



Community Health Needs Assessment

2016

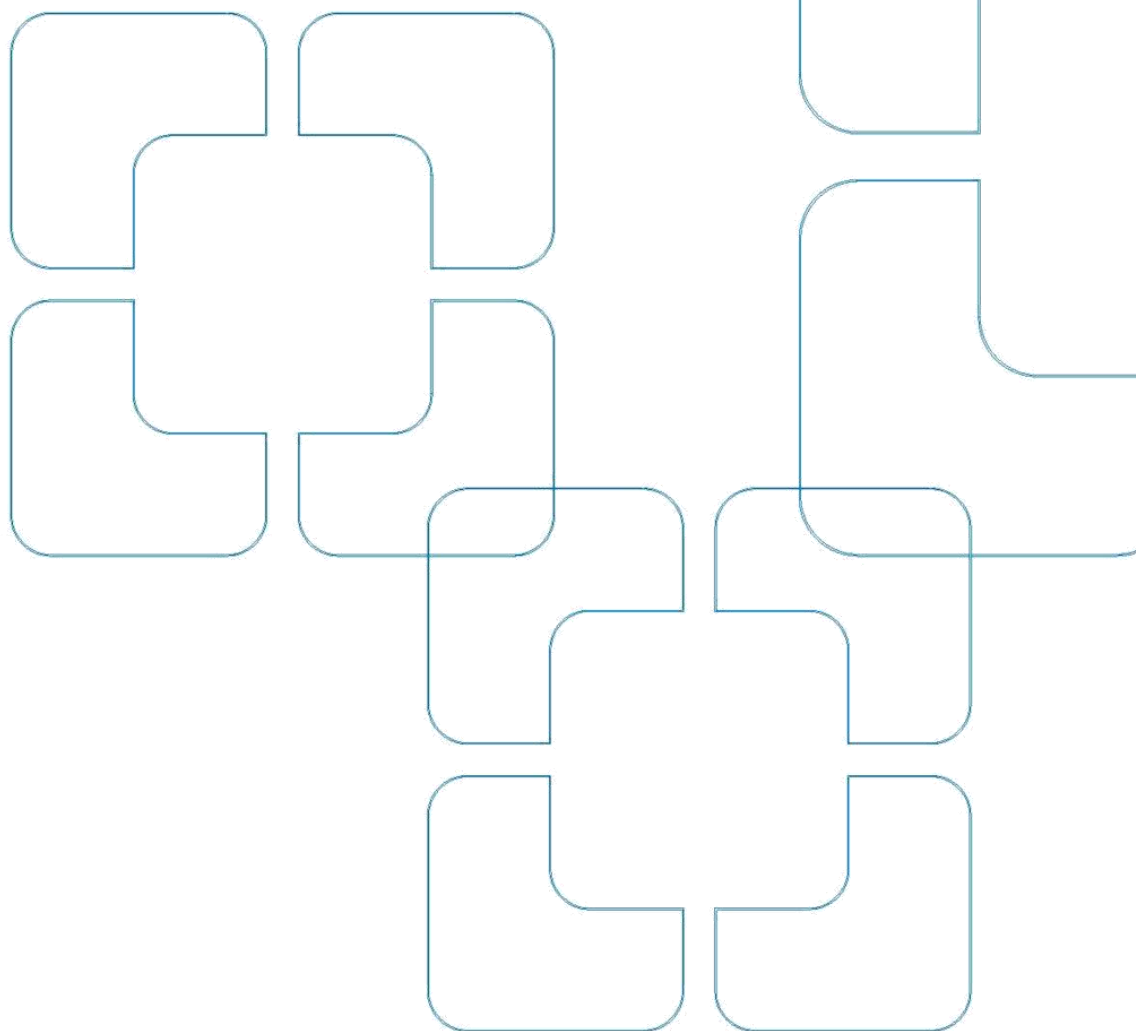


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EXECUTIVE SUMMARY

Introduction

This Community Health Needs Assessment (CHNA) was conducted by Cleveland Clinic Medina Hospital (“Medina” or “the hospital”) to identify significant community health needs, to inform development of an Implementation Strategy to address current needs and to evaluate the impact of ongoing efforts to address previously identified community needs.

Medina is a modern, 136-bed hospital that is located on the corridor to the Medina community. The hospital features the latest technology and procedures with more than 300 physicians on the Medical Staff covering more than 30 areas of specialization. Additional information on the hospital and its services is available at:

http://my.clevelandclinic.org/locations_directions/Regional-Locations/Medina-hospital.

The hospital is part of the Cleveland Clinic health system, which includes an academic medical center, multiple regional hospitals, two children’s hospitals, a rehabilitation hospital, a Florida hospital and a number of other facilities and services across Northeast Ohio and Florida. Additional information about Cleveland Clinic is available at: <https://my.clevelandclinic.org/>.

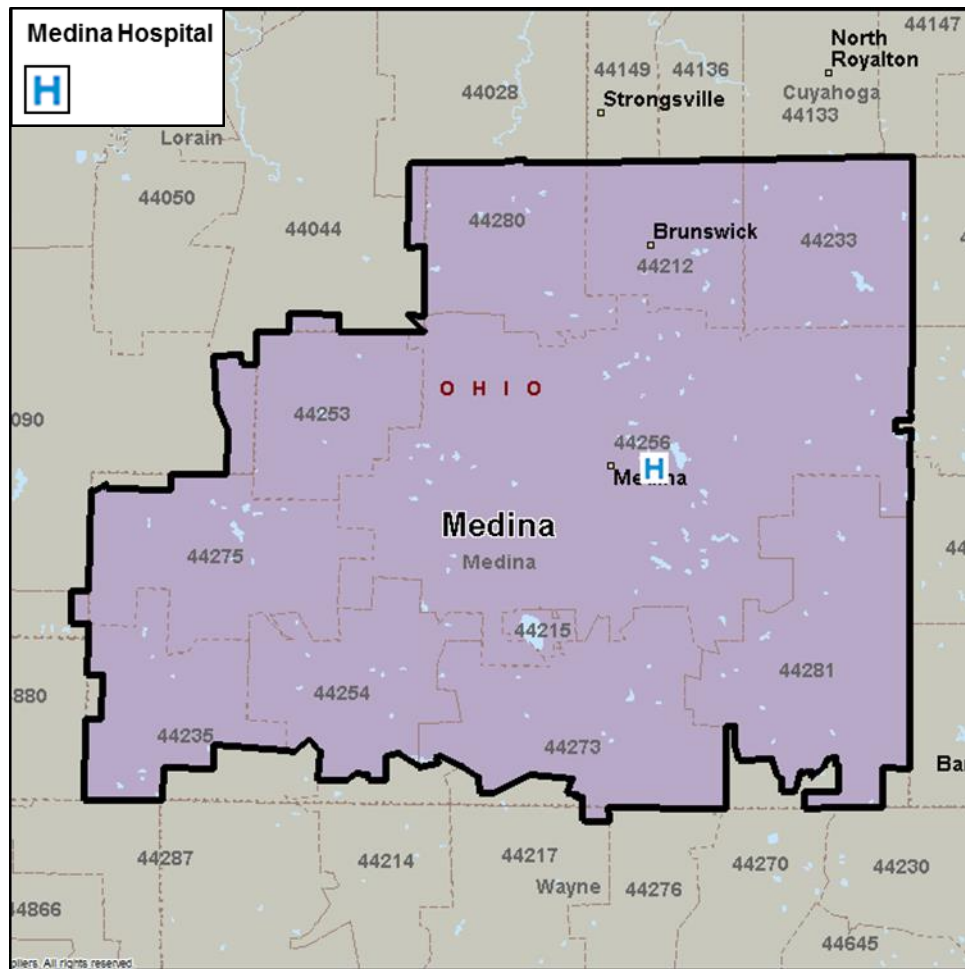
Each Cleveland Clinic hospital is dedicated to the communities it serves. Cleveland Clinic hospitals verify the health needs of communities by performing periodic health needs assessments. These formal assessments are analyzed using widely accepted criteria to determine and measure the health needs of a specific community.

Community Definition

For purposes of this report, Medina’s community is defined as 11 ZIP codes in Medina County, Ohio comprising over 79 percent of the hospital’s inpatient volumes. This area has comparatively unfavorable health status and socioeconomic indicators, particularly for minority residents. The total population in Medina’s community in 2015 was 174,882.

EXECUTIVE SUMMARY

The following map portrays the community served by Medina.



Significant Community Health Needs

Six significant community health needs were identified through this assessment:

1. Access to Affordable Healthcare
2. Chronic Diseases and Other Health Conditions
3. Economic Development and Community Conditions
4. Health Professions Education and Research
5. Healthcare for the Elderly
6. Wellness

Based on an assessment of secondary data (a broad range of health status and access to care indicators) and of primary data (received through key stakeholder interviews), the following were identified as significant health needs in the community served by Medina. The needs are presented below in alphabetical order, along with certain highlights regarding why each issue was identified as “significant.”

EXECUTIVE SUMMARY

Access to Affordable Health Care

- Access to basic health care is challenging for some segments of the Medina community who are unaware of how to access and use available services and who experience other access barriers including cost and inadequate transportation. While the Medina community has comparatively favorable socioeconomic indicators overall, there are still populations who regularly struggle with health care access issues. The recent election of the new president raises questions regarding whether access improvements associated with the Affordable Care Act will be sustained.

Chronic Diseases and Other Health Conditions

- Chronic diseases and other health conditions including, in alphabetical order: cancer, chemical dependency, diabetes, heart disease, hypertension, obesity, and poor mental health status (including childhood depression) were identified as prevalent in the Medina community.

Economic Development and Community Conditions

- Several areas and populations within the Medina community lack adequate social services and transportation, and experience high rates of poverty.

Health Professions Education and Research

- There is a need for more trained health professionals in the community, particularly primary care physicians, mental health providers, and dentists. Research conducted by Cleveland Clinic, has improved health for community members through advancements in new clinical techniques, devices and treatment protocols in diseases and health conditions such as cancer, heart disease, diabetes, and others. There is a need for more research to address these and other community health needs.

Healthcare for the Elderly

- The elderly population in the Medina community is expected to increase in the next five years and meeting the health and social service needs of the aging population is a significant issue.

Wellness

- Programs and activities that target behavioral health change were identified as needed in the Medina community. Education and opportunities for residents regarding alcohol abuse, exercise, and nutrition specifically were noted.

OBJECTIVES AND METHODOLOGY

Regulatory Requirements

Federal law requires that tax-exempt hospital facilities conduct a CHNA every three years and adopt an Implementation Strategy that addresses significant community health needs.¹ Each tax-exempt hospital facility must conduct a CHNA that identifies the most significant health needs in the hospital's community.

The regulations require that each hospital:

- Take into account input from persons representing the broad interests of the community, including those knowledgeable about public health issues, and
- Make the CHNA widely available to the public.

The CHNA report must include certain information including, but not limited to:

- A description of the community and how it was defined,
- A description of the methodology used to determine the health needs of the community, and
- A prioritized list of the community's health needs.

Tax-exempt hospital organizations also are required to report information about the CHNA process and about community benefits they provide on IRS Form 990, Schedule H. As described in the instructions to Schedule H, community benefits are programs or activities that provide treatment and/or promote health and healing as a response to identified community needs. Community benefit activities and programs also seek to achieve objectives, including:

- improving access to health services,
- enhancing public health,
- advancing increased general knowledge, and
- relief of a government burden to improve health.²

To be reported, community need for the activity or program must be established. Need can be established by conducting a Community Health Needs Assessment.

CHNAs seek to identify significant health needs for particular geographic areas and populations by focusing on the following questions:

- **Who** in the community is most vulnerable in terms of health status or access to care?
- **What** are the unique health status and/or access needs for these populations?
- **Where** do these people live in the community?

¹ Internal Revenue Code, Section 501(r).

² Instructions for IRS form 990 Schedule H, 2015.

OBJECTIVES AND METHODOLOGY

- **Why** are these problems present?

The question of **how** each hospital can address significant community health needs is the subject of the separate Implementation Strategy.

Methodology

Federal regulations that govern the CHNA process allow hospital facilities to define the community they serve based on “all of the relevant facts and circumstances,” including the “geographic location” served by the hospital facility, “target populations served” (e.g., children, women, or the aged), and/or the hospital facility’s principal functions (e.g., focus on a particular specialty area or targeted disease).³ The community defined by Medina accounts for over 79 percent of the hospital’s 2014 inpatient discharges.

This assessment was conducted by Verité Healthcare Consulting, LLC. *See* Appendix A.

Secondary data from multiple sources were gathered and assessed. *See* Appendix B. Considering a wide array of information is important when assessing community health needs to ensure the assessment captures a wide range of facts and perspectives and to increase confidence that significant community health needs have been identified accurately and objectively.

Input from the community was received through key informant interviews. These informants represented the broad interests of the community and included individuals with special knowledge of or expertise in public health. *See* Appendix C.

Certain community health needs were determined to be “significant” if they were identified as problematic in at least two of the following three data sources: (1) the most recently available secondary data regarding the community’s health, (2) recent assessments developed by other organizations, and (3) input from the key informants who participated in the interview process.

In addition, data was gathered to evaluate the impact of various services and programs identified in the previous CHNA process. *See* Appendix D.

Collaborating Organizations

For this assessment, Medina collaborated with the following Cleveland Clinic hospitals: Main Campus, Cleveland Clinic Children’s, Akron General, Euclid, Fairview, Hillcrest, Lodi, Lutheran, Marymount, South Pointe, Edwin Shaw Rehabilitation and Cleveland Clinic Florida. Medina also collaborated with Ashtabula County Medical Center and Glenbeigh.

³ 501(r) Final Rule, 2014.

OBJECTIVES AND METHODOLOGY

Data Sources

Community health needs were identified by collecting and analyzing data from multiple sources. Statistics for numerous community health status, health care access, and related indicators were analyzed, including data provided by local, state, and federal government agencies, local community service organizations, and Cleveland Clinic. Comparisons to benchmarks were made where possible. Findings from recent assessments of the community's health needs conducted by other organizations (e.g., local health departments) were reviewed as well.

Input from 15 persons representing the broad interests of the community was taken into account through key informant interviews. Interviewees included: individuals with special knowledge of or expertise in public health; local public health departments; agencies with current data or information about the health and social needs of the community; representatives of social service organizations; and leaders, representatives, and members of medically underserved, low-income, and minority populations.

Information Gaps

This CHNA relies on multiple data sources and community input gathered between January 2016 and July 2016. A number of data limitations should be recognized when interpreting results. For example, some data (e.g., County Health Rankings, Community Health Status Indicators, Behavioral Risk Factors Surveillance System, and others) exist only at a county-wide level of detail. Those data sources do not allow assessing health needs at a more granular level of detail, such as by ZIP code or census tract.

Secondary data upon which this assessment relies measure community health in prior years. For example, the most recently available mortality data published by the Ohio Department of Health are from 2012. Others sources incorporate data from 2010. The impacts of recent public policy developments, changes in the economy, and other community developments are not yet reflected in those data sets.

The findings of this CHNA may differ from those of others conducted in the community. Differences in data sources, communities assessed (e.g., hospital service areas versus counties or cities), and prioritization processes can contribute to differences in findings.

DATA AND ANALYSIS

Definition of Community Assessed

This section identifies the community that was assessed by Medina. The community was defined by considering the geographic origins of the hospital's 2014 inpatient discharges.

On that basis, Medina's community is comprised of the 11 ZIP codes in Medina County, Ohio (**Exhibit 1**) which in 2014 accounted for over 79 percent of its inpatient discharges.

Exhibit 1: Medina Inpatient Discharges by ZIP Code, 2014

City	ZIP Code	Inpatient Cases (2014)	Percent of Total
Medina	44256	3,024	44.0%
Brunswick	44212	974	14.2%
Wadsworth	44281	366	5.3%
Lodi	44254	207	3.0%
Seville	44273	177	2.6%
Hinckley	44233	143	2.1%
Litchfield	44253	142	2.1%
Valley City	44280	139	2.0%
Spencer	44275	137	2.0%
Chippewa Lake	44215	100	1.5%
Homerville	44235	47	0.7%
Subtotal		5,456	79.5%
Other Areas		1,409	20.5%
Total Discharges		6,865	100.0%

Source: Analysis of OHA Discharge Data, 2014.

DATA AND ANALYSIS

The total population of this community in 2015 was approximately 175,000 persons (**Exhibit 2**).

