

Community Health Needs Assessment for:

Zeeland Community Hospital d/b/a Spectrum Health Zeeland Community Hospital

Spectrum Health is a not-for-profit health system, based in West Michigan, offering a full continuum of care through the Spectrum Health Hospital Group, which is comprised of 12 hospitals, including Helen DeVos Children's Hospital; 180 ambulatory and service sites; 3,600 physicians and advanced practice providers, including 1,500 members of the Spectrum Health Medical Group; and Priority Health, a health plan with 779,000 members. Spectrum Health is West Michigan's largest employer, with 26,000 employees. The organization provided \$372 million in community benefit during its 2017 fiscal year. Spectrum Health was named one of the nation's 15 Top Health Systems—and in the top five among the largest health systems—in 2017 by Truven Health Analytics®, part of IBM Watson Health™. This is the sixth time the organization has received this recognition.

Community Health Needs Assessment – Exhibit A

The focus of this Community Health Needs Assessment (CHNA) attached in Exhibit A is to identify the community needs as they exist during the assessment period (2017-2018), understanding fully that they will be continually changing in the months and years to come. For purposes of this assessment, “community” is defined as the county in which the hospital facility is located. This definition of community based upon county lines, is similar to the market definition of Primary Service Area (PSA). The target population of the assessment reflects an overall representation of the community served by this hospital facility. The information contained in this report is current as of the date of the CHNA, with updates to the assessment anticipated every three (3) years in accordance with the Patient Protection and Affordable Care Act and Internal Revenue Code 501(r). This CHNA complies with the requirements of the Internal Revenue Code 501(r) regulations either implicitly or explicitly.

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

Attached in Exhibit B is an evaluation of the impact of any actions that were taken, since the hospital facility finished conducting its immediately preceding CHNA, to address the significant health needs identified in the hospital facility's prior CHNA.

2017 Community Health Needs Assessment, Ottawa County, MI

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Executive
Summary



Background



Methodology



Findings &
Implications

Table of Contents

	Page
Introduction	3
Financial Contributors	4
Task Force	5
Background and Objectives	6
Methodology	9
GIS Section Map	18
Executive Summary and Key Findings [Significant Health Needs]	19
Detailed Findings	44
Social Indicators	45
Community Characteristics	56
Health Status Indicators	68
Health Care Access	87
Risk Behavior Indicators	114
Clinical Preventive Practices	128
Chronic Conditions	135
Solutions and Strategies	141
Appendix	154
Respondent Profile	155

INTRODUCTION

Financial Contributors

The following community organizations are responsible for primary funding of the 2017 Ottawa County Community Health Needs Assessment:



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Background and Objectives

- VIP Research and Evaluation was contracted by the Community Health Needs Assessment (CHNA) team of Ottawa County to conduct a Community Health Needs Assessment, which included a Behavioral Risk Factor Survey (BRFS).
- 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 Ottawa County communities began meeting to discuss how the community could collectively meet the requirement of a CHNA. Currently these partners comprise a task force consisting of Ottawa County Department of Public Health, Community Mental Health of Ottawa County, Holland Hospital, North Ottawa Community Health System, Spectrum Health Zeeland Community Hospital, and the Greater Ottawa County United Way.



Background and Objectives (Continued)

- Information collected from this research will be utilized in the Community Health Needs Assessment for the three hospitals in Ottawa County and in the Health section of the broader United Way Community Assessment.
- The information collected will be used to:
 - ❖ Prioritize health issues and develop strategic plans
 - ❖ Monitor the effectiveness of intervention measures
 - ❖ Examine the achievement of prevention program goals
 - ❖ Support appropriate public health policy
 - ❖ Educate the public about disease prevention through dissemination of information
- The overall objective of the CHNA is to obtain information and feedback from Ottawa County residents, health care professionals, and key community leaders in various industries and capacities about a wide range of health and health care topics to gauge the overall health climate of Ottawa County.



Background and Objectives (Continued)

- More specific objectives include measuring:
 - ❖ Social indicators, such as crime rates, education, and poverty rates
 - ❖ Community characteristics, such as resources, collaboration, and volunteerism
 - ❖ Physical health status indicators, such as life expectancy, mortality, physical health, disability, chronic conditions, chronic pain, and weight status
 - ❖ Mental health status indicators, such as psychological distress, anxiety disorder, depressive disorder, and suicide
 - ❖ Health risk behaviors, such as smoking and tobacco use, drinking, diet, and physical activity
 - ❖ Clinical preventative measures, such as routine physical checkups, oral health, and immunizations
 - ❖ Disparities in health
 - ❖ Positive and negative health indicators
 - ❖ Accessibility of health care
 - ❖ Barriers to health care
 - ❖ Gaps in health care services or programs



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:

	Data Collection Methodology	Target Audience	Number Completed
Key Stakeholders	In-Depth Telephone Interviews	Hospital Directors, Clinic Executive Directors	10
Key Informants	Online Survey	Physicians, Nurses, Dentists, Pharmacists, Social Workers	91
Community Residents (Underserved)	Self-Administered (Paper) Survey	Vulnerable and underserved sub-populations	489
Community Residents	Telephone Survey (BRFS)	Ottawa County Adults (18+)	1,318

- Secondary data was derived from local hospital utilization data and various government and health sources such as the U.S. Census, Michigan Department of Health and Human Services, County Health Rankings, Youth Risk Behavior Survey, Youth Assessment Survey, and Kids Count Database.



Methodology (Continued)

- Of the 10 Key Stakeholders invited to participate, all 10 completed an in-depth interview (100% response rate). Key Stakeholders were defined as executive-level community leaders who:
 - ❖ Have extensive knowledge and expertise on public health and/or human service issues
 - ❖ Can provide a “50,000 foot perspective”
 - ❖ Are often involved in policy decision-making
 - ❖ Examples include hospital administrators and clinic executive directors
- The number of Key Informants participating this iteration increased 18.0% from 77 in 2014 to 91 in 2017. 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 (e.g., physicians, nurses, dentists, pharmacists, social workers) or directors of non-profit organizations



Methodology (Continued)

- There were 489 self-administered surveys completed by targeted sub-populations, such as single mothers with children; senior adults; those uninsured, underinsured, or with Medicaid; and Hispanics. The following organizations received paper surveys and assisted in distributing to their clientele:
 - ❖ City On A Hill Health Clinic
 - ❖ Community Action House
 - ❖ Coopersville Cares
 - ❖ Four Points Senior Center
 - ❖ Georgetown Connections
 - ❖ Good Samaritan Ministries
 - ❖ Grand Haven Salvation Army
 - ❖ Harvest Stand Ministries
 - ❖ Holland Community Health Center
 - ❖ Holland Hospital
 - ❖ Jehovah Jireh Ministries
 - ❖ Love In Action
 - ❖ Love INC (Allendale, Hudsonville)
 - ❖ North Ottawa Community Hospital
 - ❖ Ottawa County Community Mental Health
 - ❖ Ottawa County Department of Public Health
 - ❖ Pathways to Better Health
 - ❖ Spectrum Health Zeeland Community Hospital
 - ❖ The People Center



Methodology (Continued)

- A Behavioral Risk Factor Survey was conducted among 1,318 Ottawa County adults (age 18+) via telephone. The response rate was 38%.
- Disproportionate stratified random sampling (DSS) was used to ensure results could be generalized to the population of Ottawa County. DSS utilizes both listed and unlisted landline sample, allowing everyone with a landline telephone the chance of being selected to participate.
- In addition to landline telephone numbers, the design also targeted cell phone users. Of the 1,318 completed surveys:
 - ❖ 613 are cell phone completes (46.5%), and 705 are landline phone completes (53.5%)
 - ❖ 466 are cell-phone-only households (35.4%)
 - ❖ 170 are landline-only households (12.9%)
 - ❖ 682 have both cell and landline numbers (51.7%)
- For landline numbers, households were selected to participate subsequent to determining that the number was that of an Ottawa County residence. Vacation homes, group homes, institutions, and businesses were excluded.



Methodology (Continued)

- Respondents were screened to ensure they were at least 18 years of age and resided in Ottawa County, or resided in one of four zip codes that overlap with Ottawa County and neighboring counties (49404, 49423, 49448, 49456) that are considered to be service areas by health care and health-related organizations.
- In households with more than one adult, interviewers randomly selected one adult to participate based on which adult had the nearest birthday. In these cases, every attempt was made to speak with the randomly chosen adult; interviewers were instructed to not simply interview the person who answered the phone or wanted to complete the interview.
- Spanish-speaking interviewers were used where Spanish translation/interpretation was needed.
- The 1,318 households represent 1.4% of the 96,283 households in Ottawa County according to the 2016 U.S. Census estimate.
- The margin of error for the entire sample of 1,318, at a 95% confidence level, is +/- 2.7%. This calculation is based on a population of roughly 213,331 Ottawa County residents 18 years or older, according to the 2016 U.S. Census estimate.



