

Spectrum Health Pennock

Community Health Needs Assessment

Martin Hill, PhD | June 2, 2020



Table of Contents

- Introduction** 3
- Background and Objectives** 4
- Methodology** 5
- Executive Summary and Key Findings [Significant Health Needs]** 7
- Detailed Findings** 13
 - Social Indicators** 14
 - Demographics of Barry County 14
 - Crime Rates 15
 - Unemployment 16
 - Poverty 16
 - Education 19
 - Environmental Factors 20
 - Adverse Childhood Experiences 21
 - Community Characteristics** 22
 - Characteristics of a Healthy Community 22
 - Characteristics of the SHP Community 23
 - Overall Health of the SHP Community 24
 - Social Determinants of Health 25
 - Health Status Indicators** 26
 - Life Expectancy and Years of Potential Life Lost 26
 - Mortality Rates 27
 - Leading Causes of Death 28
 - Cancer Diagnosis and Death Rates 29
 - Chronic Conditions 30
 - Most Pressing Health Issues or Concerns 32
 - Overall Satisfaction with Health Climate 38
 - Health of Underserved Residents 39
 - Substance Use/Abuse 41
 - Health Care Access** 42
 - Satisfaction with Health Care System 42
 - Payment for Health Care 43
 - Sources of Health Information 44
 - Awareness and Use of Health Care Services 45
 - Barriers to Health Care Access 46
 - Program and Services Lacking in the Community 48
 - Improvement in Health Care Access 49
 - Lack of Primary Care 50
 - Underserved Populations 51
 - Communication Between Health Care Providers 54
 - Ability to Refer People to Care 55
 - Solutions and Strategies** 56
 - Strategies Implemented Since Last CHNA 56
 - Resources Available to Meet Issues/Needs 58
 - Suggested Strategies to Address Issues/Needs 61
- Appendix** 63
 - Participant Profiles 63
 - Previous Implementation Plan Impact 66

Introduction



Background and Objectives

VIP Research and Evaluation was contracted by Spectrum Health to conduct a Community Health Needs Assessment (CHNA) for Spectrum Health Pennock Hospital (SHP) in 2019. For the purposes of this assessment, “community” is defined as, not only the county in which the hospital facilities are located (Barry), but also regions outside the county which compose SHP’s primary (PSA) and secondary (SSA) service areas, such as Eaton County. 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 SHP 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 SHP 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 SHP.

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

Information collected from this research will be utilized by the Community Health Needs Assessment team of Spectrum Health Pennock 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	29
Community Residents (Underserved)	Self-Administered (Paper) Survey	Vulnerable and underserved subpopulations	57
Community Residents	Telephone Survey	SHP area adults (18+)	400

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 57 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 400 SHP area adults (age 18+). The response rate was 34%.

Disproportionate stratified random sampling (DSS) was used to ensure results could be generalized to the larger SHP 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 400 completed surveys:

- 163 are cell phone completes (40.8%) and 237 are landline phone completes (59.3%).
- 107 are cell-phone-only households (26.8%).
- 96 are landline-only households (24.0%).
- 197 have both cell and landline numbers (49.3%).

For landline numbers, households were selected to participate subsequent to determining that the number belonged to a residence within the zip codes of the primary or secondary SHP 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 SHP 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 400, 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 Pennock 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 SHP 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 SHP 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 SHP 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 SHP 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, SHP 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 Community Health Needs Assessment, Spectrum Health Pennock Hospital resides in a community faced with economic, social, and health challenges. However, these challenges are not as great as those in some surrounding counties, and community members do 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 SHP 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 lead 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 Barry County has lower levels of violent crime and homicide compared to the state and nation, the rate of child abuse/neglect is higher than the national rate.

Unemployment and poverty rates are actually lower than state and national rates. Still, 9.3% of all people live in poverty and 35.9% of single-female families with children under age 18 live in poverty. Educational levels are lower than the state and the nation; however, the freshman graduation rate for Barry County is higher than the state rate.

In general, compared to state and national rates, life expectancy rates are higher and age-adjusted mortality rates are lower for residents in Barry County. The infant mortality rate is also lower in Barry County compared to the state and the nation.

There is ample room for improving the health climate of the SHP area. Taking everything into account – health conditions, health behaviors, health care availability, health care access – only 16.7% of Key Informants are satisfied overall with the health climate of the region. Even those who are satisfied realize there could be improvement in many different areas. Moreover, only 39.8% 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 SHP 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 (74.9%) of area residents believe access to health care is a critical problem for some community residents
- Two-thirds (66.7%) 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 instant access to information or a list of available resources or services as well as the availability of social workers to help people navigate the system and connect them to critical social services to round out their treatment plan
- There are far fewer MDs and DOs (per 100,000 population) in Barry County (33.4) 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.
 - Seven in ten (70.8%) Key Informants say transportation issues are a common barrier to accessing care; tied for first on a long list of barriers rated
 - Lack of transportation is a top reason cited by underserved residents who have trouble meeting their health care needs
- **Cost** of care is another barrier for some residents, and this barrier is present even for those with insurance due to unaffordable copays, deductibles, and spend-downs.
 - Seven in ten (70.8%) Key Informants cite the inability to afford out-of-pocket expenses as a common barrier (tied for first with 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:
 - Half (51.0%) of 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
 - 45.5% of underserved adults report that they visited the ER/ED at least once in the past year; 16.4% three or more times
 - 21.8% of underserved adults had to skip or stretch their medication in the past year due to cost
 - 14.3% of underserved adults have no health care provider (no medical home)
 - 12.4% of all adults in the general sample have Medicaid for their health insurance, compared to 36.8% for the 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 Health 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 SHP service area's social environment such as poverty make area residents more susceptible to mental health challenges.
 - 33.3% of Key Informants see a lack of residential treatment for mental health.
 - Three in ten (30.0%) Key Informants believe that access to mental health treatment for the uninsured has worsened over the past 5-6 years. During that same time period, 40.0% think access to mental health treatment for severe and/or persistent disorders, and 22.7% think access for those with mild to moderate disorders, has worsened.

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, Key Informants, and area residents.
- Three in ten (29.2%) Key Informants see a lack of residential treatment for substance use disorder in the area.
- 19.3% of underserved residents have resided in a household where alcohol use had a negative impact.
- Both Key Stakeholders and Key Informants cite smoking as a problem and one in five (19.3%) underserved residents report nicotine/smoking had a negative impact on their household.
- There exists a culture of acceptance where substance use is considered the norm and is passed down from generation to generation.
- Substance use disorder often leads to other serious problems, including loss of employment, child welfare issues, and compounded health risks.

4. Obesity

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

- Health care professionals would like to see more attention and resources dedicated to promoting a healthy diet and providing access to healthy food choices, weight loss programs, and nutritional counseling. These opportunities should be available to all regardless of socioeconomic circumstances.
- Obesity is considered one of the most pressing health issues in the SHP 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.
- Obesity is also a major concern of Key Informants; 48.3% cite it as one of the most pressing health issues or concerns in the community.
- More than one-fourth (27.2%) of area adults report obesity as the most important health problem in their community, the top mention.
- Four in ten (41.7%) Key Informants consider programs targeting obesity reduction to be lacking in the community.

Other Health Needs

Chronic Disease

- Key Stakeholders cite chronic disease as one of the most concerning health issues in the community because things like cancer, heart disease, and diabetes are connected to other lifestyles choices (diet) and behaviors (substance use disorder).
- Barry County has higher death rates for chronic lower respiratory diseases than the state or nation.
- The death rate for cancer is higher in Barry County compared to the nation and on par with the state rate.
- Because the cancer diagnosis rate is lower in Barry County compared to Michigan and the U.S., but the cancer death rate is higher or on par, it raises the question: Is better cancer screening needed in order to detect cancer before it is too late to treat the condition?
- Almost one-fourth (23.7%) of area adults report cancer as the most important health problem in their community today, second only to obesity.

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 problem in the area, although it is not as severe as in some surrounding counties.
- 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

- Half (53.2%) of area adults say they are not very or not at all active in their community in terms of being involved in things like civic organizations, commissions/boards, non-profits, volunteerism, etc.
- This research also shows the importance of collecting data on Adverse Childhood Experiences and demonstrating the relationship of these negative experiences to adult outcomes. Key Stakeholders were adamant about the importance this data has for the purposes of trying to prevent future negative outcomes.

Social Determinants of Health

A trend over the last 10 years that is moving in a positive direction is the realization by health care professionals, human service professionals, and other community leaders that health and health care outcomes are very much 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: 63.7% 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

- The Suicide Prevention Task Force determines patterns of suicide and educates the community on how to recognize warning signs and the benefit of learning coping skills.
- Pine Rest has opened a psychiatric service for mental health and/or substance use disorder.
- Area leaders and stakeholders are speaking more publicly about suicide and depression, seeking help, and trying to reduce the stigma of having a mental illness and seeking treatment for the condition.
- Spectrum Health Pennock partners with other organizations (e.g., Community Mental Health) and holds regular meetings to communicate local health issues and develop action plans to address them.

- Several coalitions have been developed to address issues such as substance abuse, tobacco use, physical activity and nutrition, and access to care.
- The Substance Abuse Task Force wrote a federal grant entitled Partnership to Success in hopes of partnering with schools to pre-screen for substance abuse and intervene where necessary.
- Local initiatives have been created to increase physical activity among residents by making the community more walkable.
- Telecommunication via video conferencing is being used in mental health treatment to offset the lack of psychiatrists in the area.
- Increased education on diabetes via SHP and increased education (and services) on autism via Community Mental Health.
- Various organizations and leaders in the community are looking into transforming Barry County/Hastings into a Blue Zone.

Suggestions on Additional Strategies to Employ to Address Needs

- Integrate behavioral health into primary care to increase access for those with mental illness and/or substance use disorders.
- Encourage organizations that treat mental health to accept all insurance plans.
- Instead of addressing poverty (that would be hard to change), focus on solutions that address conditions that are often associated with poverty such as increasing wages, building more affordable housing, providing childcare, and providing transportation or assistance.
- Focus on substance use disorder as a public health problem instead of a legal problem.
- Urge hospitals and health care providers to staff more social workers to address the social component of health and to assist with processing treatment plans.
- Create incentives to entice primary care providers to not only work, but also live, in the SHP 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 (e.g., Grand Rapids or Kalamazoo).
- Find more effective ways to educate the community on lifestyle choices, mental health, and substance abuse.
- Implement the Food as Medicine concept in hospitals for patients, visitors, and staff.
- Find ways to fund (ideally via health insurance plans) health education/classes and coaching.

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 reported that appropriate topics had been explored and the correct questions were asked:

I do, and I think that Pennock does a pretty good job in drawing in the providers and the resources that need to be at the table, and I think everybody is looking at the same issues. It's just such an overwhelming task sometimes.

- Key Stakeholder

Yeah, I think they're pointed questions, and so they're good.

- Key Stakeholder

I did use the last report for my grant that I just wrote. I think we do; you ask the right questions, absolutely. How does the community work on that afterwards? Let's actually make it something that goes somewhere, right? Let's train physicians and health-care providers to really work with their patients - spend the time with them to facilitate that referral to mental health or behavioral health or cardiac health-care. Let's really work on improving the base instead of putting a Band-Aid out there.

- Key Stakeholder

Key Stakeholders also believe the CHNA process can be used to: (1) get input from ER and EMS providers in emergency situations, (2) find better ways to integrate mental and physical health, and (2) gather feedback from younger residents in the community by surveying them in schools.

I'm not always sure we're asking the right people. Are we asking the **ER staff**? What about **doing something like this with the ER staff** during one of their staff meetings or during one of their team meetings or something so that you can get a better understanding? **What about EMS?** Are you asking EMS? I think EMS a lot of the time sees all of that **front-line stuff**, and the ER, so **they have to have a better idea about the emergency situations** that are going on that need addressing really quickly.

- Key Stakeholder

I think a big topic is still the **integration of physical health and mental health**. That's still a big push from the state, and so how do we do that? **How do we integrate them?** We **have an integration grant**, so we're **working with Cherry Health to provide physical and mental health some integration** and looking at shared clients that we have and then **forming hubs** and forming the **mental health and physical health and needs into one plan**.

- Key Stakeholder

The only other thing that comes to my mind is **do you do any surveying within the schools of the younger population?** The CHNA is very reflective of what I see. The one thing from my meeting with the president of the Chamber of Commerce a few weeks ago is that I really think that **we have an opportunity to start taking more preventative action within the schools**. We do the **Baby Catch program**; kind of hitting the adolescents teaching them healthy behaviors. It's really going to be a key.

- Key Stakeholder

Detailed Findings



Social Indicators

Demographics of Barry County

Barry County is predominantly a rural area, where 94.3% of its residents are White and roughly 41.1% of the population is under age 35. The median household income is \$61,016, higher than the state (\$54,938) or the nation (\$60,293).

Barry County Demographic Characteristics

	N	%
Total Population	60,057	100.0%
Gender		
Male	30,248	50.4%
Female	29,809	49.6%
Age		
Under 5	3,291	5.5%
5 to 14	7,704	12.7%
15 to 24	7,239	12.1%
25 to 34	6,489	10.8%
35 to 44	6,861	11.4%
45 to 54	8,585	14.3%
55 to 64	9,234	15.4%
65 to 74	6,362	10.6%
75 to 84	2,947	4.9%
85 and over	1,345	2.2%
Race/Ethnicity		
White/Caucasian	56,645	94.3%
Black/African American	226	0.4%
Hispanic/Latino	1,714	2.9%
American Indian/Alaskan Native	163	0.3%
Asian	333	0.6%
Native Hawaiian/Pacific Islander	3	<0.1%
Some Other Race	94	0.2%
Two or More Races	879	1.5%

	%
Household Income	
Less than \$10,000	4.4%
\$10,000 to \$14,999	2.8%
\$15,000 to \$24,999	9.1%
\$25,000 to \$34,999	8.3%
\$35,000 to \$49,999	14.3%
\$50,000 to \$74,999	23.8%
\$75,000 to \$99,999	16.0%
\$100,000 to \$149,999	14.2%
\$150,000 to \$199,999	4.4%
\$200,000 or more	2.8%
Urban/Rural Population	
Urban	22.9%
Rural	77.1%

Source: U.S. Census Bureau, American Community Survey, 2014-2018. Urban/Rural data from U.S. Census Bureau, Decennial Census, 2010.

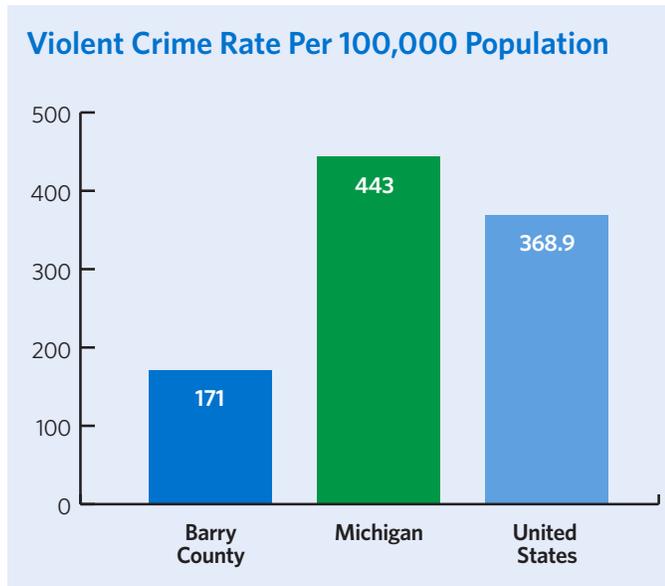
Social Indicators

Crime Rates

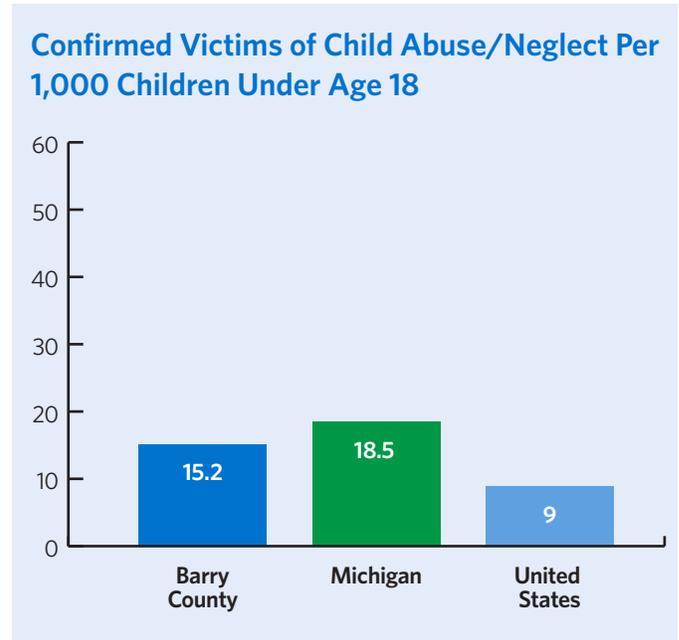
Barry County experiences considerably less violent crime than Michigan and the U.S.

The homicide rate is much lower in Barry County than the rates in Michigan and the U.S.

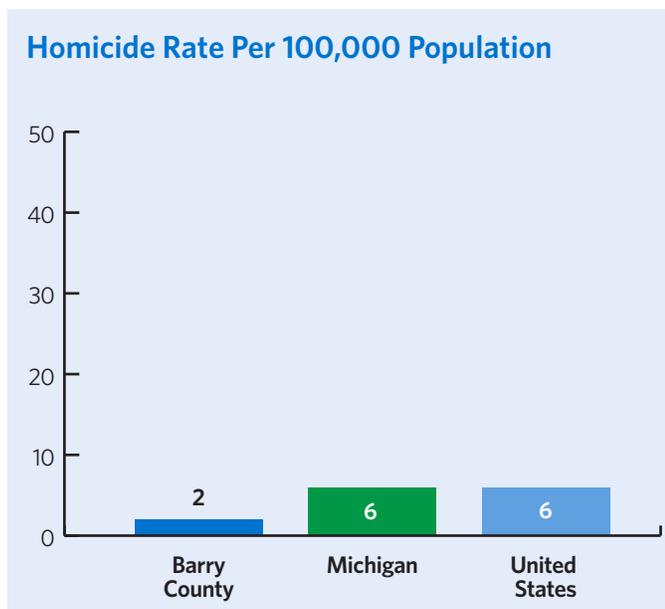
Barry County has a significantly higher rate of child abuse than the U.S. rate but a lower rate compared to Michigan's.



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



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

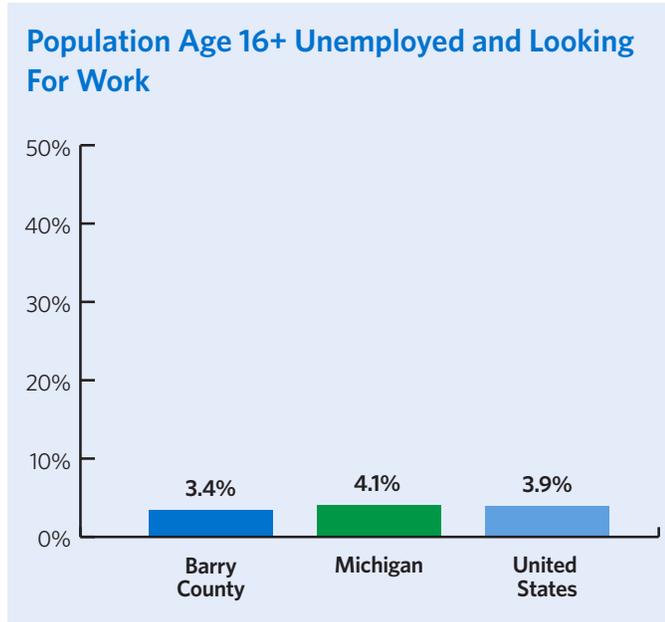


Source: County Health Rankings, 2014-2016.

