Spectrum Health United and Kelsey Hospitals Community Health Needs Assessment

Martin Hill, PhD | May 31, 2020





Table of Contents

Introduction	3
Background and Objectives	4
Methodology	5
Executive Summary and Key Findings [Significant Health Needs]	7
Detailed Findings	
Social Indicators	
Demographics of Montcalm County	
Crime Rates	
Unemployment	
Poverty	
Education	
Environmental Factors	
Adverse Childhood Experiences	21
Community Characteristics	
Characteristics of a Healthy Community	
Characteristics of the SHUK Community	
Overall Health of the SHUK CommunitySocial Determinants of Health	
Health Status Indicators	
Life Expectancy and Years of Potential Life Lost	
Leading Causes of Death	
Cancer Diagnosis and Death Rates	
Chronic Conditions	
Most Pressing Health Issues or Concerns	
Overall Satisfaction with Health Climate	37
Health of Underserved Residents	
Substance Use/Abuse	40
Health Care Access	
Satisfaction with Health Care System	
Payment for Health Care	
Sources of Health Information	
Awareness and Use of Health Care Services Barriers to Health Care Access	
Program and Services Lacking in the Community	
Improvement in Health Care Access	
Lack of Primary Care	
Underserved Populations	50
Communication Between Health Care Providers	53
Ability to Refer People to Care	52
Solutions and Strategies	55
Strategies Implemented Since Last CHNA	
Resources Available to Meet Issues/Needs	
Suggested Strategies to Address Issues/Needs	59
Appendix	
Participant Profiles	
Previous Implementation Plan Impact	63

Introduction



Background and Objectives

VIP Research and Evaluation was contracted by Spectrum Health to conduct a Community Health Needs Assessment (CHNA) for Spectrum Health United and Kelsey Hospitals (SHUK) in 2019. For the purposes of this assessment, "community" is defined as, not only the county in which the hospital facilities are located (Montcalm), but also regions outside the county which compose SHUK's primary (PSA) and secondary (SSA) service areas, such as Ionia 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 SHUK communities 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 SHUK 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 SHUK.

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 SHUK, including primarily Montcalm County, but also portions of Ionia 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 United and Kelsey Hospitals 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	3
Key Informants	Online Survey	Physicians, Nurses, Dentists, Pharmacists, Social Workers	28
Community Residents (Underserved)	Self-Administered (Paper) Survey	Vulnerable and underserved subpopulations	60
Community Residents	Telephone Survey	SHUK area adults (18+)	413

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 60 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 413 SHUK area adults (age 18+). The response rate was 33%.

Disproportionate stratified random sampling (DSS) was used to ensure results could be generalized to the larger SHUK 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 413 completed surveys:

- 175 are cell phone completes (42.4%) and 238 are landline phone completes (57.6%).
- 115 are cell-phone-only households (27.8%).
- 96 are landline-only households (23.2%).
- 201 have both cell and landline numbers (48.7%).

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 SHUK 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 SHUK 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 413, 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 United and Kelsey Hospitals.

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 SHUK 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 SHUK 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:

- Examination of quantitative data to see the issues
 Key Informants and SHUK 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.
- 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.
- 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 SHUK 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, SHUK 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-ofpocket 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 United and Kelsey Hospitals reside in communities faced with many economic, social, and health challenges. However, community members also see improvement over the past several years from the CHNAs that have been conducted and the strategic plans that have been implemented that focused on areas of need uncovered in the research.

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

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

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

While Montcalm County has lower levels of violent crime and homicide compared to the state, the rates of child abuse/neglect are much higher than state and national rates.

Unemployment is on par with state and national rates. Poverty levels are higher than state and national rates, and one-fourth (25.3%) of all children live in poverty. Further, half (52.3%) of single female families with children under five years old live in poverty. Educational levels are lower than the state and the nation; however, the freshman graduation rate for Montcalm County is higher than the state and national rates.

Compared to state and national rates, life expectancy rates are lower, and age-adjusted mortality rates are higher, for residents in Montcalm County. On the other hand, infant mortality rates are lower in Montcalm County compared to the state or the nation.

There is ample room for improving the health climate of the SHUK area. Taking everything into account – health conditions, health behaviors, health care availability, health care access – only 23.1% 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 28.9% of area adults think, overall, their community is very or extremely healthy.

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

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

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

1. Health Care Access

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

- When SHUK area adults think about the characteristics that make a community "healthy," access to health care is their top consideration.
- So, it's concerning when almost three-fourths (72.1%) of area residents believe access to health care is a critical problem for some community residents.
- Only six in ten (59.1%) 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 more resources or services ideally, but practically lists/tools that identify programs and services available with contact information
- There are far fewer MDs and DOs (per 100,000 population) in Montcalm County (42.9) 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 (70.4%) Key Informants say transportation issues are a common barrier to accessing care; ranked first on a long list of barriers
 - Lack of transportation is the top reason cited by underserved residents who have trouble meeting their health care needs
- **Cost** of care is another barrier for some residents, and this barrier is present even for those with insurance due to unaffordable copays, deductibles, and spend-downs.
 - Six in ten (63.0%) Key Informants cite the inability to afford out-of-pocket expenses as a common barrier (second behind transportation)
 - Area adults report that the top two barriers to access, by far, are the inability to afford out-of-pocket expenses and the high cost of prescription drugs
- Lack of awareness of existing programs or services may not be a barrier to access since almost eight in ten (79.0%) 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:
 - One in five (22.4%) 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-ofpocket expenses
 - The vulnerable and underserved often forego needed preventive or maintenance care, including prescription medications, and over-utilize emergency room services
 - Eight in ten (79.3%) underserved adults report that they visited the ER/ED at least once in the past year; 27.6% three or more times
 - 15.0% of underserved adults had to skip or stretch their medication in the past year due to cost
 - 13.6% of underserved adults have no health care provider (no medical home)
 - 19.3% of all adults in the general sample have Medicaid for their health insurance, compared to 81.0% 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 Heath Needs Assessments have been conducted.

- Key Stakeholders and Key Informants consider mental health to be among the most pressing community issues for several reasons:
- The area suffers from a lack of mental health professionals (especially psychiatrists) and a lack of programs, services, and resources in general that address mental health; this void includes a lack of resources to address mental health proactively, such as teaching coping skills and stress management techniques and providing children with mental health support early on
- Health is often not considered in a holistic manner, leaving root causes of a patient's condition or difficulty unaddressed; as a result, mental health issues may not be recognized in their early stages when they can be more easily treated
- Aspects of the SHUK service area's social environment such as widespread poverty make area residents more susceptible to mental health challenges
- 47.8% of Key Informants see a lack of residential treatment for mental health
- Almost half (47.1%) of 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, a sizeable proportion of Key Informants also think
 access to mental health treatment for severe and/or
 persistent disorders (40.0%) and access for those with
 mild to moderate disorders (35.0%), 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.
- More than half (52.2%) of Key Informants see a lack of residential treatment for substance use disorder and this was their top mention.
- 25.0% 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-third (33.3%) of underserved residents report nicotine/smoking had a negative impact on their household.
 - In Montcalm County, smoking is a problem among pregnant women
- 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 SHUK area by Key Stakeholders, primarily because of its comorbidity with other chronic conditions or negative outcomes such as diabetes, hypertension, heart disease, and sleep apnea.
- One-fourth (24.7%) of area adults cite obesity as the most important health problem in their community, second only to cancer.
- One-fourth (26.1%) of 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).
- Montcalm County has higher death rates than the state or nation for heart disease, diabetes, chronic lower respiratory diseases, and Alzheimer's disease.
- Cancer death and diagnosis rates are lower in Montcalm County compared to state and national rates.
- Three in ten (29.1%) area adults report cancer as the most important health problem in their community today, the highest proportion of all problems rated.

Negative Social Indicators

- Negative social indicators, such as lack of affordable housing, lack of affordable healthy food, adverse childhood experiences, and environmental conditions can cultivate negative health outcomes.
- As stated earlier, poverty is a major problem in the area, and Key Informants rated it the second most important health issue or concern in the community, only behind mental health.
- That said, poverty is a macro socioeconomic problem that, in and of itself, is very difficult to ameliorate and beyond the scope of any CHNA implementation plan. However, ways to address some of the issues of poverty include:
 - Finding ways to provide more affordable housing
 - Providing more healthy food options to residents at lower costs in order to improve the nutrition of those who would not otherwise be able to afford healthy food
- Strengthening social service programs to offset the negative outcomes that can accompany poverty (e.g., broken homes, abusive relationships, household challenges) and help disrupt/break negative family cycles that perpetuate generations of suffering
- Addressing the economic disparity by ensuring that underserved/vulnerable groups have access to services that will move them closer to participating on a level playing field, such as education
- Connecting economically struggling residents with services providing low-cost or no-cost doctor visits, prescription refills, and other needed health services
- Six in ten (62.7%) 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, nonprofits, 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: 66.2% 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

- Spectrum Health partners with schools to address health behaviors/risk behaviors at an early age.
- Grant money through FDHC is being utilized to address the opioid problem and substance use disorder.
- Local initiatives, such as drug takeback programs (Greenville), exist to address substance use disorder.
- Telecommunication via video conferencing is being used in mental health treatment to offset the lack of psychiatrists in the area.
- Community Mental Health and Cherry Street Clinic are partnering to improve access to mental health treatment.

- United Lifestyles supports initiatives that improve the access to affordable healthy food, as well as provide healthy food to schools and hospitals.
- United Lifestyles is also working with the Health Department on a maternal and child health project.

Suggestions on Additional Strategies to Employ to Address Needs

- Improve access to available Community Mental Health programs.
- Encourage more/better collaboration between health care and mental health.
- Provide more resources in schools and in the community for the ALICE* population.
- Find a way to build/construct a local detox facility and/or a drug treatment program that is centrally located to all the regional hospitals.
- 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.
- Utilize on-site providers working in conjunction with centrally located specialists to use limited resources efficiently
- Urge hospitals to staff more social workers to address the social component of health.
- Create incentives to entice primary care providers to not only work, but also live, in the SHUK area. An example of this would be to pay providers more than they would make in the urban centers where they would be more likely to live and work.
- Find ways to increase access to transportation, food and lifestyle education, and smoking cessation programs.
- Offer cooking classes that would hopefully be partnered with local farmers' markets.
- Consider a concentrated effort to address substance use disorder similar to the approach currently used to address vaping.
- Increase collaboration among local agencies and organizations but also with county and state governments.
- Ensure that mindfulness is taught in the schools so children can better manage their feelings.

*ALICE, an acronym for Asset Limited, Income Constrained, Employed, is a United Way initiative to define and understand the struggles of households that earn above the Federal Poverty Level, but not enough to afford a barebones household budget

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 three Key Stakeholders interviewed reported that appropriate topics had been explored and the correct questions were asked:

I think that Spectrum CHNA is great. I think it could be brought down a little bit more, but it's really important for, obviously, driving Spectrum's strategy, which is about the programs that they want to offer in the community as a health-care provider. I think it would be important to reflect on the other pieces of the puzzle like the hospital's potential role as an agent of economic change or partnerships that it can make, for example, with the Montcalm Alliance to try to drive economic development above and beyond what they offer clinically.

- Key Stakeholder

Yes, spot on. I think this is an evolutionary step we're talking about today.

- Key Stakeholder

I do think we're asking the right questions. I think we're understanding our community and the needs more effectively. I think we really get at the things that we can impact. I think we do a good job of doing a fairly comprehensive assessment.

- Key Stakeholder

Key Stakeholders also believe the CHNA process can be used to further explore how diseases or disorders are connected, the influence of social determinants on health and health care access, better prioritizing limited resources, and better collaborating as a community to create something more.

I think chronic disease is the big killer, and I think the thing that's co-occurring with that is substance abuse and mental health, so really getting a good handle on that is very, very important. And then, understanding and helping to educate the community and policymakers about social determinants, including the economy, the kinds of jobs that are available that leave people living sort of as ALICE households. It's really important that those things are addressed. In some ways, what the Montcalm Alliance is doing, a lot of this economic development, is just as important to health as Spectrum or the health department or school-based health activities. We've got to shift the foundation – the economic foundation of the community – if we're really going to make deep changes.

- Key Stakeholder

Resource allocation. I think they need to get more in tune to prioritizing limited resources, and then look for nontraditional paths that can be organized.

- Key Stakeholder

Where I think we have opportunity is really to leverage this work not just through Spectrum Health but really through a broader sense of community, and, again, we see that in pockets. For example, Sheridan Hospital - they are in **Montcalm County**; they **do their own CHNA**, as well as Carson City hospital who does theirs, as well as the health department. I'd like to see us all **coordinating and working together**. I think we could do a lot more if we could do all these together. I'm aware of the work that they do in Ottawa County. However, as I work with the leaders in the counties that I serve, they kind of want to do their own thing still, and I'm not sure how to help bring that all together. It seems kind of silly that we're all doing our own thing. There is [a lot of redundancy]. It's small little programs that we're implementing instead of something on a much larger scale that truly impacts the community at large.

- Key Stakeholder

Detailed Findings



Demographics of Montcalm County

Montcalm County is predominantly a rural area, where 91.8% of its residents are White and roughly 42.8% of the population is under age 35. The median household income is \$47,000, much lower than the state (\$54,938) or the nation (\$60,293).

