HENRY FORD HEALTH:

Community Health Needs Assessment

2022



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December 2022

Greetings,

Henry Ford's strategic vision is: "We will be the trusted partner in health, leading the nation in superior care and value – one person at a time."

Partnership with those we serve reflects the core of our organization's values, for it is this partnership that allows us to be a driver of innovation and discovery and a fierce advocate for building strong, healthy communities.

We know that individuals and families can best thrive when they are able to make good health choices in settings where barriers to health, often called the "social determinants of health," are addressed.

Further, we know that our work as a Healthcare Anchor Institution – how we contribute to the regions we serve as a major employer, purchaser, investor, leader and participant in a web of interconnected relationships for the good of the whole – also improves our community's health.

Henry Ford takes its role as a community leader and trusted partner as seriously as any other aspect of our strategy. Yet, how do we measure our success? Like any other metric, we start with a baseline. This triennial Community Health Needs Assessment (CHNA), a detailed snapshot of our regions' health and social needs, comprises that baseline. Using several different sources, it incorporates both data and stakeholder input. You will find that information, as well as comparative data from our last CHNA in 2019, in the pages that follow.

It is through our CHNA process and ensuing implementation-planning efforts by each of our hospitals that we ensure we – in concert with community and anchor partners –are making sustaining, measurable improvements in the health and wellbeing of the communities we serve.

On behalf of our 34,000 employees and physicians and the HFH Board of Directors, we are pleased to provide this 2022 Henry Ford Health Community Health Needs Assessment. In accordance with corporate policy, the Board of Directors reviewed and approved this report at its December 16, 2022 meeting. We invite you to explore this document as well and find ways to join us as together we engage as partners in addressing and solving the critical health issues of our times.

Sincerely,

Robert G. Rinéy President Chief Executive Officer

David J. Breen Chair, Board of HFH Directors

no

Kimberlydawn Wisdom, MD, MS SVP, Community Health & Equity Chief Wellness & Diversity Officer

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Executive Summary

Henry Ford Health (HFH) is one of the nation's leading integrated healthcare provider enterprises offering a full continuum of health care services primarily to the residents of Southeastern and Southcentral Michigan, most of whom reside in the four-county area of Wayne, Macomb, Oakland, and Jackson Counties. Henry Ford Health provides acute, post-acute, specialty, primary and preventive care services supported by clinical education and research. HFH consists of a network of hospitals, ambulatory medical centers and specialty, retail and community outreach centers, as well as a managed care organization. In 2021 HFH saw 105,337 inpatient discharges and 5,253,531 total patient encounters. In addition, HFH touches more than 254,000 members through operation of Health Alliance Plan, a nonprofit managed care organization.

As a healthcare enterprise providing essential services that benefit the four-county area communities and the entire State of Michigan since 1915, we continue to reinvest our resources back into the communities we serve. We do this through our expert and caring medical teams supported by advanced technologies, access to all, regardless of their circumstances; and a full spectrum of community benefit programs strategically responsive to the community needs identified herein.

In this Community Health Needs Assessment (CHNA), you'll find a comprehensive overview of the physical, mental, and socioeconomic health of the four-county area of Jackson, Macomb, Oakland, and Wayne Counties. After a review of data from local and state-level sources, we'll share input we've received from the communities we serve regarding the most pressing problems impacting community health. Finally, we'll prioritize health issues to focus on as an organization in upcoming CHNA Implementation Plans.

In this CHNA, an analysis of the health of our communities must include the impact of the COVID-19 pandemic, which began in March 2020 and continues as 2022 nears its end. Most of the data on health and socioeconomic issues included in this report utilize datasets from 2020 and 2021. We know that these data may not yet fully reflect the impact of the pandemic on prevalence of disease, mortality rates, self-reported health status, and socioeconomic indicators. COVID-19 data for our communities are discussed in section four.

Section 1: Commitment to Community Health

Purpose and Process for the Community Health Needs Assessment

At Henry Ford Health, our vision is to be the trusted partner in health, leading the nation in superior care and value – one person at a time. To be a truly transformative force for communities and a trusted partner, it is imperative that as an organization, we listen to the voices of those we serve. Henry Ford Health serves many diverse communities and populations with unique histories, characteristics, struggles, and strengths.

To achieve this vision, Henry Ford Health must build trusted relationships with our patients and community members and ensure those we serve that their needs inform our practices, policies and allocation of resources. Our patients entrust our organization with their lives and the lives of those that they love. Assessing and responding to the changing needs of these patients is vital to developing and maintaining trusted relationships as we work toward a common goal – communities full of healthy, thriving people of all ages.

In healthcare, we face a constant challenge to use our limited time and resources to heal and treat those walking through our doors. By committing to an iterative process of assessing the needs of our communities, our enterprise can ensure that our resources are spent on the programs and services presenting the greatest opportunity for transforming the health of those entrusting us to serve them.

The purpose of the 2022 CHNA was to:

- 1. Evaluate health needs of the community and discern whether previously identified needs continue to be priority areas
- 2. Identify resources available to meet both the priorities as well as the opportunities identified through the CHNA
- 3. Inform the development of Implementation Plans to address the identified health priorities
- 4. Assist in building capacity to address the opportunities within the context of the existing programs, resources, priorities, and partnerships

The infrastructure designed to successfully complete and oversee this CHNA required the collaboration of our community hospitals and their partners. Representatives for Henry Ford Detroit Hospital, Henry Ford Macomb Hospital, Henry Ford West Bloomfield Hospital, Henry Ford Wyandotte Hospital, and Henry Ford Jackson Hospital meet regularly to develop the CHNA and monitor Implementation Plans. No third parties were contracted to conduct this CHNA.

To maintain and expand "local market leadership" on our path to True North, the Community Health ANchor Council Enterprise-wide (CHANCE) directs the positive impact of HFH operations and strategic initiatives – and our external partnerships – on the vulnerable communities we serve, to improve social and environmental factors affecting human health and well-being. As Henry Ford Health exerts its resources, talent, and influence in local market leadership, one of

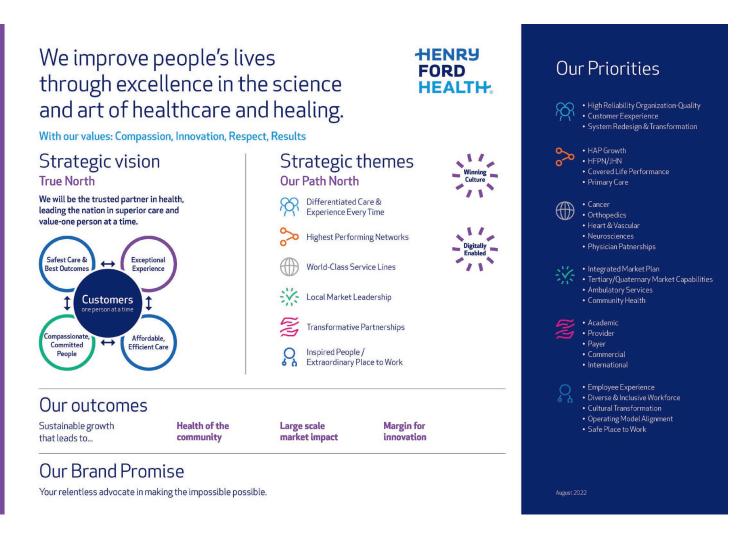
the key strategies identified includes an expansion of community health efforts. Creating alignment, reducing inefficiencies, and promoting growth opportunities, both internally and externally, are paramount to this effort. The proposed framework for organizing the work of the community health enterprise is now substantially broader, reflecting a new perspective from the field that critical determinants of health are social and economic as much as they relate to health care provision and access. The term "anchor institution" describes an organizational role to contribute to this expanded version of community health, since all of what we do has a bearing on our communities. As a member of the Healthcare Anchor Network (HAN), HFH has made commitments that will contribute to local economic impact in the areas of investing, policy, hiring, purchasing, real estate and facilities, measuring impact, and through the CHNA.

The key functions of CHANCE include, but are not limited to, the following activities:

- Responsibility for the Community Health Needs Assessment (CHNA) development, tracking, and reporting
- Responsibility for the CHNA's corresponding Community Health Implementation Plan development, tracking and reporting
- Partnership with Compliance for Community Benefit reporting and enterprise-wide strategic alignment
- Provide guidance and technical support on all place-based and social determinants of health strategies and programming, including community and population health, to foster alignment, collaboration and information sharing across enterprise
- Provide guidance and technical support on all anchor-based mission elements related to local hiring, purchasing, and investing, driving environmental and economic sustainability for local communities to realize improved vitality

Members of CHANCE approve Henry Ford Health's ongoing work as a national, state and local leader in community health advocacy that seeks to improve health status not only in Detroit, but also its surrounding communities. This is achieved through targeted health improvement programs such as our Women-Inspired Neighborhood (WIN) Network: Detroit, Generation With Promise, Faith Community Nursing initiatives, school-based health clinics, health literacy improvement projects and other activities. Through targeted volunteerism and partnerships, Henry Ford Health's goal is to continue to cultivate community relationships.

This assessment was prepared by the Office of Community Health, Equity, Wellness, and Diversity (CHEW-D), with assistance from the Office of Planning & CON (Certificate of Need) Strategy. Results are being used as a foundation for planning, developing and refining HFH's community services in the four-county area. Results of this assessment have been reviewed with Henry Ford Health leadership, and will lead to strategic and Implementation Plan modifications to align strategy with identified needs.



In our efforts to achieve our strategic vision, we are committed to maintaining local market leadership. In order to be a local market leader, it is imperative that our patients see us not only as providers, but as partners in their health and the health of their community. Our commitment to community health and the Community Health Needs Assessment process is vital to our ability to achieve our "True North" – providing an exceptional experience, affordable, efficient care, and the safest and best outcomes, with compassionate and committed people.

The Community Health Needs Assessment process informs Henry Ford Health in how we reach within and beyond our walls, forming partnerships to better learn about and serve the community. Our enterprise has long valued community partnerships because they help us assess our communities' needs, expand our reach, and push ourselves to find new ways to support the health and wellbeing of our patients.

Partner organizations assisted in gathering stakeholder input to determine the most pressing health and social needs facing the communities that we serve by participating in surveys. A full list of these partner organizations can be found in Section 5.

Commitment to Diversity, Equity, Inclusion, and Social Justice

Henry Ford Health recently adopted a new, five-year Diversity, Equity, Inclusion, and Social Justice Strategic Plan. This Board-approved plan was incepted in 2020 and formally released in 2022. The four pillars of this plan are Anti-Racism and Social Justice Advocacy, Diverse Workforce and Inclusive Culture, Community Empowerment, and Healthcare Equity. Within each pillar, strategic goals are outlined that underly our commitment to making meaningful impacts for our team members, patients, and community members.

While Henry Ford Health has long been a leader in diversity, equity, and inclusion, this is the first time our organization has formally prioritized anti-racism and social justice. This underlies our understanding of the deeply entrenched impact that racism has on our patients' and community members' wellbeing and the necessity of a social justice framework to provide equity for all.

Equity for all cannot be achieved until we understand where exactly inequities are occurring. It is essential that needs assessments investigate racial and ethnic differences in disease prevalence, health behaviors, and mortality. To further support our commitment to diversity, equity, inclusion, and social justice, in this Community Health Needs Assessment we have sought out and included data stratified by race/ethnicity whenever it was possible to obtain.

Data stratified by race/ethnicity in this Community Health Needs Assessment can be found in the purple-colored tables.

Health of the Community

In addition to the Diversity, Equity, Inclusion and Social Justice Strategic Plan, this CHNA also aims to support and align with Henry Ford Health's efforts to define the "Health of the Community." CHANCE has guided these efforts to define health of the community, ensure equity is a consideration in every metric, and align resources around coordinated targets that improve community health. "Above the line" metrics which have been identified as essential to improving health of the community include completed referrals for patient social needs through a Community Information ExchangeTM, blood pressure control, comprehensive diabetes care, and avoidable emergency department visits per 1,000.

"Below the line" metrics have been identified by their respective CHANCE subcommittees as those with a demonstrated contributing effect on the critical above-the-line metrics. The current working below-the-line metrics are: share of employee hires from vulnerable neighborhoods, diversity in procurement, and a variety of sustainability measures in operations (Anchor); educational, screening, and referral services provided to patients and community in areas of diabetes, infant mortality, heart disease, mental health and substance use disorder, infant mortality, and cancer (CHNA); revamping the reporting strategy and policies for Community Benefit (Community Benefit); operationalization of the closed-loop referral system, demonstration of its effectiveness, and scaling it up (Community Information Exchange).

Retrospective Review of 2019-2022 CHNA and Implementation Plan Progress

In 2019, Henry Ford Health conducted a CHNA of the four main counties in which it provided health care—Wayne, Macomb, Oakland, and Jackson Counties. Across Henry Ford Health, shared priorities were identified as mental health and substance use disorder and healthy lifestyles and diabetes prevention. Each hospital chose its own unique third priority.

	Healthy Lifestyles and Diabetes	Mental Health and Substance Use Disorder	Infant Mortality	Heart Disease	Cancer
Henry Ford Detroit Hospital	Х	Х	Х		
Henry Ford Macomb Hospital	Х	Х		Х	
Henry Ford West Bloomfield Hospital	Х	Х			Х
Henry Ford Wyandotte Hospital	Х	Х			Х
Henry Ford Jackson Hospital	Х	Х	Х		

Henry Ford Health Identified Priorities in 2019 CHNA

The 2020-2022 Community Health Needs Assessment Implementation Plans set strategies to improve health in these priority areas. A summary of progress on these Implementation Plans from 2020 through mid-year 2022 is described below.

Henry Ford Health 2019 CHNA Implementation Plan Progress Review

Priority 1: Healthy Lifestyles and Diabetes Prevention						
Goal/Activity		Progress a	t each Henry Ford Heal	th Hospital		
	Detroit	Jackson	Macomb	West Bloomfield	Wyandotte	
Implement Diabetes	In 2020, 33% of	DPP began in	In 2020, 69% of	DPP began in West	DPP began in	
Prevention Program and	participants	Jackson in 2021. In	participants	Bloomfield in 2021.	Wyandotte in 2022.	
reach 30% of	reached goal. In	2021, 33% of	reached goal. In	In 2021, 45% of	2022 data not	
participants completing	2021, 42% of	participants	2021, 60% reached	participants	available yet.	
program with 5-7%	participants reach	reached goal. 2022	goal. 2022 data not	reached goal. 2022		
weight loss annually	this goal. 2022 data	data not available	available yet.	data not available		
	not available yet.	yet.		yet.		
Provide at least 24	880 sessions	78 sessions	513 sessions	0 sessions provided	138 sessions	
educational sessions to	provided from	provided from	provided from	from 2020-mid	provided from	
SNAP-eligible	2020-mid 2022.	2020-mid 2022.	2020-mid 2022.	2022.	2020-mid 2022.	
participants annually						
Increase screening for	SDOH screenings	SDOH screenings	SDOH screenings	SDOH screenings	SDOH screenings	
social needs at HFH	increased 16,521%	increased 70.9%	increased 6038%	increased 36,727%	increased 20,190%	
locations by 5%	2019 to 2021. 2022	2019 to 2021. 2022	2019 to 2021. 2022	2019 to 2021. 2022	2019 to 2021. 2022	
annually	data not available	data not available	data not available	data not available	data not available	
	yet.	yet.	yet.	yet.	yet.	
Invest 1% of HFH		roved for this \$15 millio	n investment; planning	is in the works. Investi	ment to be completed	
investment portfolio in	by 2025.					
place-based social						
determinant of health						
priorities by 2022						

Goal/Activity	and Substance Use Disorder Prevention Progress at each Henry Ford Health Hospital						
	Detroit	Jackson	Macomb	West Bloomfield	Wyandotte		
Reduce opioid	2020: 28.6%	2020: 20.7%	2020: 24.5%	2020: 30.3%	2020: 27.9%		
pills/patches prescribed	decrease.	decrease.	decrease.	decrease.	decrease.		
by 20%, annually	2021: 5.3%	2021: 11.3%	2021: 0.9%	2021: 17.3%	2021: 1.4%		
	increase.	increase.	increase.	increase.	increase.		
	Total 2019 to 2021:	Total 2019 to 2021:	Total 2019 to 2021:	Total 2019 to 2021:	Total 2019 to 2021:		
	24.8% decrease.	11.8% decrease.	23.8% decrease.	18.1% decrease.	26.8% decrease.		
	2022 data not	2022 data not	2022 data not	2022 data not	2022 data not		
	available yet.	available yet.	available yet.	available yet.	available yet.		
Reduce Milligram	2020: 28.0%	2020: 24.5%	2020: 22.8%	2020: 24.7%	2020: 27.3%		
Morphine Equivalent	decrease.	decrease.	decrease.	decrease.	decrease.		
(MMEs) prescribed by	2021: 4.1%	2021: 13.4%	2021: 0.4%	2021: 19.4%	2021: 1.5%		
20%, annually	increase.	increase.	decrease.	increase.	increase.		
	Total 2019 to 2021:	Total 2019 to 2021:	Total 2019 to 2021:	Total 2019 to 2021:	Total 2019 to 2021:		
	25% decrease.	14.4% decrease.	23.1% decrease.	10.1% decrease.	27.3% decrease.		
	2022 data not	2022 data not	2022 data not	2022 data not	2022 data not		
	available yet.	available yet.	available yet.	available yet.	available yet.		
Increase percentage of	2020: 10.53%	2020: 2.76%	2020: 3.73%	2020: 10.4%	2020: 5.19%		
patients with access to	increase	increase.	increase.	increase.	increase.		
MAT (Medication-	2021: 10.67%	2021: 19.75%	2021: 1% increase	2021: 1.07%	2021: 1.1%		
Assisted Treatment) by	increase.	increase.	Total 2019 to 2021:	increase.	increase.6.34%		
10% by 2022	Total 2019 to 2021:	Total 2019 to 2021:	4.72% increase.	Total 2019 to 2021:	increase.		
	21.2% increase.	22.51% increase.	2022 data not	11.47% increase.	Total 2019 to 2021:		
	2022 data not	2022 data not	available yet.	2022 data not	2022 data not		
	available yet.	available yet.		available yet.	available yet.		
Increase percentage of	2020: 0.34%	2020: 1.06%	2020: 0.22%	2020: 0.03%	2020: 0.05%		
Narcan resource	increase.	increase.	increase.	increase.	increase.		
distribution by 5%	2021: 2.84%	2021: 6.91%	2021: 2.2%	2021: 0.98%	2021: 1.2%		
annually (Opioid orders	increase.	increase.	increase.	increase.	increase.		
with a narcan resource	Total 2019 to 2021:	Total 2019 to 2021:	Total 2019 to 2021:	Total 2019 to 2021:	Total 2019 to 2021:		
increase by 5%	3.81% increase.	7.97% increase.	2.42% increase.	1.01% increase.	1.25% increase.		
annually)	2022 data not	2022 data not	2022 data not	2022 data not	2022 data not		
	available yet.	available yet.	available yet.	available yet.	available yet.		
Increase % patients with	2020: 0.35%	2020: 38.47%	2020: 0.35%	2020: 0.35%	2020: 0.35%		
access to BH services	increase	increase.	increase	increase	increase		
within 10 days by 5% by	2021: 4.05%	2021: 62.1%	2021: 4.05%	2021: 4.05%	2021: 4.05%		
2022	decrease	decrease.	decrease	decrease	decrease		
	Total 2019 to 2021:	Total 2019 to 2021:	Total 2019 to 2021:	Total 2019 to 2021:	Total 2019 to 2021:		
	3.65% decrease.	23.7% decrease.	3.65% decrease.	3.65% decrease.	3.65% decrease.		
	2022 data not	2022 data not	2022 data not	2022 data not	2022 data not		
	available yet.	available yet.	available yet.	available yet.	available yet.		