Social Indicators

Unemployment

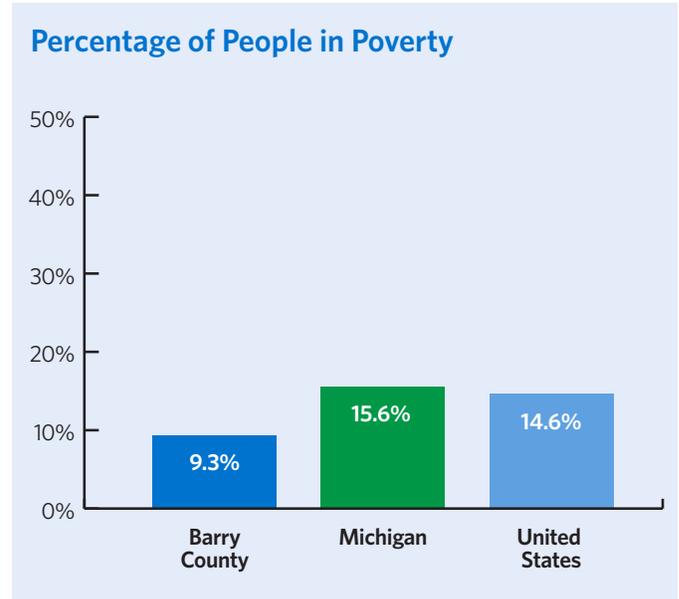
The unemployment rate in Barry County is lower than the state and national rates.



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

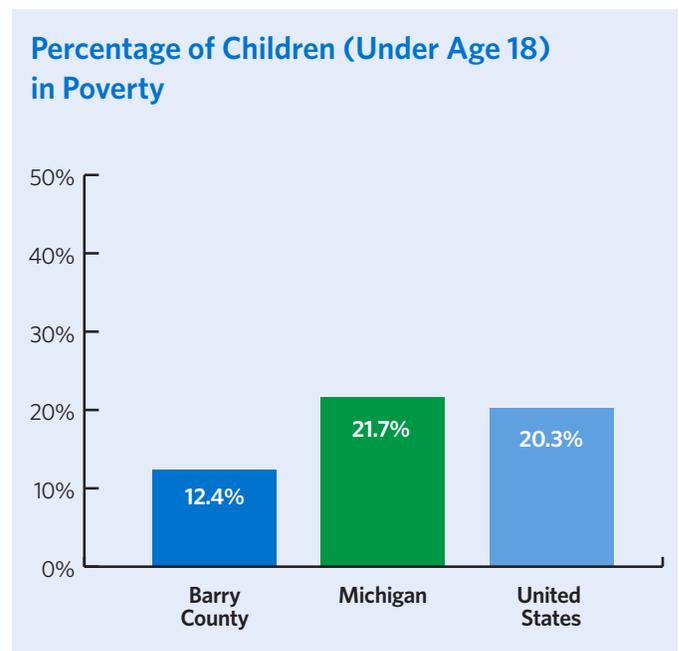
Poverty

The proportion of all people living in poverty is lower in Barry County than in Michigan and the U.S.



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

In addition, the percentage of children living in poverty is lower in Barry County than in the state and the nation.



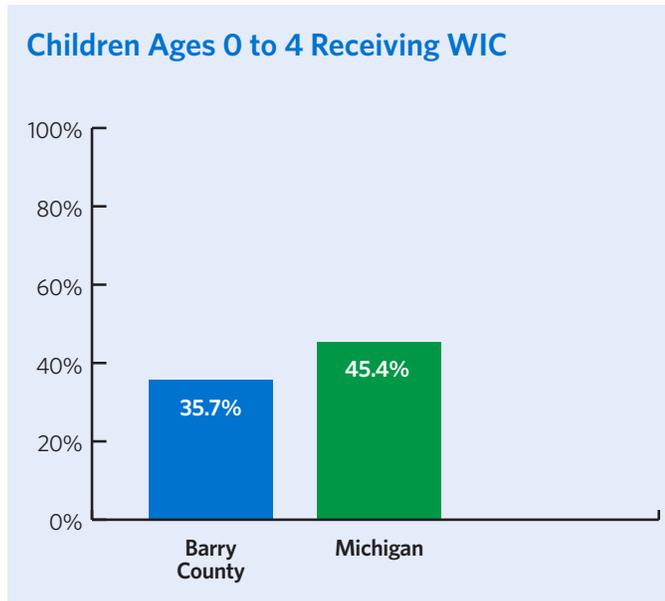
Source: U.S. Census Bureau, 2013-2017, 5-Year American Community Survey.

Social Indicators

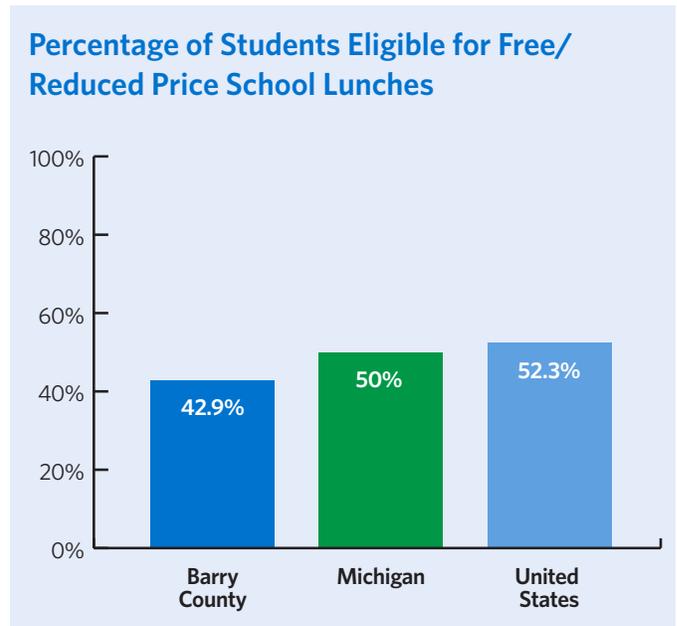
Poverty, Continued

More than one-third (35.7%) of the children aged 0-4 in Barry County receive WIC, a rate lower than the Michigan rate.

Further, four in ten (42.9%) students in Barry County are eligible for free/reduced price lunches. This proportion is lower than the proportions in Michigan and the U.S.



Source: Kids Count Data Center, 2018.



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

Social Indicators

Poverty, Continued

The proportion of all families living in poverty is much lower in Barry County compared to the proportions in the state and the nation.

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

Almost one in four (23.9%) single-female families with children under age five from Barry County live in poverty, a rate much lower than the state or the U.S.

Poverty Levels

	Barry County	Michigan	U.S.
All Families			
With children under age 18	9.6%	18.4%	16.7%
With children under age 5	7.6%	20.6%	16.2%
Total	5.5%	10.9%	10.5%
Married Couple Families			
With children under age 18	3.4%	7.5%	7.5%
With children under age 5	3.9%	6.9%	5.9%
Total	2.9%	4.9%	5.3%
Single Female Families			
With children under age 18	35.9%	42.5%	38.7%
With children under age 5	23.9%	49.5%	43.7%
Total	25.6%	31.3%	28.8%

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

Social Indicators

Education

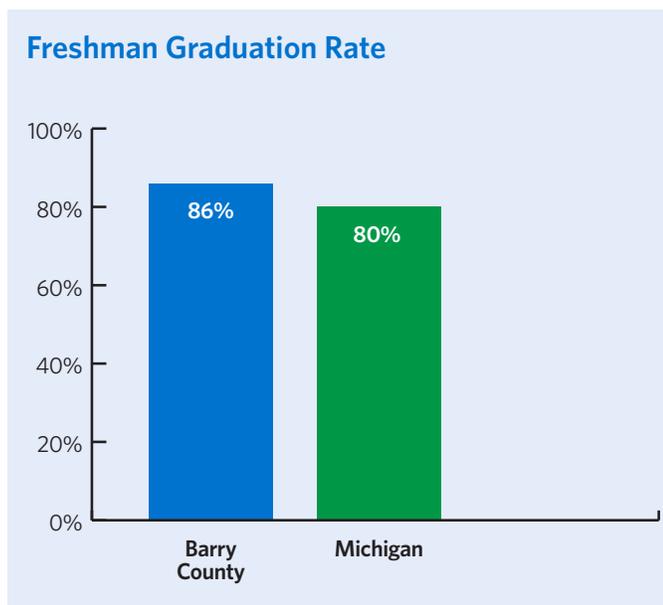
Barry County has a greater proportion of adults, both men and women, whose highest educational achievement is high school graduate compared to MI and the U.S. Moreover, the rate of adults who have earned a Bachelor's degree or higher is lower compared to Michigan or the U.S.

On the other hand, the freshman graduation rate is higher in Barry County than in the state.

Education Level (Among Adults Age 25+)

	Men			Women		
	Barry County	MI	U.S.	Barry County	MI	U.S.
No Schooling Completed	0.6%	1.1%	1.4%	0.4%	1.0%	1.4%
Did Not Graduate High School	9.2%	9.4%	11.9%	5.9%	8.1%	10.6%
High School Graduate, GED, or Alternative	39.3%	30.0%	28.1%	35.8%	28.6%	26.6%
Some College, No Degree	24.7%	23.6%	20.5%	23.3%	23.6%	21.0%
Associate's Degree	9.1%	8.0%	7.4%	12.8%	10.5%	9.1%
Bachelor's Degree	11.1%	16.9%	18.9%	15.7%	17.2%	19.4%
Master's Degree	4.2%	7.4%	7.7%	5.1%	8.8%	9.1%
Professional School Degree	1.1%	2.1%	2.4%	0.8%	1.3%	1.7%
Doctorate Degree	0.7%	1.5%	1.7%	0.3%	0.9%	1.1%

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



Source: County Health Rankings, 2016-2017.

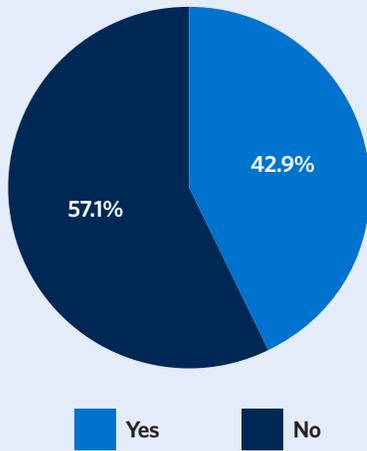
Social Indicators

Environmental Factors

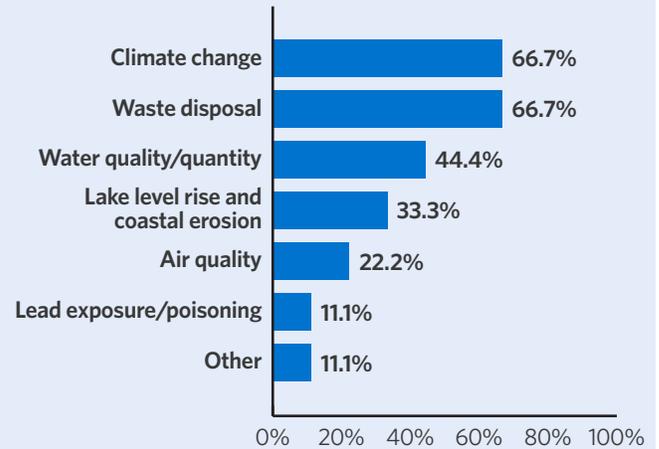
Four in ten (42.9%) Key Informants surveyed indicate they are concerned about environmental factors that could impact the health of area residents in the next few years.

Of those who are concerned, two-thirds (66.7%) cite climate change and an equal proportion report waste disposal as the top two environmental concerns.

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=21); Q11a: (If yes) What are the environmental factors that you think could impact the health of area residents? (Multiple response) (n=9)

Social Indicators

Adverse Childhood Experiences

All 6 Key Stakeholders are aware of ACEs data and what it entails and all think it is important that researchers collect such data for CHNAs; in fact, 5 think it is “very” or “extremely” important.

Key Stakeholders see the importance of ACEs to understand an individual’s experience and see how it can lead to negative adult outcomes. Spectrum Health also has to do a better job of sharing this, and all, information from the CHNA with other community organizations and leaders who are also important partners in addressing the health climate of the community.

I think it’s **extremely important** to collect that data **from a clinical standpoint** in **order to understand the individual’s experience and their trauma**. Then **determine how that could direct treatment** or even **what resources may need to be in place or better applied** in the community.

– Key Stakeholder

It’s just another aspect of community health to look at and see **how it connects with some of the other issues**, like substance abuse, mental health, access to care, tobacco use, and chronic disease. **They are all interrelated**.

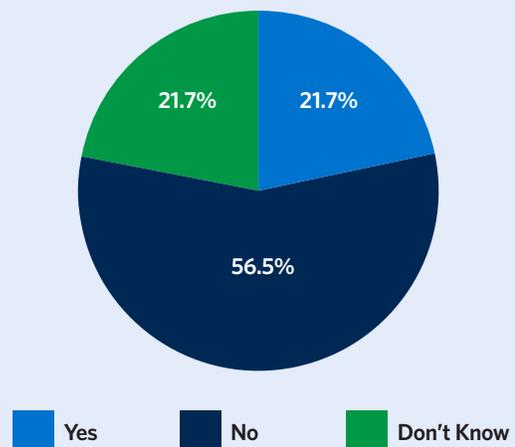
– Key Stakeholder

Yes. I know the term, but **I don’t remember seeing that**, and I’m not sure that we actually saw that in the report. **I also sit on the Governor’s Task Force for Child Abuse and Neglect. I think that I need to get that information**.

– Key Stakeholder

Despite the fact that ACEs are considered important as predictors of adult outcomes, only 21.7% of Key Informants can confirm that they, or their organization, screen patients/clients for adverse childhood experiences.

Currently Screening for Adverse Childhood Experiences (ACEs)



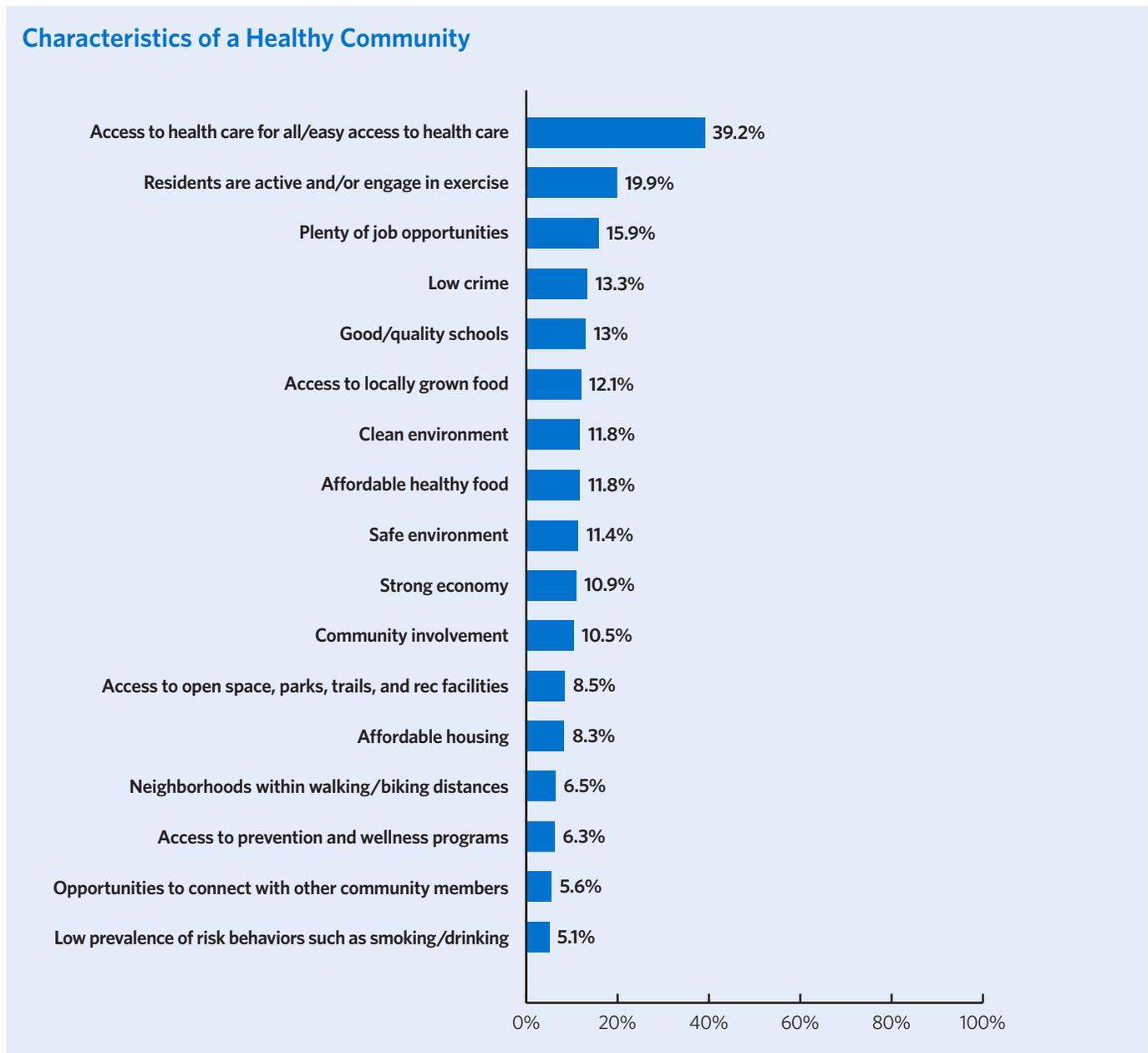
Source: Key Stakeholder Interviews, Q4: Are you aware of the ACEs (Adverse Childhood Experiences) data that came out of the last CHNA/BRFS study conducted in 2017, or are you aware of ACEs data in general? (n=6); Q4a: (If yes) How important is it that we collect this type of data in the CHNA? (n=6); 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=23)

Community Characteristics

Characteristics of a Healthy Community

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

Four in ten (39.2%) area residents define a healthy community as one where everyone has access to health care.



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=391).

Community Characteristics

Characteristics of the SHP Community

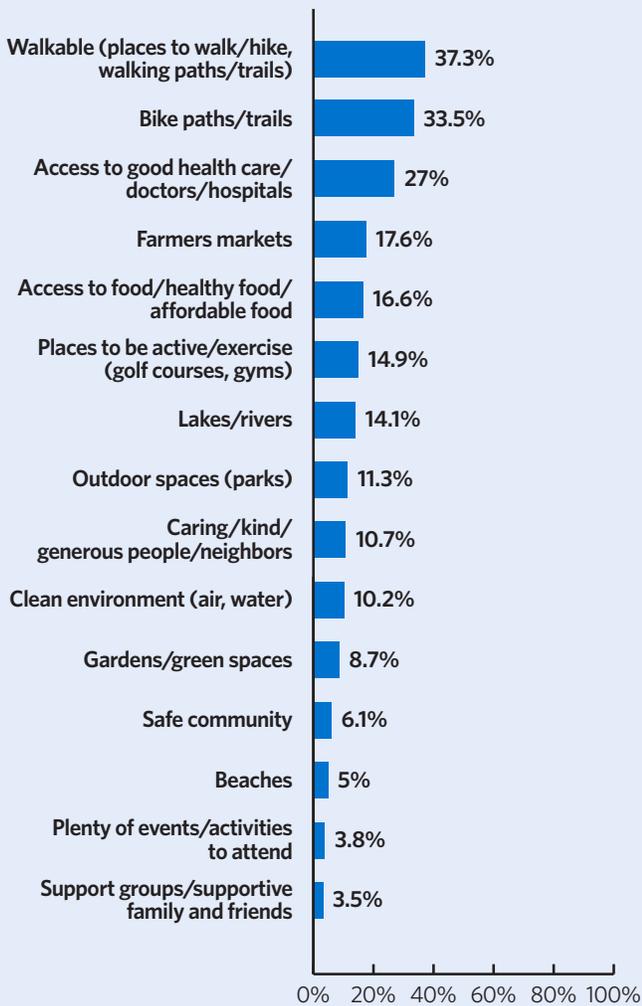
A major SHP community characteristic that makes it easy for residents to be healthy is the plethora of outdoor spaces that are conducive to being active: walking trails/paths/sidewalks, bike trails/paths, parks, lakes, and rivers.

