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Introduction

This Community Health Needs Assessment (CHNA) was conducted by Cleveland Clinic Fairview Hospital (Fairview or "the hospital") to identify significant community health needs and to inform development of an Implementation Strategy to address current needs.

Fairview Hospital is a community hospital with 460 staffed beds. Fairview is a fully accredited hospital by The Joint Commission, with a certified Level II Trauma Center. Cleveland Clinic Cancer Center at Fairview Hospital Moll Pavilion, located directly across the street from the main building, is part of the Integrated Network Cancer Program and has been awarded the Outstanding Achievement Award by the American College of Surgeons, Commission on Cancer. Additional information on the hospital and its services is available at: https://my.clevelandclinic.org/locations/fairview-hospital.

The hospital is part of the Cleveland Clinic health system, which includes an academic medical center near downtown Cleveland, eleven regional hospitals in northeast Ohio, a children's hospital, a children's rehabilitation hospital, five southeast Florida hospitals, and a number of other facilities and services across Ohio, Florida, and Nevada. Additional information about Cleveland Clinic is available at: <u>https://my.clevelandclinic.org/</u>.

Each Cleveland Clinic hospital supports a tripartite mission of patient care, research, and education. Research is conducted at and in collaboration with all Cleveland Clinic hospitals. Through research, Cleveland Clinic has advanced knowledge and improved community health for all its communities, from local to national, and across the world. This allows patients to access the latest techniques and to enroll in research trials no matter where they access care in the health system. Through education, Cleveland Clinic helps to train health professionals who are needed and who provide access to health care across Ohio and the United States.

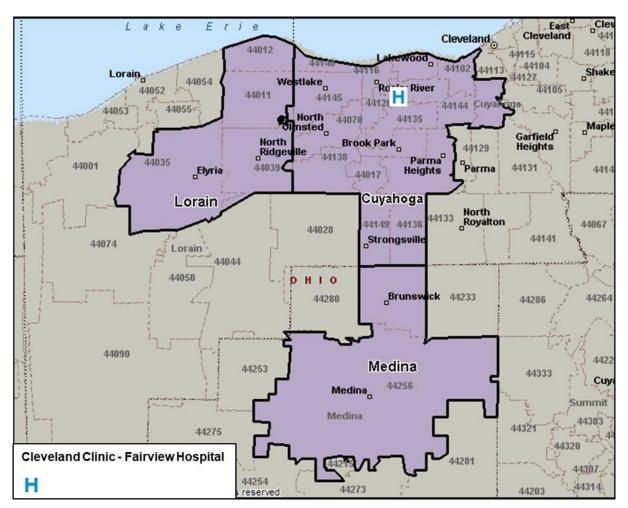
Each Cleveland Clinic hospital also is dedicated to the communities it serves. Each Cleveland Clinic hospital conducts a CHNA in order to understand and plan for the current and future health needs of residents and patients in the communities it serves. The CHNAs inform the development of strategies designed to improve community health, including initiatives designed to address social determinants of health.

These assessments are conducted using widely accepted methodologies to identify the significant health needs of a specific community. The assessments also are conducted to comply with federal and state laws and regulations.

Community Definition

For purposes of this report, Fairview's community is defined as 23 ZIP codes in Cuyahoga, Lorain, and Medina counties, Ohio, accounting for over 78 percent of the hospital's recent inpatient volumes. The community was defined by considering the geographic origins of the

hospital's discharges in calendar year 2017. The total population of Fairview's community in 2017 was 742,295.



The following map portrays the community served by Fairview.

Significant Community Health Needs

Fairview Hospital's significant community health needs as determined by analyses of quantitative and qualitative data are:

- Access to Affordable Health Care
- Addiction and Mental Health
- Chronic Disease Prevention and Management
- Infant Mortality
- Medical Research and Health Professions Education
- Socioeconomic Concerns

Significant Community Health Needs: Discussion

Access to Affordable Health Care

Access to affordable health care is challenging for some residents, particularly to primary care, mental health, dental care, and addiction treatment services. Access barriers include cost, poverty, inadequate transportation, a lack of awareness regarding available services, and an undersupply of providers. Both Lorain and Medina counties have a comparative undersupply of primary care physicians, dentists, and mental health providers.

Three community ZIP codes (home to 107,000 persons) have been identified as comparatively high need by the Dignity Health Community Need IndexTM. In these ZIP codes, 20 percent of residents are Black, and the poverty rate is 34 percent (nearly twice the average in Cuyahoga County). Admissions for ambulatory care sensitive conditions in these ZIP codes (and across the community) have been comparatively high.

Federally-designated Medically Underserved Areas (MUAs), Primary Care Health Professional Shortage Areas (HPSAs), and Dental Care HPSAs are present. The Fairview community and Ohio as a whole need more health care professionals to meet current and future access needs.¹ (Sources: Exhibits 4, 5, 9, 25, 26, 38, 39, 40, other assessments, key stakeholder interviews).

Addiction and Mental Health

Drug abuse, particularly the abuse of opioids, is a primary concern of many key stakeholder interviewees. Perceived over-prescribing of prescription drugs, poverty, and mental health problems were cited as contributing factors. Deaths due to "accidental poisoning by and exposure to drugs and other biological substances" have been increasing across Ohio, and in both Cuyahoga and Lorain counties have been above average.

The Ohio State Health Improvement Plan (SHIP) and assessments prepared by the health departments in Cuyahoga, Lorain, and Medina counties emphasize the need to address the growing opioid epidemic and to reduce drug overdose deaths. (Sources: Exhibits 25, 27, other assessments, key stakeholder interviews).

Cuyahoga, Lorain, and Medina counties rank poorly for "percent of driving deaths with alcohol involvement" compared to Ohio, national, and peer-county averages. Medina County also compares unfavorably for excessive and binge drinking.

Ohio's State Health Assessment and local health department assessments identify addressing alcohol abuse as a priority. (Sources: Exhibits 25, 26, other assessments).

Mental health also was identified by interviewees as a significant concern. Depression, suicide, hopelessness, and isolation (particularly among elderly residents and those exposed to traumas

¹ 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.

early in life) are perceived to be increasing in severity. Rates of depression have been highest in lower-income ZIP codes. Mortality rates for suicide by firearm are higher than average in both Lorain and Medina county. Access to mental health care is challenging due to cost, insurance benefit limits, and an undersupply of psychiatrists.

The Ohio SHIP and local health department assessments for Cuyahoga, Lorain, and Medina counties all identified mental health as a priority issue. These assessments cite the need for additional services, early identification of mental health risks, and greater awareness of existing programs. (Sources: Exhibits 4, 25, 26, key stakeholder interviews, other assessments).

Chronic Disease Prevention and Management

Chronic diseases, including heart disease, hypertension, obesity, diabetes, high cholesterol, chronic obstructive pulmonary disease (COPD), and others are prevalent in the Fairview community.

Heart disease and hypertension are leading causes of death. Fairview's community benchmarks poorly for the incidence of diabetes, high blood pressure, and high cholesterol, and for hospital admissions for diabetes complications. Higher hypertension rates are observed in lower-income communities. Addressing heart (or cardiovascular) disease was identified as a priority by the Ohio SHIP and the Cuyahoga County Community Health Assessment. (Sources: Exhibits 4, 34, 36, other assessments, key stakeholder interviews).

Key stakeholders also identified obesity as a persistent and growing problem, driven by physical inactivity and poor nutrition. Poor nutrition results from the higher cost of fresh and healthy food, the presence of food deserts, and a lack of time and knowledge about how to prepare healthy meals. Physical inactivity is worsened by a lack of safe places to exercise, time, and education regarding the importance of remaining active.

In Fairview's community, per-capita admissions for COPD (an ambulatory care sensitive condition) have been 28 percent higher than the Ohio average. Admissions have been 18 percent higher for diabetes long-term complications and 6 percent higher for uncontrolled diabetes (Source: Exhibit 36).

In Cuyahoga, Lorain, and Medina counties, the percent of obese adults (Body Mass Index greater than 30) has been above the national average. The Ohio SHIP and local health department assessments consistently identify obesity and diabetes (and reducing physical inactivity and enhancing nutrition) as priorities. (Sources: Exhibits 25, 36, 37, other assessments).

Key stakeholders emphasized the importance of changing unhealthy behaviors. The demand for exercise, nutrition, and tobacco cessation programs has been identified, as have health education and literacy programs.

Smoking rates are comparatively high. The Ohio State SHIP emphasizes the need for Ohioans to consume healthy food, reduce physical inactivity, reduce adult smoking, and reduce youth all-tobacco use. Local health assessments for Cuyahoga, Lorain, and Medina counties all included

tobacco usage as a significant concern. According to the Cuyahoga County Community Health Assessment, health behaviors that need attention include: flu vaccination rates, tobacco use, and physical inactivity. (Sources: Exhibit 26, other assessments, key stakeholder interviews).

Fairview's 65+ population is projected to grow much faster than other age groups. Providing an effective continuum of care for seniors will be challenging. Elderly residents are at greater risk for falls, food insecurity, transportation issues, and unsafe or inadequate housing. Social isolation contributes to poor physical and mental health conditions. (Sources: Exhibit 9, key stakeholder interviews).

Infant Mortality

Cuyahoga County compares unfavorably to Ohio averages for most maternal and child health indicators. The infant mortality rate in Cuyahoga County has been well above Ohio and U.S. averages. Rates have been particularly high for Black infants; key stakeholders frequently mentioned racial disparities as an important concern.

The Ohio SHIP established ten "priority outcomes," three of which are addressing: preterm births, low birth weight, and infant mortality. The Cuyahoga County Community Health Assessment established "maternal and infant health" and reducing infant mortality as priorities. (Sources: Exhibits 25, 31, 32, other assessments).

Medical Research and Health Professions Education

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 such areas as cancer, heart disease, and diabetes. More research can address these and other community health needs. (Sources: Exhibits 39, 40, key stakeholder interviews).

Socioeconomic Concerns

Key stakeholders identified poverty and other social determinants of health as significant concerns. Poverty has significant implications for health, including the ability for households to access health services, afford basic needs, and benefit from prevention initiatives. Problems with housing, educational achievement, and access to workforce training opportunities also contribute to poor health.

Adverse Childhood Experiences (ACEs) increasingly are recognized as problematic in Ohio and the nation. ACEs refer to all types of abuse, neglect, and other traumas experienced by children. According to the CDC, ACEs have been linked to risky healthy behaviors, chronic health conditions, low life potential, and premature death.² America's Health Rankings indicates that Ohio ranks 43rd nationally for ACEs (a composite indicator that includes: socioeconomic hardship, divorce/parental separation, lived with someone who had an alcohol or drug problem,

² <u>https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/aboutace.html</u>

victim or witness of neighborhood violence, lived with someone was mentally ill or suicidal, domestic violence witness, parent served time in jail, treated or judged unfairly due to race/ethnicity, and death of a parent).³

More than 47 percent of rented households have been designated as "rent burdened," a level slightly above the Ohio average. In three lower-income ZIP codes, over 55 percent of these households devote more than 30 percent of household income to rent. Cuyahoga and Lorain counties also benchmark poorly for "percent of households experiencing severe housing problems" (Source: Exhibits 20, 25, 26).

Cuyahoga County has had a higher poverty rate than Ohio and the U.S. Across each county served by Fairview, poverty rates for Black and Hispanic (or Latino) populations have been well above rates for Whites. Substantial variation in poverty rates is present across the community. (Sources: Exhibits 4, 14, 15).

Social determinants of health are particularly problematic in Cuyahoga County, including poverty, unemployment, affordable housing, violent crime, and high-school graduation rates. (Sources: Exhibits 4, 14, 15, 17, 19, 20, 25, key stakeholder interviews, other assessments).

The Northeast Ohio Coalition for the Homeless has estimated that "there were about 23,000 people experiencing homelessness in 2018 in Cuyahoga County."⁴ In recent years, several Cleveland Clinic hospitals have experienced increases in emergency room encounters by homeless patients.

The Ohio SHIP establishes social determinants of health as a "cross-cutting factor" and emphasizes the need to increase third grade reading proficiency, reduce school absenteeism, address burdens associated with high cost housing, and reduce secondhand smoke exposure for children. The Cuyahoga County CHIP emphasizes how poverty and income inequality contribute to poor health. (Sources: other assessments).

³ <u>https://www.americashealthrankings.org/explore/health-of-women-and-children/measure/ACEs/state/OH</u>

⁴ <u>https://www.neoch.org/2019-overview-of-the-numbers</u>

Definition of Community Assessed

This section identifies the community that was assessed by Fairview. The community was defined by considering the geographic origins of the hospital's discharges in calendar year 2017. The definition also considered the hospital's mission, target populations, principal functions, and strategies.

On that basis, Fairview's community is defined as 23 ZIP codes in Cuyahoga, Lorain, and Medina counties, Ohio. These ZIP codes accounted for nearly 79 percent of the hospital's recent inpatient volumes (**Exhibit 1**).

ZIP Code	County	City/Town	Discharges	Percent of Discharges
44107	Cuyahoga	Lakewood	2,978	10.0%
44111	Cuyahoga	Cleveland	2,923	9.8%
44135	Cuyahoga	Cleveland	2,370	8.0%
44102	Cuyahoga	Cleveland	1,753	5.9%
44070	Cuyahoga	North Olmsted	1,666	5.6%
44116	Cuyahoga	Rocky River	1,443	4.8%
44126	Cuyahoga	Cleveland	1,186	4.0%
44145	Cuyahoga	Westlake	994	3.3%
44109	Cuyahoga	Cleveland	860	2.9%
44039	Lorain	North Ridgeville	759	2.5%
44138	Cuyahoga	Olmsted Falls	659	2.2%
44035	Lorain	Elyria	649	2.2%
44212	Medina	Brunswick	640	2.1%
44130	Cuyahoga	Cleveland	637	2.1%
44142	Cuyahoga	Brook Park	541	1.8%
44144	Cuyahoga	Cleveland	525	1.8%
44140	Cuyahoga	Bay Village	518	1.7%
44012	Lorain	Avon Lake	509	1.7%
44011	Lorain	Avon	505	1.7%
44136	Cuyahoga	Strongsville	425	1.4%
44256	Medina	Medina	376	1.3%
44149	Cuyahoga	Strongsville	310	1.0%
44017	Cuyahoga	Berea	274	0.9%
	Community Z	CIP Codes	23,500	78.8%
	All Other ZI	P Codes	6,307	21.2%
	All ZIP Co	odes	29,807	100.0%

Exhibit 1: Fairview Inpatient Discharges by ZIP Code, 2017

Source: Analysis of Cleveland Clinic Discharge Data, 2018.

The community includes portions of Cuyahoga, Lorain, and Medina counties. The total population of this community in 2017 was approximately 742,000 persons (**Exhibit 2**).

ZIP Code	County	City/Town	Total Population 2017	Percent of Total Population 2017
44256	Medina	Medina	64,301	8.7%
44035	Lorain	Elyria	63,485	8.6%
44107	Cuyahoga	Lakewood	51,600	7.0%
44130	Cuyahoga	Cleveland	49,176	6.6%
44212	Medina	Brunswick	44,344	6.0%
44102	Cuyahoga	Cleveland	42,397	5.7%
44111	Cuyahoga	Cleveland	38,260	5.2%
44109	Cuyahoga	Cleveland	38,259	5.2%
44039	Lorain	North Ridgeville	33,236	4.5%
44145	Cuyahoga	Westlake	33,048	4.5%
44070	Cuyahoga	North Olmsted	32,080	4.3%
44135	Cuyahoga	Cleveland	26,332	3.5%
44136	Cuyahoga	Strongsville	25,181	3.4%
44012	Lorain	Avon Lake	23,965	3.2%
44011	Lorain	Avon	23,902	3.2%
44138	Cuyahoga	Olmsted Falls	23,541	3.2%
44144	Cuyahoga	Cleveland	20,770	2.8%
44116	Cuyahoga	Rocky River	20,273	2.7%
44149	Cuyahoga	Strongsville	19,716	2.7%
44017	Cuyahoga	Berea	19,009	2.6%
44142	Cuyahoga	Brook Park	18,312	2.5%
44126	Cuyahoga	Cleveland	15,988	2.2%
44140	Cuyahoga	Bay Village	15,120	2.0%
	Communit	y Total	742,295	100.0%

Exhibit 2: Community Population, 2017

Source: Truven Market Expert, 2018.

The hospital is located in Cleveland, Ohio (ZIP code 44111).

The map in **Exhibit 3** portrays the ZIP codes that comprise the Fairview community.

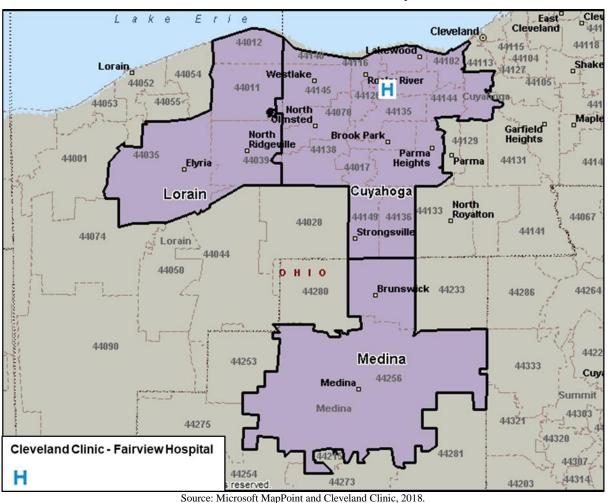


Exhibit 3: Fairview Community

Secondary Data Summary

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

Demographics

Population characteristics and trends directly influence community health needs. The total population in the Fairview community is expected to increase 0.4 percent from 2017 to 2022. However, the population 65 years of age and older is anticipated to grow by 14.7 percent during that time. This development should contribute to the growing demand for health services, since older individuals typically need and use more services than younger persons.

Fairview serves a geographic area that includes 23 ZIP codes and portions of three Ohio counties (Cuyahoga, Lorain, and Medina). Substantial variation in demographic characteristics (e.g., race/ethnicity and income levels) exists across this area.

In 2017, over 20 percent of the population in two ZIP codes was Black. These ZIP codes, located in Cuyahoga County, also are associated with comparatively high poverty rates and comparatively poor health status. In 14 ZIP codes, the percent of the Black population was under three percent.

Economic Indicators

On average, people living in low-income households are less healthy than those living in more prosperous areas. According to the U.S. Census, in the 2012-2016 period, approximately 15.1 percent of people in the U.S. were living in poverty. At 18.5 percent, Cuyahoga County's poverty rate was above average. The poverty rates in Lorain and Medina counties have been below the national average.

Across each county, poverty rates for Black and for Hispanic (or Latino) residents have been higher than rates for Whites. For example, in Cuyahoga County the rate for Black residents was 33.3 percent. For Whites, it was 11.1 percent.

A number of low-income census tracts can be found in Fairview's community, particularly in Cuyahoga County ZIP codes east of the hospital. Most of these same areas are where over 50 percent of households are "rent burdened."

After several years of improvement, between 2015 and 2017, unemployment rates in Cuyahoga, Lorain, and Medina counties increased. In 2017, rates in all three counties were above national averages.

Notably, crime rates in Cuyahoga County have been above Ohio averages. Crime rates in Lorain and Medina counties have been below Ohio averages for all offenses.

Ohio was among the U.S. states that expanded Medicaid eligibility pursuant to the Patient Protection and Affordable Care Act (ACA, 2010). On average, approximately four percent of those living in the community served by Fairview were uninsured in 2017.

Community Need Index[™]

Dignity Health, a California-based hospital system, developed and published a *Community Need* $Index^{TM}$ (CNI) that measures barriers to health care access. 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

A CNI score is calculated for each ZIP code. Scores range from "Lowest Need" (1.0-1.7) to "Highest Need" (4.2-5.0).

Three of the 23 ZIP codes in the Fairview community scored in the "highest need" CNI category and three were found to be "lowest need."

As shown in **Exhibit 4**, ZIP codes found to be higher need are associated with higher rates of poverty, a higher proportion of the Black population, more problematic BRFSS indicators (e.g., rates of smoking and high blood pressure), and higher rates of admissions for ACSCs.

		• •	0				
Indicators	Highest Need	<=	== CNI Range ==>	>	Lowest Need		
multators	4.2-5.0	3.4-4.1	2.6-3.3	1.8-2.5	1.0-1.7		
Demographic Characteristics							
ZIP Codes	3	3	3	11	3		
Total Persons	106,988	122,515	119,785	334,206	58,801		
Poverty Rate	34%	20%	12%	6%	3%		
% African American	20%	12%	5%	2%	1%		
BRFSS Indicators							
% Arthritis	26.9%	26.3%	22.6%	21.7%	20.7%		
% Asthma	14.0%	12.9%	11.7%	10.8%	10.7%		
% Depression	22.5%	21.1%	18.0%	16.8%	16.7%		
% Diabetes	21.2%	18.0%	16.6%	15.0%	13.6%		
% Heart Disease	9.6%	10.9%	10.1%	10.6%	9.2%		
% Heart Failure	3.6%	4.5%	3.9%	3.8%	3.1%		
PQI Rates			·		•		
COPD	1,607	1,347	787	666	413		
Congestive Heart Failure	846	766	521	547	458		
Diabetes long-term complications	308	144	134	101	86		
Bacterial pneumonia	307	330	211	255	182		
Dehydration	266	276	249	232	228		
Diabetes short-term complications	166	110	56	44	35		
Urinary tract infection	260	229	222	228	191		
Hypertension	100	81	62	60	42		
Low birth weight (per 1,000 births)	6	10	10	8	5		
Young adult asthma	81	44	16	27	15		
Lower-extremity amputation among		24	25				
patients with diabetes	67	erité Analysis	35	35	35		

Exhibit 4: Statistics Arrayed by CNI Range

Source: Verité Analysis.

