Spectrum Health Reed City 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 Reed City Hospital (SHRC) in 2019. For the purposes of this assessment, "community" is defined as, not only the county in which the hospital facility is located (Osceola), but also regions outside the county which compose SHRC's primary (PSA) and secondary (SSA) service areas, including Mecosta and Lake counties. For example, since no hospital resides in Lake County, which borders Osceola County to the west, some residents in the eastern portion of Lake County travel to Osceola County and SHRC 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 Spectrum Health Reed City 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 SHRC 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 SHRC.

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 SHRC, including primarily Osceola County, but also portions of Mecosta and Lake counties.
- 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 Reed City 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	46
Community Residents (Underserved)	Self-Administered (Paper) Survey	Vulnerable and underserved subpopulations	85
Community Residents	Telephone Survey	SHRC area adults (18+)	584

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 85 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 584 SHRC area adults (age 18+). The response rate was 32%.

Disproportionate stratified random sampling (DSS) was used to ensure results could be generalized to the larger SHRC 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 584 completed surveys:

- 255 are cell phone completes (43.7%) and 329 are landline phone completes (56.3%).
- 166 are cell-phone-only households (28.4%).
- 126 are landline-only households (21.6%).
- 292 have both cell and landline numbers (50.0%).

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 SHRC 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 SHRC 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 584, 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 Reed City 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 SHRC 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 SHRC 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 SHRC 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 SHRC 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, SHRC 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 Reed City 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 SHRC 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 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.

While Mecosta County has higher levels of violent crime compared to the state and nation, Osceola and Lake counties have lower crime rates. Rates of child abuse/neglect in the region are much higher than state or 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, almost twice the state and national levels. Educational levels are relatively low, particularly in Lake County; however, the freshman graduation rates for Mecosta and Lake counties are on par with the state and nation, and this rate is even better in Osceola County.

Compared to state and national rates, life expectancy rates are higher for residents in Mecosta County, on par in Osceola County, and lower in Lake County. All three counties have higher mortality rates for both infants and adults compared to Michigan and the U.S.

There is ample room for improving the health climate of the SHRC area. Taking everything into account – health conditions, health behaviors, health care availability, health care access – only 26.8% 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 30.9% of area adults think, overall, their community is very or extremely healthy.

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

1. Mental health
2. Health care access
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 SHRC 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 (78.1%) of area residents believe access to health care is a critical problem for some community residents.
- Only half (52.9%) 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 training, education, physical staff, and lists/tools that identify programs and services available with contact information
- The shortage of primary care providers in the SHRC area emerged as the top health-related concern among Key Informants.
  - There are far fewer MDs and DOs (per 100,000 population) in Mecosta (53.2), Osceola (30.3), and especially 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.
  - Almost six in ten (58.1%) Key Informants say transportation issues are a common barrier to accessing care; ranked first on a long list of barriers
  - Lack of transportation is the 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.
  - Over half (53.5%) of 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 (75.1%) 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 (40.2%) 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 forego needed preventive or maintenance care, including prescription medications, and over-utilize emergency room services
  - Over half (56.6%) of underserved adults report that they visited the ER/ED at least once in the past year; 27.6% two or more times
  - 14.3% of underserved adults had to skip or stretch their medication in the past year due to cost
  - 25.3% of underserved adults have no health care provider (no medical home), up from 20.0% in 2017
  - 17.4% of all adults have Medicaid for their health insurance, compared to 47.6% 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 SHRC service area's social environment such as widespread poverty make area residents more susceptible to mental health challenges
  - 37.5% of Key Informants see a lack of residential treatment for mental health
  - Roughly half of Key Informants believe that access to mental health treatment for severe and/or persistent disorders, as well as access to treatment for those without insurance, has worsened over the past 5-6 years. Four in ten (41.0%) believe access for those with mild to moderate 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 area residents. Key Informants also see it as an issue but prioritize it lower compared to other issues.
  - That said, 45.0% of Key Informants see a lack of residential treatment for substance use disorder
- 37.6% 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-fourth (24.7%) of 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 SHRC 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.
- Nearly one-fourth (23.2%) of area adults cite obesity as the most important health problem in their community, second only to cancer.
- More than one-third (35.0%) of Key Informants consider programs targeting obesity reduction to be lacking in the community.

Other Health Needs

Chronic Disease

- Lake, Mecosta, and Osceola counties all have higher death rates from cancer and heart disease compared to the state and nation.
  - However, cancer diagnosis rates are lower in Mecosta and Lake counties compared to Michigan or the U.S.
- Because the cancer diagnosis rate is lower in Mecosta and Lake 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 (27.3%) of area adults report cancer as the most important health problem in their community today, the highest proportion of all problems rated.

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 lack of primary care providers.
- 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 (51.8%) 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: 56.4% say that social determinants of health are only sometimes or rarely 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

- Organizations are collaborating with Ferris State University to address substance use disorder issues among young adults.
- A Substance Abuse Disorder Coalition is working with local law enforcement and the DEA on drug takeback programs.
- Telecommunication via video conferencing is being used in mental health treatment to offset the lack of psychiatrists in the area.
- A general overall wellness initiative is taking place to address both obesity and access to care.
- DHHS is providing tickets/passes for buses to address the transportation barrier.
- A program called Project Assert is being used by Spectrum Health in collaboration with organizations that treat substance use disorder to identify and pre-screen people with SUD who end up in the ER/ED for care.
- A number of area programs are available to assist residents who have difficulty affording the cost of prescription drugs.

Suggestions on Additional Strategies to Employ to Address Needs

- Find ways to secure additional funding (e.g., applying for grants) for needs such as lack of primary care providers.
- Create incentives to entice primary care providers to not only work, but also live, in the SHRC 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.
- Find ways to increase access to transportation, food and lifestyle education, and smoking cessation programs.
- Increase the ability of Urgent Care to cover more services and accept all insurance plans.
- Find ways to enable CMHCM to provide services for residents with mild to moderate mental health issues.
- Expand Project Assert mentioned above to primary care and urgent care.
- Consider health homes for complex patients with SUD who are comorbid for other issues.
- Increase collaboration among local agencies and organizations but also with county and state governments.
- Develop and fund Care Manager positions where care would be managed and considered from a holistic perspective.

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:

I think that you just did a great job at the outset of this conversation **reminding me of the things that we had talked about previously**. It **helps me reflect on what I was thinking two years ago** and also **reinforces** that **what I said made a difference**. I mean, when you said, "Hey, now we've incorporated ACEs," that's really **exciting and reassuring**. I feel like those are the best lines of questions because you can ask a hundred questions, but **if I know that there's actual action taken and follow up**, and **it has an influence**, then **I'm much more inclined to answer any questions you have**.

– Key Stakeholder

I think we get at really the things that we can impact. I think we do a good **job of doing a fairly comprehensive assessment.**

– 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

Key Stakeholders also mention additional topics that could be explored or existing topics that could explored more in-depth. 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

I just think that when **new topics** come up like, for example, **legalization of marijuana**, we **might want to address that**. We've seen a negative impact from the mental-health perspective by using it to deal with anxiety, and they're using it all day long and not functioning.

– Key Stakeholder

I do think we're **asking the right questions**. I think we're **understanding our community and the needs more effectively**. Where I think we **have opportunity is really to leverage this work** not just through **Spectrum Health** but really through **a broader sense of community**, and, again, we see that in pockets.

– Key Stakeholder

Detailed Findings

Social Indicators

Demographics of Osceola County

Osceola County is considered completely a rural area, where 94.7% of its residents are White and 40.8% of the population is under age 35. The median household income is $42,689, much lower than the state ($54,938) or the nation ($60,293).

Osceola County Demographic Characteristics

	N	%
Total Population	23,232	100.0%
Gender		
Male	11,738	50.5%
Female	11,494	49.5%
Age		
Under 5	1,274	5.5%
5 to 14	2,948	12.7%
15 to 24	2,773	11.9%
25 to 34	2,483	10.7%
35 to 44	2,471	10.6%
45 to 54	3,061	13.2%
55 to 64	3,523	15.2%
65 to 74	2,722	11.7%
75 to 84	1,504	6.5%
85 and over	473	2.0%
Race/Ethnicity		
White/Caucasian	22,003	94.7%
Hispanic/Latino	418	1.8%
Black/African American	253	1.1%
American Indian/Alaskan Native	192	0.8%
Asian	70	0.3%
Native Hawaiian/Pacific Islander	7	<0.1%
Two or More Races	296	1.3%

	%
Household Income	
Less than $10,000	7.9%
$10,000 to $14,999	6.5%
$15,000 to $24,999	13.2%
$25,000 to $34,999	13.2%
$35,000 to $49,999	17.4%
$50,000 to $74,999	18.9%
$75,000 to $99,999	10.7%
$100,000 to $149,999	9.4%
$150,000 to $199,999	1.6%
$200,000 or more	1.3%
Urban/Rural Population	
Urban	0.0%
Rural	100.0%

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

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**	
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.

Demographics of Mecosta County

Mecosta County is predominantly a rural area, where 91.4% of its residents are White and roughly half (48.6%) of the population is under age 35. The median household income is $44,460, much lower than the state ($54,938) or the nation ($60,293).

Mecosta County Demographic Characteristics

	N	%
Total Population	**43,264**	**100.0%**
Gender		
Male	**21,844**	**50.5%**
Female	**21,420**	**49.5%**
Age		
Under 5	**2,057**	**4.8%**
5 to 14	**4,504**	**10.4%**
15 to 24	**9,896**	**22.9%**
25 to 34	**4,573**	**10.6%**
35 to 44	**4,059**	**9.4%**
45 to 54	**4,787**	**11.1%**
55 to 64	**5,729**	**13.2%**
65 to 74	**4,554**	**10.5%**
75 to 84	**2,299**	**5.3%**
85 and over	**806**	**1.9%**
Race/Ethnicity		
White/Caucasian	**39,545**	**91.4%**
Black/African American	**1,227**	**2.8%**
Hispanic/Latino	**958**	**2.2%**
Asian	**327**	**0.8%**
American Indian/ Alaskan Native	**162**	**0.4%**
Native Hawaiian/ Pacific Islander	**7**	**<0.1%**
Some Other Race	**59**	**0.1%**
Two or More Races	**979**	**2.3%**

	%
Household Income	
Less than $10,000	**8.6%**
$10,000 to $14,999	**7.2%**
$15,000 to $24,999	**12.4%**
$25,000 to $34,999	**11.4%**
$35,000 to $49,999	**15.0%**
$50,000 to $74,999	**19.1%**
$75,000 to $99,999	**11.7%**
$100,000 to $149,999	**9.3%**
$150,000 to $199,999	**3.0%**
$200,000 or more	**2.3%**
Urban/Rural Population	
Urban	**33.3%**
Rural	**66.7%**

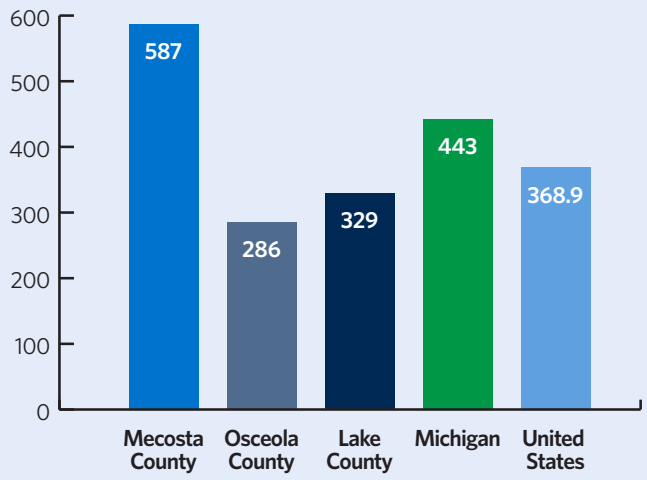
Source: U.S. Census Bureau, American Community Survey, 2013-2018. Urban/Rural data from U.S. Census Bureau, Decennial Census, 2010.

Crime Rates

Osceola and Lake counties experience considerably less violent crime than Michigan and the U.S. However, in Mecosta County, violent crime rates are higher than both state and national rates.

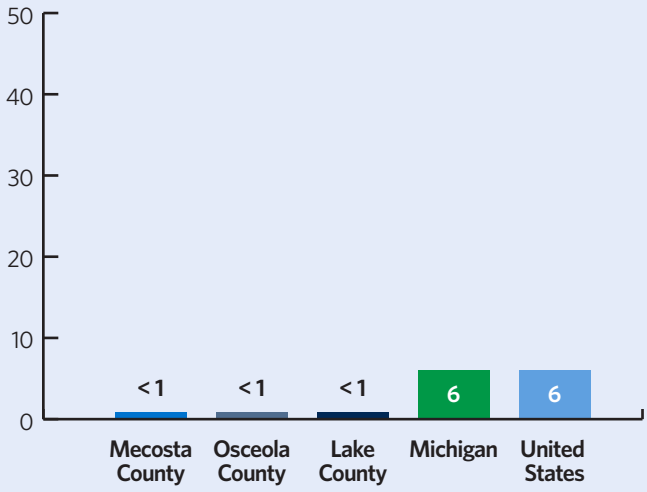
All three counties have lower homicide rates than Michigan and the U.S.

Violent Crime Rate Per 100,000 Population



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

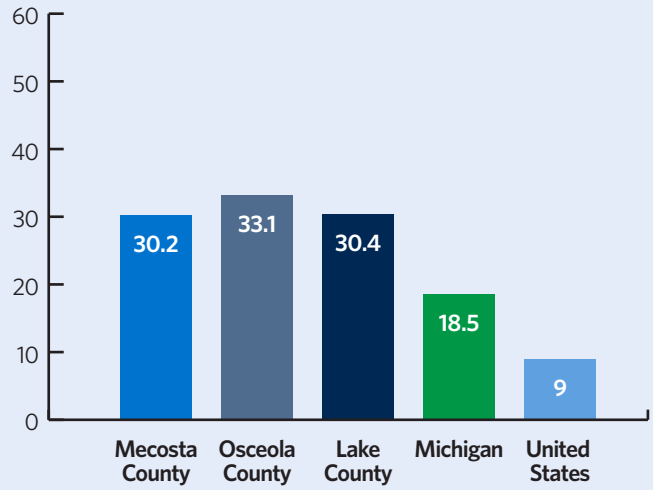
Homicide Rate Per 100,000 Population



Source: County Health Rankings, 2014-2016.

All three 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.

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

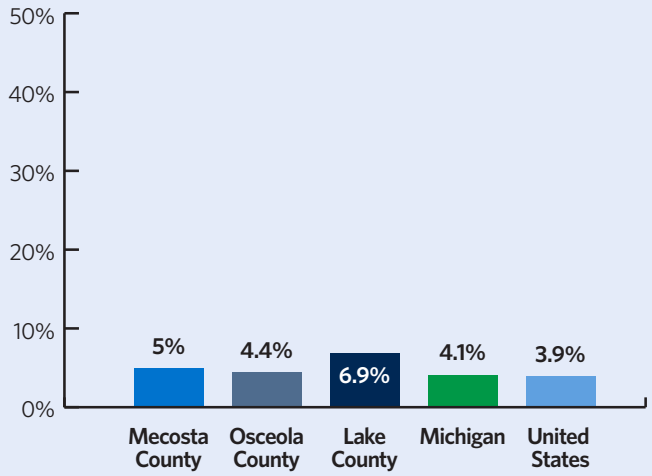


Source: Kids Count Data Center, 2018.

Unemployment

Unemployment rates in Mecosta, Osceola, and Lake counties continue to be higher than Michigan and the U.S.

Population Age 16+ Unemployed and Looking For Work

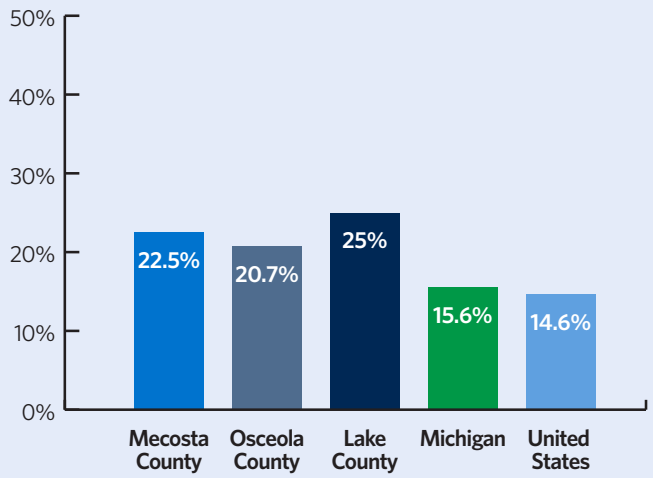


Source: Bureau of Labor Statistics, Local Area Unemployment Statistics 2018.

Poverty

Mecosta, Osceola, and Lake counties all have poverty rates higher than Michigan and the U.S.

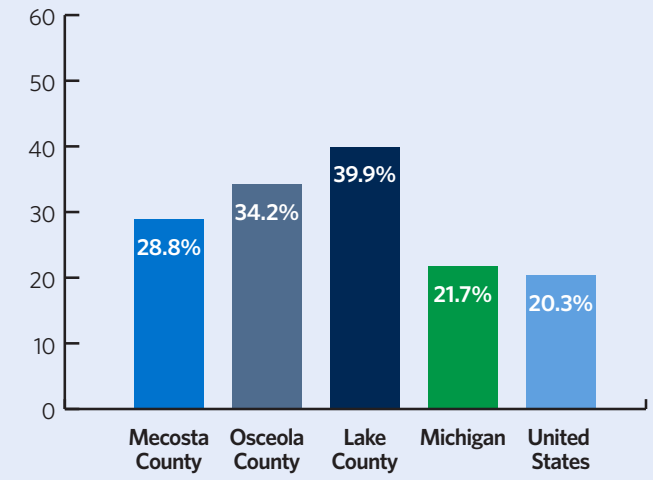
Percentage of People in Poverty



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

In addition, the percentage of children living in poverty is higher in all three 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



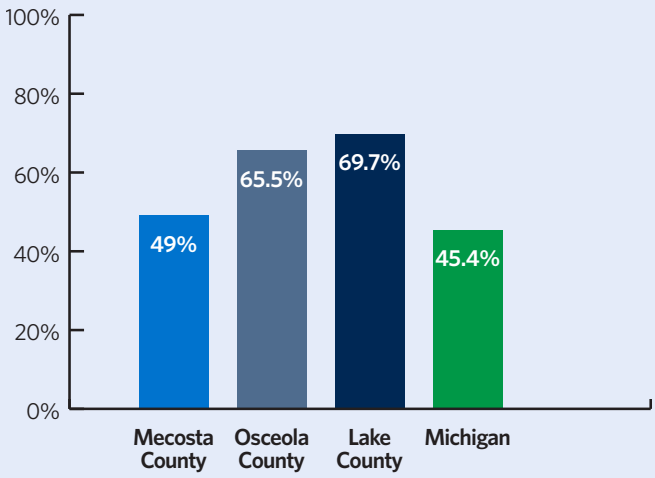
Source: U.S. Census Bureau, 2013-2017, 5-Year American Community Survey.

