)	↑	Indicates that the amount of people replying to a survey that they have Poor or Fair health is going up in the county
Poor physical health days (in past 30 days)	↑	Indicates that the amount of people replying to the survey question “Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?" is going up in the county
Suicide (rate per 100,000)	↑	Indicates that the amount of people that die from a suicide is going up in the county
Total preterm live births (%)	↑	Indicates that the amount of babies born preterm is going up in the county
Health Factors: Health Behaviors		
Access to exercise opportunities (%)	↑	Indicates that the percentage of the population with access to exercise opportunities is going up in the county
Adult obesity (%)	↑	Indicates that the percentage of obese adults is going up in the county
Adult smoking (%)	↑	Indicates that the percentage of adults who smoke tobacco is going up in the county
Alcohol-impaired driving deaths (%)	↑	Indicates that the percentage of alcohol-impaired driving deaths is going up in the county
Drug poisoning deaths (per 100,000)	↑	Indicates that the percentage of adults who died from a drug poisoning is going up in the county

Explanation, *continued*

Measure	Trend	Explanation
Health Factors: Health Behaviors		*continued*
Excessive drinking (%)	↑	Indicates that the percentage of adults who drink more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days or those drinking more than 1 (women) or 2 (men) drinks per day on average is going up in the county
Food environment index	↑	Indicates that the amount of people that have limited access to healthy/reliable foods has been going down in the county
Food insecurity (%)	↑	Indicates that the amount of people with without a reliable source of food in the past year has been going up in the county
Heroin poisoning overdose deaths (per 100,000)	↑	Indicates that the amount of people dying from a heroin related heroin drug poisoning is going up in the county
Limited access to healthy foods (%)	↑	Indicates that the amount of people with limited access to healthy food is going up in the county
Motor vehicle crash deaths (per 100,000)	↑	Indicates that the amount of people who die in motor vehicle crashes is going up in the county
Naloxone administration rate (per 10,000)	↑	Indicates that the amount of Naloxone administrations is going up in the county. Naloxone is a drug that stops a heroin overdose.
Physical inactivity (%)	↑	Indicates that the percentage of adults aged 20 and over reporting no leisure-time physical activity
Teen births (per 1000 age 15-19)	↑	Indicates the amount of teenage mothers aged 15-19 giving birth is going up in the county
Student Drug Use		
Alcohol	↑	Indicates that high school children that report drinking alcohol is going up in the county
Marijuana	↑	Indicates that high school children that report smoking marijuana is going up in the county
Prescription/OTC drugs abuse	↑	Indicates that high school children that report abusing prescription or over the county drugs is going up in the county
Tobacco	↑	Indicates that high school children that report using tobacco products is going up in the county

Explanation, *continued*

Measure	Trend	Explanation
Clinical Care		
Could not see doctor due to cost (%)	↑	Indicates that the amount of adults who could not see a doctor due to cost is going up in the county
Dentists (ratio)	↑	Indicates that the amount of residents per dentist is going up in the county
Diabetic screening (% HbA1c)	↑	Indicates that the percentage of diabetic Medicare enrollees aged 65-75 that receive HbA1c monitoring is going up in the county
Health care costs (Medicare per enrollee)	↑	Indicates that the Medicare costs per enrollee is going up in the county
Mammography screening (%)	↑	Indicates that the percentage of female Medicare enrollees aged 67-69 that receive mammography screening is going up in the county
Mental health providers (ratio)	↑	Indicates that the amount of residents per mental health provider is going up in the county
NP, PA, CNS (ratio)	↑	Indicates that the amount of residents per nurse practitioner/physician assistant/certified nurse specialist is going up in the county
Preventable hospital stays (per 1,000 Medicare enrollees)	↑	Indicates that the number of hospitals stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees is going up in the county
Primary care physicians (ratio)	↑	Indicates that the number of residents per primary care physician is going up in the county
Social & Economic Factors		
Children eligible for free lunch (%)	↑	Indicates that the percentage of children eligible for a free lunch at school is going up in the county
Children in poverty (%)	↑	Indicates that the percentage of children who live in poverty is going up in the county
Children in single-parent households (%)	↑	Indicates that the percentage of children living in single-parents households is going up in the county
High school graduation (%)	↑	Indicates that the percentage of children graduating high school is going up in the county
Homicide rate (per 100,000)	↑	Indicates that the amount of people who die from a homicide is going up in the county
Injury deaths (per 100,000)	↑	Indicates that the amount of people who die from an injury is going up in the county
Median household income ($)	↑	Indicates that the median household income is going up in the county
Some college (%)	↑	Indicates that the percentage of people with some college education is going up in the county

Explanation, *continued*

Measure	Trend	Explanation
Social & Economic Factors		*continued*
Unemployment (%)	↑	Indicates that the percentage of adults who are unemployed is going up in the county
Violent crime (per 100,000)	↑	Indicates that the amount of violent crime is going up in the county
Physical Environment		
Annual average ambient concentrations of PM2.5 in mg/m3	↑	Indicates that the annual average ambient concentrations of PM 2.5 in mg/m3 is going up in the county
Ozone - # of days with maximum 8-hour avg. ozone concentration over the NAAQS	↑	Indicates that the number of days with maximum 8-hour average ozone concentration of the NAAQS is going up in the county
GCHSS Results		
Adults with hypertension or high blood pressure (% Yes)	↑	Indicates that the percentage of adults who report they have hypertension or high blood pressure is going up in the county
Alcohol (% Heavy Drinking)	↑	Indicates that the percentage of adults who report they drink heavily is going up in the county
Cost affecting care access (% Yes)	↑	Indicates that the percentage of adults who report experiencing cost affecting their access to care is going up in the county
Daily intake of vegetables	↑	Indicates that the percentage of adults who report they eat their daily recommended intake of vegetables is going up in the county
Depression (%)	↑	Indicates that the percentage of adults who report they have depression is going up in the county
Diabetes (%)	↑	Indicates that the percentage of adults who report they have diabetes is going up in the county
Insurance barrier - lack of (% Yes)	↑	Indicates that the percentage of adults who report they experience barriers due to a lack of insurance is going up in the county
Insurance barrier - type of (% Yes)	↑	Indicates that the percentage of adults who report they experience barriers due to their type of insurance is going up in the county
Obesity (% Moderately, Severely, Very Severely)	↑	Indicates that the percentage of adults who report they are moderately, severely, or very severely obese is going up in the county
People with a usual primary care provider (%)	↑	Indicates that the percentage of adults who report they have a usual primary care provider is going up in the county

