Spectrum Health Pennock Hospital
Community Health Needs Assessment

Research Results from the 2015 Community Health Needs Assessment
A Research Project for

SPECTRUM HEALTH
Pennock

Barry-Eaton District
Health Department
Be Active • Be Safe • Be Healthy

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INTRODUCTION
Background and Objectives

- VIP Research and Evaluation was contracted by Spectrum Health to conduct a Community Health Needs Assessment (CHNA) for Spectrum Health Pennock Hospital (SHPH).

- The Patient Protection and Affordable Care Act (PPACA) passed by Congress in March 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 (CHNA) and must adopt an implementation strategy to meet the community health needs identified through the assessment. The law further states that the assessment must take into account input from persons who represent the broad interests of the community, including those with special knowledge of, or expertise in, public health.

- In response to the PPACA requirements, organizations serving both the health needs and broader needs of Spectrum Health Pennock Hospital communities began meeting to discuss how the community could collectively meet the requirement of a CHNA.
Background and Objectives (Continued)

- The overall objectives of CHNA include:
  - Gauge the overall health climate or landscape of the regions primarily served by Spectrum Heath Pennock Hospital, but primarily Barry County
  - Determine positive and negative health indicators
  - Identify risk behaviors
  - Determine the frequency with which clinical preventive practices occur
  - Measure the prevalence of chronic conditions
  - Establish accessibility of health care
  - Ascertain barriers and obstacles to health care
  - Uncover gaps in health care services or programs
  - Identify health disparities

- The information collected will be used to:
  - Prioritize health issues and develop strategic plans
  - Monitor the effectiveness of intervention initiatives
  - Assess outcomes from prevention programs’ goals
  - Support appropriate public health policy
  - Educate the public about disease prevention through dissemination of information
EXECUTIVE SUMMARY
Executive Summary

In 2015, VIP Research and Evaluation was contracted by Spectrum Health to conduct a Community Health Needs Assessment (CHNA) for Spectrum Health Pennock Hospital (SHPH).

The primary goal of the study was to identify key health and health service issues in the SHPH service area, which included primarily Barry County, but also other areas in the SHPH service area, such as Allegan, Eaton, Ionia, and Kent counties. The results will be used to assist in planning, implementation of programs and services, evaluating results, allocation of resources, and achieving improved health outcomes, specifically related to identified needs.

Data were gathered from a variety of sources and using multiple methodologies. Resident feedback was obtained via a telephone survey (n=500) of the broader adult population in the SHPH area. Subsequent resident feedback from more targeted subpopulations of underserved or vulnerable residents (e.g., single mothers with children, uninsured/underinsured/Medicaid recipients) was obtained by way of self-administered surveys (n=69) and focus groups (n=25). Health care professionals and other community leaders, known as Key Stakeholders or Key Informants, provided input via in-depth interviews (n=10) and an online survey (n=27). Secondary data gathered from state and national databases was also used to supplement the overall findings.
Some of the characteristics that make the SHPH area a great place to live and raise a family, such as being a small, close-knit rural community with farm fresh food/gardens, parks, recreation areas, and lakes, also contribute to problems of high unemployment and poverty rates and lead to transportation issues for many.

On the positive side, most adult residents in the SHPH area report their general overall health to be good to excellent. Poor physical and poor mental health were reported by less than one in ten adults.

Still, 17.5% report fair or poor general health, a proportion on par with the state when one would expect it to be better, and one in ten adults suffer from poor physical and mental health.

Area men have higher life expectancy rates than men across MI or the U.S., while area women life expectancy rates on par with the state and the nation. Adult mortality rates are lower than the U.S. but higher than the state. Death rates from cancer and heart disease are also lower than MI or the U.S.

Many chronic conditions, such as arthritis, angina/coronary heart disease, cancer, COPD, depression, heart attacks, kidney disease, stroke, and any cardiovascular disease are more prevalent among adults in the SHPH area than in Michigan.
While asthma and diabetes are less prevalent than in MI or the U.S., one in ten adults suffers from diabetes, and diabetes-related death rates are far higher than the state or the nation.

Two-thirds (66.4%) of area adults are overweight or obese and the obesity rate (34.6%) for adults in the area is greater than the state. Local youth obesity rates are also higher than state averages. Further, local health professionals perceive obesity to be the area’s top health issue, and they believe community response to this issue has been insufficient.

Roughly one-third of adults have high blood pressure, but this rate is better than the state’s. On the other hand, the rate for high cholesterol is higher than the state average.

In terms of risk behaviors, while the rate of area adult cigarette smoking is lower than MI (16.7% vs. 22.0%), Key Informants believe smoking to be the top health behavior problem in the region. This may be due to the fact that smoking is comorbid with many other health problems.

Adult rates for heavy drinking are on par with the state but rates for binge drinking are lower than the state. Still, 15.7% of adults engage in binge drinking.
Executive Summary (Continued)

Area youth have lower rates of other risk behaviors, such as smoking, binge drinking and marijuana use, compared to MI or the U.S.

Area adults and children also consume inadequate amounts of fruits and vegetables and do not engage in physical activity as much as they should.

We know from CHNA’s conducted throughout the region that there is a direct relationship, or at the very least a strong association, between positive health outcomes and both education and income; those with higher incomes and more education are more likely to report better health and greater satisfaction with life, and are more likely to have health coverage, visit a dentist, refrain from smoking, and exercise regularly. They are less likely to have chronic health conditions, high blood pressure, or high cholesterol.

Most adults engage in clinical preventive practices such as routine physical checkups and cancer screenings. Still, the proportion of men aged 50+ screened for prostate cancer is only 40.1% and lags behind the state.

Dental care is a preventive practice that many neglect, with one in four area adults reporting no dental visit/cleanings in the past year.

Health care coverage has expanded in the last several years to where nine in ten area adults have health care coverage and nine in ten have a medical home (primary care provider). Both of these proportions are better than state rates.
Executive Summary (Continued)

Despite an increase in insured residents, almost one in seven adults (15.0%) has had to forego a needed doctor visit due to cost in the past year, as deductibles and co-pays can be prohibitive. A similarly widespread barrier exists with respect to dental care.

These barriers are particularly prominent among the vulnerable/underserved populations, such as the uninsured, the underinsured, Medicaid recipients, those with low incomes, and residents facing cultural and language barriers.

Not only are high health care costs a barrier to these groups, but even those with Medicaid find it hard to see a provider because increasingly more physicians refuse to accept Medicaid. This has created critical consequences for primary health care, mental health treatment, dental care, and substance abuse treatment.

Further, traditional health insurance often doesn’t cover ancillary services such as prescription drugs, vision, or dental care. If consumers have to pay for these services, in addition to deductibles and co-pays, the cost burden can be great and residents will avoid seeking necessary treatment or any type of preventive service.

Additional barriers to care include transportation, lack of awareness of existing programs and services, cultural (fear of system, public misperception of the underserved), and the inability of some residents to secure appointments or get referrals.
In sum, having health care coverage does not necessarily translate into utilization of needed services.

Additional areas identified by Key Stakeholders, Key Informants, and residents as needing more services and programming are:

- Primary care, dental care, mental health care, and substance abuse treatment for the underserved (uninsured, underinsured, Medicaid, low income)
- Mental health services for people with mild to severe conditions
- Services for pain management
- Services for school-age individuals with a diagnosis of autism or a similar disorder
- Screening services for HIV and STDs
- Education on how to navigate the system (e.g., that co-pays/deductibles don’t often apply to prevention/check-ups, how to avoid using the ER)
- Specialty and subspecialty services such as oncology and oral surgery
- Coordination and collaboration of services (e.g., SHPH, Cherry Street, Barry Community Health, Barry-Eaton District Health Department, Barry Community Mental Health, other providers, various coalitions, etc.)
- Psychoeducation at an early age on nutrition, exercise, living healthy lifestyles
- Community programs accessible to those with transportation/income barriers
- Higher quality food at affordable prices
- More unified approach to prevention and wellness
- Programs targeting obesity reduction, especially at the school level
- Programs that teach people how to cook/prepare healthy foods
- Housing services (because of lack of affordable housing, housing in neglect)
Executive Summary (Continued)

Since the last CHNA conducted in 2011, Key Stakeholders report numerous programs and services have been implemented to improve the overall health and health climate of the region. Additionally, there has been strengthening of dialogue between public health, the hospital community, and various health care professionals and providers. Additional initiatives include:

- Outreach programs and several committees addressing a multitude of issues such as obesity, tobacco use, nutrition, diabetes awareness, and exercise
- Initiatives targeting safe routes to school, sidewalks, bike trails
- Work conducted by different committees that have been established, such as a committee on access to care
- Opening of a federally-qualified health center (FQHC) in Barry County to address accessibility concerns identified previously (Cherry Street Clinic)
- Key Stakeholders also note that some of the initiatives existed prior to the needs assessment but the assessment helped augment the work that was already in place
- Increased collaboration and coordination between and among agencies to address community health issues and needs
- Tobacco-free parks
- Dialysis care
- Increased recruitment efforts to attract primary care providers to the region
- Specific initiatives include drug abuse awareness
Community members (both residents and health care professionals) suggest further strategies to improve the health care landscape. Priorities include:

- Several stakeholders suggest that, even though coordination and collaboration among area services has improved over the last three years, further efforts are needed to maximize the effectiveness of current services and to improve service provider/patient relationships, while creating more client-centered services.
- Strengthening partnerships between the health sector (above) with other industries in the community, such as business, schools, faith-based, arts, and government.
- Implementing telemedicine and tele-psychiatry.
- Continuing to recruit primary care providers as well as specialists.
- Need to integrate physical and mental health, toward a whole-person perspective (e.g., biopsychosocial).
- Making programs accessible to all residents including those with limited incomes, limited or no insurance, and/or limited means of transportation.
- Finding creative ways to secure funding for health and health care initiatives.
- Improving the antiquated appearance of the existing hospital (or building new one).
- Including more community residents (consumers) in health care planning and decision making.
- Providing more prevention education that also focuses on navigation of the health care system.
- Increasing awareness of existing programs and services.
- Creating a culture of a healthy mindset early on in the life cycle by working closely with families and schools.
- Reducing the initiation of tobacco use by increasing the legal age of use to 21.
- Prioritizing transportation ideas/services, investigating possible grant opportunities, and reallocating resources to address transportation barriers.
Community members (both residents and health care professionals) suggested strategies to improve the health care landscape (cont’d.):

- Making better use of services and programs that are currently in place – through increased access (e.g., transportation; flexible hours; outreach services to rural areas), increased awareness among residents about available services, and stronger partnerships among existing services/providers
- Finding ways to offer more affordable health care (e.g., offering sliding scale fees) among other providers outside of the Cherry Street Clinic
- Increasing mental health services (particularly outpatient services) and substance abuse services (because of high co-morbidity)

Next steps may include the creation of a steering committee or task force to work on prioritizing and then developing a coordinated response to issues deemed most important to work on, within a specific time frame, such as 1 year, 3 year, and 5 year goals. Above all, next steps involve the establishment of careful priorities for action that, once implemented, will benefit the community for the long term.
Executive Summary – Strengths

Health Care Access
- Good health resources, services, and programs when one considers the size of the county and the limited resources
- Key informants identify emergency care, orthopedics, ophthalmology, OB/GYN, and urgent care services as top services
- More adults have health insurance and medical home (PCP) than MI
- High satisfaction among adults with health care visits and communication from provider to patient
- Proportion of all residents with health coverage higher than MI
- Health partnerships are collaborative and cooperative (but could do better)
- Cherry Street Clinic serves those without insurance or with limited insurance

Health Indicators
- Higher life expectancy rates for men compared to MI/US and peer counties; women on par with MI/US
- Lower infant mortality rates than MI/US
- Child mortality rate lower than MI/US
- Proportion of low birth weight lower than MI/US
- Death rates from heart disease and cancer lower compared to MI/US
- Cancer diagnosis rates lower than MI/US
- Cancer, gonorrhea, and syphilis morbidity better than peer counties
- Proportion of adults in poor physical and/or mental health lower than MI
- Activity limitation due to poor physical/mental health better than MI
- Lower prevalence of overweight adults than MI
- Lower prevalence of chronic disease such as asthma and diabetes compared to MI

Risk Behaviors
- Lower prevalence of adult cigarette smoking vs. MI
- Lower prevalence of youth risk behaviors such as smoking, binge drinking and marijuana use compared to MI/US
- Lower rates of teenage sexual activity and teenage births compared to MI
- Lower prevalence of adult binge drinking compared to MI
- Youths more active and consume more fruits and vegetables than MI/US
- Lower prevalence of HBP than MI
Executive Summary – **Strengths** (Continued)

### Social Indicators
- Lower violent crime rates than MI/US
- Lower homicide rates than MI/US
- Local initiatives aimed at creating a healthier community (e.g., fresh food initiative, substance abuse task force)
- Strong Community Foundation with resources to devote to strengthening community
- Farmers Markets and the rural nature of the county allow access to healthy food
- Safe and family-friendly community
- Access to recreational areas (e.g., Yankee Springs)
- Active organizations that promote health, such as fitness centers, senior centers, the Health Department
- Caring and compassionate community
- Strong volunteer force
- Lower rates of poverty for individuals and families compared to MI and US

### Preventive Practices
- Prevalence of cancer screening among woman (breast exam, mammogram, Pap test) higher than MI
- Colorectal cancer screenings higher than MI
- More having a routine checkup than MI/US
- Higher proportion of immunized children than MI/US
- Majority have routine checkups and health screenings/tests
- Flu and pneumonia vaccines for adults aged 65+ higher than MI
- Three-fourths of pregnant women begin prenatal care in first trimester, better than MI
- Fewer women receive late or no prenatal care vs. MI/US
Executive Summary – Opportunities for Improvement

Health Care Access
✓ Even though more individuals are insured, high deductibles and co-pays prevent many residents from utilizing coverage
✓ One in ten adults between 18-64 have no health insurance
✓ One in six residents have no health insurance
✓ Far fewer PCPs per capita than MI
✓ Lack of adequate mental health care services in general and those that accept multiple forms of insurance
✓ One in ten adults have no primary care physician
✓ Lack of affordable oral health care and available dentists for uninsured, low income, and Medicare/Medicaid residents
✓ Lack of health care access for unemployed, uninsured, and Medicare/Medicaid residents
✓ Key Informants report a lack of services such as mental health treatment for mild to severe, oral surgery, substance abuse treatment, non-emergency transport, and oncology
✓ Transportation continues to be a barrier to access
✓ Personal responsibility and cultural issues are additional barriers to access
✓ Not enough health care services to meet community demand for uninsured residents
✓ Shortage of physicians accepting Medicare/Medicaid, and a shortage of specialists
✓ Lack of access to services such as HIV and STD screening
✓ Limited knowledge of/difficulty navigating health care system

Health Indicators
✓ Almost one in six adults perceive their general health as fair or poor, on par with MI
✓ Age adjusted mortality rate is lower than MI but higher than US
✓ One in ten adults in poor physical and one in ten in poor mental health
✓ Almost one in four adults suffer from a physical, mental, or emotional disability
✓ Prevalence of older adult asthma and depression higher than peer counties
✓ Only one-third of Key Informants are satisfied with the overall health climate in Barry County
✓ Prevalence of chronic conditions such as arthritis, cancer, COPD, angina/CHD, heart attack, stroke, any cardiovascular disease, kidney disease, and depression higher than MI
✓ Leading cause of preventable hospitalization is COPD, much more likely in Barry County vs. MI
✓ Death rates from chronic lower respiratory disease and stroke are higher vs. MI/US
✓ Death rates from diabetes significantly higher than MI/US
✓ Three in ten youths reporting depression, higher than MI/US
✓ Prevalence of youths attempting suicide as high as US
✓ Prevalence of adult obesity higher, and prevalence of adults at healthy weight lower, than MI/US
✓ Key Informants consider three major health issues in the region to be obesity, anxiety, and depression and are dissatisfied with the community response to the conditions
✓ Youth obesity rates higher than MI/US
Executive Summary – Opportunities for Improvement (Continued)

Social Indicators
✓ Higher child abuse/neglect rates compared to MI/US
✓ Unemployment rate higher than US
✓ More than one in ten people living in poverty
✓ Over half of kids aged 0-4 receiving WIC
✓ One-third of all births are Medicaid births
✓ High housing costs and housing stress, worse than peer counties
✓ Barry County worse than peer counties with regard to on-time high school graduation rates
✓ One in six children living in poverty
✓ One-third of students eligible for free/reduced lunch
✓ Half of single female families with children under the age of 5 live in poverty, a higher rate than the US
✓ In general, adults are less educated (more have only high school education, fewer have college/graduate degrees) than MI/US
✓ Access to parks worse than peer counties
✓ Lack of sufficient sidewalks or other places to walk in some areas
✓ Streets/roads in need of repair
✓ Discrimination toward people on Medicaid/Medicare

Risk Behavior Indicators
✓ One in six adults and one in twelve youths smoke cigarettes
✓ Almost one in four adults and two in five youths not physically active
✓ Few people wearing required safety helmets
✓ Prevalence of high blood cholesterol higher than MI
✓ Proportion of pregnant woman who smoke during pregnancy (almost one in four) higher compared to MI
✓ Teen repeat births rate higher than MI/US
✓ Lack of fruit and vegetable consumption for both youth and adults, combined with a lack of affordable, healthy food
✓ Prevalence of heavy drinking on par with MI
✓ One in six adults engage in binge drinking
✓ Lack of personal responsibility, motivation, and willpower to engage in behavioral changes
✓ Key Informants consider substance abuse of both licit (prescription drugs, alcohol) and illicit drugs to be the top health behavior issues in the region and they are dissatisfied with the community response to these issues

Preventive Practices
✓ Proportion of men aged 40+ screened for prostate cancer lower than MI
✓ Adult female routine Pap tests worse than peer counties
✓ One in four adults have not had a routine physical in the past year
✓ More than one in four have not visited dentist in past year for a routine dental cleaning or exam
Key Findings

Health Care Access

+ Nine in ten adults in the SHPH area have health insurance and nine in ten have a medical home – both of these rates are better than state averages. Health care coverage has expanded since 2011, largely due to the Affordable Care Act and the Healthy Michigan Plan.

- The SHPH area suffers from a shortage of providers and services, and Key Stakeholders agree that existing programs and services are limited in their ability to meet the needs and demands of community residents.

- The area has far fewer primary care physicians per capita than Michigan as a whole. Specifically, per capita, the state has twice as many PCPs compared to Barry County.

- In addition, the area lacks mental health and substance abuse services, as well as local access to medical specialists. Dental care is also lacking, especially oral surgery.

- Further, even though more than one in five residents has Medicaid, provider options for this group are especially limited.

- Despite the increase in insured residents, several barriers prevent citizens from obtaining needed care, most notably cost barriers, which can include the high cost of co-pays and/or deductibles for insured residents. The cost barrier is particularly prominent among the underserved populations.
Key Findings (Continued)

Health Care Access (Continued)

- For example, 15.0% of the general adult population had to forego needed medical care in the past year due to costs, and this proportion rises dramatically for the underserved (e.g., 33.3% of our underserved survey respondents).

- Transportation is another major barrier, particularly with Barry County having a limited public transportation system.

+ Key Informants find the SHPH area strong in services such as emergency care, orthopedics, ophthalmology, OB/GYN, and urgent care services.

- Conversely, Key Informants see a need for mental health treatment for individuals suffering from mild/moderate/severe disorders, oral surgery, substance abuse treatment, non-emergency transport, and oncology.

- Additional service gaps identified by health care professionals as most critical include a general lack of primary care, dental care, mental health care, and substance abuse treatment for the underserved/vulnerable population (uninsured, underinsured, Medicaid, low income).

- While Key Stakeholders and Key Informants are cognizant of service gaps, they also stress that existing programs and services could be better utilized by: (1) increasing awareness of their existence, how they work, and who they serve; (2) making transportation available to all residents; (3) enhancing service hours to enable more residents to access services; and (4) increasing coordination among providers, agencies, and community programs that support health.
Health Status

- Life expectancy among area men is higher than the state and national averages and life expectancy for women is on par with MI and the U.S.

- The age adjusted mortality rate for Barry County is higher than the U.S.
  - However, this mortality rate is lower than the rate for MI.
  - Almost one in six area adults report their overall health status as fair or poor, a rate equal to the state.

- Fewer than one in ten adults are considered to have poor physical and fewer than one in ten are considered to have poor mental health, meaning their physical, mental, or emotional condition limits their daily activities 14 or more days per month, a rate better than MI.

- However, among area adults, more than one in five (21.0%) has been diagnosed with depression. Rates for older adult depression are worse in the SHPH area compared to peer counties. Among area youth (grades 9-12), almost one-third (31.0%) report depression in the past year and 8.0% report having attempted suicide.

- Two-thirds (66.4%) of area adults are either overweight or obese. The obesity rate of 34.6% is higher compared to MI. The proportion of obese adults is also worse than peer counties. Moreover, the 31.9% that represents adults at a healthy weight is lower vs. the state.
Key Findings (Continued)

Health Status (Cont’d.)

- Youth obesity rates are also higher than MI or the U.S.
- Key Informants consider obesity to be the top health issue in the SHPH area and they believe the community has inadequately addressed this problem.
- Additionally, Key Informants consider anxiety and depression to be major mental health issues in the region and are dissatisfied with the community response to both.

+ Child (age 1-14) and infant mortality rates are lower in Barry County compared to MI and the U.S.
+ The proportion of births with low birth weight is lower in Barry County compared to state or national averages.
Key Findings (Continued)

Chronic Disease

+ Area adults have lower prevalence of asthma and diabetes compared to those across the state.

- However, one in ten (10.2%) area adults has diabetes.

- Moreover, the death rate from diabetes is significantly higher in Barry County compared to the state or nation; in fact, it is more than 2.5 times that of MI.

- Arthritis, angina, cancer, COPD, heart attack, stroke, any cardiovascular disease, kidney disease, and depression are more prevalent in the SHPH area compared to across MI.

- More than one in three adults have arthritis.

+ Cancer diagnosis rates are much lower in Barry County vs. MI and the U.S.

+ Both heart disease and cancer are the leading causes of death in Barry County (the same as MI and U.S.) but the rates are much lower compared to MI and U.S.
Clinical Preventive Practices

+ Three-fourths (75.0%) of area adults have visited a physician for a routine checkup within the past year, a greater percentage than in the state.

+ The majority of older adults recommended to receive cancer screening (breast, cervical, and colon) are doing so, and rates for breast cancer screening, cervical cancer screening, and colon cancer screening are better than the state.

- However, fewer area men aged 50+ are having prostate cancer screening compared to men across the state as a whole.

+ The majority of adults age 65 or older have received a flu vaccine in the past year and the rates are higher than MI. In addition, eight in ten (79.5%) have received a pneumonia vaccine at some time, and this rate is also better than the state.

- Dental care is an issue, as more than one in four adults (28.7%) has not visited a dentist, for any reason, in the past year. Additionally, Key Informants view oral surgery as a service that lags behind the demand in the area.

+ The proportion of immunized children is higher in Barry County compared to MI and the U.S.

+ Almost all pregnant women receive prenatal care and three-fourths receive it in the first trimester.
Lifestyle Choices/Behaviors

+ Most people know what they need to do to live a healthier lifestyle, such as exercising, eating healthier foods, and getting plenty of sleep.

- Thus, advocating for more education about healthy lifestyle choices is probably not the best way to utilize resources.

+ Residents recognize that what prevents them from making positive changes is lack of willpower, time, and/or energy, as well as cost.

+ Therefore, if policies are to focus on ways to encourage residents to make lifestyle changes, then the following four approaches are worth investigating: (1) find ways to incentivize people to make changes, (2) increase access to affordable and healthy foods, (3) educate people on quick, easy ways to prepare delicious healthy meals, and (4) increase access (affordable, convenient location, ease of use) to gyms, recreation areas, and community exercise programs and activities, especially in the winter months.

+ Education delivered in person at easily-accessible community sites is likely to be more successful with area residents than education delivered online.
Key Findings (Continued)

Risk Behaviors

+ The SHPH area has lower rates of adult binge drinking compared to the state.
- However, the prevalence of heavy drinking is on par with MI.
+ Fewer adults have high blood pressure (HBP) compared to the state.
- Still, one third (32.2%) report they have HBP.
- The proportion of adults who have high cholesterol is higher in the SHPH region compared to the proportion of adults across the state.
+ Area youth and adults are more active than those across the state.
- Nearly nine in ten area adults and more than three-fourths of area youth consume inadequate amounts of fruits and vegetables daily.
- Although fewer adults in the area smoke cigarettes compared to adults across MI, still one in six area adults are smokers. Further, smoking during pregnancy is more prevalent among Barry County women compared to Michigan in general.
+ Area youth participate less in risk behaviors such as smoking, binge drinking and marijuana use compared to youth across MI and the U.S.
+ Area teens are less sexually active and they account for a lower proportion of all births compared to MI and U.S. teens.
## Summary Tables – A Comparison of Barry County to Peer Counties

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<td>Unintentional injury</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Morbidity</th>
<th>Better (Most Favorable Quartile)</th>
<th>Moderate (Middle Two Quartiles)</th>
<th>Worse (Least Favorable Quartile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>Adult diabetes</td>
<td>Adult obesity</td>
<td></td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>Adult overall health status</td>
<td>Older adult asthma</td>
<td></td>
</tr>
<tr>
<td>Syphilis</td>
<td>Alzheimer’s disease/dementia</td>
<td>Older adult depression</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HIV</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Preterm births</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above Summary Comparison Report provides an “at a glance” summary of how Barry County compares with peer counties on the full set of primary indicators. Peer county values for each indicator were ranked and then divided into quartiles.

Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Community Health Profile, Barry County.
## Summary Tables – A Comparison of Barry County to Peer Counties (Continued)

<table>
<thead>
<tr>
<th>Access</th>
<th>Better (Most Favorable Quartile)</th>
<th>Moderate (Middle Two Quartiles)</th>
<th>Worse (Least Favorable Quartile)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cost barrier to care</td>
<td>Older adult preventable hospitalizations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Primary care provider access</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Uninsured</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health</th>
<th>Better (Most Favorable Quartile)</th>
<th>Moderate (Middle Two Quartiles)</th>
<th>Worse (Least Favorable Quartile)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adult binge drinking</td>
<td>Adult female routine pap tests</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adult physical inactivity</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adult smoking</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Teen births</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Community Health Profile, Barry County.
### Summary Tables – A Comparison of Barry County to Peer Counties (Continued)

<table>
<thead>
<tr>
<th>SOCIAL FACTORS</th>
<th>Better (Most Favorable Quartile)</th>
<th>Moderate (Middle Two Quartiles)</th>
<th>Worse (Least Favorable Quartile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children in single parent households</td>
<td>High housing costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inadequate social support</td>
<td>On time high school graduation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poverty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violent crime</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ENVIRONMENT</th>
<th>Better (Most Favorable Quartile)</th>
<th>Moderate (Middle Two Quartiles)</th>
<th>Worse (Least Favorable Quartile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited access to healthy food</td>
<td>Annual average PM2.5 concentration</td>
<td>Access to parks</td>
<td></td>
</tr>
<tr>
<td>Living near highways</td>
<td>Housing stress</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
DETAILED FINDINGS
Secondary Data Sources
The unemployment rate is lower in Barry County than across Michigan and is slightly higher than that of the U.S., with approximately 6% of people aged 16+ looking for work. The proportion of people living in poverty in Barry County is lower than the state or nation.

Unemployment and Poverty Rates

Population Age 16+ Unemployed and Looking for Work

- Barry County: 6.3%
- Michigan: 9.1%
- United States: 5.9%

Percentage of People in Poverty

- Barry County: 11.7%
- Michigan: 12.3%
- United States: 15.8%

The proportion of children living in poverty in Barry County is less compared to Michigan. Moreover, the proportion of students eligible for free or reduced price school lunches is lower in Barry County compared to the state.

**Children Living in Poverty**

<table>
<thead>
<tr>
<th>Percentage of Children (&lt; Age 18) in Poverty</th>
<th>Percentage of Students Eligible for Free/Reduced Price School Lunches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barry County: 16.7%</td>
<td>Barry County: 32.6%</td>
</tr>
<tr>
<td>Michigan: 25.0%</td>
<td>Michigan: 41.0%</td>
</tr>
</tbody>
</table>

The proportion of children aged 0-4 receiving WIC and the proportion of births paid by Medicaid are both lower in Barry County in comparison to Michigan. In Barry County, slightly more than half of children aged 0-4 are currently receiving WIC assistance and more than one-third of all births are Medicaid paid births.

The proportions of all families and of married couple families living in poverty in Barry County are lower compared to Michigan and the U.S. However, the proportion of Barry County single female families living in poverty is greater than MI or the U.S. Further, almost half of single female families with children under age 18 live in poverty.

**Poverty Status of Families by Family Type**

(\% Below Poverty)

### All Families
- **Barry County**
  - Total: 14.3\%
  - With Children <18 Years: 13.1\%
  - With Children <5 Years: 12.0\%
- **Michigan**
  - Total: 20.0\%
  - With Children <18 Years: 17.8\%
  - With Children <5 Years: 11.3\%
- **United States**
  - Total: 18.6\%
  - With Children <18 Years: 17.8\%
  - With Children <5 Years: 11.3\%

### Married Couple Families
- **Barry County**
  - Total: 4.3\%
  - With Children <18 Years: 7.6\%
  - With Children <5 Years: 5.4\%
- **Michigan**
  - Total: 8.5\%
  - With Children <18 Years: 8.5\%
  - With Children <5 Years: 5.4\%
- **United States**
  - Total: 8.3\%
  - With Children <18 Years: 8.3\%
  - With Children <5 Years: 5.6\%

### Single Female Families
- **Barry County**
  - Total: 45.2\%
  - With Children <18 Years: 54.7\%
  - With Children <5 Years: 48.3\%
- **Michigan**
  - Total: 45.2\%
  - With Children <18 Years: 45.2\%
  - With Children <5 Years: 34.3\%
- **United States**
  - Total: 40.0\%
  - With Children <18 Years: 30.6\%
  - With Children <5 Years: 46.9\%


VIP Research and Evaluation
The proportion of Barry County residents that achieve no education beyond high school graduate/GED is higher compared to MI or the U.S. Further, the proportion of Barry County adults with Bachelor’s, graduate, or professional degrees is lower than the proportion of adults across the state or the nation.

### Educational Level Age 25+

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Barry County</td>
<td>Michigan</td>
</tr>
<tr>
<td>Less than High School Graduate</td>
<td>10.3%</td>
<td>11.7%</td>
</tr>
<tr>
<td>High School Graduate, GED, or Alternative</td>
<td>39.0%</td>
<td>30.7%</td>
</tr>
<tr>
<td>Some College, No Degree</td>
<td>25.4%</td>
<td>23.8%</td>
</tr>
<tr>
<td>Associate's Degree</td>
<td>8.3%</td>
<td>7.4%</td>
</tr>
<tr>
<td>Bachelor's Degree</td>
<td>10.4%</td>
<td>15.9%</td>
</tr>
<tr>
<td>Graduate or Professional Degree</td>
<td>6.6%</td>
<td>10.4%</td>
</tr>
</tbody>
</table>

Barry County residents enjoy the safety of their community, as Barry County has a far lower violent crime rate and far fewer homicides than Michigan or the U.S. However, child abuse/neglect rates in Barry County are higher than Michigan and much higher than the U.S.

**Crime Rates**

**Violent Crime Rate Per 100,000 Population**

<table>
<thead>
<tr>
<th>Barry County</th>
<th>Michigan</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>175.2</td>
<td>478.0</td>
<td>386.9</td>
</tr>
</tbody>
</table>

**Homicide Rate Per 100,000 Population**

<table>
<thead>
<tr>
<th>Barry County</th>
<th>Michigan</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>6.5</td>
<td>5.2</td>
</tr>
</tbody>
</table>

**Confirmed Victims of Child Abuse/Neglect Rate Per 1,000 Children <18**

<table>
<thead>
<tr>
<th>Barry County</th>
<th>Michigan</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.5</td>
<td>14.9</td>
<td>9.0</td>
</tr>
</tbody>
</table>

*Barry County homicide count too low to calculate rate.

While Barry County men have slightly longer average life expectancy rates (when adjusted for age) compared to men across Michigan and the U.S., the life expectancy of Barry County women is roughly on par with the state and slightly lower than the nation.

Source: Barry County, MI and US 2013: Institute for Health Metrics and Evaluation at the University of Washington County Profiles
While Barry County’s age adjusted mortality rate is slightly lower than Michigan’s, it is slightly higher than the nation’s. The most recent child mortality data for Barry County is too low to reliably calculate the child mortality rate; however, we can conclude it is much lower than MI or the U.S.

*Barry County child mortality count too low to calculate rate.

nation. Like the child mortality rate, the most recent data on infant mortality in Barry County is too low to meet statistical standards of reliability, so it is difficult to compare its infant mortality rate to that of the state or nation. That said, we can conclude it is lower than MI or the U.S.

Low Birth Weight Rates and Infant Mortality Rates

**Proportion of Live Births with Low Birth Weight**

<table>
<thead>
<tr>
<th></th>
<th>Barry County</th>
<th>Michigan</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Birth Weight</td>
<td>6.5%</td>
<td>8.4%</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

**Infant Mortality Rate Per 1,000 Live Births**

<table>
<thead>
<tr>
<th></th>
<th>Barry County</th>
<th>Michigan</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant Mortality Rate</td>
<td>*</td>
<td>7.0</td>
<td>6.0</td>
</tr>
</tbody>
</table>

*Barry County infant mortality count too low to calculate rate.

The top three causes of death for Barry County, Michigan, and the U.S. are the same: heart disease, cancer, and chronic lower respiratory disease. The rates of heart disease and cancer are lower in Barry County compared to the state or the nation. In 2012, the death rate for diabetes was much higher in Barry County compared to MI or the U.S.

**Top 10 Leading Causes of Death**
*(Age-Adjusted Rates)*

<table>
<thead>
<tr>
<th>Rank</th>
<th>Barry County</th>
<th>Michigan</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rate</td>
<td>Rate</td>
<td>Rate</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>168.5</td>
<td>198.0</td>
<td>170.5</td>
</tr>
<tr>
<td>Cancer</td>
<td>149.0</td>
<td>174.9</td>
<td>166.5</td>
</tr>
<tr>
<td>Chronic Lower Respiratory Diseases</td>
<td>45.3</td>
<td>45.2</td>
<td>41.5</td>
</tr>
<tr>
<td>Stroke</td>
<td>41.6</td>
<td>37.3</td>
<td>36.9</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>41.1</td>
<td>23.0</td>
<td>21.2</td>
</tr>
<tr>
<td>Unintentional Injuries</td>
<td>34.9</td>
<td>36.6</td>
<td>39.1</td>
</tr>
<tr>
<td>Intentional Self-Harm (Suicide)</td>
<td>N/A</td>
<td>12.4</td>
<td>12.6</td>
</tr>
<tr>
<td>Alzheimer's Disease</td>
<td>N/A</td>
<td>25.6</td>
<td>23.8</td>
</tr>
<tr>
<td>Pneumonia/Influenza</td>
<td>N/A</td>
<td>13.3</td>
<td>14.4</td>
</tr>
<tr>
<td>Kidney Disease</td>
<td>N/A</td>
<td>13.6</td>
<td>13.1</td>
</tr>
<tr>
<td>All Causes of Death</td>
<td>740.4</td>
<td>775.0</td>
<td>732.8</td>
</tr>
</tbody>
</table>

Source: Michigan Department of Community Health, Barry Co., MI, and US 2012
Compared to the state or the nation, cancer diagnosis and cancer death rates are much lower for Barry County residents.

Cancer Rates

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

Barry County  Michigan  United States
286.3  445.8  450.6

Overall Cancer Death Rate
Per 100,000 Population

Barry County  Michigan  United States
147.3  170.4  166.5

Source: MDCH Cancer Incidence Files. Barry Co., MI; MDCH/ County Health Rankings. 2013
Chronic obstructive pulmonary disease is the leading cause of preventable hospitalization in Barry County, followed by congestive heart failure, which is the leading cause of preventable hospitalizations in Michigan. Bacterial Pneumonia is the third leading cause of preventable hospitalizations in Barry County and is the second leading cause in Michigan.

**Top 10 Leading Causes of Preventable Hospitalizations**

<table>
<thead>
<tr>
<th></th>
<th>Barry County</th>
<th>Michigan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RANK</td>
<td>% of All Preventable Hospitalizations</td>
</tr>
<tr>
<td>Chronic Obstructive Pulmonary Disease (COPD)</td>
<td>1</td>
<td>13.6%</td>
</tr>
<tr>
<td>Congestive Heart Failure</td>
<td>2</td>
<td>13.2%</td>
</tr>
<tr>
<td>Bacterial Pneumonia</td>
<td>3</td>
<td>12.6%</td>
</tr>
<tr>
<td>Kidney/Urinary Infections</td>
<td>4</td>
<td>6.5%</td>
</tr>
<tr>
<td>Cellulitis</td>
<td>5</td>
<td>6.1%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>6</td>
<td>4.7%</td>
</tr>
<tr>
<td>Asthma</td>
<td>7</td>
<td>4.1%</td>
</tr>
<tr>
<td>Grand Mal and Other Epileptic Conditions</td>
<td>8</td>
<td>2.8%</td>
</tr>
<tr>
<td>Dehydration</td>
<td>9</td>
<td>2.6%</td>
</tr>
<tr>
<td>Gastroenteritis</td>
<td>10</td>
<td>1.3%</td>
</tr>
<tr>
<td><strong>All Other Ambulatory Care Sensitive Conditions</strong></td>
<td>32.6%</td>
<td>36.1%</td>
</tr>
<tr>
<td><strong>Preventable Hospitalizations as a % of All Hospitalizations</strong></td>
<td>18.9%</td>
<td>20.2%</td>
</tr>
</tbody>
</table>

Barry County women are slightly more likely than women across Michigan to receive timely prenatal care, especially in the first trimester. The proportion of Barry County children, aged 19-35 months, who are fully immunized is greater compared to children of the same age elsewhere in the state or in the nation.

### Prenatal Care and Childhood Immunizations

<table>
<thead>
<tr>
<th>Proportion of Women Who Begin Prenatal Care in First Trimester</th>
<th>Proportion of Births to Women Who Receive Late or No Prenatal Care</th>
<th>Proportion of Children Aged 19-35 Months Fully Immunized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barry County: 75.0%</td>
<td>Barry County: 4.0%, Michigan: 4.5%, United States: 6.0%</td>
<td>Barry County: 77.8%, Michigan: 74.3%, United States: 74.0%</td>
</tr>
</tbody>
</table>

Roughly one in six Barry/Eaton adults perceive their general health to be fair or poor, the same proportion as the state. Poor physical health and poor mental health are each reported by slightly fewer than one in ten.

### Heath Status (2012-2014 Prevalence Estimates)

#### Perception of General Health (Fair/Poor)

<table>
<thead>
<tr>
<th>Region</th>
<th>Michigan</th>
<th>Barry-Eaton Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception</td>
<td>17.2%</td>
<td>17.2%</td>
</tr>
</tbody>
</table>

Among all adults, the proportion who reported that their health, in general, was either fair or poor.

#### Poor Physical Health (On At Least 14 Days in Past Month)

<table>
<thead>
<tr>
<th>Region</th>
<th>Michigan</th>
<th>Barry-Eaton Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor Health</td>
<td>9.7%</td>
<td>12.9%</td>
</tr>
</tbody>
</table>

Among all adults, the proportion who reported 14 or more days of poor physical health, which includes physical illness and injury, during the past 30 days.

#### Poor Mental Health (On At Least 14 Days in Past Month)

<table>
<thead>
<tr>
<th>Region</th>
<th>Michigan</th>
<th>Barry-Eaton Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor Mental</td>
<td>9.3%</td>
<td>12.6%</td>
</tr>
</tbody>
</table>

Among all adults, the proportion who reported 14 or more days of poor mental health, which includes stress, depression, and problems with emotions, during the past 30 days.

Slightly fewer than one in four Barry/Eaton adults are disabled, a rate better than Michigan’s. Far fewer Barry/Eaton adults experience activity limitation – meaning poor physical or mental health prevented them from doing their usual activities – compared to adults across Michigan.

**Heath Status (Cont’d.)**

**2012-2014 Prevalence Estimates**

**Disability**

<table>
<thead>
<tr>
<th>Region</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barry-Eaton</td>
<td>23.6%</td>
</tr>
<tr>
<td>Michigan</td>
<td>25.0%</td>
</tr>
</tbody>
</table>

Among all adults, the proportion who reported being limited in any activities because of physical, mental, or emotional problems, or reported that they required use of special equipment (such as a cane, a wheelchair, a special bed, or a special telephone) due to a health problem.

**Activity Limitation**

(At Least 14 Days in Past Month)

<table>
<thead>
<tr>
<th>Region</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barry-Eaton</td>
<td>4.9%</td>
</tr>
<tr>
<td>Michigan</td>
<td>8.9%</td>
</tr>
</tbody>
</table>

Among all adults, the proportion who reported 14 or more days in the past 30 days in which either poor physical health or poor mental health kept them from doing their usual activities, such as self-care, work, and recreation.

Two in three Barry/Eaton adults are either overweight or obese (66.4%). More than one third (34.6%) are considered obese according to their BMI, a proportion higher than across Michigan. Moreover, fewer Barry/Eaton adults are at a healthy weight, according to their BMI, compared to adults across Michigan.

Chronic Health Conditions
The most prevalent chronic health conditions among Barry/Eaton adults are *arthritis, depression, cancer, cardiovascular disease, asthma,* and *diabetes.* One in five adults has diabetes. With the exception of asthma and diabetes, compared to Michigan, the Barry/Eaton region has higher prevalence of all chronic conditions in the table below.

### Chronic Conditions (2012-2014 Prevalence Estimates)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Barry-Eaton Region</th>
<th>Michigan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever told have arthritis</td>
<td>35.3%</td>
<td>31.7%</td>
</tr>
<tr>
<td>Ever told have diabetes</td>
<td>10.2%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Ever told have asthma</td>
<td>14.0%</td>
<td>15.8%</td>
</tr>
<tr>
<td>Current asthma</td>
<td>10.5%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Ever told had COPD</td>
<td>8.6%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Ever told have heart attack</td>
<td>6.7%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Ever told have angina/coronary heart disease</td>
<td>5.6%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Ever told have stroke</td>
<td>5.3%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Ever told any cardiovascular disease</td>
<td>12.2%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Ever told have cancer</td>
<td>14.0%</td>
<td>12.2%</td>
</tr>
<tr>
<td>Ever told have kidney disease</td>
<td>4.0%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Ever told have depression</td>
<td>21.0%</td>
<td>20.8%</td>
</tr>
</tbody>
</table>


= worst measure among the comparable groups
Adult Risk Behaviors
One in six Barry/Eaton adults currently smoke cigarettes, compared to more than one in five adults across the state. The prevalence of heavy drinking is on par with the state, while the prevalence of binge drinking is lower compared to MI. That said, more than one in six engage in binge drinking.

**Tobacco and Alcohol**
*(2012-2014 Prevalence Estimates)*

**Current Smoker**
- Barry-Eaton Region: 16.7%
- Michigan: 22.0%

**Heavy Drinking**
- Barry-Eaton Region: 6.5%
- Michigan: 6.4%

**Binge Drinking**
- Barry-Eaton Region: 15.7%
- Michigan: 19.0%

Among all adults, the proportion who reported consuming five or more drinks per occasion (for men) or four or more drinks per occasion (for women) at least once in the previous month.

The proportion of Barry County mothers who smoke during pregnancy is consistently higher than the proportion across Michigan. More alarming is that this proportion appears to be on the rise.

Source: Kids County Data Center, Barry County and Michigan, Births to Mothers Who Smoked During Pregnancy- New Birth Certificate
Just under one-fourth of Barry/Eaton adults do not engage in leisure time physical activity, a rate slightly better than MI. Almost nine in ten (86.0%) do not eat adequate amounts of fruits and vegetables per day (at least five times per day), a rate worse than MI.

**Exercise and Diet**


<table>
<thead>
<tr>
<th>Region</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barry-Eaton</td>
<td>23.6%</td>
</tr>
<tr>
<td>Michigan</td>
<td>24.4%</td>
</tr>
</tbody>
</table>

**Inadequate Fruit and Vegetable Consumption (2011-2013 Prevalence Estimates)**

<table>
<thead>
<tr>
<th>Region</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barry-Eaton</td>
<td>86.0%</td>
</tr>
<tr>
<td>Michigan</td>
<td>83.4%</td>
</tr>
</tbody>
</table>

Among all adults, the proportion who reported not participating in any leisure-time physical activities or exercises, such as running, calisthenics, golf, gardening, or walking, during the past month.

Among all adults, the proportion whose total frequency of consumption of fruits (including juice) and vegetables was less than five times per day.

Roughly one-third of Barry/Eaton adults have high blood pressure (HBP), slightly lower than the state average. Of Barry/Eaton adults who have had their blood cholesterol checked, more than four in ten report they have high cholesterol, a rate higher than MI.

### Hypertension and Cholesterol

#### Ever Told Have High Blood Pressure (2011-2013 Prevalence Estimates)

- **Barry-Eaton Region**: 32.2%
- **Michigan**: 34.4%

#### Ever Told Have High Cholesterol (2011-2013 Prevalence Estimates)

- **Barry-Eaton Region**: 43.6%
- **Michigan**: 41.2%

Among all adults, the proportion who reported that they were ever told by a doctor that they had high blood pressure.

Among all adults who ever had their blood cholesterol checked, the proportion who reported that a doctor, nurse, or other health professional had told them that their cholesterol was high.

Youth Risk Behaviors
More than one in four Barry County youths have had sexual intercourse, significantly lower than both Michigan and the U.S. Fewer than one in five Barry County youths have had sexual intercourse in the past three months, also notably lower compared to MI or the U.S.

**Teenage Sexual Activity**

**Youth Who Have Ever Had Sexual Intercourse**

- Barry County: 27.9%
- Michigan: 38.1%
- United States: 47.0%

**Youth Who Have Had Intercourse in Past 3 Months**

- Barry County: Female 18.1%, Male 18.6%
- Michigan: Female 26.8%, Male 27.0%
- United States: Female 35.2%, Male 32.7%

Source: MiPhy 2013-2014 Sexual Behavior MI and US YRBS 2013; NOTE: MiPhy includes grades 9 and 11, while YRBS includes grades 10 and 12.
The teen birth rate is lower in Barry County (4.5%) than in Michigan or the U.S (6.9%). However, the repeat teen birth rate is higher in Barry County than either the state or nation.

**Teenage Pregnancy**

**Teen Births, Ages 15-19**

(% Of All Births)

- Barry County: 4.5%
- Michigan: 6.9%
- United States: 6.9%

**Repeat Teen Births**

(% Of All Births to Mothers Aged 15-19)

- Barry County: 18.5%
- Michigan: 16.8%
- United States: 17.0%

Three in ten Barry County youths reported depression in 2013, while 8.0% reported attempting suicide. The former rate is higher for Barry County compared to the state or nation.

Far fewer Barry County youths currently smoke cigarettes (8.5%) compared to youths across the U.S. (15.7%) and slightly fewer smoke less compared to youths across the state. The proportion of Barry County youths that participate in binge drinking or currently use marijuana is lower compared to the state or the nation.

**Tobacco, Alcohol and Marijuana Use Among Youth**

<table>
<thead>
<tr>
<th>Proportion of Youth Who Report Current Smoking (Past 30 Days)</th>
<th>Proportion of Youth Reporting Binge Drinking (5+ Drinks, Past 30 Days)</th>
<th>Proportion of Youth Reporting Current Marijuana Use (Past 30 Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barry County 8.5%</td>
<td>MI 9.6%</td>
<td>Barry County 12.1%</td>
</tr>
<tr>
<td>MI 11.8%</td>
<td>MI 16.7%</td>
<td>MI 18.2%</td>
</tr>
<tr>
<td>US 15.7%</td>
<td>US 20.8%</td>
<td>US 23.4%</td>
</tr>
</tbody>
</table>

Source: MiPhy 2013-2014- Alcohol and other drugs. MI and US YRBS 2013: NOTE: MiPhy includes grades 9 and 11, while YRBS includes grades 10 and 12.
The proportion of obese youth in Barry County is greater than the state or the nation. Conversely, four in ten Barry County youth report inadequate physical activity, this proportion is actually better than the state and nation.

**Obesity and Physical Activity Among 9th and 11th Grade Students**

Youth Who Are Obese (>95th Percentile BMI for Age and Sex)

- Barry County: 15.1%
- MI: 13.0%
- US: 13.7%

Youth Reporting Inadequate Physical Activity (<60 Minutes, 5+ Days Per Week)

- Barry County: 43.6%
- MI: 50.3%
- US: 52.7%

Source: MiPhy 2013-2014, MI and US YRBS 2013; NOTE: MiPhy includes grades 9 and 11, while YRBS includes grades 10 and 12.
One in five Barry County youth report eating five or more servings of fruits and vegetables per day. Although this unit of measure is different than what is used by the state or the nation, it is still possible to infer that overall, youth in Barry County eat more servings of fruits and vegetables per day compared to youth across Michigan and the United States.

**Fruit and Vegetable Consumption Among High School Students**

- **% Youth reporting 5 or more servings of fruits/vegetables per day (past week)**
  - Barry County: 22.3%
  - MI: 11.9%
  - US: 15.7%

- **% Youth reporting 3 or more servings of vegetables per day (past week)**
  - MI: 17.2%
  - US: 21.9%

- **% Youth reporting 3 or more servings of fruits/100% fruit juice per day (past week)**
  - MI: 21.9%
  - US: 21.9%

Source: Barry Co: YRBS or Michigan Profile for Healthy Youth (MiPhy) 2013-2014. Barry Co. Question: Percentage of students who ate five or more servings per day of fruits and vegetables during the past seven days

US and MI: Percentage of high school students who ate vegetables, ate fruit, or drank 100% fruit juice three or more times/day. Vegetables are defined as green salad, potatoes (excluding French fries, fried potatoes, or potato chips), carrots, or other vegetables United States, Youth Risk Behavior Survey, 2013.
Health Care Access
One in ten (9.6%) Barry/Eaton adults aged 18-64 have *no health care coverage* and one in ten (10.0%) have *no personal health care provider*. Both of these rates are much better than the state. Additionally, 15.0% of Barry/Eaton adults have foregone health care in the past year due to health care costs.

**Heath Care Access**  
(2012-2014 Prevalence Estimates)

### No Health Care Coverage Among Adults Aged 18-64
- **Michigan**: 15.6%
- **Barry-Eaton Region**: 9.6%

### No Personal Health Care Provider
- **Michigan**: 16.3%
- **Barry-Eaton Region**: 10.0%

### No Health Care Access in Past 12 Months Due to Cost
- **Michigan**: 15.0%
- **Barry-Eaton Region**: 15.0%

Among adults aged 18-64, the proportion who reported having no health care coverage, including health insurance, prepaid plans such as HMOs, or government plans, such as Medicare.

Among all adults, the proportion who reported that they did not have anyone that they thought of as their personal doctor or health care provider.

Among all adults, the proportion who reported that in the past 12 months there was a time when they needed to see a doctor but could not due to cost.

There are far fewer – in fact, half as many – primary care physicians (PCPs) per capita in Barry County compared to the state. Among all Barry County residents, more than one in ten have no health care coverage, a proportion slightly lower than MI but higher than the U.S.