Poverty, Continued

All three area counties have higher proportions of children ages 0-4 receiving WIC as compared to the state. In Lake and Osceola counties, roughly two-thirds of children ages 0-4 receive WIC.

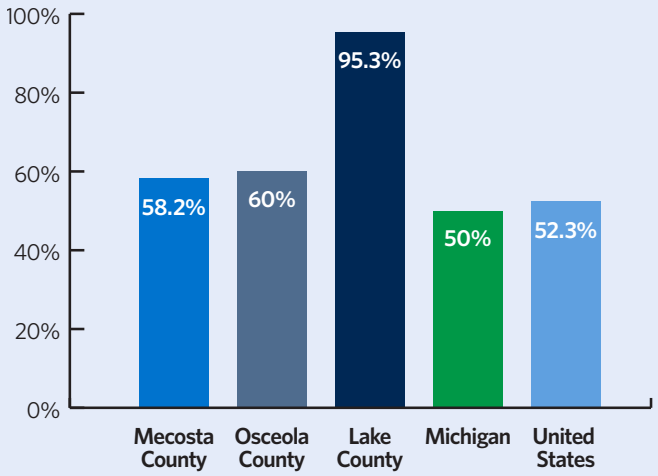
In addition, all three area counties have higher proportions of students eligible for free/reduced price lunches as compared to the state and nation. In Lake County, more than nine in ten students are eligible.

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 all three 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 5 live in poverty.

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

Over half of single female families with children under five years old from Mecosta and Osceola counties, and nine in ten from Lake County, live in poverty.

Poverty Levels

	Lake County	Mecosta County	Osceola County	Michigan	U.S.
All Families					
With children under age 18	32.8%	24.8%	27.2%	18.4%	16.7%
With children under age 5	42.1%	27.6%	28.3%	20.6%	16.2%
Total	15.6%	13.1%	14.8%	10.9%	10.5%
Married Couple Families					
With children under age 18	16.5%	13.4%	14.7%	7.5%	7.5%
With children under age 5	20.3%	19.9%	9.3%	6.9%	5.9%
Total	9.1%	6.6%	8.2%	4.9%	5.3%
Single Female Families					
With children under age 18	68.3%	50.6%	55.7%	42.5%	38.7%
With children under age 5	91.3%	60.9%	56.2%	49.5%	43.7%
Total	49.4%	40.4%	41.5%	31.3%	28.8%

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

Education

All three area counties have lower proportions of high school graduates (male, female) than Michigan overall. In addition, fewer male and female residents of these counties have earned a Bachelor's degree or higher compared to Michigan and the U.S.

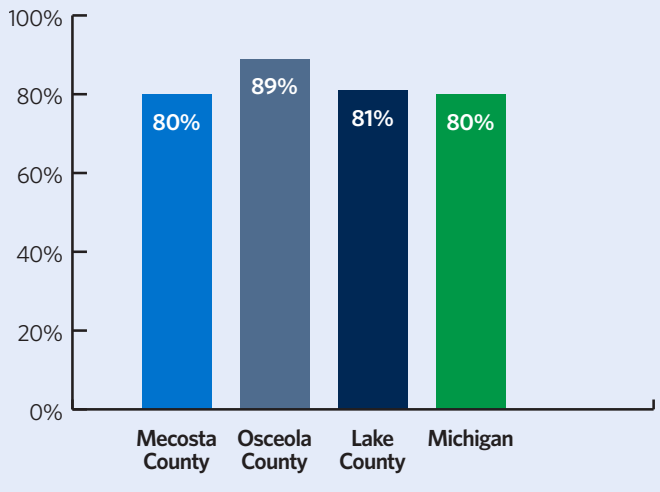
On the other hand, freshman graduation rates are on par with (Lake, Mecosta), or better than (Osceola), state rates.

Education Level (Among Adults Age 25+)

	Men					Women				
	Lake County	Mecosta County	Osceola County	MI	U.S.	Lake County	Mecosta County	Osceola County	MI	U.S.
No Schooling Completed	1.5%	1.0%	0.9%	1.1%	1.4%	1.4%	1.5%	0.6%	1.0%	1.4%
Did Not Graduate High School	17.3%	10.1%	13.3%	9.4%	11.9%	14.4%	8.0%	10.3%	8.1%	10.6%
High School Graduate, GED, or Alternative	43.5%	36.8%	47.5%	30.0%	28.1%	40.2%	34.7%	42.7%	28.6%	26.6%
Some College, No Degree	21.2%	20.5%	20.9%	23.6%	20.5%	22.8%	23.5%	21.9%	23.6%	21.0%
Associate's Degree	5.7%	9.1%	6.1%	8.0%	7.4%	9.1%	11.2%	11.1%	10.5%	9.1%
Bachelor's Degree	6.4%	13.3%	7.2%	16.9%	18.9%	8.0%	13.2%	9.0%	17.2%	19.4%
Master's Degree	3.2%	5.9%	3.2%	7.4%	7.7%	3.1%	6.1%	3.6%	8.8%	9.1%
Professional School Degree	0.5%	1.3%	0.6%	2.1%	2.4%	0.5%	0.8%	0.2%	1.3%	1.7%
Doctorate Degree	0.7%	1.9%	0.4%	1.5%	1.7%	0.3%	1.0%	0.6%	0.9%	1.1%

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

Freshman Graduation Rate



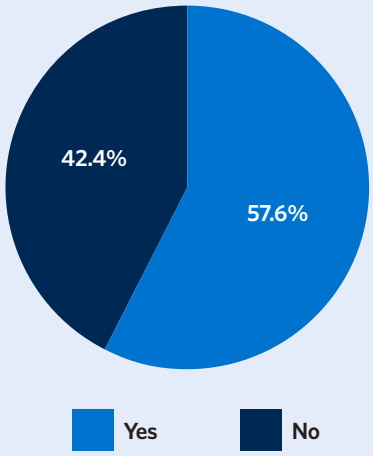
Source: County Health Rankings, 2016-2017.

Environmental Factors

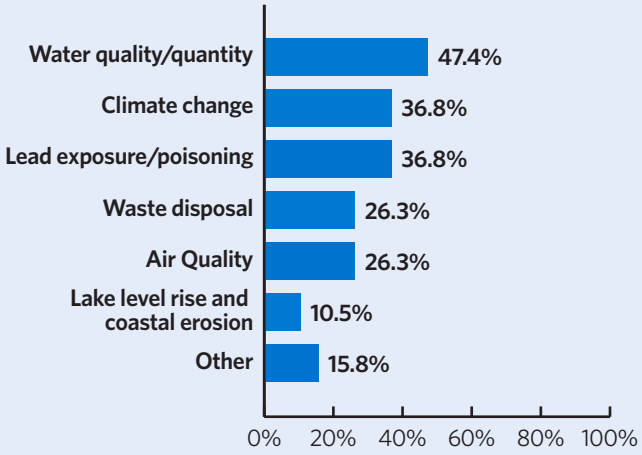
More than half (57.6%) of the Key Informants surveyed indicate they are concerned about environmental factors that could impact the health of area residents in the next few years.

Of those who are concerned, nearly half (47.4%) cite water quality/quantity as possibly impacting the health of area residents, while 36.8% cite climate change and/or lead exposure/poisoning.

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



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=33*); Q11a (If yes) What are the environmental factors that you think could impact the health of area residents? (Multiple response) (n=19*)

Adverse Childhood Experiences

All 6 Key Stakeholders are aware of ACEs data and what it entails, and all 6 think it is important that researchers collect such data for CHNAs; in fact, 4 of the 6 say it is "extremely" important.

Key Stakeholders see the importance of ACEs because the data demonstrates 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 pretty substantial** because there's just more and more research that's talking **about how those higher ACEs scores can be so quick to predict other kinds of health care issues like substance use disorders, like mental illness**, because a lot of people somaticize their trauma or try and self-medicate their trauma. **Having those kinds of baselines can help steer decision making** from a **resource-allocation standpoint**. You **need that kind of data** to kind of help **drive innovation a**s well as to help **inform the medical staff** of the people that are walking through our doors because while they may be coming in with concern about their kid or ear infections for their kids, there's a whole bunch of stuff underneath that. We **need to treat those in person and have that whole-person consciousness** as they enter our care.

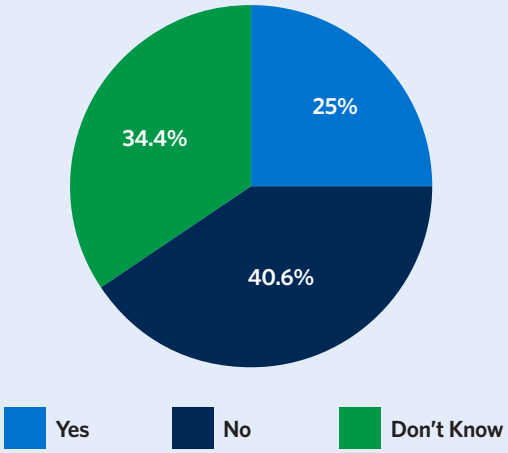
– Key Stakeholder

I think it's **good to know that information**. I think it's **relevant**. It's **interesting**. I think we have a lot of work to do to **help educate people on how we can utilize that data more effectively.**

– Key Stakeholder

Despite the fact that ACEs are considered important as predictors of adult outcomes, only 25.0% of Key Informants can confirm that they, or their organization, screens patients/clients for adverse childhood experiences.

Currently Screening for Adverse Childhood Experiences (ACEs)



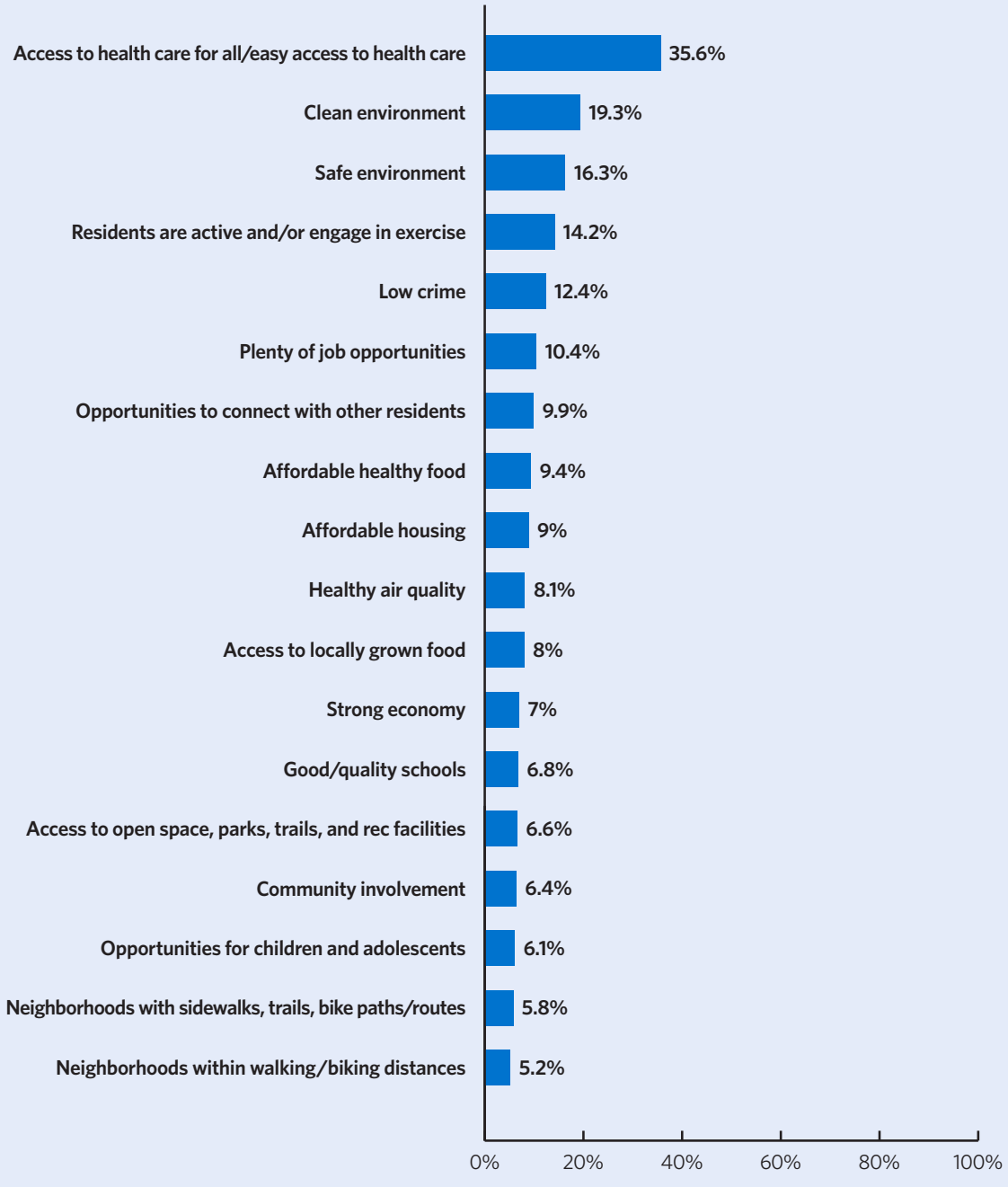
Source: Key Stakeholder Interviews, Q4: Are you aware of the ACEs (Adverse Childhood Experiences) data that came out of the last CHNA/BRFS study conducted in 2017, or are you aware of ACEs data in general? (n=6); Q4a: (If yes) How important is it that we collect this type of data in the CHNA? (n=6); 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=32)

Characteristics of a Healthy Community

When asked to describe what a healthy community looks like, area residents take a broad perspective, discussing access to services, a community where members are active, engaged, and connected, low crime, plentiful jobs, and safe and clean environments.

Over one-third of area residents (35.6%) 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=558)..

Characteristics of the SHRC Community

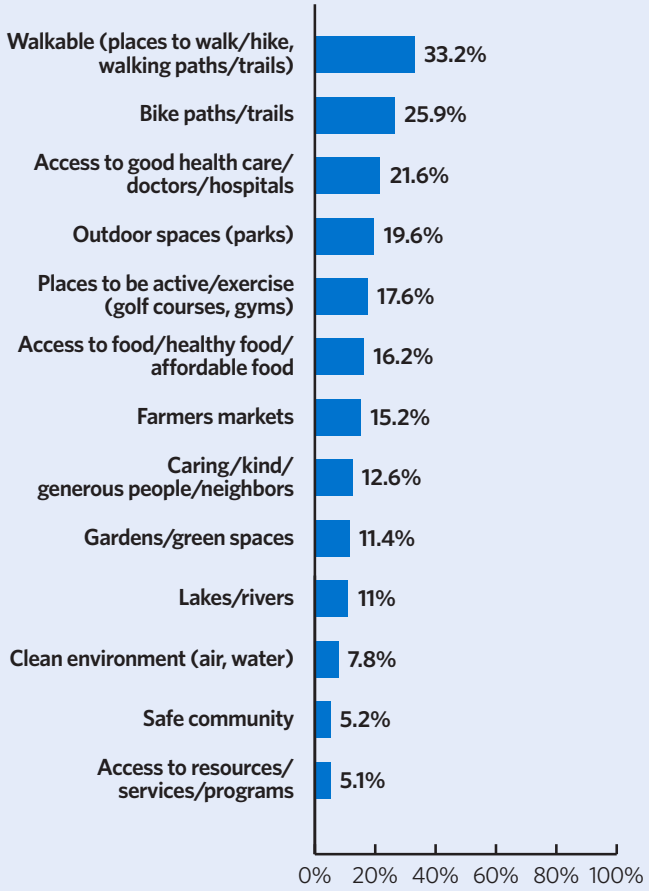
A major SHRC community characteristic that makes it easy for residents to be healthy is the plethora of outdoor spaces that are conducive to being active: bike trails/paths, walking trails/paths/sidewalks, parks, lakes, and rivers.

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

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 a poor economy, bad weather, and having to travel for things due to the remoteness or ruralness of the area.

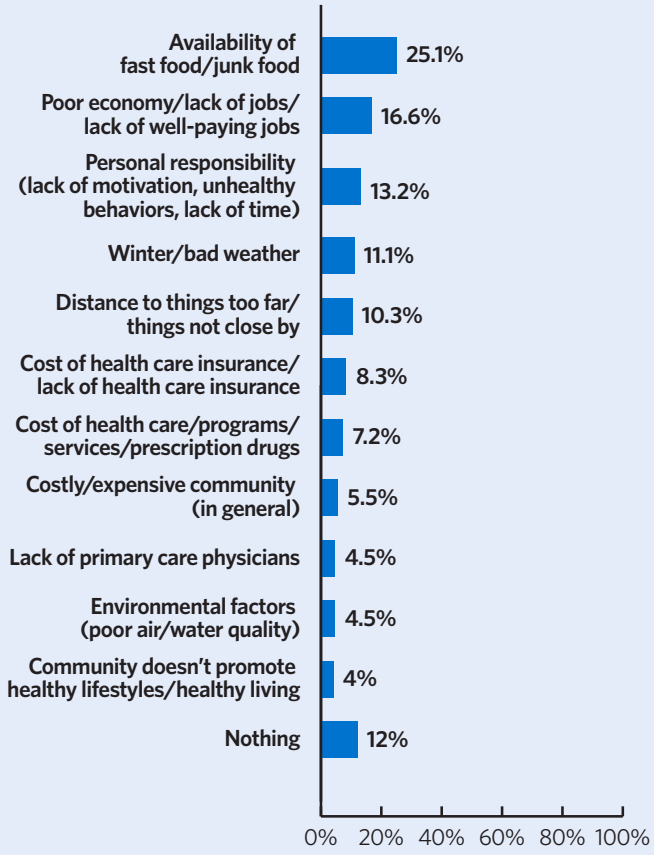
Personal responsibility is also a factor to more than one in ten (13.2%) residents.