Explanation, *continued*

Measure	Trend	Explanation
GCHSS Results		*continued*
Physical exercise in the past month (% Yes)	↑	Indicates that the percentage of adults who report they exercised in the past month is going up
Racial barriers to healthcare (% Yes)	↑	Indicates that the percentage of adults who report racial barriers to healthcare is going up
Smoking (% Current Smoker)	↑	Indicates that the percentage of adults who report they are a current tobacco smoker is going up in the county
Chlamydia incidence (rate per 100,000)	↑	Indicates that the percentage of adults acquiring a chlamydia infection is going up in the county
Chronic lower respiratory disease deaths age 65+ (rate per 100,000)	↑	Indicates that the amount of adults aged 65 or older who dies from a Chronic Lower Respiratory Disease is going up in the county
Gonorrhea incidence (rate per 100,000)	↑	Indicates that the amount of adults acquiring a gonorrhea infection is going up in the county
Heart disease deaths (rate per 100,000)	↑	Indicates that the amount of adults dying from a heart disease related death is going up in the county
Stroke deaths (rate per 100,000)	↑	Indicates that the amount of adults dying from a stroke is going up in the county
Syphilis incidence (rate per 100,000)	↑	Indicates that the amount of adults acquiring a syphilis infection is going up in the county
Uninsured % (Total)	↑	Indicates that the amount of uninsured adults is going up in the county
Cancer		
Cancer incidence, Breast (rate per 100,000)	↑	Indicates that the amount of people acquiring breast cancer is going up in the county
Cancer incidence, Colon (rate per 100,000)	↑	Indicates that the amount of people acquiring colon cancer is going up in the county
Cancer incidence, Kidney (rate per 100,000)	↑	Indicates that the amount of people acquiring kidney cancer is going up in the county
Cancer incidence, Lung (rate per 100,000)	↑	Indicates that the amount of people acquiring lung cancer is going up in the county
Cancer incidence, Oro-pharyngeal (rate per 100,000)	↑	Indicates that the amount of people acquiring Oro-pharyngeal cancer is going up in the county
Cancer incidence, Overall (rate per 100,000)	↑	Indicates that the amount of people acquiring cancer is going up in the county
Cancer incidence, Prostate (rate per 100,000)	↑	Indicates that the amount of people acquiring prostate cancer is going up in the county
Cancer incidence, Thyroid (rate per 100,000)	↑	Indicates that the amount of people acquiring thyroid cancer is going up in the county
Cancer incidence, Uterus (rate per 100,000)	↑	Indicates that the amount of people acquiring uterine cancer is going up in the county
Cancer mortality, Breast (rate per 100,000)	↑	Indicates that the amount of people dying from breast cancer is going up in the county

Explanation, *continued*

Measure	Trend	Explanation
Cancer		*continued*
Cancer mortality, Colon (rate per 100,000)	↑	Indicates that the amount of people dying from colon cancer is going up in the county
Cancer mortality, Kidney (rate per 100,000)	↑	Indicates that the amount of people dying from kidney cancer is going up in the county
Cancer mortality, Lung (rate per 100,000)	↑	Indicates that the amount of people dying from lung cancer is going up in the county
Cancer mortality, Oro-pharyngeal (rate per 100,000)	↑	Indicates that the amount of people dying from Oro-pharyngeal cancer is going up in the county
Cancer mortality, Overall (rate per 100,000)	↑	Indicates that the amount of people dying from cancer is going up in the county
Cancer mortality, Prostate (rate per 100,000)	↑	Indicates that the amount of people dying from prostate cancer is going up in the county
Cancer mortality, Thyroid (rate per 100,000)	↑	Indicates that the amount of people dying from thyroid cancer is going up in the county
Cancer mortality, Uterus (rate per 100,000)	↑	Indicates that the amount of people dying from uterine cancer is going up in the county

Appendix D. List of Focus Group Attendees

From 7/7 through 11/3/2015

Name	Indiv.	Org.	Org. Name	Street Address	ZIP	City	County	Date
Amy Freymuth		x	Auglaize County Department of Job and Family Services	12 N. Word Street	45895	Wapakoneta	Auglaize	10/6/2015
Kendall Krites		x	Wapakoneta Fire & EMS	103 Willipie Street	45895	Wapakoneta	Auglaize	10/6/2015
Annie Stalnaker		x	Family Life Center	104 W. Spring Street	45885	St. Marys	Auglaize	10/6/2015
Marc Bellisario		x	Primary Health Solutions	210 S. Second Street	45011	Hamilton	Butler	7/30/2015
Kay Farrar		x	City of Hamilton Health Department	345 High Street, Suite 330	45011	Hamilton	Butler	7/30/2015
Sarah Kinley		x	YWCA Hamilton	244 Dayton Street	45011	Hamilton	Butler	7/30/2015
Sharon Klein		x	McCullough-Hyde Hospital	110 W. Poplar Street	45056	Oxford	Butler	7/30/2015
Lauren Marsh		x	Butler County Coalition / Mental Health and Addiction Recovery Services	5963 Boymel Drive	45014	Fairfield	Butler	7/30/2015
Shawna Noble		x	Butler County Commissioners	315 High Street	45011	Hamilton	Butler	7/30/2015
Araceli Ortiz		x	TriHealth Outreach Ministries	412 S. Front Street	45013	Hamilton	Butler	7/30/2015
Jackie Phillips		x	Middletown City Health Department	One Donham Plaza	45042	Middletown	Butler	7/30/2015
Shirley Smith		x	TriHealth	412 S. Front Street	45013	Hamilton	Butler	7/30/2015
Rachel Stall		x	Atrium Medical Center	One Medical Center Drive	45005	Middletown	Butler	7/30/2015
Kimball Stricklin		x	Butler Behavioral Health Services	1490 University Boulevard	45011	Hamilton	Butler	7/30/2015
Christi Valentini		x	Coalition for a Healthy, Safe and Drug-Free Greater Hamilton	2935 Hamilton-Mason	45011	Hamilton	Butler	7/30/2015
Danielle Webb		x	Community First Solutions	230 Ludlow	45011	Hamilton	Butler	7/30/2015
Heather Wells		x	Butler County Families and Children First Council	400 N. Fair Avenue	45011	Hamilton	Butler	7/30/2015
Kecia C. Williams		x	Mercy Health - Fairfield OB Clinic	3000 Mack Road, Suite 110	45014	Fairfield	Butler	7/30/2015
Nick Heimlich		x	Springfield Fire	350 N. Fountain Avenue	45504	Springfield	Clark	10/13/2015