Priority 3: Infant Mortality (Henry Ford Detroit Hospital)	
Goal/Activity	Progress through 2021
Reach at least 250 group prenatal care patients at Henry Ford Medical Center New Center One and Henry Ford Medical Center Ford Road by 2022.	321 patients reached
Amongst group prenatal care patients, maintain a preterm birth percentage that is 20% lower than that of the City of Detroit (11.68% goal in 2021)	7% preterm birth
Train at least 75% of Women's Health Services team members on unconscious bias and respectful maternity care	88% trained
Increase % of patients reporting their provider treated them with respect (Consumer Assessment of Healthcare Providers and Systems (CAHPS)) by 5%	0.91% increase in 2020, 0.02% increase in 2021

Priority 3: Infant Mortality (Henry Ford Jackson Hospital)	
Goal/Activity	Progress through 2021
Train at least 75% of Women's Health Services team members on	82% trained
unconscious bias and respectful maternity care	
Increase % of patients reporting their provider treated them with respect	1.4% decrease in 2020, 0.85%
(Consumer Assessment of Healthcare Providers and Systems (CAHPS)) by	decrease in 2021
5%	

Priority 3: Cancer (Henry Ford West Bloomfield Hospital)	
Goal/Activity	Progress through 2021
Increase screening volume for all cancers by 5% each year	2020: 12.37% decrease
	2021: 25.3% increase
	Total 2019 to 2021: 9.8%
	increase
Hold 2 community education events for each awareness area: cervical,	2020: 4 colon cancer events, 3
colon, breast, and lung cancer	breast cancer events, 1 all-type
	cancer event
	2021: 5 all-type cancer events, 2
	colon cancer events, 1 breast
	cancer event
Increase % patients staged at diagnosis to 40%	2020: 45.8%
	2021: 45.0%

Priority 3: Cancer (Henry Ford Wyandotte Hospital)	
Goal/Activity	Progress through 2021
Increase screening volume for all cancers by 5% each year	2020: 19.6% decrease
	2021: 22.06% increase
	Total 2019 to 2021: 1.9%
	decrease
Maintain number of Primary Care Provider Referrals to Tobacco	2020: 20.8% increase
Treatment Services (TTS) or increase by 10%	2021: 103% increase
	Total 2019 to 2021: 146%
	increase
Maintain number of patients that enroll in TTS or increase by 10%	2020: 55% increase
	2021: 28.5% decrease
	Total 2019 to 2021: 11% increase
Maintain number of patients that enroll in Freedom From Smoking classes	2020: 83% decrease
or increase by 10%	2021: 100% decrease
	Total 2019 to 2021: 100%
	decrease
Hold 2 community education events for each awareness area: cervical,	2020: 3 breast cancer events, 2
colon, breast, and lung cancer	colon cancer events, 1 lung
	cancer event, 3 all-type cancer
	events
	2021: 4 all-type cancer events, 2
	colon cancer events, 1 cervical
	cancer events, 1 breast cancer
	event
Increase % patients staged at diagnosis to 40%	2020: 46%
	2021: 46.2%

Priority 3: Heart Disease (Henry Ford Macomb Hospital)	
Goal/Activity	Progress through 2021
Increase participation in blood pressure screening and health education	2020: 82.5% decrease
events by 10% annually	2021: 51% decrease
	Total 2019 to 2021: 91%
	decrease
Increase enrollment in HSMP by 10% annually	2020: 24% decrease
	2021: 85% decrease
	Total 2019 to 2021: 88%
	decrease
Increase educational encounters related to risks of tobacco use, e-	2020: 45% decrease
cigarettes, and vaping by 10% annually	2021: 30% increase
	Total 2019 to 2021: 29%
	decrease
Increase referrals to Tobacco Treatment Services by 10% annually	2020: 45% decrease
	2021: 35% increase
	Total 2019 to 2021: 100%
	decrease 26% decrease

Narrative Summary for Selected Implementation Plan Strategies

To accompany the data tables which provide a comprehensive overview of the data and progress on these implementation plans, we have included additional narrative around some of the implementation plan work for the past CHNA cycle.

Priority 1: Healthy Lifestyles and Diabetes Prevention

Detroit

Henry Ford Health provided the CDC-recognized Diabetes Prevention Program (DPP) for our patients in Detroit to support their journey towards preventing the onset of diabetes while increasing healthy habits. We partnered with organizations with similar goals for preventing diabetes and chronic diseases. The class is a year-long commitment, with the goal of permanent changes to improve weight and reduce A1cs through physical activity, improved diet and social support. Since 2020 and the Public Health Emergency (PHE), we have shifted primarily to virtual classes, however in 2022, an in-person class is being provided in the community with patients from the Bangladeshi community, provided in Bengali by a trained lifestyle coach. Through the year, we worked internally to provide education to physicians and staff to ensure awareness around the Diabetes Prevention Program. We launched a web page to give quick information regarding the program and who to contact.

regarding the program and who to contact.

Henry Ford Health leverages it's SNAP-Ed program, Generation With Promise, to provide evidence-based direct education programming to children and adults throughout the service area. Each program is tailored to the target audience and is conducted in partnership with schools and community-based organizations, including at farmers markets. Since 2020, classes have been provided either virtually, inperson, or hybrid. The classes range from one to ten sessions in a series, focusing on nutrition and physical activity, with hands-on, culturally





relevant, skills-based education rooted in USDA's MyPlate. Fruit and vegetable consumption and physical activity levels have been measured and shown to increase among the target audiences. 880 sessions were held between 2020-2022, reaching thousands of individuals at over 50 sites per year. Additionally, new food access sites at parks and built environment/park improvements were instituted through partnerships, creating permanent opportunities for increased healthy living for residents.

Jackson

Henry Ford Health provided the CDC-recognized Diabetes Prevention Program (DPP) for our patients in the Henry Ford Jackson Health service area to support their journey towards preventing the onset of diabetes while increasing healthy habits. The class is a year-long commitment, with the goal of permanent changes to improve weight and reduce A1cs through physical activity, improved diet and social support. Since 2020 and the Public Health Emergency (PHE), we have shifted primarily to virtual classes.

Henry Ford Health leverages it's SNAP-Ed program, Generation With Promise, to provide evidence-based direct education programming to young children in the service area. The program in Jackson is geared towards children and families in early care and education facilities in low-income housing complexes, in partnership with the Jackson County Health Department and the Community Action Agency in the service area. Since 2020, classes have been provided either virtually, in-person, or hybrid. The classes are eight sessions in a series, focusing on nutrition and physical activity, with hands-on, culturally relevant, skills-based education rooted in USDA's MyPlate. Fruit and





vegetable consumption and physical activity levels have

been measured and shown to increase among the target audiences. Over 78 sessions were held between 2020 and mid-2022. In addition, the Community Action Agency in Jackson has committed to providing more access to fresh drinking water to all of its Head Starts in the county, due in part to our efforts there.

Macomb

The Henry Ford Macomb Diabetes Prevention Program achieved *Full Plus Recognition* from the CDC for achieving excellent outcomes. In 2022 we brought on a new DPP Coordinator, trained 10 new lifestyle coaches, started 10 cohorts of the Diabetes Prevention Program and enrolled 110 individuals. Similar to other programming, a major barrier has been COVID-19 and the Public Health Emergency (PHE). The DPP program has been delivered virtually to our community members in most situations.

SNAP-Ed programming in Macomb covers the life span, with interventions from preschool to seniors. We have shifted our SNAP-Ed work to address policy, system and environmental changes that will support healthy lifestyle changes in the community. We pivoted our plan to include virtual presentations when necessary and adjusted interventions to meet the needs of the community. Our in-person groups were smaller to accommodate social distancing and safe guidelines. We also increased our reach to the community with videos, live Facebook sessions and social media posts.

West Bloomfield

Henry Ford Health provided the CDC-recognized Diabetes Prevention Program (DPP) for our patients in the West Bloomfield service area to support their journey towards preventing the onset of diabetes while increasing healthy habits. The class is a year-long commitment, with the goal of permanent changes to improve weight and reduce A1cs through physical activity, improved diet, and social support. We partnered with the National Kidney Foundation of Michigan, who has similar goals for preventing diabetes and chronic diseases. Since 2020 and the Public Health Emergency (PHE), we have shifted primarily to virtual classes. We have reached hundreds of patients each year of this partnership.

Wyandotte

Henry Ford Health provided the CDC-recognized Diabetes Prevention Program (DPP) for our patients in the Wyandotte service area to support their journey towards preventing the onset of diabetes while increasing healthy habits. The class is a year-long commitment, with the goal of permanent changes to improve weight and reduce A1cs through physical activity, improved diet, and social support. We worked towards success by partnering with external organizations with similar goals for preventing diabetes and chronic diseases. Since 2020 and the Public Health Emergency (PHE), we have shifted primarily to virtual classes, however in 2022, an in-person class is being provided in the community for patients in the Dearborn area.

Henry Ford Health leverages it's SNAP-Ed program, Generation With Promise, to provide evidence-based direct education programming to children in schools in the service area of Henry Ford Wyandotte Hospital, primarily in Lincoln Park. This builds upon the school-based health center relationship that Henry Ford Health established in 2019 in Lincoln Park High School. Since 2020, classes have been provided either virtually, in-person, or hybrid. The classes are typically five sessions in a series, focusing on nutrition and physical activity, with hands-on, culturally relevant, skills-based education rooted in USDA's MyPlate. Fruit and vegetable consumption and physical activity levels have been measured and shown to increase among the target audiences. 138 sessions were held between 2020 and mid-2022.

Priority 2: Mental Health and Substance Use Disorder

There continues to be a national shortage of mental health professionals in the United States which is compounded by an increase in depression, anxiety, and substance use disorders since the onset of the COVID-19 pandemic. Henry Ford Health is currently receiving more than 600 outpatient referrals each week for behavioral health care. Strategies to improve access to Behavioral Health Services within 10 days of initial contact have included: (1) to foster virtual care when appropriate, as this strategy increases attendance at appointments and increases the ease of access and (2) ensuring appropriate productivity of our staff. Two other important innovations to improve access include the creation of a collaborative care model for adults, children, and the perinatal population. This strategy is currently linked to more than 375 physicians for the treatment of mild to moderate mental illness, opening access in our specialty clinics to more severe mental illness. We have also begun piloting the use of digital cognitive behavioral therapy to help patients with mild depression and anxiety. These patients are paired with a digital

navigator to help monitor their progress (via a self-report Patient Health Questionnaire-9) as well as a registry. Enrolled patients then have access to 24/7 psychotherapy.

Henry Ford has made significant strides in decreasing inappropriate use of opiates for chronic pain management. From 2017-2019, the reduction in usage was approximately 38%. After publishing and re-editing a Pain Management Guideline, we had further reduction. Currently, post-operative pain management is evidence-based. Much of our focus is on chronic pain management within the primary care arena. A "Prescribing Wisely" dashboard is available for primary care physicians as well as a registry for chronic pain patients. In addition, a Chair's dashboard was designed to allow providers and leaders to monitor any outliers to current opiate guidelines. We also are involved in several programs which serve to help patients manage pain and to avoid opioid use, when appropriate. The programs focus on populations such as sickle cell crisis, lower back pain, as well as a pain clinic which offers in-person and virtual care. In terms of Narcan prescriptions for opioid users, we are leading the State of Michigan. For those non-cancerous patients prescribed >50 MME, 26% are receiving Narcan. This number is growing with the use of a Best Practice Advisory to remind physicians of the importance in Narcan prescribing in select patients.

Infant Mortality

Detroit

In Detroit, the Women-Inspired Neighborhood (WIN) Network: Detroit partners with Henry Ford Detroit Hospital Women's Health Services to provide our enhanced model of Group Prenatal Care (GPC) to address infant mortality. Group prenatal care is an alternative prenatal care model which in each session brings together 8-12 pregnant women of similar gestational ages to receive their prenatal care in a group setting, allowing for more time with their provider and extra health education during



their visit. Groups are co-facilitated by a HFH Certified Nurse Midwife and a Community Health Worker. Our enhanced model places an added focus on addressing the social determinants of health that may be impacting the ability of a mom and her family to have a healthy pregnancy, birth, and baby. Community Health Workers perform home visits with participants, providing extra support for families until their baby turns one year old. Group prenatal care sessions are two hours long and provide participants with ample time with their providers. Each group incorporates education on many topics related to pregnancy, birth, and parenting such as breastfeeding, proper nutrition, making a birth plan, and common pregnancy discomforts, so that all participants are fully prepared for what a new baby will bring. 321 babies have been born in GPC. Only 7% of these births have been born preterm, reaching our goal to have a preterm birth



rate that is at least 20% lower than the City of Detroit overall. In 2020 due to COVID-19, group prenatal care could not be held in-person. Instead, WIN Network pivoted to virtual group prenatal care. In 2022, in-person groups resumed in our new dedicated Group Prenatal Care Center

space at Henry Ford Medical Center – New Center One. This dedicated space will allow WIN Network to reach more moms and families to prevent even more infant deaths.

To ensure quality, unbiased and respectful maternal and birth care, Women's Health Services team members at Henry Ford Detroit Hospital and contributing ambulatory sites were trained using the Reducing Unconscious Bias, an Imperative (RUBI)[™] curriculum in 2020-2021. This 3-hour training focuses on Black maternal health disparities and equips team members with knowledge and skills to provide unbiased, patient-centered, respectful care to address infant and maternal health disparities. The training was developed in partnership between the Office of Community Health, Equity and Wellness, and providers in Women's Health Services. 88% of the entire Women's Health Services team was trained, covering all providers. Continuing education is being provided for new residents each year and at Women's Health Grand Rounds.

Heart Disease

Macomb

In-person blood pressure screenings have been paused to protect the health and safety of community members during COVID-19. In the last several months we have seen a reopening of services, with an opportunity to re-engage with screenings in the community. To support the reopening, we have provided guidelines and recommendations to our Faith Community Nurses and their congregations. We work closely and support the work of Macomb County School Nurses for ensuring safe reopening. We have distributed masks and hand sanitizer, as well as printed material to our community partners to ensure safe in-person blood pressure screening and heart health education events. Our Faith Community Nurses have recently resumed blood pressure screenings.

During the pandemic, blood pressure coaches were added to any in-person Diabetes Prevention Program to screen and refer patients into the Hypertension Self-Management Program. To further increase participation in the Hypertension Self-Management Program, a referral system is being implemented into EPIC so that providers can easily refer patients.

To increase educational encounters related to tobacco use, e-cigarettes, and vaping, we partnered with schools to provide education on the health risks associated with these products. We partner closely with the Chippewa Valley Coalition for Youth and Families on their mission to

promote a healthy, resilient, drug-free youth. This partnership allows for greater reach to community members for education.

The COVID-19 pandemic caused Henry Ford Macomb Hospital to curtail its usual robust schedule of in-person community outreach events that would have included free blood pressure screening

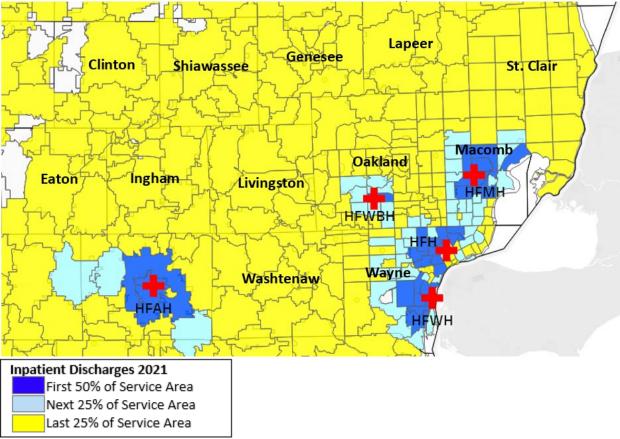


and education on heart disease awareness and prevention. In 2021, Henry Ford Macomb Hospital hosted Facebook Live events on Staying Heart Healthy featuring HFH providers. We also participated in the American Heart Association Heart Walk to raise awareness for heart disease and stroke.

Section 2: Communities Served by Henry Ford Health

Definition and Description of Communities Served

For purposes of this needs assessment, the Henry Ford Health (HFH) service area is defined as the population of Wayne, Oakland, Macomb and Jackson Counties. Figure 1 shows a map of the communities where HFH receives most of its inpatient volume, along with our five hospital locations marked by a red "+." The variable of inpatient volume provides a good geographic indication of what communities HFH significantly interacts with, and likewise, where HFH targets its limited resources to make the greatest impact on the community.





DataKoala

Although Henry Ford Health sees patients from counties throughout Michigan, as well as patients outside of Michigan, most of the patient volume comes from the four-county area of Wayne, Oakland, Macomb and Jackson Counties as depicted in Figure 1 and Figure 2. The four-county area was chosen as the most appropriate geographical area for assessing and impacting community health needs and is the focus of this assessment. The total 2021 estimated populations¹ of the four counties are as follows:

¹ Sg2 Population Estimates

- Jackson County 158,134
- Macomb County 880,655
- Oakland County 1,296,439
- Wayne County 1,745,411

Within the four-county region, each of Henry Ford Health's hospitals has been assigned to a specific county or city based on the location from which most of each hospital's inpatient discharges originate (Figure 2).

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Region	Henry Ford Health	Henry Ford Hospital	Henry Ford Jackson Hospital	Henry Ford Macomb Hospital & Mt. Clemens	Henry Ford West Bloomfield Hospital	Henry Ford Wyandotte Hospital
Macomb	22%	9%	0%	85%	4%	0%
Oakland	12%	8%	0%	4%	64%	1%
Wayne (excluding Detroit)	26%	27%	0%	2%	19%	90%
Detroit	17%	44%	0%	2%	8%	5%
Jackson	13%	1%	80%	0%	0%	0%
Outside Four-county	10%	11%	20%	8%	5%	4%

Figure 2 – 2021 Percentage of Inpatient Discharges by Hospital and Region

DataKoala

Figure 2 illustrates what percentage of Henry Ford inpatient discharges originate from each county within the four-county area including the City of Detroit, as well as outside this region. For each hospital, the region that represents the largest proportion of patient volume has been highlighted. Overall, Henry Ford Health had 105,337 inpatient discharges in 2021 with 90% originating from the four-county area residents.

Demographic Profile of Communities Served

The four-county area includes the Wayne, Oakland, Macomb and Jackson Counties, which are located in southeastern and southcentral Michigan and account for 41% of the Michigan population. Wayne, Oakland, and Macomb (in that order) are the most populous counties in Michigan; Jackson is a much smaller county. Of the over 4 million residents in the four-county area, approximately 51% of the population is female. The four-county area is 63% white, 24% Black, and 5% Hispanic.¹

Population in the four-county area is expected to remain flat by 2026. When examining age distribution, the four-county area has a comparable population to that of the country with 18% of the population above the age of 65. Of particular interest to healthcare providers is the aging population of the four-county area with the 65-year-old and above population expected to rise

by 14% from 2021 to 2026. The "Percent Change" columns in Figure 3 represent predicted population changes from 2021 to 2026.

	Market 2022	Market 2022	Market 2027	Market 2027	Market Population	National 2022
Population and Gender	Population	% of Total	Population	% of Total	% Change	% of Total
Female Population	2,093,753	51.31%	2,111,853	51.25%	0.86%	50.76%
Male Population	1,986,886	48.69%	2,008,788	48.75%	1.10%	49.24%
Fotal	4,080,639	100.00 %	4,120,641	100.00 %	0.98 %	100.00 %
Age Groups	Market 2022 Population	Market 2022 % of Total	Market 2027 Population	Market 2027 % of Total	Market Population % Change	National 2022 % of Total
00-17	882,343	21.62%	870,992	21.14%	(1.29 %)	21.98%
18-44	1,392,142	34.12%	1,392,679	33.80%	0.04%	35.61%
15-64	1,074,133	26.32%	1,023,137	24.83%	(4.75 %)	24.91%
55-UP	732,021	17.94%	833,833	20.24%	13.91%	17.50%
Total	4,080,639	100.00 %	4,120,641	100.00 %	0.98 %	100.00 %
	Market 2022	Market 2022	Market 2027	Market 2027	Market Population	National 2022
Ethnicity/Race	Population	% of Total	Population	% of Total	% Change	% of Total
Asian & Pacific Is. Non-Hispanic	216,550	5.31%	250,959	6.09%	15.89%	6.09%
Black Non-Hispanic	960,009	23.53%	963,124	23.37%	0.32%	12.45%
lispanic	208,208	5.10%	229,954	5.58%	10.44%	19.26%
White Non-Hispanic	2,576,043	63.13%	2,545,248	61.77%	(1.20 %)	58.82%
All Others	119,829	2.94%	131,356	3.19%	9.62%	3.38%
Total	4,080,639	100.00 %	4,120,641	100.00 %	0.98 %	100.00 %
	Market 2022	Market 2022	Market 2027	Market 2027	Market Households	National 2022
Household Income	Households	% of Total	Households	% of Total	% Change	% of Total
<\$15K	161,615	9.94%	145,379	8.82%	(10.05 %)	8.82%
\$15-25K	124,744	7.67%	112,245	6.81%	(10.02 %)	7.56%
\$25-50K	328,455	20.20%	303,727	18.43%	(7.53 %)	19.06%
\$50-75K	263,599	16.21%	253,092	15.35%	(3.99 %)	16.21%
\$75-100K	205,376	12.63%	204,765	12.42%	(0.30 %)	12.60%
\$100K-200K	388,921	23.92%	427,604	25.94%	9.95%	24.79%
>\$200K	153,275	9.43%	201,490	12.22%	31.46%	10.97%
Total	1,625,985	100.00 %	1,648,302	100.00 %	1.37 %	100.00 %
	Market 2022	Market 2022	Market 2027	Market 2027	Market Population	National 2022
Education Level**	Population	% of Total	Population	% of Total	% Change	% of Total
Less than High School	87,825	3.08%	89,163	3.07%	1.52%	4.90%
Some High School	182,271	6.39%	185,319	6.39%	1.67%	6.64%
High School Degree	770,603	27.00%	784,025	27.03%	1.74%	26.92%
Some College/Assoc. Degree	950,771	33.31%	966,772	33.33%	1.68%	30.84%
Bachelor's Degree or Greater	863,071	30.24%	875,559	30.18%	1.45%	30.70%
Total	2,854,541	100.00 %	2,900,838	100.00 %	1.62 %	100.00 %

Figure 3 - Demographic Shapshot of Four-County Area	Figure 3	- Demographic Snapshot of Four-County Area
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*Excludes population under age 5

** Excludes population under age 25

Sg2 Population Estimates

Regarding education, the four-county area has approximately 10% of residents who have some high school education or less compared to the national average of 12%. Further, 30% of residents have a bachelor's degree or greater, which is comparable to the national average. The four-county area is diverse in population, race/ethnicity, economic growth and development. The automotive industry remains the largest employer in the region, but the healthcare sector is represented among the top employers in the region as well.²

² Crain's Detroit 2021 List of Major Employers

Within the four-county area, the median household income in Oakland County (\$81,587) is significantly higher than Wayne County (\$49,359), Jackson County (\$54,511), and Macomb County (\$64,641).³ The United Way ALICE (Asset Limited, Income Constrained, Employed) report shows the number of households whose average income is insufficient to afford basic expenses, including housing, childcare, health care and transportation, by county and city.

