Executive summary

Beaumont Health understands the importance of serving the health needs of its communities. To do that successfully, we must first take a comprehensive look at the issues our patients, their families and neighbors face when making healthy life choices and health care decisions.

Beginning in January 2019, Beaumont began the process of assessing the health needs of the

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The results were aggregated across the eight hospital communities to identify the predominant health needs for the overall Beaumont community. Needs were identified for the overall Beaumont community if they were common across at least five of the eight Beaumont hospital communities.

In June 2019, the Beaumont CHNA Prioritization Workgroup met to review the health needs matrix and prioritize significant community health needs for Beaumont. The meeting was moderated by IBM Watson Health and included an overview of the CHNA process for the Beaumont community, the methodology for determining the top health needs and the selection and prioritization of significant health needs for the community Beaumont serves.

The group reviewed the Beaumont Health needs matrix and identified the significant community health needs to prioritize. They next used criteria selected by the Beaumont CHNA Steering Committee to score the community's significant health needs. The list of significant health needs was then prioritized based on the overall scores. The session participants subsequently reviewed the prioritized health needs for each community and chose the four community health needs with the highest prioritization scores as those to be addressed by Beaumont through subsequent implementation strategies. The health needs to be addressed by Beaumont include:

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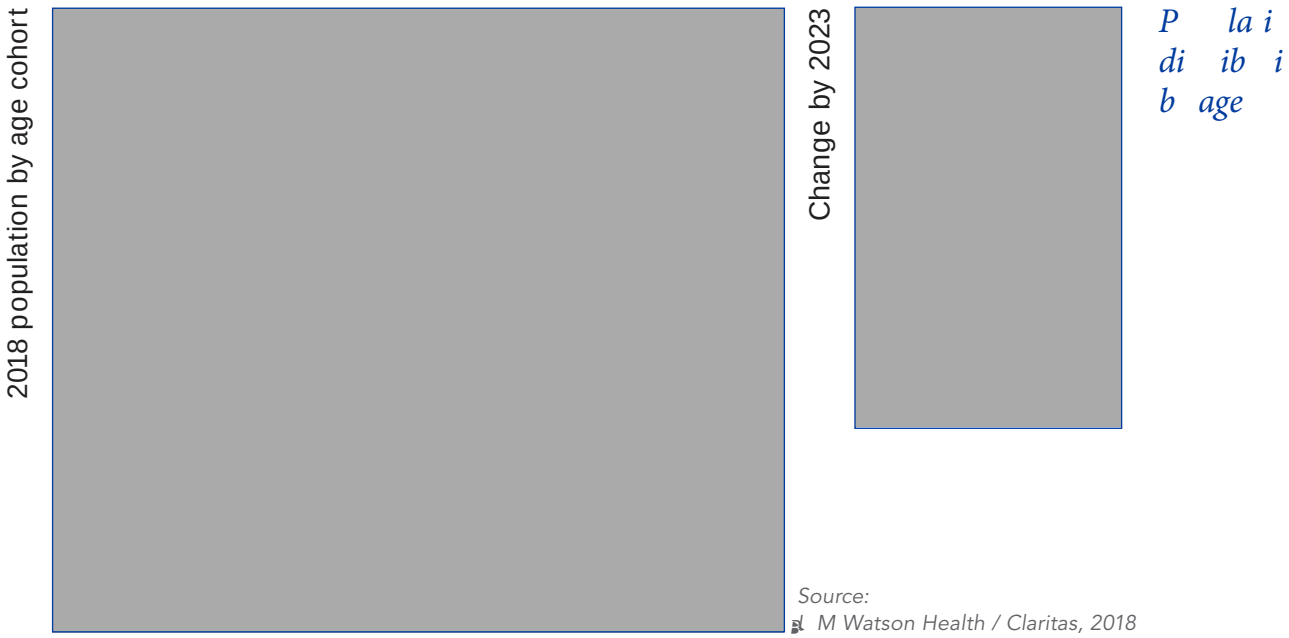
Beaumont, Troy

Beaumont, Troy offers a comprehensive array of health care services that continue to develop

The community's population skews slightly younger with 32.8% of the population ages 18-44 and 21.2% under age 18. The largest cohort (18-44) is expected to increase by 8,531 people (2.9%) by 2023. The age 65-plus cohort, the smallest cohort at 16.7% of the population, is the only other age group expected to grow (18.9% increase) over the next five years, adding almost 28,000 seniors to the community. Growth in the senior population will likely contribute to increased utilization of services as the population continues to age.