Some residents (27.0%) also say they have access to quality health care and health professionals.

When asked what characteristics of their community make it hard to be healthy, residents report personal responsibility and the availability of fast/junk food at the top, followed by the cost of health care, winter/bad weather, a poor economy, and having to travel for things due to the remoteness or ruralness of the area.

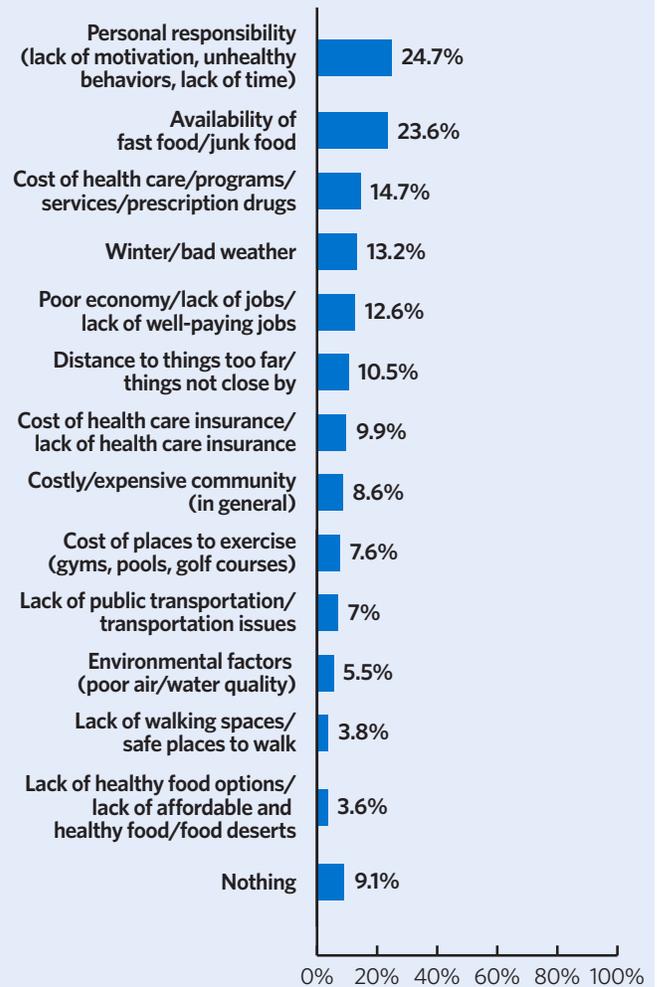
One in ten (9.1%) area adults say there is nothing in their community that makes it hard to be healthy.

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=392).

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



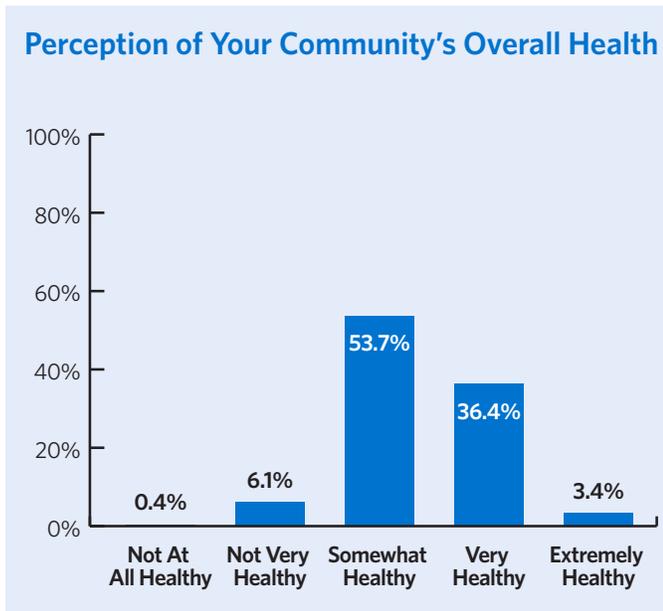
Source: Resident Telephone Survey: Q5: On the other hand, what are the primary characteristics of your community that make it hard to be healthy? (Multiple response) (n=387).

Community Characteristics

Overall Health of the SHP Community

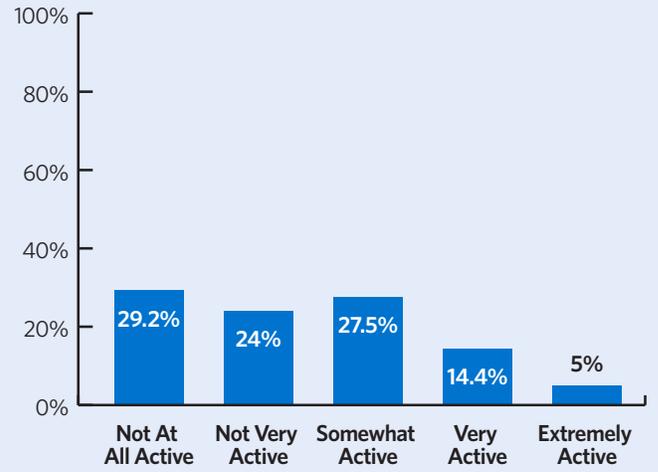
Four in ten (39.7%) area residents believe their community is very or extremely healthy overall. Almost one in seven (14.6%) see their community as not very or not at all healthy.

Four in ten (42.6%) area adults are not active in their community when it comes to being involved with organizations, town commissions/boards, non-profits, volunteerism, etc.



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=388).

Degree to Which You are Active in Your Community



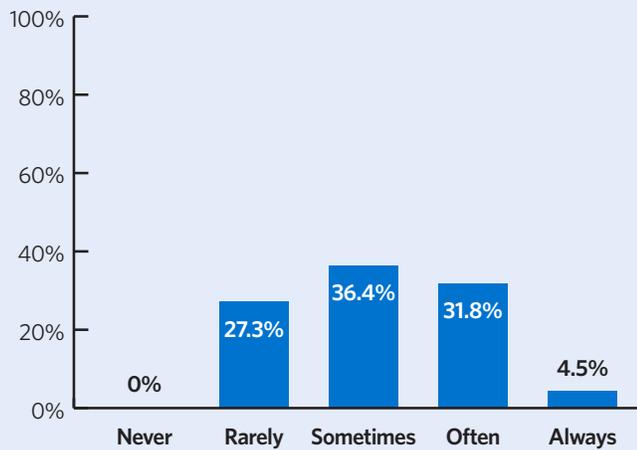
Source: Resident Telephone Survey: Q20: How active would you say you are in your community when it comes to things like being involved in civic organizations, volunteering, town commissions/boards, non-profits, etc.? Would you say...? (n=411).

Community Characteristics

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 in three (36.4%) say that social determinants of health are considered only sometimes and another 27.3% say they are considered rarely, when developing treatment/care plans for area residents.

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



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=22)

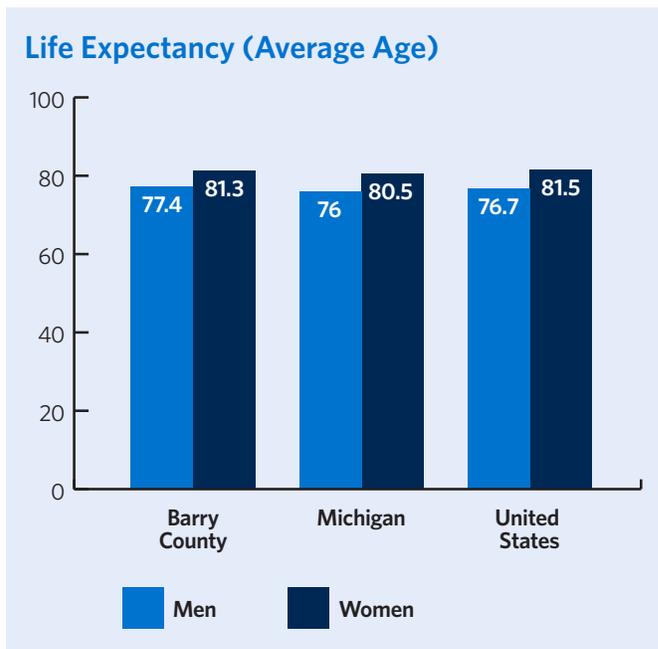
Health Status Indicators

Life Expectancy and Years of Potential Life Lost

For Barry County men, life expectancy is higher compared to the state and nation. For women, the rate is higher than the state and on par with the U.S.

Barry County residents experience fewer years of potential life lost overall compared to Michigan, and specifically to accidents and heart disease.

On the other hand, Barry County residents experience more years of potential life lost for malignant neoplasms and chronic lower respiratory diseases.



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

Years of Potential Life Lost

	Michigan		Barry County	
	Rank	Rate	Rank	Rate
All Causes		7992.0		7233.5
Malignant neoplasms (All)	1	1571.6	1	1885.8
Accidents	2	1434.6	3	964.2
Diseases of the heart	3	1283.9	2	978.5
Drug-induced deaths	4	1031.2		**
Intentional self-harm (Suicide)	5	431.5		**
Chronic lower respiratory diseases	6	243.3	4	355.8

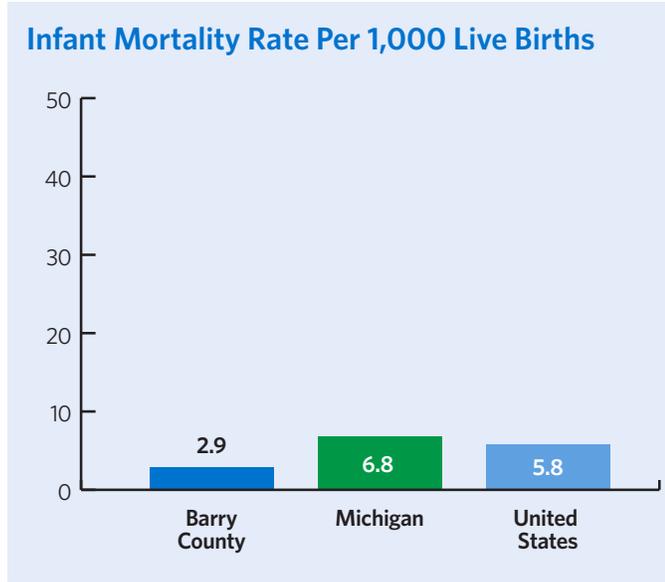
Source: Michigan DHHS, Division of Vital Records and Health Statistics, Geocoded Michigan Death Certificate Registry, 2017.

Note: ** = data do not meet standards of reliability and precision OR have a zero value.

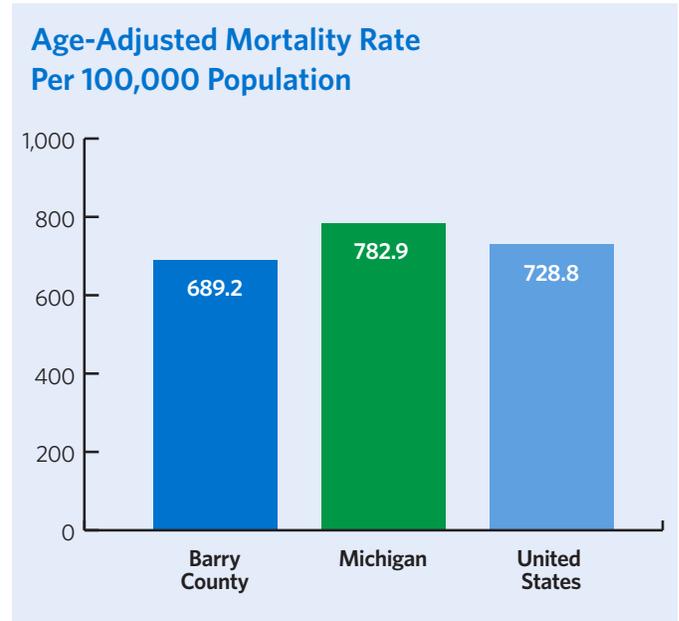
Health Status Indicators

Mortality Rates

The infant mortality and age-adjusted mortality rates are lower in Barry County compared to the state and national rates.



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



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.

Health Status Indicators

Leading Causes of Death

Heart disease and cancer are the leading causes of death in Barry County, the state, and the nation.

Barry County has lower death rates from heart disease, unintentional injuries, and stroke compared to Michigan and the U.S.

The death rate from cancer is higher in Barry County compared to the nation and on par with the state rate.

The death rate from chronic lower respiratory diseases is much higher in Barry County compared to the state and national rates.

Years of Potential Life Lost

	Michigan		U.S.		Barry County	
	Rank	Rate	Rank	Rate	Rank	Rate
Heart Disease	1	195.9	1	165.5	2	153.0
Cancer	2	161.1	2	155.8	1	161.0
Unintentional injuries	3	53.9	3	47.4	4	44.7
Chronic Lower Respiratory Diseases	4	44.3	4	40.6	3	53.6
Stroke	5	39.2	5	37.3	6	29.4
Alzheimer's Disease	6	34.5	6	30.3	5	33.7
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		158.7

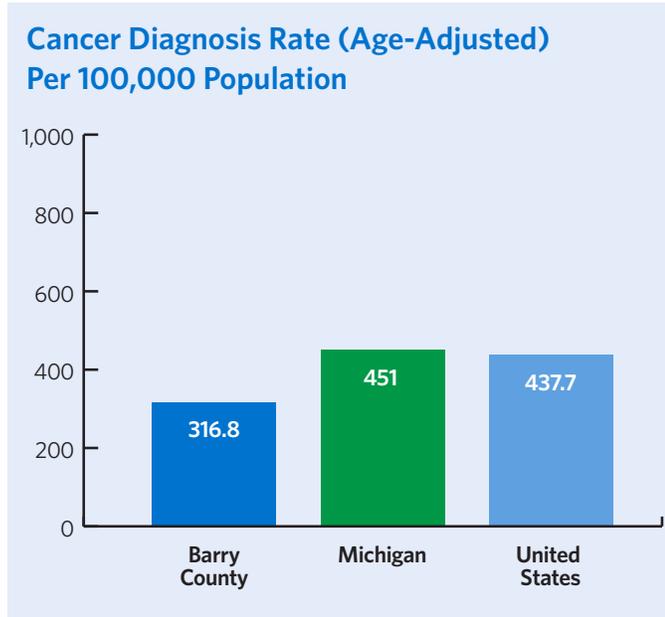
Source: Michigan Department of Health and Human Services, 2017 for MI and counties, 2016 for U.S.

Note: ** = data do not meet standards of reliability and precision OR have a zero value.

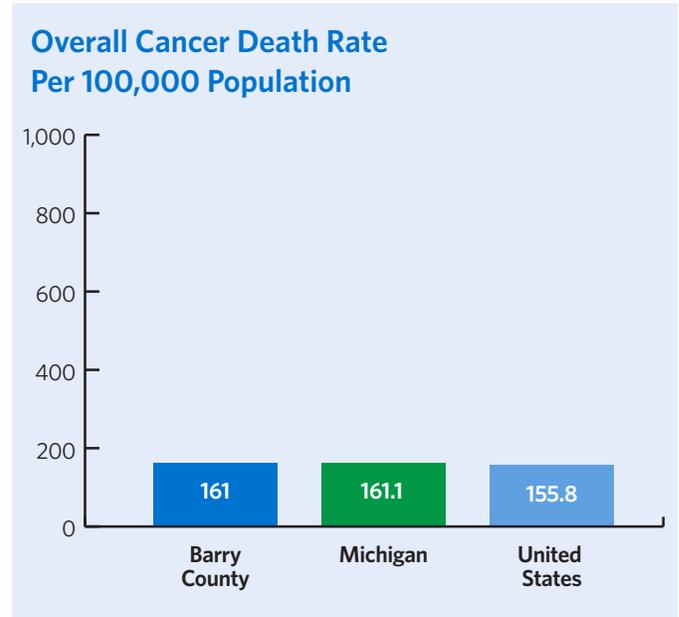
Health Status Indicators

Cancer Diagnosis and Death Rates

Barry County has a lower cancer diagnosis rate compared to the state and national rates, but the cancer death rate is higher in Barry County compared to the rate in the U.S.



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



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

Health Status Indicators

Chronic Conditions

Three in ten (30.0%) SHP area adults report having arthritis and more than one-fourth (27.1%) report chronic pain. One in eight (12.1%) have diabetes and an additional 23.6% have pre-diabetes.

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

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

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

Area adults with annual household incomes under \$20,000 are more likely to have asthma, diabetes, and COPD compared to adults with higher household incomes.

Prevalence of Chronic Diseases by Demographics

	TOTAL	Gender		Race		Age						
		Men	Women	White	Non-White	18-24	25-34	35-44	45-54	55-64	65-74	75+
Chronic pain	30.0%	31.5%	28.6%	29.6%	39.2%	1.6%	12.1%	14.2%	33.8%	43.8%	51.3%	55.7%
Arthritis	27.1%	28.1%	26.1%	27.8%	17.8%	7.2%	6.7%	29.4%	27.3%	39.4%	40.9%	29.2%
Pre-diabetes	23.6%	23.3%	23.8%	22.2%	39.5%	28.8%	4.3%	8.2%	18.7%	38.8%	37.9%	36.3%
Lifetime asthma	14.5%	9.5%	19.1%	13.7%	26.3%	3.4%	37.2%	8.9%	16.1%	13.4%	14.1%	9.0%
Diabetes	12.1%	13.9%	10.4%	12.5%	5.4%	2.3%	4.7%	2.1%	11.0%	15.6%	25.8%	28.1%
Current asthma	9.4%	3.9%	14.5%	9.2%	13.1%	3.4%	20.1%	6.8%	11.7%	5.3%	11.9%	8.1%
COPD	4.9%	3.9%	5.9%	4.3%	15.8%	0.0%	0.0%	0.0%	8.1%	4.6%	12.8%	9.8%

Continued

	TOTAL	Education				Income					Poverty Level	
		<High School	HS Grad	Some College	College Degree	<\$20K	\$20K- <\$35K	\$35K- <\$50K	\$50K- <\$75K	\$75K+	Below Poverty Level	Above Poverty Level
Chronic pain	30.0%	30.6%	28.3%	33.6%	27.1%	23.1%	38.7%	35.0%	26.3%	21.3%	29.6%	30.9%
Arthritis	27.1%	35.9%	25.3%	29.9%	21.8%	25.1%	37.2%	20.3%	30.8%	27.4%	37.1%	27.4%
Pre-diabetes	23.6%	17.0%	27.7%	23.8%	16.0%	25.2%	27.8%	17.9%	26.1%	5.5%	15.1%	20.9%
Lifetime asthma	14.5%	51.9%	10.0%	10.7%	13.8%	17.3%	10.9%	13.4%	4.8%	10.0%	15.4%	10.1%
Diabetes	12.1%	21.5%	11.4%	11.5%	10.4%	16.9%	11.5%	11.9%	7.0%	12.0%	11.3%	11.4%
Current asthma	9.4%	31.6%	7.9%	5.3%	10.4%	12.7%	6.1%	11.9%	4.3%	5.3%	8.1%	7.6%
COPD	4.9%	6.8%	5.6%	2.8%	6.3%	12.2%	6.4%	7.9%	1.7%	2.1%	10.8%	4.8%

Source: 2017 SHP Behavioral Risk Factor Survey, (n=594)

Health Status Indicators

Chronic Conditions, Continued

Roughly one in twelve (8.0%) SHP 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 cardiovascular disease and cancer.

White adults are more likely than non-White adults to have cancer, heart attacks, and strokes.

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

Area adults with annual household incomes under \$20,000 are more likely to have skin cancer and heart attacks compared to adults with higher household incomes.