Methodology (Continued)

- Unless noted, consistent with the Michigan BRFs, respondents who refused to answer a question or did not know the answer to a specific question were excluded from analysis. Thus, the base sizes vary throughout the report.
- Data weighting is an important statistical process that was used to remove bias from the BRFs sample. The formula consists of both design weighting and iterative proportional fitting, also known as “raking” weighting. The purposes of weighting the data are to:
 - ❖ Correct for differences in the probability of selection due to non-response and non-coverage errors
 - ❖ Adjust variables of age, gender, race/ethnicity, marital status, education, home ownership, and region to ensure the proportions in the sample match the proportions in the population of Ottawa County adults
 - ❖ Allow the generalization of findings to the entire Ottawa County adult population
- The formula used for the final weight is: Design Weight X Raking Adjustment



Methodology (Continued)

- Adverse Childhood Experiences (ACEs) data were collected using the BRFSS 11-item version. The 11 items measure the following adverse groups and subgroups:

- ❖ Abuse:

- Emotional abuse
- Physical abuse
- Sexual abuse

- ❖ Household challenges:

- Intimate Partner Violence
- Household Substance Abuse
- Household Mental Illness
- Parental Separation or Divorce
- Incarcerated Household Member



Methodology (Continued)

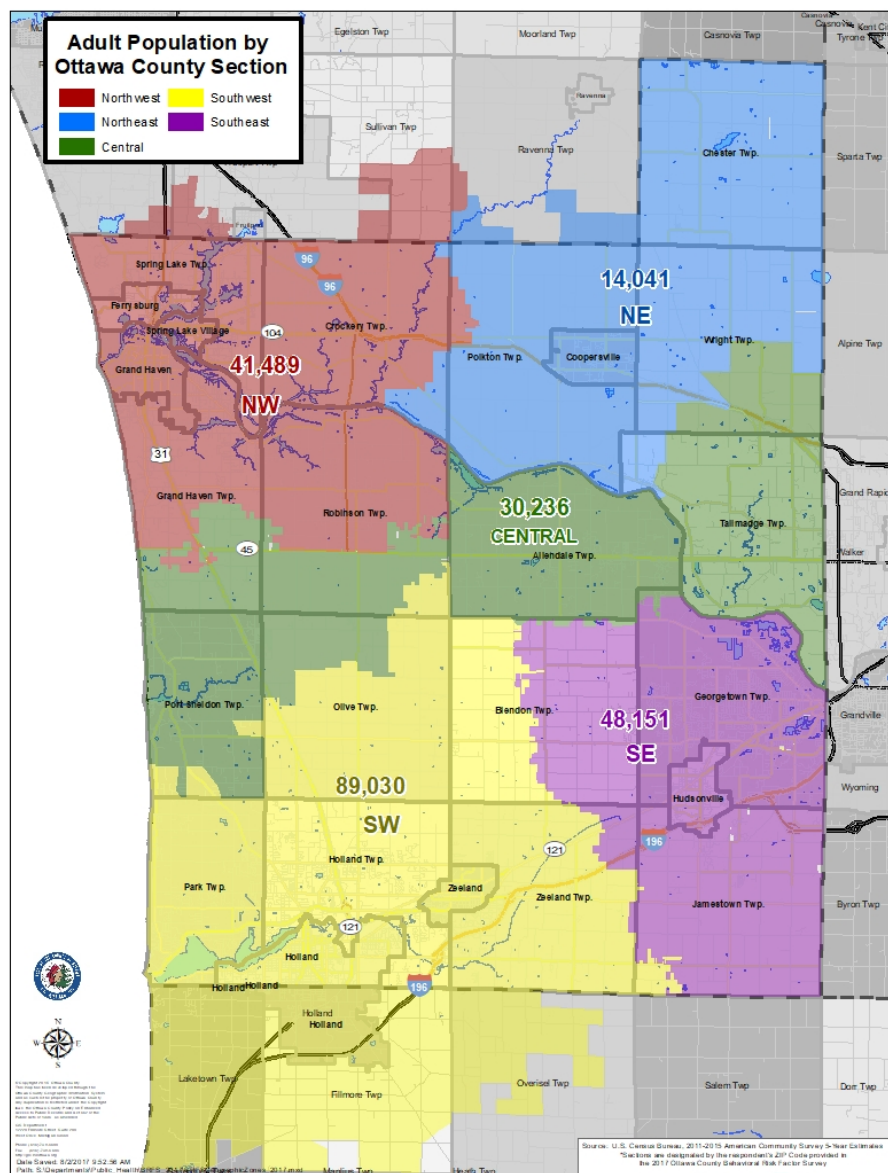
- Five of the 11 questions have “yes” or “no” response categories and the remaining 6 questions have “never,” “once,” or “more than once” response categories. Respondents scored either a “0” for each “no” or a “1” for each “yes,” and they scored either a “0” for each “never” or a “1” for each “once” or “more than once.” Their total ACEs score was computed by adding the sum of the scores across the 11 items. The total ACEs scores were segmented into three groups according to the number of adverse childhood experiences they had: none, 1 to 3, and 4 or more.
- It should be noted that if the respondent said “don’t know” or refused to answer any of the ACEs items then they were not included in the ACEs analyses by groups. This decision was made because the CHNA team and the researchers believe that coding “don’t know” or “refused” answers as zero and then including them in one of the three groups could possibly create an inaccurate picture of the extent to which adverse childhood experiences exist in the population of Ottawa County residents. As an example, if someone refused to answer all 11 ACE questions, rather than coding them as a none (zero), it was determined best to exclude them from the analyses.



Methodology (Continued)

- In the Executive Summary, VIP Research and Evaluation has identified several key findings, or significant health needs, which we have determined to be the most critical areas of need, derived from primary and secondary data. The process for making such determinations involved analyzing quantitative and qualitative feedback from Key Stakeholders, Key Informants, Ottawa County adults, and Ottawa County underserved residents to gain a better understanding of what they deem to be the most important health and health care issues in the community. Information needed to identify and determine the community's significant health needs was obtained by conducting telephone surveys with adult residents, sending out additional community health (paper) surveys to underserved adult residents, and conducting telephone interviews and online surveys with community healthcare professionals and community leaders. This question was asked explicitly of three of these four respondent groups, and additional information was gleaned from all groups via their responses to various questions throughout the surveys or discussion guides. Secondary data was then used to complement the findings from the primary data analyses. The result is a robust process that we are confident depicts an accurate assessment of the most critical health or health care issues in Ottawa County.

GIS Section Map



Section Name	Community Area	ZIP Codes*
Northwest Section	Crockery Ferrysburg Grand Haven Spring Lake & surrounding areas	49409, 49415, 49417, 49456*, 49448*
Northeast Section	Coopersville Chester Lamont Wright & surrounding areas	49318, 49403, 49404*, 49430, 49451
Central Section	Allendale Port Sheldon Tallmadge & surrounding areas	49401, 49435, 49460, 49534, 49544
Southwest Section	Holland Olive Park Zeeland & surrounding areas	49423*, 49424, 49464
Southeast Section	Georgetown Hudsonville Jamestown & surrounding areas	49315, 49418, 49427, 49428

*Indicates a ZIP code where all respondents were included, even though the ZIP code extends beyond the border of Ottawa County.

EXECUTIVE SUMMARY & KEY FINDINGS



Executive Summary

- In general, the findings from the 2017 Community Health Needs Assessment portray Ottawa County as a community that lives up to its billing as the healthiest county in Michigan, according to the County Health Rankings. With three hospitals, three free medical clinics, and hundreds of health care professionals, health care is accessible to most people.
- Ottawa County is considered to be a caring, giving, and philanthropic community with a wealth of excellent resources, programs, and services, a robust volunteer force, and strong collaborative spirit among people and organizations.
- Moreover, it is a community of faith with strong schools that mirrors the high education achievement of the residents. It is a very safe community with low levels of violent crime and homicide. Poverty levels are far lower compared to the state and the nation and the solid economy boasts a 3.5% unemployment rate, down from 8.1% in 2011.
- Environmentally, the area is clean and offers a plethora of outdoor spaces such as lakes, beaches, parks, walking/hiking paths, and biking trails that invite activity. Additionally, with the farms nearby and the farmer's markets throughout the warmer months, there is generous access to healthy food for those who can afford it.
- In sum, Ottawa County possesses all of the social and community characteristics that Key Stakeholders say distinguish a community as “healthy.”



Executive Summary (Continued)

- Most area residents have health insurance, have a personal health care provider, and are at least somewhat confident they can navigate the health care system and complete medical forms.
- Ottawa County residents also report good health and relatively low levels of psychological distress. They enjoy longer life expectancy and lower adult and child mortality rates than residents across Michigan or the U.S. Local residents are far less likely to have years of potential life lost compared to residents throughout Michigan.
- The prevalence of chronic conditions is low relative to the state and the nation; however, the prevalence of many of the chronic conditions, including diabetes, is up from the last two CHNA iterations (2011, 2014).
- Ottawa County performs well when it comes to clinical preventive practices. A sizeable majority of adults age 65 or older have received flu and pneumonia vaccines. The vast majority of children age 19-35 months are fully immunized and almost all children 0-17 have had a routine physical exam in the past year. The vast majority of pregnant women begin prenatal care in the first trimester.
- The prevalence of risk behaviors is also relatively low compared to the state or nation, and the prevalence of cigarette smoking, heavy drinking, and binge drinking are lower this year than in the previous two CHNA iterations.