Other Local Health Status and Access Indicators

In the 2018 *County Health Rankings* and for overall health outcomes, Cuyahoga County ranked 60th (out of 88 counties), Lorain County ranked 38th, and Medina County ranked 4th.

These overall rankings are derived from 42 measures that themselves are grouped into several categories such as "health behaviors," and "social & economic factors."

- In 2018, Cuyahoga County ranked in the bottom 50th percentile among Ohio counties for 28 of the 42 indicators assessed. Of those, 15 were in the bottom quartile, including quality of life, social and economic factors, physical environment, and various socioeconomic indicators.
- In Lorain County, 19 of the 42 indicators ranked in the bottom 50th percentile among Ohio counties. Five were in the bottom quartile, including alcohol-impaired driving deaths, sexually transmitted infections, children in single-parent households, social associations, and severe housing problems.
- In Medina County, seven indicators ranked in the bottom 50th percentile among Ohio counties. Five were in the bottom quartile, including excessive drinking, alcohol-impaired driving deaths, social associations, percent that drive alone to work, and percent that drive alone who have a long commute.
- All three counties ranked in the bottom quartile for alcohol-impaired driving deaths and for a lack of social associations.
- Overall, Medina County ranked among the healthiest Ohio counties.

The 2018 *County Health Rankings* shows that each county has unique community health issues. However, a few are present in across the community counties, including:

- Air pollution (average daily PM2.5)
- Injury mortality rate
- Percent of adults who drive alone to work
- Percent of adults who drive alone to work with long commutes
- Percent of children living in single-parent households
- Percent of driving deaths with alcohol involvement
- Ratio of population to dentists
- Ratio of population to mental health providers
- Ratio of population to primary care physicians
- Social associations rate
- Teen birth rate
- Unemployment

Community Health Status Indicators ("CHSI") compares indicators for each county with those for peer counties across the United States. Each county is compared to 30 to 35 of its peers. Peers are selected based on a number of socioeconomic characteristics, such as population size, population density, percent elderly, and poverty rates.

The counties served by Fairview benchmark most poorly for:

- Percent of adults who smoke
- Food environment index
- Percent of driving deaths alcohol-impaired
- Preventable hospitalizations rate
- Unemployment
- Income ratio
- Air pollution (average daily PM2.5)
- Percent of adults who drive alone to work

Mortality statistics published by the Ohio Department of Health show how deaths due to "accidental poisoning by and exposure to drugs and other biological substances" have been increasing across the state. At 52.0 per 100,000, the 2016 mortality rate in Lorain County was well over the Ohio average (36.8 per 100,000); the Cuyahoga County rate of 44.6 was above the state rate as well.

In Cuyahoga County, incidence rates for sexually transmitted diseases have been significantly higher than Ohio averages. Tuberculosis rates in Lorain County also have been above average.

Cuyahoga, Lorain, and Medina counties each have had higher than average age-adjusted incidence rates for cancer.

Cuyahoga County compares unfavorably to Ohio averages for most maternal and child health indicators. The infant mortality rate in Cuyahoga County has been above Ohio and U.S. averages. As documented by many, rates have been particularly high for Black infants across Ohio.

The Centers for Disease Control's Behavioral Risk Factor Surveillance System (BRFSS) provides self-reported data on many health behaviors and conditions. According to BRFSS, diabetes, high blood pressure, and high cholesterol were more prevalent in ZIP codes served by Fairview than in other parts of Ohio.

Ambulatory Care Sensitive Conditions

Ambulatory Care Sensitive Conditions ("ACSCs") include thirteen health conditions (also referred to as Prevention Quality Indicators ("PQIs")) "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: diabetes, perforated appendixes, chronic obstructive pulmonary disease ("COPD"), hypertension, congestive heart failure, dehydration, bacterial pneumonia, urinary tract infection, and asthma.

ACSC rates in Fairview community ZIP codes have exceeded Ohio averages for diabetes short-term complications, diabetes long-term complications, COPD, congestive heart failure,

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

dehydration, bacterial pneumonia, urinary tract infections, uncontrolled diabetes, young adult asthma, and lower-extremity amputation among patients with diabetes.

Food Deserts

The U.S. Department of Agriculture's Economic Research Service identifies census tracts that are considered "food deserts" because they include lower-income persons without supermarkets or large grocery stores nearby. Several community census tracts have been designated as food deserts, particularly in Cuyahoga and Lorain counties.

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." Several census tracts in the community have been designated as medically underserved areas, particularly east of the hospital in Cuyahoga County.

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. Several census tracts in Cuyahoga County have been designated as primary care and dental care HPSAs.

Relevant Findings of Other CHNAs

In recent years, the Ohio Department of Health and local health departments in Cuyahoga, Lorain, and Medina counties conducted Community Health Assessments and developed State or Community Health Improvement Plans (SHIP or CHIP). This CHNA also has integrated the findings of that work.

The issues most frequently identified as *significant* in these other assessments are:

- Drug addiction and abuse
- Mental health
- Social determinants of health
- Maternal and child health (including infant mortality)
- Prevalence (and need to manage) chronic diseases
- Obesity and diabetes
- Access to primary care and prevention services
- Health disparities

The Fairview CHNA also has identified the above issues as *significant*, in part because this CHNA considered findings from these other assessments as an important factor in the prioritization process. The Fairview CHNA places more emphasis on health needs of a growing senior population and includes more information on preventable hospital admissions.

Significant Indicators

Exhibit 5 presents many of the indicators discussed in the above secondary data summary. An indicator is considered *significant* if was found to vary materially from a benchmark statistic (e.g., an average value for the State of Ohio or for the United States). For example, 44 percent of Cuyahoga County's driving deaths have involved alcohol; the average for a series of peer counties was 27 percent. The last column of the **Exhibit 5** identifies where more information regarding the data sources can be found.

The benchmarks include Ohio averages, national averages, and in some cases averages for "peer counties" from across the United States. In the *Community Health Status Indicators* analysis, community counties' peers were selected because they are similar in terms of population density, household incomes, and related characteristics. Benchmarks were selected based on judgments regarding how best to assess each data source.

Exhibit 5: Significant Indicators

				Benchmark		
Indicator	Area	Value	Value	Area	Exhibit	
65+ Population change, 2017-2022	Community ZIP codes	14.7%	0.4%	Total Community Population	9	
Poverty rate, 2012-2016	Cuyahoga County	18.5%	15.4%	Ohio	14	
Poverty rate, 2012-2016	"Highest Need" ZIP codes	33.9%	3.5%	"Lowest Need" ZIP codes	4	
% of Population Black, 2017	"Highest Need" ZIP codes	20.1%	1.3%	"Lowest Need" ZIP codes	4	
Poverty rate, Black, 2012-2016	Lorain County	36.5%	14.0%	Lorain County, Total	15	
Unemployment rate	Lorain County	6.1%	4.4%	United States	17	
Percent ninth-grade cohort graduates	Cuyahoga County	74.8%	83.0%	United States	25	
Percent children in poverty	Cuyahoga County	26.4%	20.0%	United States	25	
Percent of households with severe housing problems	Cuyahoga County	18.5%	15.0%	Ohio	25	
Percent of households rent burdened	Community ZIP codes	47.3%	46.7%	Ohio	20	
Violent Crimes per 100,000	Cuyahoga County	695	306	Ohio	19	
Years of potential life lost per 100,000	Cuyahoga County	8,037	7,734	Ohio	25	
Percent live births with low birthweight	Cuyahoga County	10.6%	8.0%	United States	25	
Infant mortality rate	Cuyahoga County	9.3	7.4	Ohio	32	
Infant mortality rate, Black	Cuyahoga County	16.3	5.2	Cuyahoga County, White	32	
Binge drinking percent	Medina County	19.7%	18.0%	United States	25	
	Cuyahoga County	44.0%	34.3%	Ohio	25	
Percent driving deaths w/alcohol involvement	Lorain County	46.4%	34.3%	Ohio	25	
	Medina County	46.7%	34.3%	Ohio	25	
Mortality rate for accidental poisoning by drugs and other substances per 100,000	Lorain County	52.0	36.8	Ohio	27	
Chlamydia rate per 100,000	Cuyahoga County	720	479	United States	25	
HIV rate per 100,000	Cuyahoga County	373	200	Ohio	30	
	Cuyahoga County	29.9%	28.0%	United States	25	
Percent of adults that report a BMI >= 30	Lorain County	30.4%	28.0%	United States	25	
	Medina County	31.6%	28.0%	United States	25	
	Cuyahoga County	20.6%	16.2%	Peer Counties	26	
Percent of adults that smoke	Lorain County	19.9%	19.6%	Peer Counties	26	
	Medina County	17.3%		Peer Counties	26	
	Cuyahoga County	483		Ohio	29	
Cancer incidence rate per 100,000	Lorain County	464	462	Ohio	29	
	Medina County	472	462	Ohio	29	
	Lorain County	1,744	1,320	United States	25	
Population per primary care physician	Medina County	1,633		United States	25	
	Lorain County	2,142		United States	25	
Population per dentist	Medina County	1,947	1,480	United States	25	
	Lorain County	772	470	United States	25	
Population per mental health provider	Medina County	900	470	United States	25	
Preventable admissions (for ambulatory care	1					
sensitive conditions) per 1,000 Medicare	Lorain County Medina County	65 51	49	United States Peer Counties	25 26	
enrollees	,					
PQI: COPD per 100,000	Community ZIP codes	892	696	Ohio	36	
Average Daily PM 2.5 (Particulate Matter, a	Cuyahoga County	12.9	8.7	United States	25	
measure of air pollution)	Lorain County	11.3	8.7	United States	25	
. ,	Medina County	11.7 alysis.	8.7	United States	25	

Primary Data Summary

Primary data were gathered by conducting interviews with key stakeholders (*See* Appendix C for additional information on those providing input). Thirty-seven (37) interviews were conducted with individuals regarding significant community health needs in the community served by Fairview and why such needs are present.

Interviewees most frequently identified the following community health issues as significant concerns.

- **Poverty and other social determinants of health** were identified as serious concerns. Interviewees stated that poverty has significant implications for health, including the ability for households to access health services, afford basic needs, and benefit from prevention initiatives.
 - **Housing** is an issue, with many community residents unable to find housing that is both affordable and safe. Low income and elderly populations were identified as especially vulnerable. Poor housing contributes to lead exposure and falling risks, among other health problems.
 - Problems with **educational achievement** and access to **workforce training** opportunities reduce employment prospects and increase poverty rates.
- **Mental health** was identified by many as a significant concern. Depression, suicide, hopelessness, and isolation (particularly among elderly residents and those exposed to traumas early in life) are perceived to be increasing in severity. Access to mental health care is challenging due to cost (and limited benefits) and an undersupply of psychiatrists and other providers.
- **Substance abuse and addiction**, particularly the abuse of opioids, was a primary concern of many interviewees. Perceived over-prescribing of prescription drugs, poverty and economic insecurity, and mental health problems were cited as contributing factors.
 - While problems with opioids were mentioned most frequently, several interviewees stated that misuse of other drugs (primarily methamphetamines) is on the rise. They emphasized that underlying addiction is the real problem.
- **Obesity** was identified as growing problem, driven by ongoing difficulties with physical inactivity and poor nutrition.
 - Many are not eating healthy foods due to the higher costs of fresh and healthy options, food deserts that create access problems, a lack of knowledge about healthy cooking, and a lack of time (particularly for people working several jobs) to prepare meals.
 - Contributors to physical inactivity include a lack of safe places to exercise, a lack of time, and a lack of education regarding the importance of remaining active.

- The prevalence of and need to manage **chronic conditions** were identified as significant concerns, specifically: diabetes, hypertension, and cardiovascular diseases. Obesity (and its contributing factors) is considered a primary contributor to these conditions.
- **Transportation** was identified as a barrier to maintaining good health. Few public transportation options are available, and many neighborhoods are not serviced at all. Transportation affects access to health care services, healthy foods, and employment opportunities. Low-income and elderly residents were identified as groups that had the largest unmet transportation needs.
- Many identified a need for more **localized**, **community-based health clinics and programs**. While the region has many hospitals and physician groups, these entities "do not have a great connection with the community." Health systems need to improve their local presence, building up connections with local stakeholders and communities.
- Interviewees stated that the community needs more **health education** and better understanding of the health care system. Many are unsure about where and how they can access certain services. Questions about insurance coverage and more generally how to achieve a healthy life are prevalent. Many in the community demand prevention initiatives. Additionally, the need for **better referral mechanisms and a continuum of care** was discussed by several interviewees.
- **Health disparities** are present particularly for infant mortality rates and the prevalence of chronic conditions. Low-income, Black, and Hispanic (or Latino) residents were specifically identified as groups with disproportionately poor health outcomes.
 - Health care services need to be more culturally competent. Language and cultural barriers make it challenging for providers to improve the health of many residents.
- Growth in the **senior population** and the ability to age in place are significant concerns. Elderly residents are at greater risk for falls, food insecurity, transportation issues, and unsafe or inadequate housing. **Isolation** contributes to poor physical and mental health conditions.
- While the region has numerous health care providers, interviewees expressed concerns about **access to care**.
 - Cost of care, insurance gaps, waitlists, and providers not accepting Medicaid and other insurances were thought to be primary contributors.
 - Primary care, dental/oral health care, psychiatrists, and substance abuse treatment services were identified as particularly difficult to access.

OTHER FACILITIES AND RESOURCES IN THE COMMUNITY

This section identifies other facilities and resources available in the community served by Fairview 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 eight FQHC sites operating in the Fairview community (**Exhibit 6**).

County	ZIP Code	Site Name	City	Address
Cuyahoga	44102	Detroit Shoreway Community Health Center	Cleveland	6412 Franklin Blvd
Lorain	44035	Lorain County Health & Dentistry	Elyria	412 E River St
Cuyahoga	44102	Neighborhood Family Practice Administrative Annex	Cleveland	3600 Ridge Rd
Cuyahoga	44102	Neighborhood Family Practice Mobile Van 1	Cleveland	3569 Ridge Rd
Cuyahoga	44135	Puritas Community Health Center (Relocation)	Cleveland	14625 Puritas Ave
Cuyahoga	44102	Ridge Community Health Center	Cleveland	3569 Ridge Rd
Cuyahoga	44111	W. 117 Community Health Center	Cleveland	11709 Lorain Ave
Lorain	44035	Wilkes Villa Public Housing	Elyria	105 Louden Ct

Exhibit 6: Federally Qualified Health Centers, 2018

Source: HRSA, 2018.

Data published by HRSA indicate that in 2017, FQHCs served approximately nine percent of uninsured, Fairview community residents and 11 percent of the community's Medicaid recipients.⁶ In Ohio, FQHCs served about 15 percent of both population groups. Nationally, FQHCs served 22 percent of uninsured individuals and 18 percent of Medicaid recipients. These percentages ranged from 6 percent (Nevada) to 40 percent (Washington State).

Hospitals

Exhibit 7 presents information on hospital facilities located in the Fairview community.

⁶ HRSA refers to these statistics as FQHC "penetration rates."

OTHER FACILITIES AND RESOURCES IN THE COMMUNITY

ZIP Code	County	City/Town	Hospital Name	Address
44011	Lorain	Avon	Cleveland Clinic Avon Hospital	33300 Cleveland Clinic Blvd
44011	Lorain	Avon	Cleveland Clinic Rehabilitation Hospitals LLC	33355 Health Campus Blvd
44111	Cuyahoga	Cleveland	Fairview Hospital	18101 Lorain Avenue
44256	Medina	Medina	Medina Hospital	1000 East Washington Street
44109	Cuyahoga	Cleveland	MetroHealth System	2500 Metrohealth Drive
44130	Cuyahoga	Cleveland	Southwest General Health Center	18697 Bagley Road
44145	Cuyahoga	Westlake	St John Medical Center	29000 Center Ridge Road
44035	Lorain	Elyria	University Hospitals - Elyria Medical Center	630 East River Street
44011	Lorain	Avon	University Hospitals Avon Rehabilitation Hospital	37900 Chester Road

Exhibit 7: Hospitals, 2018

Source: Ohio Department of Health, 2019.

Other Community Resources

A wide range of agencies, coalitions, and organizations that provide health and social services is available in the region served by Fairview. 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: <u>http://www.211oh.org/</u>.

APPENDIX A – OBJECTIVES AND METHODOLOGY

APPENDIX A – 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.⁷ In conducting a CHNA, each tax-exempt hospital facility must:

- Define the community it serves;
- Assess the health needs of that community;
- Solicit and take into account input from persons who represent the broad interests of that community, including those with special knowledge of or expertise in public health;
- Document the CHNA in a written report that is adopted for the hospital facility by an authorized body of the facility; and,
- Make the CHNA report 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.

Ohio law⁸ requires local health departments (LHDs) and tax-exempt hospitals to submit their Community Health Improvement Plans and Implementation Strategy reports to the Ohio Department of Health (the department). Beginning January 1, 2020, Ohio law also requires LHDs and tax-exempt hospitals to complete assessments and plans "in alignment on a three-year interval established by the department." Specific methods and approaches for achieving "alignment" are evolving.

Methodology

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?
- *Why* are these problems present?

⁷ Internal Revenue Code, Section 501(r).

⁸ ORC 3701.981

APPENDIX A - OBJECTIVES AND METHODOLOGY

The focus on *who* is most vulnerable and *where* they live is important to identifying groups experiencing health inequities and disparities. Understanding *why* these issues are present is challenging, but is important to designing effective community health improvement initiatives. The question of *how* each hospital can address significant community health needs is the subject of the separate Implementation Strategy.

Federal regulations 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)."⁹ Accordingly, the community definition considered the geographic origins of the hospital's patients and also the hospital's mission, target populations, principal functions, and strategies.

This assessment was conducted by Verité Healthcare Consulting, LLC. See Appendix A for consultant qualifications.

Data from multiple sources were gathered and assessed, including secondary data¹⁰ published by others and primary data obtained through community input. *See* Appendix B. 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. 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.

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 the State of Ohio and local health departments, 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, Fairview collaborated with the following Cleveland Clinic and Cleveland Clinic – Select Medical hospitals: Main Campus, Cleveland Clinic Children's, Cleveland Clinic Children's Hospital for Rehabilitation, Avon, Akron General, Euclid, Fairview, Hillcrest, Lodi, Lutheran, Marymount, Medina, South Pointe, Union, Cleveland Clinic Florida, Select Specialty Hospital – Cleveland Fairhill, Select Specialty Hospital – Cleveland Gateway, Regency Hospital of Cleveland East, and Regency Hospital of Cleveland West. These facilities collaborated by

⁹ 501(r) Final Rule, 2014.

¹⁰ "Secondary data" refers to data published by others, for example the U.S. Census and the Ohio Department of Health. "Primary data" refers to data observed or collected from first-hand experience, for example by conducting interviews.

APPENDIX A – OBJECTIVES AND METHODOLOGY

gathering and assessing community health data together and relying on shared methodologies, report formats, and staff to manage the CHNA process.

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 37 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.

The Cleveland Clinic health system posts CHNA reports online at <u>www.clevelandclinic.org/CHNAReports</u> and makes an email address (<u>chna@ccf.org</u>) available for purposes of receiving comments and questions. No written comments have yet been received on CHNA reports.

Information Gaps

This CHNA relies on multiple data sources and community input gathered between July 2018 and January 2019. A number of data limitations should be recognized when interpreting results. For example, some data (e.g., County Health Rankings, Community Health Status Indicators, 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.

The community assessed by Fairview includes portions of three separate counties (Cuyahoga, Lorain, and Medina counties). County-wide data for each of these counties should be assessed accordingly.

Secondary data upon which this assessment relies measure community health in prior years and may not reflect current conditions. 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 that assessed this community. Differences in data sources, geographic areas assessed (e.g., hospital service areas versus counties or cities), interview questions, and prioritization processes can contribute to differences in findings.

APPENDIX A – OBJECTIVES AND METHODOLOGY

Consultant Qualifications

Verité Healthcare Consulting, LLC (Verité) was founded in May 2006 and is located in Arlington, Virginia. The firm serves clients throughout the United States as a resource that helps hospitals conduct Community Health Needs Assessments and develop Implementation Strategies to address significant health needs. Verité has conducted more than 60 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 Fairview community. Fairview's community is comprised of 23 ZIP codes in Cuyahoga, Lorain, and Medina counties, Ohio.

Demographics

Exhibit 8: Percent Change in Community Population by ZIP Code, 2017-2022

County	City/Town	ZIP Code	Estimated Population 2017	Projected Population 2022	Percent Change 2017 - 2022
Lorain	Avon	44011	23,902	25,545	6.9%
Lorain	North Ridgeville	44039	33,236	35,157	5.8%
Lorain	Avon Lake	44012	23,965	24,907	3.9%
Cuyahoga	Olmsted Falls	44138	23,541	24,277	3.1%
Medina	Medina	44256	64,301	66,089	2.8%
Medina	Brunswick	44212	44,344	45,113	1.7%
Cuyahoga	Strongsville	44149	19,716	19,937	1.1%
Cuyahoga	Westlake	44145	33,048	33,292	0.7%
Cuyahoga	Rocky River	44116	20,273	20,292	0.1%
Lorain	Elyria	44035	63,485	63,434	-0.1%
Cuyahoga	Berea	44017	19,009	18,990	-0.1%
Cuyahoga	Strongsville	44136	25,181	25,115	-0.3%
Cuyahoga	Cleveland	44135	26,332	26,208	-0.5%
Cuyahoga	Lakewood	44107	51,600	51,348	-0.5%
Cuyahoga	Cleveland	44144	20,770	20,603	-0.8%
Cuyahoga	Cleveland	44130	49,176	48,643	-1.1%
Cuyahoga	North Olmsted	44070	32,080	31,697	-1.2%
Cuyahoga	Cleveland	44126	15,988	15,743	-1.5%
Cuyahoga	Bay Village	44140	15,120	14,876	-1.6%
Cuyahoga	Cleveland	44111	38,260	37,542	-1.9%
Cuyahoga	Brook Park	44142	18,312	17,939	-2.0%
Cuyahoga	Cleveland	44102	42,397	41,452	-2.2%
Cuyahoga	Cleveland	44109	38,259	37,399	-2.2%
	Community Total		742,295	745,598	0.4%

Source: Truven Market Expert, 2018.