Prevalence of Chronic Diseases by Demographics

	TOTAL	Gender		Race		Age						
		Men	Women	White	Non-White	18-24	25-34	35-44	45-54	55-64	65-74	75+
Any cardiovascular disease*	8.0%	10.7%	5.4%	8.0%	7.1%	0.0%	0.0%	2.7%	0.9%	11.0%	28.3%	21.0%
Other (non-skin) cancer	7.7%	9.7%	5.9%	7.9%	6.3%	0.0%	0.0%	8.3%	1.6%	10.3%	23.1%	16.6%
Skin cancer	5.7%	6.9%	4.5%	6.0%	0.8%	0.0%	0.0%	0.0%	4.9%	6.3%	15.1%	17.3%
Stroke	4.2%	6.7%	1.8%	4.1%	5.4%	0.0%	0.0%	0.0%	0.0%	7.8%	13.9%	10.4%
Heart attack	3.9%	4.5%	3.2%	4.0%	1.6%	0.0%	0.0%	0.0%	0.9%	3.8%	15.5%	13.8%
Angina/coronary heart disease	2.8%	4.7%	1.1%	3.0%	0.0%	0.0%	0.0%	2.7%	0.0%	3.5%	11.5%	4.2%

Continued

	TOTAL	Education				Income					Poverty Level	
		<High School	HS Grad	Some College	College Degree	<\$20K	\$20K- <\$35K	\$35K- <\$50K	\$50K- <\$75K	\$75K+	Below Poverty Level	Above Poverty Level
Any cardiovascular disease*	8.0%	11.8%	7.5%	9.2%	4.7%	11.6%	10.3%	7.9%	6.8%	4.7%	7.4%	8.1%
Other (non-skin) cancer	7.7%	9.2%	7.9%	7.4%	7.2%	9.8%	14.0%	5.1%	11.4%	5.1%	11.1%	8.7%
Skin cancer	5.7%	10.7%	4.9%	5.6%	4.8%	10.0%	4.0%	2.9%	3.9%	8.7%	6.4%	5.0%
Stroke	4.2%	3.7%	5.2%	4.7%	1.2%	0.8%	5.7%	1.3%	5.2%	4.7%	0.5%	4.4%
Heart attack	3.9%	11.8%	3.4%	3.8%	1.1%	7.3%	5.8%	4.1%	0.0%	1.5%	4.7%	3.4%
Angina/coronary heart disease	2.8%	3.8%	2.3%	3.3%	2.5%	4.1%	5.4%	3.3%	4.1%	0.0%	2.6%	3.5%

Source: 2017 SHP Behavioral Risk Factor Survey, (n=594). *Any cardiovascular disease = respondent said they had at least one of the following: heart attack, angina/coronary heart disease, or stroke.

Health Status Indicators

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) substance use disorder, including addiction to prescription drugs and opiates, (2) obesity, and chronic conditions like diabetes and hypertension that are connected, (3) access to care, including lack of both primary care and specialty care, (4) mental health, and (5) smoking.

- Obesity (2)
- Mental health (2)
- Substance use disorder (2)
- Tobacco use/smoking (2)
- Access to care
- Addiction to prescription drugs
- Chronic disease issues
- Dental issues
- Diabetes
- Hypertension
- Inadequate resources for hospitalization (lack of beds)
- Lack of primary care
- Lack of specialty care
- Lifestyle choices (diet, exercise)
- Need to integrate physical and behavioral health services better
- Opioid crisis

Key Stakeholders say additional health issues or concerns are an increase in suicides, dementia and its complications, and the lack of effective collaboration and cooperation between and among area organizations, in particular health care, education, mental health, and the courts.

The **number of people that are threatening or attempting suicide seems to have gone up over the last year**, as well.

- Key Stakeholder

I put **dementia** in there. I think that's **really emerging as a concern and all the complications that go with that**. I think that's probably the one in terms of health issues.

- Key Stakeholder

I feel like it's **harder for me to partner with certain segments**. I coordinate a collaborative coalition that we're all supposed to be working together, and I **feel like there are certain entities that are members, but it's only on paper because they don't have the time to be out of their silo**. So, it's **harder to have a true collaborative effort if you can't always get people to the table. Health care and education - that always seems to be where we run into that**.

- Key Stakeholder

Probably **the biggest issue right now is understanding each other's roles: the hospital, Community Mental Health, and then the court; how the three of us intersect and understanding the law and the roles specific to court-ordered pickup orders**.

- Key Stakeholder

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=6); Q1b: What are the new issues that are pressing or concerning, if any? (n=6)

Health Status Indicators

Most Pressing Health Issues or Concerns, Continued

The reasons Key Stakeholders give for why substance use disorder and mental health continue to be pressing health issues and concerns center largely on their comorbidity and the lack of treatment for these conditions. Moreover, the prevalence of substance use disorder appears to be increasing yearly and the age of the user appears to be decreasing.

Substance abuse disorder

The **mental health and the substance abuse** - we definitely live in a community with **very rural areas**, and we've **seen the substance abuse rates increase year over year**, and one of the more concerning ones within Barry County is **vaping**. It is **among both adults and adolescents**, but **they're really targeting middle-school kids**, and so we really **need to get the education out**. The **effects of it are more irreversible** than just regular smoking, plus with **vaping they can use different substances within it more easily**.

- Key Stakeholder

I knock on wood that we have not had overdoses from opioids, but we've got a lot of people that are **eating meth and dying**, so I would say **substance abuse is still a huge issue**.

- Key Stakeholder

Mental health

For example, Barry County Community Mental Health, **we can only really provide services to those who are severely and persistently mentally ill**. The community doesn't understand that because if you have somebody who's **struggling with anxiety**, you think they're pretty severely ill, right, but the regulations make it so **difficult to get care**. **Lack of care**, like **lack of psych beds, lack of substance-use recovery**, that's still there, **absolutely**.

- Key Stakeholder

Some of the work we've done - the data supports the - especially in the area of substance abuse/mental health - still seeing access issues with people being able to access care appropriately.

- Key Stakeholder

A lot of those things remain issues because our substance abuse and mental health are not able to take clients that really need that assistance.

- Key Stakeholder

Source: Key Stakeholder Interviews, Q1a: In your opinion, what are the reasons they remain the top health issues in your community? (n=3); Q1b: What are the new issues that are pressing or concerning, if any? (n=3); Q1d: What are the reasons they are top issues in your community? (n=3)

Health Status Indicators

Most Pressing Health Issues or Concerns, Continued

Lifestyle choices, such as lack of exercise and poor diet, are habits that prove difficult to change and continue to prevent people from achieving optimum health. The remoteness of the area prevents primary care providers and specialists from living and working there. Organizations' unwillingness or inability to look outside of their silos prevents collaboration that would be beneficial to the community as it strives to improve the overall health climate.

Lifestyle choices The **data still around chronic disease and physical activity and nutrition still aren't very positive overall** as a community, so that's why I still mark them as issues in my book.

- Key Stakeholder

Lifestyle over the course of a lifetime - people are **not willing to change their habits**. And **if you don't change, then you never experience an improvement**, so they don't realize there's improvement on the other end if they change.

- Key Stakeholder

Lack of primary care

I think we still are going to fight that **rural issue. People want to live closer to Grand Rapids or maybe Kalamazoo**. They want to be a part of that, so you might focus yourself on that. It **takes a special person to want to live and work here in a more rural community. People come in who work in Barry County but live in a more metropolitan area**, and so **they may not be living here, where they're investing their money, their time, and their talent** in their off hours. We have one school district that **cannot pass the millage**, and that starts to **affect the community**. People who care about education and some of those things will remove their children.

- Key Stakeholder

Lack of collaboration and coordination

For me, **what I'm really struggling with is that nobody in health care seems to have time to respond to anything**. That was a really awful statement. I feel like **health care has less time to be part of the community**. Everything is **so focused on what this meeting is going to do**, what's the outcome of this meeting and what is that going to do? **Some of the networking is gone**. Some of that ability to sit down at a meeting or come to meetings because **everything has to be billable** - "if it's not billable, we can't do it" - kind of stuff.

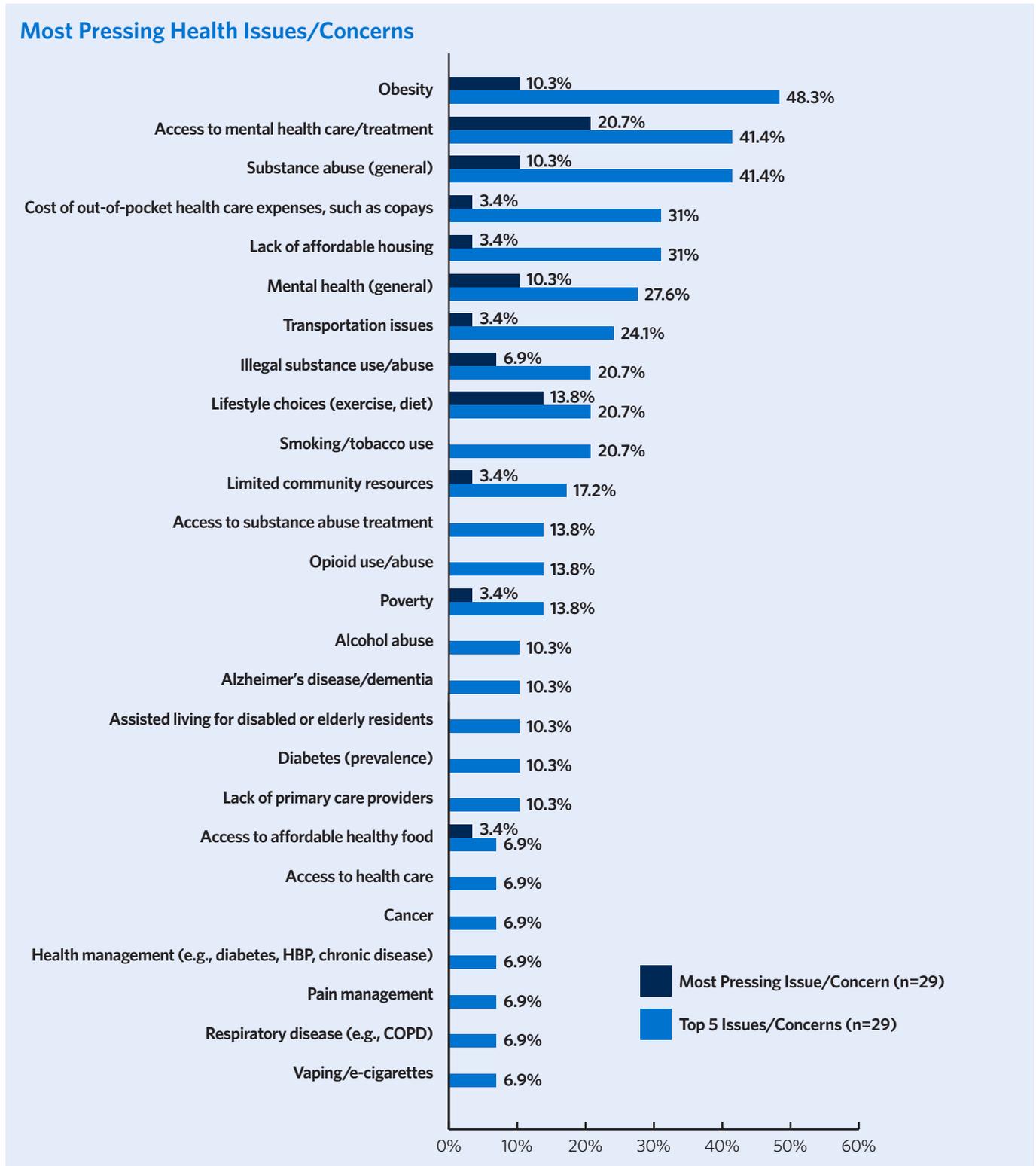
- Key Stakeholder

Source: Key Stakeholder Interviews, Q1a: In your opinion, what are the reasons they remain the top health issues in your community? (n=3); Q1b: What are the new issues that are pressing or concerning, if any? (n=3); Q1d: What are the reasons they are top issues in your community? (n=3)

Health Status Indicators

Most Pressing Health Issues or Concerns, Continued

Key Informants cite a number of pressing health issues or concerns in the SHP area today. Most often cited are mental health, especially access to treatment, lifestyle choices, obesity, substance use disorder, out-of-pocket health care costs, lack of affordable housing, and transportation issues.



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

Health Status Indicators

Most Pressing Health Issues or Concerns, Continued

Mental illness and substance use disorder, when not properly treated, are connected to so many additional societal ills such as crime, family dysfunction, and an ability to care for oneself.

Poor lifestyles choices, which are often caused by poverty, lack of resources, or addiction, also lead to further health problems such as obesity.

Moreover, obesity leads to additional health complications such as diabetes, heart disease, chronic pain, and depression.

Mental health/ access to care

No mental health psychiatry in Barry County. Primary care is trying to manage but does not have the expertise. This feeds into noncompliance with everything else. Uncontrolled mental health individuals **affect not only themselves but their children, coworkers, employers** and they often then **resort to drug use, prescription and illicit**, which just muddies the water even more.

- Key Informant

ED is new clearinghouse for all mental health/substance abuse issues. Lack resources on all fronts. **No psychiatry and few inpatient services available.**

- Key Informant

Substance abuse

The **frequency of substance abuse connected to criminal activity** noted in reported court cases reflects the critical nature of this issue. It seems **safe to infer from these incidents that much abuse remains hidden and what's known is the proverbial tip of the iceberg.**

- Key Informant

Numerous patients with substance abuse disorders in our community.

- Key Informant

Lifestyle choices

Diet and activity choices directly affect all of the major health issues we treat. Obesity, heart disease, lung disease, musculoskeletal issues all are affected.

- Key Informant

Poor diet, limited exercise leads to **obesity driven disorders** like **heart disease**, the **leading cause of death.**

- Key Informant

Health Status Indicators

Most Pressing Health Issues or Concerns, Continued

Obesity

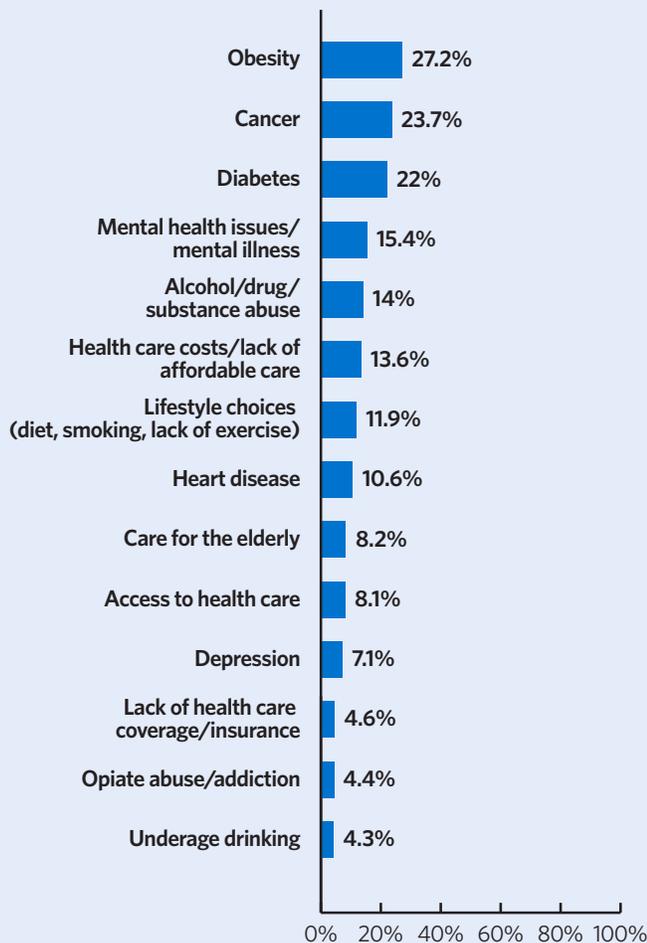
Obesity is probably a **primary driver in the vast majority of the health problems** that I see, including **diabetes, heart disease, chronic pain, and depression. Obesity is now the rule, not the exception.** Culturally, **unhealthy foods are considered normal** and people don't understand what healthy eating actually looks like.

- Key Informant

Obesity negatively affects every body system. There is a severe **lack of knowledge and/or motivation** in the general population as to the importance of appropriate body weight and how to maintain a healthy weight.

- Key Informant

Most Important Health Problems/Concerns in the Community



SHP area adults list obesity, cancer, and diabetes as the three most important health problems or concerns in the community.

Approximately one in seven area adults mention mental health issues (15.4%) and/or substance use disorder (14.0%) as most important health problems or concerns in their community.

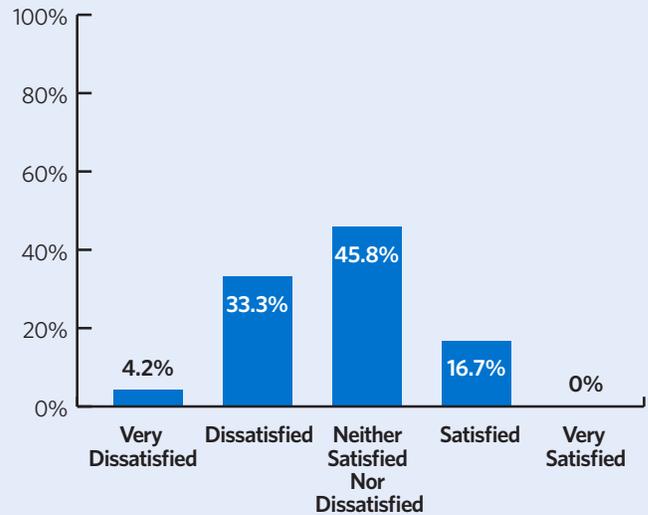
Source: Resident Telephone Survey: Q3: What are two or three of the most important health problems or concerns in your community today? (Multiple response) (n=366).

Health Status Indicators

Overall Satisfaction with Health Climate

In considering the overall health climate of the SHP area, only one in six (16.7%) 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

Most people can obtain the services they need.

Neither satisfied nor dissatisfied

I think there is **room for improvement in many areas**. **Cherry Health** assists with **healthcare access for uninsured and underinsured**, but there is a **gap for individuals with high deductibles**.

I believe that **more can be done for community residents**, but **several providers do not want to extend themselves beyond the office setting**.

Dissatisfied

Loss of inpatient hospital services at SH Pennock. Inability to keep primary care providers at Cherry Health. Loss of transportation for out of county medical care closing of Hope Network.

Obesity are methamphetamine abuse are rampant. Under appreciated harmful effects of chronic marijuana use. Apathy and neglect of parental responsibility to help their children flourish in school. Bullying and social media in children with increased isolation, depression and anxiety leading to more mental health issues.

