Spectrum Health Gerber Memorial Hospital

Community Health Needs Assessment

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Spectrum Health

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Introduction

Background and Objectives

VIP Research and Evaluation was contracted by Spectrum Health to conduct a Community Health Needs Assessment (CHNA) for Spectrum Health Gerber Memorial Hospital (SHGM) in 2019. For the purposes of this assessment, "community" is defined as, not only the county in which the hospital facility is located (Newaygo), but also regions outside the county which compose SHGM's primary (PSA) and secondary (SSA) service areas. Since no hospital resides in Lake County, which borders Newaygo County to the north, some residents in the southern portion of Lake County travel to Newaygo County and SHGM for health care services. Thus, the target population of the assessment reflects the overall representation of the community served by this hospital facility.

The Patient Protection and Affordable Care Act (PPACA) of 2010 set forth additional requirements that hospitals must meet in order to maintain their status as a 501(c)(3) Charitable Hospital Organization. One of the main requirements states that a hospital must conduct a Community Health Needs Assessment and must adopt an implementation strategy to meet the community health needs identified through the assessment. The law further states that the assessment must take into account input from persons who represent the broad interests of the community, including those with special knowledge of, or expertise in, public health.

In response to the PPACA requirements, organizations serving both the health needs and broader needs of the Spectrum Health Gerber Memorial Hospital community began meeting to discuss how the community could collectively meet the requirement of a CHNA.

The overall objective of a CHNA is to obtain information and feedback from SHGM area residents, health care professionals, and key community leaders in various industries and capacities about a wide range of health and health care topics to gauge the overall health climate of the region covered by SHGM.

Because this CHNA is unique and an ad hoc endeavor, the overall objective of this CHNA is to gather feedback from the same groups listed above but is more narrow in scope, focusing on continued existing issues or problems, steps taken to address pre-identified issues or problems, and solutions and strategies going forward for both the creation of the next CHNA, as well as the implementation of services to address the issues or problems. More specific objectives include measuring:

- The overall health climate, or landscape, of the regions served by SHGM, including primarily Newaygo County, but also portions of Lake County.
- Social indicators, such as crime rates, education, employment, poverty rates, and environmental factors.
- Community characteristics, such as factors that make it easy or hard for residents to lead healthy lives, social determinants of health, and available resources.
- Physical health status indicators, such as life expectancy, mortality rates, and leading causes of death.
- Perception of the most pressing or concerning health issues by Key Stakeholders, Key Informants, and adult area residents.
- Accessibility of health care, sources of health care payment, awareness of available services, services utilized, barriers to access, programs or services lacking, and health literacy.
- Improvement in health care access.
- Solutions and strategies implemented, recommendations, and resources available to address area health and health care needs.

Information collected from this research will be utilized by the Community Health Needs Assessment team of Spectrum Health Gerber Memorial Hospital to:

- Prioritize health issues and develop strategic plans.
- Monitor the effectiveness of intervention measures.
- Examine the achievement of prevention program goals.
- Support appropriate public health policy.
- Educate the public about disease prevention through dissemination of information.

Methodology

This research involved the collection of primary and secondary data. The table below shows the breakdown of primary data collected, including the target audience, method of data collection, and number of completes.

	Data Collection Methodology	Target Audience	Number Completed
Key Stakeholders	In-Depth Telephone Interviews	Hospital Administrators, Clinic Executive Directors	6
Key Informants	Online Survey	Physicians, Nurses, Dentists, Pharmacists, Social Workers	67
Community Residents (Underserved)	Self-Administered (Paper) Survey	Vulnerable and underserved subpopulations	80
Community Residents	Telephone Survey	SHGM area adults (18+)	409

Secondary data were derived from various government and health sources such as the U.S. Census, Michigan Department of Health and Human Services, County Health Rankings, Bureau of Labor Statistics, and Kids Count Data Center.

Key Stakeholders are defined as executive-level community leaders who:

- Have extensive knowledge and expertise on public health and/or human service issues.
- Can provide a "50,000-foot perspective" of the health and health care landscape of the region.
- Are often involved in policy decision-making.
- Examples include hospital administrators and clinic executive directors.

Key Informants are community leaders who:

- Have extensive knowledge and expertise on public health issues, or
- Have experience with subpopulations impacted most by issues in health/health care.
- Examples include health care professionals (e.g., physicians, nurses, dentists, pharmacists, social workers) and directors of non-profit organizations.

There were 80 self-administered surveys completed by targeted subpopulations considered to be vulnerable and/or underserved, such as single mothers with children, senior adults, and those who are uninsured, underinsured, or have Medicaid as their health insurance.

A telephone survey was conducted among 409 SHGM area adults (age 18+). The response rate was 31%.

Disproportionate stratified random sampling (DSS) was used to ensure results could be generalized to the larger SHGM patient population. DSS utilizes both listed and unlisted landline samples, allowing everyone with a landline telephone the chance of being selected to participate.

In addition to landline telephone numbers, the design also targeted cell phone users. Of the 409 completed surveys:

- 167 are cell phone completes (40.8%) and 242 are landline phone completes (59.2%).
- 105 are cell-phone-only households (25.7%).
- 90 are landline-only households (22.0%).
- 214 have both cell and landline numbers (52.3%).

For landline numbers, households were selected to participate subsequent to determining that the number belonged to a residence within the zip codes of the primary or secondary SHGM service areas (PSA/SSA). Vacation homes, group homes, institutions, and businesses were excluded. All respondents were screened to ensure they were at least 18 years of age and resided in the SHGM PSA/SSA service areas.

In households with more than one adult, interviewers randomly selected one adult to participate based on which adult had the nearest birthday. In these cases, every attempt was made to speak with the randomly chosen adult;

interviewers were instructed to not simply interview the person who answered the phone or wanted to complete the interview.

The margin of error for the entire sample of 409, at a 95% confidence level, is +/- 5.0% or better based on the population of zip codes that constitute the PSA/SSA of Spectrum Health Gerber Memorial Hospital.

Unless noted, consistent with CDC protocol, respondents who refused to answer a question or did not know the answer to a specific question were excluded from analysis. Only valid responses were used and thus, the base sizes vary throughout the report.

Data weighting is an important statistical process that was used to remove bias from the sample. The formula consists of both design weighting and iterative proportional fitting, also known as "raking" weighting. The purposes of weighting the data are to:

- Correct for differences in the probability of selection due to non-response and non-coverage errors.
- Adjust variables of age, gender, race/ethnicity, marital status, education, and home ownership to ensure the proportions in the sample match the proportions in the larger adult population of the county where the respondent lived.
- Allow the generalization of findings to the larger adult population of each county.

The formula used for the final weight is:

Design Weight X Raking Adjustment

The same robust process used in the 2017 CHNA to identify significant, or critical, health needs was used for this CHNA. Primary data comprised of quantitative and qualitative feedback from area health and human service professionals such as Key Stakeholders and Key Informants, as well as SHGM area adults and underserved area residents, were systematically analyzed to determine pressing/critical/important health issues and emerging themes. This enabled researchers to gain a better understanding of areas respondents deemed to be the most important or critical health and health care issues in the community. Further, Key Stakeholders, Key Informants, and SHGM area adults were specifically asked what they considered to be the most important or critical health needs in the community. The analyses of the primary data were combined with analyses of secondary data collected, providing the basis for determination of the significant health needs in the community.

The process utilized for determination of a significant health need involved the following steps:

1. Examination of quantitative data to see the issues Key Informants and SHGM area adults rated as most pressing/important/critical health problems in the community.
2. Examination of Key Stakeholder responses regarding what they considered to be the most important health problems or issues in the community.
3. Further exploration of Key Stakeholder qualitative responses to additional questions that shed light on issues they considered important or critical; in this way, qualitative data were used to support quantitative data in the determination of issues that were considered significant or key.
4. Identification of important or critical health issues from previous CHNAs that have remained important issues or may have even become increasingly critical over time (e.g., haven't improved).
5. Analyses of secondary data were used to supplement the primary data and were particularly useful when comparisons could be made between the SHGM area and the state and nation.
6. An important consideration when determining an issue to be a significant health need is that the issue is something the CHNA team, SHGM staff, and the subsequent strategic plan can actually address.

The most significant health needs or issues in a community are often overarching areas that have a number of indicators that are also, individually, pressing or important issues. Examples of overarching significant health needs and their indicators include:

- Health care access – lack of primary care providers, inadequate health insurance, inability to afford out-of-pocket expenses, lack of specialty care, and barriers such as transportation issues.
- Mental health – prevalence of mental illness, lack of treatment options, comorbidity with substance use disorder, and continued stigma preventing those in need from seeking care.
- Substance use disorder – prevalence of illicit substance use, prescription drug abuse, opioid addiction, lack of treatment options, and comorbidity with mental illness.
- Obesity – prevalence, links to other health problems, and lack of access to affordable healthy food coupled with easy access to unhealthy food.

Executive Summary and Key Findings

Executive Summary and Key Findings

In general, consistent with findings from the 2017 CHNA, Spectrum Health Gerber Memorial Hospital resides in a community faced with many economic, social, and health challenges. However, community members also see improvement over the past several years from the CHNAs that have been conducted and the strategic plans that have been implemented that focused on areas of need uncovered in the research.

The SHGM area is recognized as having committed leadership across a broad array of community sectors dedicated to improving the health of the community. The area's collaborative spirit is strong, and organizations strive to make the most of limited resources.

The area's physical environment, clean and with a wealth of natural beauty, is one of its best assets. The area's natural resources provide ample opportunities for outdoor activities such as hiking, biking, and water sports. Residents also have access to fresh healthy produce from nearby farms, if they can afford it. In addition, residents enjoy a small-town feel and rural atmosphere. All of these things make it easier for residents to be healthy.

On the other hand, the area's rural location presents challenges with regard to recruiting health care providers to the area and transporting residents to needed services and programs, and can lend to feelings of isolation and lack of social cohesion for some residents. Additionally, there is a plethora of places that offer fast food or junk food, and the winter months can make it hard to be active. All of these things make it harder to be healthy.

Newaygo and Lake counties have lower levels of violent crime compared to the state and nation. On the other hand, both counties have much higher rates of child abuse/neglect compared to state and national rates.

Unemployment, while higher than state and national rates, has decreased substantially over the past few years. Poverty levels are higher than state and national rates, and Lake County in particular has a strikingly high percentage of children living in poverty, more than twice the state and national levels. Educational levels are relatively low, particularly in Lake County; however, the freshman graduation rate for Lake County is on par with the state and nation, and the rate is even better in Newaygo County.

Compared to state and national rates, life expectancy rates are lower for residents in both counties. Both counties have higher age-adjusted mortality rates compared to Michigan and the U.S. Lake County has a much higher infant mortality rate than the state and the nation.

There is ample room for improving the health climate of the SHGM area. Taking everything into account – health conditions, health behaviors, health care availability, health care access – only 32.1% of Key Informants are satisfied overall with the health climate of the region. Even those who are satisfied suggest there is room for improvement in many different areas. Moreover, only 31.0% of area adults think, overall, their community is very or extremely healthy.

The four most **significant needs** remain the same from 2017:

1. Health care access
2. Mental health
3. Substance use disorder
4. Obesity

In addition, focusing on the social determinants of health as contributors to health and health care access is also important. A summary of findings follows.

1. Health Care Access

Access to health care remains a critical area of concern for a number of reasons despite the fact that the vast majority of residents have some form of health care insurance.

- When SHGM area adults think about the characteristics that make a community "healthy," access to health care is their top consideration.
- So, it's concerning when three-fourths (77.7%) of area residents believe access to health care is a critical problem for some community residents.
- Only half (52.3%) of Key Informants feel equipped to help people (patients, clients) access needed programs and services.
  - What would better equip them to be able to help people would be education, social workers to connect patients to services, and lists/tools that identify programs and services available with contact information
- The shortage of primary care providers in the SHGM area emerged as the top health-related concern among Key Informants.
  - There are far fewer MDs and DOs (per 100,000 population) in Newaygo (41.7) and Lake (8.7) counties compared to Michigan (79.4)

- Area residents continue to experience long wait times for appointments, including primary care for both adults and children.
- With distance to providers a factor, **transportation** challenges present a barrier for residents who do not have access to reliable transportation and/or can't afford transportation costs.
  - More than six in ten (62.3%) Key Informants say transportation issues are a common barrier to accessing care; ranked first on a long list of barriers
  - Lack of transportation is a top reason cited by underserved residents who have trouble meeting their health care needs
- **Cost** of care is another barrier for some residents, and this barrier is present even for those with insurance due to unaffordable copays, deductibles, and spend-downs.
  - Six in ten (60.7%) Key Informants cite the inability to afford out-of-pocket expenses as a common barrier (second behind transportation)
  - Area adults report that the top two barriers to access, by far, are the inability to afford out-of-pocket expenses and the high cost of prescription drugs
- Lack of awareness of existing programs or services may not be a barrier to access since three-fourths (75.8%) of area adults report they are somewhat or very aware of programs and services available in the community.
- Key Stakeholders and Key Informants recognize that certain subpopulations are underserved when it comes to accessing health care, especially those who are uninsured or underinsured, with reasons being:
  - Four in ten (42.7%) underserved adults had trouble meeting their health care needs in the past two years
  - Even if they have insurance, it may not be accepted by some providers (e.g., Medicaid/ Medicare), or they may not utilize it because they can't afford out-of-pocket expenses
  - The vulnerable and underserved often forgo needed preventive or maintenance care, including prescription medications, and over-utilize emergency room services
  - Over half (57.0%) of underserved adults report that they visited the ER/ED at least once in the past year; 36.7% two or more times
  - 15.6% of underserved adults had to skip or stretch their medication in the past year due to cost
  - 14.7% of underserved adults have no health care provider (no medical home)
  - 16.4% of all adults sampled have Medicaid for their health insurance, compared to 53.2% for underserved adults

2. Mental Health

Access to mental health treatment continues to be an issue, and this has shown little to no improvement in the 10 years the Community Heath Needs Assessments have been conducted.

- Key Stakeholders and Key Informants consider mental health to be among the most pressing community issues for several reasons:
  - The area suffers from a lack of mental health professionals (especially psychiatrists) and a lack of programs, services, and resources in general that address mental health; this void includes a lack of resources to address mental health proactively, such as teaching coping skills and stress management techniques and providing children with mental health support early on
  - Health is often not considered in a holistic manner, leaving root causes of a patient's condition or difficulty unaddressed; as a result, mental health issues may not be recognized in their early stages when they can be more easily treated
  - Aspects of the SHGM service area's social environment such as widespread poverty make area residents more susceptible to mental health challenges, increased isolation, and lack of social cohesion
  - 51.8% of Key Informants see a lack of residential treatment for mental health
  - Access to mental health treatment is also the most pressing health issue according to Key Informants
  - A sizeable proportion of Key Informants believe that access to mental health treatment for mild to moderate disorders (32.7%), as well as access to treatment for those without insurance (44.2%), has worsened over the past 5-6 years. Three in ten (29.8%) believe access for those with severe and/or persistent disorders has also worsened over the same time period

3. Substance Use Disorder

Substance use disorder remains pervasive in the area and is under-addressed in terms of prevention and treatment. More significantly, substance use disorder is often comorbid with mental illness and has led to the emergence of the field of "behavioral health."

- Substance use disorder continues to be one of the most pressing or concerning community issues among Key Stakeholders and Key Informants. Area residents also see it as an issue but prioritize it lower compared to other problems.
  - That said, 41.1% of Key Informants see a lack of residential treatment for substance use disorder
- 23.8% of underserved residents have resided in a household where alcohol use had a negative impact.
- Both Key Stakeholders and Key Informants cite smoking as a problem, and one in five (21.3%) underserved residents report nicotine/smoking had a negative impact on their household.
- There exists a culture of acceptance where substance use is considered the norm and is passed down from generation to generation.
- Substance use disorder often leads to other serious problems, including loss of employment, child welfare issues, and compounded health risks.

4. Obesity

The proportion of adult area residents considered overweight or obese hovers around two-thirds or worse, and this also has remained consistent for the past 10 years.

- Health care professionals would like to see more attention and resources dedicated to promoting a healthy diet and providing access to healthy food choices, weight loss programs, and nutritional counseling. These opportunities should be available to all regardless of socioeconomic circumstances.
- Obesity is considered one of the most pressing health issues in the SHGM area by Key Stakeholders, primarily because of its comorbidity with other chronic conditions or negative outcomes such as diabetes, hypertension, heart disease, and sleep apnea.
- One in five (20.9%) area adults cite obesity as the most important health problem in their community, second only to cancer.
- Almost one-third (28.6%) of Key Informants consider programs targeting obesity reduction to be lacking in the community.

Other Health Needs

Chronic Disease

- Newaygo and Lake counties both have higher death rates from cancer compared to the state and nation.
  - However, cancer diagnosis rates are lower in Newaygo and Lake counties compared to Michigan or the U.S.
- Because the cancer diagnosis rate is lower in both counties compared to Michigan and the U.S., but the cancer death rate is higher, it raises the question: Is better cancer screening needed in order to detect cancer before it is too late to treat the condition?
- More than one-fourth (27.8%) of area adults report cancer as the most important health problem in their community today, the highest proportion of all problems rated.
- The death rate for heart disease is lower in Newaygo County, but higher in Lake County, compared to the Michigan and U.S. rates.

Negative Social Indicators

- Negative social indicators, such as lack of affordable housing, lack of affordable healthy food, adverse childhood experiences, and environmental conditions can cultivate negative health outcomes.
- As stated earlier, poverty is a major problem in the area, and Key Informants rated it the second most important health issue or concern in the community, only behind access to mental health treatment.
- That said, poverty is a macro socioeconomic problem that, in and of itself, is very difficult to ameliorate and beyond the scope of any CHNA implementation plan. However, ways to address some of the issues of poverty include:
  - Finding ways to provide more affordable housing
  - Providing more healthy food options to residents at lower costs in order to improve the nutrition of those who would not otherwise be able to afford healthy food
  - Strengthening social service programs to offset the negative outcomes that can accompany poverty (e.g., broken homes, abusive relationships, household challenges) and help disrupt/break negative family cycles that perpetuate generations of suffering
  - Addressing the economic disparity by ensuring that underserved/vulnerable groups have access to services that will move them closer to participating on a level playing field, such as education
  - Connecting economically struggling residents with services providing low-cost or no-cost doctor visits, prescription refills, and other needed health services

- Over half (55.2%) of area adults say they are not very or not at all active in their community in terms of being involved in things like civic organizations, commissions/boards, non-profits, volunteerism, etc.
- This research also shows the importance of collecting data on Adverse Childhood Experiences and demonstrating the relationship of these negative experiences to adult outcomes. Key Stakeholders were adamant about the importance this data has for the purposes of trying to prevent future negative outcomes.

Social Determinants of Health

A trend over the last 10 years that is moving in a positive direction is the acknowledgement by health care professionals, human service professionals, and other community leaders that health and health care outcomes are greatly influenced by social determinants. Because of this, the most effective way to address health and health care issues is through an integrated, holistic, or biopsychosocial approach.

- Still, Key Informants demonstrate there is room for improvement: only 40.8% say that social determinants of health are often or always considered when developing treatment or care plans.
- The determinants of health that contribute to each person's well-being are biological, socioeconomic, psychosocial, behavioral, and social. The determinants of health include:
  - Biological (genes) (e.g., sex and age)
  - Health behaviors (e.g., drug use, alcohol use, diet, exercise)
  - Social/environmental characteristics (e.g., discrimination, income)
  - Physical environment/total ecology (e.g., where a person lives, crowded conditions)
  - Health services/medical care (e.g., access to quality care)

Solutions and Strategies Currently Employed to Address Needs

- Federal funds are being distributed to area coalitions to work on substance abuse prevention initiatives (e.g., harm reduction programming).
- TrueNorth is partnering with researchers from Western Michigan University to study the association of social isolation and lack of social cohesion with health outcomes.
- Communities That Care and Live Well are two initiatives that are addressing lifestyle choices by concentrating on providing more spaces for residents to be active.
- Telecommunication via video conferencing is being used in mental health treatment to offset the lack of psychiatrists in the area.
- There is a general movement to improve collaboration and coordination among and between area organizations (e.g., SHGM, CMH, Health Department) to address many health problems or issues in the community, such as expanding a critical linkages model, partnering with care management teams, and employing community health workers.
- Efforts continue to be made to solve the issue of transportation as a barrier to care by searching for ways to secure funding to counterbalance the dwindling pool of voluntary drivers.

Suggestions on Additional Strategies to Employ to Address Needs

- Utilize more telepsychiatry to offset the lack of mental health providers.
- Hire more on-site counseling psychologists and social workers to assist people who have needs outside of physical health but find themselves going to the ER/ED for treatment.
- Find ways to secure additional funding (e.g., applying for grants) for needs such as lack of primary care providers and lack of effective wellness programs.
- Create incentives to entice primary care providers to not only work, but also live, in the SHGM area. An example of this would be to pay providers more than they would make in the urban centers where they would be more likely to live and work.
- Utilize a population-based approach to prevention activities that target youth, teens, and adults.
- Have more open and frank discussions with children/teens about marijuana use now that it's legal in the state.
- Find ways to build/create needed facilities such as detox/rehabilitation centers, inpatient care, and certified recovery homes for people with substance use disorder and/or mental illness.
- Employ care managers to ensure no patients fall through the cracks and that they all receive the services they need.
- Work on addressing poverty by focusing on improving pay for jobs in the area and building a community that provides human capacity support.
- Since voluntary drivers are harder to find, increase incentives to entice people to drive, or provide transportation for, area residents who face transportation barriers.

One of the goals of this CHNA was to determine if the appropriate topics had been explored or the right questions were asked in previous CHNAs. The feedback gathered from Key Stakeholders will be used to guide the research design, or approach, for future CHNAs.

All six Key Stakeholders interviewed report that appropriate topics had been explored and the correct questions were asked, but there is always room for improvement:

Y**es, I think you have for the most part,** and the information is **extremely helpful,** and it **really helps communities start to focus on some areas and/or writing for grants for funds** to help with that area.

– Key Stakeholder

I think from a public-health perspective **you have to make it pretty broad**, so not only what you consider those **traditional health issues**, like cholesterol, obesity, and things like that **but also some of those environmental issues**, so water quality and air quality and housing, transportation-type issues. So, it's all of those **social determinants of health** which obviously are going to have an impact on individuals' health. So, it's **looking real broadly and then kind of narrowing it down from there**.

– Key Stakeholder

I think **we're talking about the right stuff. I think we're getting the right kind of information in play. I just think the problems are so vexing** that you identify the problem, but **there's so much you need to do** that I think that (not a criticism, it's just the **reality) these are tough-to-fix challenges in our community**. So, I think there's **room for improvement** just **because the problems are so big** that the **time and the people-resources to move things to the right direction** is going to **take a long time to see impact there**.

– Key Stakeholder

Key Stakeholders also mention additional topics that could be explored or existing topics that could be explored more in-depth, especially issues that are truly important to community members. They also mention the importance of the next step: doing something important and impactful with the data.

I think it's **more on the other end**; once the assessment is complete, **how can leadership in the communities** be more **advocacy-driven to talk to legislators about specific needs** and **bring to the table some specific challenges** that, maybe **with the legislative support**, could really make a change? I think that list is pretty exhaustive from the affordability of medication to just lots of things. I could just go on and on about all of the things that I think that **legislatively some action could really have a very positive impact on community**.