**Primary Care Physicians and Uninsured**

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

<table>
<thead>
<tr>
<th>Barry County</th>
<th>Michigan</th>
</tr>
</thead>
<tbody>
<tr>
<td>39.1</td>
<td>78.8</td>
</tr>
</tbody>
</table>

**Proportion of Uninsured Residents**

<table>
<thead>
<tr>
<th>Barry County</th>
<th>Michigan</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.3%</td>
<td>13.6%</td>
<td>10.4%</td>
</tr>
</tbody>
</table>

Source: US Department of Health & Human Services, Community Health Status Indicators; County Health Rankings 2014, MI and US BRFS 2013
Clinical Preventative Practices
One-fourth of Barry/Eaton adults did not have a routine physical checkup in the past year. Worse, more than one-fourth have not visited a dentist in the past year, even for a dental cleaning.

**Health Care Visits**
**2012-2014 Prevalence Estimates**

<table>
<thead>
<tr>
<th>No Routine Physical Checkup in Past Year</th>
<th>No Dental Visit in Past Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Barry-Eaton Region</strong></td>
<td><strong>Barry-Eaton Region</strong></td>
</tr>
<tr>
<td>25.0%</td>
<td>28.7%</td>
</tr>
<tr>
<td><strong>Michigan</strong></td>
<td><strong>Michigan</strong></td>
</tr>
<tr>
<td>30.6%</td>
<td>31.7%</td>
</tr>
</tbody>
</table>

Among all adults, the proportion who reported that they did not have a routine checkup in the past year.

Among all adults, the proportion who reported that they had visited a dentist or dental clinic for any reason in the previous year.

Eight in ten (79.5%) and two-thirds (67.1%) of Barry/Eaton adults aged 65 or older have been vaccinated against pneumonia and have received a flu vaccine in the past year, respectively. Both rates are substantially higher than the state.

Vaccines Among Adults Age 65+ (2012-2014 Prevalence Estimates)

Among adults aged 65 years and older, the proportion who reported that they ever had a pneumococcal vaccine.

Among adults aged 65 years and older, the proportion who reported that they had a flu vaccine, either by an injection in the arm or sprayed in the nose during the past 12 months.

Almost six in ten (58.4%) Barry/Eaton women aged 40 or older have had both a clinical breast exam and a mammogram in the previous year. Among Barry/Eaton women aged 18 or older, more than eight in ten (82.7%) have had an appropriately timed Pap test (within the past three years). Since both rates are higher than the state, it demonstrates that women in the Barry/Eaton region are doing more than women across the state to prevent breast and cervical cancer.

**Cancer Screening Among Women (2012-2014 Prevalence Estimates)**

**Had Clinical Breast Exam and Mammogram in Past Year (Among Women 40 Years and Older)**

- **Barry-Eaton Region:** 58.4%
- **Michigan:** 49.1%

**Had Appropriately Timed Pap Test (Among Women 18 Years and Older)**

- **Barry-Eaton Region:** 82.7%
- **Michigan:** 77.2%

Among women aged 40 years and older, the proportion who had both a clinical breast exam and a mammogram in the previous year.

Among women aged 18 years and older, the proportion who had a Pap test within the previous three years.

Four in ten (40.1%) Barry/Eaton men aged 50 or older have had a PSA test in the past year, a rate lower than the state’s. Among all Barry/Eaton adults aged 50 or older, three fourths have had a sigmoidoscopy in the past five years or a colonoscopy in the past ten years. This proportion is higher compared to Michigan.

Hospital Data
In 2015, one in twenty (4.8%) Pennock consumers who visited the ER/ED were uninsured, while three in ten (31.1%) had Medicaid. Just over one-third (34.7%) had commercial insurance. The racial/ethnic mix of ER/ED consumers matches the population of Barry County as a whole.

Source: Spectrum Health Pennock Hospital, 2015.
Key Stakeholder Interviews
Despite an increase in the number of insured residents, many still face access challenges due to a shortage of providers, particularly those who accept Medicaid. Other pressing issues are insufficient access to mental health care and persistent social issues such as poverty and low levels of education.

**Most Pressing Health Needs or Issues**

- Key Stakeholders report that access to health care remains a critical concern. Several stakeholders cited a shortage of primary care physicians in general and also limited access to health care for new patients.
- Similarly, Key Stakeholders report the need for more psychiatric and behavioral health care, noting limited availability of these services.
- Stakeholders also identify the need for integrating health and psychiatric care for individuals who have multiple health and mental health needs.
- Other health-related needs or issues reported by Key Stakeholders are listed below:
  - Substance abuse
  - Smoking
  - Obesity
  - Limited health awareness
  - Access to acute care
  - Services for school-age individuals who have a diagnosis of Autism or similar disorders
  - Services for pain management
  - Poverty

Q1: What do you feel are the most pressing health needs or issues in your community?
Verbatim Comments on Most Pressing Health Needs or Issues

“I think what affects our clients the most is the need for integration for mental health and physical health services so that people are getting more of an integrated approach for the whole person.”

“I think we see a lot of lifestyle diseases: diabetes, hypertension, smoking. Those are sort of my big ones. I think mental health is a real problem in this community too.”

“What I’m seeing at least from the hospital provider side is that we have a desperate need for access to behavioral health care and mental health care. Those patients are ending up in places where they don’t/aren’t really getting the best service and they are not coming to medical facilities for really behavioral needs.”

“The fact that insurance is so expensive and the new insurance is costly. We are hearing people say that they now have less access to health care than what they had previously. That’s the biggest one that we see. It’s just a frustration, Those that didn’t have insurance and then they just went because it’s free now they qualify for insurance, but it’s too expensive; they can’t afford it.”

Q1: What do you feel are the most pressing health needs or issues in your community?
Key Stakeholders cite programs and plans underway to address the community’s top health care concerns. Limited funding is cited as a constraint.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Programs/Plans Aimed at Addressing Issue</th>
</tr>
</thead>
</table>
| Need for partnerships        | • Partnership with Spectrum Health  
• Partnership with Cherry Street Health and Barry Community Health Center  
• Various coalitions available targeting key problems including obesity, smoking, activity |
| Mental health/Emotional health | • Hiring additional clinicians  
• Considering adding telepsychiatry services  
• Suicide awareness and prevention campaigns |
| Health behaviors             | • Health education on nutrition and healthy lifestyles |
| Obesity                     | • Several initiatives targeting obesity at the school level |
| Substance abuse             | • Health Department offering smoking cessation programs |
| Shortage of providers        | • Hiring new primary care physicians |

“There are various coalitions addressing tobacco, obesity, and activity. Of course the school system’s been charged with education, and they are attempting to increase the community support for education.”

“In terms of the psychiatric and psychological needs being met, we are looking into telemedicine and we work closely with our county mental health department.”

Q1a. Is there anything currently being done to address these issues? Q1b. (If yes) How are these issues being addressed? Q1c. (If no) In your opinion, why aren’t these issues being addressed? Q1d. (If no) In what ways have these issues been addressed in the past, if any?
Access to preventative care, obesity rates/BMI, degree of access to care, and chronic illness prevalence are cited as important health outcome measures. Several Stakeholders remarked on the importance of reaching beyond the typical measures to take a broader or deeper look at the issues impacting health.

**Important Health Outcomes**

- Key Stakeholders identified the following *as important measures for health-related outcomes*:
  - Increased rates of preventative care – e.g., cancer screening, diabetic screening, immunizations
  - Improved access to health care/dental care
  - Decreased incidence of chronic illnesses – e.g., cancer, diabetes
  - Decreased infant mortality rates
  - More women using prenatal care
  - More women using substance abuse treatment
  - More children receiving immunizations
  - Improved admission practices to psychiatric inpatient health care
  - Increased visits to primary care instead of urgent care or emergency rooms
  - Decreased number of premature deaths due to smoking, obesity, alcohol, etc.
  - Improvement across several areas including housing, income disparity, poverty, education

Q2. What are the outcomes that should be evaluated?
Verbatim Comments on Important Health Outcomes

“A psych unit would be a dream come true. I want to see more people get placed in psychiatric care with less difficulty.”

“Health improvement would be my assumption. Have we actually improved health? And not just provided more care, but improved health. Are people getting sick less often? Are they getting healthier? Are they more active?”

“I want to know maybe less population-level but maybe more individual-level. Do people like their primary care? Do they report increased satisfaction in their primary care from year to year?”

“I want to see less transfers for neonatal opioid exposure. I want to see more pregnant women in substance abuse treatment, I think they get forgotten.”

Q2. What are the outcomes that should be evaluated?
A shortage of providers, especially for Medicaid patients, and high out-of-pocket costs—such as co-pays, deductibles, and prescription drugs—for the insured, present barriers to access for area residents.

The State of Health Care Access

- Key Stakeholders note that there remains a shortage of primary health care providers and oftentimes providers do not accept new patients.
- Additionally, Key Stakeholders report that recipients of Medicaid have a difficult time accessing health services because some providers do not accept Medicaid.
- Some programs such as Cherry Street Health are geared toward Medicaid recipients but sometimes individuals may face accessibility issues because federally-qualified health care programs are understaffed.
- Access to services such as dental care remains limited for residents in general and especially for Medicaid recipients. Even where free dental clinics are available, outreach needs to be improved in order to increase awareness of the clinics.
- Transportation is another barrier to accessing health services, and, when transportation is available, individuals need to know to call and schedule in advance.
- Some stakeholders note that individuals who are insured still face the challenge of high deductibles and co-pays, and high costs for the portion of prescription drugs not covered by their plan.
**Verbatim Comments on the State of Health Care Access**

“We also, at times, hear how **difficult it is to find a doctor that’s taking on new patients**, that we’re in need of **primary care doctors**. They just can’t find out who is taking someone new so that becomes a struggle, as well as if they need specialized care or a **specialist** – **getting access to those specialists can be difficult**.”

“We have a **free dental care program as well as Cherry Street** and quite honestly, we do the intake here for the free clinic and **we have seen a huge decline in the need for that (dental) since the Cherry Street Health Clinic has gone in with the dental piece with it**. If we get three a month, that’s more our average these days.”

“I do hear that **even people that have health insurance are having a difficult time getting in to see their doctor.** I do think **people on Medicaid have difficulty accessing dental care and a regular physician’s office, just because they only take so many.”**

“**Transportation is always a challenge in Barry County.** Barry County Transit is very well utilized during the business days and they do have some services on the weekends **but it’s very limited so that’s always a challenge for mental health services.”**

“**Prescription drugs is a challenge as well with some of our clients and we will pay for their meds**, or we have nurses who can get them hooked up with a **sample through pharmacies** if they have the financial need for that, but in our opinion, if they don’t take their psychiatric of psychotropic meds, then we are looking at a much more expensive and not as appropriate hospitalization state for people to stabilize them.”

Q3. **Describe** the current state of health care access in your community. Q3a. Is there a wide variety(choice) of primary health care providers? Q3b. (If yes) Is this variety(choice) available to both insured and uninsured people? Q3c. (If no) In your opinion, why is there a lack of primary health care providers? Q3d. Is there a lack of insurance coverage for ancillary services, such as prescriptions or dental care? Q3e. Is there an inability to afford out-of-pocket expenses, such as co-pays and deductibles?”
Existing Programs and Services
Most Key Stakeholders think existing programs and services are somewhat limited in their ability to meet the community’s health care needs. Limiting factors include a lack of available providers/services and a lack of coordination among services that do exist.

Existing Programs and Services Meeting Residents’ Needs

- A majority of Key Stakeholders find the area’s existing programs and services to be increasingly capable of meeting the needs of area residents.
- Key Stakeholders note that progress has been made in prevention and outreach programs, and partnerships with different employers and key institutions (places of worship, schools, YMCA) in the area have fostered increased awareness and services targeting healthy lifestyle choices.
- Despite notable progress, Key Stakeholders also identify limitations to existing programs and services, including:
  - Access to specialty care (oncology, cardiovascular care)
  - Screening services for HIV, sexually transmitted diseases, breast and cervical screening programs
  - Housing services (shelters for homeless men)
  - Limited knowledge on how to navigate the system; some individuals continue to use ER services to manage their care
  - More unified approach to wellness and prevention care, as oftentimes these initiatives are only available in some areas
  - Psychoeducation services on nutrition and exercise, particularly in school settings
  - Behavioral health including both psychoeducation, screening for substance use, and treatment services

Q4. How well do existing programs and services meet the needs and demands of people in your community? Would you say they meet them exceptionally well, very well, somewhat well, not very well, or not at all well? Q4a. Why do you say (INSERT RESPONSE)? Q4b. What programs or services are lacking in the community?
Verbatim Comments on Programs/Services Lacking in Community

“I think we have to work at the education piece. I work on substance abuse community prevention, so when you combat something, you have to come at it ten different ways; you can’t come at it one way.”

“Housing is an interesting issue. We don’t really have any shelters, we’ve got some folks living under bridges and things.”

“I still think we have a high number of folks who are not well-educated in health care benefits, and so I think they’re still using the ER to manage their care, and I think it’s partly because they are not enrolling in the programs that are available to them because they don’t know about them, like the Affordable Care Act programs and those sorts of things.”

“I think the big question is: “How far should you need to drive for oncology care? Is that a service that should be provided in the local communities or should people be expected to drive to that?”

“If somebody in Barry County needs HIV testing or sexually-transmitted disease testing, there is no place to go. They don’t go or they’d have to go out of county.”

Q4. How well do existing programs and services meet the needs and demands of people in your community? Would you say they meet them exceptionally well, very well, somewhat well, not very well, or not at all well? Q4a. Why do you say (INSERT RESPONSE)? Q4b. What programs or services are lacking in the community?
Several Stakeholders would like to see a **more coordinated effort among service providers**. Expected benefits include **maximization of resources and a more comprehensive approach towards an individual’s health needs**.

**Recommendations for Service Improvement**

- Stakeholders suggest the need for more resources and making information available to the segments of the population that need the information the most.
- Several Key Stakeholders suggest increased coordination and partnerships among service providers and key institutions in the community (employers, schools, etc.).
- Stakeholders report the need for more funding, particularly to sponsor initiatives targeting public awareness.

Q4c. In your opinion, **how could any of the existing services/programs in your community be implemented better**?
**Verbatim Comments on Recommendations for Service Improvement**

“In other communities, different agencies or different organizations have owned components of the social fabric. **In Barry County people try to do everything for everyone and so you’ll find agencies having competing programs instead of working together and people all want to be in groups and everybody wants to get credit.**”

“There’s things that need more funding, there’s things that need more public awareness.”

“I think the way that you get things done is you **fund it**, you **organize it**, and you **make it a priority** and that’s really how you achieve success with the programs.”

“I think somehow we need to figure out where those outreach points are to get to the demographics or to get to all of those that we’re trying to get to that are in need of those programs. I think they are really trying hard at this. We do a Project Homeless Connect and they’re doing all of those things trying to **encourage people to find out what their health is and how they can access those services.**”

Q4c. In your opinion, how could any of the existing services/programs in your community be implemented better?
Stakeholders recognize the value of partnerships among those in the health care community and several applaud current efforts. That said, there is room for improvement, such as strengthening partnerships between physicians and the local hospital with the local government, schools, the business community, mental health and substance abuse, and prevention and wellness programs. Some cite constraints such as the time and degree of cooperation needed to collaborate.

**Recommendations for Partnerships**

- Successful partnerships currently in place include:
  - Partnership with the health department and the hospital
  - Cherry Street and its partnership with the Health Department
  - Partnerships between the health department and other providers

- Additional partnerships that could be improved include:
  - Partnerships with primary care physicians to provide more integrative services
  - More involvement with local government, schools, and businesses
  - More partnership with Center for Aging (COA)
  - Increased partnerships targeting mental health issues
  - Increased partnership targeting prevention, health, and wellness programs
  - More widespread partnering between hospital and other community organizations in general

Q5. Are there any partnerships that could be developed to better meet a need? Q5a. (If yes) What are the partnerships? Q5b. (If yes) How could they be better developed?
Q5. Are there any partnerships that could be developed to better meet a need? Q5a. (If yes) What are the partnerships? Q5b. (If yes) How could they be better developed?

“I think the hospital specifically needs to do better with the schools.”

“I think that we have an OB program that has a lot of opportunity; we don’t have a great market share there, and so we’re putting in a program where we have home care going into homes for first birth and checking on new moms and doing that piece. I don’t think it’s funded but that’s a real opportunity to impact how children are treated and helping them get set early on.”

“I think the Cherry Street has a clinic now in the city of Hastings. It’s connected to the health department, and they are talking about doubling the size or moving to a new location. I think that clinic is the best way to handle people who don’t have insurance.”

“Diabetes education: if the organizations that are providing those services individually could get together, we might be able to spread that care out to more of the population and that’s true even with things as simple as childhood fitness programs. Let’s have the schools talk to one another. Let’s get the preschools on board. Let’s have conversations between everybody.”
Barriers to Health Care Access
Barriers to health care include a lack of transportation, cultural differences, and insufficient technology access.

**Key Stakeholders identified the following barriers or obstacles to obtaining care:**

- Costs, including medication expenses as well as high deductibles and co-pays that prevent individuals from using care as needed
- Although there is transportation assistance, one needs to know how to navigate it (e.g., call in advance, schedule pick up/drop off, etc.)
- Limited access to mental health care services, which are often delivered by primary care providers
- Limited access to health services among Latino/a groups; those who are undocumented are hesitant to access and utilize care

**Successful efforts to address barriers include:**

- United Way partnering with local banks to help individuals manage their money better
- Cherry Health Services has been great in that they provide services in a number of communities
- Availability of interpretation services via phone when needed

Q6. Are there any barriers or obstacles to health care programs/services in your community? Q6a. (If yes) What are they? Q6b. Have any of these barriers been addressed? Q6c. Are there any effective solutions to these issues? Q6d. (If yes) What are they? Are they cost effective? Q6e. Have any solutions been tried in the past?
Verbatim Comments on Barriers and Ways They are Being Addressed

Barriers

“I think **cost is the biggest barrier** and I think **people are just choosing not to go**, and again, that’s what we see in our office.”

“There are **always cultural barriers** – a lot of **fear of health care** that has to be overcome; a lot of education that’s required.”

“**Transportation is a barrier** because **public transportation is pretty much just available during the daytime hours** and also because **if you live in an outlying more rural area of the County, you have to schedule your appointment on certain days when the bus is in your area.”

“The **absence of mental health providers is a big issue. I think it’s more of an issue for individuals who require hospitalization and for those transitions after discharge.”

Addressing Barriers

“The **Cherry Health Clinic, they see all patients. They see you whether you have insurance or not, so they are established to do that, to try to deal with the cost issue.”

“I really do think that **this community does a good job of communicating what services there are and offers a lot of resources because we have a very strong United Way, we have a community foundation that’s very strong.”
Key Stakeholders would like to see more inclusion of consumers in health care planning and decision-making.

Involvement of Relevant Stakeholders/Community Residents

- Stakeholders report that overall, several individuals and institutions are involved in multiple initiatives, including the recent opening of a Dialysis Center with the support of benefactors in the area.

- Additionally, Key Stakeholders note the presence of several community boards that gather on different initiatives and represent various community structures and the general public.

- However, some respondents note limitations characterizing involvement of community stakeholders and residents, in that, participation may sometimes be more political than a true representation of consumer needs.
Verbatim Comments on Involvement of Relevant Stakeholders/Community Residents

“Any time they are asked, they are going to help, and they step up. Like the dialysis center; they needed $500,000 to make it happen. When they got it all together, and they had one gentleman and his family come and write a check for $500,000. I think that they’re invited.”

“Our board of directors here at the hospital has a pretty good cross-representation in our community, and actually for example, the head of the United Way is in our board.”

“We have everything from housewives to CEOs at banks to union people on our board. I have a 30-member board and we’re very careful to make sure that we get donors who are on our board of directors from all different areas.”

“No, in my opinion no. And part of it goes back to this politics thing. The people sitting in that room represent the groups or the agencies that they work for but they’re more politically trying to vie for their own position versus advocate on behalf of the consumer.”

“On our mental health board, we do have people from all walks of life. We do a good job of that. I think even our County Board of Commissioners has pretty diverse backgrounds. Sometimes, I think we might not have the marginalized population represented very well on some, but I think that’s normal.”

Q8. With regard to health and health care issues, are relevant stakeholders or community residents involved in planning and decision making?  
Q8a. (If yes) Who is involved?  
Q8b. (If no) Should they be?  
Q8c. (If yes) Who should be?
Community Resources
Stakeholders named local foundations, community organizations and initiatives, and individuals as important contributors to the health of the community.

- Commission on Aging offers help to individuals ranging from furnace repairs to roof work, etc.
- Local churches such as TVC also offer support in home improvement, building handicapped ramps at no cost
- Community Foundation offers several grant opportunities and has partnered with Cherry Street on important community initiatives
- Barry Free Clinic is widely viewed as a salient resource in the community
- United Way continues to play a dynamic role in the community and their volunteer center is a great resource
- Individuals contribute generously with time, services via their professional expertise, or monetary donations
- Several important community initiatives have been impactful such as the Fresh Food Initiative, Substance Abuse Task Force

Resource limitations include lack of internet availability for individuals to access information (although public libraries offer this option), a shortage of well-paying jobs and few employers other than the hospital in the community, transportation barriers, and lack of availability of some services like psychiatric services, and kids’ services due to funding limitations.

Q7. What resources currently exist in your community beyond programs/services just discussed? Q7a. What are any resource limitations, if any?
Verbatim Comments on Community Resources and Resource Limitations

**Resources**

“When we look at funding, we have a ton of people that do open up their wallets and people are very, very willing to be helpful. You can see that by the fact that our United Way has an endowment fund that covers all our administrative costs, as does our Community Foundation.”

“We have a lot of people that will volunteer in the community.”

“Barry County is a very giving community.”

“We have an incredibly great Community Foundation founded 20 years ago. I believe we just celebrated their 20th anniversary. It has endowments, I believe, at almost $30 million – very, very healthy, very active community foundation.”

“We have some eye doctors that are making time available for people who don’t have vision. There are some other programs that are available, and most of those are funneled through what we call our Barry County Resource Network.”

**Resource Limitations**

“I think there’s just a funding limitation. One great thing about Barry County is people are always willing to come together and work on a problem, but much of the time you still have to have a funding mechanism to support it ongoing.”

Q7. What resources currently exist in your community beyond programs/services just discussed? Q7a. What are any resource limitations, if any?
Impact of Health Care Reform
To reiterate, while health care coverage has expanded, particularly under the Healthy Michigan Plan, some residents have been unable to utilize their coverage due to a shortage of physicians, especially those accepting Medicaid.

The Impact of Federal Health Care Reform and the Healthy Michigan Plan

- Key Stakeholders report mixed perspectives on the impact of the federal health care reform with some respondents noting that the reform has provided coverage for people who didn’t have it but it has also created a lot of confusion among recipients about what plan to choose and how to best utilize it.

- Among the positive effects associated with the reform, respondents note increased availability of services for individuals that didn’t have resources before.

- Several Key Stakeholders note that more information on health care plans is necessary, as some individuals may lack information particularly during the time they were making decisions regarding the choice of plans.

- Respondents also note that despite the reform, some patients still do not have insurance.

- Also, when insurance has been made available, it has become too expensive for many.

Q9. What has been the impact of Federal Health Care Reform or the Healthy Michigan Plan in your community?  Q9a. Has the implementation of HCR or Healthy MI positively impacted the access to health care?  Q9b. In what ways have these changes impacted service delivery?  Q9c. What impact has it had, if any, on health outcomes?
Verbatim Comments on Impact of Federal Health Care Reform and the Healthy Michigan Plan

“Certainly, by insuring these folks that before did not have insurance. It’s improved access to dental care.”

“I think that it has had a tremendously positive effect on availability of services for people that didn’t have any resources before. It kind of filled that gap between Medicaid and those with third-party insurances, so from our standpoint, it’s made the services more available.”

“The downside of the Affordable Care Act is that it’s created this new group of underserved that are harder to identify. They are the people with coverage but they can’t afford the deductibles.”

“We are seeing more of our patients are coming in and having some sort of insurance product but I still think there are patients that do not have insurance and then, on the flipside, the insurance has gotten so expensive that some people are having a difficult time figuring how they’re going to get the resources and use the resources. People are having to pay more for their health care, and so they have to make choices, and they’re having to navigate this system that is not so easily navigable.”

“And most of the time that’s people lack of knowledge on how the benefit works. Understand that part of what Affordable Care did is require certain services are free, essentially, so you don’t have to meet your deductible first to get them, and they just have to understand how to take advantage of that, so certain required immunizations, your annual visit to the doctor, certain health screenings, etc. are all covered under your benefit, regardless of how high your deductible is, and a lot of people don’t understand that.”
Impact of 2011 Community Health Needs Assessment
Key Stakeholders note several improvements that have taken place since the last assessment including:

- Outreach programs and several committees addressing a multitude of issues such as obesity, tobacco, nutrition, diabetes awareness, exercise
- Initiatives targeting safe routes to school, sidewalks, bike trails
- Work conducted by different committees that have been established, such as a committee on access to care
- Creation of a federally-qualified health center (FQHC) in Barry County to address accessibility concerns identified previously
- Key Stakeholders also note that some of the initiatives existed prior to the needs assessment but the assessment helped guide the work that was already in place
Community Preparedness for a Communicable Disease Outbreak
In general, Key Stakeholders feel at least somewhat confident in the health care community’s level of preparedness for an infectious disease outbreak such as Ebola. Some also express ambivalence about the level of preparedness.

Community Preparedness for a Disease Outbreak

- A majority of Stakeholders believe the local health care community is well prepared, to the extent possible, to respond to scenarios involving infectious disease outbreaks.

“I know we have an Infectious Disease Department at Pennock, so I hope they’re prepared. You don’t know how good you are until you get tested, and communication is going to be key. I think we’d do okay. I know we have a great Emergency Management Director.”

“I think they have done some testing and had some successful test runs on the “what if” scenarios.”