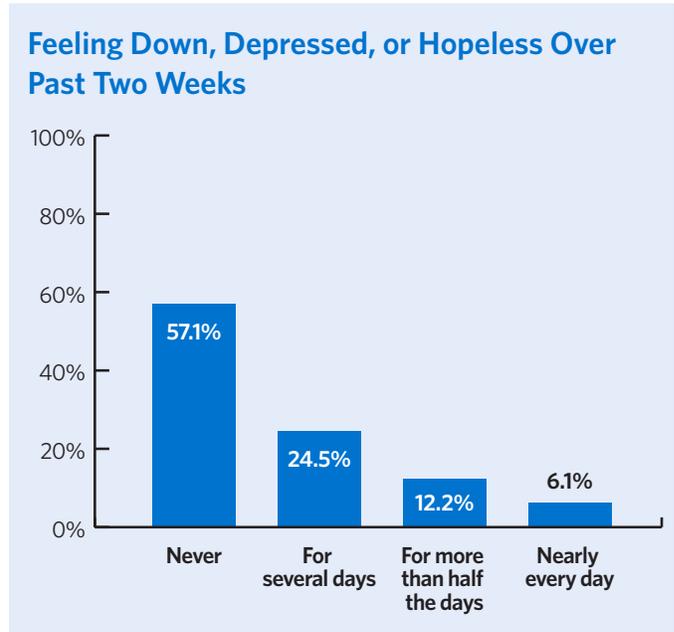
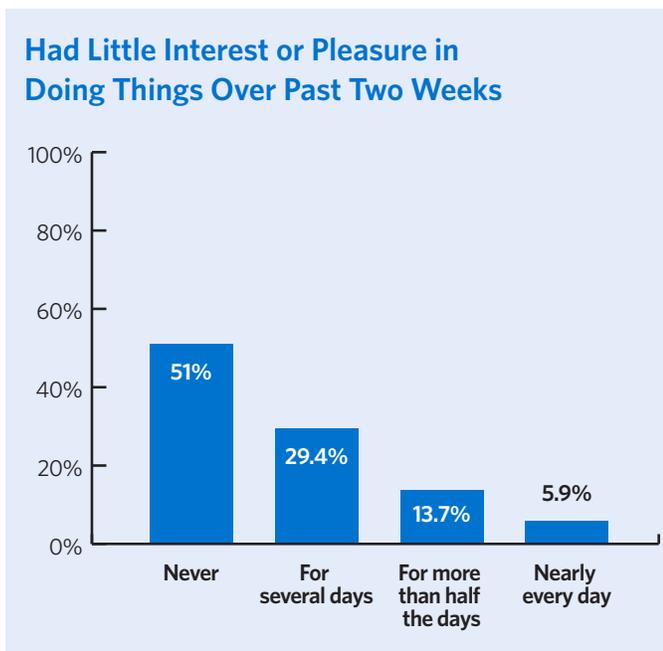
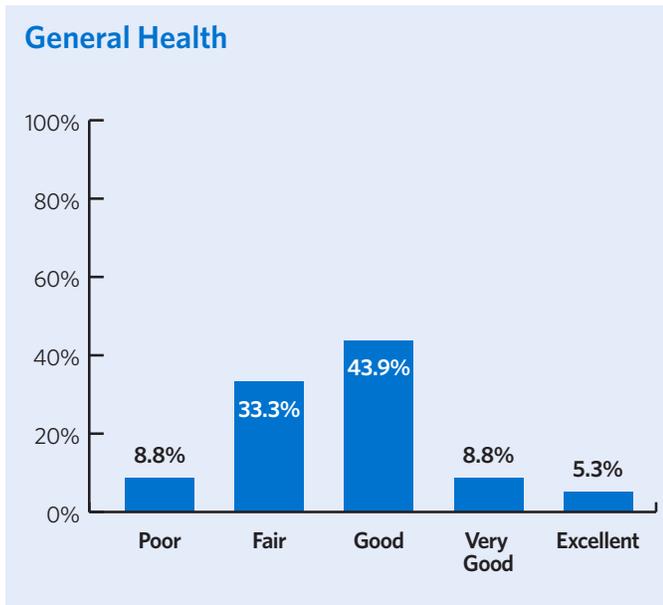
Source: Key Informant Online Survey, Q9: Taking everything into account, including health conditions, health behaviors, health care availability, and health care access, how satisfied are you overall with the health climate in your community? (n=24); Q9a: Why do you say that?

Health Status Indicators

Health of Underserved Residents

Four in ten (42.1%) underserved residents report their general health as fair or poor. Additionally, half (49.0%) had “little interest/pleasure in doing things” and 42.9% “felt down, depressed, or hopeless” at some point during the past two weeks.

Almost one in eleven (8.8%) underserved residents thought about taking their life during the past year; 5.3% of them attempted suicide in the past year.



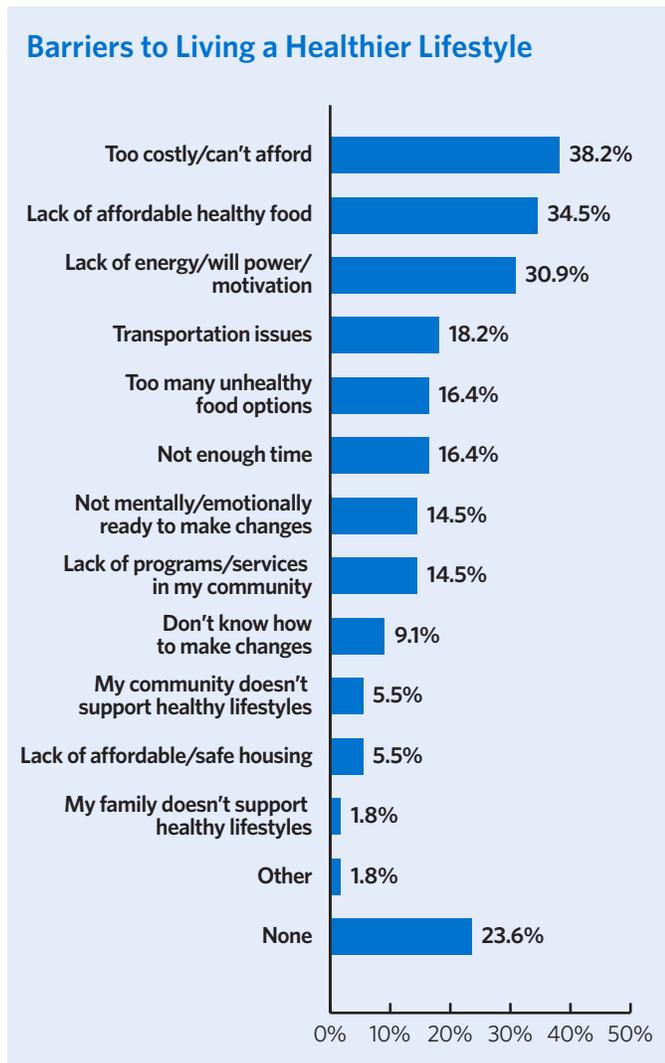
Source: Underserved Resident Self-Administered Survey: Q1: To begin, would you say your general health is...? (n=57); Q17: Over the past two weeks, how often have you been bothered by having little interest or pleasure in doing things? (n=51); Q18: Over the past two weeks, how often have you been bothered by feeling down, depressed, or hopeless? (n=49); Q19: Has there been a time in the past 12 months when you thought of taking your own life? (n=57); Q20: During the past 12 months, did you attempt to commit suicide (take your own life)? (n=57)

Health Status Indicators

Health of Underserved Residents, Continued

There are many barriers that prevent underserved residents from living healthy lifestyles, but the three most common are the high cost, lack of affordable healthy food, and lack of motivation, energy, or will-power.

Transportation issues, too many unhealthy food options, lack of time, not being emotionally or mentally ready, and lack of available programs and services are also barriers to living healthier.



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=55)

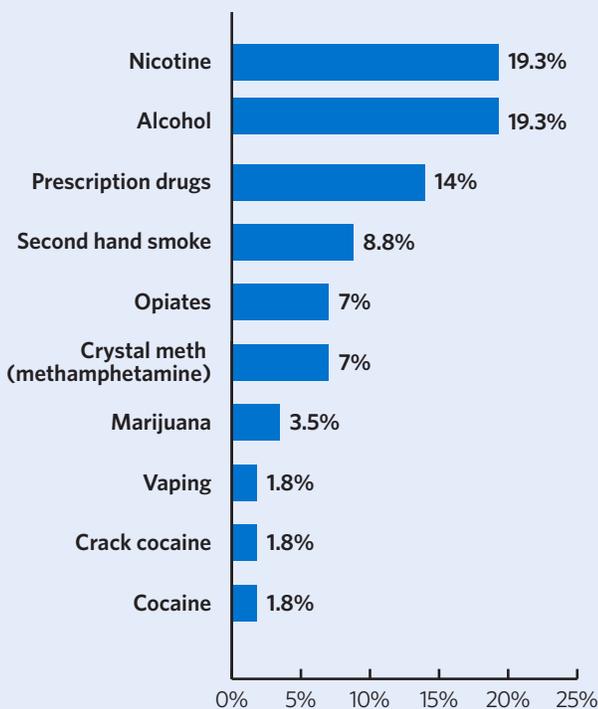
Health Status Indicators

Substance Use/Abuse

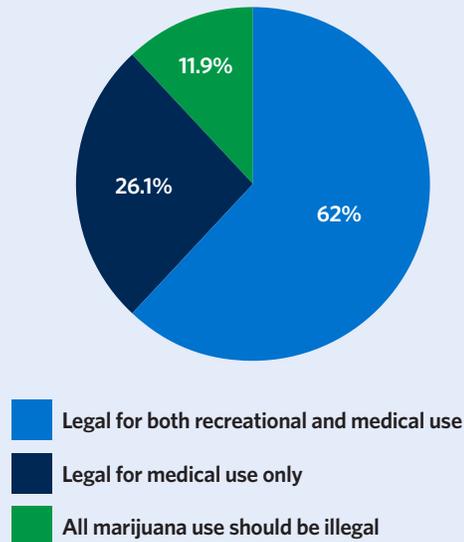
One in five (19.3%) underserved residents report that nicotine negatively impacted their family and an equal proportion report alcohol use/abuse was harmful.

Among adults in the general population, more than six in ten (62.0%) 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=57); 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=377)

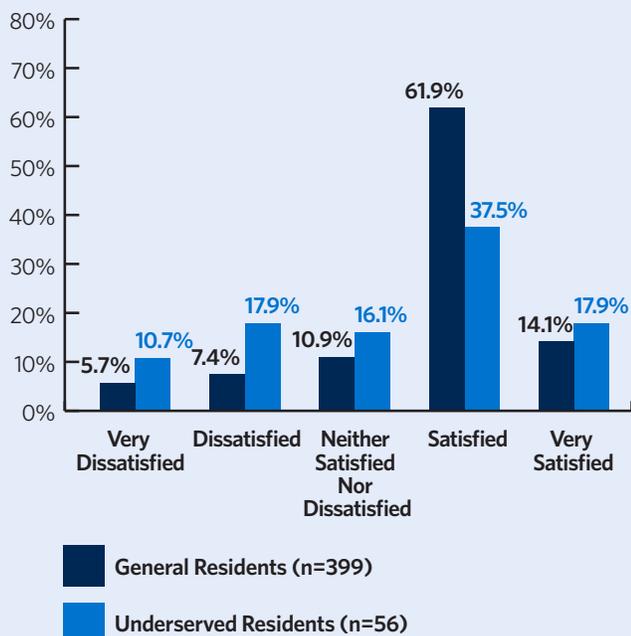
Health Care Access

Satisfaction with Health Care System

In terms of satisfaction with the health care system, underserved residents are more dissatisfied (28.6% dissatisfied/very dissatisfied) with the system overall than general residents (13.1% dissatisfied/very dissatisfied).

Reasons for dissatisfaction are many, but poor communication is cited most often. Residents are also critical of the profit-driven business model which leads to high cost.

Satisfaction with Health Care System Overall



They are **fundamentally driven by profit, not purpose.**

- General Resident

Medical **costs are too high. Everyone should be able to get good health care.**

- Underserved Resident

They **don't communicate well** and the **cost of everything is too expensive.**

- General Resident

My **local hospital refused to treat my husband** and sent him to Grand Rapids by ambulance without trying to stabilize him, then he **went into heart failure half way there, and died.**

- General Resident

I personally **cannot afford insurance but make too much to claim for Medicaid.**

- Underserved Resident

You have to have your own information about your **health care.** You need to know what is going on with your own health **so that you can tell each doctor you go to. They do not communicate with each other.**

- General Resident

Can't find a doctor that will take my insurance.

- Underserved Resident

I think it is broken it is too big to fix - more of a corporation.

- General Resident

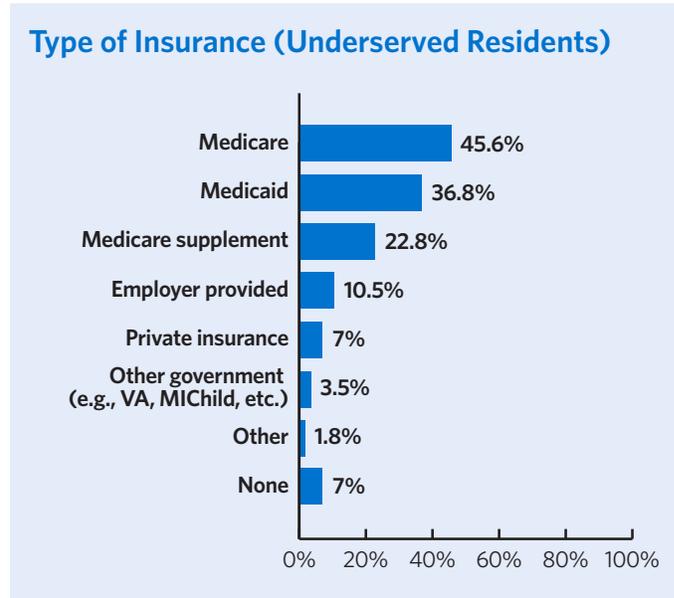
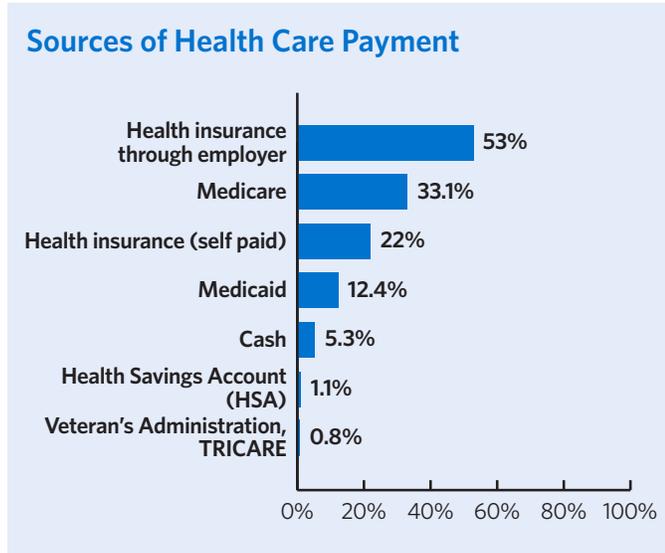
Source: Resident Telephone Survey/Underserved Resident Self-Administered Survey, Q19/Q3: How satisfied are you with the health care system overall? Q19a/Q4: (If dissatisfied) Why are you dissatisfied with the health care system overall?

Health Care Access

Payment for Health Care

The majority of adult residents pay for their health care through insurance they receive through their employer (53.0%) or via private insurance that they purchased (22.0%).

Conversely, the majority of underserved residents have either Medicare (45.6%) or Medicaid (36.8%) for health insurance, while 7.0% have no insurance.



Source: Resident Telephone Survey, Q12: How do you usually pay for your health care? (Multiple response) (n=393); Underserved Resident Self-Administered Survey, Q6: Which of these describes your health insurance situation? (Multiple response) (n=57)

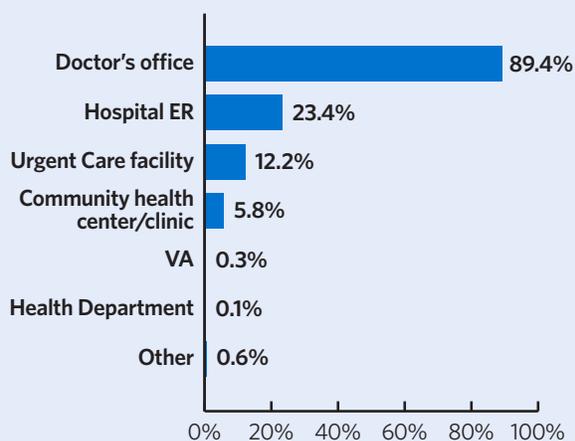
Health Care Access

Sources of Health Information

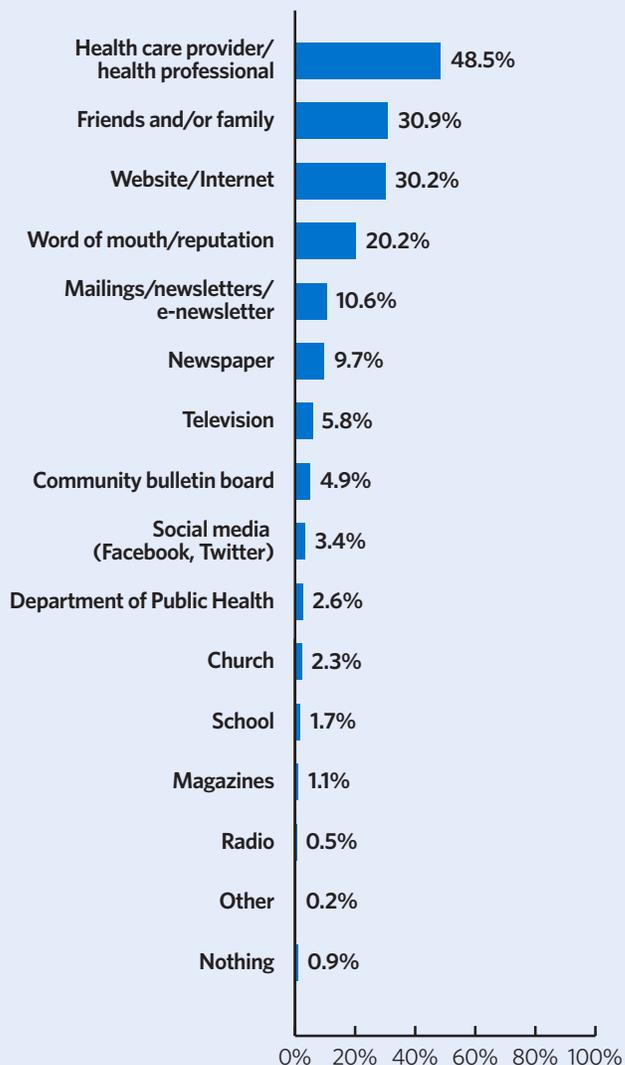
Although nine in ten (89.4%) area adults report they usually go to the doctor's office when they get sick, 23.4% visit the Emergency Room (ER).

When seeking information about available health services and programs available in the community, adults most often turn to health professionals, friends/family, the Internet, 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=399); Q10: What information sources do you use to learn about the health services and programs that are available in your community? (Multiple response) (n=397)

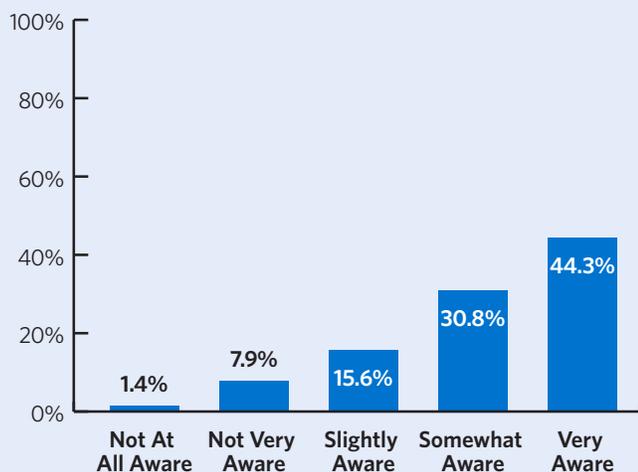
Health Care Access

Awareness and Use of Health Care Services

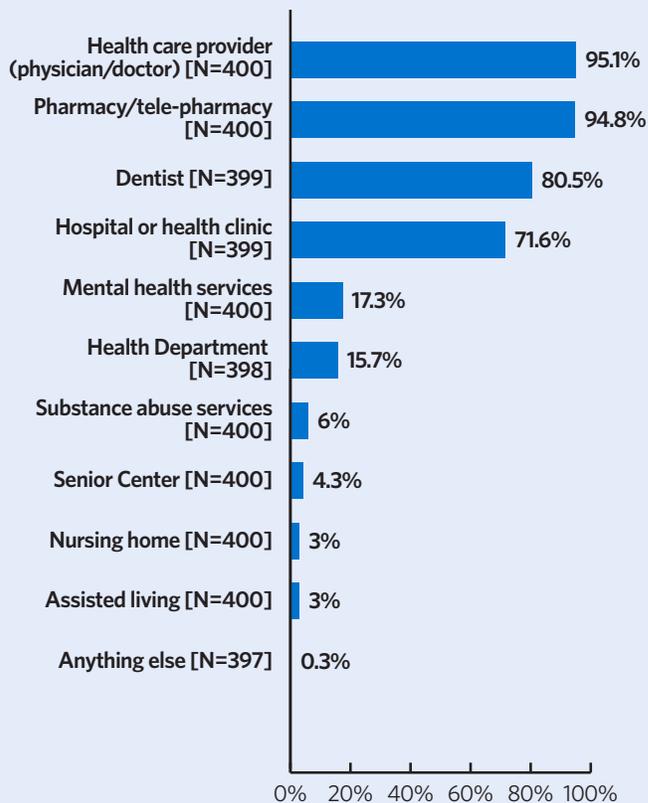
Three-fourths (75.1%) of SHP area adults say they are somewhat or very aware of health services and programs available in the area.