Exhibit 2: Community Population, 2015

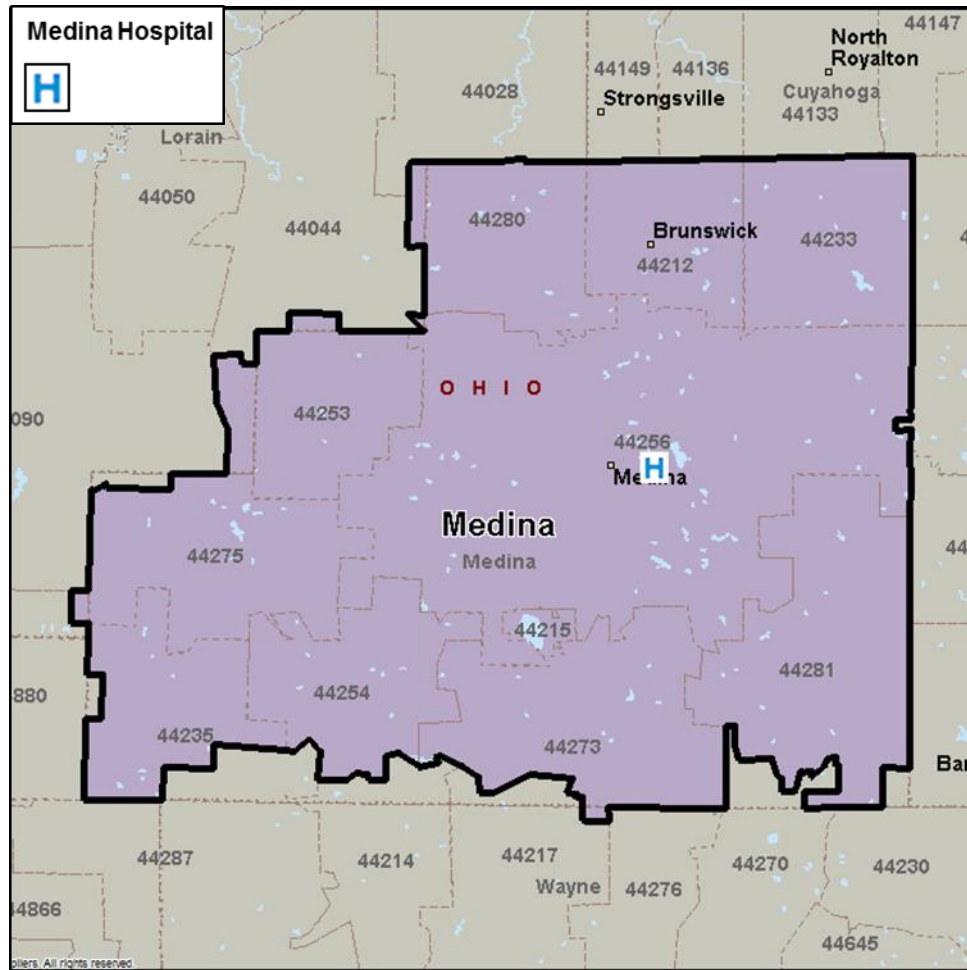
City	ZIP Code	Total Population 2015	Percent of Total Population 2015
Brunswick	44212	44,174	25.3%
Chippewa Lake	44215	2,024	1.2%
Hinckley	44233	8,006	4.6%
Homerville	44235	1,685	1.0%
Litchfield	44253	3,418	2.0%
Lodi	44254	4,757	2.7%
Medina	44256	63,763	36.5%
Seville	44273	7,546	4.3%
Spencer	44275	3,279	1.9%
Valley City	44280	5,312	3.0%
Wadsworth	44281	30,918	17.7%
Community Total		174,882	100.0%

Source: Truven Market Expert, 2015.

The hospital is located in Medina, Ohio (ZIP code 44256). The map in **Exhibit 3** portrays the ZIP codes that comprise the Medina community.

DATA AND ANALYSIS

Exhibit 3: Medina Community



Source: Microsoft MapPoint and Cleveland Clinic, 2015.

DATA AND ANALYSIS

Secondary Data Summary

The following section summarizes principal findings from the secondary data analysis. Appendix B provides more detailed information.

Demographics

Population characteristics and changes directly influence community health needs. The total population in the Medina community is expected to increase two percent from 2015 to 2020. Between 2015 and 2020, five of the eleven ZIP codes in the Medina community are projected to lose population. The populations in ZIP codes 44256 and 44280 are expected to increase by approximately three percent.

While the total population is expected to increase very modestly, the number of persons aged 65 years and older is projected to increase by 19.6 percent between 2015 and 2020. The growth of older populations is likely to lead to growing need for health services, since on an overall per-capita basis, older individuals typically need and use more services than younger persons.

In 2015, less than one percent of residents were Black in nine community ZIP codes (44215, 44233, 44235, 44253, 44254, 44273, 44275, 44280, and 44281).

Medina County had a lower percentage of residents aged 25 years and older without a high school diploma than Ohio and United States averages. Compared to Ohio, Medina County also had a lower proportion of the population that is linguistically isolated.⁴

Economic Indicators

Many health needs have been associated with poverty. According to the U.S. Census, in 2014 approximately 15.9 percent of people in Ohio were living in poverty. At 7.5 percent, Medina County's poverty rate was lower than Ohio's poverty rate during that year. In Medina County, poverty rates have been comparatively high for Black residents, however there are currently no low income census tracts in the community.

2014 crime rates in Medina County were well below Ohio averages.

The percentage of people uninsured has declined in recent years, due to two primary factors. First, between 2010 and 2015, unemployment rates at the local (Medina County), state, and national level decreased significantly. Many receive health insurance coverage through their (or a family member's) employer. Second, in 2010 the Patient Protection and Affordable Care Act (ACA, 2010) was enacted, and Ohio was among the states that expanded Medicaid eligibility. In 2015, ten out of the 11 ZIP codes in the Medina community had uninsured rates below five percent. By 2020, it is projected that this will increase to every ZIP code in the community.

⁴ Linguistic isolation is defined as residents who speak a language other than English and speak English less than "very well."

DATA AND ANALYSIS

Local Health Status and Access Indicators

In the 2016 *County Health Rankings*, Medina County ranked in the bottom 50th percentile among Ohio counties for five of the 27 indicators assessed. Of those five indicators ranking in the bottom 50th percentile, four of them ranked in the bottom quartile, including Excessive Drinking, Inadequate Social Support, Physical Environment, and Air Pollutions. Between 2013 and 2016, rankings for 17 indicators fell in Medina County. The following indicators underlying the rankings are comparatively unfavorable:

- Air pollution
- Binge and heavy drinking
- Percent of driving deaths with alcohol involved
- Percent of Medicare enrollees who receive diabetic screenings
- Percent of workers with a long commute who drive alone
- Percent of workforce that drive alone to work
- Social associations rate

In the 2015 *Community Health Status Indicators*, which compares community health indicators for each county with those for peers across the United States, the following indicators appear to be most significant:

- Annual average particulate matter concentration
- Morbidity associated with adult diabetes and older adult depression
- Mortality rates for Alzheimer's disease, chronic lower respiratory disease, and coronary heart disease
- Rates of preventable hospitalizations for older adults
- The number of females who do not have routine pap tests

According to the Ohio Department of Health, the age-adjusted mortality rate for pedestrians killed in traffic collisions was higher in Medina County than the Ohio average. Overall age-adjusted mortality and incidence rates for cancer in the community have been slightly above average.

Ohio Department of Health data also indicate that:

- The incidence of Hepatitis A, B, and C has been particularly high in Medina County.
- The percent of births to older women (40-54 years old) was comparatively higher in Medina County.

Data from the Centers for Disease Control's Behavioral Risk Factor Surveillance System (BRFSS) indicate comparatively high rates of obesity, smoking, and asthma in several ZIP codes across the community.

DATA AND ANALYSIS

Ambulatory Care Sensitive Conditions

Ambulatory Care Sensitive Conditions (ACSCs) include fourteen health conditions we analyzed “for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease.”⁵ Among these conditions are: angina without procedure, diabetes, perforated appendixes, chronic obstructive pulmonary disease (COPD), hypertension, congestive heart failure, dehydration, bacterial pneumonia, urinary tract infection, and asthma.

We reviewed ACSC rates in the Medina community for 14 conditions and Medina community rates have exceeded the Ohio averages for angina without procedure, bacterial pneumonia, congestive heart failure, perforated appendixes, and urinary tract infections. The rate for angina without procedure was particularly problematic.

Community Need Index

Dignity Health, a California-based hospital system, developed and has made widely available for public use a *Community Need Index*TM (CNI) that measures barriers to health care access by county/city and ZIP code. The index is based on five social and economic indicators:

- The percentage of elders, children, and single parents living in poverty
- The percentage of adults over the age of 25 with limited English proficiency, and the percentage of the population that is non-White
- The percentage of the population without a high school diploma
- The percentage of uninsured and unemployed residents
- The percentage of the population renting houses

The CNI calculates a score for each ZIP code based on these indicators. Scores range from “Lowest Need” (1.0-1.7) to “Highest Need” (4.2-5.0).

The CNI indicates that none of the 11 ZIP codes in the Medina community scored in the two “highest need categories.” Lodi (ZIP code 44254) received a score of 2.6, the highest in the community.

Food Deserts

The U.S. Department of Agriculture’s Economic Research Service estimates the number of people in each census tract that live in a “food desert,” defined as low-income areas more than one mile from a supermarket or large grocery store in urban areas and more than 10 miles from a supermarket or large grocery store in rural areas. No locations within the Medina community have been designated as food deserts.

⁵Agency for Healthcare Research and Quality (AHRQ) Prevention Quality Indicators.

DATA AND ANALYSIS

Medically Underserved Areas and Populations

Medically Underserved Areas and Populations (MUA/Ps) are designated by the Health Resources and Services Administration (HRSA) based on an “Index of Medical Underservice.” The index includes the following variables: ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 or over. Areas with a score of 62 or less are considered “medically underserved.” There is one census tract in the hospital’s community that has been designated as medically underserved.

Health Professional Shortage Areas

A geographic area can receive a federal Health Professional Shortage Area (HPSA) designation if a shortage of primary medical care, dental care, or mental health care professionals is found to be present, however no census tracts have been designated to be HPSAs in the hospital’s community.

Relevant Findings of Other CHNAs

The following community health needs were most frequently found to be significant in other, recently conducted community health needs assessments:

- Obesity
- Mental/Behavioral health
- Access to basic/primary health care
- Diabetes
- Cardiovascular/heart disease
- Tobacco use/smoking
- Drug/substance abuse
- Alcohol abuse and excessive drinking
- Elderly care/aging population
- Cancer
- Infant mortality (disparities)
- Access to dental care
- Access/lack of health insurance coverage
- Cost of care
- Poverty
- Transportation

The assessment prepared by the Cuyahoga County Health Improvement Partnership (2015) also highlighted issues with violence and health disparities/equity.

DATA AND ANALYSIS

Primary Data Summary

The following community health issues were identified by interviewees as significant. The issues are presented based on the frequency with which they were mentioned.

Substance Abuse. Across all interviews, substance abuse – specifically the abuse of opiates and heroin – was identified as the health behavior of greatest concern within the community. The low cost and increased availability of the narcotics are believed to be at the root of the problem. Interviewees cited high rates of abuse among the adolescent population within the county; however, it was also explained that the epidemic is widespread and impacts individuals of all ages, races, and incomes. Interviewees stated that more educational and drug enforcement programs have been instituted to address the issue, but the severe shortage of drug treatment facilities is still problematic.

Interviewees indicated that while the need for treatment facilities is apparent within the community, the stigma associated with the facilities has led to a “Not in My Backyard” attitude among residents and has become a serious obstacle.

Interviewees also cited the impact that substance abuse has had on the workforce within the county, noting that it has become increasingly challenging to hire employees for entry-level jobs due to high failure rates during drug tests.

The abuse of alcohol was also identified as a significant issue affecting the adult population within the community. While the motivating factors for binge drinking were influenced by socioeconomic status, it is apparent that this is also a widespread issue.

Unhealthy Lifestyle and Related Conditions. Nearly all interviewees cited the unhealthy lifestyles, including poor diets, physical inactivity, and smoking among residents and the related morbidity as a significant health concern within the community. Unhealthy diets were attributed to limited access to healthy foods for many in lower socio-economic classes and certain cultural groups. Insufficient knowledge about nutrition was mentioned in many interviews as a contributing factor to health conditions, along with a misunderstanding of the perceived affordability of fast food.

While a lack of access to exercise facilities was stated as a barrier to physical activity, many of the interviewees cited job stress and a general lack of motivation among residents as the primary reasons for the increase in sedentary lifestyles.

The perception of unhealthy lifestyle drove most of the commonly-cited chronic conditions from interviewees. Obesity, diabetes/pre-diabetes, heart disease, and hypertension were the most often cited conditions and health concerns for the area. Related to this, some interviewees also commented that there is a lack of services and attention to general primary and preventive care, instead of merely treating disease.

DATA AND ANALYSIS

Behavioral Health and Mental Health Services. A majority of those interviewed indicated that the inadequate mental and behavioral health services within the community are a serious concern. Mental illness was cited as being a widespread issue, affecting individuals of all ages, races, and socio-economic classes; however increased concern was directed at the youth population given the increasing number of autistic children present in the community. One of the chief concerns related to mental health resources was the complete absence of inpatient psychiatric hospital beds within Medina County. Interviewees also noted that the limited resources were increasingly inaccessible to the low-income population who face challenges with transportation.

Transportation. Several interviewees identified a lack of transportation as a serious concern within the county, stating that the issue prevented individuals from accessing important community health resources. Interviewees noted that the transportation issues within the community were particularly problematic for seniors, low-income individuals, and residents living in the more rural parts of the county.

Conditions and Care of the Elderly. Aging well in the community was a top concern of many interviewees. With an aging population, many chronic conditions associated with elderly populations arose as areas of need. The growth of this population means more resources will be needed, and interviewees noted that there are not enough senior living facilities (especially for low-income seniors), a lack of providers accepting Medicare, challenges with transportation for seniors, and isolation among this population.

Addressing the Needs of Vulnerable Populations. Several interviewees identified the unmet needs of vulnerable populations within the community as a significant issue. Given the affluence that exists within Medina County, a common misconception among residents is that all members of the community have access to basic resources.

- **Access for the Low Income Population.** Interviewees cited a significant deficiency in the number of resources available for the low income population and those without insurance coverage.
 - **Access to Dental Care.** A majority of interviewees believed that the dental care available in the community was not enough to serve the needs of the population, particularly for those without insurance. Others believed that oral health was an important concern that, without prevention, could lead to more severe health concerns.
 - **Access to Healthy Food.** Several interviewees stated that many of the chronic diseases affecting the low-income population could be alleviated with a better diet and understanding of nutrition. While multiple food banks exist within the county, interviewees did not believe they could provide an adequate amount of nutritious food to this population. It was also believed that this population was generally unaware of how to prepare healthy meals.

DATA AND ANALYSIS

- **Needs of the Amish Population.** A number of interviewees noted that a sizeable Amish population exists within Medina County and while this population tends to operate independently of the community at large, when members of Amish population do require acute medical attention, they face increased challenges accessing it.

SIGNIFICANT COMMUNITY HEALTH NEEDS

Prioritization Process

The following section highlights why certain community health needs were determined to be “significant.” Needs were determined to be significant if they were identified as problematic by at least two of the following three data sources: (1) the most recently available secondary data regarding the community’s health, (2) recent assessments developed by other organizations (e.g., local Health Departments), and (3) the key informants who participated in the interview process.

Access to Affordable Health Care

Access to basic health care is challenging for some segments of the Medina community who are unaware of how to access and use available services and who experience other access barriers including cost and inadequate transportation. While the Medina community has comparatively favorable socioeconomic indicators overall, there are still populations who regularly struggle with health care access issues. The recent election of the new president raises questions regarding whether access improvements associated with the Affordable Care Act will be sustained.

- A federally-designated Medically Underserved Population (MUP) is present in the community served by Medina (**Exhibit 33**).
- Rates for ambulatory care sensitive conditions within the Medina community were higher than the Ohio averages (**Exhibits 28 and 29**). Disproportionately high rates indicate potential problems with the availability or accessibility of ambulatory care and preventive services and can suggest areas for improvement in the health care system and ways to improve outcomes.
- In Community Health Status Indicators (CHSI), Medina County ranks poorly compared to peer counties for Older Adult Preventable Hospitalizations (**Exhibit 21**).
- Interviewees identified a lack of access to basic medical care as a significant concern, particularly for low income individuals and members of certain religious groups.

Chronic Diseases and Other Health Conditions

Health conditions and other chronic diseases including, in alphabetical order, cancer, chemical dependency, diabetes, heart disease, hypertension, obesity, and poor mental health status (including childhood depression) were identified as prevalent in the Medina community.

- **Cancer**
 - According to the Ohio Department of Health, cancer was the second leading cause of death in Medina County (**Exhibit 23**).
 - Age-adjusted cancer mortality rates in Medina County were significantly higher than the Ohio averages for prostate, pancreas, ovary, leukemia, non-Hodgkin’s lymphoma, bladder, uterus, multiple myeloma, and stomach (**Exhibit 23**).