APPENDIX B - SECONDARY DATA ASSESSMENT

Description

Exhibit 8 portrays the estimated population by ZIP code in 2017 and projected to 2022.

- Between 2017 and 2022, 14 of 23 ZIP codes are projected to decrease in population. In total, the community population is expected to increase by 0.4 percent between 2017 and 2022.
- The population in ZIP code 44111 (where the hospital is located) is expected to decrease by 1.9 percent.

APPENDIX B - SECONDARY DATA ASSESSMENT

Age/Sex Cohort	Estimated Population 2017	Projected Population 2022	Percent Change 2017 - 2022
0 - 17	162,395	157,700	-2.9%
Female 18 - 34	75,928	74,704	-1.6%
Male 18 - 34	75,670	75,997	0.4%
35 - 64	301,544	291,825	-3.2%
65+	126,758	145,372	14.7%
Community Total	742,295	745,598	0.4%

Exhibit 9: Percent Change in Population by Age/Sex Cohort, 2017-2022

Source: Truven Market Expert, 2018.

Description

Exhibit 9 shows the community's population for certain age and sex cohorts in 2017, with projections to 2022.

- While the total community population is expected to increase slightly between 2017 and 2022, the number of persons aged 65 years and older is projected to increase by 14.7 percent.
- 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.

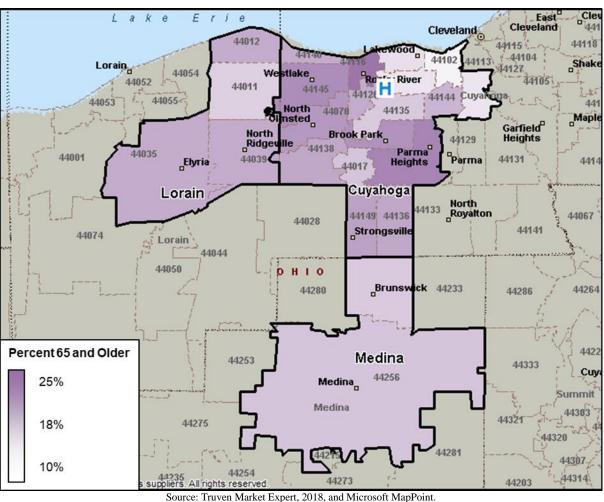


Exhibit 10: Percent of Population Aged 65+ by ZIP Code, 2017

Description

Exhibit 10 portrays the percent of the population 65 years of age and older by ZIP code.

Observations

• Cuyahoga County ZIP codes 44116, 44130, and 44145 have the highest proportions of the population 65 years of age and older, each over 22 percent.

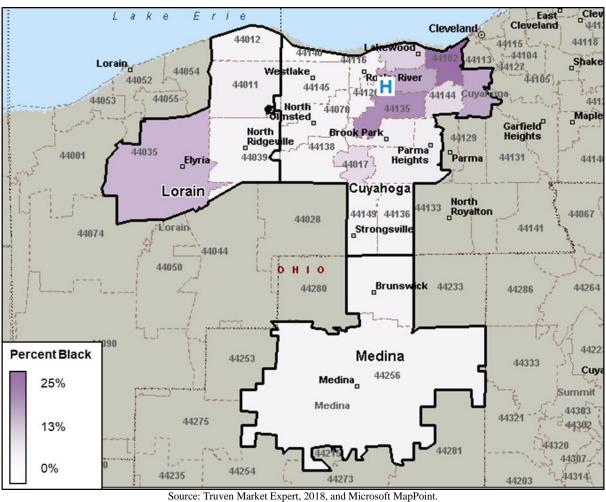


Exhibit 11: Percent of Population - Black, 2017

Description

Exhibit 11 portrays locations where the percentages of the population that are Black were highest in 2017.

- In two Cuyahoga County ZIP codes, over 20 percent of residents were Black (44102 and 44135).
- In 2017, the percentage of residents who are Black was under three percent in 14 ZIP codes.

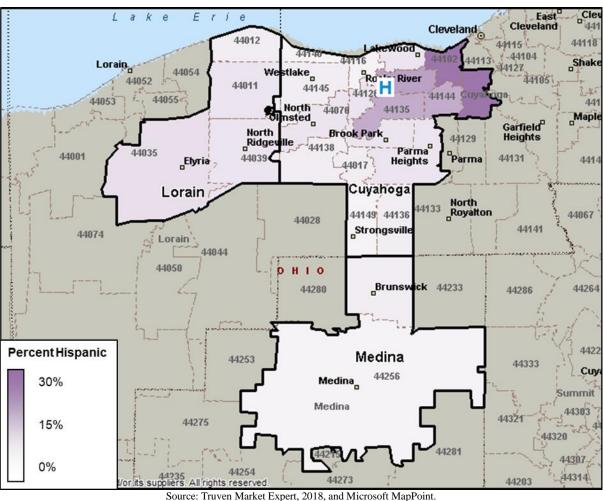


Exhibit 12: Percent of Population – Hispanic (or Latino), 2017

Description

Exhibit 12 portrays locations where the percentages of the population that are Hispanic (or Latino) were highest in 2017.

- The percentage of residents that are Hispanic (or Latino) was highest in Cuyahoga County ZIP codes 44109 and 44102, each over 28 percent.
- No other community ZIP code was over 20 percent.

APPENDIX B – SECONDARY DATA ASSESSMENT

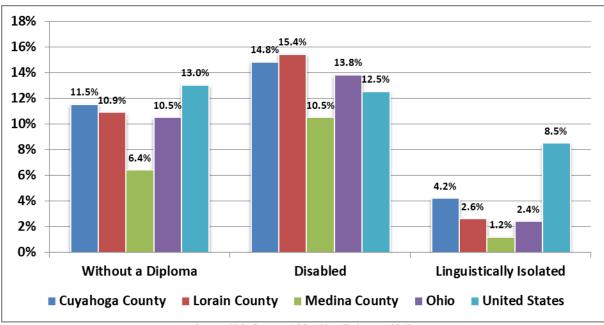


Exhibit 13: Other Socioeconomic Indicators, 2012-2016

Source: U.S. Census, ACS 5-Year Estimates, 2017.

Description

Exhibit 13 portrays the percent of the population (aged 25 years and above) without a high school diploma, with a disability, and linguistically isolated, by county.

- The percentage of residents aged 25 years and older without a high school diploma in Lorain and Cuyahoga counties has been higher than the Ohio average.
- Cuyahoga and Lorain counties had a higher percentage of the population with a disability compared to Ohio and United States averages.
- Compared to Ohio (but not to the United States), Cuyahoga and Lorain counties had a higher 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 economic indicators with implications for health were assessed: (1) people in poverty; (2) unemployment rate; (3) insurance status; and (4) crime.

People in Poverty

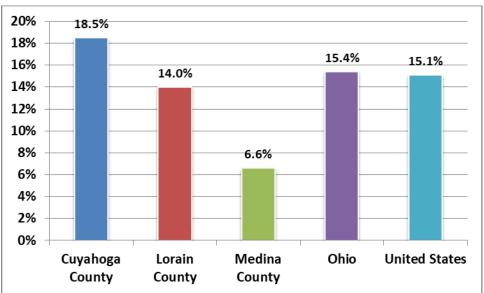


Exhibit 14: Percent of People in Poverty, 2012-2016

Source: U.S. Census, ACS 5-Year Estimates, 2017.

Description

Exhibit 14 portrays poverty rates by county.

- The poverty rate in Cuyahoga County was higher than Ohio and national averages throughout 2012-2016.
- The rates in Lorain and Medina counties were below Ohio and United States averages.

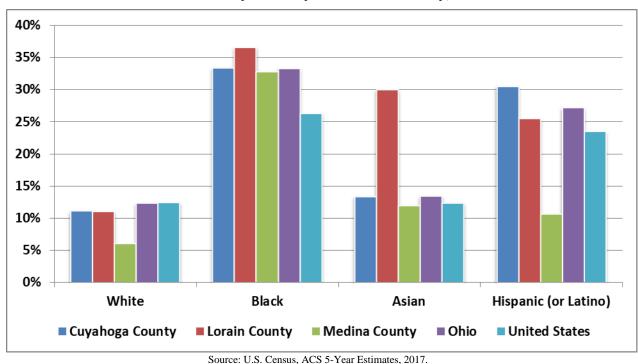


Exhibit 15: Poverty Rates by Race and Ethnicity, 2012-2016

Description

Exhibit 15 portrays poverty rates by race and ethnicity.

- Poverty rates have been higher for Black and Hispanic (or Latino) residents than for Whites.
- The poverty rates for Black residents in Cuyahoga County (33.3 percent) and Lorain County (36.5 percent) have been higher than poverty rates for Black individuals across Ohio (33.2 percent) and the United States (26.2 percent).
- At 32.7 percent, the rate for Black residents of Medina County also has been above the national average.

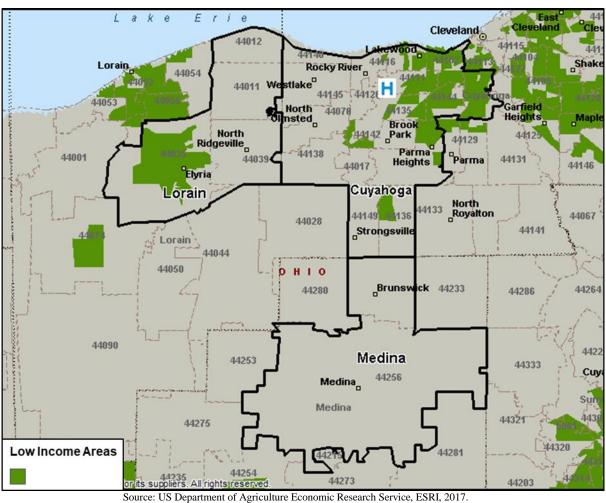


Exhibit 16: Low Income Census Tracts, 2017

Description

Exhibit 16 portrays the location of federally-designated low income census tracts.

Observations

• Low income census tracts have been present in Cuyahoga and Lorain counties.

Unemployment

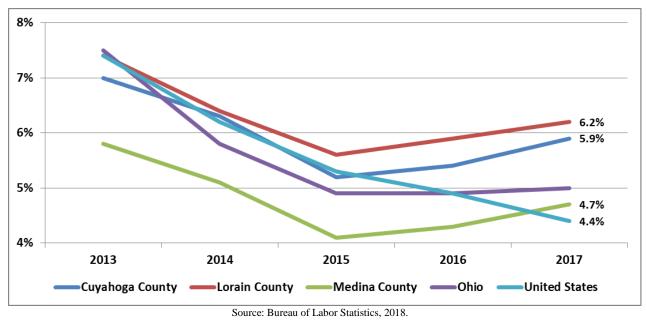


Exhibit 17: Unemployment Rates, 2013-2017

Description

Exhibit 17 shows unemployment rates for 2013 through 2017 by county, with Ohio and national rates for comparison.

- Between 2012 and 2015, unemployment rates at the local, state, and national levels declined significantly. Between 2015 and 2017, unemployment rates increased slightly in each of the three community counties.
- In 2017, rates in Cuyahoga and Lorain counties were above the Ohio average.
- Rates for all three counties were above the U.S. average in 2017.

Insurance Status

County	City/Town	ZIP Code	Total Population 2017	Percent Uninsured 2017	Total Population 2022	Percent Uninsured 2022
Cuyahoga	Cleveland	44102	42,397	6.7%	41,452	5.7%
Cuyahoga	Cleveland	44109	38,259	6.3%	37,399	5.4%
Cuyahoga	Cleveland	44135	26,332	5.2%	26,208	4.5%
Cuyahoga	Cleveland	44111	38,260	5.1%	37,542	4.3%
Lorain	Elyria	44035	63,485	4.7%	63,434	4.1%
Cuyahoga	Lakewood	44107	51,600	4.5%	51,348	3.6%
Cuyahoga	Cleveland	44144	20,770	4.4%	20,603	3.6%
Cuyahoga	Cleveland	44130	49,176	3.6%	48,643	3.0%
Cuyahoga	Cleveland	44126	15,988	3.4%	15,743	2.9%
Cuyahoga	Berea	44017	19,009	3.4%	18,990	2.8%
Cuyahoga	Brook Park	44142	18,312	3.3%	17,939	2.8%
Cuyahoga	Strongsville	44136	25,181	3.0%	25,115	2.6%
Cuyahoga	Rocky River	44116	20,273	2.8%	20,292	2.5%
Lorain	Avon	44011	23,902	2.8%	25,545	2.7%
Cuyahoga	Olmsted Falls	44138	23,541	2.7%	24,277	2.4%
Lorain	Avon Lake	44012	23,965	2.6%	24,907	2.4%
Cuyahoga	Westlake	44145	33,048	2.5%	33,292	2.1%
Cuyahoga	North Olmsted	44070	32,080	2.5%	31,697	2.1%
Cuyahoga	Bay Village	44140	15,120	2.2%	14,876	2.0%
Medina	Brunswick	44212	44,344	1.8%	45,113	1.6%
Medina	Medina	44256	64,301	1.8%	66,089	1.6%
Cuyahoga	Strongsville	44149	19,716	1.7%	19,937	1.5%
Lorain	North Ridgeville	44039	33,236	1.7%	35,157	1.5%
	Community Total	0 7	742,295 ven Market Exper	3.6%	745,598	3.0%

Exhibit 18: Percent of the Population without Health Insurance, 2017-2022

Source: Truven Market Expert, 2018.

Description

Exhibit 18 presents the estimated percent of population in community ZIP codes without health insurance (uninsured) – in 2017 and with projections to 2022.

- In 2017, the highest "uninsurance rates" were in Cuyahoga County ZIP codes.
- 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. Across the United States, uninsurance rates have fallen most in states that decided to expand Medicaid.¹¹

¹¹ See: http://hrms.urban.org/briefs/Increase-in-Medicaid-under-the-ACA-reduces-uninsurance.html

Crime Rates

Crime	Cuyahoga County	Lorain County	Medina County	Ohio
Violent Crime	694.9	150.9	47.0	305.9
Property Crime	2,977.7	1,369.6	682.1	2,537.4
Murder	15.1	4.5	1.7	5.9
Rape	57.6	33.4	9.2	47.4
Robbery	327.7	50.3	1.7	111.1
Aggravated Assault	294.5	62.7	34.4	141.5
Burglary	753.6	373.4	93.4	573.5
Larceny	1,742.1	930.8	577.9	1,789.7
Motor Vehicle Theft	482.0	65.3	10.9	174.2
Arson	33.6	9.0	2.9	23.4

Exhibit 19: Crime Rates by Type and Jurisdiction, Per 100,000, 2016

Source: FBI, 2017.

Description

Exhibit 19 provides crime statistics. Light grey shading indicates rates that were higher (worse) than the Ohio average; dark grey shading indicates rates that were more than 50 percent higher than the Ohio average.

- 2016 crime rates in Cuyahoga County were more than 50 percent higher than the Ohio averages for violent crime, murder, robbery, aggravated assault, and motor vehicle theft.
- Lorain and Medina counties had below average crime rates for all types presented.

Housing Affordability

County City/Town		ZIP Code	Occupied Units	Households	Rent Burden >
County	City/10wil	ZIP Coue	Paying Rent	Paying >30%	30% of Income
Cuyahoga	Cleveland	44111	7,084	4,065	57.4%
Cuyahoga	Cleveland	44135	4,180	2,373	56.8%
Cuyahoga	Cleveland	44109	8,491	4,702	55.4%
Cuyahoga	Cleveland	44102	11,767	6,416	54.5%
Lorain	Elyria	44035	9,660	5,167	53.5%
Cuyahoga	Brook Park	44142	1,575	808	51.3%
Lorain	Avon Lake	44012	1,666	843	50.6%
Lorain	North Ridgeville	44039	1,644	765	46.5%
Cuyahoga	Olmsted Falls	44138	1,730	790	45.7%
Lorain	Avon	44011	1,394	623	44.7%
Cuyahoga	Cleveland	44126	1,862	824	44.3%
Cuyahoga	Bay Village	44140	454	200	44.1%
Cuyahoga	North Olmsted	44070	3,349	1,475	44.0%
Cuyahoga	Cleveland	44144	3,741	1,642	43.9%
Cuyahoga	Berea	44017	2,090	895	42.8%
Medina	Medina	44256	4,843	2,052	42.4%
Cuyahoga	Cleveland	44130	7,773	3,263	42.0%
Medina	Brunswick	44212	3,414	1,374	40.2%
Cuyahoga	Rocky River	44116	2,408	953	39.6%
Cuyahoga	Strongsville	44136	2,631	1,033	39.3%
Cuyahoga	Westlake	44145	3,456	1,329	38.5%
Cuyahoga	Lakewood	44107	12,923	4,957	38.4%
Cuyahoga	Strongsville	44149	522	160	30.7%
	Community Total		98,657	46,709	47.3%
	Ohio		1,453,379	678,101	46.7%
	United States		39,799,272	20,138,321	50.6%

Exhibit 20: Percent of Rented Households Rent Burdened, 2013-2017

Source: U.S. Census, ACS 5-Year Estimates, 2018.

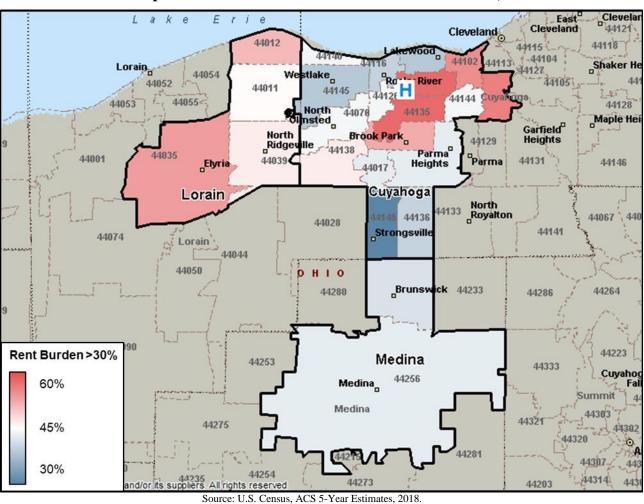


Exhibit 21: Map of Percent of Rented Households Rent Burdened, 2013-2017

Description

The U.S. Department of Housing and Urban Development ("HUD") has defined households that are "rent burdened" as those spending more than 30 percent of income on housing.¹² On that basis and based on data from the U.S. Census, Exhibits 20 and 21 portray the percentage of rented households in each ZIP code that are rent burdened.

Observations

As stated by the Federal Reserve, "households that have little income left after paying rent may not be able to afford other necessities, such as food, clothes, health care, and transportation."¹³

¹² https://www.federalreserve.gov/econres/notes/feds-notes/assessing-the-severity-of-rent-burden-on-low-income-families-20171222.htm

 $^{^{13}}$ Ibid.

- More than 47 percent of households have been designated as "rent burdened," a level above the Ohio average.
- The percentage of rented households rent burdened was highest in ZIP codes where poverty rates and the Dignity Health Community Need IndexTM (CNI) also are above average (see next section for information on the CNI).

Dignity Health Community Need Index[™]

County	City/Town	ZIP Code	CNI Score		
Cuyahoga	Cleveland	44102	4.8		
Cuyahoga	Cleveland	44109	4.8		
Cuyahoga	Cleveland	44135	4.4		
Cuyahoga	Cleveland	44111	4.0		
Lorain	Elyria	44035	3.8		
Cuyahoga	Cleveland	44144	3.6		
Cuyahoga	Lakewood	44107	3.2		
Cuyahoga	Cleveland	44130	2.8		
Cuyahoga	Berea	44017	2.6		
Cuyahoga	Brook Park	44142	2.4		
Cuyahoga	Cleveland	44126	2.2		
Cuyahoga	Strongsville	44136	2.2		
Lorain	North Ridgeville	44039	2.0		
Cuyahoga	North Olmsted	44070	2.0		
Cuyahoga	Westlake	44145	2.0		
Lorain	Avon	44011	1.8		
Cuyahoga	Rocky River	44116	1.8		
Cuyahoga	Olmsted Falls	44138	1.8		
Medina	Brunswick	44212	1.8		
Medina	Medina	44256	1.8		
Lorain	Avon Lake	44012	1.4		
Cuyahoga	Strongsville	44149	1.4		
Cuyahoga	Bay Village	44140	1.2		
	2.8				
Cu	3.3				
L	3.0				
N	Medina County Average				

Exhibit 22: Community Need IndexTM Score by ZIP Code, 2018

Source: Dignity Health, 2018.

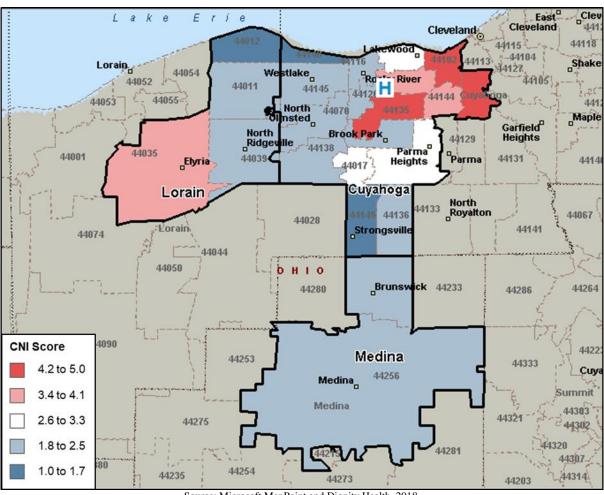


Exhibit 23: Community Need Index, 2018

Source: Microsoft MapPoint and Dignity Health, 2018.

