

2. Executive Summary

The 2018 Cuyahoga County Community Health Assessment represents an exciting 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. Historically, Cuyahoga County public health and hospital stakeholders completed independent assessments to understand the health needs of the community. In 2018, these entities committed their time and resources to bridging public health and clinical medicine by conducting a health assessment of Cuyahoga County together. This is the first combined assessment of its kind in Cuyahoga County and represents a new, more effective and collaborative approach to identifying and addressing the health needs of the community. This work helps to align local community health improvement planning efforts with state population health efforts and presages an even larger collaborative effort planned for 2019 that engages additional health care systems.

Several data sources provided by the following organizations informed the 2018 Cuyahoga County Community Health Assessment: 1) Centers for Disease Control and Prevention; 2) Ohio Department of Health; 3) Cuyahoga County Board of Health; 4) U.S. Census Bureau; 5) Ohio Hospital Association; 6) Prevention Research Center for Healthy Neighborhoods at Case Western Reserve University; and other national, state and local data sources (cited throughout the report). The assessment also encompasses interview data from several community stakeholders who are experts on the health care needs of residents in the county as well as existing community voice data gathered by a range of other Greater Cleveland organizations.

Health Equity – A Shared Vision in Cuyahoga County

Collectively, these data elucidate the health status of Cuyahoga County residents and areas ripe for improvement in the upcoming community health improvement plan. The report illuminates the stark reality that community residents living in some neighborhoods in Greater Cleveland do not have equitable opportunities to reach their full potential as a result of conditions impacting health. Some Cuyahoga County residents are born and live in places where it is difficult to grow up healthy. The conditions in which people live, and the opportunities they have, form the foundation for health, and without them, people are more likely to live shorter, sicker lives. The Health Improvement Partnership-Cuyahoga, known as HIP-Cuyahoga (www.hipcuyahoga.com) is a cross-sector partnership working to build opportunities for everyone in Cuyahoga County to have a fair chance to be healthy. When healthy living is easier, we all live longer and healthier lives. We believe that the differences highlighted in this report are a result of systems and structures that impact poor health for some and are avoidable, unfair and unjust. We commit to working together to rectify these inequities and achieve health equity in our community.

In partnership with the Health Policy Institute of Ohio, our shared definition of health equity is: *Everyone is able to achieve their full health potential. This requires addressing historical and contemporary injustices and removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments and health care.*

The following key findings from the 2018 Cuyahoga County Community Health Assessment illustrate these health inequities in our community:

1. **The strongest indicator we have of health status is poverty.** The 2018 Cuyahoga County Community Health Assessment identified several inequities in access to care and health outcomes based on socioeconomic status:
 - a. One-third (35%) of city of Cleveland residents lived below the poverty line in 2016, compared to half that (18.1%) of county residents, as a whole.
 - b. Likewise, Cleveland residents were significantly more likely to die of cardiovascular disease (+27.5%), a drug-induced death (+64.3%) or to be a homicide victim (+99.3%).
2. There are several priority health and safety concerns for Cuyahoga County and there are several reasons for this designation. They may be conditions where Cuyahoga County appears to compare unfavorably to its peer counties, they may be conditions that can be minimized or prevented via effective programming, or they may have been selected because they impact certain population groups in our county at particularly high frequency. For all of these, Cuyahoga County compares unfavorably to national benchmark goals in the following areas:
 - a. Cuyahoga County's mortality rate from **cardiovascular disease** was significantly higher (199.8 per 100,000) than for the U.S. overall (165.5) and the national benchmark of 100.8. Cardiovascular disease was also the most common reason for hospitalizations in Cuyahoga County in 2016.
 - b. Cuyahoga County's **suicide rate** is two points above the national benchmark of 10.2 (per 100,000). In surveys, county residents report an average of 3.7 **poor mental health days** per month. The **homicide rates** within Cuyahoga County (14.2) and the city of Cleveland (28.3) are significantly higher than the national benchmark of 5.5 (per 100,000).
 - c. **Infant mortality** rates in Cuyahoga County (8.7 per 1,000) and the city of Cleveland (12.0) are also significantly higher than for the U.S. overall (5.9) and the national benchmark (6.0). Furthermore, the county rate is three times higher for Black, non-Hispanic infants (15.0) compared to White, non-Hispanic infants (4.5).
 - d. **High blood lead levels** among young children (ages 5 and younger) are a persistent problem. For Cuyahoga County residents under age 6, 8.2% had dangerous blood lead levels (> 5 ug/dl) in 2016, and that was significantly higher for young children in the city of Cleveland (12.4%). This compares very unfavorably to the state (2.0%) and national rate (3.0% in 2015) overall. Blood lead levels above zero are considered above the national benchmark.
 - e. The number of **unintentional opioid deaths** was high in Ohio overall (32.9 per 100,000), but somewhat higher in Cuyahoga County (38.2). In the city of Cleveland, the rate of unintentional opioid deaths is about twice as high (61.8) as in the county overall. The rate of unintentional opioid deaths in the city of Cleveland is about five times that of the U.S. overall (13.3).
 - f. Many of the estimated 20,000 or more deaths in the U.S. from influenza each year may have been prevented by the flu vaccine. The national benchmark for vaccination levels among Medicare beneficiaries is 70%. Within Cuyahoga County during the 2017-2018 flu season, only 48.9% **received a flu vaccine**.
 - g. **Tobacco (cigarette) use in Cuyahoga County is higher than the national rate (21% vs. 15.5%).** City of Cleveland residents use cigarettes at a much higher rate (35.2%). Of particular concern is