Montcalm County Demographic Characteristics

	N	%
Total Population	63,209	100.00%
Gender		
Male	32,595	51.6%
Female	11,494	48.4%
Age		
Under 5	3,592	5.7%
5 to 14	8,148	12.9%
15 to 24	7,706	12.2%
25 to 34	7,552	11.9%
35 to 44	7,716	12.2%
45 to 54	8,933	14.1%
55 to 64	9,043	14.3%
65 to 74	6,115	9.7%
75 to 84	3,154	5.0%
85 and over	1,250	2.0%
Race/Ethnicity		
White/Caucasian	58,050	91.8%
Black/African American	1,332	2.1%
Hispanic/Latino	2,197	3.5%
Asian	306	0.5%
American Indian/Alaskan Native	253	0.4%
Native Hawaiian/Pacific Islander	41	0.1%
Some Other Race	23	<0.1%
Two or More Races	1,007	1.6%

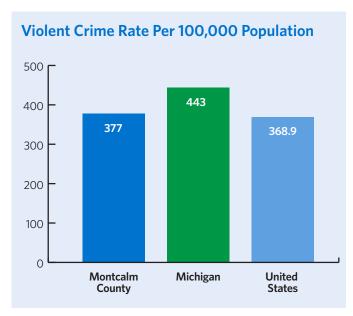
	0/
	%
Household Income	
Less than \$10,000	6.6%
\$10,000 to \$14,999	5.3%
\$15,000 to \$24,999	12.2%
\$25,000 to \$34,999	13.2%
\$35,000 to \$49,999	16.3%
\$50,000 to \$74,999	19.7%
\$75,000 to \$99,999	12.5%
\$100,000 to \$149,999	10.1%
\$150,000 to \$199,999	2.5%
\$200,000 or more	1.5%
Urban/Rural Population	
Urban	15.4%
Rural	84.6%

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

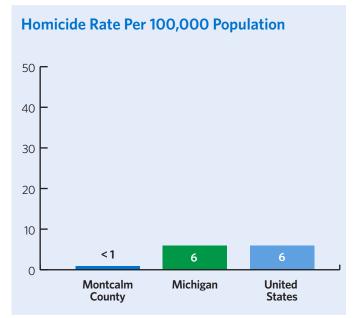
Crime Rates

Montcalm County experiences considerably less violent crime than Michigan but slightly more than the U.S.

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

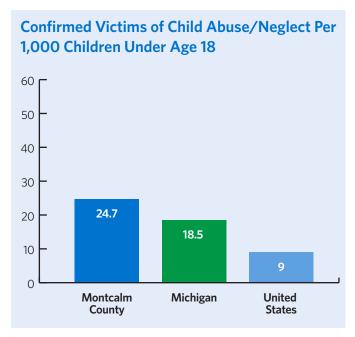


Source: County Health Rankings, 2014-2016; Federal Bureau of Investigation, Uniform Crime Reporting Program, 2018.



Source: County Health Rankings, 2014-2016.

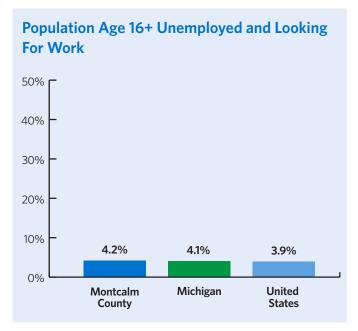
Montcalm County has a significantly higher rate of child abuse and neglect than Michigan and the U.S. In fact, the rate in Montcalm County is almost triple that of the national rate.



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

Unemployment

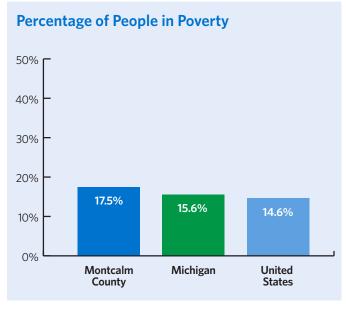
The unemployment rate in Montcalm County, although low, is still slightly higher than the state or national rates.



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

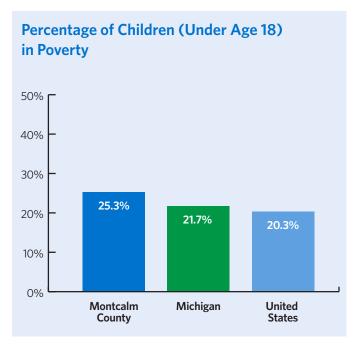
Poverty

The proportion of all people living in poverty is higher in Montcalm County than in Michigan or 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 higher in Montcalm County than in the state or the nation.

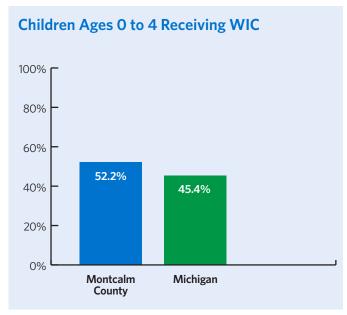


Source: U.S. Census Bureau, 2013-2017, 5-Year American Community Survey.

Poverty, Continued

More than half (52.2%) of the children aged 0-4 in Montcalm County receive WIC; a rate higher than the Michigan rate.

Further, six in ten (60.2%) students in Montcalm County are eligible for free/reduced price lunches. This proportion is higher than the proportions in Michigan or the U.S.



Source: Kids Count Data Center, 2018.

Percentage of Students Eligible for Free/ **Reduced Price School Lunches** 100% 80% 60% 60.2% 52.3% 50% 40% 20% 0% Montcalm Michigan United County States

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

Poverty, Continued

The proportion of all families living in poverty is higher in Montcalm County compared to the proportion in the state or the nation.

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

Almost four in ten (38.6%) single-female families with children under five years old from Montcalm County live in poverty; a rate higher than the state or the U.S.

Poverty Levels

	Montcalm County	Michigan	U.S.
All Families			
With children under age 18	22.4%	18.4%	16.7%
With children under age 5	27.3%	20.6%	16.2%
Total	12.7%	10.9%	10.5%
Married Couple Families			
With children under age 18	11.6%	7.5%	7.5%
With children under age 5	15.0%	6.9%	5.9%
Total	6.9%	4.9%	5.3%
Single Female Families			
With children under age 18	48.8%	42.5%	38.7%
With children under age 5	52.3%	49.5%	43.7%
Total	38.6%	31.3%	28.8%

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

Education

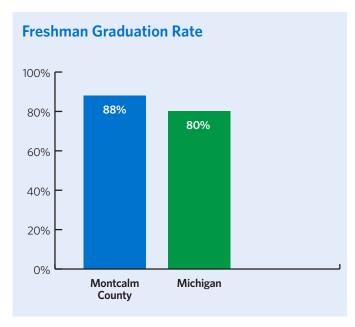
Montcalm County has a greater proportion of adults, both men and women, whose highest educational achievement is high school graduate. Moreover, the rate of adults who have earned a Bachelor's degree or higher are lower compared to Michigan or the U.S.

On the other hand, freshman graduation rates are higher in Montcalm County than in the state.

Education Level (Among Adults Age 25+)

		Men			Women	
	Montcalm County	MI	U.S.	Montcalm County	MI	U.S.
No Schooling Completed	1.6%	1.1%	1.4%	0.9%	1.0%	1.4%
Did Not Graduate High School	12.4%	9.4%	11.9%	8.9%	8.1%	10.6%
High School Graduate, GED, or Alternative	41.1%	30.0%	28.1%	36.9%	28.6%	26.6%
Some College, No Degree	25.2%	23.6%	20.5%	27.7%	23.6%	21.0%
Associate's Degree	7.8%	8.0%	7.4%	11.9%	10.5%	9.1%
Bachelor's Degree	8.0%	16.9%	18.9%	9.6%	17.2%	19.4%
Master's Degree	2.9%	7.4%	7.7%	3.4%	8.8%	9.1%
Professional School Degree	0.9%	2.1%	2.4%	0.5%	1.3%	1.7%
Doctorate Degree	0.2%	1.5%	1.7%	0.2%	0.9%	1.1%

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

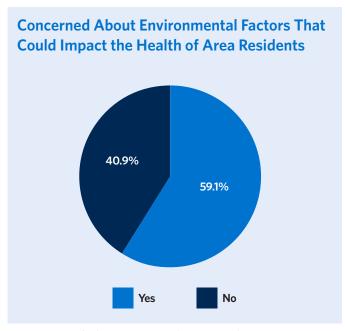


Source: County Health Rankings, 2016-2017.

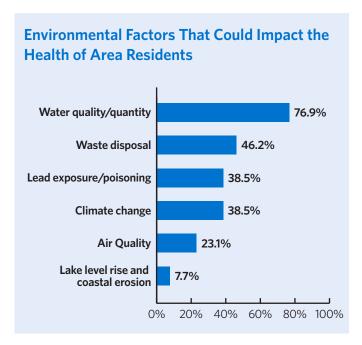
Environmental Factors

Six in ten (59.1%) 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, three-fourths (76.9%) cite water quality/quantity as possibly impacting the health of area residents, while 46.2% cite waste disposal as a negative factor.



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



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=22); Q11a; (If yes) What are the environmental factors that you think could impact the health of area residents? (Multiple response) (n=13)

Adverse Childhood Experiences

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

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

I really want to thank you for doing that. That was tremendously valuable. Those were used at the Montcalm Human Services Coalition to really drive the conversation with them. You did a really good job, and you know the correlation between the ACEs and poor health outcomes was so strong. It's just right there in people's faces, so I really want to thank you for doing that.

- Key Stakeholder

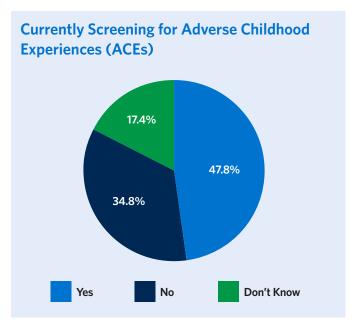
I think it's **good to know** that information. I think it's **relevant**. It's **interesting** - the familiarity that, quite honestly, even health-care providers have with the ACEs. I think we have a lot of work to do to help educate people on **how we can utilize that data more effectively**.

- Key Stakeholder

I don't know how it will impact the near term versus the long term. There's some substantial research from what I've been reading that correlates a lot of earlyage behavior and situations and living arrangements or whatever to long-term health needs. That's a leap that we've got to sort of work on over time, but I think certainly in the near term there are some compelling areas that we can work on. It makes sense to me, but I don't know how to connect the dots with that yet.

- Key Stakeholder

Despite the fact that ACEs are considered important as predictors of adult outcomes, only 47.8% of Key Informants can confirm that they, or their organization, screen patients/clients for adverse childhood experiences.

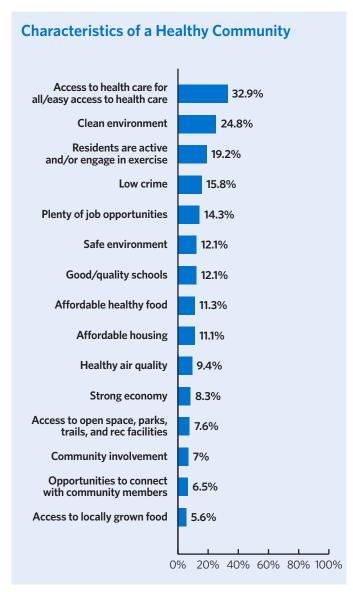


Source: Key Stakeholder Interviews, Q4: Are you aware of the ACEs (Adverse Childhood Experiences) data that came out of the last CHNA/BRFS study conducted in 2017, or are you aware of ACEs data in general? (n=6); Q4a: (If yes) How important is it that we collect this type of data in the CHNA? (n=6);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

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, engaged, and connected, low crime, plentiful jobs, and safe and clean environments.

Over one-third of area residents (32.9%) 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=404).

Characteristics of the SHUK Community

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

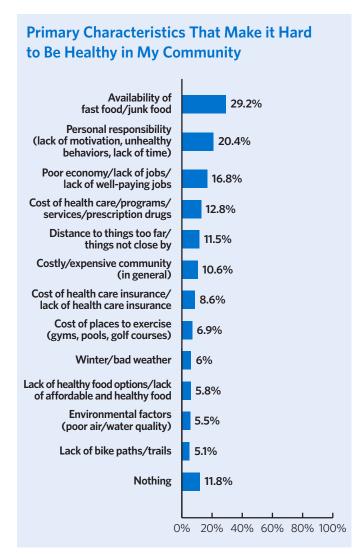
Some residents also consider health care and affordable healthy food to be accessible for some residents.

Primary Characteristics That Make it Easy to Be Healthy in My Community Walkable (places to walk/hike, 36.3% walking paths/trails) Bike paths/trails 30.8% Outdoor spaces (parks) 17.6% Lakes/rivers 17.5% **Farmers markets** 17% Access to good health care/ 15.6% doctors/hospitals Access to food/healthy food/ 15% affordable food Places to be active/exercise 11.7% (golf courses, gyms) Caring/kind/ 10.8% generous people/neighbors 10.5% Gardens/green spaces Clean environment (air, water) 6.3% Safe community 5.8% 20% 40% 60% 80% 100%

Source: Resident Telephone Survey: Q4: What are the primary characteristics of your community that make it easy to be healthy? (Multiple response) (n=407).