“I think it depends on the provider to some extent. Some are more prepared than others. I think there’s certainly lots of opportunity to practice more and communicate and work together to understand how we would react, but I am optimistic that we could handle it when it came. I mean, it might not be perfect, but we’ve learned a lot in the last few years of how to handle such situations, and it just takes being prepared and practicing.”

Q11. How well prepared are local health care professionals to deal with a communicable or infectious disease outbreak, such as Ebola? Would you say not at all well, not very well, somewhat well, very well, or extremely well? Why do you say that?
Key Stakeholders who included closing comments reiterated the success and progress that has taken place but were clear in their assessment that there is much room for improvement. Moreover, one way to tackle complex issues such as improving the health and health care of a community requires cooperation and collaboration from all area stakeholders and participants.

**Stakeholders’ Closing Comments**

“I think **Pennock has done a great job of doing what they’re good at**, knowing what they’re good at, and transferring that to an appropriate hospital.”

“**Initiatives focusing on improving health and healthcare for area residents require the involvement of a wide array of community leaders and stakeholders**”

“No, I’m glad I remembered that mental health issue because we’re just seeing so much more of that and difficulty. It’s so frustrating because when you get into an older adult population with mental health issues, somebody has to diagnose in order to do something about it, and nobody seems to want to diagnose.”
Key Informant Survey
Health Conditions
When asked to cite the most pressing health issues or needs in Barry County top of mind, Key Informants mentioned myriad issues. Most often reported are issues revolving around three main topics: **mental health**, **access to care**, and **social issues** that respondents perceive to impact health or health care access. More specific areas of concern are **obesity**, substance abuse and treatment, a need for more **health education**, and **personal responsibility**.

### Most Pressing Health Needs or Issues in Barry County (Volunteered)

<table>
<thead>
<tr>
<th>Issue</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health Issues (access to care/treatment, prevalence of mental illness)</td>
<td>63.0%</td>
</tr>
<tr>
<td>Obesity</td>
<td>22.2%</td>
</tr>
<tr>
<td>Access to health care (lack of insurance/providers not accepting Medicaid/Medicare/health care costs/lack of affordable care)</td>
<td>22.2%</td>
</tr>
<tr>
<td>Substance abuse/substance abuse treatment</td>
<td>18.5%</td>
</tr>
<tr>
<td>Social Issues (poverty, inadequate food supply, teenage risk behaviors, lack of affordable healthy food, lack of community resources)</td>
<td>18.5%</td>
</tr>
<tr>
<td>Lack of specialty care/medical specialists</td>
<td>18.5%</td>
</tr>
<tr>
<td>Lack of/access to primary care</td>
<td>14.8%</td>
</tr>
<tr>
<td>Health education (healthy lifestyles, nutrition, medication)</td>
<td>14.8%</td>
</tr>
<tr>
<td>Lifestyle choices/personal responsibility</td>
<td>11.1%</td>
</tr>
<tr>
<td>Chronic disease (e.g., diabetes, heart disease)</td>
<td>7.4%</td>
</tr>
<tr>
<td>Access to dental care/affordable dental care</td>
<td>7.4%</td>
</tr>
<tr>
<td>Elderly Issues (affordable senior centers, lack of gerontological care, transportation to appointments)</td>
<td>7.4%</td>
</tr>
<tr>
<td>Transportation</td>
<td>7.4%</td>
</tr>
<tr>
<td>Access to care/services/programs outside of normal business hours</td>
<td>7.4%</td>
</tr>
<tr>
<td>Easier access to exercise facilities, physical therapy</td>
<td>7.4%</td>
</tr>
<tr>
<td>Lack of coordination/coordinated services/collaboration</td>
<td>3.7%</td>
</tr>
<tr>
<td>Immunizations/vaccinations (flu, whooping cough)</td>
<td>3.7%</td>
</tr>
</tbody>
</table>

(n=27)

Q1: To begin, what do you feel are the most pressing health needs or issues in Barry County? Please be as detailed as possible.
Key Informants view **obesity** as the most prevalent health issue in Barry County, followed by diabetes, COPD, depression, anxiety, and heart disease. They do not perceive autism or lack of childhood immunizations to be very prevalent.

**Perception of Prevalence of Health Issues in Barry County**

Q2: Please tell us how prevalent the following health issues are in Barry County. (1=not at all prevalent, 2=not very prevalent, 3=slightly prevalent, 4=somewhat prevalent, 5=very prevalent)
Key Informants are most satisfied with the community’s response to heart disease and stroke, followed by diabetes and childhood immunizations. Conversely, they are least satisfied with the response to depression, anxiety, and obesity, which are three of the issues they believe are most prevalent.

**Satisfaction with Community’s Response to Health Issues in Barry County**

<table>
<thead>
<tr>
<th>Health Issue</th>
<th>Satisfaction Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease (n=23)</td>
<td>3.91</td>
</tr>
<tr>
<td>Stroke (n=22)</td>
<td>3.91</td>
</tr>
<tr>
<td>Diabetes (n=23)</td>
<td>3.70</td>
</tr>
<tr>
<td>Lack of Childhood Immunizations (n=19)</td>
<td>3.63</td>
</tr>
<tr>
<td>Autism (n=15)</td>
<td>3.53</td>
</tr>
<tr>
<td>Asthma (n=23)</td>
<td>3.52</td>
</tr>
<tr>
<td>Cancer (n=21)</td>
<td>3.48</td>
</tr>
<tr>
<td>Alzheimer’s (n=19)</td>
<td>3.47</td>
</tr>
<tr>
<td>Sexually Transmitted Diseases (n=17)</td>
<td>3.47</td>
</tr>
<tr>
<td>COPD (n=22)</td>
<td>3.41</td>
</tr>
<tr>
<td>Obesity (n=25)</td>
<td>2.60</td>
</tr>
<tr>
<td>Anxiety (n=22)</td>
<td>2.59</td>
</tr>
<tr>
<td>Depression (n=24)</td>
<td>2.46</td>
</tr>
</tbody>
</table>

Q2a: How satisfied are you with the community's response to these health issues? (1=not at all satisfied, 2=not very satisfied, 3=slightly satisfied, 4=somewhat satisfied, 5=very satisfied)
The quadrant chart below depicts both problem areas and opportunities for improvement. Areas of success include diabetes, COPD, and heart disease as Key Informants perceive these issues to be prevalent and are satisfied with the community response to these conditions. Conversely, anxiety, depression, and obesity are critical problem areas because they are not only prevalent, but the response has been less than satisfactory.

Performance of Community in Response to Health Issues in Barry County

Q2: Please tell us how prevalent the following health issues are in Barry County. Q2a: How satisfied are you with the community’s response to these health issues?
Health Behaviors
Key Informants believe health behaviors involving the misuse/abuse of substances (tobacco, alcohol, illicit drugs, prescription drugs) and health management issues to be most prevalent. Elder abuse is perceived as less widespread.

Q3: Please tell us how prevalent the following health behaviors are in Barry County.

<table>
<thead>
<tr>
<th>Health Behavior</th>
<th>Perception Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking/tobacco use (n=27)</td>
<td>4.56</td>
</tr>
<tr>
<td>Alcohol abuse (n=26)</td>
<td>4.27</td>
</tr>
<tr>
<td>Prescription drug abuse/misuse (n=26)</td>
<td>4.23</td>
</tr>
<tr>
<td>Illegal substance abuse (n=27)</td>
<td>4.22</td>
</tr>
<tr>
<td>Health management (e.g., diabetes, HBP, chronic disease) (n=24)</td>
<td>3.71</td>
</tr>
<tr>
<td>Domestic abuse (n=25)</td>
<td>4.27</td>
</tr>
<tr>
<td>Motor vehicle accidents (n=22)</td>
<td>3.59</td>
</tr>
<tr>
<td>Child abuse/neglect (n=24)</td>
<td>3.54</td>
</tr>
<tr>
<td>Suicide (n=24)</td>
<td>3.38</td>
</tr>
<tr>
<td>Elder abuse (n=17)</td>
<td>2.94</td>
</tr>
</tbody>
</table>
Key informants are only moderately satisfied with the community’s response to the health behaviors rated. Opportunities for improvement exist with respect to behaviors identified as prevalent, such as prescription drug abuse, alcohol abuse and illicit substance abuse.

**Satisfaction with Community’s Response to Health Behaviors in Barry County**

<table>
<thead>
<tr>
<th>Health Behavior</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor vehicle accidents (n=21)</td>
<td>3.81</td>
</tr>
<tr>
<td>Health management (e.g., diabetes, HBP, chronic disease) (n=25)</td>
<td>3.04</td>
</tr>
<tr>
<td>Domestic abuse (n=24)</td>
<td>2.88</td>
</tr>
<tr>
<td>Elder abuse (n=20)</td>
<td>2.80</td>
</tr>
<tr>
<td>Smoking/tobacco use (n=27)</td>
<td>2.78</td>
</tr>
<tr>
<td>Child abuse/neglect (n=22)</td>
<td>2.64</td>
</tr>
<tr>
<td>Suicide (n=25)</td>
<td>2.56</td>
</tr>
<tr>
<td>Illegal substance abuse (n=27)</td>
<td>2.48</td>
</tr>
<tr>
<td>Alcohol abuse (n=26)</td>
<td>2.46</td>
</tr>
<tr>
<td>Prescription drug abuse/misuse (n=27)</td>
<td>2.41</td>
</tr>
</tbody>
</table>

Q3a: How satisfied are you with the community’s response to these health behaviors?
The quadrant chart shows low to moderate satisfaction with community response to most health behaviors. The three areas most in need of addressing are the responses to **prescription drug abuse**, **illegal substance abuse**, and **alcohol abuse**. While satisfaction with **child abuse/neglect** and **suicide** are low compared to other areas, these behaviors are less prevalent than others.

Q3: Please tell us how prevalent the following health behaviors are in Barry County. Q3a: How satisfied are you with the community’s response to these health behaviors?
When Key Informants were asked for additional health or health behavior issues that they deemed prevalent, mental health issues and the lack of treatment for those with mental illness were clearly the most widespread concerns. Additional concerns are lack of exercise, transportation barriers, and poor chronic disease management.

Additional Health and Health Behavior Issues Prevalent in Barry County

“Mental illness. Very dissatisfied.”

“Lack of exercise.”

“Chronic disease such as COPD and CHF seem to have a fair amount of recidivism due to poor management, lack of patient accountability and responsibility, and pressure to get patient out of the hospital before they are well enough.”

“Very poor psychiatric services when attempting to get inpatient services. This is not unique to our county or state. Prescription drug abuse is rampant. We need a region wide multidisciplinary approach to this that is consistent.”

“1) Inadequate access, 1a) My patients in Delton cannot get to see any specialists in Hastings or beyond due to lack of public transportation options, 1b) There is an insufficient number of psychiatrists to see the myriad patients with mental health needs.”

Q2b: What additional health issues are prevalent in Barry County, if any? For each listed, tell us how satisfied you are with the community’s response to the health issue.

Q3b: What additional health behaviors are prevalent in Barry County, if any? For each listed, tell us how satisfied you are with the community’s response to the health issue.
Access to Health Care
Eight in ten (80.8%) Key Informants believe access to health care is a pressing and prevalent issue in Barry County. The greatest barriers to health care access are: **inability to afford out-of-pocket expenses such as co-pays/deductibles**, transportation issues, **limited providers accepting Medicaid** as insurance, **limited community resources**, lack of primary care providers, lack of awareness, **limited providers accepting Medicare**, and **limited provider options in general**.

**Access to Health Care**

Is Access to Health Care a Pressing and Prevalent Issue in Barry County

- **Yes, 80.8%**
- **Don’t Know, 7.7%**
- **No, 11.5%**

(n=26)

**Reasons Access to Health Care is an Issue**

- Can’t afford co-pays/ deductibles/ prescription drugs: 59.3%
- Transportation barriers: 59.3%
- Many providers not accepting Medicaid: 59.3%
- Limited community resources: 51.9%
- Lack of primary care providers: 51.9%
- Unaware of available options: 48.1%
- Many providers not accepting Medicare: 44.4%
- Not enough providers/options: 44.4%
- Have to travel out of area for care: 37.0%
- Few providers accept patients without insurance: 33.3%
- Lack of gerontological care: 25.9%
- Language barriers: 0.0%
- Other: 3.7%

Q4: Do you believe that access to health care is a pressing and prevalent issue for some residents in Barry County?

Q4a: (If yes) In your opinion, why is access to health care an issue for some Barry County residents? (multiple responses allowed)
Two-thirds (68.0%) of Key Informants recognize that certain subpopulations or groups in Barry County are underserved with respect to health care. **Those most at risk lack insurance, either completely or partially.**

Q5: Are there specific subpopulations or groups of people in Barry County that are underserved with regard to health care?

Q5a: (If yes) Which of the following subpopulations are underserved? (multiple responses allowed)

**Subpopulations or Groups Underserved**

- **Underinsured**: 51.9%
- **Uninsured**: 48.1%
- **Uninsurable**: 29.6%
- **Senior Adults**: 18.5%
- **Disabled**: 18.5%
- **Non-English Speaking**: 14.8%
- **Children**: 11.1%
- **Undocumented Immigrants**: 7.4%
- **Women**: 7.4%
- **Minorities**: 7.4%
- **Mentally Ill**: 7.4%
- **Those with Medicaid**: 3.7%
- **Men**: 3.7%

(n=27)
Gaps in Health Care
Barry County programs and services perceived to meet the needs/demands of residents well are emergency care, orthopedics, ophthalmology, OB/GYN, and urgent care services. Conversely, mental health treatment (mild to severe), oral surgery, substance abuse, and non-emergency transportation are perceived to be lacking.

**Degree to Which Programs/Services Meet the Needs/Demands of Barry County Residents**

<table>
<thead>
<tr>
<th>Service</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Care (n=23)</td>
<td>4.48</td>
</tr>
<tr>
<td>Orthopedics (n=23)</td>
<td>4.48</td>
</tr>
<tr>
<td>Ophthalmology (n=23)</td>
<td>4.43</td>
</tr>
<tr>
<td>OB/GYN (n=24)</td>
<td>4.42</td>
</tr>
<tr>
<td>Urgent Care Services (n=23)</td>
<td>4.39</td>
</tr>
<tr>
<td>General Surgery (n=24)</td>
<td>4.33</td>
</tr>
<tr>
<td>Prenatal Care (n=24)</td>
<td>4.33</td>
</tr>
<tr>
<td>Pediatrics (n=23)</td>
<td>4.26</td>
</tr>
<tr>
<td>Ambulatory/Emergency Transport (n=24)</td>
<td>4.21</td>
</tr>
<tr>
<td>Podiatry (n=23)</td>
<td>4.09</td>
</tr>
<tr>
<td>Nursing Home Care (n=22)</td>
<td>3.91</td>
</tr>
<tr>
<td>In-Home Care (n=21)</td>
<td>3.67</td>
</tr>
<tr>
<td>Cardiology (n=22)</td>
<td>3.59</td>
</tr>
<tr>
<td>Assisted Living (n=22)</td>
<td>3.50</td>
</tr>
<tr>
<td>Dermatology (n=21)</td>
<td>3.29</td>
</tr>
<tr>
<td>General Dental Care (n=23)</td>
<td>3.22</td>
</tr>
<tr>
<td>Oncology (n=22)</td>
<td>3.18</td>
</tr>
<tr>
<td>Non-Emergency Transportation (n=22)</td>
<td>2.95</td>
</tr>
<tr>
<td>Substance Abuse (n=23)</td>
<td>2.39</td>
</tr>
<tr>
<td>Oral Surgery (n=20)</td>
<td>2.30</td>
</tr>
<tr>
<td>Mental Health Treatment (Mild/Moderate) (n=24)</td>
<td>2.25</td>
</tr>
<tr>
<td>Mental Health Treatment (Severe/Persistent) (n=24)</td>
<td>1.79</td>
</tr>
</tbody>
</table>

Q6: How well do the following programs and services meet the needs and demands of Barry County residents? (1=not at all well, 5=very well)
Key Informants report that Barry County lacks programs or services that **address the underserved; uninsured/underinsured** and **low income** residents. Although **primary care** and **dental services** are said to be lacking, the greatest void is found in **mental health treatment/services**.

### Programs/Services Lacking in Barry County

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental health treatment for the uninsured/underinsured</td>
<td>74.1%</td>
</tr>
<tr>
<td>Programs for the low income population (e.g., dental, mental health, primary care)</td>
<td>63.0%</td>
</tr>
<tr>
<td>Mental health services</td>
<td>63.0%</td>
</tr>
<tr>
<td>Dental care for the uninsured/underinsured</td>
<td>63.0%</td>
</tr>
<tr>
<td>Primary care for the uninsured/underinsured</td>
<td>63.0%</td>
</tr>
<tr>
<td>Programs targeting obesity reduction</td>
<td>44.4%</td>
</tr>
<tr>
<td>Specialty programs/services</td>
<td>40.7%</td>
</tr>
<tr>
<td>Prevention programs</td>
<td>33.3%</td>
</tr>
<tr>
<td>Community based care for disabled/elderly</td>
<td>22.2%</td>
</tr>
<tr>
<td>Home care/assisted living for disabled</td>
<td>14.8%</td>
</tr>
<tr>
<td>Home care/assisted living for elderly</td>
<td>11.1%</td>
</tr>
<tr>
<td>Wellness programs</td>
<td>11.1%</td>
</tr>
<tr>
<td>Quality health care</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other</td>
<td>7.4%</td>
</tr>
</tbody>
</table>

*(n=27)*

**Q7**: What programs or services are **lacking** in the community, if any? Please be as detailed as possible.
Barriers to Health Care
According to Key Informants, the top two barriers or obstacles to health care programs and services are the inability to afford out-of-pocket expenses such as co-pays and deductibles and personal irresponsibility. Other notable barriers include: transportation, lack of awareness of existing programs/services, lack of/inadequate health insurance, and limited providers accepting Medicaid. Conversely, trust and language/cultural issues are not considered to be widespread barriers to programs and services.

**Q8: What are the top three barriers or obstacles to health care programs and services? Please rank from 1 to 3, where 1 is the greatest barrier, 2 is the second greatest barrier, and 3 is the third greatest barrier.**
Key Informants offer effective solutions for many of the barriers to health care. A prominent barrier, personal irresponsibility, is the most difficult to conquer because it is deeply embedded in society’s culture. That said, effective solutions begin with education regarding existing programs and services, stepping up recruiting of additional providers, especially specialized physicians/services, and addressing the transportation barrier issue more completely. A community fund might be one way to offset the top barrier of high co-pays and deductibles. Lack of awareness of existing programs and services can be addressed through various communication efforts.

**Effective Solutions to Barriers and Obstacles to Health Care**

**Verbatim Comments**

“Better education and community programs that allow for incentives for patients to care for themselves.”

“Bring specialty providers to Barry County for clinics 1 to 2 times per month. Offer bus services to transport patients in for visits.”

“Community outreach to address specific needs beginning with an in-home assessment.”

“Helping people understand the insurance programs. More jobs.”

“Hire some new providers, support the ones you have.”

“I have been advocating for a voucher system for the county transit for non-emergent healthcare needs. I have been advocating for an embedded mental health clinician in Delton. I have been advocating for a TeleMed Psychiatrist for Delton.”

“In all cases more outreach and financial resources to help. Unwillingness to change will not change.”

“Increase the number of providers in the area including specialists.”

“More effective transportation services for individuals.”

“There is not a quick fix to the above problem but there needs to be discussion and movement towards a permanent solution.”

“Track patients MISUSE of urgent Care services and have a dedicated employee at doctors’ offices and at ER to discuss appropriate use of urgent services.”

“Transportation services, more physicians to carry the patient load. Insurance reform, complete overhaul of the mental health system nation-wide. Consistent region-wide approach to chronic pain as well as prescription drug abuse. More specialty care.”

“Transportation to appointments for the underserved. After-hour appointment times nights and weekends.”

“Work to provide more access to mental health for those who have insurance but can’t afford their high copay for services.”

Q8a: What, if any, are the effective solutions to these barriers? Please be as detailed as possible and identify which problems you are referring to when discussing solutions. (open-end)
Identifying and Addressing Needs
Only one-third (34.8%) of Key Informants are satisfied overall with the health climate in Barry County. Those who are satisfied cite **good services and programs for the size of the county** and **caring and capable health care professionals**. Those less than satisfied see **lack of services**, such as mental health, dental, and specialty care, as well as a **lack of a collaborative and coordinated focus on trying to change unhealthy lifestyle choices**.

### Overall Satisfaction with Health Climate in Barry County

**Level of Satisfaction**

- **Satisfied/Very Satisfied**: 34.8%
- **Satisfied** : 34.8%
- **Neither Dissatisfied Nor Satisfied** : 30.4%
- **Dissatisfied** : 30.4%
- **Very Dissatisfied** : 30.4%

**Reasons for Rating**

<table>
<thead>
<tr>
<th>Level of Satisfaction</th>
<th>Reasons for Rating</th>
</tr>
</thead>
</table>
| **Satisfied/Very Satisfied** | ✔ For a small hospital, services are good  
✔ With the FQHC we have reasonable resources to meet needs  
✔ Patients have good relationships with providers |
| **Satisfied** | ✔ Dedicated health care workers who provide quality care  
✔ Caring providers  
✔ Good medical staff that has maintained a high level of competency |
| **Neither Dissatisfied Nor Satisfied** | ✔ Resources are okay, but poverty effects overall health  
✔ There are great resources for some and great providers for some but not enough services or providers  
✔ Lacking mental health support  
✔ High co-pays and deductibles prevent people from seeking care |
| **Dissatisfied** | ✔ Lack of personal responsibility  
✔ Service utilization remains low  
✔ Lack of exercise and nutrition  
✔ Quality services, but not enough of them  
✔ Slight disconnect between specialties and referrals in cohesive care of the patient |
| **Very Dissatisfied** | ✔ Personal irresponsibility, bad habits, poor lifestyle choices  
✔ Lack of mental health care  
✔ Lack of dental care  
✔ Lack of specialty care  
✔ Failure of Board of Heath to advocate for policies that promote health |
| **Lack of programs/services to target tobacco use** | ✔ People visit ER/ED instead of primary care provider  
✔ Limited resources (e.g., money) prevent people from seeking care |

Q10: 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 Barry County? Q10a: Why do you say that? Please be as detailed as possible.
Key Informants offer a multitude of strategies for improving the overall health climate in Barry County. Most frequently mentioned are suggestions surrounding health care access. In addition to increasing the number of providers – both primary care and specialists – there are suggestions to increase access to very specific services such as HIV testing, obesity programs, and pain management. Further, Key Informants suggest reducing barriers to access by providing care after normal hours, reducing costs for dental care and counseling, and readily accepting more Medicaid patients; in short, providing better access to the underserved.

**Suggested Strategies to Improve the Overall Health Climate in Barry County**

**Verbatim Comments**

**Access to Health Care**

“Access to care even at the local health department level, such as HIV testing, which residents now have to go out of county for.”

“Bring in specialty care services.”

“Inadequate access. My patients in Delton cannot get to see any specialists in Hastings or beyond due to lack of public transportation options.”

“Improvements in the facilities as well as increased medical specialists available.”

“Increase availability of hospital services at night (radiology, etc.).”

“Increase the number of physicians and providers. Build a new facility in keeping with this century.”

“Lower cost counseling.”

“More family physicians taking care of Medicaid patients.”

“More providers and expansion of services.”

“More providers (PCP) willing/able to care for the underserved. Low cost dental care available to all the underserved.”

“Obesity programs.”

“Physician recruitment. Plan as discussed by Dr. Cory Waller who is a GR pain specialist to help deal with drug abuse and chronic pain.”
Access to mental health care is a major issue in and of itself. According to Key Informants, there are not enough psychiatrists in the area to meet the demand of residents who need mental health treatment. There is also a need for after-hours psychiatric services since the ER/ED is often a stop for individuals seeking mental health care, especially beyond normal office hours. Other suggestions include programs and policies aimed at improving negative lifestyle choices/behaviors (e.g., reducing obesity and youth tobacco consumption).

**Suggested Strategies to Improve the Overall Health Climate in Barry County**

**Verbatim Comments (Cont’d.)**

**Mental Health Care**

“Add mental health services.”

“Add psychiatrist locally to the Pine Rest facility.”

“Addiction and Psychiatric services might be helpful.”

“Increase number of family doctor providers and mental health resources.”

“More psych availability/presence at the Emergency Room. There is an insufficient number of psychiatrists to see the myriad patients with mental health needs.”

**Lifestyle Choices**

“Better overall diet and wellness.”

“Incentives for patients to make better health choices (i.e. pay them 5 dollars for coming in for an appointment to get blood work done). Give out free blood pressure cuffs. Give patients who log a certain number of hours of physical activity 10 dollars or so.”

“Policy change in schools and businesses to incorporate healthy living as a way of life. By reducing obesity and poor health behaviors, chronic disease and trips to the doctor/emergency room will decrease over time. This has to involve everyone.”

“Reduce youth initiation of tobacco by increasing minimum sales age to 21, regulate e-cigarettes as tobacco, prohibit essential flavorings in tobacco that target youth, and increase the price of tobacco.”
Lastly, education is a suggested strategy for dealing with a number of varied issues such as informing people how they can control and impact their cost of health care and educating the broader public to increase their awareness of health and health care issues. More importantly, education must target kids with the goal of instilling life-long healthy habits.

### Suggested Strategies to Improve the Overall Health Climate in Barry County

**Verbatim Comments (Cont’d.)**

#### Education

“*Education to the community around costs of care and how they can really influence those costs* by proactively owning their care.”

“Get *school board and educator buy-in for health awareness.*”

“*Improve education* (a Barry county promise).”

“*TEACH, TEACH, TEACH* when they are young and impressionable about healthy living/eating/healthy relationships so it is THEIR goal and not someone else's to change bad/unhealthy habits.”

#### Other

“*Improve cultural diversity* at the school level.”