the higher incidence of mothers who smoked during pregnancy (U.S. overall, 7.2%; Cuyahoga County, 9.1%; city of Cleveland, 14.3%).

- h. Within the city of Cleveland, **residents lack sufficient physical activity** at higher rates (58.1%) compared to the national benchmark (32.6%).
3. **Childhood asthma** was the most common ambulatory care sensitive (ACS) condition¹ for hospitalized children in 2016, where the incidence of childhood asthma differed based on race and/or ethnicity. Significantly higher proportions of hospitalized Medicaid beneficiaries were Black (4.2%) or of Hispanic descent (3.3%) compared to White children (1.3%). **This suggests higher rates of childhood asthma among Black and Hispanic children and lower access to primary care to minimize hospitalizations.** We know that exposure to asthma triggers like dust mites and indoor pollutants associated with substandard housing and exposure to environmental tobacco smoke and outdoor air pollutants are risk factors for childhood asthma, and optimizing clinical care, improving the quality of housing, and reducing trigger exposure can reduce asthma exacerbations.
4. The most common ACS conditions for older adult residents of Cuyahoga County in 2016 were **chronic obstructive pulmonary disease** (4.6% of all adults age 40+ hospitalizations) and **congestive heart failure** (5.5% of all seniors hospitalized). Improved screening and primary care for these conditions can reduce hospitalization rates.
5. An examination of all hospitalized Cuyahoga County patients' diagnoses in 2016 shines a light on the impact of chronic health conditions as well as the complexity of most hospitalization cases. Most inpatients had multiple secondary diagnoses requiring a high level of coordinated care. The following are conditions that were far more common as secondary diagnoses than as primary diagnoses (in other words, patients' secondary diagnoses did not lead to the hospitalization, but greatly complicated the care needed during hospitalization):
 - a. Hyperlipidemia (18.3%)
 - b. Type 2 diabetes (16.5%)
 - c. Essential hypertension (16.0%)
 - d. Anemias (11.2%)
 - e. Nicotine dependence (10.4%)
 - f. Substance dependence/abuse (alcohol, opioids, cocaine, cannabis, etc., 8.2%)
 - g. Hypertensive heart & kidney disease (8.0%)
 - h. Gastro-esophageal reflux disease (6.9%)
 - i. Chronic kidney disease (6.8%)
 - j. Asthma (5.8%)
 - k. Adverse effect/poisoning by prescribed or over-the-counter drugs (4.9%)
 - l. Chronic pain (4.2%)
 - m. Encephalopathy (4.2%)
 - n. Dementia (3.6%)

The most common reason children are hospitalized differs from that for adults. Looking just at hospitalized Cuyahoga County patients under the age of 18 in 2016, excluding healthy newborns, the most common primary diagnosis was related to diseases of the respiratory system (23.0%) – whereas for adults diseases of the circulatory system were the most common reason for hospitalization. Asthma was the most common condition and was a primary diagnosis for 4.6% of patients and a secondary diagnosis for 12.8% of young patients. Hospitalizations related to mental and behavioral health disorders (12.2%) comprised the second largest category of primary diagnoses among patients under the age of 18. Digestive system diseases (7.3%) were the third most common category of primary diagnoses among young patients.

6. Evidence is growing that food insecurity due to poverty and lack of access to high-quality nutritious food leads to increased risk for chronic disease and poor health outcomes. A large proportion of the city of Cleveland is considered a “food desert,” where residents have limited local access to grocery stores and other sources of healthy food.