– Key Stakeholder

I do think that you're **asking the right questions**. Probably **more questions need to be gleaned about things like social support of families** because people feel support and have perceptions of support in many different ways. I think that could be really telling about what we're seeing in northern Michigan and maybe in other places about the **social isolation** and the **impact that it has on health**.

– Key Stakeholder

One question that I would like to have asked is: **How do we get them involved?** In other words, "What would it take to get you involved if this is an issue?" For example, I think if a family is dealing with cancer or substance-abuse issues, they deal with it themselves, and yet **there's not that broader discussion**. I wonder if you could **ask them if they could fix it, what would they do, or if they could address it, what would they do, because maybe they have some ideas that we're not thinking about in our silos**.

– Key Stakeholder

Detailed Findings

Demographics of Newaygo County

Newaygo County is predominantly a rural area, where 90.6% of its residents are White and 41.6% of the population is under age 35. The median household income is $46,724, much lower than the state ($54,938) or the nation ($60,293).

Newaygo County Demographic Characteristics

	N	%
Total Population	48,142	100.00%
Gender		
Male	24,149	50.2%
Female	23,993	49.8%
Age		
Under 5	2,775	5.8%
5 to 14	6,247	13.0%
15 to 24	5,696	11.8%
25 to 34	5,310	11.0%
35 to 44	5,282	11.0%
45 to 54	6,534	13.6%
55 to 64	7,437	15.4%
65 to 74	5,262	10.9%
75 to 84	2,576	5.4%
85 and over	1,023	2.1%
Race/Ethnicity		
White/Caucasian	43,613	90.6%
Black/African American	612	1.3%
Hispanic/Latino	2,792	5.8%
American Indian/Alaskan Native	300	0.6%
Asian	160	0.3%
Some Other Race	42	0.1%
Two or More Races	623	1.3%

	%
Household Income	
Less than $10,000	7.4%
$10,000 to $14,999	6.2%
$15,000 to $24,999	12.2%
$25,000 to $34,999	10.7%
$35,000 to $49,999	16.0%
$50,000 to $74,999	20.5%
$75,000 to $99,999	12.6%
$100,000 to $149,999	9.7%
$150,000 to $199,999	2.8%
$200,000 or more	1.8%
Urban/Rural Population	
Urban	16.2%
Rural	83.8%

Source: U.S. Census Bureau, American Community Survey, 2013-2018. Urban/Rural data from U.S. Census Bureau, Decennial Census, 2010.

Demographics of Lake County

SHGM's areas encompasses a sizable portion of Lake County, in addition to neighboring Newago County. Consequently, statistics for Lake County are also included throughout this CHNA.

Lake County is entirely rural county. Most of its residents, 84.7%, are non-Hispanic White and the remaining 15.3% are racial/ethnic minorities. Approximately, one-third of the population, 31.5%, is under age 35 and another third is 65 years old or older. Lake County is one of the poorest counties in Michigan with a median household income of only $34,631; much lower than the state ($54,938) or the nation ($60,293).

Lake County Demographic Characteristics

	N	%
Total Population	11,763	100.00%
Gender		
Male	6,000	51.0%
Female	5,763	49.0%
Age		
Under 5	492	4.2%
5 to 14	1074	9.2%
15 to 24	1160	9.9%
25 to 34	969	8.2%
35 to 44	1,088	9.2%
45 to 54	1,491	12.7%
55 to 64	1,160	9.9%
65 to 74	1,123	9.5%
75 to 84	1,980	16.8%
85 and over	960	8.2%
Race/Ethnicity		
White/Caucasian	9,963	84.7%
Black/African American	939	8.0%
Hispanic/Latino	311	2.6%
American Indian/Alaskan Native	113	1.0%
Asian	27	0.2%
Some Other Race	7	0.1%
Two or More Races	403	3.4%

	%
Household Income	
Less than $10,000	12.8%
$10,000 to $14,999	8.1%
$15,000 to $24,999	15.0%
$25,000 to $34,999	14.5%
$35,000 to $49,999	16.9%
$50,000 to $74,999	16.6%
$75,000 to $99,999	8.7%
$100,000 to $149,999	5.0%
$150,000 to $199,999	1.5%
$200,000 or more	0.9%
Urban/Rural Population	
Urban	0%
Rural	100%

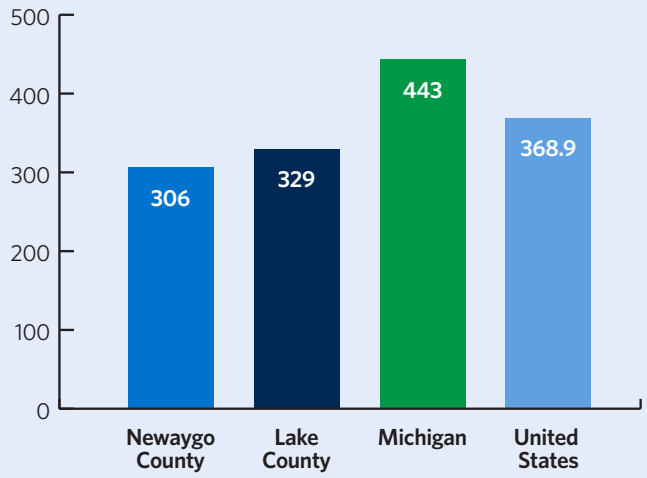
Source: U.S. Census Bureau, American Community Survey, 2013-2018. Urban/Rural data from U.S. Census Bureau, Decennial Census, 2010.

Crime Rates

Newaygo and Lake counties experience considerably less violent crime and lower homicide rates compared to Michigan and the U.S.

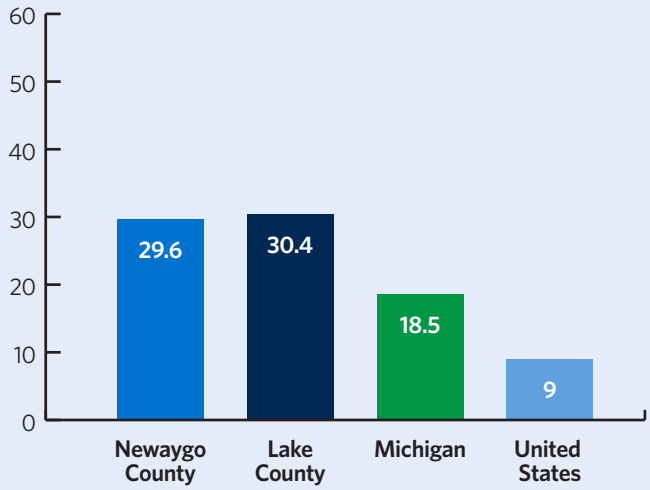
Both counties have significantly higher rates of child abuse and neglect than Michigan and the U.S. In fact, rates for each county are more than three times the national rate.

Violent Crime Rate Per 100,000 Population



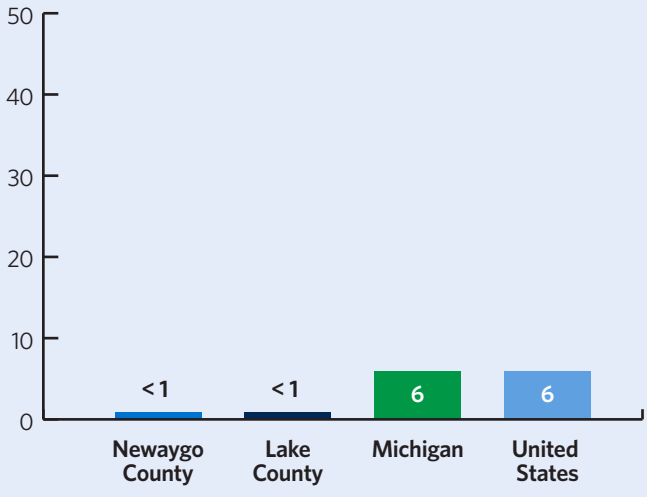
Source: County Health Rankings, 2014-2016; Federal Bureau of Investigation, Uniform Crime Reporting Program, 2018.

Confirmed Victims of Child Abuse/Neglect Per 1,000 Children Under Age 18



Source: Kids Count Data Center, counties and MI, 2018; U.S., 2017.

Homicide Rate Per 100,000 Population

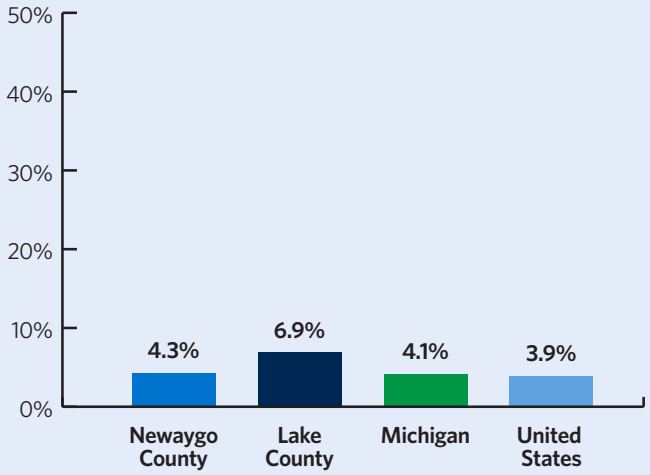


Source: County Health Rankings, 2014-2016.

Unemployment

Unemployment rates in both Newayo and Lake counties continue to be higher than in Michigan and the U.S. Lake County's rate is much higher than the rate in the other regions.

Population Age 16+ Unemployed and Looking For Work

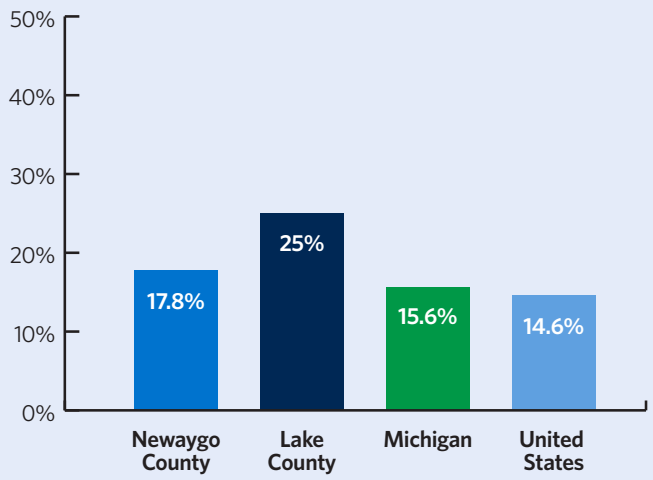


Source: Bureau of Labor Statistics, Local Area Unemployment Statistics 2018.

Poverty

Newaygo and Lake counties have poverty rates higher than Michigan and the U.S.

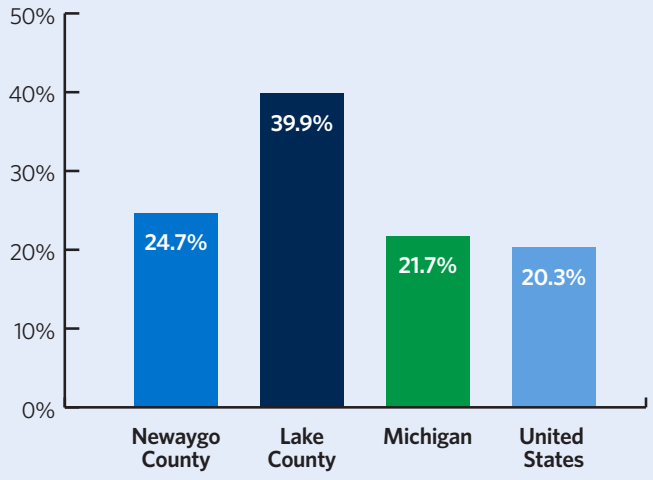
Percentage of People in Poverty



Source: U.S. Census Bureau, 2013-2017, 5-Year American Community Survey.

In addition, the percentage of children living in poverty is higher in both counties than in the state and nation as a whole. In Lake County, four in ten children under age 18 live in poverty.

Percentage of Children (Under Age 18) in Poverty

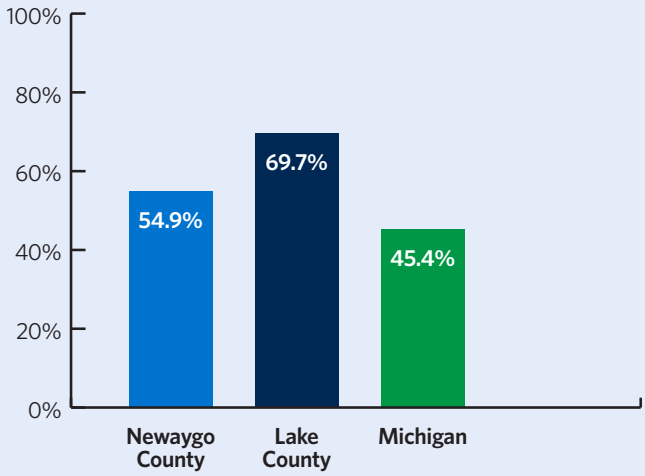


Source: U.S. Census Bureau, 2013-2017, 5-Year American Community Survey.

Both SHGM area counties have higher proportions of children ages 0-4 receiving WIC compared to the state. In Lake County, roughly two-thirds of children ages 0-4 receive WIC.

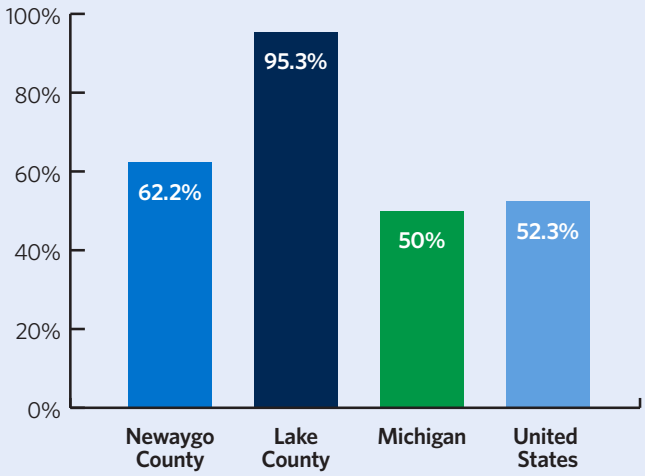
In addition, both counties have higher proportions of students eligible for free/reduced price lunches as compared to the state and nation. In Lake County, more than nine in ten students are eligible.

Children Ages 0 to 4 Receiving WIC



Source: Kids Count Data Center, 2018.

Percentage of Students Eligible for Free/ Reduced Price School Lunches



Source: Kids Count Data Center, 2018 for MI and counties; Digest of Education Statistics, 2018 for U.S.

Social Indicators

Poverty, Continued

In both area counties, the proportion of families living in poverty is higher than state and national rates. In Lake County, four in ten families with children under age five live in poverty.

Married couple families are far less likely to be living in poverty compared to single-female households.

Six in ten single female families with children under five years old from Newaygo County, and nine in ten from Lake County, live in poverty.

Poverty Levels

	Lake County	Newaygo County	Michigan	U.S.
All Families				
With children under age 18	32.8%	22.1%	18.4%	16.7%
With children under age 5	42.1%	27.5%	20.6%	16.2%
Total	**15.6%**	**13.5%**	**10.9%**	**10.5%**
Married Couple Families				
With children under age 18	16.5%	11.8%	7.5%	7.5%
With children under age 5	20.3%	9.6%	6.9%	5.9%
Total	**9.1%**	**7.9%**	**4.9%**	**5.3%**
Single Female Families				
With children under age 18	68.3%	59.9%	42.5%	38.7%
With children under age 5	**91.3%**	**63.3%**	**49.5%**	**43.7%**
Total	**49.4%**	**47.0%**	**31.3%**	**28.8%**

Source: U.S. Census Bureau, 2013-2017, 5-Year American Community Survey.

Education

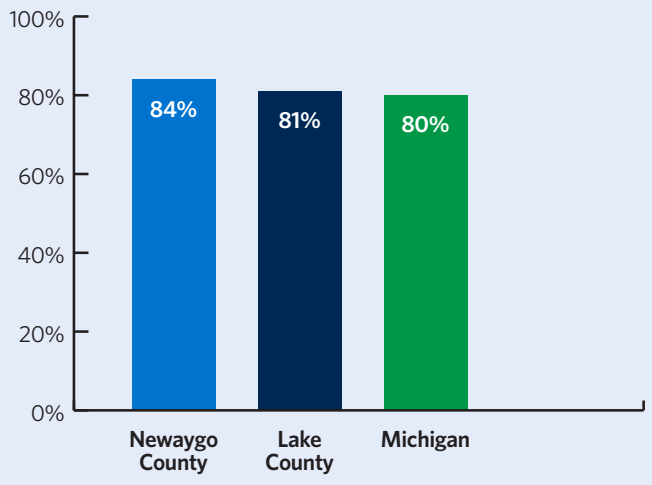
Both area counties have higher proportions of residents (both male and female) who do not receive education beyond a high school diploma/GED compared to Michigan and the U.S. In addition, fewer male and female residents of both counties have earned a Bachelor's degree or higher compared to Michigan and the U.S.

Education Level (Among Adults Age 25+)

	Men				Women			
	Lake County	Newaygo County	MI	U.S.	Lake County	Newaygo County	MI	U.S.
No Schooling Completed	1.5%	1.1%	1.1%	1.4%	1.4%	1.2%	1.0%	1.4%
Did Not Graduate High School	17.3%	15.0%	9.4%	11.9%	14.4%	9.5%	8.1%	10.6%
High School Graduate, GED, or Alternative	43.5%	42.5%	30.0%	28.1%	40.2%	39.2%	28.6%	26.6%
Some College, No Degree	21.2%	21.8%	23.6%	20.5%	22.8%	23.3%	23.6%	21.0%
Associate's Degree	5.7%	6.1%	8.0%	7.4%	9.1%	10.3%	10.5%	9.1%
Bachelor's Degree	6.4%	9.2%	16.9%	18.9%	8.0%	10.9%	17.2%	19.4%
Master's Degree	3.2%	3.3%	7.4%	7.7%	3.1%	4.5%	8.8%	9.1%
Professional School Degree	0.5%	0.5%	2.1%	2.4%	0.5%	0.6%	1.3%	1.7%
Doctorate Degree	0.7%	0.4%	1.5%	1.7%	0.3%	0.5%	0.9%	1.1%

Source: U.S. Census Bureau, 2013-2017, 5-Year American Community Survey.

Freshman Graduation Rate



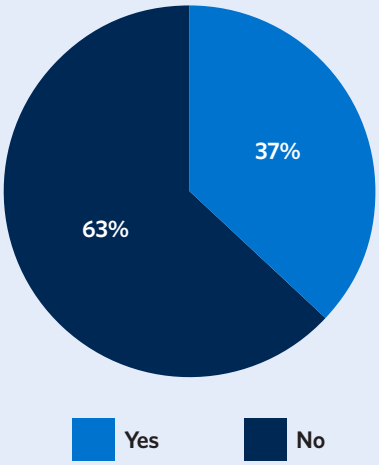
Source: County Health Rankings, 2016-2017.

Environmental Factors

More than one-third (37.0%) of the Key Informants surveyed indicate they are concerned about environmental factors that could impact the health of area residents in the next few years.

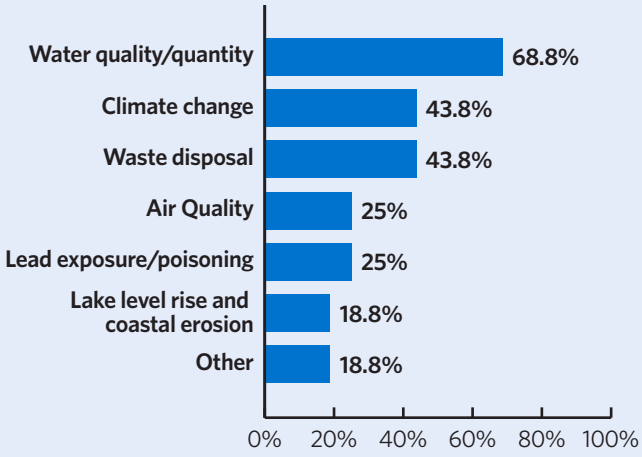
Of those who are concerned, two-thirds (68.8%) cite water quality/quantity as possibly impacting the health of area residents, while 43.8% cite climate change and/or waste disposal.

Concerned About Environmental Factors That Could Impact the Health of Area Residents



Source: Bureau of Labor Statistics, Local Area Unemployment Statistics 2018.

Environmental Factors That Could Impact the Health of Area Residents



Source: Key Informant Online Survey, Q11: Are you concerned about any environmental factors that could impact the health of area residents in the next few years? (n=46); Q11a (If yes) What are the environmental factors that you think could impact the health of area residents? (Multiple response) (n=16).

Adverse Childhood Experiences

Four of the six Key Stakeholders are aware of ACEs data and what it entails. Of the four, two think it is very important, and two think it is extremely important, that researchers collect such data for CHNAs.

Key Stakeholders see the importance of ACEs because the data demonstrate that childhood experiences impact adult outcomes, and children who experience a number of negative childhood experiences are likely to experience negative adult outcomes. Knowing how to utilize the data is equally important.

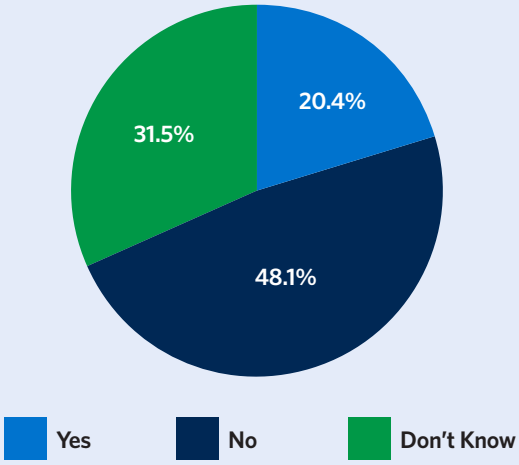
> I think it's **extremely important**. People are who they are based on how they lived, and **how we build resiliency in the people** and what they - **somebody who's experienced the same things that somebody else experienced functioned and not functioned**, so I think it's **extremely important**.
>
> **– Key Stakeholder**

> I think we're ready to move to the next step because **I don't think there's a question in any person's mind that has seen those results that early childhood events impact how you develop as an adult**, how you think, how take care of yourself, etc. It just **needs to go to the next level**.
>
> **– Key Stakeholder**

> No surprise, our folks that struggle with poverty have high levels of childhood trauma. The **problem is, then, so what? Now that we know this, what are we going to do about it?** There's **nothing in place to address that**. I mean, I guess it's good information to have; it **helps us understand that population better**.
>
> **– Key Stakeholder**

Despite the fact that ACEs are considered important as predictors of adult outcomes, only 20.4% of Key Informants can confirm that they screen, or their organization screens, patients/clients for adverse childhood experiences.

