Spectrum Health Grand Rapids

Community Health Needs Assessment

Kent County Health Department

Spectrum Health

Community Health Needs Assessment for:

Spectrum Health Hospitals d/b/a Spectrum Health Grand Rapids

Spectrum Health Medical Center, including

- **Spectrum Health Butterworth Hospital**
- **Helen DeVos Children's Hospital**
- **Fred and Lena Meijer Heart Center**
- **Lemmen-Holton Cancer Pavilion**

Spectrum Health Blodgett Hospital

All Outpatient & Ambulatory Sites

Spectrum Health System, a not-for-profit, integrated health system, is committed to improving the health and wellness of our communities. We live our mission every day with 31,000 compassionate professionals, 4,600 medical staff experts, 3,300 committed volunteers and a health plan serving 1 million members. Our talented physicians and caregivers are privileged to offer a full continuum of care and wellness services to our communities through 14 hospitals, including Helen DeVos Children's Hospital, 150 ambulatory sites and telehealth offerings. We pursue health care solutions for today and tomorrow that diversify our offerings. Locally-governed and based in Grand Rapids, Michigan, our health system provided $585 million in community benefit in fiscal year 2019. Thanks to the generosity of our communities, we received $30 million in philanthropy in the most recent fiscal year to support research, academics, innovation and clinical care. Spectrum Health has been recognized as one of the nation's 15 Top Health Systems by Truven Health Analytics®, part of IBM Watson Health™.

Community Health Needs Assessment

Spectrum Health Grand Rapids has partnered with the Kent County Health Department to complete a Community Health Needs Assessment (CHNA), the focus of this CHNA attached in Exhibit A is to identify the community needs as they exist during the assessment period (2019-2020), understanding fully that they will be continually changing in the months and years to come. For the purposes of this assessment, "community" is defined as, the county in which the hospital facility is located (Kent county). This definition of community based upon county lines, is similar to the market definition of Primary Service Area (PSA). The target population of the assessment reflects an overall representation of the community served by this hospital facility. The information contained in this report is current as of the date of the CHNA, with updates to the assessment anticipated every three (3) years in accordance with the Patient Protection and Affordable Care Act and Internal Revenue Code 501(r). This CHNA complies with the requirements of the Internal Revenue Code 501(r) regulations either implicitly or explicitly.

Please note that the assessment period concluded before the widespread outbreak of COVID-19 in the communities served by Spectrum Health. Recognizing that the pandemic's impact has and will continue to influence the health needs of our communities, Spectrum Health plans to address this in forthcoming implementation plans.

Evaluation of Impact of Actions Taken to Address Health Needs in Previous CHNA – Exhibit B

Exhibit A

KENT COUNTY

COMMUNITY HEALTH NEEDS ASSESSMENT REPORT

2019

SPECTRUM HEALTH

COUNTY OF KENT MICHIGAN

HEALTH DEPARTMENT

Caring today for a healthy tomorrow

Contents

EXECUTIVE SUMMARY

Background

A Community Health Needs Assessment (CHNA) is an ongoing, systematic process used to describe the current health status of a community and identify the top health priorities. The 2019 CHNA was conducted by the Kent County Health Department (KCHD) in partnership with Spectrum Health, a non-profit health system serving West and Southwest Michigan.

The purpose of this report is to 1) provide updated data on key health, social, and economic indicators for Kent County; 2) identify and prioritize health-related needs; and 3) serve as a foundation to meet the IRS Tax Code 501(r) requirements to conduct a CHNA every three years as set forth by the Affordable Care Act (ACA). The findings in this report will guide the development of strategies for health improvement and ensure they are aligned with the community's current needs.

Community Defined

This assessment encompasses all of Kent County, the primary service area for Spectrum Health Grand Rapids. The entities operating within this service area include the Spectrum Health Medical Center (comprised of Spectrum Health Butterworth Hospital, Helen DeVos Children's Hospital, Fred and Lena Meijer Heart Center, and Lemmen-Holton Cancer Pavilion), Spectrum Health Blodgett Hospital, and numerous outpatient and ambulatory sites. For the purposes of this CHNA, the term "community" is used to describe:

- The general population – those who live, work, learn, and play in Kent County
- Subsets of the population based on geography, demographics, or other shared characteristics (e.g., low-income communities)
- The local public health system and those involved (e.g., community partners)

Description of the CHNA Process

This CHNA is based on the Mobilizing for Action through Planning and Partnerships (MAPP) framework. MAPP is a nationally recognized community-driven approach to strategic planning and health improvement. A key element of the MAPP framework is engaging and convening a variety of organizations, groups, and individuals from the local public health system to collectively plan and conduct the assessment.[1] Data was systematically collected using mixed methods from a variety of participants and sources to get a more complete understanding of community health issues and systems, particularly for those who face the greatest health challenges and inequities.

Timeframe and overview of activities

Planning and Partner Engagement: May – October 2019

KCHD worked closely with Spectrum Health in the early phases of planning to coordinate logistics and timelines. The core CHNA team at KCHD engaged community partners and subject matter experts to identify data gaps, develop

[1] National Association of County and City Health Officials (NAACHO). (2008). *Mobilizing for Action through Planning and Partnerships: A community approach to health improvement.* Fact sheet. Available at https://www.naccho.org/uploads/downloadable-resources/Programs/Public-Health-Infrastructure/MAPP-factsheet-system-partners.pdf.

† Partners who assisted in survey planning development; individual partners who assisted with survey distribution is unknown since they were distributed to organizations.

data collection instruments, and encourage participation among residents. A total of 30 community partners from 28 different organizations and agencies were involved, representing various sectors of the local public health system including schools, hospital systems, community coalitions, faith-based organizations, social service agencies, mental health providers, substance use treatment, and Federally Qualified Health Centers (FQHCs).

Data Collection: October 2019 – March 2020

Quantitative and qualitative primary data were collected from key stakeholders, the general Kent County adult population, and from residents who face the greatest health challenges or inequities (i.e., underserved/vulnerable populations). Secondary data was collected at the local, state, and national level. Frequently used sources include the American Community Survey, Michigan Department of Health and Human Services, the Centers for Disease Control and Prevention (CDC), and County Health Rankings.

Primary Data Collection Method	Description	Target Population	N
Community Survey	A self-administered survey collecting information on the opinions and experiences of residents related to health and well-being	Populations that are more likely to experience health inequities or have greater health challenges (i.e., vulnerable populations)	310
Behavioral Risk Factor Surveillance System (BRFSS) Survey	A standardized survey conducted via telephone interview collecting information on self-reported disease prevalence and select risk factors	Randomly selected adults age 18 and over who live in Kent County	1,375
Key Stakeholder Interviews	In-depth interviews about the community's current state from a systems-level perspective and how the local public health system functions to serve the community	Spectrum Health leaders who are knowledgeable about and have experience in Kent County's local public health system	4

Identifying and Prioritizing Health Needs: March – April 2020

Health-related needs were determined to be a priority based on the collective findings from analysis of all three primary data sources. Secondary data was used to provide context and compare local outcomes with state and national outcomes. Four factors were used to evaluate issues:

- Identified by the community
- Evidence of disparities associated with the need
- Change over time
- Magnitude

The most pressing health needs identified in past Kent County CHNAs—mental health, substance use, and obesity and poor nutrition—continue to be top priorities. Additionally, several social determinants of health were also identified as significant community challenges, all of which are closely linked to the health priorities. Quantitative analysis revealed disparities in who is affected by these challenges that often correlate with race/ethnicity, education, and income.

Health Priorities:

1. Mental health
2. Substance use
3. Obesity/Poor nutrition
4. Social determinants (access to care; housing; economic security; violence; child trauma)

METHODOLGY

Kent County Health Department (KCHD) has used the Mobilizing for Action through Planning and Partnerships (MAPP) framework to conduct the county's past three CHNAs (2011, 2014, and 2017). MAPP is a nationally recognized, best-practice framework for community health needs assessment and improvement planning processes that was developed by the National Association of County and City Health Officials (NAACHO) and the Centers for Disease Control and Prevention (CDC).[1] It's intended to be an ongoing, continuous cycle of maintaining and expanding partnerships and regularly conducting assessments so improvement efforts are focused on the current state and needs of the community.[2]

Since 2014, the same health issues have been prioritized by residents and local public health stakeholders: mental health, substance use, and obesity and poor nutrition. The focus of this CHNA is to build on these known priorities and explore the specific needs, barriers, and underlying factors associated with each of these complex health challenges. Greater understanding of these issues may provide more specific guidance for developing community health improvement plans.

Community Survey

The community health survey was developed in collaboration with community partners who are actively involved with one of the three Kent County community health improvement plan (CHIP) workgroups. Each group is a coalition with representation from various sectors of the local public health system (see Appendix A for a list of community stakeholders involved).

The survey instrument asked Kent County residents about perceptions and experiences related to social determinants of health and the challenges and strengths in the communities where they live including the most pressing health issues in their community. The survey also asked detailed questions related to the county's current health priorities (substance use, obesity and poor nutrition, and mental health). For each priority, the respective CHIP workgroup was consulted for gaps in local-level data.

Surveys were self-administered and offered in paper and electronic formats in both English and Spanish (see Appendix D for the survey instrument). The survey period lasted from November 8, 2019 through March 13, 2020. KCHD identified a list of partner organizations to help distribute the survey among the community members they serve through their programming. Survey distribution partners were identified based on their work with populations who are at-risk of poorer health outcomes due to disparities or inequities. Target populations include those who are low-income, disabled, immigrants, refugees, people of color, and veterans. Survey respondents were offered incentives for participating. Over the duration of the survey period, a total of 310 people participated (58% responded to the online survey and 42% took the paper survey). Twenty respondents took the survey in Spanish.

Due to the purposeful and convenience sampling methods used for this survey, the sample is not representative of the entire Kent County population and results may not be generalizable. Survey respondents were primarily female

[1] National Association of County and City Health Officials (NAACHO). (2008). *Mobilizing for Action through Planning and Partnerships: A community approach to health improvement.* Fact sheet. Available at https://www.naccho.org/uploads/downloadable-resources/Programs/Public-Health-Infrastructure/MAPP-factsheet-system-partners.pdf.

[2] Community Toolbox. (2020). *Section 12. MAPP: Mobilizing for Action through Planning and Partnerships.* Retrieved from https://ctb.ku.edu/en/table-of-contents/overview/models-for-community-health-and-development/mapp/main.

and low-income, and more likely to be younger, non-White, unemployed, and have a disability compared to the overall population of Kent County (see Appendix C for demographic and socioeconomic comparisons). Survey findings are highlighted throughout the report to avoid confusion in interpretation of results.

Survey results were analyzed in Excel to obtain descriptive statistics and disaggregate data by various demographic and socioeconomic characteristics. Qualitative survey data was analyzed for themes and subthemes.

Behavioral Risk Factor Surveillance System (BRFSS) Survey

The BRFSS is an ongoing telephone survey conducted nationally by states and supported by the CDC. KCHD contracted with Issues & Answers Network, a marketing research firm, to conduct a local BRFSS survey. The most recent (2019) CDC questionnaire was used to collect 2020 BRFSS data for Kent County. The most recent state and national BRFSS data is from 2018, which is used as the comparison to the local 2020 data.

The survey instrument includes 14 core sections covering:

- Health status
- Healthy days
- Healthcare access
- Hypertension awareness
- Cholesterol awareness
- Chronic health conditions
- Arthritis
- Demographics
- Tobacco use
- Alcohol consumption
- Exercise (physical activity)
- Fruits and vegetables
- Immunization
- HIV/AIDS

The KCHD team identified nine additional modules to include in the survey instrument:

- Prediabetes
- Medical insurance status
- Marijuana use
- Sexual orientation and gender identity
- Mental illness and stigma
- Reactions to race
- Sugar-sweetened beverages
- Social determinants of health

BRFSS data collection took place from February 3 to March 22, 2020. Surveys were conducted via telephone interviews (landline and cell phone) and offered in English and Spanish. Adults were randomly selected to participate based on a sample of households in Kent County. To provide population-specific results, Hispanic/Latino and African American residents were oversampled. Trained interviewers from Issues & Answers conducted a total of 1,375 telephone interviews (37% via landline 63% via cell phone). The response rate was 15% and the refusal rate was 1.7%. Each completed interview lasted, on average, approximately 24 minutes.

The BRFSS data in this report were compiled by Issues & Answers and weighted to adjust for gender, age, and race using the 2010 Kent County Census population distributions. Due to the large sample size and randomly selected sample, BRFSS results are likely representative of the Kent County population allowing for generalizability and comparison of data over time.

Key Stakeholder Interviews

To gain a more complete understanding of population health and local partnerships within Kent County, in-depth interviews were conducted with leaders at Spectrum Health to get a systems-level perspective.

Spectrum Health identified four executive-level decision makers from various departments within the organization. Using a structured interview guide (see Appendix E), each person was asked about existing and emerging community needs, what is being done to address those needs, and what challenges or barriers the local public health system faces in improving community health.

Interviews were conducted in October and November of 2019. Each interview was audio recorded and transcribed using NVivo Transcription services. Transcriptions were checked for accuracy, coded, and analyzed thematically for main categories and subthemes using Nvivo software. Selected quotes from the interviews—without personal identifying information—are presented throughout this report to support some of the themes identified.

Secondary Data

A variety of existing data and informational resources were used to inform the CHNA. These data provide important context about the population characteristics of Kent County. Data were obtained from the following key sources with specific citations included throughout the report:

- U.S. Census Bureau/American Community Survey
- County Health Rankings
- Michigan Department of Health and Human Services
- Michigan State Police
- Annie E. Casey Foundation Kids Count Data Center
- Michigan Profile for Healthy Youth

Data indicators were selected based on the recognition that health is significantly impacted by non-medical factors. In order to thoroughly describe the health needs of residents and understand the underlying factors that contribute to inequitable outcomes between populations, data on the social, economic, and environmental conditions are included and presented as drivers of health.

Identifying and Prioritizing Community Health Needs

Findings from all four methods of data collection were synthesized and integrated into this report to determine the most significant health needs. Several key themes emerged after analyzing qualitative and quantitative primary data form the community health survey and key stakeholder interviews. Secondary data and primary data from the BRFSS provide additional evidence supporting the critical nature of each health issue in terms of magnitude, trend, and evidence of disparities.

Priorities identified by community health survey respondents:

See Appendix B for the complete list and rankings of community-identified health issues.

1. Ability to pay for health care
2. Mental health
3. Obesity and poor nutrition
4. Substance use
5. Violence
6. Child trauma

Priorities identified through key stakeholder interviews:

1. Access to care (specifically mental health and substance use treatment services; some specialty services)
2. Mental health
3. Substance use
4. Social determinants
    - Housing
    - Economic security
    - Inequities between zip codes
5. Obesity

Final health priorities:

1. Mental health
2. Substance use
3. Obesity/Poor nutrition
4. Social determinants:
    - Access to care
    - Housing
    - Economic security
    - Violence
    - Child trauma

Health priorities are indicated throughout the report

COMMUNITY DESCRIPTION

Geography & Population

Kent County is Michigan's fourth most populous county, with an estimated population of 653,786 in 2018.[1] The county's geographic footprint is roughly 872 square miles and is comprised of 21 townships, five villages, and nine cities. Grand Rapids is the largest city in Kent County and accounts for one third of the total population. Grand Rapids is Michigan's second most populous city next to Detroit. The population density in Kent County is 758 persons per square mile.

Listing of Townships, Villages, and Cities in Kent County, MI[2]	
Townships	
Ada Twp.	Grattan Twp.
Algoma Twp.	Lowell Twp.
Alpine Twp.	Nelson Twp.
Bowne Twp.	Oakfield Twp.
Byron Twp.	Plainfield Twp.
Caledonia Twp.	Solon Twp.
Cannon Twp.	Sparta Twp.
Cascade Twp.	Spencer Twp.
Courtland Twp.	Tyrone Twp.
Gaines Twp.	Vergennes Twp.
Grand Rapids Twp.	
Villages	
Village of Caledonia	Village of Sand Lake
Village of Casnovia	Village of Sparta
Village of Kent City	
Cities	
City of Cedar Springs	City of Lowell
City of East Grand Rapids	City of Rockford
City of Grand Rapids	City of Walker
City of Grandville	City of Wyoming
City of Kentwood	

Kent County's population has increased by approximately 50,000 residents since 2010, a growth rate of 8.4%. As of 2018, the estimated population of Grand Rapids surpassed 200,000 residents, representing a 6.4% population growth rate since 2010. Both are growing at faster rates than Michigan (1.2%) and the U.S. (5.6%).

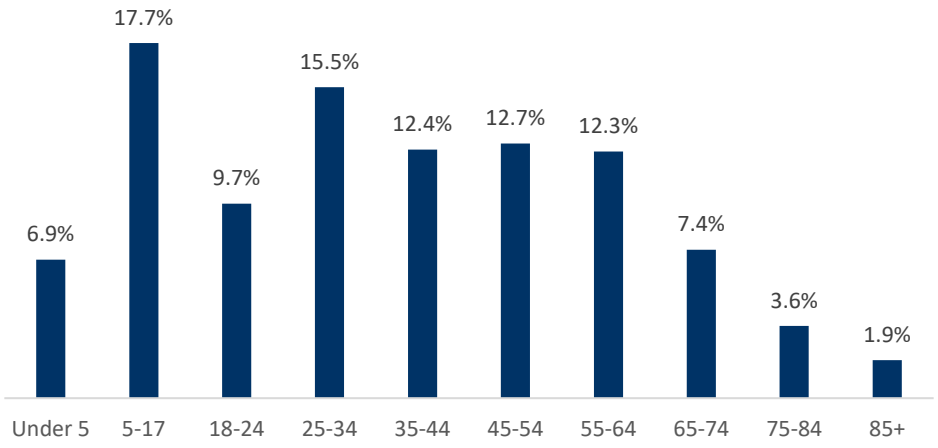
The median age in Kent County is 35.1 years (see Figure 1 for the age distribution of the population). Approximately 53,000 Kent County residents (8.3%) were born outside of the US. Nearly a quarter of which came to the US after 2009.

[1] U.S. Census Bureau (2018). American Community Survey 1-Year Estimates, 2018.
[2] County of Kent. (2017). *City, township, and village directory*. Retrieved from https://www.accesskent.com/ctvdirectory.htm.

Table 1. Percentage of Kent County population by race/ethnicity, 2014-2018[1]

Race/Ethnicity	%
American Indian and Alaska Native	0.2%
Asian	3.0%
Vietnamese	0.7%
Asian Indian	0.5%
Chinese	0.4%
Burmese	0.3%
Korean	0.3%
Filipino	0.2%
Nepalese	0.2%
Other Asian	0.3%
Black or African American	9.3%
Hispanic or Latino	10.5%
Mexican	6.7%
Puerto Rican	1.0%
Cuban	0.3%
Dominican Republic	0.4%
Other Hispanic/Latino	2.2%
Some Other Race	0.1%
Two or More Races	2.9%
White	74.0%

Figure 1. Percentage of Kent County population by age group, 2014-2018[1]



[1] U.S. Census Bureau. (2018). American Community Survey 5-Year Estimates, 2014-2018. Retrieved from https://www.socialexplorer.com/tables/ACS2018_5yr.

Socioeconomic Characteristics

Education & Employment

There are 20 public school districts in Kent County with 221 total schools. During the 2018-2019 academic year, over 108,000 students were enrolled in public schools.[1] On average, Kent County performs better than the state in third grade English and eighth grade math proficiency, on-time high school graduation, and college readiness.

Table 2. Primary and secondary education indicators[2]

Indicator	Year	Kent County	Michigan
Children (Age 3-4) Not Enrolled in Preschool	2018	54.0%	52.9%
Students Not Proficient in 3rd Grade English Language Arts	2019	49.7%	54.9%
Students Not Proficient in 8th Grade Math	2018	63.7%	67.3%
Students Not Graduating High School on Time	2019	17.1%	18.6%
High School Dropouts	2019	8.7%	8.4%
Students Not College Ready	2016-2018	59.7%	65.4%

Fourteen colleges and universities have campuses located within Kent County and the main campuses of three major universities are within commuting distance.[3] Approximately 35% of Kent County residents have a bachelor's degree or higher.