SIGNIFICANT COMMUNITY HEALTH NEEDS

- **Chemical Dependency**
 - Nearly every interviewee identified the widespread abuse of opiates in Medina County as a serious community health concern. Interviewees were particularly concerned about the increasing chemical dependency among adolescents in the community and the lack of treatment facilities within the county.
 - According to the 2014 Ohio Department of Health Drug Overdose Report, fentanyl drug seizures in the United States increased by 300 percent between 2013 and 2014. In 2014, fentanyl-related overdoses accounted for 19.9 percent of accidental overdoses, a significant rise from 4.0 percent in 2013.
 - Several other, recent health assessments identified drug/substance abuse as a significant concern for Medina County.
- **Diabetes**
 - Community Health Status Indicators (CHSI), data indicate that Diabetes Deaths and Adult Diabetes morbidity benchmark unfavorably in Medina County compared to peer counties (**Exhibit 21**).
 - Multiple interviewees identified diabetes as a significant concern within the community. The high rate of diabetes in Medina County is believed to be a consequence of the increasing sedentary lifestyles and poor eating habits of Medina County residents.
- **Heart Disease and Hypertension**
 - According to the Ohio Department of Health, heart disease is the leading cause of death in Medina County (**Exhibit 22**).
 - In Community Health Status Indicators (CHSI), Medina County ranks poorly compared to peer counties for Coronary Heart Disease Deaths (**Exhibit 21**).
 - In the Medina community, 6 out of 11 ZIP codes had higher rates of congestive heart failure than the Ohio average and 7 of the 11 ZIP codes had significantly higher rates of angina without procedure (**Exhibit 28**).
 - Interviewees cited heart disease and hypertension as two of the most significant health concerns in the community.
- **Obesity**
 - While no federally-designated Food Deserts are present in the community served by Medina, interviewees stated that many lower income residents struggle with food insecurity. Lack of access to affordable healthy food options and high concentrations of fast food restaurants may lead individuals to consume calorie dense, nutrient poor foods that lead to obesity. Chronic conditions such as hypertension and diabetes are much more prevalent among individuals who are obese.
 - Behavioral Risk Factor Surveillance System data show that many of the ZIP codes in the Medina community have comparatively high rates for obesity compared to the average of the 21 counties in Northeast Ohio (**Exhibit 27**).
- **Poor Mental Health Status**
 - In Community Health Status Indicators (CHSI), Medina County ranks poorly compared to peer counties for Older Adult Depression (**Exhibit 21**).
 - Nearly all interviewees identified mental illness and the lack of access to mental and behavioral health services within Medina County as a significant concern.

SIGNIFICANT COMMUNITY HEALTH NEEDS

- The 2012 Medina County Community Health Needs Assessment indicates that 17 percent of Medina County youth had seriously considered attempting suicide in the past year. Childhood depression was also identified as a serious issue in Medina County; approximately 25 percent of youth reported feeling sad or hopeless almost every day for 2 or more weeks in a row.⁶

Economic Development and Community Conditions

Several areas and populations within the Medina community lack adequate social services and transportation, experience high rates of poverty, and are affected by adverse environmental conditions.

- Medina County has a lower poverty rate than both the Ohio and national averages; however the poverty rate among Black residents in Medina County is significantly higher than both the Ohio and national averages (**Exhibit 13**).
- Poverty rates among Black populations in Medina County are more than five times as high as the poverty rate of White residents. (**Exhibit 13**).
- In County Health Rankings, Medina County ranked 76th out of the 88 counties in Ohio for Inadequate Social Support. (**Exhibit 19**).
- A majority of interviewees identified economic and healthcare disparities among minority residents as significant community health issues.
- In County Health Rankings, Medina County ranked 79th out of 88 counties, in Physical Environment and 67th in Air Pollution (**Exhibit 19**).
- Other health assessments also identified transportation and environmental concerns as priorities.
- Interviewees identified a lack of transportation options as a significant barrier to good health in the community. This was especially true for low-income, elderly, and disabled residents.

Health Professions Education and Research

There is a need for more research to address these and other community health needs. More trained health professionals are needed locally, regionally and nationally. Research conducted by Cleveland Clinic has improved health for community members through advancements in new clinical techniques, devices and treatment protocols in diseases and health conditions such as cancer, heart disease, and diabetes.

- Data from County Health Rankings indicate that Medina County has fewer primary care physicians, dentists, and mental health providers per capita than the Ohio averages (**Exhibit 20**).
- The need for behavioral health specialists was a frequent topic of concern among interviewees from the Medina community. It was believed that the absence of a

⁶ Living Well Medina County, *Medina County Community Needs Assessment*, 2012.

SIGNIFICANT COMMUNITY HEALTH NEEDS

behavioral health treatment center within Medina County has contributed to the rising rates of substance abuse.

- A report conducted by the Robert Graham Center indicates that Ohio will need an additional 681 primary care physicians by 2030 (an eight percent increase) to maintain current levels of primary care access. Physicians nearing retirement age and increases in demand associated with increases in insurance coverage are expected to exacerbate this need.⁷
- Through research, Cleveland Clinic has advanced knowledge and improved community health for all its communities, from local to national, and across the world. Cleveland Clinic is involved in both basic research and clinical studies and seeks to translate discoveries into advanced treatments and cures for a variety of diseases and conditions. Cleveland Clinic's tripartite mission of patient care, research, and education facilitates bringing new therapies and treatments to patients and their providers, because Cleveland Clinic physicians provide quality clinical care closely integrated with the latest research and educational developments. Research is conducted at and in collaboration with all Cleveland Clinic hospitals. This allows patients to access the latest techniques and to enroll in research trials no matter where they access care in the health system.

Healthcare for the Elderly

The elderly population in the Medina community is expected to increase in the next five years and meeting the health and social service needs of the aging population is a significant issue.

- The population in Medina's community is projected to increase by two percent between 2015 and 2020; the number of persons 65 years of age and older in the community is projected to increase by 19.6 percent over this period (**Exhibit 7**).
- In Community Health Status Indicators (CHSI), Medina County ranks poorly compared to peer counties for Older Adult Preventable Hospitalizations (**Exhibit 21**).
- Interviewees identified care of the elderly as a challenge in the community, including the need for additional in-home health care, services, and day care services. Concerns were also raised about the lack of providers accepting Medicare and the number of seniors who live alone.

Wellness

Programs and activities that target behavioral health change were identified as needed in the Medina community. Education and opportunities for residents regarding exercise, nutrition, and excessive drinking specifically were noted.

- In County Health Rankings, Medina County ranked 85th out of 88 counties in Excessive Drinking (**Exhibit 19**). The underlying data also indicate that Medina County compares unfavorably to Ohio for the percent of driving deaths with alcohol involvement. (**Exhibit 20**).

⁷ Petterson, Stephen M; Cai, Angela; Moore, Miranda; Bazemore, Andrew. State-level projections of primary care workforce, 2010-2030. September 2013, Robert Graham Center, Washington, D.C.

SIGNIFICANT COMMUNITY HEALTH NEEDS

- Interviewees and other, recent assessments identified alcohol abuse, physical inactivity, and nutrition as significant concerns in Medina County.

OTHER FACILITIES AND RESOURCES IN THE COMMUNITY

This section identifies other facilities and resources available in the community served by Medina that are available to address community health needs.

Federally Qualified Health Centers

Federally Qualified Health Centers (FQHCs) are established to promote access to ambulatory care in areas designated as “medically underserved.” These clinics provide primary care, mental health, and dental services for lower-income members of the community. FQHCs receive enhanced reimbursement for Medicaid and Medicare services and most also receive federal grant funds under Section 330 of the Public Health Service Act. There currently are no FQHC sites operating in the Medina community, however one free clinic does operate in Medina (**Exhibit 4**).

Exhibit 4: Federally Qualified Health Centers

Health Center	County	ZIP Code
Medina Health Ministry	Medina	44256

Source: Health Resources and Services Administration, 2016.

Hospitals

Exhibit 5 presents information on hospital facilities that operate in the community.

Exhibit 5: Hospitals

Hospital Name	Type	Beds	ZIP Code	County
Lodi Community Hospital	Acute	20	44254	Medina
Medina Hospital	Acute	157	44256	Medina

Source: Ohio Hospital Association, 2016.

OTHER FACILITIES AND RESOURCES IN THE COMMUNITY

Other Community Resources

A wide range of agencies, coalitions, and organizations that provide health and social services is available in the region served by Medina. United Way 2-1-1 Ohio maintains a large, online database to help refer individuals in need to health and human services in Ohio. This is a service of the Ohio Department of Social Services and is provided in partnership with the Council of Community Services, The Planning Council, and United Way chapters in Cleveland. United Way 2-1-1 Ohio contains information on organizations and resources in the following categories:

- Donations and Volunteering
- Education, Recreation, and the Arts
- Employment and Income Support
- Family Support and Parenting
- Food, Clothing, and Household Items
- Health Care
- Housing and Utilities
- Legal Services and Financial Management
- Mental Health and Counseling
- Municipal and Community Services
- Substance Abuse and Other Addictions

Additional information about these resources is available at: <http://www.211oh.org/>.

APPENDIX A – CONSULTANT QUALIFICATIONS

Verité Healthcare Consulting, LLC (Verité) was founded in May 2006 and is located in Alexandria, Virginia. The firm serves clients throughout the United States as a resource that helps health care providers conduct Community Health Needs Assessments and develop Implementation Strategies to address significant health needs. Verité has conducted more than 50 needs assessments for hospitals, health systems, and community partnerships nationally since 2010.

The firm also helps hospitals, hospital associations, and policy makers with community benefit reporting, program infrastructure, compliance, and community benefit-related policy and guidelines development. Verité is a recognized national thought leader in community benefit and Community Health Needs Assessments.

APPENDIX B – SECONDARY DATA ASSESSMENT

This section presents an assessment of secondary data regarding health needs in the Medina community.

Community Assessed

As mentioned previously and shown in **Exhibit 1**, Medina's community is comprised of 11 ZIP codes, all of which are located in Medina County, Ohio.

Demographics

Population characteristics and changes directly influence community health needs. The total population in the Medina community is expected to decrease 2.0 percent from 2015 to 2020 (**Exhibit 6**).

Exhibit 6: Percent Change in Community Population by ZIP Code

City	ZIP Code	Estimated Population 2015	Projected Population 2020	Percent Change 2015-2020
Brunswick	44212	44,174	44,937	1.7%
Chippewa Lake	44215	2,024	1,988	-1.8%
Hinckley	44233	8,006	8,119	1.4%
Homerville	44235	1,685	1,685	0.0%
Litchfield	44253	3,418	3,410	-0.2%
Lodi	44254	4,757	4,687	-1.5%
Medina	44256	63,763	65,744	3.1%
Seville	44273	7,546	7,505	-0.5%
Spencer	44275	3,279	3,237	-1.3%
Valley City	44280	5,312	5,470	3.0%
Wadsworth	44281	30,918	31,638	2.3%
Community Total		174,882	178,420	2.0%

Source: Truven Market Expert, 2015.

Between 2015 and 2020, 6 of the 11 ZIP codes in the community are projected to increase in population size. The populations in ZIP codes 44256 and 44280 are expected to increase by approximately three percent.

Exhibit 7 shows the community's population for certain age and sex cohorts in 2015, with projections to 2020.

APPENDIX B – SECONDARY DATA ASSESSMENT

Exhibit 7: Percent Change in Population by Age/Sex Cohort, 2015-2020

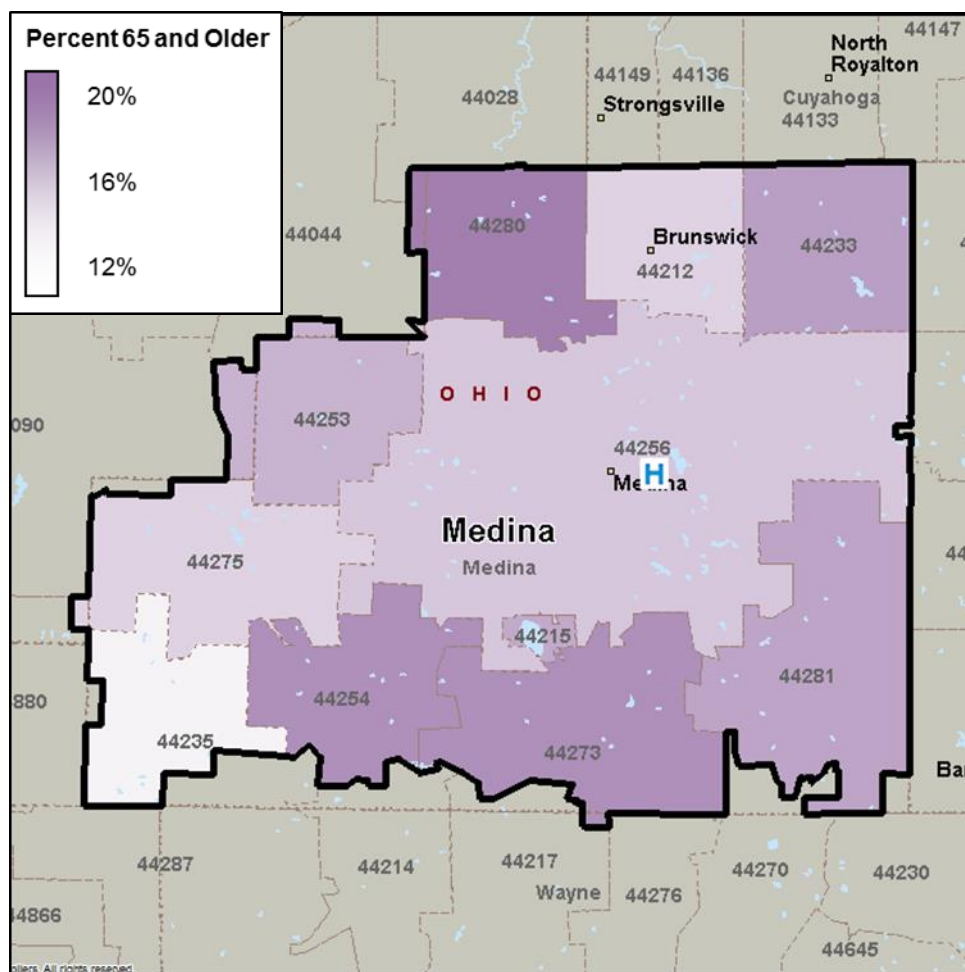
Age/Sex Cohort	Estimated Population 2015	Projected Population 2020	Percent Change 2015-2020
0-17	40,434	37,983	-6.1%
Female 18-44	27,175	27,429	0.9%
Male 18-44	27,320	28,036	2.6%
45-64	52,620	52,289	-0.6%
65+	27,333	32,683	19.6%
Total	174,882	178,420	2.0%

Source: Truven Market Expert, 2015.

The number of persons aged 65 years and older is projected to increase by 19.6 percent between 2015 and 2020. The growth of older populations is likely to lead to a growing need for health services, since on an overall per-capita basis, older individuals typically need and use more services than younger persons.

Exhibit 8 illustrates the percent of the population 65 years of age and older in the community by ZIP code.

Exhibit 8: Percent of Population Aged 65+ by ZIP Code, 2015



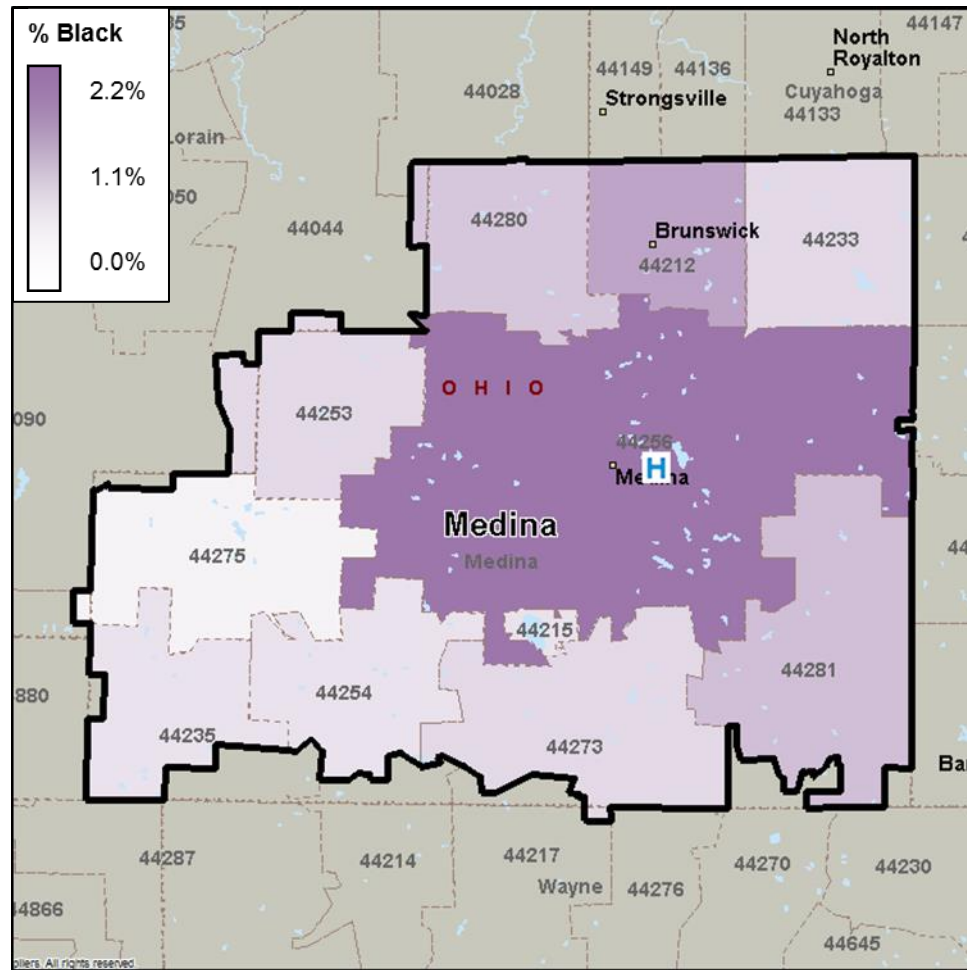
Source: Truven Market Expert, 2015.