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=568)..

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



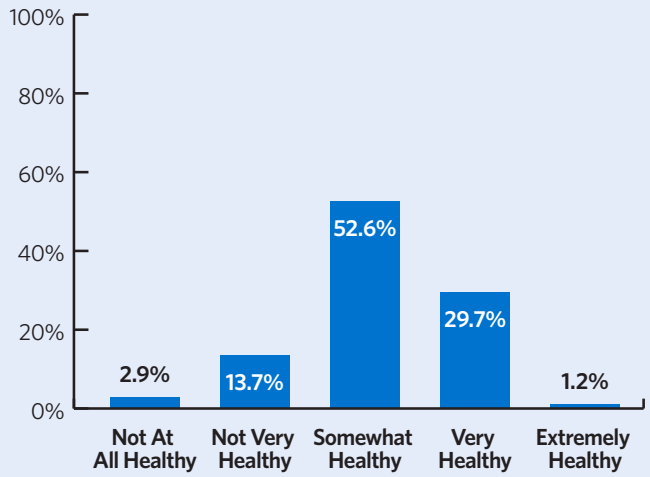
Source: Resident Telephone Survey: Q5: On the other hand, what are the primary characteristics of your community that make it **hard** to be healthy? (Multiple response) (n=569).

Overall Health of the SHRC Community

Three in ten (30.9%) area residents believe their community is very or extremely healthy overall. Almost one in six (16.6%) see their community as not very or not at all healthy.

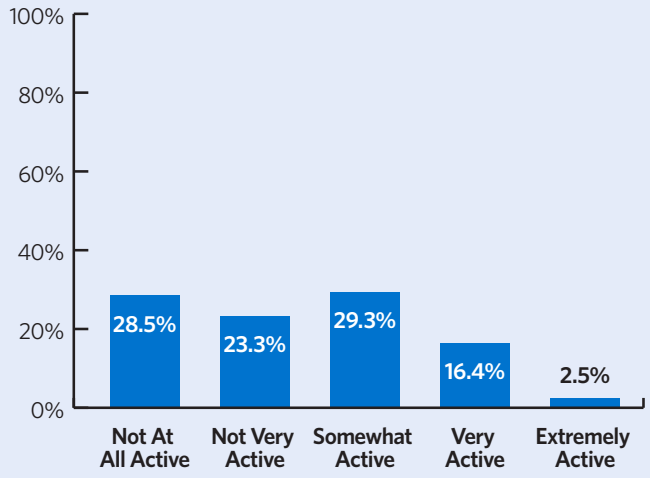
More than half (51.8%) of residents are not active in their community when it comes to being involved with organizations, town commissions/boards, non-profits, volunteerism, etc.

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=556).

Degree to Which You are Active in Your Community



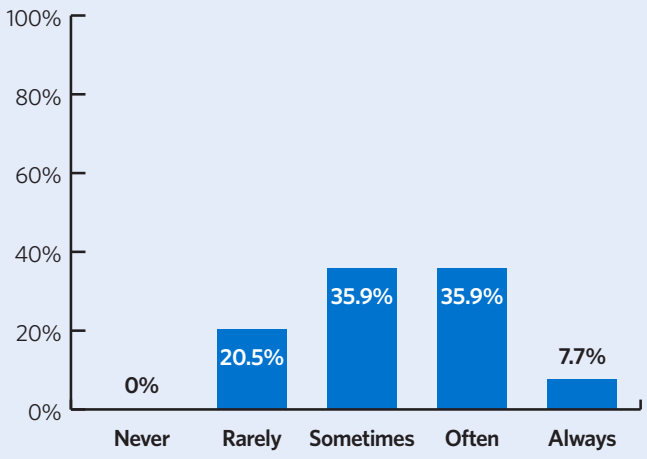
Source: Resident Telephone Survey: Q20: How active would you say you are in your community when it comes to things like being involved in civic organizations, volunteering, town commissions/boards, non-profits, etc.? Would you say...? (n=579).

Social Determinants of Health

According to Key Informants, opportunity exists for more inclusion of social determinants of health when developing treatment or care plans. One third (35.9%) say that social determinants of health were considered only sometimes and another 20.5% say they were considered rarely, 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 engaging community partners for possible collaboration on solutions and strategies when addressing problems from a holistic approach.

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 **social 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**

> From a community-level perspective, you really do have to start looking at the **social determinants of health**, particularly **for those that are high utilizers of health care**. What are some of those common denominations in that expensive cycle? **What are things that we can do as communities?** How do we kind of break out of our silos and **think of ways that we can kind of use funding to become more innovative** in ways that can both **effectively engage people** so that they feel safer to come forward to pursue these things and actually **have effective outcomes** to show that we're **moving the needle** in different ways that help globally.
>
> **– 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)

Health Status Indicators

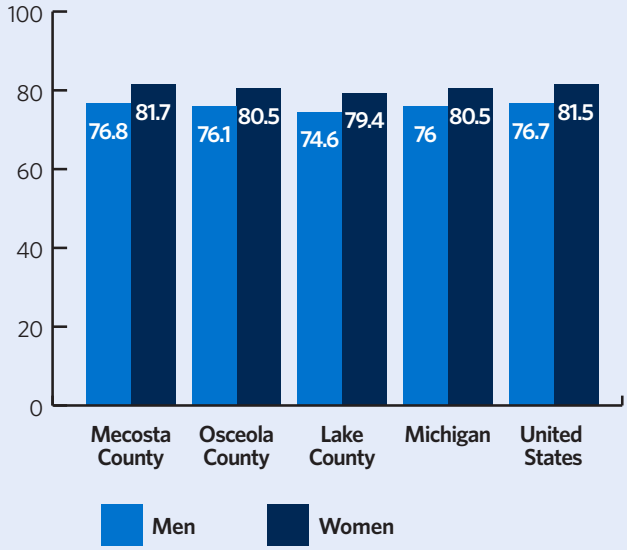
Life Expectancy and Years of Potential Life Lost

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

Mecosta County residents experience fewer years of potential life lost overall compared to Michigan but lose more years to malignant neoplasms and chronic lower respiratory disease.

Osceola and Lake counties experience more years of potential life lost overall and due to malignant neoplasms and heart disease compared to the state.

Life Expectancy (Average Age)



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

Years of Potential Life Lost

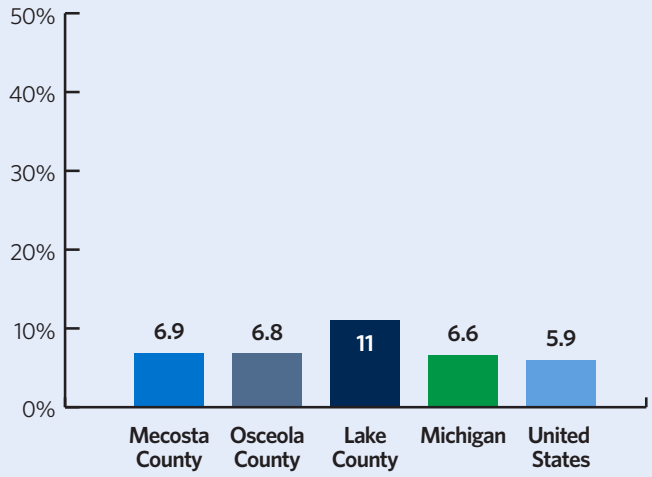
	Michigan		Mecosta County		Osceola County		Lake County	
	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Rate
All Causes		**7992.0**		**5952.4**		**8858.0**		**10605.2**
Malignant neoplasms (All)	1	1571.6	1	1740.5	1	1671.8	2	2514.0
Accidents	2	1434.6		**		**		**
Diseases of the heart	3	1283.9	2	1044.3	2	1389.2	1	2653.6
Drug-induced deaths	4	1031.2		**		**		**
Intentional self-harm (Suicide)	5	431.5		**		**		**
Chronic lower respiratory diseases	6	243.3	3	298.4	3	659.3		**

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

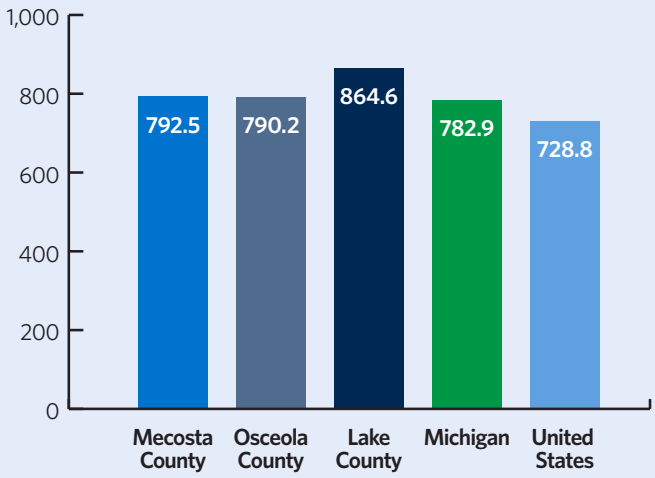
All of the SHRC area counties have higher infant mortality and age-adjusted mortality rates compared to the state and the nation. In both cases, Lake County has the highest rates, by far, among the five areas compared.

Infant Mortality Rate Per 1,000 Live Births



Source: Michigan Department of Health and Human Services, Division of Vital Records and Health Statistics, 2018.

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 Mecosta, Osceola, and Lake counties, as well as in the state and nation.

Lake, Mecosta, and Osceola counties have higher death rates from cancer compared to Michigan and the U.S; all three counties also have higher death rates from heart disease compared to the U.S.

Lake County has the highest death rates from both heart disease and cancer than the other comparable regions.

Years of Potential Life Lost

	Michigan		U.S.		Mecosta County		Osceola County		Lake County	
	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Rate	Rank	Rate
Heart Disease	1	195.9	1	165.5	1	188.3	1	180.5	1	243.5
Cancer	2	161.1	2	155.8	2	172.2	2	165.7	2	180.3
Unintentional injuries	3	53.9	3	47.4		**		**		**
Chronic Lower Respiratory Diseases	4	44.3	4	40.6	3	57.8	3	66.6		**
Stroke	5	39.2	5	37.3	4	39.8		**		**
Alzheimer's Disease	6	34.5	6	30.3		**		**		**
Diabetes Mellitus	7	22.1	7	21.0		**		**		**
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		191.4		153.4		170.0

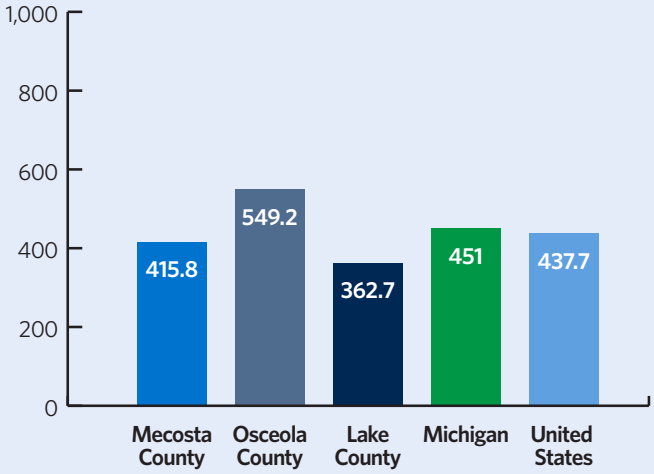
Source: Michigan Department of Health and Human Services, 2017 for MI and counties, 2016 for U.S.
Note: ** = data do not meet standards of reliability and precision OR have a zero value.

Cancer Diagnosis and Death Rates

Osceola County has a higher cancer diagnosis rate compared to Mecosta and Lake counties as well as the state and nation overall.

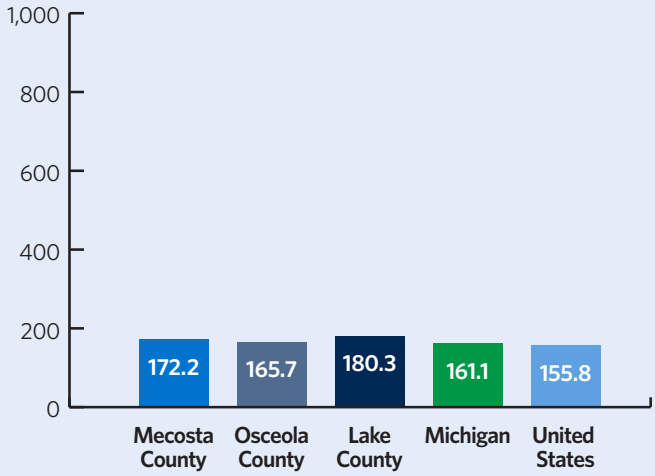
Lake County has the highest cancer death rate compared to the other regions.

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

More than one-third (34.7%) of SHRC area adults report arthritis and three in ten (30.1%) report chronic pain. One in seven (14.4%) have diabetes and an additional 24.2% 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 chronic pain.

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

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

Area adults with annual household incomes under $20,000 are more likely to have arthritis, chronic pain, asthma, and COPD 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	**34.7%**	30.9%	38.2%	35.7%	24.9%	0.0%	26.7%	22.9%	43.4%	50.4%	49.6%	51.1%
Arthritis	**30.1%**	33.7%	26.8%	29.3%	35.9%	0.7%	25.7%	38.4%	47.6%	37.1%	33.0%	29.4%
Pre-diabetes	**24.2%**	20.8%	27.4%	25.8%	7.7%	15.0%	20.4%	39.9%	27.0%	24.7%	21.7%	23.7%
Lifetime asthma	**17.0%**	10.9%	22.8%	14.2%	43.9%	33.5%	14.4%	16.9%	20.8%	11.1%	12.2%	4.2%
Diabetes	**14.4%**	14.7%	14.0%	13.7%	18.6%	0.0%	3.2%	4.1%	21.0%	23.0%	24.3%	20.2%
Current asthma	**14.1%**	8.2%	19.6%	11.0%	42.3%	28.6%	12.7%	14.7%	15.6%	9.6%	8.9%	3.5%
COPD	**9.9%**	9.9%	10.0%	9.5%	14.0%	0.0%	5.4%	5.3%	11.1%	18.1%	15.9%	11.0%

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	**34.7%**	55.7%	37.6%	26.6%	28.1%	48.4%	46.9%	35.4%	26.9%	23.3%	47.1%	36.3%
Arthritis	**30.1%**	44.1%	30.4%	26.7%	26.0%	67.5%	34.4%	31.0%	18.6%	24.6%	62.0%	27.0%
Pre-diabetes	**24.2%**	15.6%	26.6%	26.0%	21.4%	24.4%	23.0%	29.4%	22.9%	21.2%	25.9%	23.8%
Lifetime asthma	**17.0%**	14.5%	16.9%	22.6%	8.0%	19.5%	10.2%	8.3%	10.3%	9.5%	16.1%	9.6%
Diabetes	**14.4%**	18.5%	15.3%	12.1%	13.3%	17.7%	22.4%	13.7%	7.5%	12.3%	19.8%	15.5%
Current asthma	**14.1%**	14.5%	14.5%	16.7%	7.1%	17.9%	8.2%	5.9%	8.7%	6.6%	15.0%	7.2%
COPD	**9.9%**	13.7%	13.8%	6.4%	4.8%	19.4%	18.1%	6.9%	4.9%	3.7%	20.5%	9.7%

Source: 2017 SHRC Behavioral Risk Factor Survey, (n=1,004)

Health Status Indicators

Chronic Conditions, Continued

One in ten (10.6%) SHRC 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, strokes, and skin cancer, while women are more likely than men to have other types of cancer (non-skin).

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 non-skin cancer than adults with more education.

Area adults with annual household incomes under $20,000 are more likely to have any cardiovascular disease, especially strokes, 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*	**10.4%**	13.8%	7.1%	9.9%	13.8%	0.0%	1.0%	5.5%	11.9%	11.0%	22.9%	22.5%
Other (non- skin) cancer	**8.9%**	7.4%	10.4%	8.9%	7.1%	0.0%	1.1%	1.5%	7.1%	15.7%	19.0%	16.8%
Skin cancer	**4.4%**	6.6%	2.3%	4.1%	5.8%	0.0%	0.0%	4.1%	1.5%	4.4%	11.5%	10.8%
Stroke	**4.4%**	5.5%	3.3%	3.9%	9.2%	0.0%	1.0%	1.3%	6.7%	5.8%	9.4%	5.7%
Heart attack	**4.3%**	5.4%	3.3%	4.8%	0.1%	0.0%	0.0%	1.1%	1.5%	2.3%	13.2%	16.3%
Angina/coronary heart disease	**4.1%**	5.7%	2.6%	4.4%	1.3%	0.0%	0.0%	1.2%	3.7%	4.6%	11.2%	8.6%

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**
Any cardio-vasculardisease*	**10.4%**	9.3%	12.9%	9.2%	7.8%	16.6%	13.3%	13.8%	4.5%	6.8%	16.6%	10.3%
Other (non-skin) cancer	**8.9%**	20.6%	7.9%	7.2%	6.4%	12.9%	15.2%	4.6%	4.4%	6.3%	11.7%	9.6%
Skin cancer	**4.4%**	2.1%	5.4%	3.3%	5.9%	5.0%	4.9%	6.5%	3.2%	5.4%	6.4%	4.6%
Stroke	**4.4%**	5.5%	5.5%	3.8%	2.1%	9.2%	6.3%	5.8%	0.6%	0.1%	10.4%	3.3%
Heart attack	**4.3%**	4.8%	3.3%	3.5%	7.9%	2.9%	4.2%	5.1%	2.9%	5.0%	4.0%	4.1%
Angina/coronary heart disease	**4.1%**	4.8%	6.2%	2.7%	1.2%	4.0%	7.9%	2.5%	2.1%	1.6%	5.8%	4.2%

Source: 2017 SHRC Behavioral Risk Factor Survey, (n=1,004). *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

Five 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, which encompasses mental health and substance abuse, which are often comorbid, (2) access to care, due to cost and a lack of providers, (3) social issues such as housing, employment, food access, and adverse childhood experiences, and (4) lifestyle issues or risk behaviors such as obesity and smoking.