	Households living below ALICE	Households living below Poverty	Households living above ALICE
Michigan	25%	13%	62%
Jackson	25%	16%	59%
Macomb	27%	9%	64%
Oakland	22%	8%	70%
Wayne (includes Detroit)	30%	18%	52%
Detroit	36%	33%	31%

2019 ALICE Report

Worse than state average

Lower household incomes negatively impact purchasing power, health insurance coverage, and ability to afford necessities. The four-county area's safety nets, including healthcare systems, are being stretched to the limit. Michigan ranks 33rd in the country for children under age 18 in families below poverty level, at 17.3% in 2019, a 2% improvement from 2018.⁴

In order to increase the utility of the Community Health Needs Assessment, it is important to analyze the profile(s) of each of these counties at a more detailed level, such as zip codes, so that certain differences within the area become evident.

One community in particular need of attention is the City of Detroit (Figure 4), where the average household income is \$52,005, significantly less than average household income of the overall four-county area (\$96,462). 18% of Detroit residents have less than a high school education and only 15% have a bachelor's degree or higher.

³ American Community Survey 2016-2020 5-Year Estimates

⁴ https://talkpoverty.org/state-year-report/michigan-2020-report/

Population and Gender	Market 2022 Population	Market 2022 % of Total	Market 2027 Population	Market 2027 % of Total	Market Population % Change	National 2022 % of Total
Female Population	324,748	52.48%	319,466	52.30%	(1.63 %)	50.76%
Male Population	294,054	47.52%	291,315	47.70%	(0.93 %)	49.24%
Total	618,802	100.00 %	610,781	100.00 %	(1.30 %)	100.00 %
	Market 2022	Market 2022	Market 2027	Market 2027	Market Population	National 2022
Age Groups	Population	% of Total	Population	% of Total	% Change	% of Total
00-17	153,688	24.84%	148,996	24.39%	(3.05 %)	21.98%
18-44	223,962	36.19%	221,256	36.23%	(1.21 %)	35.61%
45-64	144,544	23.36%	134,119	21.96%	(7.21 %)	24.91%
65-UP	96,608	15.61%	106,410	17.42%	10.15%	17.50%
Total	618,802	100.00 %	610,781	100.00 %	(1.30 %)	100.00 %
Ethnicity/Race	Market 2022 Population	Market 2022 % of Total	Market 2027 Population	Market 2027 % of Total	Market Population % Change	National 2022 % of Total
Asian & Pacific Is. Non-Hispanic	5,317	0.86%	6,087	1.00%	14.48%	6.09%
Black Non-Hispanic	484,743	78.34%	466,266	76.34%	(3.81 %)	12.45%
Hispanic	53,938	8.72%	57,601	9.43%	6.79%	19.26%
White Non-Hispanic	54,254	8.77%	57,008	9.33%	5.08%	58.82%
All Others	20,550	3.32%	23,819	3.90%	15.91%	3.38%
Total	618,802	100.00 %	610,781	100.00 %	(1.30 %)	100.00 %
Household Income	Market 2022 Households	Market 2022 % of Total	Market 2027 Households	Market 2027 % of Total	Market Households % Change	National 2022 % of Total
<\$15K	56,521	23.50%	50,588	21.16%	(10.50 %)	8.82%
\$15-25K	30,824	12.82%	28,119	11.76%	(8.78 %)	7.56%
\$25-50K	65,698	27.31%	61,768	25.84%	(5.98 %)	19.06%
\$50-75K	37,185	15.46%	37,273	15.59%	0.24%	16.21%
\$75-100K	20,786	8.64%	22,673	9.49%	9.08%	12.60%
\$100K-200K	24,199	10.06%	30,570	12.79%	26.33%	24.79%
>\$200K	5,315	2.21%	8,045	3.37%	51.36%	10.97%
Total	240,528	100.00 %	239,036	100.00 %	(0.62 %)	100.00 %
	Market 2022	Market 2022	Market 2027	Market 2027	Market Population	National 2022
Education Level**	Population	% of Total	Population	% of Total	% Change	% of Total
ess than High School	19,321	4.72%	19,160	4.74%	(0.83 %)	4.90%
Some High School	52,414	12.81%	52,148	12.89%	(0.51 %)	6.64%
High School Degree	137,995	33.72%	136,603	33.77%	(1.01 %)	26.92%
Some College/Assoc. Degree	138,475	33.84%	136,786	33.81%	(1.22 %)	30.84%
Bachelor's Degree or Greater	61,031	14.91%	59,854	14.80%	(1.93 %)	30.70%
Total	409.236	100.00 %	404.551	100.00 %	(1.14 %)	100.00 %

Figure 4 – City of Detroit Demographics

*Excludes population under age 5

** Excludes population under age 25

Sg2 Population Estimates

In addition to the City of Detroit, there are other zip codes in the four-county area with lower incomes and lower educational attainment. Figure 5a displays the zip codes in Jackson, Macomb, Oakland, and Wayne (excluding Detroit) Counties ranking in the top 20 zip codes for both lowest average household income and highest proportion of the population without a high school diploma in the four-county area. The average household income of these zip codes ranges from \$27,380-\$65,690, lower than the four-county service area. Overall, 17% of residents in these zip codes have less than a high school education compared to 9% for the four-county area.

Demographic data for these zip codes is highlighted in Figure 5b. The populations in these zip codes are more racially and ethnically diverse compared to the four-county area. 39% of the residents of these top 20 zip codes are racial minorities compared to 37% of residents in the entire four-county area.

Macomb County		Oa	Oakland County		Wayne County*		Jackson County	
48091	Warren	48342	Pontiac	48218	River Rouge	49203	Jackson	
48089	Warren	48030	Hazel Park	48203	Highland Park	49284	Springport	
48310	Sterling Heights	48341	Pontiac	48126	Dearborn	49202	Jackson	
48043	Mount Clemens	48340	Pontiac	48120	Dearborn	49277	Rives Junction	
48066	Roseville	48071	Madison Heights	48212	Hamtramck	49201	Jackson	
*Ex	cludes Detroit							

Figure 5a – Top 20 Zip Codes with Lowest Average Income and Lowest Education

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The City of Detroit and above 20 zip codes are of particular interest in planning community needs initiatives within the four-county area. Figure 6 depicts the top 20 zip codes and City of Detroit graphically. These data will influence the focus of our Implementation Plans.

Figure 5b – Demographic Snapshot Top 20 Zip Codes

Population and Gender	Market 2022 Population	Market 2022 % of Total	Market 2027 Population	Market 2027 % of Total	Market Population % Change	National 2022 % of Total
Female Population	255,044	49.90%	255,575	49.86%	0.21%	50.76%
Male Population	256,036	50.10%	257,036	50.14%	0.39%	49.24%
Fotal	511,080	100.00 %	512,611	100.00 %	0.30 %	100.00 %
Age Groups	Market 2022 Population	Market 2022 % of Total	Market 2027 Population	Market 2027 % of Total	Market Population % Change	National 2022 % of Total
00-17	125,833	24.62%	124,089	24.21%	(1.39 %)	21.98%
8-44	182,943	35.80%	179,802	35.08%	(1.72 %)	35.61%
5-64	123,728	24.21%	120,810	23.57%	(2.36 %)	24.91%
5-UP	78,576	15.37%	87,910	17.15%	11.88%	17.50%
otal	511,080	100.00 %	512,611	100.00 %	0.30 %	100.00 %
Ethnicity/Race	Market 2022 Population	Market 2022 % of Total	Market 2027 Population	Market 2027 % of Total	Market Population % Change	National 2022 % of Total
Asian & Pacific Is. Non-Hispanic	30,670	6.00%	34,606	6.75%	12.83%	6.09%
Black Non-Hispanic	119,141	23.31%	122,226	23.84%	2.59%	12.45%
lispanic	28,907	5.66%	32,301	6.30%	11.74%	19.26%
Vhite Non-Hispanic	311,437	60.94%	301,360	58.79%	(3.24 %)	58.82%
All Others	20,925	4.09%	22,118	4.31%	5.70%	3.38%
otal	511,080	100.00 %	512,611	100.00 %	0.30 %	100.00 %
Household Income	Market 2022 Households	Market 2022 % of Total	Market 2027 Households	Market 2027 % of Total	Market Households % Change	National 2022 % of Total
<\$15K	29,753	15.40%	26,845	13.78%	(9.77 %)	8.82%
15-25K	22,596	11.69%	20,913	10.74%	(7.45 %)	7.56%
25-50K	49,468	25.60%	46,858	24.06%	(5.28 %)	19.06%
50-75K	33,376	17.27%	33,139	17.02%	(0.71 %)	16.21%
75-100K	22,817	11.81%	23,373	12.00%	2.44%	12.60%
100K-200K	29,876	15.46%	35,684	18.32%	19.44%	24.79%
\$200K	5,333	2.76%	7,944	4.08%	48.96%	10.97%
Total	193,219	400.00.0/	194,756	100.00 %	0.80 %	100.00 %
	155,215	100.00 %	134,730	100.00 /8	0.00 /0	100.00 /0
	Market 2022 Population	Market 2022 % of Total	Market 2027 Population	Market 2027 % of Total	Market Population % Change	
ducation Level**	Market 2022	Market 2022	Market 2027	Market 2027	Market Population	National 2022
Education Level** .ess than High School	Market 2022 Population	Market 2022 % of Total	Market 2027 Population	Market 2027 % of Total	Market Population % Change	National 2022 % of Total
iducation Level** ess than High School iome High School	Market 2022 Population 23,080	Market 2022 % of Total 6.75%	Market 2027 Population 22,963	Market 2027 % of Total 6.71%	Market Population % Change (0.51 %)	National 2022 % of Total 4.90%
iducation Level** .ess than High School Some High School High School Degree	Market 2022 Population 23,080 33,895	Market 2022 % of Total 6.75% 9.92%	Market 2027 Population 22,963 34,126	Market 2027 % of Total 6.71% 9.98%	Market Population % Change (0.51 %) 0.68%	National 2022 % of Total 4.90% 6.64%
Education Level** Less than High School Some High School High School Degree Some College/Assoc. Degree Bachelor's Degree or Greater	Market 2022 Population 23,080 33,895 116,231	Market 2022 % of Total 6.75% 9.92% 34.01%	Market 2027 Population 22,963 34,126 116,736	Market 2027 % of Total 6.71% 9.98% 34.13%	Market Population % Change (0.51 %) 0.68% 0.43%	National 2022 % of Total 4.90% 6.64% 26.92%

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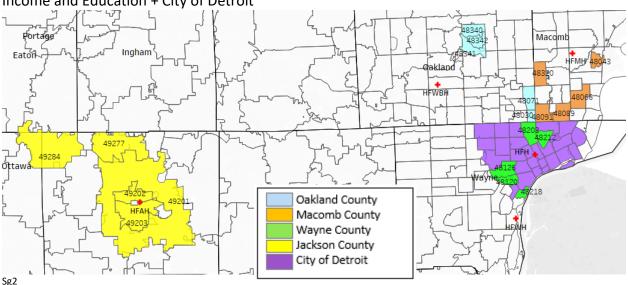


Figure 6 – Top 5 Zip Codes Surrounding Each Henry Ford Health Hospital with Lowest Median Income and Education + City of Detroit

Historical Perspective on Communities Served

The population of the four-county area Henry Ford Health serves is 24% Black, and it is no coincidence that a large portion of the City of Detroit and Top 20 zip codes with lowest income and education levels are Black residents. Southeast Michigan's history is rife with spatial racism that has limited Black people, indigenous people, and people of color's ability to amass wealth, creating the unfavorable social and neighborhood conditions that directly contribute to poor health outcomes.⁵

During the Great Depression, maps were created by the Home Owners Loan Corporation explicitly barring non-white racial and ethnic groups from buying and renting property in certain neighborhoods. This process, now known as "redlining," was technically outlawed in 1968 under the Fair Housing Act. However, recent research leads us to believe that systemic segregation of minority groups from whites still occurs through individual, institutional, and policy-level decisions. African Americans were, and still are, more likely to earn lower incomes than their white neighbors and secluding African Americans into specific neighborhoods meant they had more limited access to well-funded schools, job opportunities, a clean environment, and resources.

This unfair treatment of African Americans helped lead to the uprising of 1967 throughout the City of Detroit, sparking the movement of much of the white population out to the suburbs. As a result, Detroit is now nearly 80% African American, a population of people who have had to overcome far more barriers than a non-minority population in accessing basic resources needed to maintain good health. During the Great Recession of 2007-2009, the rise in home foreclosures

⁵ The legacy of redlining in the effect of foreclosures on Detroit residents' self-rated health, <u>https://www.sciencedirect.com/science/article/pii/S135382921830618X</u>

disproportionately affected BIPOC residents (Black, Indigenous, People of Color) and lower income people in Detroit. Research shows that in areas of Detroit that have been slower to recover from the Great Recession and areas most affected by redlining there are residents who are more likely to negatively rate their own health.⁶ We know that the conditions in which someone lives – their neighborhood, their access to quality education, good jobs, reliable transportation, healthy food, safe spaces – all impact their physical and mental health. The seclusion of African Americans in poorly resourced neighborhoods has also long hindered the ability of black families to build wealth, which epidemiologic studies have confirmed has a close relationship to health outcomes.⁷

The result of this history of racial discrimination is that far too many health disparities lessen life expectancies, burden families with generations of recurring negative health outcomes, overwhelm low-income people with medical costs, and hold communities back from reaching their full potential. Communities that are lower income, that have more marginalized residents, that have experienced more racial and ethnic discrimination and disinvestment have fallen behind, and it's reflected in the data. There are direct relationships between higher prevalence of chronic disease and higher death rates and populations with minority and lower income residents.

In contrast with Metro Detroit, Jackson County is mostly white and largely rural in landscape. Rural populations have historically faced unique health disparities as well. Rural residents are more likely to smoke cigarettes, exercise less, have less healthy diets, and often are more obese than suburban residents. According to the CDC, rural Americans are at greater risk of death from heart disease, cancer, unintentional injury, chronic lower respiratory disease, and stroke compared to urban Americans. People living in rural environments often must travel longer distances to receive medical care and are less likely to have health insurance. Rural communities do not have as high of population density as urban and suburban areas, making it difficult to dedicate resources and build health programs in these areas that might need them, due to difficulty reaching enough residents to make these programs cost-effective. While their circumstances are different from vulnerable and marginalized communities in and around Detroit, many of the health disparities that result from Jackson County residents' living situations are similar to those previously discussed.

The Community Health Needs Assessment process is an important step in lifting the voices of those from these communities to ensure in the future their needs are at the forefront of our programs and policies, to mitigate the abuses and neglect they have suffered in the past.

⁶ The legacy of redlining in the effect of foreclosures on Detroit residents' self-rated health. <u>https://www.ncbi.nlm.nih.gov/pubmed/30448354</u>

⁷ CDC: Social Determinants of Health <u>https://www.cdc.gov/socialdeterminants/index.htm</u>

Section 3: Social and Environmental Health in the Four-County Area

We know that our health and health outcomes are affected by much more than our genetics and the quality of healthcare that we receive. Henry Ford Health is a champion of addressing social determinants of health (SDOH) to help improve population health and achieve health equity. Notably, advancing health equity has been part of our deeply rooted commitment to improving the lives of the patients and communities we serve for decades. To achieve health equity, we understand the importance of looking at all factors that contribute to a person's health, going beyond the walls of our organization and into the communities in which our patients and their families live, work, and play. Healthcare experts have long known that the delivery of healthcare services alone does not drive health and health outcomes; medical care is just one factor in a person's overall health. Because of its importance, we have included achieving health equity in our five-year DEIJ strategic plan, where we commit to achieving equity in clinical outcomes and experience to empower patients to achieve optimal health and well-being.

The social determinants of health (SDOH) describe the conditions in which people live, learn, work, and play, and these conditions have enormous impacts on our health status. Social determinants of health can include housing, education level, income, transportation, neighborhood quality and safety, access to food, social support, the environment (e.g. access to clean water, air and soil quality, exposure to extreme weather conditions) and more.⁷ Poverty and lower income are almost always associated with poorer social determinants of health such as unstable housing, unsafe neighborhoods, no access to transportation, living far from access to healthy foods, underfunded education systems, and more. Facing these conditions makes accessing and navigating healthcare systems more difficult and puts constraints on the ability of people to practice healthy behaviors that prevent chronic diseases. Many of the communities in the four-county area served by HFH face profound barriers relating to the social determinants of health, directly contributing to poor health outcomes in comparison to state averages and averages in communities with higher incomes. Despite our efforts to provide the highest quality clinical care possible to those we serve, many of our patients leave our hospitals and clinics and return to neighborhoods and socioeconomic conditions that oftentimes undermine opportunities for good health.

Poverty, Income, Unemployment, and Education

At particular risk for poor health outcomes in the four-county area are those with lower income and/or education. As income and education increase, the prevalence of preventive health practices increases, prevalence of chronic conditions decrease, and general health improves. For example, according to the results of the 2020 Michigan Behavioral Risk Factor Survey:

- 33.8% of people with incomes less than \$20,000 rated their health as fair or poor while just 5.3% of people with incomes of greater than \$75,000 rated their health as fair or poor.
- 34.5% of people with incomes less than \$20,000 smoke cigarettes, compared to 10.3% of people with incomes greater than \$75,000.
- 60.4% of women making less than \$20,000 had a breast cancer screening in the past two years, compared to 78.2% of women who make more than \$75,000.

• 14.5% of children living in households making less than \$20,000 have asthma, compared to just 5.6% of children in households making greater than \$75,000.

This correlation is also seen in health care access, cardiovascular disease, depression, disability, physical activity, oral health, diabetes, and more. Due to these trends, it is important to prioritize efforts to improve health for communities with households with lower income and education.

Many communities with lower income and education exist throughout the four-county area. The largest is the City of Detroit, located in Wayne County. The median household income in the City of Detroit is \$32,498 which is 45% lower than the median household income in Michigan of \$59,234. In Detroit, 15.3% of the population 25 years and older has a bachelor's degree or higher, versus 29.1% in Michigan. Another community with lower average income and education is the City of Pontiac, in Oakland County, in the zip codes 48340, 48341, and 48342. In Pontiac, the median household income is 58% below the Oakland County median and 43% below the U.S. median. 13.2% of Pontiac adults 25 years and older have a bachelor's degree or higher versus 47.2% for Oakland County overall. In Macomb County's City of Warren (48091), the median household income is 20% below the Macomb County average and 13.7% of residents of this community have no high school diploma versus 10% for Macomb County overall. In Jackson County, Jackson City (4801-203) has a median household income 32% lower than the Jackson County median and 15.6% of Jackson City's residents have less than a high school diploma, compared to 9.2% of Jackson County.