In the community, ZIP codes 44280 and 44273 had the highest proportions of residents 65 years of age and older. ZIP code 44235 had the lowest.

Exhibits 9 and 10 show locations in the community where the percentages of the population that are Black and Hispanic (or Latino) were highest in 2015.

APPENDIX B – SECONDARY DATA ASSESSMENT

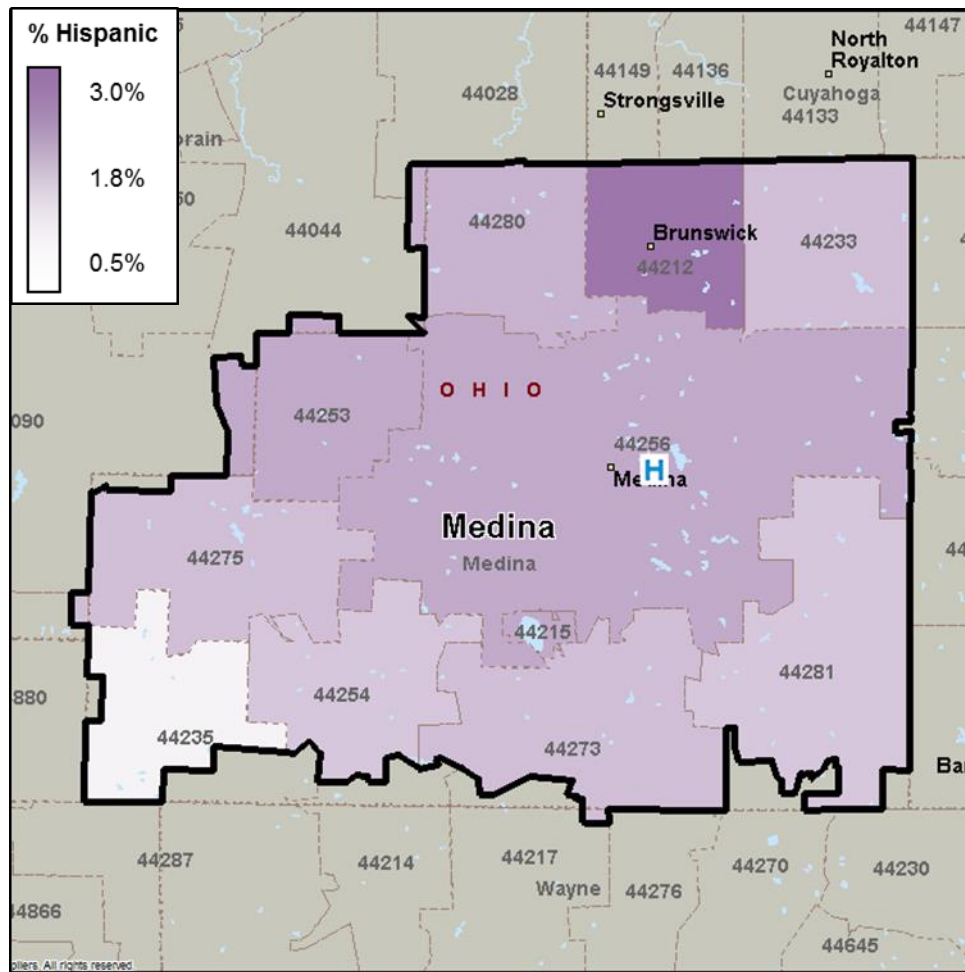
Exhibit 9: Percent of Population - Black, 2015



Source: Truven Market Expert, 2015.

Just over two percent of residents of ZIP code 44256 were Black. Less than one percent of residents were Black in nine community ZIP codes (44215, 44233, 44235, 44253, 44254, 44273, 44275, 44280, and 44281).

Exhibit 10: Percent of Population – Hispanic (or Latino), 2015



Source: Truven Market Expert, 2015.

The percentage of residents that are Hispanic was highest in ZIP codes 44212, 44253, and 44256.

APPENDIX B – SECONDARY DATA ASSESSMENT

Data regarding residents without a high school diploma, with a disability, and who are linguistically isolated are presented in **Exhibit 11** for Medina County, Ohio, and the United States.

Exhibit 11: Other Socioeconomic Indicators, 2014

Measure	Medina County	Ohio	United States
Population 25+ without High School Diploma	6.6%	11.2%	13.6%
Population with a Disability	9.6%	13.5%	12.3%
Population Linguistically Isolated	1.3%	2.4%	8.6%

Source: U.S. Census, ACS 5-Year Estimates, 2010-2014.

Exhibit 11 indicates that:

- Medina County had a lower percentage of residents aged 25 years and older without a high school diploma than Ohio and United States averages.
- Medina County had a lower percentage of the population with a disability compared to Ohio and United States averages.
- Compared to Ohio, Medina County had a lower proportion of the population that is linguistically isolated. Linguistic isolation is defined as residents who speak a language other than English and speak English less than “very well.”

Economic indicators

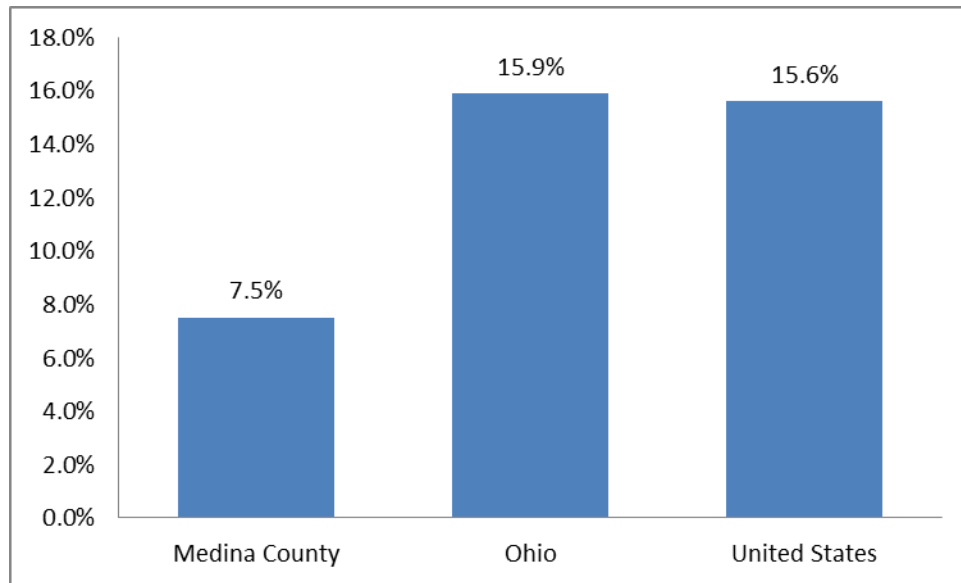
The following categories of economic indicators with implications for health were assessed: (1) people in poverty; (2) unemployment rate; (3) insurance status; and (4) crime.

People in Poverty

Many health needs have been associated with poverty. According to the U.S. Census, in 2014 approximately 15.9 percent of people in Ohio were living in poverty. Medina County’s poverty rate was lower than Ohio’s poverty rate during that year (**Exhibit 12**).

APPENDIX B – SECONDARY DATA ASSESSMENT

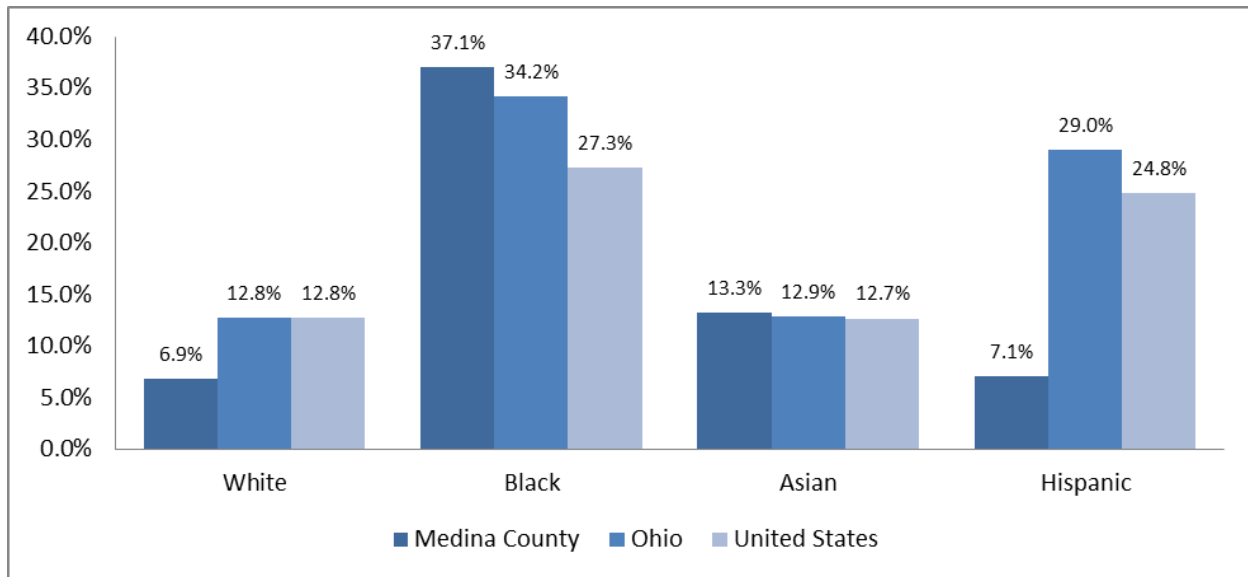
Exhibit 12: Percent of People in Poverty, 2014



Source: U.S. Census, ACS 5-Year Estimates, 2010-2014.

Considerable variation in poverty rates is present across racial and ethnic categories, in Medina County and Ohio (**Exhibit 13**).

Exhibit 13: Poverty Rates by Race and Ethnicity, 2014

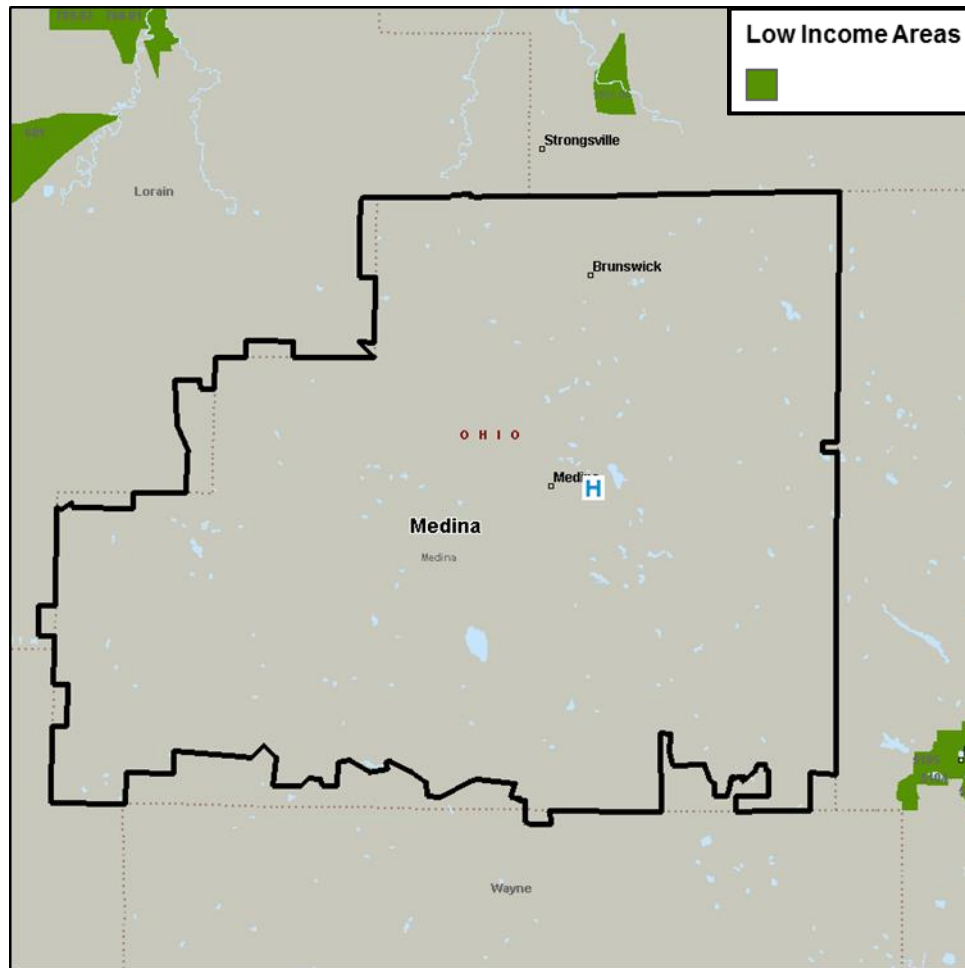


Source: U.S. Census, ACS 5-Year Estimates, 2010-2014.

Poverty rates in Medina County and Ohio have been comparatively high for Black residents. The poverty rate for Hispanic residents of Medina County is well below the Ohio and United States average.

Exhibit 14 portrays (in green shading) the locations of low income census tracts in the community. The U.S. Department of Agriculture defines “low income census tracts” as areas where poverty rates are 20 percent or higher or where median family incomes are 80 percent or lower than within the metropolitan area.

Exhibit 14: Low Income Census Tracts



Source: US Department of Agriculture Economic Research Service, ESRI, 2015.

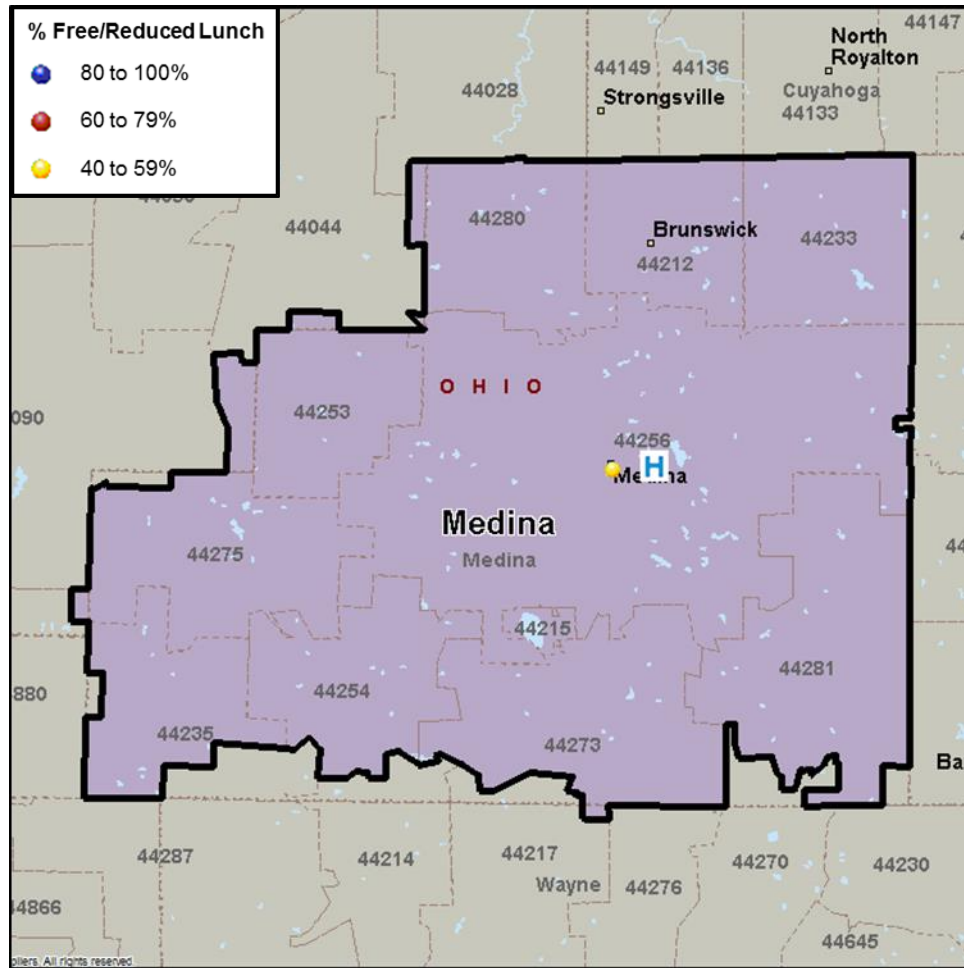
Medina County currently has no low income census tracts in the community.