- Mental/behavioral health (2)
- Obesity (2)
- Smoking (2)
- Access to health care
- ACEs (adverse childhood experiences)
- Cost of health care, specifically increasing copays and spend downs
- Elderly issues
- Limited access to healthy food
- Need for holistic care over the life course
- Prescription narcotics and over-prescription
- Shortage of primary care physicians
- Social issues (housing, employment)
- Substance abuse issues, specifically the opioid epidemic
- Transportation

New issues emerging since 2017 include increased focus on the **social determinants of health** and an increase in **drinking and driving fatalities**.

> 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 issues [**substance abuse, specifically the opiate epidemic, mental/behavioral health needs, access to health care**]
>
> **– Key Stakeholder**

> A survey was done that we ranked the worst county for health conditions, and it had to do with **risky behaviors like drinking and driving, smoking** - we have a higher level of fatalities, so I guess I'd definitely have to say that would be an issue, too. There are some things that people are doing - behaviors that are putting them at **risk** for more health problems. That's Mecosta. **Obesity** is for both counties.
>
> **– Key Stakeholder**

The lone new Key Stakeholder interviewed reports that the **utilization of primary care** by people with substance abuse issues is the most pressing or concerning health issue today.

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=5); Q1b: What are the new issues that are pressing or concerning, if any? (n=5); 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=1)

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.

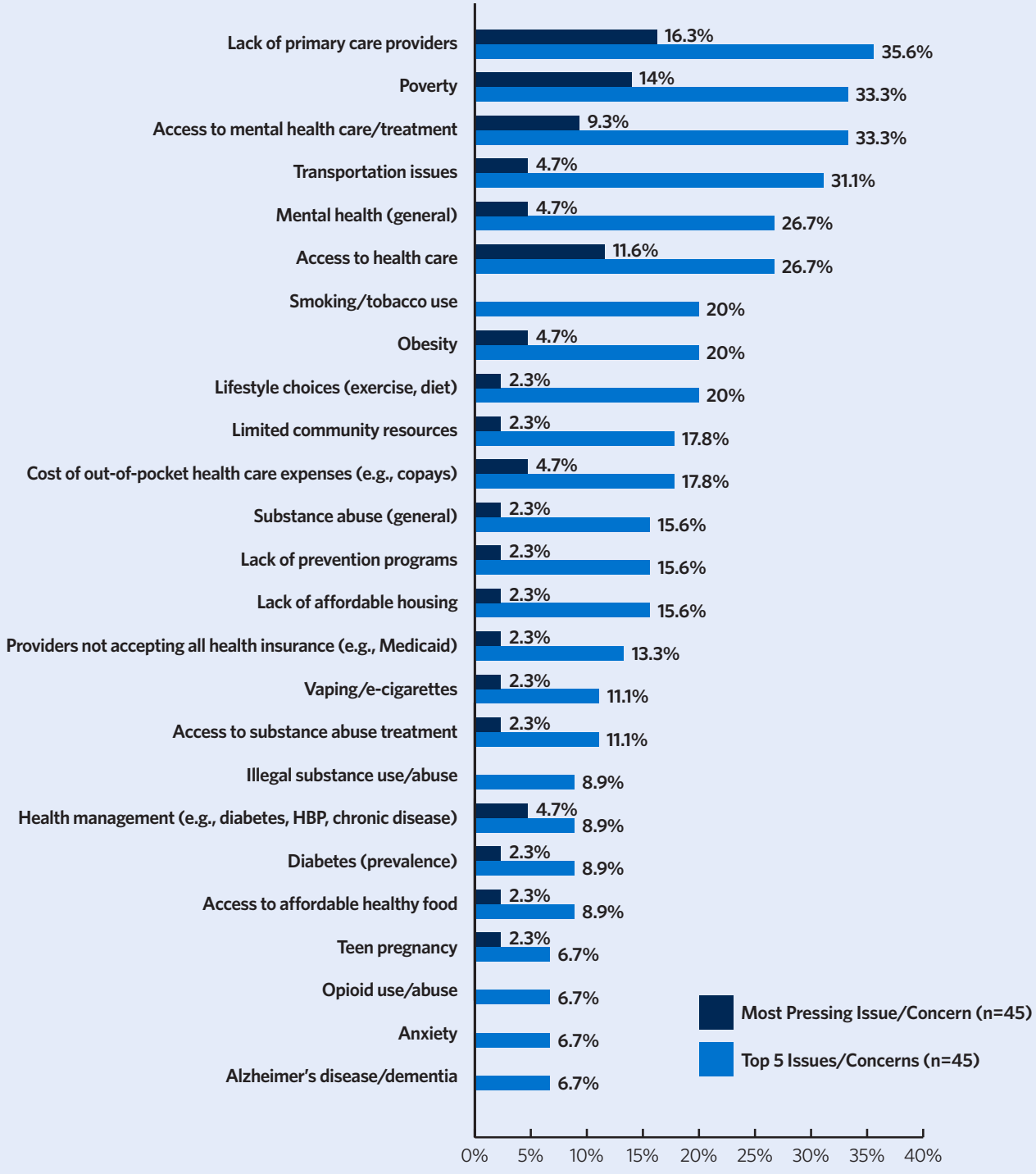
Mental health/ behavioral health	There is **comorbidity** between **substance abuse and mental illness**. Somewhere between 40 to 60 percent would have some mental-health diagnosis as a part of their condition, **typically anxiety or depression**, most in the **mild to moderate state**. So that becomes another kind of **access-to-care issue** that falls back to the primary-care setting because since **they don't rise to the level of having a serious, persistent mental illness**, they **don't qualify for Community Mental Health services,** which means that **they can't access a psychiatric meds for that depression or anxiety through psychiatrists**, so sometimes they have to then kind of **default back to primary care** in pursuit of that, and that starts the next dance. **– Key Stakeholder**
Smoking	I think it has to do with the **lack of employment**. There's **not a lot for people to do**, and part of it's just **cultural**. Some of it is just **generational; their parents smoked**, their **grandparents smoked**, they smoke. We have a **lot of bars up here** that have been going on for a long time, and people go in the bar, and they drink, and they smoke. **– Key Stakeholder**
Obesity	Our restaurants are not restaurants like you would find in more urban areas. These **restaurants are connected to a bar-and-grill type of thing**, so **food - how the food's prepared** and the type of food adds to that, and it's all one big vicious cycle. **– Key Stakeholder**
Utilization of primary care	For the population that we work with, which is primarily **those that struggle with a substance-use disorder**, it really comes down to **utilization of primary care**. I don't want to say access to primary care. A lot of times they **end up using the urgent care** or the **ER** as their means of health care, **as opposed to working with a family physician** or a primary-care doc to work with them long-term. Whether it's real or perceived, but the notion that a **physician may judge them or treat them differently** if they find out that they have a substance use disorder. That may play into their interactions on different things because **it's a complicated dance**. Once they're in recovery, they want to be able to work on some of these things, but **they're afraid of being judged if they openly disclose that history.** **– 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=5, n=1); Q1b: What are the new issues that are pressing or concerning, if any? (n=5); Q1d: What are the reasons they are top issues in your community? (n=5)

Most Pressing Health Issues or Concerns, Continued

Key Informants cite a number of pressing health issues or concerns in the SHRC area today. Most often cited are lack of primary care providers, poverty, mental health and access to treatment, transportation issues, and access to health care.

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=45); Q1b: Of the most pressing health issues or concerns you selected, which one do you think is the most critical? (n=45)

Most Pressing Health Issues or Concerns, Continued

Poverty exacerbates the existing problem of limited access to health care services, especially primary care and mental health treatment.

When access to care is available there are often long wait times, or many residents find themselves traveling out of the area for care.

Since travel is often required to receive proper care, having reliable transportation is extremely important.

Lack of primary care providers

Even if the other critical health issues/concerns were solved, the lack of high-quality primary care providers in the county would continue to create barriers. Well trained providers, who have experience with the community challenges/whole approach, might create a desire to seek care.

– Key Informant

I am **constantly hearing that patients have difficulty scheduling timely appointments** because of **limited scheduling availability and limited providers.**

– Key Informant

Poverty

Poverty affects mental health, access to health care, access to transportation, diet.

– Key Informant

Financial concerns often limit patients' access to treatment/tests/specialty referrals/ transportation.

– Key Informant

Mental health/ access to mental health treatment

Mental health impacts all other health outcomes. Lack of resources for those in need impacts the individual, the family and friends, and the employer.

– Key Informant

Individuals with mild to moderate mental health issues are often unable to find providers that accept their insurance or are too costly. Children and adults are falling through the cracks.

– Key Informant

Health Status Indicators

Most Pressing Health Issues or Concerns, Continued

Access to health care

Availability of providers is limited. Either health **care will not be accessed, they will go to the emergency department** inappropriately, they **won't have a consistent provider who knows them**, or **will travel many miles**, if able, **to seek care.**

– Key Informant

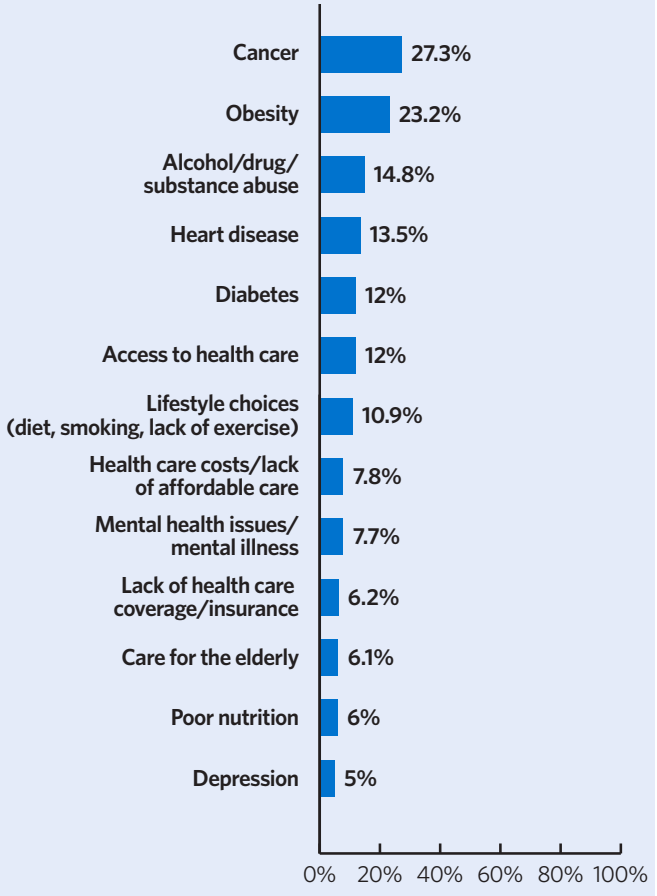
Transportation

The **ability of residents to get to and from health care facilities**, along with **lack of transportation for healthy lifestyle choices - exercise, healthy foods, general care - leads to unhealthy citizens which impacts employment, education**, etc.

– Key Stakeholder

Source: Key Informant Online Survey, Q1c: Why do you think [insert issues] is the most critical health issue or concern in the area? (n=46).

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=536).

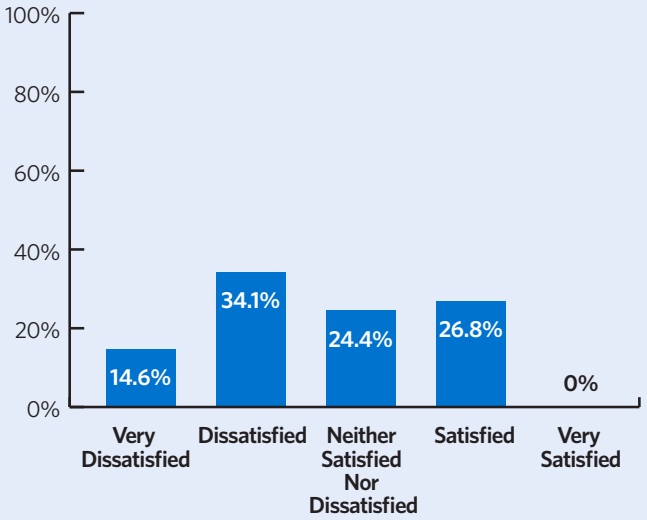
SHRC area residents list cancer and obesity as the two most important health problems or concerns in the community.

More than one in ten residents mention other chronic diseases such as heart disease and diabetes, as well as substance abuse, access to health care, and lifestyle choices.

Overall Satisfaction with Health Climate

In considering the overall health climate of the SHRC area, fewer than three in ten (26.8%) 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

There are always things to improve. I am heavily involved in **many initiatives** throughout the community in which **attempts are being made to address these issues. Progress is slow, due to limited resources, though progress is being made.**

We have excellent hospitals, doctors, mental health professionals as well as programs through MSU extension 1016 recovery, etc. And **they all work hard to do the best they can with the resources available**. There are just instances where funds are not available to meet all of the needs.

Neither satisfied nor dissatisfied

We have good opportunity in our area. It's **sometimes difficult for the lower income people to access services. Always room for improvement.**

We are **doing better**, with **more coordinated care models**, but **more can always be done.**

Dissatisfied

Lack of access to mental and physical healthcare for **all** individuals in our community.

We are one of the **most obese cultures in the world**. We have a **lot of people suffering being poorly treated and having to maintain chronic disease.**

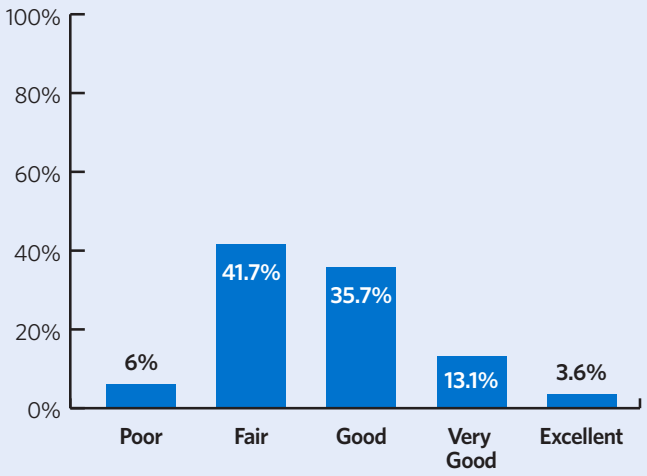
Source: Key Informant Online Survey, Q9: Taking everything into account, including health conditions, health behaviors, health care availability, and health care access, how satisfied are you overall with the health climate in your community? (n=41); Q9a: Why do you say that?

Health of Underserved Residents

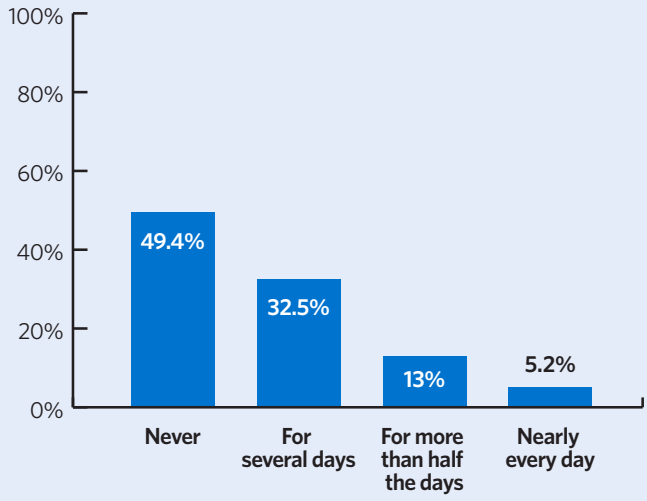
Almost half (47.7%) of underserved residents report their general health as fair or poor. Additionally, roughly half had "little interest/pleasure in doing things" (50.6%) and/or "felt down, depressed, or hopeless" (47.0%) at some point during the past two weeks.

Almost one in ten (9.4%) underserved residents thought about taking their life during the past year. Only (1.2%) individual attempted suicide in the past year.

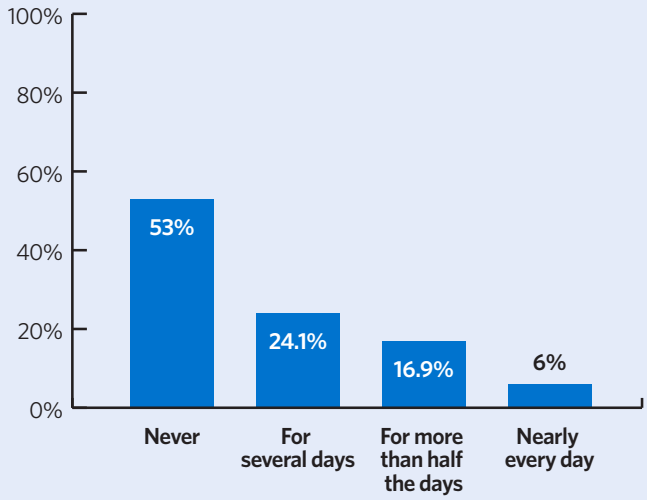
Perception of General Health



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=84); Q17: Over the past two weeks, how often have you been bothered by having little interest or pleasure in doing things? (n=77); Q18: Over the past two weeks, how often have you been bothered by feeling down, depressed, or hopeless? (n=83); Q19: Has there been a time in the past 12 months when you thought of taking your own life? (n=85); Q20: During the past 12 months, did you attempt to commit suicide (take your own life)? (n=85)

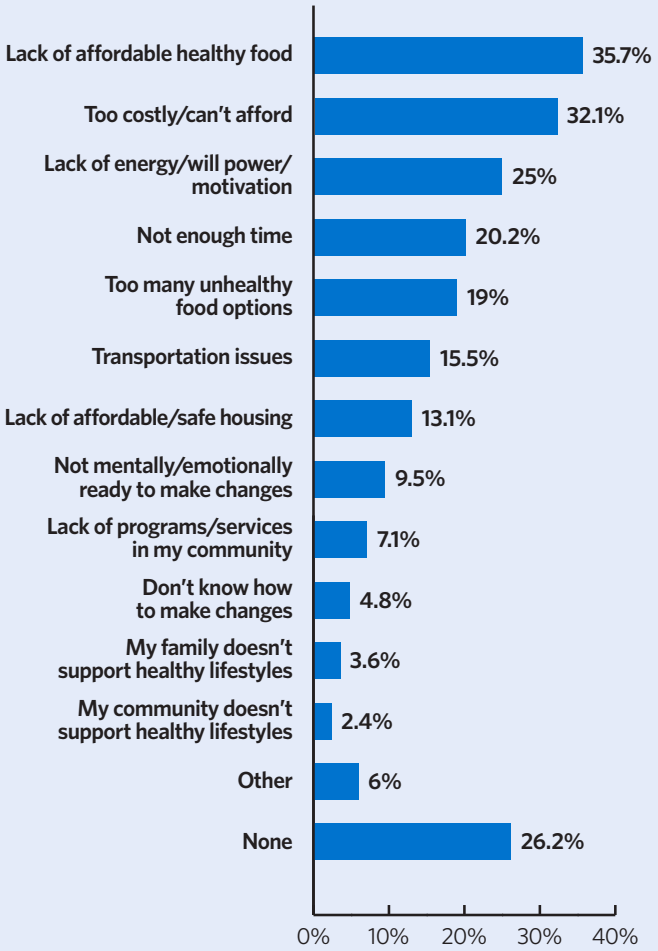
Health of Underserved Residents, Continued

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.