Table 3. Educational attainment for population 25 years and over[4]

Educational Attainment	Kent County	Males	Females
Less than High School	9.7%	10.2%	9.3%
High School Graduate	24.5%	25.0%	23.9%
Some College	30.7%	29.5%	31.8%
Bachelor's Degree	23.2%	22.9%	23.4%
Graduate Degree or Higher	12.0%	12.5%	11.5%

Table 4. Employment status for total population 16 years and over, Kent County[4]

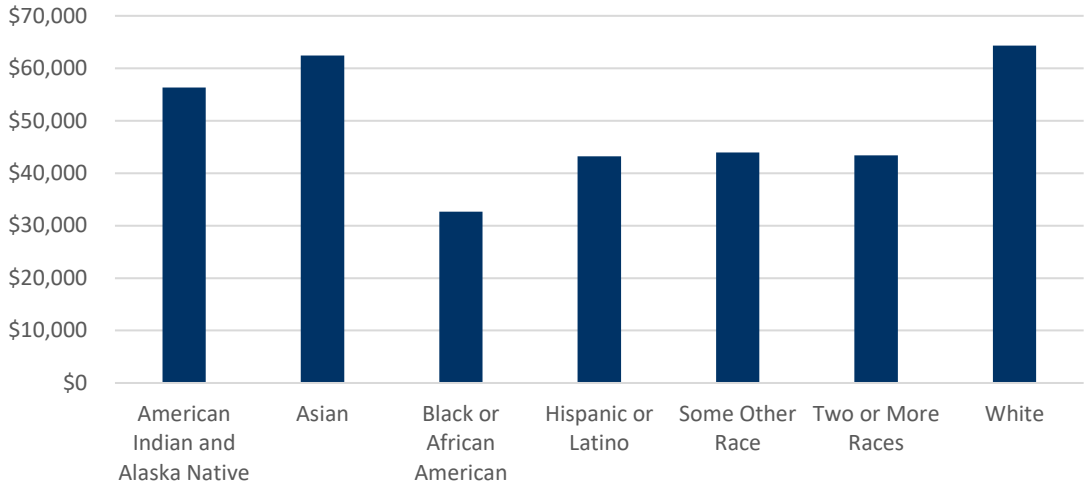
Employment Status	%
Employed	65.6%
Unemployed	3.3%
Not in Labor Force	31.1%

[1] Kent ISD Directory. (2020). *Statistics.* Retrieved from https://www.kentisd.org/downloads/superintendent__school_board/000_directory_2019-2020_-02.pdf.
[2] Annie E. Casey Foundation, Kids Count Data Center. (2018). Retrieved from https://datacenter.kidscount.org/data.
[3] County of Kent. (2017). *City, township, and village directory*. Retrieved from https://www.accesskent.com/ctvdirectory.htm.
[4] U.S. Census Bureau. (2018). American Community Survey 5-Year Estimates, 2014-2018. Retrieved from https://www.socialexplorer.com/tables/ACS2018_5yr.

Income & Economic Security

The median household income in Kent County is $60,351, which is higher than the state ($54,938) and roughly the same as the national average. In Kent County, there are significant racial and gender inequities in earnings. African American householders have a much lower median income than any other racial group in Kent County and half that of non-Hispanic White householders. Although this same disparity is evident at the state and national level, the gap between African American and White householder incomes is largest in Kent County.

Figure 2. Median household income by race/ethnicity, 2014-2018[1]



Despite similar educational attainment (see Table 3), the median income for females (who worked full-time, year-round in the past 12 months) is $40,551 while the median income for males is $51,778. The same disparity (by roughly the same amount) is also observed at the state and national level. In Grand Rapids, the gender-gap in earnings is much smaller, with median incomes of $38,274 and $41,107 for females and males, respectively.

Community Strengths

According to survey respondents, the top strengths of their communities are:

- Nearby parks
- Arts, cultural, or entertainment events
- Good place to raise children
- Good schools

From an organizational standpoint, key stakeholders emphasized the philanthropic culture in Kent County and large number of non-profit organizations. Many people give their time, efforts, or money and "all band together as a community to support each other."

[1] U.S. Census Bureau. (2018). American Community Survey 5-Year Estimates, 2014-2018. Retrieved from https://www.socialexplorer.com/tables/ACS2018_5yr.

FACTORS CONTRIBUTING TO HEALTH

Within the healthcare system, there has been an increasing focus on non-medical factors as underlying causes of morbidity and mortality. Social determinants of health are the social, economic, and environmental conditions in which people live, learn, work, and play that affect well-being, behavior, and health status. Social determinants are linked to a lack of opportunity and lack of resources to protect and maintain health. These factors are cumulative and often affect large groups of people disproportionately, leading to inequities (i.e., unfair and avoidable differences) in health outcomes.[1]

The following factors have been prioritized as a critical health-related needs or represent a contributing factor or behavior associated with the identified priorities.

- Access to care
- Safe, affordable housing
- Poverty and economic security
- Community safety and violence
- Childhood trauma
- Stress
- Physical activity
- Substance use
- Discrimination
- Food insecurity

[1] Centers for Disease Control and Prevention. (2019). *National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention: Social Determinants of Health.* Retrieved from https://www.cdc.gov/nchhstp/socialdeterminants/index.html.

ACCESS TO CARE

Access to quality, affordable care is important to all facets of health. Regular and reliable access to medical, dental, and mental health services and treatment (e.g., necessary prescription drugs) can help prevent disease, detect and treat illness sooner, and manage chronic conditions, enabling individuals to live longer, healthier lives.[1]

Access to care is influenced by:

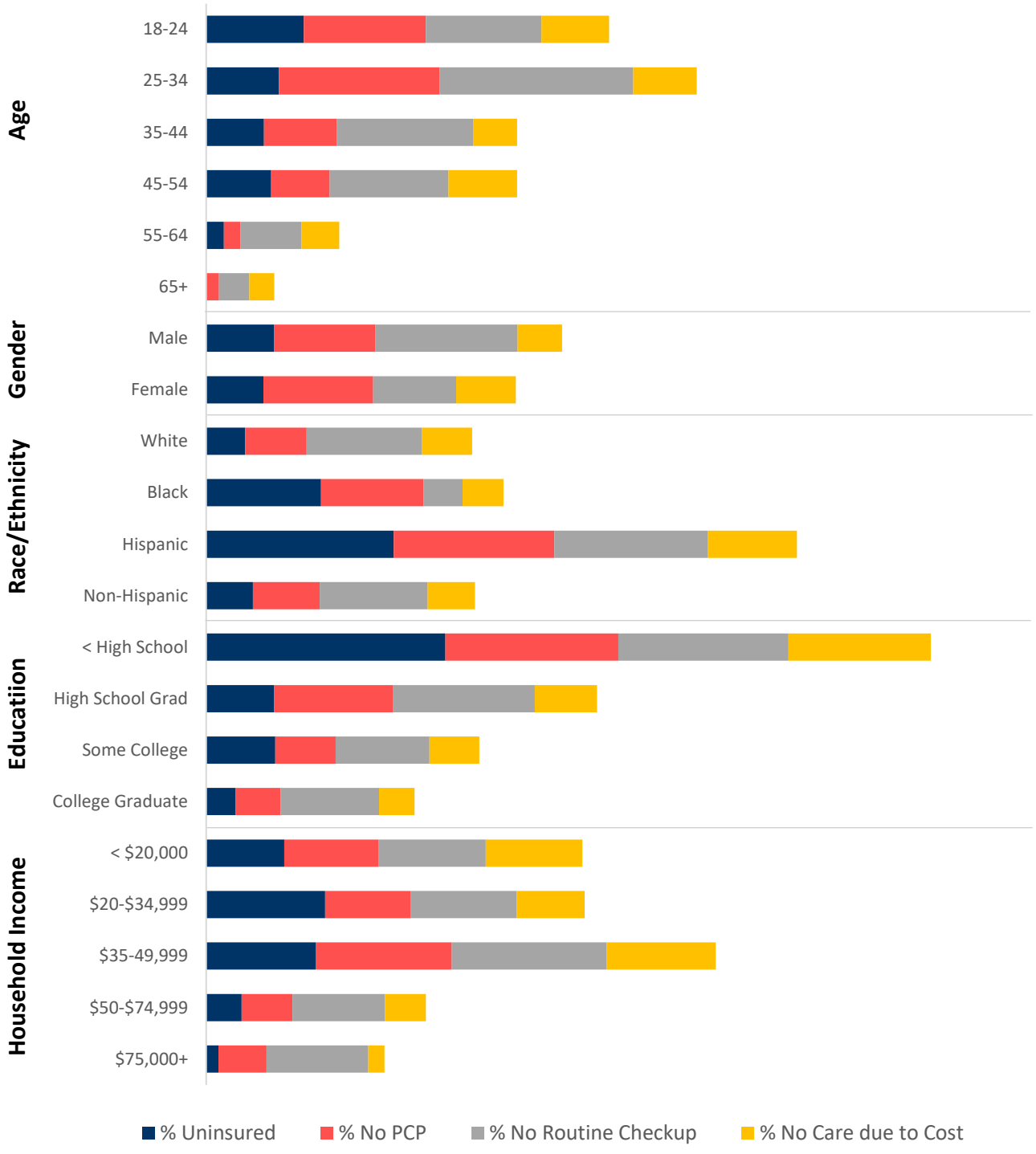
- Health insurance coverage
- Geographic availability of health services
- Utilization of preventive services
- Having a usual source of care

Other factors impact ability to access care, including transportation, language, and cost. There are also significant disparities in access to care based on race, ethnicity, age, sex, socioeconomic status, disability status, sexual orientation, gender identity, and residential location.[2] In Kent County, adults who are younger (age 18-34), Hispanic/Latino, have less than a high school education, and have a household income of less than $50,000 are more likely to lack access to health care (see Figure 3).

Among survey respondents, ability to pay for care was the most frequently selected health problem. Lack of transportation to health services was another factor impacting access to care and was a major problem for 29% of survey respondents, particularly among those living in Grand Rapids (64%) and in northern Kent County (78%).

[1] County Health Rankings. (2020). *County health rankings model: Clinical care.* https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model/health-factors/clinical-care.
[2] Agency for Healthcare Research and Quality. (2018). *Access and disparities in access to health care.* https://www.ahrq.gov/research/findings/nhqrdr/nhqdr15/access.html.

Figure 3. Indicators of low access to health care among Kent County adults, by select demographic characteristics[1]



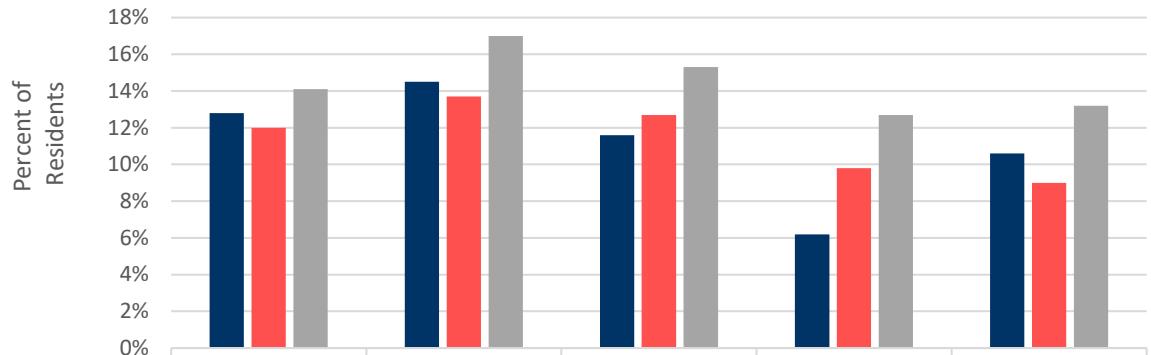
[1] Kent County Behavioral Risk Factor Surveillance System Survey (BRFSS), 2020.

Insurance Coverage

Health insurance helps individuals enter the system and access primary care, specialty care, and emergency services. Uninsured people are more likely to delay routine medical care due to costs, have poor health status, receive late diagnoses, and die prematurely.[1]

The percentage of uninsured adults (age 18-64) in Kent County increased from only 6.2% in 2017 to 10.6% in 2020 (see Figure 4). This increase is largely attributable to uninsured individuals who are younger, Hispanic/Latino, and those in the $20,000-$49,999 income bracket. Among those who are insured, over half have coverage through their employer and a quarter have Medicare or Medicaid as their primary insurance.[2]

Figure 4. Adults (age 18-64) with no health care coverage[2]



	2002	2008	2014	2017	2020*
Kent County	12.8%	14.5%	11.6%	6.2%	10.6%
Michigan	12.0%	13.7%	12.7%	9.8%	9.0%
United States	14.1%	17.0%	15.3%	12.7%	13.2%

*The 2020 comparative data is based on 2018 BRFSS of Michigan residents and 2018 Nationwide BRFSS.

Affordability

Even with insurance, the cost of health services can be prohibitive for many. Ability to pay for health care was the most frequently selected problem among survey respondents. When describing unmet needs, respondents attributed high costs to not seeking medical care or obtaining necessary prescriptions.

In the past 12 months, 8.8% of Kent County residents could not see a doctor when they needed to because of cost. This represents a sustained downward trend in cost barriers to care from 12.7% in 2008. Of those who reported cost as a barrier to seeing a doctor, 75% were insured.[2]

> "My son has schizophrenia. His prescription is $2400 now that he has a fulltime job with insurance, [s]o he no longer gets free shots. He has not had a shot for 3 months. When he is put back in [the hospital] he will lose his job, be back in the system and his shots will be free again. So why does this have to happen over and over?"
>
> *—Community Survey Respondent*

[1] Healthy People 2020. (ND). *Access to health services: Overview*. https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services#2.
[2] Kent County Behavioral Risk Factor Surveillance System Survey (BRFSS), 2020.

Availability of Health Services

The timeliness in which people receive care can have negative effects for the patient and the health care system. Delays in getting care can lead to emotional distress, increased complications, higher treatment costs, and increased hospitalizations.[1] The availability of appropriate providers, location where services are offered, and office hours are all factors impacting accessibility. In Kent County, geographic disparities in access to care have been noted by key stakeholders and are apparent in the data. Of all non-hospital facilities included in Table 5, 79% are located in Grand Rapids.

> **"We needed counseling and we had a really difficult time finding a location that was accessible (not on the other side of town) that also had hours where we would not miss work/school."**
>
> *—Community Survey Respondent*

Table 5. Number of health facilities, 2019[2]

Indicator	Kent County	Michigan
Non-Hospital Facilities		
Ambulatory Surgical Centers	8	101
Federally Qualified Health Centers	19	261
Home Health Agencies	18	484
Hospices	9	132
Rural Health Clinics	1	189
Skilled Nursing Facilities	26	439
Outpatient Physical Therapy/Speech Pathology	6	154
Hospital Facilities		
Hospitals (total)	10	182
Short Term	3	94
Long Term	1	14
Critical Access Hospitals	0	37
Psychiatric Hospitals	2	13
Rehabilitation Hospitals	1	2
Transplant Hospitals	3	9

According to Grand Valley State University's West Michigan Health Care Economic Forecast, hospital capacity in Grand Rapids (measured by the number of hospital beds per 1,000 residents) has decreased from 2016 to 2017 (from 1.97 to 1.90 beds per 1,000 residents) and remains lower than the national average.[3]

[1] Healthy People 2020. (ND). *Access to health services: Overview*. https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services#2.
[2] United States Department of Health and Human Services, Health Resources and Services Administration. (2019). Health Care Facilities (CMS). Retrieved from https://data.hrsa.gov/data/about.
[3] Linde, S., & Simons, G. (2020). *Health check: Analyzing trends in West Michigan 2020*. Seidman College of Business, Grand Valley State University. Retrieved from https://www.gvsu.edu/vphealth/health-check-65.htm.

Table 6. Health profession employment levels and growth by occupation for the Grand Rapids metro area and state of Michigan, 2018[1]

Occupation	Employment (2018)		Long Term Employment Growth (%) Since 2005		Recent Employment Growth (%) Since 2017	
	Grand Rapids	Michigan	Grand Rapids	Michigan	Grand Rapids	Michigan
Anesthesiologists	N/A	N/A	N/A	N/A	N/A	N/A
Audiologists	30	450	N/A	-34.8	N/A	N/A
Cardiovascular Technologists/Technicians	400	2,510	N/A	29.4	2.6	1.6
Dental Assistants	1,060	9,960	23.3	3.2	15.2	4.3
Dental Hygienists	1,010	9,510	46.4	21.1	-15.1	-5.7
Dentists	420	3,810	20.0	-16.6	-19.2	-6.2
Diagnostic Medical Sonographers	330	2,670	153.8	76.8	6.5	6.4
Dietitians and Nutritionists	260	2,010	85.7	42.6	13.0	12.3
EMT and Paramedics	520	7,100	15.6	6.4	18.2	3.6
Home Health Aides	1,840	26,580	-5.6	1.6	7.6	-1.9
Medical Assistants	2,440	23,680	58.4	63.4	-2.4	3.9
Medical Records/Health Info Technicians	630	6,050	23.5	25.5	-4.5	2.7
Medical Transcriptionists	90	1,810	-69.0	-41.2	0.0	-7.2
Nuclear Medicine Technologists	70	630	-36.4	-34.4	16.7	-6.0
Nurse Practitioners	350	4,490	N/A	N/A	-5.4	13.1
Nurses, RN	12,550	96,680	98.9	18.8	9.6	2.8
Nurses, LPN or LVN	2,030	14,840	8.6	-16.9	-1.5	-0.5
Nursing Aides and Assistants	7,280	49,760	47.1	1.6	4.9	-3.6
Occupational Therapists	580	4,580	152.2	30.5	-10.8	-4.2
Occupational Therapy Assistants	260	1,140	420.0	28.1	30.0	0.0
Opticians, Dispensing	400	3,580	25.0	0.8	17.6	-1.9
Optometrists	260	1,590	225.0	23.3	8.3	10.4
Pharmacists	930	9,140	66.1	12.7	4.5	-3.0
Pharmacy Technicians	1,370	15,580	95.7	82.0	-2.1	8.3
Physical Therapists	980	7,970	197.0	54.2	-3.9	-3.4
Physical Therapist Assistants	560	3,800	460.0	49.0	5.7	-1.8
Physician Assistants	610	4,490	238.9	93.5	-21.8	-6.1
Physicians, Family and General Practitioners	N/A	3,320	N/A	9.6	N/A	-31.7
Physicians, Obstetricians and Gynecologists	130	730	N/A	-2.7	85.7	7.4
Physicians, Pediatricians	150	930	400.0	151.4	N/A	27.4
Physicians, Psychiatrists	80	630	N/A	57.5	60.0	6.8
Physicians, Surgeons	210	1,320	110.0	-19.5	75.0	3.9
Physicians and Surgeons, All Other	1,260	16,480	231.6	61.3	12.5	0.7
Radiologic Technologists and Technicians	820	6,710	115.8	11.5	26.2	5.0
Recreational Therapists	110	710	83.3	1.4	10.0	16.4
Respiratory Therapists	650	4,580	170.8	35.1	20.4	7.3
Speech-language Pathologists	620	3,950	59.0	18.3	8.8	16.2
Surgical Technologists	730	4,240	231.8	62.5	35.2	5.7

[1] Linde, S., & Simons, G. (2020). *Health check: Analyzing trends in West Michigan 2020*. Seidman College of Business, Grand Valley State University. Retrieved from https://www.gvsu.edu/vphealth/health-check-65.htm.

Primary Care Providers

The ratio of population to primary care providers in Kent County is lower than the state average. Particularly among non-physician providers (nurse practitioners, physician assistants, and clinical nurse specialists). The Health Services Research Administration (HRSA) projects that these primary care workforces will grow far more rapidly than the physician supply in the next 10 years, which could help address shortages as demand increases.[1] Since 2005, the number of employed physician assistants in the Grand Rapids metro area has tripled (see Table 6). However, recently (from 2017 to 2018), there has been a slight decrease in the number of employed physician assistants and nurse practitioners (21.8% and 5.4% decrease, respectively).[2]

Ratio of population to primary care physicians (2017):[3]

1,110:1

Kent County

1,280:1

Michigan

Ratio of population to other primary care providers† (2019):[2]

533:1

Kent County

944:1

Michigan

†includes nurse practitioners, physician assistants, and clinical nurse specialists

Dental Providers

Access to and utilization of preventive and dental care is a critical component of overall health, however there are significant income disparities in dental insurance coverage. This was reflected in the community health survey, with 44% of respondents indicating dental problems (e.g., cavities, or accessing dental care) are a pressing health issue. It was more likely to be reported by respondents who are older and have lower incomes.