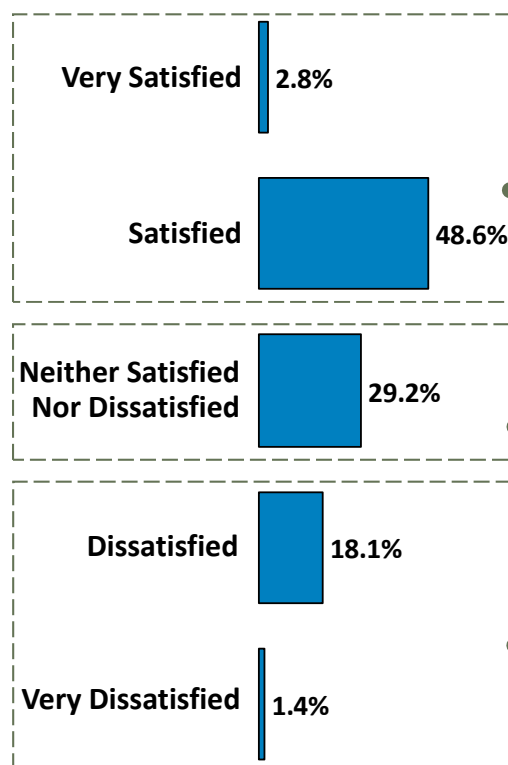


Executive Summary

Satisfaction With Overall Health Climate (Key Informants)

- All of that said, only half (51.4%) of Key Informants – the very people on the ground working in or around the field of health care – are satisfied with the overall health climate of Ottawa County, demonstrating that there is substantial room for improvement, and their comments indicate concerns across several areas.
 - ❖ By and large, the community has many resources, services, and programs to address health and health care needs; however, there are pockets of residents, or groups, that face tremendous barriers to these resources, services, and programs

Overall Satisfaction with Health Climate



Reasons for Rating

We are a **resource rich community** and we **work very well together** to **help support** not only **one another** but also the **residents** of Ottawa County.

Coordination among providers and with agencies is **good** and **improving**.

I think there are **generally a lot of wonderful services and programs** out there, people striving to **improve their health and support** for doing so. I just think **we could do better**.

For myself I **am satisfied**, but I work with **those who cannot get the same level of care that I can**.

It **could be better** since we are **number one** in a state that is **number 22 [sic]** compared to other states.

There are **good things** and there are **bad things**. We're doing **some things right** but have a **long way to go**.

We compare well to the rest of the state and country but **when 2/3 of your population is overweight/obese** (often leading to other health issues), **we have a long way to go**.

I **would like to see more community resources and support** for individuals with **mental health diagnoses and/or substance use disorders**.

I see **families who are not getting the assistance and funding they need** to get their children the services necessary.

Source: KIOS – Q11: 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 Ottawa County? (n=72); KIOS – Q11a: Why do you say that? (n=71)



KEY FINDINGS

➤ What follows are nine key findings and discussions of each:

- ❖ KEY FINDING [Significant Health Need] #1: Mental health continues to be a critical issue and hasn't improved from 2011
- ❖ KEY FINDING [Significant Health Need] #2: Substance abuse, particularly opioid addiction and the abuse of prescription drugs, has become more problematic since 2011
- ❖ KEY FINDING [Significant Health Need] #3: Obesity (and being overweight): a sizeable majority of adults are either overweight or obese and this proportion is higher than in 2011 and 2014
- ❖ KEY FINDING [Significant Health Need] #4: Access to care can be summed up as a case of those who have and those who have not
- ❖ KEY FINDING [Significant Health Need] #5: Addressing certain negative social indicators will improve the overall health and health care climate of the region
- ❖ KEY FINDING [Significant Health Need] #6: Chronic disease rates are relatively low, but some conditions merit watching
- ❖ KEY FINDING [Significant Health Need] #7: Certain risk behaviors, such as lack of exercise and lack of adequate fruit and vegetable consumption, remain issues worth addressing
- ❖ KEY FINDING [Significant Health Need] #8: The most appropriate way to address health and health care issues is from an integrated, holistic, or biopsychosocial perspective
- ❖ KEY FINDING [Significant Health Need] #9: Health disparities exist across several demographic groups



KEY FINDING [Significant Health Need] #1: Mental health continues to be a critical issue and hasn't improved from 2011

➤ Prevalence data demonstrates:

- ❖ 16.2% of Ottawa County adults are considered to have mild to severe psychological distress
- ❖ 15.0% of area adults have anxiety disorder
- ❖ 17.1% of adults have depressive disorder and one-fourth (24.0%) of area youth report depression in the past year
- ❖ 17.5% of adults say that growing up they lived with someone who was depressed, mentally ill, or suicidal

➤ Key Stakeholders and Key Informants consider issues surrounding mental health to be the most pressing or concerning health issues currently in Ottawa County and cite four major reasons for their concern:

- ❖ Lack of programs, services, and resources to address the issue
- ❖ Lack of funding for services
- ❖ Specifically, lack of therapists and psychiatrists
- ❖ Continued stigma that may prevent some people from seeking and receiving needed treatment



KEY FINDING [Significant Health Need] #1: Mental health continues to be a critical issue and hasn't improved from 2011 (continued)

- Key Informants perceive anxiety and depression to be the top two health issues in the county and these have overtaken obesity as the top health issues in 2014.
 - ❖ Worse, they are dissatisfied with the community response to these issues and this dissatisfaction has remained constant since 2011
- More than one-third of adults with anxiety and/or depression are dissatisfied with the effectiveness of existing programs and services to help them manage their condition.
- It is concerning that sizeable proportions of people who currently suffer from some form of mental illness are not undergoing treatment or taking medication, though there has been improvement since 2014.
 - ❖ For example, half of adults who report poor mental health and one-third who report anxiety and/or depression are not currently getting treatment for these conditions
- If the vast majority of adults believe that treatment can help people with mental illness lead normal lives, it begs the question as to why so many people do not seek treatment that would benefit them?
 - ❖ The answer may partly lie in the continued stigma concerning mental health conditions: just half of adults think people are caring and sympathetic to people with mental illness



KEY FINDING [Significant Health Need] #1: Mental health continues to be a critical issue and hasn't improved from 2011 (continued)

- In absolute terms, the suicide rates for both adults and youth are low; however, three times as many youth think about committing suicide, and twice as many attempt suicide, compared to adults.

How would your community be different if the mental health issues went away?

I think people's **quality of life would be a lot better**. If you think about someone who's struggling with a mental health issue, sometimes it's very hard to live with and be productive and be able to make it to work and take care of their families. I think certainly the quality of life would be better. I think if we can get on the front end of some of these things, that would **help us to manage our costs**, so maybe it could **impact affordability**. We want happy, healthy people, and health contributes to happy. It opens up people like me to do other things and take care of other needs, too, **so resources could be shifted to other needs that maybe don't get addressed**. – Key Stakeholder

Obviously, for our young people, if we can figure out how to deal with this, we're **actually saving lives**. It's not just improving the health of somebody, this is **stopping this disaster**. For the other things, it would **be improving their overall well-being** and **reducing the ultimate reliance on high-cost health care**. – Key Stakeholder



KEY FINDING [Significant Health Need] #2: Substance abuse, particularly opioid addiction and the abuse of prescription drugs, has become more problematic since 2011

- Substance abuse, which is often co-morbid with mental illness, is identified as the second most concerning issue among area professionals (Key Stakeholders and Key Informants).
- Prevalence data demonstrates:
 - ❖ 17.6% of adults and 6.8% of youth (grades 8-12) currently smoke cigarettes
 - ❖ 5.7% of adults are heavy drinkers
 - ❖ 14.1% of adults and 8.4% of youth are binge drinkers
 - ❖ 29.7% of adults have used prescription medication in the past year
 - ❖ 9.1% of adults know someone who has taken pain medication and/or stimulants or amphetamines not prescribed to them
 - ❖ 19.4% of adults lived with someone while growing up who abused substances
 - ❖ 5.7% of youth have used a prescription drug without a doctor's permission in the past 30 days
 - ❖ 10.3% of youth have used marijuana in the past 30 days



KEY FINDING [Significant Health Need] #2: Substance abuse, particularly opioid addiction and the abuse of prescription drugs, has become more problematic since 2011 (continued)

- Key Stakeholders and Key Informants cite four major reasons for their concern about substance abuse:
 - ❖ Opioid use and prescription drug abuse are interrelated, as people become addicted to prescription medication and then have to turn to illicit opiates to avoid withdrawals; this is a problem for all ages – from teens through older adults
 - ❖ Provider over-prescription of opiates has been a major catalyst for this problem
 - ❖ Lack of treatment options in the community
 - ❖ Increase in overdoses
- Key Informants perceive prescription drug abuse as the top health behavior issue in the county, followed by alcohol abuse, illicit substance abuse, and smoking.
 - ❖ They are most dissatisfied with the community response to prescription drug abuse and illicit substance use



KEY FINDING [Significant Health Need] #2: Substance abuse, particularly opioid addiction and the abuse of prescription drugs, has become more problematic since 2011 (continued)

How would your community be different if substance abuse issues went away?