One-fourth (26.2%) do not think there are any barriers to their living a healthier lifestyle.

Barriers to Living a Healthier Lifestyle



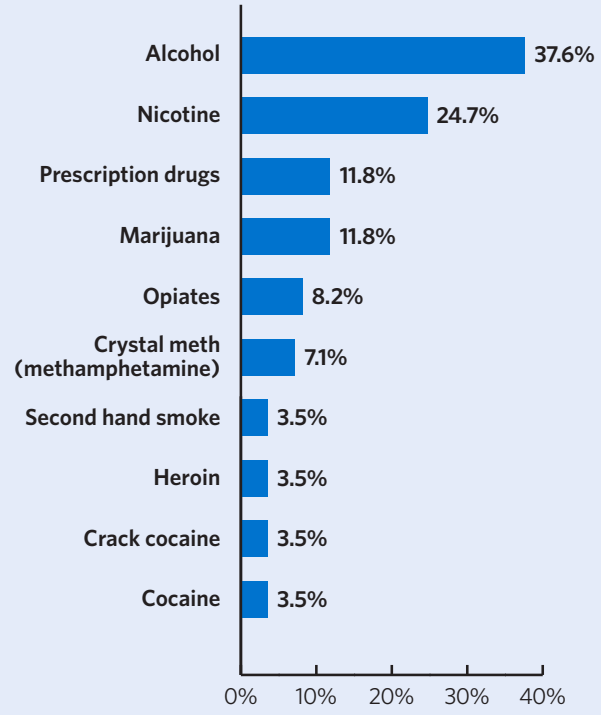
Source: Underserved Resident Self-Administered Survey: Q10: What are some of the barriers you face when trying to live a healthier lifestyle? (Multiple response) (n=84)

Substance Use/Abuse

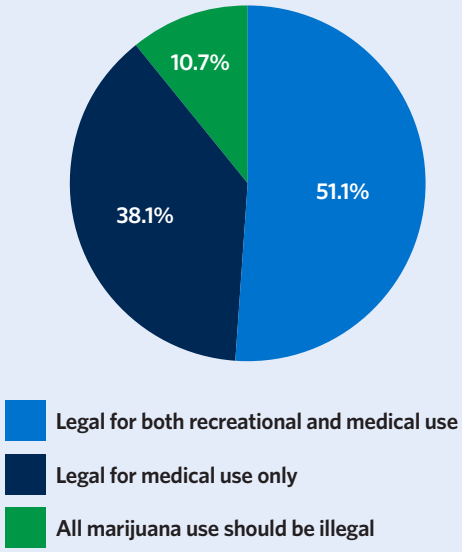
More than one-third (37.6%) of underserved residents report that alcohol use/abuse has negatively impacted their family. Additionally, one-fourth (24.7%) say smoking/nicotine was also harmful.

Among adults in the general population, half (51.1%) 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



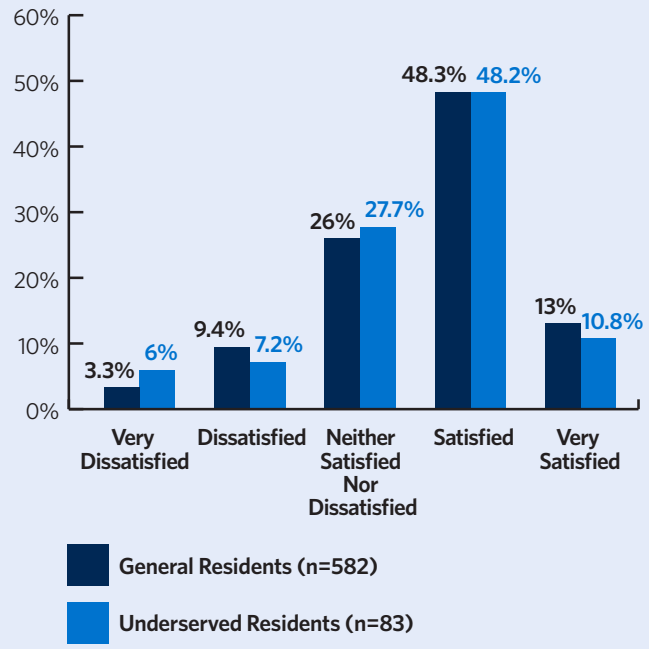
Source: Underserved Resident Self-Administered Survey: Q13: Substance abuse and addiction can have a negative impact on individuals and families. Which of the following, if any, have had a negative effect on your or your family? (Multiple response) (n=85); Resident Telephone Survey, Q21: In your opinion, should marijuana use by adults be legal for both recreational and medical use, medical use only, or should all marijuana use be illegal? (n=554)

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 six in ten 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



Health providers only care about money (Spectrum). The lack of access and care that is prevalent in my area.

– Underserved Resident

Because **doctors do not communicate with each other or with the patients** and there is **no follow-up.**

– General Resident

Insurance is too much and our premiums and copays went up as well.

– General 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

Local doctors through Spectrum leave. They aren't consistent, they **leave because of restraints on seeing patients**. They are on quota system, and **can't spent time on anyone**. There are **different doctors every time I go.**

– General Resident

The **cost. Mental health is non-existent**. You have to pay everyone. **Insurance companies won't pay**. It's so **expensive**. Why is it so much?

– General Resident

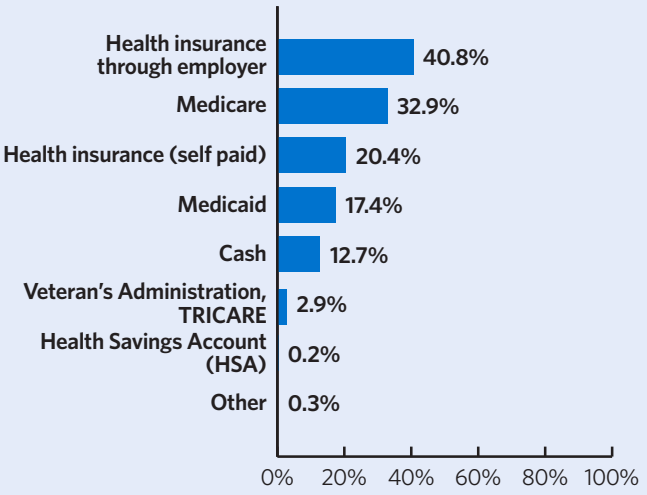
Source: Resident Telephone Survey/Underserved Residents Self-Administered Survey, Q19/Q3: How satisfied are you with the health care system overall? Q19a/Q4: (If dissatisfied) Why are you dissatisfied with the health care system overall?

Payment for Health Care

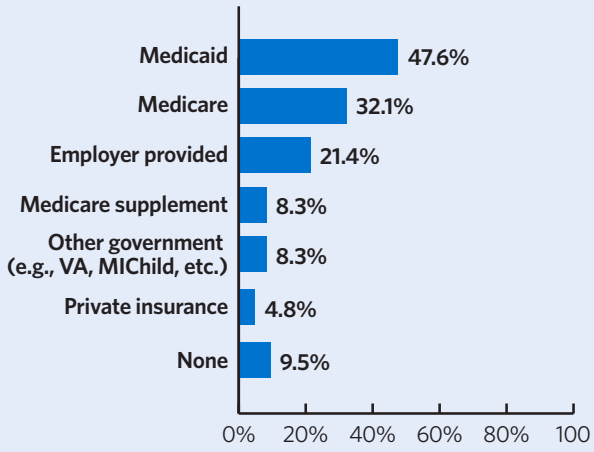
The majority of adult residents pay for their health care through insurance they receive through their employer (40.8%) or via private insurance that they purchased (20.4%).

Conversely, almost half (47.6%) of underserved residents have Medicaid for health insurance, while almost one in ten (9.5%) have no insurance.

Sources of Health Care Payment



Type of Insurance (Underserved Residents)



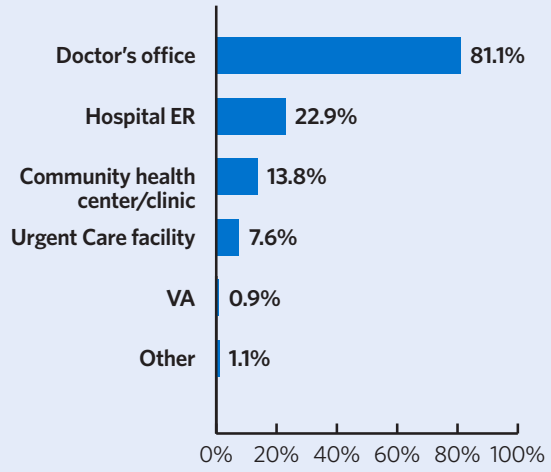
Source: Resident Telephone Survey, Q12: How do you usually pay for your health care? (Multiple response) (n=578); Underserved Resident Self-Administered Survey, Q6: Which of these describes your health insurance situation? (Multiple response) (n=84)

Sources of Health Information

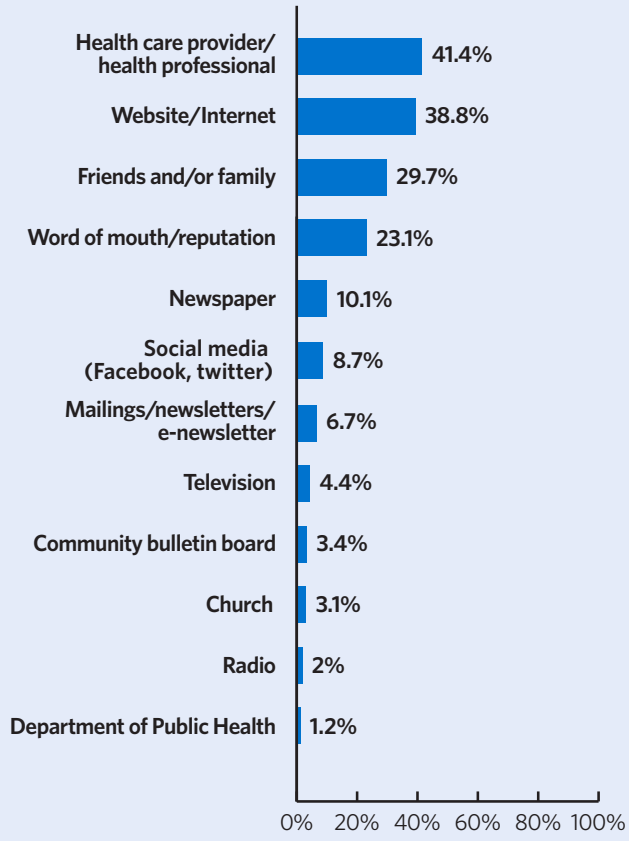
Although eight in ten (81.1%) area adults report they usually go to the doctor's office when they get sick, more than one in five (22.9%) visit the Emergency Room (ER).

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



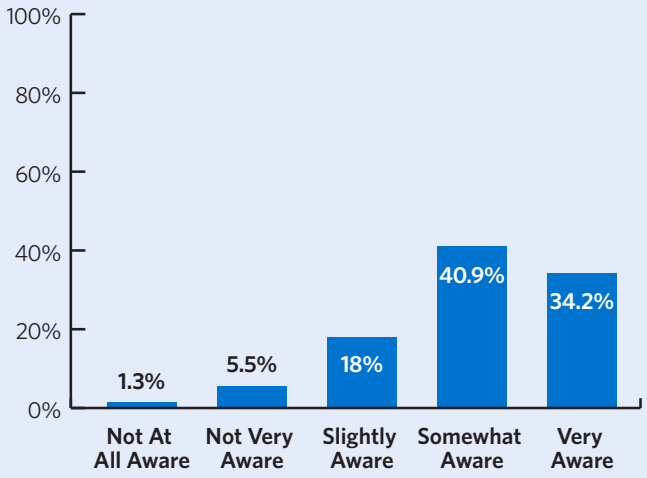
Source: Resident Telephone Survey, Q11: Where do you usually go when you are sick or in need of care? (Multiple response) (n=579); Q10: What information sources do you use to learn about the health services and programs that are available in your community? (Multiple response) (n=577)

Awareness and Use of Health Care Services

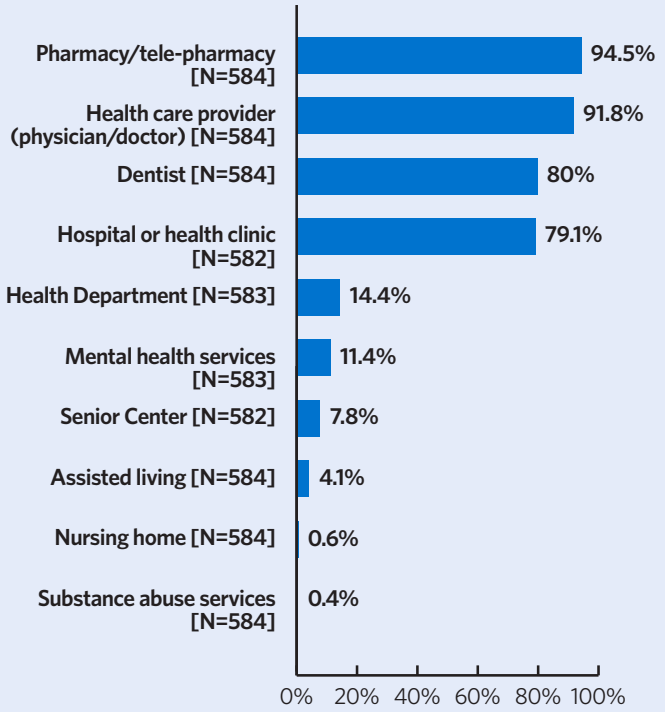
Three-fourths (75.1%) of SHRC area adults say they are somewhat or very aware of health services and programs available in the area.

Almost all adults report using pharmacies and health care providers, 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's



Community Health Resources Used in Past Three Years



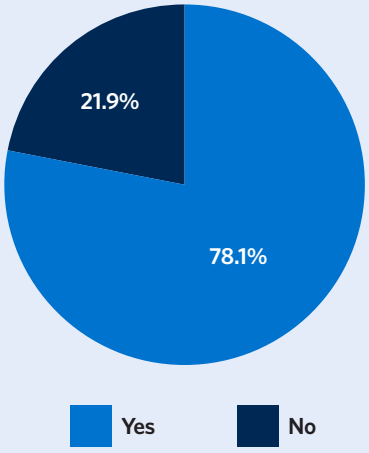
Source: Resident Telephone Survey, Q6: In general, how would you rate your awareness of the health services and programs available in your community? (n=578); Q7: Which of the following community health resources have you used in the past three years?

Barriers to Health Care Access

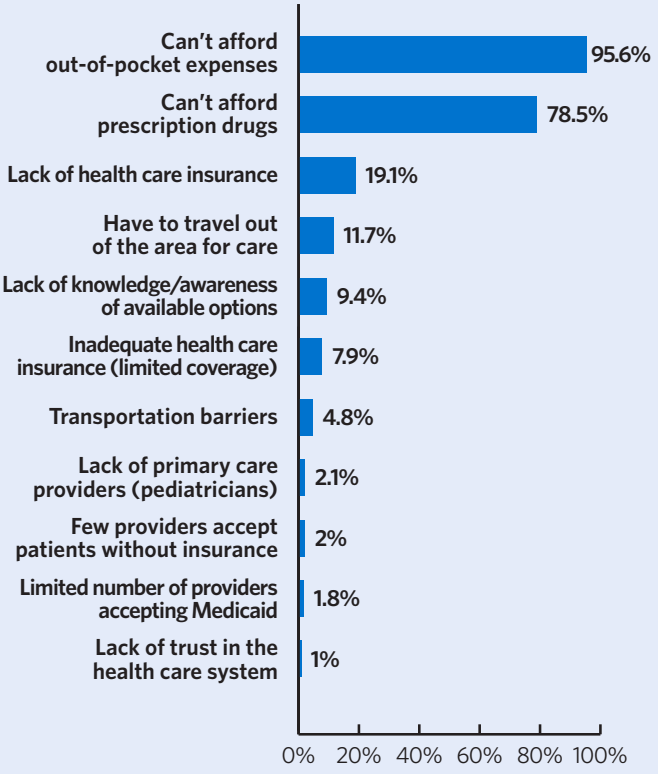
More than three-fourths (78.1%) of SHRC area adults believe access to health care is a critical issue or problem for some community members.