The availability of dentists for the population is worse in Kent County than in Michigan.[3] However, employment of dental professionals (including dentists, dental assistants, and dental hygienists) in Grand Rapids has increased since 2005 (see Table 6).[2]

Ratio of population to dentists (2018):

1,390:1

Kent County

1,340:1

Michigan

[1] County Health Rankings, CMS National Provider Registry. (2019). *Additional measures: Other primary care providers.* Retrieved from https://www.countyhealthrankings.org/app/michigan/2019/.
[2] Linde, S., & Simons, G. (2020). *Health check: Analyzing trends in West Michigan 2020*. Seidman College of Business, Grand Valley State University. Retrieved from https://www.gvsu.edu/vphealth/health-check-65.htm.
[3] County Health Rankings, Area Health Resource File. (2018). *Health factors: Primary care physicians; Dentists.* Retrieved from https://www.countyhealthrankings.org/app/michigan/2019/measure/factors.

Mental Health & Substance Use Disorder Treatment Services

The number of mental health care providers has been increasing in both Kent County and the state of Michigan. In Kent County, the number of mental health providers increased by 50% from 2015 to 2019.[1]

Although the number of providers has increased, according to key stakeholders, accessibility to mental health and substance use disorder (SUD) services remains a challenge for Kent County residents.

According to the Substance Abuse and Mental Health Services Administration Treatment Locator, there are 29 substance use treatment facilities in Kent County. Additionally, there are 89 buprenorphine practitioners—providers who are licensed to treat opioid dependency with buprenorphine—an increase from 43 in 2017. [2] However, rural parts of Kent County, particularly northern Kent County, still lacks access to substance use treatment facilities, mental health services, and providers who are licensed to prescribe buprenorphine (see Figure 5).

Ratio of population to mental health providers (2019):

290:1

Kent County

370:1

Michigan

Awareness of Services

Survey participants were asked if they know how to access SUD treatment and/or support services in Kent County for themselves or others. Just **over half reported that they know where to find treatment** (54%) **and less than half reported knowing where to find support services** (45%). Ten percent of respondents did not know the difference between treatment and support services.

Routine Care[3]

Individuals who have a usual source of care are more likely to receive routine care, including health screenings and preventive services, timely intervention, and follow-up care. Overall, 87% of residents have a usual source of care. Those who do not have a personal health care provider are more likely to be younger, male, Hispanic/Latino, African American, and have lower socioeconomic status.

Similarly, visits to a primary care provider are an indicator of preventive health care access and utilization, which contribute to better health outcomes and health management. In Kent County, 81% of adults received a routine checkup within the past year. Females were much more likely to have had a recent checkup (86%) than males (76%). African American residents were also more likely to have had a recent checkup (93%) than White (81%) or Hispanic/Latino (74%) residents.

Actions Being Taken

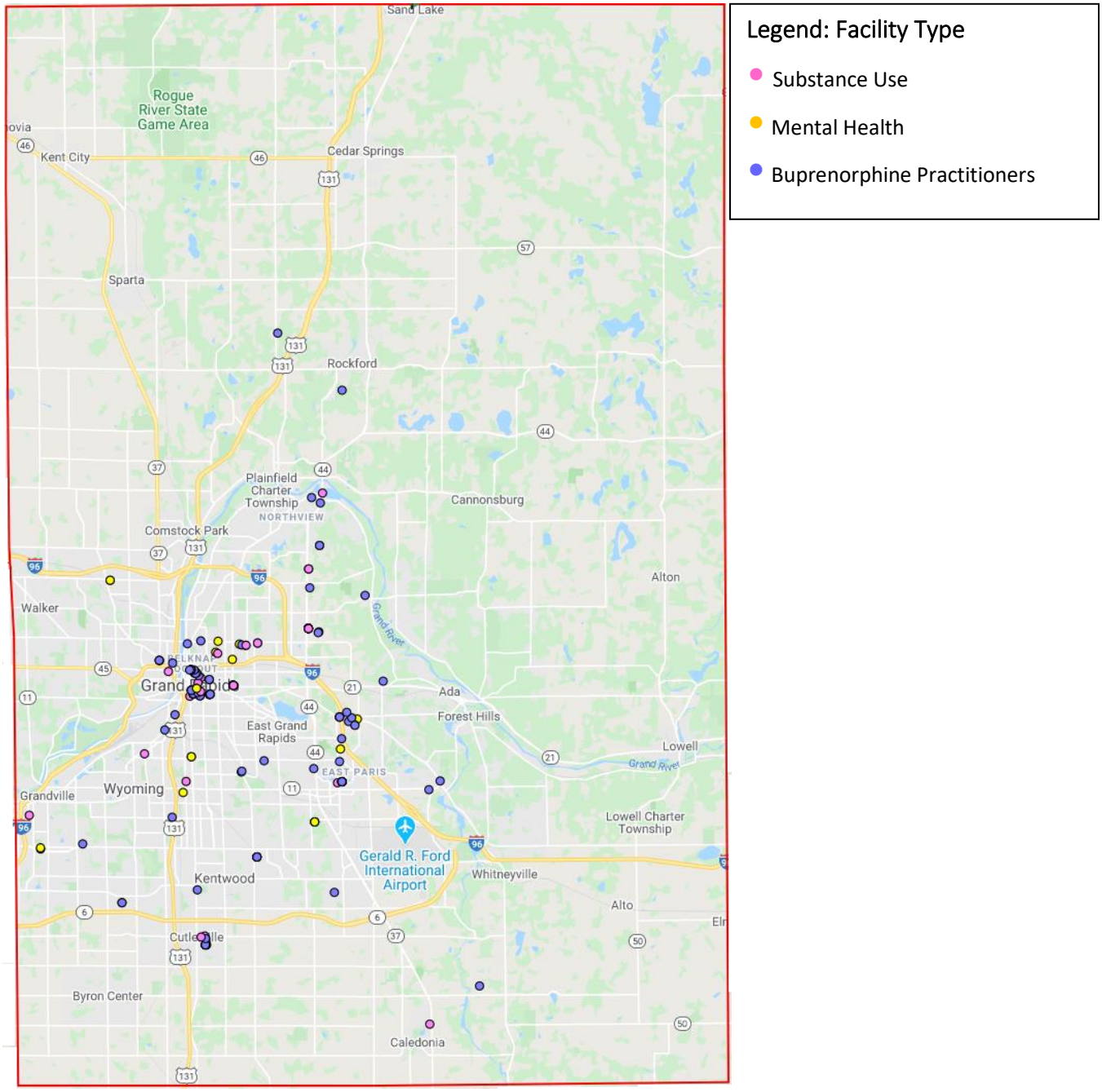
Key stakeholders agreed that geographic disparities exist in Kent County when accessing health care. According to stakeholders, local action is being taken to improve access to care for Kent County residents, including:

- Expanding virtual health care – offering behavioral health and medical appointments
- Streamlining Spectrum Health processes to improve access to primary care
    - Making it easier for people to get next-day appointments

[1] County Health Rankings, CMS National Provider Identification Registry. (2018). *Mental health providers.* Retrieved from https://www.countyhealthrankings.org/app/michigan/2019/measure/factors/62/data.
[2] Substance Abuse and Mental Health Services Administration. (2020). SAMHSA Treatment Locator. Retrieved from https://findtreatment.samhsa.gov/locator.
[3] Kent County Behavioral Risk Factor Surveillance System Survey, 2020.

- Restructured primary care practices so providers can see more new patients (approximately 7,500 new patients in a month without adding any FTEs)
- Team-based care and utilizing other medical providers (physician assistants, nurse practitioners, nurse midwives, etc.) to improve access to traditional primary care.

Figure 5. Availability of substance use treatment facilities, mental health providers and buprenorphine practitioners in Kent County, 2020.[1]



[1] Substance Abuse and Mental Health Services Administration. (2020). SAMHSA Treatment Locator. Retrieved from https://findtreatment.samhsa.gov/locator.

HOUSING

Among key stakeholders, housing was an area of major concern. They emphasized safe, affordable housing as a prerequisite to good health, quality education, and employment.

Poor-quality housing also has direct impacts on health. Unsafe or inadequate living environments contribute to health problems such as unintentional injuries, asthma, lead poisoning, and poor childhood development. Housing costs can also be a significant source of stress and poor mental health.

"It's hard to take care of yourself when you don't know where you're going to stay or where you're staying is not safe."

—Key Stakeholder

Homeownership

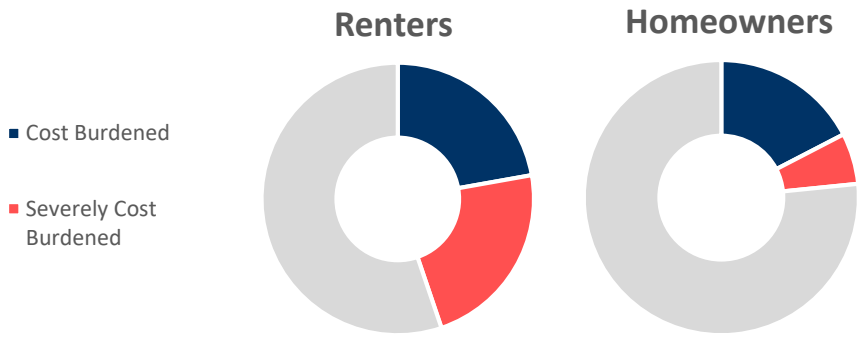
High levels of homeownership are associated with more stable housing and more tightly knit communities. Owning a home over time can also be an indicator of economic security by allowing individuals and families to build savings for education or other opportunities that are important for health and future family wealth.[1]

The rate of homeownership in Kent County is 69% and the majority of homeowners are White (88%). The median home value is $189,100 and has increased by 40% since 2013.[3]

Affordability

The U.S. Department of Housing and Urban Development (HUD) defines cost-burdened families as those who pay more than 30% of their income for housing. Severe housing cost burden is the percentage of households who pay more than 50% of their income on housing.[2] In Kent County, homeowners are much less likely to be cost burdened than renters. Almost half of renters paid at least 30% of their income in rent, compared to only a quarter of homeowners (see Figure 6). Cost-burdened individuals and families are often forced to make difficult trade-offs in meeting other basic needs such as health care, healthy food, and utility bills.[1]

Figure 6. Percent of renters and homeowners paying more than 30% of their income on housing costs[3]



[1] County Health Rankings. (2019). *Homeownership.* Retrieved from https://www.countyhealthrankings.org/app/michigan/2019/measure/factors/153/description.
[2] U.S. Department of Housing and Urban Development. (ND). *Rental burdens: Rethinking affordability measures.* Retrieved from https://www.huduser.gov/portal/pdredge/pdr_edge_featd_article_092214.html.
[3] U.S. Census Bureau. (2018). American Community Survey 5-Year Estimates, 2014-2018. Retrieved from https://www.socialexplorer. com/tables/ACS2018_5yr.

Overall, 8.0% of residents were unable to pay their mortgage, rent, or other bills in the past year. This is associated with lower education and income and younger age groups. African American and Hispanic/Latino residents were almost twice as likely to experience this financial strain compared to non-Hispanic White residents.

Key stakeholders discussed housing affordability as a concern particularly in Grand Rapids, where the economic prosperity and development is putting greater pressure on the housing market and pushing low- and middle-income individuals and families out of the city center and/or into older housing.

While the median rent in Grand Rapids is slightly higher than in Kent County, the median income for Grand Rapids residents is approximately 30% lower than the rest of the County.[1]

> "Housing for someone who makes too much for "low income" but cannot afford $1000 in rent, near my place of work. 50% of my take home pay went to rent, while making $15/per hour full time."
>
> *—Community Survey Respondent describing an unmet need*

Among community survey respondents, only 33% agreed that affordable housing is available. Nearly a third of respondents indicated they or their family faced problems or needs within the past year which they were unable to get help with and housing was the most frequently mentioned unmet need. Responses varied, but themes included:

- Homelessness
- Limited availability of low-income or Section 8 housing
- Finding housing that is affordable and safe
- Adequate housing for large families or individuals who are disabled
- Assistance with rent payment or eviction notices

Table 7. Percent of Kent County adults reporting financial difficulties related to housing[2]

Demographic Characteristics	Unable to pay mortgage/rent or bills in past year
Total	**8.0%**
Age	
18-24	10.1%
25-34	9.7%
35-44	8.1%
45-54	8.7%
55-64	6.4%
65+	3.8%
Gender	
Male	6.1%
Female	9.7%
Race/Ethnicity	
White	7.3%
Black	12.9%
Hispanic	12.1%
Non-Hispanic	7.6%
Education	
< High School	19.9%
High School Grad	12.4%
Some College	8.9%
College Graduate	2.9%
Household Income	
<$20,000	15.2%
$20,000-$34,999	17.3%
$35,000-$49,999	9.3%
$50,000-$74,999	2.3%
$75,000 or more	2.4%

[1] U.S. Census Bureau. (2018). American Community Survey 5-Year Estimates, 2014-2018. Retrieved from https://www.socialexplorer.com/tables/ACS2018_5yr.
[2] Kent County Behavioral Risk Factor Surveillance System Survey (BRFSS), 2020.

Safety

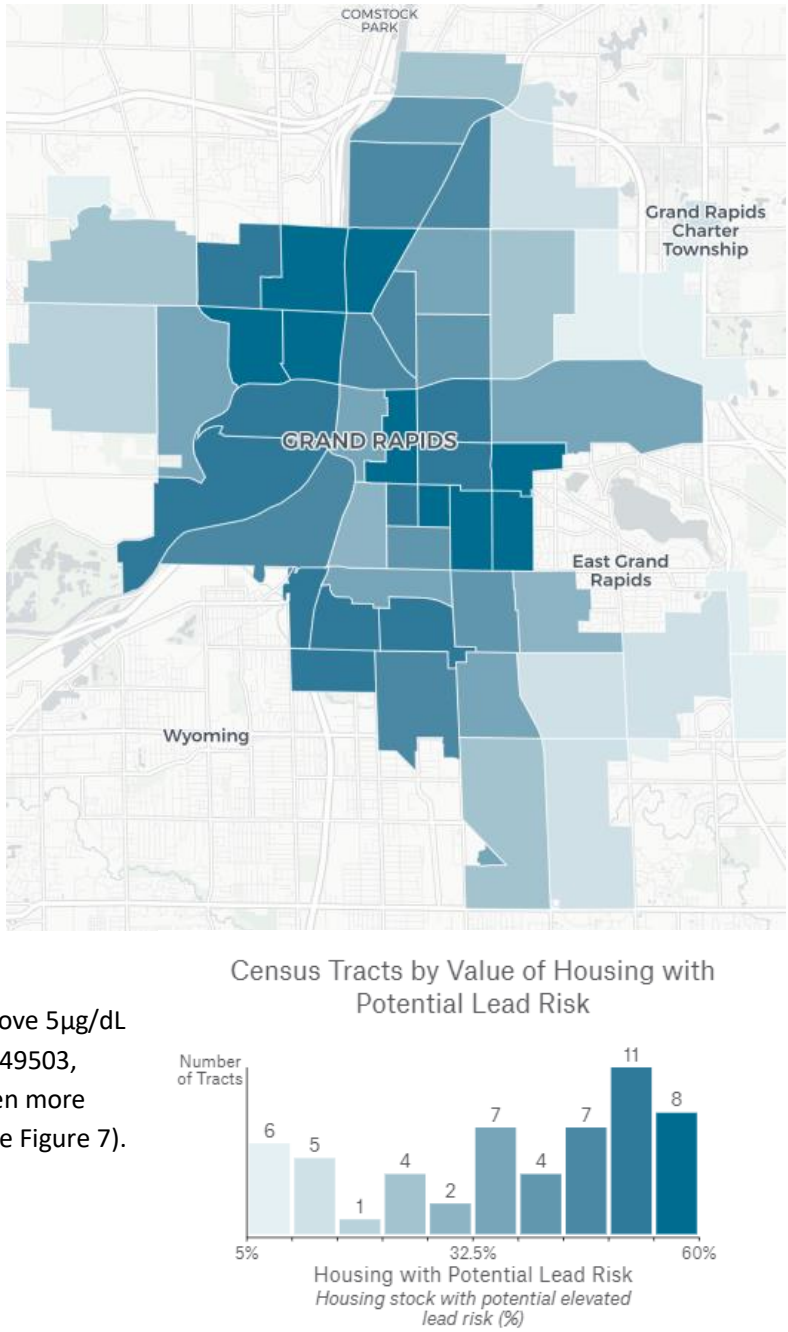
Childhood Lead Exposure

When children are exposed to lead in their homes there are typically no observable symptoms, so the exposure often goes unnoticed. Even low levels of lead exposure have been shown to affect IQ, ability to pay attention, and academic achievement. Because the effects of lead cannot be corrected, it's critical to prevent exposure before it occurs.[1]

One of the most common sources of lead exposure is from paint and dust in homes built before 1978. Children living at or below the poverty level in older housing are at the highest risk for lead poisoning. According to Michigan's Childhood Lead Poisoning Prevention Program, 18.8% of children under age six in Kent County were tested for lead exposure in 2016, lower than the state of Michigan's testing rate of 22.9%. Based on the CDC's reference for high blood lead levels (BLL) of five micrograms of lead per deciliter of blood, 6.1% of children who were tested in Kent County had BLL greater than or equal to 5µg/dL compared to only 3.6% of Michigan children who were tested.[2]

Sixty-five percent of children who tested at or above 5µg/dL BLL lived in one of three Grand Rapids zip codes: 49503, 49504, and 49507. Geographic disparities are even more apparent when disaggregated by census tract (see Figure 7).

Figure 7. Grand Rapids housing with potential lead risk, 2013-2017[3]



[1] Centers for Disease Control and Prevention. (ND). *Blood lead levels in children: What do parents need to know?* Retrieved from http://www.cdc.gov/nceh/lead/ACCLPP/Lead_Levels_in_Children_Fact_Sheet.pdf.

[2] Michigan Department of Health and Human Services, Childhood Lead Poisoning Prevention Program. (2016). Retrieved from https://mitracking.state.mi.us/?bookmark=11.

[3] City Health Dashboard. (2018). *Grand Rapids, MI: Lead exposure risk index*. Retrieved from https://www.cityhealthdashboard.com/mi/grand%20rapids/metric-detail?metric=48.

ECONOMIC SECURITY

Poverty & ALICE

Asset Limited, Income Constrained, Employed (ALICE) comprises households that earn more than the Federal Poverty Level (FPL) but less than the basic cost of living (the ALICE Threshold). In Michigan, 14% of households earn below the FPL and another 29% are ALICE.[1]

ALICE may be a better indicator of economic well-being than poverty level alone. Particularly because FPL is used to determine eligibility for some federal and state programs and benefits, which excludes many who are still low-income but do not quality for many public assistance programs. This is a major challenge for individuals and families who make too much to qualify for programs like Medicaid, food assistance, or housing assistance, but do not make enough to access health services, buy enough healthy food, or pay market price rent, placing a significant economic burden on a large segment of the population.

In Kent County, single adults need an annual salary of $21,624 and a family of four needs an annual salary of $64,788 just to afford the basics.† These cost of living estimates for Kent County are slightly higher than the Michigan state average of $21,036 for single adults and $61,272 for a family of four. The 2020 Federal Poverty Level is significantly lower—$12,760 for a single adult and $26,200 for a family of four. The estimated annual salary for single adults and families to afford basic needs falls outside of the upper income limit to qualify for Medicaid in Michigan, for example ($16,971 cap for single individuals and $34,846 cap for a family of four).[2]

The percentage of Kent County's population below the ALICE Threshold differs significantly based on geography. Ranging from 9% in Ada Township to 52% in the cities of Cedar Springs and Grand Rapids (see Table 8). Even within the city of Grand Rapids there are disparities between zip codes – 31% of the 49506 population is below the ALICE Threshold compared to 61% of 49507 residents.

Between 2010 and 2017, the basic cost of household expenses increased by 27% for a family of four and 26% for a single adult. In that same time, the FPL increased by 12% for a family of four and 11% for a single adult.

> "I think there are resource limitations in certain places and there's an overabundance of resources in other places and so, that's the real issue – if we're really thinking about the whole of Kent County there are the haves and the have nots, and it's very clear."
>
> *—Key Stakeholder*

[1] Michigan Association of United Ways. (2019). *ALICE in Michigan: A financial hardship study.* Available at https://www.unitedforalice.org/michigan.