Name	Indiv.	Org.	Org. Name	Street Address	ZIP	City	County	Date
Brian Leciejewski		x	Springfield Fire	350 N. Fountain Avenue	45504	Springfield	Clark	10/13/2015
Charles Patterson		x	Clark County Combined Health District	529 E. Home Road	45503	Springfield	Clark	10/13/2015
Kerry Pedraza		x	United Way	120 S. Center Street	45502	Springfield	Clark	10/13/2015
Stephen Reigelsperger	x		Springfield High School	701 E. Home Road	45503	Springfield	Clark	10/13/2015
Paul Weber		x	YMCA	300 S. Limestone Street	45505	Springfield	Clark	10/13/2015
Shelly Acker		x	Wayne Healthcare	835 Sweitzer Street	45331	Greenville	Darke	10/15/2015
Christy Baker		x	Darke County United Way	207 E. Fourth, PO Box 716	45531	Greenville	Darke	10/15/2015
Shelly Gasson		x	Midmark	60 Vista Drive	45380	Versailles	Darke	10/15/2015
Terry Holman		x	Health Department	3 W. Garst Avenue	45331	Greenville	Darke	10/15/2015
Carlos Menendez		x	Family Health	5735 Meeker Road	45331	Greenville	Darke	10/15/2015
Deanna Schlarman		x	Darke/Mercer County WIC	5735 Meeker Road	45331	Greenville	Darke	10/15/2015
Russ Thompson		x	Greenville Fire Department	100 Public Square	45331	Greenville	Darke	10/15/2015
Judy Baker		x	Xenia Adult Recreation & Services Ctr.	130 E. Church Street	45385	Xenia	Greene	10/29/2015
Rachel Hotelling		x	Greene & Soin Hospital	1 Prestige Place	45342	Miamisburg	Greene	10/29/2015
Trish Jenkins	x		Miami Valley Jamestown ER	49040 Cottonville Road	45335	Jamestown	Greene	10/29/2015
Stephanie Luman	x		Miami Valley Jamestown ER	49040 Cottonville Road	45335	Jamestown	Greene	10/29/2015
Alan Milkis		x	YMCA	135 E. Church Street	45385	Xenia	Greene	10/29/2015
Karen Puterbaugh		x	Greene County Council on Aging	1195 W. Second Street	45385	Xenia	Greene	10/29/2015
Amy Esser		x	Council on Rural Services	201 Robert M. Davis Pkwy.	45356	Piqua	Miami	10/20/2015
Deb French		x	Miami County Public Health	510 W. Water Street	45373	Troy	Miami	11/3/2015

Name	Indiv.	Org.	Org. Name	Street Address	ZIP	City	County	Date
Bill Davis		x	SPANOhio.org	7231 Hardwicke Place	45414	Dayton	Montgomery	10/15/2015
Esmail Abuhdima	x			6603 Hidden Knolls Court	45449	West Carrolton	Montgomery	10/22/2015
Letitia Alexander		x	The Potters House	2050 Germantown Avenue	45417	Dayton	Montgomery	10/22/2015
Jason Brown		x	Kettering Health Network	4000 Miamisburg Centerville Road	45342	Miamisburg	Montgomery	10/22/2015
Mr. Channonher	x						Montgomery	10/22/2015
Melonya Cook		x	United Way	33 W. First Street, #500	45402	Dayton	Montgomery	10/22/2015
Don Drake		x	Circles - Kettering	1047 Independence Drive	45429	Kettering	Montgomery	10/22/2015
Kim Estepp		x	Kettering Medical Center	3535 Southern Boulevard	45429	Kettering	Montgomery	10/22/2015
Kelly Fackel		x	Grandview Medical Center	405 W. Grand Avenue	45405	Dayton	Montgomery	10/22/2015
Philip Herman	x			2399 Hemphill Road	45440	Kettering	Montgomery	10/22/2015
Andrea Hoff		x	ADAMHS	409 E. Monument Avenue	45402	Dayton	Montgomery	10/22/2015
Paul Hoover		x	Kettering Health Network	3535 Southern Boulevard	45429	Kettering	Montgomery	10/22/2015
Shannon Jackson		x	The Potters House	2050 Germantown Avenue	45417	Dayton	Montgomery	10/22/2015
Teresa Kanthak		x	Premier Health			Dayton	Montgomery	10/22/2015
George Lewis		x	Kettering Health Network	3535 Southern Boulevard	45429	Kettering	Montgomery	10/22/2015
Barbara Marsh		x	Public Health	117 S. Main Street	45422	Dayton	Montgomery	10/22/2015
Tom Maultsby		x	United Way	33 W. First Street, #500	45402	Dayton	Montgomery	10/22/2015
Michele McCorkle		x	Miami Valley Hospital Social Services	1 Wyoming Street	45409	Dayton	Montgomery	10/22/2015
Jennifer Scholz		x	Premier Health	565 W. Rahn Road	45429	Dayton	Montgomery	10/22/2015

Name	Indiv.	Org.	Org. Name	Street Address	ZIP	City	County	Date
Sharon Sherlock		x	Reach Out of Montgomery County	25 E. Foraker Street	45409	Dayton	Montgomery	10/22/2015
Bob Steinbach		x	Miami Valley Regional Planning Commission	10 N. Ludlow Street, #700	45402	Dayton	Montgomery	10/22/2015
David Thomas	x	x	Dayton Fire	700 Old Springfield Road	45377	Vandalia	Montgomery	10/22/2015
Tami Whalen		x	Reach Out of Montgomery County	25 E. Foraker Street	45409	Dayton	Montgomery	10/22/2015
Laurel Kerr		x	Alzheimer's Association	31 W. Whipp Road	45459	Dayton	Montgomery	10/29/2015
Marty Larson		x	Greater Dayton Area Hospital Assoc.	2 Riverplace, #400	45405	Dayton	Montgomery	10/29/2015
Erik Balster		x	Preble County Public Health	615 Hillcrest Drive	45320	Eaton	Preble	7/29/2015
Amy Raynes		x	Preble County Mental Health and Recovery Board	225 N. Barron Street	45320	Eaton	Preble	7/29/2015
Nan Smith		x	Preble County Public Health	615 Hillcrest Drive	45320	Eaton	Preble	7/29/2015
Becky Sorrell		x	Preble County Job & Family Services	1500 Park Avenue	45320	Eaton	Preble	7/29/2015
William Balling		x	City of Sidney	234 W. Court Street	45365	Sidney	Shelby	10/20/2015
Scott Barr		x	Shelby County United Way	232 S. Ohio	45365	Sidney	Shelby	10/20/2015
Tony Bornhorst		x	County Commissioner	8360 Brandewie Road	45845	Ft. Loramie	Shelby	10/20/2015
Margie Eilerman		x	Shelby County Health Department	202 W. Poplar Street	45365	Sidney	Shelby	10/20/2015
Amy Esser		x	Shelby County HeadStart	1502 N. Main Street	45365	Sidney	Shelby	10/20/2015
Susan Hartley		x	Sidney Daily News	1451 N. Vandemark	45365	Sidney	Shelby	10/20/2015
Betty Miars		x	Shelby Co. Big Brothers Big Sisters	14933 State Route 119	45302	Anna	Shelby	10/20/2015
David O'Leary		x	Sidney YMCA	300 E. Parkwood Street	45365	Sidney	Shelby	10/20/2015
Rosalee Patterson	x			324 Canal Street	45360	Port Jefferson	Shelby	10/20/2015
Elaine Schweller-Snyder		x	Catholic Social Services	1201 Fairington Drive	45365	Sidney	Shelby	10/20/2015
Fred Simpson		x	Wilson Health	915 W. Michigan Street	45365	Sidney	Shelby	10/20/2015
Diane Stephenson	x			117 E. Lyndhurst Street	45365	Sidney	Shelby	10/20/2015