Area adults 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=521); Q14: (If yes) In your opinion, why is access to health care an issue for some residents in your community? (Multiple response) (n=398)

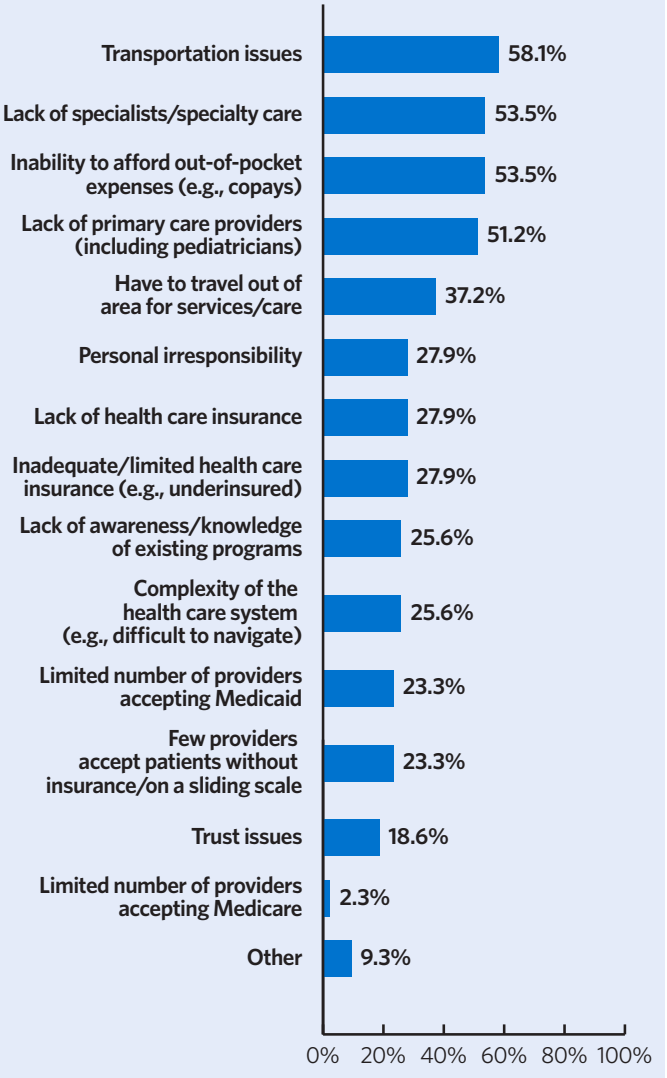
Health Care Access

Barriers to Health Care Access, Continued

Key Informants report the four greatest barriers to accessing health care as transportation, lack of specialists or specialty care, an inability to afford out-of-pocket expenses such as copays and deductibles, and lack of primary care providers (including pediatricians).

Approximately one-fourth of Key Informants view insurance issues as a barrier to care, either lack of health insurance altogether (27.9%), having insurance which is limited in what it covers (27.9%), providers not accepting Medicaid (23.3%), or fewer providers accepting patients without insurance or on a sliding scale (23.3%).

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=43)

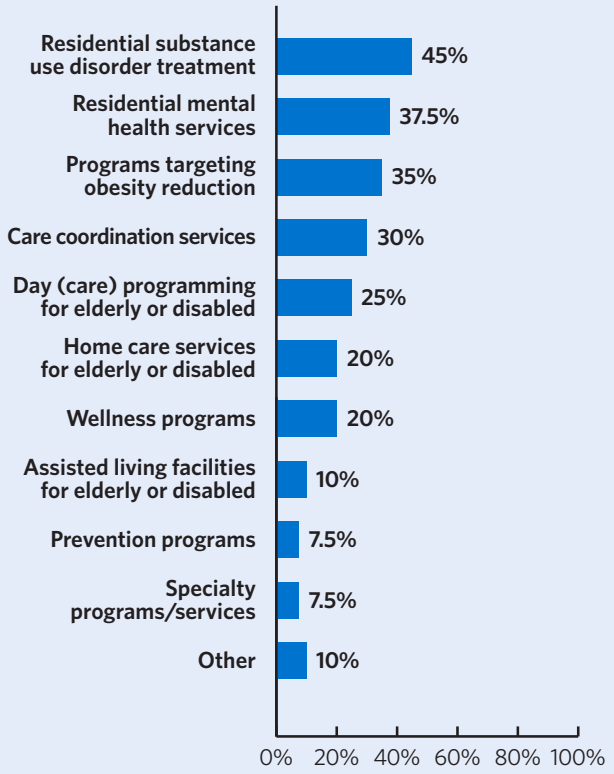
Program and Services Lacking in the Community

Four in ten (40.6%) area residents report there is no lack of health programs, services, or classes in their community; however, nearly one in ten adults would like to see more programs involving nutrition, mental health, or focused on low income individuals/families.

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=511); 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=40)

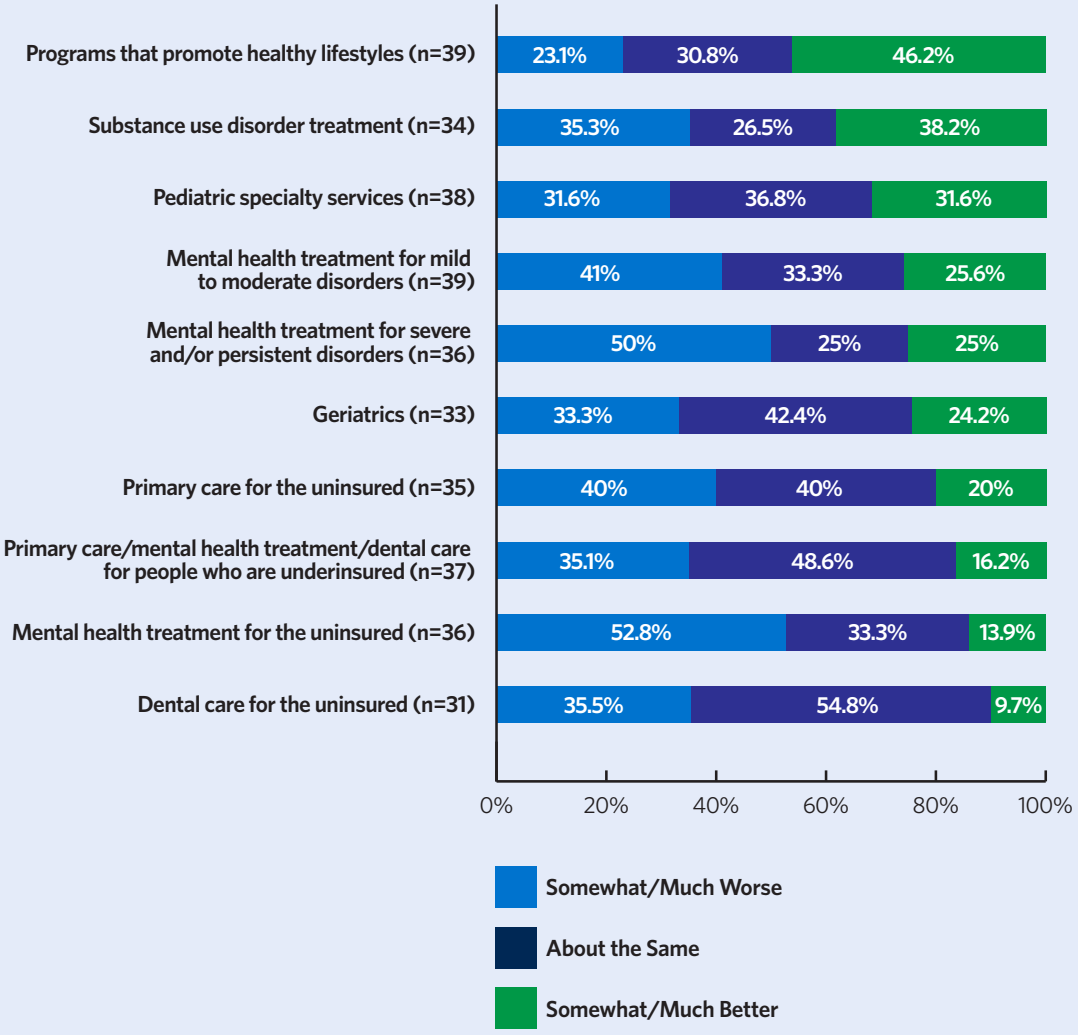
Improvement in Health Care Access

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. There are mixed feelings for substance abuse treatment programs or pediatric specialty services where roughly equal proportions say access is better and access is worse.

Key Informants clearly view access to mental health treatment for all in need – mild to severe and those without insurance – as becoming worse over the past several years.

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



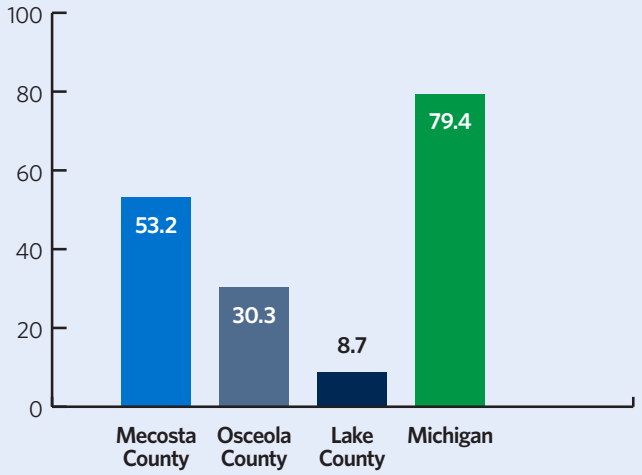
Source: Key Informant Online Survey, Q6: Below is a list of programs and services from the past two Community Health Needs Assessments that Key Informants reported did not meet the needs and demands of area residents well. In your opinion, over the past 5-6 years, to what degree has access to each improved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

Lack of Primary Care

All three SHRC service area counties have considerably lower PCPs (MDs and DOs) per capita 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 results in many patients unnecessarily using hospital ERs for care.

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.

I am constantly hearing that patients have difficulty scheduling timely appointments because of limited scheduling availability and limited primary care providers.

– Key Informant

In this area it takes up to 6 months to get in as a new patient, leaving many with no providers and utilizing ERs as their PCP.

– Key Informant

Patients do not have access to primary care providers if they are new in town. If a patient does not have an established PCP and develops a health issue the wait is 3-6 months to get in. They are forced to enter the system through the ER to get assigned a provider for non-emergent care. The walk-in clinic will help with some but not others. The current primary care providers are overloaded and have mid-levels taking care of patients that need more (NOT solving the issue).

– Key Informant

I've gotten some primary care. I'm trying not to be jaded here because my doctors are leaving. We tend to get coverage, and then they leave, but now we do have a walk-in, which we didn't have before.

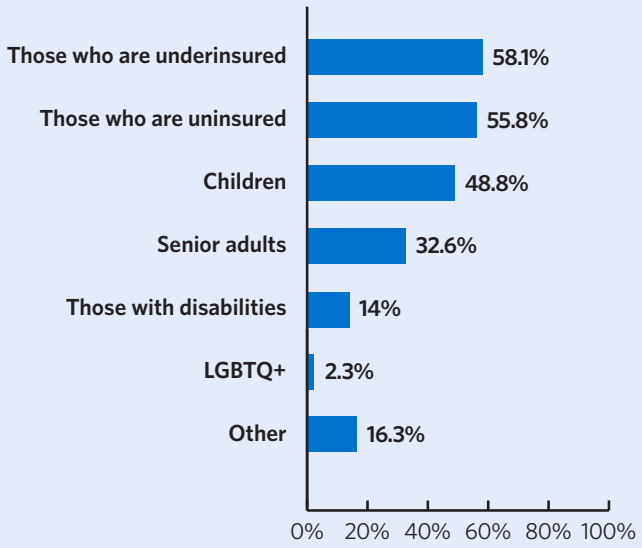
– Key Stakeholder

Underserved Populations

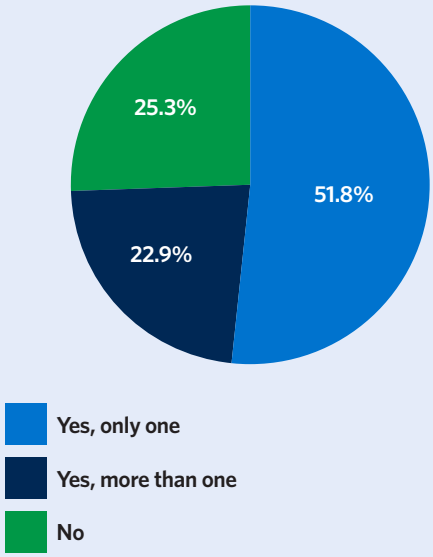
According to Key Informants, underserved groups most deserving of the community's focus are those who are uninsured or underinsured, children, and senior adults.

One-fourth (25.3%) of underserved residents have no medical home (no personal health care provider).

Underserved Groups That Should Be Focused On



Have Personal Health Care Provider

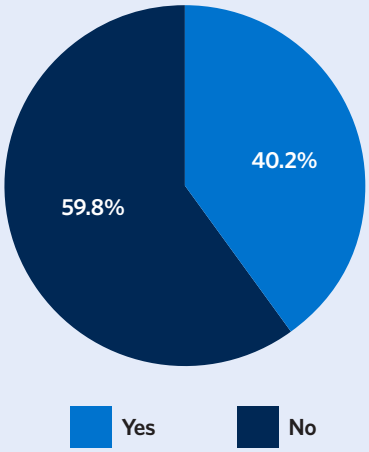


Source: Key Informant Online Survey, Q3: With regard to health care, which of the following underserved groups should we focus on most as a community? (Multiple response) (n=43); Underserved Resident Self-Administered Survey, Q2: Do you have one person you think of as your personal doctor or health care provider? (n=83)

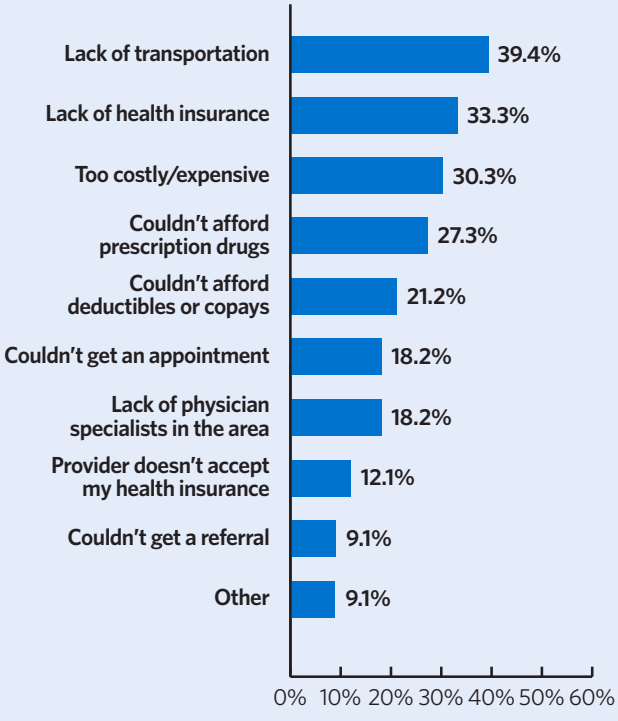
Four in ten (40.2%) underserved residents had trouble meeting their health care needs in the past two years.

Lack of transportation, lack of health insurance, and cost were the most common reasons they had trouble meeting their health care needs.

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



Reasons Had Trouble Meeting Health Care Needs

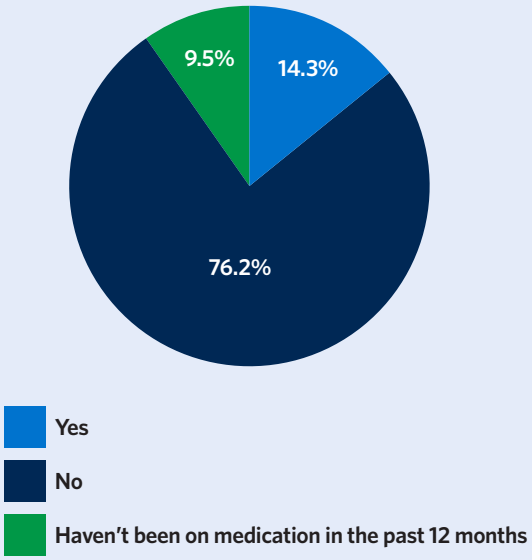


Source: Underserved Resident Self-Administered Survey, Q7: In the past two years, was there a time when you had trouble meeting your health care needs? (n=82); Q8: (If yes) What are some of the reasons you had trouble meeting your health care needs? (Multiple response) (n=33)

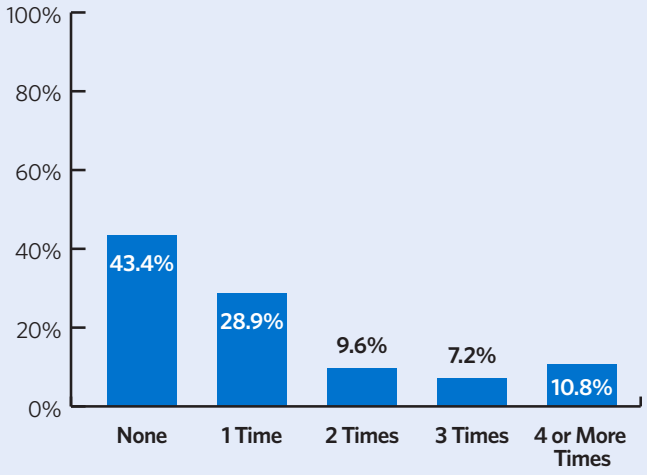
Roughly one in seven (14.3%) underserved residents had to skip, or stretch their supply of, medication in the past 12 months in order to save on costs.

More than half (56.6%) of underserved residents have personally used the hospital ER in the past 12 months, and one in ten (10.8%) visited four or more times.