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

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

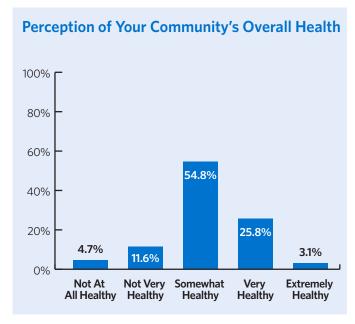


Source: Resident Telephone Survey: Q5: On the other hand, what are the primary characteristics of your community that make it hard to be healthy? (Multiple response) (n=389).

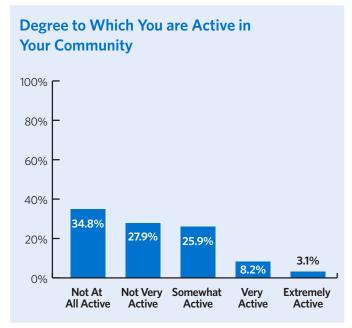
Overall Health of the SHUK Community

Three in ten (28.9%) area residents believe their community is very or extremely healthy overall. Almost one in six (16.3%) see their community as not very or not at all healthy.

More than six in ten (62.7%) area residents 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=400).



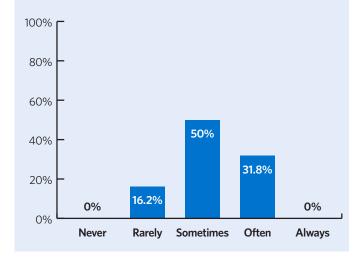
Source: Resident Telephone Survey: Q20: How active would you say you are in your community when it comes to things like being involved in civic organizations, volunteering, town commissions/boards, non-profits, etc.? Would you say...? (n=411).

Social Determinants of Health

According to Key Informants, opportunity exists for more inclusion of social determinants of health when developing treatment or care plans. Half (50.0%) say that social determinants of health are considered only sometimes and another 16.2% say they are considered rarely, when developing treatment/care plans for area residents.

Unprompted, Key Stakeholders mention the importance of the social determinants of health for addressing health and outcomes; negative social conditions drive poor health or negative outcomes.

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



I still feel like while it's probably true that parts of Michigan are recovering economically, it's not the narrative in this part of the state, and so the **social determinants of health** are **still driving poor health**.

- Key Stakeholder

It's repeating points I've made before that **chronic disease**, **substance abuse**, and **mental health** in particular are really **driven by social determinants: low incomes, low-paying jobs, high unemployment, unaffordable housing**, things that that. It creates a lot of profound strategy issues for hospitals. If they're in low-income communities, then they're the biggest employer, and they don't just want to throw their money away. They want to stay in business, but their existence as a hospital and their role as an employer becomes part of the solution - or maybe not solution, but part of the strategy to dealing with these issues.

- Key Stakeholder

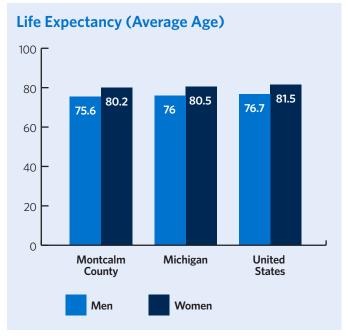
Source: Key Informant Online Survey: Q8: In your opinion, how often are social determinants of health considered when developing treatment or care plans for area residents? Examples of social determinants of health include housing, transportation, and food access, among others. (n=22)

Life Expectancy and Years of Potential Life Lost

For both men and women, life expectancy in Montcalm County is lower compared to Michigan and the U.S.

Montcalm County residents experience more years of potential life lost overall compared to Michigan, and specifically to accidents, heart disease, and chronic lower respiratory disease.

On the other hand, Montcalm County residents experience fewer years of potential life lost for malignant neoplasms.



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

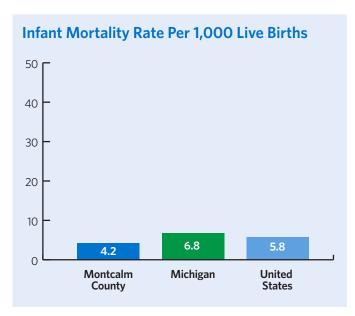
Years of Potential Life Lost

	Mic	higan	Montcal	m County
	Rank	Rate	Rank	Rate
All Causes		7992.0		8748.7
Malignant neoplasms (All)	1	1571.6	3	1346.3
Accidents	2	1434.6	1	2011.9
Diseases of the heart	3	1283.9	2	1607.1
Drug-induced deaths	4	1031.2		**
Intentional self-harm (Suicide)	5	431.5		**
Chronic lower respiratory diseases	6	243.3	6	271.0

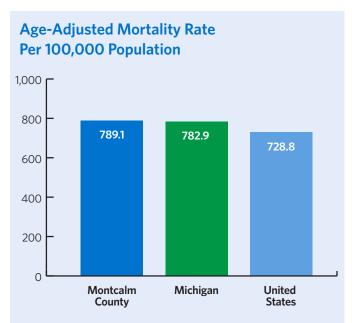
Source: Michigan DHHS, Division of Vital Records and Health Statistics, Geocoded Michigan Death Certificate Registry, 2017. **Note:** ** = data do not meet standards of reliability and precision OR have a zero value.

Mortality Rates

The infant mortality rate is lower in Montcalm County, but the age-adjusted mortality rate is higher, 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.

Leading Causes of Death

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

Montcalm County has higher death rates from heart disease, unintentional injuries, chronic lower respiratory diseases, Alzheimer's disease, diabetes, and pneumonia/influenza compared to Michigan and the U.S.

The death rate from cancer is lower in Montcalm County than the state or national rates.

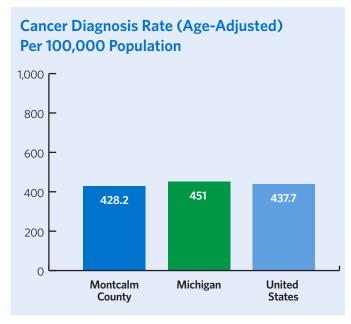
	Micl	nigan	United	l States	Montcal	m County
	Rank	Rate	Rank	Rate	Rank	Rate
Heart Disease	1	195.9	1	165.5	1	197.8
Cancer	2	161.1	2	155.8	2	143.3
Unintentional Injuries	3	53.9	3	47.4	3	71.3
Chronic Lower Respiratory Diseases	4	44.3	4	40.6	4	58.8
Stroke	5	39.2	5	37.3	7	32.6
Alzheimer's Disease	6	34.5	6	30.3	5	35.7
Diabetes Mellitus	7	22.1	7	21.0	6	33.8
Kidney Disease	8	14.7	10	13.1		**
Pneumonia/Influenza	9	14.1	9	13.5	8	25.2
Intentional Self-Harm (Suicide)	10	13.6	9	13.5		**
All Other Causes		189.6		190.8		160.9

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

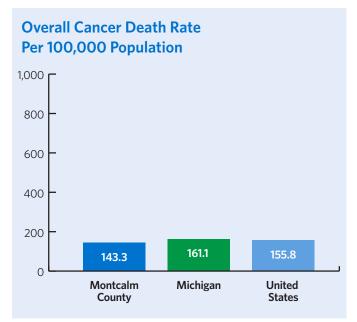
Note: ** = data do not meet standards of reliability and precision OR have a zero value.

Cancer Diagnosis and Death Rates

Montcalm County has lower cancer diagnosis and cancer death rates compared to the state and national rates.



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.

Chronic Conditions

One-third (33.4%) of SHUK area adults report having chronic pain and three in ten (30.2%) report arthritis. One in nine (10.9%) have diabetes and an additional 27.9% have pre-diabetes.

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

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

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

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

Prevalence of Chronic Diseases by Demographics

		Gender				Age						
	TOTAL	Men	Women	White	Non- White	18-24	25-34	35-44	45-54	55-64	65-74	75+
Chronic pain	33.4%	40.2%	27.1%	32.2%	47.7%	30.4%	30.9%	32.5%	38.3%	40.8%	24.5%	30.7%
Arthritis	30.2%	24.3%	35.7%	31.3%	20.9%	13.2%	14.1%	11.8%	25.1%	43.7%	51.1%	65.1%
Pre-diabetes	27.9%	30.0%	26.0%	24.1%	57.2%	29.0%	29.1%	25.9%	28.1%	38.8%	17.6%	20.0%
Lifetime asthma	22.9%	19.1%	26.4%	18.6%	61.5%	16.0%	42.7%	26.3%	31.1%	14.3%	10.5%	7.3%
Diabetes	16.8%	11.6%	21.6%	13.2%	50.9%	5.2%	34.0%	18.8%	25.7%	9.9%	8.7%	3.1%
Current asthma	14.6%	16.9%	12.5%	13.9%	20.6%	15.0%	1.3%	13.3%	15.6%	20.9%	21.8%	17.1%
COPD	10.9%	14.7%	7.5%	11.9%	0.0%	1.7%	0.0%	4.4%	10.1%	20.1%	17.9%	27.8%

Continued

		Educat	tion			Incom	е				Poverty Level	
	TOTAL	<high School</high 	HS Grad	Some College	College Degree	<\$20K	\$20K- <\$35K	\$35K- <\$50K	\$50K- <\$75K	\$75K+	Below Poverty Level	Above Poverty Level
Chronic pain	33.4%	43.3%	31.9%	40.3%	19.8%	64.5%	29.0%	34.2%	39.0%	16.8%	42.8%	31.3%
Arthritis	30.2%	49.0%	30.0%	32.2%	16.3%	37.1%	32.2%	22.4%	26.1%	19.5%	38.5%	24.9%
Pre-diabetes	27.9%	15.6%	29.0%	31.3%	29.4%	22.4%	28.1%	18.1%	19.6%	28.2%	33.7%	20.9%
Lifetime asthma	22.9%	15.1%	25.3%	26.6%	18.4%	10.8%	39.9%	12.2%	18.2%	13.0%	43.7%	17.6%
Diabetes	16.8%	6.8%	20.0%	18.0%	16.1%	5.6%	35.5%	8.7%	6.7%	5.4%	40.6%	10.5%
Current asthma	14.6%	11.0%	19.3%	18.2%	3.8%	28.3%	17.4%	9.1%	8.7%	0.6%	18.7%	11.9%
COPD	10.9%	5.8%	6.3%	16.4%	13.8%	20.4%	8.7%	9.2%	10.5%	7.4%	10.1%	10.5%

Source: 2017 SHUK Behavioral Risk Factor Survey, (n=587)

Chronic Conditions, Continued

One in ten (9.5%) SHUK area adults report some form of cardiovascular disease such as stroke, heart attack, and/or angina/coronary heart disease (CHD).

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

Non-White adults are more likely than White adults to have non-skin cancer, while White adults are more likely to have cardiovascular disease and skin cancer than non-White adults. Area adults with less than a high school degree are slightly more likely to have non-skin cancer, heart attacks, and strokes than adults with more education.

Area adults with annual household incomes under \$20,000 are more likely to have any cardiovascular disease compared to adults with higher household incomes.

Prevalence of Chronic Diseases by Demographics

		Gend	er	Race		Age						
	TOTAL	Men	Women	White	Non- White	18-24	25-34	35-44	45-54	55-64	65-74	75+
Any cardio- vascular disease*	9.5%	13.0%	6.1%	9.8%	3.4%	0.0%	0.8%	1.2%	7.4%	18.2%	15.2%	30.1%
Other (non- skin) cancer	7.9%	10.8%	5.3%	6.7%	18.0%	0.0%	0.0%	18.3%	0.8%	9.8%	15.1%	14.8%
Skin cancer	5.4%	4.9%	5.8%	5.8%	0.0%	0.0%	0.7%	0.0%	7.9%	9.7%	7.1%	14.6%
Stroke	4.8%	8.1%	1.7%	4.9%	1.9%	0.0%	0.8%	0.0%	2.4%	9.7%	7.6%	16.9%
Heart attack	4.2%	4.6%	3.8%	4.3%	3.4%	0.0%	0.0%	1.2%	6.2%	8.4%	6.9%	6.0%
Angina/coronary heart disease	3.5%	5.6%	1.7%	3.3%	1.9%	0.0%	0.0%	0.0%	1.2%	6.2%	6.7%	15.7%

Continued

		Educa	tion			Income	е				Poverty Level	
	TOTAL	<high School</high 	HS Grad	Some College	College Degree	<\$20K	\$20K- <\$35K	\$35K- <\$50K	\$50K- <\$75K	\$75K+	Below Poverty Level	Above Poverty Level
Any cardio- vasculardisease*	9.5%	14.8%	8.8%	9.5%	7.2%	20.5%	7.7%	12.8%	4.4%	3.4%	10.6%	8.3%
Other (non- skin) cancer	7.9%	12.8%	9.3%	5.5%	6.2%	5.2%	15.5%	0.7%	5.7%	3.3%	4.0%	10.3%
Skin cancer	5.4%	2.5%	4.5%	7.2%	6.0%	3.5%	4.7%	3.3%	2.4%	2.7%	1.6%	4.5%
Stroke	4.8%	6.9%	5.0%	4.9%	2.8%	12.2%	3.7%	10.2%	2.8%	1.1%	6.3%	4.9%
Heart attack	4.2%	7.0%	4.2%	4.3%	2.2%	11.3%	4.2%	3.0%	1.0%	0.0%	5.8%	3.0%
Angina/coronary heart disease	3.5%	0.8%	3.4%	4.3%	4.3%	6.1%	2.5%	5.4%	2.2%	3.3%	2.8%	3.7%

Source: 2017 SHUK Behavioral Risk Factor Survey, (n=587). *Any cardiovascular disease = respondent said they had at least one of the following: heart attack, angina/coronary heart disease, or stoke.