Currently Screening for Adverse Childhood Experiences (ACEs)



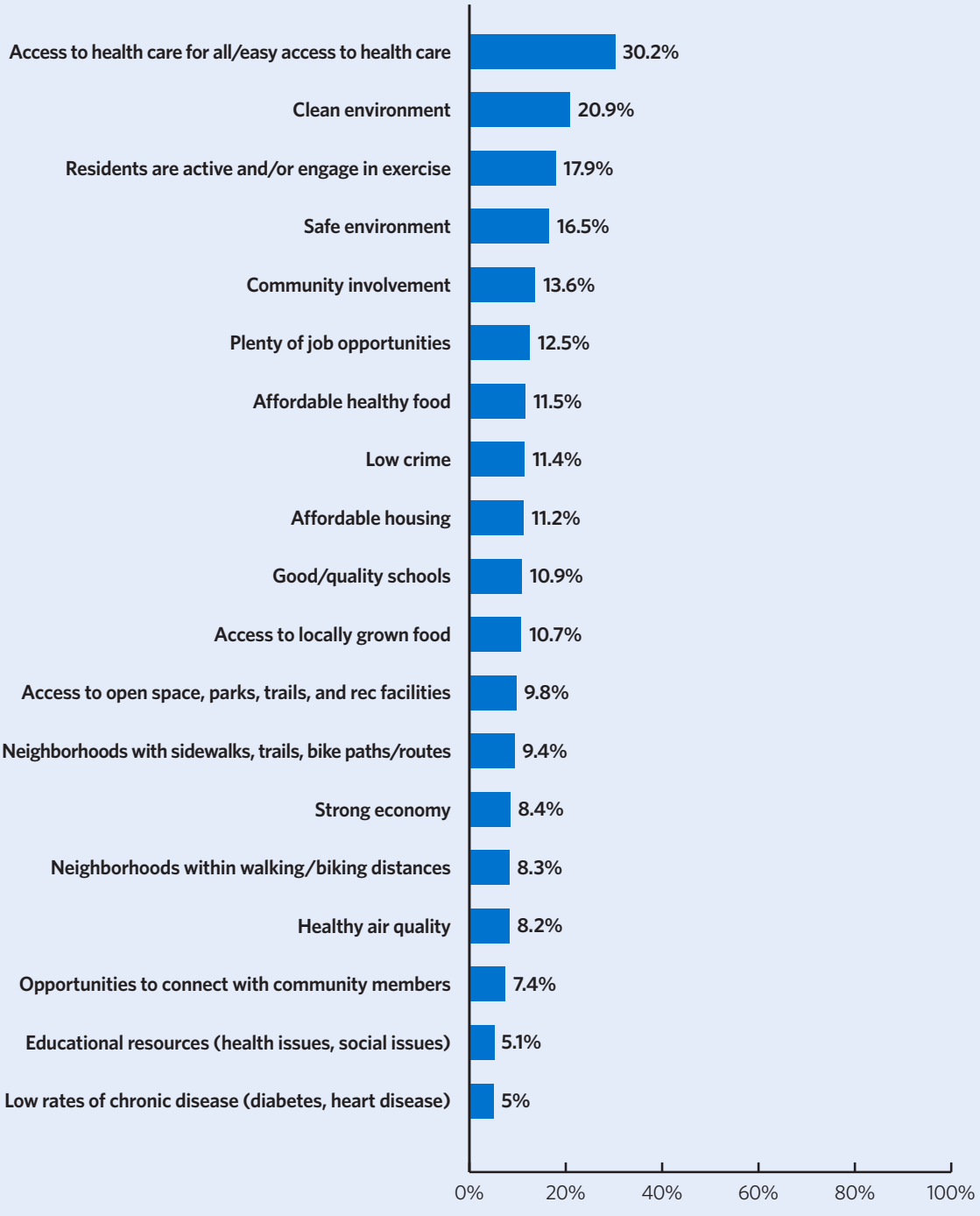
Source: Key Stakeholder Interviews, Q4: Are you aware of the ACEs (Adverse Childhood Experiences) data that came out of the last CHNA/BRFS study conducted in 2017, or are you aware of ACEs data in general? (n=6); Q4a: (If yes) How important is it that we collect this type of data in the CHNA? (n=6); Q4b: Why do you say that?; Key Informant Online Survey, Q10: Are you or members of your organization currently screening people/clients/patients for Adverse Childhood Experiences (ACEs)? (n=54)

Characteristics of a Healthy Community

When asked to describe what a healthy community looks like, area residents take a broad perspective, discussing access to health care services, a clean and safe environment, a community where members are active, engaged, and involved, plentiful jobs, low crime, and access to affordable housing and affordable food.

Three in ten area residents (30.2%) define a healthy community as one where everyone has access to health care.

Characteristics of a Healthy Community



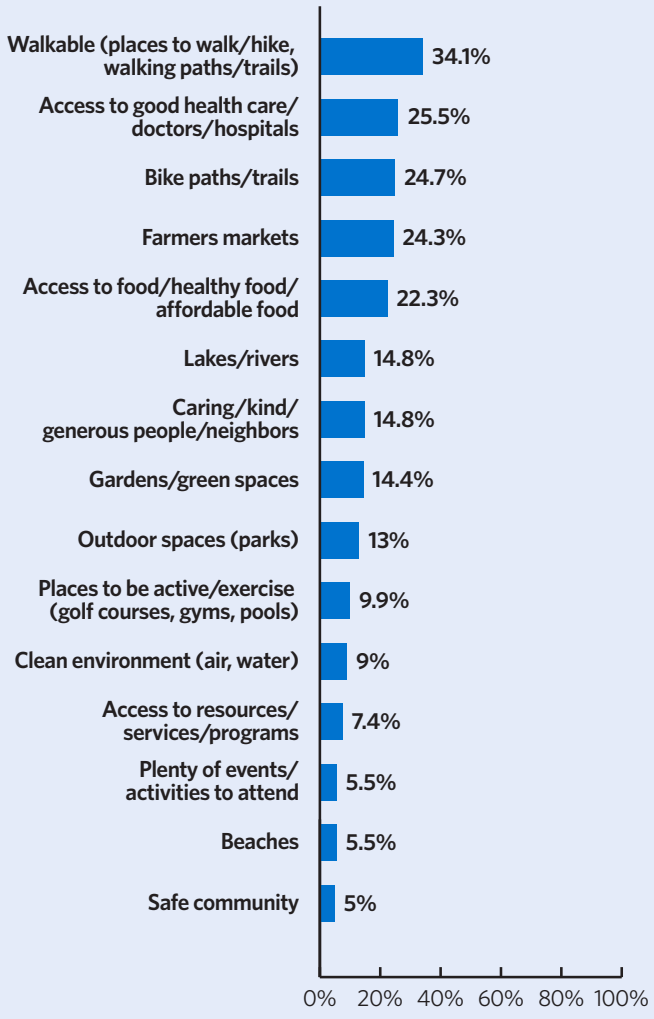
Source: Resident Telephone Survey: Q1: There are many ways to define a healthy community. What does a healthy community look like, or mean, to you? (Multiple response) (n=393).

Characteristics of the SHGM Community

A major SHGM community characteristic that makes it easy for residents to be healthy is the plethora of outdoor spaces that are conducive to being active: bike trails/paths, walking trails/paths/sidewalks, parks, lakes, and rivers.

Some residents also consider quality health care and affordable healthy food to be accessible for some residents.

Primary Characteristics That Make it Easy to Be Healthy in My Community

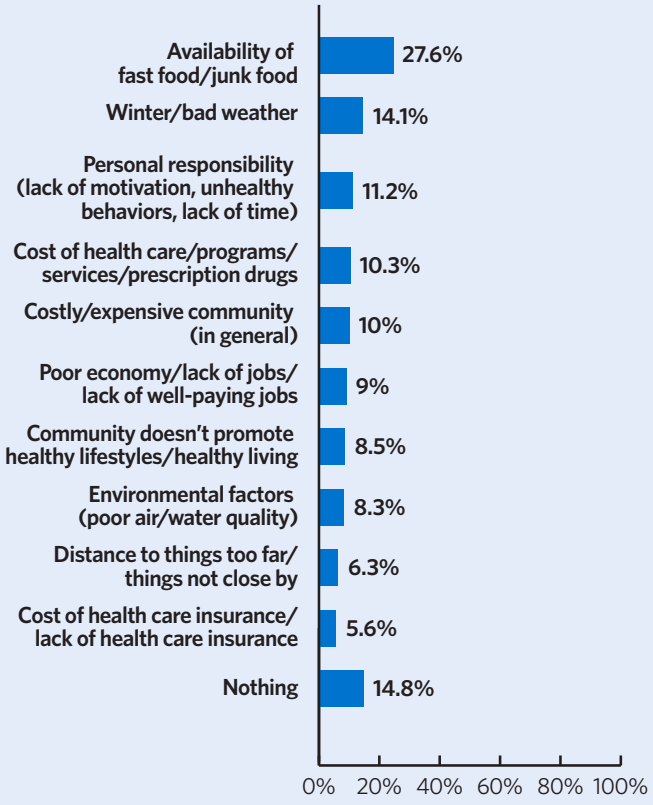


Source: Resident Telephone Survey: Q4: What are the primary characteristics of your community that make it easy to be healthy? (Multiple response) (n=399).

When asked what characteristics of their community make it hard to be healthy, residents report the availability of fast/ junk food at the top, followed by bad weather (winter), personal responsibility, and the cost of health care, or the general cost of living in the community.

Roughly one in seven (14.8%) adults do not see anything within the community that makes it hard to be healthy.

Primary Characteristics That Make it Hard to Be Healthy in My Community

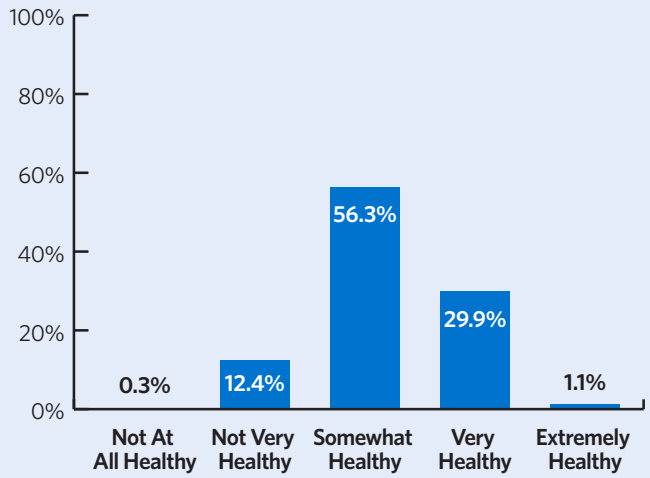


Source: Resident Telephone Survey: Q5: On the other hand, what are the primary characteristics of your community that make it hard to be healthy? (Multiple response) (n=396).

Overall Health of the SHGM Community

Three in ten (31.0%) area residents believe their community is very or extremely healthy overall, while 12.7% see their community as not very or not at all healthy.

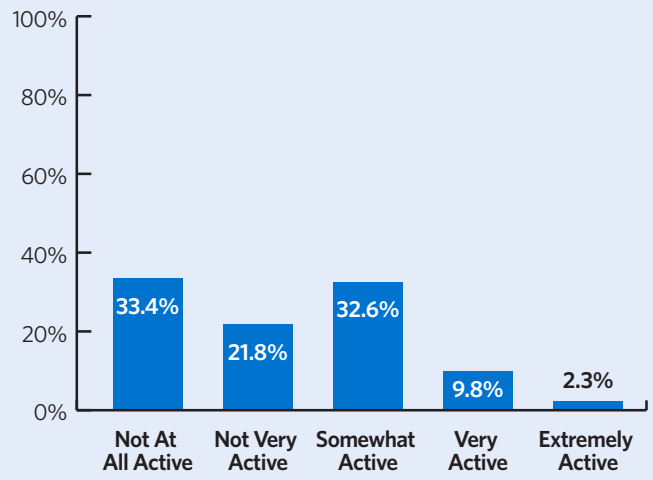
Perception of Your Community's Overall Health



Source: Resident Telephone Survey: Q2: If you were rating the overall health of your community (physical, social, emotional), would you say that your community is...? (n=395).

More than half (55.2%) of residents are not active in their community when it comes to being involved with organizations, town commissions/boards, non-profits, volunteerism, etc.

Degree to Which You are Active in Your Community



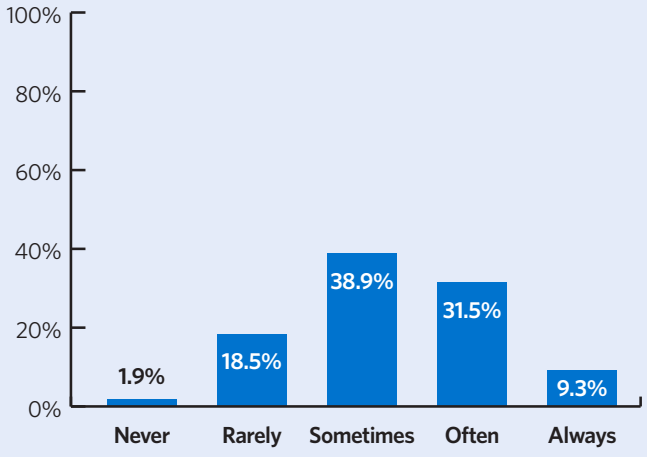
Source: Resident Telephone Survey: Q20: How active would you say you are in your community when it comes to things like being involved in civic organizations, volunteering, town commissions/boards, non-profits, etc.? Would you say...? (n=409).

Social Determinants of Health

According to Key Informants, opportunity exists for more inclusion of social determinants of health when developing treatment or care plans. Almost four in ten (38.9%) say that social determinants of health are considered only sometimes, another 18.5% say they are considered rarely, and 1.9% say they are never considered when developing treatment/care plans for area residents.

Unprompted, Key Stakeholders mention the importance of the social determinants of health for addressing health and outcomes, and also for utilizing this data in health and health care to make it current and sustainable as an industry.

Extent to Which Social Determinants of Health are Considered When Developing Treatment/ Care Plans



The health department has been working hard to bring leadership together and these communities to engage, through program development. We're trying to get patients engaged. We're working on those s**ocial determinants of health** and trying to **bring people out of isolation** because that is the other issue. **People get isolated, they get depressed**, they sit, they smoke, they eat too much, and then they go out at night or whatever on the weekends, go out and drink.

– Key Stakeholder

More importantly, **we're also finally putting social determinants into the electronic health record** and **making that part of the standard work of rooming patients**, at least to inquire about them; but that's only **just now rolling out**, and it's in a **limited number of practices**.

– Key Stakeholder

I'm pleased that the **leadership has identified this new thing called social determinants** because at least it's going to give us traction. I hope we are as an industry – I don't want to focus on Spectrum only because I think it's the entire industry - **I hope we as an industry can get our arms around understanding the impact of social determinants, trauma, life experiences, medical literacy, all those things** and the influence they have on how it is our businesses exist and, frankly, how it is we're going to have to figure out how to survive.

– Key Stakeholder

Source: Key Informant Online Survey: Q8: In your opinion, how often are social determinants of health considered when developing treatment or care plans for area residents? Examples of social determinants of health include housing, transportation, and food access, among others. (n=39)

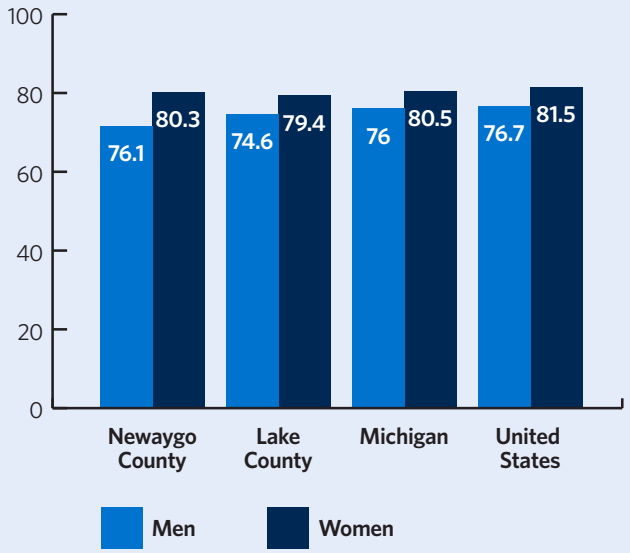
Life Expectancy and Years of Potential Life Lost

For women, the life expectancy rate in Newaygo County is lower compared to Michigan and the U.S. For men in Newaygo County, the rate is on par with Michigan but lower than the U.S. Lake County experiences the lowest rates of all comparable regions for both genders.

Residents of both Newaygo and Lake counties experience more years of potential life lost overall compared to Michigan, and specifically for malignant neoplasms and heart disease.

Newaygo County residents also live fewer years than Michigan residents due to accidents, but do not lose more years due to chronic lower respiratory diseases.

Life Expectancy (Average Age)



Source: Institute for Health Metrics and Evaluation at the University of Washington, 2014.

Years of Potential Life Lost

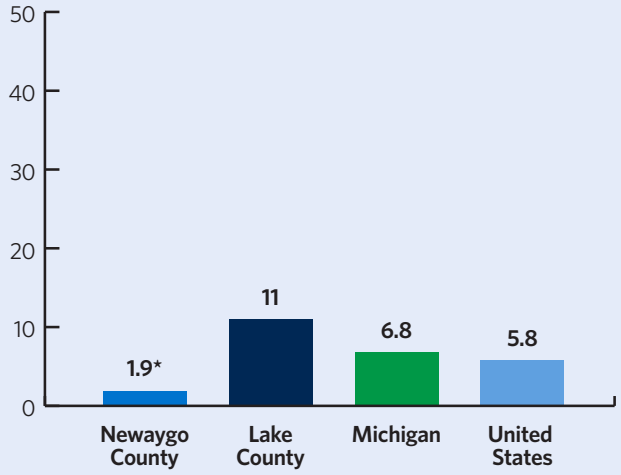
	Michigan		Newaygo County		Lake County	
	Rank	Rate	Rank	Rate	Rank	Rate
All Causes		**7992.0**		**8497.2**		**10605.2**
Malignant neoplasms (All)	1	1571.6	1	1953.1	2	2514.0
Accidents	2	1434.6	2	1941.9		**
Diseases of the heart	3	1283.9	3	1358.2	1	2653.6
Drug-induced deaths	4	1031.2		**		**
Intentional self-harm (Suicide)	5	431.5		**		**
Chronic lower respiratory diseases	6	243.3	6	168.4		**

Source: Michigan DHHS, Division of Vital Records and Health Statistics, Geocoded Michigan Death Certificate Registry, 2017.
Note: ** = data do not meet standards of reliability and precision OR have a zero value.

Mortality Rates

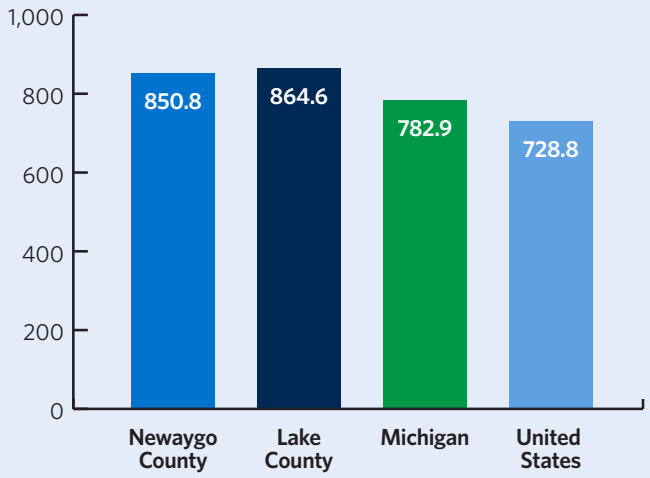
Both Newaygo and Lake counties have higher age-adjusted mortality rates compared to the state and the nation. The infant mortality rate is far higher in Lake County compared to the state or the national rate, while the rate in Newaygo County is lower (for the year data was pulled in 2018).

Infant Mortality Rate Per 1,000 Live Births



Source: Michigan Department of Health and Human Services, Division of Vital Records and Health Statistics, 2018. *Note: Rate for Newaygo County in 2018 was much lower than prior years due to only one death recorded.

Age-Adjusted Mortality Rate Per 100,000 Population



Source: Michigan Resident Death File, Vital Records & Health Statistics Section, Michigan Department of Health & Human Services, 2017 for MI and counties, 2016 for U.S.

Leading Causes of Death

Heart disease and cancer are the leading causes of death in Newaygo and Lake counties, as well as in the state and nation.

Newaygo and Lake counties have higher death rates from cancer compared to Michigan and the U.S.

Newaygo County has the lowest death rate from heart disease compared to the other three regions, while Lake County has the highest rate, by far.

The death rates for unintentional injuries, chronic lower respiratory disease, stroke, Alzheimer's disease, and diabetes are all higher in Newaygo County compared to the state and national rates.

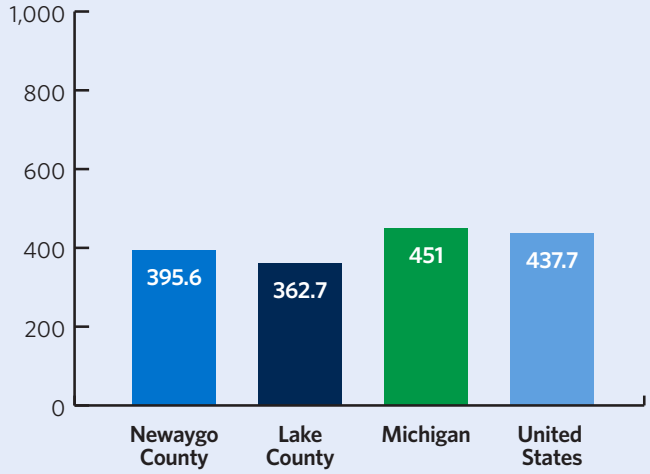
	Michigan		United States		Newaygo County		Lake County	
	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Rate
Heart Disease	1	195.9	1	165.5	2	163.8	1	243.5
Cancer	2	161.1	2	155.8	1	186.9	2	180.3
Unintentional Injuries	3	53.9	3	47.4	3	83.5		**
Chronic Lower Respiratory Diseases	4	44.3	4	40.6	5	58.9		**
Stroke	5	39.2	5	37.3	4	59.3		**
Alzheimer's Disease	6	34.5	6	30.3	6	44.9		**
Diabetes Mellitus	7	22.1	7	21.0	7	29.0		**
Kidney Disease	8	14.7	10	13.1		**		**
Pneumonia/Influenza	9	14.1	9	13.5		**		**
Intentional Self-Harm (Suicide)	10	13.6	9	13.5		**		**
All Other Causes		189.6		190.8		172.7		170.0

Source: Michigan Department of Health and Human Services, 2017 for MI and counties, 2016 for U.S.
Note: ** = data do not meet standards of reliability and precision OR have a zero value.

Cancer Diagnosis and Death Rates

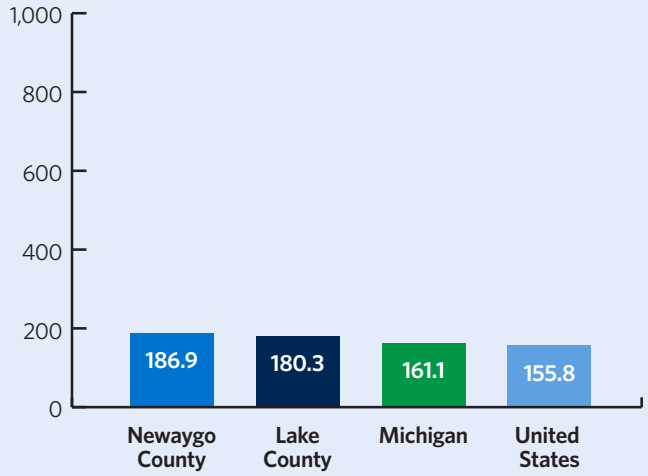
While the cancer death rates are higher in Newaygo and Lake counties than they are in Michigan or the U.S., the cancer diagnosis rates are lower in both counties, which suggests better cancer pre-screening is needed in the region.