“*Job opportunities* (incentivize business growth).”
When commenting on the impact of Federal Health Care Reform or the Healthy Michigan Plan, Key Informants are more likely to cite negative or mixed results, compared to positive results. Those few who view the legislation in an entirely positive light point to a greater access to health care because more people have health insurance.

**Impact of Federal Health Care Reform/Healthy Michigan Plan in Barry County**

**Positive Results Verbatim Comments**

“For those who signed up for a health plan, they have access to health care.”

*Improved access to health care.*

“Out with the free clinic, in with Cherry Health - a good thing! Maybe less hospitalizations overall.”

*Service delivery has improved, if only because of the FQHC.*

“We have less patients without insurance; they can now seek emergent care when in the past they would not.”
Q12: What has been the impact of Federal Health Care Reform or the Healthy Michigan Plan in your community? In other words, in what ways has it impacted the following: (1) access to health care, (2) service delivery, and (3) health outcomes? Please be as detailed as possible.

Key Informants who view FCR and/or the Healthy Michigan Plan negatively say people are not using their plan because they cannot afford deductibles and increasingly more providers are not accepting Medicaid as a form of coverage. Others have said they have witnessed no change at all.

**Impact of Federal Health Care Reform/Healthy Michigan Plan in Barry County**

**Negative Results Verbatim Comments**

“At the beginning of the year, people do not want to see their physicians because they have to meet their deductibles.”

“Haven't noticed significant change.”

“More and more providers are not accepting Medicaid because of the low reimbursement level.”

“Not much difference as of yet. I think private insurance has become less affordable and I do not think it has been very successful.”

“Overall, based on what my patients tell me, they are very dissatisfied with the healthcare bureaucracy as a whole, including but not limited to Barry County, the State of Michigan, and Federal Healthcare.”
“Because of the number of people who have health care insurance, we, who are taking care of people, are working harder. We need more help.”

“Cherry Health (FQHC) has been able to absorb the increase in Medicaid patients. Health Care reform has created a new class of underserved – those for whom the cost of deductibles and insurance are burdensome. No easy way to identify and assist those individuals.”

“Healthy Michigan has given people health care but that did not give them more efficient access to care. Same with Health Care Reform.”

“I believe patients feel like they have more access, but the appropriate setting (PCP) is still lacking. I don’t believe outcomes have been impacted significantly.”

“Made access easier but more administratively complex.”

“More patients are insured, but ED volumes have not decreased due to lack of providers specifically in Hastings. It has had little impact on mental health.”

“More people have the insurance in hand and are seeking attention in the urgent care and ER areas. We are still seeing little affect in the primary care areas as patients are not focused on preventative care.” "More dental access through Cherry Street Health Services, though there has been a reduction in services through the Barry-Eaton Health Department.”

“Much improved access to care. I believe it is encouraging patients to take better care of their health in general, but I am also seeing people who are trying to ‘take advantage’ of their new insurance and are abusing the system.”

“The ACA has improved access for the poor while reducing access for other groups.”
Since the last CHNA conducted in 2011, Key Informants report a number of activities and initiatives implemented as the result of the information coming out of that research. One of the greatest efforts has been the addition of the FQHC Cherry Street Clinic which provides services to the underserved population. Other changes include tobacco-free parks, dialysis care, drug abuse awareness initiatives, programs targeting obesity, and programs to encourage healthy behaviors. Although there appear to be more pediatricians, recruiting health care providers to the area remains a challenge.

**Activities Since CHNA Conducted in 2011 Verbatim Comments**

- "Addition of **Cherry Health** (FQHC) as access point for underinsured and underserved. **Tobacco free parks.**"
- "**Cherry Street Clinic** has been a great help locally."
- "**Cherry Street Clinic** has made a positive impact, but has not been able to provide care for all who need it. The closing of the free clinic has also been a negative impact."
- "Continued recruitment has been somewhat weak. More reactive than proactive but I do feel that is improving. The aging hospital facility was to be addressed and that has faltered."
- "Dialysis care was added to Barry County."
- "Medicaid expansion, **Cherry Health**."
- "More drug abuse awareness."
- "More employers implementing health initiatives for employees."
- "**Obesity awareness initiatives** through community partners."
- "One child obesity program implemented."
- "The expansion of the **Cherry Street** project into Barry County is significant. As they become more efficient and reach more people, it will be more significant to the county."
- "The **Pennock Foundation** has brought in some healthy living teachings to school-aged children. The area has offered more things for outdoor activities to encourage people to have healthier lifestyles."
- "There are more pediatric providers in the community now."
- "There is more emphasis on healthy eating /obesity issues with the B. Healthy events going on. I am not as familiar or do not see much in the way of tobacco cessation."

Q13: Since the Community Health Needs Assessment conducted three years ago in 2011, what has been done locally to address any issues relating to the health and health care of Barry County residents? Please be as detailed as possible.
Community Health Needs Assessment Survey
Health Status and Perception of Health Care Providers
One-fourth (25.0%) of the adults in the SHPH catchment area who participated in the telephone survey report their health as fair or poor. This rate is even higher for adults in Barry, Eaton, and Ionia counties.

**Perception of General Health**

- **Excellent**: 13.0%
- **Very Good**: 26.0%
- **Good**: 36.0%
- **Fair**: 19.0%
- **Poor**: 6.0%

*(n=500)*

**Perception of General Health by County (% Poor/Fair)**

- **Allegan (n=51)**: 15.0%
- **Barry (n=244)**: 28.0%
- **Eaton (n=11*)**: 30.0%
- **Ionia (n=79)**: 28.0%
- **Kent (n=45)**: 18.0%

*Caution: small base size*

Q1. To begin, would you say your general health is poor, fair, good, very good, or excellent?
Almost all adults (95.0%) report having a medical home. This rate is lower for those in Eaton County, where one in ten (10.0%) adults say they do not have a primary care physician they can visit if needed.

Q2. Do you and your family members have a primary care physician that you can visit for questions or concerns about your health?

<table>
<thead>
<tr>
<th>Have a Primary Care Physician (Total Sample)</th>
<th>Have a Primary Care Physician by County (% No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Allegan (n=51) 4.0%</td>
</tr>
<tr>
<td></td>
<td>Barry (n=244) 4.0%</td>
</tr>
<tr>
<td></td>
<td>Eaton (n=11*) 10.0%</td>
</tr>
<tr>
<td></td>
<td>Ionia (n=79) 4.0%</td>
</tr>
<tr>
<td></td>
<td>Kent (n=45) 4.0%</td>
</tr>
</tbody>
</table>

*Caution: small base size

VIP Research and Evaluation
The most important qualities SHPH area adults seek in their health care provider are **communication** and **expertise**, the latter of which is most important to Allegan and Kent residents. Communication is most important to residents in Barry, Eaton, and Ionia counties. To Kent County adults, providing good/quality/personalized care is far less important than other provider attributes.

**Qualities Sought in a Health Care Provider**

**Most Important Qualities in a Health Care Provider (Total Sample)**

<table>
<thead>
<tr>
<th>Quality</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication with provider</td>
<td>33.0%</td>
</tr>
<tr>
<td>Specialist expertise</td>
<td>20.0%</td>
</tr>
<tr>
<td>Specialist attitude</td>
<td>10.0%</td>
</tr>
<tr>
<td>Specialist availability</td>
<td>7.0%</td>
</tr>
<tr>
<td>Provides personalized care</td>
<td>5.0%</td>
</tr>
<tr>
<td>Good patient care</td>
<td>5.0%</td>
</tr>
<tr>
<td>Appointment/scheduling</td>
<td>3.0%</td>
</tr>
<tr>
<td>Relationship/contract/familiar with client</td>
<td>3.0%</td>
</tr>
<tr>
<td>Insurance/cost/billing</td>
<td>3.0%</td>
</tr>
<tr>
<td>Thoroughness and attention to detail</td>
<td>3.0%</td>
</tr>
<tr>
<td>Other</td>
<td>7.0%</td>
</tr>
<tr>
<td>Refused</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

(n=500)

**Top Five Qualities in a Health Care Provider by County**

<table>
<thead>
<tr>
<th>County</th>
<th>Specialist expertise</th>
<th>Communication with provider</th>
<th>Communication with provider</th>
<th>Communication with provider</th>
<th>Communication with provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegan County</td>
<td>Communication with specialist</td>
<td>Specialist expertise</td>
<td>Communication with provider</td>
<td>Communication with provider</td>
<td>Specialist expertise</td>
</tr>
<tr>
<td>Barry County</td>
<td>Communication with specialist</td>
<td>Specialist expertise</td>
<td>Communication with provider</td>
<td>Communication with provider</td>
<td>Communication with provider</td>
</tr>
<tr>
<td>Eaton County</td>
<td>Communication with specialist</td>
<td>Specialist expertise</td>
<td>Communication with provider</td>
<td>Communication with provider</td>
<td>Communication with provider</td>
</tr>
<tr>
<td>Ionia County</td>
<td>Communication with specialist</td>
<td>Specialist expertise</td>
<td>Communication with provider</td>
<td>Communication with provider</td>
<td>Communication with provider</td>
</tr>
<tr>
<td>Kent County</td>
<td>Communication with provider</td>
<td>Specialist expertise</td>
<td>Communication with provider</td>
<td>Communication with provider</td>
<td>Specialist expertise</td>
</tr>
</tbody>
</table>

Q3. What is the most important quality you look for in a health care provider? Please be as detailed as possible. (open-end)
More than nine in ten (92.0%) area adults are satisfied with their last health care visit. Adults in Allegan and Barry counties are more satisfied than adults in Eaton, Ionia, and Kent counties.

<table>
<thead>
<tr>
<th>Satisfaction (Total Sample)</th>
<th>Satisfaction by County (% Satisfied/Very Satisfied)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Satisfied</td>
<td>Allegan (n=49)</td>
</tr>
<tr>
<td>Satisfied</td>
<td>Barry (n=234)</td>
</tr>
<tr>
<td>Neither Dissatisfied Nor Satisfied</td>
<td>Eaton (n=10*)</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>Ionia (n=76)</td>
</tr>
<tr>
<td>Very Dissatisfied</td>
<td>Kent (n=43)</td>
</tr>
</tbody>
</table>

- 92.0% satisfaction overall
- Allegan 96.0%
- Barry 94.0%
- Eaton 84.0%
- Ionia 89.0%
- Kent 85.0%

*Caution: small base size
Q4. (If Q2=yes) How satisfied were you with your last visit for health care?

VIP Research and Evaluation
Adults cite varied reasons for being satisfied with their last health care visit, but the most often cited reason is communication, followed by physician knowledge or skill.

**Reasons for Satisfaction with Last Health Care Visit**  
(Among Those Satisfied/Very Satisfied)

- Communication: 23.0%
- Skill/knowledge (doctor): 10.0%
- Tests/exams: 8.0%
- Care of patient: 8.0%
- Solve problem: 7.0%
- Attention/available (doctor): 5.0%
- Waiting time: 5.0%
- Time with patient: 4.0%
- Bedside manner/concern (doctor): 3.0%
- Bedside manner (staff): 3.0%
- Appointments/patient scheduling: 2.0%
- Medication: 2.0%
- Other: 18.0%

Q5. Why do you say that? (open-end)
Similarly, adults cite varied reasons for being less than satisfied with their last health care visit. Most often cited are problem solving and physician knowledge or skill. Communication was seldom cited as an issue.

**Reasons for Being Less Than Satisfied with Last Health Care Visit**
*(Among Those Neutral/Dissatisfied/Very Dissatisfied)*

- Solve problem: 24.0%
- Skill/knowledge (doctor): 17.0%
- Attention/available (doctor): 9.0%
- Bedside manner/concern (doctor): 4.0%
- Care of patient: 4.0%
- Medication: 4.0%
- Time with patient: 4.0%
- Appointments/patient scheduling: 4.0%
- Communication: 4.0%
- Tests/exams: 4.0%
- Costs/expenses: 2.0%
- Teamwork and communication between staff: 2.0%
- Skill/knowledge (nursing): 2.0%
- Other: 15.0%

(n=39)
As patients, the vast majority (86.0%) of area adults believe health care providers communicate well with them. This rate drops to seven in ten (70.0%) for Eaton County.
However, when it comes to health care providers communicating with each other, area adults are less confident; seven in ten (72.0%) believe health care providers communicate well with each other. This rate is highest in Allegan County and lowest in Eaton County.

**How Well Health Care Providers Communicate with Each Other (Total Sample)**

- Extremely Well: 38.0%
- Somewhat Well: 34.0%
- Slightly Well: 14.0%
- Not Very Well: 9.0%
- Not At All Well: 5.0%

**Communication Between Health Care Providers**

**How Well Health Care Providers Communicate with Each Other by County (% Somewhat Well/Extremely Well)**

- Allegan (n=51): 81.0%
- Barry (n=243): 70.0%
- Eaton (n=11*): 40.0%
- Ionia (n=78): 76.0%
- Kent (n=45): 68.0%

*Caution: small base size

Q7. How well do you feel health care providers communicate **with each other** about your health care? Would you say...?
Health Care Access
Four in ten area adults have health insurance through work and one-fourth have Medicare. Only 2.0% reported having no coverage. Residents in Kent and Allegan counties are more likely than others to have employer provided coverage, while residents in Ionia are more likely to have Medicaid.

Q8. Which of these describes your health insurance situation? Is your insurance…?

<table>
<thead>
<tr>
<th>Type of Health Insurance</th>
<th>Allegan County</th>
<th>Barry County</th>
<th>Eaton County</th>
<th>Ionia County</th>
<th>Kent County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer provided</td>
<td>58.0%</td>
<td>39.0%</td>
<td>35.0%</td>
<td>28.0%</td>
<td>71.0%</td>
</tr>
<tr>
<td>Medicare</td>
<td>22.0%</td>
<td>27.0%</td>
<td>40.0%</td>
<td>22.0%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>4.0%</td>
<td>10.0%</td>
<td>0.0%</td>
<td>22.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Medicare supplemental</td>
<td>1.0%</td>
<td>8.0%</td>
<td>5.0%</td>
<td>4.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Governmental plan</td>
<td>8.0%</td>
<td>5.0%</td>
<td>10.0%</td>
<td>4.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Private insurance</td>
<td>1.0%</td>
<td>5.0%</td>
<td>0.0%</td>
<td>8.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Self-pay</td>
<td>4.0%</td>
<td>4.0%</td>
<td>10.0%</td>
<td>7.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>None</td>
<td>2.0%</td>
<td>2.0%</td>
<td>0.0%</td>
<td>5.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
In the past two years, the vast majority of area adults (85.0%) have had no trouble meeting their, or their family’s, health care needs. One in five Eaton County adults reports having trouble meeting health care needs during the past two years.

**Trouble Meeting Health Care Needs**

<table>
<thead>
<tr>
<th>Had Trouble Meeting Health Care Needs in Past Two Years</th>
<th>Had Trouble Meeting Health Care Needs by County (% Yes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes 15.0%</td>
<td>Allegan (n=51) 15.0%</td>
</tr>
<tr>
<td>No 85.0%</td>
<td>Barry (n=244) 16.0%</td>
</tr>
<tr>
<td>(n=500)</td>
<td>Eaton (n=11*) 20.0%</td>
</tr>
<tr>
<td></td>
<td>Ionia (n=79) 15.0%</td>
</tr>
<tr>
<td></td>
<td>Kent (n=45) 11.0%</td>
</tr>
</tbody>
</table>

*Caution: small base size

Q9. In the past two years, was there a time when you had trouble meeting the health care needs of you and your family?
By far, the primary reason people had trouble meeting health care needs in the past two years was their **inability to afford out-of-pocket expenses such as co-pays and deductibles.** More than one-fourth reported lack of coverage as a barrier. These two reasons are the top two for all five counties in SHPH’s catchment area.

### Reasons Had Trouble Meeting Health Care Needs

- **Inability to pay deductibles or co-pays**: 65.0%
- **Lack of health insurance**: 28.0%
- **Don’t know how to find a physician/doctor**: 7.0%
- **Lack of transportation**: 4.0%
- **Couldn’t get an appointment**: 2.0%
- **Lack of physician specialists in the area**: 2.0%
- **Couldn’t get a referral**: 1.0%
- **I’m not comfortable with any doctor**: 1.0%
- **Other**: 8.0%
- **Don’t know**: 5.0%

(n=72)

Q10. (If Q9=yes) What are some of the reasons you had trouble meeting the health care needs of you and your family?
When asked what health care related programs, services, or classes are lacking in the community, the vast majority were unable to provide examples.

**Health Care Related Programs, Services, or Classes Lacking in the Community**

- Health and wellness classes: 4.0%
- Special health services: 3.0%
- Exercise and fitness services: 2.0%
- Everything; there is nothing: 2.0%
- Nutrition/weight control: 1.0%
- Other: 4.0%
- Don’t know: 79.0%

(n=500)

Q11. What health care related programs, services, or classes are lacking in your community? In other words, what programs, services, or classes do you want that are currently unavailable? Please be as detailed as possible. (open-end)
Community Characteristics That Impact Health
When adults consider the top five issues that impact health in their community, they offer myriad examples, led by affordable health insurance, affordable health programs, poverty, education, and substance abuse services.

Top 5 Issues in the Community that Impact Health

- Affordable health insurance: 22.0%
- Affordable health programs: 15.0%
- Poverty: 14.0%
- Education: 14.0%
- Substance abuse services: 13.0%
- Jobs/unemployment: 12.0%
- More health professionals: 12.0%
- Tobacco use: 11.0%
- Affordable fresh/natural food: 10.0%
- Affordable healthy lifestyle services: 10.0%
- Transportation: 10.0%

(n=227)

Q12. What are the top five issues in your community that impact health? (multiple response)
Adults from four of the five counties in the SHPH area cite **affordable health insurance** as the top issue in the community that impacts health. **Affordable health programs** is a top five issue in all five counties, and **education** is a top five issue in four of the five counties. **Poverty** is seen as critical in Allegan and Barry counties, and **jobs/unemployment** is critical in Eaton and Ionia counties.

### Top 5 Issues in the Community that Impact Health

#### By County

<table>
<thead>
<tr>
<th>Allegan County (n=24)</th>
<th>Barry County (n=108)</th>
<th>Eaton County (n=2*)</th>
<th>Ionia County (n=40)</th>
<th>Kent County (n=16*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordable health programs</td>
<td>Affordable health insurance</td>
<td>Affordable health insurance</td>
<td>Affordable health insurance</td>
<td>Affordable health insurance</td>
</tr>
<tr>
<td>More health professionals</td>
<td>Affordable health programs</td>
<td>Education</td>
<td>Jobs/unemployment</td>
<td>Education</td>
</tr>
<tr>
<td>Poverty</td>
<td>Poverty</td>
<td>Jobs/unemployment</td>
<td>Tobacco use</td>
<td>Affordable healthy lifestyle programs</td>
</tr>
<tr>
<td>Education</td>
<td>Substance abuse services</td>
<td>Affordable health programs</td>
<td>Affordable healthy lifestyle programs</td>
<td>Tobacco use</td>
</tr>
<tr>
<td>Affordable health insurance/ substance abuse service</td>
<td>Education</td>
<td>Affordable fresh/natural food</td>
<td>Affordable health programs</td>
<td>Affordable health programs</td>
</tr>
</tbody>
</table>

*Caution: small base size

Q12. What are the top five issues in your community that impact health? (multiple response)
When asked what community characteristics make it **easy** to be healthy, more than one-fourth (27.0%) say **access to wellness programs**, but these programs could be lacking in Eaton County. Other characteristics include **access to health facilities**, the **environment**, and **access to healthy food**. Good health providers is cited by only 2.0%, and 30.0% did not suggest anything.

### Healthy Community Characteristics

#### Community Characteristics That Make It **Easy To Be Healthy** *(Total Sample)*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to wellness programs</td>
<td>27.0%</td>
</tr>
<tr>
<td>Access to health care facilities</td>
<td>13.0%</td>
</tr>
<tr>
<td>Location/environment</td>
<td>11.0%</td>
</tr>
<tr>
<td>Access to healthy food</td>
<td>9.0%</td>
</tr>
<tr>
<td>Good health care providers</td>
<td>2.0%</td>
</tr>
<tr>
<td>Other</td>
<td>8.0%</td>
</tr>
<tr>
<td>None</td>
<td>4.0%</td>
</tr>
<tr>
<td><strong>Don’t know/refused</strong></td>
<td>30.0%</td>
</tr>
</tbody>
</table>

(n=500)

#### Community Characteristics That Make It **Easy To Be Healthy** *by County*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Allegan County (n=51)</th>
<th>Barry County (n=244)</th>
<th>Eaton County (n=11*)</th>
<th>Ionia County (n=79)</th>
<th>Kent County (n=45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to wellness programs</td>
<td>31.0%</td>
<td>28.0%</td>
<td>15.0%</td>
<td>24.0%</td>
<td>35.0%</td>
</tr>
<tr>
<td>Access to health care facilities</td>
<td>6.0%</td>
<td>13.0%</td>
<td>25.0%</td>
<td>9.0%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Location/environment</td>
<td>11.0%</td>
<td>14.0%</td>
<td>30.0%</td>
<td>7.0%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Access to healthy food</td>
<td>7.0%</td>
<td>7.0%</td>
<td>0.0%</td>
<td>16.0%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Good health care providers</td>
<td>2.0%</td>
<td>3.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other</td>
<td>14.0%</td>
<td>6.0%</td>
<td>0.0%</td>
<td>9.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td><strong>Don’t know/refused</strong></td>
<td>29.0%</td>
<td>29.0%</td>
<td>30.0%</td>
<td>34.0%</td>
<td>22.0%</td>
</tr>
</tbody>
</table>

*Caution: small base size

Q13. What are the primary characteristics of your community that make it **easy** to be healthy? Please be as detailed as possible. (open-end)
Conversely, when asked what community characteristics make it hard to be healthy, almost half (45.0%) provided no suggestions. Availability or affordability of healthy food was cited most often, by 15.0% of adults.

### Unhealthy Community Characteristics

#### Community Characteristics That Make It **Hard** To Be Healthy  
(Total Sample)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability/affordability of healthy food</td>
<td>15.0%</td>
</tr>
<tr>
<td>Proximity to health centers</td>
<td>8.0%</td>
</tr>
<tr>
<td>Weather/traffic conditions</td>
<td>5.0%</td>
</tr>
<tr>
<td>Poverty/affordable health care</td>
<td>5.0%</td>
</tr>
<tr>
<td>Lifestyle choices</td>
<td>5.0%</td>
</tr>
<tr>
<td>Available/affordable fitness centers</td>
<td>4.0%</td>
</tr>
<tr>
<td>Insurance affordability/access</td>
<td>2.0%</td>
</tr>
<tr>
<td>Access to qualified health care professionals</td>
<td>2.0%</td>
</tr>
<tr>
<td>Education (health, finance)</td>
<td>2.0%</td>
</tr>
<tr>
<td>Other</td>
<td>6.0%</td>
</tr>
<tr>
<td>None</td>
<td>16.0%</td>
</tr>
<tr>
<td>Don’t know/refused</td>
<td>29.0%</td>
</tr>
</tbody>
</table>

#### Community Characteristics That Make It **Hard** To Be Healthy  
by County

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Allegan County (n=51)</th>
<th>Barry County (n=244)</th>
<th>Eaton County (n=11*)</th>
<th>Ionia County (n=79)</th>
<th>Kent County (n=45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability/affordability of healthy food</td>
<td>19.0%</td>
<td>14.0%</td>
<td>10.0%</td>
<td>20.0%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Proximity to health centers</td>
<td>12.0%</td>
<td>5.0%</td>
<td>45.0%</td>
<td>3.0%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Weather/traffic conditions</td>
<td>6.0%</td>
<td>4.0%</td>
<td>0.0%</td>
<td>5.0%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Poverty/affordable health care</td>
<td>5.0%</td>
<td>6.0%</td>
<td>0.0%</td>
<td>6.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Lifestyle choices</td>
<td>1.0%</td>
<td>5.0%</td>
<td>0.0%</td>
<td>5.0%</td>
<td>11.0%</td>
</tr>
</tbody>
</table>

*Caution: small base size (n=500)

Q14. What are the primary characteristics of your community that make it hard to be healthy? Please be as detailed as possible. (open-end)
Moreover, when residents are asked which areas are most important to making their community healthier, more than half say increase physical activity and education, and almost half say improve nutrition or eating habits. Further, roughly one-third believe improved access to physical and mental health care, and dental care, are most important to making their community healthier. Few have concerns about water or air quality.

### Areas Most Important to Making Community Healthier

**Areas Most Important to Making Community Healthier**

<table>
<thead>
<tr>
<th>Area</th>
<th>Total Sample</th>
<th>Allegan County (n=51)</th>
<th>Barry County (n=244)</th>
<th>Eaton County (n=11*)</th>
<th>Ionia County (n=79)</th>
<th>Kent County (n=45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase participation in physical activity</td>
<td>56.0%</td>
<td>70.0%</td>
<td>55.0%</td>
<td>56.0%</td>
<td>54.0%</td>
<td>57.0%</td>
</tr>
<tr>
<td>Educating residents</td>
<td>53.0%</td>
<td>61.0%</td>
<td>49.0%</td>
<td>50.0%</td>
<td>50.0%</td>
<td>55.0%</td>
</tr>
<tr>
<td>Improve nutrition/eating habits</td>
<td>48.0%</td>
<td>41.0%</td>
<td>49.0%</td>
<td>81.0%</td>
<td>47.0%</td>
<td>52.0%</td>
</tr>
<tr>
<td>Improve access to dental care</td>
<td>34.0%</td>
<td>27.0%</td>
<td>40.0%</td>
<td>31.0%</td>
<td>33.0%</td>
<td>29.0%</td>
</tr>
<tr>
<td>Improve access to health care</td>
<td>34.0%</td>
<td>23.0%</td>
<td>35.0%</td>
<td>44.0%</td>
<td>40.0%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Improve access to mental health care</td>
<td>31.0%</td>
<td>34.0%</td>
<td>30.0%</td>
<td>19.0%</td>
<td>32.0%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Improve water quality</td>
<td>14.0%</td>
<td>18.0%</td>
<td>12.0%</td>
<td>0.0%</td>
<td>16.0%</td>
<td>15.0%</td>
</tr>
<tr>
<td>Improve air quality</td>
<td>13.0%</td>
<td>5.0%</td>
<td>13.0%</td>
<td>0.0%</td>
<td>13.0%</td>
<td>22.0%</td>
</tr>
</tbody>
</table>

**Caution: small base size**

Q15. From the following list, please rank the top three areas that are most important to making the people in your community healthier. The choices are (read 1-8). Which of these is most important? Which of these is second-most important? Which of these is third-most important?
Residents offer a number of strategies for making the community healthier, with **educating the public on healthy living** and **getting people to live healthier lifestyles** topping the list. Recreational facilities and better access to reduced cost health care are important to people living in Eaton County.