Description

Exhibits 22 and 23 present the *Community Need Index*TM (CNI) score for each ZIP code in the Fairview community. Higher scores (e.g., 4.2 to 5.0) indicate the highest levels of community need. The index is calibrated such that 3.0 represents a U.S.-wide median score.

Dignity Health, a California-based hospital system, developed and published the CNI as a way to assess barriers to health care access. The index, available for every ZIP code in the United States, is derived from 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; and
- The percentage of the population renting houses.

CNI scores are grouped into "Lowest Need" (1.0-1.7) to "Highest Need" (4.2-5.0) categories.

- Three of the 23 ZIP codes in the Fairview community (Cuyahoga County ZIP codes 44102, 44109, and 44135) scored in the "highest need" category. Three other ZIP codes scored in the "lowest need" category.
- At 2.8, the weighted average CNI score for the Fairview community is below the U.S. median of 3.0.

Other Local Health Status and Access Indicators

This section assesses other health status and access indicators for the Fairview community. Data sources include:

- (1) County Health Rankings
- (2) Community Health Status Indicators, published by County Health Rankings
- (3) Ohio Department of Health
- (4) 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

Exhibit 24: County Health Rankings, 2015 and 2018 (Light Grey Shading Denotes Bottom Half of Ohio Counties; Dark Grey Denotes Bottom Quartile)

	Cuyahoga	County	Lorain County		Medina County	
Measure	2015	2018	2015	2018	2015	2018
Health Outcomes	65	60	28	38	4	4
Health Factors	50	62	43	37	3	5
Length of Life	51	48	31	33	4	5
Premature death	51	48	31	33	4	5
Quality of Life	72	67	30	47	5	4
Poor or fair health	32	46	41	54	4	2
Poor physical health days	24	24	22	59	7	2
Poor mental health days	49	12	20	45	13	2
Low birthweight	87	88	41	48	16	23
Health Behaviors	36	49	37	27	4	9
Adultsmoking	14	50	34	34	4	8
Adult obesity	9	12	28	16	7	29
Food environment index	75	71	50	47	7	8
Physical inactivity	23	12	7	21	15	12
Access to exercise opportunities	3	2	14	9	8	8
Excessive drinking	33	22	45	34	34	79
Alcohol-impaired driving deaths	67	79	83	84	76	85
Sexually transmitted infections	87	86	72	71	18	6
Teen births	51	47	29	31	7	6
Clinical Care	6	4	31	18	5	5
Uninsured	53	49	13	15	4	6
Primary care physicians	2	2	25	27	29	24
Dentists	1	1	29	30	20	21
Mental health providers	2	3	37	28	24	37
Preventable hospital stays	33	25	58	58	49	17
Diabetes monitoring	65	62	52	40	13	33
Mammography screening	8	18	11	4	3	2
Social & Economic Factors	78	79	51	47	7	5
High school graduation	85	83	73	64	23	4
Some college	8	9	19	19	6	6
Unemployment	51	52	59	59	15	23
Children in poverty	68	72	47	42	3	4
Income inequality	86	85	59	60	8	11
Children in single-parent households	88	86	73	69	11	6
Social associations	79	77	70	69	75	76
Violent crime	85	85	70	66	47	6
Injury deaths	31	47	9	49	3	5
Physical Environment	68	86	63	40	70	62
Air pollution	63	87	57	42	67	64
Severe housing problems	87	87	69	68	33	31
Driving alone to work	7	7	48	32	79	80
Long commute - driving alone	45	48	58	59	79	74

Source: County Health Rankings, 2018.

Description

Exhibit 24 presents *County Health Rankings*, a University of Wisconsin Population Health Institute initiative funded by the Robert Wood Johnson Foundation that 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,¹⁴ social and economic factors, and physical environment.¹⁵ *County Health Rankings* is updated annually. *County Health Rankings 2018* relies on data from 2006 to 2017, with most data from 2011 to 2016.

The exhibit presents 2015 and 2018 rankings for each available indicator category. Rankings indicate how the county ranked in relation to all 88 counties in Ohio, with 1 indicating the most favorable rankings and 88 the least favorable. Light grey shading indicates rankings in the bottom half of Ohio counties; dark grey shading indicates rankings in bottom quartile of Ohio counties.

- In 2018, Cuyahoga County ranked in the bottom 50th percentile among Ohio counties for 28 of the 42 indicators assessed. Of those, 15 were in the bottom quartile, including quality of life, social and economic factors, physical environment, and various socioeconomic indicators.
- In Lorain County, 19 of the 42 indicators ranked in the bottom 50th percentile among Ohio counties. Five were in the bottom quartile, including alcohol-impaired driving deaths, sexually transmitted infections, children in single-parent households, social associations, and severe housing problems.
- In Medina County, seven indicators ranked in the bottom 50th percentile among Ohio counties. Five were in the bottom quartile, including excessive drinking, alcohol-impaired driving deaths, social associations, percent that drive alone to work, and percent that drive alone who have a long commute.
- All three counties ranked in the bottom quartile for alcohol-impaired driving deaths and for a lack of social associations.
- Overall, Medina County ranked among the healthiest Ohio counties.

¹⁴A 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.

¹⁵A composite measure that examines Environmental Quality, which measures the number of air pollutionparticulate 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.

Exhibit 25: County Health Rankings Data Compared to Ohio and U.S. Averages, 2018 (Light Grey Shading Denotes Bottom Half of Ohio Counties; Dark Grey Denotes Bottom Quartile)

Indicator Category	Data		Lorain County	Medina County	Ohio	United States		
Health Outcomes								
Length of Life	Years of potential life lost before age 75 per 100,000 population	8,037	7,137	5,438	7,734	6,700		
	Percent of adults reporting fair or poor health	16.4%	16.9%	11.3%	17.0%	16.0%		
Quality of Life	Average number of physically unhealthy days reported in past 30 days	3.7	4.0	3.0	4.0	3.7		
Quality of Life	Average number of mentally unhealthy days reported in past 30 days	3.7	4.0	3.5	4.3	3.8		
	Percent of live births with low birthweight (<2500 grams)	10.6%	7.8%	7.0%	8.6%	8.0%		
	Health Factors							
Health Behaviors								
Adult Smoking	Percent of adults that report smoking >= 100 cigarettes and currently smoking	20.6%	19.9%	17.3%	22.5%	17.0%		
Adult Obesity	Percent of adults that report a BMI >= 30	29.9%	30.4%	31.6%	31.6%	28.0%		
Food Environment Index	Index of factors that contribute to a healthy food environment, 0 (worst) to 10 (best)	7.0	7.6	8.5	6.6	7.7		
Physical Inactivity	Percent of adults aged 20 and over reporting no leisure-time physical activity	24.3%	25.4%	24.3%	25.7%	23.0%		
Access to Exercise Opportunities	Percent of population with adequate access to locations for physical activity	96.1%	92.2%	93.2%	84.7%	83.0%		
Excessive Drinking	Binge plus heavy drinking	16.8%	17.3%	19.7%	19.1%	18.0%		
Alcohol-Impaired Driving Deaths	Percent of driving deaths with alcohol involvement	44.0%	46.4%	46.7%	34.3%	29.0%		
STDs	Chlamydia rate per 100,000 population	720	378	172	489	479		
Teen Births	Teen birth rate per 1,000 female population, ages 15-19	30.3	27.8	12.4	27.6	27.0		
Clinical Care								
Uninsured	Percent of population under age 65 without health insurance	7.8%	6.5%	6.0%	7.7%	11.0%		
Primary Care Physicians	Ratio of population to primary care physicians	898:1	1,744:1	1,633:1	1,307:1	1,320:1		
Dentists	Ratio of population to dentists	979:1	2,142:1	1,947:1	1,656:1	1,480:1		
Mental Health Providers	Ratio of population to mental health providers	356:1	772:1	900:1	561:1	470:1		
Preventable Hospital Stays	Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	53	65	51	57	49		
Diabetes Screening	Percent of diabetic Medicare enrollees that receive HbA1c monitoring	83.8%	86.0%	86.4%	85.1%	85.0%		
Mammography Screening	Percent of female Medicare enrollees, ages 67-69, that receive mammography screening	64.7%	67.9%	68.6%	61.2%	63.0%		

Source: County Health Rankings, 2018.

Exhibit 25: County Health Rankings Data Compared to Ohio and U.S. Averages, 2018 (*continued*) (Light Grey Shading Denotes Bottom Half of Ohio Counties; Dark Grey Denotes Bottom Quartile)

Indicator Category	Data	Cuyahoga County	Lorain County	Medina County	Ohio	United States	
Health Factors							
Social & Economic Factors							
High School Graduation	Percent of ninth-grade cohort that graduates in four years	74.8%	86.6%	95.8%	81.2%	83.0%	
Some College	Percent of adults aged 25-44 years with some post-secondary education	68.7%	64.9%	71.6%	64.5%	65.0%	
Unemployment	Percent of population age 16+ unemployed but seeking work	5.4%	5.9%	4.3%	4.9%	4.9%	
Children in Poverty	Percent of children under age 18 in poverty	26.4%	17.9%	8.1%	20.4%	20.0%	
Income Inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	5.6	4.5	3.7	4.8	5.0	
Children in Single-Parent Households	Percent of children that live in a household headed by single parent	45.0%	37.4%	20.5%	35.7%	34.0%	
Social Associations	Number of associations per 10,000 population	9.3	10.2	9.5	11.3	9.3	
Violent Crime	Number of reported violent crime offenses per 100,000 population	589	180	50	290	380	
Injury Deaths	Injury mortality per 100,000	76.4	77.0	53.1	75.5	65.0	
Physical Environment							
Air Pollution	The average daily measure of fine particulate matter in micrograms per cubic meter (PM2.5) in a county	12.9	11.3	11.7	11.3	8.7	
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	18.5%	14.6%	11.9%	15.0%	19.0%	
Driving Alone to Work	Percent of the workforce that drives alone to work	79.8%	84.1%	87.6%	83.4%	76.0%	
Long Commute – Drive Alone	Among workers who commute in their car alone, the percent that commute more than 30 minutes	32.6%	35.6%	43.7%	30.0%	35.0%	

Source: County Health Rankings, 2018.

Description

Exhibit 25 provides data that underlie the County Health Rankings.¹⁶ The exhibit also includes Ohio and national averages. Light grey shading highlights indicators found to be worse than the Ohio average; dark grey shading highlights indicators more than 50 percent worse than the Ohio average.

- The following indicators (presented alphabetically) compared particularly unfavorably:
 - Air pollution (average daily PM2.5)
 - Injury mortality rate
 - Percent of adults who drive alone to work
 - Percent of adults who drive alone to work with long commutes
 - Percent of children living in single-parent households
 - Percent of driving deaths with alcohol involvement
 - Ratio of population to dentists
 - Ratio of population to mental health providers
 - Ratio of population to primary care physicians
 - Social associations rate
 - Teen birth rate
 - o Unemployment
- In Exhibit 25, Cuyahoga County's crime rate is more than 50 percent worse than the Ohio average. The county's chlamydia rate is just under 50 percent above average. Medina County's mental health providers rate is more than 50 percent worse than the Ohio average.
- Ohio-wide indicators are worse than U.S. averages for virtually all of the indicators presented.

¹⁶ 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

Community Health Status Indicators

Exhibit 26: Community Health Status Indicators, 2018
(Light Grey Shading Denotes Bottom Half of Peer Counties; Dark Grey Denotes Bottom Quartile)

Category	Indicator	Cuyahoga County	Lorain County	Medina County
Length of Life	Years of Potential Life Lost Rate			
	% Fair/Poor Health			
Quality of Life	Physically Unhealthy Days			
Quality of Life	Mentally Unhealthy Days			
	% Births - Low Birth Weight			
	% Smokers			
	% Obese			
	Food Environment Index			
Health	% Physically Inactive			
Behaviors	% With Access to Exercise Opportunities			
Della Vioro	% Excessive Drinking			
	% Driving Deaths Alcohol-Impaired			
	Chlamydia Rate			
	Teen Birth Rate			
	% Uninsured			
	Primary Care Physicians Rate			
	Dentist Rate			
Clinical Care	Mental Health Professionals Rate			
	Preventable Hosp. Rate			
	% Receiving HbA1c Screening			
	% Mammography Screening			
	High School Graduation Rate			
	% Some College			
	% Unemployed			
Social &	% Children in Poverty			
Economic	Income Ratio			
Factors	% Children in Single-Parent Households			
	Social Association Rate			
	Violent Crime Rate			
	Injury Death Rate			
	Average Daily PM2.5			
Physical	% Severe Housing Problems			
Environment	% Drive Alone to Work			
	% Long Commute - Drives Alone			

Source: Community Health Status Indicators, 2017.

Description

County Health Rankings has organized community health data for all 3,143 counties in the United States. Following a methodology developed by the Centers for Disease Control's *Community Health Status Indicators* Project (CHSI), County Health Rankings also publishes lists of "peer counties," so comparisons with peer counties in other states can be made. Each county in the U.S. is assigned 30 to 35 peer counties based on 19 variables including population size, population growth, population density, household income, unemployment, percent children, percent elderly, and poverty rates.

This *Community Health Status Indicators* analysis formerly was available from the CDC. Because comparisons with peer counties (rather than only counties in the same state) are meaningful, Verité Healthcare Consulting rebuilt the CHSI comparisons for this and other CHNAs.

Exhibit 26 compares Fairview community counties to their respective peer counties and highlights community health issues found to rank in the bottom half and bottom quartile of the counties included in the analysis. Light grey shading indicates rankings in the bottom half of peer counties; dark grey shading indicates rankings in the bottom quartile of peer counties.

- The CHSI data indicate that the counties served by Fairview compared unfavorably to their peers for the following indicators:
 - Percent of adults who smoke
 - Food environment index
 - Percent of driving deaths alcohol-impaired
 - Preventable hospitalizations rate
 - o Unemployment
 - Income ratio
 - Air pollution (average daily PM2.5)
 - Percent of adults who drive alone to work

Ohio Department of Health

Exhibit 27: Selected Causes of Death, Age-Adjusted Rates per 100,000 Population, 2016 (Light Grey Shading Denotes Indicators Worse than Ohio Average; Dark Grey Denotes Any Indicators More than 50 Percent Worse than Ohio Average)

Specific Causes of Death	Cuyahoga County	Lorain County	Medina County	Ohio
All Causes of Death	827.3	790.0	661.7	832.3
All other forms of chronic ischemic heart disease	52.3	52.1	46.2	53.2
Other chronic obstructive pulmonary disease	33.6	52.6	35.2	43.7
Organic dementia	46.5	33.1	40.5	38.4
Alzheimer's disease	20.5	31.9	22.0	33.4
Acute myocardial infarction	24.4	25.4	21.7	32.1
Accidental poisoning by and exposure to drugs and other biological substances	44.6	52.0	26.5	36.8
Diabetes mellitus	25.9	17.8	21.4	24.6
Conduction disorders and cardiac dysrhythmias	21.0	17.9	20.1	20.2
Congestive heart failure	17.8	16.9	25.3	19.5
Stroke, not specified as hemorrhage or infarction	16.1	14.3	11.0	17.8
Atherosclerotic cardiovascular disease	34.5	16.0	N/A	15.4
Renal failure	15.3	12.4	9.8	15.1
Septicemia	17.1	13.9	9.5	13.7
Pneumonia	9.3	14.5	5.8	13.3
All other diseases of nervous system	9.6	10.6	13.0	12.3
Hypertensive heart disease	15.0	7.0	10.1	11.9
All other diseases of respiratory system	8.3	9.5	10.5	11.4
Other cerebrovascular diseases and their sequelae	7.7	7.3	7.7	10.4
Parkinson's disease	6.9	10.8	9.4	8.7
Intentional self-harm (suicide) by discharge of firearms	6.2	7.6	9.4	7.4
Alcoholic liver disease	5.8	6.8	N/A	5.1
Unspecified fall	0.7	N/A	N/A	4.7

Source: Ohio Department of Health, 2017.

Description

The Ohio Department of Health maintains a database that includes county-level mortality rates and cancer incidence rates. Exhibit 27 provides age-adjusted mortality rates for selected causes of death in 2016.

- The following mortality rates compared particularly unfavorably to Ohio averages:
 - o Organic dementia
 - Accidental poisoning by and exposure to drugs and other biological substances

- Atherosclerotic cardiovascular disease
- Septicemia
- Parkinson's disease
- Intentional self-harm (suicide) by discharge of firearms
- o Alcohol liver disease

Exhibit 28: Age-Adjusted Cancer Mortality Rates per 100,000 Population, 2016 (Light Grey Shading Denotes Indicators Worse than Ohio Average; Dark Grey Denotes Any Indicators More than 50 Percent Worse than Ohio Average)

Cancer Site/Type	Cuyahoga County	Lorain County	Medina County	Ohio
All Cancer Types	180.0	172.9	144.3	173.8
Lung and Bronchus	44.7	49.4	35.6	47.9
Prostate	23.2	18.0	24.1	19.8
Other Sites/Types	21.5	19.6	15.4	19.6
Colon & Rectum	14.5	16.0	12.2	15.5
Breast	12.7	13.9	8.7	12.0
Pancreas	13.1	11.2	9.3	11.5
Ovary	8.9	5.9	14.8	7.8
Leukemia	7.9	7.4	5.4	6.9
Liver & Intrahepatic Bile Duct	7.6	6.5	4.8	6.1
Non-Hodgkins Lymphoma	5.7	6.6	5.0	5.9
Uterus	6.9	4.4	N/A	5.2
Esophagus	4.7	5.3	5.3	5.1
Bladder	6.2	4.3	5.9	5.1
Brain and Other CNS	4.1	2.6	N/A	4.8
Kidney & Renal Pelvis	3.4	3.5	N/A	3.8
Multiple Myeloma	3.3	3.3	N/A	3.3
Oral Cavity & Pharynx	3.1	3.6	N/A	2.9
Melanoma of Skin	1.4	N/A	N/A	2.6
Stomach	4.1	N/A	N/A	2.5
Cervix	3.3	N/A	N/A	2.1
Larynx	1.0	N/A	N/A	1.2
Thyroid	0.8	N/A	N/A	0.4

Source: Ohio Department of Health, 2017.

Description

Exhibit 28 provides age-adjusted mortality rates for selected types of cancer in 2016.

- Cuyahoga County's age-adjusted stomach, cervix, and thyroid cancer mortality rates were significantly higher than the Ohio average. Medina County's ovarian cancer mortality rate was significantly higher than the Ohio average.
- Cancer mortality rates for prostate, breast, ovary, leukemia, liver and intrahepatic bile duct, esophagus, bladder, and oral cavity and pharynx were higher than the state average in at least two community counties.

Exhibit 29: Age-Adjusted Cancer Incidence Rates per 100,000 Population, 2011-2015 (Light Grey Shading Denotes Indicators Worse than Ohio Average)

Cancer Site/Type	Cuyahoga County	Lorain County	Medina County	Ohio
All Cancer Types	483.2	463.7	471.9	461.6
Prostate	131.7	122.6	124.5	108.0
Lung and Bronchus	65.6	69.0	60.0	69.3
Breast	73.1	68.6	68.9	68.0
Colon & Rectum	43.4	41.2	39.9	41.7
Other Sites/Types	39.5	33.3	34.9	36.4
Uterus	32.5	27.1	27.4	29.2
Bladder	20.9	23.0	23.4	21.9
Melanoma of Skin	16.8	20.2	26.8	21.7
Non-Hodgkins Lymphoma	20.1	18.6	22.3	19.0
Kidney & Renal Pelvis	16.9	18.7	18.3	16.8
Thyroid	16.4	17.5	16.4	14.8
Pancreas	13.8	14.4	12.7	12.7
Leukemia	12.7	10.6	16.0	12.2
Oral Cavity & Pharynx	11.1	10.5	9.1	11.7
Ovary	12.2	8.2	13.5	11.4
Cervix	6.6	8.3	3.4	7.6
Brain and Other CNS	6.7	7.0	7.6	6.9
Liver & Intrahepatic Bile Duct	8.9	6.2	5.6	6.7
Stomach	7.9	7.1	6.5	6.4
Multiple Myeloma	7.4	4.7	5.4	5.8
Testis	6.8	7.4	8.5	5.8
Esophagus	5.1	4.4	4.4	5.1
Larynx	4.3	3.6	4.0	4.1
Hodgkins Lymphoma	3.3	2.3	3.6	2.7

Source: Ohio Department of Health, 2016.

Description

Exhibit 29 presents age-adjusted cancer incidence rates by county.

- The overall cancer incidence rates in Cuyahoga, Lorain, and Medina counties were higher than the Ohio average.
- In all three counties, incidence rates for prostate, breast, kidney and renal pelvis, thyroid, stomach, and testis cancers were above Ohio averages.

Exhibit 30: Communicable Disease Incidence Rates per 100,000 Population, 2017 (Light Grey Shading Denotes Indicators Worse than Ohio Average; Dark Grey Denotes Any Indicators More than 50 Percent Worse than Ohio Average)

Indicator	Cuyahoga County	Lorain County	Medina County	Ohio
Living with diagnosis of HIV infection (2016)	373.2	114.9	49.7	199.5
Gonorrhea	408.5	171.0	38.4	206.6
Chlamydia	884.8	487.0	218.4	528.9
Total Syphilis	29.8	12.4	2.8	16.4
Tuberculosis	2.2	2.3	0.6	1.3

Source: Ohio Department of Health, 2018.

Description

Exhibit 30 presents incidence rates for various communicable diseases in the community.

- Cuyahoga County rates for all indicators were more than 50 percent worse than Ohio averages.
- The Lorain County rate for tuberculosis was more than 50 percent worse than the Ohio average.