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



ER Utilization in Past 12 Months

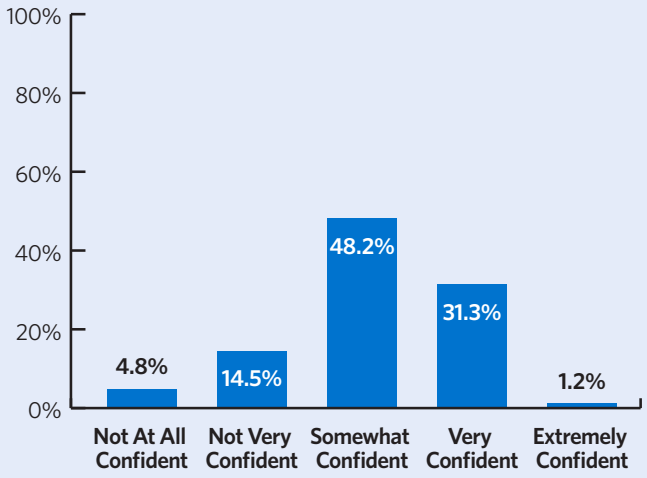


Source: Underserved Resident Self-Administered Survey, Q9: Was there ever a time in the past 12 months when you did not take your medication as prescribed, such as skipping doses or splitting pills, in order to save on costs? (n=84); Q12: How many times have you been to an Emergency Room/ Emergency Department in the past 12 months? (n=33)

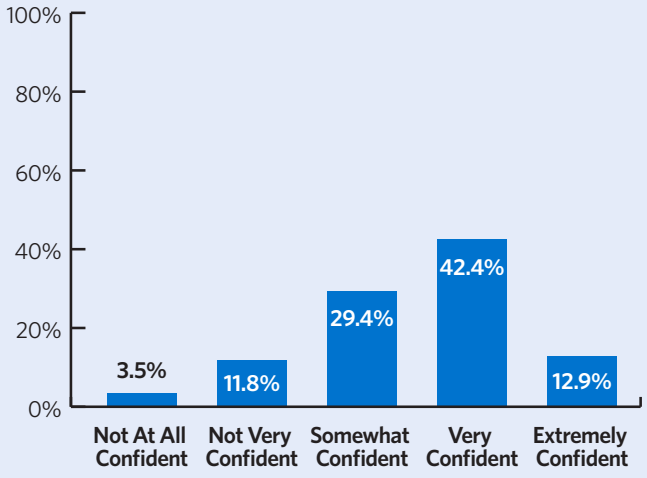
Underserved residents lack confidence in navigating the health care system: one in five (19.3%) are not very or not at all confident and half (48.2%) are only somewhat confident.

They are more confident that they can complete medical forms by themselves (55.3% very/extremely) and 63.6% rarely or never have problems understanding information necessary to be knowledgeable about their health condition.

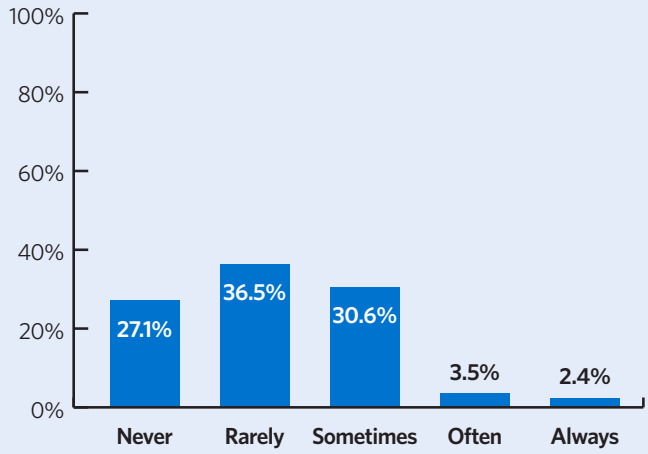
Confidence in Navigating the Health Care System



Confidence in Completing Medical Forms By Yourself



Frequency of Having Difficulty in Understanding Written Information Regarding Health Conditions



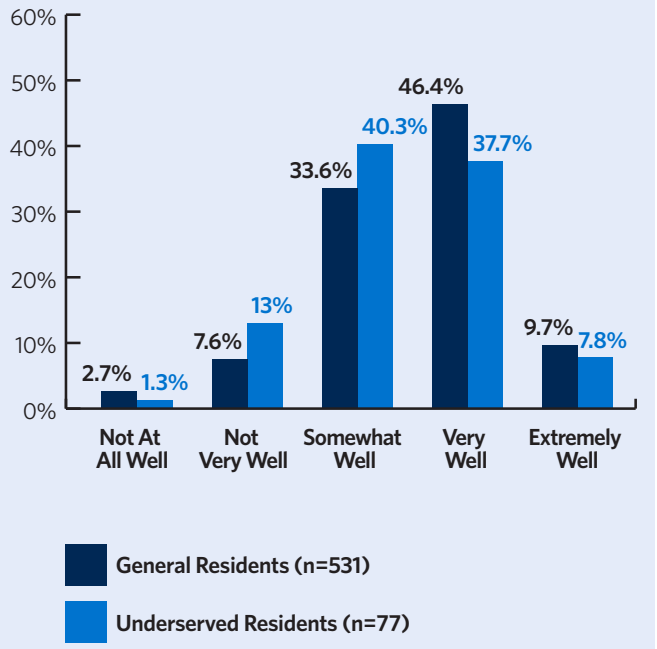
Source: Underserved Resident Self-Administered Survey, Q14: How confident are you that you can successfully navigate the health care system? (n=83); Q15: How confident are you in filling out medical forms by yourself? (n=85); Q16: How often do you have problems learning about your health condition because of difficulty in understanding written information? (n=85)

Communication Between Health Care Providers

Overall, the vast majority of SHRC area adults believe health care providers communicate at least somewhat well with each other regarding patients' health care.

Area adults from the general sample have a slightly more favorable view of provider-to-provider communication: 56.1% of area adults in the general population report providers communicate very or extremely well with each, compared to 45.5% for underserved adults.

Extent to Which Health Care Providers Communicate with Each Other About Patients' 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

Slightly more than half (52.9%) of SHRC 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 training, education, physical staff, and lists/tools that identify programs and services available with contact information.

Resources currently used include behavioral health and case worker referrals and local organizations such as Spectrum Health, the Health Department, Community Mental Health, Mid-Michigan Community Action Agency, True North, and the Commission on Aging.

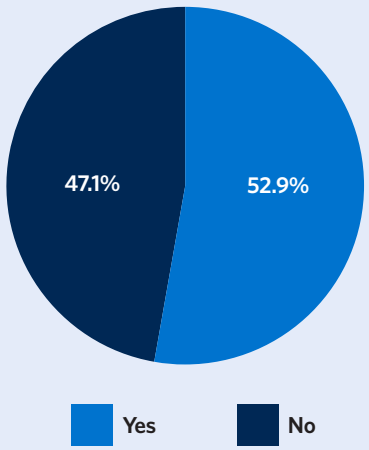
What Would Better Equip You

- Additional **training**, something simplified that I don't have to spend HOURS reading to simplify.
- Better **education** about what **resources** are **available** for **uninsured and underinsured** patients. How do they access and afford care?
- Have a **list of providers** or places that **accept low income insurance**.
- Need more **physicians** that are **properly trained** in **substance abuse**.
- **Physical staff**!! We need appropriate, adequate **skilled providers**!! WE ARE **UNDERSTAFFED**!!! **Critically**!!!
- Referral tools that provide quick contact information and basic **information on what services are provided and by who**.
- We need the **services**. We **need more primary care doctors**. We **need mental health care physicians**.

Resource Used Most Often

- **Behavior health referral** or **case worker referral**.
- Federal block **grant dollars** for those that are **uninsured or underinsured**. Transportation assistance.
- **Local Health Department, Mid-Michigan Community Action Agency**.
- **Spectrum Health** BRRC **website, Community Mental Health** website.
- **DHD10** phone/website, **Commission on Aging** phone/website.
- **Staff** within our office, **Commission on Aging, DHS, NCMH**.
- **True North** is a great resource for housing and other support programs.

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=34); 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?

Solutions and Strategies

Strategies Implemented Since Last CHNA

Key Stakeholders and Key Informants cite numerous initiatives that have resulted from the past two CHNAs and their corresponding implementation plans. These initiatives target substance use disorder, mental health treatment, obesity, access to care, and transportation.

Substance abuse/ treatment	Our organization has developed a **collegiate recovery program**, so we're on the **campus of Ferris State** to **work with kids** and try and **address their substance-use disorder issues** that so frequently occur on the college scene. I know as a community our **SUD coalition has been very active in drug-takeback programs - working with the DEA and law enforcement** and the **health department.** They're **also taking needles back** at the same time. **– Key Stakeholder**
Mental health/ treatment	The way we've addressed the **psychiatric shortage** is we are now doing **telecommunication using different resources to have them on a video-con** so that the individuals we serve can see them. I believe the **hospitals have done some of that as well**. Pretty much the majority of our psychiatric services are now done that way, so we'll have **psychiatrist from another state that uses video-con to connect with us**, so that we have positive recognition. **– Key Stakeholder**
Obesity	In the Big Rapids community there's a **general overall wellness initiative** that's happening **related to obesity** and to **access to care**, but, again, it's just related to that community, so nothing widespread. I think there's **more going on in Mecosta County than any of the counties**. I feel like they have a **much more coordinated plan in place** of kind of a **partnership with the health department** and **Ferris State.** We do a lot in Mecosta, whereas the **other three counties**, Montcalm, Osceola, and Lake Counties are, in my opinion, **very uncoordinated.** **– Key Stakeholder**
Transportation	**Transportation is the worst** because we've gone round and round. We've set up another committee to **try and find resolutions** but we **only get short-term** solutions. For my whole career that's been the major issue, and I've been here thirty-two years. We've **provided tickets for buses**, but our **bus system is inadequate**. Just to give you an idea: If someone comes for a mental-health appointment, if they live in the county, the county bus picks them up at the beginning of the day, but then they **don't get picked up until the end of the day, so you have to sit in mental health all day**. Again, it's **the impoverished**, they **don't have the voice.** **– Key Stakeholder**

Source: Key Stakeholder Interviews, Q1e/Q2b: What, if anything, has been done to address these issues? (n=5, n=1)

Solutions and Strategies

Strategies Implemented Since Last CHNA, Continued

One other initiative implemented since the last CHNA includes a program where organizations partner with Spectrum Health on Project Assert, targeting residents with substance use disorders that end up in local hospital ERs/Eds seeking care. The goal is to pre-screen them in the hospital and direct them to more appropriate treatment (e.g., SUD).

Additionally, there are programs that assist residents who have problems paying for their prescription drugs. One Key Stakeholder suggested a similar program in collaboration with Spectrum Health, creating a shared position where the person in this role would be able to better manage issues of access around cost by overseeing Medicaid applications to ensure they are processed quicker.

Health care access	We're in Mecosta and Osceola. We don't have services directly in Lake, but one of the ways that we actually **have a partnership in Spectrum is that we have an ED-based program called Project Assert** that was started by Boston Medical about 25-30 years ago, and so what that does is **we have a staff person embedded** in the **emergency department** there **at Spectrum**, both at Big Rapids and Reed City, and that **allows our staff to be engaging with patients who might have a possible substance-use disorder**. The medical staff would **identify them**, and then we would do a screen - a **prescreen,** a **brief intervention**, and a **referral to treatment** if a patient agrees to that, so that's a way for us to engage people differently rather than just kind of waiting for them to walk through our doors, and that's **been a very successful partnership**. In the two counties where we work with Spectrum, there **have been a lot of efforts on the prevention and education side**. **– Key Stakeholder**
Health care cost	In relationship to **copays**, it is **still problematic, particularly for elderly populations**. Now, I think a lot of that is in relationship to **copayments for prescriptions particularly**. And **spend-downs**, I should say, not necessarily copayments. There are a **number of programs that are available for copayments for prescriptions** that are **local**, but it's still that **spend-down piece which becomes challenging**. One thing that **we worked on locally regarding access** and then **spend-down** and actually payments to Spectrum, which I would encourage them to look at again, is a **shared position**, where the department pays half and Spectrum pays half. I submitted a proposal to Spectrum last year to consider that because we don't have one in Mecosta and Osceola, where it's particularly worrying (universal caseloads counties) with assistance payments. In relationship to **spend-downs, access to care, that position would probably alleviate** a lot of it because what that would entail is **one person overseeing all Medicaid applications**, so anyone that applies gets assistance in applying while at the hospital. Those **applications could be processed right away by this worker**, that shared position. Without it the process might take months. **– Key Stakeholder**

Source: Key Stakeholder Interviews, Q1e/Q2b: What, if anything, has been done to address these issues? (n=5, n=1)

Resources Available to Meet Issues/Needs

Key Stakeholders agree that resources do exist in the community but they are lacking to effectively address any issue with full force. In many cases, resources that exist do not cover the full extent of the need and/or are limited to certain segments of the population. The very nature of the region – being rural and somewhat isolated – creates limitations on resources available. If organizations coordinate and collaborate more with each other that would offset some of the effects of resource limitations.

Obesity	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?" You can have a coalition of individuals, and does everybody around the table look at addressing the issue with kind of a broad agenda or a very narrow agenda? **– Key Stakeholder**
Lack of transportation	Transportation: we **definitely do not [have adequate resources to address** the issue]. So, I think transportation, particularly **the volume - we're by far the highest rural transporter in the state** with those numbers. We've reached out to other counties; they're not anywhere near the **number of drives that are being provided by DHHS**. And again, it's not the drives per se. We have the drivers; we have someone - we have a payment capacity. **We don't have someone to consistently coordinate it all** because it's not funded within the department and we just don't have a resource for that within our community. **– Key Stakeholder**
Integrated care	We **want to move to more effective integrated care** because we know a decent chunk of the **folks that we work with that have severe and chronic substance use disorder issues often also have chronic medical diseases**, whether it's diabetes or hypertension or chronic-pain issues. Are there ways that we could **develop some kind of integrated services between Spectrum and our organization** where we're working **collaboratively in a primary-care setting** for some of these identified patients? We **could do population health in a different way that's truly integrated** rather than just kind of referring back and forth. **– Key Stakeholder**
Substance abuse	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. **– Key Stakeholder**

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

Resources Available to Meet Issues/Needs, Continued

Five of the six Key Stakeholders interviewed think that the community prioritizes issues effectively given the resources that are available. Collaboration between the hospital, health department, and other community organizations has improved over the years.

That said, there continues to be room for improvement; even more organizations and key leaders should be invited to the table to brainstorm and have an open dialogue to determine if everyone can agree on two or three critical areas to focus on for program implementation.

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 **set 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.

Yeah, actually, we have a **Human Services Coordinating Body** that gives us the opportunity to **vet those issues. Spectrum is extremely responsive**, as well as our **other community partners**, so when we bring an issue - for example, **we brought transportation to the table**. We met with a number of people, kind of **brainstormed some strategies**; we tried some of the things that they suggested, and then when we were still struggling, we brought it to our Human Services Coordinating Body, which set an agenda item that gave us the opportunity to walk through this. I think that's generally how we would process through some of these identified concerns: **internally and then external community partners** and then with our Human Services Coordinating Body.

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 do. **We actually all work well together**, so we **have open dialogue and do needs assessments** and **determine that we are using dollars that are available appropriately.**

Yeah, I think for the most part **we've got a lot of good, invested stakeholders** that want to try and do the next great thing as it comes to our community. **It always comes down to the limitations of funding** in what we're allowed to do and not do based on some of those kind of reimbursement rules and that's always the challenge.

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

Solutions and Strategies

Resources Available to Meet Issues/Needs, Continued

A summary of area resources available to address health and health care needs are as follows:

Health Care/Human Service Organizations

- Baldwin Family Health
- Commission on Aging
- Community Mental Health for Central Michigan (CMH)
- Convenient Clinic (walk-in via Spectrum Health)
- Department of Health and Human Services (DHHS)
- District Health Department #10
- Ferris State University
- Hope House Free Clinic
- Mecosta Health Services
- Mecosta-Osceola United Way
- MSU extension
- Spectrum Health Big Rapids Hospital
- Spectrum Health Reed City Hospital
- Women's Information Services, Inc. (WISE)

Community Initiatives/Coalitions

- Cooking classes
- Diabetes education programs
- Farmers' markets
- Helping the Whole You speaker series
- MedNow and other technology to increased health care access
- SANE program
- School nurse program
- Substance Abuse Coalition

Suggested Strategies to Address Issues/Needs

Key Informants suggest several ways to resolve the lack of treatment for mental health: (1) increase funding for Community Mental Health and other organizations that provide treatment to those in need, (2) encourage more conversation and advertising to reduce the stigma, (3) urge more providers to accept multiple forms of insurance or implement a sliding scale, and (4) increase access by providing transportation to and from appointments, as well as extending office hours beyond the work day.

Key Informants would also like to see reduced stigma for those with substance use disorder, as well as more services that are affordable.

Lack of primary care providers	Provide **funding for more PCPs.** **– Key Informant** Apparently there needs to be some type of "**bonus**" for deciding to practice in Mecosta County instead of Grand Rapids. The easy answer is **proportionately greater pay for the same service**. This may not actually work. Could also **maintain level of benefits for decreased work hours**. We need to build a **more cohesive interactive medical staff** so doctors in APPs feel supported and included. Whenever doing activities be sure to **include the providers' spouses and families** as much as possible. **– Key Informant** **Incentives** to **recruit qualified and skilled practitioners to not only work in Big Rapids but to also live here and become a vested member of our community**. You cannot expect to pay a surgeon working in a rural facility the same salary as one working in a large urban facility. The requirements, needs, and obligations are exceedingly different. **– Key Informant**
Poverty	**Increased access to resources** for our patients living in poverty such as **transportation assistance, smoking cessation, food/lifestyle education and access.** **– Key Informant** **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**
Access to health care	**Give annual incentives to local providers that remain working in the area. Seek local providers' input and assistance with recruiting providers to their practice**. Build into the onboarding plan to allow time for mentoring new providers to their role. **– Key Informant** **Hire more providers. Increase the abilities of the urgent care to cover more services**. Have the urgent care **accept all insurances.** **– 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=45).

Solutions and Strategies

Suggested Strategies to Address Issues/Needs, Continued

Improved access for mental health treatment can be achieved through, much like primary care, efforts to secure more funding through grants, for example, to possibly entice psychiatrists to the area. As an alternative for the time being, increased use of tele-psychiatry through video conferencing can help.

More funding is also needed for substance use disorder treatment which would enable the creation of detox and residential treatment facilities, as well as recovery homes.

Further collaboration is needed between health, human service, and government agencies to ensure residents with substance use disorder and/or mental health issues receive appropriate treatment.

Mental health/ treatment	**Access grant funding to help provide for or pay for services**. Have **CMHCM** be **allowed to provide services for mild to moderate population. Enhance prevention services in the schools** that have a component to provide treatment. **– Key Informant** It would be very helpful if **telehealth access were available for these services** to assist rural community members to have access to professionals in a private setting, if it is not feasible to have more therapists and mental health services actually located in our communities. **– Key Informant**
Substance abuse/ treatment	Currently providing good community-based treatment, but **access is limited. No local options for detox, residential treatment** or **recovery housing**. Need to **expand Project Assert from the ED to primary care, urgent care**. Maybe **consider health homes for complex patients** that have **comorbid** substance use disorders and chronic health problems. **– 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.** **– 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 the doctors see they cannot possibly keep a record and mindset for best practices and overall puzzle pieces put 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=45).