† Basic expenses include housing, childcare, food, transportation, health care, miscellaneous, technology, and taxes. It does not include savings for emergencies or future goals like college.

[2] Office of the Assistant Secretary for Planning and Evaluation (ASPE). (2020). *HHS poverty guidelines for 2020*. Available at https://aspe.hhs.gov/poverty-guidelines.

Table 8. Percentage of population below the ALICE Threshold[1]

Geography	*Total HH*	*% ALICE + % Poverty*
Michigan	**3,935,132**	**43%**
Kent County 2017	**240,678**	**37%**
Ada Township	4,734	9%
Algoma Township	3,902	26%
Alpine Township	5,422	48%
Bowne Township	1,110	23%
Byron Township	8,271	33%
Caledonia Township	4,708	25%
Cannon Township	4,928	20%
Cascade Charter Township	6,916	15%
Cedar Springs City	1,269	52%
Courtland Township	2,733	18%
East Grand Rapids City	4,028	11%
Gaines Charter Township	9,397	33%
Grand Rapids Charter Township	6,310	17%
Grand Rapids City	73,434	52%
Grandville City	6,248	38%
Grattan Township	1,487	30%
Kentwood City	20,368	46%
Lowell Charter Township	2,506	33%
Lowell City	1,470	35%
Nelson Township	1,820	31%
Oakfield Township	2,191	25%
Plainfield Charter Township	12,921	32%
Rockford City	2,269	41%
Solon Township	2,547	35%
Sparta Township	3,367	45%
Spencer Township	1,561	40%
Tyrone Township	1,567	45%
Vergennes Township	1,452	16%
Walker City	10,078	43%
Wyoming City	27,915	46%

49503 = 57%
49504 = 50%
49505 = 50%
49506 = 31%
49507 = 61%

[1] Michigan Association of United Ways. (2019). *ALICE in Michigan: A financial hardship study.* Available at https://www.unitedforalice.org/michigan.

COMMUNITY SAFETY AND VIOLENCE

High levels of violent crime compromise physical safety and psychological well-being. Feeling unsafe can also deter residents from pursuing healthy behaviors, such as exercising outdoors. Exposure to crime and violence also increases stress, which may exacerbate hypertension and other stress-related disorders. Exposure to chronic stress, particularly among children, contributes to increased risk for certain chronic diseases.[1]

Community Safety

In Kent County, 5.0% of residents consider their neighborhood unsafe. Those with lower household incomes are more likely to consider their neighborhood unsafe – particularly among the lowest income earners (i.e., below $20,000 per year), with 12.3% believing their neighborhood is unsafe.[2]

Violence & Crime

According to the Michigan State Police, there were 12,817 violent and property crimes committed in Kent county during 2018. The majority of which (81%) were property crimes including burglary, larceny, and motor vehicle theft.[3] Of all violent crimes committed (murder, rape, robbery, and aggravated assault), 60% were aggravated assault.

Violence was a major health concern for 64% of community survey respondents, specifically:

- Bullying/cyberbullying, harassment (38.2%)
- Gun violence (37.5%)
- Domestic violence (33.2%)
- Sexual violence or assault (30.4%)

Bullying & Cyberbullying

Bullying is a form of youth violence and childhood adversity that can be physical, verbal (e.g., teasing, verbal or written threats), and social (e.g., excluding someone, spreading rumors). Bullying can result in physical injury, social and emotional distress, self-harm, and even death. It increases the risk for depression, anxiety, lower academic achievement, and dropping out of school. Youth who bully others are at increased risk for substance use, academic

Community Perceptions

The community health survey asked respondents about their perceived reliability of emergency responders in their community and their level of comfort interacting with police or other public safety officers. Overall, perceptions were positive, however there were notable differences based on the respondent's race/ethnicity.

90% agreed there was reliable 24-hour police, fire, and emergency medical services available

90% of White respondents
88% of African American respondents
81% of Hispanic/Latino respondents

82% felt comfortable interacting with police or other public safety officers

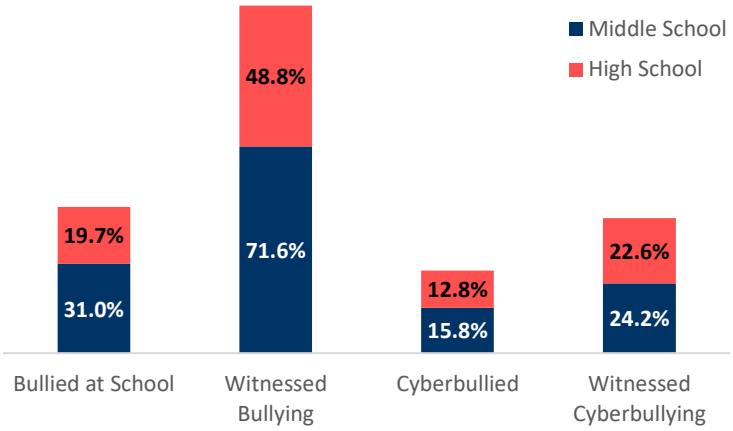
90% of White respondents
67% of African American respondents
70% of Hispanic/Latino respondents

[1] County Health Rankings. (2020). *Health factors: Violent crime.* Retrieved from https://www.countyhealthrankings.org/app/michigan/2020.
[2] Kent County Behavioral Risk Factor Surveillance System Survey (BRFSS), 2020.
[3] Michigan State Police. (2018). *Michigan Incident Crime Reporting, 2018 Violent and Property Crimes by County, City/Township.* Retrieved from https://www.michigan.gov/documents/msp/q_Violent_Property_Crimes_661320_7.pdf.

problems, and experiencing violence later in life. Youth who bully others and are bullied themselves suffer the most serious consequences and are at greater risk for mental health and behavioral problems.[1]

In Kent County, middle school-aged youth report being bullied and seeing others bullied at a higher rate than high school youth (see Figure 8).[2] A much higher percentage of youth reported witnessing others being bullied or cyberbullied than being bullied themselves. This suggests that bullying is underreported among youth.

Figure 8. Youth reporting bullying or cyberbullying in the past year, 2018-2019



Gun Violence

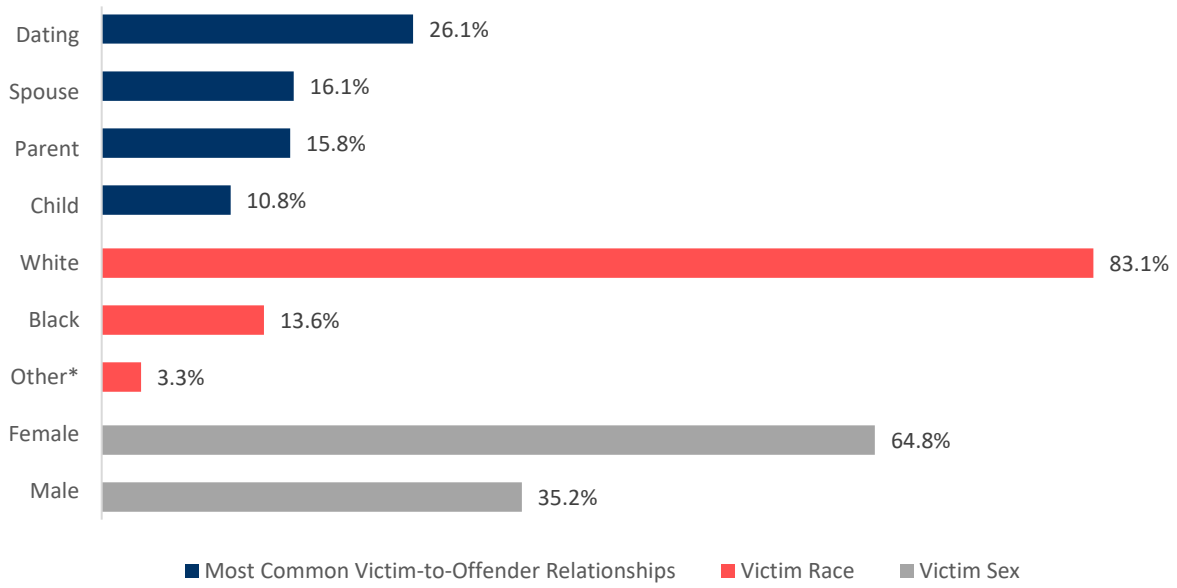
In 2018, the age-adjusted mortality rate due to firearm-related injuries was 6.5 per 100,000—about half the Michigan rate of 12.9.[3] Although roughly 38% of all survey respondents identified gun violence as an issue in their community, 58% of African American respondents identified gun violence as a pressing community health issue.

Domestic Violence

In Kent County, domestic violence is most likely to occur among couples who are dating and spouses. Of reported offenses in 2018, the majority of victims were White and female (see Figure 9).[4] The community health survey revealed that African American respondents (50%) and those under age 25 (47%) selected domestic violence as a pressing health problem in their community more often than other racial and age groups.

[1] Centers for Disease Control and Prevention. (2019). *Violence prevention: Preventing bullying.* Retrieved from https://www.cdc.gov/violenceprevention/youthviolence/bullyingresearch/fastfact.html.
[2] Michigan Department of Education. Michigan Profile for Healthy Youth, violence, 2018-2019.
[3] Centers for Disease Control and Prevention, National Center for Health Statistics. (2018). *Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released in 2020*. Data are from the Multiple Cause of Death Files, 1999-2018, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved from http://wonder.cdc.gov/ucd-icd10.html.
[4] Michigan State Police. (2018). *Michigan Incident Crime Reporting, 2018 Domestic Violence.* Retrieved from https://www.michigan.gov/documents/msp/I_Domestic_Violence_661305_7.pdf.

Figure 9. Domestic violence in Kent County, 2018



*Other victim race includes American Indian/Alaskan Native, Asian, and Unknown.

CHILDHOOD TRAUMA

Trauma occurs when a child experiences an intense event that threatens or causes harm to his or her emotional and physical well-being. When children and adolescents are exposed to strong, frequent and/or prolonged adversity, they can develop a toxic stress response. Toxic stress (as opposed to positive or tolerable stress, forms that can be healthy and promote resilience) is characterized by the prolonged activation of the body's stress response system, which can disrupt brain development and other organ systems.[1]

Early research measured the effects of Adverse Childhood Experiences (ACEs) on health and found that as the number of ACEs increases, so does the risk of poor health outcomes, including chronic disease (e.g., diabetes, heart disease, and cancer), substance use, and depression.[2]

ACEs include abuse (physical, emotional, sexual), neglect (physical, emotional), and household dysfunction, such as domestic violence, divorce, loss of a parent due to death or incarceration, mental illness, or substance use in the household. However, community environments can also expose children to toxic stress. Things like growing up in poverty, witnessing community violence, being bullied at school, or surviving a natural disaster can all be sources of toxic stress with lifelong impacts.

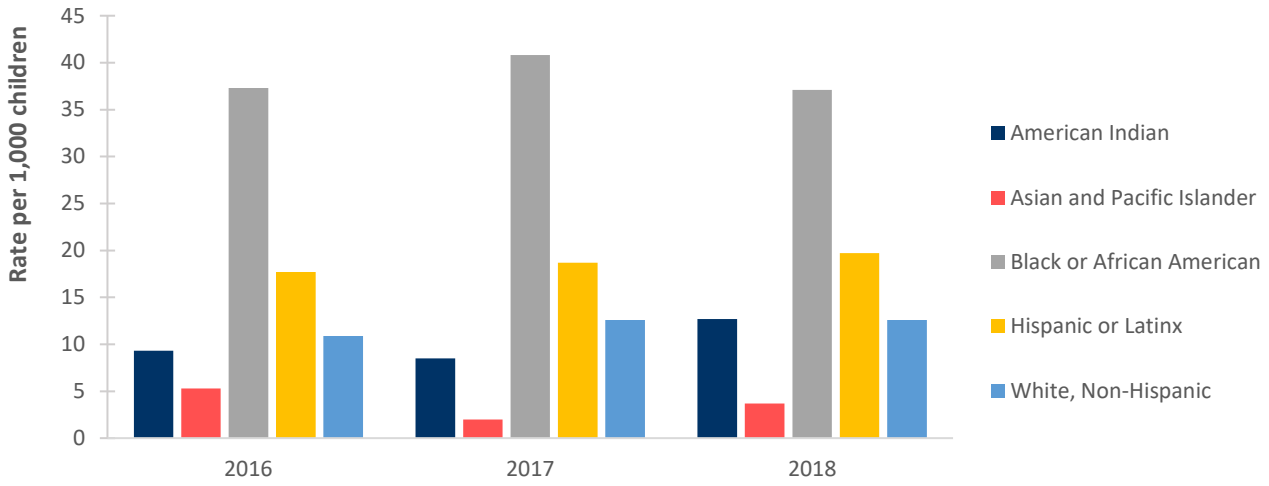
[1] Harvard University Center on the Developing Child. (ND). *Toxic stress.* Retrieved from https://developingchild.harvard.edu/science/key-concepts/toxic-stress/.
[2] Centers for Disease Control and Prevention. (2020). *Preventing Adverse Childhood Experiences.* Retrieved from https://www.cdc.gov/violenceprevention/childabuseandneglect/aces/fastfact.html.

Identified by the Community

Child trauma was a pressing health issue for 46% of survey respondents, ranking 7th overall. Among African American respondents, child trauma was the third most pressing health issue, selected by 61% of respondents.

The rate of child abuse and neglect in Kent County continues to be slightly higher than the state average (19.0 and 18.5 per 1,000, respectively). In 2018, half of all confirmed cases in Kent County were among children age 0-5. There are clear racial disparities, as shown in Figure 10, most notably among African Americans, where the rate is nearly three times that of non-Hispanic Whites.[1]

Figure 10. Confirmed victims of abuse/neglect among Kent County children age 0-17, by race/ethnicity, 2016-2018[1]



STRESS

Stress was selected as a pressing health problem by 51% of survey respondents. It was selected more often by respondents who are African American (68%) than those who are White (47%) or Hispanic/Latino (45%). Income was also associated with stress as a major problem. Among respondents with less than $20,000 in household income, 63% selected stress, compared to 45% of respondents from all other income brackets combined.

As previously mentioned, stress affects everyone from time to time but chronic stress and prolonged anxiety, insecurity, low self-esteem, social isolation and lack of control over work and home life have powerful effects on health. Such psychosocial risks accumulate during life and increase the risk for developing many different health conditions.[2] People with greater socioeconomic advantage (e.g., with more education, higher incomes and/or greater wealth) may be more likely to experience stress in ways that have beneficial effects on their health, like being able to

[1] Annie E. Casey Foundation, Kids Count Data Center. (2018). *Selected indicators for Kent County, Michigan.* Michigan Department of Health and Human Services, Children's Protective Services. Retrieved from https://datacenter.kidscount.org.
[2] World Health Organization. (1998). *Social determinants of health: The solid facts.* Retrieved from https://apps.who.int/iris/bitstream/handle/10665/108082/e59555.pdf;jsessionid=AC5A42C2981F2E6044AD08A16D77C6CA?sequence=1.

adapt to changes and cope with challenges. Conversely, those with less education and lower incomes typically face more frequent and numerous stressors in many aspects of their lives, while at the same time having more limited social and material resources for coping.[1]

According to the 2020 BRFSS, 10.2% of adults reported being stressed all or most of the time during the past 30 days. Stress was reported more frequently among those who are White (10.4%) compared to African American and Hispanic/Latino (7.6% and 6.7%, respectively). The likelihood of being stressed all or most of the time is inversely proportional to both age and income, with younger and lower income groups reporting stress more often than their counterparts.[2]

PHYSICAL ACTIVITY

According to County Health Rankings, 92% of the population in Kent County has adequate access to locations for physical activity. However, there are numerous real and perceived barriers that may contribute to lack of access in some communities. For example, parks may be unsafe or have different levels of amenities, or varying walkability between communities.

Approximately one quarter of Kent County residents report no leisure-time physical activity. This is the highest proportion to date (since 2002) and for the first time, surpassed state and national levels of adults reporting no leisure-time physical activity. The increase is driven by young adults (age 18-24), Hispanic/Latinos, and those with less than a high school education.[2] Reported physical activity is higher among middle and high school-age youth. Just less than half of middle school students and 40% of high school students were physically active for at least 60 minutes per day on five or more of the past seven days. However, they reported spending more time per day sedentary. Half of middle and high schoolers played video or computer games and approximately one-quarter watched tv for three or more hours per day on an average school day.[3]

Among survey respondents, frequently reported barriers to being physically active include:

- Lack of time (41%)
- Lack of energy (41%)
- Cost (31%)
- Existing health problems such as shortness of breath or joint pain (22%)

'Nearby parks' was the number one community strength, according to survey respondents. In general, most agreed that their parks are clean and safe, there are enough parks and places for recreation, and that it is easy to walk, bike or exercise in their community. However, only 58% thought their parks were smoke-free.

When discussing access to green spaces, stakeholders had differing opinions. Some considered the recreation opportunities available as a strength of Kent County, while others were concerned about the lack of easy access to

[1] Robert Wood Johnson Foundation. (2011). How social factors shape health: The role of stress. *Issue Brief Series: Exploring the Social Determinants of Health*. Available at http://www.nmpha.org/Resources/Documents/RWJF%20Issue%20Brief%20-%20Stress%20_%20Health.pdf.
[2] Kent County Behavioral Risk Factor Surveillance System Survey (BRFSS), 2020.
[3] Michigan Department of Education. Michigan Profile for Healthy Youth, physical activity, 2018-2019.

open spaces. One key stakeholder described new green spaces being added but noted that they were not necessarily being built within geographic proximity to the communities that could benefit the most.

SUBSTANCE USE

Substance use is the consumption of alcohol or drugs. Substance use disorders (SUD) occur when frequent or repeated use of alcohol, drugs, or both causes significant behavioral, physical, social, and psychological impairments. The effects of substance use and SUD contribute heavily to the burden of disease in the United States. It is often a comorbidity (i.e., occurring at the same time) of mental health disorders. SUDs are preventable and treatable, however many people do not receive the treatment they need.[1]

Identified by the Community

73% of survey respondents selected at least one of the substance use behaviors as a pressing health problem in their community.

- Alcohol (heavy use or dependency) – 38%
- Vaping or e-cigarette use – 36%
- Illegal substance use – 36%
- Prescription medication use – 34%
- Adult tobacco use – 28%
- Marijuana use – 26%
- Teen tobacco use – 25%
- Alcohol (underage binge or heavy use) – 21%

Alcohol Use

Alcohol use disorder is the most common SUD among adults in the U.S. In Kent County, the rate of heavy drinking is the highest it's been since 2008 (2.1%) but still significantly lower than state and national levels (6.4% and 6.5%, respectively). The binge drinking rate in Kent County (15.8%) is closer to the state and national levels (18.2% and 16.2%, respectively).[2]

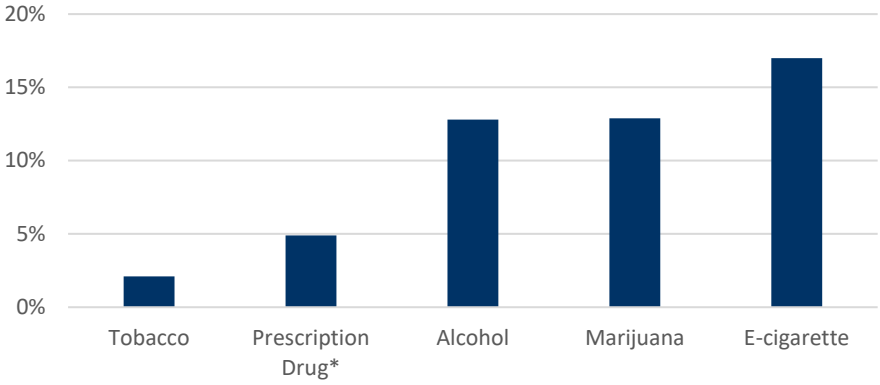
Vaping and E-Cigarette Use

Electronic cigarettes (or e-cigarettes) produce aerosol by heating up a liquid that usually contains nicotine. E-cigarette use has spiked in recent years, particularly among youth. In 2018, more than 3.6 million middle and high school students in the U.S. used e-cigarettes in the past 30 days—including one in five high school students.[3] In Kent County, e-cigarette use is the most common substance used among high schoolers. In the 2018-2019 school year, 17% of 9th and 11th Grade students had used an e-cigarette in the past 30 days (see Figure 11). Since they

18% of survey respondents agreed to some extent that e-cigarettes or vapes are safer and better for a person's health than tobacco cigarettes.