Name	Indiv.	Org.	Org. Name	Street Address	ZIP	City	County	Date
Ed Thomas		x	Sidney YMCA	300 E. Parkwood Street	45365	Sidney	Shelby	10/20/2015
Kent Topp		x	Shelby County Health Department	202 W. Poplar Street	45305	Sidney	Shelby	10/20/2015
Eileen Wiseman		x	Senior Center	304 S. West Avenue	45365	Sidney	Shelby	10/20/2015
Greg Long		x	Wilson Health	915 W. Michigan Street	45365	Sidney	Shelby	11/3/2015
Gary Giffen		x	Wilson Health Medical Group	915 W. Michigan Street	45365	Sidney	Shelby	10/1/15 & 10/20/2015
Donna C. Banks	x		Premier Health: Atrium Medical Center	8904 Franklin-Trenton Road	45005	Franklin	Warren	7/7/2015
Carla Clasen	x			8735 Toftrees Lane	45066	Springboro	Warren	7/7/2015
Doug Koenig	x		Premier Health: Atrium Medical Center	1432 New England Way	45036	Lebanon	Warren	7/7/2015
Rhonda Koenig	x		Premier Health: Atrium Medical Center	1432 New England Way	45036	Lebanon	Warren	7/7/2015
Sam Lobar	x		Premier Health: Atrium Medical Center	5879 Stillwater Drive	45040	Mason	Warren	7/7/2015
Nicole Schiesler	x	x	PreventionFIRST (also resident)	1288 Tecumseh Drive	45039	Maineville	Warren	7/7/2015
Erica Newberry		x	Centerpoint Health	333 Conover Drive	45005	Franklin	Warren	10/1/2015
Duane Stansbury		x	Warren County Health Department	416 S. East Street	45036	Lebanon	Warren	10/1/2015
Jonathan M. Westendorf		x	City of Franklin - Fire & EMS	1 Benjamin Franklin Way	45005	Franklin	Warren	10/1/2015
Lauren Day		x	Kettering Health Network	40 Haley Court	45066	Springboro	Warren	10/29/15 & 11/3/2015

Appendix E. List of Participating Agencies / Organizations

Organizations serving all ten counties participated by attending community-based focus groups and/or completing an online survey. Not all of the survey respondents identified their organization. Vulnerable populations served and identified by participating organizations included: Low-income; Racial minorities; Ethnic minorities; People with disabilities; Elderly; Children; Rural; Uninsured; Homeless; LGBTQ; Court-involved population; People with dementia; People with mental illness and/or substance abuse disorders; Pregnant women; and Refugees.

Ninety-four unduplicated agencies or organizations provided feedback by survey or by attending a focus group meeting. All participating organizations are listed below, followed by a break-down of how they participated.

ADAMHS Board for Montgomery County
Alzheimer's Association Miami Valley Chapter
Alzheimer's Association of Greater Cincinnati
American Red Cross
Auglaize County Department of Job and Family Services
Big Brothers/Big Sisters, Sidney, OH
Bogg Ministries
Butler Behavioral Health Services
Butler County Coalition / Mental Health and Addiction Recovery Services
Butler County Commissioners
Butler County Families and Children First Council
Butler County United Way
Catholic Social Services
Centerpoint Health
Cincinnati Children's
Circles - Kettering
City of Franklin - Fire and EMS
City of Hamilton Health Department
City of Sidney
Clark County Combined Health District
Coalition for a Healthy, Safe and Drug-Free Greater Hamilton
Community First Solutions
Community Health Centers of Greater Dayton
Council on Rural Services
Darke County Health Department
Darke County United Way
Darke/Mercer County WIC
Dayton & Montgomery County WIC Program
Dayton Fire
Diabetes Dayton
Family Health

Family Life Center
Five Rivers Health Centers
The Foodbank, Inc.
Good Neighbor House
Grandview Medical Center
The Greater Cincinnati Foundation
Greater Dayton Area Hospital Association
Greene and Soin Hospital
Greene County Council on Aging
Greenville Fire Department
The Health Collaborative
HealthPath Foundation of Ohio
Homefull
House of Bread
Kettering Health Network
McCullough-Hyde Hospital
Mercy Health - Fairfield OB Clinic
Miami County Public Health
Miami County Recovery Council
Miami Valley Hospital Social Services
Miami Valley Regional Planning Commission
Middletown City Health Department
Midmark
New Choices, Inc.
Omega CDC
The Potters House
Preble County Job and Family Services
Preble County Mental Health and Recovery Board
Preble County Public Health
Premier Health
Premier Health: Atrium Medical Center
Premier Health: Miami Valley Jamestown Emergency Room
PreventionFIRST
Primary Health Solutions
Public Health - Dayton & Montgomery County
Reach Out of Montgomery County
Senior Center
Shelby Co. Big Brothers Big Sisters
Shelby County Commissioners
Shelby County HeadStart
Shelby County United Way
Sidney Daily News
Sidney Shelby County Health Department
Sidney YMCA
SPANOhio.org
Springfield Christian Youth Ministries
Springfield Fire
Talbert House