Eligibility for the National School Lunch Program

Schools participating in the National School Lunch Program are eligible to receive financial assistance from the United States Department of Agriculture (USDA) to provide free or reduced-price meals to low-income students. Schools with 40 percent or more of their student body receiving this assistance are eligible for school-wide Title I funding, designed to ensure that students meet grade-level proficiency standards.

Exhibit 15 illustrates the locations of the schools with at least 40 percent of the students eligible for free or reduced price lunch.

Exhibit 15: Public Schools with over 40 Percent of Students Eligible for Free or Reduced-Price Lunches, School Year 2014-2015



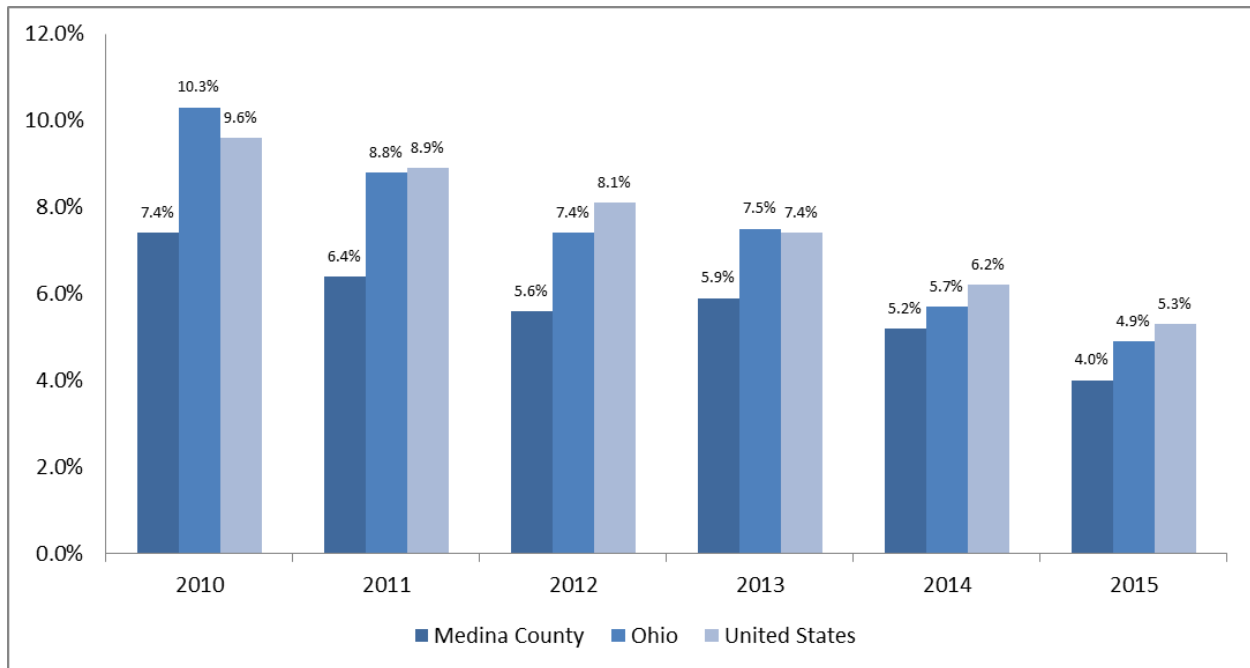
Source: Ohio Department of Education, 2014.

There is one within the Medina community where at least 40 percent of students are eligible for free or reduced price lunches.

Unemployment

Unemployment is problematic because many receive health insurance coverage through their (or a family member's) employer. If unemployment rises, access to employer based health insurance can decrease. **Exhibit 16** shows unemployment rates for 2010 through 2015 for Medina County, with Ohio and national rates for comparison.

Exhibit 16: Unemployment Rates, 2010-2015



Source: Bureau of Labor Statistics, 2010-2014.

Between 2010 and 2015, unemployment rates at the local (Medina County), state, and national level decreased significantly. In 2015, the unemployment rate in Medina County was lower than both the state and national rates.

Insurance Status

Exhibit 17 presents the estimated percent of populations in Medina County without health insurance (uninsured), by ZIP code.

Exhibit 17: Percent of the Population without Health Insurance, 2015-2020

City	ZIP Code	Total Population 2015	% Uninsured 2015	Total Population 2020	% Uninsured 2020
Brunswick	44212	44,174	3.0%	44,937	2.1%
Chippewa Lake	44215	2,024	3.3%	1,988	2.3%
Hinckley	44233	8,006	1.9%	8,119	1.4%
Homerville	44235	1,685	4.2%	1,685	3.1%
Litchfield	44253	3,418	1.9%	3,410	1.4%
Lodi	44254	4,757	5.3%	4,687	3.6%
Medina	44256	63,763	3.4%	65,744	2.4%
Seville	44273	7,546	2.5%	7,505	1.8%
Spencer	44275	3,279	2.9%	3,237	2.1%
Valley City	44280	5,312	1.7%	5,470	1.3%
Wadsworth	44281	30,918	3.2%	31,638	2.3%

Source: Truven Market Expert, 2015.

In 2015, five out of the 11 ZIP codes in the Medina community had uninsured rates above three percent. By 2020, it is projected that only two of the 11 ZIP codes in the community will have uninsured rates above three percent (ZIP codes 44235 and 44254).

Ohio Medicaid Expansion

Subsequent to the ACA's passage, a June 2012 Supreme Court ruling provided states with discretion regarding whether or not to expand Medicaid eligibility. Ohio was one of the states that expanded Medicaid. Medicaid expansion accounted for over 76 percent of Ohio's ACA enrollment and plans purchased through the federal healthcare.gov exchange accounted for about 24 percent.⁸

In Ohio, Medicaid primarily is available for low-income individuals, pregnant women, children, low-income elderly persons, and individuals with disabilities.⁹ With a network of more than 83,000 providers, the Ohio Department of Medicaid covers over 2.9 million Ohio residents. Across the United States, uninsured rates have fallen most in states that decided to expand Medicaid.¹⁰

The recent election of the new president raises questions regarding whether access improvements associated with the Affordable Care Act will be sustained.

Crime

Exhibit 18 provides certain crime statistics for Medina County and Ohio.

⁸ <http://watchdog.org/237980/75percent-ohio-obamacare/>

⁹ <http://medicaid.ohio.gov/FOROHIOANS/WhoQualifies.aspx>

¹⁰ See: <http://hrms.urban.org/briefs/Increase-in-Medicaid-under-the-ACA-reduces-uninsurance.html>

APPENDIX B – SECONDARY DATA ASSESSMENT

Exhibit 18: Crime Rates by Type and County, Per 100,000, 2014

(Light grey shading indicates indicator worse than Ohio average; Dark grey shading indicates more than 50 percent worse than Ohio average)

Crime	Medina County	Ohio
Violent Crime	38.6	278.4
Property Crime	966.8	2,880.8
Murder	1.2	4.4
Rape	12.1	36.2
Robbery	10.4	129.2
Aggravated Assault	15.0	126.1
Burglary	134.2	786.5
Larceny	813.7	1,921.8
Motor Vehicle Theft	19.0	172.5
Arson	2.3	21.1

Source: FBI, 2014.

2014 crime rates in Medina County were all well below the Ohio average for all crimes.

Local Health Status and Access Indicators

This section assesses health status and access indicators for the Medina community. Data sources include: (1) County Health Rankings, (2) the Centers for Disease Control's (CDC) Community Health Status Indicators, (3) the Ohio Department of Health, and (4) the CDC's Behavioral Risk Factor Surveillance System.

Throughout this section, data and cells are highlighted if indicators are unfavorable – because they exceed benchmarks (typically, Ohio averages). Where confidence interval data are available, cells are highlighted only if variances are unfavorable and statistically significant.

County Health Rankings

County Health Rankings, a University of Wisconsin Population Health Institute initiative funded by the Robert Wood Johnson Foundation, incorporates a variety of health status indicators into a system that ranks each county/city within each state in terms of “health factors” and “health outcomes.” These health factors and outcomes are composite measures based on several variables grouped into the following categories: health behaviors, clinical care,¹¹ social and economic factors, and physical environment.¹² *County Health Rankings* is updated annually.

¹¹A composite measure of Access to Care, which examines the percent of the population without health insurance and ratio of population to primary care physicians, and Quality of Care, which examines the hospitalization rate for ambulatory care sensitive conditions, whether diabetic Medicare patients are receiving HbA1C screening, and percent of chronically ill Medicare enrollees in hospice care in the last 8 months of life.

¹²A composite measure that examines Environmental Quality, which measures the number of air pollution-particulate matter days and air pollution-ozone days, and Built Environment, which measures access to healthy foods and recreational facilities and the percent of restaurants that are fast food.

APPENDIX B – SECONDARY DATA ASSESSMENT

County Health Rankings 2016 relies on data from 2006 to 2015, with most data from 2010 to 2013.

Exhibit 19 presents 2013 and 2016 rankings for each available indicator category. Rankings indicate how the county ranked in relation to all 88 counties in the Ohio, with 1 indicating the most favorable rankings and 88 the least favorable. The table also indicates if rankings fell between 2013 and 2016.

APPENDIX B – SECONDARY DATA ASSESSMENT

Exhibit 19: County Health Rankings, 2013 and 2016

(Light grey shading indicates indicator in bottom half of Ohio counties; Dark grey shading indicates in bottom quartile of Ohio counties)

	Medina County		
	2013	2016	Rank Change
Health Outcomes	4	5	↓
Health Factors	4	5	↓
Length of Life	3	4	↓
Quality of Life	6	5	
Frequent Physical Distress	N/A	3	
Frequent Mental Distress	N/A	3	
Drug Overdose Deaths	N/A	9	
Health Behaviors	3	5	↓
Adult Smoking	6	2	
Adult Obesity	5	14	↓
Excessive Drinking	37	85	↓
Sexually Transmitted Infections	7	9	↓
Teen Births	26	7	
Clinical Care	5	6	↓
Primary Care Physicians	15	24	↓
Dentists	4	21	↓
Mental Health Providers	16	28	↓
Preventable Hospital Stays	37	30	
Diabetic Screening	38	57	↓
Social & Economic Factors	3	7	↓
Some College	4	6	↓
Unemployment	5	20	↓
Inadequate Social Support	18	76	↓
Injury Deaths	10	3	
Physical Environment	34	79	↓
Air Pollution	70	67	
Severe Housing Problems	N/A	24	

Source: County Health Rankings, 2016.

In 2016, Medina County ranked in the bottom 50th percentile among Ohio counties for five of the 27 indicators assessed. Of those five indicators ranking in the bottom 50th percentile, four of them ranked in the bottom quartile, including Excessive Drinking, Inadequate Social Support, Physical Environment, and Air Pollution. Between 2013 and 2016, rankings for 17 indicators fell in Medina County.

Exhibit 20 provides data for each underlying indicator of the composite categories in the County Health Rankings.¹³ The exhibit also includes national averages.

¹³ County Health Rankings provides details about what each indicator measures, how it is defined, and data sources at http://www.countyhealthrankings.org/sites/default/files/resources/2013Measures_datasources_years.pdf

APPENDIX B – SECONDARY DATA ASSESSMENT

Exhibit 20: County Health Rankings Data Compared to Ohio and U.S. Averages, 2016
(Light grey shading indicates indicator worse than Ohio average; Dark grey shading indicates more than 50 percent worse than Ohio average)

Indicator Category	Data	Medina County	Ohio	U.S.
Health Outcomes				
Length of Life	Years of potential life lost before age 75 per 100,000 population	5,102.9	7,533.6	7,700.0
Quality of Life	Percent of adults reporting fair or poor health	11.9	16.0	16.0
	Average number of physically unhealthy days reported in past 30 days	3.2	3.8	3.7
	Average number of mentally unhealthy days reported in past 30 days	3.6	4.0	3.7
	Percent of live births with low birthweight (<2500 grams)	6.9	8.6	8.0
Health Factors				
Health Behaviors				
Adult Smoking	Percent of adults that report smoking >= 100 cigarettes and currently smoking	15.9	19.2	18.0
Adult Obesity	Percent of adults that report a BMI >= 30	28.9	30.5	31.0
Food Environment Index	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	8.1	6.9	7.2
Physical Inactivity	Percent of adults aged 20 and over reporting no leisure-time physical activity	24.1	26.3	28.0
Access to Exercise Opportunities	Percent of population with adequate access to locations for physical activity	94.3	83.2	62.0
Alcohol Impaired Driving Deaths	Percent of driving deaths with alcohol involvement	41.9	35.3	30.0
Excessive Drinking	Binge plus heavy drinking	19.5	17.9	17.0
STDs	Chlamydia rate per 100,000 population	157.2	460.2	287.7
Teen Births	Teen birth rate per 1,000 female population, ages 15-19	15.6	34.4	40.0
Clinical Care				
Uninsured	Percent of population under age 65 without health insurance	9.9	13.0	17.0
Primary Care Physicians	Ratio of population to primary care physicians	1576:1	1296:1	1990:1
Dentists	Ratio of population to dentists	2047:1	1713:1	2590:1
Mental Health Providers	Ratio of population to mental health providers	894:1	642:1	1060:1
Preventable Hospital Stays	Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	63.9	64.9	60.0
Diabetic Screening	Percent of diabetic Medicare enrollees that receive HbA1c monitoring	84.6	84.9	85.0
Mammography Screening	Percent of female Medicare enrollees, ages 67-69, that receive mammography screening	67.0	60.0	61.0

Source: County Health Rankings, 2016.

APPENDIX B – SECONDARY DATA ASSESSMENT

Exhibit 20: County Health Rankings Data Compared to Ohio and U.S. Averages, 2016 (*continued*)
(Light grey shading indicates indicator worse than Ohio average; Dark grey shading indicates more than 50 percent worse than Ohio average)

Indicator Category	Data	Medina County	Ohio	U.S.
Health Factors				
Social & Economic Factors				
High School Graduation	Percent of ninth-grade cohort that graduates in four years	95.1	82.7	86.0
Some College	Percent of adults aged 25-44 years with some post-secondary education	70.5	63.4	56.0
Unemployment	Percent of population age 16+ unemployed but seeking work	5.2	5.7	6.0
Children in poverty	Percent of children under age 18 in poverty	9.6	22.7	23.0
Income Inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	3.7	4.8	4.4
Children in single-parent households	Percent of children that live in a household headed by single parent	22.0	35.4	32.0
Social Associations	Number of associations per 10,000 population	9.3	11.4	13.0
Violent Crime	Number of reported violent crime offenses per 100,000 population	95.1	307.2	199.0
Injury Deaths	Injury mortality per 100,000	42.2	62.7	74.0
Physical Environment				
Air Pollution	The average daily measure of fine particulate matter in micrograms per cubic meter (PM2.5) in a county	13.7	13.5	11.9
Severe Housing Problems	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities	11.6	15.2	14.0
Drive Alone to Work	Percent of the workforce that drives alone to work	87.3	83.5	80.0
Long Commute- Drive Alone	Among workers who commute in their car alone, the percent that commute more than 30 minutes	44.5	29.4	29.0

Source: County Health Rankings, 2016

APPENDIX B – SECONDARY DATA ASSESSMENT

Exhibit 20 highlights the following comparatively unfavorable indicators:

- Percent of driving deaths with alcohol involved
- Binge and heavy drinking
- Percent of Medicare enrollees who receive diabetic screenings
- Social associations rate
- Air pollution
- Percent of workforce that drive alone to work
- Percent of workers with a long commute who drive alone

Community Health Status Indicators

The Centers for Disease Control and Prevention’s *Community Health Status Indicators* provide health profiles for all 3,143 counties in the United States. Counties are assessed using 44 metrics associated with health outcomes including health care access and quality, health behaviors, social factors, and the physical environment.

The *Community Health Status Indicators* allows for a comparison of a given county to other “peer counties.” Peer counties are assigned based on 19 variables including population size, population growth, population density, household income, unemployment, percent children, percent elderly, and poverty rates.

Exhibit 21 compares Medina County to its respective peer counties and cities and highlights community health issues found to rank in the bottom quartile of the counties included in the analysis.

APPENDIX B – SECONDARY DATA ASSESSMENT

Exhibit 21: Community Health Status Indicators, 2015
(Shading indicates indicator in bottom quartile compared to peer counties)

Category	Indicator	Medina County
Mortality	Alzheimer's Disease Deaths	
	Cancer Deaths	
	Chronic Kidney Disease Deaths	
	Chronic Lower Respiratory Disease (CLRD) Deaths	
	Coronary Heart Disease Deaths	
	Diabetes Deaths	
	Female Life Expectancy	
	Male Life Expectancy	
	Motor Vehicle Deaths	
	Stroke Deaths	
	Unintentional Injury (including motor vehicle)	
Morbidity	Adult Diabetes	
	Adult Obesity	
	Adult Overall Health Status	
	Alzheimer's Disease/Dementia	
	Cancer	
	Gonorrhea	
	HIV	
	Older Adult Asthma	
	Older Adult Depression	
	Preterm Births	
	Syphilis	
Health Care Access and Quality	Cost Barrier to Care	
	Older Adult Preventable Hospitalizations	
	Primary Care Provider Access	
	Uninsured	
Health Behaviors	Adult Binge Drinking	
	Adult Female Routine Pap Tests	
	Adult Physical Inactivity	
	Adult Smoking	
	Teen Births	
Social Factors	Children in Single-Parent Households	
	High Housing Costs	
	Inadequate Social Support	
	On Time High School Graduation	
	Poverty	
	Unemployment	
	Violent Crime	
Physical Environment	Access to Parks	
	Annual Average PM2.5 Concentration	
	Drinking Water Violations	
	Housing Stress	
	Limited Access to Healthy Food	
	Living Near Highways	

Source: Community Health Status Indicators, 2015.