Most Pressing Health Issues or Concerns

All three 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) smoking, especially among pregnant women, (2) chronic disease which is often preceded by obesity, and (3) social issues such as lack of jobs, limited access to healthy food, substandard education, and transportation barriers that can have a negative impact on overall well-being.

- Access to primary care
- Chronic disease
- Education
- General health and well-being
- Health behavior issues such as smoking among pregnant women
- Limited access to healthy food
- Low screening rates
- Loss of good jobs and lack of opportunities
- Obesity
- Smoking
- Transportation

All three Key Stakeholders say they would now add, or stress, substance use disorder, especially the connection between SUD and mental health or other issues with which it is comorbid. This is often known as behavioral health. determinants of health.

I would add to that mental health, including substance abuse. It seems to be threatening the community, particularly youth mental health. We haven't been hit by the opioid crisis like some places farther north, but substance abuse in general is pretty high and co-occurs with other risk factors.

- Key Stakeholder

There's one that's beginning to supersede all of those, and they're connected. It's **behavioral health**- substance abuse. Increasingly, we're connecting the dots, and some of those other issues like general health, physical health, are dependent upon behavioral health. That's becoming more and more evident. Substance abuse is one area; we'll get that cleaned up, but regardless, just the cloud we call behavioral health, however we define that, with the elderly population, beyond dementia, depression, things like that. Then within the younger generation, substance abuse and chronic users of alcohol, opioids, whatever, is rising to the top.

- Key Stakeholder

I think substance use disorder definitely ranks right up there in our counties. We're seeing, certainly, opioid-related issues climbing rapidly.

- 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=3); Q1b: What are the new issues that are pressing or concerning, if any? (n=3)

Most Pressing Health Issues or Concerns, Continued

When Key Stakeholders are asked for the reasons the issues they cited are the most pressing or concerning issues in the community, they provide a picture of a community where behavioral health is a top concern because it not only encompasses multiple health issues, but the issues are largely driven by social determinants of health. However, these social determinants are not easily addressable due to a tremendous lack of resources.

Behavioral health

With the stoplights focusing on opioids addiction, I think we're unearthing a lot more than just the opioid-addicted patients. I think we've become more sensitive to substance abuse on different levels and then also on how their behavioral health affects their physical health, and then we'll be looking at other behavioral-health issues. For us, in health care, we're seeing increasing numbers of patients - Medicare patients - that have co-occurrence or comorbidity with behavioral health issues. That now is becoming a barrier to continuity of care, so if they're in a hospital for sepsis, they're delusional, they're ready for discharge medically, they've got a behavioral issue - a comorbidity or a co-occurrence. Then where do they go? They're not psych enough to go to a psych facility, but they're too psych to go to a medical facility. They're falling between the cracks now. I think we're getting better at identifying that, and that's why.

- Key Stakeholder

Lack of resources

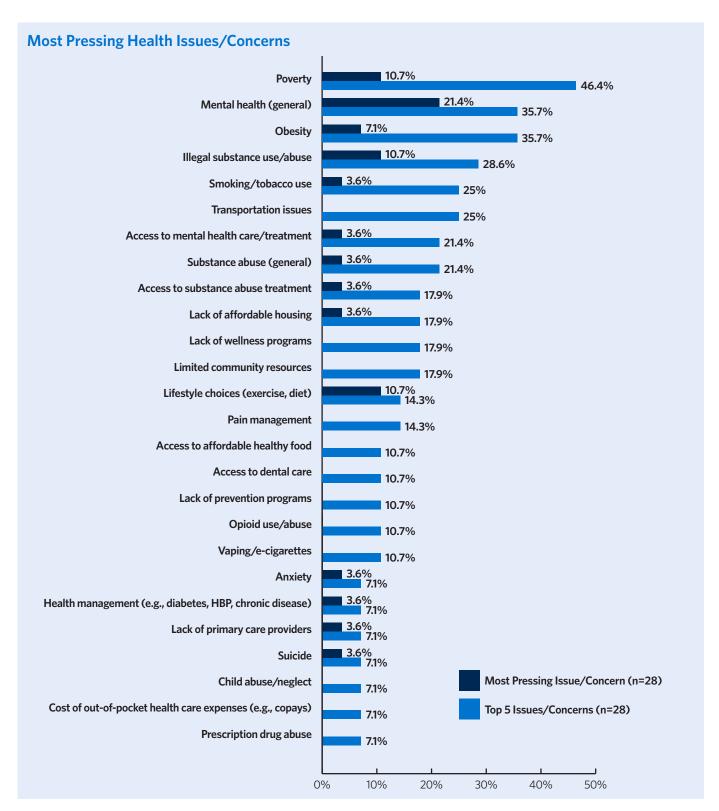
The **challenges** that we have in these **rural communities** related to all of these things are not something that's easy to solve overnight. I think there's a **general overall lack of resources in all of these communities** to help **offset these issues**, so it **will take time**. The other thing I would add, though, is I think that there are **pockets of awareness for these issues** as well as **actions for these issues**, **but they're only pockets**, and so if you happen to live in the community where they happen to be tackling substance-use disorder, that's great, but it's only that one little town in the county, as an example, so it's **just not widespread**.

- 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)

Most Pressing Health Issues or Concerns, Continued

Key Informants cite a number of pressing health issues or concerns in the SHUK area today. Most often cited are mental health (and access to treatment), substance use disorder (and access to treatment), poverty, obesity, smoking, 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?

Most Pressing Health Issues or Concerns, Continued

Mental illness and substance use disorder are connected to so many additional societal ills; however, the lack of treatment hinders addressing any problems associated with either.

Poverty exacerbates existing health and behavioral problems and is also a barrier to existing resources.

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

Mental health

People behave according to their narrative; if that is skewed, it affects everything from financial choices to self-medication and treatment of others.

- Key Stakeholder

Daily mental health patients are having to be evaluated in the emergency room. Many of these patients **end up having to be in the emergency room for hours to days** at a time without needing medical treatment. **They need mental health treatment**.

- Key Stakeholder

Substance use disorder

It is a **root cause of many other issues** in the community such as **child abuse**, increase in foster children, **learning issues with children**, and it is being reported by our children in as low as 5th grade to be **easy to access and an issue in schools.**

- Key Informant

I feel that there has been an increase in substance use/abuse within the last five years, leading to higher poverty rates and less affordable housing.

- Key Stakeholder

Poverty

Poverty has been linked to increased health issues among those who live in or encounter poverty. **Poverty contributes to many instances of inequitable access to resources and opportunities.**

- Key Informant

I believe that many of the "other" health issues diminish if the family or individual has adequate resources.

- Key Stakeholder

Source: Key Informant Online Survey, Q1c: Why do you think [insert issues] is the most critical health issue or concern in the area? (n=28).

Most Pressing Health Issues or Concerns, Continued

Lifestyle choices Poor dietary choices. Lack of exercise and unwillingness to follow up with health maintenance issues lead to overall poor health in general.

- Key Informant

Because these choices contribute to obesity and poverty and mental illness.

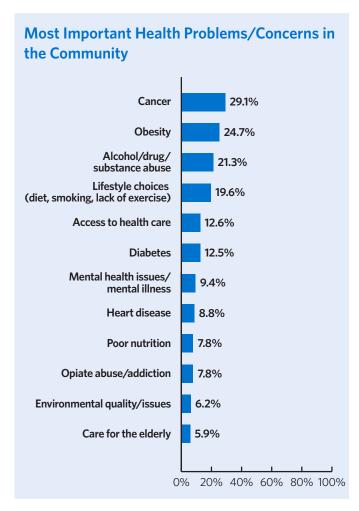
- Key Informant

Obesity

Obesity plays into a lot of the other issues. It is also one of the hardest things for a person to change.

- Key Informant

Source: Key Informant Online Survey, Q1c: Why do you think [insert issues] is the most critical health issue or concern in the area? (n=28).



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=377).

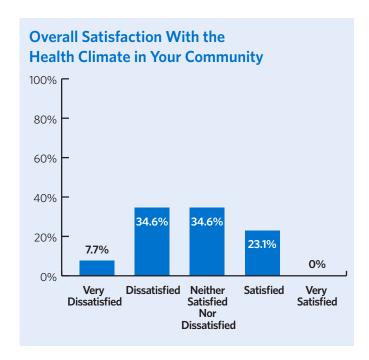
SHUK area adults list cancer and obesity as the two most important health problems or concerns in the community.

One in five area adults mention substance use disorder and/ or lifestyle choices as additional health issues or concerns in their community.

Health Status Indicators

Overall Satisfaction with Health Climate

In considering the overall health climate of the SHUK area, fewer than one-fourth (23.1%) of 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.



Satisfied

There has been **growth** in the **programming available** and the **medical services/specialties** coming **in the county.**

I am satisfied with the access to health care in the community; I find it easy to locate a provider and have the appointment be within the week.

Neither satisfied nor dissatisfied

Neither satisfied Some attention is being given but not enough, especially to low-income residents.

There are **clearly barriers for some people** when it comes to being healthy. There are **also many people that do not accept responsibility** for their own health.

Dissatisfied

With lack of resources, we have many people falling through the cracks. Especially with mental health issues.

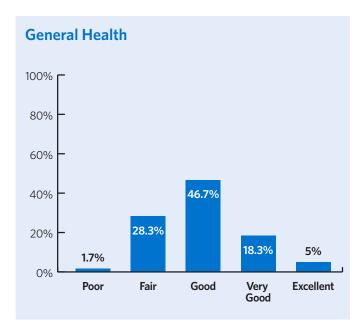
We are **doing OK overall**, but there are **several areas that we could improve**. **Substance abuse, mental health, affordable housing**, and **transportation** are the largest issues we face.

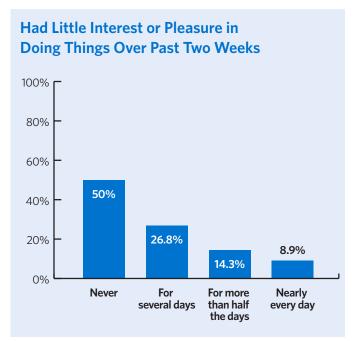
Source: Key Informant Online Survey, Q9: Taking everything into account, including health conditions, health behaviors, health care availability, and health care access, how satisfied are you overall with the health climate in your community? (n=26); Q9a: Why do you say that?

Health of Underserved Residents

Three in ten (30.0%) underserved residents report their general health as fair or poor. Additionally, roughly half had "little interest/pleasure in doing things" (50.0%) and/or "felt down, depressed, or hopeless" (51.8%) at some point during the past two weeks.

Almost one in seven (15.0%) underserved residents thought about taking their life during the past year; 3.4% of them attempted suicide in the past year.





Feeling Down, Depressed, or Hopeless Over **Past Two Weeks** 100% 80% 60% 48.2% 40% 28.6% 20% 12.5% 10.7% 0% Never For Nearly For more several days than half every day the days

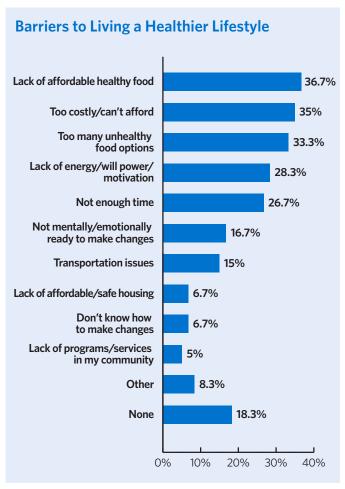
Source: Underserved Resident Self-Administered Survey: Q1: To begin, would you say your general health is...? (n=60); Q17: Over the past two weeks, how often have you been bothered by having little interest or pleasure in doing things? (n=56); Q18: Over the past two weeks, how often have you been bothered by feeling down, depressed, or hopeless? (n=56); Q19: Has there been a time in the past 12 months when you thought of taking your own life? (n=60); Q20: During the past 12 months, did you attempt to commit suicide (take your own life)? (n=60)

Health Status Indicators

Health of Underserved Residents, Continued

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

Too many unhealthy food options, lack of energy, will power, motivation, and time are also barriers to living healthier.