Source:
M Watson Health / Claritas, 2018

Population statistics are analyzed by race and by Hispanic ethnicity. The largest racial groups in the community are white (83.1%), followed by Asian/Pacific Islander (7.5%). The black population (6.1%) is projected to experience the greatest growth (20.5%), adding more than 11,000 people to the community. The Hispanic population (all races) is expected to grow by 13.3% or 4,000 people by 2023, while the non-Hispanic population (all races) is expected to increase by more than 20,000 people (2.4%) by 2023..

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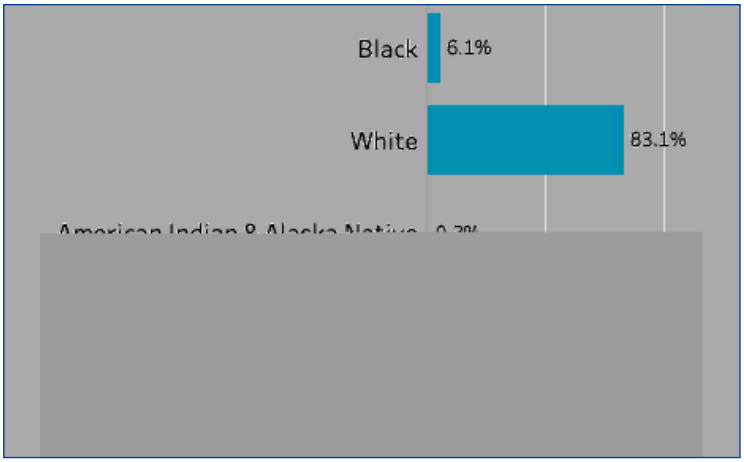

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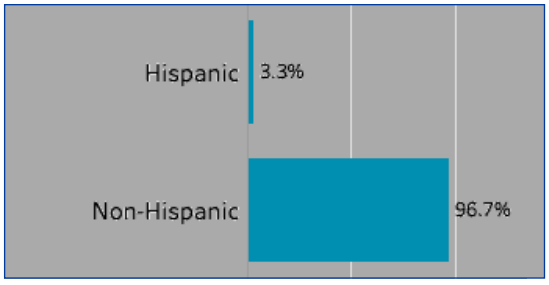
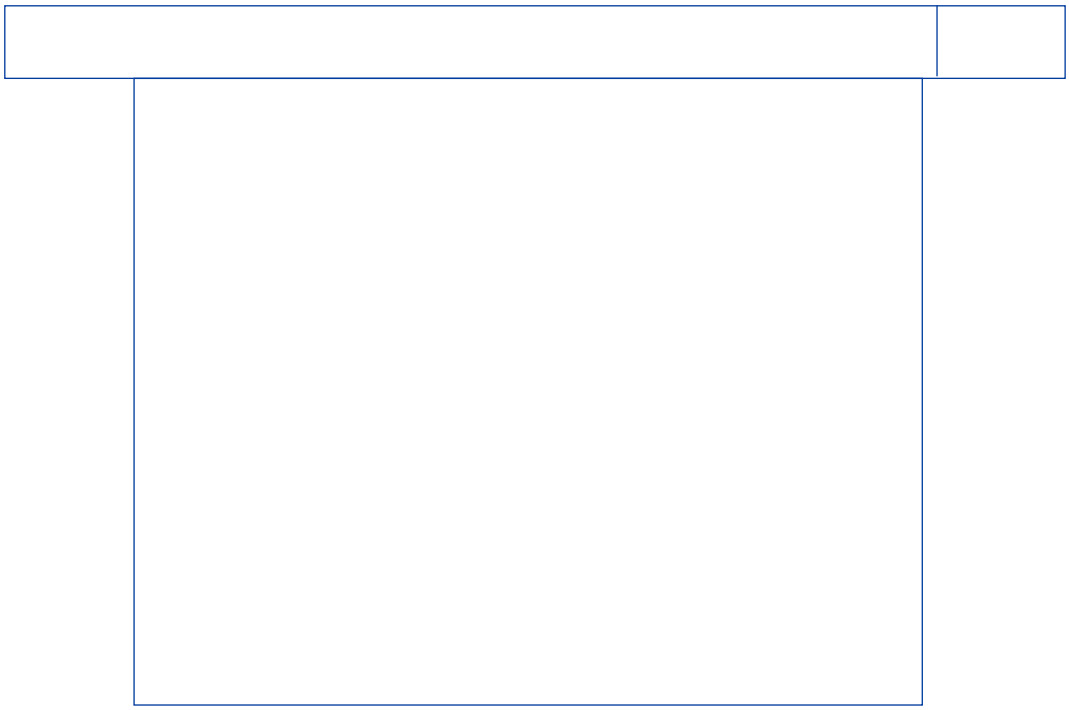