The CHSI data indicate that mortality related to Alzheimer's disease, chronic lower respiratory disease, coronary heart disease, and adult diabetes are comparatively high. Older adult depression, older adult preventable hospitalizations, adult female routine pap tests, and annual average PM2.5 concentration (air pollution) also benchmark unfavorably.

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Ohio Department of Health

The Ohio Department of Health maintains a data warehouse that includes county-level indicators regarding mortality rates (**Exhibits 22 and 23**), cancer incidence (**Exhibit 24**), communicable disease incidence (**Exhibit 25**), and maternal and child health indicators (**Exhibit 26**).

Exhibit 22 provides age-adjusted mortality rates for selected causes of death in 2012.

Exhibit 22: Selected Causes of Death, Age-Adjusted Rates per 100,000 Population, 2012
(Light grey shading indicates indicator worse than Ohio average; Dark grey shading indicates more than 50 percent worse than Ohio average)

Measure	Medina County	Ohio	Healthy People 2020
Heart Disease	172.8	191.4	-
Diabetes	20.2	26.1	-
Influenza and Pneumonia	13.6	15.4	-
Suicide	9.3	12.0	10.2
Motor Vehicle Collisions	6.0	9.0	12.4
Homicide	0.5	5.4	-
Motor Vehicle Collisions (Alcohol)	3.3	3.8	-
Aortic Aneurysm	2.8	3.7	-
HIV	N/A	1.3	-
Pedestrians Killed in Traffic Collisions	0.6	0.5	1.4

Source: Ohio Department of Health, 2012.

In Medina County, the pedestrians killed in traffic collisions rate was higher than the Ohio average.

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Exhibit 23: Age-Adjusted Cancer Mortality Rates per 100,000 Population, 2013
(Light grey shading indicates indicator worse than Ohio average; Dark grey shading indicates more than 50 percent worse than Ohio average)

Cancer Site/Type	Medina County	Ohio Rate	U.S. Rate
All Sites/Types	170.9	186.6	171.2
Lung and Bronchus	48.9	55.3	47.2
Breast (Female)	22.4	23.6	21.9
Prostate	24.1	22.0	21.4
Colon and Rectum	13.3	17.0	15.5
Pancreas	13.0	11.5	10.9
Ovary	8.1	7.9	7.7
Leukemia	8.4	7.3	7.0
Non-Hodgkin Lymphoma	7.8	6.9	6.2
Liver and Intrahepatic Bile Duct	3.6	5.3	6.0
Bladder	5.2	5.0	4.4
Esophagus	4.9	5.0	4.2
Uterus	5.9	4.9	4.4
Brain and Other CNS	4.3	4.5	4.3
Kidney and Renal Pelvis	3.6	4.3	3.9
Multiple Myeloma	4.0	3.5	3.3
Melanoma of Skin	1.6	3.0	2.7
Stomach	3.0	2.9	3.4
Cervix	-	2.6	2.3
Oral Cavity and Pharynx	1.5	2.5	2.5
Larynx	1.0	1.3	1.1
Thyroid	-	0.5	0.5
Hodgkin Lymphoma	-	0.4	0.4
Testis	-	0.3	0.3

Source: Ohio Department of Health, 2013.

Age-adjusted cancer mortality rates in Medina County were significantly higher than the Ohio averages for prostate, pancreas, ovary, leukemia, non-Hodgkin's lymphoma, bladder, uterus, multiple myeloma, and stomach.

Exhibit 24 presents age-adjusted cancer incidence rates in the community.

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Exhibit 24: Age-Adjusted Cancer Incidence Rates per 100,000 Population, 2008-2012
(Light grey shading indicates indicator worse than Ohio average; Dark grey shading indicates more than 50 percent worse than Ohio average)

Site/Type	Medina County	Ohio
Total	466.1	452.5
Prostate	119.1	101.7
Breast	61.9	67.6
Lung and Bronchus	60.5	67.4
Colon and Rectum	38.1	40.6
Other Sites/Types	30.6	35.8
Uterus	35.0	28.8
Bladder	27.2	22.1
Melanoma of Skin	28.9	19.5
Non-Hodgkins Lymphoma	21.2	18.6
Kidney and Renal Pelvis	18.0	16.9
Thyroid	14.7	15.2
Pancreas	12.7	12.3
Leukemia	16.8	11.9
Oral Cavity and Pharynx	12.6	11.7
Ovary	11.7	11.3
Brain and Other CNS	7.0	7.4
Cervix	4.8	7.4
Stomach	8.2	6.8
Liver and Intrahepatic Bile Duct	7.3	6.6
Multiple Myeloma	4.3	5.9
Testis	-	5.2
Esophagus	4.0	5.0
Larynx	4.8	4.3
Hodgkins Lymphoma	-	2.6

Source: Ohio Department of Health, 2012.

The cancer incidence rates for prostate, uterus, bladder, melanoma of skin, non-Hodgkin's lymphoma, kidney and renal, pelvis, pancreas, leukemia, oral cavity and pharynx, ovary, stomach, liver and intrahepatic bile duct, and larynx in Medina County were higher than the Ohio averages.

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Exhibit 25: Communicable Disease Incidence Rates per 100,000 Population, 2012
(Light grey shading indicates indicator worse than Ohio average; Dark grey shading indicates more than 50 percent worse than Ohio average)

Measure	Medina County	Ohio
Chlamydia	178.1	462.0
HIV	25.9	154.3
Gonorrhea	23.8	143.5
Syphilis	0.0	9.9
Varicella	4.6	7.0
Viral Meningitis	0.6	6.1
Hepatitis A, B, and C	2.3	1.9

Source: Ohio Department of Health, 2012.

Medina County has had comparatively high incidence rates of Hepatitis A, B, and C.

Exhibit 26: Maternal and Child Health Indicators, 2012
(Light grey shading indicates indicator worse than Ohio average; Dark grey shading indicates more than 50 percent worse than Ohio average)

Measure	Medina County	Ohio	Healthy People 2020
Mortality Rate per 1,000 Live Births			
Infant	3.3	7.7	N/A
Neonatal	2.2	5.2	N/A
Post-Neonatal	1.1	2.5	N/A
% Deliveries			
Low Birth Weight	6.8	8.6	7.8
Very Low Birth Weight	1.3	1.6	1.4
% Preterm Births			
< 32 weeks of gestation	1.8	2.3	1.8
32-33 weeks of gestation	1.4	1.6	1.4
34-36 weeks of gestation	7.9	8.6	8.1
< 37 weeks of gestation	11.2	12.6	11.4
% Births to			
Unmarried Women 18-54 Years Old	22.6	41.3	N/A
Women 40-54 Years Old	3.1	2.1	N/A
Women <18 Years Old	1.2	3.0	N/A
Teenage Pregnancies per 1,000 Births			
Births to Females 15-19 Years Old	16.2	36.0	N/A

Source: Ohio Department of Health, 2012.

Exhibit 26 indicates births to women aged 40 to 54 years old are comparatively higher in Medina County.

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Behavioral Risk Factor Surveillance System

The Centers for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance System (BRFSS) gathers data through a telephone survey regarding health risk behaviors, healthcare access, and preventive health measures. Data are collected for the entire United States. Analysis of BRFSS data can identify localized health issues, trends, and health disparities, and can enable county, state, or nation-wide comparisons.

BRFSS data were assessed for each ZIP code in the Medina community and compared to the averages for the 21 counties in Northeast Ohio.¹⁴

¹⁴ The 21 counties include Ashland, Ashtabula, Carroll, Columbiana, Crawford, Cuyahoga, Erie, Geauga, Holmes, Huron, Lake, Lorain, Mahoning, Medina, Portage, Richland, Stark, Summit, Trumbull, Tuscarawas, and Wayne counties.

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Exhibit 27: Behavioral Risk Factor Surveillance System, Chronic Conditions, 2015

(Light grey shading indicates indicator worse than the 21-County average; Dark grey shading indicates more than 50 percent worse than the 21-County average)

City	ZIP Code	Total Population 18+ 2015	% Obese	% Back Pain	% Diabetes	% Asthma	% Depression	% High Blood Pressure	% High Cholesterol	%COPD	% Smoking
Brunswick	44212	34,494	29.8%	20.9%	10.4%	9.5%	11.8%	26.2%	21.7%	3.6%	23.4%
Chippewa Lake	44215	1,058	39.8%	28.9%	18.0%	12.0%	18.0%	35.5%	24.9%	5.4%	33.9%
Hinckley	44233	6,105	25.8%	15.9%	8.6%	11.8%	11.1%	20.6%	19.6%	3.0%	21.0%
Homerville	44235	1,184	33.4%	15.4%	9.6%	8.1%	14.5%	22.3%	19.1%	3.9%	34.7%
Litchfield	44253	2,639	28.3%	18.0%	10.0%	12.4%	11.0%	22.7%	23.2%	3.6%	23.6%
Lodi	44254	3,634	33.6%	27.9%	15.1%	9.9%	13.7%	31.3%	26.0%	4.6%	30.1%
Medina	44256	48,100	29.6%	18.9%	11.4%	10.4%	11.9%	25.8%	21.5%	3.7%	22.4%
Seville	44273	6,353	31.2%	25.5%	13.5%	10.3%	13.7%	29.2%	23.8%	4.5%	25.8%
Spencer	44275	3,640	32.7%	22.9%	11.5%	7.9%	13.5%	26.0%	21.9%	4.3%	29.9%
Valley City	44280	4,343	29.1%	15.6%	10.0%	13.2%	11.9%	24.9%	21.7%	4.1%	21.9%
Wadsworth	44281	23,953	31.8%	22.8%	12.8%	9.3%	13.4%	27.3%	21.9%	3.8%	25.8%
Community Average		135,503	30.2%	20.6%	11.4%	10.1%	12.3%	26.2%	21.8%	3.8%	24.0%
21-County Average		3,454,621	31.7%	25.6%	14.0%	11.6%	15.1%	30.6%	24.1%	4.7%	27.5%

Source: Truven Market Expert/Behavioral Risk Factor Surveillance System, 2015.

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Compared to the 21-County averages, the Medina community compared unfavorably to the Ohio average for high blood pressure. Within the Medina community, 11 ZIP codes had higher rates of high blood pressure, 9 ZIP codes had higher rates of smoking, and 8 ZIP codes had higher rates of obesity.

Ambulatory Care Sensitive Conditions

This section examines the frequency of discharges for Ambulatory Care Sensitive Conditions (ACSCs, frequently referred to as Prevention Quality Indicators or PQIs) throughout the community.

ACSCs are health “conditions for which good outpatient care can potentially prevent the need for hospitalization or for which early intervention can prevent complications or more severe disease.”¹⁵ As such, rates of hospitalization for these conditions can “provide insight into the quality of the health care system outside of the hospital,” including the accessibility and utilization of primary care, preventive care and health education. Among these conditions are: angina without procedure, diabetes, perforated appendixes, chronic obstructive pulmonary disease (COPD), hypertension, congestive heart failure, dehydration, bacterial pneumonia, urinary tract infection, and asthma.

Disproportionately high rates of discharges for ACSC indicate potential problems with the availability or accessibility of ambulatory care and preventive services and can suggest areas for improvement in the health care system and ways to improve outcomes.

Exhibit 28 provides 2014 PQI rates (per 100,000 persons) for ZIP codes in the Medina community – with comparisons to Ohio averages.

¹⁵Agency for Healthcare Research and Quality (AHRQ) Prevention Quality Indicators.

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Exhibit 28: PQI (ACSC) Rates per 100,000, 2014

(Light grey shading indicates indicator worse than Ohio average; Dark grey shading indicates more than 50 percent worse than Ohio average)

City	ZIP Code	Diabetes Short-Term Complications	Perforated Appendix	Diabetes Long-Term Complications	Chronic Obstructive Pulmonary Disease	Hypertension	Congestive Heart Failure	Low Birth Weight
Brunswick	44212	68	49	101	459	18	405	48
Chippewa Lake	44215	61	0	122	535	0	714	50
Hinckley	44233	0	42	48	172	0	193	39
Homerville	44235	0	0	84	133	133	532	91
Litchfield	44253	0	56	143	302	50	554	38
Lodi	44254	26	83	131	527	0	753	0
Medina Totals	44256	75	39	60	272	57	447	60
Seville	44273	81	0	65	138	23	345	146
Spencer	44275	0	0	119	116	58	1218	216
Valley City	44280	46	0	46	124	0	248	0
Wadsworth	44281	59	32	67	368	37	418	57
Medina Totals		61	39	77	324	36	436	57
Ohio Totals		95	37	119	609	53	424	61

Source: Cleveland Clinic, 2014.
Note: Rates are not age-sex adjusted.

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Exhibit 28: PQI (ACSC) Rates per 100,000, 2014 (*continued*)

(Light grey shading indicates indicator worse than Ohio average; Dark grey shading indicates more than 50 percent worse than Ohio average)

City	ZIP Code	Dehydration	Bacterial Pneumonia	Urinary Tract Infection	Angina without Procedure	Uncontrolled Diabetes	Adult Asthma	Lower-Extremity Amputation Among Patients with Diabetes
Brunswick	44212	65	237	123	9	9	17	9
Chippewa Lake	44215	103	696	175	89	0	0	0
Hinckley	44233	0	167	42	43	0	0	0
Homerville	44235	0	778	261	0	0	0	0
Litchfield	44253	0	393	395	50	0	123	36
Lodi	44254	0	441	221	0	38	0	26
Medina Totals	44256	102	194	106	27	3	27	10
Seville	44273	55	179	135	46	0	56	0
Spencer	44275	134	113	227	0	0	0	0
Valley City	44280	156	121	303	31	0	0	0
Wadsworth	44281	135	219	196	12	6	26	0
Medina Totals		88	225	145	22	5	23	7
Ohio Totals		107	196	131	12	13	36	9

Source: Cleveland Clinic, 2014.

Note: Rates are not age-sex adjusted.

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The rates of admissions for ACSC in the Medina community exceeded Ohio averages for perforated appendix, congestive heart failure, bacterial pneumonia, urinary tract infection, and angina without procedure. Within the community, Litchfield ZIP code 44253 had significantly higher PQI rates for eight of the 14 conditions, compared to the Ohio averages.

Exhibit 29 provides the ratio of PQI rates in the Medina community compared to the Ohio averages. Conditions where the ratios are highest (meaning that the PQI rates in the community are the most above average) are presented first.

Exhibit 29: Ratio of PQI Rates for Medina and Ohio, 2014

Indicator	Medina Hospital	Ohio	Ratio: Medina/Ohio
Angina without Procedure	21.8	11.7	1.9
Bacterial Pneumonia	225.0	196.2	1.1
Urinary Tract Infection	145.1	131.5	1.1
Perforated Appendix	39.3	36.9	1.1
Congestive Heart Failure	436.5	423.8	1.0
Low Birth Weight	56.8	61.4	0.9
Lower-Extremity Amputation Among Patients with Diabetes	7.4	8.9	0.8
Dehydration	88.0	107.2	0.8
Hypertension	35.9	52.6	0.7
Adult Asthma	23.5	36.0	0.7
Diabetes Long-Term Complications	76.6	118.8	0.6
Diabetes Short-Term Complications	61.0	94.7	0.6
Chronic Obstructive Pulmonary Disease	324.4	608.8	0.5
Uncontrolled Diabetes	5.4	13.2	0.4

Source: Cleveland Clinic, 2014.
Note: Rates are not age-sex adjusted.

In the Medina community, the ACSC rate for angina without procedure was nearly twice as high as the Ohio average.

Community Need Index™ and Food Deserts

Dignity Health Community Need Index

Dignity Health, a California-based hospital system, developed and has made widely available for public use a *Community Need Index*™ that measures barriers to health care access by county/city and ZIP code. The index is based on five social and economic indicators:

- The percentage of elders, children, and single parents living in poverty;
- The percentage of adults over the age of 25 with limited English proficiency, and the percentage of the population that is non-White;

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- The percentage of the population without a high school diploma;
- The percentage of uninsured and unemployed residents; and
- The percentage of the population renting houses.

The *Community Need Index*TM calculates a score for each ZIP code based on these indicators. Scores range from “Lowest Need” (1.0-1.7) to “Highest Need” (4.2-5.0).