Exhibit 31: Maternal and Child Health Indicators, 2014-2018 (Light Grey Shading Denotes Indicators Worse than Ohio Average)

Indicator	Cuyahoga County	Lorain County	Medina County	Ohio
Low Birth Weight Percent	8.5%	7.0%	5.9%	7.2%
Very Low Birth Weight Percent	2.2%	1.4%	0.9%	1.6%
Births to Unmarried Mothers	51.7%	48.4%	24.9%	43.2%
Preterm Births Percent	9.5%	8.3%	7.6%	8.7%
Very Preterm Births Percent	2.5%	1.6%	1.1%	1.8%

Source: Ohio Department of Health, 2018.

Description

Exhibit 31 presents various maternal and infant health indicators.

Observations

• All Cuyahoga County indicators in Exhibit 31 were worse than Ohio averages.

Lorain County compared unfavorably for births to unmarried mothers.

Exhibit 32: Infant Mortality Rates by County, 2010-2016 and for Ohio, 2016 (Light Grey Shading Denotes Indicators Worse than Ohio Average)

Indicator	Cuyahoga County	Lorain County	Medina County	Ohio
Overall Infant Mortality Rate	9.3	5.9	3.8	7.4
Black Infant Mortality Rate	16.3	10.9	N/A	15.2
Hispanic Infant Mortality Rate	6.0	6.0	N/A	7.3
White Infant Mortality Rate	5.2	5.1	N/A	5.8

Source: County Health Rankings, 2018 and Ohio Department of Health, 2017 (for Ohio-wide averages).

Description

Exhibit 32 presents infant mortality rates by race and ethnicity by county and for Ohio.

- The overall infant mortality rate and the Black infant mortality rate in Cuyahoga County were higher than the Ohio averages.
- As documented by many, infant mortality rates have been particularly high for Black infants across Ohio.

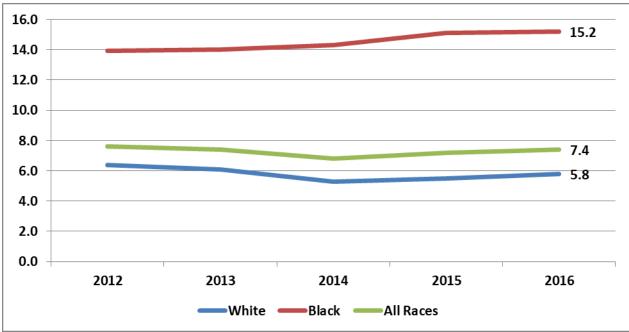


Exhibit 33: Infant Mortality Rates by Race, Ohio overall, 2012-2016

Source: Ohio Department of Health, 2018.

Description

Exhibit 33 presents infant mortality rates in Ohio by race for each year from 2012 to 2016.

Observations

• Infant mortality rates for Black infants in Ohio were consistently higher than rates for White infants and infants of all races.

Behavioral Risk Factor Surveillance System

Exhibit 34: Behavioral Risk Factor Surveillance System, Chronic Conditions, 2017 (Light Grey Shading Denotes Indicators Worse than Ohio Average; Dark Grey Denotes Any Indicators More than 50 Percent Worse than Ohio Average)

County	City/Town	ZIP Code	Total Population 18+	% Arthritis	% Asthma	% Depression	% Diabetes	% Heart Disease	% Heart Failure	% High Blood Pressure	% High Cholesterol	% Adult Smoking	% COPD	% Back Pain
Cuyahoga	Lakewood	44107	41,528	20.5%	12.1%	17.9%	15.5%	9.8%	3.3%	31.3%	24.4%	28.9%	5.1%	31.5%
Cuyahoga	Cleveland	44111	30,098	25.2%	13.5%	22.1%	19.9%	8.9%	3.5%	36.5%	27.0%	33.3%	7.5%	32.2%
Cuyahoga	Cleveland	44135	19,726	26.0%	13.0%	21.4%	17.9%	10.9%	4.0%	34.7%	27.1%	32.0%	7.8%	33.2%
Cuyahoga	Cleveland	44102	31,962	27.1%	14.4%	22.3%	22.7%	8.6%	3.2%	37.3%	27.6%	36.9%	6.3%	34.2%
Cuyahoga	North Olmsted	44070	25,696	22.3%	10.3%	16.7%	15.3%	11.5%	3.7%	32.3%	22.9%	23.3%	4.8%	27.6%
Cuyahoga	Rocky River	44116	16,136	20.9%	10.4%	17.9%	18.7%	12.2%	4.8%	31.6%	27.3%	20.9%	4.3%	26.0%
Cuyahoga	Cleveland	44126	12,877	24.5%	11.6%	18.8%	15.8%	9.4%	4.9%	32.4%	23.7%	24.3%	4.7%	28.4%
Cuyahoga	Westlake	44145	26,850	22.2%	10.3%	15.9%	14.2%	9.5%	3.2%	32.5%	24.6%	19.2%	4.9%	25.9%
Cuyahoga	Cleveland	44109	28,800	27.4%	14.2%	23.5%	21.8%	9.8%	3.7%	36.7%	28.2%	33.7%	7.1%	33.8%
Lorain	North Ridgeville	44039	25,233	21.4%	10.4%	15.3%	14.3%	9.7%	3.8%	30.0%	24.9%	22.7%	5.4%	26.4%
Cuyahoga	Olmsted Falls	44138	18,354	21.1%	12.0%	18.0%	18.9%	11.6%	4.3%	33.2%	28.4%	24.4%	4.5%	25.3%
Lorain	Elyria	44035	48,827	26.4%	12.7%	20.4%	16.1%	11.4%	5.3%	32.4%	25.4%	29.3%	6.6%	33.4%
Medina	Brunswick	44212	34,993	20.5%	10.7%	16.6%	14.7%	10.3%	3.5%	30.0%	24.3%	23.6%	4.6%	24.7%
Cuyahoga	Cleveland	44130	41,083	24.8%	11.6%	18.4%	19.0%	10.6%	4.7%	34.1%	26.2%	25.9%	6.3%	29.1%
Cuyahoga	Brook Park	44142	14,996	26.8%	11.2%	18.6%	16.5%	11.7%	5.2%	34.3%	27.5%	27.3%	6.6%	31.1%
Cuyahoga	Cleveland	44144	16,608	28.2%	12.5%	21.4%	20.4%	12.8%	4.0%	34.7%	30.6%	29.8%	7.3%	32.6%
Cuyahoga	Bay Village	44140	11,585	21.8%	10.4%	15.3%	11.3%	7.6%	2.8%	33.0%	23.8%	17.9%	4.7%	24.0%
Lorain	Avon Lake	44012	18,385	20.9%	11.3%	17.2%	14.7%	10.1%	3.1%	33.4%	22.7%	20.9%	4.1%	27.2%
Lorain	Avon	44011	17,003	22.8%	9.2%	16.6%	11.2%	10.5%	2.5%	29.3%	23.6%	21.2%	4.4%	25.2%
Cuyahoga	Strongsville	44136	19,866	17.5%	12.1%	17.2%	14.8%	12.8%	3.1%	31.5%	23.4%	19.0%	4.0%	26.6%
Medina	Medina	44256	49,001	21.7%	10.9%	16.3%	13.9%	9.5%	3.7%	29.4%	24.4%	23.2%	4.5%	27.6%
Cuyahoga	Strongsville	44149	16,061	19.7%	10.3%	17.2%	13.9%	9.3%	3.2%	32.0%	22.7%	18.6%	4.2%	26.6%
Cuyahoga	Berea	44017	15,486	22.6%	10.8%	17.3%	13.3%	9.8%	3.6%	28.8%	22.9%	28.4%	5.2%	30.3%
ŀ	Hospital Community		581,154	23.3%	11.7%	18.5%	16.5%	10.3%	3.8%	32.6%	25.4%	26.1%	5.5%	29.3%
	Ohio Average		9,044,061	24.2%	11.9%	19.2%	15.7%	10.7%	4.5%	31.8%	25.0%	27.5%	6.0%	31.1%

Source: Truven Market Expert/Behavioral Risk Factor Surveillance System, 2018.

Description

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.

Exhibit 34 depicts BRFSS data for each ZIP code in the Fairview community and compared to the averages for Ohio.

- Fairview community averages for the prevalence of diabetes, high blood pressure, and high cholesterol were worse than the Ohio averages.
- Cuyahoga County ZIP codes 44135 and 44144 compared unfavorably to Ohio averages for all conditions except heart failure.

Ambulatory Care Sensitive Conditions

Exhibit 35: PQI (ACSC) Rates per 100,000, 2017 (Light Grey Shading Denotes Indicators Worse than Ohio Average; Dark Grey Denotes Any Indicators More than 50 Percent Worse than Ohio Average)

County	City/Town	ZIP Code	Diabetes Short-Term Complications	Perforated Appendix	Diabetes Long- Term Complications	Chronic Obstructive Pulmonary Disease	Hypertension	Congestive Heart Failure
Cuyahoga	Lakewood	44107	62	417	115	912	48	497
Cuyahoga	Cleveland	44111	102	467	167	1,485	109	775
Cuyahoga	Cleveland	44135	297	571	243	1,770	109	961
Cuyahoga	Cleveland	44102	112	435	260	1,741	96	860
Cuyahoga	North Olmsted	44070	35	500	85	754	97	579
Cuyahoga	Rocky River	44116	37	750	86	731	62	635
Cuyahoga	Cleveland	44126	87	429	119	831	79	427
Cuyahoga	Westlake	44145	33	615	115	618	67	588
Cuyahoga	Cleveland	44109	132	600	406	1,350	97	750
Lorain	North Ridgeville	44039	27	667	156	681	74	454
Cuyahoga	Olmsted Falls	44138	16	625	99	848	77	493
Lorain	Elyria	44035	118	481	134	1,516	73	779
Medina	Brunswick	44212	50	625	108	598	55	563
Cuyahoga	Cleveland	44130	52	688	171	688	74	588
Cuyahoga	Brook Park	44142	114	500	147	1,234	33	895
Cuyahoga	Cleveland	44144	101	750	137	625	53	712
Cuyahoga	Bay Village	44140	26	400	52	453	35	518
Lorain	Avon Lake	44012	44	800	120	512	33	511
Lorain	Avon	44011	53	714	88	487	47	553
Cuyahoga	Strongsville	44136	44	625	74	526	39	541
Medina	Medina	44256	39	556	71	502	41	461
Cuyahoga	Strongsville	44149	32	857	70	269	58	352
Cuyahoga	Berea	44017	51	714	90	753	64	411
C	Community Average	es	73	571	141	892	68	613
	Ohio Averages		70	595	120	696	72	584
U	nited States Averag	es	69	351	102	481	49	322

Source: Cleveland Clinic, 2018.

Note: Rates are not age-sex adjusted. Perforated appendix rate calculated per 1,000; low birth weight calculated per 1,000 births.

Exhibit 35: PQI (ACSC) Rates per 100,000, 2017 (*continued*) (Light Grey Shading Denotes Indicators Worse than Ohio Average; Dark Grey Denotes Any Indicators More than 50 Percent Worse than Ohio Average)

County	City/Town	ZIP Code	Low Birth Weight	Dehydration	Bacterial Pneumonia	Urinary Tract Infection	Uncontrolled Diabetes	Young Adult Asthma	Lower- Extremity Amputation Among Patients with Diabetes
Cuyahoga	Lakewood	44107	6	219	161	180	62	6	36
Cuyahoga	Cleveland	44111	8	337	255	197	88	72	41
Cuyahoga	Cleveland	44135	3	327	297	282	99	-	50
Cuyahoga	Cleveland	44102	5	257	340	283	67	95	64
Cuyahoga	North Olmsted	44070	6	239	270	297	42	35	15
Cuyahoga	Rocky River	44116	5	308	327	222	25	22	6
Cuyahoga	Cleveland	44126	5	222	150	261	55	98	32
Cuyahoga	Westlake	44145	4	309	357	342	63	38	56
Cuyahoga	Cleveland	44109	10	233	278	219	104	114	83
Lorain	North Ridgeville	44039	14	176	270	199	23	13	55
Cuyahoga	Olmsted Falls	44138	13	241	252	175	27	-	49
Lorain	Elyria	44035	14	258	399	258	61	35	20
Medina	Brunswick	44212	2	230	210	163	53	9	26
Cuyahoga	Cleveland	44130	10	265	280	275	55	31	40
Cuyahoga	Brook Park	44142	5	334	421	234	87	63	53
Cuyahoga	Cleveland	44144	5	226	255	202	18	17	47
Cuyahoga	Bay Village	44140	6	181	173	147	43	-	17
Lorain	Avon Lake	44012	-	299	185	250	38	38	49
Lorain	Avon	44011	-	159	206	170	35	39	35
Cuyahoga	Strongsville	44136	8	207	276	217	34	16	25
Medina	Medina	44256	19	194	177	222	22	19	33
Cuyahoga	Strongsville	44149	11	179	185	154	32	-	32
Cuyahoga	Berea	44017	27	289	167	193	51	15	19
(Community Average	es	8	246	261	228	53	36	39
	Ohio Averages		18	218	238	198	50	36	36
U	nited States Averag	es	-	130	250	156	13	41	17

Source: Cleveland Clinic, 2018.

Note: Rates are not age-sex adjusted. Perforated appendix rate calculated per 1,000; low birth weight calculated per 1,000 births.

Description

Exhibit 35 provides 2017 PQI rates (per 100,000 persons) for ZIP codes in the Fairview community – with comparisons to Ohio averages.

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."¹⁷ 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.

- The rates of admissions for ACSC in the Fairview community exceeded Ohio averages for the following conditions: diabetes short-term complications, diabetes long-term complications, COPD, congestive heart failure, dehydration, bacterial pneumonia, urinary tract infections, uncontrolled diabetes, young adult asthma, and lower-extremity amputation among patients with diabetes.
- Cuyahoga County ZIP code 44109 had comparatively high PQI rates for nearly every condition. This ZIP code also has an above average poverty rate.

¹⁷Agency for Healthcare Research and Quality (AHRQ) Prevention Quality Indicators.

Indicator	Community Averages	Ohio Averages	Ratio: Fairview / Ohio
Chronic Obstructive Pulmonary Disease	891.9	695.6	1.28
Diabetes Long-Term Complications	141.2	120.2	1.18
Urinary Tract Infection	228.3	197.5	1.16
Dehydration	246.4	218.3	1.13
Bacterial Pneumonia	261.4	238.4	1.10
Lower-Extremity Amputation Among Patients with Diabetes	38.8	36.3	1.07
Uncontrolled Diabetes	53.1	50.2	1.06
Congestive Heart Failure	613.0	584.2	1.05
Diabetes Short-Term Complications	73.3	70.1	1.05
Young Adult Asthma	35.9	35.7	1.00
Perforated Appendix	570.9	594.7	0.96
Hypertension	67.6	71.6	0.94
Low Birth Weight	8.3	18.1	0.46

Exhibit 36: Ratio of PQI Rates for Fairview Community and Ohio, 2017

Source: Cleveland Clinic, 2018.

Note: Rates are not age-sex adjusted. Perforated appendix rate calculated per 1,000; low birth weight calculated per 1,000 births.

Description

Exhibit 36 provides the ratio of PQI rates in the Fairview community to rates for Ohio as a whole. Conditions where the ratios are highest (meaning that the PQI rates in the community are the most above average) are presented first.

Observations

• The community ACSC rate for COPD was above the Ohio average by 28 percent. Rates for diabetes long-term complications, urinary tract infection, dehydration, and bacterial pneumonia exceeded Ohio averages by at least 10 percent.

Food Deserts

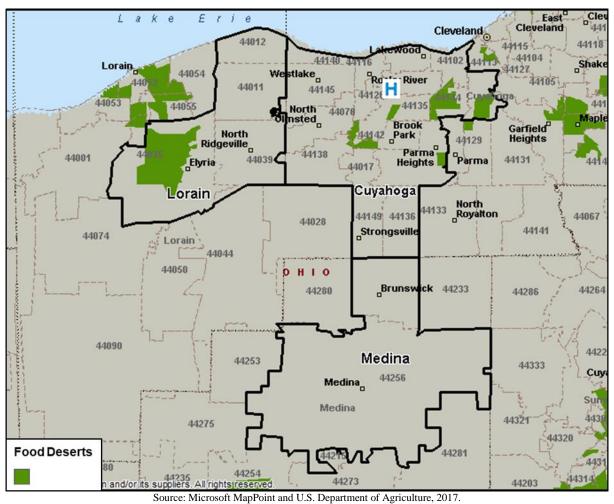


Exhibit 37: Food Deserts, 2017

Description

Exhibit 37 shows the location of "food deserts" in the community.

The U.S. Department of Agriculture's Economic Research Service defines urban food deserts as low-income areas more than one mile from a supermarket or large grocery store and rural food deserts as more than 10 miles from a supermarket or large grocery store. Many government-led initiatives aim to increase the availability of nutritious and affordable foods to people living in these areas.

Observations

• Several census tracts in Lorain and Cuyahoga counties have been designated as food deserts.

Medically Underserved Areas and Populations

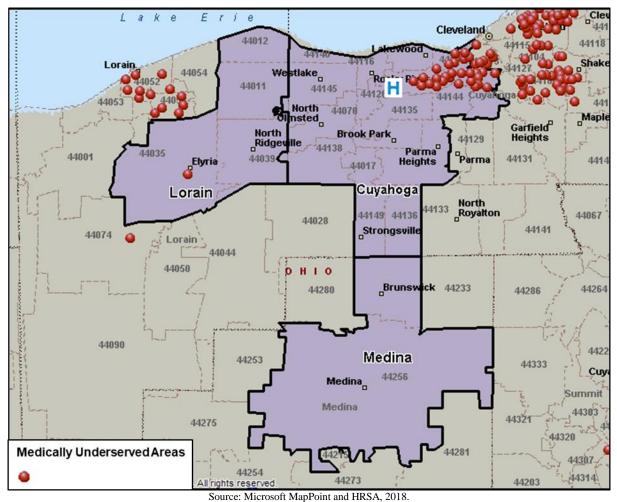


Exhibit 38: Medically Underserved Areas and Populations, 2018

Description

Exhibit 38 illustrates the location of Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs) in the community.

Medically Underserved Areas and Populations (MUA/Ps) are designated by 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.¹⁸ 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

¹⁸ Heath Resources and Services Administration. See http://www.hrsa.gov/shortage/mua/index.html

APPENDIX B – SECONDARY DATA ASSESSMENT

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."¹⁹

Observations

• Several census tracts have been designated as areas where Medically Underserved Areas are present, particularly east of the hospital.

Health Professional Shortage Areas

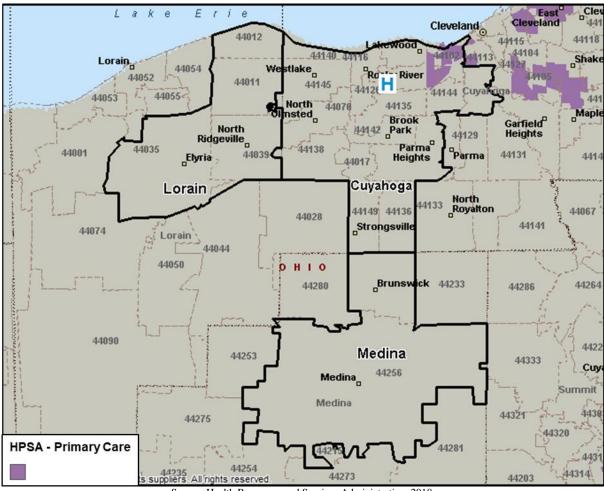


Exhibit 39: Primary Care Health Professional Shortage Areas, 2018

Source: Health Resources and Services Administration, 2018.

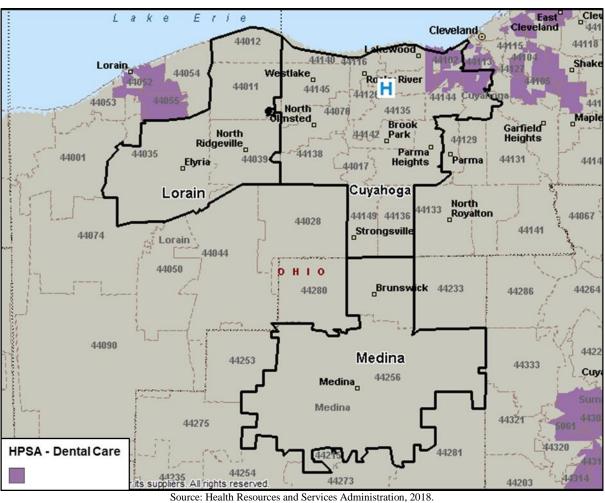


Exhibit 40: Dental Care Health Professional Shortage Areas, 2018

Description

Exhibits 39 and 40 show the locations of federally-designated primary care and dental care HPSA Census Tracts.

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.

APPENDIX B - SECONDARY DATA ASSESSMENT

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."²⁰

Observations

• Several census tracts in Cuyahoga County have been designated as primary care and dental care HPSAs, particularly east of the hospital.

²⁰ U.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

APPENDIX B - SECONDARY DATA ASSESSMENT

Findings of Other Assessments

In recent years, the Ohio Department of Health and local health departments in Cuyahoga, Lorain, and Medina counties conducted Community Health Assessments and developed Health Improvement Plans. This section identifies community health priorities found in that work. This CHNA report considers those findings when *significant* community health needs are specified.