Cancer Diagnosis Rate (Age-Adjusted) Per 100,000 Population



Source: MDCH Cancer Incidence Files. Counties and MI 2012-2016 5-year average, U.S. 2015.

Overall Cancer Death Rate Per 100,000 Population



Source: MDHHS counties and MI, 2017, U.S., 2016.

Chronic Conditions

One third of SHGM area adults report chronic pain and an equal proportion report arthritis, while one in seven (13.9%) have diabetes and an additional 28.5% have pre-diabetes.

Area women are more likely than area men to have arthritis, asthma, and pre-diabetes, while men are more likely than women to have diabetes.

Non-White adults are more likely than White adults to have chronic pain, pre-diabetes, and asthma.

Area adults with less than a high school degree are more likely to have chronic pain, arthritis, diabetes, and COPD than adults with more education.

Area adults with annual household incomes under $20,000 are more likely to have all of the chronic conditions listed below compared to adults with higher household incomes.

Prevalence of Chronic Diseases by Demographics

		Gender		Race		Age						
	TOTAL	Men	Women	White	Non-White	18-24	25-34	35-44	45-54	55-64	65-74	75+
Chronic pain	**33.6%**	31.5%	35.5%	31.4%	47.8%	6.2%	30.6%	23.4%	45.0%	37.8%	45.2%	36.0%
Arthritis	**33.2%**	26.2%	39.7%	33.9%	27.1%	1.1%	18.3%	16.7%	36.3%	47.7%	52.5%	48.0%
Pre-diabetes	**28.5%**	23.1%	33.2%	26.5%	38.9%	38.7%	27.9%	29.2%	31.8%	16.3%	35.4%	20.0%
Lifetime asthma	**18.2%**	11.1%	24.9%	15.4%	35.3%	31.1%	15.5%	13.3%	20.8%	22.1%	8.2%	8.5%
Diabetes	**13.9%**	17.3%	10.7%	14.7%	10.4%	0.0%	0.0%	9.2%	10.2%	23.4%	27.1%	23.0%
Current asthma	**13.9%**	6.9%	20.3%	10.3%	35.3%	26.1%	2.6%	7.4%	18.0%	19.0%	7.4%	6.6%
COPD	**9.7%**	9.2%	10.2%	10.2%	6.8%	0.0%	5.3%	7.1%	8.6%	15.0%	14.8%	14.6%

Continued

		Education				Income					Poverty Level	
	TOTAL	<High School	HS Grad	Some College	College Degree	<$20K	$20K-<$35K	$35K-<$50K	$50K-<$75K	$75K+	Below Poverty Level	Above Poverty Level
Chronic pain	**33.6%**	43.1%	29.9%	34.5%	32.7%	54.0%	34.8%	44.3%	9.3%	22.8%	49.8%	28.3%
Arthritis	**33.2%**	43.8%	30.8%	32.1%	30.4%	50.9%	37.8%	38.2%	12.9%	27.0%	48.3%	29.3%
Pre-diabetes	**28.5%**	7.7%	33.4%	33.5%	24.2%	34.7%	31.0%	25.9%	20.1%	9.3%	41.9%	19.8%
Lifetime asthma	**18.2%**	16.8%	17.8%	19.0%	19.0%	30.1%	10.1%	11.2%	6.7%	22.2%	21.1%	12.3%
Diabetes	**13.9%**	22.3%	8.1%	18.3%	10.6%	30.8%	19.7%	10.1%	10.7%	5.8%	26.4%	11.6%
Current asthma	**13.9%**	15.0%	13.8%	14.0%	12.5%	22.9%	5.5%	7.0%	5.0%	12.0%	12.7%	8.0%
COPD	**9.7%**	14.7%	9.2%	8.6%	8.7%	23.4%	8.9%	9.9%	3.3%	7.2%	13.3%	8.7%

Source: 2017 SHGM Behavioral Risk Factor Survey, (n=568)

Health Status Indicators

Chronic Conditions, Continued

One in ten (10.6%) SHGM area adults report some form of cardiovascular disease such as stroke, heart attack, and/or angina/coronary heart disease (CHD).

Area men are slightly more likely than women to have heart attacks, angina/CHD, and skin cancer, while women are more likely than men to have other types of cancer (non-skin) and strokes.

Non-White adults are more likely than White adults to have any cardiovascular disease, while White adults are more likely to have cancer than non-White adults.

Area adults with less than a high school degree are slightly more likely to have cancer and heart attacks than adults with more education.

Area adults with annual household incomes under $20,000 are more likely to have all of the chronic conditions listed below, with the exception of non-skin cancer, compared to adults with higher household incomes.

Prevalence of Chronic Diseases by Demographics

		Gender		Race		Age						
	TOTAL	**Men**	**Women**	**White**	**Non-White**	**18-24**	**25-34**	**35-44**	**45-54**	**55-64**	**65-74**	**75+**
Any cardio-vascular disease*	**10.6%**	12.6%	8.6%	9.5%	17.9%	0.0%	0.0%	3.0%	11.2%	11.0%	23.2%	27.7%
Other (non- skin) cancer	**8.9%**	8.1%	9.7%	9.7%	5.3%	0.0%	8.1%	4.0%	1.8%	10.1%	14.3%	35.6%
Skin cancer	**6.3%**	7.4%	5.3%	7.5%	0.0%	0.0%	5.1%	1.0%	4.1%	5.5%	13.7%	19.7%
Stroke	**6.0%**	5.6%	6.5%	4.7%	14.1%	0.0%	0.0%	2.2%	9.9%	5.0%	10.2%	14.3%
Heart attack	**5.1%**	7.4%	2.8%	5.0%	5.7%	0.0%	0.0%	2.2%	1.3%	8.1%	15.5%	8.7%
Angina/coronary heart disease	**3.0%**	4.0%	2.1%	2.9%	4.2%	0.0%	0.0%	0.8%	0.5%	6.4%	2.7%	12.4%

Continued

		Education				Income					Poverty Level	
	TOTAL	**<High School**	**HS Grad**	**Some College**	**College Degree**	**<$20K**	**$20K-<$35K**	**$35K-<$50K**	**$50K-<$75K**	**$75K+**	**Below Poverty Level**	**Above Poverty Level**
Any cardio-vasculardisease*	**10.6%**	14.0%	8.2%	11.8%	10.7%	18.4%	11.2%	6.4%	6.0%	6.2%	14.1%	7.8%
Other (non-skin) cancer	**8.9%**	14.5%	6.0%	10.5%	7.8%	3.1%	12.2%	3.9%	5.3%	2.6%	4.1%	7.0%
Skin cancer	**6.3%**	8.1%	6.2%	5.3%	6.7%	7.9%	3.2%	4.0%	5.1%	4.7%	5.0%	4.3%
Stroke	**6.0%**	4.7%	6.2%	8.6%	1.4%	13.9%	6.5%	2.2%	3.5%	0.6%	10.0%	3.4%
Heart attack	**5.1%**	9.4%	3.0%	4.9%	6.4%	11.6%	5.2%	4.0%	3.0%	4.5%	9.6%	3.9%
Angina/coronary heart disease	**3.0%**	4.1%	1.1%	3.4%	6.4%	5.6%	3.1%	3.0%	2.5%	1.8%	4.7%	2.6%

Source: 2017 SHGM Behavioral Risk Factor Survey, (n=568). *Any cardiovascular disease = respondent said they had at least one of the following: heart attack, angina/coronary heart disease, or stoke.

Most Pressing Health Issues or Concerns

Four of the six Key Stakeholders were also interviewed in 2017 and confirmed that the most pressing or concerning issues listed below from 2017 are still the most critical issues in 2019.

The most critical issues include: (1) behavioral health, encompassing both mental health and substance use disorder, which are often comorbid, (2) access to care, due to cost and a lack of providers, (3) lifestyle issues or risk behaviors such as obesity and smoking, (4) transportation issues, and (5) cancer.

- Obesity (3)
- Lack of providers (both primary and specialists (2)
- Opioids (2)
- Substance use disorder (2)
- Smoking (2)
- Access to health care
- Behavioral health
- Cancer
- Diabetes
- Lifestyle choices (diet, exercise)
- Mental health
- Transportation issues

New issues emerging since 2017 include environmental issues with local water sources, chronic disease prevention and management, and an increased focus on the social determinants of health.

> **We've had some additional concerns with water quality and environmental issues with PFOS**. There's been some water studies done on the public water system here in **Lake County** because they're discovering that **Michigan has quite a bit of PFOS found in the ground**. That's kind of like a permanent thing. **You can't clean it up**. **It's already in our bodies**. Recently, here in Baldwin, we've had **some issues with a dry-cleaning company that dumped all the chemicals and things into the Pere Marquette** River.
>
> **– Key Stakeholder**

> I think I would add **chronic-disease prevention and management**.
>
> **– Key Stakeholder**

> I don't know if it's necessarily new issues but issues that are getting more attention now, and it would be how do the **social determinants of health** play into each of those.
>
> **– Key Stakeholder**

The two new Key Stakeholders interviewed report that, in their opinion, the most critical issues involve the social determinants of health: (1) social isolation and social cohesion, which tie into loneliness, a sense of belonging, and connectedness, especially in rural communities, (2) access to affordable and safe housing, and (3) access to support services for the underserved.

Source: Key Stakeholder Interviews, Q1: Two years ago, when we last spoke, you said that [insert issues mentioned] were the most pressing or concerning health issues facing residents in your area. Would you say those are still the most pressing or concerning issues facing residents in your area today? (n=4); Q1b: What are the new issues that are pressing or concerning, if any? (n=4); Q2: (For new participants) What do you feel are the two or three most pressing or concerning health issues facing residents in your community? (n=2)

Health Status Indicators

Most Pressing Health Issues or Concerns, Continued

When Key Stakeholders were asked why the issues they cited in 2017 are still the most pressing or concerning issues, they provide a picture of a community where some residents have mental health issues and/or substance abuse issues, and they face many barriers to addressing their problems, the greatest of which is accessing needed care. Further, the issues are complex and complicated, and it is difficult to see improvement, especially in areas where the resources are very limited. Greater strides are being made with regard to obesity by targeting residents when they are young.

Obesity

I know that they're **making strides with the obesity issue** in Newaygo County especially because **they're really targeting schools and healthy eating and starting young**. I think part of the reason **it's an issue is because it's been ingrained**. Some of us are **teaching bad eating habits** and not necessarily going to change our ways.

– Key Stakeholder

I've been here ten years and obesity certainly is a culprit that creates a lot of chronic illness, but now rates of **cancer as well**.

– Key Stakeholder

Substance Use Disorder

The **opioid issue seems to be getting worse**, and I think there's a **lack of providers for that service**. When I say that, I mean you have a main provider, but **there's no treatment facilities either in Lake or Newaygo**, so somebody who needs that service we could be **sending them to Grand Rapids, but then we bring them back** to where it's at.

– Key Stakeholder

Mental Health

I think **they're not easy to fix**. The **mental health issues** – it's a combination of it's **hard to move the needle**, and the **resources** (and **what we dedicate to that**) are **not adequate**. **Unless we do a lot more than we've done, we're not going to see the kind of major improvement** in the whole **mental-health area**. I just think **they're daunting challenges**, and I think that's why it's **hard to get movement on them**. Once you start doing the right thing, it **takes a long time to actually see the efforts you're putting forth make a difference**.

– **Key Stakeholder**

Behavioral Health

The **substance abuse**, or **opiate issue**, the **behavioral health issue**, **access to care** are all **still issues**. The counties are all pretty unified, and actually I think I mentioned to you that we're just kind of in the process of doing that regional community health needs assessment for those thirty-one counties, and actually the top **two focus areas that everybody agreed to focus on and identified was substance abuse and mental health**.

– **Key Stakeholder**

Source: Key Stakeholder Interviews, Q1a/Q2a: In your opinion, what are the reasons they remain the top health issues in your community? (n=4, n=2); Q1b: What are the new issues that are pressing or concerning, if any? (n=4); Q1d: What are the reasons they are top issues in your community? (n=4)

Most Pressing Health Issues or Concerns, Continued

Lack of primary care and specialty care remain issues because it is hard to recruit providers to live and work in rural areas. Cancer death rates are high in the area (and diagnosis rates are low) so there is a question of whether there is a relationship between cancer and the environmental issues.

There is some very interesting work exploring the association between negative outcomes (e.g., pain, anxiety) and the lack of social cohesion (sense of belonging, connectedness) and social isolation (loneliness, lack of high-quality interpersonal relationships), commonly experienced by residents of rural communities.

Social Cohesion

A few years ago, I would have told you **poverty** and the usual characters around **determinants of health,** and, don't get me wrong, **I still feel that those are probably the biggest issues, but** I would say as significant as those are, a lot of the research I've been doing lately indicates that there are **a lot of social factors that are every bit, if not more, prevalent, especially in the more rural communities in Michigan.** Specifically, what I've been measuring and doing some research on are **social isolation** and **social cohesion.** So, social isolation is, in short, **loneliness.** You literally don't have a lot of contact **– don't have a lot of interpersonal relationships that are high quality,** and **social cohesion** is your **sense of belonging** or **connectedness** to community, and so **levels** of both of those things are **low**, and, more importantly, I think, **they're dropping**, and so that **impacts people's perceptions around things like pain and anxiety.** There are very low levels. For example, we've done some work on social capital and there are **very low levels of trust, very low levels of hope. When you couple the social factors and the emotional factors with poverty, you kind of get the perfect storm for population health care disaster.** At TrueNorth, **we're seeing pain at three times the rate of the general population and anxiety at above double the rate,** so it makes a lot of sense when you start to **connect the dots.**

– Key Stakeholder

Cancer

I don't know what the link to PFOS is. I don't think they've really confirmed everything, but there is **some kind of association.** We **do have a high rate of cancer mortality.** Most times, **it's diagnosed late; people choose not to do much about it in those late stages**, and I don't have the exact numbers on that, but it **would be an interesting question to pose to the health department**. We talk about what's going on with their environment because tourism is really important here.

– Key Stakeholder

Access to Care

Lack of access to primary care and specialists is in both communities and **still** a **challenge.** We do have a **telemedicine** service that provides some **assistance in that, but it still remains a problem. The challenge is in recruiting. Recruitment to the rural areas in Michigan pretty much remains a challenge for everybody.**

– Key Stakeholder

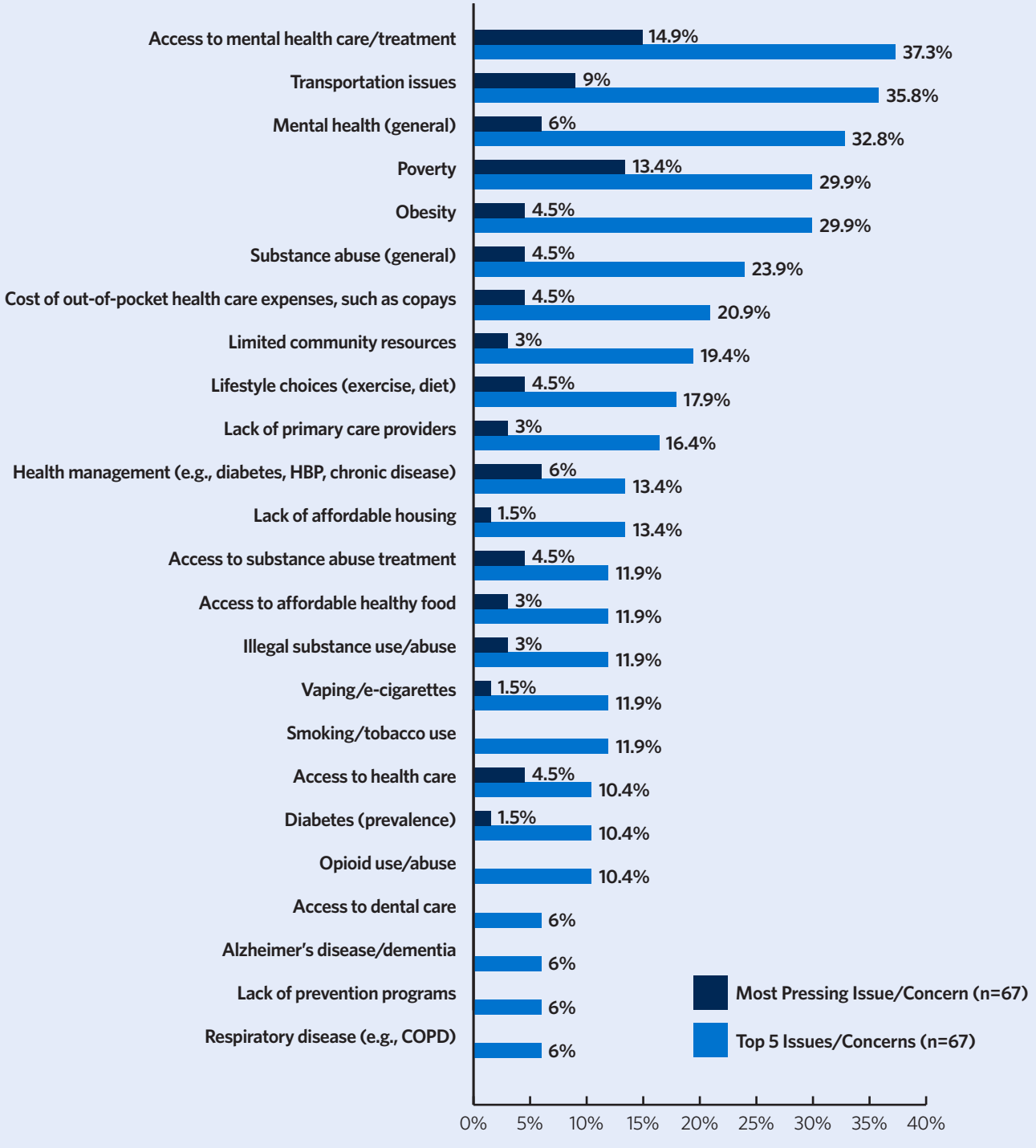
Source: Key Stakeholder Interviews, Q1a/Q2a: In your opinion, what are the reasons they remain the top health issues in your community? (n=4, n=2); Q1b: What are the new issues that are pressing or concerning, if any? (n=4); Q1d: What are the reasons they are top issues in your community? (n=4)

Health Status Indicators

Most Pressing Health Issues or Concerns, Continued

Key Informants cite a number of pressing health issues or concerns in the SHGM area today. Most often cited are mental health and access to mental health treatment, poverty, transportation issues, obesity, substance abuse, and cost of out-of-pocket health care expenses.

Most Pressing Health Issues/Concerns



Source: Key Informant Online Survey, Q1: To begin, what are the most pressing health issues or concerns in your area? Please check no more than five issues. (Multiple response) (n=41); Q1b: Of the moshressing health issues or concerns you selected, which one do you think is the most critical? (n=67)

Health Status Indicators

Most Pressing Health Issues or Concerns, Continued

Area residents (children, adolescents, adults) in need of mental health services will find limited options especially if they are not on Medicaid.

Poverty exacerbates existing problems, or creates new problems, and is a primary driver behind the social determinants of health.

Transportation is a major barrier to needed care, obesity can lead to many other health issues (e.g., diabetes, HBP), and substance use disorder is prevalent in the community.

Mental health/ access to mental health treatment	The clients I work with **have a difficult time finding a place that will see them if they don't qualify for CMH**. **– Key Informant** In the office **we are prescribing more than typical primary care. There are no psychiatrists with openings for kids. Access to counseling isn't good either.** There are a **lot of suffering kids and families. We treat to the best of our abilities**, but that is **also taxing on our schedules**. **– Key Informant**
Poverty	Due to the poverty issue it has a **domino effect** with the issue like **copays, prescription costs, transportation, insurance which causes stress and substance abuse, neglect of health, diet, wellness.** **– Key Informant** **Poverty impacts access to health services** and is the **driver for most other social determinants of health.** **– Key Informant**
Transportation	**Patients are unable to access critical treatment due to limited transportation services** in Newaygo County. **Taxi vouchers** come from Muskegon which **are very costly**, and most services that are available in the county **require a 3-day notice** to provide services. **– Key Informant**
Obesity	**Obesity usually leads to several other health concerns** such as HTN, DM, kidney disease, etc. **– Key Informant**
Substance Use Disorder	**Children are reporting that everyone is now smoking marijuana, parents of their peers, edibles are available in grade school.** **– Key Informant**

Source: Key Informant Online Survey, Q1c: Why do you think [insert issues] is the most critical health issue or concern in the area? (n=67).

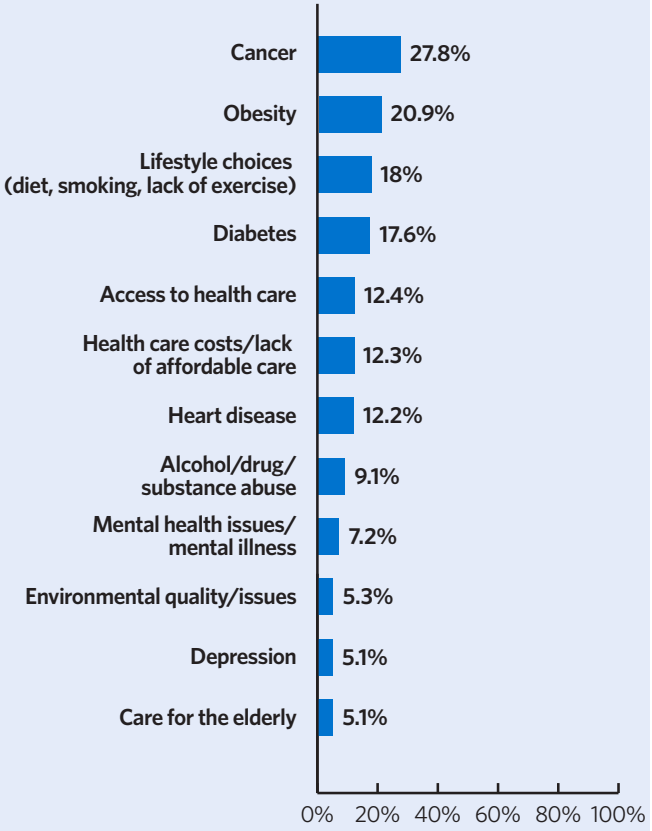
Health Status Indicators

Most Pressing Health Issues or Concerns, Continued

SHGM area residents list cancer and obesity as the two most important health problems or concerns in the community.

Other important health problems or concerns are lifestyle choices, diabetes, access to care, health care costs, and heart disease.