Well, **substance use** for us has **caused an increase in child abuse and neglect**. It's the point in addiction where they're **leaving their kids with other people for days** on end **on a binge** or people that are **having their kids in their car when they're intoxicated**. It also **creates other systemic issues such as having less food for their kids, increases in law enforcement referrals and drug courts**. So, we see a **trickle through effect on many different entities within the community** based on things like substance abuse. – *Key Stakeholder*

We **would have a much more healthy community** obviously, a **more robust community**. I would say that you would **potentially have less crime** because of the drug aspect of it. I believe that you **would have a generally more robust and spirited community** if people are living a healthy lifestyle. – *Key Stakeholder*



KEY FINDING [Significant Health Need] #3: Obesity (and being overweight): a sizeable majority of adults are either overweight or obese and this proportion is higher than in 2011 and 2014

- Prevalence data demonstrates:
 - ❖ 63.2% of adults are either overweight (33.3%) or obese (29.9%)
 - ❖ 10.8% of youth (grades 8-12) are obese
- Key Stakeholders and Key Informants consider obesity to be a pressing or concerning health issue in Ottawa County today primarily because:
 - ❖ Prevalence is high and not improving
 - ❖ Obesity is comorbid with other chronic conditions or negative outcomes such as diabetes, heart disease, and stroke
- Key Informants perceive obesity to be the third most concerning health issue in the county, only behind anxiety and depression.
 - ❖ Further, they are dissatisfied with the community response to obesity
- Area adults believe that obesity is the most important health problem in their community today.



KEY FINDING [Significant Health Need] #4: Access to care can be summed up as a case of those who have and those who have not

- Those with insurance and the ability to afford out-of-pocket expenses such as co-pays and deductibles have access to almost any kind of service imaginable. Those without insurance, or with insurance but the inability to afford copays/deductibles, have trouble accessing needed services and this is most problematic for certain vulnerable or underserved subpopulations.
- Prevalence data demonstrates:
 - ❖ 9.2% of all adults age 18-64 have no health insurance and this proportion rises to 17.1% for underserved adults
 - ❖ 8.9% of all adults have Medicaid for their health insurance, compared to 40.2% for underserved adults
 - ❖ Nearly one-fourth (23.5%) of children age 0-18 have Medicaid
 - ❖ Four in ten (42.1%) underserved adults have had trouble meeting health care needs in the past two years
 - ❖ One-third (34.6%) of underserved adults have had to skip or stretch their medication in order to save on costs
 - ❖ Six in ten (60.2%) underserved adults report they, or a family member, visited the ER/ED at least once in the past year; 39.8% two or more times



KEY FINDING [Significant Health Need] #4: Access to care can be summed up as a case of those who have vs. those who have not (continued)

- Underserved adults are less health literate than other adults; for example, they are:
 - ❖ Less confident when it comes to navigating the health care system
 - ❖ Less confident in completing medical forms
 - ❖ More likely to have problems learning about their health condition
- Key Stakeholders and Key Informants recognize that certain subpopulations are underserved when it comes to accessing health care, especially those who are uninsured, underinsured, undocumented immigrants and/or non-English speaking (ESL) for three primary reasons:
 - ❖ Even if they have insurance, it may not be accepted by some providers (e.g., Medicaid/Medicare)
 - ❖ These groups often have too many barriers to overcome (e.g., cost, transportation, hours of operation, cultural, system distrust, language)
 - ❖ Lack of treatment options for these groups, such as primary care, mental health, substance abuse, and dental care
- Key Informants report the programs and services most lacking include:
 - ❖ Primary care, mental health treatment, and dental care for the uninsured/underinsured
 - ❖ Primary care, mental health treatment, and dental care for low income groups
 - ❖ Programs/services for people with insurance, but who don't utilize coverage because they cannot afford out-of-pocket expenses



KEY FINDING [Significant Health Need] #4: Access to care can be summed up as a case of those who have vs. those who have not (continued)

➤ Underserved residents report the programs and services most lacking include:

- ❖ Nutrition classes or programs that teach low income families how to stretch their resources to obtain healthy food, and teach ways to prepare and cook healthy food, as well as easy, fast, and inexpensive meals kids will eat
- ❖ Free or reduced cost exercise/fitness options, especially in winter months
- ❖ More affordable mental health treatment options
- ❖ Assistance finding more economical health insurance that better covers medication



KEY FINDING [Significant Health Need] #5: Addressing certain negative social indicators will improve the overall health and health care climate of the region

- Negative social indicators, such as lack of affordable housing, lack of affordable healthy food, and adverse childhood experiences can cultivate negative health outcomes.
- Although poverty levels are relatively low in Ottawa County compared to neighboring counties, the state, or the nation, there are pockets of poverty (e.g., single mothers with children under age 5) that negatively impact the health of residents experiencing it.
- That said, an overarching problem such as poverty is hard to ameliorate. Some of the issues that are connected to poverty, however, can be addressed such as:
 - ❖ Finding ways to provide more affordable housing
 - ❖ Providing more healthy food options to residents at lower costs in order to improve the nutrition of those who would not otherwise be able to afford healthy food
 - ❖ Strengthening social service programs to offset the negative outcomes that can accompany poverty (e.g., broken homes, abusive relationships, household challenges) and help disrupt/break negative family cycles that perpetuate generations of suffering
 - ❖ Addressing the economic disparity by ensuring that underserved and vulnerable groups have access to services that will move them closer to participating on a level playing field



KEY FINDING [Significant Health Need] #5: Addressing certain negative social indicators will improve the overall health and health care climate of the region (Continued)

- This research has shown the adverse effects of negative social conditions: people who experience four or more adverse childhood experiences have a far greater chance of experiencing negative outcomes – such as poor physical health, poor mental health, engaging in risk behaviors, and being obese – compared to those who experience fewer adverse childhood experiences.

In my exam room **I see generations of dysfunction**, but I have an optimism that **if we can break those cycles, we can make a significant change in the wellness of our community**. I think a lot of **families** who had generational function or relative function **don't really even understand the generations of dysfunction** because they don't overlap a lot. I think there's an **unawareness of this by people in the decision-making seats**, who **have the purse-strings** and who are making decisions, on community levels. I don't think they particularly even know the families that are stuck in cycles that **might be broken with some help**. – *Key Stakeholder*

With the housing crisis, we have a very large population here in comparison to some of the surrounding areas. I think we would have more people staying here that work here because right now a number of people are living in the surrounding counties and coming here to work. So, how would that be different for the community? **I think you would have more of a true community if people could live and work in the same place**. – *Key Stakeholder*



KEY FINDING [Significant Health Need] #6: Chronic disease rates are relatively low, but some conditions merit watching

➤ Prevalence data demonstrates:

- ❖ Cancer and heart disease death rates are far lower than the state or national rates but they are still, by far, higher than other causes of death
- ❖ According to area adults, cancer is the second most important health problem in their community today
- ❖ The death rate from Alzheimer's Disease in Ottawa County is far higher than the rate in Michigan and this hasn't improved from 2014
- ❖ One in ten adults (9.8%) have diabetes and this rate is up from 2011 and 2014
- ❖ One fourth (24.1%) of area adults suffer from chronic pain, and of these an almost equal proportion report their pain is not managed well

➤ More pressing is the fact that area adults report that area programs and services are not very effective in helping them manage conditions such as heart disease, COPD, diabetes, arthritis, depression, and anxiety.



KEY FINDING [Significant Health Need] #7: Certain risk behaviors, such as lack of exercise and lack of adequate fruit and vegetable consumption, remain issues worth addressing

➤ Prevalence data demonstrates:

- ❖ Almost one-fourth (23.4%) of area adults engage in no leisure time physical activity, and more than four in ten (44.7%) youth engage in inadequate amounts of physical activity
- ❖ More than eight in ten (82.4%) adults and two-thirds (67.8%) of youth consume fewer than five servings of fruits and vegetables per day

➤ There are a couple of pressing issues regarding weight and weight loss that need to be addressed. First, only one-fourth of area adults say they are receiving advice from a health professional regarding their weight, which is distressing since two-thirds of the adult population is either overweight or obese.

- ❖ Only half (49.5%) of obese adults and 22.7% of overweight adults are getting advice from a health professional about their weight

➤ Further, many overweight and obese people see themselves in a better light (not as heavy) than what their current BMI indicates. This skewed perception could be a result of the lack of health professional feedback regarding their weight.



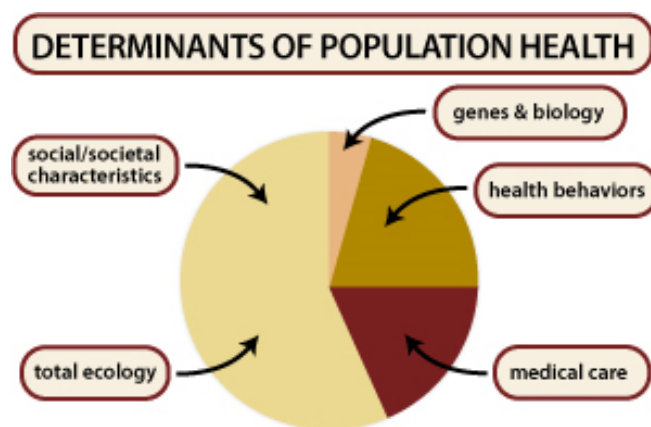
KEY FINDING [Significant Health Need] #8: The most appropriate way to address health and health care issues is from an integrated, holistic, or biopsychosocial perspective

- We recommend adopting the tenants of the World Health Organization:
 - ❖ Health is a state of complete **physical, mental and social** well-being and **not merely the absence of disease or infirmity**.
 - ❖ The enjoyment of the highest attainable standard of health is one of the **fundamental rights of every human being** without distinction of race, religion, political belief, economic or social condition.
 - ❖ The health of all peoples is **fundamental to the attainment of peace and security** and is dependent upon the **fullest co-operation of individuals and States**.
 - ❖ The achievement of any State in the **promotion and protection of health is of value to all**.
 - ❖ Unequal development in different countries in the promotion of health and control of disease, especially communicable disease, is a common danger.
 - ❖ **Healthy development of the child is of basic importance**; the ability to live harmoniously in a changing total environment is essential to such development.
 - ❖ The **extension to all peoples of the benefits of medical, psychological and related knowledge** is essential to the fullest attainment of health.
 - ❖ **Informed opinion and active co-operation on the part of the public** are of the utmost importance in the **improvement of the health of the people**.
 - ❖ Governments have a **responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures**.