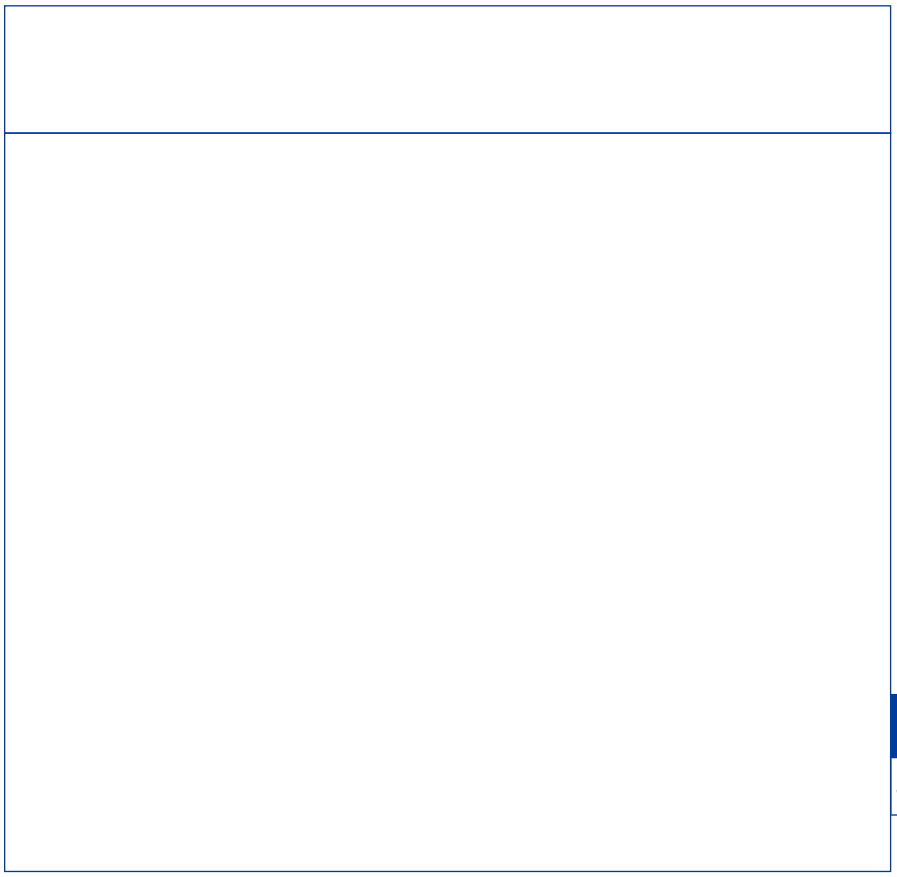
Source: M Watson Health / Claritas, 2018

2018 - 2023 Whi e ace la i jec ed cha ge b ZIP c de



Source: M Watson Health / Claritas, 2018

2018 Media h eh ld i c e b ZIP c de



The 2018 median household income for the United States is $62,175 and $55,727 for the state of Michigan. The median household income for the ZIP codes within this community range from $45,854 for ZIP code 48071 - Madison Heightsto $137,733 for ZIP code 48306 - Rochester. There is one ZIP code with a median household income of less than $50,200, twice the 2018 federal poverty limit for a family of four:

Zip Codes	Income
48071 Madison Heights	$45,854

Source: M Watson Health / Claritas, 2018

A majority of the population (59%) are insured through employer sponsored health coverage, followed by those with Medicare (17%) and Medicaid (13%). The remainder of the population is divided between

The IBM Watson Health community need Index is a statistical approach to identifying areas within a community where health disparities may exist. The CNI takes into account vital socioeconomic factors (income, cultural, education, insurance and housing) about a community to generate a CNI score for every populated ZIP code in the United States. The CNI strongly links to variations in community health care needs and is an indicator of a community's demand for various health care services. The CNI score by ZIP code identifies specific areas within a community where health care needs may be greater.