Appendix

Participant Profiles

Key Stakeholder In-Depth Interviews

Administrator, Baldwin Family Health
Director, Community Mental Health
Director, Department of Health and Human Services
Health Officer, District Health Department #10
President, Ten16 Recovery Network
Regional Market Leader, Spectrum Health Big Rapids Hospital/Spectrum Health Reed City Hospital

Key Informant Online Survey		
Director (2)	Doctor of Medicine	Physician Assistant-Certified
Nurse Practitioner (2)	Doctor of Podiatric Medicine	Pharmacy Operations Manager and Pharmacy Technician
Academic Nurse Educator	Educational Administrator	Physician
Account Clerk	Emergency Room Physician Assistant	President/CEO
Administrative Supervisor	Executive Director	Primary Care Physician
Clinical Education Specialist	Family Nurse Practitioner	Program Coordinator; Associate Professor
Community Health Program Coordinator	General Surgeon	Quality, Safety, and Experience Manager
Community Volunteer	Manager	Registered Nurse
Certified Registered Nurse Anesthetist	Medical	Registered Nurse (Home Care)
Dean, Michigan College of Optometry	Nurse Anesthetist	Social Worker
Director of Behavioral Health	Nurse Supervisor	Teacher

Appendix

Resident Telephone Survey

	Total		Total		Total
Gender	**(n=584)**	**Marital Status**	**(n=575)**	**Own or Rent**	**(n=570)**
Male	**47.2%**	Married	**49.8%**	Own	**78.7%**
Female	**52.8%**	Divorced	**10.5%**	Rent	**15.3%**
Age	**(n=568)**	Widowed	**7.0%**	Other	**6.0%**
18 to 24	**15.2%**	Separated	**0.4%**	**Zip Code**	**(n=584)**
25 to 34	**31.1%**	Never married	**31.7%**	49304	**9.8%**
35 to 44	**12.4%**	Member of an unmarried couple	**0.6%**	49305	**1.2%**
45 to 54	**14.5%**	**Employment Status**	**(n=578)**	49309	**1.2%**
55 to 64	**17.6%**	Employed for wages	**43.0%**	49307	**13.8%**
65 to 74	**14.1%**	Self-employed	**7.9%**	49312	**0.1%**
75 or Older	**10.4%**	Out of work 1 year+	**2.5%**	49320	**0.1%**
Race/Ethnicity	**(n=575)**	Out of work <1 year	**2.3%**	49332	**2.4%**
White/Caucasian	**90.9%**	Homemaker	**5.6%**	49336	**3.9%**
Hispanic/Latino	**4.3%**	Student	**0.7%**	49337	**21.8%**
Black/African American	**4.0%**	Retired	**27.5%**	49338	**1.3%**
Asian	**0.3%**	Unable to work	**10.5%**	49342	**0.5%**
Native American	**0.2%**	**Education**	**(n=575)**	49346	**9.9%**
Other	**0.2%**	Less than 9th grade	**1.7%**	49349	**8.9%**
Adults in Household	**(n=584)**	Grades 9 through 11	**8.2%**	49623	**0.6%**
One	**25.5%**	High school grad/GED	**37.0%**	49631	**8.2%**
Two	**52.6%**	College, 1 to 3 years	**35.4%**	49639	**2.8%**
Three	**9.9%**	College 4+ years (grad)	**17.7%**	49642	**2.2%**
Four	**9.0%**	**Income**	**(n=398)**	49677	**10.2%**
Five or more	**3.0%**	Less than $10K	**8.2%**	49679	**1.0%**
Children in Household	**(n=581)**	$10K to less than $15K	**6.2%**		
None	**63.9%**	$15K to less than $20K	**6.5%**		
One	**9.8%**	$20K to less than $25K	**10.8%**		
Two	**19.9%**	$25K to less than $35K	**16.7%**		
Three	**3.8%**	$35K to less than $50K	**15.8%**		
Four	**0.8%**	$50K to less than $75K	**15.7%**		
Five or more	**1.9%**	$75K or more	**20.2%**		

Appendix

Underserved Resident Survey (Self-Administered)

	Total		Total		Total
Gender	**(n=85)**	**Marital Status**	**(n=85)**	**Own or Rent**	**(n=82)**
Male	**37.6%**	Married	**15.3%**	Own	**32.9%**
Female	**62.4%**	Divorced	**18.8%**	Rent	**45.1%**
Age	**(n=85)**	Widowed	**10.6%**	Other	**22.0%**
18 to 24	**20.0%**	Separated	**5.9%**	**Zip Code**	**(n=82)**
25 to 34	**27.1%**	Never married	**41.2%**	40330	**1.2%**
35 to 44	**10.6%**	Member of an unmarried couple	**8.2%**	48176	**1.2%**
45 to 54	**10.6%**	**Employment Status**	**(n=84)**	48877	**1.2%**
55 to 64	**9.4%**	Employed for wages	**38.1%**	48879	**1.2%**
65 to 74	**12.9%**	Self-employed	**1.2%**	49301	**1.2%**
75 or Older	**9.4%**	Out of work 1 year+	**1.2%**	49304	**2.4%**
Race/Ethnicity	**(n=85)**	Out of work <1 year	**10.7%**	49305	**2.4%**
White/Caucasian	**80.0%**	Homemaker	**3.6%**	49307	**29.3%**
Black/African American	**10.6%**	Student	**10.7%**	49309	**2.4%**
Hispanic/Latino	**3.5%**	Retired	**16.7%**	49327	**1.2%**
Native American	**2.4%**	Unable to work	**17.9%**	49329	**6.1%**
Asian	**1.2%**	**Education**	**(n=85)**	49332	**1.2%**
Adults in Household	**2.4%**	Less than 9th grade	**0.0%**	49336	**1.2%**
One	**(n=81)**	Grades 9 through 11	**8.2%**	49337	**11%**
Two	**42.0%**	High school grad/GED	**38.8%**	49338	**1.2%**
Three	**29.6%**	College, 1 to 3 years	**36.5%**	49340	**1.2%**
Four or five	**14.8%**	College 4+ years (grad)	**16.5%**	49342	**2.4%**
Children in Household (6-17)	**(n=77)**	**Income**	**(n=85)**	49346	**6.1%**
None	**74.0%**	Less than $10K	**40.0%**	49349	**18.3%**
One	**16.9%**	$10K to less than $15K	**18.8%**	49412	**1.2%**
Two or more	**9.1%**	$15K to less than $20K	**10.6%**	49623	**1.2%**
Children in Household (<6)	**(n=81)**	$20K to less than $25K	**8.2%**	49631	**1.2%**
None	**76.5%**	$25K to less than $35K	**8.2%**	49639	**1.2%**
One	**12.3%**	$35K to less than $50K	**7.1%**	49677	**1.2%**
Two or more	**11.1%**	$50K to less than $75K	**3.5%**	49679	**1.2%**
		$75K or more	**3.5%**		

Exhibit B

Spectrum Health Reed City 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

Behavioral health inclusive of substance use and abuse.

Improve Access

Action 1

Reduce youth thoughts of suicide

Measurable Impact

a. Establish baseline for youth depression screenings by 6/30/2019.

b. Upon the implementation of the screening tool, increase the number of depression screenings completed (over baseline) annually.

c. Develop a referral process and track referrals completed for identified students.

Impact of Implementation Plan Strategy

Impacting the incidence of youth behavioral health wasn't realized as originally planned. The assessment of youth behavioral health revealed the community is lacking resources. Behavioral Health providers for Lake, Mecosta and Osceola Counties range from twice to four times less prevalent than the State of Michigan average. The gap for behavioral health resources lengthens for youth. Baselines for youth depression screening were completed. These assessment showed there isn't a universal or consistent screening process in three of many public school districts throughout the two counties. What was accomplished is building strong relationships between Spectrum Health and three public school districts. As a result of these relationships, agreements have been reached to move forward with future school based tele-behavioral health clinics when funding can be secured. Also, a behavioral health agency located in Osceola County expanded services to include Mecosta County. The behavioral health agency was not able to receive reimbursement from a prominent health insurance agency. Through facilitation, the behavioral health agency became boarded and was able to accept clients. As a result, increased the communities behavioral health resources.

Action 2

Reduce number of opioids overdose deaths

Measurable Impact

a. Process to identify patients at risk for overdose and provide Naloxone as indicated with education to be completed by 6/30/2019.

b. Expand identification process to additional practice sites by 6/30/2020.

c. Expand identification process to 100% of all Spectrum Health family practice sites and Emergency Department by 6/30/2021.

Impact of Implementation Plan Strategy

The practice of limiting the amount of narcotics and opioids prescribed has been realized throughout Spectrum Health. Providers in the Family Practices, Emergency Departments, Walk-In-Clinics and Clinical departments have accomplished this by decreasing the amount and length of time they prescribed narcotics and opioids. Patients are screened for substance use and when warranted are provided education on the use of Naloxone and either provided a Naloxone Kit or a prescription.

Action 3

Collaborate with community partners to provide education events

Measurable Impact

a. Six medication and needle take back events offered annually to be completed by 6/30/2019, 6/30/2020 and 6/30/2021.

b. Five education events completed by 6/30/2021.

Impact of Implementation Plan Strategy

The impact of these initiatives were dampened with several community medication and needle take back events canceled as a result of the COVID-19 pandemic. In spite of these developments, nine medication and needle take back events were held serving 544 community members collecting 896 pounds of medications and needles. Five education events held reaching 382 community members. Titles of the education included; The Crisis next Door, Protecting Your

Behavioral health inclusive of substance use and abuse, Continued

Family from Opioid Abuse, Hidden in Plain Sight and Town Hall with community health service providers on the topic of opioids. Partnerships through collaboration with Mecosta Osceola Substance Awareness Coalition, Ten16 recovery Network and law enforcement has facilitated the placement of permanent medication take back boxes in local pharmacies and law enforcement locations. These efforts account for a total of 12 medication take back boxes located in every law enforcement location and with the exception of one privately own pharmacy, all privately owned pharmacies have a medication take back box in Mecosta and Osceola Counties.

Action 4

Partner with Project Assert (PA), also known as Alcohol Substance Abuse Services, Education, Referral, Treatment, a program that is staffed by a community Wellness Advocate (peer recovery coach) who provides initial assessment, refers patients to treatment/resources and follows the patient through the process.

Measurable Impact

a. Increase the number of patients screened by Wellness Advocate by 6/30/2019.

b. Develop a referral process for the use of the Wellness Advocate from Spectrum Health Family Practice sites and Walk-in Clinic by 6/30/2020.

c. Implement Wellness Advocate program at Family Practice sites and Walk-in Clinic by 6/30/2021.

Impact of Implementation Plan Strategy

In a collaborative effort between Spectrum Health and Ten16 Recovery Network, substance use services were introduced and expanded to clinical service lines. The services included the placement of a community Wellness Advocate (peer recovery coach) who provides an initial assessment, refers patients to treatment, provides resources and follows the patients through the process. The service has grown from three days a week to seven days week by leveraging a telemedicine format. The reach has expanded beyond the initial Emergency Departments to include; Walk-In-Clinics, Labor & Delivery and Family Practice Providers. The Project Assert program has expanded to a total of 7 sites and served 329 patients with a little over 50% acceptance rate of being referred for treatment resources.

Action 5

Reduce percentage of adult smoking through Tobacco Cessation education

Measurable Impact

a. 6 education events completed. 2 by 6/30/2019, 2 by 6/30/2020 and 2 by 6/30/2021.

b. Complete two school education events completed per annually by 6/30/2019, 6/30/2020, and 6/30/2021.

c. Initiate a Better Breather's Club implemented in Big Rapids and expanded to Reed City by 6/30/2020.

d. Implement two public spaces identified as tobacco free by 6/30/2021.

Impact of Implementation Plan Strategy

Adult smoking rates for Lake, Mecosta and Osceola counties have decreased from above the State of Michigan average to within the State average. Tobacco and vaping cessation awareness education was provided through various venues to exceed the set targets. These venues include clinical service provider locations, Farmers Market, community events and festivals. In total 1,596 community members were in attendance at 7 events. In collaboration withTen16 recovery Network, vaping cessation education was deployed by providing education to local schools. In total, 10 schools and close to 1,850 students were educated. A Better Breather's support group was implemented at Spectrum Health Big Rapids Hospital. This support group is facilitated by Pulmonary Rehabilitation staff. The support group is comprised of community members afflicted with and supporting individuals with chronic lung diseases. Collaborating with two separate county health coalitions five public spaces established tobacco or substance free designations

Obesity and Weight Issues

Improve Access

Action 1

Increase access to services that can improve an individual's health: teach practical skills such as healthy cooking, grocery shopping, how to incorporate vegetables in diet, and how to maintain a healthy weight

Measurable Impact

- Conducting 2 events per year offering healthy recipe samplings. To be completed by 6/30/2019, 6/30/2020 and 6/30/2021.
- With dietician input, one Food Pantry per county will have healthy food options identified by 6/30/2021.
- Implement Grocery Store Tours by 6/30/2020 and evaluate the impact on lifestyle change by 6/30/2021.
- Implement Weight Management program by 6/30/2020 and evaluate the impact on lifestyle change by 6/30/2021.

Impact of Implementation Plan Strategy

Access to services has expanded to provide individuals opportunities to improve their health. These services include collaborating with community partners to build an outdoor gym located in a city park adjacent to Spectrum Health Big Rapids Hospital in Mecosta County. Provided weekly dietician supported healthy recipe sampling as a larger access to produce initiative. The initiative provided public transportation and produce vouchers to underserved community members. In total, 22 events and 1,814 community members participated. Provided in collaboration with Ferris State University, held two community Culinary Medicine classes and one provider class. In total, 46 community members and 12 provider participated. Collaborated with the Health Department while providing a Spectrum Health dietician to assess a convenience store located in a lower economic neighborhood resulting in signage for healthier options. Spectrum Health dietician provided education and assistance to a food pantry located in Lake County. This initiative produced labeling healthier options provided in the pantry along with educational materials for their clientele. Developed and started a weight management program. Since inception, three series of classes have been completed. 45 community members have attended the weight management program with close to 50% of them meeting their goals.

Action 2

Engage youth in healthy behaviors to reduce childhood obesity by identifying and collaborate with community partners to develop a school-based health program.

Measurable Impact

Implement a healthy lifestyles program in at least 2 schools by 6/30/2021.

Impact of Implementation Plan Strategy

Four schools throughout Mecosta and Osceola Counties participated in Healthier Eating and Movement programs. The programs served 772 students. Collectively, the students recorded walking 8,323 miles and consuming 14,114 servings of produce. Processes created for schools nurses to refer students to Spectrum Health's Healthy Weight Center.

Maternal Infant Health

Improve Infant Health

Action 1

Implement an evidence-based screening tool addressing substance use for pregnant women

Measurable Impact

a. Substance use screening tool implemented by 6/30/2019.

b. Establish baseline metric for current referral rates. Improve referral rates to exceed 80% of pregnant women using tobacco products by 6/30/2020.

c. Referral pathway created for pregnant mothers screening positive for substance use by 6/30/2021.

Impact of Implementation Plan Strategy

The health of pregnant women was impacted by implementing screening for substance use in the intake process for the Obstetric office and Labor & Delivery Departments. Evidence-based SCRIPTS smoking cessation program was incorporated within the Obstetrics' office. Referral rates to the SCRIPTS program are over 90%. SCRIPTS program participation enrollment rates remain low. Project Assert Wellness Advocate services were deployed in the Labor & Delivery department and continue to work on providing Project Assert Wellness Advocate services to the Obstetrics' office.

Action 2

Collaborate with Community partners to improve infant health outcomes

Measurable Impact

a. Continue multi-stakeholder collaborative including Region 4 Perinatal Alliance and Mecosta-Osceola Great Start annually through 6/30/2021.

b. Establish baseline metric for current referral rates to MIHP by 6/30/2019.

c. Increase percentage of qualified referrals to MIHP by 6/30/2021.

Impact of Implementation Plan Strategy

A task force formed and is comprised of Spectrum Health Big Rapids Hospital Labor & Delivery, Obstetrics, District Health Department Ten and Central Michigan Health Department leadership. A referral process was developed to increase referral rates to the health departments' Maternal Infant Health program. Prior to this collaborative relationship, referrals were sporadic with low enrollment rates. Now, referrals are robust with a 21% program enrollment rate

Action 3

Reduce Infant Preventable Deaths

a. Safe Sleep: Promote infant safe sleep practices to prevent suffocation and integrate safe sleep education to all programs that serve pregnant women and families with infants.

b. Car Seat Safety: Develop community awareness by providing car seat technician training and community car seat clinics.

Measurable Impact

a. Assess current education programs and identify gaps by 6/30/2019.
   - Develop multiple methods of education regarding safe sleep 6/30/2020.
   - Engage community partners to assist in dissemination of education by 6/30/2021

b. Offer local car seat technician training by 6/30/2019. Provide community car seat clinics by 6/30/2020.

Impact of Implementation Plan Strategy

Mecosta-Osceola Early Childhood Wellness Coalition formed to address childhood wellness with safe sleep as one of it's priorities. The coalition has representatives from Spectrum Health, Department of Health and Human Services, District Health Department, Community Mental Health, Great Start and Ten16 Recovery Network. The coalition assessed current programs and identified gaps in programs. The coalition deployed a new pregnant mother information packet for clientele of Mecosta Osceola Department of Health and Human Services (DHHS). DHHS staff distribute the information packets to all their pregnant and new mothers. The coalition attends community events providing safe sleep education. Through a collaboration with Live Well Mecosta, a community coalition, a privacy breast feeding and new mother rest tent has been made available for community organization use. Community car seat installation technician training clinic were completed and certified 18 new technicians from Lake, Mecosta and Osceola Counties. In collaboration with Great Start, started regular yearly community car seat clinics. 2019, 11 community car seat clinics were held. 2020, additional community car seat clinics are on hold because of the COVID-19 pandemic.

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:

Reed City Hospital Corporation d/b/a Spectrum Health Reed City Hospital

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 (Osceola), but also regions outside the county which compose SHRC's primary (PSA) and secondary (SSA) service areas, including Mecosta and Lake counties. 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