State Health Improvement Plan, 2017-2019

The Ohio Department of Health prepared a 2017-2019 State Health Improvement Plan (SHIP), informed by its State Health Assessment. The SHIP established two overall health outcomes (improving health status and reducing premature death) and ten priority outcomes organized into three "topics," as follows:

- 1. Mental Health and Addiction
 - Depression
 - o Suicide
 - Drug dependency/abuse
 - Drug overdose deaths
- 2. Chronic Disease
 - o Heart disease
 - o Diabetes
 - Child asthma
- 3. Maternal and infant health
 - Preterm births
 - Low birth weight
 - Infant mortality

For each outcome, the plan calls for achieving equity for "priority populations" specified throughout the report, including low-income adults, Black (non-Hispanic males), and other specific groups.

The plan also addresses the outcomes through strategies focused on "cross-cutting factors," namely:

- 1. Social Determinants of Health, e.g.,
 - Increase third grade reading proficiency,
 - Reduce school absenteeism,
 - Address high housing cost burden, and
 - Reduce secondhand smoke exposure for children.
- 2. Public Health System, prevention and health behaviors, e.g.,
 - Consume healthy food,
 - Reduce physical inactivity,
 - Reduce adult smoking, and

- Reduce youth all-tobacco use.
- 3. Healthcare system and access, e.g.,
 - Reduce percent of adults who are uninsured,
 - Reduce percent of adults unable to see a doctor due to cost, and
 - Reduce primary care health professional shortage areas.
- 4. Equity strategies likely to decrease disparities for priority populations.

Cuyahoga County Community Health Assessment 2018

A Community Health Assessment ("CHA") for Cuyahoga County was developed through a collaboration between Case Western Reserve University School of Medicine, the Cleveland Department of Public Health, the Cuyahoga County Board of Health, the Health Improvement Partnership- Cuyahoga, The Center for Health Affairs, and University Hospitals. Data sources that informed the 2018 Cuyahoga County CHA include interviews from community stakeholders, existing community perceptions gathered by other organizations, and secondary data from national, state and local sources.

Thirteen "Top Health Needs" were identified in the Cuyahoga County CHA, as follows:

Quality of Life

- 1. Poverty
- 2. Food insecurity

Chronic Disease

- 3. Lead poisoning
- 4. Cardiovascular disease
- 5. Childhood asthma
- 6. Diabetes

Health Behaviors

- 7. Flu vaccination rates
- 8. Tobacco use/COPD
- 9. Lack of physical activity

Mental Health and Addiction

- 10. Suicide/mental health
- 11. Homicide/violence/safety
- 12. Opioids/substance use disorders

Maternal/Child Health 13. Infant mortality

APPENDIX B – SECONDARY DATA ASSESSMENT

Lorain County Community Health Improvement Plan, 2014-2019

A Community Health Improvement Plan ("CHIP") was commissioned by Lorain County Public Health (LCPH), formerly the Lorain County General Health District. The CHIP process included community engagement session with stakeholders and community members. The CHIP identified five target areas, as follows:

- 1. Improve access to care;
- 2. Expand coordinated education and prevention services;
- 3. Improve weight issues and obesity among adults and children;
- 4. Reduce alcohol, tobacco, and drug abuse among adults and children; and
- 5. Improve mental health of seniors, adults, and children/

Medina County Community Health Improvement Plan, 2018-2020

A Community Health Improvement Plan ("CHIP") for Medina County was developed by Living Well Medina County, a collaboration of healthcare, government, education, business, nonprofit, and faith communities in Medina County, including the Medina County Health Department. Priority areas identified in the CHIP are as follows:

- 1. Mental health and addiction (including tobacco use); and
- 2. Chronic Disease (adult heart disease, adult diabetes, and obesity

APPENDIX C – COMMUNITY INPUT PARTICIPANTS

APPENDIX C – COMMUNITY INPUT PARTICIPANTS

Individuals from a wide variety of organizations and communities participated in the interview process (**Exhibit 41**).

Organization						
Alcohol and Drug Addiction Services Board of Lorain County	Kent State School of Public Health					
American Heart Association	Lorain County Board of Mental Health					
Benjamin Rose Institute on Aging	Lorain County Department of Health					
Boys & Girls Clubs of Cleveland	Lorain County Free Clinic					
Carmella Rose Health Foundation	Medina County ADAMH					
Center for Community Solutions	Medina County Department of Health					
Center for Health Affairs	NAMI					
City of Cleveland	Ohio Department of Health					
City of Cleveland - Department of Public Health	The Catholic Health Association					
Cleveland Foundation	The Centers (for families and children)					
Cuyahoga County Board of Health	The Gathering Place					
Cuyahoga Metropolitan Housing Authority	The LCADA Way					
El Centro	United Cerebral Palsy					
Esperanza	United Way of Greater Cleveland					
Fairhill Partners	United Way of Greater Lorain County					
Greater Cleveland Food Bank	Western Reserve Area Agency on Aging					
Health Policy Institute of Ohio						

Exhibit 41: Interviewee Organizational Affiliations

APPENDIX D – IMPACT EVALUATION

APPENDIX D – IMPACT EVALUATION

Impact of Actions Taken Since the Last CHNA – Fairview Hospital

Cleveland Clinic Fairview 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 2016 CHNA Implementation Strategy are described below with representative impacts.

1. Identified Need: Access to Affordable Care

Actions:

Fairview Hospital continues to provide medically necessary services to all patients regardless of race, color, creed, gender, country of national origin or ability to pay. Fairview 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 the Cleveland Clinic.

Cleveland Clinic provides telephone and internet access to patients seeking to make appointments for primary, specialty and diagnostic services. Representatives are available 24/7 and can assist patients in identifying the next available or closest location for an appointment at all facilities within the Cleveland Clinic health system.

Highlighted Impacts:

In 2016 – 2018, Cleveland Clinic health system provided over \$286 million in financial assistance to its communities in Ohio, Florida, and Nevada.

Fairview 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.

In 2018, Cleveland Clinic health system provided 43,125 virtual visits to patients seeking care, a 75% increase from 2017.

APPENDIX D – IMPACT EVALUATION

2. Identified Need: Chronic Disease and Health Conditions

a. Cancer

Action:

The Moll Cancer Center at Fairview Hospital continues to emphasize prevention, early detection, personalized aggressive treatment and customized cancer support. The Breast Health Center, part of the Cancer Center at Fairview Hospital, is accredited by the National Accreditation Programs for Breast Centers (NAPBC), a program administered by the American College of Surgeons. Preventive and educational services, as well as screening programs, continue to be provided to the community throughout the year, including on colon cancer, lung cancer and breast cancer.

Highlighted Impact:

Fairview Hospital provided breast health care and mammography to insured, uninsured, and underinsured women with the support of grants with National Breast Cancer Foundation, and partnerships with Breast and Cervical Cancer Project of Cuyahoga County.

Fairview Hospital provided over 29,000 mammogram screenings 2016 - 2018.

Fairview Hospital provided health fair cancer screenings and community education classes for over 2,000 community residents from 2016 - 2018.

b. Chemical Dependency

Action:

Cleveland Clinic hospitals continue to address community needs in the heroin and opioid epidemic by developing internal programs, educational modules, and treatment plans. We also continue to collaborate with external partners on strategies and policies that will positively impact this drug epidemic.

Highlighted Impacts:

In 2018, Cleveland Clinic hosted an Opioid Summit, titled "Opioids: A Crisis Still Facing Our Community," for 300 community leaders, with the U.S. Attorney's Office.

An 8 week Integrative Recovery Shared Medical Appointment program was developed jointly by the Cleveland Clinic Wellness Institute and the Alcohol and Drug Recovery Center in 2018. The new program is open to adults with 3 months to 4 years of sobriety and active within a 12-step recovery program.

In May 2017, Cleveland Clinic announced Naloxone would be available without a prescription at all Cleveland Clinic pharmacies in NE Ohio.

Community town halls with local health districts, police departments, and fire departments discussed the "triple threat," of the epidemic: opiates, heroin, and fentanyl in Cleveland Clinic communities particularly hard-hit by the opiate

APPENDIX D – IMPACT EVALUATION

epidemic. There were a total of 13 programs in 2017 and 2018, reaching over 865 attendees.

c. Diabetes

Action:

Fairview Hospital continues to provide inpatient care including clinical nutrition services to those with acute diabetic conditions. Fairview Hospital continues to work closely with Lakewood Family Health Center to provide early diagnostic and outreach activities through Lakewood's diabetic education program, staffed by certified diabetic educators. In addition, diabetes education programs are provided to children in local schools.

Highlighted Impact:

Fairview Hospital community outreach nurses provided diabetic screenings to over 500 people in 2016-2018.

Diabetes education programs were provided at various community locations and local schools reaching over 70 community members from 2016 - 2018.

d. Heart Disease

Action:

Fairview Hospital's Heart Center, renowned in cardiac medicine, continues to provide a certified Stroke Center and operates a 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, COPD, and hypertension and cardiac rehabilitation.

Highlighted Impacts:

Fairview Hospital's community outreach nurses provided over 1800 blood pressure screenings from 2016 through 2018 at various community locations.

Community educational programs on heart related topics, including Protect Your Heart: Know Your Numbers, Hypertension 101, and Stroke 101, reached over 140 community members from 2016 through 2018.

e. Obesity

Action:

Cleveland Clinic's Bariatric and Metabolic Institute continues services at Fairview Hospital with a focus on addressing obesity with treatment strategies, research, and education, including surgery or a non-surgical medical weight loss treatment plan.

Highlighted Impact:

Fairview Hospital's Healthy Community Initiatives, *Come Cook With Us* nutrition classes, and fitness challenges in the community included approximately 300 community residents from 2016 – 2018, referenced in Wellness section.

Fairview Hospital sponsors the Kamm's Corners Farmers Market and provides cooking demonstrations once a month during the summer market.

f. Poor Birth Outcomes

Action:

Cleveland Clinic hospitals continue to offer a wide range of clinical, wellness and education services relating to women's health. Cleveland Clinic's Infant Mortality Task Force continues its educational programming and work to strengthen and foster collaborative opportunities with other organizations in an effort to improve birth outcomes.

Our continued community educational efforts in schools and neighborhoods focus on addressing risk factors that would improve poor birth outcomes.

Highlighted Impacts:

In 2016 Cleveland Clinic's Infant Mortality Task Force became a founding partner of First Year Cleveland in Cuyahoga County and focused on priority areas of Racial Disparities, Prematurity and Safe Sleep.

Cleveland Clinic's Centering Pregnancy programming, group pre-natal care for women, was started in four high-risk neighborhoods in 2017 and 2018, and provides Cleveland Clinic services for NE Ohio residents. Cleveland Clinic Centering locations include: Stephanie Tubbs Jones Health Center, Lakewood Family Health Center, Columbia Medical Office, and South Pointe Hospital.

The Fairview Birthing Center and Midwifery services were expanded in 2017.

Fairview Hospital's Childbirth Education Department provided CPR, Grandparenting, Baby Basics, Childbirth Preparation and Boot Camp for New Dads classes to 5,314 participants in 2016 through 2018. Additionally, safe sleep education was provided to all mothers delivering babies at Fairview Hospital during the years 2016-2018.

Cleveland Clinic's Outreach team hosted Community Baby Showers in high need neighborhoods to introduce resources and programs available to over 2500 high-risk patients and families 2016 - 2018.

g. Poor Mental Health Status

Action:

The Fairview Center for Family Medicine continues to offer a broad spectrum of primary care -- including psychological counseling for children, families, couples and individuals.

Fairview Hospital continues to provide pediatric psychiatry services. Fairview Hospital works collaboratively with Lutheran Hospital to help adult patients with behavioral medicine.

APPENDIX D - IMPACT EVALUATION

Highlighted Impact:

Fairview Hospital's Adolescent Psychiatry team initiated the Transition Bridge Program in 2017 with community partners to support a student's transition from an inpatient mental health stay back to the school setting. This was piloted in Berea Midpark School District and has expanded to Lakewood, Bay Village, and Strongsville City Schools and continues to grow to other districts.

h. Respiratory Diseases

Action:

Fairview Hospital continues to provide acute inpatient care, outpatient care, pulmonary rehabilitation, and preventive education to patients with COPD and Adult Asthma. Community health education programs continue to be offered to the community on numerous topics for lung health and tobacco cessation.

Highlighted Impact:

Tobacco education was provided to over 1200 students on the dangers of tobacco use at Westlake High School from 2016-2018.

3. Identified Need: Health Professions Education and Medical Research

Health Professions Education

Action: Cleveland Clinic operates one of the largest graduate medical education programs in the Midwest and one of the largest programs in the country. Cleveland Clinic sponsors a wide range of high quality medical education training through its Education Institute including accredited training programs for nurses and allied health professionals. Cleveland Clinic's Education Institute oversees 202 residency and fellowship programs across the Cleveland Clinic Health System.

Fairview Hospital is a teaching hospital with an approved residency training program in Internal Medicine and an approved residency training program in Pharmacy. Fairview serves as a major teaching site for the Cleveland Clinic residency training programs in Family Medicine, General Surgery, and Obstetrics/Gynecology and provides rotation opportunities for residents in Pediatrics and Emergency Medicine many subspecialties. In addition to providing clerkship opportunities for medical students, Fairview offers allied health and administrative internships to undergraduate and graduate students from colleges throughout the state, and also serves as a training site for nursing students for several area colleges

Highlighted Impacts:

Fairview Hospital served as clinical site for allied health internships including: Anesthesiologist Assistant, Biomedical Engineering, Cardiac Ultrasound, CT/MRI, Echocardiography, EMT Paramedic, Health Information Management, Mammography Technologist, Nuclear Medicine Technologists, Occupational Therapy, Pharmacy, Phlebotomists, Physical Therapy, Physician Assistant, Radiologic Technologists, Respiratory Therapy, Social Work, Sonography, Speech-Language Pathology, Sterile Processing and Distribution, Surgical Technologists, and Vascular Sonography. Fairview Hospital Community Outreach partnered with John Marshall High School to enhance opportunities for distance learning classes and student internships.

Research

Action:

Clinical trials and other clinical research activities continue to occur throughout the Cleveland Clinic health system including at the community hospitals. For example, Fairview Hospital physicians are involved in heart anesthesia, pediatric and cancer research, and the hospital works in collaboration with the Cleveland Clinic Taussig Cancer Institute to make Fairview patients aware of appropriate clinical trials in cancer care available to them

Highlighted Impacts:

Approximately 1,500 people work in 175 laboratories in 10 departments at LRI. In addition to basic discovery and translational research, Cleveland Clinic researchers and physicians had nearly 4,000 active projects involving human participants in 2017. In Lerner Research Institute alone, commercialization efforts led to 53 invention disclosures, 20 new licenses, and 98 patents with the goal of accelerating advances in patient care.

The Cleveland Clinic Center for Populations Health Research was established in 2017 to help physicians and investigators leverage Cleveland Clinic's patient population to generate insights about why certain groups of people or communities are more or less likely to be healthy, and how this can be transformed into community interventions that improve health outcomes at the population level.

Fairview Hospital currently has 60 open clinical trials in pediatrics, heart disease, anesthesia, and cancer

4. Identified Need: Healthcare for the Elderly

Action:

Cleveland Clinic joined the Medicare Shared Savings Program in 2015 to form an Accountable Care Organization (ACO) which serves a population of Medicare fee-for-service beneficiaries in Northeast Ohio.

Cleveland Clinic's Center for Geriatric Medicine assists elderly patients and their primary care physicians in the unique medical needs of aging patients. Geriatric services are designed to help preserve independence, maintain quality of life, and coordinate care among a multidisciplinary team of doctors, nurses, therapists, technicians, social workers, and other medical professionals to improve outcomes for older patients.

Cleveland Clinic's Center for Connected Care provides clinical programs designed to help patients with their post-hospital needs, including home care, hospice, mobile

APPENDIX D - IMPACT EVALUATION

primary care physician services, home infusion pharmacy, and home respiratory therapy.

Highlighted Impacts:

Over the past three years our ACO managed 95,000 Medicare patients across Northeast Ohio and Florida.

In 2016 through 2018, Fairview Community Outreach provided nutrition, exercise, and financial planning classes to elderly residents, as described in the Wellness section, below.

5. Identified Need: Wellness

Action:

Fairview Hospital continues to offer outreach programs and community health talks focused on educating the community on healthy behavior choices, including exercise, healthcare navigation, stress management, nutrition, and tobacco cessation to promote health and wellness, increase access to healthcare resources, and reduce disease burden. Some of these programs are held in nursing homes and/or focused on seniors or geriatric care.

Highlighted Impact:

Fairview Hospital's Healthy Community Initiatives collaborated with development corporations, grocers, health resource agencies, recreation centers, financial institutions, and government offices to provide community health classes reaching approximately 300 community members

Fairview Hospital Wellness Center held regularly scheduled fitness classes, including: Jazzercise, FitPaths, Yoga, cooking classes, and Friends and Family CPR.

The Wellness Center provided fitness classes, for a nominal fee, to over 7,000 community residents per year.

This Appendix contains a review of secondary data that was conducted by the Cleveland Clinic to help identify significant community health needs for the residents of Lakewood, OH. The Appendix is organized into the following sections:

- Introduction and Methodology
- Definition of the Community Assessed
- Summary of Lakewood Health Needs (Based on Secondary Data Only)
- Summary of Lakewood Secondary Health Data
- Summary of Cuyahoga County Secondary Health Data
- Profile of Available Community Resources
- Lakewood Community Health Data Exhibits

Introduction and Methodology

This review was conducted as part of the 2019 Fairview CHNA, pursuant to the Master Agreement among the City of Lakewood, Lakewood Hospital Association, and the Cleveland Clinic dated December 21, 2015.

Consistent with the methodology for the Fairview CHNA, secondary data from multiple sources were reviewed and assessed for the Lakewood community. Some data were available at a ZIP code or census tract level of detail. Other data only were available at a county-wide level of detail. Because Lakewood represents under five percent of the total population of Cuyahoga County, caution is advised when applying county-wide findings specifically to the Lakewood community.

Definition of the Community Assessed

For purposes of this review, the Lakewood community was defined as ZIP code 44107. This ZIP code has accounted for a significant number of inpatients for Cleveland Clinic hospitals. For example:

- Ten percent (2,978) of Cleveland Clinic Fairview Hospital's total discharges in 2017 were from residents of ZIP code 44107. This represented more than any other ZIP code in the hospital's community.
- Over six percent (571) of Cleveland Clinic Lutheran Hospital's total discharges in 2017 were from ZIP code 44107. ZIP code 44107 was one of Lutheran's top three sources of inpatient discharges.
- In addition, over 500 discharges for Cleveland Clinic Main Campus (including the Cleveland Clinic Children's Hospital) originated in ZIP code 44107.

Exhibit 1 portrays the location of ZIP code 44107 within Cuyahoga County.



Exhibit 1: Location of ZIP Code 44107 (Lakewood)

Source: Microsoft MapPoint and Cleveland Clinic, 2018.

In 2017, the total population of ZIP code 44107 was approximately 52,000 persons (Exhibit 2). Cuyahoga County was comprised of 1.3 million people, and northeast Ohio (a 21-county region) of 4.4 million people.

Region	Total Population 2017
City of Lakewood (44107)	51,600
Cuyahoga County	1,255,781
Northeast Ohio	4,402,929

Exhibit 2: Community Population, 201	tion, 2017	Ρορι	mmunity	Exhibit 2:	E
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Source: Truven Market Expert, 2018.

Summary of Lakewood Health Needs (Based on Secondary Data Only)

Based on a review of secondary data only, the following appear to be the most significant community health needs in Lakewood:

Access to Affordable Health Care

Access to affordable healthcare is an issue in Lakewood and surrounding areas. The area has relatively high rates of preventable hospitalizations, and areas surrounding Lakewood have been designated by the federal government as Medically Underserved Areas and Health Professional Shortage Areas.

Addiction and Mental Health

Addiction and mental health are significant concerns. Cuyahoga County's mortality rates for drug poisoning have exceeded Ohio averages and have been more than double national averages.

Chronic Disease Prevention and Management

Several chronic conditions and unhealthy behaviors are more prevalent in Lakewood than in Ohio, including adult asthma and adult smoking. Hospital admissions for Chronic Obstructive Pulmonary Disease (COPD) and uncontrolled diabetes also are comparatively high. Cuyahoga County as a whole also compares unfavorably for many indicators, including adult obesity.

Infant Mortality

Infant mortality is a significant concern in Lakewood and throughout Cuyahoga County, particularly for Black infants.

Health Professions Education

More trained health professionals are needed locally, regionally and nationally. The Cleveland Clinic plays an important role in educating health professionals to meet current and future needs.

Socioeconomic Concerns

While Lakewood benchmarks favorably to Cuyahoga County as a whole for many socioeconomic indicators, pockets of poverty and related needs exist. Poverty has significant implications for health, including the ability for households to access health services, afford basic needs, and benefit from prevention initiatives.

Poverty rates have been comparatively high for Lakewood's Black and Hispanic (or Latino) residents. At 3.2, the Community Need Index (CNI) score for Lakewood indicates above average needs. The national median CNI is calibrated to 3.0.

Many of these Lakewood-specific needs also were found by CHNAs conducted by Cleveland Clinic Fairview Hospital, Cleveland Clinic Lutheran Hospital, and other Cleveland Clinic hospital facilities which include Lakewood within the communities they serve.