TriHealth
United Way Clark County
United Way Montgomery County
Wapakoneta Fire and EMS
Warder Literacy Center
Warren County Health Department
Wayne Healthcare
WellSpring
Wilson Health
Xenia Adult Recreation and Services Center
Xenia YMCA
YMCA Clark County
YMCA Greene County
YWCA Hamilton
YWCA of Dayton

83 representatives attended focus groups from 67 organizations (from sign-in sheet):

ADAMHS Board for Montgomery County
Alzheimer's Association Miami Valley Chapter
Auglaize County Department of Job and Family Services
Butler Behavioral Health Services
Butler County Coalition / Mental Health and Addiction Recovery Services
Butler County Commissioners
Butler County Families and Children First Council
Catholic Social Services
Centerpoint Health
Circles - Kettering
City of Franklin - Fire and EMS
City of Hamilton Health Department
City of Sidney
Clark County Combined Health District
Coalition for a Healthy, Safe and Drug-Free Greater Hamilton
Community First Solutions
Council on Rural Services
Darke County Health Department
Darke County United Way
Darke/Mercer County WIC
Dayton Fire
Family Health
Family Life Center
Grandview Medical Center
Greater Dayton Area Hospital Assoc.
Greene and Soin Hospital
Greene County Council on Aging
Greenville Fire Department
Kettering Health Network

McCullough-Hyde Hospital
Mercy Health - Fairfield OB Clinic
Miami County Public Health
Miami Valley Hospital Social Services
Miami Valley Regional Planning Commission
Middletown City Health Department
Midmark
The Potters House
Preble County Job and Family Services
Preble County Mental Health and Recovery Board
Preble County Public Health
Premier Health
Premier Health: Atrium Medical Center
PreventionFIRST
Primary Health Solutions
Public Health – Dayton & Montgomery County
Reach Out of Montgomery County
Senior Center
Shelby County Big Brothers Big Sisters
Shelby County Commissioners
Shelby County HeadStart
Shelby County United Way
Sidney Daily News
Sidney Shelby County Health Department
Sidney YMCA
SPANOhio.org
Springfield Fire
TriHealth
United Way Clark County
United Way Montgomery County
Wapakoneta Fire and EMS
Warren County Health Department
Wayne Healthcare
Wilson Health
Xenia Adult Recreation and Services Center
YMCA Clark County
YMCA Greene County
YWCA Hamilton

41 representatives of these 35 organizations completed online surveys (optional self-reporting):

ADAMHS Board for Montgomery County
Alzheimer's Association of Greater Cincinnati
American Red Cross
Big Brothers/Big Sisters, Sidney, OH
Bogg Ministries
Butler County United Way

Cincinnati Children's
City of Sidney
Community Health Centers of Greater Dayton
Council on Rural Services
Darke County United Way
Diabetes Dayton
Five Rivers Health Centers
The Foodbank, Inc.
Good Neighbor House
Grandview Medical Center
The Greater Cincinnati Foundation
The Health Collaborative
HealthPath Foundation of Ohio
Homefull
House of Bread
Miami County Recovery Council
New Choices, Inc.
Omega CDC
Premier Health: Miami Valley Jamestown ER
Primary Health Solutions
Public Health - Dayton & Montgomery County WIC Program
Shelby County United Way
Sidney Shelby County Health Department
Springfield Christian Youth Ministries
Talbert House
Warder Literacy Center
WellSpring
Xenia YMCA
YWCA of Dayton

Nine health commissioners attended meetings in person, and five health department staff attended, representing a total of 11 health departments.

Appendix F. Survey and Focus Group Questions

For Focus Groups

1. What are the most serious health issues facing your community?

2. Which important health issues are being handled well in your community?

3. Which important health issues are not being addressed, or not being addressed enough, in your community?

4. What can you do to improve your health? (Or, for agencies, What can your clients do to improve their health?)

5. Where are some of the places you know that can help with health-related issues in your community?

6. Have you, or those you serve, experienced barriers to receiving health care in your community? (Barriers can be financial or non-financial.)
   a. If you have experienced barriers that were financial, which barriers were there?
   b. If you have experienced barriers that were not financial, which barriers were there?

7. Given the health and health- related issues facing the community, which ones would be your top three priorities? (voting by ‘dot’ exercise)

For Individual Consumers, via online survey

1. Which county do you reside in?

2. What are the most serious health issues facing your community?

3. Which important health issues are being handled well in your community? Please give an example.

4. Which important health issues are not being addressed enough in your community? What more could be done?

5. What can you do to improve your health?

6. Where are some of the places you know that can help with health-related issues in your community?

7. Have you experienced barriers to receiving health care in your community? (Barriers can be financial or non-financial. See checklists below.)

<u>If you have experienced financial barriers, which barriers were there?</u>

- ☐ no insurance
- ☐ can't afford co-pay
- ☐ can't afford prescription medicine
- ☐ can't afford medical equipment
- ☐ past due bill with health care provider
- ☐ no car
- ☐ can't afford gas for car
- ☐ can't take time off work
- ☐ other: _____

<u>If you have experienced barriers that were not financial, which barriers were there?</u>

- ☐ don't know where to go for help
- ☐ finding a doctor/provider who will accept my insurance
- ☐ no one to watch my children
- ☐ can't understand health care information
- ☐ don't speak English
- ☐ difficulty with reading instructions
- ☐ need help/support at home to follow medical instructions
- ☐ physical disability
- ☐ mental disability
- ☐ other: _____

Health and health-related priorities were determined by categorizing and analyzing how often common themes and phrases recurred across all individual survey responses.

For Agencies/Organizations, via online survey

1. Which county or counties do you serve?

2. What are the most serious health issues facing your community?

3. Which important health issues are being handled well in your community?

4. Which important health issues are not being addressed enough in your community? What more could be done?

5. What can the people, whom your agency serves, do to improve their health?

6. Where are some of the places you know that can help with health-related issues in your community?

7. Have the people whom you serve experienced barriers to receiving health care in your community? (Barriers can be financial or non-financial. See checklists below.)