	Michigan	Jackson County	Macomb County	Oakland County	Wayne County	City of Detroit
Percent minority (race other than white, alone)	26.1%	16.9%	23.7%	29.9%	50.8%	89.3%

Figure 7 – Minority Status in the Four-County Area

2020 Census

Figure 8 – Socioeconomics in the Four-County Area

	Michigan	Jackson County	Macomb County	Oakland County	Wayne County	City of Detroit	Trends since 2019 CHNA
Percent below poverty	13.70%	12.40%	9.90%	7.80%	21.30%	33.20%	Improved in all regions
Unemployment rate	6.00%	6.30%	5.60%	4.70%	8.90%	14.90%	Improved in all regions
Median household income	\$59,234	\$54,511	\$64,641	\$81,587	\$49,359	\$32,498	Improved in all regions
Percent of adults age 25+ with no high school diploma	8.70%	8.20%	9.50%	5.60%	12.90%	18.10%	Improved in all regions

American Community Survey 2016-2020 5-Year Estimates

Figure 7 shows the percentage of the population in each region that are a racial minority, meaning any race other than white alone. Figure 8 summarizes important socioeconomic characteristics in the four-county area, with the red highlighted figures indicating those regions face worse socioeconomics than the Michigan state average. Whenever available, we aim to analyze Detroit as a separate entity, as its population characteristics and subsequent health outcomes are unique from Wayne County as a whole. Here, the relationship between race and poverty is evident, as the two regions with the largest percentage of minorities (Detroit and Wayne County) have the greatest percentage of their populations living below poverty. Detroit and Wayne County see the greatest struggles in these social determinants compared to the Michigan average in each category.

Poverty and unemployment are major barriers facing a great number of people in our service area. Three of these five regions (Jackson, Wayne, and Detroit) have a higher unemployment rate than the state of Michigan average, and these same regions consequently have lower median household incomes than the state average. Macomb, Wayne, and Detroit exceed the state average in percent of adults who have no high school diploma. The lack of a high school diploma not only affects these residents' earning potential and ability to secure quality, stable jobs, but also may impact health literacy and ability to navigate the complex healthcare system.

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	Michigan	Jackson County	Macomb County	Oakland County	Wayne County	City of Detroit	Trends since 2019 CHNA
Percent aged 65 and older ¹	17.10%	17.60%	17.00%	16.90%	15.30%	13.90%	Increased in all regions by about 1-2%
Percent civilian noninstitutionalized population with a disability ¹	14.20%	15.10%	14.00%	11.70%	15.70%	19.20%	Increased in Michigan, Wayne, Detroit; No change in Jackson, Oakland, Macomb
Percent of households single parent with children under 18 (no other family present in household) ²	8.80%	9.30%	8.30%	6.30%	12.10%	17.20%	Increased in Michigan; Decrease in Jackson, Macomb, Oakland, Wayne, Detroit

Figure 9 - Vulnerable Residents in the Four-County Area

¹American Community Survey 2016-2020 5-Year Estimates ²American Community Survey 2014-2018 5-Year Estimates Greater than state average

Figure 9 summarizes the percentage of Michigan residents or households in three vulnerable categories. 17.10% of Michigan residents are aged 65 or older, and most of the four-county area has a similar percentage of residents over aged 65. The exception is the City of Detroit, which has 3.8% fewer residents over aged 65, likely a result of lower life expectancy in Detroit. In all four-county area regions, the percentage of residents over aged 65 has increased in the past three years by 1-2% as the Baby Boomer generation ages. Jackson County, Wayne County, and City of Detroit have more noninstitutionalized disabled residents than state average. Single parenthood households are more prevalent than state average in Macomb County, Wayne County, and the City of Detroit. While single parenthood itself does not cause health issues, single mothers are

more likely to lack social support and more likely to experience lower median household income, which are related to poorer health outcomes and vulnerable socioeconomic status.⁸

Housing, Transportation, Technology

	Michigan	Jackson County	Macomb County	Oakland County	Wayne County	City of Detroit
Households with no vehicle	7.50%	6.90%	6.00%	5.60%	13.00%	22.60%
Percent of workers 16+ taking public transportation to work	1.19%	0.36%	0.67%	0.42%	2.60%	6.50%
Percent occupied housing units renter-occupied	28.30%	25.70%	25.90%	28.80%	37.50%	52.40%
Percentage of renters paying 30% or more of household income on rent	48.50%	47.00%	48.20%	42.30%	53.10%	58.80%
Percentage of renters paying 35% or more of household income on rent	39.80%	39.40%	38.60%	34.90%	44.30%	48.70%
Percent households with a broadband internet subscription	84.40%	84.50%	88.40%	90.50%	80.30%	71.90%

Figure 10 – Housing Type, Transportation, and Technology in the Four-County Area

American Community Survey 2016-2020 5-Year Estimates

More vulnerable than state average

Figure 10 summarizes housing type, transportation, and technology in the four-county area. Wayne County and Detroit residents are vulnerable to transportation barriers, with 13% of Wayne County and 22.6% of Detroit residents not having access to a vehicle in their home. Wayne County and Detroit residents also rely on public transportation to get to work more than the average Michigan resident. Despite being a large urban area, Detroit and Wayne County do not have an adequately reliable public transportation system, making the lack of vehicle access in these areas even more restrictive. Lack of transportation to medical appointments is a huge barrier for Detroit patients of Henry Ford Health. Not only does lack of transportation impact adherence to preventive care screenings and appointments, receiving care for chronic diseases and acute health problems, but also affects residents' abilities to make healthy lifestyle choices that can help prevent these health concerns. Detroit residents without a vehicle and without access to good public transportation may not have the ability to access grocery stores that offer healthy, affordable food, and are less able to travel to recreational physical activity opportunities like fitness centers and parks.

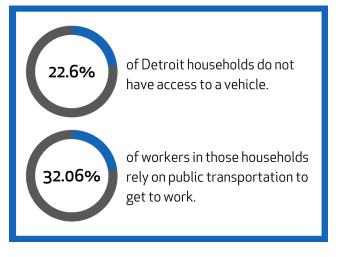
⁸ Single Mothers and Social Support <u>https://link.springer.com/article/10.1023/A:1005567910606</u>

	Michigan	Jackson County	Macomb County	Oakland County	Wayne County	City of Detroit
Car, truck, or van	54.26%	65.74%	69.76%	71.11%	46.94%	39.40%
Public transportation	16.30%	5.75%	9.59%	4.81%	25.03%	32.06%
Walk	13.41%	18.99%	10.50%	9.33%	11.33%	11.65%
Taxi, bicycle, motorcycle, other	10.03%	7.65%	7.72%	7.93%	10.57%	10.72%
Worked from home	5.99%	1.83%	2.42%	6.80%	6.11%	6.12%

Figure 11 – Type of Transportation to Work for Workers in Households with No Vehicle

American Community Survey 2016-2020 5-Year Estimates

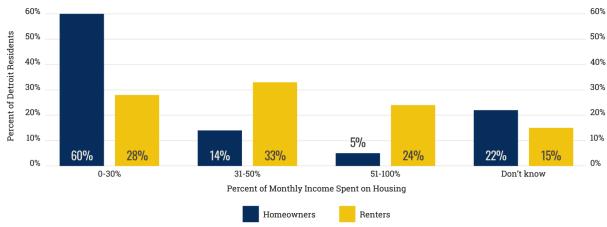
Figure 11 shows what method people in households without a vehicle use to get to work. In all regions, these workers largely still find a way to use a car, truck, or van to get to work perhaps through carpooling and relying on other people to drive or borrowing another person's car. In Wayne County 25.03% and in Detroit 32.06% of these workers use public transportation to get to work. In areas where public transportation is less of a viable option, such as Jackson, Macomb, and Oakland Counties, these workers use it less often.



Housing is a very important social determinant of health as it affects personal safety, stability, financial security, and wealth. Figure 10 shows the percentage of housing units in each of the four-county areas which are rented, not owned, and the housing cost burden on those renters as a percentage of household income. We see that in Oakland County, Wayne County, and Detroit, more people rent their homes on average compared to the state of Michigan. Home ownership in the United States is many families' primary method of incurring and building wealth, and the lack of home ownership in these communities, especially African American communities, holds these residents back from building wealth, financial security, and the improved health outcomes that accompany wealth. For renters, the cost burden of this expense is often a high percentage of their household income. Nearly half (48.5%) of Michigan renters spend greater than 30% of their income on that rent, which is exceeded by Wayne County (53.10%) and Detroit (58.8%). Spending more than 30% of household income on rent is considered a significant cost burden by the U.S. Government, and these renters have difficulty affording other necessities such as food, clothing, transportation, and medical care. However, spending 30% or more of your household income on housing is far more detrimental to a low-income household than a highincome household. Wayne County and Detroit have far lower median household incomes than

state average, making housing affordability an issue severely limiting the ability of these residents to attain good health.⁹

The Detroit Metro Area Communities Study (DMACS) measured Detroiters' cost burden of housing as a percentage of monthly income spent on housing for homeowners and renters, shown in Figure 12. Renters were more likely to be spending greater than 30% of their monthly income on housing. 57% of renters reported their housing costs to be greater than 30% of their monthly income, compared to 19% of homeowners.





Detroit Metro Area Communities Study May 2022

84.4% of Michigan households have a broadband internet subscription but only 80.30% of Wayne County households and 71.9% of Detroit households have one. Lacking consistent internet access has negative implications on our health due to the way in which using the internet has become necessary to accessing services and information, especially since the start of the COVID-19 pandemic. People who do not have internet access are less able to keep up with up-to-date information from reliable sources on COVID-19. Virtual care has become more prevalent since 2020, and patients without reliable internet access encountered a new barrier to safe care.

Food Access

Figure 13 – Percentage of Population That Is Food Insecure

Michigan	Macomb County	Oakland County	Jackson County	Wayne County	
13.00%	11.80%	9.80%	13.10%	15.50%	
Ecoding Amorica 2010					

Feeding America 2019

Food insecurity is represented in Figure 13 and is defined as a household-level economic and social condition of limited or uncertain access to adequate food. The defining characteristic of

⁹ Rental Burdens: Rethinking Affordability Measures

https://www.huduser.gov/portal/pdredge/pdr_edge_featd_article_092214.html

very low food security is that, "at times during the year, food intake of household members is reduced and their normal eating patterns are disrupted because the household lacks money and other resources for food."¹⁰ Food insecurity exists in all four counties, but affects Wayne and Jackson Counties the most.

The Environment & Built Environment

The environment also affects our health. Our patients are impacted by climate events such as extreme hot and cold temperatures, poor air quality, flooding, power outages, and more. Many public health experts argue that addressing climate change is the most pressing public health issue facing our planet and our communities. The health consequences of climate change include temperature-related deaths and illness, vector-borne diseases, water-related illnesses, water-borne diseases, food safety, and mental and behavioral health issues. While all Americans are at risk, some populations are disproportionately vulnerable, including those with low income, communities of color, immigrant groups (including those with limited English proficiency), Indigenous peoples, children and pregnant women, older adults, vulnerable occupational groups, persons with disabilities, and persons with preexisting or chronic medical conditions.¹¹

It is understood that healthcare delivery itself is a significant contributor to climate change. Increasing research in this space over the past decade has demonstrated not only the industry's impact on climate change, but the need for greater awareness and action to mitigate its effects. For example, there is ample evidence showing that anesthetic gasses, commonly used in the hospital setting, are a major source of greenhouse gas emissions. A recent literature review found that healthcare pollution "is associated with substantial health burden"ⁱ but remains largely unchecked. To clarify this point, based on the findings of three case studies in the United States, Canada, and the United Kingdom, the "life cycle of greenhouse gas emissions contributions from the annual operation of surgical suites... [had a] combined climate impact...equivalent to the annual carbon footprint of 2 million passenger vehicles."¹²

It is imperative that a standard set of industry recommendations and quality metrics be adopted, along with funding and incentives to offset the costs, to help hospitals rapidly implement proven technologies and measures to significantly reduce greenhouse gas emission and air pollution.

Improving the Built Environment

Studies show improved rates of patient healing, improved employee satisfaction, and wellbeing at facilities that have green spaces outside windows.¹³ Beyond the beneficial health impacts, green spaces also provide many environmental impacts by cleaning the air and soil, buffering noise pollution, reducing flooding, and lowering temperature, especially in urban environments.

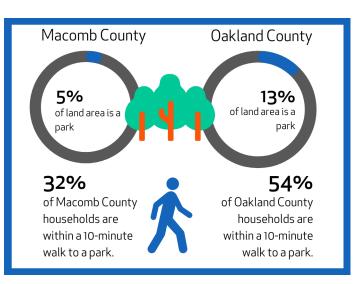
¹¹ The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment (globalchange.gov)
 ¹² Operating in a Climate Crisis: A State-of-the-Science Review of Life Cycle Assessment within Surgical and Anesthetic Care |
 Environmental Health Perspectives | Vol. 129, No. 7 (nih.gov)

¹⁰ USDA <u>Food Insecurity</u>.

¹³ Green Spaces (psychiatrictimes.com)

From a mental health and wellbeing perspective, it is critical that we support the preservation and development of greenspace within our communities. There is a large body of evidence demonstrating the myriad benefits of access and exposure to nature and tree canopy. For example, studies have suggested there are "beneficial associations between green space exposure and reduced stress, positive mood, less depressive symptoms, better emotional wellbeing, improved mental health and behavior, and decreased psychological distress in adolescents."¹⁴ Green spaces also promote movement and exercise which can reduce several chronic diseases and obesity, in addition to the reduction in crime.

Addressing climate change through updates to our built environments (building design and infrastructure, walkable/bikeable streets, green spaces, clean water, etc.) would reduce health disparities, improve mental and physical health and increase access to health care services. For example, building more walkable and bikeable cities with greater access to reliable public transportation will not only reduce environmental pollution by reducing the number of individual drivers, but it could also improve patient



no-show rates to appointments. Figure 14 represents important aspects of the built environment in Macomb, Oakland, and Wayne Counties. This information, provided by the Southeast Michigan Council of Governments (SEMCOG), was not available for Jackson County.

	Total Park Space - Acres / % of Land Area	Park Space per 1,000 Residents (acres)	10-minute walk to a park - All households / %	High/ Moderate Demand Areas for Walking and Biking - All households / % of Total	High/ Moderate Demand Areas - Households without pedestrian access - % of Total	High/ Moderate Demand Areas - Households without biking access / % of Total
Macomb County	5%	18.8	32%	55%	3%	40%
Oakland County	13%	58.0	54%	61%	9%	16%
Wayne County (excluding Detroit)	9%	23.7	52%	70%	2%	53%
Detroit	6%	8.0	69%	95%	0.4%	45%

Figure 14 – Built Environment in Macomb, Oakland, Wayne County, and Detroit

SEMCOG, 2019-2020

¹⁴ <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7557737/</u>

Tree Equity Score

Patients we serve are also impacted by the "tree equity" score (Figure 15), which examines existing tree canopy, population density, income, employment, surface temperature, race, age and health to develop a score ranging from 0 -100, where 100 means the city has achieved tree equity.¹⁵ According to American Forestry which developed the tree score, trees are critical infrastructure that are vital to the health, wealth and well-being of communities. The Tree Equity Score is one resource that can be used by environmental justice advocates, conservation organizations and others to help make the case for more investment in neighborhoods with the greatest need for trees, jobs and protection from the effects of climate change.

- Trees across the U.S. absorb 17.4 million tons of air pollutants, preventing 670,000 cases of asthma and other acute respiratory symptoms annually.
- In cities nationwide, trees prevent approximately 1,200 heat-related deaths and countless heat-related illnesses annually by lowering surface and air temperatures. The ability of trees to reduce peak temperatures is significant, given that a 10-fold increase in heat-related deaths is expected in the Eastern U.S. by 2050.
- On average, trees in the U.S. reduce energy demand for heating and cooling by 7.2%.
- Trees are a source of income—such as jobs related to tree maintenance and making products out of reclaimed wood. For every \$1 million invested in forest restoration, approximately 39 forest-related jobs are created in rural U.S. areas alone.¹⁶

The inequitable distribution of trees exacerbates social inequities. Detroit, for example, has been identified as one of 20 places in the country that would benefit most from planting more trees. If Detroit achieved tree equity, about 90.8 tons of particle pollution would be mitigated.

Figure 15 – Tree Equity Score

Macomb County	Oakland County	Jackson County	Wayne County	Detroit
84	92	80	85	80

TreeEquityScore.com

Figure 16 – Total Tree Canopy

Macomb County	Oakland County	Wayne County	Detroit
269	6 44%	26%	16%

TreeEquityScore.com

Air Quality & Exposures

The environmental quality of the air and space around us has additional effects on our health outcomes. Poor air quality in the four-county area contributes to high rates of asthma. Toxic air pollutants, or air toxics, are those pollutants known or suspected of causing cancer or other

¹⁵ About | Tree Equity Score

¹⁶ FAQ | Tree Equity Score

serious health problems, such as birth defects. Cancer risk is expressed as a number in a million, e.g., 16 in a million chance of getting cancer due to air pollution. In 2014, the total Michigan inhalation cancer risk per million was 23.8 according to the National Air Toxics Assessment. This figure is higher than state average in all four-county regions. In Oakland County, the total cancer risk per million is 25, in Macomb 26, in Jackson 24, in Wayne 28 and in Detroit the total risk is 35 per million.¹⁷ In the American Lung Association's "The State of Air" report, released in 2018, Wayne, Oakland, and Macomb Counties were all given a grade of "F" for ground-level ozone levels (also known as smog).¹⁸ Lead exposure poses a significant environmental threat to children in Wayne County, where the percent of children tested with confirmed blood lead levels of 5 µg/dL or greater was 2.3 times higher than the Michigan average in 2015.¹⁹ Three of the four counties in the four-county area (Oakland, Macomb, and Wayne) exceed state average in percent of the population living within 150 meters of a highway, which has negative health effects due to both air and noise pollution.¹⁹

Henry Ford Health Patient Social Needs Screenings

2021 Percentage of Positive Response by Race/Ethnicity						
	All Races	White Non- Hispanic	Black Non- Hispanic	Asian/Middle Eastern/Multi Racial/Other	Hispanic	
Unable to do things because of my physical/mental health	19.00%	17.49%	29.03%	19.11%	16.29%	
Food	2.30%	1.32%	4.66%	1.24%	1.98%	
Struggle to get together with friends or family	6.60%	6.41%	9.21%	6.37%	6.23%	
Transportation	3.92%	3.07%	7.68%	3.34%	3.82%	
Difficulty Reading	4.22%	3.82%	6.77%	5.24%	4.95%	
Utilities	3.55%	2.76%	8.26%	4.18%	3.84%	
Housing	2.79%	1.99%	6.34%	1.86%	2.51%	
Unable to afford healthcare	3.29%	2.94%	4.43%	4.29%	4.94%	

Figure 17 – Henry Ford Health Social Needs Screening – Top Needs by Patient Race, 2021

Henry Ford Health

Figure 17 shows the top 8 social needs identified in Henry Ford Health social needs screenings with patients during 2021 stratified by patient race. The social needs barriers most exhibited by patients were "unable to do things because of my physical/mental health," "struggle to get together with friends or family," difficulty reading, and transportation. Black patients were more likely to have these barriers -11.54% more Black patients said they are unable to do things because of their physical or mental health than white patients. 4.35% more Black patients said they had difficulty with housing than white patients, and 5.5% more Black patients said they needed help paying for utilities than white patients.

¹⁷ National Air Toxics Assessment

¹⁸ The State of Air Report <u>https://www.lung.org/our-initiatives/healthy-air/sota/city-rankings/states/michigan/</u>

¹⁹ CDC National Environmental Public Health Tracking Network

It is important to analyze and understand the effects that the social determinants of health have on communities, especially in the Community Health Needs Assessment. The often-negative impact to health of being a racial and ethnic minority, having low income, and low education is reflected in the data in the four-county area. To build programs and a system of care that truly serve the needs of our patients, it is vital to understand the social, environmental, and economic circumstances at play in their lives, as these circumstances too often do more to inhibit our communities' good health than our clinical procedures and policies are equipped to mitigate.