### Additional Ideas to Making Community Healthier

#### Additional Ideas to Making Community Healthier

**Educate public on healthy living**
- **23.0%**

**Healthier lifestyle choices**
- **22.0%**

**More programs that promote exercise**
- **14.0%**

**Access to health care/ reduce cost**
- **12.0%**

**More recreational facilities**
- **7.0%**

**Reduce cost of food**
- **6.0%**

**Personal motivation**
- **3.0%**

**Environmental issues**
- **2.0%**

**Other**
- **13.0%**

---

Q16. What other ideas do you have to make people healthier? Please be as detailed as possible. (open-end)
Lifestyle Choices
Almost two-thirds (64.0%) of adults feel they need to exercise more often or more consistently in order to improve their health status, while more than four in ten (43.0%) think they need to eat healthier and one-third (35.0%) need to diet. Almost one in five feel they need to get more sleep and/or reduce their smoking behavior, the latter of which is highest in Ionia and Eaton counties.

### Behavioral Changes Needed to Improve Health

#### Behavioral Changes You Need to Make to Improve Health (Total Sample)

- **Exercise more/regularly**: 64.0%
- **Eat healthier**: 43.0%
- **Diet**: 35.0%
- **Get more sleep**: 18.0%
- **Reduce smoking**: 18.0%
- **Visit health practitioners**: 10.0%
- **Other**: 2.0%
- **Nothing/no changes**: 3.0%

#### Behavioral Changes You Need to Make to Improve Health by County

<table>
<thead>
<tr>
<th>Behavioral Change</th>
<th>Allegan County (n=51)</th>
<th>Barry County (n=244)</th>
<th>Eaton County (n=11*)</th>
<th>Ionia County (n=79)</th>
<th>Kent County (n=45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise more/regularly</td>
<td>69.0%</td>
<td>67.0%</td>
<td>53.0%</td>
<td>65.0%</td>
<td>68.0%</td>
</tr>
<tr>
<td>Eat healthier</td>
<td>33.0%</td>
<td>48.0%</td>
<td>29.0%</td>
<td>35.0%</td>
<td>62.0%</td>
</tr>
<tr>
<td>Diet</td>
<td>32.0%</td>
<td>35.0%</td>
<td>35.0%</td>
<td>38.0%</td>
<td>32.0%</td>
</tr>
<tr>
<td>Get more sleep</td>
<td>26.0%</td>
<td>16.0%</td>
<td>6.0%</td>
<td>18.0%</td>
<td>17.0%</td>
</tr>
<tr>
<td>Reduce smoking</td>
<td>20.0%</td>
<td>14.0%</td>
<td>24.0%</td>
<td>31.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Visit health practitioners</td>
<td>11.0%</td>
<td>11.0%</td>
<td>24.0%</td>
<td>8.0%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Other</td>
<td>0.0%</td>
<td>3.0%</td>
<td>0.0%</td>
<td>1.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Nothing/no changes</td>
<td>2.0%</td>
<td>4.0%</td>
<td>2.0%</td>
<td>4.0%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

*Caution: small base size*

Q17. Which of the following behavioral changes do you believe you need to make to improve your health?
Adults face a multitude of barriers to living a healthier lifestyle, but the greatest is their lack of will power, followed by lack of time. One in five lack the energy needed to live a healthier lifestyle, and an equal proportion face cost barriers.

**Barriers to Living a Healthier Lifestyle**

- Currently lack the will power: 36.0%
- Not enough time: 30.0%
- Lack of energy: 21.0%
- Too costly/can’t afford: 20.0%
- Don’t have someone to join in/be partner: 13.0%
- Lack of programs/services in my area: 10.0%
- Not ready to make changes: 9.0%
- Transportation issues: 8.0%
- Don’t know how to make changes: 4.0%
- Other: 15.0%
- None – I don’t need to make changes: 4.0%
- None – I don’t want to make changes: 1.0%

*(n=500)*

Q18. What are some of the barriers you face when trying to live a healthier lifestyle? (Multiple response)
Lack of will power is the top problem cited by adults from Allegan, Barry, and Ionia counties, while adults from Eaton and Kent counties report lack of time as the top barrier. Transportation is a widespread barrier in Eaton County.

### Barriers to Living a Healthier Lifestyle by County

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Allegan County (n=51)</th>
<th>Barry County (n=244)</th>
<th>Eaton County (n=11*)</th>
<th>Ionia County (n=79)</th>
<th>Kent County (n=45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently lack the will power</td>
<td>44.0%</td>
<td>35.0%</td>
<td>0.0%</td>
<td>37.0%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Not enough time</td>
<td>38.0%</td>
<td>25.0%</td>
<td>41.0%</td>
<td>20.0%</td>
<td>52.0%</td>
</tr>
<tr>
<td>Lack of energy</td>
<td>9.0%</td>
<td>23.0%</td>
<td>24.0%</td>
<td>25.0%</td>
<td>19.0%</td>
</tr>
<tr>
<td>Too costly/can't afford</td>
<td>27.0%</td>
<td>20.0%</td>
<td>0.0%</td>
<td>23.0%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Don't have someone to join in/be partner</td>
<td>9.0%</td>
<td>13.0%</td>
<td>12.0%</td>
<td>22.0%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Lack of programs/services in my area</td>
<td>14.0%</td>
<td>10.0%</td>
<td>12.0%</td>
<td>10.0%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Not ready to make changes</td>
<td>14.0%</td>
<td>6.0%</td>
<td>0.0%</td>
<td>7.0%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Transportation issues</td>
<td>5.0%</td>
<td>11.0%</td>
<td>24.0%</td>
<td>8.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Don’t know how to make changes</td>
<td>0.0%</td>
<td>3.0%</td>
<td>12.0%</td>
<td>11.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other</td>
<td>12.0%</td>
<td>14.0%</td>
<td>29.0%</td>
<td>19.0%</td>
<td>11.0%</td>
</tr>
<tr>
<td>None – I don't need to make changes</td>
<td>0.0%</td>
<td>4.0%</td>
<td>3.0%</td>
<td>3.0%</td>
<td>9.0%</td>
</tr>
<tr>
<td>None – I don’t want to make changes</td>
<td>1.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

Q18. What are some of the barriers you face when trying to live a healthier lifestyle? (Multiple response)
If education or instruction were provided on ways to live healthier lifestyles in various formats, area residents are somewhat more likely to select **in-person over online**. Online health-related websites are more appealing than other websites (e.g., YouTube) or chat rooms.

**Likelihood to Participate in Education/Instruction on Leading Healthier Lifestyles**

- **In-person, at locations such as the Health Department, colleges, hospitals, etc.**
  - Very Likely: 30.0%
  - Somewhat Likely: 23.0%
  - Not Very Likely: 30.0%
  - Not At All Likely: 14.0%

- **Online at health-related websites**
  - Very Likely: 43.0%
  - Somewhat Likely: 21.0%
  - Not Very Likely: 22.0%
  - Not At All Likely: 12.0%

- **Online at various websites, such as Youtube.com**
  - Very Likely: 53.0%
  - Somewhat Likely: 22.0%
  - Not Very Likely: 17.0%
  - Not At All Likely: 6.0%

- **Online chat opportunities for support, such as online forums, discussion boards, specific Q&A sites**
  - Very Likely: 53.0%
  - Somewhat Likely: 28.0%
  - Not Very Likely: 13.0%
  - Not At All Likely: 4.0%

Q19. Next, I'd like to ask you how likely you would be to participate in some opportunities to learn about leading a healthier lifestyle. Would you be not at all likely, not very likely, somewhat likely, very likely, or extremely likely to participate in...?
In-person instruction is the preferred method for adults from each county except Kent, where slightly more adults prefer learning about living healthier lifestyles via health-related websites.

### Likelihood to Participate in Education/Instruction on Leading Healthier Lifestyles By County (%Extremely/Very/Somewhat Likely)

<table>
<thead>
<tr>
<th></th>
<th>Allegan County (n=51)</th>
<th>Barry County (n=244)</th>
<th>Eaton County (n=11*)</th>
<th>Ionia County (n=79)</th>
<th>Kent County (n=45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-person, at locations such as the Health Department, colleges, hospitals, etc.</td>
<td>52.0%</td>
<td>43.0%</td>
<td>61.0%</td>
<td>54.0%</td>
<td>38.0%</td>
</tr>
<tr>
<td>Online at health-related websites</td>
<td>47.0%</td>
<td>35.0%</td>
<td>35.0%</td>
<td>30.0%</td>
<td>43.0%</td>
</tr>
<tr>
<td>Online at various websites, such as Youtube.com</td>
<td>30.0%</td>
<td>23.0%</td>
<td>30.0%</td>
<td>30.0%</td>
<td>26.0%</td>
</tr>
<tr>
<td>Online chat opportunities for support, such as online forums, discussion boards, specific Q&amp;A sites</td>
<td>20.0%</td>
<td>17.0%</td>
<td>35.0%</td>
<td>22.0%</td>
<td>15.0%</td>
</tr>
</tbody>
</table>
Housing Information
Few homes in the SHPH area have peeling paint and more than half were built after 1978, when lead-based paint was no longer used. Three-fourths have working carbon monoxide detectors and almost all have working smoke detectors. Homes in Ionia County are more likely than homes in other counties to have peeling paint, have been built before 1978, and have no working carbon monoxide detector.

**Housing Information (% Yes)**

<table>
<thead>
<tr>
<th>Home Has Peeling Paint</th>
<th>Home Was Built Before 1978</th>
<th>Home Has Working Carbon Monoxide Detector</th>
<th>Home Has Working Smoke Detector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (n=500)</td>
<td>5.0%</td>
<td>43.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td>Allegan (n=51)</td>
<td>5.0%</td>
<td>39.0%</td>
<td>75.0%</td>
</tr>
<tr>
<td>Barry (n=244)</td>
<td>4.0%</td>
<td>45.0%</td>
<td>78.0%</td>
</tr>
<tr>
<td>Eaton (n=11*)</td>
<td>0.0%</td>
<td>60.0%</td>
<td>90.0%</td>
</tr>
<tr>
<td>Ionia (n=79)</td>
<td>13.0%</td>
<td>57.0%</td>
<td>65.0%</td>
</tr>
<tr>
<td>Kent (n=45)</td>
<td>0.0%</td>
<td>10.0%</td>
<td>78.0%</td>
</tr>
</tbody>
</table>

*Caution: small base size

Q20. Does your home have peeling paint?
One in ten (11.0%) adults have observed mold in their home within the past year. When it exists, it’s most often found in the basement, followed by bathrooms or bedrooms. Residents in Allegan County are most likely to report spotting mold in their home.

**Q23:** Have you observed mold in your home in the last 12 months?  
**Q24:** (If yes) What was the location of the mold? (Allow multiple response)
Almost two-thirds (63.0%) of adults say they have a septic system and, of those, almost an equal proportion (62.0%) say they had it inspected or pumped within the last three years. Kent County residents are most likely to have city sewer service.

**Have a Septic System**

- **No, 37.0%**
- **Yes, 63.0%**

(n=500)

**Last Time Septic System Was Inspected or Pumped**

- **3 Years or Less**
  - **62.0%**
  - Allegan (n=51)
  - Barry (n=244)
- **Between 3 and 5 Years Ago**
  - **17.0%**
  - Eaton (n=11*)
- **6 or More Years Ago**
  - **21.0%**
  - Ionia (n=79)
  - Kent (n=45)

**Have a Septic System by County (% Yes)**

- **Kent (n=45)**
  - **48.0%**
- **Ionia (n=79)**
  - **59.0%**
- **Eaton (n=11*)**
  - **90.0%**
- **Barry (n=244)**
  - **67.0%**
- **Allegan (n=51)**
  - **57.0%**

Q25: Do you have a septic system?
Q26: (If yes) How long has it been since your septic system was inspected or pumped by a professional?
Seven in ten (69.0%) report getting their water from a private well. Slightly more than four in ten (42.0%) have had their well water tested in the past three years; however, almost an equal proportion (37.0%) have not had it inspected for at least six years. Again, Kent County residents are most likely to have city water service.
Substance Abuse Issues
Adults perceive substance use overall as a community-wide problem. Tobacco, methamphetamine, and alcohol use are viewed as the greatest substance use problems in the community. Prescription drug abuse and marijuana use are not far behind, with more than six in ten viewing them as problems. Heroin and cocaine use are believed to be problems by more than four in ten adults in the SHPH area.

**Perceived Substance Use in the Community**

<table>
<thead>
<tr>
<th>Substance Use</th>
<th>Not A Problem</th>
<th>Somewhat Of A Problem</th>
<th>Major Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco use (n=458)</td>
<td>16.0%</td>
<td>47.0%</td>
<td>37.0%</td>
</tr>
<tr>
<td>Use of methamphetamines, crystal meth, or speed (n=403)</td>
<td>29.0%</td>
<td>34.0%</td>
<td>37.0%</td>
</tr>
<tr>
<td>Alcohol abuse (n=435)</td>
<td>22.0%</td>
<td>52.0%</td>
<td>26.0%</td>
</tr>
<tr>
<td>Prescription drug abuse without a doctor’s prescription (n=371)</td>
<td>31.0%</td>
<td>47.0%</td>
<td>22.0%</td>
</tr>
<tr>
<td>Marijuana use (n=419)</td>
<td>34.0%</td>
<td>44.0%</td>
<td>22.0%</td>
</tr>
<tr>
<td>Heroin use (n=312)</td>
<td>56.0%</td>
<td>28.0%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Cocaine use (n=316)</td>
<td>58.0%</td>
<td>36.0%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Ecstasy use (n=249)</td>
<td>71.0%</td>
<td>23.0%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

Q29. Next, I’m going to read a list of substances and ask you if you believe that each is a problem in your community and an area where local healthcare facilities should focus efforts on prevention and treatment. Please tell me if you believe (read and rotate A-H) is not a problem, is somewhat of a problem, or is a major problem in your community.
Adults from Barry County perceive tobacco, marijuana, and cocaine use as major problems, more so than adults from the other four counties. On the other hand, adults from Eaton County believe the use of amphetamines, alcohol abuse, and the abuse of prescription drugs to be major problems, more so than adults from the other counties. It’s clear that adults from the four more rural counties (Allegan, Barry, Eaton, Ionia) perceive methamphetamine use as a major problem.

### Perceived Substance Use in the Community by County (% Major Problem)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Allegan County</th>
<th>Barry County</th>
<th>Eaton County</th>
<th>Ionia County</th>
<th>Kent County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco use</td>
<td>31.0%</td>
<td>41.0%</td>
<td>22.0%</td>
<td>40.0%</td>
<td>31.0%</td>
</tr>
<tr>
<td>Use of amphetamines, crystal meth, or speed</td>
<td>40.0%</td>
<td>37.0%</td>
<td>56.0%</td>
<td>37.0%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Alcohol abuse</td>
<td>28.0%</td>
<td>31.0%</td>
<td>33.0%</td>
<td>16.0%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Prescription drug abuse without a doctor’s prescription</td>
<td>15.0%</td>
<td>24.0%</td>
<td>46.0%</td>
<td>31.0%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Marijuana use</td>
<td>18.0%</td>
<td>28.0%</td>
<td>13.0%</td>
<td>20.0%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Heroin use</td>
<td>10.0%</td>
<td>14.0%</td>
<td>0.0%</td>
<td>25.0%</td>
<td>12.0%</td>
</tr>
<tr>
<td>Cocaine use</td>
<td>0.0%</td>
<td>10.0%</td>
<td>0.0%</td>
<td>3.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>Ecstasy use</td>
<td>0.0%</td>
<td>7.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>10.0%</td>
</tr>
</tbody>
</table>

Q29. Next, I’m going to read a list of substances and ask you if you believe that each is a problem in your community and an area where local healthcare facilities should focus efforts on prevention and treatment. Please tell me if you believe (read and rotate A-H) is not a problem, is somewhat of a problem, or is a major problem in your community.
Underserved Resident Survey
Community Perceptions
Area underserved residents view the top community strengths to be its farmers markets, its availability of health care and mental health care, its active community, and that it’s a beautiful place to live. That said, the fact that only one in five think that the availability of health care and mental health care is a top strength suggests this is an area of opportunity for the community. Few underserved residents believe top community strengths include good neighbors, widespread philanthropy, engaged and involved members, or being health-focused.

**Perceived Community Strengths**

- **Farmers Markets**: 30.4%
- **Availability of health care**: 21.7%
- **Availability of mental health care**: 20.3%
- **Active community**: 20.3%
- **Beautiful area/great place to live**: 20.3%
- **Education (K-12)**: 17.4%
- **Availability of dental care**: 15.9%
- **Strong religious faith/faith-based community**: 15.9%
- **Safe community**: 14.5%
- **Clean and safe streets**: 13.0%

From the following list, what do you believe are the current STRENGTHS of your community? Strengths can be defined as those characteristics that make your community an ideal place to live, raise a family, and visit. Please circle NO MORE THAN FIVE (5).
Conversely, underserved residents see myriad weaknesses, led by **lack of affordable housing**, **poor quality streets, sidewalks, and crosswalks**, and **lack of access to affordable healthy food**. Very few think social issues such as violence/safety, disparities/inequality, or racism are community issues that need addressing.

<table>
<thead>
<tr>
<th>Weakness</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of affordable housing</td>
<td>20.3%</td>
</tr>
<tr>
<td>Streets need repair</td>
<td>20.3%</td>
</tr>
<tr>
<td>Lack of access to affordable healthy food</td>
<td>17.4%</td>
</tr>
<tr>
<td>Sidewalks and crosswalk repair</td>
<td>15.9%</td>
</tr>
<tr>
<td>Need sidewalks and crosswalks repair</td>
<td>14.5%</td>
</tr>
<tr>
<td>Poverty</td>
<td>14.5%</td>
</tr>
<tr>
<td>Lack of access to dental care</td>
<td>11.6%</td>
</tr>
<tr>
<td>Lack of access to public transportation</td>
<td>10.1%</td>
</tr>
<tr>
<td>Motor vehicle accidents</td>
<td>10.1%</td>
</tr>
<tr>
<td>Poor housing quality</td>
<td>10.1%</td>
</tr>
<tr>
<td>Lack of access to health care</td>
<td>7.2%</td>
</tr>
<tr>
<td>Low graduation rates</td>
<td>7.2%</td>
</tr>
<tr>
<td>Poor life skills education (e.g., cooking, budgeting)</td>
<td>7.2%</td>
</tr>
<tr>
<td>Poor street quality</td>
<td>7.2%</td>
</tr>
<tr>
<td>Lack of access to mental health care</td>
<td>5.8%</td>
</tr>
<tr>
<td>Lack of affordable health care and treatment</td>
<td>5.8%</td>
</tr>
<tr>
<td>Poor nutrition education</td>
<td>5.8%</td>
</tr>
<tr>
<td>Lack of education on how to navigate the health care system</td>
<td>4.3%</td>
</tr>
<tr>
<td>Racism</td>
<td>4.3%</td>
</tr>
<tr>
<td>Lack of health education</td>
<td>4.3%</td>
</tr>
<tr>
<td>Violence and safety</td>
<td>1.4%</td>
</tr>
<tr>
<td>Poor communication and community collaboration</td>
<td>4.3%</td>
</tr>
<tr>
<td>Disparities and inequality</td>
<td>2.9%</td>
</tr>
<tr>
<td>Poor education standards (K-12)</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

From the following list, what do you believe are the current **WEAKNESSES** of your community? Weaknesses can be defined as those aspects of your community that need improvement. Please circle NO MORE THAN FIVE (5).
residents. However, **mental illness**, as a general category, is the greatest health problem since 27.5% believe depression is an issue, while another 20.3% say non-depression mental health issues have an impact on the community. One-fourth cite **alcohol abuse** as a health problem that affects the community. Few underserved residents believe youth issues, such as tobacco use, marijuana use, or teen pregnancy are serious health issues.

From the following list, what do you believe are the HEALTH PROBLEMS that most affect your community? Please circle NO MORE THAN FIVE (5).
Health Care Information
Was there a time in the past 12 months when you needed health care but could not get it? (If yes) What were some of the reasons you could not get the health care you needed? (Select all that apply)

One-third (33.3%) of the underserved could not get needed health care in the past year. However, the most noteworthy issue is that even people with health insurance went without needed care because they: (1) could not afford out-of-pocket expenses such as co-pays or deductibles and/or (2) providers refused their existing health insurance.
Seven in ten (71.0%) of the underserved have a government sponsored health insurance plan, either Medicaid, Medicare, Healthy Michigan, or VA/Tricare. The remainder are split between employer-sponsored health insurance, private health insurance, or fee-for-service payments. Those who have no health insurance say they can’t afford or don’t understand it.

**Paying for Health Care and Health Insurance**

**Sources of Health Care Payment**

- Medicaid: 31.9%
- Medicare: 24.6%
- Health Insurance Through Employer: 11.6%
- Healthy Michigan Plan: 11.6%
- Cash: 10.1%
- Health Insurance (Self-Paid): 10.1%
- Veteran’s Administration/Tricare: 2.9%
- Other: 2.9%

**Reasons for Having No Health Insurance**

- Can’t afford it: 60.0%
- Don’t understand it: 30.0%
- It isn’t offered: 10.0%

How do you usually pay for your health care?
If you do not have insurance, why?
The majority of underserved residents receive their health care from a physician’s office. More then one in ten (13.0%) seek care at urgent care clinics. Family and friends are the most often cited source of health information, followed by health professionals, the Internet, and TV and radio.
Health Status Information
Three in ten underserved residents report they have been diagnosed as obese and/or have allergies. Roughly one-fourth have been told they suffer from stress, have HBP, have high cholesterol, and/or have been diagnosed with a mental illness. Also, roughly one in five suffer from chronic pain, asthma, arthritis, and/or have diabetes. Few report stroke, memory loss issues, substance abuse, or cancer.

<table>
<thead>
<tr>
<th>Health Condition</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity</td>
<td>30.4%</td>
</tr>
<tr>
<td>Allergies</td>
<td>30.0%</td>
</tr>
<tr>
<td>Stress</td>
<td>27.5%</td>
</tr>
<tr>
<td>High blood pressure</td>
<td>26.1%</td>
</tr>
<tr>
<td>High cholesterol</td>
<td>26.1%</td>
</tr>
<tr>
<td>Mental health issues</td>
<td>24.6%</td>
</tr>
<tr>
<td>Chronic pain</td>
<td>21.7%</td>
</tr>
<tr>
<td>Asthma</td>
<td>21.7%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>18.8%</td>
</tr>
<tr>
<td>Arthritis</td>
<td>18.8%</td>
</tr>
<tr>
<td>Vision loss</td>
<td>17.4%</td>
</tr>
<tr>
<td>Hearing loss</td>
<td>13.0%</td>
</tr>
<tr>
<td>Sinus issues</td>
<td>13.0%</td>
</tr>
<tr>
<td>Heart disease</td>
<td>5.8%</td>
</tr>
<tr>
<td>Concussion or brain injury</td>
<td>5.8%</td>
</tr>
<tr>
<td>Drug abuse/addiction</td>
<td>4.3%</td>
</tr>
<tr>
<td>Cancer</td>
<td>4.3%</td>
</tr>
<tr>
<td>Alcohol abuse/addiction</td>
<td>2.9%</td>
</tr>
<tr>
<td>Memory loss (Alzheimer’s, dementia)</td>
<td>2.9%</td>
</tr>
<tr>
<td>Stroke</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

Has a doctor, nurse, or other health professional ever told you that you have any of the following?

VIP Research and Evaluation
Almost six in ten (58.8%) of underserved adults report a disability and, of these, an equal proportion report it as a medical disability. An additional 29.0% have a mobility disability and 9.7% have a hearing disability.

Prevalence of Disability

Have a Disability

- No, 41.2%
- Yes, 58.8%

Type of Disability

- Medical: 58.1%
- Mobility: 29.0%
- Hearing: 9.7%
- Other: 3.2%

(n=51)
The majority of underserved residents received a physical exam, eye exam, and a flu shot within the past year. Fewer than four in ten (38.5%) visited a dentist in the past year. Slightly more than four in ten (41.8%) ate less in the past month than they should have because of a lack of food in the household.
Safety Information
More than four in ten (42.3%) never wear a helmet when engaging in activities where it is either legally required or recommended. Six in ten report no secondhand smoke in their home, while one in four say people are exposed to it daily.

**Helmet Wearing and Secondary Smoke**

**Frequency of Wearing a Helmet When Engaging in Activities that Warrant It (Among Those Who Participate)**

- **Always**: 30.8%
- **Nearly always**: 11.5%
- **Sometimes**: 7.7%
- **Rarely**: 7.7%
- **Never**: 42.3%

**Frequency of Secondhand Smoke in the Home**

- **Daily**: 25.9%
- **Weekly**: 3.4%
- **Monthly**: 0.0%
- **A few times**: 10.3%
- **Never**: 60.3%
The vast majority of underserved residents have working smoke detectors but more than half live in homes built before 1978 which means they probably contain some lead-based paint. More than four in ten report rodents in their home. Residents smoking in their home and visitors smoking in the home are each reported by roughly one-third.