Most Important Health Problems/Concerns in the Community

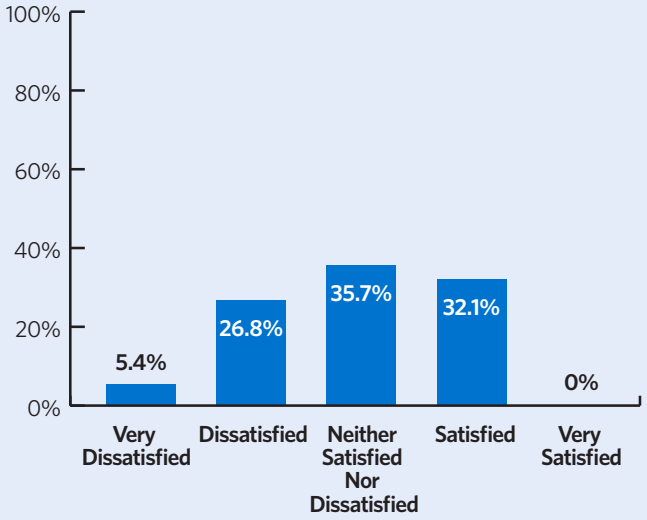


Source: Resident Telephone Survey: Q3: What are two or three of the most important health problems or concerns in your community today? (Multiple response) (n=370).

Overall Satisfaction with Health Climate

In considering the overall health climate of the SHGM area, roughly three in ten (32.1%) Key Informants – the very people on the ground working in or around the field of health care – are satisfied, demonstrating that there is substantial room for improvement, and their comments indicate concerns across several areas.

Overall Satisfaction With the Health Climate in Your Community



Satisfied

For a rural community I think we do okay. Specialists are quite accessible, except for psychiatry (for the insured). Medicaid and uninsured can be seen at CMH.

Considering our population, their economic situations, and their educational level **we have many good options**.

Neither satisfied nor dissatisfied

I'm am **satisfied with the access and care provided**, but **not satisfied with health conditions/behaviors**.

Dissatisfied

I think there is **significant work to be done in the healthcare climate of our community.** I think the **gap between the properly insured and the uninsured/underinsured** is only **getting more significant.**

We are **losing our local doctors**, which won't help our community.

There are **too many barriers to leading a healthy lifestyle and accessing services.**

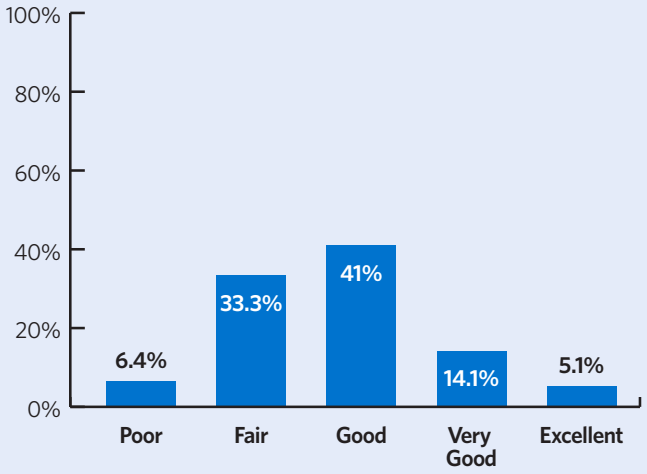
Source: Key Informant Online Survey, Q9: Taking everything into account, including health conditions, health behaviors, health care availability, and health care access, how satisfied are you overall with the health climate in your community? (n=41); Q9a: Why do you say that?

Health of Underserved Residents

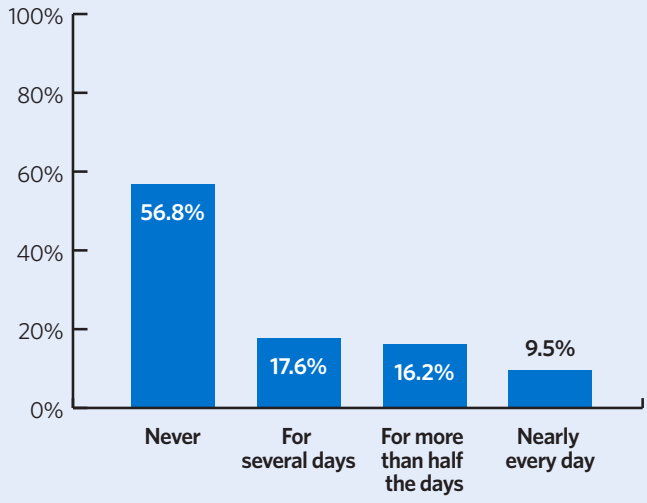
Four in ten (39.7%) underserved residents report their general health as fair or poor. Additionally, more than four in ten had "little interest/pleasure in doing things" (43.2%) and/or "felt down, depressed, or hopeless" (45.5%) at some point during the past two weeks.

One in seven (13.9%) underserved residents thought about taking their life during the past year, while 2.6% attempted suicide in the past year.

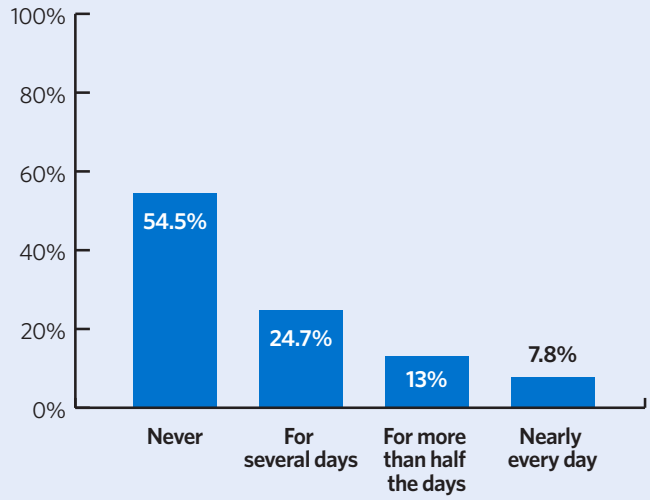
Perception of General Health



Had Little Interest or Pleasure in Doing Things Over Past Two Weeks



Feeling Down, Depressed, or Hopeless Over Past Two Weeks



Source: Underserved Resident Self-Administered Survey: Q1: To begin, would you say your general health is…? (n=78); Q17: Over the past two weeks, how often have you been bothered by having little interest or pleasure in doing things? (n=74); Q18: Over the past two weeks, how often have you been bothered by feeling down, depressed, or hopeless? (n=77); Q19: Has there been a time in the past 12 months when you thought of taking your own life? (n=79); Q20: During the past 12 months, did you attempt to commit suicide (take your own life)? (n=79)

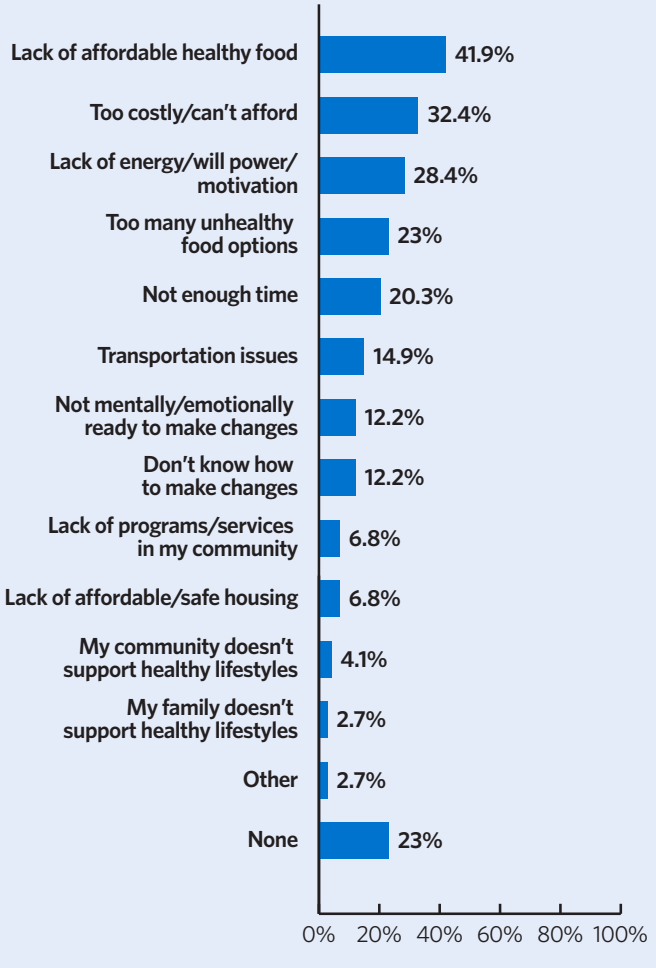
Health of Underserved Residents, Continued

There are many barriers that prevent underserved residents from living healthy lifestyles, but the two most common revolve around cost: the lack of affordable healthy food and the general cost of trying to live a healthy lifestyle.

Lack of energy, will power, motivation, and time are also barriers to living healthier.

Nearly one-fourth (23.0%) think there are too many unhealthy food options in the area and an equal proportion do not think there are any barriers to their living a healthier lifestyle.

Barriers to Living a Healthier Lifestyle



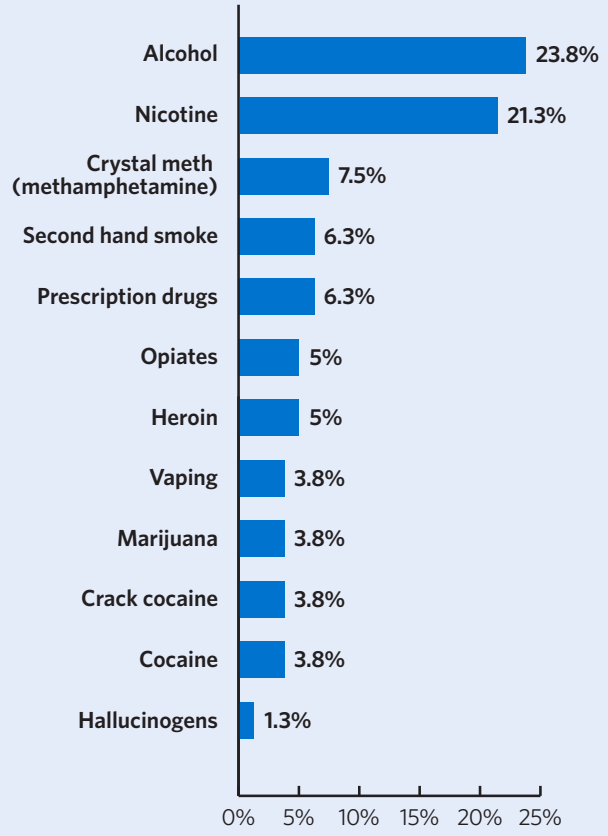
Source: Underserved Resident Self-Administered Survey: Q10: What are some of the barriers you face when trying to live a healthier lifestyle? (Multiple response) (n=74)

Substance Use/Abuse

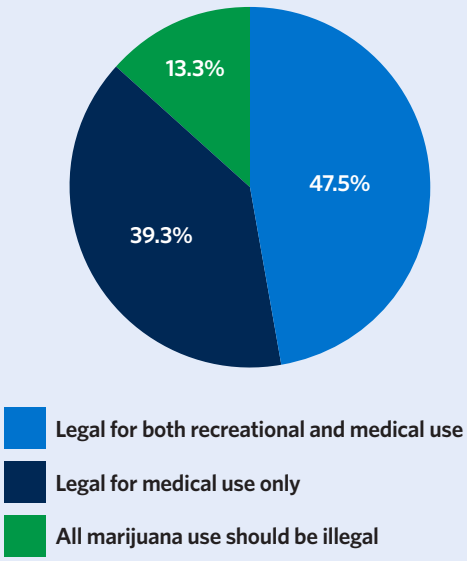
Almost one in four (23.8%) underserved residents report that alcohol use/abuse has negatively impacted their family. Additionally, 21.3% say smoking/nicotine was also harmful.

Among adults in the general population, almost half (47.5%) think marijuana should be legal for both medical and recreational use.

Substance/Addiction That Have Had a Negative Impact on the Person/Family



Opinion on Marijuana Use Among Adults in Michigan



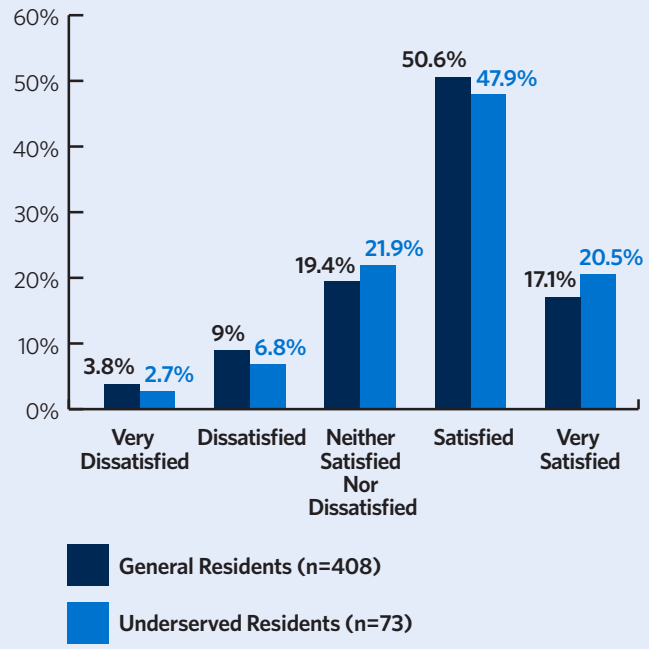
Source: Underserved Resident Self-Administered Survey: Q13: Substance abuse and addiction can have a negative impact on individuals and families. Which of the following, if any, have had a negative effect on your or your family? (Multiple response) (n=80); Resident Telephone Survey, Q21: In your opinion, should marijuana use by adults be legal for both recreational and medical use, medical use only, or should all marijuana use be illegal? (n=389)

Satisfaction with Health Care System

In terms of satisfaction with the health care system, there is very little difference between the general residents and the underserved residents: approximately two-thirds are either satisfied or very satisfied with the health care system overall.

Reasons for dissatisfaction are many, but most often cited are costs, lack of access, poor communication, wait times to see a provider, and poor-quality care.

Satisfaction with Health Care System Overall



Source: Underserved Resident Self-Administered Survey: Q10: What are some of the barriers you face when trying to live a healthier lifestyle? (Multiple response) (n=74)

I don't really trust the health care system. It's **too regulated and too big. I don't feel like my doctor is a family doctor anymore.** She has to **herd me like chickens to get in and out.**

– Underserved Resident

The **cost is outrageous!** The **doctors do not spend time with the patient** and **do not try to help.** They **spend five minutes with you, do not treat you** and **then send you a huge bill.**

– General Resident

I believe in free health care for all. While I was working last year, it **cost too much to even get insurance but I was not eligible for Medicaid.**

– Underserved Resident

We **can't get a doctor here. All I can see is a Physician's Assistant** and I have a rare incurable illness. I have **been fighting for years to get to see a doctor.**

– General Resident

Because the **inaccessibility of medical services** and you **have to travel to Grand Rapids** for the services.

– General Resident

I had surgeries and they **gave me an IV that caused a seizure** and they didn't want to put that drug on my records. They **didn't communicate with each other.**

– General Resident

They **don't care about the patients, only care about their paychecks.**

– General Resident

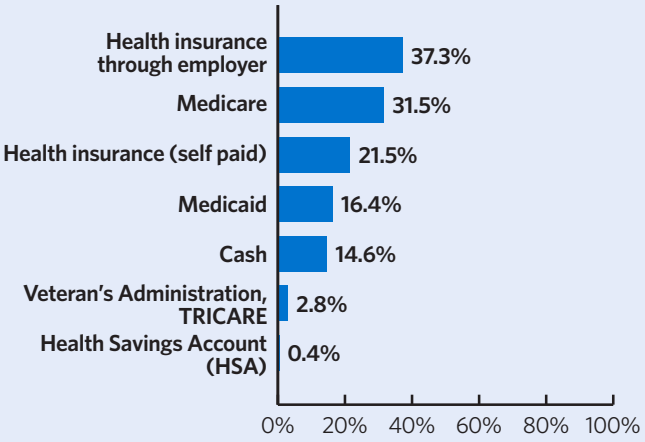
Source: Resident Telephone Survey/Underserved Residents Self-Administered Survey, Q19/Q3: How satisfied are you with the health care system overall? Q19a/Q4: (If dissatisfied) Why are you dissatisfied with the health care system overall?

Payment for Health Care

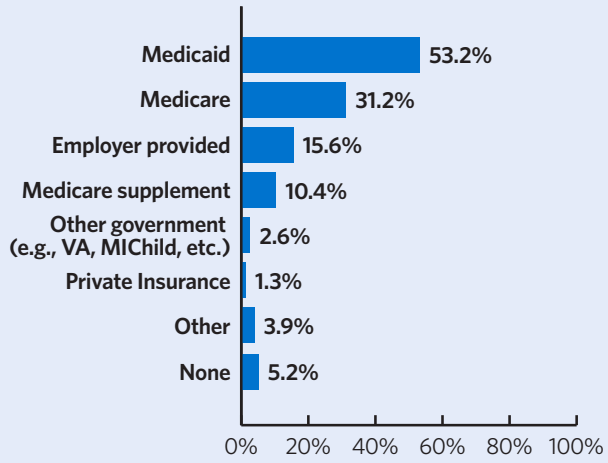
The majority of adult residents pay for their health care via insurance they receive through their employer (37.3%) or through private insurance that they purchased (21.5%).

Conversely, over half (53.2%) of underserved residents have Medicaid for health insurance, while 5.2% have no insurance.

Sources of Health Care Payment



Type of Insurance (Underserved Residents)



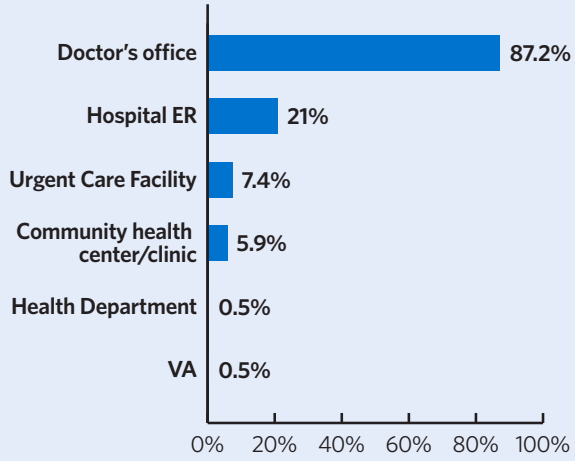
Source: Resident Telephone Survey, Q12: How do you usually pay for your health care? (Multiple response) (n=405); Underserved Resident Self-Administered Survey, Q6: Which of these describes your health insurance situation? (Multiple response) (n=77)

Sources of Health Information

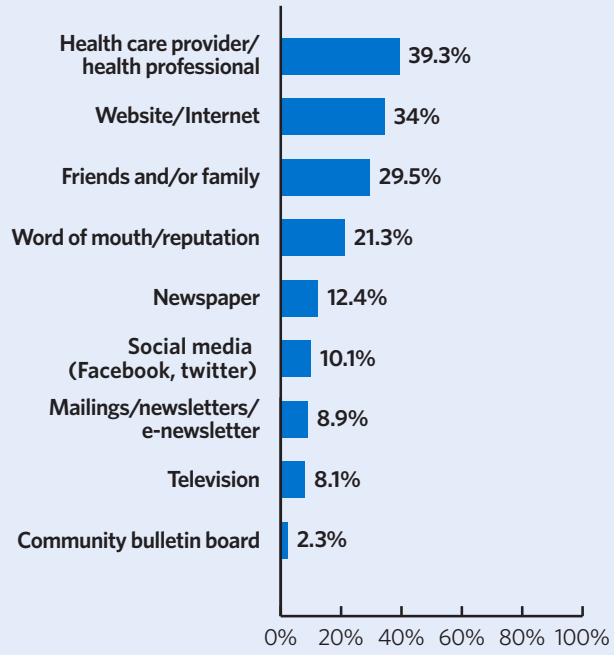
Although almost nine in ten (87.2%) area adults report they usually go to the doctor's office when they get sick, more than one in five (21.0%) visit the Emergency Room (ER).

When seeking information about available health services and programs available in the community, adults most often turn to health professionals, the Internet, friends/family, and/or word-of-mouth.

Place Usually Go When Sick or in Need of Health Care



Information Sources Used to Learn About Available Health Services and Programs



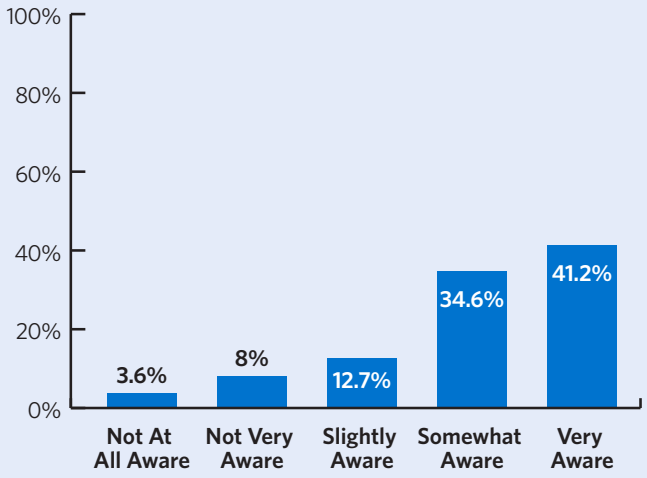
Source: Resident Telephone Survey, Q11: Where do you usually go when you are sick or in need of care? (Multiple response) (n=409); Q10: What information sources do you use to learn about the health services and programs that are available in your community? (Multiple response) (n=404)

Awareness and Use of Health Care Services

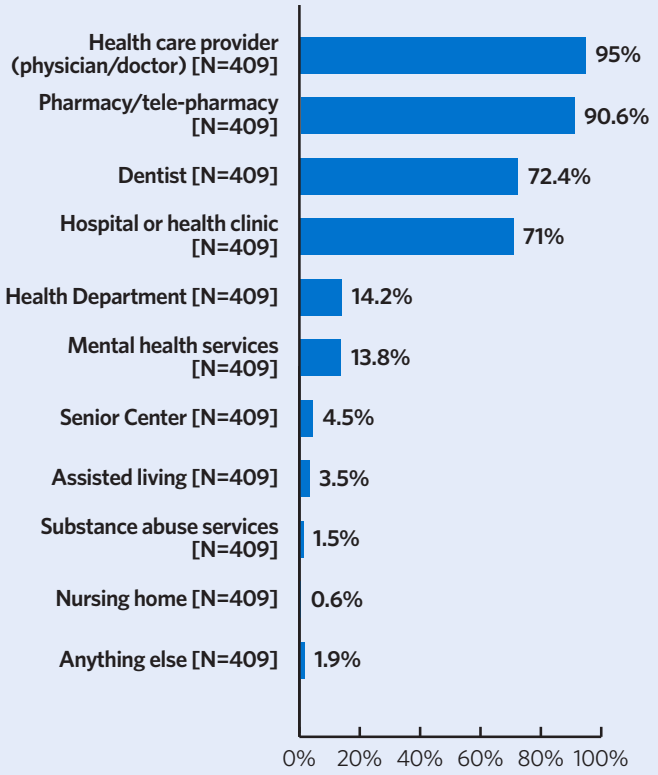
Three-fourths (75.8%) of SHGM area adults say they are somewhat or very aware of health services and programs available in the area.