[1] Substance Abuse and Mental Health Services Administration National Survey on Drug Use and Health. (2017). *Trends in substance use disorders among adults aged 18 or older.* Retrieved from https://www.samhsa.gov/data/sites/default/files/report_2790/ShortReport-2790.html.
[2] Kent County Behavioral Risk Factor Surveillance System Survey (BRFSS), 2020.
[3] Centers for Disease Control and Prevention. (2020). *Smoking and tobacco use: Electronic cigarettes.* Retrieved from https://www.cdc.gov/tobacco/basic_information/e-cigarettes/index.htm.

Figure 11. Percentage of 9th and 11th Graders in Kent County reporting substance use during the past 30 days[1]



are a newer product, research on the potentially harmful effects was limited until more recently, after an outbreak of lung injuries and deaths associated with the use of some e-cigarette and vaping products.

*Prescription drug not prescribed to them, including painkillers

Illegal Substance Use and Prescription Medication Use

Opioid use disorder continues to be one of the most pressing substance use disorders affecting the U.S. As a result of the opioid epidemic, a targeted effort has been made across the country, and particularly in Kent County, to reduce the number of opioids circulating in the community and expand Medication Assisted Treatment (MAT) for people with an opioid use disorder. In Kent County, opioid prescriptions are at their lowest level since 2006 (when data became available). In 2018, there were 55.3 prescriptions per 100 people, much lower than the state average of 74.2.[2] However, after a drop in opioid-related overdose deaths in 2018 (from 104 in 2017 to 65), there was a slight increase in 2019 with 79 opioid-related overdose deaths in Kent County.[3]

Tobacco Use

A total of 13.5% of Kent County adults are current smokers, down from 15.4% in 2017. This positive change is driven mostly by a decrease in the proportion of current smokers among younger people, males, Hispanic/Latinos, and those with a college education. The prevalence of current smokers in Kent County is lower than the state and national prevalence (18.9% and 16.1%, respectively).[4]

Marijuana Use

Recreational marijuana use was legalized in the state of Michigan in 2018, although it remains illegal at the federal level. Use is increasing while the perception of how harmful marijuana use can be is declining. According to SAMHSA, one in 10 adults who use marijuana can become addicted. This rate is even higher for adolescents, for which one in six who start using before age 18 can become addicted.[5]

Over half

of survey respondents agreed to some extent that addiction to marijuana is less harmful and safer than addiction to other drugs or substances.

One-third

did not think a person who uses marijuana could become addicted.

[1] Michigan Department of Education. (2019). Michigan Profile for Healthy Youth, alcohol and other drugs, 2018-2019. Retrieved from https://mdoe.state.mi.us/schoolhealthsurveys/ExternalReports/CountyReportGeneration.aspx.
[2] *Centers for Disease Control and Prevention, Opioid Overdose. U.S. County Prescribing Rates (2017-2018). Available at* https://www.cdc.gov/drugoverdose/maps/rxrate-maps.html.
[3] Kent County Health Department. (2020). *Kent County Opioid Surveillance.* Retrieved from https://www.accesskent.com/Health/pdf/KCOTF/Opioid_Surveillance_Monthly.pdf.
[4] Kent County Behavioral Risk Factor Surveillance System Survey (BRFSS), 2020.
[5] Substance Abuse and Mental Health Services Administration. (2019). *Public Messages: Know the Risks of Marijuana*. Retrieved from https://www.samhsa.gov/marijuana.

In Kent County, 16.1% of Kent County adults reported using marijuana at least once in the past 30 days. This is highest among those age 18-34, where nearly one in three reported recent use.[1] Among high school students in Kent County, 12.9% report having used marijuana in the past 30 days (see Figure 11).

Key Stakeholders

Key stakeholders almost exclusively discussed opioid and prescription medication substance use disorders and described local action have been taken to address this community priority, including:

- **Increasing the capacity of providers to manage SUD** through education and awareness of their opioid prescribing habits, rolling out evidence-based prescribing guidelines, and establishing teams to provide support and tool kits to providers who are new to prescribing
- **Expanding MAT** and putting more than 100 primary care providers through training to receive a license to prescribe the opioid-reducing medication Suboxone
- **Reducing opioid prescriptions and preventing unnecessary exposure in the emergency room setting**
- **Distributing Naloxone emergency kits in the emergency department** to individuals who are at a greater risk of overdose and providing Naloxone education to the family and friends of the patient
- **Streamlining access to resources** to quickly identify where to send someone for recovery when they have self-identified

Future Action

- Hiring more professionals with lived experience to help people navigate some of the mental health and SUD issues
- Shifting focus to address the social determinants of health

> "[S]imply offering recovery services without addressing those very social factors that have helped to create that, I think is an exercise in futility as a health care system. […] We have a shifting perspective that's occurring within Spectrum Health—our desire to become more of an anchor institution of health within our own communities—[it's] going to allow us to become more active, I think, in addressing that social milieu."
>
> *—Key Stakeholder*

[1] Kent County Behavioral Risk Factor Surveillance System Survey (BRFSS), 2020.

DISCRIMINATION

Racial and ethnic health disparities have repeatedly been observed in the U.S., and perceptions of racial-ethnic discrimination have been linked with poorer mental and physical health outcomes, even after considering other risk factors. This may be attributable to the stress related to living in a society with a legacy of racial discrimination.[1] The internal experiences of racism and survival strategies employed by individuals to cope with overt and covert forms of racism have received little attention. They are, however, a contributing factor to health outcomes and health disparities, including factors such as sleep difficulties, obesity, or hypertension.[2]

Within the past 12 months, 3.1% of Kent County residents felt they were treated worse at work than people of other races. When seeking health care, 1.5% felt their experiences were worse than for people of other races. In both cases, African Americans (10.2 and 5.1%, respectively) and Hispanic/Latinos (3.9 and 7.3%, respectively) were much more likely to have had these experiences recently.

Within the past month, 2.6% have experienced physical symptoms, such as a headache, upset stomach, tensing of muscles, or a pounding heart due to how they were treated based on their race. Moreover, 6.3% have felt emotionally upset—angry, sad, or frustrated—as a result of how they were treated based on their race. African Americans and females were more likely to report physical symptoms, while Hispanic/Latinos and males were more likely to experience emotional effects, compared to their counterparts.[3]

FOOD INSECURITY & NUTRITION

Poor nutrition includes consuming unhealthy foods—whether by choice or necessity—as well as food insecurity, or not having enough food. Access to food is impacted by proximity of grocery stores and affordability of healthy food.

Food Insecurity

In 2017, 11.3% of the Kent County population was considered food insecure (i.e., lacking adequate access to food). Among children in Kent County, this rate is higher (12.8%).[4] According to a recent local survey on food security in Kent County, residents around the urban core of Grand Rapids and in northern Kent County rated the availability of fresh fruits and vegetables as low (i.e., less than half of the people have enough fruits and vegetables). The same survey also indicated that the top challenges that keep people from eating fresh fruits and vegetables include:[5]

- Cost

[1] Robert Wood Johnson Foundation. (2011). *Race, socioeconomic factors and health.* Issue Brief 6. Retrieved from https://www.rwjf.org/en/library/research/2011/04/race-and-socioeconomic-factors-affect-opportunities-for-better-h.html.
[2] Powell, L. R., Jesdale, W. M., Lemon S. C., *On Edge: The Impact of Race-Related Vigilance and Obesity Status in African-Americans*, Obesity Science & Practice, 2016.
[3] Kent County Behavioral Risk Factor Surveillance System Survey (BRFSS), 2020.
[4] Feeding America. (2017). *Child food insecurity in Kent County.* Retrieved from https://map.feedingamerica.org/county/2017/child/michigan/county/kent.
[5] Luchies, L., Pendery, A., & Rudi, A. (2019). *Kent County community food survey: Findings, challenges, and opportunities.* Calvin College Center for Social Research. Retrieved from https://public.tableau.com/profile/center.for.social.research#!/vizhome/KentCountyCommunityFoodSurveyDataViz/Welcome.

- Too busy to cook/prepare
- Lack of fresh produce in neighborhood
- Work schedule makes it to difficult
- Too busy to shop for them

Nutrition

More than one-third of adults consume fruit less than one time per day, and nearly one-fifth consume vegetables less than one time per day—and improvement since 2017.[1] These rates observed in Kent County closely reflect the state and national prevalence data. Lowest fruit and vegetable consumption continues to be reported by individuals with a high school diploma or less and those with lower incomes.

Sugar-Sweetened Beverage Consumption

Overall, 21.4% of adults consume soda or sugar-sweetened fruit drinks at least once per day. African Americans and Hispanic/Latinos were much more likely to report sugar-sweetened beverage consumption (28.5% and 32.5%, respectively) than Whites (19.4%). Consumption at least once a day is also inversely proportional to educational attainment.[25] Sugar-sweetened beverage consumption among middle and high school youth is similar to that of the adult population (19.7% and 18.4%, respectively).[2]

Table 9. Kent County residents experiencing food insecurity in the past year[3]

Demographic Characteristics	Often did not have money to buy more food	Often did not have money for balanced meals
Total	**3.7%**	**4.2%**
Age		
18-24	6.2%	9.2%
25-34	4.4%	4.4%
35-44	5.0%	3.4%
45-54	2.7%	4.7%
55-64	2.8%	2.4%
65+	1.6%	1.5%
Gender		
Male	2.8%	4.1%
Female	4.6%	4.3%
Race/Ethnicity		
White	3.4%	4.4%
Black	6.2%	4.9%
Hispanic	5.5%	4.7%
Non-Hispanic	3.6%	4.2%
Education		
< High School	10.6%	12.7%
High School Grad	5.4%	8.8%
Some College	4.8%	3.7%
College Graduate	0.9%	0.6%
Household Income		
<$20,000	9.6%	7.1%
$20,000-$34,999	9.6%	10.2%
$35,000-$49,999	1.6%	4.2%
$50,000-$74,999	0.8%	0.7%
$75,000 or more	0.4%	1.0%

Key Stakeholders

Key stakeholders agreed that food insecurity and access to affordable healthy food is a problem in Kent County with geographic disparities depending on the zip code.

Action Being Taken

- Partnering with community organizations
- Providing financial support for the work that's being done to provide food resources
- Strategically placing registered dieticians in soup kitchens and food pantries to increase the nutritional content of food offered
- Continuing education initiatives for low-income families, including a culinary medicine program to teach youth and families how to make meals that are healthy and inexpensive.

[1] Kent County Behavioral Risk Factor Surveillance System Survey (BRFSS), 2020.
[2] Michigan Department of Education. Michigan Profile for Healthy Youth, weight and nutrition, 2018-2019.

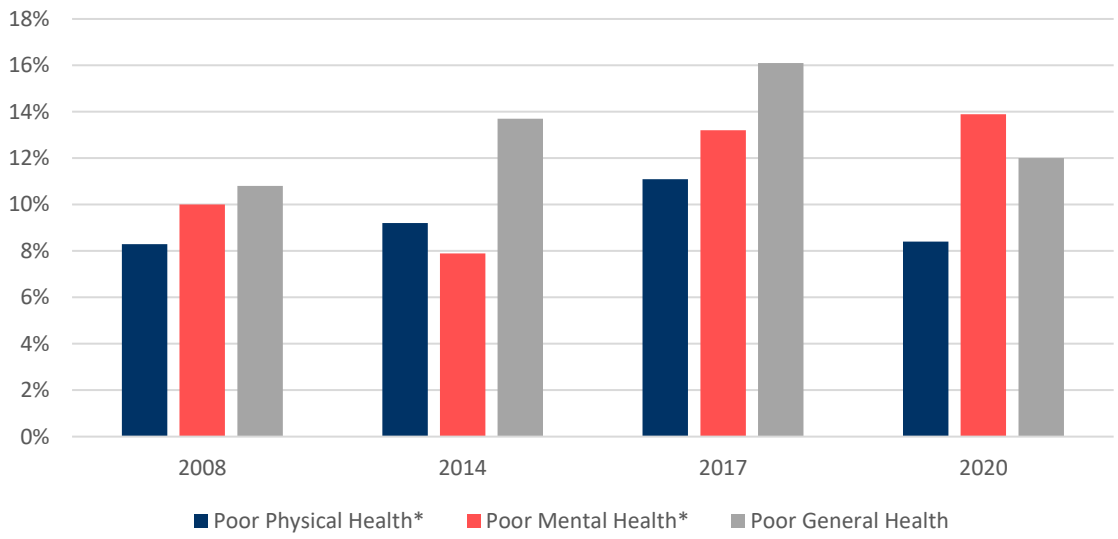
MORBIDITY & MORTALITY

Self-Reported Health Status

General health status is a reliable self-rated assessment of one's perceived health, which may be influenced by all aspects of life, including behaviors, environmental factors, and community. Self-rated general health status is useful in determining unmet health needs, identifying disparities among subpopulations, and characterizing the burden of disease and overall well-being within a population.[1]

Only 12% of Kent County residents report fair or poor general health – a rate which is notably below the Michigan and nationwide figures (19.3% and 17.3%, respectively). In Kent County, poor general health continues to be reported at higher rates among older adults (21.5%), African Americans (22.2%), those with less than a high school education (24.7%), and those with less than $50,000 in annual household income (16.9-24.1%).

Figure 12. Self-reported health status, among Kent County adults 2008-2020[1]



*Adults who reported 14 or more days of poor physical/mental health

Mental Health

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and cope with challenges. Mental illness is a broad term that covers a range of conditions affecting mood, emotion, thinking, and behavior. Common conditions include depression, anxiety, and addiction. As with many diseases, mental illness can be mild or severe.[2] There are multiple factors that contribute to mental health conditions. Genetics, environment, and lifestyles often influence whether someone develops a mental health condition and things like stress and traumatic life events make some people more

[1] Kent County Behavioral Risk Factor Surveillance System Survey (BRFSS), 2020.

[2] American Psychiatric Association. (2018). *What is mental illness?* Retrieved from https://www.psychiatry.org/patients-families/what-is-mental-illness.

susceptible.[1] Mental health conditions can be treated or successfully managed, however, stigma and lack of access to services are significant barriers to obtaining treatment.

Identified by the Community

Overall, 78% of survey respondents selected mental health, stress, or suicide as a pressing health problem in their community.

- Mental health among adults – 57%
- Mental health among teens – 52%
- Stress – 51%
- Suicide – 28%

Mental Health Status[3]

Overall, 13.9% of Kent County residents report having 14 or more days of poor mental health within the past 30 days. Although the total has remained relatively stagnant over the past three years, the prevalence of poor mental health has increased substantially among young adults (age 18-24) from 17.7% in 2017 to 30.2% in 2020. The prevalence of poor mental health among African American residents, however, is decreasing. In 2017, 15% of reported 14 or more days of poor mental health compared to 7.6% in 2020.

Among the LGBTQ population in Kent County, nearly one third reported 14 or more poor mental health days.

Nearly a quarter (23.7%) of residents have been told by a doctor that they had a depressive disorder (including depression, major depression, dysthymia) or minor depression. The likelihood of this diagnosis is inversely proportional to age and income level, with younger and less affluent individuals being most likely to suffer from depression.

Suicide

Suicide is the 10th leading cause of death in Michigan and the US, and the 8th leading cause of death in Kent County (see Table 13). Hopelessness is a risk factor of all three types of suicidal behaviors (completed suicide, suicide attempts, and suicidal ideation). A total of 3.8% of Kent County residents report feeling hopeless all or most of the time during the past 30 days. Hopeless feelings are higher among younger respondents, particularly those age 18-24, as well as non-college graduates and lower income earners (i.e., those making less than $50,000 per year).[2]

Stigma & Community Perceptions

Stigma is a significant barrier to people seeking treatment for mental health conditions. The majority (65%) of Kent County adults think that people are generally caring and sympathetic to people with mental illness. And a small percentage (3.5%) did not agree that treatment can help people with mental illness lead normal lives. Younger people (age 18-24) and those with less than a high school education are most likely to disagree with this statement (8.1% and 9.5%, respectively).[2]

> **"...[W]e need to remove or reduce the stigma of behavioral health [and] mental health or mental health issues so that people feel more comfortable talking about it."**
>
> *– Key Stakeholder*

[1] National Alliance on Mental Illness (NAMI). (2020). *Mental health conditions.* Retrieved from https://www.nami.org/learn-more/mental-health-conditions.

[2] Kent County Behavioral Risk Factor Surveillance System Survey (BRFSS), 2020.

Most people who responded to the community survey thought it was beneficial to talk about their mental health with others and expressed interest in education on mental health topics. "When to seek help" was the most frequently selected education topic desired (66% of respondents), and people expressed an interest in topics related to taking action (e.g., how to access services, how to address mental health crises) more often than topics related to information (e.g., how trauma impacts mental health, information about self-harm and suicide). However, 42% selected every topic, suggesting a need for broad mental health education within the community. Most survey respondents also thought children should start becoming educated on mental health before 5th Grade.

Systems-Level Challenges

Key stakeholders discussed the challenges of addressing mental health from the systems-level perspective, including inefficient and fragmented reimbursement system for community mental health compared to traditional medical care.

> "[I]f behavioral health was paid for across the country like open heart surgery was, or orthopedic surgery, we'd have [a lot] more behavioral health infrastructure, research, and access to providers without a doubt."

Stakeholders linked the state and insurance funding systems to the lack of mental health resources and shortage of appropriate providers in Kent County. Both factors that make it difficult to address mental health "upstream" by embedding social workers and others in various systems to address problems early, as opposed to waiting until medication or hospitalization is needed. The shortage of appropriate providers puts a strain on emergency departments and primary care providers – particularly among the pediatric population – who are often lack the support and training to serve as mental health workers.

Action being taken

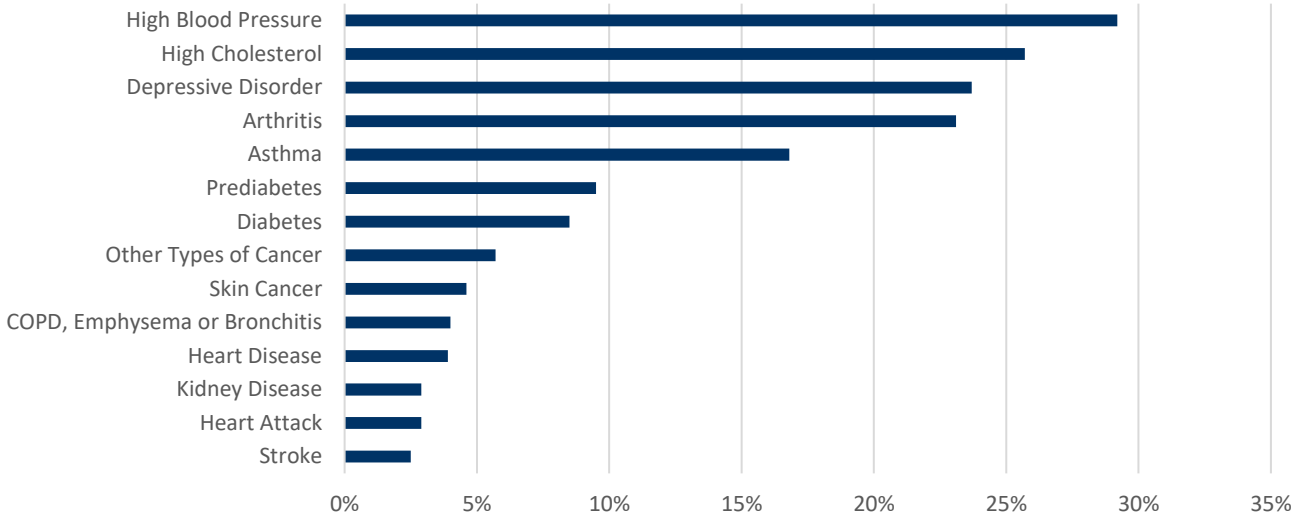
- Workforce development – effectiveness of suicide prevention training
- Creating a mental health crisis system in partnership with other health systems
- Added behavioral health appointments to virtual care system (telemedicine) to expand access to mental health providers

Action needed

- Increase the number of qualified health professionals
- Deliver mental health care upstream (e.g., in schools, other systems, etc.)
- Public policy advocacy focused on funding for behavioral health and changes to the reimbursement system

Disease Prevalence[1]

Figure 13. Self-reported diagnosis of prominent health conditions, 2020



Heart Disease

Heart disease is the leading cause of death in Kent County, Michigan, and the U.S. In 2020, 3.9% of Kent County adults had been told at some point that they had angina or coronary heart disease, a decrease from 6.4% in 2017. This positive change is mostly a result of observable drop in the reported incidence of heart disease among the lowest education and income segments. A total of 2.9% of adults were told they have had a heart attack. Unsurprisingly, both rates were highest among those age 65 and older.