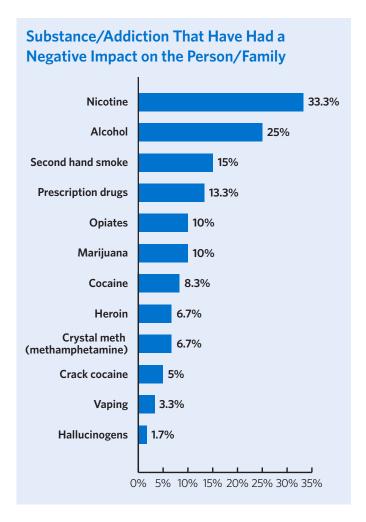
Source: Underserved Resident Self-Administered Survey: Q10: What are some of the barriers you face when trying to live a healthier lifestyle? (Multiple response) (n=60)

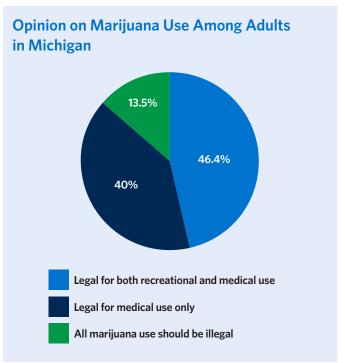
Health Status Indicators

Substance Use/Abuse

One-third (33.3%) of underserved residents report that nicotine negatively impacted their family. Additionally, one-fourth (25.0%) said alcohol use/abuse was harmful.

Among adults in the general population, almost half (46.4%) think marijuana should be legal for both medical and recreational use.



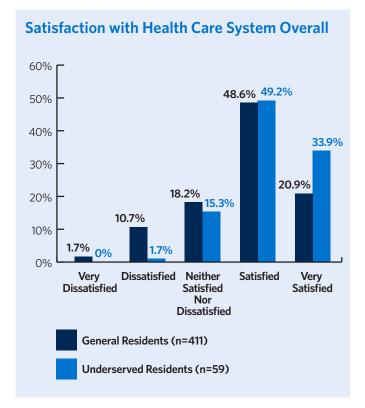


Source: Underserved Resident Self-Administered Survey: Q13: Substance abuse and addiction can have a negative impact on individuals and families. Which of the following, if any, have had a negative effect on your or your family? (Multiple response) (n=60); Resident Telephone Survey, Q21: In your opinion, should marijuana use by adults be legal for both recreational and medical use, medical use only, or should all marijuana use be illegal? (n=392)

Satisfaction with Health Care System

In terms of satisfaction with the health care system, underserved residents are more satisfied (83.1% satisfied/very satisfied) with the system overall than general residents (69.5% satisfied/very satisfied).

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



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

Cost of medication is causing senior citizens to choose food or medicine.

- General Resident

Have to **sit on the phone a long time. 35 minutes** is a long time.

- General Resident

I think everyone should have access to health care and not everyone does.

- General Resident

The **communication is bad** and it **leads to bad out outcomes** because they are so busy.

- General Resident

Cost of insurance and medical bills. It's hard to find a doctor who really cares.

- General Resident

It costs too much and then you have to pay out of pocket.

- General Resident

Prices are artificially inflated.

- Underserved Resident

Doctors do not take time with the patients. The health care is often not helpful; they do not diagnose.

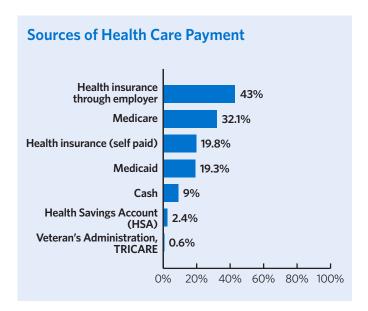
- General Resident

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?

Payment for Health Care

The majority of adult residents pay for their health care through insurance they receive through their employer (43.0%) or via private insurance that they purchased (19.8%).

Conversely, eight in ten (81.0%) underserved residents have Medicaid for health insurance, while 5.2% have no insurance.



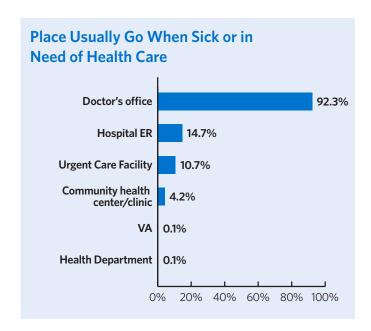
Type of Insurance (Underserved Residents) Medicaid 81% Medicare 19% **Employer provided** 10.3% Medicare supplement 3.4% Private insurance 1.7% Other government (e.g., VA, MIChild, etc.) None 5.2% 40% 60% 80% 100% 20%

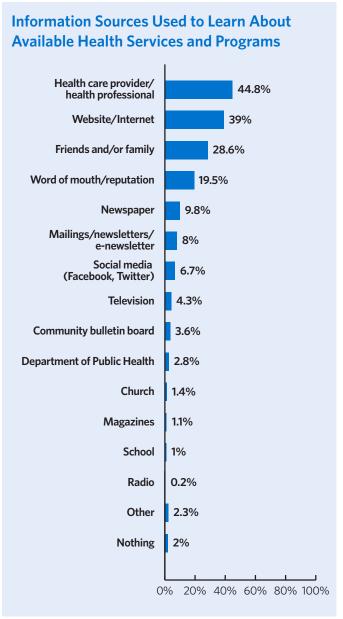
Source: Resident Telephone Survey, Q12: How do you usually pay for your health care? (Multiple response) (n=387); Underserved Resident Self-Administered Survey, Q6: Which of these describes your health insurance situation? (Multiple response) (n=58)

Sources of Health Information

Although more than nine in ten (92.3%) area adults report they usually go to the doctor's office when they get sick, 14.7% visit the Emergency Room (ER).

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



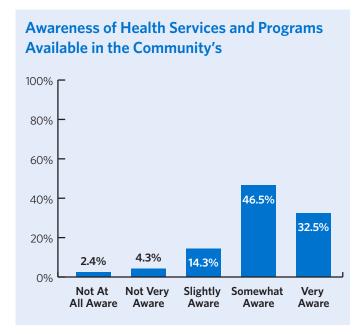


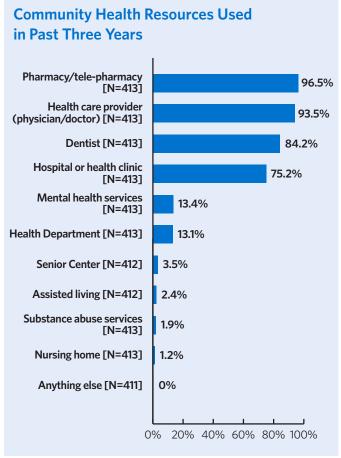
Source: Resident Telephone Survey, Q11: Where do you usually go when you are sick or in need of care? (Multiple response) (n=410); Q10: What information sources do you use to learn about the health services and programs that are available in your community? (Multiple response) (n=406)

Awareness and Use of Health Care Services

Almost eight in ten (79.0%) SHUK area adults say they were somewhat or very aware of health services and programs available in the area.

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



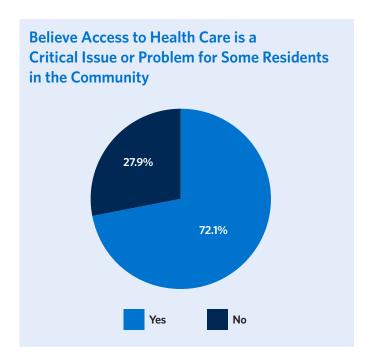


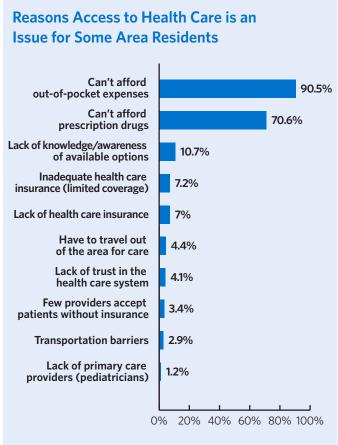
Source: Resident Telephone Survey, Q6: In general, how would you rate your awareness of the health services and programs available in your community? (n=411); Q7: Which of the following community health resources have you used in the past three years?

Barriers to Health Care Access

Seven in ten (72.1%) SHUK 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.



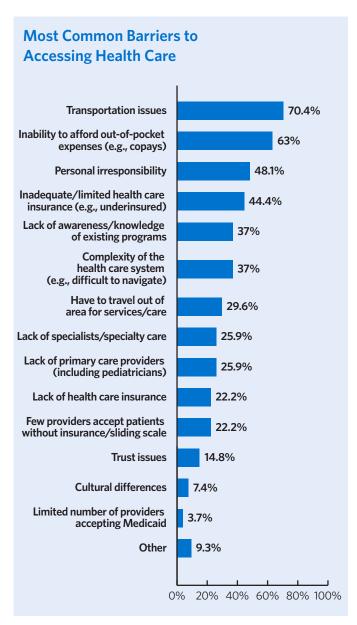


Source: Resident Telephone Survey, Q13: Do you believe that access to health care is a critical issue or problem for some residents in your community? (n=374); Q14: (If yes) In your opinion, why is access to health care an issue for some residents in your community? (Multiple response) (n=275)

Barriers to Health Care Access, Continued

Key Informants report the four greatest barriers to accessing health care as transportation, an inability to afford out-ofpocket expenses such as copays and deductibles, personal responsibility, and inadequate/limited health care insurance.

More than one-third (37.0%) of Key Informants view lack of awareness of existing programs as a common barrier, and an equal proportion believe the difficulties in navigating the system prevent some residents from accessing needed care.

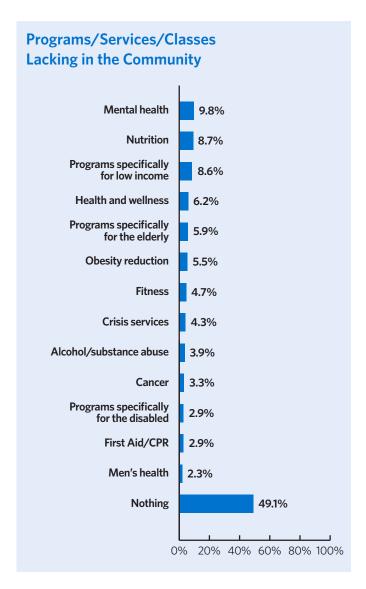


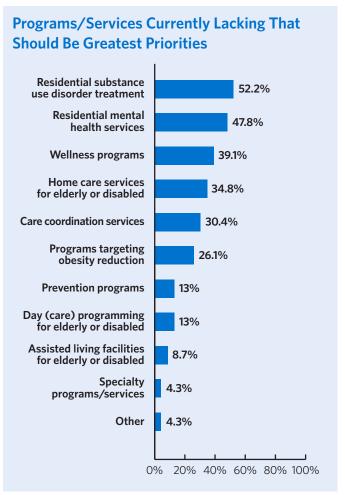
Source: Key Informant Online Survey, Q2: In your opinion, what are the most common barriers to accessing health care in your community? (Multiple response) (n=27)

Program and Services Lacking in the Community

Half (49.1%) of area residents report there is no lack of health programs, services, or classes in their community; however, nearly one in ten adults would like to see more programs involving mental health, nutrition, and programs specifically for low income.

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





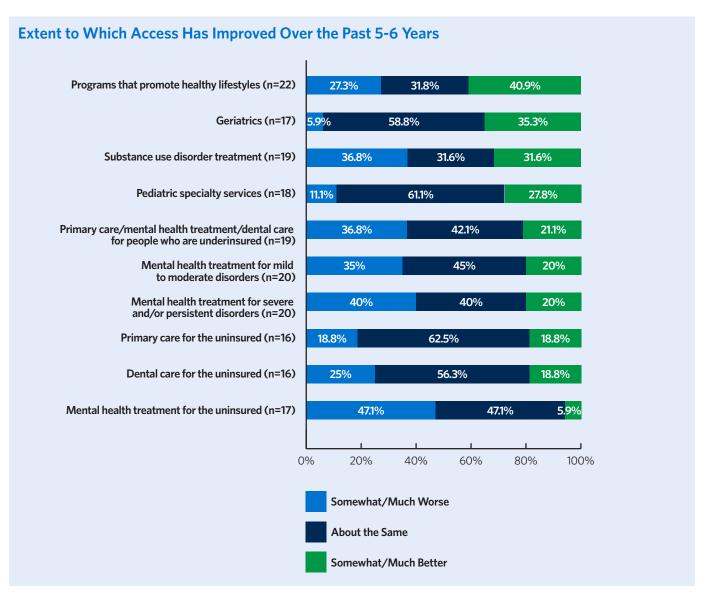
Source: Resident Telephone Survey, Q9: What health programs, services, or classes do you feel are lacking in the community? (Multiple response) (n=369); Key Informant Online Survey, Q7: What programs or services are currently lacking in the community that should be the greatest priorities, if any? (Multiple response) (n=23)

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 promote healthy lifestyles, although 27.3% feel access worsened. There are mixed feelings about substance abuse treatment programs where roughly equal proportions say access is better and access is worse.

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



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

Lack of Primary Care

Montcalm County has considerably fewer PCPs (MDs and DOs) per capita compared to Michigan overall.