Almost all adults reported using health care providers and pharmacies, and a vast majority used dentists, hospitals, or health clinics in the past three years while very few adults report using mental health or substance abuse services.

Awareness of Health Services and Programs Available in the Community



Community Health Resources Used in Past Three Years



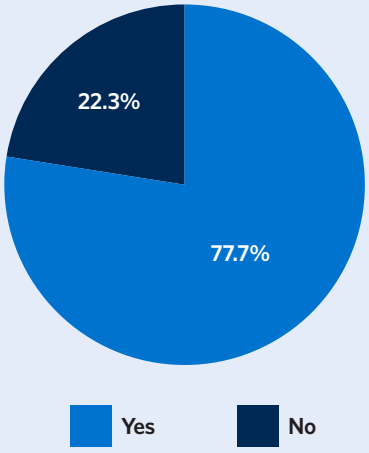
Source: Resident Telephone Survey, Q6: In general, how would you rate your awareness of the health services and programs available in your community? (n=408); Q7: Which of the following community health resources have you used in the past three years?

Barriers to Health Care Access

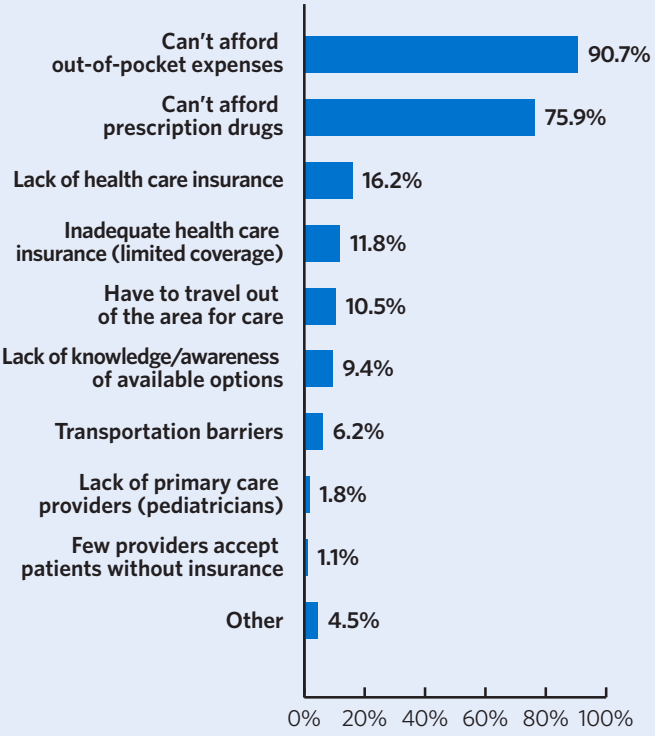
More than three-fourths (77.7%) of SHGM area adults believe access to health care is a critical issue or problem for some community members.

Those who see this issue as critical believe the two greatest barriers to health care access are the inability to afford out-of-pocket expenses and the cost of prescription drugs.

Believe Access to Health Care is a Critical Issue or Problem for Some Residents in the Community



Reasons Access to Health Care is an Issue for Some Area Residents



Source: Resident Telephone Survey, Q13: Do you believe that access to health care is a critical issue or problem for some residents in your community? (n=361); Q14: (If yes) In your opinion, why is access to health care an issue for some residents in your community? (Multiple response) (n=276)

Health Care Access

Barriers to Health Care Access, Continued

More than three-fourths (77.7%) of SHGM area adults believe access to health care is a critical issue or problem for some community members.

Those who see this issue as critical believe the two greatest barriers to health care access are the inability to afford out-of-pocket expenses and the cost of prescription drugs.

Most Common Barriers to Accessing Health Care

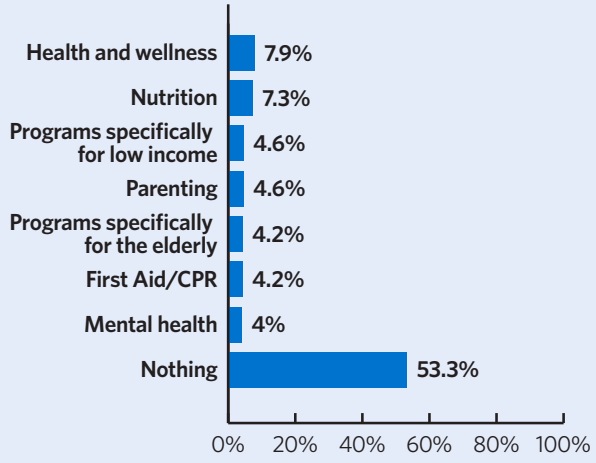
Source: Key Informant Online Survey, Q2: In your opinion, what are the most common barriers to accessing health care in your community? (Multiple response) (n=61)

Program and Services Lacking in the Community

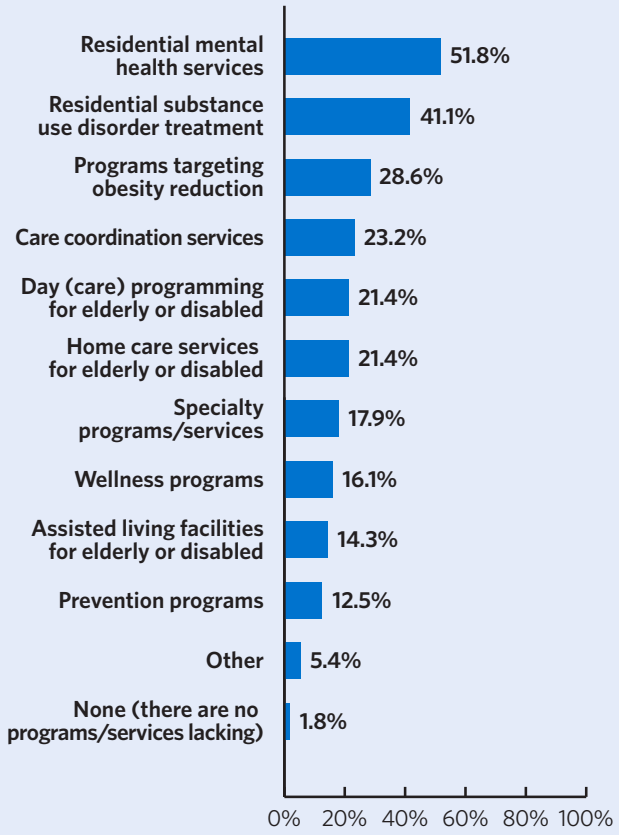
Over half (53.3%) of area residents report there is no lack of health programs, services, or classes in their community; however, those who see a lack of services list programs for wellness and nutrition most often.

On the other hand, Key Informants believe a number of programs and services are lacking in the community and top priority should be programs targeting substance abuse and/or mental health.

Programs/Services/Classes Lacking in the Community



Programs/Services Currently Lacking That Should Be Greatest Priorities



Source: Resident Telephone Survey, Q9: What health programs, services, or classes do you feel are lacking in the community? (Multiple response) (n=358); Key Informant Online Survey, Q7: What programs or services are currently lacking in the community that should be the greatest priorities, if any? (Multiple response) (n=56)

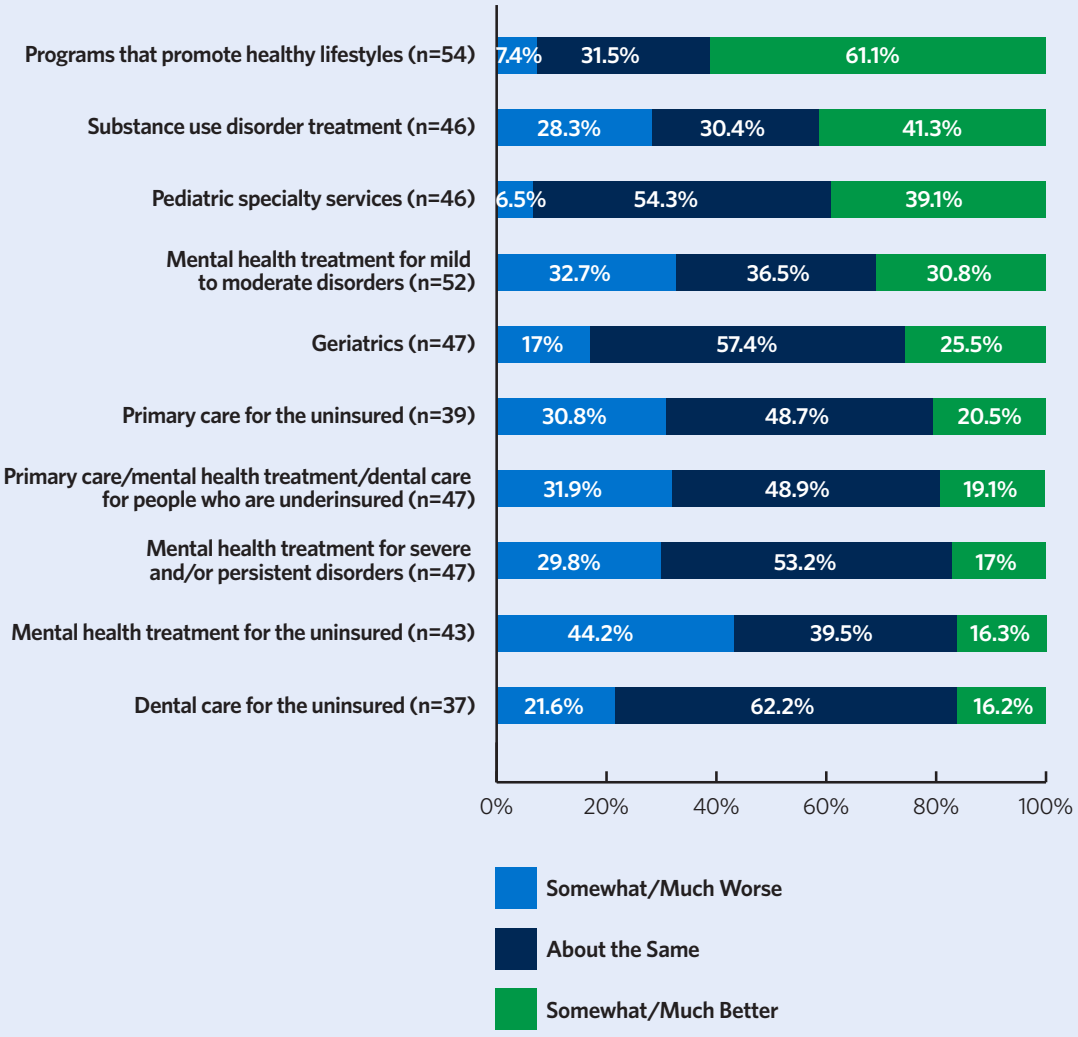
Improvement in Health Care Access

Key Informants were presented with a list of programs and services that were deemed (by Key Informants and Key Stakeholders) to be lacking and not meeting the needs and demands of area residents over the past 5-6 years. They were then asked whether or not access has become better, worse, or remained the same.

They feel that access improved most for programs that promote healthy lifestyles, followed by substance use disorder treatment, and pediatric specialty services.

Where access worsened over that same time period is with mental health treatment and primary care for the uninsured or underinsured.

Extent to Which Access Has Improved Over the Past 5-6 Years



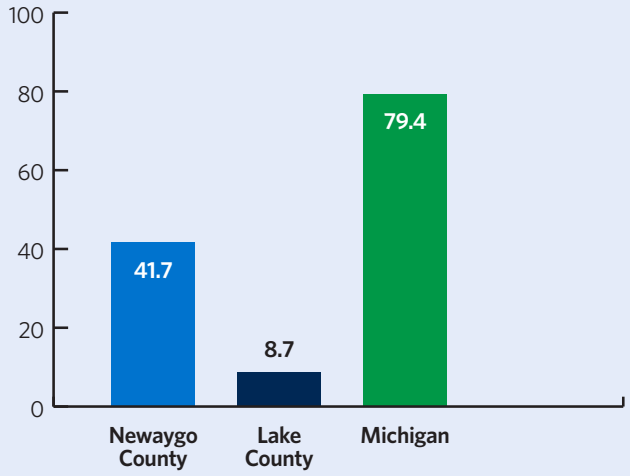
Source: Key Informant Online Survey, Q6: Below is a list of programs and services from the past two Community Health Needs Assessments that Key Informants reported did not meet the needs and demands of area residents well. In your opinion, over the past 5-6 years, to what degree has access to each improved (or not) for area residents?

Lack of Primary Care

Both SHGM service area counties have considerably fewer PCPs (MDs and DOs) per 100,000 population compared to Michigan overall. Lake County's rate is by far the lowest, with only about one-tenth the number of PCPs per capita as the state.

Lack of primary care providers leads to extremely lengthy wait times which can have the negative effect of patients ceasing medication or avoiding care altogether.

Primary Care Physicians* (MDs and DOs) Per 100,000 Population



Source: County Health Rankings, 2016
***Note:** Physicians defined as general or family practice, internal medicine, pediatrics, obstetrics or gynecology.

People **have to wait months to be established with new PCPs**. This **leads them to stop taking their medications, splitting their medications**, or **giving up on health care** and stop seeing PCPs in general.

– Key Informant

Patients are **unable to establish with PCPs within a timely manner. PCPs are over-booked** and access to established patients is limited. **Community would benefit from additional providers.**

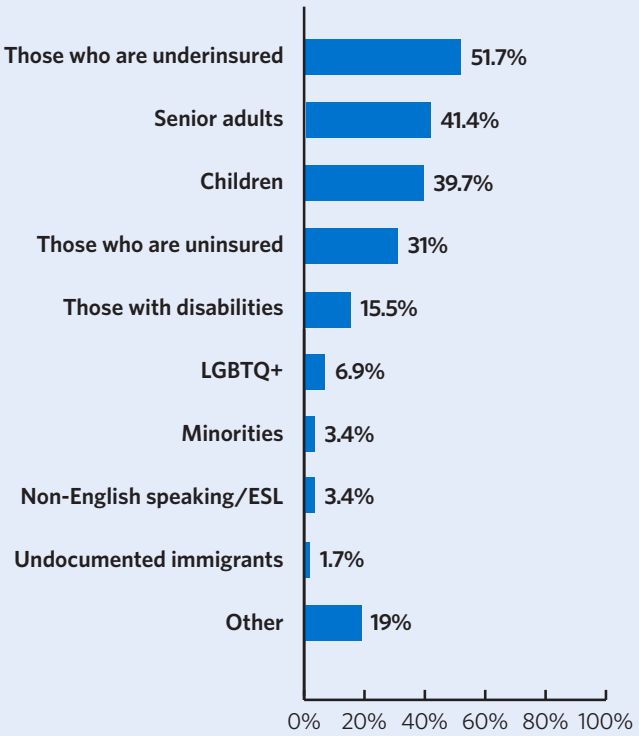
– Key Informant

Underserved Populations

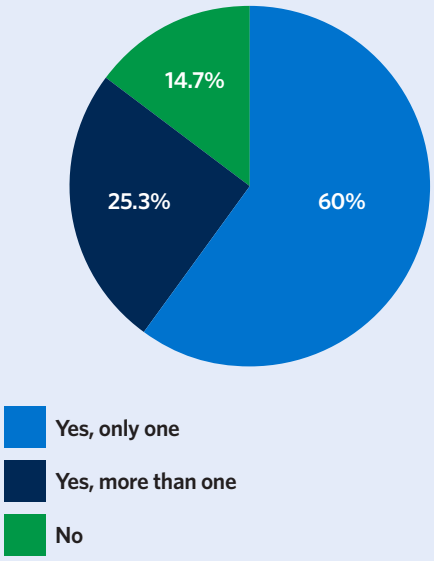
According to Key Informants, underserved groups most deserving of the community's focus are those who are underinsured and uninsured, senior adults, and children.

One in seven (14.7%) underserved residents have no medical home (no personal health care provider).

Underserved Groups That Should Be Focused On



Have Personal Health Care Provider

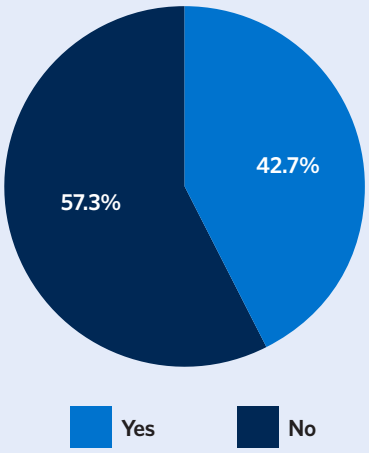


Source: Key Informant Online Survey, Q3: With regard to health care, which of the following underserved groups should we focus on most as a community? (Multiple response) (n=58); Underserved Resident Self-Administered Survey, Q2: Do you have one person you think of as your personal doctor or health care provider? (n=75).

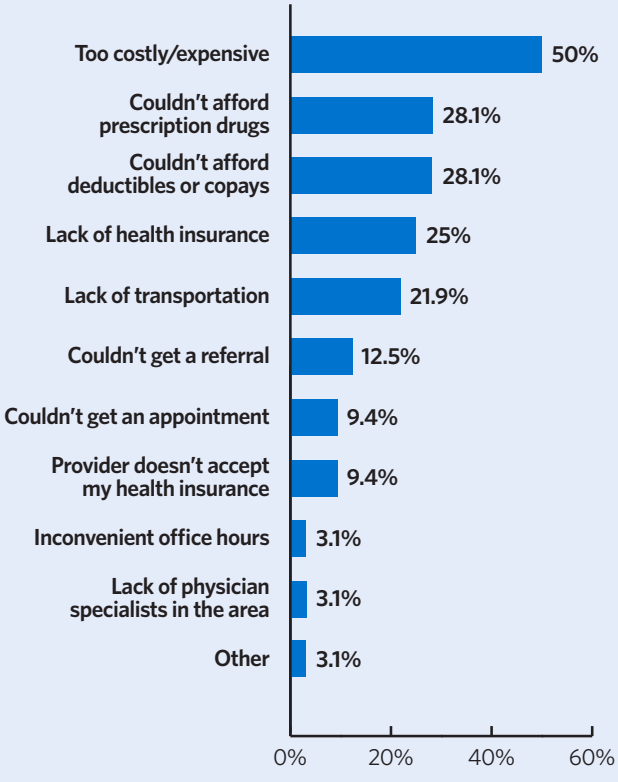
Four in ten (42.7%) underserved residents had trouble meeting their health care needs in the past two years.

The cost of health care in general, and specifically out-of-pocket expenses for copays, deductibles, and prescription drugs, as well as lack of insurance, and lack of transportation were the most common reasons they had trouble meeting their health care needs in the past two years.

Have Had Trouble Meeting Health Care Needs In the Past Two Years



Reasons Had Trouble Meeting Health Care Needs

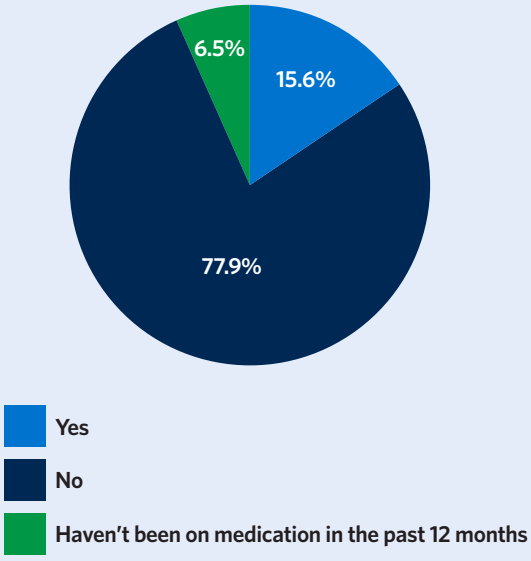


Source: Underserved Resident Self-Administered Survey, Q7: In the past two years, was there a time when you had trouble meeting your health care needs? (n=75); Q8: (If yes) What are some of the reasons you had trouble meeting your health care needs? (Multiple response) (n=32)

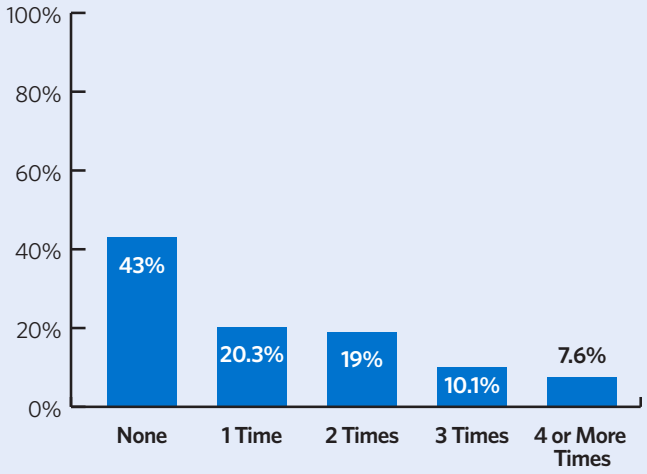
Roughly one in six (15.6%) underserved residents had to skip, or stretch their supply of, medication in the past 12 months in order to save on costs.

More than half (57.0%) of underserved residents have personally used the hospital ER in the past 12 months, and 36.7% visited two or more times.

Have Skipped, or Stretched Supply of, Medication to Save on Costs



ER Utilization in Past 12 Months



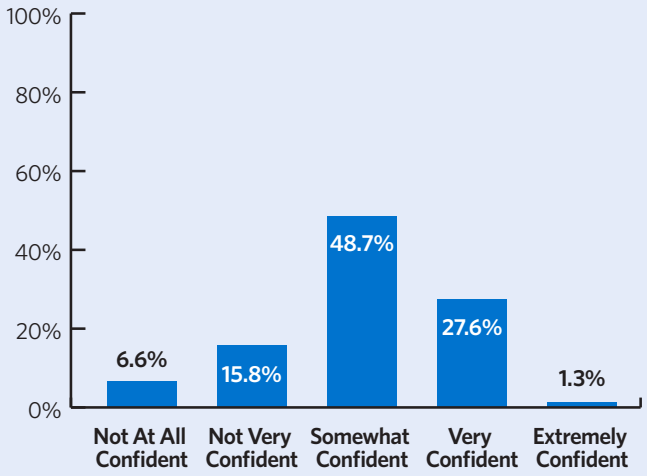
Source: Underserved Resident Self-Administered Survey, Q9: Was there ever a time in the past 12 months when you did not take your medication as prescribed, such as skipping doses or splitting pills, in order to save on costs? (n=77); Q12: How many times have you been to an Emergency Room/ Emergency Department in the past 12 months? (n=79)

Underserved Populations, Continued

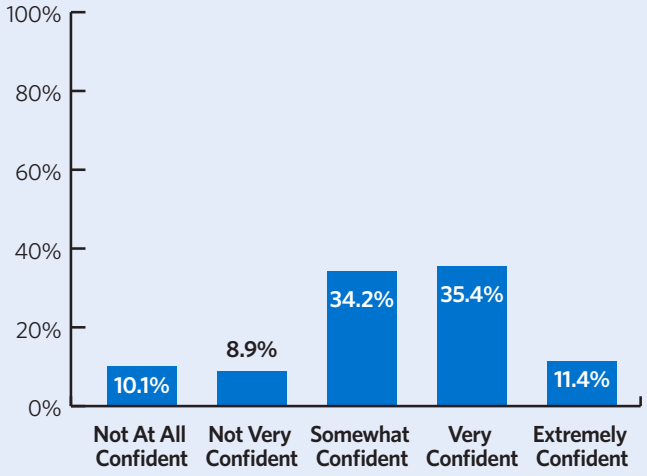
Underserved residents lack confidence in navigating the health care system: one in five (22.4%) are not very or not at all confident and half (48.7%) are only somewhat confident.