Stroke

Overall, 2.5% of Kent County adults have been told by a doctor that they have had a stroke, a decrease from 5.2% of adults in 2017. The decrease is attributable mainly to lower incidence of stroke among males, African Americans, and those in the very bottom income and education categories.

Asthma

Asthma rates have been increasing over the past 20 years in Kent County. The largest spike in asthma prevalence (those who have ever had asthma) occurred in the past three years—increasing from 12.1% to 16.8%. The percentage of those who still have asthma increased from 7.3% to 10.4%. Higher asthma prevalence is associated with lower household income and younger age groups.

Arthritis

Arthritis is a leading cause of disability, and over half of people living with this condition say it interferes with their daily activities. Nearly a quarter of all adults in Kent County and over half of adults age 65 and older have been told they have had some form of arthritis. It's generally more prevalent among females, non-Hispanic/Latino adults.

Diabetes

[1] Kent County Behavioral Risk Factor Surveillance System Survey (BRFSS), 2020.

The prevalence of diabetes among Kent County adults (8.5%) is at its lowest since 2014 and well below the state and national rates (11.7% and 11.0%, respectively). This decrease is attributable to lower rates among adults under age 65, males, African Americans, Hispanic/Latinos, and those in the lower education and income brackets. Even with this decrease, African Americans are still more likely to have been diagnosed with diabetes (15.9%) than other racial groups (e.g., 8.1% among Hispanic/Latinos), however, they are also more likely to have received a diabetes test within the past three years.

Table 10. Self-reported diagnosis of prominent health conditions by demographic characteristics[1]

	Depressive Disorder	Arthritis	Asthma	Prediabetes	Diabetes	Other Cancer	Skin Cancer	COPD, Emphysema or Chronic Bronchitis	Heart Disease	Kidney Disease	Heart Attack	Stroke
United States	**19.6%**	**26.1%**	**14.7%**	**11.0%**	**11.0%**	**7.1%**	**6.3%**	**6.4%**	**4.3%**	**2.9%**	**4.6%**	**3.4%**
Michigan	**23.2%**	**32.1%**	**16.0%**	**6.8%**	**11.7%**	**7.7%**	**6.4%**	**8.6%**	**5.0%**	**3.5%**	**5.3%**	**3.4%**
Kent County	**23.7%**	**23.1%**	**16.8%**	**9.5%**	**8.5%**	**5.7%**	**4.6%**	**4.0%**	**3.9%**	**2.9%**	**2.9%**	**2.5%**
Demographic Characteristics												
Age												
18-24	36.7%	3.9%	20.6%	9.0%	2.7%	--	1.4%	1.3%	--	1.3%	--	--
25-34	22.0%	2.6%	22.6%	1.5%	--	--	1.4%	0.7%	--	1.2%	0.8%	--
35-44	23.5%	14.3%	18.2%	7.5%	3.4%	4.0%	0.6%	2.6%	0.8%	1.3%	1.5%	0.5%
45-54	22.3%	31.5%	16.1%	13.5%	10.1%	7.0%	3.4%	3.3%	0.9%	2.4%	1.3%	0.5%
55-64	24.8%	35.0%	14.3%	13.8%	13.4%	6.1%	7.9%	5.6%	1.6%	5.0%	3.1%	2.9%
65+	16.9%	53.1%	8.5%	15.5%	23.2%	18.0%	14.3%	11.3%	13.6%	6.7%	10.9%	6.9%
Gender												
Male	18.4%	18.9%	13.4%	9.5%	7.6%	3.8%	3.7%	2.8%	4.8%	1.8%	2.8%	2.2%
Female	28.8%	27.0%	20.0%	9.6%	9.3%	7.6%	5.5%	5.0%	3.0%	3.9%	2.9%	2.8%
Race/Ethnicity												
White	25.5%	24.8%	17.6%	9.1%	7.6%	6.1%	5.5%	4.5%	4.0%	2.5%	3.2%	2.4%
Black	16.0%	24.8%	16.1%	17.4%	15.9%	5.4%	0.3%	4.3%	4.6%	4.8%	2.9%	4.1%
Hispanic	16.4%	13.0%	10.6%	9.8%	8.1%	2.5%	--	1.1%	1.8%	3.4%	0.9%	3.0%
Non-Hispanic	24.5%	24.1%	17.4%	9.5%	8.5%	6.0%	5.0%	4.2%	4.0%	2.6%	3.0%	2.5%
Education												
< High School	23.2%	17.8%	17.3%	5.7%	14.9%	4.9%	1.0%	4.9%	1.2%	3.5%	2.6%	3.0%
High School Grad	23.0%	22.6%	18.1%	10.4%	9.5%	4.8%	5.4%	5.6%	3.7%	2.4%	3.5%	3.4%
Some College	28.0%	26.3%	17.7%	10.7%	11.1%	6.3%	3.5%	5.3%	6.7%	3.9%	3.3%	3.2%
College Graduate	21.2%	21.7%	15.4%	8.8%	5.0%	6.0%	5.5%	1.9%	2.8%	2.4%	2.2%	1.6%
Household Income												
<$20,000	30.3%	25.0%	25.2%	12.3%	11.8%	5.2%	3.9%	4.9%	4.9%	2.4%	3.9%	4.1%
$20,000-$34,999	30.5%	32.2%	17.5%	11.8%	13.6%	9.7%	3.0%	7.4%	5.4%	5.3%	5.0%	5.6%
$35,000-$49,999	28.1%	30.4%	17.5%	10.5%	9.5%	7.3%	8.2%	7.8%	5.3%	4.4%	4.9%	1.1%
$50,000-$74,999	25.6%	26.6%	13.3%	9.7%	6.6%	4.1%	3.3%	2.7%	3.9%	3.6%	2.3%	1.4%
$75,000 or more	14.0%	15.5%	13.9%	5.5%	4.8%	4.3%	4.5%	1.1%	1.1%	1.1%	0.6%	1.1%

[1] Kent County Behavioral Risk Factor Surveillance System Survey, 2020.

Risk Factors for Chronic Diseases and Leading Causes of Death

Aside from behavioral risk factors, such as tobacco use, alcohol consumption, and physical inactivity, health conditions are also known to increase the risk of developing chronic disease.

Hypertension and Cholesterol

Hypertension (high blood pressure) and high cholesterol are both risk factors for heart disease and stroke. Nearly a third (29.2%) of all adults in Kent County were told by a doctor that they have had high blood pressure, and a quarter (25.7%) have been told they have had high cholesterol. The American Heart Association recommends that adults have their cholesterol checked with a blood test every four to six years. In Kent County, only 10.3% of adults reported not having had their cholesterol checked in the past five years. Both hypertension and high cholesterol are associated with age. African Americans are the most likely to have high blood pressure whereas non-Hispanic and White adults are most likely to have high cholesterol compared to other racial groups.

Obesity

Obesity increases the risk for many health conditions including poor mental health status, diabetes, heart disease, stroke, hypertension, cancer, liver and gallbladder disease, sleep apnea, respiratory problems, and osteoarthritis.[2] Obesity is generally indicative of poor diet and limited physical activity, but genetics and environment can also play a role. Adult and child obesity are top health concerns for 47% and 41% of community survey respondents, respectively. In Kent County, obesity rates continue to increase among adults and youth.

Table 12. Obesity rates among Kent County youth and adults, by year

Year	Youth[3]		Adults[1]
	Middle School	High School	
2014	9.7%	11.4%	27.6%
2016/2017	11.4%	12.5%	32.0%
2019/2020	16.8%	19.1%	34.0%

Table 11. Select risk factors by demographic characteristics[1]

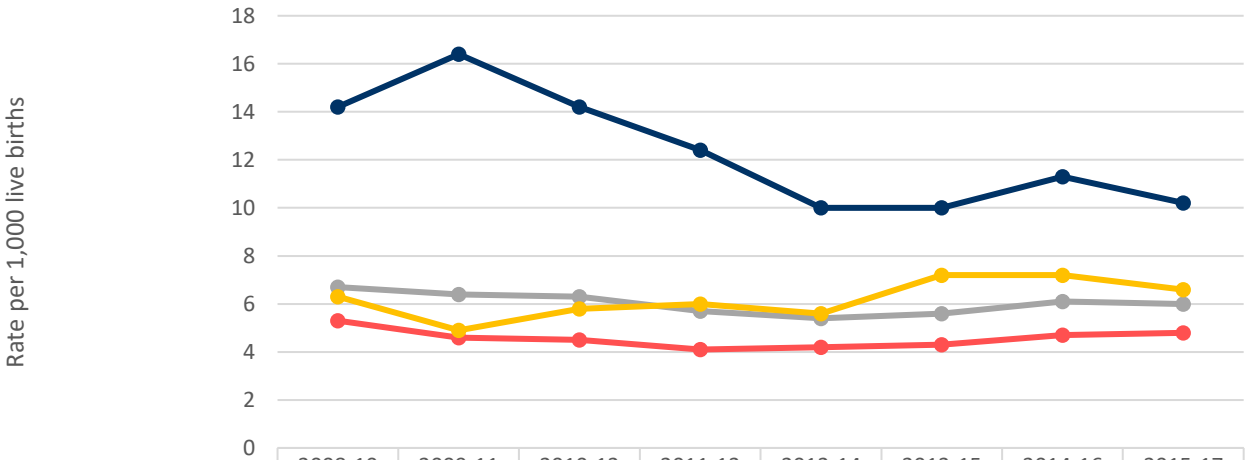
	High Blood Pressure	High Cholesterol	Cholesterol Not Checked Past 5 Years
United States	**32.3%**	**33.0%**	**13.8%**
Michigan	**34.7%**	**35.1%**	**10.8%**
Kent County	**29.2%**	**25.7%**	**10.3%**
Demographic Characteristics			
Age			
18-24	8.8%	10.2%	24.1%
25-34	10.1%	3.9%	13.1%
35-44	20.0%	21.6%	11.8%
45-54	30.7%	31.9%	7.5%
55-64	46.3%	38.1%	3.6%
65+	61.8%	45.3%	2.1%
Gender			
Male	29.7%	27.3%	10.3%
Female	28.8%	24.1%	10.4%
Race/Ethnicity			
White	28.5%	27.3%	10.2%
Black	49.5%	22.7%	6.5%
Hispanic	17.8%	19.3%	21.2%
Non-Hispanic	30.5%	26.1%	9.1%
Education			
< High School	40.6%	27.4%	20.8%
High School Grad	32.2%	23.9%	11.5%
Some College	30.2%	24.6%	12.5%
College Graduate	25.0%	27.3%	6.4%
Household Income			
<$20,000	31.9%	27.8%	12.2%
$20,000-$34,999	37.1%	26.4%	10.8%
$35,000-$49,999	30.8%	36.1%	13.6%
$50,000-$74,999	29.1%	28.0%	7.0%
$75,000 or more	23.0%	20.4%	7.6%

[1] Kent County Behavioral Risk Factor Surveillance System Survey (BRFSS), 2020.
[2] County Health Rankings. (2020). *Adult obesity.* Retrieved from https://www.countyhealthrankings.org/app/michigan/2019/measure/factors/11/datasource.
[3] Michigan Department of Education. Michigan Profile for Healthy Youth, weight and nutrition, 2018-2019.

Infant Mortality

Infant mortality rate (IMR) is defined as the number of deaths of children before one year of age. It is an important measure of community health because it reflects the health of the mother and infant during pregnancy and the year thereafter. Factors impacting maternal and infant health (and IMR) include access to prenatal care, prevalence of prenatal health behaviors (such as alcohol or tobacco use and proper nutrition during pregnancy), postnatal care and behaviors (such as childhood immunizations and nutrition), sanitation, and infection control.[1] Persistent racial disparities in IMR are also indicative of health and socioeconomic inequities within communities. In Kent County the African American IMR is roughly twice that of the non-Hispanic White IMR. This disparity is also observed at the national level.

Figure 14. Kent County infant mortality rate over time, by race, 2008-2018[2]



	2008-10	2009-11	2010-12	2011-13	2012-14	2013-15	2014-16	2015-17
Kent County Overall	6.7	6.4	6.3	5.7	5.4	5.6	6.1	6.0
Non-Hispanic White	5.3	4.6	4.5	4.1	4.2	4.3	4.7	4.8
Non-Hispanic Black	14.2	16.4	14.2	12.4	10.0	10.0	11.3	10.2
Hispanic	6.3	4.9	5.8	6.0	5.6	7.2	7.2	6.6

Life Expectancy at Birth

An expected result of positive health outcomes is higher life expectancy. In Kent County, average life expectancy is 79.9 years, but lower for African American residents (75.4) than for White (80.2) and Hispanic/Latino (84.4) residents.[3]

[1] Centers for Disease Control and Prevention. (2012). *Mortality Frequency Measures.* Retrieved from https://www.cdc.gov/csels/dsepd/ss1978/lesson3/section3.html.
[2] United States Department of Health and Human Services (US DHHS), Centers of Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics (DVS). Linked Birth / Infant Death Records 2007-2017, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program, on CDC WONDER On-line Database. Retrieved from http://wonder.cdc.gov/lbd-current.html.
[3] County Health Rankings. (2020). *Additional Measures: Length of life.* Retrieved from https://www.countyhealthrankings.org/app/michigan/2019.

Leading Causes of Death

Table 13. Number of deaths and age-adjusted mortality rates for the ten leading causes of death, Kent County and Michigan 2018, and United States residents, 2017.[1]

Michigan Rank & Cause of Death	Number of Deaths			Age-adjusted Mortality Rate per 100,000		
	Kent County	Michigan	United States	Kent County	Michigan	United States
All Causes of Death	4,932	98,985	2,813,503	701.2	783.1	731.9
1. Heart Disease	1,204	25,345	647,457	168.2	194.9	165.0
2. Cancer	1,028	21,025	599,108	143.6	161.1	152.5
3. Chronic Lower Respiratory Diseases	272	5,783	160,201	38.6	44.2	40.9
4. Unintentional Injuries	303	5,564	169,936	44.8	52.1	49.4
5. Stroke	233	5,180	146,383	33.3	39.9	37.6
6. Alzheimer's Disease	346	4,474	121,404	48.6	34.3	31.0
7. Diabetes Mellitus	81	2,824	83,564	11.9	21.9	21.5
8. Kidney Disease	45	1,943	50,633	7.0	15.0	13.0
9. Pneumonia/Influenza	90	1,871	55,672	12.8	14.5	14.3
10. Suicide	86	1,547	47,173	13.2	15.0	14.0

Inequities in Mortality

Age-adjusted death rates in Kent County are higher among African Americans (988.5 per 100,000) than non-Hispanic Whites (691.0 per 100,000) and Hispanic/Latinos (478.9 per 100,000). When rates are disaggregated by gender, there is further evidence of inequity. African American men in Kent County have an age-adjusted death rate of 1,220.4 compared to 796.7 among White men and 571.0 among Hispanic/Latino men. Similarly, African American women in Kent County have a higher age-adjusted mortality rate (816.4) than White women (601.8) and nearly twice that of Hispanic/Latino women (405.2).[2†]

DISSEMINATION PLAN

The IRS requires non-profit health systems to make the CHNA report widely available to the public. The Kent County Health Department will share findings of this report with the community partners who were involved in the CHNA process. This report will also be available to the public on Spectrum Health's website www.SpectrumHealth.org.

[1] Geocoded Michigan Death Certificate Registry. (2018). Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services.

[2] Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released in 2020. Data are from the Multiple Cause of Death Files, 1999-2018, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved from http://wonder.cdc.gov/ucd-icd10.html.

† All rates are per 100,000

Inquiries about this report or its contents can be directed to:

Maris Brummel, MPH
Epidemiologist
Kent County Health Department
Maris.Brummel@kentcountymi.gov
(616)632-7177

APPENDIX A: COMMUNITY INPUT – PUBLIC HEALTH STAKEHOLDERS

Partner Engagement: Survey Distribution

The Kent County Health Department team solicited a select number of community partners to assist with survey distribution. Partners were chosen based on organizational services in attempts to reach residents who face the greatest health challenges and/or inequities.

Arbor Circle
Cherry Health
Disability Advocates of Kent County
Exalta Health
Family Outreach Center
Freedom Flight Refugee Taskforce
The Grand Rapids RED Project
Health Net of West Michigan
Kent County Home Visiting Programs
Kent County Infant Health Action Team
Kent County Veteran's Services
Kentwood Public Schools
Recovery Allies of West Michigan
Recovery Infused Yoga Center
Spectrum Health Healthier Communities
United Church Outreach Ministries

Partner Engagement: Survey Development

Organizational representation from the community health improvement plan (CHIP) workgroups:

Access of West Michigan
Aspire Academy
Cherry Health
Community Members (3)
Family Outreach Center
Fit Kids 360
Forest View Hospital
The Grand Rapids RED Project
Health Net of West Michigan
Healthy Kent
Heart of West Michigan United Way
Kent County Health Department
Mental Health Foundation
Mercy Health
Molina Healthcare

Next Gen
North End Wellness Coalition
Recovery Allies of West Michigan
Spectrum Health Healthier Communities

Key Stakeholders' Community Involvement

The key stakeholders who were interviewed for this assessment hold board member positions for multiple local and state agencies, community organizations, and coalitions.

Business Leaders for Michigan
Degage Ministries
Fifth Third Bank Western Michigan
Gerald R. Ford Foundation
Grand Rapids Economic Club
Grand Valley State University Health Advisory Board
Health Net of West Michigan
Heart of West Michigan United Way
Junior Achievement of the Michigan Great Lakes
Kent County Opioid Taskforce
Kent School Services Network
Michigan Center for Clinical Systems Improvement
Michigan Health & Hospital Association
Michigan State University Healthcare Management Advisory Board
Scottsdale Institute
The Right Place
YMCA of Greater Grand Rapids

APPENDIX B: COMMUNITY-IDENTIFIED PRIORITIES, RANKED

Health Issue	N (280 total)	%
Ability to pay	192	68.6%
Mental Health	174	62.1%
Obesity	146	52.1%
Stress	144	51.4%
Poor nutrition/eating habits	140	50.0%
Violence	140	50.0%
Child trauma/ACEs	128	45.7%
Oral health	122	43.6%
Substance use (illegal or prescription medication)	120	42.9%
Alcohol use	117	41.8%
Lack of physical activity	114	40.7%
Bullying/cyberbullying, harassment	107	38.2%
Diabetes	106	37.9%
Vaping or e-cigarette use	102	36.4%
Tobacco use	91	32.5%
Chronic disease	89	31.8%
Reckless or distracted driving	84	30.0%
Lack of transportation	82	29.3%
Aging problems	78	27.9%
Suicide	77	27.5%
Marijuana use	74	26.4%
Infectious disease	61	21.8%
Sexual health care	58	20.7%
Sexually transmitted infections	55	19.6%
Lead poisoning or exposure	43	15.4%
Asthma	42	15.0%
Injuries	37	13.2%
Lack of prenatal care	33	11.8%
Not getting vaccinations	32	11.4%

Limitations

The list of health topics that survey respondents were given to indicate the most pressing issues in their community had several inconsistencies. First, community partners noted that a limitation of the 2017 CHNA was the lack of specificity surrounding the health priorities. To better understand specific issue areas within the known priorities, some health-related issues were very specific (e.g., substance use of illegal substances), while others were left in broad terms (e.g., chronic disease such as heart disease, cancer, etc.). The broad issues were still included to account for potential shifts in the community's priorities. The list also included social determinants (e.g., lack of transportation to health services), health behaviors (e.g., reckless or distracted driving), as well as health conditions (e.g., diabetes).

Despite these limitations, findings provide useful insight into the importance of health-related factors in vulnerable communities compared to health conditions. It also provides specificity that was previously lacking for the health issues that have been county priorities for the past six years.