KEY FINDING [Significant Health Need] #8: The most appropriate way to address health and health care issues is from an integrated, holistic, or biopsychosocial perspective (Continued)

- Further, the determinants of health that contribute to each person's well being are biological, socioeconomic, psychosocial, behavioral, and social. The determinants of health include*:
 - ❖ Biological (genes) (e.g., sex and age)
 - ❖ Health behaviors (e.g., drug use, alcohol use, diet, exercise)
 - ❖ Social/environmental characteristics (e.g., discrimination, income)
 - ❖ Physical environment/total ecology (e.g., where a person lives, crowding conditions)
 - ❖ Health services/medical care (e.g., access to quality care)
- The chart below estimates how each of the five major determinants influence population health:





KEY FINDING [Significant Health Need] #9: Health Disparities Exist Across Several Demographic Groups

- There is a direct relationship between health outcomes and both education and income. Positive outcomes are more prevalent among adults with higher levels of education and adults from households with higher income levels, while negative outcomes are more prevalent among those with less education and lower incomes. Examples of this disparity include:
 - ❖ General health status
 - ❖ Physical health, disability, and chronic pain
 - ❖ Mental health, psychological distress, and having anxiety or depression
 - ❖ Chronic diseases such as diabetes , COPD, or any cardiovascular disease
 - ❖ Health risk behaviors such as fruit and vegetable consumption, smoking, physical activity, muscle strengthening activity
 - ❖ Preventive practices such as visiting a dentist and being vaccinated against the flu or pneumonia
 - ❖ Health care access such as having a primary care provider, having health insurance, lack of access to care and medication due to cost, or being health literate
 - ❖ Food insufficiency
- The link between both education and income and positive health outcomes goes beyond the direct relationship. Those occupying the very bottom groups, for example no high school diploma and/or household income less than \$20K (or living below the poverty line), are most likely to experience the worst health outcomes.



KEY FINDING [Significant Health Need] #9: Health Disparities Exist Across Several Demographic Groups (Continued)

- There is also a direct relationship between health outcomes and age. In many cases, negative outcomes are more often associated with younger adult age groups, for example:
 - ❖ Poor mental health, having psychological distress, anxiety, or depression
 - ❖ No health care coverage and having no personal care provider
 - ❖ Risk behaviors such as smoking cigarettes and binge drinking
 - ❖ Food insufficiency
 - ❖ No routine physical checkup
- In other cases, negative outcomes are more associated with older adult groups, such as:
 - ❖ Fair or poor general health status, poor physical health, and activity limitation
 - ❖ Having chronic diseases like diabetes, arthritis, cancer, cardiovascular disease, and COPD
 - ❖ Having chronic pain
 - ❖ Lack of muscle strengthening activities



KEY FINDING [Significant Health Need] #9: Health Disparities Exist Across Several Demographic Groups (Continued)

- There are links between health outcomes and gender. For example:
 - ❖ Men are more likely than women to:
 - Engage in risk behaviors such as smoking, binge drinking, eating fewer fruits and vegetables
 - Resist preventive practices such as visiting a dentist or having a routine physical exam
 - Lack health insurance or a personal health care provider
 - ❖ Women are more likely than men to:
 - Be obese or be at a healthy weight
 - Have poor physical health
 - Have poor mental health, psychological distress, anxiety, or depression
 - Have chronic conditions such as asthma, arthritis, and chronic pain
 - Not engage in muscle strengthening activities
- There are also links between race and health outcomes. Non-Whites are more likely than Whites to:
 - ❖ Engage in risk behaviors such as smoking, binge drinking, and eating fewer fruits/vegetables
 - ❖ Not engage in preventive practices such as visiting a dentist or having a routine physical exam
 - ❖ Lack health insurance or a personal health care provider
 - ❖ Experience psychological distress



KEY FINDING [Significant Health Need] #9: Health Disparities Exist Across Several Demographic Groups (Continued)

- Adults living in the southeast section of Ottawa County fared better than adults in other sections on the following measures:
 - ❖ General health status
 - ❖ Activity limitation
 - ❖ Health risk behaviors such as fruit and vegetable consumption, being physically active, smoking, heavy drinking, and binge drinking
 - ❖ Preventive practices such as visiting a dentist or having a routine physical exam
- The northeast section of the county demonstrates an odd mix where adults fare best on nine of the major outcomes (e.g., vaccinations, five of the chronic conditions) and fare worst on an additional nine major outcomes (e.g., obesity, having no insurance, heavy drinking).

DETAILED FINDINGS

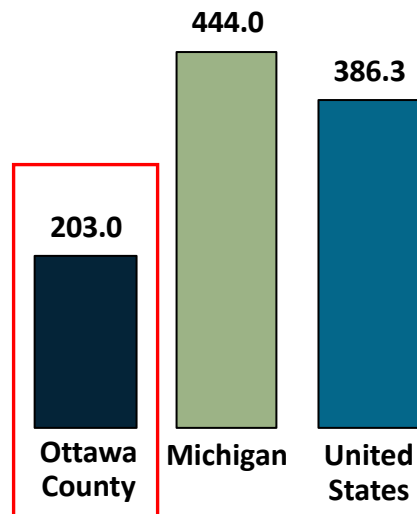
Social Indicators



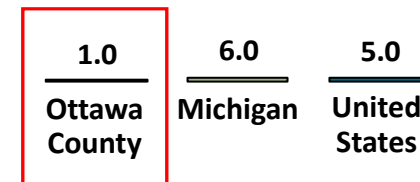
Crime Rates

- Ottawa County residents enjoy the safety of their community. In fact, Ottawa County has far lower violent crime and homicide rates compared to Michigan or the U.S.
- Although child abuse/neglect rates in Ottawa County are also lower than in the state, there is room for improvement as this rate is higher than the national rate and has almost tripled from 2011 (rate = 3.6).

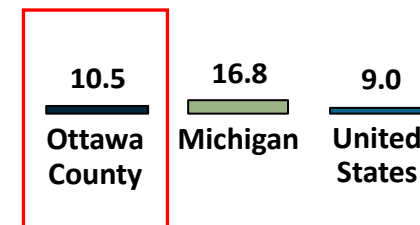
Violent Crime Rate
Per 100,000 Population



Homicide Rate
Per 100,000 Population



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

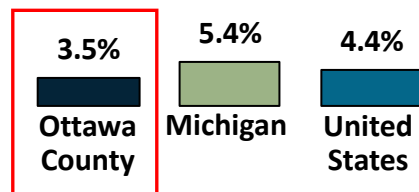




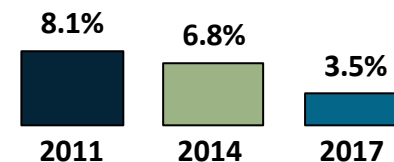
Unemployment

- The current unemployment rate in Ottawa County is extremely low and, consequently, not considered to be a societal issue or to have a negative impact on the health of area residents like it was perceived in years past.
 - ❖ In 2014, area adults considered jobs (lack of) and unemployment to be the most significant problem in their community
- A side effect, or unintended consequence, of an extremely low unemployment rate is that many positions go unfilled.

Population Aged 16+ Unemployed and Looking for Work



Unemployment Rate for Ottawa County Residents Over the Past Three CHNAs



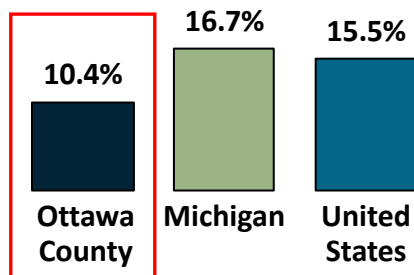
Our unemployment rate today is very low, and it's been that way for the past year or so, so we don't have people for the jobs right now. We're struggling to actually fill vacancies, which is driving our wages up. You can start a new job with no education tomorrow for \$15 an hour in this county. You can start tomorrow with insurance. But when you have 3% unemployment, that last 3% of your population - that includes your people who have personal challenges that can be physical, medical, or behavioral health related, so we're in a tight spot, if that makes sense. You can't get to 100% employment; it's not possible. – *Key Stakeholder*



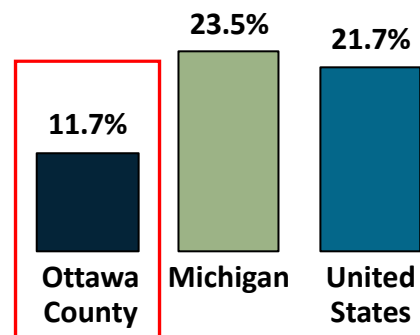
Poverty

- One in ten Ottawa County residents lives in poverty, a rate lower than in the state or the nation.
- A slightly higher proportion of Ottawa County children live in poverty, a rate far lower than the rate in MI or the U.S.