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

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

79.4

Montcalm County

Michigan

Source: County Health Rankings, 2016

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

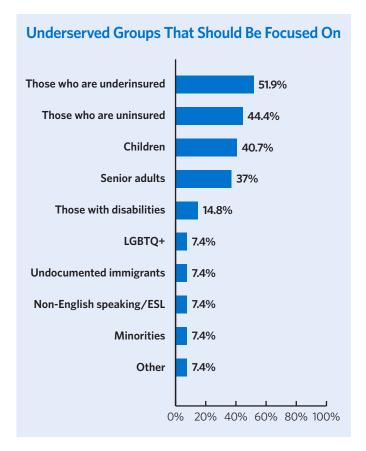
There are very few of them [primary care providers], and the ones that are in the area are always full and it takes weeks to make an appointment, so most people go to the ER, which overburdens the ER.

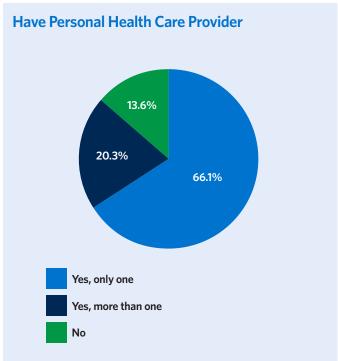
- Key Informant

Underserved Populations

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

One in seven (13.6%) of underserved residents have no medical home (no personal health care provider).



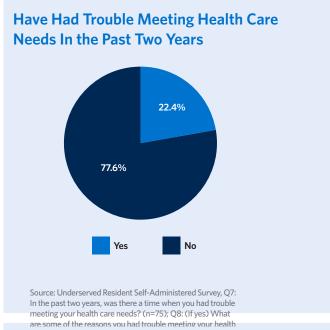


Source: Key Informant Online Survey, Q3: With regard to health care, which of the following underserved groups should we focus on most as a community? (Multiple response) (n=27); Underserved Resident Self-Administered Survey, Q2: Do you have one person you think of as your personal doctor or health care provider? (n=59)

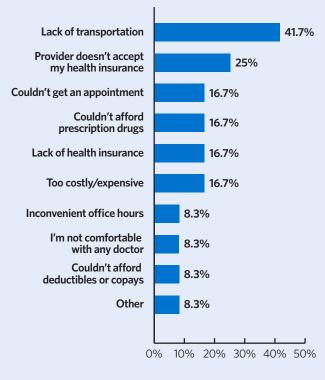
Two in ten (22.4%) underserved residents had trouble meeting their health care needs in the past two years.

Lack of transportation and providers not accepting their health insurance plans were the top two reasons they had trouble meeting their health care needs.

Underserved Populations, Continued



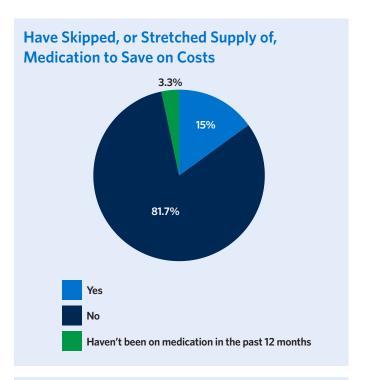
Reasons Had Trouble Meeting Health Care Needs

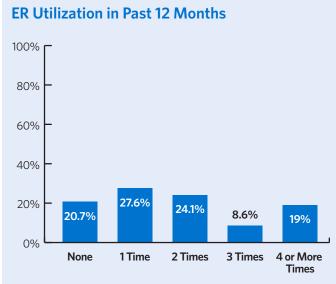


Source: Underserved Resident Self-Administered Survey, Q7: In the past two years, was there a time when you had trouble meeting your health care needs? (n=58); Q8: (If yes) What are some of the reasons you had trouble meeting your health care needs? (Multiple response) (n=12)

Roughly one in seven (15.0%) underserved residents have had to skip, or stretch their supply of, medication in the past 12 months in order to save on costs.

Eight in ten (79.3%) underserved residents have personally used the hospital ER in the past 12 months, and two in five (19.0%) visited four or more times.



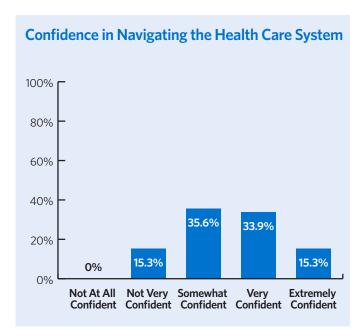


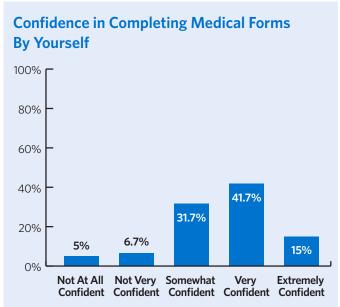
Source: Underserved Resident Self-Administered Survey, Q9: Was there ever a time in the past 12 months when you did not take your medication as prescribed, such as skipping doses or splitting pills, in order to save on costs? (n=60); Q12: How many times have you been to an Emergency Room/Emergency Department in the past 12 months? (n=58)

Underserved Populations, Continued

Underserved residents are only moderately confident in navigating the health care system: one in seven (15.3%) are not very confident and 35.6% are only somewhat confident.

They are more confident that they can complete medical forms by themselves (56.7% very/extremely) and 75.0% rarely or never have problems understanding information necessary to be knowledgeable about their health condition.





Frequency of Having Difficulty in Understanding Written Information Regarding Health Conditions 100% - 40% - 45% - 45% - 5% 6.7%

Source: Underserved Resident Self-Administered Survey, Q14: How confident are you that you can successfully navigate the health care system? (n=59); Q15: How confident are you in filling out medical forms by yourself? (n=60); Q16: How often do you have problems learning about your health condition because of difficulty in understanding written information? (n=60)

Sometimes

Often

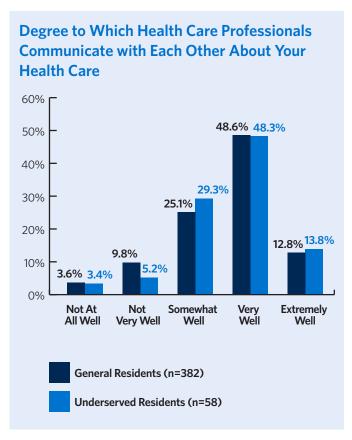
Always

Rarely

Never

Communication Between Health Care Providers

Overall, the vast majority of SHUK 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?

Ability to Refer People to Care

Six in ten (59.1%) SHUK 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, ideally, more resources or services. However, practically speaking, lists/tools that identify programs and services available with contact information would be very helpful as well.

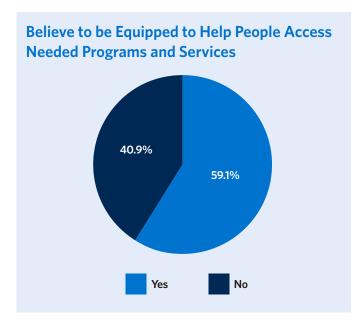
Resources currently used include Cherry Health, Montcalm Care Network, in-house social workers, 211 (county resource directory), RAVE Ionia/Montcalm, funds that have grants available, and free resources such as GoodRx.

What Would Better Equip You

- Information. Phone numbers. Directions for specific matters of concern. For example, "If the problem is ______, please contact this number."
- Have a **list of all local services together in one place**. Also have this list available in Epic to place orders from.
- Having **more access to programs**. I can connect them to what is there. **Transportation** is a huge barrier.
- My employment expertise is in a different field, but I do sometimes refer people to other agencies and programs for services.
- **Resources and contacts** for patients to seek help.
- We need more resources to help people.

Resource Used Most Often

- For out-of-pocket costs for prescribed medications, I refer them to use GoodRx and other free benefits which are a huge asset for patients.
- Cherry Health.
- Depending on what they need I will direct them to a specific service or I will provide them with a county resource directory such as 2-1-1 to help them.
- I utilize our in-house social workers for patients who need access to programs and services.
- RAVE-I/M, Inc. Montcalm Care Network, Have Mercy, EightCAP. Law Enforcement.
- Our Hope Fund grant writing.



Source: Key Informant Online Survey, Q5: Do you feel you are equipped to help people/clients/patients access needed programs and services? (n=22); 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?

Strategies Implemented Since Last CHNA

Key Stakeholders speak about initiatives designed to address substance use, behavioral health, mental illness, access to healthy food, and maternal and child health. There have been applications for grants to address some of these issues, and there have been coordinated efforts between organizations to collaborate on these issues.

Behavioral health

I think Spectrum's doing a fine job of getting into the school system. We're doing some work improving our telemedicine on the behavioral side. We got a grant, which is kind of cool, which is tied to opioid/substance abuse and how do we organize and network with schools and so forth, so I think there's money coming into the system through grants, through FDHC, and where they're giving us an opportunity to try things we haven't done before.

- Key Stakeholder

Substance use disorder

There have been **several initiatives**, but, again, they are just **very localized**. For example, **related to opioids**, in **Greenville**, we have **drug takebacks**, or we've got **partnerships with Community Mental Health and/or Cherry Street Clinic** or things of that nature where we do kind of **community seminars**, but, again, they're just **very small-scale**.

- Key Stakeholder

Access to healthy food

United Lifestyles has supported this effort to try to create a food hub, a nonprofit business that would buy local produce and sell it to the schools to improve school nutrition, and they're really interested in being a buyer of that food to improve the nutritional offerings in the hospitals. I understand that that's actually something that the whole system is thinking about, not just the local campus here in Greenville, but nothing has happened with that yet, so I'm just kind of talking about their continued responsiveness to a lot of the things that the community's trying to work on. We are trying to get funding from USDA for the food hub, and we've got a couple big grants out there.

- Key Stakeholder

Maternal/ child health

United Lifestyles has been very active; they've been very responsive. **We're working with them right now on a maternal-child health project**, and they're trying to figure out what their role is in their partnership.

- Key Stakeholder

 $\textbf{Source:} \ \text{Key Stakeholder Interviews, Q1e: What, if anything, has been done to address these issues? (n=3)}$

Resources Available to Meet Issues/Needs

Key Stakeholders agree that resources do exist in the community but they are limited in the area/region they cover and cannot effectively address any issue with full force. On the positive side, they think it is better now than in years past.

It has been suggested that there is a need for somebody, or some organization, to coordinate what already exists. In many cases, resources that exist do not cover the full extent of the need and/or are limited to certain segments of the population. The very nature of the region – being rural and somewhat isolated – creates limitations on resources available. If organizations coordinate and collaborate more with each other that would offset some of the effects of resource limitations.

Behavioral health

I would give resource allocation a B/B-minus. What is desperately in need now is for health-care systems to help coordinate what's out there. I was astonished - I went to a Saturday affair in Greenville, which was geared toward substance abuse and addictions and physical abuse, and the number of little agencies that exist in this county was staggering, but they're not connected. I think there could be more resources, certainly, but I think the health-care systems, who are professional organizers, need to help stoke the connecting the dots among all these little agencies.

- Key Stakeholder

Substance use disorder

I feel there are not enough resources to tackle these issues, but I'm feeling like there are more than there used to be. For example, we were talking about maternal and child health, and one of these things - this collaboration was to focus on substance-use screening. I think people used to say it was so futile to screen for substance use in Montcalm County because there's no place to send them for treatment, and that's less than what's true. If they've got Medicaid, they can get treatment more and more locally, so that's a good shift.

- Key Stakeholder

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

None of the three Key Stakeholders interviewed think that the community prioritizes issues effectively given the resources that are available. This is not for lack of effort, but the two major hurdles preventing this from occurring are limited resources and disorganization that inhibits collaboration between the hospitals, health department, and other community organizations.

The community would benefit greatly if more people came to the table and could determine what truly needs to be addressed. Perhaps there is an agency that could take the lead on improving collaboration and coordination, or perhaps through funding, a position could be created where someone's role would be to oversee the collaboration of community organizations.

I think that people want to do that, but I think the resource limitations that we have prevent us from doing all that we know we should be doing. You really see that with the Human Services Coalition where you have these really smart people around the table representing agencies that in some other parts of the state would really have a long reach and a lot of power to do things, and we struggle to get to the goal line here, and it breaks my heart. I think people are really trying, so I'm not knocking leadership; I just think we're facing resource limitations because the economic base of the community is weak.

- Key Stakeholder

Resources Available to Meet Issues/Needs, Continued

No, not as well as we could do. I think we're getting better; these community health assessments are leading us there. I think it's very disorganized, and how do you assign priorities among all these competing personal and professional agendas? I think we're doing a better job, and we're on the right path right now. I think one step that's been taken in the right direction is professionalizing the assessment through an organization like yours and health systems. I believe we need to engage these community-based organizations. I think we need to engage those organizations in a very soft way before we impose our big-system coordination process on them, which is what's needed. I'm not dismissing that, but we've got to scare them out, get them out of the shadows, put them around the table, and say, "Okay, folks. How are we going to do this?". I think it would help if there were a person or organization in charge of organizing that.

- Key Stakeholder

I'm trying to think of a good example where a community has done that, and I don't think I have one, so I guess the answer would have to be no. I think the communities that we serve, at least in my areas, can get passionate about one thing or another, but it isn't necessarily what's on top of the list in each community. So, I don't think they do a good job of that at all. It's kind of the people with a lot of choices who start things versus maybe what really needs to be addressed.