Section 4: Assessment of Significant Health Issues in the Four-County Area

To get a comprehensive picture of the health of the communities we serve, our CHNA process included an in-depth review of state and local data, from which many common health issues and trends emerged. These data were gathered largely from the Michigan Department of Health and Human Services (MDHHS) Vital Statistics, the Michigan Behavioral Risk Factor (BRFS) Survey, and the American Communities Survey. The most updated data were generally collected from 2018 to 2020. Data from 2020 may be influenced by the COVID-19 pandemic. However, since data more recent than 2020 is largely not yet available, this CHNA is not able to fully reflect the impact of COVID-19. We also examined trends in these data since completing our last Community Health Needs Assessment in 2019, from which data were mostly collected during 2015-2017.

The COVID-19 pandemic, which began in 2020 and continues as of the completion of this CHNA in 2022, has impacted the lives and the physical, mental, social, and economic wellbeing of residents of the four-county area.

COVID-19 in the Four-County Area

COVID-19 Mortality

Worse than state average

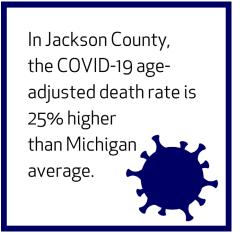
	Deaths per 100k
United States	271
Michigan	292
Jackson County	365
Macomb County	275
Oakland County	248
Wayne County	291
HealthEquityTracker.org Updated July 2022	

Figure 18a – COVID-19 Age-Adjusted Death Rate Per 100k People

Figure 18 shows age-adjusted death rates per 100,000 people due to COVID-19 in the United States, Michigan and the four-county area. As of July 2022, there have been 292 deaths from

COVID-19 per 100,000 people in Michigan, which is 7.7% higher than 271 deaths per 100,000 in the United States. Jackson County's rate exceeds Michigan's, with 365 per 100,000 deaths. Wayne, Macomb, and Oakland County death rates are all slightly lower than state average, at 291, 275, and 248 per 100,000, respectively. The age-adjusted death rate per 100,000 is not

available for the City of Detroit specifically on HealthEquityTracker.org, but data on Michigan.gov show that as of July 26, 2022, Detroit has had 3,586 COVID-19 deaths and Wayne County (excluding Detroit) has had 4,604 COVID-19 deaths. We can calculate that the City of Detroit makes up approximately 35.6% of the population of Wayne County (US Census 2021 Estimates), yet makes up approximately 43.7% of Wayne County's COVID-19 deaths. This calculation shows us that Detroiters have experienced a larger burden of death from COVID-19 compared to Wayne County as a whole. In total, there have been 16,880 deaths in the four-county area due to COVID-19 as of July 26, 2022 (Michigan.gov).



There have been significant racial/ethnic disparities in death rates from COVID-19, shown in figures 18b-e. These figures show age-adjusted COVID-19 death rates per 100,000 people, the share of all COVID-19 deaths in the county attributed to that racial/ethnic group, and the total share of the county's population that each racial/ethnic group comprises. In the tables, blue text shows that a racial/ethnic group's share of the county's COVID-19 deaths exceed their share of the total population, exhibiting a disproportionate burden due to COVID-19.

Race And Ethnicity	COVID-19 Deaths Per 100k People (Age-Adjusted)	Share Of Total COVID-19 Deaths	Population Share
American Indian and Alaska Native (Non- Hispanic)	552per 100k	0.5% of COVID-19 deaths	0.3% of population
Asian (Non-Hispanic)	0per 100k	0.0% of COVID-19 deaths	0.8% of population
Black or African American (Non-Hispanic)	459per 100k	9.9% of COVID-19 deaths	7.7% of population
Hispanic or Latino	107per 100k	1.1% of COVID-19 deaths	3.5% of population
Native Hawaiian and Pacific Islander (Non- Hispanic)	Insufficient Data	Insufficient Data	0.02% of population
Two or more races & Unrepresented race (Non-Hispanic)	21per 100k	0.2% of COVID-19 deaths	2.9% of population
White (Non-Hispanic)	371per 100k	88.3% of COVID-19 deaths	84.6% of population

Figure 18b – Jackson County COVID-19 Deaths by Race/Ethnicity

HealthEquityTracker.org

Worse than state average for all races

% of County's COVID-19 deaths in this racial/ethnic group exceeds % of population share Updated July 2022

Race And Ethnicity	COVID-19 Deaths Per 100k People (Age- Adjusted)	Share Of Total COVID-19 Deaths	Population Share
American Indian and Alaska Native (Non-Hispanic)	184per 100k	0.2% of COVID-19 deaths	0.3% of population
Asian (Non-Hispanic)	169per 100k	2.5% of COVID-19 deaths	4.0% of population
Black or African American (Non- Hispanic)	327per 100k	14.3% of COVID-19 deaths	11.6% of population
Hispanic or Latino	101per 100k	1.0% of COVID-19 deaths	2.6% of population
Native Hawaiian and Pacific Islander (Non-Hispanic)	0per 100k	0.0% of COVID-19 deaths	0.1% of population
Two or more races & Unrepresented race (Non-Hispanic)	307per 100k	2.8% of COVID-19 deaths	2.4% of population
White (Non-Hispanic)	268per 100k	79.3% of COVID-19 deaths	79.0% of population

Figure 18c – Macomb County COVID-19 Deaths by Race/Ethnicity

HealthEquityTracker.org

Worse than state average for all races

% of County's COVID-19 deaths in this racial/ethnic group exceeds % of population share

Updated July 2022

Figure 18d – Oakland County COVID-19 Deaths by Race/Ethnicity

Race And Ethnicity	COVID-19 Deaths Per 100k People (Age- Adjusted)	Share Of Total COVID-19 Deaths	Population Share
American Indian and Alaska Native (Non-Hispanic)	147per 100k	0.1% of COVID-19 deaths	0.2% of population
Asian (Non-Hispanic)	80per 100k	2.5% of COVID-19 deaths	7.4% of population
Black or African American (Non- Hispanic)	423per 100k	24.3% of COVID-19 deaths	13.5% of population
Hispanic or Latino	137per 100k	2.4% of COVID-19 deaths	4.1% of population
Native Hawaiian and Pacific Islander (Non-Hispanic)	0per 100k	0.0% of COVID-19 deaths	0.02% of population
Two or more races & Unrepresented race (Non-Hispanic)	140per 100k	1.6% of COVID-19 deaths	2.7% of population
White (Non-Hispanic)	226per 100k	69.0% of COVID-19 deaths	72.0% of population

HealthEquityTracker.org

Worse than state average for all races

% of County's COVID-19 deaths in this racial/ethnic group exceeds % of population share

Updated July 2022

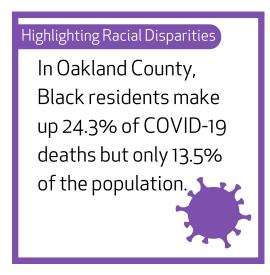
Race And Ethnicity	COVID-19 Deaths Per 100k People (Age- Adjusted)	Share Of Total COVID-19 Deaths	Population Share
American Indian and Alaska Native (Non-Hispanic)	107per 100k	0.1% of COVID-19 deaths	0.3% of population
Asian (Non-Hispanic)	89per 100k	1.1% of COVID-19 deaths	3.3% of population
Black or African American (Non- Hispanic)	231per 100k	32.2% of COVID-19 deaths	38.5% of population
Hispanic or Latino	174per 100k	3.7% of COVID-19 deaths	5.9% of population
Native Hawaiian and Pacific Islander (Non-Hispanic)	0per 100k	0.0% of COVID-19 deaths	0.02% of population
Two or more races & Unrepresented race (Non-Hispanic)	289per 100k	2.5% of COVID-19 deaths	2.4% of population
White (Non-Hispanic)	337per 100k	60.4% of COVID-19 deaths	49.5% of population

Figure 18e – Wayne County COVID-19 Deaths by Race/Ethnicity

HealthEquityTracker.org

Worse than state average for all races

% of County's COVID-19 deaths in this racial/ethnic group exceeds % of population share Updated July 2022

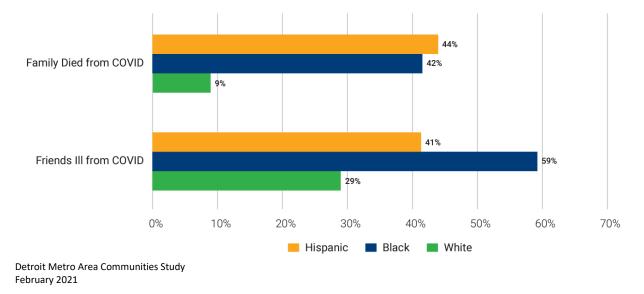


The largest disparity between percentage of a county's COVID-19 deaths versus percentage of that county's population can be seen amongst the Black residents of Oakland County, where Black residents make up 24.3% of Oakland County's COVID-19 deaths but only 13.5% of its population. The second-largest disparity is in Wayne County, where white residents make up 60.4% of the COVID-19 deaths but only 49.5% of the population.

Data in Figure 19 from the Detroit Metro Area Community Study shows the disproportionate burden that death due to COVID-19 has placed on Black and Hispanic Detroiters. Hispanic Detroiters and Black

Detroiters had a 44% and 42% probability, respectively, of having a family member die of COVID-19 compared to 9% probability for white Detroiters.

Figure 19 - Predicted Probability of Detroit Resident Knowing Family or Friends Affected by COVID-19, by Race (Tract-Fixed Effects)



COVID-19 Vaccination

Figure 20a – Percent of Population Fully Vaccinated* for COVID-19

	United States ¹	Michigan ²	Jackson County ²		Oakland County ²	Wayne County ^{**2}	City of Detroit ²
% Fully	67.2%	57.2%	53.7%	58.0%	68.10%	64.3%	39.8%
Vaccinated							

¹Centers for Disease Control and Prevention

²Michigan.gov

Updated July 26, 2022

Worse than state average

*2 doses of Pfizer/Moderna or 1 dose of Johnson & Johnson vaccine

** Excluding City of Detroit

COVID-19 vaccinations began in late 2020 and efforts continue to vaccinate more people each day. Percentages of the population fully vaccinated for COVID-19 are shown in Figure 24. As of July 2022, in the United States 67.2% of people have been fully vaccinated for COVID-19, meaning they received two doses of the Pfizer or Moderna vaccine or one dose of the Johnson & Johnson vaccine. Michigan has fully vaccinated 57.7% of its residents. The four-county area varies in its levels of vaccination. In Oakland County and Wayne County excluding Detroit, vaccination efforts have been far more successful than in Michigan as a whole, where 68.1% and 64.3% of people have been fully vaccinated, respectively. Macomb County is slightly behind Michigan, at 58% fully vaccinated. Jackson County (53.70%) and Detroit (39.80%) are behind Michigan in percent fully vaccinated.

Figure 20b – Michigan COVID-19 Full Vaccinations by Race

	Percent Fully Vaccinated
Non-Hispanic White	50.800%
Non-Hispanic Black	38.500%
Non-Hispanic Asian/Native Hawaiian/Other Pacific Island	58.000%
Non-Hispanic American Indian/Alaska Native	51.500%
Hispanic	51.100%

Figure 20c – Detroit COVID-19 Full Vaccinations by Race

	Percent Fully Vaccinated
Non-Hispanic White	33.200%
Non-Hispanic Black	29.200%
Non-Hispanic Asian/Native Hawaiian/Other Pacific	28.800%
Island Non-Hispanic American	28.800%
Indian/Alaska Native	14.400%
Hispanic	66.200%

Michigan.gov

Updated July 26, 2022 *2 doses of Pfizer/Moderna or 1 dose of Johnson & Johnson vaccine Michigan.gov Updated July 26, 2022

*2 doses of Pfizer/Moderna or 1 dose of Johnson & Johnson vaccine

Figure 20b shows percent fully vaccinated statewide by race/ethnicity statewide. Non-Hispanic Asian/Native Hawaiian/Other Pacific Islander residents have the highest percentage vaccinated at 58%, while Black residents have the lowest percentage vaccinated at 38.5%. Figure 20c shows percent fully vaccinated in Detroit by race/ethnicity. Nearly 80% of City of Detroit residents are Black, and only 29.2% have been fully vaccinated for COVID-19. Most racial groups have low prevalence of COVID-19 vaccination in Detroit: Non-Hispanic American Indian/Alaska Native 14.4%, Non-Hispanic Asian/Native Hawaiian/Other Pacific Islander 28.8%, and Non-Hispanic White 33.2%. An exception is that 66.2% of the Hispanic population in Detroit has been fully vaccinated, which is higher than the overall percentage of Michigan residents fully vaccinated, and a stark outlier compared to other racial/ethnic groups in Detroit.

Healthcare Coverage and Access

		9	6 Estimated	Prevalence			
	Michigan	Macomb	Oakland	Wayne*	Jackson	Detroit	Trends since 2019 CHNA
No Health Care Coverage (aged 18-64)	9.50%	8.90%	5.30%	8.20%	6.90%	13.80%	Improved in all regions
No Personal Health Provider	14.60%	12.80%	12.10%	13.50%	14.20%	20.60%	Worsened in Macomb, Wayne, Jackson; Improved elsewhere
No Health Care Access in Past 12 Months Due to Cost	10.50%	11.30%	9.60%	10.60%	9.20%	14.70%	Improved in all regions

Figure 21a – Health Care Coverage & Access

Michigan BRFS 2018-2020 Combined Estimates

*Excluding Detroit

The 2019 Community Health Needs Assessment is the second in which our metrics were generally recorded following the full deployment of the Affordable Care Act and Medicaid Expansion, and as such we have seen continued improvements in healthcare coverage from the 2016 to 2019 CHNA and from the 2019 to 2022 CHNA. The Affordable Care Act positively impacted the ability of people to access health insurance and medical care.²⁰

Figure 21a summarizes healthcare coverage and access. From 2012-2014, 17.4% of Michiganders aged 18-64 had no health care coverage, which improved to 11.5% from 2014-2016, and 9.5% from 2018-2020. Generally, the four-county area is doing as well as or better than the state average in terms of healthcare coverage and having a personal care provider (PCP), except for Detroit. One fifth of Detroiters do not have a personal care provider. Macomb County, Wayne County, and Detroit have a higher than state average percentage of people who have not accessed healthcare in the past year due to cost.

Figures 21b-21f show healthcare coverage and access data stratified by race for each of the fourcounty area regions. These data exhibit the existence of disparities between racial groups that are influenced by racial disparities in income and other social determinants of health.

	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic
No Health Care Coverage (aged 18-64)	13.80%	17.20%	12.40%		
No Personal Health Provider	20.60%	23.00%	19.60%	20.40%	
No Health Care Access in Past 12 Months Due to Cost	14.70%	18.30%	12.90%	21.00%	

Figure 21b – City of Detroit Healthcare Coverage & Access by Race

Michigan BRFS 2018-2020 Combined Estimates

Worse than state average

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Figure 21c – Macomb County Healthcare Coverage & Access by Race

	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic
No Health Care Coverage (aged 18-64)	8.90%	7.50%	13.50%		
No Personal Health Provider	12.80%	12.40%	12.30%		
No Health Care Access in Past 12 Months Due to Cost	11.30%	10.20%	18.10%	13.40%	

Michigan BRFS 2018-2020 Combined Estimates

Worse than state average

²⁰ http://www.chrt.org/publication/cover-michigan-survey-2014-coverage-and-health-care-access/#accordion-section-2

Figure 21d – Oakland County Healthcare Coverage & Access by Race

	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic
No Health Care Coverage (aged 18-64)	5.30%	4.90%	7.10%		
No Personal Health Provider	12.10%	10.70%	11.30%	22.50%	25.10%
No Health Care Access in Past 12 Months Due to Cost	9.60%	8.80%	10.20%	12.00%	

Michigan BRFS 2018-2020 Combined Estimates

Worse than state average

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Figure 21e – Wayne* County Healthcare Coverage & Access by Race

	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic
No Health Care Coverage (aged 18-64)	8.20%	6.80%	9.60%	13.00%	
No Personal Health Provider	13.50%	12.20%	15.50%	17.40%	20.90%
No Health Care Access in Past 12 Months Due to Cost	10.60%	9.80%	12.60%	9.90%	

Michigan BRFS 2018-2020 Combined Estimates *Excluding City of Detroit

Worse than state average

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Figure 21f – Jackson County Healthcare Coverage & Access by Race

	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic
No Health Care Coverage (aged 18-64)	6.90%	6.60%			
No Personal Health Provider	14.20%	12.90%			
No Health Care Access in Past 12 Months Due to Cost	9.20%	9.00%			

Michigan BRFS 2018-2020 Combined Estimates

Worse than state average

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Figure 21g – Four-County Area Combined Healthcare Coverage & Access by Race

	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic
No Health Care Coverage (aged 18-64)	8.40%	6.60%	11.00%	7.50%	14.00%
No Personal Health Provider	14.10%	12.00%	16.70%	19.90%	22.10%
No Health Care Access in Past 12 Months Due to Cost	11.10%	9.70%	13.00%	13.00%	12.80%

Michigan BRFS 2018-2020 Combined Estimates

Worse than state average

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Figure 21g shows data on healthcare coverage and access for the entire four-county area combined and stratified by race. Black, other & multi-racial, and Hispanic four-county residents are more likely than white residents to not have healthcare coverage, not have a Primary Care Provider (PCP), and to have avoided care in the past year due to cost. Some of the largest disparities show that 22.1% of Hispanic, 19.9% of other/multi-racial, and 16.7% of Black four-county area residents do not have a PCP compared to 12% of white four-county area residents.

Health Behaviors, Lifestyle Factors, and Preventive Health Practices

Health behaviors and lifestyle factors such as alcohol and drug use, smoking, lack of physical activity, poor nutrition, and obesity are known to greatly impact onset of disease and chronic illness. Preventive practices such as regular health screenings, physicals, vaccinations, and dental care are known to positively impact these health outcomes. As noted earlier, as income and education increase, people are often able to practice health behaviors and lifestyles that contribute to good health outcomes.

Weight & Health Behaviors

				% Esti	mated Pre	evalence	
							Trends since 2019 CHNA
Obese (Adults 18+)	34.70%	32.70%	29.30%	36.80%	35.10%	39.90%	Increased in Michigan, Oakland, Wayne, Detroit; Decreased in Macomb, Jackson
Overweight (Adults 18+)	34.50%	37.30%	36.40%	35.40%	35.20%	31.20%	Increased in Macomb, Wayne, Jackson; Decreased in Michigan, Oakland, Detroit
No Leisure-Time Physical Activity (Adults 18+)	23.30%	24.20%	18.30%	23.20%	23.50%	32.70%	Decreased in all regions
Current Cigarette Smoking (Adults 18+)	18.60%	18.20%	12.40%	18.70%	21.70%	24.70%	Decreased in all regions
Current e-Cigarette Smoking (Adults 18+)	6.50%	8.30%	7.10%	7.50%	5.70%	4.70%	Increased in Michigan by 32.6%
Heavy Drinking (Adults 18+)	6.50%	5.50%	6.00%	5.70%	6.70%	5.60%	Increased in Oakland, Jackson; Decreased in Michigan, Macomb, Wayne; Same in Detroit
Binge Drinking (Adults 18+)	17.90%	17.60%	18.10%	17.30%	17.40%	16.80%	Increased in Oakland; Decreased everywhere else

Figure 22a – Weight & Health Behaviors

Michigan BRFS 2018-2020 Combined Estimates *Excluding City of Detroit

Worse than state average

Figure 22a outlines the prevalence of specific lifestyle factors for residents of the four-county area. Obesity is most prevalent and higher than state average in Detroit (39.9%), Wayne County (36.8%), and Jackson County (35.1%). Since the 2019 CHNA, obesity has increased statewide and in Oakland County, Wayne County, and Detroit, while it has decreased in Macomb County and Jackson County. 69.3% of four-county area residents are either obese or overweight, which is an increase of 3.3% since the 2019 CHNA. This is an area of particular concern given that obesity is linked with many adverse health outcomes such as hypertension, type 2 diabetes, coronary heart disease, stroke, and sleep apnea.

Likely contributing to the high obesity rates in the four-county area is the lack of physical activity among residents. Figure 22a shows that 23.3% of Michigan residents get no physical activity in their leisure time, and in Macomb County (24.2%), Jackson County (23.5%), and Detroit (32.7%)

this prevalence is worse than state average. While getting no physical activity during leisure time is a serious issue in the four-county area, in all regions it has improved slightly since the 2019 CHNA.

Cigarette smoking became less prevalent in all regions since the 2019 CHNA, but Wayne County, Jackson County, and Detroit have a higher prevalence of cigarette smoking than state average. E-cigarette smoking increased statewide by 32.6% since the 2019 CHNA. While only 6.50% of all adults in Michigan currently use e-cigarettes, the prevalence of current ecigarette use among 18–24-year-olds is 21.1%.