Overall, the composite CNI score for the community served is 2.2, lower than the CNI national average of 3.0 and state average of 3.3. Thirty-eight of the 42 ZIP codes in this community have a CNI score lower than 3.0, potentially indicating fewer health needs among the population.

2018 C i eed i de b ZIP c de

Source:
M Watson Health / Claritas, 2018

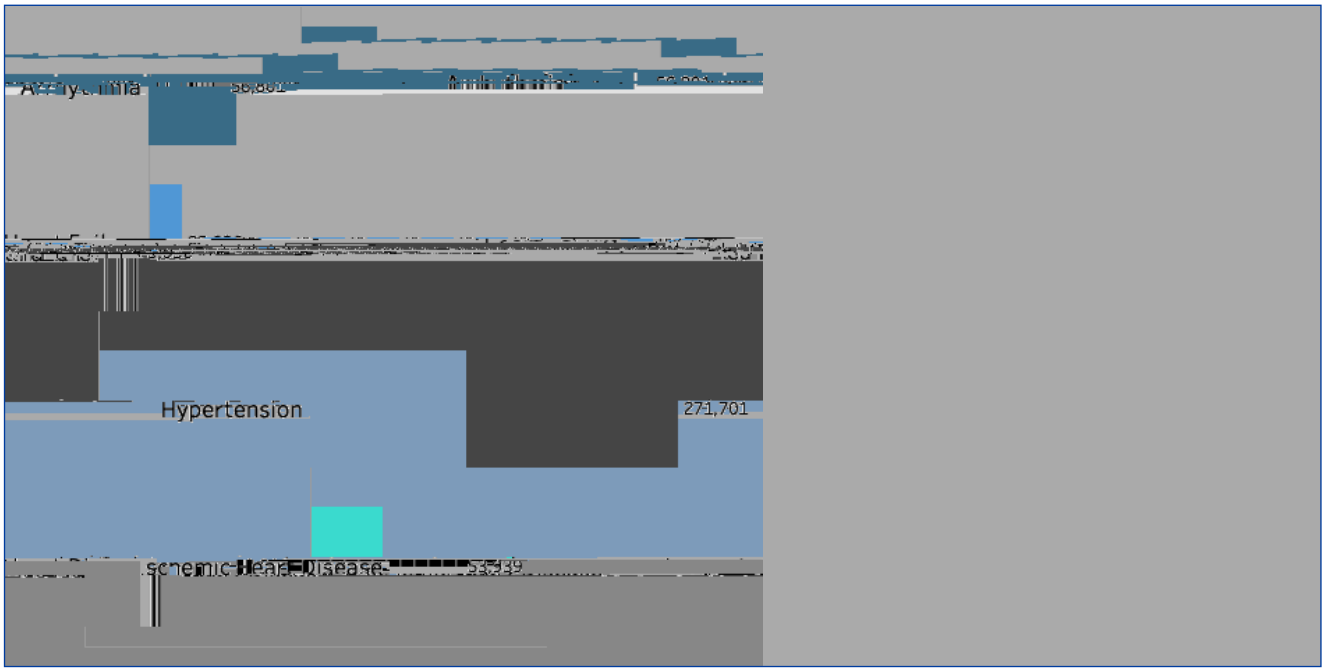
ZIP Map where color shows the community need index on a scale of 0 to 5. Orange color indicates high need areas (CNI = 4 or 5); blue color indicates low need (CNI = 1 or 2). Gray colors have needs at the national average (CNI = 3).

IBM Watson Health community data

IBM Watson Health supplemented the publicly available data and population statistics with estimates of localized disease prevalence of heart disease and cancer as well as Emergency Department visit estimates.

IBM Watson Health heart disease estimates identified hypertension as the most prevalent heart disease diagnoses; there are more than 271,000 estimated cases in the community overall. The 48038 ZIP code of Clinton Township has the most estimated cases of arrhythmia, heart failure and ischemic heart disease, while the 48044 ZIP code of Macomb has the highest number of cases of hypertension. The 48304 ZIP code of Bloomfield Hills has the highest estimated prevalence rates for arrhythmia (96 cases per 1,000 population), heart failure (40 cases per 1,000 population), hypertension (378 cases per 1,000 population) and ischemic heart disease (97 cases per 1,000 population).