<u>If you have experienced financial barriers, which barriers were there?</u>

- ☐ no insurance
- ☐ can't afford co-pay
- ☐ can't afford prescription medicine
- ☐ can't afford medical equipment
- ☐ past due bill with health care provider
- ☐ no car
- ☐ can't afford gas for car
- ☐ can't take time off work
- ☐ other: _____

<u>If you have experienced barriers that were not financial, which barriers were there?</u>

- ☐ don't know where to go for help
- ☐ finding a doctor/provider who will accept my insurance
- ☐ no one to watch my children
- ☐ can't understand health care information
- ☐ don't speak English
- ☐ difficulty with reading instructions
- ☐ need help/support at home to follow medical instructions
- ☐ physical disability
- ☐ mental disability
- ☐ other: _____

8. Given the health and health- related issues facing the community, which ones would be your top priorities?

For Health Departments, via personal interview or online survey

1. Which county do you serve? *(online survey only)*
2. What are the most serious health issues facing your community?
3. Which important health issues are being handled well in your community?
4. Which important health issues are not being addressed enough in your community? What more could be done?
5. What can the people, whom your organization serves, do to improve their health?
6. Where are some of the places you know that can help with health-related issues in your community?
7. What are some financial barriers to receiving health care in your community? (Barriers can be financial or non-financial. *Checklists were available only on online survey.*)
8. What are some of the non-financial barriers?

<u>If you have experienced financial barriers, which barriers were there?</u>

- ☐ no insurance
- ☐ can't afford co-pay
- ☐ can't afford prescription medicine
- ☐ can't afford medical equipment
- ☐ past due bill with health care provider
- ☐ no car
- ☐ can't afford gas for car
- ☐ can't take time off work
- ☐ other: _____

<u>If you have experienced barriers that were not financial, which barriers were there?</u>

- ☐ don't know where to go for help
- ☐ finding a doctor/provider who will accept my insurance
- ☐ no one to watch my children
- ☐ can't understand health care information
- ☐ don't speak English
- ☐ difficulty with reading instructions
- ☐ need help/support at home to follow medical instructions
- ☐ physical disability
- ☐ mental disability
- ☐ other: _____

9. Given the health issues facing the community, which ones would be your top priorities?
10. Do you serve one or more vulnerable populations? Please specify.
11. Briefly state your public health experience or other qualifications.

Appendix G. Health Department Contacts & Qualifications

County	Health Department	Person Contacted	Qualifications	Method
Auglaize	Auglaize County Health Department	Oliver Fisher	9 years as a sanitarian with the Allan County Health Department. Health Commissioner at Auglaize County Health Department for 15 months.	Phone Interview
Butler	Butler County Health Department	Patricia Burg	Forty-four years of experience with the Health Department and 30 years as Director.	Online Survey
Butler	City of Hamilton Health Department	Kay Farrar	Health Commissioner, BSN. Health Commissioner City of Hamilton 2012 - present. Public Health Nursing Administrator 2008 - present.	Online Survey
Butler	Middletown City Health District	Jackie Phillips	Health Commissioner, MPH, BSN. Health Commissioner Middletown City Health District 2010 - present.	Phone Interview
Clark	Clark County Combined Health District	Charles Patterson	More than 26 years of experience in public health in local and state level. Health Commissioner in Clark County for more than 15 years.	Phone Interview
Darke	Darke County General Health District	Dr. Terrence Holman	Doctor of Veterinary Medicine, Health Commissioner since 1985.	Phone Interview
Greene	Greene County Public Health	Melissa Howell	25 years in nursing and public health.	Online Survey

County	Health Department	Person Contacted	Qualifications	Method
Miami	Miami County Public Health	Dennis Propes	Input not received after attempts by phone and email.[5]	N/A
Montgomery	Public Health - Dayton and Montgomery County	Jeff Cooper	25 years of experience in public health.	Online Survey
Shelby	Sidney-Shelby County Health Department	Steven J. Tostrick	MPH, REHS, RS. 18 years of federal/state/county/city experience. Shelby County Health Commissioner for 5 years.	Phone Interview
Preble	Preble County Health District	Erik Balster	Health Commissioner, MPH, REHS, RS.	Phone Interview
Warren	Warren County Combined Health District	Duane Stansbury	Health Commissioner, MPH, BS. Health Commissioner Warren County Combined Health District 2005 - present.	Phone Interview

[5] Director of Nursing at Miami County Public Health, Deb French, was an active participant at the Miami County focus group.

Appendix H. 2013 CHNA Priorities

Name of Hospital	Top #1 Priority	Top #2 Priority	Top #3 Priority	Top #4 Priority	Top #5 Priority
Fort Hamilton Hospital	Maternal and Infant Priorities (First Trimester Prenatal Care and Moms Who Smoke during Pregnancy)	Primary and Chronic Diseases (Hypertension, Diabetes, Breast Cancer, Alcohol & Drug Dependence, and Hospitalization for Mental Health Disorders)			
Grandview Medical Center	Diabetes	Breast Cancer	Heart Disease	Chronic Lower Respiratory Disease	Cerebrovascular Disease
Greene Memorial Hospital	Heart Disease	Breast Cancer	Diabetes	Chronic Lower Respiratory Disease	Unintentional Injury
Kettering Medical Center	Heart Disease	Diabetes	Breast Cancer	Chronic Lower Respiratory Disease	Cerebrovascular Disease
Premier Health: Atrium Medical Center	Maternal and Infant Priorities (First Trimester Prenatal Care and Infant Mortality)	Primary and Chronic Diseases (Hypertension, Breast Cancer, Diabetes, and Alcohol & Drug Dependence)			
Premier Health: Good Samaritan Hospital	Maternal and Infant Priorities (First Trimester Prenatal Care, Low Birth Weight, and Infant Mortality Rate)	Primary and Chronic Diseases (Hypertension, Breast Cancer, Diabetes, Alcohol & Drug Dependence, and Mental Health Disorders)			

2013 CHNA Priorities, *continued*

Name of Hospital	Top #1 Priority	Top #2 Priority	Top #3 Priority	Top #4 Priority	Top #5 Priority
Premier Health: Miami Valley Hospital	Maternal and Infant Priorities (First Trimester Prenatal Care, Low Birth Weight, and Infant Mortality Rate)	Primary and Chronic Diseases (Hypertension, Breast Cancer, Diabetes, and Alcohol & Drug Dependence)			
Premier Health: Upper Valley Medical Center	Maternal and Infant Priorities (First Trimester Prenatal Care, Teen Pregnancy, Mothers Who Smoke, and Low Birth Weight)	Primary and Chronic Diseases (Hypertension, Melanoma of Skin Cancer, and Alcohol & Drug Dependence)			
Soin Medical Center	Heart Disease	Diabetes	Breast Cancer	Chronic Lower Respiratory Disease	Unintentional Injury
Southview Medical Center	Diabetes	Breast Cancer	Heart Disease	Chronic Lower Respiratory Disease	Cerebrovascular Disease
Sycamore Medical Center	Diabetes	Breast Cancer	Heart Disease	Chronic Lower Respiratory Disease	Cerebrovascular Disease
Wilson Health	Family Instability	Physical Health (Maternal & Infant Health, Preventive Screenings, and Physician Access)	Mental Health	Substance Abuse	