Since the 2019 CHNA, adult cigarette smoking has decreased by:							
8.1%	in Detroit						
5.3%	in Macomb County						
4.3%	in Jackson County						
3.2%	in Wayne County excluding Detroit						
1.4%	in Oakland County						

Figures 22b-f show weight and health behaviors data stratified race for each of the four-county area regions.

% Estimated Prevalence							
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic		
Obese (Adults 18+)	39.90%	25.50%	42.10%	20.50%			
Overweight (Adults 18+)	31.20%	34.10%	31.40%	26.40%			
No Leisure-Time Physical Activity (Adults 18+)	32.70%	17.80%	34.30%	30.40%			
Current Cigarette Smoking (Adults 18+)	24.70%	18.80%	25.50%	27.90%			
Current e-Cigarette Smoking (Adults 18+)	4.70%		4.40%				
Heavy Drinking (Adults 18+)	5.60%	12.90%	4.80%				
Binge Drinking (Adults 18+)	16.80%	27.90%	15.60%	12.00%			

Figure 22b – City of Detroit Weight & Health Behaviors by Race

Michigan BRFS 2018-2020 Combined Estimates

Worse than state average

% Estimated Prevalence								
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic			
Obese (Adults 18+)	32.70%	32.20%	38.50%	16.70%				
Overweight (Adults 18+)	37.30%	36.10%	47.50%	39.20%				
No Leisure-Time Physical Activity (Adults 18+)	24.20%	22.40%	33.90%	25.90%				
Current Cigarette Smoking (Adults 18+)	18.20%	18.60%	17.20%					
Current e-Cigarette Smoking (Adults 18+)	8.30%	9.10%						
Heavy Drinking (Adults 18+)	5.50%	6.40%						
Binge Drinking (Adults 18+)	17.60%	18.50%	14.40%					

Figure 22c – Macomb County Weight & Health Behaviors by Race

Michigan BRFS 2018-2020 Combined Estimates

Worse than state average

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Figure 22d – Oakland County Weight & Health Behaviors by Race

% Estimated Prevalence								
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic			
Obese (Adults 18+)	29.30%	28.50%	41.60%	15.20%	30.10%			
Overweight (Adults 18+)	36.40%	36.90%	35.30%	32.20%	45.10%			
No Leisure-Time Physical Activity (Adults 18+)	18.30%	16.80%	24.40%	20.80%	21.80%			
Current Cigarette Smoking (Adults 18+)	12.40%	13.10%	9.20%	11.50%				
Current e-Cigarette Smoking (Adults 18+)	7.10%	7.40%						
Heavy Drinking (Adults 18+)	6.00%	6.90%						
Binge Drinking (Adults 18+)	18.10%	19.20%	14.50%	13.70%	26.60%			

Michigan BRFS 2018-2020 Combined Estimates

Worse than state average

% Estimated Prevalence								
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic			
Obese (Adults 18+)	36.80%	35.50%	47.50%	27.00%	39.90%			
Overweight (Adults 18+)	35.40%	35.60%	32.20%	36.00%	38.30%			
No Leisure-Time Physical Activity (Adults 18+)	23.20%	21.20%	36.50%	25.40%	20.30%			
Current Cigarette Smoking (Adults 18+)	18.70%	19.40%	14.40%	15.00%	23.50%			
Current e-Cigarette Smoking (Adults 18+)	7.50%	7.30%						
Heavy Drinking (Adults 18+)	5.70%	6.70%						
Binge Drinking (Adults 18+)	17.30%	18.80%	9.80%	8.20%	21.20%			

Figure 22e – Wayne* County Weight & Health Behaviors by Race

Michigan BRFS 2018-2020 Combined Estimates

*Excluding City of Detroit

Worse than state average

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Figure 22f – Jackson County Weight & Health Behaviors by Race

% Estimated Prevalence								
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic			
Obese (Adults 18+)	35.10%	34.80%						
Overweight (Adults 18+)	35.20%	34.90%						
No Leisure-Time Physical Activity (Adults 18+)	23.50%	22.80%						
Current Cigarette Smoking (Adults 18+)	21.70%	20.80%						
Current e-Cigarette Smoking (Adults 18+)	5.70%	5.50%						
Heavy Drinking (Adults 18+)	6.70%	6.60%						
Binge Drinking (Adults 18+)	17.40%	17.50%						

Michigan BRFS 2018-2020 Combined Estimates

Worse than state average

<u> </u>								
% Estimated Prevalence								
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic			
Obese (Adults 18+)	33.90%	31.90%	42.20%	19.40%	42.70%			
Overweight (Adults 18+)	35.40%	36.10%	34.20%	33.70%	34.30%			
No Leisure-Time Physical Activity (Adults 18+)	23.40%	20.00%	32.70%	24.10%	23.30%			
Current Cigarette Smoking (Adults 18+)	17.70%	17.00%	19.90%	15.20%	19.10%			
Current e-Cigarette Smoking (Adults 18+)	6.90%	7.60%	4.50%	7.70%	10.70%			
Heavy Drinking (Adults 18+)	5.70%	6.80%	3.50%	2.90%				
Binge Drinking (Adults 18+)	17.50%	19.00%	14.40%	11.50%	23.40%			

Figure 22g – Four-County Area Combined Weight & Health Behaviors by Race

Michigan BRFS 2018-2020 Combined Estimates

Worse than state average

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Figure 22g shows weight and health behavior data stratified by race for the combined four-county area. Obesity is 10.3% more prevalent amongst Black residents and 10.8% more prevalent amongst Hispanic residents than white. White residents are most likely to get leisure-time physical activity with only 20% reporting none, compared to 32.7% of Black, 24.1% of other & multi-racial, and 23.3% of Hispanic residents. Black and Hispanic residents are the most likely to smoke cigarettes at 19.90% and 19.20% respectively, which is slightly higher than a prevalence of 17% amongst white residents. Hispanic residents are most likely to use e-cigarettes. Prevalence of heavy drinking is 3.3% more prevalent

Highlighting Racial Disparities

10.7% of Hispanic adults use e-cigarettes, compared to 7.6% of white and 4.5% of Black adults.

among white than Black. Binge drinking prevalence is highest amongst Hispanic (23.40%) and white (19.0%) residents, while Black and other/multi-racial residents binge drink less than state average.

Preventive Health Practices

				% Estir	mated Preva	lence	
	Michigan	Macomb	Oakland	Wayne*	Jackson	Detroit	Trends since 2019 CHNA
Had Flu Vaccine in Past Year (Adults 65+)	61.60%	65.10%	64.80%	61%	57.90%	51.10%	Improved in all regions except Wayne; Worsened in Wayne
No Routine Checkup in Past Year (Adults 18+)	21.20%	20.10%	20.40%	18.40%	20.30%	18.50%	Improved in all regions significantly
Breast Cancer Screening (Women 40+) in Past 2 Years	72.70%	75.10%	73.20%	72.40%	70.70%	66.90%	Improved in Macomb, Wayne; Worsened in Michigan, Oakland, Jackson, Detroit
Cervical Cancer Screening (Women 18+) in Past 3 Years	79.20%	87.10%	83%	79.90%		81.60%	Improved in all regions
Prostate Cancer Screening (Men 50+) in Past Year	32.90%	45%	43.40%	27.20%		20.50%	Worsened in all regions
Colorectal Cancer Screening (50+)	75.60%	77.90%	75%	74.80%	84.90%	70.70%	Improved in all regions
No Dental Visit in Past Year (Adults 18+)	30.80%	30.10%	23.30%	31.20%	30.50%	43%	Improved in Oakland, Jackson, Detroit; Worsened in Michigan, Macomb, Wayne
Ever Had an HIV Test (Adults 18- 64)	45.50%	44%	46.20%	47.30%	49.20%	71.80%	Improved in all regions
Always uses seatbelt (Adults 18+)	89.10%	91.10%	91.50%	90.10%	91.90%	87%	Improved in Michigan, Macomb, Jackson, Detroit; Worsened in Oakland, Wayne

Figure 23a – Preventive Health Practices

Michigan BRFS 2018-2020 Combined Estimates

*Excluding City of Detroit

Worse than state average

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

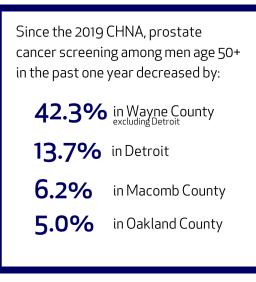


Figure 23a outlines the prevalence of several preventive health practices in the four-county area. These actions we encourage, as they can help prevent chronic disease, catch serious illnesses earlier in the disease progression, and promote safety. Each region in the four-county area exhibits worse-than-state-average prevalence of at least one of these preventive health practices. The greatest areas in need of improvement are breast cancer screening, flu vaccines for adults 65+, and colorectal cancer screenings. The percent of the population aged 65+ that received a flu vaccine increased in all four-county regions since the 2019 CHNA except Wayne County, where it decreased. Wayne County (61.0%), Jackson County (57.90%), and Detroit

(51.10%) have elderly populations that are less vaccinated against the flu than state average (61.60%).

Wayne County, Jackson County, and Detroit residents performed worse than state average in breast cancer screenings for women aged 40+. The largest area of need for breast cancer screenings is in Detroit, where only 66.9% of women have had a breast cancer screening in the past 2 years compared to 72.70% statewide. The prevalence of breast cancer screenings worsened in Detroit, Jackson County, Oakland County, and statewide. Colorectal cancer screening prevalence improved in all regions since the 2019 CHNA, but in Oakland and Wayne Counties, prevalence is slightly below state average. In Detroit, prevalence of colorectal cancer screenings is 4.9% worse than statewide. Prostate cancer screening prevalence decreased significantly in Wayne County excluding Detroit, by 42.3%, and less severe decreases were seen in Detroit, Macomb County, and Oakland County.

The four-county area excelled in number of residents who received a routine checkup in the past year. In all regions, the prevalence of routine checkups improved since the 2019 CHNA. We see that in areas that struggle with a lower percentage of the population with health coverage – Wayne County and Detroit – there is also a lower percentage of people having dental visits in the past year. Since the 2019 CHNA, the prevalence of adults not having a dental visit in the past year in Detroit has improved from 49.6% to 43%. More adults are reporting ever having had an HIV test in all regions. The area where HIV tests are most accessed is in Detroit, where 71.80% of adults have been tested compared to 45.50% statewide.

Figures 23b-23f show preventive health practices data stratified by race for each of the fourcounty area regions.

% Estimated Prevalence									
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic				
Had Flu Vaccine in Past Year (Adults 65+)	51.10%	64.6%	51.0%						
No Routine Checkup in Past Year (Adults 18+)	18.50%	31.9%	16.2%	26.5%					
Breast Cancer Screening (Women 40+) in Past 2 Years	66.90%	58.7%	69.2%						
Cervical Cancer Screening (Women 18+) in Past 3 Years	81.60%		82.0%						
Prostate Cancer Screening (Men 50+) in Past Year	20.50%								
Colorectal Cancer Screening (50+)	70.70%	97.8%	72.2%						
No Dental Visit in Past Year (Adults 18+)	43%	32.8%	44.3%						
Ever Had an HIV Test (Adults 18-64)	71.80%	44.3%	76.6%	52.1%					
Always uses seatbelt (Adults 18+)	87%		85.9%						

Figure 23b – City of Detroit Preventive Health Practices by Race

Michigan BRFS 2018-2020 Combined Estimates

Worse than state average

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Figure 23c – Macomb County Preventive Health Practices by Race

% Estimated Prevalence									
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic				
Had Flu Vaccine in Past Year (Adults 65+)	65.10%	65.3%							
No Routine Checkup in Past Year (Adults 18+)	20.10%	21.0%	14.2%						
Breast Cancer Screening (Women 40+) in Past 2 Years	75.10%	72.4%							
Cervical Cancer Screening (Women 18+) in Past 3 Years	87.10%	83.1%							
Prostate Cancer Screening (Men 50+) in Past Year	45%	34.9%							
Colorectal Cancer Screening (50+)	77.90%	79.7%							
No Dental Visit in Past Year (Adults 18+)	30.10%	26.3%							
Ever Had an HIV Test (Adults 18-64)	44%	39.6%	73.3%	30.6%					
Always uses seatbelt (Adults 18+)	91.10%	91.2%							

Michigan BRFS 2018-2020 Combined Estimates

Worse than state average

% Estimated Prevalence									
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic				
Had Flu Vaccine in Past Year (Adults 65+)	64.80%	66.0%	55.6%						
No Routine Checkup in Past Year (Adults 18+)	20.40%	20.5%	18.6%	24.2%	19.2%				
Breast Cancer Screening (Women 40+) in Past 2 Years	73.20%	70.9%							
Cervical Cancer Screening (Women 18+) in Past 3 Years	83%	82.70%							
Prostate Cancer Screening (Men 50+) in Past Year	43.40%	46.2%							
Colorectal Cancer Screening (50+)	75%	73.1%							
No Dental Visit in Past Year (Adults 18+)	23.30%	22.0%	25.8%	26.9%					
Ever Had an HIV Test (Adults 18-64)	46.20%	42.8%	70.3%	36.1%	41.2%				
Always uses seatbelt (Adults 18+)	91.50%	92.6%	87.5%						

Figure 23d – Oakland County Preventive Health Practices by Race

Michigan BRFS 2018-2020 Combined Estimates

Worse than state average

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Figure 23e – Wayne County* Preventive Health Practices by Race

% Estimated Prevalence									
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic				
Had Flu Vaccine in Past Year (Adults 65+)	61%	62.0%							
No Routine Checkup in Past Year (Adults 18+)	18.40%	18.0%	14.9%	25.0%	27.2%				
Breast Cancer Screening (Women 40+) in Past 2 Years	72.40%	72.7%							
Cervical Cancer Screening (Women 18+) in Past 3 Years	79.90%	79.40%							
Prostate Cancer Screening (Men 50+) in Past Year	27.20%	29.1%							
Colorectal Cancer Screening (50+)	74.80%	76.1%							
No Dental Visit in Past Year (Adults 18+)	31.20%	29.8%	35.1%						
Ever Had an HIV Test (Adults 18-64)	47.30%	43.2%	70.1%	35.1%	60.9%				
Always uses seatbelt (Adults 18+)	90.10%	90.0%							

Michigan BRFS 2018-2020 Combined Estimates

*Excluding City of Detroit

Worse than state average

% Estimated Prevalence								
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic			
Had Flu Vaccine in Past Year (Adults 65+)	57.90%	58.4%						
No Routine Checkup in Past Year (Adults 18+)	20.30%	20.1%						
Breast Cancer Screening (Women 40+) in Past 2 Years	70.70%	69.8%						
Cervical Cancer Screening (Women 18+) in Past 3 Years								
Prostate Cancer Screening (Men 50+) in Past Year								
Colorectal Cancer Screening (50+)	84.90%	84.4%						
No Dental Visit in Past Year (Adults 18+)	30.50%	29.7%						
Ever Had an HIV Test (Adults 18-64)	49.20%	50.2%						
Always uses seatbelt (Adults 18+)	91.90%	91.6%						

Figure 23f – Jackson County Preventive Health Practices by Race

Michigan BRFS 2018-2020 Combined Estimates

Worse than state average

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Figure 23g – Four-County Area Combined Preventive Health Practices by Race

% Estimated Prevalence									
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non- Hispanic	Hispanic				
Had Flu Vaccine in Past Year (Adults 65+)	61.80%	64.2%	53.9%	43.1%					
No Routine Checkup in Past Year (Adults 18+)	19.50%	20.1%	16.2%	23.4%	23.4%				
Breast Cancer Screening (Women 40+) in Past 2 Years	72.50%	71.8%	76.2%	67.6%	79.7%				
Cervical Cancer Screening (Women 18+) in Past 3 Years	83.20%	82.30%	87.1%						
Prostate Cancer Screening (Men 50+) in Past Year	34.90%	37.20%	29.10%						
Colorectal Cancer Screening (50+)	75.40%	76.6%	74.8%	61.8%					
No Dental Visit in Past Year (Adults 18+)	30.30%	26.3%	38.7%	35.7%	34.6%				
Ever Had an HIV Test (Adults 18-64)	50%	42.5%	73.6%	36.6%	55.9%				
Always uses seatbelt (Adults 18+)	90.30%	91.3%	88.1%	91.8%	86.2%				

Michigan BRFS 2018-2020 Combined Estimates

Worse than state average

Figure 23g shows prevalence of preventive health practices for the entire four-county area combined stratified by race. White residents generally show greater adherence to recommended preventive practices than nonwhite residents, which is reflective of the positive impact that higher income, education, and fewer social barriers has on ability to commit to these practices. There are large racial disparities in people aged 65+ having had a flu vaccine in the past year between white (64.2%), Black (53.9%), and other/multi-racial non-Hispanic (43.1%) residents of

Highlighting Racial Disparities

29.1% of Black men age 50+ in Henry Ford Health's service area have had a prostate cancer screening in the last year.

The prevalence is 8.1% lower than among white men.

the four-county area. Black residents were most likely to have had a routine checkup in the past year with only 20.1% not having one, while 23.4% of both other/multi-racial non-Hispanic and Hispanic residents did not have a routine checkup. There are racial disparities in cancer screening prevalence, but the most significant appear to be between prostate cancer screening for Black (29.1%) vs. white (37.2%), and for colorectal cancer screening for other/multi-racial non-Hispanic (61.8%) vs. white (76.6%). Disparities in dental visits are large, with 12.3% more Black residents, 9.4% more other/multi-racial non-Hispanic residents, and 8.3% more Hispanic residents not having had a dental visit than white residents.

Drugs and Opioids

Overdose Deaths Crude Rate Per 100k									
Michigan Macomb Oakland Wayne Jacks									
Opioid Deaths Crude Rate per 100k	21.78	30.89	7.34	40.22	7.65				
All Drug Deaths Crude Rate per 100k	27.47	37.9	16.43	45.62	11.47				
Percent of Drug Overdose Deaths Caused by Opioids	79.2%	81.5%	44.7%	88.2%	66.7%				

Figure 24 – Drug and Opioid Overdose Deaths 2020

Michigan Death Certificates, Vital Records and Statistics, MDHHS Worse than state average

Figures 24 summarizes the state of drug and opioid overdose deaths in the four-county area in 2020. Opioid abuse has become a serious health concern amongst the four-county area residents since the 2016 CHNA, and the data support these concerns. In Michigan, the crude death rate for opioid deaths in 2017 was 20.61, which rose to 21.78 in 2020. For all drug overdoses the death rate was 26.96 statewide in 2017, rising to 27.47 in 2020. In Macomb and Wayne Counties, the opioid and all drug overdose death rates are higher than statewide. Macomb's opioid death rate is 41.8% higher than state average. Wayne County's opioid death rate is 84.6% higher than state average. Statewide, 79.2% of all drug overdoses are caused by opioids. In Macomb County, this percentage is 81.5% and in Wayne County 88.2%.

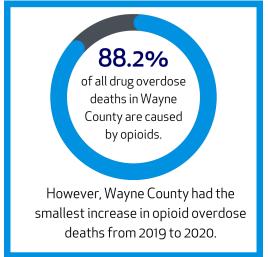
Percent Change in Age-Adjusted Rate of Drug Overdose Deaths								
Michigan Macomb Oakland Wayne Jacks								
Percent change in opioid drug overdose deaths	23%	25.50%	236%	10%	303%			
Percent change in all drug overdose deaths	23.60%	31.70%	5.80%	7%				

Figure 25 – Change in Drug and Opioid Overdose Deaths 2019 to 2020

Michigan Death Certificates, Vital Records and Statistics, MDHHS

Worse than state average

Figure 25 shows the percent change in drug and opioid overdose death rates from 2019 to 2020. The highest increases in opioid overdose death rates were in Jackson County (303% increase), Oakland County (236% increase) and Macomb County (25.50% increase). While Jackson County had a threefold increase in opioid death rate, there was only a small increase in the all-drug overdose death rate. In Jackson County, only 66% of all drug overdoses are caused by opioids – a smaller share compared to Macomb and Wayne Counties. This may explain why Jackson saw a large increase in the opioid overdose death rate but a small increase in the all-drug overdose death rate. Wayne County was the only County in the four-county



area where opioid drug overdoses increased less than state average. There were no regions where opioid and all drug overdose deaths decreased from 2019 to 2020.