Percentage of People in Poverty



Percentage of Children (<Age 18) in Poverty

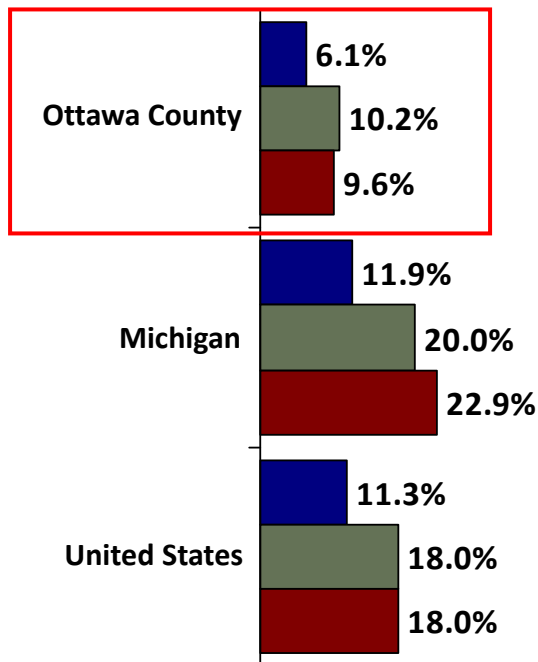




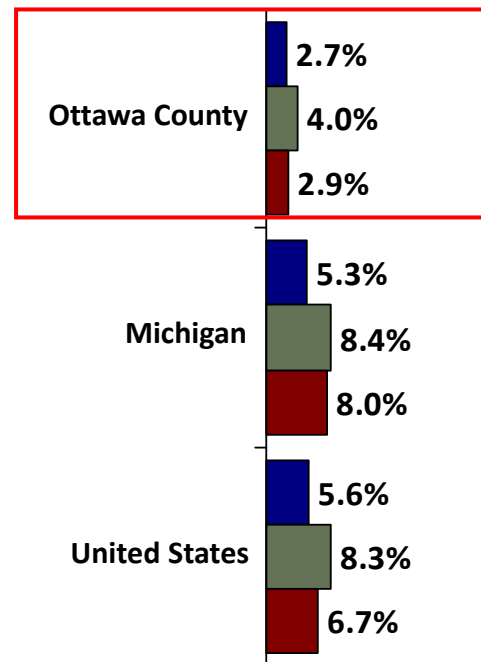
Families in Poverty

- The proportion of Ottawa County families living in poverty is lower than in the state or the nation.
 - ❖ Yet, one in ten Ottawa County families with children (10.2%) lives in poverty
- Married couples are far less likely to be living in poverty than single female households.
 - ❖ Nearly three in ten Ottawa County single female households live in poverty, but this proportion rises to more than four in ten for those with children under the age of five years

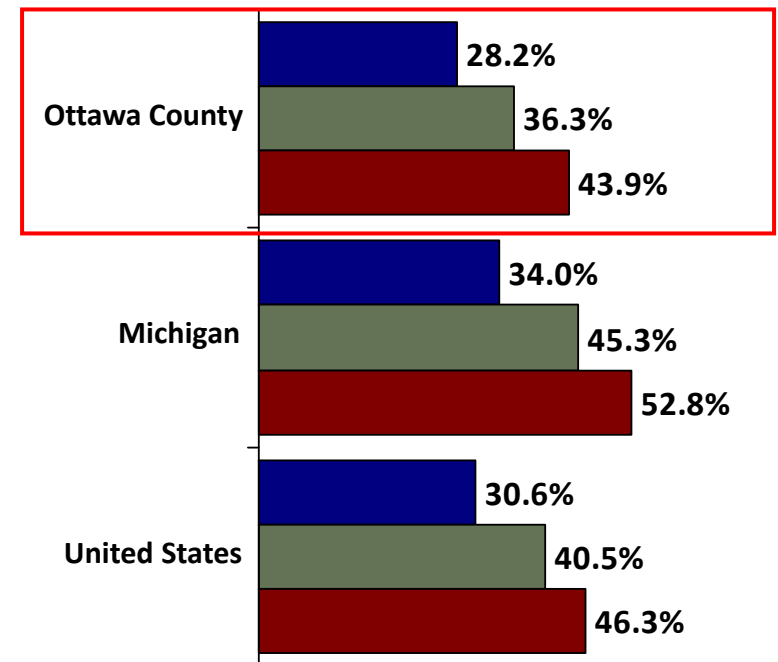
All Families
(% Below Poverty)



Married Couple Families
(% Below Poverty)



Single Female Families
(% Below Poverty)



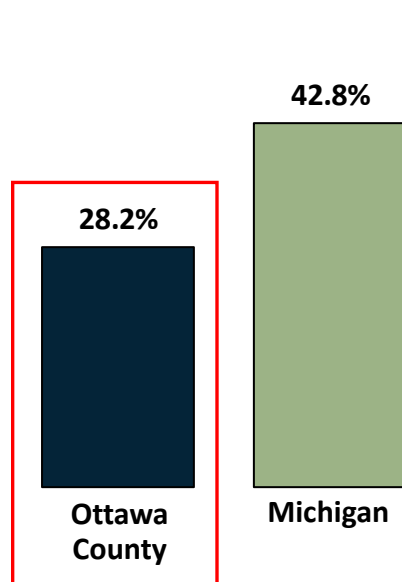
■ Total ■ With Children <18 Years ■ With Children <5 Years



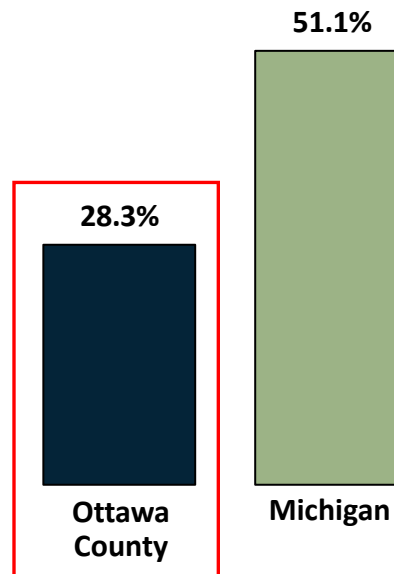
Children in Poverty

- The proportion of Medicaid paid births, children receiving WIC, and students eligible for free or reduced school lunches is much lower in Ottawa County compared to the state of Michigan as a whole.
- Still, there is room for improvement as more than one-fourth of births are Medicaid paid and a similar proportion of children age 1 to 4 receive WIC assistance.
- Further, more than one-third of students are eligible for free or reduced price school lunches.

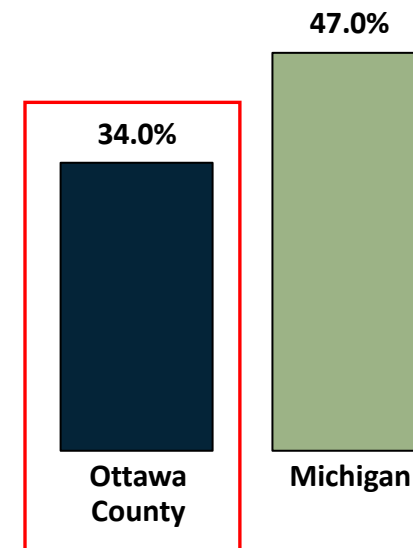
Medicaid Paid Births



Children Ages 1-4 Receiving WIC



Percentage of Students Eligible for Free/Reduced Price School Lunches





Education

- For both men and women, more Ottawa County residents graduate high school and graduated college with degrees compared to residents in the state and the nation.
- The graduation rate among those who begin 9th grade is higher for Ottawa County youth compared to youth in Michigan or the U.S.

Educational Level (Among Adults Age 25+)						
	Men			Women		
	Ottawa County	Michigan	U.S.	Ottawa County	Michigan	U.S.
No Schooling Completed	0.8%	1.1%	1.4%	0.9%	1.0%	1.4%
Did Not Graduate High School	7.1%	9.4%	12.1%	7.1%	8.2%	10.7%
High School Graduate, GED, or Alternative	29.1%	30.1%	28.4%	28.1%	28.7%	26.8%
Some College, No Degree	20.3%	23.6%	20.5%	22.5%	23.7%	21.0%
Associate's Degree	10.0%	8.0%	7.3%	10.4%	10.4%	9.1%
Bachelor's Degree	21.6%	16.9%	18.8%	20.3%	17.1%	19.2%
Master's Degree	7.5%	7.2%	7.5%	8.5%	8.6%	8.9%
Professional School Degree	1.8%	2.1%	2.4%	1.2%	1.2%	1.6%
Doctorate Degree	1.7%	1.5%	1.7%	1.0%	0.9%	1.1%

Freshman Graduation Rate

Ottawa County – 88.0%

Michigan – 81%

United States – 83%



Positive Environmental Factors

- Environmental factors that positively impact health include a wealth of natural resources that make it easier to be active, safety (low crime), a solid infrastructure, and farmer's markets offering healthy food, for those who can afford it.