Appendix I. Diagnostic Codes for 15 Underlying Causes of Death in Region (2014)

Disease(s) causing death	# Deaths	ICD Code(s)
1. Diseases of heart	3,696	I00-I09, I11, I13, I20-I51
2. Malignant neoplasms	3,675	C00-C97
3. Accidents	1,147	V01-X59, Y85-Y86
4. Chronic lower respiratory diseases	983	J40-J47
5. Cerebrovascular diseases	859	I60-I69
6. Alzheimer's disease	805	G30
7. Diabetes mellitus	517	E10-E14
8. Influenza & pneumonia	337	J09-J18
9. Septicemia	296	A40-41
10. Nephritis, nephrotic syndrome & nephrosis	273	N00-N07, N17-N19, N25-N27
11. Intentional self-harm (suicide)	234	U03, X60-X84, Y87.0
12. Chronic liver disease & cirrhosis	205	K70, K73-K74
13. Hypertension & hypertensive renal disease	195	I10, I12, I15
14. Parkinson’s disease	163	G20-G21
15. Pneumonitis due to solids & liquids	113	J69

Source:

15 Leading Causes, Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death, 1999-2014 on CDC WONDER Online Database, released 2015. Data are from the Multiple Cause of Death Files, 1999-2014, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Small and unreliable numbers suppressed. Accessed at http://wonder.cdc.gov/ucd-icd10.html.

Appendix J. List of Community Resources

Resource	Description of Programs/Services
Montgomery County	
2-1-1	Information and referral phone line
ADAMHS Board	Planning, funding, and evaluation of comprehensive mental health and recovery services
AIDS Resource Center	Advocacy HIV information and testing HIV/STD Hotline Medical center Pharmacy services Support
American Heart Association - Dayton Division in Kettering OH	Focused on heart disease, stroke, cardiovascular disease Health education and resource information Professional training and community initiatives Fundraising events and research
American Holistic Nurses Association	Geriatric care Integrated healthcare Private practice Stress management
Alzheimer's Association	Advocacy Hotline Support
Area Agency on Aging	Assisted living Choices home care waiver Civic engagement initiative Golden Buckeye program Healthy lifestyle program Long-term care ombudsman programs Music & memory PACE (Program of All-inclusive Care for the Elderly) Passport program Senior community service employment program Senior farmer's market nutrition program
BOGG Ministries	Food, clothing, and other essentials
CareSource	Managed care company

Resource	Description of Programs/Services
Community Action Partnership	Computer literacy training Emergency services Housing services Micro-enterprise business development and training Utility assistance Volunteer income tax assistance (VITA) program Weatherization Workforce development Youth services
Community Health Centers of Greater Dayton: Corwin-Nixon Health Center Dr. Charles R. Drew Health Center East Dayton Health Center East Dayton Dental Center	Behavioral health services Dental health services Medical services Patient support services Physician services
CompuNet satellite offices	Allergy and asthma testing Clinical laboratories Health information Health screening Pain management/Prescription drug monitoring
Daymont	Assertive community treatment Child counseling services Outpatient counseling services Support
Dayton Recreation Centers	Computer lab Family aquatic indoor pool Fitness room Gymnasium Senior programs Youth and after school programs
Dayton Dental Clinic	Dental implants Root canal Teeth whitening service
Diabetes Dayton	Camps for children living with diabetes Classes on living with diabetes Emergency diabetes testing supplies Low cost testing and meter supplies Online quick reference diabetes resource guide Support and assistance to individuals affected by diabetes

Resource	Description of Programs/Services
Employment First	Employment opportunities for people with developmental disabilities through the County's Board of Developmental Disabilities
Fidelity HealthCare	Hearing assistance Home care aides Home care equipment Independent care services Infusion therapy Mother and infant care Nursing Rehabilitative care Social services Telehealth
Five Rivers Health Center	Dental services Family health Medical surgical health center Pediatric health Women's health
GetUp	Obesity prevention program
Girl Scouts of Western Ohio	Service center in Dayton Camp Leadership experience Programs & events Volunteer training
Good Neighbor House	Dental services Eye services Medical services Nutrition and wellness
Good Samaritan Hospital	Behavioral health Diabetes services Diagnostics and imaging Occupational health services Rehabilitation Respiratory care Sleep center Surgery

Resource	Description of Programs/Services
Good Samaritan North	Cancer care Cardiac and pulmonary rehab Imaging: CT, MRI, X-ray, Ultrasound & Mammography Outpatient surgery Pharmacy services Physical therapy Primary care Sports medicine
Habitat for Humanity of Greater Dayton	New construction of affordable housing ReStore
Help Me Grow Brighter Futures	Advocacy Education Home visiting services Support
Homefull	Behavioral health services Case management Homelessness prevention services Housing assistance Street outreach Support services Transitional housing for veterans
IMPACT Counseling	Counseling services
Joslin Diabetes Center in Trotwood, Dayton	Diabetes education Diabetes management
Kettering Health Network	Network of healthcare facilities
Kettering Medical Center	Brian, spine, and stroke Breast health Cancer care Emergency Heart care Maternity Mental health Orthopedics Sports medicine Weight loss
Kettering Recreation Center	Adventure reef outdoor waterpark Fitness center Ice arena Indoor pool Walk/run track

Resource	Description of Programs/Services
Kroc Center	After school programs Basketball Music Fitness
Lactation assistance	Various locations: at hospitals and with private consultants
Life Enrichment Center	Building community Educational programs Health and wellness programs Meals and supplemental groceries
Little Clinic at Kroger	Flu shots Health consultations Physicals
Mahogany's Child (Miami Valley Hosp.)	African American women's health program
Miami Valley Council Boy Scouts of America	Headquarters in Dayton Service opportunities Summer camping Youth programs
Miami Valley Hospital	Cancer care Cardiology and vascular Emergency and trauma Gynecology Maternity Neurosciences Orthopedics Sports medicine
Planned Parenthood	Anemia, cholesterol, and diabetes screenings Contraception materials for both men and women Infertility testing Pregnancy testing STD screening Termination of pregnancy Testicular cancer screenings
Premier Health	Network of healthcare facilities
Prevent Blindness Ohio	Vision screening and health
Pri-Med	Primary care Specialty care
Project SEARCH	Employer partners offer employment opportunities for young adults with developmental disabilities