Maternal and Infant Mortality

Infant Mortality

0			,	, 0			
	Detroit	Wayne	Macomb	Oakland	Jackson	Michigan	Trends since 2019 CHNA
All Races	14.1	10	5.2	5.1	5.3	6.6	Improved in Michigan, Macomb, Oakland, Jackson, and slightly in Michigan; Worsened in Detroit and Wayne
White	5.3	5.4	3.6	3.9	3.5	4.7	Improved in all regions, most significantly in Detroit
Black	15.8	15.6	11.1	10.7	16.3	14.1	Improved in Oakland, Jackson; Worsened in Michigan, Detroit, Wayne, Macomb

Figure 26 – Infant Mortality Rates by Region and Race 2018-2020

Michigan Department of Health and Human Services, Vital Statistics, 2018-2020 Average Worse than state average

Highlighting Racial Disparities

In Detroit, Black infant mortality is 3x higher than white infant mortality.

In Jackson County, Black infant mortality is more than 4x higher than white infant mortality.

The infant mortality rate is the number of deaths of infants one year or younger per 1,000 live births. Figure 26 summarizes infant mortality rates in the four-county area by race. The Michigan all-race infant mortality rate of 6.6 deaths per 1,000 live births is exceeded by Detroit (14.1) and Wayne County (10.0). The all-race infant mortality rate in Detroit is over two times higher than Michigan's rate. In Detroit and Wayne County, Black and white infants have worse infant mortality rates than Michigan average, and racial disparities have worsened. Since the 2019 CHNA, Detroit's Black infant mortality rate decreased 42%, and for all races increased 3.7%. In Wayne County, Black infant mortality increased 18.2%

and white infant mortality decreased 11.4%, for all races increased 7.5%. There were significant improvements in Jackson and Oakland Counties. In Jackson County, Black infant mortality decreased 19%, white infant mortality decreased 27%, and overall decreased 18.4%. However, in Jackson County, Black infant mortality remains higher than state average. The Black-white infant mortality disparity in Jackson County is the highest disparity of the four-county area. Black infant mortality decreased 25% in Oakland County. Since 2010, Jackson County and Oakland County are the only four-county area regions showing significant improvement in Black infant mortality.

Maternal Mortality

rigure 27 ricghancy her			i tanty Nat
	All Race	White	Black
Michigan	11.6		
Macomb	21.4	17.3	
Oakland	11.9	12.7	
Wayne including Detroit	17.2		30.1
Wayne excluding Detroit	10.3		
City of Detroit	26.9		32.9

Figure 27 – Pregnancy-Related Maternal Mortality Ratio (Deaths per 100k Live Births 2014-2018)

Michigan Department of Health and Human Services Vital Statistics Worse than state average

Jackson County data not available due to fewer than 6 deaths

A pregnancy-related death is any death of a pregnant person during pregnancy or within 365 days of end of pregnancy that is directly related to or aggravated by the pregnancy. The pregnancy-related maternal mortality ratio represents pregnancy-related deaths per 100,000 live births. Figure 27 shows the pregnancy-related maternal mortality ratios for the four-county area (Jackson County data not available due to having fewer than 6 deaths during 2014-2018). Michigan's ratio is 11.6, and the four-county area struggles with a ratio higher than state average in every region except in Wayne County excluding Detroit. Maternal mortality is 131% higher in

Detroit, 84.5% higher in Macomb County, 48.3% higher in Wayne County (including Detroit), and 2.6% higher in Oakland County than Michigan average.

These data show that the maternal mortality ratio in Detroit for Black mothers is 22.3% higher than the ratio for all races and there were fewer than 6 pregnancy-related deaths of white Detroit mothers from 2014-2018. There were fewer than 6 deaths among both white and Black mothers in Wayne County (excluding Detroit) from 2014-2018, which tells us that most of Wayne County's pregnancy-related deaths are of Detroit mothers.

Chronic Disease

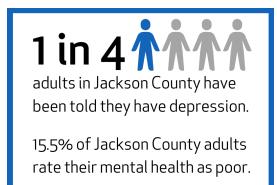
Certain behaviors such as lack of physical activity, poor nutrition, tobacco use, and not seeking appropriate preventive care can result in developing chronic disease and illness. In addition, the aging of the population coupled with longer life expectancies contributes to increases in the prevalence of chronic disease. Figure 28a outlines the prevalence of several chronic conditions for the four-county area and Michigan.

				% Estim	ated Preva	lence Amo	ong Adults 18+
	Michigan						Trends since 2019 CHNA
General Health, Fair or Poor	17.90%	17.20%	14.20%	19.20%	17.80%	27.90%	Improved in Macomb, Jackson; Worsened in Michigan, Oakland, Wayne, Detroit
Poor Physical Health	13.20%	10.60%	11.30%	14.00%	13.10%	17.90%	Improved in all regions
Poor Mental Health	15.40%	15.20%	13.50%	16.80%	15.50%	17.80%	Improved in all regions except Wayne where there was no change
Ever Told Depression	21.40%	17.10%	17.90%	20.80%	25.40%	19.70%	Improved in Michigan, Macomb, Oakland, Detroit; Worsened in Wayne and Jackson
Ever Told Arthritis	31.00%	30.80%	27.50%	32.90%	34.00%	31.20%	Improved in Michigan, Macomb, Oakland, Wayne; Slightly worsened in Jackson, Detroit
Ever Told Asthma	15.90%	17.10%	14.40%	15.10%	18.60%	20.20%	Improved in Oakland, Jackson, Wayne, Detroit; Worsened in Michigan, Macomb
Ever Told Any Cardiovascular Disease	9.70%	9.80%	8.40%	10.90%	11.50%	10.60%	No change in Michigan; Improved in Jackson, Detroit; Worsened in Macomb, Oakland, Wayne
Ever Told Heart Attack	4.90%	4.00%	3.80%	5.80%	5.50%	4.90%	No change in Michigan; Improved in Macomb, Jackson, Detroit; Worsened in Oakland, Wayne
Ever Told Angina/Coronary Heart Disease	4.80%	5.30%	4.80%	5.50%	6.10%	4.00%	Improved in Michigan, Macomb, Jackson, Detroit; Worsened in Oakland, Wayne
Ever Told Diabetes	11.70%	12.60%	10.30%	12.90%	12.20%	13.00%	Improved in Jackson, Detroit; Worsened in Michigan, Macomb, Oakland, Wayne
Ever Told Stroke	3.50%	3.60%	3.00%	3.80%	4.10%	5.10%	Improved in Detroit; Worsened in Michigan, Oakland, Wayne; No change in Macomb, Jackson

Figure 28a – Prevalence of Chronic Disease and Illness

Michigan BRFS 2018-2020 Combined Estimates

*Excludes City of Detroit



There is significant need to improve prevalence of chronic diseases. In Wayne County and Detroit, people rate their general health and physical health as fair or poor more often than state average. Fair or poor general health is 10% more prevalent in Detroit (27.90%) than in Michigan. Wayne County, Jackson County, and Detroit residents rate their mental health as fair or poor more often than state average. Since the 2019 CHNA, prevalence of fair or poor general health worsened in Oakland County, Wayne County, and Detroit, and improved in Macomb and Jackson

Counties. The prevalence of people who've been told they have depression has improved since the 2019 CHNA in Macomb County, Oakland County, and Detroit and worsened in Wayne and Jackson Counties. In Jackson County, 25.40% of adults have been told they have depression.

In Detroit and Jackson County, 20.2% and 18.6% of the population, respectively, have been told they have asthma, compared to a 15.9% average in Michigan, however asthma prevalence has improved since the 2019 CHNA. Cardiovascular disease, heart attack, coronary heart disease, diabetes, and stroke all pose threats to the health of the four-county area. Prevalence of diabetes increased in Michigan, Macomb County, Oakland County, and Wayne County, while decreasing in Jackson County and Detroit. Most of the increases were <2%, except for a 2% increase in Macomb County. This is the second CHNA cycle in which Macomb has seen a 2% increase in diabetes prevalence. In Detroit, the prevalence of stroke improved from 6.0% to 5.1%. Figures 28b-28f show chronic disease prevalence by region and race.

% Estimated Prevalence							
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non-Hispanic	Hispanic		
General Health, Fair or Poor	27.90%	16.90%	28.60%	20.10%			
Poor Physical Health	17.90%		18.30%	25.10%			
Poor Mental Health	17.80%	23.30%	15.70%	27.30%			
Ever Told Depression	19.70%	36.30%	17.80%	15.90%			
Ever Told Arthritis	31.20%	29.20%	32.60%	25.20%			
Ever Told Asthma	20.20%	25.70%	19.90%	20.40%			
Ever Told Any Cardiovascular Disease	10.60%		10.80%				
Ever Told Heart Attack	4.90%		4.70%				
Ever Told Angina/Coronary Heart Disease	4.00%		3.70%				
Ever Told Diabetes	13.00%		13.90%				
Ever Told Stroke	5.10%		5.30%				

Figure 28b - City of Detroit Chronic Disease & Illness by Race/Ethnicity

Michigan BRFS 2018-2020 Combined Estimates

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

% Estimated Prevalence							
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non-Hispanic	Hispanic		
General Health, Fair or Poor	17.20%	16.00%	24.00%				
Poor Physical Health	10.60%	10.90%	9.90%				
Poor Mental Health	15.20%	16.00%	13.50%				
Ever Told Depression	17.10%	17.70%	15.00%	14.30%			
Ever Told Arthritis	30.80%	32.00%	33.00%	17.70%			
Ever Told Asthma	17.10%	16.70%	21.40%				
Ever Told Any Cardiovascular Disease	9.80%	10.10%	9.50%				
Ever Told Heart Attack	4.00%	4.00%					
Ever Told Angina/Coronary Heart Disease	5.30%	5.70%					
Ever Told Diabetes	12.60%	11.70%	18.10%				
Ever Told Stroke	3.60%	3.70%					

Figure 28c – Macomb County Chronic Disease & Illness by Race/Ethnicity

Michigan BRFS 2018-2020 Combined Estimates

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Worse than state average

Figure 28d – Oakland County Chronic Disease & Illness by Race/Ethnicity

% Estimated Prevalence							
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non-Hispanic	Hispanic		
General Health, Fair or Poor	14.20%	13.30%	20.00%	12.10%			
Poor Physical Health	11.30%	13.40%	8.60%	8.30%			
Poor Mental Health	13.50%	13.00%	12.10%	11.70%			
Ever Told Depression	17.90%	19.00%	14.80%	14.90%			
Ever Told Arthritis	27.50%	30.20%	23.40%	14.90%			
Ever Told Asthma	14.40%	14.10%	19.00%	9.90%			
Ever Told Any Cardiovascular Disease	8.40%	9.30%	6.30%				
Ever Told Heart Attack	3.80%	4.10%					
Ever Told Angina/Coronary Heart Disease	4.80%	5.60%					
Ever Told Diabetes	10.30%	10.00%	15.10%				
Ever Told Stroke	3.00%	2.80%					

Michigan BRFS 2018-2020 Combined Estimates

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

% Estimated Prevalence							
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non-Hispanic	Hispanic		
General Health, Fair or Poor	19.20%	18.40%	26.30%		18.90%		
Poor Physical Health	14.00%	13.60%	17.30%	18.80%			
Poor Mental Health	16.80%	15.60%	13.60%	17.50%	18.60%		
Ever Told Depression	20.80%	21.10%	16.90%	24.10%	25.60%		
Ever Told Arthritis	32.90%	34.90%	28.00%	21.30%	26.20%		
Ever Told Asthma	15.10%	14.40%	20.50%				
Ever Told Any Cardiovascular Disease	10.90%	10.90%	12.50%				
Ever Told Heart Attack	5.80%	6.10%	4.10%				
Ever Told Angina/Coronary Heart Disease	5.50%	5.80%					
Ever Told Diabetes	12.90%	12.50%	19.10%				
Ever Told Stroke	3.80%	3.00%	7.30%				

Figure 28e – Wayne County* Chronic Disease & Illness by Race/Ethnicity

Michigan BRFS 2018-2020 Combined Estimates

*Excluding City of Detroit

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Worse than state average

Figure 28f – Jackson County Chronic Disease & Illness by Race/Ethnicity

% Estimated Prevalence						
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non-Hispanic	Hispanic	
General Health, Fair or Poor	17.80%	17.30%				
Poor Physical Health	13.10%	14.10%				
Poor Mental Health	15.50%	13.80%				
Ever Told Depression	25.40%	26.20%				
Ever Told Arthritis	34.00%	35.20%				
Ever Told Asthma	18.60%	18.90%				
Ever Told Any Cardiovascular Disease	11.50%	11.60%				
Ever Told Heart Attack	5.50%	5.30%				
Ever Told Angina/Coronary Heart Disease	6.10%	6.00%				
Ever Told Diabetes	12.20%	12.40%				
Ever Told Stroke	4.10%	4.10%				

Michigan BRFS 2018-2020 Combined Estimates

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

% Estimated Prevalence							
	All	White Non- Hispanic	Black Non- Hispanic	Other & Multi Non-Hispanic	Hispanic		
General Health, Fair or Poor	18.50%	15.90%	26.00%	14.00%	20.30%		
Poor Physical Health	13.40%	12.70%	15.30%	13.90%	13.20%		
Poor Mental Health	14.80%	14.90%	14.40%	14.60%	16.60%		
Ever Told Depression	19.10%	20.10%	16.80%	17.20%	21.60%		
Ever Told Arthritis	30.50%	32.40%	30.10%	18.50%	21.60%		
Ever Told Asthma	16.30%	15.50%	19.90%	13.10%	15.40%		
Ever Told Any Cardiovascular Disease	9.90%	10.20%	10.00%	6.20%	6.90%		
Ever Told Heart Attack	4.60%	4.80%	4.30%	3.10%			
Ever Told Angina/Coronary Heart Disease	5.00%	5.70%	3.50%				
Ever Told Diabetes	12.00%	11.30%	15.30%	8.80%	9.00%		
Ever Told Stroke	3.70%	3.30%	5.10%				

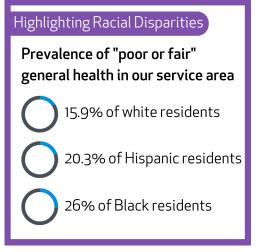
Figure 28g - Four-County Area Combined Chronic Disease & Illness by Race/Ethnicity

Michigan BRFS 2018-2020 Combined Estimates

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Worse than state average

Figure 28g shows chronic disease prevalence by race/ethnicity for all four-county area residents combined. In the four-county area, many racial disparities exist in chronic disease prevalence. White and other/multi-racial non-Hispanic residents have the lowest prevalence of chronic disease. It is important to note that many of these prevalence figures are based on whether a person has been told by a medical professional that they have a certain illness. People who have less access to healthcare because of low income are perhaps more likely to have an undiagnosed illness unrepresented in these data, which could be underlying some of these disparities. The largest disparities



represented here are as follows. Fair or poor general health is 10.1% more prevalent among Black residents than white and 12% more prevalent among Black residents compared to other/multi-racial non-Hispanic. 13.9% more white residents have been told they have arthritis than other/multi-racial non-Hispanic residents. Prevalence of asthma amongst Black residents is 4.4% higher than white and 6.8% higher than other/multi-racial non-Hispanic residents is 4% higher than white and 6.5% higher than other/multi-racial non-Hispanic residents.

Leading Causes of Death

				Ra	te per 100,	000 populat	ion
Cause of Death	Michigan	Macomb	Oakland	Wayne	Jackson	Detroit	Trends since 2019 CHNA
Heart Disease	206	193.9	191.8	274.4	212.2	340.4	Increased everywhere except Macomb; Decreased in Macomb
Cancer	158.8	166.5	133.7	162	170.4	173.1	Decreased everywhere
COVID-19	86.5	121	84.9	145	80.8	215	New to leading causes of death
Unintentional Injuries	56.2	57	28.2	77.2	33.2	103.4	Increased in Michigan, Wayne, Detroit; Decreased in Macomb, Oakland, Jackson
Stroke	44.8	42.1	51.7	45.7	41.5	46.9	Increased everywhere except Detroit; Decreased slightly in Detroit
Chronic Lower Respiratory Diseases	42.4	40.9	33.5	36.6	58.7	30.9	Slight increase in Macomb; Decreased everywhere else
Alzheimer's Disease	37	35.1	25.1	27.7	53.2	18.2	Increased in Michigan, Macomb, Wayne, Jackson; Decreased in Oakland and Detroit
Diabetes Mellitus	26.3	32.7	22	32.6	22.9	38.3	Increased in all regions except Jackson, most significantly in Detroit, Wayne, and Oakland; No change in Jackson
Kidney Disease	14.8	15.2	14.5	19.3	17.9	25.7	Increased in all regions - most significantly in Jackson and Macomb
Pneumonia/Influe nza	14.4	15.2	12.1	26.6	11.2	31.8	Increased in Michigan, Macomb, Wayne, Detroit; Decreased in Oakland, Jackson
Intentional Self- Harm (suicide)	14	12.6	12.1	12.6	16.3	Not available	Increased in Michigan, Oakland, Wayne; Decreased in Macomb, Jackson
All Other Causes	226.6	233	197	260.2	255.9	304.1	

Figure 29a - Age-Adjusted Death Rates for Leading Causes (Sorted by Michigan Rate) 2020

Michigan Department of Health and Human Services Vital Statistics 2020 Worse than state average

Figure 29a shows the leading causes of death in 2020 for Michigan and the four-county area. COVID-19 became the third-leading cause of death in Michigan in 2020, which caused suicide to fall out of the top ten leading causes. Heart disease remained the number one cause of death, and the age-adjusted death rates from heart disease increased by 2-6% in all regions except Macomb County, where there was a slight decrease. Cancer remained the second-leading cause of death, but cancer death rates decreased in all regions; 2.8% in Macomb County, 6.3% in Oakland County, 11.8% in Wayne County, 13% in Jackson County, and 10.2% in Detroit. Cancer death rates remain higher than state average in all four-county regions except Oakland County.

The unintentional injury death rate increased significantly in Wayne County (21.3%) and Detroit (43.4%). The stroke death rate increased 22.7% in Macomb County and 37.5% in Oakland County. The diabetes death rate increased in all regions except Jackson County, with a 38.7% increase in Detroit, 33% in Wayne County, 34.1% in Oakland County, 16.4% in Macomb County. The kidney

disease death rate increased in all regions, most significantly in Jackson County (33.5%) and Macomb County (23.5%). The pneumonia/Influenza death rate increased significantly in Macomb County (12.6%), Wayne County (42.2%), Detroit (51%).