There were several notable areas of improvement with regard to drivers of health.

1. From 2013 to 2016, the **number of hospitalizations of Cuyahoga County residents decreased by 6.4%**.

- This decrease appears to have been driven largely by a reduction in the hospitalization rates for those aged 66 and older. The number of seniors in Cuyahoga County increased from 2013 to 2016 by 4.9%, but the **hospitalization levels for this population decreased by 10%** in that same time period.
- The hospitalization rates for younger residents also decreased from 2013 to 2016: by 4.0% for those aged 18 to 65 and by 5.2% for those under age 18.
- Many factors can account for this difference:
 - a. Improved access to primary care and preventive care/health screenings.
 - b. Increased access to the health care system via the expansion of Medicaid to cover more than 700,000 additional Ohio residents, of which 94,000 were from Cuyahoga County. This important policy decision resulted in a decline in the number of uninsured in Cuyahoga County from 12.5% to 4.9%.
 - c. Better patient discharge communication, education, and care coordination, leading to reduced readmission rates for many of the leading causes of repeat hospitalizations.

2. Just as hospitalization rates have declined among Cuyahoga County residents from 2013 to 2016, **the proportion of ambulatory care sensitive (ACS) conditions for both children and adults has decreased**. This trend provides further evidence that improved disease screening and monitoring and improved access to primary care provided through Medicaid expansion are having an impact on the health and well-being of residents. In 2013, the proportion of adults hospitalized due to an ACS condition was 18.2%; this decreased to 15.2% in 2016. The reduction in ACS conditions among hospitalized children decreased even more. In 2013, 12.2% of children were hospitalized due to an ACS condition; by 2016, that rate was reduced to 8.2%.

In summary, there is some good news related to the health and well-being of Cuyahoga County residents. Hospitalizations decreased from 2013 to 2016, as did the frequency of hospitalizations related to a lack of

primary care. These changes were significant and likely a result of the health care and public health systems' focused attention on prevention and better management of several chronic diseases along with policy changes that extended Medicaid to additional Cuyahoga County residents.

However, Cuyahoga County still lags, often far behind, the rest of the state and the nation on several health indicators: poverty levels, cardiovascular disease, homicides, infant mortality, childhood lead poisoning, and opioid deaths. Each of these negatively impacts the length and quality of life of Cuyahoga residents.

We also know that there are significant inequities in access to quality care based on race and socioeconomic status in Cuyahoga County. Childhood asthma rates are significantly higher among Black and Hispanic children, and the same pattern persists for cardiovascular disease in adults. The city of Cleveland has opportunities to improve its infrastructure to better support strong health habits: most residents in the city of Cleveland live in a food desert and residents are not finding easy access to opportunities for physical activity.

¹ Ambulatory care sensitive (ACS) conditions are 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," according to the Agency for Healthcare Research and Quality.

Top Health Needs

These top 13 health issues were identified through a careful analysis of the qualitative and quantitative data provided in the 2018 Cuyahoga County Community Health Assessment:

Quality of Life

- Poverty
- Food insecurity

Chronic Disease

- Lead poisoning
- Cardiovascular disease
- Childhood asthma
- Diabetes

Behavioral Health

- Flu vaccination rates
- Tobacco use/COPD
- Lack of physical activity

Mental Health and Addiction

- Suicide/mental health
- Homicide/violence/safety
- Opioids/substance use disorders

Maternal/Child Health

- Infant mortality

Many of the top health and safety concerns for Cuyahoga County were selected based on Cuyahoga County comparing unfavorably to peer counties and unfavorably to national benchmark goals, such as cardiovascular disease and suicide rates. Some of the top health needs were chosen because certain population groups in Cuyahoga County experience these conditions at high rates, such as infant mortality and childhood asthma. Poverty was selected given that many inequities in access to care and health outcomes are based on socioeconomic status.

Prioritized List of Health Needs

From the list of 13 top health needs, the following health needs were selected as priorities that will be the focus of the Community Health Improvement Plan / Implementation Strategy. There is strong alignment between the selected health priorities and state population health priorities. In no particular order:

1. Poverty (i.e., healthy homes, food insecurity)
2. Opioids / Substance Use Disorders / Mental and Behavioral Health
3. Infant Mortality
4. Homicides / Violence / Safety
5. Chronic Disease Management and Prevention (cancer, diabetes, COPD, asthma, cardiovascular disease, healthy eating / active living)