Summary of Lakewood Community Health Data

Community health data reviewed for Lakewood (ZIP code 44107 and associated census tracts) indicate the following:

- The total population in Lakewood is expected to decrease 0.5 percent from 2017 to 2022; however, the number of persons aged 65 years and older is projected to increase by 19.7 percent during this time.
- At 14.6 percent, Lakewood's poverty rate was below Cuyahoga County, Ohio, and national averages. Poverty rates in Lakewood, Cuyahoga County, and Ohio have been comparatively high for Black and Hispanic (or Latino) residents.
- A number of low-income census tracts are present in ZIP code 44107.
- In 2017, approximately 4.5 percent of Lakewood's population was uninsured. By 2022, it is projected that 3.6 percent of the population will be uninsured. This largely should occur due to continued impacts of health reform.
- Approximately 39 percent of Lakewood households paying rent have been "rent burdened" because they have devoted more than 30 percent of household income to rent. This percentage has been lower than Ohio and national averages.
- Dignity Health, a California-based hospital system, developed and has made widely available for public use a *Community Need Index*[™] (CNI) that measures factors contributing to barriers to health care access by county/city and ZIP code on a scale of 1 to 5, with 5 representing the highest need. In Lakewood, the average CNI was 3.2, a score higher than the national median of 3.0. Cuyahoga County as a whole scored 3.3. This indicates that Lakewood and Cuyahoga County have above average community health needs.
- Per-capita drug poisoning deaths in Cuyahoga County and Ohio more than doubled between 2013 and 2017. Mortality rates in Cuyahoga County and Ohio were more than double the United States rate in 2017.
- 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. The BRFSS data show that compared to Ohio averages, Lakewood has comparatively high rates of asthma, adult smoking, and back pain.
- The review included analyzing the frequency of hospital admissions for "ambulatory care sensitive conditions" (ACSCs). There are fourteen such 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."²¹ 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. Disproportionately high rates of discharges for ACSC indicate potential problems with the availability or accessibility of ambulatory care and preventive services and can suggest opportunities for improvement.

Lakewood ACSC rates have been above Ohio averages for:

- Chronic Obstructive Pulmonary Disease (COPD),
- Uncontrolled diabetes, and
- Dehydration.
- According to data available from the U.S. Department of Agriculture, no "food deserts" are present in Lakewood.
- According to data available from the federal Health Resources and Services Administration (HRSA) no census tracts in Lakewood have been designated as Medically Underserved Areas. However, a number of such areas are proximate to ZIP code 44107.
- No Health Professional Shortage Areas (HPSAs) currently are present in ZIP code 44107; however, several exist just east of Lakewood both for primary care physicians and for dentists.

Exhibits documenting the above findings are provided in the last section of this Appendix.

Summary of Cuyahoga County Community Health Data

Community health data reviewed for Cuyahoga County indicate the following. As previously mentioned, because Lakewood represents under five percent of the total population of Cuyahoga County, caution is advised when applying county-wide findings specifically to the Lakewood community. Exhibits and additional detail regarding these data are available in the CHNA report for Cleveland Clinic Fairview Hospital.

- After several years of improvement, between 2015 and 2017, unemployment rates in Cuyahoga County increased. In 2017, the Cuyahoga County rate was above Ohio and national averages.
- According to the FBI, 2016 crime rates in Cuyahoga County were well above the Ohio averages for nearly all crime types. Violent crime was particularly problematic.
- According to County Health Rankings for 2018, Cuyahoga County ranked in the bottom 50th percentile among Ohio counties for 28 of the 42 indicators assessed. Of those, 15

²¹Agency for Healthcare Research and Quality (AHRQ) Prevention Quality Indicators.

were in the bottom quartile, including quality of life, violent crime and other social and economic factors, physical environment, and various socioeconomic indicators.

• *Community Health Status Indicators* ("CHSI") compares indicators for each county with those for peer counties across the United States. Each county is compared to 30 to 35 of its peers. Peers are selected based on a number of socioeconomic characteristics, such as population size, population density, percent elderly, and poverty rates.

The CHSI data indicate Cuyahoga County benchmarks most poorly for low birth weight births, adult smoking, driving deaths with alcohol involvement, air pollution (average daily PM2.5), and adults who drive alone to work.

- The Ohio Department of Health publishes a variety of county-level health indicators, along with comparisons to state-wide averages. According to these data:
 - In Cuyahoga County, age-adjusted mortality rates for organic dementia, accidental poisoning by and exposure to drugs and other substances, diabetes, atherosclerotic cardiovascular disease, and others were all higher than the Ohio averages.
 - The age-adjusted stomach, cervical, and thyroid cancer mortality rates in Cuyahoga County were significantly higher than the Ohio averages, and the overall cancer mortality rate was higher than the state average.
 - The overall cancer incidence rate in Cuyahoga County was higher than the Ohio average, and incidence rates were also higher in Cuyahoga County for a variety of indicators, including prostate, breast, colon and rectum, and uterus cancers.
 - Cuyahoga County has had comparatively high incidence rates of communicable diseases, including HIV, gonorrhea, chlamydia, syphilis, and tuberculosis.
 - A number of maternal and child health indicators have been unfavorable for Cuyahoga County, including: infant mortality rates, low birth weights, and preterm births. Infant mortality rates were particularly problematic for Black residents.

Profile of Available Community Resources

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

Hospitals

There are five hospitals most proximate to Lakewood, including two operated by Cleveland Clinic Health System.

ZIP Code	County	City/Town	Hospital Name	Address
44111	Cuyahoga	Cleveland	Fairview Hospital	18101 Lorain Avenue
44113	Cuyahoga	Cleveland	Lutheran Hospital	1730 West 25th Street
44109	Cuyahoga	Cleveland	MetroHealth System	2500 Metrohealth Drive
44130	Cuyahoga	Cleveland	Southwest General Health Center	18697 Bagley Road
44145	Cuyahoga	Westlake	St John Medical Center	29000 Center Ridge Road

Exhibit 3: Hospitals Proximate to ZIP Code 44107

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. While there currently are no FQHC sites operating in Lakewood, there are eight FQHC sites nearby.

Exhibit 4: FQHCs Proximate to ZIP Code 44107

County	ZIP Code	Site Name	City	Address
Cuyahoga	44102	Detroit Shoreway Community Health Center	Cleveland	6412 Franklin Blvd
Cuyahoga	44102	Neighborhood Family Practice Administrative Annex	Cleveland	3600 Ridge Rd
Cuyahoga	44113	Neighborhood Family Practice Administrative Office	Cleveland	4115 Bridge Ave
Cuyahoga	44102	Neighborhood Family Practice Mobile Van 1	Cleveland	3569 Ridge Rd
Cuyahoga	44102	Ridge Community Health Center	Cleveland	3569 Ridge Rd
Cuyahoga	44113	Riverview Towers Clinic	Cleveland	1795 W 25th St
Cuyahoga	44113	Tremont Community Health Center	Cleveland	2358 Professor Ave
Cuyahoga	44111	W. 117 Community Health Center	Cleveland	11709 Lorain Ave

Other Community Resources

A wide range of agencies, coalitions, and organizations that provide health and social services is available in the region served by Lakewood. 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: <u>http://www.211oh.org/</u>.

Lakewood Community Health Data Exhibits

This section provides a number of tables and maps that include community health data for Lakewood, including certain benchmark data for Cuyahoga County, Northeast Ohio, and the state.

Significant Community Health Indicators

Exhibit 5 presents community health indicators found to be most significant based on the secondary data review. An indicator is considered *significant* if was found to vary materially from a benchmark statistic (e.g., an average value for the State of Ohio or for the United States). For example, 44 percent of Cuyahoga County's driving deaths have involved alcohol; the average for a series of peer counties was 27 percent. The last column of the **Exhibit 3** identifies where more information regarding the data sources can be found. For Cuyahoga County exhibits, please see Appendix B in the Cleveland Clinic Fairview report.

The benchmarks include Ohio averages, national averages, and averages for "peer counties" from across the United States. In the *Community Health Status Indicators* analysis, Cuyahoga County's peers were selected because they are similar in terms of population density, household incomes, and related characteristics. Benchmarks were selected based on judgements regarding how best to assess each data source.

		Value				
Indicator	Indicator Area		Value	Area	Exhibit	
65+ Population change, 2017-2022	Lakewood (44107)	19.7%	-0.5%	Total Community Population	7	
Poverty rate, Black, 2012-2016	Lakewood (44107)	23.6%	12.9%	Lakewood, White	10	
Poverty rate, Hispanic, 2012-2016	Lakewood (44107)	32.0%	12.9%	Lakewood, White	10	
Unemployment rate	Cuyahoga County	5.9%	4.4%	United States	Арр. В	
Percent uninsured	Lakewood (44107)	4.5%	3.9%	Northeast Ohio	12	
Violent Crimes per 100,000	Cuyahoga County	695	306	Ohio	Арр. В	
Community Need Index score	Lakewood (44107)	3.2	2.9	Ohio	14	
Drug poisoning mortality rate per 100,000	Cuyahoga County	48.4	21.6	United States	15	
Asthma incidence	Lakewood (44107)	12.1%	11.9%	Ohio	16	
Smoking incidence	Lakewood (44107)	28.9%	27.5%	Ohio	16	
Percent of adults obese	Cuyahoga County	29.9%	28.0%	United States	Арр. В	
Percent driving deaths w/alcohol involvement	Cuyahoga County	44.4%	26.6%	Peer Counties	Арр. В	
Cancer incidence rate per 100,000	Cuyahoga County	483	462	Ohio	Арр. В	
PQI: COPD per 100,000	Lakewood (44107)	912	696	Ohio	18	
PQI: Uncontrolled diabetes per 100,000	Lakewood (44107)	63	50	Ohio	18	
Percent live births with low birthweight	Cuyahoga County	10.6%	8.0%	United States	Арр. В	
Infant mortality rate	Cuyahoga County	9.3	7.4	Ohio	Арр. В	
Infant mortality rate, Black	Cuyahoga County	16.3	5.2	Cuyahoga County, White	Арр. В	
Chlamydia rate per 100,000	Cuyahoga County	720	479	United States	Арр. В	
HIV rate per 100,000	Cuyahoga County	373	200	Ohio	Арр. В	
Average Daily PM 2.5 (Particulate Matter, a measure of air pollution)	Cuyahoga County	12.9	8.7	United States	Арр. В	

Exhibit 5: Significant Indicators

Source: Verité Analysis.

Demographics

Population characteristics and changes directly influence community health needs. The total population in Lakewood is expected to decrease 0.5 percent from 2017 to 2022 (**Exhibit 6**).

Exhibit 6:	Percent	Change in	Community	Population	by Regi	on, 2017-2022
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Region	Estimated Population 2017	Projected Population 2022	Percent Change 2017 - 2022
Lakewood (44107)	51,600	51,348	-0.5%
Cuyahoga County	1,255,781	1,245,537	-0.8%
Northeast Ohio	4,402,929	4,396,331	-0.1%

Source: Truven Market Expert, 2018.

In percentage terms, the projected population decline for Lakewood is less than Cuyahoga County, but more than Northeast Ohio.

Exhibit 7 shows Lakewood's population for certain age and sex cohorts in 2017, with projections to 2022.

Age/Sex Cohort	Lakewood Estimated Population 2017	Lakewood Projected Population 2022	Lakewood Percent Change 2017 - 2022	Cuyahoga County Percent Change 2017 - 2022	Northeast Ohio Percent Change 2017 - 2022
0 - 17	9,983	9,911	-0.7%	-3.2%	-4.0%
Female 18 - 34	6,619	5,497	-17.0%	-5.1%	-0.1%
Male 18 - 34	6,580	5,482	-16.7%	-2.5%	1.8%
35 - 64	21,463	22,133	3.1%	-3.7%	-4.5%
65+	6,955	8,325	19.7%	12.3%	12.7%
Community Total	51,600	51,348	-0.5%	-0.8%	-0.1%

Fyhihit 7.	Percent Chang	e in Ponula	tion by Age/S	Sex Cohort, 2017-2022
EAMDIU /.	I tittin Chang	se m i opula	uon by Age/c	CX COHOIL, 2017-2022

Source: Truven Market Expert, 2018.

In Lakewood, the number of persons aged 65 years and older is projected to increase by 19.7 percent between 2017 and 2022. The 65 years of age and older age cohort also is expected to grow across Cuyahoga County and Northeast Ohio. 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.

Exhibit 8 illustrates the racial composition of Lakewood, Cuyahoga County, and Northeast Ohio.

Region	Total Population 2017	% White	% Black	% Asian	% Hispanic (or Latino)	% All Others
Lakewood (44107)	51,600	82.1%	7.6%	2.3%	5.2%	2.8%
Cuyahoga County	1,255,781	59.4%	29.4%	3.1%	5.8%	2.3%
Northeast Ohio	4,402,929	78.2%	13.6%	1.8%	4.1%	2.3%

Exhibit 8: Percent of Population, by Race/Ethnicity, 2017

Source: Truven Market Expert, 2018.

Compared to Cuyahoga County and Northeast Ohio, Lakewood has had a lower proportion of Black residents. Lakewood also has had a lower proportion of Hispanic (or Latino) residents compared to Cuyahoga County.

People in Poverty

Many health needs have been associated with poverty. According to the U.S. Census, in 2016 approximately 15.4 percent of people in Ohio were living in poverty. At 14.6 percent, Lakewood's poverty rate was below the Cuyahoga County and Ohio rates in 2016 (**Exhibit 9**).

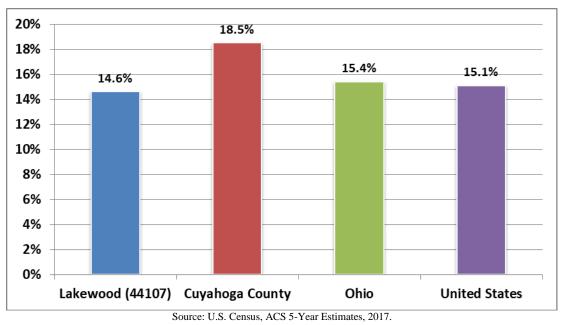


Exhibit 9: Percent of People in Poverty, 2012-2016

Considerable variation in poverty rates has been present across racial and ethnic categories, in Lakewood, Cuyahoga County, and Ohio (**Exhibit 10**).

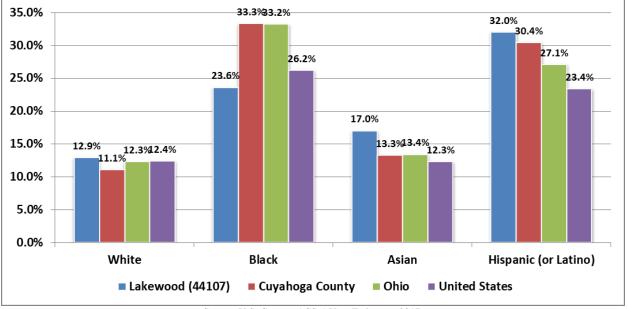


Exhibit 10: Poverty Rates by Race and Ethnicity, 2012-2016

Source: U.S. Census, ACS 5-Year Estimates, 2017.

Poverty rates in Lakewood, Cuyahoga County, and Ohio have been comparatively high for Black and Hispanic (or Latino) residents. The poverty rate for White, Asian, and Hispanic (or Latino) residents of Lakewood has exceeded Cuyahoga County, Ohio, and national rates.

Exhibit 11 portrays (in green shading) the locations of low income census tracts in and proximate to Lakewood. 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.





Source: US Department of Agriculture Economic Research Service, ESRI, 2017.

A number of low-income census tracts have been present in ZIP code 44107.

Insurance Status

Exhibit 12 presents the estimated percent of population in Lakewood, Cuyahoga County, and Ohio who lack health insurance (uninsured).

Region	Total Population 2017	Percent Uninsured 2017	Total Population 2022	Percent Uninsured 2022
Lakewood (44107)	51,600	4.5%	51,348	3.6%
Cuyahoga County	1,255,781	4.6%	1,245,537	3.9%
Northeast Ohio	4,402,929	3.9%	4,396,331	3.3%

Exhibit 12.	Percent of the Population	n without Health Insurance, 20)17-2022
EAHIDIU 12.	I ercent of the ropulation	i without ileann insulance, 20	11-2022

Source: Truven Market Expert, 2015.

In 2017, approximately 4.5 percent of Lakewood's population were uninsured (the "uninsurance rate"). By 2022, it is projected that 3.6 percent percent of the population will be uninsured. This largely should occur due to continued impacts of health reform and favorable economic trends.

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. Across the United States, uninsurance rates have fallen most in states that decided to expand Medicaid.²²

Housing Affordability

The U.S. Department of Housing and Urban Development ("HUD") has defined households that are "rent burdened" as those spending more than 30 percent of income on housing.²³ As stated by the Federal Reserve, "households that have little income left after paying rent may not be able to afford other necessities, such as food, clothes, health care, and transportation."²⁴

On that basis and based on data from the U.S. Census, Exhibit 13 portrays the percentage of rented households in each ZIP code that have been rent burdened.

Area	Occupied Units Paying Rent	Households Paying >30%	Rent Burden > 30% of Income
Lakewood (44107)	12,923	4,957	38.4%
Ohio	1,453,379	678,101	46.7%
United States	39,799,272	20,138,321	50.6%

Exhibit 13: Percent of Rented Households Rent Burdened, 2013-2017

Source: U.S. Census, ACS 5-Year Estimates, 2018.

In 2017, approximately 38 percent of households in Lakewood were rent burdened, a level below Ohio and national averages.

²² See: http://hrms.urban.org/briefs/Increase-in-Medicaid-under-the-ACA-reduces-uninsurance.html

²³ <u>https://www.federalreserve.gov/econres/notes/feds-notes/assessing-the-severity-of-rent-burden-on-low-income-families-20171222.htm</u>

²⁴ Ibid.

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*TM 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; 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 14 presents the *Community Need Index*TM (CNI) score of each ZIP code in the Lakewood community.

Exhibit 14: Community Need IndexTM Score by ZIP Code, 2018

CNI Score		
3.2		
3.3		
2.9		
2.9		

Source: Dignity Health, 2015.

In Lakewood, the average CNI was 3.2, indicating that it was a "medium need" area. Cuyahoga County as a whole also is considered "medium need" based on its average CNI.

Drug Poisoning Mortality

Exhibit 15 portrays annual drug poisoning mortality rates per 100,000 (2013 through 2017) for Cuyahoga County, Ohio, and the United States. The data were classified using ICD-10 and include drug poisoning deaths where the intent was: unintentional, suicide, homicide, or "undetermined."

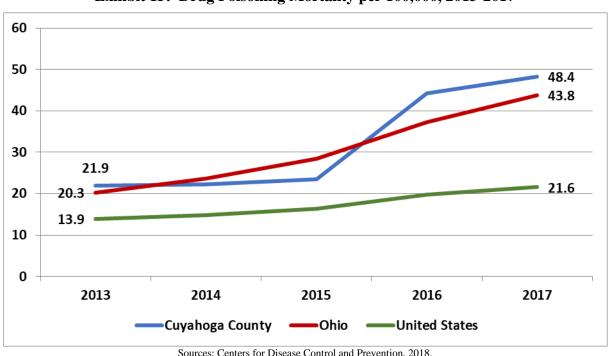


Exhibit 15: Drug Poisoning Mortality per 100,000, 2013-2017

Sources: Centers for Disease Control and Prevention, 2018. Note: Rates are not age-adjusted.

Per-capita drug poisoning deaths in Cuyahoga County and Ohio more than doubled between 2013 and 2017. Additionally, mortality rates in Cuyahoga County and Ohio consistently have exceeded national averages.

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 ZIP code 44107 and compared to the averages for Cuyahoga County and Ohio (**Exhibit 16**).

Exhibit 16: Behavioral Risk Factor Surveillance System, Chronic Conditions, 2017 (Light Grey Shading Denotes Indicators Worse than Ohio Average; Dark Grey Denotes Indicators More than 50 Percent Worse than Ohio Average)

Region	Lakewood (44107)	Cuyahoga County	Ohio	
Total Population 18+	41,528	989,879	9,044,061	
% Arthritis	20.5%	24.3%	24.2%	
% Asthma	12.1%	12.3%	11.9%	
% Depression	17.9%	19.1%	19.2%	
% Diabetes	15.5%	17.9%	15.7%	
% Heart Disease	9.8%	10.7%	10.7%	
% Heart Failure	3.3%	3.9%	4.5%	
% High Blood Pressure	31.3%	33.5%	31.8%	
% High Cholesterol	24.4%	26.2%	25.0%	
% Adult Smoking	28.9%	27.4%	27.5%	
% COPD	5.1%	6.0%	6.0%	
% Back Pain	31.5%	30.3%	31.1%	

Source: Truven Market Expert/Behavioral Risk Factor Surveillance System, 2018.

Compared to Ohio averages, Lakewood has had comparatively high rates of asthma, smoking, and back pain.

Ambulatory Care Sensitive Conditions

Exhibit 17 provides 2017 PQI rates (per 100,000 persons) for Lakewood – with comparisons to Cuyahoga County, Northeast Ohio, and Ohio averages.

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."²⁵ 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.

²⁵Agency for Healthcare Research and Quality (AHRQ) Prevention Quality Indicators.

Exhibit 17: PQI (ACSC) Rates per 100,000, 2017			
(Light Grey Shading Denotes Indicators Worse than Ohio Average; Dark Grey Denotes			
Indicators More than 50 Percent Worse than Ohio Average)			

ZIP Code	Lakewood (44107)	Cuyahoga County	Ohio	United States
Diabetes Short-Term Complications	62.5	85.4	70.1	68.9
Perforated Appendix	416.7	577.9	594.7	351.4
Diabetes Long-Term Complications	115.3	156.7	120.2	101.6
Chronic Obstructive Pulmonary Disease	912.0	962.6	695.6	480.9
Hypertension	48.1	111.9	71.6	49.2
Congestive Heart Failure	497.4	786.6	584.2	321.6
Low Birth Weight	5.7	16.2	18.1	-
Dehydration	218.7	293.1	218.3	130.1
Bacterial Pneumonia	161.0	265.2	238.4	249.7
Urinary Tract Infection	180.2	244.1	197.5	155.6
Uncontrolled Diabetes	62.5	77.6	50.2	13.2
Young Adult Asthma	5.7	67.4	35.7	41.1
Lower-Extremity Amputation Among Patients with Diabetes	36.0	47.0	36.3	17.2

Source: Cleveland Clinic, 2018.

Note: Rates are not age-sex adjusted. Perforated appendix rate calculated per 1,000; low birth weight calculated per 1,000 births.