- Key Stakeholder

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

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

Health Care/Human Service Organizations

- Cherry Street Health
- Commission on Aging
- Convenient Care (walk-in clinic)
- Department of Health and Human Services (DHHS)
- Methadone clinics
- Mid-Michigan District Health Department
- Montcalm Care Network
- Montcalm Center for Behavioral Health
- Montcalm Recovery and Integrated Services of Care (RISC)
- MSU Extension
- Spectrum Health Cancer Center
- Sheridan Community Hospital
- Sparrow Carson Hospital
- Spectrum Health Kelsey Hospital
- Spectrum Health United Hospital
- United Way of Montcalm and Ionia Counties

Community Initiatives/Coalitions

- Diabetes education
- Drug Treatment Court
- Families Against Narcotics
- Farmers' markets
- Food pantries
- MedNow, telemed, telepsych, and other technology to increased health care access
- Montcalm Prevention Collaborative
- Support groups (e.g., AA, NA, Alanon)
- United Lifestyles

Suggested Strategies to Address Issues/Needs

Key Informants don't have easy answers for how to address the problems of mental health and substance use disorder, but clearly, they believe the community needs a more coordinated effort to address the lack of treatment for both issues, which are often comorbid.

The best approach seems to be that health care professionals work with specialists in mental health and substance use disorder, along with social workers, to treat these issues from a holistic perspective.

Mental health

It would help to have more psychiatrists. Unfortunately, the underlying triggers of mental health diseases cannot be easily fixed. We live in a very anxiety-provoking culture.

- Key Informant

There needs to be **better access and availability to community mental health programs** to possibly **stop these acute crisis situations.**

- Key Informant

Provide more resources in schools and in the community for the ALICE people.

- Key Informant

Health care and mental health need to work together to provide adequate resources. Hospitals need more social work available in-house.

- Key Informant

Substance use/abuse

A **concentrated effort, similar** to what is currently happening **with vaping** in our community.

- Key Informant

Screening for preemployment and benefits such as Medicaid, WIC, child support, etc.

- Key Informant

We need to have everyone working together and on the same page sharing the needed resources, we need to start talking to kids before they hit middle school.

- Key Informant

Recently, the Sheridan Hospital **opened a detox facility but they've closed it again. We need something closer than Grand Rapids** that can deal with this issue in our community.

- Key Informant

A drug treatment program for all the regional hospitals coordinated in one central location might be the best approach. Utilize on-site providers working in conjunction with centrally located specialists to use limited resources efficiently.

- Key Informant

Suggested Strategies to Address Issues/Needs, Continued

Instead of attempting to address poverty head on, more practical efforts should focus on addressing conditions that are symptoms of poverty (e.g., lack of safe/affordable housing, lack of access to healthy food, etc.), and particular focus should be on ALICE families that, although employed, still struggle.

Education in the form of classes or training would help residents make better, or healthier, lifestyle choices. For example, courses that show people how to prepare affordable healthy meals or how to develop exercise plans can lead to improved health outcomes.

Poverty

The first step is to make the distinct realization, community-wide, that poverty is an issue. As communities we need to identify the areas that contribute to our pockets of poverty and work to increase wages, affordable housing, childcare, and transportation.

- Key Informant

Jobs that pay enough to reduce the number of ALICE families is critical.

- Key Informant

I would like to see access to vegetables in each village/town. Double Up Food Bucks was helpful for my patients. I would like to see improved low income housing and transportation. I would like to see mindfulness taught in schools so that kids can learn how to address their feelings better and hopefully not start experimenting with substances to do that. I would like to see more skilled trades programs for high school kids.

- Key Informant

Lifestyle choices Courses for weight loss. Cooking classes with farmers market partnering.

- Key Informant

I have found that most people don't know what a healthy diet and exercise plan look like. When people use a glucometer and get immediate feedback on glucose levels after meals and counseling regarding how food choices affect these levels, they are **able to make better choices**.

- Key Informant

Lack of primary care

Encourage more PCPs to open offices in the area. This will require the insurers/SH to be willing to pay physicians more in order to attract them to the area.

- 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=28).

Appendix

Participant Profiles

Key Stakeholder In-Depth Interviews

CEO, Sheridan Community Hospital Health Officer, Mid-Michigan District Health Department President, Spectrum Health United and Kelsey Hospitals

Key Informant Online Survey	
Director (3)	Obstetrician/Gynecologist
Executive Director (3)	Pastor
Physician Assistant (3)	Physician; Chief of Radiology
Doctor of Medicine (2)	Project Director
Assistant	Registered Nurse
Emergency Physician	School Administrator
Extension Educator	School Social Worker
Family Medicine Physician	WH Division Chief - Regions
Nurse Practitioner	

Appendix

Resident Telephone Survey

	Total	Total			Total
Gender	(n=413)	Marital Status	(n=406)	Own or Rent	(n=400)
Male	48.7%	Married	57.8%	Own	79.4%
Female	51.3%	Divorced	10.6%	Rent	18.5%
Age	(n=400)	Widowed	7.2%	Other	2.1%
18 to 24	8.3%	Separated	1.5%	Zip Code	(n=413)
25 to 34	14.2%	Never married	22.6%	48809	14.7%
35 to 44	15.7%	Member of an unmarried couple	0.2%	48838	24.6%
45 to 54	15.9%	Employment Status	(n=407)	48850	4.5%
55 to 64	21.4%	Employed for wages	38.4%	48884	4.4%
65 to 74	13.9%	Self-employed	3.4%	48885	0.4%
75 or Older	10.6%	Out of work 1 year+	2.7%	48886	2.4%
Race/Ethnicity	(n=409)	Out of work <1 year	4.7%	48888	5.4%
White/Caucasian	92.0%	Homemaker	3.3%	49319	12.3%
Black/African American	0.7%	Student	4.0%	49322	1.1%
Hispanic/Latino	6.3%	Retired	35.9%	49329	8.9%
Asian	0.6%	Unable to work	7.5%	49336	5.9%
Native American	0.4%	Education	(n=400)	49339	5.5%
Adults in Household	(n=413)	Less than 9th grade	3.7%	49343	7.4%
One	21.1%	Grades 9 through 11	7.5%	49347	2.4%
Two	60.1%	High school grad/GED	39.1%		
Three	12.1%	College, 1 to 3 years	28.7%		
Four	5.4%	College 4+ years (grad)	21.1%		
Five or more	1.4%	Income	(n=271)		
Children in Household	(n=408)	Less than \$10K	3.1%		
None	73.0%	\$10K to less than \$15K	8.4%		
One	9.7%	\$15K to less than \$20K	4.3%		
Two	8.6%	\$20K to less than \$25K	13.2%		
Three	8.1%	\$25K to less than \$35K	18.4%		
Four or more	0.6%	\$35K to less than \$50K	13.3%		
		\$50K to less than \$75K	17.7%		
		\$75K or more	21.7%		
		L		-	

Appendix

Underserved Resident Survey (Self-Administered)

	Total		Total		Total
Gender	(n=60)	Children in Household (<6)	(n=60)	Income	(n=60)
Male	13.3%	None	28.3%	Less than \$10K	30.0%
Female	86.7%	One	33.3%	\$10K to less than \$15K	18.3%
Age	(n=60)	Two or more	38.3%	\$15K to less than \$20K	13.3%
18 to 24	31.7%	Marital Status	(n=60)	\$20K to less than \$25K	11.7%
25 to 34	45.0%	Married	33.3%	\$25K to less than \$35K	6.7%
35 to 44	5.0%	Divorced	16.7%	\$35K to less than \$50K	15.0%
45 to 54	5.0%	Widowed	3.3%	\$50K to less than \$75K	1.7%
55 to 64	6.7%	Separated	1.7%	\$75K or more	3.3%
65 to 74	5.0%	Never married	38.3%	Own or Rent	(n=58)
75 or Older	1.7%	Member of an unmarried couple	6.7%	Own	39.7%
Race/Ethnicity	(n=60)	Employment Status	(n=60)	Rent	50.0%
White/Caucasian	91.7%	Employed for wages	36.7%	Other	10.3%
Black/African American	6.7%	Self-employed	1.7%	Zip Code	(n=60)
Native American	1.7%	Out of work 1 year+	3.3%	48809	3.4%
Adults in Household	(n=60)	Out of work <1 year	13.3%	48829	15.5%
One	18.3%	Homemaker	15.0%	48838	39.7%
Two	53.3%	Student	10.0%	48852	1.7%
Three	15.0%	Retired	3.3%	48886	8.6%
Four	10.0%	Unable to work	16.7%	48888	12.1%
Five	3.3%	Education	(n=60)	48891	1.7%
Children in Household (6-17)	(n=55)	Less than 9th grade	1.7%	49319	1.7%
None	58.2%	Grades 9 through 11	16.7%	49326	3.4%
One	21.8%	High school grad/GED	35.0%	49329	8.6%
Two or more	20.0%	College, 1 to 3 years	41.7%	49347	1.7%
		College 4+ years (grad)	5.0%	49929	1.7%v

Exhibit B

Spectrum Health United and Kelsey Hospitals

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

Reduce Opioid Dependency and Abuse

Action 1

Project Assert (PA), also known as Alcohol Substance Abuse Services, Education, Referral, Treatment, will be utilized in the Emergency Department (ED) at Kelsey and United Hospitals. This program is staffed by a community peer recovery coach who provides initial assessment in the ED, refers patients to treatment/resources and follows the patient through the process. This will be a partnership between Spectrum Health United & Kelsey, and Wedgwood Christian Services.

Measurable Impact

- A baseline of patients needing/seeking opioid abuse resources/services-Established by 12/31/2018
- While a PA (Project Assert) staff is present, 90% of individuals who have a positive SBIRT (Screening Brief Intervention and Referral to Treatment) are referred to appropriate resources/treatment-To be completed 12/30/2019
- While a PA staff is present, 25% of those who are referred agree to attend treatment-To be completed 12/30/2019.

Impact of Implementation Plan Strategy

In collaboration with Wedgwood Christian Services the Project Assert program was established in the Emergency Departments at Spectrum Health Kelsey and United Hospitals. Project Assert is staffed by a community peer recovery coach who provides initial assessment in the Emergency Department, refers patients to treatment/resources and follows the patient through the process. The community peer recovery coach on average have attained agreement from patients identified with a substance use history to accepts resources or attend treatment.

Action 2

SBIRT is an evidence-based approach to identifying patients who use alcohol and other drugs at risky levels with the goal of reducing and preventing related health consequences, disease, accidents and injuries. This approach will be used by the Project Assert Wellness Advocate. Resources will include: residential treatment, detox, and outpatient treatment (throughout Michigan, including Montcalm Care Network and other mental health services in-county).

Measurable Impact

- While a PA staff is present, 90% of individuals who have a positive SBIRT screening are referred to appropriate resources/treatment-To be completed 6/30/2020.
- While a PA staff is present, 35% of those referred for treatment agree to attend treatment-To be completed 6/30/2021.

Impact of Implementation Plan Strategy

67% of all patients with a positive SBIRT (Screening Brief Invention and Referred to Treatment) accepted services. This translates to 48 people being serviced after receiving 96 referrals.

Action 3

While a Project Assert (PA) staff is present we expect a reduction in ED visits by individuals who have 10 or more ED visits per year due to substance seeking behaviors.

Measurable Impact

- Baseline of repeat visits established by 12/31/2019.
- 15% reduction of visits to ED due to substance seeking behaviors-To be completed 12/31/2019.
- 20% reduction of visits to ED due to substance seeking behaviors-To be completed by 6/30/2020.
- 25% reduction of visits to ED due to substance seeking behaviors-To be completed by 6/30/2021.

Impact of Implementation Plan Strategy

Unable to complete as intended because the data is not available.

Substance Use and Abuse, Continued

Action 4

Utilizing a physician work group, hospital clinical leads will report monthly at the Medical Executive Committee (MCE) meeting and the ambulatory spaces will meet quarterly for the purpose of demonstrating compliancy with prescription guidelines and promoting a reduction in opioid prescribing. Physician scorecards will be utilized for reporting.

Measurable Impact

- A baseline of opioids prescribed in the hospital and ambulatory sites-established 12/31/2018.
- 5% reduction in opioid prescribing by both work groups-To be completed 6/30/2019.
- 10% reduction in opioid prescribing by both work groups-To be completed 6/30/2020.
- 15% reduction in opioid prescribing by both work groups-To be completed 6/30/2021.

Impact of Implementation Plan Strategy

Emergency Department and Ambulatory provider sites received education and committed to reduce the prescribing of opioids. Baseline prescribing data for the emergency departments were established. Spectrum Health Kelsey Hospital Emergency Department patients received on average 28% and Spectrum Health United Hospital Emergency Department patients received on average 24% fewer morphine milliequivalents from baseline. Ambulatory site data is unavailable. Ambulatory site health care teams anecdotally report a significant reduction in the practices of prescribing opioids.

Action 5

Increase number of Suboxone providers in the ambulatory spaces by engaging three providers in the Suboxone certification process over a period of three years to provide increased access to Suboxone treatment in the community. 1 additional provider at Lakeview Family Medicine and 2 located in Greenville (sites to be determined).

Measurable Impact

- Increase Suboxone certification by one provider at Lakeview Family Medicine-To be completed by 6/30/2019.
- Increase Suboxone certification by one provider at the Greenville site-To be completed by 6/30/2019.
- Increase Suboxone certification by an additional provider at the Greenville site-To be completed 6/30/2020.