APPENDIX C: COMMUNITY HEALTH SURVEY DEMOGRAPHICS

Respondent demographics and socioeconomic characteristics compared to the general Kent County population[1]

Demographic Characteristic	Survey respondents (%)	Kent County (%)
Age		
Under 18	1.1%	24.6%
18-24	10.2%	9.7%
25-34	34.5%	15.5%
35-44	17.1%	12.4%
45-54	15.9%	12.7%
55-64	13.6%	12.3%
65-74	7.6%	7.4%
75+	0	5.5%
Gender		
Female	82.9%	50.8%
Male	15.6%	49.3%
Other*	1.5%	N/A
Race/Ethnicity		
American Indian and Alaska Native	1.9%	0.2%
Asian	1.5%	3.0%
Black or African American	24.8%	9.3%
Hispanic or Latino	19.9%	10.5%
Some Other Race	1.5%	0.1%
Two or More Races	3.0%	2.9%
White	54.5%	74.0%
Disability Status†		
Some disability	17.4%	8.5%

*Other categories for survey respondents include transgender, unsure, and prefer not to say.

†Including physical, visual, auditory, or mental. Percent for Kent County only includes those under age 65.

[1] U.S. Census Bureau. (2018). American Community Survey 5-Year Estimates, 2014-2018. Retrieved from https://www.socialexplorer.com/tables/ACS2018_5yr.

Socioeconomic Characteristic	Survey respondents (%)	Kent County (%)
Education		
Less than High School	9.8%	9.7%
High School Graduate (or equivalent)	23.0%	24.5%
Some College (no degree)	22.3%	30.7%
Associate Degree or Technical Certification	7.9%	N/A
Bachelor's Degree	19.6%	23.2%
Graduate Degree or Higher	17.4%	12.0%
Employment Status		
Employed	63.9%	65.6%
Unemployed	7.5%	3.3%
Not in Labor Force†	28.6%	31.1%
Household Income		
Less than $20,000	33.2%	13.4%
$20,000-$34,999	22.1%	14.6%
$35,000-$49,999	12.6%	13.7%
$50,000-$79,999*	14.9%	19.5%*
$80,000-$99,999**	6.1%	13.7%**
$100,000-$119,999***	6.1%	9.1%***
$120,000 or more****	5.0%	16.2%****
Marital Status		
Single/Never Married	42.2%	34.5%
Married	42.5%	49.1%
Domestic Partnership	4.5%	N/A
Separated	1.9%	1.1%
Widowed	1.9%	4.8%
Divorced	5.6%	10.5%
Other	1.5%	N/A

†Survey respondents who selected: unemployed and not currently job searching; unable to work; retired; homemaker or stay-at-home parent; or other are not in the labor force.

*Census category is $50,000-$74,999

**Census category is $75,000-$99,999

***Census category is $100,000-$124,999

****Census category is $125,000 or more

APPENDIX D: COMMUNITY HEALTH SURVEY INSTRUMENT

Kent County Community Health Survey

Share your voice!

The Kent County Health Department would like to hear about your opinions and experiences on health and wellbeing in your community. Your responses will help us better understand the community's needs and how to improve health and quality of life for those who live, work, learn, and play in Kent County.

Your participation is voluntary, and your survey answers are confidential. No identifying information, such as your name or address, is required to complete the survey. Upon completion, you may collect a $10 Meijer gift card from the representative who gave you the survey.

You will be asked to sign a form, acknowledging that you received a gift card. Only your name and signature are required on the form and it will be stored in a secure file, separate from your completed survey to keep your responses confidential.

The survey will take about 15 minutes to complete. Thank you for your time and participation.

Community

The following questions will ask about your opinions of and experiences within your community, or the area where you spend most of your time – where you live, learn, work, or play. Community can have different meanings; some view their community as their neighborhood block, and some view it as their entire city or town.

Please answer the following questions based on what you consider your community.

1. How long have you lived in your community?

- O Less than 2 years
- O 2 – 5 years
- O 6 – 10 years
- O More than 10 years

Thinking about your community, please rate the extent to which you agree or disagree with the following statements by checking the appropriate box.

2. Social Cohesion	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	Don't Know
My community offers enough arts and cultural events	O	O	O	O	O	O	O
Cultural diversity is valued	O	O	O	O	O	O	O
People are socially connected	O	O	O	O	O	O	O
There are support networks for individuals or families during times of stress or need	O	O	O	O	O	O	O
3. Safety	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	Don't Know
I feel safe in my community	O	O	O	O	O	O	O
We have reliable 24-hour police, fire, and emergency medical services	O	O	O	O	O	O	O
I feel comfortable interacting with a police officer or other public safety officer	O	O	O	O	O	O	O
There is discrimination in my community	O	O	O	O	O	O	O

4. Recreation and Nutrition	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	Don't Know
My community is kept clean	O	O	O	O	O	O	O
It is easy to walk, bike, or exercise in my community	O	O	O	O	O	O	O

There are enough parks and other places for recreational activities	O	O	O	O	O	O	O
Our parks are clean and safe	O	O	O	O	O	O	O
Our parks are smoke-free	O	O	O	O	O	O	O
It is easy to access grocery stores	O	O	O	O	O	O	O
It is easy to access affordable healthy food	O	O	O	O	O	O	O
5. Economic Wellbeing	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	Don't Know
There are enough job opportunities in or near my community	O	O	O	O	O	O	O
The job opportunities in my community provide a living wage (i.e., enough income to meet basic needs)	O	O	O	O	O	O	O
There are opportunities for workforce development/job skills training	O	O	O	O	O	O	O
There are affordable options for childcare in my community	O	O	O	O	O	O	O
There is enough public transportation available	O	O	O	O	O	O	O
Affordable housing is available	O	O	O	O	O	O	O

6. In your community, there are enough programs, services, and support available for…

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	Don't Know
Aging adults	O	O	O	O	O	O	O
Children with special needs	O	O	O	O	O	O	O
Low-income individuals/families	O	O	O	O	O	O	O
Non-English speakers	O	O	O	O	O	O	O
Pregnant women	O	O	O	O	O	O	O
Men/Fathers	O	O	O	O	O	O	O
Refugees	O	O	O	O	O	O	O
Immigrants	O	O	O	O	O	O	O
People with physical disabilities	O	O	O	O	O	O	O
People with other disabilities (learning, psychological, or medical)	O	O	O	O	O	O	O

People experiencing homelessness	O	O	O	O	O	O	O
People that identify as lesbian, gay, or bisexual	O	O	O	O	O	O	O
People that identify as transgender	O	O	O	O	O	O	O
Veterans	O	O	O	O	O	O	O
Youth and teens during non-school hours	O	O	O	O	O	O	O

7. Are there other populations or groups of people in the community for which programs or support services are lacking?

O No

O Yes (please specify) _____

_____

8. What do you think are the **most pressing health problems** in your community? Select all that apply.

O Ability to pay for health care
O Alcohol – heavy use or dependency
O Alcohol – underage binge or heavy use
O Aging problems (such as hearing/vision loss, living independently, etc.)
O Asthma
O Bullying/cyberbullying/harassment
O Child trauma (such as abuse, neglect, or household dysfunction)
O Chronic disease (such as heart disease, cancer, etc.)
O Dental problems (such as cavities, access to dental care, etc.)
O Diabetes
O Infectious disease (such as the flu, pneumonia, etc.)
O Injuries (such as falls, motor vehicle accidents, etc.)
O Lack of physical activity
O Lack of prenatal care
O Lack of transportation to health services
O Lead poisoning or exposure
O Marijuana use
O Mental health among adults
O Mental health among teens
O Not getting vaccinations/shots
O Obesity in adults
O Obesity in children and teens
O Poor nutrition or eating habits
O Reckless or distracted driving
O Sexual health (such as access to contraceptives)
O Sexually transmitted infections (such as chlamydia, syphilis, HIV, etc.)
O Stress
O Substance use – prescription medication
O Substance use – illegal substances

- O Suicide
- O Tobacco use among adults
- O Tobacco use among teens
- O Vaping or e-cigarette use
- O Violence – domestic violence
- O Violence – gun violence
- O Violence – sexual violence or sexual assault
- O Other (please describe) _____

9. What are the top **five** strengths of your community? Select only five.

- O Acceptance of others
- O Access to healthcare
- O Arts, cultural, or entertainment events
- O Availability of healthy, affordable food
- O Clean environment
- O Diversity, equity and inclusion
- O Economic prosperity (job security/living wage)
- O Good place to raise children
- O Good place to retire
- O Good schools
- O Job opportunities
- O Locally-owned businesses
- O Nearby parks
- O Quality and affordable housing
- O Reliable public transportation
- O Public safety
- O Social networks and support
- O Strong religious or spiritual values
- O Other (please describe) _____

Personal Opinions and Experiences

The following questions ask about your own opinions and experiences related to health and wellbeing. Please answer to the best of your ability.

10. Were there any problems or needs that you or your family faced within the past year that you were unable to get help with?

- O No
- O Yes (please describe) _____

  _____

11. Please rate the extent to which you agree or disagree with the following statements

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree	Don't Know

It is easy to understand health information that is given to me	O	O	O	O	O	O	O
I would feel comfortable talking honestly with medical providers about the things I do that could affect my health (such as smoking, poor eating habits, or engaging in unsafe sex, etc.)	O	O	O	O	O	O	O
It is easy to see a primary care doctor	O	O	O	O	O	O	O
It is easy to access mental health services	O	O	O	O	O	O	O
E-cigarettes, or vapes are safer and better for a person's health than tobacco cigarettes	O	O	O	O	O	O	O
A person who uses marijuana can become addicted to it	O	O	O	O	O	O	O
A person who has misused substances or has a substance use disorder must stop using to be well	O	O	O	O	O	O	O
Addiction to marijuana is less harmful than addiction to other drugs or substances	O	O	O	O	O	O	O
The benefits of talking about my mental health with others outweigh the potential risks	O	O	O	O	O	O	O
I would be willing to work with or hire a person who has struggled with substance use	O	O	O	O	O	O	O

12. Do you know how to access substance use disorder treatment and/or support services in Kent County for yourself or others? Select all that apply.

- O Yes, I know where to find treatment
- O Yes, I know where to find support services
- O No, I don't know where to find treatment
- O No, I don't know where to find support services
- O I don't know the difference between the two

13. If you were experiencing mental health symptoms (such as anxiety, depression, suicidal thoughts, mood swings, etc.) that **interfered** with your daily activities, how likely would you be to go to the following places?

	Very Likely	Somewhat Likely	Somewhat Unlikely	Very Unlikely	Not Applicable
Primary care doctor	O	O	O	O	O
Health specialist (e.g., OB-GYN)	O	O	O	O	O
Mental health hospital or agency	O	O	O	O	O
Emergency room/urgent care	O	O	O	O	O
Private counselor/therapist	O	O	O	O	O
Psychiatrist	O	O	O	O	O
Community service organization (e.g., community clinic)	O	O	O	O	O
Community support group	O	O	O	O	O
Nowhere (I would not seek services)	O	O	O	O	O

14. What types of mental health education topics are most needed in your community? Select all that apply.

- O Information about self-harm/suicide
- O Information regarding specific mental health diagnoses, such as depression, anxiety, bipolar disorder, post-traumatic stress disorder, etc.
- O Coping with grief
- O How to address mental health crises
- O When to seek help
- O Information about mental health treatments
- O What to expect in counseling/treatment
- O How to access mental health services
- O How to pay for mental health services
- O How to communicate with others about my own mental health
- O How to help a friend or family member who is struggling with mental health
- O Cultural differences in addressing mental health
- O How trauma impacts mental health
- O How to decrease stigma around mental health
- O Other (please describe) _____

15. How old do you think children should be when first becoming educated on mental health?

- O Kindergarten – 2nd Grade
- O 3rd – 5th Grade
- O Middle School
- O High School

16. How comfortable would you feel talking about <u>your</u> mental health to your…?

	Very Uncomfortable	Somewhat Uncomfortable	Somewhat Comfortable	Very Comfortable	Not Applicable
Primary care doctor	O	O	O	O	O
Mental Health Professional (e.g., therapist or psychiatrist)	O	O	O	O	O
Coworker	O	O	O	O	O
Boss/Supervisor	O	O	O	O	O
Teacher/Mentor	O	O	O	O	O
Spouse/Significant Other	O	O	O	O	O
Family Member	O	O	O	O	O
Friend	O	O	O	O	O
Religious/Faith-Based Leader	O	O	O	O	O

17. On most days, how many sugar-added or sugar-sweetened beverages (such as soda, fruit punch/fruit-flavored juices, energy drinks, flavored coffee and teas) do you drink **each day**?

- O I don't drink or rarely drink sugar-sweetened beverages
- O 1 – 2 each day
- O 3 – 4 each day
- O 5 – 6 each day
- O 7 or more each day

18. How often do you eat packaged or processed snacks (such as chips, flavored puffs/crackers, cookies, cakes, or donuts)?

- O Never
- O Rarely (once per week)
- O Occasionally (2 – 3 times per week)
- O Often (4 – 6 times per week)
- O Every day (7 + times per week)

19. On most days, how many glasses (8 ounces or more) of water do you drink?

- O None, or very little
- O 1 – 3
- O 4 – 7
- O 8 – 10
- O More than 10

20. How many minutes **per week** do you get physical activity that is fast enough to increase your heart rate and breathing?

- O Less than 30 minutes

- O 30 – 90 minutes
- O More than 90 minutes but less than two and a half hours
- O Two and a half hours or more

21. What are your barriers to being physically active? Select all that apply.

- O Not enough time
- O Lack of energy (too tired)
- O Cost (gym membership, exercise equipment)
- O I don't enjoy it
- O I don't have anywhere to exercise
- O Lack of confidence in my skills or ability to be physically active
- O Health problems (joint pain, shortness of breath)
- O Fear of being injured
- O No one to exercise with
- O I don't have any barriers
- O Other (please describe) _____
  _____

22. On most nights, how many hours of sleep do you get?

- O Less than 6
- O 6 hours
- O 7 – 9 hours
- O More than 9

Demographics

1. What is your zip code? _____

2. How old are you?

- O Under 18
- O 18 – 24
- O 25 – 34
- O 35 – 44
- O 45 – 54
- O 55 – 64
- O 65 – 74
- O 75+

3. What is your primary language?

- O English
- O Spanish
- O Arabic
- O Mandarin
- O None of the above (please specify) _____

4. What other language(s) do you speak? Select all that apply.

- O None
- O English
- O Spanish
- O Arabic
- O Mandarin
- O None of the above (please specify) _____

5. What gender do you most identify with?

- O Male
- O Female
- O Transgender
- O None of the above (please specify) _____
- O Don't know/Not sure
- O Prefer not to say

6. Which of the following racial/ethnic categories best describes you? Select all that apply.

- O American Indian or Alaska Native
- O Asian or Asian American
- O Black or African American
- O Hispanic/Latinx
- O Middle Eastern or North African
- O Multiracial
- O Native Hawaiian or Pacific Islander
- O White or Caucasian
- O Other (please specify) _____

7. What is the highest level of education you have completed?

- O Less than or some high school (no diploma)
- O High school graduate or GED
- O Some college (no degree)
- O Associate degree or Technical certification
- O Bachelor's degree
- O Graduate degree or higher

8. What is your current employment status?

- O Employed, full-time
- O Employed, part-time
- O Unemployed and currently job searching
- O Unemployed and not currently job searching
- O Unable to work
- O Retired
- O Student
- O Homemaker or stay-at-home parent
- O None of the above (please describe) _____

9. What was your total household income in the past year, before taxes?

- O Less than $20,000
- O $20,000 - $34,999

- O $35,000 - $49,999
- O $50,000 - $64,999
- O $65,000 - $79,999
- O $80,000 - $99,999
- O $100,000 - $119,999
- O $120,000 - $139,999
- O $140,000 or more

10. What is your marital/relationship status?

- O Single
- O Married
- O Domestic partnership
- O Separated
- O Divorced
- O Widowed
- O None of the above (please specify) _____

11. Do you have a disability? Select all that apply.

- O No disability
- O Yes, physical (such as limited limb functioning)
- O Yes, visual (such as blindness)
- O Yes, auditory (such as hard of hearing)
- O Yes, mental (such as low mental functioning)
- O Prefer not to say

12. Do you identify as a military veteran or service member?

- O Yes
- O No

END OF SURVEY

APPENDIX E: KEY STAKEHOLDER INTERVIEW GUIDE

Definitions:

Community: the various places (neighborhoods, cities, organizations, etc.) and populations that Spectrum Health serves through its programming and services.

Community Health Needs Assessment (CHNA): a community-driven process of collecting data to describe the health status of a community.

Local public health system: individuals, agencies, and entities providing services to the public that impact health, wellbeing, or social determinants of health (see jellybean diagram on the right for examples).

Information for Interview:

Populations of interest: include older adults, low-income, children, minority populations, uninsured/underinsured, and those living in rural areas of Kent County

Interview Objectives: As part of the 2019 CHNA Community Themes and Strengths Assessment, KCHD will conduct in-depth interviews with Spectrum Health key stakeholders. These interviews will provide insight and expertise on the state of health in Kent County from a systems-level perspective. Questions will focus on the key stakeholders' perceptions of community needs, what is being done to address those needs, and what challenges or barriers the local public health systems face in improving population health.

a. Introduction: KCHD Epidemiologist, Maris Brummel, will be conducting interview.
b. Disclosures: Audio taping for accuracy, results will be reported in aggregate (i.e., not personally identifiable) to identify themes of health needs and gaps among all Spectrum Health stakeholders consulted with.
b. Guidelines: Honest opinions/no right or wrong answers, etc. answer questions in the context of entire county/public health system (i.e., not just Grand Rapids service provision).
c. Respondent Introduction:
    - Name
    - Title
    - Brief overview of job responsibilities/role
    - Tenure at current position
    - (**If applicable**) Tenure in health/health care field

Healthy Community

1. Thinking of what a healthy community means to you, what characteristics make Kent County a healthy community? What makes it unhealthy?

Pressing Issues

2. What do you feel are the two or three most pressing or concerning health issues facing residents in Kent County?
    a. Do you think these health issues differ between populations? (e.g., are there different health issues facing populations of interest?)
3. In the past two CHNAs conducted in Kent County (2014 and 2017), the same health issues were prioritized by members of the community: mental health, obesity and poor nutrition, and substance use. What is being done locally to address each of these issues?
    a. What more could be done to improve outcomes in these areas?
    b. What are the challenges to addressing each of these issues?

Social Determinants of Health

4. What are the most pressing social determinants of health facing residents in Kent County?
    a. To what extent do you agree or disagree that Kent County's local public health system (and the Spectrum Health system) adequately addresses these social determinants?

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

    b. Can you describe strengths or assets that exist in Kent County that could be used to improve social determinants?
5. Are there any environmental factors in Kent County that could/do <u>negatively impact</u> the health of residents (adults and children)?
    a. (**IF YES**) What are these factors?
    b. Conversely, are there environmental factors that <u>positively impact</u> the health of residents?
    c. (**IF YES**) What are these factors?

Health Care Access

6. Describe the current state of health care access in Kent County.
    a. Describe the current state of access to mental health services.
    b. What systems-level changes need to occur to improve access?

Barriers to Health Care

7. Are there any other barriers or obstacles to health care programs/services in the community?
    a. (**IF YES**) What are they?
    b. Are any of these barriers being addressed? How?

c. Are these solutions effective? Are they cost effective?

Community Strengths, Assets, and Gaps

8. Please talk about some of Kent County's strengths/resources that exist or can be built upon, and describe how they can be used.
    a. Are there any resource limitations (i.e., shortages of resources)? If yes, please describe these.
    b. What programs or services are lacking in the community?

Coordination of Care and Community Partnerships

9. To what extent do you agree or disagree that organizations and agencies in Kent County collaborate and coordinate services in order to make programs and services more accessible to Kent County residents?

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

    a. Why do you say (**INSERT RESPONSE**)?
    b. Are there any barriers to collaboration and coordination of services?
    c. Are there any factors that encourage collaboration and coordination of services?
    d. Are there any partnerships that currently exist between SH and other local public health system agencies to help coordinate services in Kent County?
        a. Describe these partnerships.
    e. What are the biggest barriers to forming community partnerships to improve population health?
10. Do you think community input is sought out when designing programs and/or identifying community concerns or healthcare needs?
    a. (**IF YES**) How do you engage the community?
    b. (**IF NO**) Should it be? Why/Why not?