Almost all adults report using health care providers and pharmacies, and a vast majority using 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=398); Q7: Which of the following community health resources have you used in the past three years?

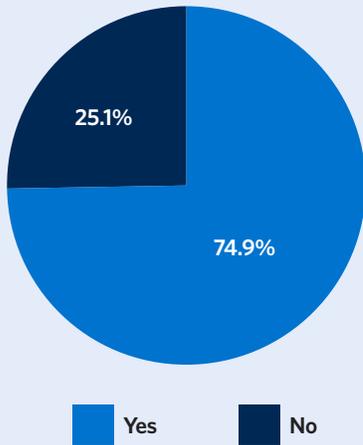
Health Care Access

Barriers to Health Care Access

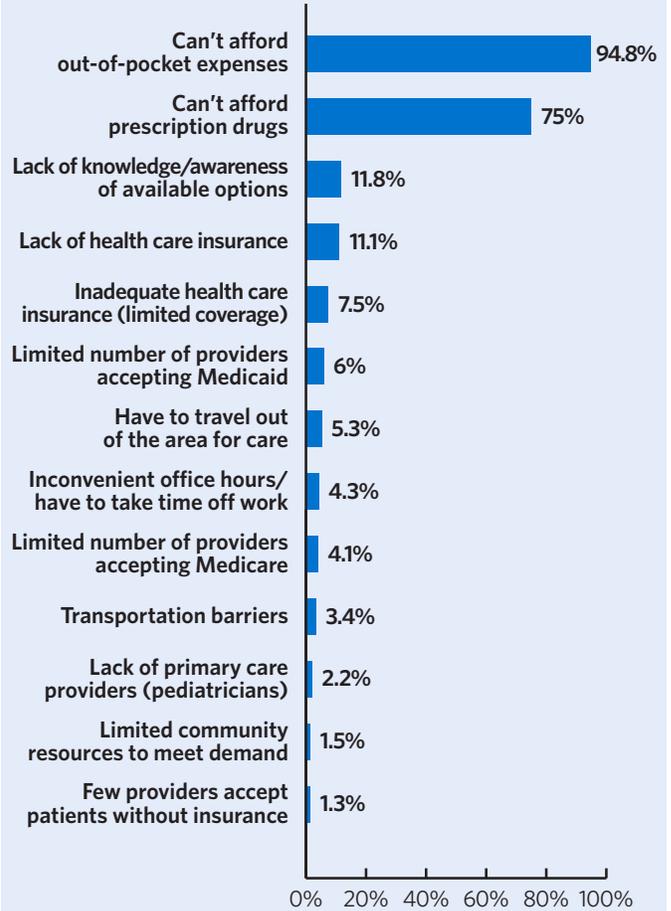
Three-fourths (74.9%) of SHP area adults believe access to health care is a critical issue or problem for some community members.

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



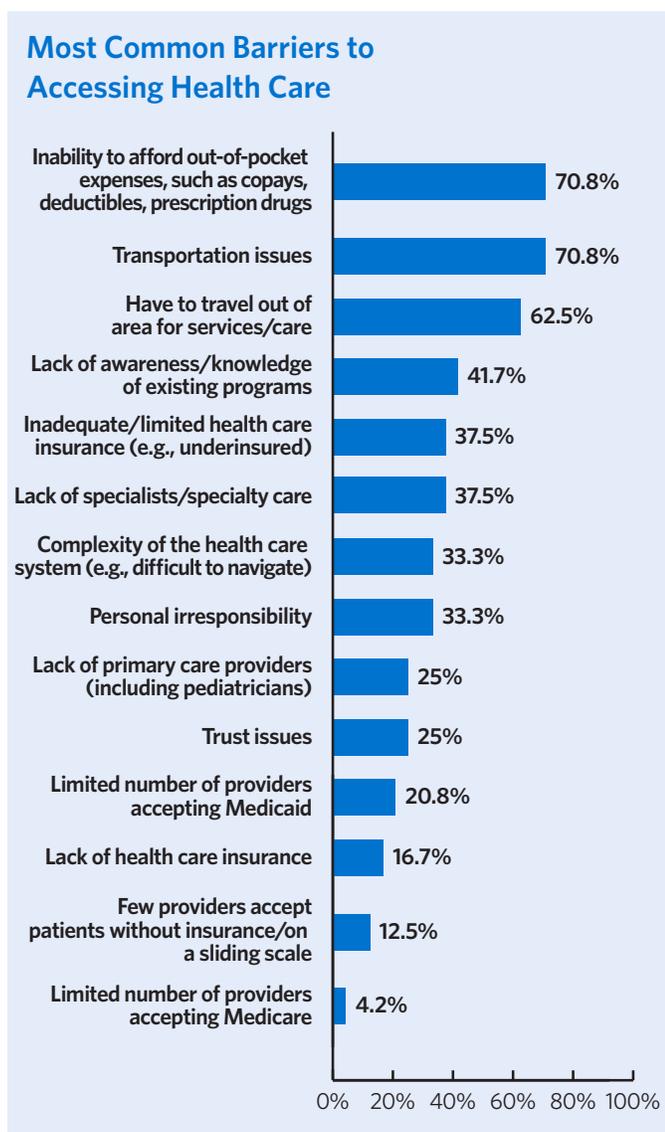
Source: Resident Telephone Survey, Q13: Do you believe that access to health care is a critical issue or problem for some residents in your community? (n=342); Q14: (If yes) In your opinion, why is access to health care an issue for some residents in your community? (Multiple response) (n=252)

Health Care Access

Barriers to Health Care Access, Continued

Key Informants report the three greatest barriers to accessing health care as the inability to afford out-of-pocket expenses such as copays and deductibles, transportation issues, and having to travel out of the area for services or care.

More than four in ten (41.7%) Key Informants view lack of awareness of existing programs as a common barrier, and more than one-third believe inadequate or limited health insurance (37.5%) and lack of specialists in the area (37.5%) prevent some residents from accessing needed 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=24)

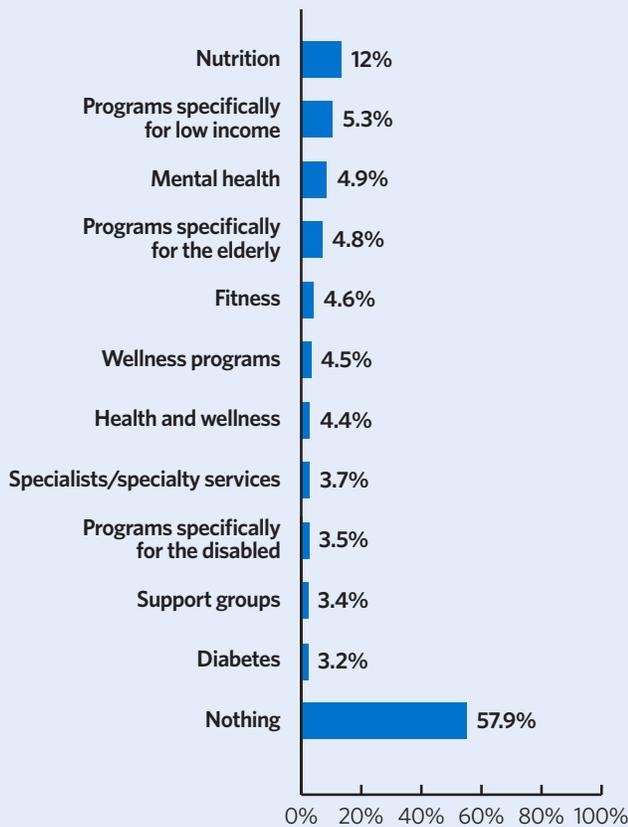
Health Care Access

Program and Services Lacking in the Community

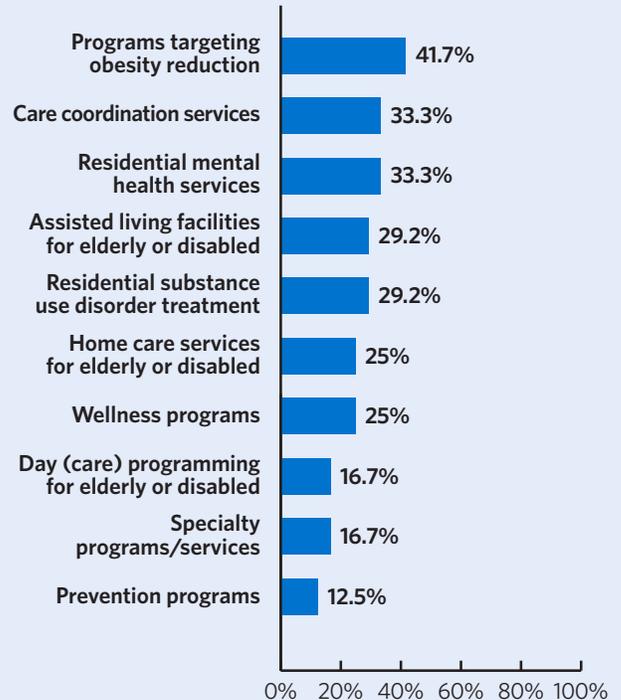
More than half (57.9%) of area residents report there is no lack of health programs, services, or classes in their community; however, 12.0% of adults would like to see more programs involving nutrition.

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 obesity reduction, care coordination services, residential services for substance abuse and/or mental health, and assisted living facilities for the elderly and disabled.

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=357); 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=24)

Health Care Access

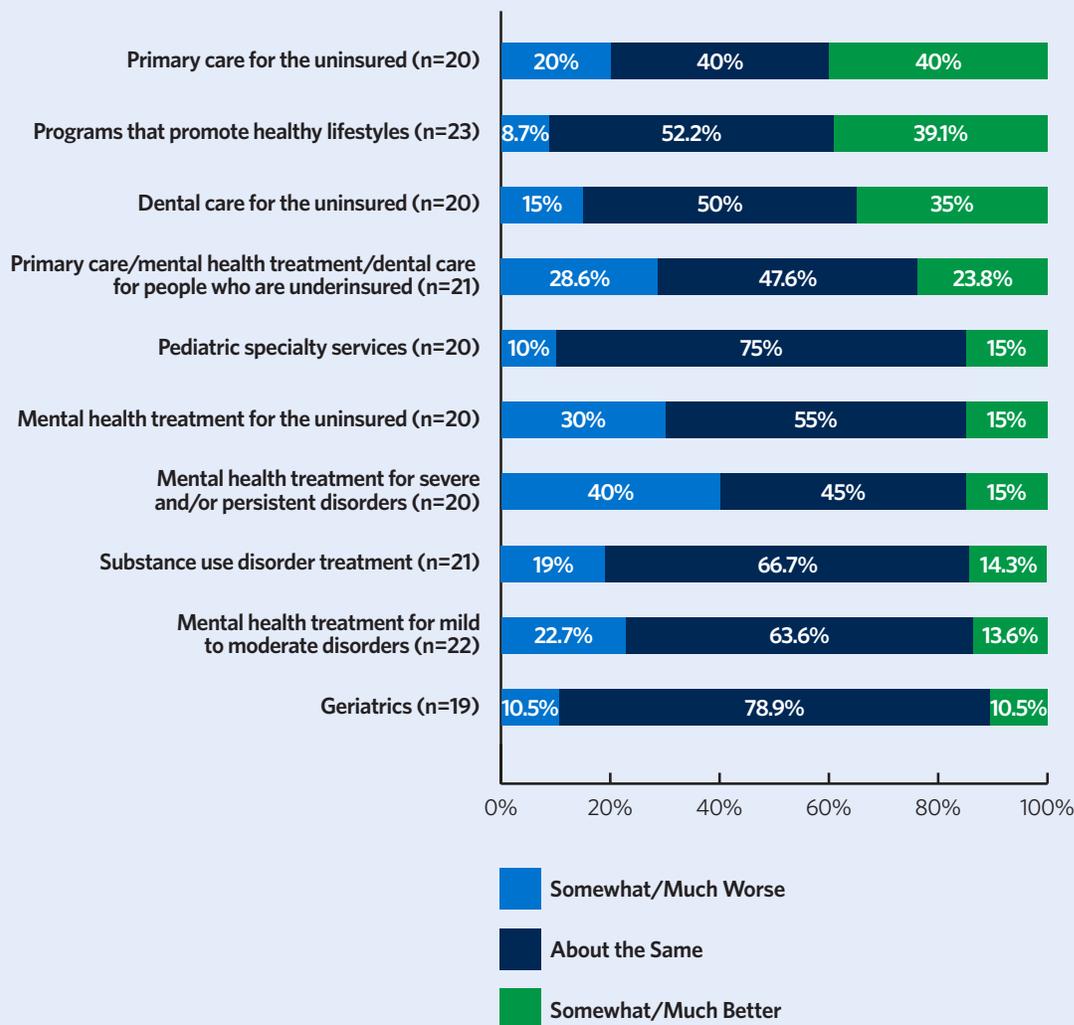
Improvement in Health Care Access

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 has improved most for programs that provide primary care or dental care for the uninsured, as well as programs that promote healthy lifestyles. There have mixed feelings about services targeting the underinsured (primary, medical, dental) as roughly equal proportions say access is better and access is worse.

Key Informants clearly view access to mental health treatment for severe and/or persistent disorders and for those without insurance – as becoming worse over the past several years.

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



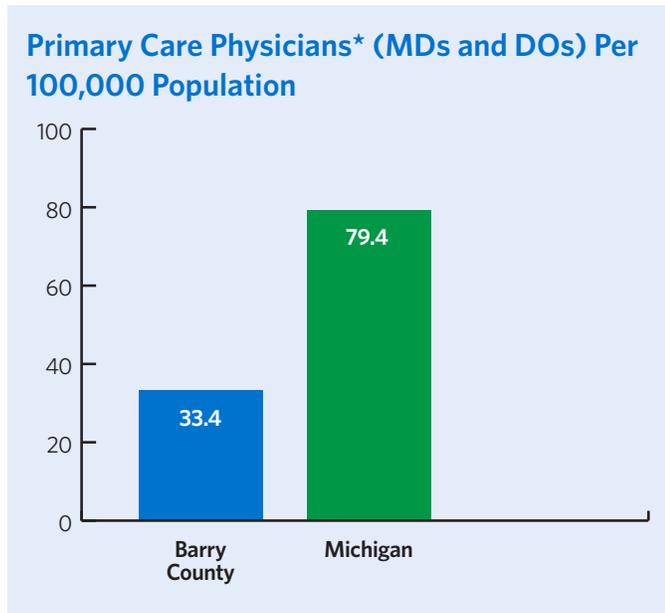
Source: Key Informant Online Survey, Q6: Below is a list of programs and services from the past two Community Health Needs Assessments that Key Informants reported did not meet the needs and demands of area residents well. In your opinion, over the past 5-6 years, to what degree has access to each improved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

Health Care Access

Lack of Primary Care

Barry County has considerably fewer PCPs (MDs and DOs) per 100,000 residents compared to Michigan overall.

Lack of primary care providers results in many patients unnecessarily using hospital ERs for care.



Source: County Health Rankings, 2016

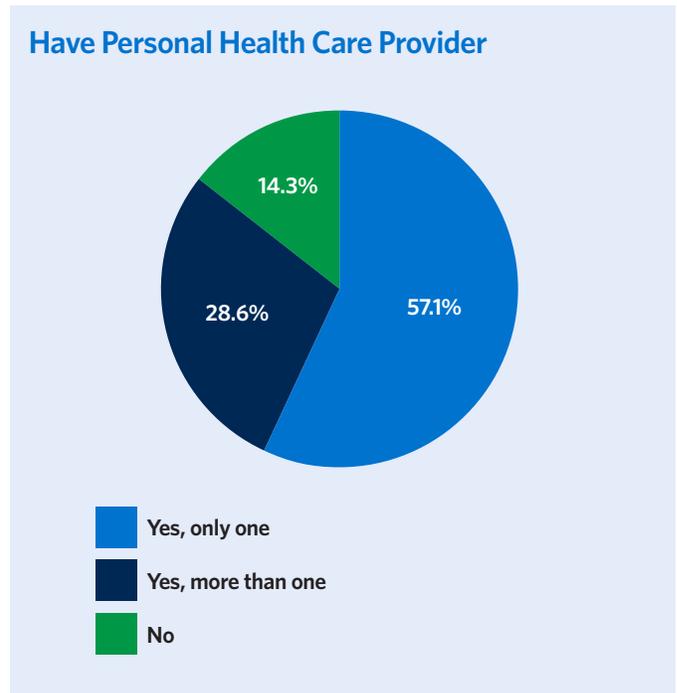
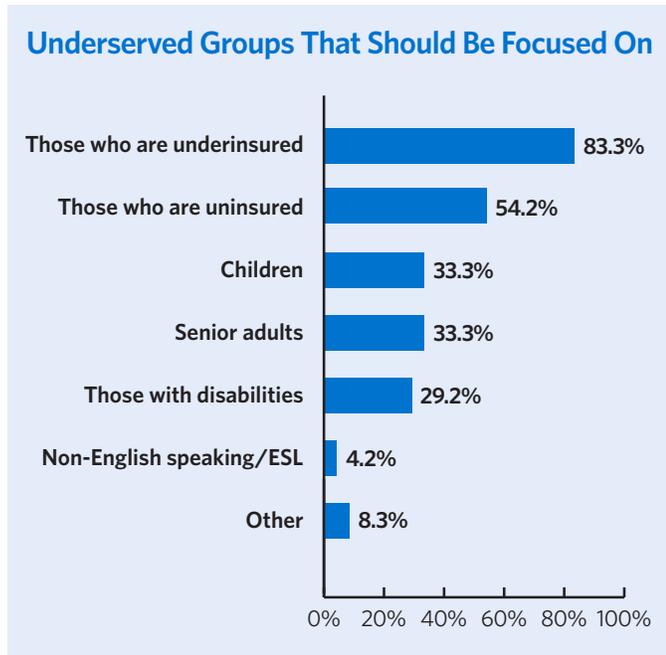
*Note: Physicians defined as general or family practice, internal medicine, pediatrics, obstetrics or gynecology.

Health Care Access

Underserved Populations

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

One in seven (14.3%) underserved residents have no medical home (no 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=24); Underserved Resident Self-Administered Survey, Q2: Do you have one person you think of as your personal doctor or health care provider? (n=56)

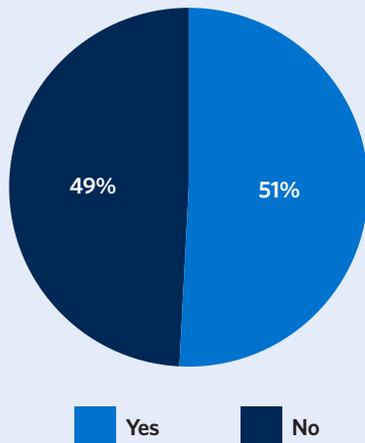
Half (51.0%) of underserved residents had trouble meeting their health care needs in the past two years.

Cost, lack of transportation, and lack of health insurance plans were the top reasons they had trouble meeting their health care needs.