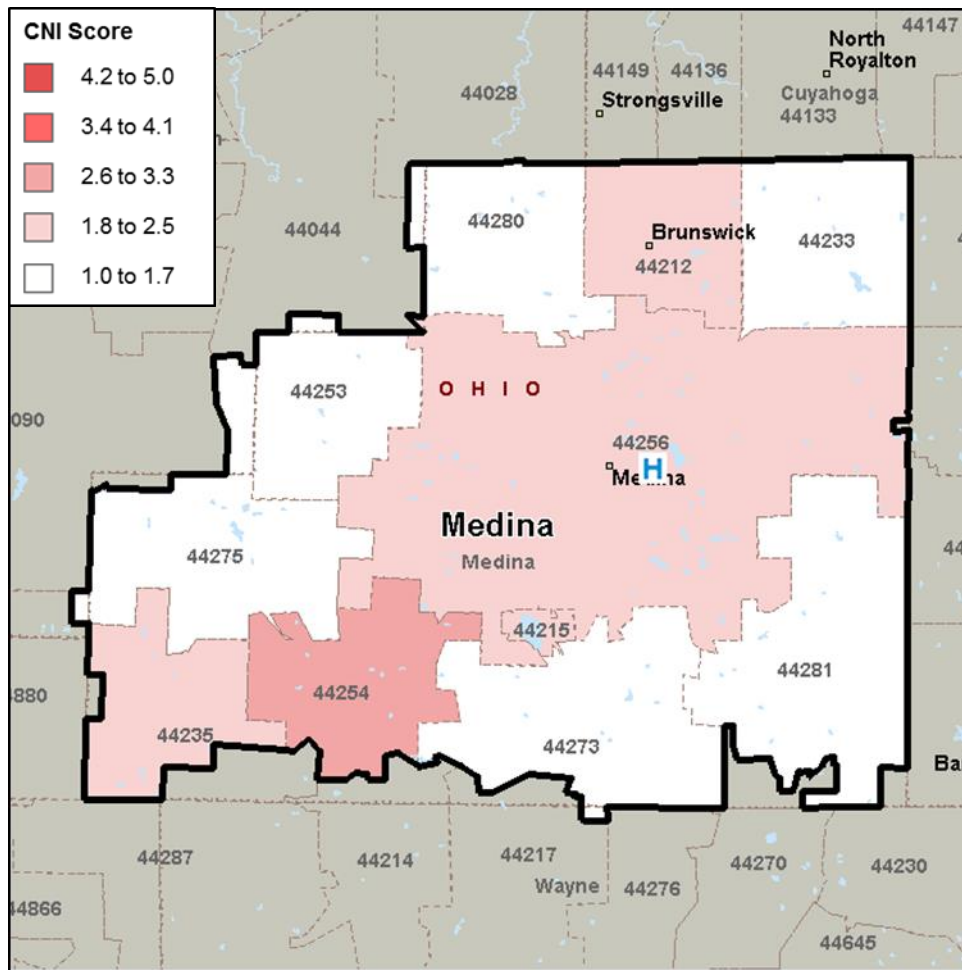
Exhibit 30 presents the *Community Need Index*TM (CNI) score of each ZIP code in the Medina community.

Exhibit 30: Community Need IndexTM Score by ZIP Code, 2015

City	ZIP Code	CNI Score
Lodi	44254	2.6
Chippewa Lake	44215	2.2
Brunswick	44212	2.0
Homerville	44235	2.0
Medina	44256	1.8
Seville	44273	1.6
Spencer	44275	1.6
Valley City	44280	1.6
Wadsworth	44281	1.6
Litchfield	44253	1.4
Hinckley	44233	1.2
Medina Community Average		1.8
Medina County Average		1.8

Source: Dignity Health, 2015.

Exhibit 31 presents these data in a community map format.

Exhibit 31: Community Need Index, 2015

Source: Microsoft MapPoint and Dignity Health, 2015.

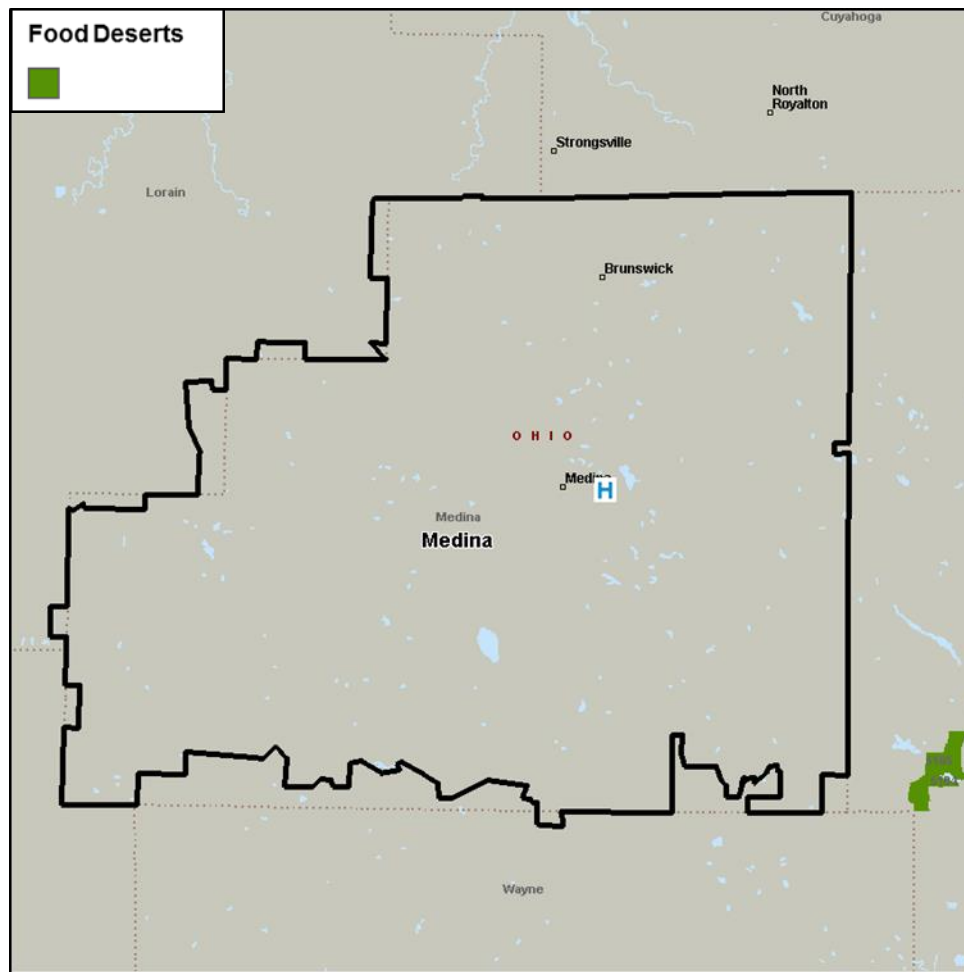
The CNI indicates that none of the 11 ZIP codes in the Medina community scored in the two “highest need categories.” Lodi (ZIP code 44254) received a score of 2.6, the highest in the community.

Food Deserts

The U.S. Department of Agriculture’s Economic Research Service estimates the number of people in each census tract that live in a “food desert,” defined as low-income areas more than one mile from a supermarket or large grocery store in urban areas and more than 10 miles from a supermarket or large grocery store in rural areas. Many government-led initiatives aim to increase the availability of nutritious and affordable foods to people living in these food deserts.

Exhibit 32 illustrates the location of food deserts in the community.

Exhibit 32: Food Deserts



Source: Microsoft MapPoint and U.S. Department of Agriculture, 2015.

No areas within the Medina community have been designated as food deserts.

Medically Underserved Areas and Populations

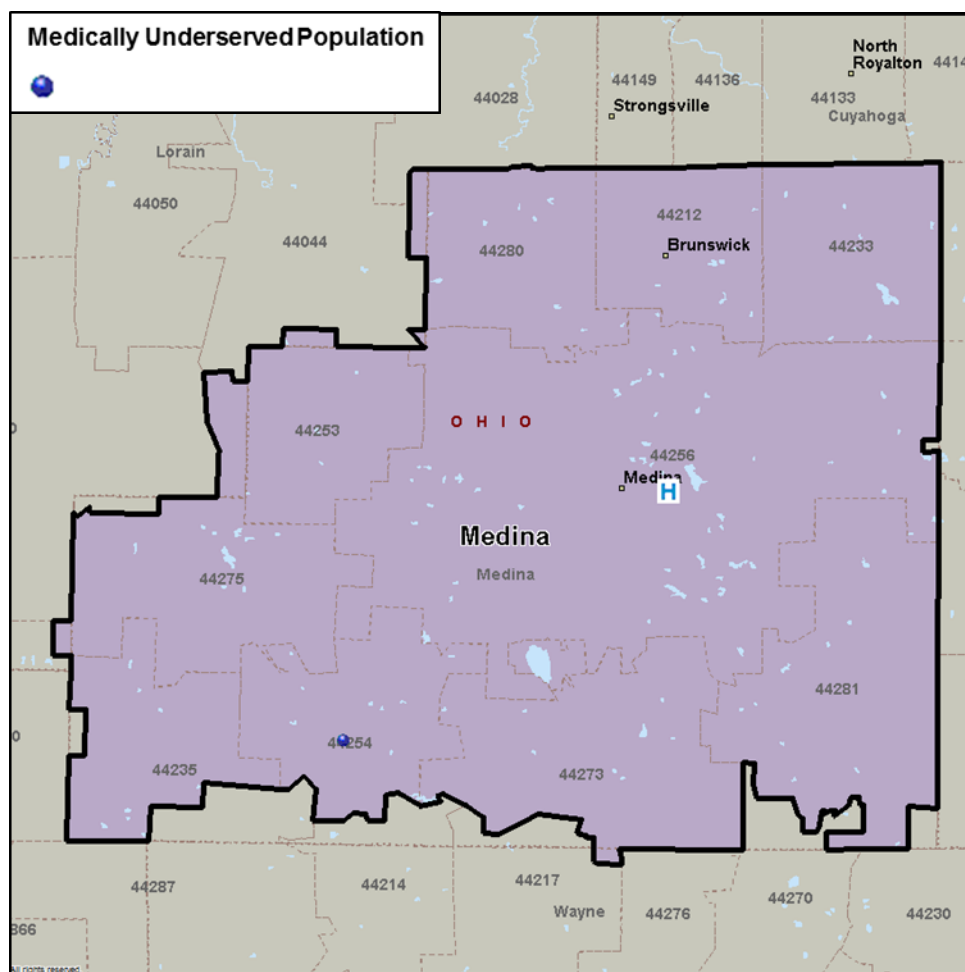
Medically Underserved Areas and Populations (MUA/Ps) are designated by the Health Resources and Services Administration (HRSA) based on an “Index of Medical Underservice.” The index includes the following variables: ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 or over.¹⁶ Areas with a score of 62 or less are considered “medically underserved.”

Populations receiving MUP designation include groups within a geographic area with economic barriers or cultural and/or linguistic access barriers to receiving primary care. If a population group does not qualify for MUP status based on the IMU score, Public Law 99-280 allows MUP designation if “unusual local conditions which are a barrier to access to or the availability of personal health services exist and are documented, and if such a designation is recommended by the chief executive officer and local officials of the state where the requested population resides.”¹⁷

There is one census tract within the hospital’s community that has been designated as an area where Medically Underserved Populations are present (**Exhibit 33**).

¹⁶ Health Resources and Services Administration. See <http://www.hrsa.gov/shortage/mua/index.html>

¹⁷ *Ibid.*

Exhibit 33: Medically Underserved Areas

Source: Microsoft MapPoint and HRSA, 2015.

Health Professional Shortage Areas

A geographic area can receive a federal Health Professional Shortage Area (HPSA) designation if a shortage of primary medical care, dental care, or mental health care professionals is found to be present. In addition to areas and populations that can be designated as HPSAs, a health care facility can receive federal HPSA designation and an additional Medicare payment if it provides primary medical care services to an area or population group identified as having inadequate access to primary care, dental, or mental health services.

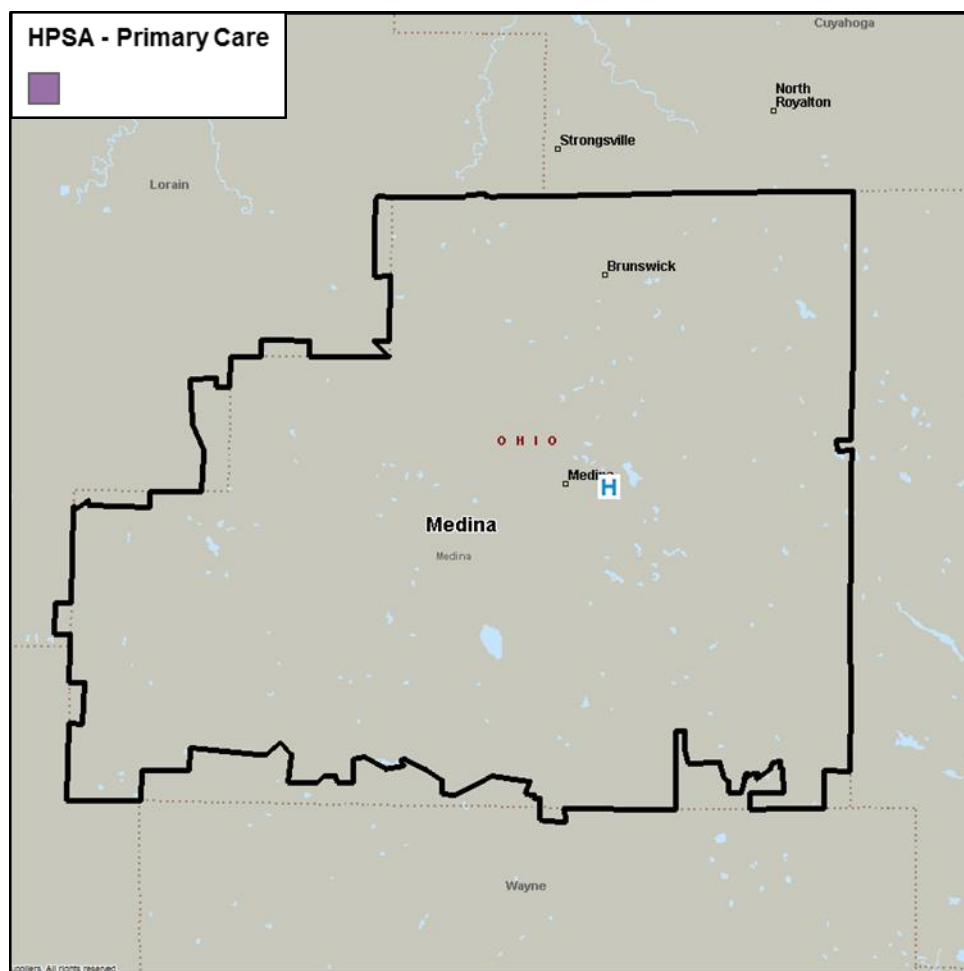
HPSAs can be: “(1) An urban or rural area (which need not conform to the geographic boundaries of a political subdivision and which is a rational area for the delivery of health services); (2) a population group; or (3) a public or nonprofit private medical facility.”¹⁸

¹⁸U.S. Health Resources and Services Administration, Bureau of Health Professionals. (n.d.). *Health Professional Shortage Area Designation Criteria*. Retrieved 2012, from <http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/index.html>

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Exhibit 34 illustrates the locations of the federally-designated HPSAs.