They are slightly more confident that they can complete medical forms by themselves (46.8% very/extremely) and 63.8% rarely or never have problems understanding information necessary to be knowledgeable about their health condition.

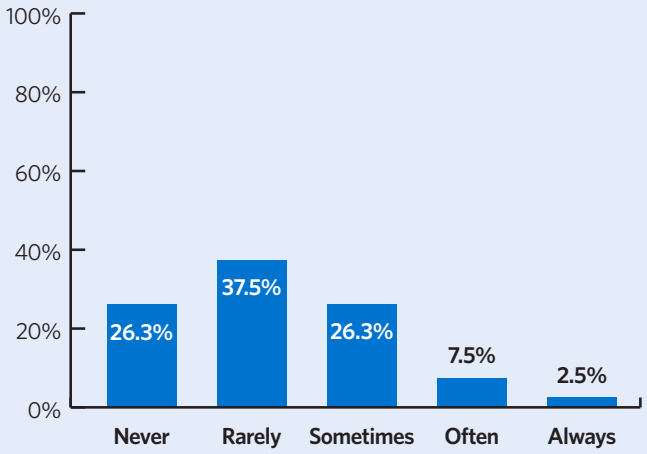
Confidence in Navigating the Health Care System



Confidence in Completing Medical Forms By Yourself



Frequency of Having Difficulty in Understanding Written Information Regarding Health Conditions



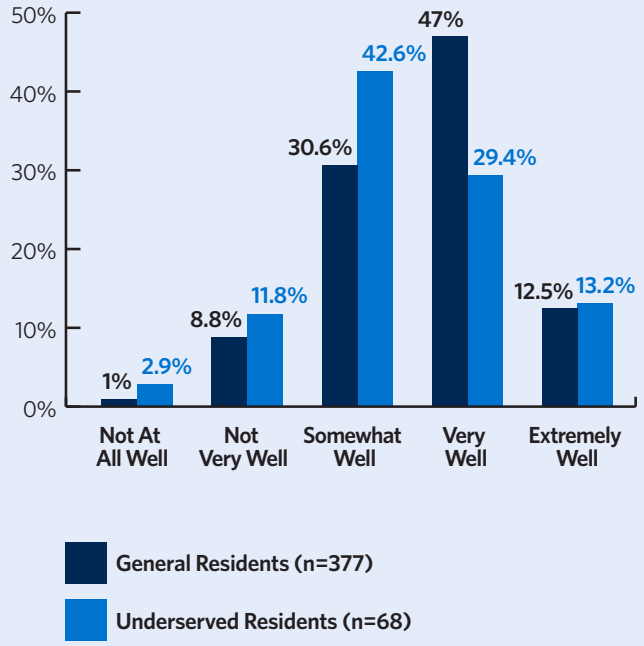
Source: Underserved Resident Self-Administered Survey, Q14: How confident are you that you can successfully navigate the health care system? (n=76); Q15: How confident are you in filling out medical forms by yourself? (n=79); Q16: How often do you have problems learning about your health condition because of difficulty in understanding written information? (n=80)

Communication Between Health Care Providers

Overall, the majority of SHGM area adults from the general sample believe health care providers communicate at least somewhat well with each other regarding patients' health care.

It is clear that underserved residents have a less favorable view of provider-to-provider communication compared to the general sample of area adults: 59.5% of area adults in the general population report providers communicate very or extremely well with each, compared to 42.6% for underserved adults.

Degree to Which Health Care Professionals Communicate with Each Other About Your Health Care



Source: Resident Telephone Survey, Q15: In your opinion, how well do health care professionals communicate with each other about your health care?; Underserved Resident Self-Administered Survey, Q5: How well do you feel health care professionals communicate with each other about your health care?

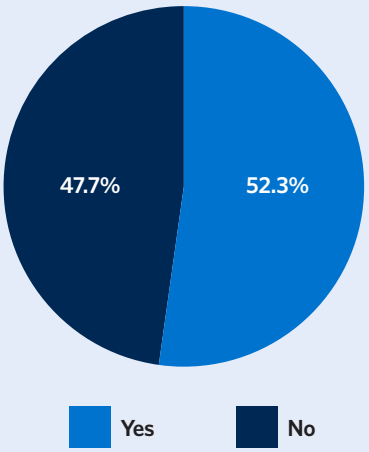
Ability to Refer People to Care

Half (52.3%) of SHGM Key Informants believe they are equipped to assist people in accessing needed programs and services.

What would better equip them to be able to help people would be education on available services (or lists of everything available), physical staff, social workers who can connect to appropriate services, free or low-cost services, and better foundation programs that have funds for low-income residents.

Some of the resources currently used include care/case managers, social workers, 211, TrueNorth, DHHS, MIHP, WIC, PACE, and Mi Bridges.

Believe to be Equipped to Help People Access Needed Programs and Services



Source: Key Informant Online Survey, Q5: Do you feel you are equipped to help people/clients/patients access needed programs and services? (n=44); Q5a: (If no) What would better equip you to help people/clients/patients access needed programs and services?; Q5b: (If yes) What is the resource you use most often to help people/clients/patients access needed programs and services?

What Would Better Equip You

- An outline of what is available, grouped by common eligibility requirements.
- Education on available programs. Documentation that is up to date and available for me to reference as I talk to people/clients/patients.
- Having a community fair so I am aware of all of the services available in the community.
- Having a full-time social worker in the office who is able to stay up to date on all of the programs and how to best connect the patients to them.
- More transportation services in the community, free/low cost/sliding scale programs.
- Need a better foundation program for the cancer center that can support the needs of a low-income community to pay for drug costs and copays along with everyday expenses like food and heat.

Resource Used Most Often

- 211 vision support, DHHS Child and Adolescent Health Center (Grant MS).
- Care Managers, TrueNorth, DHHS, PACE program.
- Medical social worker, which we need on 24 hours. Case Management.
- Mi Bridges, 211, MIHP, WIC.
- SHGM Community Health Worker and TrueNorth
- TrueNorth is a great resource for housing and other support programs.

Solutions and Strategies

Strategies Implemented Since Last CHNA

Key Stakeholders report that collaboration and coordination among and between community organizations keeps improving as a result of the past two CHNAs and their corresponding implementation plans. There have also been efforts to address the problem of substance use disorder by treating the issue as a public health problem instead of as a legal problem.

Substance abuse/ treatment

With regards to the **substance-abuse and opiate issues, we have funding for Lake County and Oceana County**. It's **federal dollars** that are aimed at **coalitions** and **working on substance-use prevention**. I think **opiates probably more so in Oceana County**, and I think **Lake County is more focused on alcohol and marijuana** but still trying to address some of the opiate-type issues. We just got approval to **implement some harm-reduction programming**, so we're **looking at implementing a service program in Lake County** to kind of **address the opiate issue, Hep C, HIV**, and some of the **other substance-abuse problems there**.

– Key Stakeholder

Coordination/ collaboration

We **are expanding our community critical linkages model**, so we have **created hubs and employ some community health workers** now and are **partnering with the care management teams** that some of the practices have to actually accept referrals and then kind of **navigate these clients to the appropriate resources**. This **gets more at those social determinants of health**.

– Key Stakeholder

I know that **they're working on the substance-abuse issue and trying to coordinate some of those services**. I know **there's good coordination or better coordination in both counties, especially in Lake** County with the **Communities That Care fund** that the **health department** is taking the lead on and then **Spectrum Health is a part of that**, so there's **more focus on it**. **I just haven't seen a lot of change**, but **we've got a strategic plan**, and we're working on that.

– Key Stakeholder

I think there **continues to be work** in the **behavioral-health area**. There continues to be work regionally **working with partners in the community, partners across the region**. I think that work is **getting more refined**, again, it's going to take time, but I think **we're seeing better coordination between the Community Mental Health agencies**, the **department of health** people, **health care**. I think we're s**eeing more collaboration there**. I just **don't think we've got enough yet to really get fired up that we've made enough progress** yet on the whole **mental-health area**, just as an example.

– Key Stakeholder

Solutions and Strategies

Strategies Implemented Since Last CHNA, Continued

Two initiatives, Communities That Care and Live Well, are partnering with other area organizations to address lifestyle changes. There is increased interest and effort being made between TrueNorth and researchers at a local university to study the associations of social isolation and social cohesion with health outcomes. Efforts continue to be made to address transportation, but it has remained a problem for decades and the volunteer base (for drivers) is dwindling.

Lifestyle changes

The **Communities That Care initiative** and the **Live Well committee** in **Newaygo** County are **focusing on substance abuse** and **healthy living**. As far as **Live Well in Newaygo** County, they're talking about **playgrounds for schools** and **walking and bike paths**, so we're **slowly moving forward** on some of those things. I feel, though, that there's **really good partnerships between both Spectrum Gerber and Spectrum Big Rapids** for both the counties, so that's been there the longer in Newaygo County but is very solid in Lake County, and those are some good things.

– Key Stakeholder

Social isolation/ social cohesion

I just did a bunch of strategic planning with the board of directors of **TrueNorth**, and so we are probably **on the verge**, I would say, of **adopting a fairly significant strategic initiative to begin much more deliberately and intentionally addressing social isolation**. It's going to be very deliberate and we will **probably start to include it as one of our core services and try to measure it**. I'm working right now with some researchers at Western Michigan University to **develop a quality-of-life index to start to measure our impact**. We, I think, **need to be far more deliberate about right from intake through service delivery, not just meeting people's basic needs and addressing determinants of health but addressing their social and emotional needs, as well, assessing those through an assessment process, identifying people that are socially isolated, and then really intentionally working on reducing those levels of social isolation, being very intentional about getting them more engaged in the community**.

– Key Stakeholder

Transportation

Transportation in Newaygo County - it has **been an issue for my thirty-year career here**, and I know we **tried to study it again**. We tried to **look at other initiatives**. We c**an't because of the funding, because of the ruralness**, because of the **numbers**. We **never seem to be able to tackle the situation**. I know that there's **an issue** in **both Lake and Newaygo County** with the **reimbursement of volunteers**. The **length of time to get reimbursed is an issue**. Then again, I think that **the generation of giving back - there's less of those people**, and so we have **fewer volunteer transporters**, then we have **less transportation**.

– Key Stakeholder

Source: Key Stakeholder Interviews, Q1e/Q2b: What, if anything, has been done to address these issues? (n=4, n=2)

Resources Available to Meet Issues/Needs

Key Stakeholders agree that there is a lack of adequate resources in the community to address these critical health issues. Coordination among and between area organizations could be stronger, and that would genuinely help make the use of limited resources more efficient.

The most critical health problems and issues in the SHGM community are complex and complicated to address even with vast resources, let alone limited resources. Further complicating the issues is the remoteness of the area itself, which is manifested by social isolation and poverty, two things that are extremely difficult to change.

No, I don't think so. I think **there's probably more that could be done**. If we had that magic recipe to know what it would take, it would be a wonderful thing. **We live in an area that's pretty isolated**, so **that alone creates some of the barriers and lack of resources that we have, but the people who are doing the work are working very hard to try to make changes,** including the **health department, the hospital, programs like mine - we're all working together, we're working collaboratively, and changes are incremental**. It just takes time.

Yes and no. I think **there are resources available in the communities**. I think **the question is "Are people willing to collaborate and coordinate together - work together - and kind of share those resources to address the problem?" Does everybody around the table look at addressing the issue with kind of a broad agenda or a very narrow agenda?**

No. **I think we're very fortunate in Newaygo County** to have the **Freemont Area Community Foundation** that really **helps support some of these issues**. However, **the scope**, especially with the **substance abuse issue**, and the way the dollars are distributed – they're **given to Mental Health**, and then they're **given to a provider** – there **just doesn't seem to be the funds to be able to address that.**

No, I really don't. I think **that's part of the problem for some of the key issues we're talking about**. These are **chronic issues** that have **been on the radar screen a long time**, but I **don't think we can ever put all the resources in play that we would need to fully move everything at the same time. You've got to sort of pick and choose what you can afford or work on and where you can put emphasis**, but I **don't think we'll ever see enough resources for some of the challenges we're dealing with here.**

Source: Key Stakeholder Interviews, Q1g/Q2d: Are there adequate area resources available to address these issues? (n=6)

Five of the six Key Stakeholders interviewed think that the community prioritizes issues at least somewhat effectively given the resources that are available. Collaboration between the hospital, health department, and other community organizations continues to be a need because, regardless of funding, manpower is required to move the needle on these issues.

There continues to be room for improvement because the issues are complex and complicated and even though the community is committed to seeing improvement by way of the number of people and organizations working towards a healthier community, there is some question as to how much this effort has positively impacted the issues in question.

I think that the **communities prioritize the issues appropriately depending upon who's around the table at that time**, if that makes sense. I think it **would be advantageous to take that piece of the process kind of out on the road** and s**et up in different locations and try to gather that input** versus saying, "Okay, we're going to come together today, and we're going to kind of prioritize what these issues are, and if you make it that day, you voice concerns, and if you don't, then unfortunately you don't." This way, I think you can probably find some commonality in a lot of those issues and narrow it down to one, two, or maybe three priority issues that everybody is focusing on but may not be saying the same thing.

Resources Available to Meet Issues/Needs, Continued

I think we do. I think we do **with the limited resources that we have. We're very fortunate**, I think in **both counties**, most especially in **Newaygo**, to have **people that are committed** and **what to address and make a difference** and know that we **have to work together** because we are small.

Yeah, I think there's **generally disconnect between what people identify as needs and available dollars and manpower to positively impact an issue**, but I think we're **looking at the right things**. I think it's a **matter of the resources relative to the problems are scarce**, and that's going to make this a **very difficult battle to sort through**, but I think we're **focusing on the right things**; I just think we've probably **underestimated - severely underestimated how much it's going to take in the way of dollars** and **manpower** to **actually move things in** the right direction.

Yeah, I do. I think that **change takes time**, and I think **we don't give up easily**. I think the **health department has done a good job in leading and trying to gather the right people around the table to make change or to address issues** or to identify ways that we can improve, but we've **gotten a lot better at collaboration over the years**, and we've done grants together, so we **have developed some resources that we didn't have before.**

I would say **absolutely not. We have a lot of resources available, particularly in Newaygo County** we have the **fourth largest per-capita community foundation in the country. They're getting better, but I don't see us having a big impact. I've done some research**, and **looking at Center for Disease Control peer counties, and there's absolutely no relationship between health** (among those peer countries, where everything else should be about the same) and things like **community-benefit dollars spending from nonprofit hospital, nonprofit human-service business activity, community foundations**, etc. **I can't come to any conclusion other than we're having very little impact, and I think that's due to the fact we haven't prioritized the right issues.**

Source: Key Stakeholder Interviews, Q5: Do you feel like the community prioritizes issues effectively given the resources that are available? (n=6).

Health Care/Human Service Organizations

- Arbor Circle
- Baldwin Family Health Care
- Commission on Aging
- Community Home Health Care Services
- Department of Health and Human Services (DHHS)
- District Health Department #10
- Family Health Care
- Newaygo County Mental Health
- Newaygo Urgent Care
- Spectrum Health Gerber Memorial Hospital
- Spectrum Health Tamarac
- TrueNorth Community Services
- United Way of the Lakeshore
- Women's Information Services, Inc. (WISE)

Community Initiatives/Coalitions

- BreatheWell smoking cessation program
- Cooking Matters cooking classes
- Coordinated Approach to Childhood Health (CATCH)
- Diabetes education
- Food banks and food pantries
- Healthy Beginnings
- LiveWell Newaygo County
- MedNow, telemedicine, telepsychiatry, and other technology to increase health care access
- Newaygo County Community Collaborative
- Newaygo Farmers Market
- Substance Abuse Prevention Coalition
- Support groups (e.g., Alzheimer's, stroke, Parkinson's, weight management)

Suggested Strategies to Address Issues/Needs

Key Stakeholders agree that there is a lack of adequate resources in the community to address these critical health issues. Coordination among and between area organizations could be stronger, and that would genuinely help make the use of limited resources more efficient.

The most critical health problems and issues in the SHGM community are complex and complicated to address even with vast resources, let alone limited resources. Further complicating the issues is the remoteness of the area itself, which is manifested by social isolation and poverty, two things that are extremely difficult to change.

Mental health/ access to treatment

More dedicated psych/med urgent care centers, EDs, or **hospitals**. **24/7 MSW coverage** for all of our sites especially if the volume continues to increase. **Better wellness programs** in the county. **Different inclusive curriculum built into schools**.

– Key Stakeholder

More mental health resources to the middle class. CMH is able to cover the patient with Medicaid, but often **people will stop their services due to the cost.**

– Key Informant

We **need additional access for transfer to in-patient care**, rather than holding patients for 24 hours in ED.

– Key Informant

Hire some on-site counseling psychologists.

– Key Informant

Substance use disorder/access to treatment

Utilize a population-based approach to prevention activities in all communities. These activities should be **targeted to youth, teens and adults**.

– Key Informant

Open, frank conversations with young children about marijuana, it being legal, what **effects it has on the body** and what this means for them growing up. Do they need it for pain, anxiety, etc.? The **reasons adults use it for medicinal purposes**, etc.

– Key Informant

Any type of **rehabilitation center, detox** center, County, State or Spectrum **funded** or **partially funded program, FAF grants**, some type of program that **must answer to a responsible board of directors and run by qualified individuals**.

– Key Informant

I would like to see the **State**, the **County**, the community (**Spectrum Health**) all **collaborate** on an **effort to build a certified recovery home** that **anyone is welcome** to come into at **any time** and check out the books, the policies and procedures, any violations and what has been done to immediately correct those. I would like to see it be **run as a non-profit** and to be **run by all certified coaches** with the **correct licensing**. This is **so badly needed in Newaygo County**. I would like to see a home **where proof of graduates or success stories could be proved on an annual basis**.

– Key Informant

Solutions and Strategies

Suggested Strategies to Address Issues/Needs, Continued

Poverty is an enormous overarching macro-sociological problem that would be difficult to address, and it will take the entire community to do so. That said, Key Informants do suggest that offering support to those in need and providing better paying jobs would help.

Transportation needs to be better coordinated and incentives need to be in place to secure drivers, but the rural area poses a challenge for implementing an efficient solution.

Strategies for improving obesity rates involve finding ways to offer healthy food that is affordable and providing mentors or coaches that could help with nutritional advice while shopping or teach people how to cook nutritious meals that are affordable, easy, and healthy.

Poverty	**Working as a community instead of in silos** to help overcome the root causes might be a good place to start. **Shifting the focus to building a community that provides human capacity support to those who need it** will continue to be a good idea (MI Works success coaches at work; peer navigators in agencies, support programs for single parents, etc.) **– Key Informant** Systemically we **need a higher minimum wage** and **guaranteed minimum income. Universal health coverage would impact poverty as well**, along with **earned income tax credits.** This is a rural agricultural community and **many jobs are low-paying.** **– Key Informant**
Transportation	**Maybe grants to finance some drivers? Gift cards if people attend for gas/drivers.** **– Key Informant** **Centralize the service offerings** to a place **near the main highway** to **help patients** and **providers from GR get to the area to provide these services** to the needs of the patients in our county. **– Key Informant**
Obesity	**Assistance programs should be inclusive of healthy food choices** and **limit access to unhealthy choices. Mentor to consumers nutritional information a**vailable in the **grocery stores. Financial incentives.** **– Key Informant**
Health management	I think **each doctor should have a group of care managers that help manage care of their patients. Total connection. Nobody falls between the cracks**. Considering the number of patients that doctors see they cannot possibly keep a record and mindset for best practices and to put all the puzzle pieces together. This would be costly at first, but the results **would be so beneficial for the community as well as each person in it.** **– Key Informant**

Source: Key Informant Online Survey, Q1d: What ideas do you have, if any, to resolve this issue [most pressing health issue or concern in the area]? (n=67).

Appendix

Participant Profiles

Key Stakeholder In-Depth Interviews

Administrator, Baldwin Family Health
Associate Chief Medical Officer, Spectrum Health Medical Group
Director of Research and Strategic Development, TrueNorth Community Services
Director, Department of Human Services
Health Officer, District Health Department #10
President, Spectrum Health Gerber Memorial Hospital

Key Informant Online Survey	
Registered Nurse (10)	Doctor of Medicine
Manager (5)	Education Administrator
Physician (3)	Elementary School Principal
Physician Assistant (2)	Health & Prevention Coordinator
Administrative Assistant	Health Officer
Administrative Supervisor	Hospitalist
Business Owner/President	Medical
Charge Nurse, Emergency Room	Nurse Care Manager
Chief Development Officer	Nurse Practitioner
Clinical Education Specialist	Physician Assistant-Certified
Community Health Program Coordinator	Physician, DO
Community Health Program Specialist	President
Community Nutrition Instructor	Primary Care Physician
Consultant	Professional
Dentist	Program Manager
Director	Quality, Safety, and Experience Manager
Director, Newaygo County Commission on Aging	Registered Nurse, Home Care

Appendix

Resident Telephone Survey

	Total		Total		Total
Gender	**(n=409)**	**Children in Household**	**(n=408)**	**Education**	**(n=401)**
Male	**52.7%**	None	**70.2%**	Less than 9th grade	**4.9%**
Female	**47.3%**	One	**10.3%**	Grades 9 through 11	**9.1%**
Age	**(n=397)**	Two	**12.0%**	High school grad/GED	**37.4%**
18 to 24	**8.4%**	Three	**5.6%**	College, 1 to 3 years	**35.8%**
25 to 34	**15.6%**	Four	**0.4%**	College 4+ years (grad)	**12.8%**
35 to 44	**13.6%**	Five or six	**1.5%**	**Income**	**(n=287)**
45 to 54	**19.9%**	**Marital Status**	**(n=404)**	Less than $10K	**13.5%**
55 to 64	**18.7%**	Married	**53.6%**	$10K to less than $15K	**7.0%**
65 to 74	**13.9%**	Divorced	**12.9%**	$15K to less than $20K	**5.5%**
75 or Older	**9.9%**	Widowed	**6.8%**	$20K to less than $25K	**5.1%**
Race/Ethnicity	**(n=405)**	Separated	**0.0%**	$25K to less than $35K	**17.7%**
White/Caucasian	**93.2%**	Never married	**25.8%**	$35K to less than $50K	**19.9%**
Black/African American	**0.7%**	Member of an unmarried couple	**0.9%**	$50K to less than $75K	**15.7%**
Hispanic/Latino	**5.3%**	**Employment Status**	**(n=406)**	$75K or more	**15.6%**
Asian	**0.3%**	Employed for wages	**38.3%**	**Own or Rent**	**(n=401)**
Native American	**0.4%**	Self-employed	**6.4%**	Own	**83.4%**
Adults in Household	**(n=409)**	Out of work 1 year+	**2.3%**	Rent	**10.5%**
One	**26.9%**	Out of work <1 year	**4.5%**	Other	**6.2%**
Two	**47.8%**	Homemaker	**6.6%**	**Zip Code**	**(n=409)**
Three	**12.2%**	Student	**1.1%**	49309	**1.7%**
Four	**7.0%**	Retired	**30.4%**	49327	**16.1%**
Five	**3.4%**	Unable to work	**10.2%**	49337	**30.4%**
Six	**2.7%**			49349	**12.4%**
				49412	**29.7%**
				49421	**9.8%**

Appendix

Underserved Resident Survey (Self-Administered)

	Total		Total		Total
Gender	**(n=80)**	**Children in Household (<6)**	**(n=76)**	**Income**	**(n=77)**
Male	**28.8%**	None	**72.4%**	Less than $10K	**39.0%**
Female	**71.3%**	One	**11.8%**	$10K to less than $15K	**16.9%**
Age	**(n=80)**	Two or more	**15.8%**	$15K to less than $20K	**9.1%**
18 to 24	**13.8%**	**Marital Status**	**(n=80)**	$20K to less than $25K	**9.1%**
25 to 34	**21.3%**	Married	**26.3%**	$25K to less than $35K	**7.8%**
35 to 44	**8.8%**	Divorced	**21.3%**	$35K to less than $50K	**11.7%**
45 to 54	**17.5%**	Widowed	**15.0%**	$50K to less than $75K	**1.3%**
55 to 64	**13.8%**	Separated	**2.5%**	$75K or more	**5.2%**
65 to 74	**15.0%**	Never married	**28.8%**	**Own or Rent**	**(n=72)**
75 or Older	**10.0%**	Member of an unmarried couple	**6.3%**	Own	**44.4%**
Race/Ethnicity	**(n=80)**	**Employment Status**	**(n=79)**	Rent	**37.5%**
White/Caucasian	**93.8%**	Employed for wages	**30.4%**	Other	**18.1%**
Black/African American	**2.5%**	Self-employed	**1.3%**	**Zip Code**	**(n=65)**
Native American	**2.5%**	Out of work 1 year+	**3.8%**	49303	**1.5%**
Other	**1.3%**	Out of work <1 year	**11.4%**	49304	**1.5%**
Adults in Household	**(n=74)**	Homemaker	**8.9%**	49309	**3.1%**
One	**37.8%**	Student	**1.3%**	49327	**9.2%**
Two	**37.8%**	Retired	**20.3%**	49329	**7.7%**
Three	**8.1%**	Unable to work	**22.8%**	49337	**12.3%**
Four	**12.2%**	**Education**	**(n=80)**	49347	**1.5%**
Five	**4.1%**	Less than 9th grade	**2.5%**	49349	**23.1%**
Children in Household (6-17)	**(n=75)**	Grades 9 through 11	**13.8%**	49412	**27.7%**
None	**68.0%**	High school grad/GED	**45.0%**	49421	**6.2%**
One	**18.7%**	College, 1 to 3 years	**31.3%**	49444	**1.5%**
Two or more	**13.3%**	College 4+ years (grad)	**7.5%**	49451	**1.5%**
				49454	**1.5%**
				49455	**1.5%**

Exhibit B

Spectrum Health Gerber Memorial Hospital

Previous Implementation Plan Impact

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

Spectrum Health

Obesity and Weight Issues

Reduce Adult Obesity

Action 1

Make Newaygo County the healthiest county in Michigan in the County Health Rankings.