Health Care Access

Underserved Populations, Continued

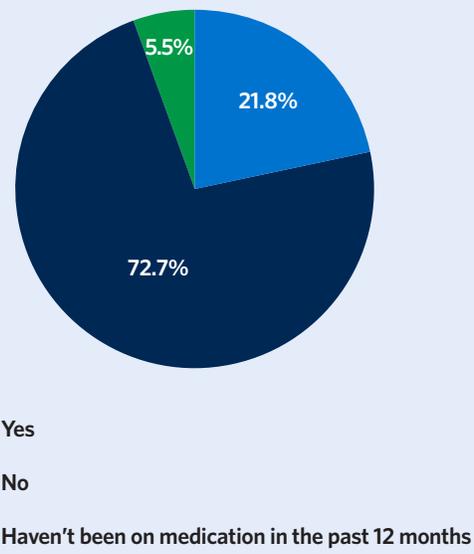
Have Had Trouble Meeting Health Care Needs In the Past Two Years



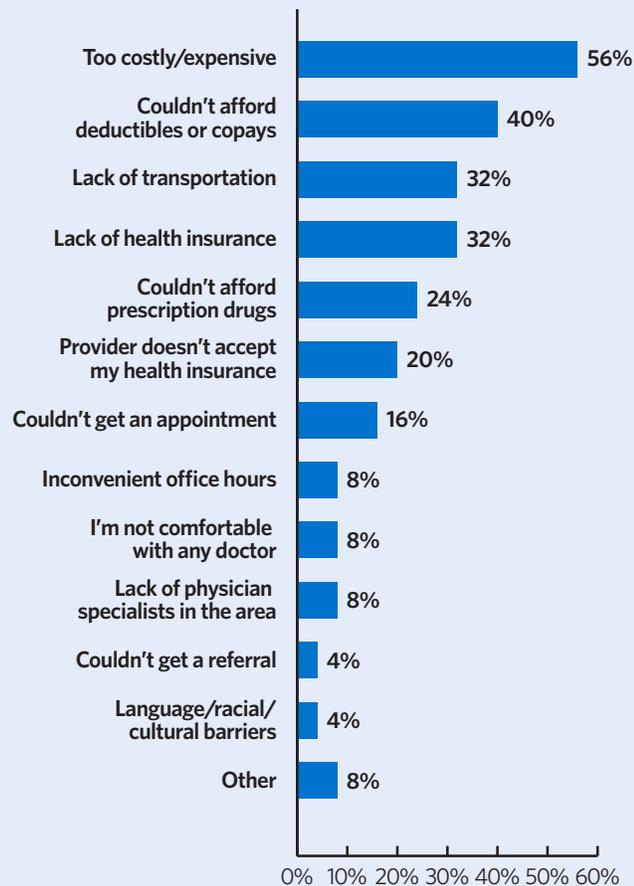
One in five (21.8%) underserved residents have had to skip, or stretch their supply of, medication in the past 12 months in order to save on costs.

More than four in ten (45.5%) underserved residents have personally used the hospital ER in the past 12 months, 16.4% visited three or more times.

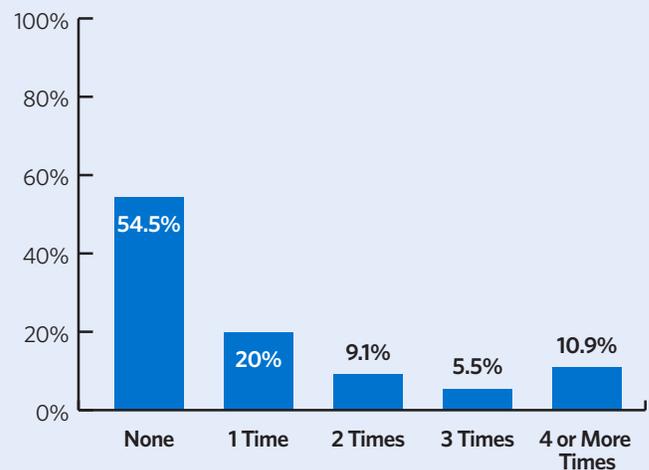
Have Skipped, or Stretched Supply of, Medication to Save on Costs



Reasons Had Trouble Meeting Health Care Needs



ER Utilization in Past 12 Months



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=51); Q8: (If yes) What are some of the reasons you had trouble meeting your health care needs? (Multiple response) (n=25)

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=55); Q12: How many times have you been to an Emergency Room/ Emergency Department in the past 12 months? (n=55)

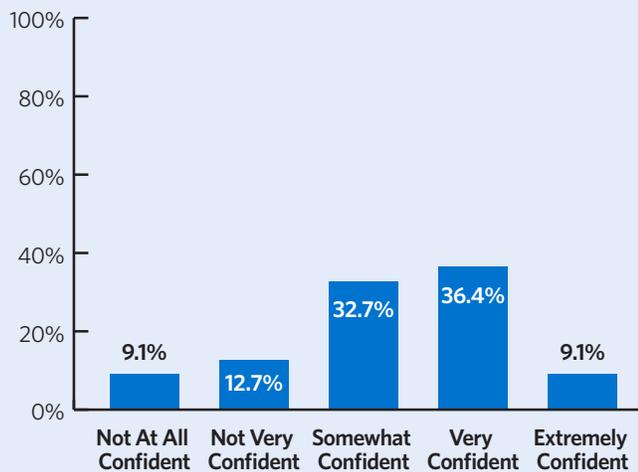
Health Care Access

Underserved Populations, Continued

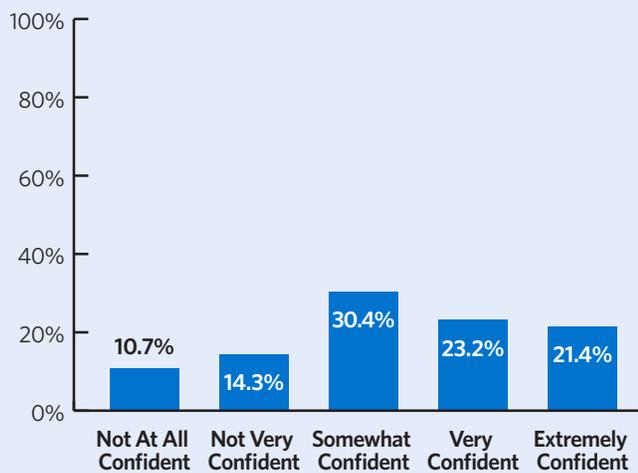
Underserved residents lack confidence that they can navigate the health care system: one in five (21.8%) are not at all or not very confident and 32.7% are only somewhat confident.

They also lack confidence they can complete medical forms by themselves (25.0% not at all/not very) but have few problems understanding information necessary to be knowledgeable about their health condition (58.9% rarely/never).

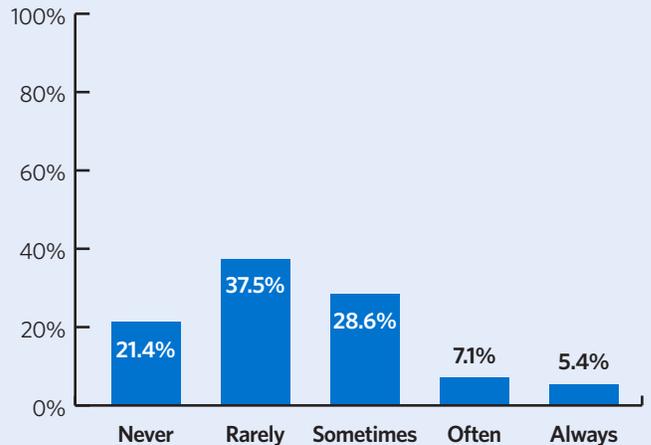
Confidence in Navigating the Health Care System



Confidence in Completing Medical Forms By Yourself



Frequency of Having Difficulty in Understanding Written Information Regarding Health Conditions

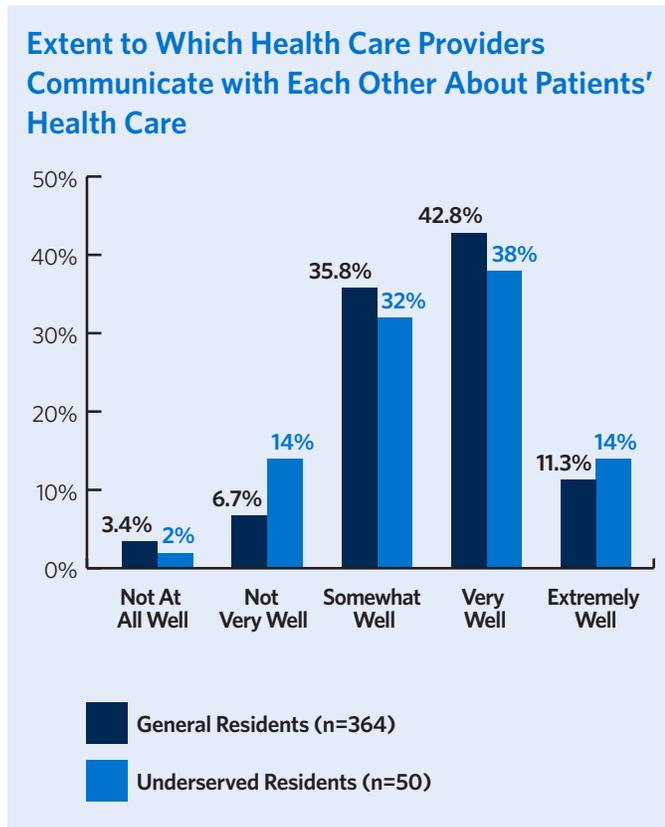


Source: Underserved Resident Self-Administered Survey, Q14: How confident are you that you can successfully navigate the health care system? (n=55); Q15: How confident are you in filling out medical forms by yourself? (n=56); Q16: How often do you have problems learning about your health condition because of difficulty in understanding written information? (n=56)

Health Care Access

Communication Between Health Care Providers

Overall, the vast majority of SHP area adults believe health care providers communicate at least somewhat well with each other regarding patients' health care. There is very little difference between the sample of general resident adults and the sample of underserved adults.



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?

Health Care Access

Ability to Refer People to Care

Two-thirds (66.7%) of SHP 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 instant access to information or a list of available resources or services. There is also a need for more social workers to help people navigate the system and connect them to critical social services to round out their treatment plan.

Resources currently used include Cherry Health, United Way, YMCA, 211, Spectrum Health Pennock, brochures distributed to health care professionals' offices and hospitals, and reaching out to other providers personally to provide patients with easily access to resources and services.

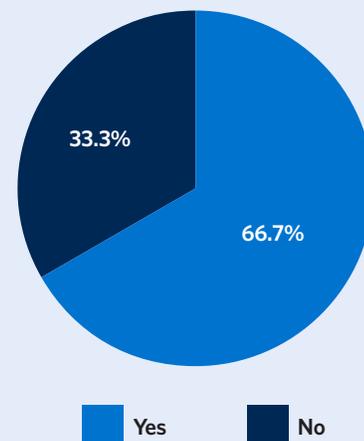
What Would Better Equip You

- **Go to where the patients are** located, such as **mobile treatment options**, or **rotating clinics**.
- **Fingertip info on transportation** options, **elderly care** options, **disability care** options, **mental health care** options.
- I blindly fire off **social work referrals** and it has worked ok, but I sometimes forget that this is even an option. It'd be nice to have a **social worker who is more involved with our office**.
- **Information about where to send patients** who need help with **diet counselling/weight loss**. Same for **smokers**.
- **Social work more available to navigate resources**.

Resource Used Most Often

- **211, United Way**.
- **Brochures** offered in **offices** and throughout **hospital**.
- Generally, an overall **list of services** comes from the **United Way** when people are needing assistance. I also think **Cherry Health** is a wonderful resource for medical, dental and behavioral health if people are uninsured.
- I often **contact other providers directly** to provide easier access to care for my patients.
- Sharing resources through community wide partnerships. **United Way, YMCA, Spectrum Health Pennock**, etc.

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=21); 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

Several initiatives have been undertaken to address mental health and substance use disorder, including: (1) building coalitions to target substance abuse, tobacco use, and lifestyle choices, (2) creating a suicide task force to educate residents, (3) increasing the using of telepsychiatry to combat access to treatment issues, and (4) increasing collaboration between SHP and Community Mental Health to develop action plans for better solutions to these issues.

Mental health

I think the **suicide-prevention task force** has been **working on trying to figure out patterns** or done a lot on **education in the community**, and quite honestly, that **could be part of the reason why so many are reported**.

- Key Stakeholder

We have a colleague at Mental Health who is sitting on access to care and they seem to focus a lot on older adults. There still seem to be a lot of questions about **how to access psychiatric or substance-abuse service**. I do know that **Pine Rest had opened their kind of psych emergency center**. We have **definitely increased telepsychiatry**; both the **hospital has access to telepsychiatry**, and then **Barry County Mental Health has more telepsychiatry**. We're definitely out there **trying to talk more about suicide and depression** and **seeking help**, trying to **get rid of the stigma** - just **finding providers, finding access to providers**.

- Key Stakeholder

I think the biggest thing is we **hold regular meetings between the hospital and Mental Health with key leaders** and meet on a quarterly basis. If things come up in between the meetings, we have a **communication process** that's been developed and we **get the information from all sides** and **develop an action plan**. So, I think those **regular meetings**, having **conversations** in between and a **desire** on both parts **to understand** that we both are **servicing the same population works well**.

- Key Stakeholder

Substance use disorder

Most of these things we have **community coalitions** that are working on those, so we have a **substance-abuse coalition**, we have a **tobacco coalition**, we have a **B. Healthy coalition** that's working on **physical activity and nutrition**, we have an **access-to-care coalition**, so they're **all doing various interventions**.

- Key Stakeholder

The **substance abuse task force** just wrote a **federal grant** entitled **Partnership to Success**, so if we were to get that funding, it would mean that we would have to **partner with the schools** to get onsite to provide some **pre-screening** and **intervention to children** that may be brought to school.

- Key Stakeholder

Source: Key Stakeholder Interviews, Q1e/Q2b: What, if anything, has been done to address these issues? (n=6)

Solutions and Strategies

Strategies Implemented Since Last CHNA, Continued

Several initiatives have also been undertaken to address lifestyle choices, the most exciting of which would be the community's attempt to transform into a Blue Zone. There have been other efforts to encourage activity and exercise by improving the walkability of the region, providing education on diabetes, and improving collaboration between and among organizations such as SHP, Community Mental, Cherry Health, and the schools.

Lifestyle choices I know especially from our perspective **we're offering more evidence-based exercise and wellness programming**. I think that there's been a pretty **conscious effort** within the community to **improve the walkability** of the community. I think there's been a conscious effort within the community to **encourage use of the river walk trail** and just the **walkability in the community**. So, **building new sidewalks** and things like that. I think **Pennock** has done some **pretty good work in terms of trying to do more education** in the community, particularly with **diabetes**, and then the **schools** and **Community Mental Health have done a good job in trying to provide services for autism**, which seems to be growing within the younger community.

- Key Stakeholder

Barry County is also looking at the **Blue Zones initiative**, which would address some of the health issues in the community as well, so that would be another piece.

- Key Stakeholder

Are you familiar with the **Blue Zones** project? I think that there was a **lot of excitement about the possibility of Blue Zones**, but not only does there not appear to be forward movement, there's no news. I know, from an inside perspective, that it's an **extremely costly endeavor**, but it **would be nice** if there was some mention in the community of **why there is a stall or why it's not moving** forward. I think **Blue Zones** is the **most exciting piece** that we have been hearing about.

- Key Stakeholder

Collaboration We are always **looking for those ways to partner**, and, most of the time, we do partner. It's just that **partnering takes time**. You don't partner alone; you have to partner with people and other agencies, so that **takes time to build that**, but those are things that are coming. We have a **partnership with Cherry Health** and they have a **federal grant**, so I think **working together will have a bigger impact**.

- Key Stakeholder

Source: Key Stakeholder Interviews, Q1e/Q2b: What, if anything, has been done to address these issues? (n=6)

Resources Available to Meet Issues/Needs

Key Stakeholders agree that there is a tremendous lack of resources when it comes to mental health and substance use disorder. Lack of funding prevents needed facilities from being built and restrictions and regulations prevent existing facilities from treating people who should get care. Despite these obstacles, there are many people on the ground working hard to try and develop solutions to these complex problems.

Mental health

I think **mental health continues to be a challenge** in the community. There are **not a lot of resources** for folks with mental health issues (for **both adults and adolescents**). **Mental health also causes problems for housing** because they get kicked out of housing.

- Key Stakeholder

There are **funding issues there** - that's **not necessarily related to the hospital or our interaction with them** or the pickup orders - things of that nature. The **resources**, as far as the **people** that are in the community, whether it's the hospital or Mental Health, **dedicate time and doing the research to try and figure out the problems**. I agree that there is **absolutely always a funding issue**.

- Key Stakeholder

Psych beds - that's **not an issue that anyone's just going to be able to push a button and fix**. You **have to have facilities**; you **have to have staff**; you **have to have centers** that will **accept people regardless of their diagnoses**. I think we **need to reframe how we see things and realize that we need to be more people-centered** in how we approach a lot of this stuff because it just doesn't happen with a snap of the finger. It goes back to that **restrictions and regulations** and all those **hoops** to jump through.

- Key Stakeholder

Substance use disorder

I think there are **adequate resources**. I think people like to hang out and say, "I can't get an appointment. I can't do this. I have to wait so long." I don't know that that's different anywhere else you go. The day and age of being able to call the doctor and get seen that day - unless you're a serious case - **I think there could always be more**. In the world of substance abuse we always hear, "Oh, someone comes in, and they want to get clean. It's two weeks until they can get a bed." Well, that's not always the case; it could be four days, but **four days is still a long time if you're trying to get clean**.

- Key Stakeholder

Source: Key Stakeholder Interviews, Q1g/Q2d: Are there adequate area resources available to address these issues? (n=3)

Solutions and Strategies

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. One Key Stakeholder sees plenty of philanthropy but little investment in the community, especially in the school system. Another thinks SHP could better partner with organizations in the region that are already conducting great work.

Others report that various organizations come together to collaborate and address issues and during this process they often discuss resources; how to utilize resources effectively, how to strengthen resources, and how to prioritize needs.

It's an **interesting dynamic** because in **Barry County**, especially specifically **Hastings**, it's a **very philanthropic community** that wants to give back specifically to Barry County, but **there's no investment**. It's my perception that **there's little investment in the Hastings public school system**. I think the **community is very interested in such things as Blue Zones**, which **to me is more of a marketing thing** because I think we do a lot of the things already that Blue Zones would encourage us to do, so it **feels like it's more of a branding**.

- Key Stakeholder

I've definitely **seen it over the last few years** when the **outcomes of the CHNA comes out**. I know **that's what those groups are working on**. I don't know always how to get involved with those groups or even if anybody wants me there. I did go to the access-to-care meetings. I think the health department was running that in conjunction with Spectrum Pennock and the Commission on Aging. **It goes back to what the CHNA report says. We then, as the stewards, need to make sure that the report is need-driven and that we actually develop services for people that are needed**. I think **we've made some good changes**.

- Key Stakeholder

In **my relationships with the hospital and the courts, sitting on committees** throughout the community, **everybody would talk about funding**. In fact, that's something that we recently talked about at **Kids Network**. **How do we prioritize the issues and the resources** that we have to **make this more of an action-based committee**? We can't do all the things on the to-do list. **What are the top couple of things that we can work on**, check those off, and then once that's done, we can move on to something else? I see that being done throughout the community.

- Key Stakeholder

I think that the community, **under the direction of the health department and Pennock**, has really **focused on obesity and smoking and behavioral health**. I think every meeting that I go to has some element of a **wrap-around approach** in the **court system**, or in the **mental-health** system, or whether it's an **access-to-care** meeting or a **health services network** meeting, a lot of the conversation **revolves around those resources and strengthening those resources**.

- Key Stakeholder

I think **they do but only with those that are chosen to partner with**. I think that they **don't look at all of the partners that could be available to look at those issues**. **I think that Spectrum oftentimes says this, but I'm not sure that they partner well with the community**. **Spectrum could be a better partner with other agencies and organizations that are already doing great work**.

- Key Stakeholder

Source: Key Stakeholder Interviews, Q5: Do you feel like the community prioritizes issues effectively given the resources that are available? (n=3).