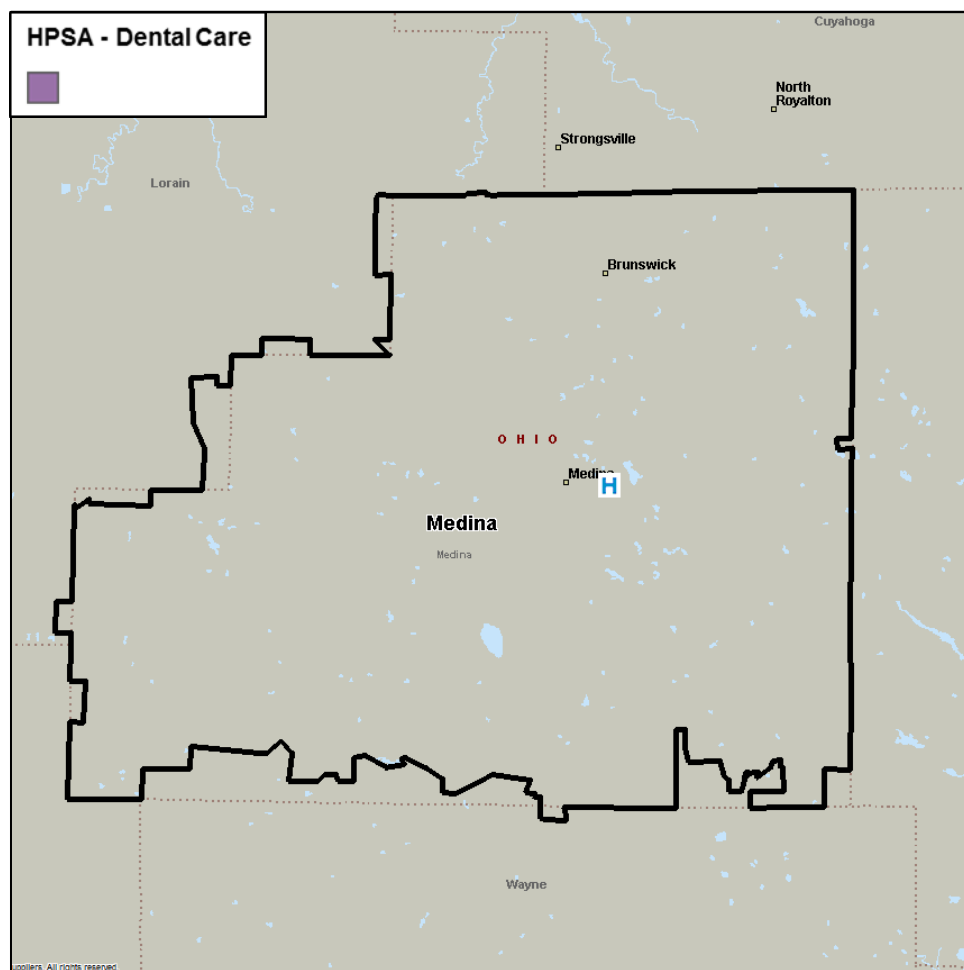
Exhibit 34A: Primary Care Health Professional Shortage Areas



Source: Health Resources and Services Administration, 2015.

Within the Medina community, no census tracts are designated as primary care HPSAs.

Exhibit 34B: Dental Care Health Professional Shortage Areas



Source: Health Resources and Services Administration, 2015.

No dental care HPSA designated census tracts are located in the Medina community.

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Findings of Other Community Health Needs Assessments

Several other needs assessments and health reports conducted by hospital facilities and other organizations that provide services for the community also were reviewed. The reviewed assessments include the following:

Other Community Assessments
Akron Children's Hospital CHNA 2013
Akron General Medical Center CHNA 2013
Geauga County CHA 2011
Health Improvement Partnership- Cuyahoga CHSA 2015
Lake County Community Health Assessment 2015
Lake Health CHNA 2013
Lorain County Health CNA 2015
Medina County CHIP 2013
Mercy Allen Hospital CHNA 2013
Mercy Medical Center CHNA 2013
Mercy Regional Medical Center CHNA 2013
Portage County CHNA 2015
Southwest General Health Center 2012
St. Vincent Charity Medical Center Implementation Plan 2013
Summa Health System CHNA 2013
Summit County CHIP 2015
UH Ahuja Medical Center CHNA 2015
UH Bedford Medical Center CHNA 2015
UH Case Medical Center CHNA 2015
UH Elyria Medical Center CHNA 2015
UH Geauga Medical Center CHNA 2015
UH Geneva Medical Center CHNA 2015
UH Parma Medical Center CHNA 2015
UH Rainbow Babies & Children's Hospital CHNA 2015
UH Rehabilitation Hospital CHNA 2015
UH Richmond Medical Center CHNA 2015
UH St. John Medical Center CHNA 2015

Source: Analysis of Other CHNA Reports by Verité, 2016.

The significant needs identified by these reports are presented in **Exhibit 35**.

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Exhibit 35: Significant Needs Identified in Other CHNAs

Significant Need	Frequency
Obesity	23
Mental/Behavioral health	22
Access to basic/primary health care	20
Cardiovascular/ heart disease	19
Diabetes	19
Drug/ substance abuse	18
Tobacco use/ smoking	18
Alcohol abuse and excessive drinking	15
Elderly care/ aging population	15
Cancer	14
Infant mortality (disparities)	14
Cost of care	11
Access to dental care	10
Access/lack of health insurance coverage	10
Poverty	10
Transportation	10
Unemployment	10
Asthma/childhood asthma	9
Respiratory diseases	9
Access to mental health services	8
Nutrition/ access to healthy food	7
Physical inactivity/lack of exercise	7
Alzheimer's disease	6
Drug/ substance abuse (youth)	6
Violence	6
Tobacco use during pregnancy	5
Access to prescription drugs/cost	4
Drug abuse- opioids/heroin	4
Drug abuse- prescriptions	4
Health disparities/ equity	4
Hypertension	4
Preventive care (immunizations, screenings, etc.)	4
Teenage pregnancy/ births	4
Access to substance abuse care	3
Low birth weight	3
Premature births	3
Pre-term births	3
Uninsured and underinsured populations	3
Violence (youth)	3

Source: Analysis of Other CHNA Reports by Verité, 2016.

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A State Health Assessment also recently was published by the Ohio Department of Health.¹⁹ The State Health Assessment (SHA) is a comprehensive report directed by a steering committee comprised of directors of Ohio's health-related state agencies. The Ohio Department of Health contracted with the Health Policy Institute of Ohio to facilitate preparation of the assessment. The purpose of the SHA is both to provide a template for state agencies and local partners for analysis as well as inform the identification and prioritization of community health needs for the State Health Improvement Plan (SHIP).

State-wide needs. The assessment found that Ohio performed worse than the U.S. overall on most measures of population health with many opportunities to improve both physical and mental health outcomes. For example:

- The average number of days Ohio residents experienced limited activity due to mental or physical difficulties increased 17 percent between 2013 and 2014.
- Over the same period, adult asthma, child asthma, and diabetes also increased by 10 percent.
- Drug overdose deaths increased 18 percent and were significantly higher in Ohio than the United States (24.7 per 100,000 compared to 14.6).
- Infant mortality also is a significant issue in Ohio, and is particularly problematic for black and Hispanic (or Latino) infants.
- Ohio ranks particularly poorly for the number mothers who smoke during pregnancy. Only 59 percent of black mothers in Ohio receive prenatal care in the first trimester, compared to 70.8 percent in the U.S. overall.
- Per-capita health spending has been higher in Ohio than in other states.
- The percentage of hospital inpatients with opiate-related diagnoses increased substantially from 2012 to 2014 (from 25.2 percent to 37.0).
- Ohio has experienced rates of avoidable emergency department visits for Medicare beneficiaries, admissions for pediatric asthma, and admissions for diabetes long-term complications that exceed United States averages.
- Access to mental health services and drug treatment services is particularly problematic, and a comparatively high percentage of Ohio residents live in areas underserved for dental care.
- Ohio has 9.9 public health agency staff per 100,000, a number substantially below the national average of 30.6.
- Infection rates for a number of communicable diseases exceed national averages, including chlamydia. The state's child immunization and HPV vaccination rates have been below average.
- Based on national comparisons, other concerns with children are also present in Ohio, including: childhood poverty rates, number of children in single-parent households, percent of children with adverse childhood experiences, and children exposed to secondhand smoke.
- There are also significant needs related to the physical environment in Ohio. The average amount of particulate matter and cases of lead poisoning are both higher in Ohio than the

¹⁹ Available at: <http://www.healthpolicyohio.org/sha-ship/>

APPENDIX B – SECONDARY DATA ASSESSMENT

United States. Food insecurity is higher in the state as well, and Ohio residents have less access to exercise opportunities than the country on average.

The SHA reviewed 211 local health department and hospital community health assessments that covered 94 percent of counties to evaluate what the most significant needs were. That review found ten most commonly identified significant community health needs: obesity, mental health, access to health care, drug and alcohol abuse, maternal and infant health, cancer, cardiovascular disease, diabetes, tobacco, and chronic diseases.

More than 400 stakeholders provided input into the SHA. Ten priority areas were identified based on this input: obesity, access to behavioral health care, drug and alcohol abuse, mental health, employment/poverty/income, equity and disparities, access to dental care, cardiovascular disease, and nutrition.

Northeast Ohio. The northeast Ohio region also had particularly significant needs identified in the SHA. Concerns about the physical environment (air pollution and lead poisoning) are particularly prevalent in northeast Ohio. Other health assessments reviewed as part of the SHA process most frequently identified the following community health needs:

- Access to health and medical care (76 percent)
- Obesity (63 percent)
- Mental health (57 percent)
- Drug and alcohol abuse (47 percent)
- Maternal and infant health (41 percent)
- Diabetes (40 percent)
- Coverage and affordability (32 percent)
- Cardiovascular disease (29 percent)
- Cancer (29 percent)
- Tobacco use (29 percent)

Stakeholders from northeast Ohio most frequently identified the following as significant community health needs: obesity, drug and alcohol abuse, mental health, access to behavioral health care, employment/ poverty /income, equity and disparities, maternal and infant health, nutrition, coverage and affordability, and diabetes.

APPENDIX C – COMMUNITY INPUT PARTICIPANTS

Individuals from a wide variety of organizations and communities participated in the interview process (shown in **Exhibit 36**). Organizations listed in *italics* indicate that the interviewee has public health expertise.

Exhibit 36: Interview Participants

Organization	Description	Populations Represented
Alternative Paths	Outpatient behavioral healthcare services	Mentally ill
American Heart and Stroke Association	National voluntary health agency	General population
Brunswick Chamber	Chamber of commerce	General population
Educational Service Center Medina County	Educational and support services for Medina County school districts	Youth, special needs, students
Feeding Medina County	Non-profit food bank	Low -income, youth, aging population, general population
Greater Medina Chamber	Chamber of commerce	General population
Leadership Medina County	Non-profit, educational and leadership development organization	Youth, general population
Medina County Drug Abuse Commission	Medina County anti-drug levy	General population, youth, substance abuse
Medina County Economic Development Corporation	Non-profit	General population
<i>Medina County Health Department</i>	County health department	General population
Montville City Government	Mayor of Medina County	General population
Montville Township Police	Township police department	General population
Montville Township Trustees	Township Board of Trustees	General population
<i>Pearlview</i>	Rehabilitation and wellness center	Aging population, general population
St. Ambrose Parish	Faith-based organization	General population

APPENDIX D – ACTIONS TAKEN SINCE THE PREVIOUS CHNA

Medina Hospital uses evidence-based approaches in the delivery of healthcare services and educational outreach with the aim of achieving healthy outcomes for the community it serves. It undertakes periodic monitoring of its programs to measure and determine their effectiveness and ensure that best practices continue to be applied.

Given that the process for evaluating the impact of various services and programs on population health is longitudinal by nature, significant changes in health outcomes may not manifest for several community health needs assessment cycles. We continue to evaluate the cumulative impact.

Each identified health need and action items in our 2013 CHNA Implementation Strategy are described below with representative impacts.

1. Identified Need: Chronic Diseases and Health Conditions, Heart Related Diseases

Action: Medina Hospital continues to provide cardiac services, is a certified Stroke Center and has a Congestive Heart Failure Clinic. The hospital continues to provide a wide range of clinical and wellness services to treat chronic heart-related diseases, including stroke, congestive heart failure and hypertension.

Highlighted Impact:

- The Cleveland Clinic health system reduced heart failure 30 day readmission rates from 2013 through 2015.
- The Medina Hospital Outreach department provided a stroke prevention program to 128 seventh graders at Claggett Middle School.

2. Identified Need: Chronic Disease and Health Conditions, Cancer

Action: Medina Hospital is certified by the American College of Surgeons Commission on Cancer and continues to use advanced diagnostic equipment, skilled physicians and experienced staff to provide cancer treatment, rehabilitation and support services for patients and families

Highlighted Impact:

- Medina Hospital continues to support a cancer/tumor registry to obtain community survival and reoccurrence records.
- Medina Hospital provided teen cancer programs, adult screenings and a “Pink Out” community breast cancer awareness event with 500 attendees.

3. Identified Need: Chronic Disease and Health Conditions, Diabetes

Action: Medina Hospital's Health & Wellness Education program continues to provide outpatient care and community wellness education programs to patients and community members on diabetes and disease management. The hospital continues to treat patients suffering from diabetes and any diabetic complications on an inpatient and outpatient basis.

Highlighted Impact:

APPENDIX D – ACTIONS TAKEN SINCE THE PREVIOUS CHNA

- Medina Hospital opened an Outpatient Wound Center in October 2014 to provide complete wound care services to community members suffering from diabetic ulcers and other complications.
- Diabetes education reached over 210 community members through the hospital's "Diabetes Updates" community health initiatives.

4. Identified Need: Chronic Disease and Health Conditions, Low Birth Weight

Action: Medina Hospital continues to offer clinical, wellness and education services relating to pediatric and women's health. The hospital continues to provide a comprehensive Family Birthing Center supported by staff neonatologists. Medina Hospital works with Hillcrest Hospital, another Cleveland Clinic hospital, to treat pediatric patients in need of more specialized care, including care affiliated with low birth weight babies.

Highlighted Impact:

- Medina Hospital provided 24/7 inpatient delivery room and nursery coverage by on-call neonatologists. The hospital partnered with the Medina County Health Department to provide home visits to every delivering mother in the county.
- From 2013-2015, Medina Hospital offered 98 childbirth and breastfeeding classes reaching 472 community members.

5. Identified Need: Wellness

Action: Medina Hospital continues to offer outreach programs and community health talks focused on educating the community on health behavior choices including exercise, healthcare navigation, stress management, nutrition, and smoking cessation to promote health and wellness, increase access to healthcare resources, and reduce disease burden. In addition, Medina Hospital continues to collaborate with local schools and businesses to implement programs to decrease childhood and adult obesity.

Highlighted Impact:

- The Healthy Medina initiative has provided health and wellness education classes to over 300 community members.
- Medina Hospital partnered with the Medina Community Recreation Center, Cloverleaf Recreation Center, city schools, and other local organizations to provide free health screenings reaching over 2,550 community members in 2013.

6. Identified Need: Access to Health Services

Action: Medina Hospital continues to provide medically necessary services to all patients regardless of race, color, creed, gender, country of national origin or ability to pay. Medina Hospital has a financial assistance policy that is among the most generous in the region that covers both hospital services and physician services provided by physicians employed by Cleveland Clinic.

Highlighted Impact:

- In 2015, Cleveland Clinic health system provided \$69.3 million in financial assistance to the communities served by its main campus, family health centers and NEO Regional Hospitals.

APPENDIX D – ACTIONS TAKEN SINCE THE PREVIOUS CHNA

Medina Hospital continues to work to improve its scheduling and support service model to provide consistent experience, improve metrics, and increase efficiency including providing Internet scheduling, accelerating technology implementation and scheduling training.

Medina Hospital implemented a split-flow model for its Emergency Department shortening the time to physicians and overall length of stay and placing patients in areas devoted to their unique needs to improve patient satisfaction and outcomes.

Highlighted Impact:

- Since 2013, the split –flow model in Cleveland Clinic health system Emergency Departments resulted in shortened wait times for patients.

7. Identified Need: Research

Cleveland Clinic health system conducts clinical research activities throughout the system, including regional hospitals. In 2015, Cleveland Clinic scientists conducted more than 2,000 clinical trials and generated 54 invention disclosures, 14 new licenses, and 76 patents.

Action: Clinical trials and other clinical research activities continue to occur throughout the Cleveland Clinic health system including at the community hospitals.

Highlighted Impact:

- Medina Hospital participated in a clinical study with the Heart and Vascular Institute: Phase III Trial to Confirm the Anti-Anginal Effect of T89 (Dantonic®) in Patients with Stable Angina.

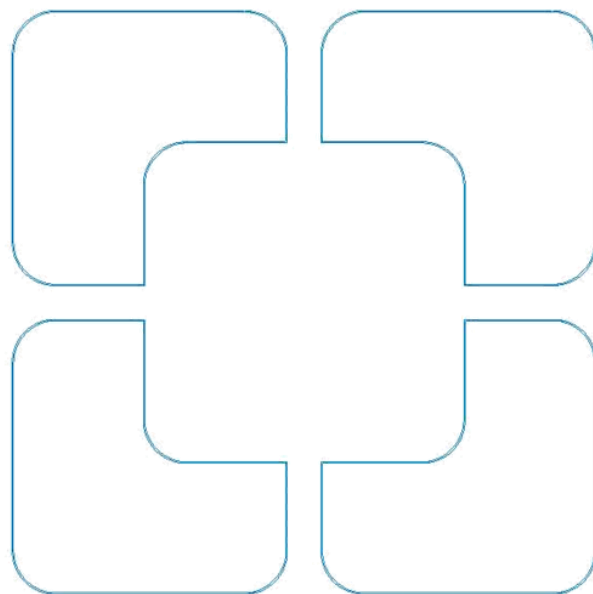
8. Identified Need: Education

Cleveland Clinic and all regional hospitals provide education of medical professions. In 2015, Cleveland Clinic trained over 1,700 residents and fellows, and provided over 1,800 student rotations in 65 allied health education programs.

Action: Medina Hospital continues to provide physician, nurse and allied health residency and other education opportunities and is affiliated with nursing and allied health schools. The hospital also provides community education programs on a variety of topics including wellness, parenting, nutrition and safety.

Highlighted Impact:

- Medina Hospital provided over 162 community safety events from 2013 through 2015.



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