Lakewood ACSC rates are above the Ohio average for:

- Chronic Obstructive Pulmonary Disease,
- Dehydration, and
- Uncontrolled Diabetes.

Exhibit 18 provides the ratio of PQI rates for Lakewood 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.

Indicator	Lakewood (44107) Averages	Ohio Averages	Ratio: Lakewood / Ohio
Chronic Obstructive Pulmonary Disease	912.0	695.6	1.31
Uncontrolled Diabetes	62.5	50.2	1.24
Dehydration	218.7	218.3	1.00
Lower-Extremity Amputation Among Patients with Diabetes	36.0	36.3	0.99
Diabetes Long-Term Complications	115.3	120.2	0.96
Urinary Tract Infection	180.2	197.5	0.91
Diabetes Short-Term Complications	62.5	70.1	0.89
Congestive Heart Failure	497.4	584.2	0.85
Perforated Appendix	416.7	594.7	0.70
Bacterial Pneumonia	161.0	238.4	0.68
Hypertension	48.1	71.6	0.67
Low Birth Weight	5.7	18.1	0.31
Young Adult Asthma	5.7	35.7	0.16

Exhibit 18: Ratio of PQI Rates for Lakewood and Ohio, 2017

Source: Cleveland Clinic, 2018.

Note: Rates are not age-sex adjusted. Perforated appendix rate calculated per 1,000; low birth weight calculated per 1,000 births.

In Lakewood, ACSC rates for chronic obstructive pulmonary disease were more than 30 percent higher than the Ohio average and admissions for uncontrolled diabetes were 24 percent higher.

Food Deserts

The U.S. Department of Agriculture's Economic Research Service defines urban food deserts as low-income areas more than one mile from a supermarket or large grocery store and rural food deserts as more than 10 miles from a supermarket or large grocery store. Many government-led initiatives aim to increase the availability of nutritious and affordable foods to people living in these areas. According to the USDA, there are no food deserts located in Lakewood.

Medically Underserved Areas and Populations

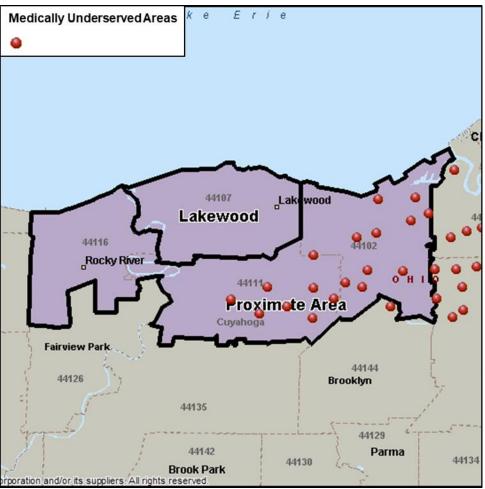
Medically Underserved Areas and Populations (MUA/Ps) are designated by HRSA based on an "Index of Medical Underservice." The index includes the following variables: ratio of primary medical care physicians per 1,000 population, infant mortality rate, percentage of the population with incomes below the poverty level, and percentage of the population age 65 or over.²⁶ Areas with a score of 62 or less are considered "medically underserved."

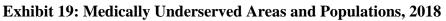
Populations receiving MUP designation include groups within a geographic area with economic barriers or cultural and/or linguistic access barriers to receiving primary care. If a population group does not qualify for MUP status based on the IMU score, Public Law 99-280 allows MUP designation if "unusual local conditions which are a barrier to access to or the availability of

²⁶ Heath Resources and Services Administration. See http://www.hrsa.gov/shortage/mua/index.html

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."²⁷

No census tracts in Lakewood have been designated as Medically Underserved Areas. However, a number of such areas are proximate to ZIP code 44107 (**Exhibit 19**).





Source: Microsoft MapPoint and HRSA, 2018.

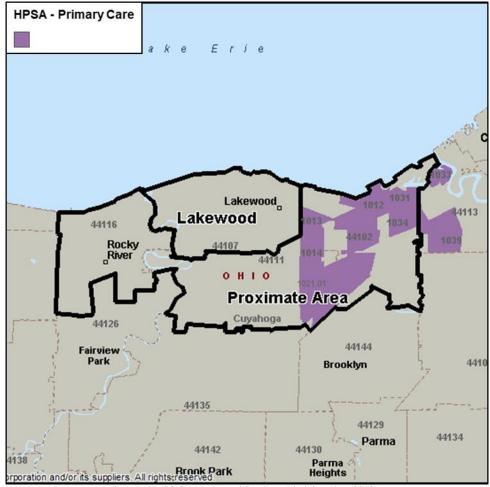
Health Professional Shortage Areas

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.

²⁷Ibid.

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."²⁸

As with Medically Underserved Areas, no HPSAs are present in ZIP code 44107; however, several are present just east of Lakewood – both for primary care health professionals and for dentists (Exhibits 20 and 21).





Source: Health Resources and Services Administration, 2018.

²⁸ U.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

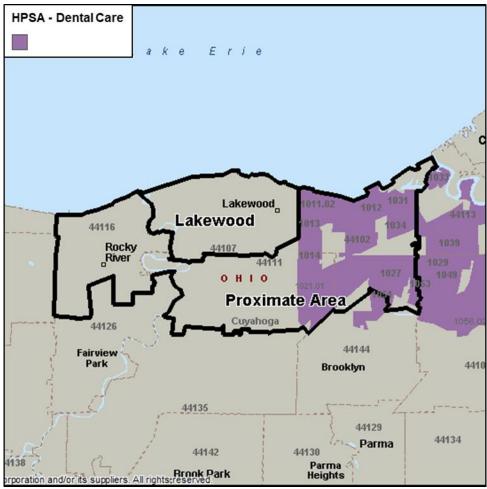
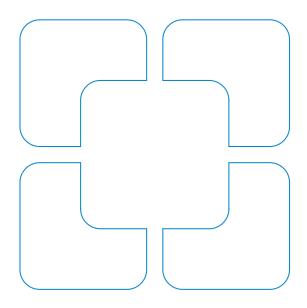


Exhibit 21: Dental Care Health Professional Shortage Areas

Source: Health Resources and Services Administration, 2018.



clevelandclinic.org/CHNAreports



Implementation **Strategy Report** 2019

Fairview Hospital 18101 Lorain Ave Cleveland, Ohio 44111

2019 Community Health Needs Assessment Implementation Strategy for Years 2020 -2022 As required by Internal Revenue Code § 501(r)(3)

Name and EIN of Hospital Organization Operating Hospital Facility:

Fairview Hospital # 34-0714618

Date Approved by Authorized Governing Body:

April 9, 2020

Contact:

Cleveland Clinic chna@ccf.org

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Fairview Hospital 2019 IMPLEMENTATION STRATEGY

I. INTRODUCTION AND PURPOSE

This written plan is intended to satisfy the requirements set forth in Internal Revenue Code Section 501(r)(3) regarding community health needs assessments and implementation strategies. The overall purpose of the implementation strategy process is to align the hospital's limited resources, program services, and activities with the findings of the community health needs assessment ("CHNA").

A. Description of Hospital

Fairview Hospital is a community hospital with 460 staffed beds. Fairview is a fully accredited hospital by The Joint Commission, with a certified Level II Trauma Center. Cleveland Clinic Cancer Center at Fairview Hospital Moll Pavilion, located directly across the street from the main building, is part of the Integrated Network Cancer Program and has been awarded the Outstanding Achievement Award by the American College of Surgeons Commission on Cancer. Additional information on the hospital and its services are available at https://my.clevelandclinic.org/locations/fairview-hospital.

The hospital is part of the Cleveland Clinic health system, which includes an academic medical center near downtown Cleveland, eleven regional hospitals in northeast Ohio, a children's hospital, a children's rehabilitation hospital, five southeast Florida hospitals, and a number of other facilities and services across Ohio, Florida, and Nevada. Additional information about Cleveland Clinic is available at https://my.clevelandclinic.org/.

B. Hospital Mission

Fairview Hospital was formed in 1892 to provide health care services to its community. Fairview Hospital's mission statement is:

To provide better care for the sick, investigation of their problems and education of those who serve

II. COMMUNITY DEFINITION

Fairview's community is defined as 23 ZIP codes in Cuyahoga, Lorain, and Medina counties in Ohio comprising over 78 percent of the hospital's 2017 inpatient volumes. This area has comparatively unfavorable health status and socioeconomic indicators, particularly for minority residents. The total population of Fairview's community in 2017 was 742,295.

Fairview Hospital is located within 10 miles of Cleveland Clinic Lutheran Hospital and 12 miles of Cleveland Clinic Avon Hospital. Because of this proximity, a portion of Fairview's community overlaps with that of Lutheran and Avon hospitals. These hospitals work together with Amherst, Avon Lake, Avon Pointe, Elyria, Lakewood, Richard E Jacobs, Sheffield, and Strongsville Family Health Centers as a part of the Cleveland Clinic health system to serve residents in its western communities.

III. HOW IMPLEMENTATION STRATEGY WAS DEVELOPED

This Implementation Strategy was developed by a team of members of senior leadership at Fairview Hospital and Cleveland Clinic representing several departments of the organizations, including clinical administration, medical operations, nursing, finance, population health, and community relations. This team incorporated input from the hospital's community and local non-profit organizations to prioritize selected strategies and determine possible collaborations. Alignment with county Community Health Assessments (CHA) and Ohio's State Health Assessment (SHA) was also considered.

Each year, senior leadership at Fairview Hospital and Cleveland Clinic will review this Implementation Strategy to determine whether changes should be made to better address the health needs of its communities.

IV. SUMMARY OF THE COMMUNITY HEALTH NEEDS IDENTIFIED

Fairview Hospital's significant community health needs as determined by analyses of quantitative and qualitative data include:

Community Health Initiatives

- Addiction and Mental Health
- Chronic Disease Prevention and Management
- Infant Mortality
- Socioeconomic Concerns

Other Identified Needs

- Access to Affordable Health Care
- Medical Research and Health Professions Education

See the 2019 Fairview Hospital CHNA for more information: http://my.clevelandclinic.org/locations/fairview-hospital/about/community

V. NEEDS HOSPITAL WILL ADDRESS

A. Cleveland Clinic Community Health Initiatives

Each Cleveland Clinic hospital provides numerous services and programs in efforts to address the health needs of the community. Implementation of our services focuses on addressing structural factors important for community health, strengthening trust with residents and stakeholders, ensuring community voice in developing strategies, and evaluating our strategies and programs.

Strategies within the ISRs are included according to the prioritized list of needs developed during the 2019 CHNA. These hospital's community health initiatives combine Cleveland Clinic and local non-profit organizations resources in unified efforts to improve health and health equity for our community members, especially low-income, underserved, and vulnerable populations. Cleveland Clinic is currently undertaking a five-year community health strategy plan which may modify the initiatives in this report.

B. Fairview Hospital Implementation Strategy 2020-2022

The Implementation Strategy Report includes the priority community health needs identified during the 2019 Fairview Hospital CHNA and hospital-specific strategies to address those needs from 2020 through 2022.

Addiction and Mental Health

Fairview Hospital's 2019 CHNA identified substance use disorders, mental health issues, and intimate partner violence as needs in the community. The 2020 - 2022 priority strategy will focus on the hospital's efforts to decrease the abuse of and overdose from opioids. Initiatives include:

	Initiatives Including Collaborations and Resources Allocated	Anticipated Impacts
А	Through Cleveland Clinic's Opioid Awareness Center, provide intervention and treatment for substance abuse disorders to Cleveland Clinic caregivers and their family members	Increase the number of individuals with opioid addiction and dependence who seek treatment
В	Through the Opioid Awareness Center, participation in the Northeast Ohio Hospital Opioid Consortium and Cuyahoga County Opiate Task Force, and community-based classes and presentations, Cleveland Clinic will provide preventative education and share evidence-based practices	Reduce the number of individuals with opioid addiction and dependence
С	In partnership with the Cuyahoga County Sheriff's <i>Office Rx Drug Drop Box Program</i> , collect unused opioid and controlled substance medications through community-based drop boxes and a collection service	Reduce the availability of unused prescription opioids within the community
D	In collaboration with community partners and schools, the Fairview Hospital Adolescent Psychiatry team continues to administer the <i>Transition Bridge Program</i> that supports students transitioning from an inpatient mental health setting back to the community	Increase self-reliance, improve school performance
E	Cleveland Clinic will develop suicide and self-harm policies procedures and screening tools for patients in a variety of care settings	Reduce suicide rates

Chronic Disease Prevention and Management

Fairview Hospital's 2019 CHNA identified chronic disease and other health conditions as prevalent in the community (ex. heart disease, cancer, diabetes, respiratory diseases, obesity). Prevention and management of chronic disease were selected with the goal to increase healthy behaviors in nutrition, physical activity, and tobacco cessation. Initiatives include:

	Initiatives Including Collaborations and Resources Allocated	Anticipated Impacts
A	Improve management of chronic conditions through Chronic Care Clinics employing a specialized model of care	Improve quality of life, decrease rates of complication, and improve treatment adherence for chronic disease patients
В	Provide free mammograms and skin cancer screenings	Increase cancer screening rates
С	Implement health promotion messaging, health education, and outreach programs	Decrease smoking, improve physical activity, improve nutrition, decrease stress levels, increase the number of individuals with a regular source of care, increase the number of individuals who receive a regular well-check
D	Through the Healthy Communities Initiative (HCI), partner to fund programs designed to improve health outcomes in four core areas: physical activity, nutrition, smoking, and lifestyle management	Decrease smoking, improve physical activity, improve nutrition
E	Support the <i>Straight from The Heart – Youth Movement Contest</i> that encourages Northeast Ohio students to engage in physical activity and awards winning schools with \$5,000 to be utilized for school-based wellness programs	Improve physical activity
F	Sponsor Kamm's Corner Farmers Market	Improve access to healthy foods, reduce food insecurity
G	Through the Wellness Center, provide classes focused on physical and emotional health and provide resources to address socioeconomic concerns	Improve physical activity, improve nutrition, decrease stress, improve access to social services and assistance programs

Infant Mortality

Fairview Hospital's 2019 CHNA identified the infant mortality rate in Cuyahoga County as well above Ohio and U.S. averages. Rates have been particularly high for Black infants. Addressing infant mortality causes and decreasing its prevalence was selected as a prioritized strategy. Initiatives include:

	Initiatives Including Collaborations and Resources Allocated	Anticipated Impacts
A	Provide expanded evidence-based health education to expecting mothers and families	Improve the number of mothers who receive adequate prenatal care, improve breastfeeding rates
В	Participate in <i>First Year Cleveland</i> , the Cuyahoga County Infant Mortality Task Force to gather data, align programs, and coordinate a systemic approach to improving infant mortality	Reduce infant mortality inequity, improve the preterm birth rate, decrease sleep- related infant deaths
С	Expand capacity to offer the <i>Centering Pregnancy</i> group prenatal care model to expecting mothers and market the program to community members	Improve the preterm birth rate, increase pregnancy spacing, reduce preterm birth inequity
D	Provide the <i>Maternal and Infant Mortality Awareness and Prevention</i> <i>Program</i> in specific high-risk geographical areas and encourage enrollment in supportive evidence-based programs	Improve the number of mothers who receive adequate prenatal care, decrease infant and maternal mortality rates, reduce infant mortality inequity, reduce maternal mortality inequity

Socioeconomic Concerns

Fairview Hospital's 2019 CHNA demonstrated that health needs are multifaceted, involving medical as well as socioeconomic concerns. The assessment identified poverty, health equity, trauma, and other social determinants of health as significant concerns. Poverty has substantial implications for health, including the ability for households to access health services, afford basic needs, and benefit from prevention initiatives. Problems with housing, educational achievement, and access to workforce training opportunities also contribute to poor health. The Centers for Disease Control and Prevention define social determinants of health as the "circumstances in which people are born, grow up, live, work and age that affect their health outcome."

Fairview Hospital is committed to promoting health equity and healthy behaviors in our communities. The hospital addresses socioeconomic concerns through a variety of services and initiatives including cross-sector health and economic improvement collaborations, local hiring for hospital workforce, local supplies sourcing, mentoring of community residents, in-kind donation of time and sponsorships, anchor institution commitment, and caregiver training for inclusion and diversity. The socioeconomic initiatives highlighted for 2020 – 2022 include:

	Initiatives Including Collaborations and Resources Allocated	Anticipated Impacts
A	Implement a system-wide social determinants screening tool for patients to identify needs such as alcohol abuse, depression, financial strain, food insecurity, intimate partner violence, and stress	Connect patients with substance abuse treatment, mental health treatment, and assistance with basic needs; reduce trauma and harm associated with violence
В	Explore a common community referral data platform to coordinate services and ensure optimal communication	Improve active referrals to community-based organizations, non-profits, and other healthcare facilities; track referral outcomes
С	Pilot patient navigation programming within a partnership pathway HUB model using community health workers and/or the co-location of community organizations with hospital facilities	Ensure connection to medical, social, and behavioral services; Improve health equity
D	Participate in the Robert Wood Johnson Foundation (RWJF) <i>Cross-Sector Innovation Initiative Project</i> in Cuyahoga County which aims to impact structural racism across various sectors	Improve health equity, improve trust in providers

Socioeconomic Concerns (continued)

Fairview Hospitals

	Initiatives Including Collaborations and Resources Allocated	Anticipated Impacts
E	Sponsor and participate in <i>Say Yes to Education Cleveland</i> , a consortium focused on increasing education levels, fostering population growth, improving college access and spurring economic growth	Increase the number of individuals with a living wage, increase the number of individuals with employer- sponsored health insurance
F	Provide workforce development and training opportunities for youth K-12 in clinical and non-clinical areas, empowering Northeast Ohio's next generation of leaders	Increase diversity within the healthcare workforce, improve trust in providers, improve
	Programs include <i>Upward Bound</i> , a hands-on workshop for low-income students who rotate through a variety of clinical areas and <i>Differential Diagnosis</i> , educating area high schoolers on the process of diagnosing and identifying medical problems	local provider shortages
G	Provide <i>Stop the Bleed</i> training via EMS to local schools, businesses, and Cleveland Clinic employees	Increase community awareness of violence, improve outcomes for patients with uncontrolled bleeding
Н	Provide transportation on a space-available basis to 1) patients within 5 miles of the Stephanie Tubbs Jones Health Center and Marymount, Euclid, Lutheran, and South Pointe Hospitals and 2) radiation oncology patients within 25 miles of Cleveland Clinic Main Campus, Hillcrest, and	Prevent missed appointments, increase preventative and well-visit attendance, improve treatment adherence

V. OTHER IDENTIFIED NEEDS

In addition to the community health needs identified in the CHNA, the hospital's 2019 CHNA also identified the needs of Access to Affordable Healthcare and Medical Research and Professions Education.

Access to Affordable Health Care

Access to affordable health care is challenging for some residents, particularly access to primary care, mental health, dental care, and addiction treatment services. Access barriers are many and include cost, health insurance, geographical barriers, scheduling difficulties, a lack of awareness regarding available services, and an undersupply of providers. Cleveland Clinic continues to evaluate methods to improve patient access to care. All Cleveland Clinic hospitals will continue to provide medically necessary services to all patients regardless of race, color, creed, gender, country of national origin, or ability to pay. Cleveland Clinic Financial Assistance. Initiatives include:

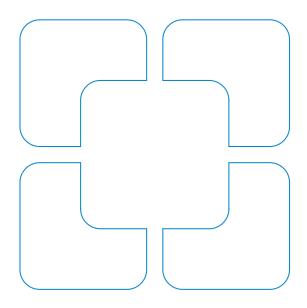
	Initiatives Including Collaborations and Resources Allocated	Anticipated Impacts
A	Patient Financial Advocates assist patients in evaluating eligibility for financial assistance or public health insurance programs	Increase the proportion of eligible individuals who are enrolled in various assistance programs
В	Fairview Hospital's Westown Physicians' Center provides primary care including OB/GYN and pediatrics services within an underserved area	Increase the number of individuals with a regular source of care, increase the number of individuals who receive a regular well-check
С	Provide access to a financial navigator for oncology patients	Improve access to medications and treatments
D	Provide parking vouchers to Emergency Department patients on campuses where parking fees are assessed	Reduce patient costs associated with emergency care
E	Provide walk-in care at Express Care Clinics and offer evening and weekend hours	Improve the number of patients who receive the right level of care
F	Utilizing medically secure online and mobile platforms, connect patients with Cleveland Clinic providers for telehealth and virtual visits	Overcome geographical and transportation barriers, improve access to specialized care

Medical Research and Health Professions Education

Cleveland Clinic cares for our communities by discovering tomorrow's treatments and educating future caregivers. Cures for disease and the provision of quality health care are part of Cleveland Clinic's mission. Cleveland Clinic has been named among America's best employers for diversity by *Forbes* magazine for three years running. The diversity of our caregivers is a key strength that helps us better serve patients, each other, and our communities. We are committed to enhancing the diversity of our teams to deepen these connections. Initiatives include:

	Initiatives Including Collaborations and Resources Allocated	Anticipated Impacts
A	Through medical research, advance clinical techniques, devices, and treatment protocols in the areas of cancer, heart disease, diabetes, and others	Improve treatment efficacy, reduced morbidity and mortality
В	Through population health research, inform clinical interventions, healthcare policy, and community partnerships	Inform health policy at the local, state, and national levels, improve clinical protocols, create cost-savings, improve population health outcomes
С	Sponsor high-quality medical education training programs for physicians, nurses, and allied health professionals via Graduate Medical Education programs, and internships and residencies	Reduce provider shortages

For more information regarding Cleveland Clinic Community Health Needs Assessments and Implementations Strategy Reports, please visit www.clevelandclinic.org/CHNAReports or contact CHNA@ccf.org .



clevelandclinic.org/CHNAreports