Conducive to recreation and outdoor activities

The obvious one is the **lake**, the access to **parks** and **recreation**, the access to **paths** and **walkways** and **hiking trails** and **biking trails** and all that, the access to kayaking areas and just general sporting/health care-related things; just our **geography allows us access to things other communities wouldn't have.** – *Key Stakeholder*

We have lots of **parks** and places like the aquatic center for **recreation and activity.** – *Key Informant*

Walkable! Lots of bike and run groups. **Bike lanes** are great. – *Underserved Resident*

Safe community

It's a **reasonably safe place, so our crime rates are not going through the roof.** – *Key Stakeholder*

Safe places to walk. – *Underserved Resident*

Infrastructure

Well, I think **infrastructure** here is good, you know? We've had all this publicity in Michigan, unfortunately; the **water** supply here is very good. So infrastructure in general, from **power** - you know, we have a new power plant - spectacular investment in that that's going to position us well for many years. I'll just say in general the utilities are strong, very strong. – *Key Stakeholder*

Farmer's markets

We've got a fair amount of **farmers markets**, but they're cost prohibitive, so I think we've got a lot of things that could help our population be healthier, but the barriers to them are insurmountable for the lower-income population. – *Key Stakeholder*

There are lots of **farmers markets** in the summer months and you can double your money from food stamps there. – *Underserved Resident*



Negative Environmental Factors

- Environmental factors that negatively impact health include relatively poor air quality and a lack of affordable housing, especially for those with lower incomes.
- Access to affordable, healthy foods remains an obstacle for many, while unhealthy food is very accessible.

Air quality	We have some of the worst air quality in the state, mostly because we're over across the lake from Gary and Chicago. – <i>Key Stakeholder</i> According to the Robert Wood Johnson health rankings, our air quality isn't great, but we're not really measuring that. – <i>Key Stakeholder</i>
Lack of affordable housing	We don't have affordable housing for low-income – there's a gap - there's a two-year wait for some programs, so even if you qualify, you can't get into low-income housing for two years, so people are living on their friend's couch or their car or between the two of them. – <i>Key Stakeholder</i> We are a healthy county, but I think that affordable housing is a burden on health for many families and individuals who want to live here. – <i>Key Informant</i>
Plethora of fast food restaurants/unhealthy food options	Fast food seems to be everywhere and it's more convenient at times. – <i>Underserved Resident</i> Doing too many pizza nights, rewarding people with junk food in gyms, jobs, etc. – <i>Underserved Resident</i>
Lack of affordable, healthy food	Sometimes healthy foods cost too much. – <i>Underserved Resident</i> Less wholesome food is more accessible (in quantity and cost). – <i>Key Informant</i>



Adverse Childhood Experiences

- Although Ottawa County adults, in general, experience fewer adverse childhood events compared to adults across Michigan or the U.S., the prevalence of mental illness in the household or living with someone who had been incarcerated is greater in Ottawa County than in Michigan or across the U.S.
- Three in ten (29.6%) Ottawa County adults have experienced emotional abuse and roughly one in five have had divorced or separated parents and/or lived with someone who was a substance abuser.

ACE Questions	Percent of People With Each ACE		
	Ottawa County	Michigan	United States
How often did a parent or adult in your home ever swear at you, insult you, or put you down? (n=1,208)	29.6%	35.3%	35.0%
Before age 18, how often did a parent or adult in your home ever hit, beat, kick, or physically hurt you in any way? Do not include spanking. Would you say... (n=1,215)	14.6%	17.2%	15.9%
How often did anyone at least five years older than you or an adult, ever touch you sexually, try to make you touch them sexually, or force you to have sex? (n=1,205)	7.5%	10.7%	10.9%
Were your parents separated or divorced? (n=1,223)	22.0%	26.6%	22.8%
Did you live with anyone who was a problem drinker or alcoholic, or who used illegal street drugs or abused prescription medication? (n=1,223)	19.4%	27.2%	25.1%
Did you live with anyone who was depressed, mentally ill, or suicidal? (n=1,230)	17.5%	15.9%	16.0%
How often did your parents or adults in your home ever slap, hit, kick, punch, or beat each other up? (n=1,214)	12.8%	16.3%	14.9%
Did you live with anyone who served time, or was sentenced to serve time, in prison, jail, or other correctional facility? (n=1,227)	7.9%	7.8%	5.7%

ABUSE

HOUSEHOLD CHALLENGES

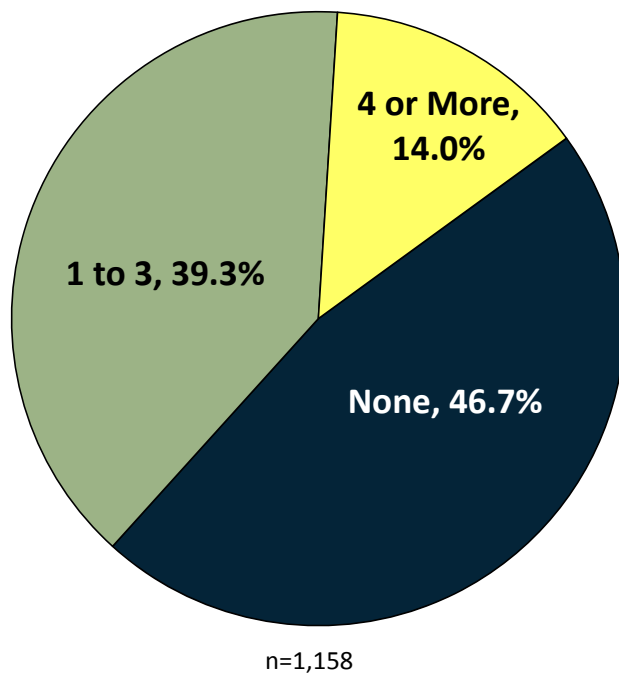
Source: Michigan Department of Health and Human Services, June 2015; Centers for Disease Control and Prevention. *Behavioral Risk Factor Surveillance System Survey ACE Data, 2009-2014*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2015.



Adverse Childhood Experiences (Continued)

- Over half (53.3%) of Ottawa County adults have experienced at least one adverse childhood event, and 14.0% have experienced four or more.
- There is a direct and linear relationship between the number of ACEs one experiences and negative outcomes later in life.

Number of Adverse Childhood Events



	Number of ACEs		
	None	1-3	4 or More
Health status fair/poor	9.8%	12.3%	18.8%
Poor physical health	6.0%	9.6%	13.3%
Poor mental health	4.3%	6.2%	27.1%
Disability	14.8%	18.4%	40.7%
Anxiety	6.0%	15.6%	42.3%
Depression	7.3%	17.8%	48.5%
Suffer from chronic pain	18.5%	19.7%	48.9%
Current smoker	9.8%	22.8%	32.6%
Heavy drinker	3.2%	5.2%	10.8%
Binge drinker	8.8%	15.3%	29.2%
Obesity	26.3%	29.3%	41.2%
Mild to severe mental illness (Kessler 6)	5.4%	20.6%	39.5%
Suicide attempt in past year (among those who thought of taking their own life)	0.0%	4.3%	50.3%

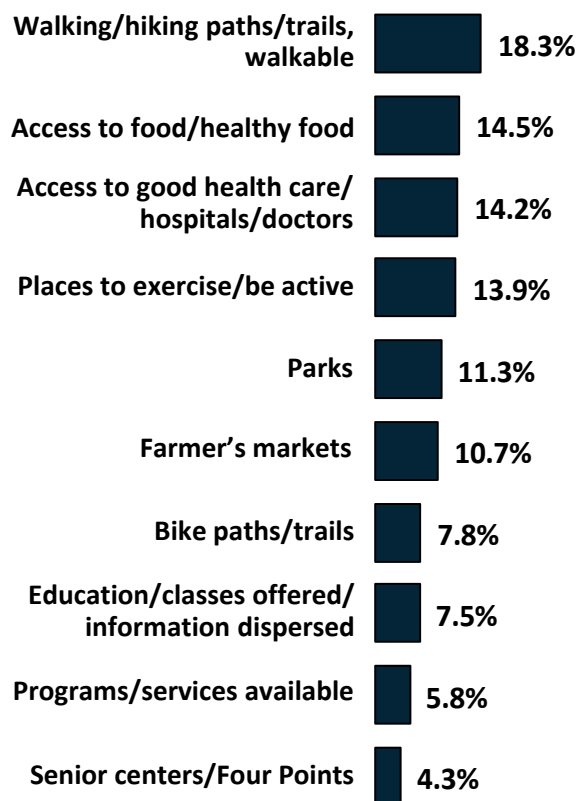
Community Characteristics



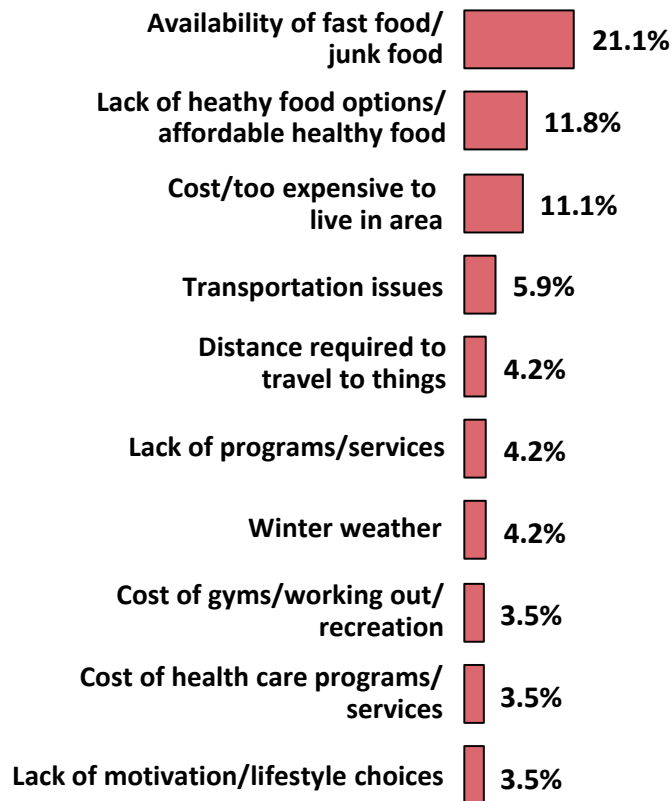
Community Characteristics Contributing to Health (Underserved Residents)