Impact of Implementation Plan Strategy

Three certified Suboxone providers are available to the community. There is one provider with Spectrum Health in the northern region of Montcalm County and two nonspectrum Health providers in the southern region of the county. The non-Spectrum Health provider office specializing in addiction medicine. The non-Spectrum office has grown their practice and are considered to be the main referral location. This agency has capacity to accept additional patients.

Action 6

Implement two community-based support groups in provider offices for Suboxone patients and Spectrum Health social workers will partner with community mental health agencies for training and education.

Measurable Impact

Spectrum Health social workers will provide group counseling sessions to support Suboxone treatment in the ambulatory spaces/monthly meetings-To be completed 6/30/2021.

Impact of Implementation Plan Strategy

Because of the robust services and available capacity of the non-Spectrum Health provider office specializing in addiction services, the need for Spectrum Health to provide social worker group counseling session has not been established.

Substance Use and Abuse, Continued

Action 7

Provide Naloxone Kits (opioid reversal agent) to high risk patients in the ED for purposes of harm reduction. Any patient discharged from the ED following an opioid overdose will be offered a Naloxone-take-home-kit.

Measurable Impact

- Baseline of overdoses in United & Kelsey Ed's-Established 12/31/2018.
- 100% ED RN's trained to provide Naloxone education to patients-To be completed 12/31/2018 (Baseline O nurses trained at this time).
- Naloxone kits available in United and Kelsey ED-To be completed 12/31/2018.
- 30% of patients presenting with an opioid overdose are discharged with a Naloxone kit-To be completed 6/30/2019.
- 50% of patients presenting with an opioid overdose are discharged with a Naloxone kit-To be completed 6/30/2020.
- 80% of patients presenting with an opioid overdose are discharged with a Naloxone kit-To be completed 6/30/2021.

Impact of Implementation Plan Strategy

A baseline of 50 patients was established for Emergency Department discharging with an opioid abuse condition. All registered nurses staffing the Emergency Department at Spectrum Health Kelsey and United Hospitals were trained to education and provide Naloxone kits to patients with a opioid substance abuse condition. Patients seen in both Emergency Departments with opioid use issues are provided education and a Naloxone Kit. Data is not available for the number of Naloxone kits dispensed to patients with an opioid overdose at discharge because the majority of patients are transferred to a higher level of care.

Smoking Cessation Support

Action 1

Embed SCRIPT (Smoking Cessation and Reduction in Pregnancy Treatment) at the OBGYN office and provide home/office visits for MIHP (Maternal/Infant Health Program) clients to increase awareness for pregnant women and encourage tobacco reduction/cessation

Measurable Impact

- Establish baseline of SCRIPT encounters (both OBGYN & MIHP (Maternal and Infant Health Program)-To be completed 12/31/2018.
- Select OBGYN staff and train in the SCRIPT program-To be completed by 6/30/2019.
- SCRIPT program embedded at OBGYN practice-To be completed 6/30/3019.
- Increase SCRIPT encounters over baseline by 25%-To be completed 6/30/2020.
- Provide reduction/cessation support through follow-up calls at 1 mo. 3 mo. 6 mo. 1 year intervals for SCRIPT referrals-To be completed 6/30/2020.
- Increase SCRIPT encounters over baseline by 35%-To be completed 6/30/2021.
- Provide reduction/cessation support calls through follow-up calls at 1 mo. 3 mo. 6 mo. 1 yr. intervals for SCRIPT referrals-To be completed 6/30/2021.

Impact of Implementation Plan Strategy

A zero referral rate as a baseline was established because the SCRIPT program wasn't embedded in either the Obstetrics or the Maternal Infant Health Program. A staff member was trained and certified as a Tobacco Treatment Specialist and completed training in the SCRIPT program. Program referral process were established and departmental staff educated. Obstetrics and Maternal Infant Health Program staff now refer pregnant women for cessation services.

Substance Use and Abuse, Continued

Action 2

Develop and implement effective anti-vaping strategies appropriate for community schools as part of a community response, including counseling available during in-school suspension with TTS (Tobacco Treatment Specialist), and Prevention Specialist support for school districts developing their anti-vaping plan.

Measurable Impact

- Decrease baseline amount of teens vaping during school hours at GPS through awareness and education by 25% (based on units removed)-To be completed 6/30/2019.
- Complete 1 additional anti-vaping response plan for 1 school district in Montcalm County-To be completed 6/30/2020.

Impact of Implementation Plan Strategy

A collaborative effort between Spectrum Health and Montcalm Prevention Network created an environment to change school policy. The collaboration was successful in changing the policy for students caught vaping from an out-of-school suspension to an in-school suspensions coupled with mandatory anti-vaping education. The result of the strategy employed to decrease the number of students vaping, increased awareness and increased the number of students caught vaping. This has lead to an increase in the number of students receiving anti-vaping education.

Action 3

In Greenville Public Schools (GPS), it has been identified that 50 students have experimented or actively vape (based on vaping units removed in school year 2017/18).

Measurable Impact

- Determine baseline of teens vaping during GPS school hours (based on units removed)-To be completed 6/30/2020.
- Decrease baseline amount of teens vaping at GPS by 50% (based on units removed)-To be completed 6/30/2020.
- Decrease baseline amount of teens vaping at second school by 25% (based on units removed)-To be completed 6/30/2021.

Impact of Implementation Plan Strategy

A baseline of 63 students were caught vaping. A final count wasn't able to be determined because the school year ended unacceptably with the onset of the COVID-19 pandemic. The total number of students caught vaping had decreased to 30 students.

Mental Health

Telehealth

Action 1

Within the regional hospital spaces, such as SHUK, we will offer telehealth psych consultative services 24 hour/7 day a week

Measurable Impact

- Establish a performance baseline one year after the service is established. To be completed by 6/30/2020.
- In subsequent years, increase tele psych consults by 10%.
 To be completed by 6/30/2021.

Impact of Implementation Plan Strategy

Psychiatric consultative service are available through telemedicine for Emergency and Inpatient departments.

Because of limited resources, the consultative service is limited to Monday through Friday during standard business hours. A baseline of 27 cases was established and year- to- date 50 patients have received services.

Reduce anxiety and depression in school-aged children

Action 1

Montcalm Care Network, Greenville Public Schools' social workers and Spectrum health Care Management team will create a generic algorithm for school-staff response to students presenting with mental health concerns. All 7 districts (Greenville Public, Lakeview Area, Tri County, Central Montcalm, Montebello, Vestaburg, and Carson City-Crystal) will have a copy of the algorithm and mental health resource list.

Measurable Impact

- Establish protocol for school staff response to "student mental health issues"-To be completed 3/31/2019.
- Mental health resource list for schools-To be completed 3/31/2019.
- protocol and resource list shared with 7 district superintendents in Montcalm County-To be completed 6/30/2019.
- Review, update and edit resource list-To be completed 6/30/2020.
- Review, update and edit resource list-To be completed 6/30/2021.

Impact of Implementation Plan Strategy

Protocols with algorithmic driven response coupled with behavioral health resource lists were developed and distributed to all school districts in Montcalm County.

Mental Health, Continued

Action 2

Develop and pilot tele-social work model for Greenville Public School students who have other-than-Medicaid insurance

Measurable Impact

- Develop a model for Telehealth social work for students at Greenville Public Schools-To be completed 6/30/2019.
- Implement Tele social work at GPS High School-To be completed 6/30/2020.
- Track utilization of service in school setting-To be completed 6/30/2020.
- Track referrals to other services-To be completed 6/30/2020.

Impact of Implementation Plan Strategy

An in-school telehealth behavioral health clinic was established in two school districts. The clinic serves the 9th through 12th grade student population. The clinics are staffed by a medical assistant and connect through telehealth with a licensed Master level social worker. The clinics opened in September of 2019 and to date have provided 234 encounters. Both locations are approaching capacity in student caseloads. August of 2020, three additional schools based telehealth behavioral health clinics be implemented.

Action 3

Implement tele-social work at one other school site in Montcalm County

Measurable Impact

Implement tele-social work for one other school district-To be completed 6/30/2021.

Impact of Implementation Plan Strategy

2020, planning underway to implement programs in three additional school districts, Montebello, Vestaburg and Tri County public schools August 2020. Central Montcalm and Carson City Public Schools for January 2021.

Obesity & Weight Issues

Access to Education

Action 1

Enhance Primary Care Providers (PCP) discussion with patients about the negative health effects of obesity, resulting in patients moving into action stage of readiness and then connecting them to evidence-based MNT (Medical Nutrition Therapy)/IBT services (Intensive Behavioral Therapy).

Measurable Impact

- 75% of SHUK Primary Care Providers (PCP) will receive training on how to have effective discussion with patients about how weight impacts health status. To be completed by 6/30/2019.
- 25% of SHUK PCP's (MD, PA, NP will have documented discussions with patients about the negative health effects of overweight/obesity. To be completed by 6/20/2020.
- Provide 60 weight-related Medical Nutrition Therapy (MNT) visits either through hospital based model or embedded in PCP office and 10 Intensive Behavioral Therapy (IBT) visits in a PCP's office. Baseline Data: We currently provide no local MNT or IBT services. To be completed by 6/30/2021.

Impact of Implementation Plan Strategy

All of the Spectrum Health ambulatory practices are aware of how to have effective conversations on the impact weight has on health status. Over 80% of providers are documenting discussions about the negative effects of being overweight has on health status. Referrals to weight-related Medical Nutrition Therapy have increased to over 75 annual cases.

Action 2

Implement the Coordinated Approach to Child Health (CATCH) evidenced-based curriculum in 2 local elementary schools.

Measurable Impact

- Create 2 elementary school partnerships with our ISD (Intermediate School District) and train 1 Spectrum Health staff to implement the CATCH program and identify 1 school staff to champion the program in their school. To be completed by 6/30/2019.
- 5% of children participating in the CATCH program will show positive behavior changes related to healthy eating and exercise as evidenced by pre and post Behavior Change Survey data. To be completed by 6/30/2020.
- Children in participating schools will maintain their BMI as evidenced by BMI collected data from each school. To be completed by 6/30/2021.

Impact of Implementation Plan Strategy

Partnerships with two elementary schools were established. A partnership with a third elementary school is underway. These partnerships have allowed a Spectrum Health staff member to teach the evidence-based Coordinated Approach to Child Health (CATCH) program. 753 students are enrolled in the CATCH program. Approximately 29% of enrolled students have BMIs above a healthy weight. Due to the COVID-19 pandemic and students not attending school, post program BMIs and post behavioral change survey data was unable to be collected.

Obesity and Weight Issues, Continued

Pregnancy and Breastfeeding

Action 1

Based on the available evidence, breastfeeding appears to provide some level of protection against childhood overweight and obesity. Together with other targeted nutrition interventions, breastfeeding can therefore be an important component of strategies to reduce the risk of overweight and obesity in children

Increase support for breastfeeding (i.e. access to postpartum breastfeeding CLC (Certified Lactation Consultant and/or IBCLC (International Board Certified Lactation Consultant) for education and support, support for breastfeeding in the workplace, father's supporting breastfeeding, etc.) which will lead to an increase in our duration rates.

Measurable Impact

By end of FY19 increase from 2 inpatient OB Unit Certified Lactation Consultants (CLCs) and 1 home visiting CLC to, 2 inpatient OB Unit CLCs, 2 OBGYN CLC's and 1 home visiting CLC.

Impact of Implementation Plan Strategy

Certified Lactation Consultants increased from the baseline of three to five.

Diabetes Prevention

Action 1

Intended for those with a Body Mass Index (BMI) ≥25, utilization of the Diabetes Prevention Program (DPP) to decrease BMI (Body Mass Index) and increase physical activity of participants.

Expected CDC (Center for Disease Control) outcomes for the 12 month program include:

- Average weight loss of 5% (minimum) from beginning weight to end weight
- Physical activity documented in at least 60% of the sessions in the year-long program
- Baseline data: in FY17/18 we had 18 participants enrolled

Measurable Impact

- Increase volume of patients seen in DPP by 3% for FY19
- Increase volume by 5% over baseline for FY20
- Increase volume by 7% over baseline for FY21

Impact of Implementation Plan Strategy

The Diabetes Prevention Program modeled after the evidence-based Center for Disease Control program underwent program challenges. The overall program growth was not realized. The program had a baseline of 19 patients. One year into the reporting time frame, the program lost half of it's participation volume finishing 2019 with 10 patients. This loss of volume had many contributing factors. An initiative to pivot to marketing with the National Kidney Foundation didn't provide referrals. A local provider's office concentrated on their obsess patients which caused a reduction in referrals. Almost all the referral sources volume was slightly lower causing a 50% reduction in volume. Through marketing efforts, participation volumes returned to baseline totals of 19 patients in 2020.



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]

Community Health Needs Assessment for:

Spectrum Health United d/b/a
Spectrum Health United Hospital
And
Spectrum Health Kelsey d/b/a
Spectrum Health Kelsey Hospital

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

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 (Montcalm), but also regions outside the county which compose SHUK's primary (PSA) and secondary (SSA) service areas, such as Ionia 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 wides pread out break 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