### Home Safety (% Yes)

- **Have working smoke detector (n=58)**: 84.5%
- **Home built before 1978 (n=48)**: 56.3%
- **Have working carbon monoxide detector (n=55)**: 49.1%
- **Have mice, rats, or other rodents (n=56)**: 42.9%
- **Have emergency supply kit (n=56)**: 41.1%
- **Residents smoke in the home (n=58)**: 36.2%
- **Visitors smoke in the home (n=58)**: 31.0%
- **Have peeling paint (n=57)**: 19.3%

---

Does your family have a basic emergency supply kit? This may include water, non-perishable food, any necessary prescriptions, first-aid supplies, flashlight and batteries, non-electric can opener, blanket, etc.?

Does your home have peeling paint?

Does anyone that resides in your home smoke in your home?

Do you allow visitors to smoke in your home?

Was your home built before 1978, the year that the sale of lead-based paint for residential housing was banned?

Does your home have a working carbon monoxide detector?

Does your home have a working smoke detector?

Have you seen signs of mice, rats, and/or rodents in your home in the last 12 months?
Two in ten underserved adults report mold in their home, most often located in the bathroom or basement.

Have you observed mold in your home in the last 12 months? (If yes) What was the location of the mold? (Select all that apply)

- No, 77.2%
- Yes, 22.8%

- Bathroom(s) 46.2%
- Basement 30.8%
- Kitchen 15.4%
- Bedroom(s) 7.7%
- Other room 30.8%
More than six in ten underserved households have a septic system and many have not kept up with timely maintenance. More than one-fourth (26.3%) say that it has been more than six years since the last pump/inspection and 31.6% cannot recall the last time.

**Have Septic System**

- Yes, 63.8%
- No, 37.2%

**Last Time Septic System was Pumped or Inspected**

- 3 years or less: 31.6%
- Between 3 and 5 years ago: 10.5%
- More than 6 years ago: 26.3%
- Don’t know: 31.6%

Do you have a septic system?  
(If yes) How long has it been since your septic system was inspected or pumped by a professional?
Health Literacy Information
One-third of underserved residents receive help navigating the health care system (e.g., completing forms, reading labels). One-third report having trouble reading and remembering health information because of the level of difficulty. Six in ten have problems learning about their medical condition because of difficulty understanding written information. Of those, half say they have problems somewhat or very often.

**Health Literacy Information (% Yes)**

- **Get help from others in filling out forms, reading prescription labels, insurance forms, and/or health education sheets (n=56)**: 33.9%
- **Have trouble reading and remembering health information because it is difficult (n=56)**: 33.9%
- **Have problems learning about your medical condition because of difficulty understanding written information (n=55)**: 61.8%

Medical terms are confusing and many people find the words hard to understand. Do you ever get help from others in filling out forms, reading prescription labels, insurance forms, and/or health education sheets? Many people have trouble reading and remembering health information because it is difficult. Is this ever a problem for you? How often do you have problems learning about your medical condition because of difficulty understanding written information?
Substance Use Information
More than one-fourth of underserved residents smoke cigarettes daily, but few consume other licit substances. In fact, only 17.0% report consuming alcohol.
Very few underserved residents report illicit substance use in the past year. Roughly one in ten has smoked marijuana and fewer have used marijuana in other forms. No residents report using ecstasy, heroin, cocaine, or methamphetamines.

### Frequency of Illicit Substance Use

<table>
<thead>
<tr>
<th>Substance</th>
<th>0 Times</th>
<th>1-2 Times</th>
<th>3-9 Times</th>
<th>10-19 Times</th>
<th>20-39 Times</th>
<th>40 or More Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana (Dabs, oil, wax)</td>
<td>92.5%</td>
<td>3.8%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>1.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Marijuana (smoked)</td>
<td>90.6%</td>
<td>5.7%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>1.9%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Synthetic marijuana (also called K2, Spice, Fake Weed, King Kong)</td>
<td>98.1%</td>
<td>1.9%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Ecstasy (also called MDMA)</td>
<td>100.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Heroin (also called Smack, Junk, or China White)</td>
<td>100.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Cocaine (Powder, Crack, Freebase)</td>
<td>100.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Methamphetamines (also called Speed, Crystal, Crank, or Ice)</td>
<td>100.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

In the past year, how often have you used the following substances?
Very few underserved residents have a Michigan Medical Marijuana card. More than one in five (21.1%) report taking prescription drugs in the past year without a physician’s prescription.

**Medical Marijuana and Prescription Drug Abuse**

- **Have Michigan Medical Marijuana Card**
  - No, 94.6%
  - Yes, 5.4%

- **Frequency of Prescription Drug Abuse**
  - 0 Times: 78.9%
  - 1 to 2 Times: 10.5%
  - 3 to 9 Times: 5.3%
  - 10 to 19 Times: 0.0%
  - 20 to 39 Times: 1.8%
  - 40 or More Times: 3.5%
Focus Group Results

Barry-Eaton District Health Department
Be Active • Be Safe • Be Healthy
Various chronic diseases, such as diabetes and asthma, as well as chronic pain, were discussed with focus group participants. Key themes to emerge from this interaction were that, not only does chronic disease limit daily routine activities, but it can lead to issues with employment and weight gain. Chronic illnesses are also costly to manage.

- Topics discussed:
  - Aging
  - Asthma
  - Diabetes
  - Communicable disease
  - Chronic disease
  - Chronic pain
  - Overall health status

**Key Themes – Health Outcomes**

- Chronic disease can make it hard to be active, contributes to weight gain, and can make it hard to maintain employment
- Chronic disease leads to days of poor health in what would otherwise be fairly good overall health
- Chronic disease treatment can be costly (co-pays, medicine, transportation), time-consuming, and confusing
- Chronic pain is debilitating, is limiting (activity, ability to drive) and can take a toll on emotional health
Verbatim Comments on Health Outcomes

“I’m recovering from a back surgery, which I’m still struggling with problems with nerve damage and scar tissue wrapped around nerves. I **have to take meds every day** for it.”

“I’m a **diabetic** and **some days I feel real good and other days I feel like I’m on death row**, but that’s what you go through being a diabetic.”

“I’m fatigued and I’m always nauseated every day from it [Hepatitis C] and I have Stage 3 renal failure, so **my whole day I got things I got to do and it’s not fun at all**.”

“I’m a cancer survivor plus I’m a diabetic. I get frustrated because I **can’t do some of the things I used to do like I used to be able to take out the garbage**. Well, **my muscles have gotten weaker so I can’t lift the bag**, so I have to depend on him to do it. But otherwise I feel like my health is about a nine or so. I’ve stayed on insulin and everything. I’m doing pretty good.”

“In the wintertime, with asthma, if it’s 20 degrees or below, we can’t be outside because it can trigger an attack.”

“I’m a severe asthmatic. And I’m **allergic to over 330 different things**. So most of the time I’m a high energy person, so I actually range between a 6 and a 10 even with my breathing difficulties. But **on my really bad days, I can’t walk from here to the door.**”
Behaviors, Stress, and Physical Condition
Lifestyle choices, such as diet, exercise, food preparation, screen time, and weight were discussed. Participants reported making unhealthy food choices because of lack of time to procure or prepare healthy foods, the cost involved, and limited access to affordable healthy food. Reasons for lack of exercise also included lack of time and access. For kids, there are limited school options, as well as a more societal issue of being a part of an electronic age which is dominated by screen time.

**Key Themes – Barriers, Stress, and Physical Condition**

- Many mentioned having personal gardens or wanting them.
- Reasons people make unhealthy food choices:
  - Lack of time to obtain and/or prepare healthy food
  - Cost
  - Access
  - Dealing with stress
- Exercise
  - Lack of time
  - Lack of access (especially low cost/free)
  - Lack of school-based options for children (cost for athletic programs, cuts to recess time, lack of play actually occurring during recess)
  - Older participants often mentioned not having someone to exercise with
  - Children being a product of an electronic environment
- People frequently mentioned wanting to exercise or lose weight.
“I’d probably eat healthier, because let’s face it, when you’re on the road a lot, you’re stopping to eat. It doesn’t matter how much time you put healthy snacks in the car or you try to follow that lifestyle, you’re still stopping because it’s not enough. Or you’re not as active as you would normally be if you had that normal lifestyle of not having to do all of the running.”

“…for this many years I’ve been trying to eat that high protein diet, and low carbs and medium fat, and it’s incredibly difficult. When we only had $32,000 a year in income, and five people in a house, there’s no way, you’re not doing it.”

“We need someplace that they can go in the wintertime and be warm and get activity because our house isn’t big enough.”

“…I can’t exercise like I used to because there’s no sidewalks out here where we live and it’s hard.”

“I’d be more willing to go to the gym at Pennock, but it’s just too expensive because I’ve looked up a gym membership and I just don’t have the cash for it.”

“They’re [children] raised by video.”
Health Care Access
While one would expect individuals who don’t have health care coverage to face barriers to care, even people with coverage face challenges: (1) lack of providers accepting Medicaid coverage, and (2) inadequate coverage and high out-of-pocket costs resulting in less utilization of services. The underserved also paint a picture of receiving less than quality care due to their insurance status.

Key Themes – Health Care Access

- Factors surrounding access to care:
  - Inadequate coverage from Medicaid, Medicare, or current insurance – leading to high copays, lack of coverage for necessary services, skipping medical care
  - Lack of specialty care providers throughout the county, and in the more rural areas a lack of primary care providers (or not enough service hours)
  - Issues finding providers (including dentists) accepting patients with Medicaid, state-sponsored children’s insurance, etc.
  - Inability to access nearby providers due to outstanding medical bills

- Lack of consistent or appropriate health care due to being seen by different providers or not the correct provider for the condition

- Mixed opinions on the quality of care received and medical knowledge available at Pennock

- Difference in access to care and quality of health care when on insurance vs. Medicaid/Medicare

- Not having access to prescriptions either due to cost or due to insurance not covering name brands/recommended drugs
Verbatim Comments on Health Care Access

“…for those right here in Nashville, we do have a doctor’s office, which is very nice, but there’s no providers there on Friday. “

“I had it [dental coverage] on Medicaid. We have to drive all the way to Charlotte for it.”

“I mean, my kids are on state aid through my ex-wife and she has to travel all the way to Delton to find a doctor for them that will take the state aid...There is no doctor that takes that state aid anymore, especially dentist office here in town. I mean, they’re either full or they just don’t take it.”

“My daughter’s primary care physician does not have the vaccines she needs to even attend school.”

“So for the past two years, I’ve had to deal with a mother that gets dizzy, she gets weak. Finally, this last time when we went over, she found the right person that is addressing the issue, but because she never sees her regular doctor, she’s just been diagnosed with the stuff that we thought was wrong, but it’s two years later. It’s not consistent health care. “

“The way they treat you because you have Medicaid and now with the boys even. I mean, this test that we’re going to have done in December, it took us over six months to get the appointment. And we know if they had healthcare it would have – it wouldn’t have to wait.”

“With my kids, it’s especially, a lot of times, we don’t do that, we’re going to send you to a referral. I’m constantly going to these referrals, and those doctors don’t know my kids, and I might see them once or twice, and then I’m back to my primary care.”
“If the kids qualify for speech services, either OT or PT services, insurance won’t cover you, outside of Spectrum. The insurance will say, no you get those services at school. But what they don’t realize is that most of the students that fall under those categories are only receiving those services for 30 minutes a month, it’s a bare minimum that a school district has to put into that child. It’s usually not the proper OT, PT or speech therapy that that child needs.”

[Discussing free medications] “Yeah, I know. But it takes us like 45 minutes to get to a Meijer from where we live. We go to WalMart because it’s closer.”

“...if we do go to the doctors, they push a lot of prescription medication. And that’s a hard thing for me to stomach. I’ve got an 11-year-old daughter that they put on Wellbutrin because she had a panic attack over her nails or something.”
Substance Abuse and Mental Illness
Substance abuse not only takes a toll on the individual abusing, but also on family members and/or other caregivers. Children of substance abusing parents need special attention but the resources for them are lacking. The co-morbidity of substance abuse and mental illness (e.g., depression, stress) requires the intervention of mental health providers who are sorely lacking in the community. In short, there are even fewer resources for the people impacted secondarily by substance abuse: children and caregivers.

**Key Themes – Substance Abuse and Mental Illness**

- Substance abuse
  - Impacts on family
  - Caring for young family members because of parent(s)’ substance abuse issues
  - Resources being available for those with substance abuse issues, but not for those without issues
  - Community events (bar crawls, festivals, sports leagues) with a social component that revolves around alcohol, hard for those in recovery to participate

- Learning to cope with stress, depression, recovery, pain, chronic diseases – often this takes help from mental health professionals

- Being a care provider for a family member, or just caring for your family in general, can be a major stressor

- Changing family dynamics and our workplace culture are leading to different lifestyles
“It’s one thing for the doctors to prescribe the drugs Norco and Adderall together, but how she takes them is another. If you misuse the drugs then they’re not helping.”

“I thank God every day I’m sober because if I wasn’t sober this would be really ugly. I wouldn’t be here. I guarantee you of that.”

“Our great granddaughter, she has six kids now. She’s 23 years old. They’ve all been exposed to drugs and alcohol and they can’t stop her from getting pregnant. And she won’t do birth control. She don’t have any of the kids, but the health problems these kids are having and stuff and that’s what makes me mad is why nobody is doing anything on these people, and it’s not just her.”

“Because like I said, I do her meds for her three times a day and she is showering by herself now, but for a while I was even showering. I keep house in both houses and it’s a lot of work. And you don’t get no help.”

“Learning to cope. Seeking help. That’s what I did. I had to seek mental health to help me cope with what’s going on because it’s a reality [inaudible] the pain hits. The chronic pain that I experience every day, not some days, every single day is there. And I have to accept that and I also have to do my best to deal with it.”

“It’s [depression and anxiety] cost me two marriages. It’s cost me my children, neither one of them want to see me and talk to me. It’s not any fun.”

“I did get my daughter back, because she wasn’t approving of my lifestyle. I never said I was perfect, I did a lot of things I shouldn’t have been doing. But it was my wake up call, and you know, I quit smoking, I haven’t smoked since that morning. I have not had a cigarette, and that’s a lot because I smoked for 41 years and I never thought I would ever, ever be able to quit smoking. And I figure if I can do it, anybody can quit smoking.”
“If mom isn’t there to juggle everything, everything else just kind of folds.”

“Yeah, I think the shift in the family unit, divorces and stuff, has really changed how our society views food and how we view health.”

“And they’re only working part-time, because the jobs, they don’t have the time to spend with the kids because the jobs are 32 hours a week at four in the morning or 12 at night or whatever it is.”
Personal Responsibility
People realize that there are benefits to making positive lifestyle choices. However, while there are obvious benefits to quitting smoking, not abusing substances, and seeking mental health care when needed, it is not easy and people have to first truly want to make the changes.

**Key Themes – Personal Responsibility**

- Mentions of benefiting from taking personal control of one’s life/actions
- People have to be willing to change
  - Smoking
  - Substance abuse/sobriety
  - Seeking mental health support
- Several participants mentioned elderly relatives who were reluctant to become involved in existing community events/programs
“*I lost weight on my own. I got tired of people calling me fat.* And I was 225 and I’ve lost over 50 pounds myself.”

“*She could go to the Methodist Church and get a meal and she won’t even do that.*”

“*My higher power is a positive mental attitude* and one that I can conquer everything. *I can make it through every situation with a positive mental attitude.* Or I can, like I’ve heard just so many times, I can give up and dwell in a world of hopeless negativity.”

“And *that’s why I’ve gotten rid of toxic people in my life.* For the last three years I’ve done nothing, nothing, and bad people came into my life, and I can’t blame everyone, I’m an adult, I’ve made choices. They weren’t all good choices, and I’m trying to make up for that now, and it’s getting easier.”
Social, Economic, and Environmental Factors
Although residents like the communities they live in, they added that it can be difficult to connect with other residents especially if they are not getting out as much due to physical limitations. Financial limitations due to the cost of transportation, health care, and everyday bills place a strain on everyday life, and this is exacerbated if one is unemployed. Participants reiterated a need for free or low cost health programs, exercise facilities, and healthy food.

**Key Themes – Social, Economic, and Environmental Factors**

- Many participants talked about growing up in this community and wanting to stay here
- Cost and stress of having to provide for extended families
- Costs, ranging from health care to transportation to housing to other bills, end up being overwhelming for many families
- Reaching the community can be difficult, even with newspapers, Facebook, etc.
- Participants talked about being unable to work and the effect on happiness, income, and lifestyle
- While many existing health and food distribution programs were noted, the need for regular, free, easy-to-access health and exercise programs and food distribution programs with quality food were discussed
“I’m also a **conservatorship for three great grandsons** who are 3, 4 and 5.”

“I pay for education instead of getting free education because I think they [my children] get a better education that way.”

“And then **you have to fight with the teachers because they’re pushing it [Ritalin]**. And the one thing I got mad about with public school is they all think they have a degree in medicine and they know exactly what she needs...Part of it would maybe be restructuring these school districts for better teachers to cope with kids that [inaudible] I would say flamboyant, more out there, more outgoing.”

“And that’s **another thing we have a problem with in our community, is communication.**”

“I don’t know how somebody making $10.00 an hour can afford a house, food, gas and utilities.”

“I’ve been fortunate enough, I’ve lived in this community long enough, I know a lot of the farmers and I’m getting reduced rates on beef and stuff like that, but that’s just – that’s not out to the general public. She’s right. **Tom’s is expensive. So is the local supermarket.**”

“Well, when I had my surgery a lot of things went wrong and I worked construction for 21 years, made a lot of money, enjoyed my life and now I’m not able to even do it. And I’ve lost a huge amount of income and it’s hard.”

[Regarding transportation issues]: “What I’m getting at is **if you’re in the courts for DUI or anything, you got to go to these meetings. They make you.”**
Barriers to Care
The cost of health care is a tremendous burden for the underserved population. Further, a paradox emerges where many feel trapped in their low-paying or part-time jobs because a higher income would disqualify them from benefits they’ve obtained on the basis of their socioeconomic and/or disability status. The cost of transportation to and from health care visits magnifies the financial difficulties.

**Key Themes – Barriers to Care**

- Medical costs, whether it is for insurance premiums, co-pays, prescriptions, or other out of pocket costs, are an extreme burden on this population
  
  - Many participants referenced being unable to earn more income, as that would disqualify them from benefits that they need to cover their medical expenses, and the increase in income would not offset the loss of benefits

- Cost and time related to transportation to far away providers, especially for those with chronic diseases that require many provider visits

- There was a mixed opinion about health care reform – for some, access and affordability have improved; for others things have gotten worse

- School policies that require a doctor’s note to excuse an absence are burdensome because of cost, transportation, and quick access to primary care physicians
In addition to transportation issues, other social factors that impact quality of life in the region include the lack of affordable housing, the condition of existing housing, lack of access to affordable healthy food, lack of low cost exercise facilities, and lack of places to exercise in inclement weather.

**Key Themes – Barriers to Care (Continued)**

- Transportation is an ongoing issue
  - Lack of access to many resources due to transportation costs, lack of convenient public transportation
  - May keep those in rural settings in social isolation
  - Rural setting means residents may spend a lot of time traveling

- Lack of affordable rental housing, especially in Hastings

- Many participants have older homes that need major repairs

- Outside of individual gardens, it can be hard to obtain access to quality fruits and vegetables (distance and cost)

- Lack of exercise, especially outdoors by children, due to a variety of factors

- More facilities/opportunities are needed for exercise by those of all ages, especially free or at very low cost
Verbatim Comments on the Barriers to Care

“I think one thing when you talk about driving is that for those right here in Nashville, we do have a doctor’s office, which is very nice, but there’s no providers there on Friday. And you might have trouble with your kid, and you’ve got to get them in on the same day that they’re sick, to get an excuse for school.”

“Our healthcare insurance used to be fantastic, until the new insurance came in, and I have two special needs kids. My son, on the autism spectrum, ended up not being covered anymore for any of his services so we’re really struggling even with the kids on disability because of the level, it’s a low level of disability, so it’s a low level that’s covered every month.”

“Actually, when my husband worked, when he didn’t have health insurance, I had it through the health department, which was great, and I loved going there, you know $10 for my office calls. And I was really bummed out when he did get health insurance because I wanted to keep going there, I loved my doctor, she was awesome, but I couldn’t.”

“And in my family, my husband gets two checks, I get two checks. One of my checks goes for medical, that’s all it goes for… I look at my 24 year old, and I don’t see her getting a house, because her medical insurance is so expensive.”

“We’re getting it next year, but mine does cover dental. I just got to find one in the network.”

“…The only other issue that I have is having to go all the way to Ann Arbor for my liver issues. That’s kind of hard instead of going to Grand Rapids or something.”

“And we make so many doctor trips in a month. Well, July we had 13 doctor visits. In December we’re going to have eight and three of them are in Grand Rapids. And we live down in Dowling.”
“That’s one thing I struggle with. I work from 5:00 to 5:00 every day and the transit closes at 5:00.”

“We drive – our transportation cost a month runs us between $800.00 to $1,000.00 a month just in fuel. It’s ridiculous.”

“Well, I’m not meaning that far away, but the little towns around us, the same exact thing [rental housing] is way cheaper than in Hastings.”

“We have a 100 year old house. So we do have a little bit of lead paint, but it’s not peeling so that’s good. But it does get very drafty.”

“Every time you drive in Nashville or in Barry County you’ll see a lot of houses that need help.”

“My toilet grows mold inside the toilet. I can clean it with bleach and cleanser, two days later the mold grows back in there.”

“Well that is one good thing about this being a small town, most of my running is with the grandkids to school and to school things, there is no really fast food place.”

“…we’re trying to teach the youngest of the population what is a better selection and get that into the classroom really early when it matters. But they have trouble…when they go into the stores, the fruits are like $5 for a cantaloupe, and it’s mush.”

“We’ve got a program starting probably in the next three weeks, we’re launching it, where we’re actually going on the playground with the kids so that they’re doing all play. Kid’s play, it’s what we’re calling it, and the adults, the volunteers, will actually teach the kids how to play among one another. It’s more active play than they are currently exposed to on our playground, because right now it’s kind of individualized play and it’s not really being active.”
“From the high school to Nashville, the only path you have is the trail back there, which is unpaved, so it’s hard to walk, or it’s muddy. Or the main street, which they go 60 or 70 miles an hour.”

“I like that we live in a safe community [Nashville] and I like that the school offers the buildings for walking in the mornings and that they leave the track open all year round for the residents to go walk on the track.”

“In this community it went from a farm community to a technological community so fast and now kids are surfing the digital highway at age 6 and 7 and they have no idea what kind of world they’re getting into.”

“I never thought Hastings would ever come down to the place where we got a Walgreens robbed at gunpoint.”
Opportunity Measures
Final thoughts on social inequalities highlight the stigma of having Medicaid or Medicare health coverage, long wait times when applying for disability, having to advocate for oneself when it comes to health problems, and the challenges of eating well and getting enough exercise when faced with financial limitations.

**Key Themes – Opportunity Measures**

- Discrimination experienced in medical care due to being on Medicaid/Medicare/uninsured
- Several participants mentioned the frustration of trying to apply for disability – long wait times, having to apply multiple times
- Having to be your own advocate, especially for your medical conditions, is necessary and often overwhelming
- Participants addressed many changing aspects of our culture, including a lack of “life skills,” changing family dynamics, and how we view and obtain food and exercise
“Well, we’ve noticed with the boys, too, with Medicaid you’re treated different than when we had healthcare. There is a huge difference there.”

“Because they’re getting more handouts to people as you have more kids. That’s the basis of it. If we had another child, we’d get more help. But we don’t want to have another child, so we get less help, which doesn’t make sense because we need a little bit more help.”

“And we do a lot of the legwork. We call it a lot of the, I say I’m a Google neurologist, I have my medical degree in Google. And it’s because literally, as with my mom’s case, with myself, you have to case what is wrong with you, so that you can say, this is what’s wrong with me.”

“Kids do a lot with their fingers now, my grandson, he’s six years old, he still has issues with forks, because of finger foods.”
APPENDIX
METHODOLOGY
Methodology

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

<table>
<thead>
<tr>
<th>Data Collection Methodology</th>
<th>Target Audience</th>
<th>Number Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Stakeholders</td>
<td>In-Depth Telephone Interviews</td>
<td>10</td>
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<tr>
<td>Key Informants</td>
<td>Online Survey</td>
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<tr>
<td>Community Residents</td>
<td>Telephone Survey</td>
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<td>Community Residents (Underserved)</td>
<td>Self-Administered (Paper) Survey</td>
<td>69</td>
</tr>
<tr>
<td>Community Residents (Underserved)</td>
<td>Focus Groups</td>
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- Secondary data was derived from various government and health sources such as the U.S. Census, Michigan Department of Community Health, County Health Rankings, Youth Risk Behavior Survey, Youth Assessment Survey, Kids Count Data, and Bureau of Labor Statistics.
Methodology (Continued)

- A total of 10 Key Stakeholders completed an in-depth interview. Key Stakeholders were defined as executive-level community leaders who:
  - Have extensive knowledge and expertise on public health issues
  - Can provide a “50,000 foot perspective”
  - Are often involved in policy decision making
  - Examples include hospital administrators and clinic executive directors

- A total of 27 Key Informants completed an online survey. Key Informants are also 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 or directors of non-profit organizations

- *There were 500 telephone surveys completed with adults age 18 or older who are: (1) the health care decision makers in their household and (2) residents of either the primary or secondary service area of SHPH based on their zip code.

*Note: This portion of the CHNA (data collection, analysis) was conducted by Healthstream.
Methodology (Continued)

- A total of 69 underserved residents completed a self-administered survey that was distributed at a Fresh Food Initiative in the fall of 2015.