Concluding Questions

11. Do you see any emerging community health needs or community concerns that were not previously mentioned?
12. Are there any activities that local health care organizations could participate in that would help accelerate improvement in some of the health priorities we've discussed?
    a. (**IF YES**) What are these activities?

Exhibit B

Spectrum Health Grand Rapids

Previous Implementation Plan Impact

This report identifies the impact of actions taken from 2018-2020 to address the significant health needs in the Implementation Plans created as a result from the 2017-2018 CHNA.

Spectrum Health

Mental Health

Behavioral health

Action 1

Creation of a 24/7 inpatient consultative service.

Measurable Impact

Hire three psychiatrists to complete this service designed to improve safety for our inpatients.

- Two psychiatrists to be recruited and on boarded by 6/30/2019 for our consultative team.
- One ambulatory psychiatrist to be recruited and on boarded by 6/30/2020.

Impact of Implementation Plan Strategy

This 24/7 consultative team is now operational and is providing services for the Butterworth and Blodgett campuses.

Action 2

Creation of an emergency deployment team that can respond to Behavioral Health urgencies.

Measurable Impact

Reduce boarding time in our ED's by 10% year over year.

- 10% completed by 6/30/2020.
- An additional 10% completed by 6/30/2021.

Impact of Implementation Plan Strategy

We recognize the need to improve ED boarding time for individuals with behavioral health needs. The inpatient consultative team is now supporting the ED. We have begun the process to create an EM-PATH unit to further advance this work.

Action 3

Create and implement a screening tool to identify emerging behavioral health concerns among our inpatients.

Measurable Impact

Provide tele-med and virtual consultative services to regional hospitals. To be completed by 6/30/2020.

Impact of Implementation Plan Strategy

Our work addressing the COVID Crisis and the EM-PATH unit has made this unattainable.

Action 4

Staff training in de-escalation and management of patients with behavioral health issues

Measurable Impact

Reduction of safety events/assaults to staff and safety events with patients with expectation of first year rise in reporting.

- 5% reduction by 6/30/2019.
- An additional 10% reduction by 6/30/2020.
- An additional 10% reduction by 6/30/2021.

Impact of Implementation Plan Strategy

This training has been completed. A very large portion of our workplace violence events have been occurring in our ED. The EM-PATH unit will certainly reduce these events. We have been challenged to find a consistent source of accurate data on the rates of these events.

Action 5

Explore and implement digital/mobile solutions and mobile applications in coordination with our Health Plan to enhance access in a manner that is consistent with needs and desires of patients (An alternative to the traditional FTE-based solutions for access)

Measurable Impact

1. Identify digital/mobile solutions to provide enhanced access for behavioral health services by 6/30/2019.
2. Deploy and market this technology within Spectrum Health Medical Group practices by 6/30/2020.
3. Increase volumes by 10% for this service by 6/30/2021.

Impact of Implementation Plan Strategy

We have identified "My Space" as a digital-mobile solution to augment existing behavioral health services. We are in the process of executing an enterprise solution.

Mental Health, Continued

Action 6

Expansion of Comprehensive Primary Care Plus (CPC+) model of embedded behavioral health within our Primary Care Practices. (Psychiatry-BM embedded care-PBM+ and part of our CPC+ reimbursement). In addition to the onboarding of additional psychiatrists (see above), we will develop preferred partnerships to improve access to individuals experiencing moderate and severe behavioral health issues.

Measurable Impact

1. Deploy the PBM+ model of embedded behavioral health within our primary care practices within Kent County.
2. Increase the number of individuals who are screened for anxiety, depression, and SUD with this tool by percent.
3. Utilize MedNow to recreate this service level into the primary care sites. From a FY18 baseline of 19,000 encounters, we will
   a. 25% increase by 6/30/2019
   b. 25% increase by 6/30/2020
   c. 25% increase by 6/30/2021

Impact of Implementation Plan Strategy

The CPC+ model of embedded behavioral health services within our Primary Care Department practices has been completed in 100% of Kent County practices. We have greatly expanded the number of patients screened, and have far surpassed historical goals around Med-Now (SH-Now).

Action 7

Work collaboratively with community to plan and implement a crisis center to address acute behavioral health needs.

Measurable Impact

1. Behavioral Health Crisis Center activities:
   a. Create a plan to operationalize a crisis center by 12/31/ 2019.
   b. Begin construction of this center by 6/30/2020

Impact of Implementation Plan Strategy

We are continuing to engage in collaborative efforts to stand up a community crisis center. The scope of this initiative has expanded greatly and is now characterized as a crisis system. The process is slower than anticipated; consequently, we are working to establish an EM-PATH unit to support our own ED.

Action 8

We will also plan to partner with community to roll out Zero Suicide as an evidence-based intervention to reduce suicidal actions in collaboration with community partners.

Measurable Impact

- Identify the partner to collaborate on the Zero Suicide initiative and create the annual baseline of current suicides occurring in our shared populations. To be completed by 6/30/2019.
- Reduce suicide by 5% within those populations by 6/30/2020.
- Reduce suicide by an additional 5% within those populations by 6/30/2021.

Impact of Implementation Plan Strategy

Zero-Suicide training has been completed. Kent County suicide rates have been decreased year over year (2019 compared to 2020)

Action 9

Spectrum Health will implement a 24/7 Psychological consultative/rapid response service within the Grand Rapids based health center. This will allow for the services to be delivered in a telehealth/virtual manner. Within the regional hospital spaces, we will offer telehealth psych consultative services 24 hour/7 day a week.

Measurable Impact

a. Establish a performance baseline one year after the service is established. To be completed by 6/30/2020.

b. In subsequent years, increase tele-psych consults by 10%. To be completed by 6/30/2021.

Impact of Implementation Plan Strategy

The 24/7 consultative model is now operational; we have implemented a tele-therapy program through Med-Now and in collaboration with Pine Rest.

Substance Abuse (Substance use disorder)

Action 1

Increasing the number of providers who are credentialed to prescribe Suboxone for the treatment of Substance Use Disorder (SUD).

Measurable Impact

Increasing number of providers credentialed to prescribe; this includes primary care physicians as well as ED providers.

a. Establish a baseline of current credentialed providers and prescribing of Suboxone. To be completed by 6/30/2019.

b. Increase prescribing physicians by 10%. Completed by 6/30/2020.

c. Increase prescribing physicians by an additional 10%. Completed by 6/30/2021.

Impact of Implementation Plan Strategy

We have continued to train providers to receive their x-license and now 10% of the entire Medical Group Primary Care providers have this ability

Prevention/Prescribing

Action 1

In collaboration with community partners and other health systems, create prescribing guidelines for opioids that are procedurally-/conditionally- based.
Measurable Impact

1. Creation and implementation of evidenced-based prescribing guidelines for:
   a. Five conditions by 6/30/2019.
   b. Ten conditions by 6/30/2020.
   c. Fifteen conditions by 6/30/2021.

Impact of Implementation Plan Strategy

Guidelines have been created and are waiting final sign-off before they are put into practice.

Action 2

Create and deploy provider scorecards to allow for identification of individual prescribing habits that are outside of normative practices.

Measurable Impact

Create and deploy provider scorecards to allow for identification of individual prescribing habits that are outside of normative practices.

Impact of Implementation Plan Strategy

Presently being completed and plan to distribute with the prescribing guidelines this summer

Action 3

Engage community partners in primary prevention sessions in the schools directed at students.

Measurable Impact

Coordinate two community sessions each fiscal year highlighting the dangers of recreational drug use.

a. Two session completed by 6/30/2019

b. Two session completed by 6/30/2020

c. Two session completed by 6/30/2021

Impact of Implementation Plan Strategy

The COVID Crisis has made this more difficult to achieve. We have coordinated activities thorough the KCOTF and made an offer to the public schools through the ISD to host educational programs. The ambiguity of the future for on-site learning has made this very challenging.

Substance Abuse, Continued

Action 4

- Coach and mentor prescribers to consider alternatives to opioids and prescribing habits that reduce risk after distribution.
- Reducing opioid prescribing for acute pain; limiting morphine equivalent dosing and implementing the ALTO program.

Measurable Impact

Implementation of the ALTO program in Grand Rapids EDs; reduce opioid prescribing for targeted conditions by 20% over measured baseline in year two and 25% in year three.

a. Baseline established by 6/30/2019.

b. Reduction of baseline by 20% completed by 6/30/2020.

c. Reduction of year two prescribing by 6/30/2021.

Impact of Implementation Plan Strategy

The ALTO program is in place at all of the EDs within Kent County and we have experienced reductions of 25-30% of opioid exposure to opioid-naive patients.

Action 5

Create and deploy public service announcements in conjunction with the Kent County Opioid Task force to bring enhanced awareness to the public and what can be done to combat this crisis.

Measurable Impact

- Create annual PSAs to engage community.
  - a. One PSA by 6/30/2019.
  - b. One PSA by 6/30/2020.
  - c. One PSA by 6/30/2021.
- Coordinate semi-annual drug take backs events as well as alternatives for disposal.
  - a. Two takeback events by 6/30/2019.
  - b. Two takeback events by 6/30/2020.
  - c. Two takeback events by 6/30/2021.

Impact of Implementation Plan Strategy

We have completed a single PSA speaking about the risks with opioid usage. We were very disappointed that local media were not willing to air it and we have made the decision to utilize our resources differently. We have participated in 2 takeback events annually.

Rescue

Action 1

Deploy naloxone emergency kits to individuals visiting our EDs who are identified as having high risk of potential overdose.

Measurable Impact

Automating a process to identify opportunities for Naloxone co-prescribing in ED and ambulatory space. Supplying all high risk patients with these rescue kits in our Grand Rapids EDs by year two.

a. Identify automation process by 12/31/2018.

b. Implementation of process by 06/30/2019.

c. 100% distribution to high risk patients in the ED. Completed by 6/30/2020.

d. 100% distribution to high risk patients in the ED. Completed by 6/30/2021.

Impact of Implementation Plan Strategy

We have been successful at providing Naloxone emergency kits to individuals presenting to the ED with opioid-related overdose. A challenge for us has been how to ensure that individuals presenting to the ED with OD and subsequently transferred to an observation unit are also provided this resource. This is being achieved by expanding our efforts of co-prescribing to our inpatient and ambulatory spaces.

Action 2

Prescribe naloxone to individuals utilizing inpatient and ambulatory spaces when being identified as having high risk of potential overdose.

Measurable Impact

Expanding naloxone co-prescribing into 100% our inpatient and ambulatory spaces by the end of year three.

a. 75% co-prescribing by 6/30/2020.

b. 100% co-prescribing by 6/30/2021.

Impact of Implementation Plan Strategy

We have utilized our Epic EMR to create a Best Practice Alert to encourage co-prescribing.

Substance Abuse, Continued

Action 3

Partner with the Grand Rapids Red Project to distribute to high risk community members and families and friends of those at risk.

Measurable Impact

Providing financial support and in-kind support to the Grand Rapids Red Project Team.

Impact of Implementation Plan Strategy

Spectrum Health Healthier Communities is providing in kind support in the form of training Community Health Workers free of charge and also providing financial support to the Red Project.

Opioid Recovery

Action 1

Train Spectrum Health providers to become credentialed in the prescribing of Suboxone to allow for the treatment of opioid dependency in the primary care setting.

Measurable Impact

1. Train 20 providers each year to be credentialed to prescribe Suboxone within Kent County.
   a. 20 credentialed providers by 6/30/2019.
   b. No less than 40 providers credentialed by 6/30/2020.
   c. No less than 60 providers credentialed by 6/30/2020.
2. Alternatively, increase by 10% the number of clinicians that are credentialed to prescribe Suboxone. (Including ED providers and primary care providers).

Impact of Implementation Plan Strategy

The number of clinicians that were credentialed to prescribe Suboxone exceeded the 10% goal.

Action 2

Support providers who are engaging patients who are identified as having a substance use disorder.

Measurable Impact

1. Developing standardized educational material targeting patients, staff, and providers that allow them to best manage this complex problem; the creation of a "go team" to deploy into sites identified in need of this high intensity education by 6/30/2020.
2. Provide dedicated resources to serve pregnant women who present with an Opioid Use Disorder by 6/30/2020.

Impact of Implementation Plan Strategy

The training material and business plan for the "go team" is complete and pending approval. The GREAT MOMs program serving pregnant women has been successful.

Reduce Tobacco use

Action 1

Tobacco use is a major factor of adverse health outcomes and Spectrum Health does not have a program to address this complicated issue. We will create a program to reduce tobacco use.

Measurable Impact

1. Design and implementation of a tobacco cessation program serving the community. To be completed by 6/30/2019.
2. Deliver yearly curriculum in schools around the prevention of all tobacco products (inclusive of vaping). To be completed by 6/30/2019.

Impact of Implementation Plan Strategy

Program has been established and utilizes in-person, virtual and digital-mobile solutions.

Access to Care

Primary Care

Action 1

To improve access to our economically disadvantaged, medically underserved and senior populations, we will increase the number of providers who are open to governmentally insured patients.

Measurable Impact

Maintaining 20 providers in Kent County that are open to governmentally insured patients each year from 6/30/2019 to 6/30/2021.

Impact of Implementation Plan Strategy

This goal has been met, we have maintained a minimum of 20 providers in Kent County.

Action 2

To improve access to all populations, we will hire 5 additional Primary Care Physicians and 3 Advance Practice Providers (APP) within Kent County either through new hires or integration.

Measurable Impact

5 primary care providers and 3 APPs:

a. By June 2019, 1 physician.

b. By June 2019, 1 APP.

c. By June 2020, 2 physicians (3 net total).

d. By June 2020, 1 APP (2 net total).

e. By June 2021, 2 physicians (5 net total).

f. By June 2021, 1 APP (3 net total).

Impact of Implementation Plan Strategy

6 providers were added to Kent County, recruitment continues to be an ongoing process.

Action 3

Increasingly, our patients have expressed interest in being able to access care in the manner of their choice, at the time of their choice, and with the provider of their choice. From a FY18 baseline of 19,000 encounters, growing and deploying Med Now and Convenient Care programs to allow for enhanced access via a methodology of patient choice.

Measurable Impact

1. Increase our volume through convenient walk in centers (Recognizing that these will open access for patients in our acute care practices). From a 2018 baseline of 3746 patients, we will expect a 10% increase year-over-year.
   a. 10% by 6/30/2019.
   b. 10% by 6/30/2020.
   c. 10% by 6/30/2021.
2. Increase our volume through urgent care centers (Recognizing that these will open access for patients in our acute care practices). From a 2018 baseline of 123,243 patients, we will expect a 3% increase year-over-year.
   a. 3% by 6/30/2019.
   b. 3% by 6/30/2020.
   c. 3% by 6/30/2021.
3. Increase volumes into our Med Now program to increase primary care access by 25% year-over-year.
   a. 25% by 6/30/2019
   b. 25% by 6/30/2020
   c. 25% by 6/30/2021

Impact of Implementation Plan Strategy

We were historically on track to hit most of these metrics (the exception being our urgent care volume which has seen contraction). We believe that this contraction is likely due to patients utilizing SH-Now, virtual connections as their modality of choice. The COVID crisis has certainly facilitated a rapid shift to this tool with the conversion of standard office visits to virtual visits (achieving a five year plan over the course of a few weeks).

Access to Care, Continued

Maternal Infant Health- reduce adverse birth outcomes among people of color through Maternal Infant Health Program

Action 1

1. Increase the percentage of MIHP-eligible women who are enrolled in the first trimester.
2. Increasing the percentage of MIHP eligible women enrolled (Baseline is currently 36%)

Measurable Impact

1. The percentage of MIHP-eligible women who enroll in the first trimester into our MIHP by 3% y-o-y in 6/30/2019, 6/30/2020 and 6/30/2021.
2. Increasing the percentage of MIHP eligible women enrolled (currently 36%) by 2% in year 1, 3% in year 2, and 3% in year 3.

Impact of Implementation Plan Strategy

Historically we enrolled 60% of MIHP-eligible women in the first trimester that has increased to 71%. We have seen a decline in overall enrollment from 36% to 23% due to immigration and economic reasons. We are actively engaged in creating new efficiencies and are hopeful to increase these numbers.

Obesity and Poor Nutrition

Community Support

Action 1

Support the Community Food Club from both a financial and in-kind perspective

Measurable Impact

Increasing the number of families served by 5% year over year; presently serving 1100 unique families per month.

Impact of Implementation Plan Strategy

We continue to support the Community Food Club both financially and in-kind. The Community Food Club reported serving 1550 families per month.

Action 2

Support the Nutritional Options through Wellness (hosted by Access of West Michigan) which provides free weekly healthy food service and education to individuals with chronic disease.

Measurable Impact

Serving 115 families with healthy food options and education per year annually. To be completed by 6/30/2019, 6/30/2020 and 6/30/2021.

Impact of Implementation Plan Strategy

We have continued to support NOW; the program has evolved to provide more concentrated services for participants and families resulting in fewer numbers achieved.

Obesity and Poor Nutrition, Continued

Culinary Medicine

Action 1

Expand delivery of and evaluate the impact of an evidence-based and innovative professional culinary medicine program to resident physicians and healthcare workers employed at Spectrum Health (SH) pediatric and family medicine clinics.

Measurable Impact

Within the Internal Medicine/Pediatric Residents' Elective, conduct a two-week, hands-on elective on how to prepare classic dishes, but with healthy modifications, so that physicians can better advise their patients on how to follow those specific diets like low sodium and low fat, but maintain flavor. To be completed by 6/30/2019.

Impact of Implementation Plan Strategy

This was created and implemented successfully.

Action 2

Implement and evaluate a family culinary medicine program inclusive of hands-on cooking skill development in a teaching kitchen, coaching from a registered dietitian, technology enabled self-management, and access to fresh healthy ingredients to children and families who are dually challenged by food insecurity and overweight/obesity.

Measurable Impact

Inclusive program will include:

a. Families will participate alongside 8-10 other families in a 3 month intervention inclusive of three 2- hour culinary medicine classes on weeks 2,4, and 6 with a final "booster" hands-on class at week 12. To be completed by 6/30/2019.

b. Participants will be referred to and have access to utilize the Community Food Club and The YMCA Veggie Van. To be completed by 6/30/2019 and 6/30/2020.

Impact of Implementation Plan Strategy

This program was created and completed in a pre-COVID environment.

Action 3

Support of Urban Roots which supports urban farming within marginalized populations as well as a local market offering locally grown produce to individuals within the 49507 zip code at discounted pricing

Measurable Impact

1. Establish a baseline of the number of persons served. To be completed by 6/30/2019.
2. Increase capacity and customer utilization by 10% over baseline. To be completed 6/30/2020.
3. Increase capacity and customer utilization by 20% over baseline. To be completed 6/30/2021.

Impact of Implementation Plan Strategy

We continue to support Urban Roots and are working through challenges to individual goals due to a change in leadership and more recently the COVID Crisis.

Action 4

Support urban farming efforts of Wellhouse. Specifically a bicycle delivery Community Supported Agriculture (CSA) as well as cooking and nutritional workshops in partnership with Michigan State Extension.

Measurable Impact

Serving over 700 pounds of food annually, to over 300+ tenants and neighborhood residents in the Baxter Community, annually. To be completed by 6/30/2019.

Impact of Implementation Plan Strategy

Goals were met and financial support was continued through 2020.

Action 5

Providing financial and in-kind support to Health Net of West Michigan's Fit Kids 360 which provides targeted intervention to morbidly obese youth.

Measurable Impact

Providing five 7-week classes annually to youth and families. To be completed by 6/30/2019, 6/30/2020 and 6/30/2021.

Impact of Implementation Plan Strategy

Goals were met in 2019 and the beginning of 2020, COVID has presented challenges that are currently being worked through.

Action 6

Partnering with the YMCA to support fitness classes for vulnerable populations to improve health.

Measurable Impact

Providing twenty 6-week community fitness cohorts. To be completed by 6/30/2019.

Impact of Implementation Plan Strategy

The community fitness cohorts were successful and financial support was continued through 2020.

Spectrum Health

Spectrum Health complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex.
[81 FR 31465, May 16, 2016; 81 FR 46613, July 18, 2016]

ATENCIÓN: Si usted habla español, tiene a su disposición servicios gratuitos de asistencia lingüística. Llame al 1.844.359.1607 (TTY: 711).

إذا كنت تتحدث اللغة العربية، فبإمكانك الحصول على المساعدة اللغوية المتاحة مجانًا. اتصل على الرقم 1.844.359.1607 (TTY: 771).