- Continue the current collaborative relationships with community partners.
- Actively participate in the healthcare collaborative group.

Measurable Impact

Continuous improvement in integration matrix and County Health Rankings.

Impact of Implementation Plan Strategy

Strong partnerships are in place with the following community collaboratives: LiveWell Newaygo County, Newaygo County Community Collaborative, Headway Substance Abuse and Prevention Coalition, Aging Well Network, Breathewell Network, and YouThrive to address social determinants of health and community needs. Newaygo County moved backwards from 38 to 39 in the overall County Health rankings while the length of life improved from 32 to 31 for the state ranking.

Action 2

Integrate primary care and the medical fitness center for patients that need lifestyle support services

- Expand healthy lifestyle prescriptions from providers to well-defined pathways at Tamarac.

Measurable Impact

Improve health outcomes through 70% patient goal achievement annually by 6/30/2019, 6/30/2020 and 6/30/2021.

Impact of Implementation Plan Strategy

Over 90% of patient goals were achieved annually and participants in the medical fitness program Momentum did improve their health outcomes related to weight loss, body fat percentages, hip and waist measurements, etc.

Action 3

Expand free or low cost options for weight management

- Offer a variety of weight management programs at Tamarac, the Center for Health and Wellness.

Measurable Impact

Engage 30 new adults per year with 40% of participants achieving their predetermined goal by 6/30/2019, 6/30/2020 and 6/30/2021.

Impact of Implementation Plan Strategy

Over 30 new adults were engaged with the weight management support groups each year with 88% of those involved achieving their predetermined goal.

Action 4

Improve the experience and outcomes for patients with diabetes

- Wrap around care through appropriate referrals into structured programs at Tamarac.

Measurable Impact

Improving diabetes outcomes

- 50% of diabetes management patients have a 0% increase in weight or BMI annually by 6/30/2019, 6/30/2020 and 6/30/2021.
- 50% of patients who receive further intervention will achieve a 7% weight loss on average each year.

Impact of Implementation Plan Strategy

An average of 63% of diabetes management patients lost weight or had a 0% increase in weight post diabetes education. Of the patients who received further intervention, the average weight loss was 5% and the average body fat loss was 3%.

Obesity and Weight Issues, Continued

Improve Nutrition

Action 1

Improve school health environment through education, policy and program development; utilizing CATCH (Coordinated Approach to Child Health) program.

- Using the collective impact framework, partner with all Newaygo County school districts (Fremont, White Cloud, Hesperia, Newaygo, Grant).

Measurable Impact

Utilizing CATCH

- Facilitate the creation of wellness committee's while implementing 1 new nutrition or physical activity policy at each school district by 6/30/2020.
- Teachers achieve 70% positive change in behavior observed (Teacher Observation & Behavioral Report), related to nutrition and healthy food consumption of students participating in CATCH.
- 0% increase in BMI (Body Mass Index) of children participating in CATCH from 6/30/2019 to 6/30/2021.

Impact of Implementation Plan Strategy

Partnerships are in place with all Newaygo County school districts and well represented wellness committees are leading health and wellness work within each elementary school. In all 5 school districts the wellness committees have implemented at least one new nutrition or physical activity policy. One such policy added additional recess time and prohibits the use of withholding recess as a form of punishment. 79% of teachers reported observing students making healthier meal and snack choices after CATCH programming was completed. BMI measurement was unable to be collected for the spring semester due to schools moving to a virtual learning platform related to COVID-19.

Action 2

Improve the nutrition of food offered to children 3 and under

- Continue Early Childhood Nutrition program, developed in partnership with Nestle Health Sciences, and support WIC efforts led by District Health Department # 10.

Measurable Impact

Engage 20 new mothers each year, with 50% changing/improving dietary habits 6 months post intervention.

Impact of Implementation Plan Strategy

Over the past year there were 27 new moms engaged with the program with 69% of moms reporting changing and improving dietary habits post intervention.

Action 3

Demonstrate how to use and cook more nutritious food options such as vegetables

- Offer Cooking Classes and food demonstrations to teens, adults, families, special populations and underserved individuals in Newaygo County.

Measurable Impact

50% of Cooking Class participants changing/improving dietary habits 6 months post intervention.

Impact of Implementation Plan Strategy

Cooking Matters for Adults, Cooking Matters for Families, and Cooking Matters for Teens continue to be offered in the community. Of the participants in the cooking classes 55% changed/improved their dietary habits post intervention.

Obesity and Weight Issues, Continued

Action 4

Expand breastfeeding support for mothers who breastfeed

- Continue to support SHGM and DHD #10 WIC collaboration.

Measurable Impact

SHGM to support 2 OB nurses to complete advanced lactation education/certification by 6/30/2020.

Impact of Implementation Plan Strategy

Both OB nurses completed their advanced lactation education/certification and a breastfeeding support group was launched at Tamarac in the spring of 2019.

Action 5

Expand support for all new mothers and their infants

- Continue to support Michigan Department of Health and Human Services WIC program Coeffective Initiative: Implement perinatal care best practices as a part of client and staff education, and early postpartum referrals to the local WIC office.

Measurable Impact

WIC office will receive referrals for 100% of women delivering at SHGM by 6/30/2021.

Impact of Implementation Plan Strategy

Currently, the social worker who is embedded in the OB practice ensures all moms are signed up for WIC and or MIHP services if they qualify. There is a small percentage of moms who deliver at Gerber Memorial who are not part of the OB practice and those moms are offered services post-delivery if they qualify.

Eliminate Barriers to Exercise

Action 1

Improve access and remove financial barriers to exercise facilities for vulnerable populations

- Offer sliding fee scale fitness memberships to Tamarac for low income individuals and families.

Measurable Impact

Provide financial assistance to 50 individuals and/or families with 70% maintaining active use of the facility 6 times per month. To be completed annually by 6/30/2019, 6/30/2020 and 6/30/2021.

Impact of Implementation Plan Strategy

On average, 57 individuals are utilizing the financial assistance program with 96% maintaining active use of the facility at least 6 times per month.

Action 2

Address and change policies that help make the healthy choice the easy choice

- Partner with local schools and governments, for example: adding bike lanes to roads, expanding bike paths, Safe Routes to School, Walking Buses.

Measurable Impact

Implement 1 new policy related to increasing opportunities for physical activity in 3 townships, cities, or school districts by 6/30/2021.

Impact of Implementation Plan Strategy

Hesperia Elementary was ready to launch a new walking school bus policy before schools were released in March due to COVID-19. They are also working on submitting a non-infrastructure grant for the Safe Routes to School grant application to implement new biking and walking education and policies at the elementary and middle school level. The City of Newaygo is working on creating accessible routes through their downtown for bikers and walkers.

Health Care Access

Improve Access

Action 1

Increase access for low acuity primary care visits

- Expand direct to consumer telemedicine services for acute care visits.

Measurable Impact

Increase # of direct to consumer visits in Newaygo County by 20% using Telemedicine data dashboard to measure volume and miles saved. To be completed annually by 6/30/2019, 6/30/2020 and 6/30/2021.

Impact of Implementation Plan Strategy

The number of direct to consumer visits in Newaygo County did not increase annually. Spectrum Health Now went through a rebranding process and new strategies are in place to increase the number of visits and the miles saved. One of these strategies is the implementation of chronic care video visits across the region that are now happening at Spectrum Health Gerber Memorial.

Action 2

Improve access in rural areas

- Add public kiosks for telemedicine in designated underserved townships.

Measurable Impact

Add Acute Care Telemedicine Kiosks: 2 in 6/30/2019, 2 in 6/30/2020, 2 in 6/30/2021.

Impact of Implementation Plan Strategy

Spectrum Health Now did not see high utilization for the telemedicine kiosks that were placed in other regions so the team was looking instead to partner with local agencies to provide services. Camp Newaygo will be adding an iPad to their clinic area for the staff nurse to assist patients with accessing Spectrum Health Now. The camp will save personnel productivity not having to transport campers to convenient care or the ED and campers will be evaluated significantly faster. The team is also looking into other local agencies where they can make utilization of Spectrum Health Now easier for community members.

Action 3

Improve primary care provider to population ratio

- Continue to recruit primary care Providers.
- Form a Primary Care Physician Task Force to support the recruitment plan.

Measurable Impact

Add 2 new primary care providers by the end of 6/30/2021, while maintaining current volume of Providers.

Impact of Implementation Plan Strategy

One new primary care provider was added and the current volume of providers has been maintained. A physician task force has not been formed because there is not a current posting for a primary care physician at Spectrum Health Gerber Memorial with the current use of APPs.

Action 4

Increase availability of preventative screenings

- Provide free screening services across the county.
- Engage community members with positive screening results with the healthcare system.

Measurable Impact

Offer 6 screenings per year in underserved locations, screening 30 people annually, and engaging 90% with abnormal readings, with the healthcare system. To be completed annually by 6/30/2019, 6/30/2020 and 6/30/2021.

Impact of Implementation Plan Strategy

On average there were 16 screenings offered each year in underserved locations with an average of 200 people screened. 16% were referred to their provider within 1 week and 2% were assisted with contacting their provider immediately.

Health Care Access, Continued

Action 5

Increase access to specialists

- Expand Telemedicine outpatient specialist services.
- Expand inpatient telemedicine specialist services.

Measurable Impact

Increased access through

- Increase # of outpatient specialty types: 4 by 6/30/2020
- Increase # of inpatient specialist services: 2 by 6/30/2021.

Impact of Implementation Plan Strategy

Neuro, I.D. Bariatrics, Oncology Genetics, Oncology Lung Screen and Oncology Genetics Screening services have all been added for outpatient specialties. The increased inpatient services provided to patients include infectious disease consultation, wound consultation, critical care consultation, PICU (Pediatric Intensive Care Unit) consultation/handoff and stroke consultation. Medication history reconciliation service has been expanded to 24/7.

Action 6

Improve number and type of physician specialists

- Continue to recruit physician specialists.

Measurable Impact

Recruit 1-2 new physician or service specialist by 6/30/2021.

Impact of Implementation Plan Strategy

Urology specialty services were added at Spectrum Health Gerber Memorial.

Action 7

Expand support for patients with specific conditions

- Continue to expand access to support groups (Parkinson's, Alzheimer's, Cancer, Stroke, etc.).

Measurable Impact

Add 4 new referral pathways for support groups by 6/30/2020.

Impact of Implementation Plan Strategy

Referral pathways have been added from social workers and care managers at Gerber Memorial, Transitional Health Services, Movement Disorder clinic in Grand Rapids, Johnson Cancer Center, Susan P. Wheatlake Cancer Center, and Lemmen-Holton Cancer Pavilion.

Access to Health Promotion

Action 1

Expand access to Diabetes Prevention

- Partner with community agencies to expand the Diabetes Prevention Program.

Measurable Impact

Add 2 new Diabetes Prevention or Diabetes Intervention series' and increase attendance by 20% by 6/30/2020.

Impact of Implementation Plan Strategy

A new diabetes prevention series was added for the community but attendance did not increase. More community members are being reached by offering an additional series.

Health Care Access, Continued

Action 2

Improve the community service events for the elderly

- Address the needs of the aging population, including falls/ balance concerns.

Measurable Impact

Provide 4 balance screening events each year, with an educational component addressing fall prevention. To be completed annually by 6/30/2019, 6/30/2020 and 6/30/2021.

Impact of Implementation Plan Strategy

4 balance screenings were held each year except in 2020. Due to COVID-19 only 2 screenings were held. The fall prevention component was addressed at each screening that was held.

Action 3

Improve Health Literacy: the use of a wide range of skills that improve people's ability to act on information in order to live healthier lives.

- Develop a program that includes reading, writing, listening, speaking, numeracy, and critical analysis, as well as communication and interaction.

Measurable Impact

Health literacy improvements

- Complete baseline literacy assessment tools from the CDC by the end of 6/30/2019.
- Health literacy program is developed and implemented by the end of 6/30/2020.

Impact of Implementation Plan Strategy

The baseline literacy assessment was completed for the SHGM pediatric and convenient care clinics. After the assessment was completed the navigation and oral exchange ratings were identified as opportunities for improvement.

Action 4

Operationalize health literacy in the primary care, ED and inpatient Gerber facilities

- With support of community partners, develop health literacy program.

Measurable Impact

Improve assessment scores by 10% in 6/30/2020 and 6/30/2021.

Impact of Implementation Plan Strategy

The navigation rating increased by 3.2% as a result of signage changes and the oral exchange rating increased by 12.5% with new strategies that staff are now using when they are interacting with patients. There are plans to roll out the health literacy assessment process to other clinics within Spectrum Health Gerber Memorial.

Action 5

Expand end of life discussions

- Continue to offer First Steps Advance Care Planning.

Measurable Impact

Complete 30 new First Steps Advance Care Planning facilitated conversations by 6/30/2021.

Impact of Implementation Plan Strategy

We are now partnering with Making Choices Michigan to refer patients who need an Advance Directive completed. Spectrum Health Gerber Memorial staff continue to complete First Steps conversations and 9 were held in 2019. In 2020, COVID-19 halted conversations but the discussions and document completion will resume once facilitators can meet with participants again.

Health Care Access, Continued

Action 6

Improve our patient experience by completing an A3 to drive change in improving the likelihood to recommend in the primary care, ED and inpatient setting.

Measurable Impact

Improve overall LTR by 7% by 6/30/2021.

Impact of Implementation Plan Strategy

The A3 has been completed and the patient experience work has been ongoing. SHGM staff went to the Beryl Institute and came back with best practices for healthcare organizations. A patient experience advisory group has been formed and the Language of Caring program has been implemented using the heart/head/heart model to improve communication with patients.

Action 7

Improve patient engagement for vulnerable populations

- Use MI Way to Thrive for disengaged individuals with low socioeconomic status who struggle with how to access and navigate the system.

Measurable Impact

Improve patient activation measures for 30% of individuals participating in MI Way to Thrive, and re-engage 75 community members with the healthcare system by 6/30/2021.

Impact of Implementation Plan Strategy

The patient activation measure (PAM) is no longer used by the system. The new tool in place of the PAM is the self-efficacy tool. MI Way to Thrive has re-engaged 48 community members with the healthcare system with 73% improving their self-efficacy score and 85% improving their PHQ-9 scores.

Mental Health

Improve Access

Action 1

Expand access to psychiatry services

- Use telemedicine across the inpatient units and the Emergency Department.
- Partner with local agencies to support further access.

Measurable Impact

Psychiatry service access through

- Increase # of visits to 50 by 6/30/2021.
- In partnership with Newaygo County Mental Health (NCMH), engage 5 school districts to provide them with referral information for accessing behavioral health services (this would include those who are indigent, have Medicaid, or commercial insurance); resulting in a 10% increase of school referrals to NCMH by 6/30/2021.

Impact of Implementation Plan Strategy

There were a total of 205 psychiatry visits across the inpatient unit and the Emergency Department. The one page referral guide was created by the Access staff at Newaygo County Mental Health and the guide was distributed to all of the local schools in Newaygo County with specific instructions for making referrals. For the 2019-2020 school year referrals increased by 21% and the number of completed assessments increased by 16%.

Action 2

Improve resources for Postpartum Depression

- Screen all mothers by 2 months post-delivery.
- Add support group.

Measurable Impact

Launch a Postpartum Depression support group in 6/30/2019.

Impact of Implementation Plan Strategy

All mothers are currently screened for postpartum depression by 2 months post-delivery. The postpartum adjustment support group was launched at Tamarac in January 2020 and is facilitated by the social worker from the OB clinic.

Action 3

Increase resources to prevent suicide by offering suicide prevention training to individuals across the county.

Measurable Impact

- In partnership with local organizations, add 2 community partners located at high risk areas in Newaygo County, as trained in suicide prevention.
- Support and promote community partner efforts with suicide prevention across Newaygo County.

Impact of Implementation Plan Strategy

- Two community partners, one at TrueNorth Community Services and one at Transitional Health Services are trained in QPR (Question, Persuade, Refer). Training offerings are made available for professionals in the community as well as the general public.
- SHGM is partnering with local community efforts for suicide prevention and behavioral health awareness across Newaygo County. Work is being done within each school district and with the ISD for suicide prevention efforts and trauma training.

Substance Use and Abuse

Expand Access

Action 1

Expand tobacco treatment services (TTS) by partnering with local coalition, BreatheWell, to continue to address tobacco prevention and cessation.

Measurable Impact

Expand tobacco treatment services through

- Participants achieve 25% decrease in smoking/vaping/tobacco use annual, between 6/30/2019 and 6/30/2021, with 10% quitting all together (exceeding CDC average) by 6/30/2021.
- Train and certify an additional individual as a TTS by 6/30/2020.

Impact of Implementation Plan Strategy

On average each year, 40% of participants involved with the tobacco treatment services have decreased or quit using tobacco. There is another full time staff at Spectrum Health Gerber Memorial who has completed their Tobacco Treatment Specialist certification and who is now offering individual counseling and group smoking cessation classes.

Action 2

Expand tobacco treatment services for pregnant women

- Continue SCRIPTS program in partnership with OB/GYN providers.

Measurable Impact

10% of pregnant women quit smoking during the term of their pregnancy.

Impact of Implementation Plan Strategy

SCRIPT programming is continuing and the Tobacco Treatment specialists are receiving referrals from the OB clinic for those pregnant women who want to be involved with one-on-one counseling or group classes. The most recent data shows that 11% of women quit smoking during their pregnancy and 16% reduced.

Action 3

Increase and expand access to tobacco quit initiatives by adopting technology (example: Pro-Change, Telemedicine, WebEx).

Measurable Impact

Implement the use of technology by 6/30/2020 to increase engagement of tobacco quit services; and achieve >10% quit rate with those who utilize the technology by 6/30/2021.

Impact of Implementation Plan Strategy

The Pro-Change app is offered to all clients involved with any smoking cessation program at Gerber. Staff is working to embed the smart phrase for Pro-Change into the note in EPIC so accurate numbers can be tracked for those who are choosing to utilize the technology.

Action 4

Reduce the impact of second hand smoke in the environment by increasing smoke-free parks in Newaygo County

Measurable Impact

Make 2 additional public parks smoke-free by 6/30/2021.

Impact of Implementation Plan Strategy

In 2019, the city of White Cloud and the city of Grant both passed ordinances to make their public parks smoke free. This made an additional 6 parks in Newaygo County smoke free.

Substance Use and Abuse, Continued

Improve Access

Action 1

Improve services for pregnant women with substance use by increasing screening of OB patients for substance abuse at prenatal visits and time of delivery.

Measurable Impact

Screen all new pregnant women for substance abuse, and of those who have positive indicators, refer 100% for treatment in 6/30/2021.

Impact of Implementation Plan Strategy

Currently, all pregnant women are being screened for substance misuse and of those who have positive indicators 100% are being referred for treatment.

Action 2

Initiate opioid prevention for youth by implementing an evidence-based program for preventing youth substance abuse.

Measurable Impact

Launch/support evidence based program that addresses youth substance abuse by 6/30/2021, and determine baseline and success metrics within year 1.

Impact of Implementation Plan Strategy

Schools have identified vaping as a more pressing issue and asked for education to address vaping and nicotine use. Tobacco Treatment specialists are delivering comprehensive vaping education to middle and high school students across Newaygo County and are also partnering with the Newaygo County Juvenile Court to educate offenders and their parents and guardians.

Spectrum Health

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

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

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

Community Health Needs Assessment for:

Newaygo County General Hospital Association d/b/a Spectrum Health Gerber Memorial

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

Community Health Needs Assessment

The focus of this Community Health Needs Assessment (CHNA) is to identify the community needs as they exist during the assessment period (2019-2020), understanding fully that they will be continually changing in the months and years to come. For the purposes of this assessment, "community" is defined as, not only the county in which the hospital facility is located (Newaygo), but also regions outside the county which compose SHGM's primary (PSA) and secondary (SSA) service areas, including Lake County. The target population of the assessment reflects an overall representation of the community served by this hospital facility. The information contained in this report is current as of the date of the CHNA, with updates to the assessment anticipated every three (3) years in accordance with the Patient Protection and Affordable Care Act and Internal Revenue Code 501(r). This CHNA complies with the requirements of the Internal Revenue Code 501(r) regulations either implicitly or explicitly.

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

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