- *A total of 25 underserved area adults participated in one of three focus groups held in the fall of 2015 in Delton, Hastings, and Nashville. As underserved residents, they had to meet at least one of the following criteria:
  - On Medicaid/Medicare/WIC
  - No health insurance or underinsured
  - Low income or unemployed
  - Use food stamps or a food bank/pantry
  - Have a mental health condition, physical disability, or be in recovery

*Note: This portion of the CHNA (data collection, analysis) was conducted by Barry-Eaton District Health Department.*
Respondent Profiles
Key Stakeholder Interviews

- Board Member, Barry County Healthcare Coalition
- Deputy Health Officer, Barry Eaton District Health Department
- Director, Barry Eaton District Health Department
- Executive Director, Barry County Community Mental Health Authority
- Executive Director, Barry County United Way
- Executive Director, Barry County Commission on Aging
- President, Spectrum Health Pennock Hospital
- Substance Abuse Prevention Supervisor, Barry County Community Mental Health Authority
- Vice President, Finance, Spectrum Health Pennock Hospital
- Vice President, Physician Network, Spectrum Health Pennock Hospital
Key Stakeholder Interviews

- Board-certified Family Physician at Spectrum Health Delton Family Medicine
- Consultant, Drug Safety
- Director of Surgical and Emergency Services at Spectrum Health Pennock
- ED Physician and director
- Executive Director
- LPC
- M.D., M.A. (Biomedical and Clinical Ethics), FAAFP
- Medical Director, Free Clinic
- Medical Director, Health Department
- Nurse Practitioner (4)
- PA-C (3)
- Pediatrician
- Pharmacist
- Physician (8)
- RN, Director at Pennock
## Community Health Needs Assessment Survey

### Gender
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### Age
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<td>Member of Unmarried Couple</td>
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### Education
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<td>Grades 9-11, some high school</td>
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<td>32.0%</td>
</tr>
<tr>
<td>College 1-3 years</td>
<td>32.0%</td>
</tr>
<tr>
<td>College 4 years or more (degree)</td>
<td>32.0%</td>
</tr>
</tbody>
</table>

### Number of Adults in Household
<table>
<thead>
<tr>
<th>Number of Adults in Household</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>33.0%</td>
</tr>
<tr>
<td>2</td>
<td>48.0%</td>
</tr>
<tr>
<td>3 to 4</td>
<td>18.0%</td>
</tr>
<tr>
<td>5 or More</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

### Number of Children Under Age 5
<table>
<thead>
<tr>
<th>Number of Children Under Age 5</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>64.0%</td>
</tr>
<tr>
<td>1</td>
<td>20.0%</td>
</tr>
<tr>
<td>2 or More</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

### Employment Status
<table>
<thead>
<tr>
<th>Employment Status</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed for Wages</td>
<td>38.0%</td>
</tr>
<tr>
<td>Self-Employed</td>
<td>6.0%</td>
</tr>
<tr>
<td>Out of Work</td>
<td>2.0%</td>
</tr>
<tr>
<td>Homemaker</td>
<td>5.0%</td>
</tr>
<tr>
<td>Retired</td>
<td>36.0%</td>
</tr>
<tr>
<td>Disabled/Unable to Work</td>
<td>13.0%</td>
</tr>
</tbody>
</table>

### Income
<table>
<thead>
<tr>
<th>Income</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $25,000</td>
<td>27.0%</td>
</tr>
<tr>
<td>$25,000 to &lt;$50,000</td>
<td>24.0%</td>
</tr>
<tr>
<td>$50,000 to &lt;$75,000</td>
<td>14.0%</td>
</tr>
<tr>
<td>$75,000 or More</td>
<td>20.0%</td>
</tr>
<tr>
<td>Don't Know/Refused</td>
<td>15.0%</td>
</tr>
</tbody>
</table>
### Community Health Needs Assessment Survey (Continued)

#### County Distribution

<table>
<thead>
<tr>
<th>County</th>
<th>TOTAL (n=444)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegan</td>
<td>16.0%</td>
</tr>
<tr>
<td>Barry</td>
<td>43.0%</td>
</tr>
<tr>
<td>Eaton</td>
<td>4.0%</td>
</tr>
<tr>
<td>Ionia</td>
<td>21.0%</td>
</tr>
<tr>
<td>Kent</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

#### Zip Code Distribution (Primary Service Area)

<table>
<thead>
<tr>
<th>Zip Code</th>
<th>TOTAL (n=500)</th>
</tr>
</thead>
<tbody>
<tr>
<td>48815</td>
<td>2.0%</td>
</tr>
<tr>
<td>48849</td>
<td>5.0%</td>
</tr>
<tr>
<td>48897</td>
<td>1.0%</td>
</tr>
<tr>
<td>49046</td>
<td>7.0%</td>
</tr>
<tr>
<td>49050</td>
<td>1.0%</td>
</tr>
<tr>
<td>49058</td>
<td>19.0%</td>
</tr>
<tr>
<td>49079</td>
<td>10.0%</td>
</tr>
<tr>
<td>49325</td>
<td>1.0%</td>
</tr>
<tr>
<td>49333</td>
<td>7.0%</td>
</tr>
</tbody>
</table>

#### Zip Code Distribution (Secondary Service Area)

<table>
<thead>
<tr>
<th>Zip Code</th>
<th>TOTAL (n=500)</th>
</tr>
</thead>
<tbody>
<tr>
<td>48846</td>
<td>14.0%</td>
</tr>
<tr>
<td>48890</td>
<td>1.0%</td>
</tr>
<tr>
<td>49096</td>
<td>2.0%</td>
</tr>
<tr>
<td>49316</td>
<td>16.0%</td>
</tr>
<tr>
<td>49344</td>
<td>3.0%</td>
</tr>
<tr>
<td>49348</td>
<td>11.0%</td>
</tr>
</tbody>
</table>
Resident (Underserved) Survey

<table>
<thead>
<tr>
<th>Gender</th>
<th>TOTAL (n=48)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>31.3%</td>
</tr>
<tr>
<td>Female</td>
<td>68.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race</th>
<th>TOTAL (n=64)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White/Caucasian</td>
<td>90.6%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>1.6%</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>4.7%</td>
</tr>
<tr>
<td>Native Hawaiian/Pacific</td>
<td>1.6%</td>
</tr>
<tr>
<td>Other</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>TOTAL (n=18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexican</td>
<td>11.1%</td>
</tr>
<tr>
<td>Filipino</td>
<td>5.6%</td>
</tr>
<tr>
<td>Other</td>
<td>83.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>TOTAL (n=61)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 9th grade</td>
<td>1.6%</td>
</tr>
<tr>
<td>Grades 9-11, some high school</td>
<td>11.5%</td>
</tr>
<tr>
<td>Grade 12 or GED, HS graduate</td>
<td>66.7%</td>
</tr>
</tbody>
</table>
| College 1-3 years | 26.2% 
| College 4 years or more (degree) | 1.6% |

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>TOTAL (n=58)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>32.8%</td>
</tr>
<tr>
<td>Divorced</td>
<td>24.1%</td>
</tr>
<tr>
<td>Widowed</td>
<td>8.6%</td>
</tr>
<tr>
<td>Separated</td>
<td>1.7%</td>
</tr>
<tr>
<td>Single</td>
<td>31.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Domestic partnership</th>
<th>TOTAL (n=52)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>21.2%</td>
</tr>
<tr>
<td>2</td>
<td>26.9%</td>
</tr>
<tr>
<td>3</td>
<td>11.5%</td>
</tr>
<tr>
<td>4</td>
<td>15.4%</td>
</tr>
<tr>
<td>5</td>
<td>9.6%</td>
</tr>
<tr>
<td>More than 5</td>
<td>15.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number Of People That Live with Respondent</th>
<th>TOTAL (n=52)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100.0%</td>
</tr>
<tr>
<td>2</td>
<td>46.7%</td>
</tr>
<tr>
<td>Rent</td>
<td>53.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Children in Household Between 5 and 17 Years Old</th>
<th>TOTAL (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>31.8%</td>
</tr>
<tr>
<td>2</td>
<td>27.3%</td>
</tr>
<tr>
<td>3</td>
<td>18.2%</td>
</tr>
<tr>
<td>4</td>
<td>13.6%</td>
</tr>
<tr>
<td>5</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Children in Household 18 Years or Older</th>
<th>TOTAL (n=28)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>39.3%</td>
</tr>
<tr>
<td>2</td>
<td>25.0%</td>
</tr>
<tr>
<td>3</td>
<td>10.7%</td>
</tr>
<tr>
<td>4</td>
<td>17.9%</td>
</tr>
<tr>
<td>5</td>
<td>3.6%</td>
</tr>
<tr>
<td>More than 5</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>TOTAL (n=62)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployed</td>
<td>67.7%</td>
</tr>
<tr>
<td>Self-Employed</td>
<td>1.6%</td>
</tr>
<tr>
<td>Employed Part-Time</td>
<td>4.8%</td>
</tr>
<tr>
<td>Employed Full-Time</td>
<td>6.5%</td>
</tr>
<tr>
<td>Retired</td>
<td>11.3%</td>
</tr>
<tr>
<td>Disabled</td>
<td>8.1%</td>
</tr>
</tbody>
</table>
### Resident (Underserved) Survey (Continued)

#### Household Income (n=59)

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $20K</td>
<td>76.3%</td>
</tr>
<tr>
<td>$20K to $40K</td>
<td>20.3%</td>
</tr>
<tr>
<td>$40K to $60K</td>
<td>1.7%</td>
</tr>
<tr>
<td>$60K to $80K</td>
<td>0.0%</td>
</tr>
<tr>
<td>$80K to $100K</td>
<td>1.7%</td>
</tr>
<tr>
<td>$100K to $120K</td>
<td>0.0%</td>
</tr>
<tr>
<td>More than $120K</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

#### County (n=56)

<table>
<thead>
<tr>
<th>County</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barry</td>
<td>94.6%</td>
</tr>
<tr>
<td>Eaton</td>
<td>1.8%</td>
</tr>
<tr>
<td>Ionia</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

#### Township/City (n=59)

<table>
<thead>
<tr>
<th>City</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hastings</td>
<td>64.4%</td>
</tr>
<tr>
<td>Freeport</td>
<td>6.8%</td>
</tr>
<tr>
<td>Middleville</td>
<td>6.8%</td>
</tr>
<tr>
<td>Nashville</td>
<td>6.8%</td>
</tr>
<tr>
<td>Lake Odessa</td>
<td>5.1%</td>
</tr>
<tr>
<td>Delton</td>
<td>3.4%</td>
</tr>
<tr>
<td>Woodland</td>
<td>3.4%</td>
</tr>
<tr>
<td>Dowling</td>
<td>1.7%</td>
</tr>
<tr>
<td>Vermontville</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

#### Zip Code (n=62)

<table>
<thead>
<tr>
<th>Zip Code</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>49058</td>
<td>64.5%</td>
</tr>
<tr>
<td>49073</td>
<td>6.5%</td>
</tr>
<tr>
<td>49325</td>
<td>6.5%</td>
</tr>
<tr>
<td>49333</td>
<td>4.8%</td>
</tr>
<tr>
<td>49017</td>
<td>3.2%</td>
</tr>
<tr>
<td>48849</td>
<td>3.1%</td>
</tr>
<tr>
<td>49096</td>
<td>1.6%</td>
</tr>
<tr>
<td>49046</td>
<td>1.6%</td>
</tr>
<tr>
<td>49050</td>
<td>1.6%</td>
</tr>
<tr>
<td>48897</td>
<td>1.6%</td>
</tr>
<tr>
<td>48893</td>
<td>1.6%</td>
</tr>
<tr>
<td>49316</td>
<td>1.6%</td>
</tr>
<tr>
<td>48815</td>
<td>1.6%</td>
</tr>
</tbody>
</table>
Focus Group Participant Characteristics

- 25 total participants
- 76% female
- 100% Caucasian
- Median age of 54 years, range 34-73 years
- 84% had a chronic disease or health condition
- 80% were either not working (and not looking for work), retired, or a stay at home provider
- 60% had an annual income of <$20,000

- Health coverage:
  - 76% with Medicaid and/or Medicare
  - 12% with insurance
  - 4% uninsured

- Disabilities:
  - 60% with a mental health condition
  - 32% with a physical disability
  - 32% with a developmental disability
  - 24% with a sensory impairment
  - 24% are a caretaker for someone with a disability
  - 16% in recovery

- Housing status:
  - 68% have current permanent housing
  - 28% are currently staying with others or have in the past
  - 12% experience(d) current/past homelessness
  - 24% have had other housing issues (mainly living in adult foster cares)
## Previous Implementation Plan Impact

### Pennock Hospital

This document serves as the tool to identify the impact of actions taken to address the significant health needs in the Implementation Plans created as a result from the previous 2013 CHNA.

<table>
<thead>
<tr>
<th>Specific Health Need</th>
<th>Goal</th>
<th>Metric</th>
<th>Impact of Implementation Plan Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The patient to primary care physician ratio of 2,812:1, which is over twice the ratio in Michigan and nearly 3 times higher than the national benchmark</td>
<td>1. Recruit additional physicians and expand advance practice practitioners</td>
<td>1. Recruited and hired 9 primary care providers, 4 specialists and 5 nurse practitioners and 3 physician assistants added over 2-years for a total of 21, “Net,” new providers.</td>
</tr>
</tbody>
</table>
|                      | Barry County Medical Staff practices are at or near capacity for their ability to accept Medicaid. The Free Clinic is open limited days and hours per week | 1. Secure Health Connections Clinic to become a Federally Qualified Healthcare Clinic or develop a revenue stream through private funding for existing clinic operations if unable to get federal funding.  
   a. Pennock provided letters of support  
   b. Hosted and participated in community meetings  
   c. Collaborated with the Barry Eaton District Health Department and the Access to Care Coalition for the addition of a Federally Qualified Health Clinic (FQHC), which is a clinic funded by federal money to increase access to underserved populations | 1. Health Connections Clinic transitioned to Cherry Health. The opening of the Cherry Health Federally Qualified Health Clinic in Hastings provided:  
   • Increased from a part-time (0.65 FTE) Physician and Nurse Practitioner to a one and a half (1.5 FTE) provider team, for a net primary care provider increase of .85. Increased total capacity of the clinic to serve approximately 975, “Net,” new patients.  
   • The addition of 1 Behavioral Health Worker. |
### Previous Implementation Plan Impact

**Pennock Hospital**

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| Difficulty in recruiting physicians to Barry County - most are looking for a large tertiary system after graduating from medical school | 1. Add Graduate Medical School Program to Pennock.  
2. Pennock Rural Healthcare Clinic (RHC) designation for two existing clinics. This accomplishes two things.  
   a. Designation makes recruitment of physicians in Barry County more appealing to candidates due to its medical school loan forgiveness clause.  
   b. It improves reimbursement rates to the clinics from Medicaid and Medicare making it easier for clinics to serve those populations without taking a financial loss. | 1. Upon implementing the Graduate program:  
   • The hospital hosted 37 students and retained three of the physicians from the program after residency. The addition of the physicians should increase access by approximately 3000 patient visits annually.  
2. Spectrum Health Pennock’s Clarksville Family Medicine and Lakewood Family Health Center both received Rural Health Clinic designation, which is an advantageous reimbursement model with a strategy to increase rural Medicare and Medicaid patients' access to primary care services. In addition to increasing access to care, it also improves Spectrum Health Pennock’s ability to recruit new physicians. |

<table>
<thead>
<tr>
<th>Specific Health Need Goal</th>
<th>Metric</th>
<th>Impact of Implementation Plan Strategy</th>
</tr>
</thead>
</table>
| Patient to provider ratio for Dental care is at 3,978:1  
Patients are using the emergency department and urgent care center for dental care | Increase access to dental care through support of community partners. | 1. The opening of the Cherry Health Federally Qualified Health Clinic in Hastings provided dental and oral care services by:  
   • Adding 2 dental care service days per week.  
2. Spectrum Health Pennock purchased 1 dental chair for the Wayland Dental Clinic to expand access for additional unserved patients. |
## Previous Implementation Plan Impact

### Pennock Hospital

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<table>
<thead>
<tr>
<th>Lack of primary care clinics available to manage patient health, increasing preventable hospital stays and chronic disease.</th>
<th>1. Apply for and receive of Patient Centered Medical Home (PCMH) designation in 4 Spectrum Health Pennock primary care clinics. Designation means that the clinics are following specified protocols to manage patient health to prevent hospital stays.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Expand use of health coaches to prevent admissions.</td>
</tr>
<tr>
<td></td>
<td>3. Expand EMR to support patient portal for improved access to Spectrum Health Pennock Physician Network patients and their care team.</td>
</tr>
<tr>
<td></td>
<td>4. Addition of new primary care clinics to serve areas of the county where there is market demand.</td>
</tr>
<tr>
<td>Medicaid expansion in 2014 will increase the volume of newly insured patients trying to get care. Demand will continue to exceed supply and utilization rates for the emergency</td>
<td>1. Provide community education for businesses, navigators, and public as necessary to aid in Medicaid enrollment.</td>
</tr>
<tr>
<td></td>
<td>1. Ongoing support through the (ACC), a community coalition of social service and health care agencies in Barry County, by distributing flyers to patients at all Barry County physician offices, advertising on Pennock’s website, and display of enrollment location posters at all Pennock properties.</td>
</tr>
<tr>
<td></td>
<td>2. 2 Health Coaches were hired.</td>
</tr>
<tr>
<td></td>
<td>3. Electronic Medical Record (EMR) expanded to all 6 Pennock primary care clinics.</td>
</tr>
<tr>
<td></td>
<td>4. 1 new clinic was added.</td>
</tr>
</tbody>
</table>
## Previous Implementation Plan Impact

### Pennock Hospital

This document serves as the tool to identify the impact of actions taken to address the significant health needs in the Implementation Plans created as a result from the previous 2013 CHNA.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Department will be the default for those patients seeking care.</td>
</tr>
<tr>
<td>2.</td>
<td>Develop a patient navigator tool, in collaboration with the community Access to Care Coalition, for social workers aiding those individuals seeking care and payment sources. The Access to Care Coalition (ACC) is a collaborative group consisting of Pennock Hospital, Barry Eaton District Health Department, Barry County Mental Health Authority, Cherry Health Center, Pine Rest, and other concerned community organizations that works to improve access to health care throughout the county by opening communication, identifying gaps and working collaboratively to improve the health of the community through improving access.</td>
</tr>
<tr>
<td>3.</td>
<td>Ensure Pennock has educated social workers and Certified Access Coordinator(s) to assist patients in finding the insurance resources they need.</td>
</tr>
<tr>
<td>4.</td>
<td>Continue outreach through health fairs (blood pressure, blood sugar, and flu shot)</td>
</tr>
<tr>
<td>2.</td>
<td>Patient navigation tool created by Pennock in collaboration with ACC and distributed to all social workers, certified access coordinators, and agencies working with the underserved population to assist in transitioning patients to the proper site of care or insurance.</td>
</tr>
<tr>
<td>3.</td>
<td>The Access Coordinator certification not pursued as the need was assumed by other healthcare providers to fill this need in Barry County. Certified Access Coordinators were provided by the United Way, Cherry Health, and the Barry Eaton Health Department that did not previously have these coordinators offering sufficient navigation for our patient population. In 2013 14% or residents did not have health insurance. That percent decreased to 7% by the end of 2015.</td>
</tr>
<tr>
<td>4.</td>
<td>To directly connect with the area’s underserved populations at community events, Diabetic Educators and Dieticians</td>
</tr>
</tbody>
</table>
Previous Implementation Plan Impact

**Pennock Hospital**

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| clinics | attended the two Barry County Resource fairs and the two community health fairs offered at Hastings High School (in year one and again in year two) to offer blood pressure screenings, blood sugar level checks, and nutritional counseling. Additionally, community flu shot clinics were offered at each of 6 Pennock primary care clinics each year. |
### Previous Implementation Plan Impact

**Pennock Hospital**

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<table>
<thead>
<tr>
<th>Specific Health Need Goal</th>
<th>Metric</th>
<th>Impact of Implementation Plan Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of education healthy foods</td>
<td>Pennock is the largest employer in Hastings and the second largest in Barry County. Pennock will demonstrate effective use of policy and environmental change to model health improvement and make an impact on a large segment of the population.</td>
<td></td>
</tr>
<tr>
<td>Inadequate physical activity</td>
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<tr>
<td>Lack of access to recreational facilities</td>
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<td>1. Pennock facilities will provide nutritional labeling and healthy food and beverage options onsite by serving locally grown produce in the cafeteria, increasing the number of healthier dietary choices, and decreasing the number of processed foods available for employees, patients, and visitors in coordination with the Michigan Health and Hospital Association’s (MHA) Healthy Food Hospital’s campaign where hospitals pledge to offer healthier choices.</td>
<td>The following initiatives were implemented:</td>
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<td>2. Continue onsite farmer’s market to ensure increased access to fresh produce.</td>
<td>1. Pennock eliminated sugar-sweetened beverages and is now offering healthy options specifically designated on menus for staff and visitors. Implemented an “At Your Request” meal room service for employees and visitors allowing greater access to nutritious food when the cafeteria is closed. Pennock works with local farms in summer months to provide local, healthy food options in the cafeteria. Healthy food options are defined as unprocessed whole foods without heavy creams or high-fat sauces and prepared in ways that are minimally disruptive to the original nutritional value.</td>
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<tr>
<td>3. Support and promote community activities that promote physical activity and healthy eating.</td>
<td>2. The onsite hosting of the farmer’s market started in the summer of 2014 and is ongoing.</td>
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### Previous Implementation Plan Impact

#### Pennock Hospital

This document serves as the tool to identify the impact of actions taken to address the significant health needs in the Implementation Plans created as a result from the previous 2013 CHNA.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details</th>
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<tbody>
<tr>
<td>Care givers attended, with 18 having 100% attendance over the 6-week session. A second session will be held in June 2016.</td>
<td>B. Healthy is a coalition Pennock participates in. Pennock provided staff to conduct the B. Healthy Families program, which teaches kids and their parents the importance of physical activity and ways to be active. Additionally, all families who participated received scholarships to attend YMCA sports activities and fun runs for one year to help families remain active and remove barriers. A Second B. Healthy Families program is planned for summer 2016 through Pennock’s diabetes educator.</td>
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<tr>
<td><strong>•</strong> Support the activities of the B. Healthy Coalition against obesity and 5-2-1-0 education. 5-2-1-0 was adopted from Blue Cross Blue Shield and encourages people to eat 5 fruits and vegetables per day, engage in 2 or more hours of physical activity per day, 1 hour or less of screen time, and consume 0 sugar-sweetened beverages.</td>
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<td><strong>•</strong> Ongoing participation and education events sponsored by partners such as the YMCA, health fairs, and various expos.</td>
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<td><strong>•</strong> Safe Routes to Schools: Approval and funding received with implementation in 2016.</td>
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<td><strong>•</strong> Nutritional counseling in schools.</td>
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<td><strong>•</strong> Collaborated with B. Healthy Coalition and MSU dietician to increase the number of restaurants in Barry County featuring healthy choice items designated with the B. Healthy icon. Over the past 2-years, 4 restaurants have adopted the symbol and offer B. Healthy education materials at the restaurant.</td>
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Previous Implementation Plan Impact

Pennock Hospital

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4. Provide community diabetic education.

5. Support policy change to improve health and an active lifestyle.

6. Provide education to other businesses to aid in health improvement efforts or to develop a health improvement plan with staff through Healthy Worksites and the Barry Eaton Health Department. The program is designed for small businesses that do not have money to invest in health gym memberships or other similar benefits.

4. Diabetes efforts included:
   - Diabetic Educator provided counseling and education at 4 community health fairs.
   - In 2016, Pennock increased a Diabetes Educator from part-time to full-time to offer diabetic education to the Pennock inpatient population and to allow for greater community education opportunities.

5. Continue work with B. Healthy Coalition through staffing to assist in community health improvement education and policy change efforts.

6. Health improvements for businesses included:
   - Hosted one Healthy Worksites education program for Barry Eaton District Health Department. From this program, the Health Department engaged two new businesses to participate and implement physical activities and nutritious foods into their work environment for employees.

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<thead>
<tr>
<th>Specific Health Need Goal</th>
<th>Metric</th>
<th>Impact of Implementation Plan Strategy</th>
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<tbody>
<tr>
<td>Tobacco Use Reduction</td>
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<tr>
<td>Lack of policy to prevent exposure to second hand smoke</td>
<td>Support the tobacco cessation activities of the local coalition that include:</td>
<td>Pennock supports efforts ongoing in all areas by attending Tobacco Reduction Coalition meetings. The Barry County Substance Abuse Task Force and Barry Tobacco Reduction Coalition are focusing efforts to get physicians and dentists onboard with implementing the Ask-Advise-Connect (AAC) cessation programming.</td>
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## Previous Implementation Plan Impact

### Pennock Hospital

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| 1. Reduction in the rate of maternal smoking during pregnancy and lower the general adult population smoking rate through tobacco cessation education. | 1. Education has been provided by:  
- Pennock physicians have integrated AAC into the standard practice of care and distribute associated materials to patient populations needing treatment.  
- ACC materials are available at patients’ bedside.  
- Programming within the clinics and distribution of resources to direct patients to Quit Line. |
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<tr>
<td>2. Create smoke-free parks, beaches, and other public spaces by supporting local policies.</td>
<td>2. Pennock implemented a smoke-free campus and lobbied the City of Hastings for smoke-free parks. 4 parks are now designated smoke-free zones.</td>
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<td>3. Implement Electronic Medical Record (EMR) Quit line connectivity.</td>
<td>3. Completed implementation of EMR Quit line connection. When a patient identifies themselves as wanting to quit smoking, that information is entered into their electronic medical record, triggering information to go to the patient and registering them with the American Cancer Society’s Quit Line.</td>
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