2018 E i a ed hea di ea e ca e



For this community, IBM Watson Health's 2018 cancer estimates revealed the cancers projected to have the greatest rate of growth in the next five years are pancreatic, bladder, melanoma and thyroid, based

Cancer type	2018 Estimated new cases	2023 Estimated new cases	5-year growth (%)
Bladder	331	375	13.1%
Brain	64	68	6.0%
Breast	732	791	8.1%
Colorectal	362	344	-5.0%
Kidney	207	230	10.9%
Leukemia	181	200	10.6%
Lung	765	833	9.0%
Melanoma	203	228	12.3%
Non-Hodgkin's lymphoma	257	284	10.6%
Oral cavity	94	104	10.3%
Ovarian	68	72	6.6%
Pancreatic	165	188	14.5%
Prostate	878	900	2.5%
Stomach	68	74	7.8%
Thyroid	120	134	12.2%
Uterine - cervical	24	24	1.4%
Uterine - corpus	149	163	9.6%
Other	539	600	11.3%
Grand total	**5,207**	**5,614**	**7.8%**

Based on population characteristics and regional utilization rates, IBM Watson Health projected

N -e e ge e i a ed 2018 E e ge c De a e i i b ZIP c de

ZIP map color shows total Emergency Department visits per 1,000 population by non-emergent status. Orange colors are higher than the state benchmark, blue colors are less than the state benchmark

Goal #1:	

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Goal #2: Decrease cardiovascular disease risk factors and prevent death from sudden cardiac arrest.	
Objective #1: Provide education programs and services.	
OUTCOME MEASURES	• Decrease percent of adult hypertension. • Decrease in cardiovascular disease risk factors. • Increase knowledge and awareness of self-monitoring practices.
STRATEGIES AND TACTICS	• Implement educational sessions on cholesterol, blood pressure and weight management. • Implement Blood Pressure Self-Monitoring Program in churches and community organizations. • Provide AED and Hands-Free CPR training across the community. • Mentor and assist schools in attaining the state Heart Safe School designation and provide AED equipment as needed. • Provide support programs, self-management and education on cardiovascular health, stroke prevention and recovery.
COMMITTED RESOURCES	Beaumont, Troy will commit both financial and in-kind resources, including staff time, charitable contributions and employee volunteerism.
PARTNERS	• Local churches • Schools • Community agencies
EVALUATION	• Attainment of Heart Safe School designation • Pre/post participant surveys • Participation rates
Objective #2: Provide early detection screenings.	
OUTCOME MEASURES	• Decrease in deaths from sudden cardiac arrest. • Decrease in CVD risk factors. • Decrease percent of adult hypertension.
STRATEGIES AND TACTICS	• Provide blood pressure, cholesterol, glucose, BMI, heart and vascular screenings across the community. • Implement the Student Heart Check Program to detect abnormal heart structure or abnormal rhythms and explore development of student support group for those currently diagnosed or affected by abnormal diagnoses.
COMMITTED RESOURCES	Beaumont, Troy will commit both financial and in-kind resources, including staff time, charitable contributions and employee volunteerism.
PARTNERS	• Local churches • Schools • Community agencies
EVALUATION	• Screening results

Goal #1: Decrease rate of mental health and substance use disorders.	
Objective #1: Improve access and coordination of services.	
OUTCOME MEASURES	• Increase referral linkages for mental health and opioid use disorders.
STRATEGIES AND TACTICS	• Support partnerships to improve integration of health care and community-based mental health services. • Improve access and coordination of services for substance abuse disorder through creating multidisciplinary care teams using community peer recovery coaches and linking individuals to community resources.
COMMITTED RESOURCES	Beaumont, Troy will commit both financial and in-kind resources, including staff time, charitable contributions and employee volunteerism.
PARTNERS	• Community mental health agencies • Universal Health Services • CARE of Southeast Michigan • Families Against Narcotics
EVALUATION	• Partnership agreements • Patients connected to community resources
Objective #2: Provide education program and services..	
OUTCOME MEASURES	• Increase knowledge and awareness of mental health.
STRATEGIES AND TACTICS	• Implement mindfulness classes to address anxiety (e)-7.3(y)-3(e)-11.8 (e)D 1 Tf0scn/GS1 gs.-26(9)0.7 (T)-11 0 0 1-12.7 1e

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2019
COMMUNITY HEALTH NEEDS ASSESSMENT
IMPLEMENTATION STRATEGY

Building Healthier Lives and Communities

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