Rate per 100,000 population							
Cause of Death	All Races	White	Black				
Heart Disease	340.4	254.6	358.4				
Cancer	173.1	146.4	180.7				
COVID-19	215	125.6	232.4				
Unintentional Injuries	103.4	97.2	107.3				
Stroke	46.9	24.8	50.8				
Chronic Lower Respiratory Diseases	30.9	29.9	31.5				
Alzheimer's Disease	18.2		19.4				
Diabetes Mellitus	38.3	36.3	39.5				
Kidney Disease	25.7	18.8	27.2				
Pneumonia/Influenza	31.8	19.7	34.1				
Intentional Self-Harm (suicide)	Not available	Not available	Not available				
All Causes	304	234.1	321.9				

Figure 29b - City of Detroit Age-Adjusted Death Rates for 10 Leading Causes 2020

Michigan Department of Health and Human Services Vital Statistics 2020

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Worse than state average

Rate per 100,000 population							
Cause of Death	All Races	White	Black				
Heart Disease	193.9	188.1	293.2				
Cancer	166.5	167.1	206.2				
COVID-19	121	106	293.4				
Unintentional Injuries	57	58.4	66.8				
Stroke	42.1	40.5	68.3				
Chronic Lower Respiratory Diseases	40.9	41.3	41.5				
Alzheimer's Disease	35.1	35.6					
Diabetes Mellitus	32.7	29.3	70.8				
Kidney Disease	15.2	12.6	46.6				
Pneumonia/Influenza	15.2	13.9	30.7				
Intentional Self-Harm (suicide)	12.6	13					
All Causes	233	225.1	365.7				

Michigan Department of Health and Human Services Vital Statistics 2020

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%. Worse than state average

Rate per 100,000 population							
Cause of Death	All Races	White	Black				
Heart Disease	191.8	185.6	260.8				
Cancer	133.7	133.8	152.9				
COVID-19	84.9	69.6	193.5				
Unintentional Injuries	28.2	28.7	32.8				
Stroke	51.7	50.2	67.3				
Chronic Lower Respiratory Diseases	33.5	34.6	35.9				
Alzheimer's Disease	25.1	24.4	33.8				
Diabetes Mellitus	22	19.2	41.1				
Kidney Disease	14.5	11.8	34.9				
Pneumonia/Influenza	12.1	11.6	15.4				
Intentional Self-Harm (suicide)	12.1	13.5					
All Causes	197	192.6	263.9				

Figure 29d – Oakland County Age-Adjusted Death Rates for 10 Leading Causes 2020

Michigan Department of Health and Human Services Vital Statistics 2020

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Worse than state average

Figure 29e – Wayne County Age-Adjusted Death Rates for 10 Leading Causes 2020

Rate per 100,000 population							
Cause of Death	All Races	White	Black				
Heart Disease	274.4	227.7	363.5				
Cancer	162.1	154	184.5				
COVID-19	145	96.7	234.5				
Unintentional Injuries	77.2	66	100				
Stroke	45.7	40.1	55.6				
Chronic Lower Respiratory Diseases	36.6	39.8	31.7				
Alzheimer's Disease	27.7	30.7	23.4				
Diabetes Mellitus	32.6	26	43.9				
Kidney Disease	19.3	14.1	28.7				
Pneumonia/Influenza	26.6	21.4	36.2				
Intentional Self-Harm (suicide)	2.6	14.8	9.7				
All Causes	260.2	223.7	327.6				

Michigan Department of Health and Human Services Vital Statistics 2020

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Rate per 100,000 population							
Cause of Death	All Races	White	Black				
Heart Disease	212.2	213					
Cancer	170	167.7	246.3				
COVID-19	80.8	70.9	327				
Unintentional Injuries	33.2	34.1					
Stroke	41.5	40.8					
Chronic Lower Respiratory Diseases	58.7	58.9					
Alzheimer's Disease	53.2	54.6					
Diabetes Mellitus	22.9	23.3					
Kidney Disease	17.9	16.5					
Pneumonia/Influenza	11.2						
Intentional Self-Harm (suicide)	16.3	14.7					
All Causes	255.9	244.8	361.5				

Figure 29f – Jackson County Age-Adjusted Death Rates for 10 Leading Causes 2020

Michigan Department of Health and Human Services Vital Statistics 2020

Some data points suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Worse than state average

Figures 29b-f show leading causes of death and their death rates per 100,000 people for each four-area county, for both white and Black residents. Black residents endure higher death rates for these leading causes of death almost across the board in the four-county area. In Wayne County, white people have a higher rate of death due to chronic lower respiratory diseases, Alzheimer's disease, and suicide; in all other causes and rates of death white people fare better than Black people.

The largest disparities (outside of COVID-19, which was discussed earlier) in the City of Detroit are in stroke, where Black people died at a rate 104% higher than white, and in pneumonia/influenza, were Black people died at a rate 73% higher than white. In Wayne County (including Detroit), Black people died from kidney disease at a rate 103% higher than white people, and from pneumonia/influenza at a rate 69% higher than white. In Macomb County, Black people died from kidney disease at a rate 269% higher than white people and from diabetes at a rate 141% higher than white people. In Oakland County, Black people died from kidney disease at a rate 195% higher than white people and from diabetes at a rate 195% higher than white people. In Jackson County, there are many missing data points, but the largest disparities apparent in the data listed are a 47% higher rate of death from all causes amongst Black people and a 46% higher death rate from cancer amongst Black people.

Preventable Hospitalizations

Preventable hospitalizations are hospitalizations for conditions where timely and effective ambulatory care could have decreased or prevented these hospitalizations, summarized in Figure 30. The data in Figure 30 are from 2020, a year when COVID-19 greatly disrupted hospitals and their capacity to admit patients for ailments other than COVID-19. In most of the categories,

preventable hospitalizations decreased from 2016 to 2020, in some areas significantly. We can hypothesize that the influx of patients admitted to hospitals due to COVID-19 in 2020 limited the space for admitting patients due to other ailments. The stay-at-home orders in place for much of 2020 and the fear of contracting COVID-19 in healthcare facilities may also have dissuaded people from going to the hospital compared to before the pandemic.

While most of the categories of preventable hospitalizations decreased from 2016 to 2020, diabetes hospitalizations dramatically increased. Diabetes went from the fourth-leading cause of Increases in diabetes preventable
hospitalizations since 2019 CHNA157%in Jackson County114%in Oakland County97%in Wayne County92%in Macomb County81%in Detroit

preventable hospitalizations statewide to the leading cause in 2020. The increase in preventable hospitalizations from diabetes were significant in all four-county area regions: Jackson County (157%), Oakland County (114%), Wayne County (97%), Macomb County (92%), and Detroit (81%). In every region, diabetes is now the leading cause of preventable hospitalizations.

Congestive heart failure went from being the leading cause in 2016 to the second-leading cause in 2020, with the numbers of preventable hospitalizations dropping by about half in all regions. Bacterial pneumonia remained the third-leading cause while decreasing in absolute numbers by up to 50% in all regions. Chronic obstructive pulmonary was the second-leading cause in 2016 and in 2020 was the fourth-leading cause. Convulsions entered the top ten, becoming the tenth-leading cause, removing kidney and urinary infections from the top 10. Overall, preventable hospitalizations decreased.

	Discharges & Rank						
Causes of Preventable Hospitalization	Michigan	Macomb	Oakland	Wayne	Jackson	Detroit	Trends since 2019 CHNA
Diabetes	43,144	4,715	4,897	11,500	766	6,020	Increased in all regions significantly
Congestive Heart Failure	16,382	1,674	1,803	4,329	297	2,203	Decreased in all regions by about half
Bacterial Pneumonia	14,155	1,427	1,549	3,069	239	1,336	Decreased in all regions up to 50%
Chronic Obstructive Pulmonary	12,650	1,295	1,307	3,474	90	1,734	Decreased in all regions by about half
Grand Mal & Other Epileptic Conditions	8,509	839	1,074	2,453	111	1,387	Decreased slightly in all regions
Cellulitis	6,6,96	878	853	1,518	77	566	Decreased in all regions up to 50%
Asthma	3,369	316	364	1,239	28	863	Decreased in all regions up to 50%
Dehydration	2,902	319	425	845	32	429	Decreased in all regions
Gastroenteritis	2,537	367	357	665	27	284	Decreased in all regions
Convulsions	1,918	182	283	493	21	237	New to top 10
Other Ambulatory Care Sensitive Conditions	130,668	15,661	18,924	35,841	2,047	18,702	Increased in Macomb, Detroit; Decreased in Michigan, Oakland, Wayne; No change in Jackson
All Ambulatory Care Sensitive Conditions	242,930	27,704	31,836	65,446	3,740	33,771	Decreased in all regions

Figure 30 - Ten Leading Causes of Preventable (ACS) Hospitalizations (Sorted by Michigan Discharges)

Michigan Department of Health and Human Services Vital Statistics 2020

Figure 31 summarizes the proportion of all hospitalizations in Michigan and in the four-county area that are preventable hospitalizations. We can see that 22.6% of all hospitalizations in Michigan are preventable, up from 21.6% in 2016. Preventable hospitalizations present a significant opportunity for improvement in the four-county area, as 4 of the 5 regions (Macomb County, Oakland County, Wayne County, Detroit) see proportions of preventable hospitalizations that are higher than state average. The proportion of preventable hospitalizations worsened in all regions since 2016, most significantly in Detroit and Macomb County. Reducing the number of preventable hospitalizations is important as such admissions increase the cost of health care to the region and divert resources that could be utilized elsewhere.

Geographic	Preventable All		% Total	Trends since 2019 CHNA				
Area	Hospitalizations	Hospitalizations						
Michigan	242,930	1,074,727	22.6	Percent increased (worsened) 1%				
Macomb	27,704	108,962	25.4	Percent increased (worsened) 2.3%				
Oakland	31,836	132,613	24	Percent increased (worsened) 1.2%				
Wayne	65,446	241,802	27	Percent increased (worsened) 1.3%				
Jackson	3,740	18,500	20.2	Percent increased (worsened) 1.1%				
Detroit	33,771	108,416	31.2	Percent increased (worsened) 2.8%				

Figure 31 - Proportion of Preventable (ACS) Hospitalization to All Hospitalization

Cancer

Figure 32 – Age-Adjusted Death Rates from Invasive Cancers

	Age-Adjusted Death Rates from Invasive Cancers, 2019							
	Michigan	Jackson	Oakland	Macomb	Wayne	Detroit	Trends since 2019 CHNA	
All Types	156.4	164.7	140.1	160.6	168.2	175.7	Decreased in all regions	
Breast Cancer	19.9	Not available	20.1	23.4	23.3	26.6	Decreased in Michigan, Wayne, Detroit; Increased slightly in Oakland, 12% in Macomb	
Colorectal Cancer	13.4	13.6	12.1	15.4	15.2	16.3	Decreased in Michigan, Jackson, Oakland, Wayne, Detroit; Increased 18% in Macomb	
Lung Cancer	38.8	44.3	31.2	40.6	40.9	42.0	Decreased significantly in all regions	
Prostate Cancer	17.7	Not available	19.2	18.5	21.1	29.9	Increased 11% in Oakland; Decreased everywhere else	

Michigan Department of Health and Human Services, 2019

*A rate is not calculated when there are fewer than 20 events

Worse than state average

Figure 32 summarizes age-adjusted death rates from various invasive cancers, including breast, colorectal, lung, and prostate. The four-county area is greatly affected by cancer, as almost every region exceeds the state's average death rate in all the categories, except Oakland County. Most notable are Detroit and Wayne County, where overall death rates from all types of invasive cancer are 12.3% and 7.5% higher than state average, respectively. The death rate from all cancers decreased 6.1% statewide from 2015 to 2019. In all four-county area regions, the lung cancer death rate decreased. The prostate cancer death rate decreased in all regions except Oakland County, where it increased 11%. The death rate from lung cancer in Jackson County went from being 25% higher than state average in 2015 to 14% higher than state average in 2019. While we did see a good amount of improvement in cancer death rates in the past few years, cancer death rates remain higher than state average almost across the board in four-county area regions for all cancer types. The burden of cancer is felt deeply in the four-county area. These figures represent the serious need to improve preventative cancer screening rates in the four-county area and address the health behaviors that contribute to these death rates, such as smoking, physical activity and nutrition.

Section 5: Community and Stakeholder Input into Needs Assessment

Surveys were used to gather input from a variety of stakeholders in Detroit, Wayne County, Macomb County, and Oakland County, including community members and leaders, and stakeholder organizations also serving the wellbeing of residents. The two groups, community members and those working at stakeholder organizations, responded each to separate surveys. Surveys were administered using SurveyMonkey and Henry Ford's Insights platform during March-April 2022. Surveys gathered input on barriers people face in achieving good health and accessing healthcare, and asked respondents to rank health and social issues that are most important to improving community health, amongst other questions about barriers to achieving good health. 1,571 responses from community members and stakeholders in Detroit, Wayne County, Macomb County, and Oakland County were collected.

Jackson County was surveyed separately through the Jackson Collaborative Network's needs assessment process, which utilizes a phone survey sampling strategy. <u>Read the entire Jackson Collaborative Network Community Assessment report here.</u> The method used for this survey was a random digit dial telephone survey of Jackson County residents. The sample was stratified by census tract, meaning the population was sampled evenly throughout all census tracts in the county (with the prison census tract being omitted). Cellular and landline telephone numbers of Jackson County residents in each census tract were randomly dialed until the target number of surveys was completed for each tract. This cycle included an oversampling of residents who self-identified as Black/African American to help strengthen the sample and help to reveal evidence of racial disparities in the Jackson community. A total of 1,300 adults in Jackson County completed the telephone survey. Within Jackson County, 26% of respondents lived in the City of Jackson, 59% lived outside of the city, and the remaining 15% had an unknown location within Jackson County.

Responses to surveys were received from organizations and individuals representing a range of racial/ethnic backgrounds. Racial/ethnic minorities represented amongst survey respondents include Black, Asian, Native American, Multi-Racial, Hispanic or Latino, and Middle Eastern or North African descent.

Organizations providing input into the Community Health Needs Assessment:

15th Street Detroit Block Club Detroit Ascension Health Advanced Technology Academy Auntie Na's House Authority Health Avalon Healing Center Black Mothers' Breastfeeding Association Blackman-Leoni Township Department of Public Safety Center for Family Health Chaldean Community Foundation

- City of Jackson Police Department
- Coalition on Temporary Shelter (COTS)
- **Community Action Agency**
- Community Health and Social Services Center
- Detroit Health Department
- Detroit Leadership Academy
- Detroit Service Learning Academy
- Drug Free Jackson
- Eat Beauty
- Families Against Narcotics
- Great Start Collaborative Detroit/Wayne County
- Great Start Collaborative of Jackson County
- Greater Romeo Washington Chamber of Commerce
- Henry Ford Jackson Hospital
- Infant Mortality Program
- Jackson Community Ambulance
- Jackson Community Foundation
- Jackson County Advocates and Leaders for Police and Community Trust (ALPACT)
- Jackson County Health Department
- Jackson County Intermediate School District
- Jackson County Office of the Michigan Department of Health and Human Services
- Jackson County Office of the Sheriff
- Jackson District Library
- Jackson Health Network
- Lincoln Park Public Schools
- Macomb County Health Department
- Macomb County Government
- Matrix Human Services
- Mercy Education Project
- Michigan Public Health Institute
- MoGo
- Partial to Girls Women Taking Action
- Project Healthy Community
- Region 2 Area Agency on Aging
- Saint Mary Mercy Livonia Hospital
- Southwest Solutions
- Sterling Heights Regional Chamber of Commerce
- Taste the Local Difference
- The Children's Center
- The Family Center of Grosse Pointe and Harper Woods
- United Way of Jackson County
- Veteran Owned Business Round Table

Findings from Community and Stakeholder Input

Survey respondents in Wayne, Oakland, and Macomb Counties were asked to rank health and social issues based on how important they are to improving the health of their community from the following list. Figures 33 and 34 show the health and social issues that were ranked as most important from respondents in Detroit, Wayne County, Macomb County, and Oakland County.

Health issues	Social issues
Tobacco, drug, and alcohol use	Safe neighborhoods
Maternal and infant health	Parks and green spaces
Mental health	Affordable housing
Cancer	Affordable healthy foods
Chronic diseases	Transportation
Vaccinations (COVID-19, influenza, etc)	Internet or Wi-Fi access
	Good jobs

Figure 33 – Top Health Issues According to Community and Stakeholder Input

	Detroit (N=164)	Wayne County (excl. Detroit) (N=474)	Macomb County (N=343)	Oakland County (N=422)
#1 Health Issue	Chronic Disease	Chronic Disease	Chronic Disease	Chronic Disease
#2 Health Issue	Mental health	Mental health	Mental health	Mental health
#3 Health Issue	Cancer	Cancer	Cancer	Cancer

Figure 34 – Top Social Issues According to Community and Stakeholder Input

	Detroit (N=164)	Wayne County (excl. Detroit) (N=474)	Macomb County (N=343)	Oakland County (N=422)
#1 Social	Safe	Safe	Safe	Safe
Issue	Neighborhoods	Neighborhoods	Neighborhoods	Neighborhoods
#2 Social	Affordable	Affordable	Affordable	Affordable
Issue	Housing	Housing	Housing	Housing
#3 Social Issue	Good Jobs	Good Jobs	Good Jobs	Good Jobs

In Jackson County, the top issues important to improving community health according to community and stakeholder feedback were found to be:

- Infant Mortality Rates
- Suicide Rates
- Drug-Related Deaths
- Deaths by Unintentional Injury
- % Poor Physical Health
- % Poor Mental Health

Section 6: Selected Priorities in the 2022 Community Health Needs Assessment

Figure 35 shows the significant health needs that were selected as priorities for Henry Ford Health's forthcoming Implementation Plans following this Community Health Needs Assessment. Priorities 1 (Chronic Disease Prevention and Management) and 2 (Behavioral Health and Substance Use Disorder) are consistent across all Henry Ford Health locations. Priority 3 is chosen considering the needs of each hospital. Infant mortality was chosen as Priority 3 for Henry Ford Jackson Hospital. Cancer Prevention and Screening was chosen as Priority 3 for Henry Ford Macomb Hospital, Henry Ford West Bloomfield Hospital, and Henry Ford Wyandotte Hospital.

Location	Enterprise-Wide: Chronic Disease Prevention & Management	Enterprise-Wide: Behavioral Health & Substance Use Disorder	Hospital-Specific Priority
Henry Ford Detroit Hospital	Х	Х	Infant Mortality
Henry Ford Jackson Hospital	Х	Х	Infant Mortality
Henry Ford Macomb	Х	Х	Cancer Prevention &
Hospital			Screening
Henry Ford West Bloomfield	Х	Х	Cancer Prevention &
Hospital			Screening
Henry Ford Wyandotte	Х	Х	Cancer Prevention &
Hospital			Screening

Figure 35 – Selected Priorities in the 2022 Community Health Needs Assessment

Process and Justification for CHNA Priority Selection

Community Health Needs Assessment Priorities are selected after considering the data on health and social needs outlined in sections 3 and 4, weighed alongside input received from community members and stakeholders regarding the issues they believe to be most important to improving community health.

The following criteria were considered most important when the CHNA workgroup was selecting the recommended priorities:

- Issues significantly contributing to death
- Issues significantly contributing to preventable hospitalizations
- Significant racial disparities in disease or mortality prevalence
- Significant worsening of a health issue since 2019 CHNA
- Ranking in top 4 issues important to improving community health by community members and stakeholders

Henry Ford's CHNA Workgroup, a workgroup of Community Health ANchor Council Enterprisewide (CHANCE), reviewed the data collected from state and local sources and the community/stakeholder input from surveys. The workgroup identified highly prevalent health issues, issues which affect people in our service area more than Michigan residents on average, and issues which have significantly worsened since the 2019 CHNA. After considering the data, community input, and our resources and initiatives, the priorities outlined in Figure 35 were recommended by the CHNA workgroup for approval by the President of each Henry Ford Health Hospital. CHNA workgroup leadership met one-on-one with each Hospital President to present needs assessment findings, priority recommendations and justifications for the selected priorities. Approval was received from each President for the recommended priorities. The recommended priorities were then presented to and ratified by each Hospital Board of Trustees and the Henry Ford Health Executive Council in the third quarter of 2022. The Community Health Leadership Council recommended this CHNA for approval by the Board of Directors on November 4, 2022. The selected priorities were ratified by the Henry Ford Health Board of Directors on December 16, 2022.

Potential Resources for CHNA Priorities

The following is a list of resources potentially available to address the health priorities identified through the CHNA. This is not an exhaustive list.

Chronic Disease Prevention & Management

- Community & Worksite Health Fairs & Screenings
- Medical Nutrition Therapy
- Tobacco Treatment Services
- Health Coaching
- Diabetes Prevention Program
- Diabetes Care Centers
- LiveWell Health Education Blog
- SNAP-Ed programs including Linking Lessons, Cooking Matters, Eat Smart Live Strong, Fresh Conversations
- Fresh Rx Program
- Better Choices Better Health, a National Kidney Foundation of Michigan chronic disease management program
- Community Information Exchange[™]
- Social Determinants of Health Screenings
- Community Health Worker Hub

Behavioral Health & Substance Use Disorder

- Trauma Recovery Initiative (TRI)
- Behavioral Health Integration
- Digital Cognitive Behavioral Therapy
- Pain Management Programs for selected populations including sickle cell disease and lower back pain
- Families Against Narcotics partnership
- Medication Assisted Treatment (MAT)

Infant Mortality

- Women-Inspired Neighborhood (WIN) Network: Detroit Enhanced Group Prenatal Care Program
- Reducing Unconscious Bias, an Imperative (RUBI)[™] training for healthcare team members
- Hope Starts Here: Detroit's Early Childhood Partnership
- Detroit Regional Infant Mortality Reduction Task Force
- Community Health Worker Hub
- Community Information Exchange[™]

Cancer Prevention & Screening

- Henry Ford Cancer Institute
- American Cancer Society partnership
- Hospital Systems Capacity Building Initiative
- Communities of Practice Site: Breast Health Equity project
- Michigan Institute of Urology Men's Health Event partnership
- Breast & Cervical Cancer Control Navigation Program (BCCCNP) partnership and financial resource (covers the costs of follow-up medical care for low-income women ages 21 to 64)

Section 7: CHNA Dissemination

The complete CHNA report is available electronically at <u>henryford.com/communityhealth</u>. To submit written comments on the CHNA or to obtain a printed copy of the report, contact Henry Ford Health at <u>communityevents@hfhs.org</u>. The next year that the Community Health Needs Assessment will be completed will be fiscal year 2025.