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

- Barry Community Free Clinic
- Barry Community Health Center (Cherry Health)
- Barry County Community Mental Health Authority (BCCMHA)
- Barry County United Way
- Barry Eaton District Health Department
- Commission on Aging
- Council on Aging
- Department of Health and Human Services (DHHS)
- Magnum Care Dementia Unit
- Pine Rest
- Spectrum Health Pennock Hospital
- Spectrum Health Pain Clinic
- Thornapple Manor
- Woodlawn Meadows Dementia Unit

Community Initiatives/Coalitions

- Access Coalition (dental)
- Ascension Counseling
- B. Healthy Coalition
- Diabetes Prevention Program
- DK Garden Program
- Farmers' markets (Hastings, Middleville)
- Food banks
- MedNow and other technology to increase health care access
- Smoking cessation programs
- Substance Abuse Task Force
- Suicide Awareness and Prevention Program
- Support groups (e.g., AA, grieving, diabetes, faith-based)
- Teens Against Tobacco Use
- Weight loss programs

Solutions and Strategies

Suggested Strategies to Address Issues/Needs

The lack of treatment for mental health can be partially addressed by: (1) integrating primary care with behavioral health care, (2) using telemedicine/telepsychiatry, (3) having social workers connect patients to needed services, and (4) pushing organizations to accept patients with all insurances and no insurance.

With regard to substance use disorder, education is paramount, as well as a holistic approach to addressing the problems associated with substance abuse. Treating the issue as a public health, and not a criminal, problem is the preferred approach.

Access to mental health treatment

Integrate behavioral health into primary care and increase access through Barry County Community Mental Health. Access to behavioral health services is limited.

- Key Informant

Telemedicine (counseling and psych) and **social workers** local to the **rural health network of primary care offices that Pennock holds.** We **need a social worker available to assist patients** and we **need telemedicine available for counseling and psych evals.**

- Key Informant

Mental Health benevolence funding and **local diversion options** other than a jail cell.

- Key Informant

Push for local psychiatric care in addition to the current psychologists. Barry County Mental Health **does not even take those with insurance** and I don't believe they even take Medicare now. **Must be without insurance to see them.** Also **waiting lists to see psychiatry in Grand Rapids is months!** Then the **patient needs to travel** and they may not be able to.

- Key Informant

Substance use/abuse

We need to **continue to work to provide education and support** for those using illegal substances. Many **students** have **indicated** through MiPHY data that **they consider marijuana and vaping less hazardous.** The issue of **heroin also needs to be addressed** and this will **take a multi-faceted approach of education, treatment, law enforcement and health care.**

- Key Informant

Promoting education and rehabilitation over incarceration would seem like a **positive direction.**

- Key Informant

Easier access to treatment for substance use disorders.

- Key Informant

Educate patients of harm of their activities and **offering alternative methods of coping.**

- 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=29).

Solutions and Strategies

Suggested Strategies to Address Issues/Needs, Continued

Lifestyle choices and obesity are often connected and Key Informants suggest ways to address these issues including: (1) using technology and social media to make information accessible and understandable, (2) creating an environment conducive to living healthier, and (3) providing education, coaching, and support to foster healthier living.

With regard to addressing the issue of access to affordable healthy food, Barry County is working toward becoming a Blue Zone which will utilize best practices and evidence-based research to achieve the goal of improving access to healthy food for all residents.

Obesity

Spectrum could **promote** and **promulgate apps, videos, and other forms of media** (i.e., social media, meet people where they are at) that are **easily accessible** and **easily understandable**. That would **wake people up** to the reality and danger of their obesity, and **help them learn** what they can do about it. Offer **video visits with nutritionists/dieticians**.

- Key Informant

Create an environment that allows healthy choices for the community. **More community physical activity, community markets with fresh food, stores with healthier choices, transportation availability**.

- Key Informant

Healthcare payment coverage which **provides for education** and **coaching in healthy lifestyles**.

- Key Informant

Lifestyle choices

Education and **support** are vital. People need to understand how important diet and lifestyle choices are to their wellbeing. They also need **support to help them make good choices**.

- Key Informant

Make healthy choices easier for everyone, through **environmental changes** and **food system improvements**. **Walkability of towns** and **school system education** pieces for those on school lunch programs.

- Key Informant

Access to affordable healthy food

Barry County is **working on** a blueprint of what we would like to do as a community around **Food Systems** currently as we speak. We are **partnering with Blue Zones LLC** to **assist us in providing best practices, evidence-based suggestions** in the area of **policy** to work to **increase access to healthier foods** and **decrease consumption of unhealthy food sources**. In the **hospital**, I think capitalizing on the **Food as Medicine concept** throughout the cafeterias so that the offerings help to increase healthy intake for staff and visitors as well as patients.

- 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=29).

Appendix

Participant Profiles

Key Stakeholder In-Depth Interviews

Executive Director, Barry County United Way
Executive Director, Barry Mental Health Authority
Executive Director, Commission on Aging
Health Officer, Barry Eaton District Health Department
President, Spectrum Health Pennock Hospital
Substance Abuse Community Preventionist, Barry County Substance Abuse

Key Informant Online Survey

Physician (4)	Director of Outreach & Community Engagement	Physician Assistant
Chief Executive Officer (2)	Emergency Medicine Physician	Program Director
Nurse Practitioner (2)	Family Nurse Practitioner	Program Manager
Blue Zones Activate Barry County Director	Integrated Care Clinician	Registered Dietitian
Clinical Worker	MD, Internal Medicine	Retired
Diagnostic Radiologist	MD, Orthopedic Surgeon	Retired Clergy

Appendix

Resident Telephone Survey

	Total		Total		Total
Gender	(n=400)	Marital Status	(n=397)	Own or Rent	(n=392)
Male	53.0%	Married	52.9%	Own	74.7%
Female	47.0%	Divorced	11.6%	Rent	23.8%
Age	(n=392)	Widowed	5.7%	Other	1.5%
18 to 24	11.7%	Separated	1.1%	Zip Code	(n=400)
25 to 34	14.4%	Never married	27.8%	48849	17.1%
35 to 44	14.4%	Member of an unmarried couple	1.0%	48897	3.4%
45 to 54	16.1%	Employment Status	(n=395)	49046	14.0%
55 to 64	21.1%	Employed for wages	46.0%	49058	37.1%
65 to 74	13.2%	Self-employed	4.9%	49073	6.0%
75 or Older	9.0%	Out of work 1 year+	0.9%	49333	22.4%
Race/Ethnicity	(n=398)	Out of work <1 year	0.1%		
White/Caucasian	92.0%	Homemaker	3.7%		
Hispanic/Latino	0.3%	Student	3.0%		
Black/African American	4.2%	Retired	31.3%		
Asian	3.2%	Unable to work	10.1%		
Native American	0.2%	Education	(n=394)		
Adults in Household	(n=400)	Less than 9th grade	1.7%		
One	17.1%	Grades 9 through 11	5.8%		
Two	56.2%	High school grad/GED	36.6%		
Three	21.3%	College, 1 to 3 years	38.3%		
Four	4.2%	College 4+ years (grad)	17.6%		
Five	1.1%	Income	(n=264)		
Six	0.1%	Less than \$10K	6.1%		
Children in Household	(n=398)	\$10K to less than \$15K	2.9%		
None	80.4%	\$15K to less than \$20K	3.9%		
One	6.3%	\$20K to less than \$25K	7.0%		
Two	7.0%	\$25K to less than \$35K	15.0%		
Three	4.0%	\$35K to less than \$50K	22.0%		
Four	2.4%	\$50K to less than \$75K	18.8%		
		\$75K or more	24.2%		

Appendix

Underserved Resident Survey (Self-Administered)

	Total		Total		Total
Gender	(n=57)	Marital Status	(n=57)	Own or Rent	(n=52)
Male	40.4%	Married	31.6%	Own	50.0%
Female	59.6%	Divorced	26.3%	Rent	44.2%
Age	(n=57)	Widowed	12.3%	Other	5.8%
18 to 24	5.3%	Separated	5.3%	Zip Code	(n=51)
25 to 34	5.3%	Never married	21.1%	49038	2.0%
35 to 44	12.3%	Member of an unmarried couple	3.5%	49046	9.8%
45 to 54	15.8%	Employment Status	(n=57)	49050	3.9%
55 to 64	26.3%	Employed for wages	17.5%	49058	64.7%
65 to 74	28.1%	Self-employed	1.8%	49325	2.0%
Race/Ethnicity	7.0%	Out of work 1 year+	10.5%	49333	11.8%
White/Caucasian	(n=56)	Out of work <1 year	5.3%	49348	5.9%
Black/African American	94.6%	Homemaker	5.3%		
Hispanic/Latino	1.8%	Student	0.0%		
Native American	3.6%	Retired	36.8%		
Adults in Household	(n=51)	Unable to work	22.8%		
One	43.1%	Education	(n=57)		
Two	41.2%	Less than 9th grade	5.3%		
Three	11.8%	Grades 9 through 11	7.0%		
Four	3.9%	High school grad/GED	52.6%		
Children in Household (6-17)	(n=53)	College, 1 to 3 years	26.3%		
None	81.1%	College 4+ years (grad)	8.8%		
One	3.8%	Income	(n=54)		
Two or more	15.1%	Less than \$10K	35.2%		
Children in Household (<6)	(n=53)	\$10K to less than \$15K	24.1%		
None	84.9%	\$15K to less than \$20K	9.3%		
One	9.4%	\$20K to less than \$25K	13.0%		
Two or more	5.7%	\$25K to less than \$35K	9.3%		
		\$35K to less than \$50K	5.6%		
		\$50K to less than \$75K	1.9%		
		\$75K or more	1.9%		

Exhibit B

Spectrum Health Pennock

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.



Substance use and abuse

Action 1

Certified Tobacco treatment specialist (TTS) with embed SCRIPT (Smoking Cessation and Reduction in Pregnancy Treatment) program for OB patients including Centering Pregnancy.

Measurable Impact

- Certify OB staff in SCRIPT by 6/30/2019.
- Certify at least one partnering agency in SCRIPT and one Tobacco Treatment Specialist by 6/30/2019.

Impact of Implementation Plan Strategy

Staff certified in SCRIPT. All pregnant patients are introduced to tobacco cessation, but very few are interested and even fewer are willing to take information with them. 44 patients have been provided SCRIPT information with only 50 percent taking information about the program. 10% of those patients taking information did not complete cessation.

Action 2

Build tobacco cessation capacity in the community through collaboration.

Measurable Impact

Reduce maternal tobacco use by 15% by 6/30/2020.

Impact of Implementation Plan Strategy

Tobacco Treatment Specialist identified and will begin certification in 2020. Delayed with COVID 19. Barry Substance Abuse was identified and is willing to have a staff member trained in SCRIPT. Has not occurred due to COVID.

Action 3

Medication takeback events targeting prescription and non-prescription medicine.

Measurable Impact

Provide at least one pharmacist at two medication takeback events annually. To be completed by 6/30/2019, 6/30/2020 and 6/30/2021.

Impact of Implementation Plan Strategy

Annual event; however 2020 is on hold due to COVID.

Action 4

Expand education opportunities for prescribers and providers on opioids through collaboration with Barry Substance Abuse, CME and Medical Staff meeting.

Measurable Impact

Offer one provider education session by 6/30/2019.

Impact of Implementation Plan Strategy

On schedule for June 2020, but was canceled due to COVID19

Health care access

School Health Program

Action 1

Provide school staff several forms of utilization/encounter types; email, telephonic, virtual, and in-person (on-site) with the local school nurse and nurse hub.

Measurable Impact

From the School Health Program's March 2018-June 2018 utilization/encounter baseline, increase school nurse encounters (including telephonic, email, MedNow and face to face) by

- 25% increase by 1/31/2019
- An additional 10% increase by 6/30/2019.

Impact of Implementation Plan Strategy

The goal for the school nurse initially was to increase interaction with each school and create a relationship for improved program utilization. Baseline encounters in 2018-19 for Delton Kellogg was 226; Hastings had 260 encounters; Charlotte had 36 encounters. At the start of the 2019 -20 school year (Aug 2019 - Oct 2019) the goal of improving utilization was being met in this 3 month period with encounters for Delton Kellogg = 142; Hastings 155; Charlotte 90

Action 2

Provide staff education through increased nurse rounding.

Measurable Impact

- Improve nurse rounding from a baseline of 10%
- Increase by 25%. To be completed by 12/31/2018.
- Increase by 25%. To be completed by 6/30/19.

Impact of Implementation Plan Strategy

The goals for on-site rounding evolved from a baseline monthly and as needed touch base for each building in 2018 to more purposeful rounding in 2019-20. Rounding in 2019-20 focused on every week to every 3 weeks, and as needed on-site visits to identify student needs in four main topics:

- Absenteeism concerns
- Health care plan/coordination needs
- Staff/family/student training needs
- Follow up

The outcome was a greater number of students were identified in 2019-20 that were in need of a school health plan with coordination of parents, school and medical provider. By training staff and daily school nurse support, this increased students ability with chronic health conditions to stay in class and be cared for safely.

Action 3

Provide staff AED and CPR training and certification for Medical Emergency Response Team (MERT) teams.

Measurable Impact

- Increase number of MERT team trainings from a baseline of 0%
- Increase to 25% 12/31/2018.
- Increase by an additional 10% 6/30/2019.

Impact of Implementation Plan Strategy

CPR certification renews every 2 years. At the start of the school program, 0% of schools had a designated MERT team and training. By the end of the 2018-19 school year, 100% of school buildings had a developed MERT team and were trained in CPR/First Aid/AED. A total of 7 trainings took place and 63 participants were trained and certified. In 2019-20, an additional 4 trainings took place in Delton Kellogg with 37 staff trained and certified.

Health care access, Continued

Social and emotional support

Action 1

Implement the Neighbor to Neighbor Network, modeled after the Memphis Congregational Health Model, which uses church volunteers to provide increase social and emotional support for patients and community members.

Measurable Impact

Use metrics from Memphis Model

Impact of Implementation Plan Strategy

Due to staff changes the program was delayed. The planning team met in March to move forward, but COVID restrictions stopped current plan due to face to face interactions. Team has assessed 3 area churches who will support the program and the chaplain is assessing their needs. Currently doing outreach to assist with return to church tools.

Action 2

Launch program with 2 community partner agencies by 4/30/2019

Measurable Impact

- Add 3 additional community partners 6/30/2020
- Add 5 additional community partners by 6/30/2021
- Maintain or reduce readmission rate 6/30/2020
- Reduce readmission rate by an additional 1-2% by 6/30/2021

Impact of Implementation Plan Strategy

Program was reset for 2020, due to lack of human resources. Three churches wanting to participate. Team met in March to restart. COVID restrictions on face to face contact has limited original offerings for education and assistance. The chaplain is reaching out to interested churches to asses needs. Currently the focus is on COVID 19 and safe return to church providing education on safety.

Bariatric services

Action 1

Increase access to specialty services by bringing bariatric services to Pennock patient service area with surgery performed at Spectrum Health's Center of Excellence.

Measurable Impact

Launch ambulatory bariatric services through a mix of in-person and telemedicine visit types in the SHP specialty clinic from SHMG Bariatric provider group by 6/30/2019

Impact of Implementation Plan Strategy

Services were launched in December of 2018, we have had 70 patients from January 2020-June 2020.

OB/GYN

Action 1

Increase access to prenatal care to decrease infant mortality and decrease preterm deliveries. Currently 7% of babies are delivered preterm.

Measurable Impact

- Establish Centering Pregnancy Program by 1/31/2019
- Enroll 90 women first 12-months.

Impact of Implementation Plan Strategy

24 patients completed during first two sessions. The third session was canceled after two classes due to COVID19. Restarting summer 2020

Obesity and weight issues

Action 1

Create a certified medical wellness center to improve access for those with obesity and chronic conditions.

Measurable Impact

- Create at least 1 defined clinical referral pathway for those with obesity or chronic disease by the end 6/30/2019.
- Identify a Medical Director and establish quarterly MFA meetings by the end of 6/30/2020.
- Certify Pennock Health and Wellness Center (HWC) as a Medical Fitness Association (MFA) Certified facility by the end of 6/30/2021.

Impact of Implementation Plan Strategy

Unachievable as originally anticipated due to capital investment for structural changes needed to meet ADA requirements for certification. Health and Wellness is pursuing a "Medical Wellness-like" program, where they will do everything they can within the requirements of being designated medical wellness.

Action 2

Create a healthy lifestyle prescription from providers to well-defined pathways at Pennock HWC by the 6/30/2020.

Measurable Impact

- Measure patient's baseline health metrics and re-measure at 3, 6 and 12-months for program impact.
- Improve basic health metrics by 5% year one. To be completed by 6/30/2021.

Impact of Implementation Plan Strategy

- Momentum is a 12 week healthy lifestyle program. Each participant starts with some key baseline measurements with a degreed, national certified fitness specialist at the Health and Wellness Center. Participants meet in a small group twice a week for the 12 week period.
- The program started at Pennock February 25, 2020. Initial baseline measurements were completed the week of February 17. Participants completed 6 sessions or 3 weeks of the program before Executive Order from the State of Michigan closed all wellness/fitness centers.

- Baseline measurements included: blood pressure, height/weight, resting heart rate, waist circumference, body fat percentage, strength and flexibility test and PHQ. Because of the mandatory shutdown we were not able to get any other measurements at this time.
- Four participants started the program. Ages ranging from 35 to 65 years old. Pathways for participants included functional fitness, diabetes and heart disease.

Action 3

Partner with a local school district to improve school health environment through policy and program development using the national Coordinated Approach to Child Health (CATCH) program.

Measurable Impact

- Create a Memo of Understanding (MOU) signed by at least 1 school by 1/31/2019, to launch the CATCH program, and schedule staff Kick-Off event.
- Implement the CATCH program in at least 1 classroom at that school by 9/30/2020.
- Expand CATCH to all classes K-5 at the identified school(s) by 1/31/2021.
- Facilitate the creation of a Wellness Committee, while implementing 1 new nutrition or physical activity policy at each school district by 1/31/2020.
- Teachers achieve 50% positive change in behavior observed (Teacher Observation and Behavioral Report), related to nutrition and healthy food consumption of students participating in CATCH by 6/30/2021.

Impact of Implementation Plan Strategy

The program was slated for begin January 2020 for K-1 classes at Thornapple Kellogg. TK schools have pulled out. Working with Northeastern Elementary in the Hastings school district; however, COVID 19 stopped any launch until school year 2020/2021

Obesity and weight issues, Continued

Action 4

Improve access for patients and community members looking to address obesity and weight issues.

Measurable Impact

- Approve new program/service 1/31/2019.
- Launch 1 new program/service, to address obesity in Barry County. (i.e. support group or OPTIFAST medically supervised weight-loss program) by 6/30/2019.
- Offer at least 2 weight loss programs/services each month by 6/30/2020.
- Track participant's pre and post biometrics with 50 % of participants decreasing their BMI, while reaching an ideal weight (BMI or physician identified). To be completed by 6/30/2020.

Impact of Implementation Plan Strategy

OPTIFAST program launched in October 2019.

22 participants. Total weight loss 3,062 lbs. Average weight loss per person 139.68 lbs. Group average BMI of 47.11 and currently have an average BMI of 33.11.



**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، فيمكنك الحصول على المساعدة اللغوية المتاحة مجاناً. اتصل على الرقم 1.844.359.1607 (TTY: 711).

Community Health Needs Assessment for:

Pennock Hospital d/b/a Spectrum Health Pennock

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 facilities are located (Barry), but also regions outside the county which compose SHP's primary (PSA) and secondary (SSA) service areas, such as Eaton County. The target population of the assessment reflects an overall representation of the community served by this hospital facility. The information contained in this report is current as of the date of the CHNA, with updates to the assessment anticipated every three (3) years in accordance with the Patient Protection and Affordable Care Act and Internal Revenue Code 501(r). This CHNA complies with the requirements of the Internal Revenue Code 501(r) regulations either implicitly or explicitly.

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

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