Resource	Description of Programs/Services
Public Health Department - Dayton and Montgomery County	Adult health Birth and death certificates Child and maternal health Communicable disease control Community health assessment Environmental health Fetal alcohol spectrum disorders Health data and reports Immunization action program Information and referral WIC
Reach Out	Volunteer safety net clinic: Adult clinic Community pharmacy Reach Out for Kids
St. Vincent de Paul	Emergency assistance Food pantries Furniture bank Gateway shelters Support services for veterans Thrift store Transitional and permanent supportive housing
Samaritan Behavioral Health (SBHI)	Adult and child services Crisis services Psychiatric services School-based services
Samaritan Crisis Care	24 hour Hotline - suicide/crisis prevention 24 hour Warmline - supportive counseling service Crisis counseling Emergency walk-ins Mobile crisis services Pre-Hospital screening Screening and triage Emergency intervention and assessment services
Samaritan Homeless Clinic	Internal medicine Pediatric health

Resource	Description of Programs/Services
Senior Resource Connection	Adult day service Care coordination/caregiver support services Case management Nutrition program Visiting home care Visiting Nurses Association
Sleep Center at the Samaritan Diabetes and Sleep Center	Diagnostic testing Fidelity health care: at-home care for sleep disorders Physical evaluation and support Sleep testing Support for patients
SPAN Ohio	Health care reform advocacy coalition
United Way of Greater Dayton	2-1-1 information and referral phone line Focus on education, financial stability and health Support for local network of health and human service organizations
Women's Center	Services for pregnant women: Consulting and support Free pregnancy tests Material assistance Training for pregnancy and parenting Ultrasound
Wright State Physicians	Aerospace medicine Concussion clinic Dermatology Emergency medicine Family medicine Geriatric medicine Internal medicine Neurology Obstetrics & Gynecology Orthopaedic surgery, sports medicine, and rehabilitation Pediatrics Physical therapy Plastic surgery Psychiatry Surgery Surgical oncology Vascular surgery

Resource	Description of Programs/Services
YMCA	Adult sports Aquatics and learn to swim programs Child care Health and wellness programs Summer camps for children
Ziks' Family Pharmacy	Pharmacy in the Wright Dunbar 3rd Street area
Warren County	
Centerpoint Health	Behavioral health Dental health Medical care: adult, pediatric, geriatric
Countryside YMCA	Adult sports Aquatics and learn to swim programs Child care centers for after school and summer Child health resources from Dayton Children's Exercise and fitness facilities Health and wellness programs Largest YMCA in the United States Summer camps for children
Dayton Children's - Springboro	Ohio pediatric care alliance Outpatient care Urgent care
Diabetes Dayton	Camps for children living with diabetes Classes on living with diabetes Emergency diabetes testing supplies Low cost testing and meter supplies Online quick reference diabetes resource guide Support and assistance to individuals affected by diabetes
Employment First	Employment opportunities for people with developmental disabilities through the County's Board of Developmental Disabilities
Girl Scouts of Western Ohio	Camps in Warren County Events Leadership experience Programs Volunteer training
Good Neighbor House	Dental services Eye services Medical services Nutrition and wellness

Resource	Description of Programs/Services
HealthSource of Ohio	Services in family medicine, internal medicine, and pediatrics, including: Behavioral health Dentistry OB/Gyn services Pharmacy
Interact for Health	Convener and funder of health and wellness initiatives
Kettering Health Network	Network of healthcare facilities
Lindner Center for Hope	Adolescent care Behavioral health issues Inpatient and outpatient services Residential care
Mental Health Recovery Services of Warren and Clinton Counties	Local board of alcohol, drug addiction and mental health services Planning, funding, and evaluation of comprehensive mental health and recovery services
Premium Health: Atrium Medical Center	Verified level III trauma center and primary stroke center: Advanced cancer care Maternal - Child Health Center for self-pay and indigent Obstetrics Surgery Women's Center
Premier Health: Atrium Medical Center Foundation	Charitable giving and resources dedicated to building healthier communities in Southwest Ohio
Project SEARCH	Employer partners offer employment opportunities for young adults with developmental disabilities
Small Business Resource Center	Free business consulting, workshops, training, and technical assistance for small businesses
Solutions Community Counseling and Recovery Centers	Locations in Franklin, Lebanon, Mason, Springboro, and Wilmington Mental health and substance abuse services for children, adolescents, and adults

Resource	Description of Programs/Services
Warren County Combined Health District	Adult clinic Birth and death certificates Child health clinic Environmental health services Family planning clinic Flu clinic HIV testing clinic Prenatal clinic Sexually Transmitted Disease Clinic Tuberculosis control
Warren County Parks and Recreation	Little League sports Maintains 3 trailheads, public golf course, and over 1,600 acres of parks and natural area

Appendix K. List of Acronyms

AIDS	Acquired Immune Deficiency Syndrome
AMI	Acute Myocardial Infarction (heart attack)
BRFSS	Behavioral Risk Factor Surveillance System (health-related telephone surveys; part of the Centers for Disease Control and Prevention)
CDC	Centers for Disease Control and Prevention (part of U.S. Department of Health and Human Services)
CHA	Community Health Assessment (conducted by Public Health departments)
CHNA	Community Health Needs Assessment (conducted by nonprofit hospitals)
CHR	County Health Rankings (developed by the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute)
CLRD	Chronic Lower Respiratory Disease
CMS	Centers for Medicare and Medicaid Services (part of U.S. Department of Health and Human Services)
CNI	Community Need Index (interactive tool maintained by Dignity Health)
COPD	Chronic Obstructive Pulmonary Disease
CV	Cardiovascular
EMS	Emergency Medical Services
FQHC	Federally Qualified Health Center
GDAHA	Greater Dayton Area Hospital Association
GIS	Geographic Information System (used to map physical locations associated with data points)
HIV	Human Immunodeficiency Virus
HP	Healthy People (national initiative that establishes benchmarks and sets 10-year measurable objectives to improve health)
MSA	Metropolitan Statistical Area (defined by U.S. Office of Management and Budget)
ODH	Ohio Department of Health
SNAP	Supplemental Nutrition Assistance Program (federal program formerly known as Food Stamps)
STD	Sexually Transmitted Disease
TB	Tuberculosis
THC	The Health Collaborative
WIC	Women, Infants, and Children (federally-funded program that provides supplemental foods, health care referrals, and nutrition education)