- Underserved adults report many community characteristics that enable them to be healthy, including an **abundance of recreational spaces** (e.g., walking paths, bike paths, parks), **access to healthy food** (especially farmer's markets), and **access to good health care**.
- On the other hand, the **lack of healthy food options** for many, coupled with the **easy access to fast/junk food**, make it hard to be healthy in Ottawa County.

Characteristics Making It Easy to Be Healthy



Characteristics Making It Hard to Be Healthy



Source: URS – Q15: What are the primary characteristics of your community that make it easy to be healthy? Please be as detailed as possible. (n=345); URS – Q16: On the other hand, what are the primary characteristics of your community that make it hard to be healthy? Please be as detailed as possible. (n=289)



Community Strengths (Key Stakeholders)

- Key Stakeholders list many community strengths or resources upon which to build programs or initiatives to address health needs or issues. Clearly, a **strong collaborative spirit among people and organizations**, a **robust and dedicated volunteer force**, **strong schools**, and **highly philanthropic people and organizations** are major assets.

Let's start with the **talent** pool. In terms of recruitment, we're in an **extraordinarily strong area**, and we are **able to attract talent**. Not every town and county can say that, but, by and large, I hear from our own metrics: we **don't have difficulty recruiting people**. We have a **strong education system**, so that's another thing to build on, and that's true **at all levels**; it's true at the elementary level, junior high, high school, and then there's a very, very good both associate and bachelor's and beyond, so the education system's a major strength.

I think that goes back to that **collaborative spirit** that we have here, and the **expectation that we work together to solve problems**.

We have a ton of strengths to build upon. I mentioned **SPOKE**, and I think we're going to continue to build upon **strengthening the relationships between all of our organizations and doing joint planning**. We have **philanthropy**, we have **incredibly strong nonprofits**, their people that are doing really good work. We have **healthcare systems that are right here**; it's not like we're in rural UP where we have to drive 150 miles to the closest healthcare facility. We have **arts**, and we have **environment**. We have **diversity** and it's a huge strength. We have really, really **wonderful educational systems**.

I think the **collaborative nature** of the leaders in our community - those in decision-making capacity - is good. I think that we are a reasonably collaborative community. I think that the **community cares as a whole**. When we have an issue and bring it to the forefront, there seems to be a lot of **alignment**.

We have a **close relationship with all the key players**: with the Health Department, with the hospital, Community Mental Health. We're trying to get stronger with the schools. There is the **Kellogg Foundation**. There's opportunities - there's **grants** throughout - I think there are a lot of good opportunities in Ottawa County if you know where to look. The **volunteer force seems pretty strong**. There are a lot of **churches** here in Ottawa County, throughout, and I like a lot of people want to be involved and volunteer.

You have very **committed health care organizations**. You have **wonderful leaders within the school system**. You have **municipal leaders who are very engaged in the overall well-being of the community**. So, **we have all of the tools**, and many of them are being put to use. It just takes a little more time to be able to see the fruit of that. The volunteer force is great.

We're **trying to bring different organizations together**, but we need to bring industry into that as well, and we need that director of social collaboration or something. We have **significant philanthropy**, **significant non-for-profits**, and **Spectrum Health**, the hospital, has more philanthropy. The **volunteer force is very strong, very dedicated**, but it's usually tied, it's very focused on a Christian-based foundation, so it's very tied to that, rather than independent of that, so it's - it has that focus.



Resource Limitations (Key Stakeholders)

- Conversely, Key Stakeholders report fewer resource limitations; however, the most pressing limitations appear to be **lack of money, time**, and the **number of people required to make great differences**.

Yeah, **money**. It's not for a lack of wanting to do it. It's frequently the **lack of money** to make it happen.

Well, from my perspective, it's **time**. I have a lot of great ideas and passion and connections, but, again, I'm a full-time father, and I'm a full-time physician, and I've got this job as a part-time job, and then we have staff that we've hired to help organize the care managers - care managers are there. So, I think **time** and **finance** right now.

I'll go back to **dollars to support behavioral health**. Until it hits your home, you don't know it's real. I think it goes back to that "pull your own pants up and pull your own weight," until you realize - and you're close with somebody that has a real challenge. It's a **low priority**, so I think bringing awareness to that and supporting it. **Even philanthropy for behavioral health is not attractive to give unless you had a personal tragedy in your home**.

Sometimes, it's just **quantity**. You have everybody, I think, that wants to be on the same page, but **there's only so many of us**, and so I don't see that necessarily changing because it's not as though we can't recruit more people to believe that way; you're **tapping out the resources that you have**, so it's just going to take time.

The **ALICE population - a third of our population not being able to afford basic needs - that's a resource limitation**. If we were talking about four homeless people that we had to house, it's a different animal than if they're the working population needing help, so I think the scale is a limitation - that there's **an awful lot of people that need something**.

I think we probably have **resource limitations for low-income, uninsured**, like we said, some of the language and cultural differences can create challenges for folks.

We could be even more attractive if our housing - **affordable housing** options because this **has been a problem of our success**. There's opportunities to improve that, and people are trying to do it. There's a variety of different developments that are trying to get at this very issue of **creating more affordable housing**.

Probably when you think about the things I listed previously, it probably **does come down to money**.



What A Healthy Community Looks Like (Key Stakeholders)

- When asked to describe what a healthy community looks like, Key Stakeholders went beyond common physical metrics (e.g., lifestyle choices, chronic conditions), although these are certainly important. Their responses, which focused on things such as **employment, commerce, schools, safety, access to care, engagement, collaboration, and goals**, demonstrate a **focus on health from a biopsychosocial lens**.

To me, it's having **individuals be able to provide**, and be **stable**, and be **independent**. So, **communities where they're fostering a healthy environment for people to raise their children in**. People should not be afraid to go outside at nighttime. People should be able to know that they can **get a job within a reasonable distance of their house** so that they can be spending time with their family and not in a car commuting, and also being able to provide for each other. **It shouldn't take agencies and entities to step in all the time; many issues should be able to be resolved within a neighborhood and in a community**.

A healthy community to me would be sort of a utopian, I guess. It would be **people who are physically active**, people who **are engaged and involved in their community and supporting one another**, people have **access without barriers to health care and to other services**. **Access, healthy, employed, people have housing**, all those things, I think - **affordability** is important, but what it looks like is just **people are productive and healthy and kind** and - that's where the utopian part comes in - **be nice to one another**.

It's one where there's **employment opportunities for everyone**, where there's **diversity of thought and ideas as well as opportunity**. It's an **active community** who has the **opportunity** with the **resources** in the area to be out and **exercising and enjoying the outdoors**. It's a community that has **strong schools**. It's a community that has **great opportunities**. It's **faith-based**, so access to churches and organizations that support individuals. What is also vital is **health care accessibility**, so having a **hospital in the community that we serve** I think is extremely important. Having a **good mix of commerce**, because we want people to stay and not have to move. The **arts and museums** and things of it, and to have a general downtown area that has **great local entrepreneurs** who expand and have a **thriving business**, and for us, tourism. That brings so much to our community - not just money, but it **brings ideas**, and it **brings just a general sense of pride in the community**, so that **lifts and elevates what I think what makes our community or any community successful**.

Collaboration: obviously entities within the community **working together towards one or two goals that are very concrete**. Really **work collaboratively as a collective**, all the different agencies, to really **zero in on a target and go after it**. That, to me, is a powerful thing; it's a lot stronger than each of us working in a vacuum.

One that's **physically active**, we've got **people that are managing their BMI and other metrics, blood pressure** and other things are under control. Ideally, you'd have **people visiting their primary care physicians** at least **annually** and kind of **working towards health goals and health improvement**. I would add a healthy community, too, would have a **vision among leadership that shares the goal of this**, and has actually intentional vision that **coordinates these resources for the objective of health**.



Is Ottawa County A Healthy Community? (Key Stakeholders)

- Key Stakeholders agree that **Ottawa County is a healthy community** when you look at the important key metrics. That said, they **also realize that there is room for improvement as not everyone is healthy**; there are **segments of the population that struggle** with physical and mental health issues, access to care, lifestyle choices, and having access to resources that would alleviate many of their problems.

I think **we're healthy comparatively**, and I don't live comparatively. I think what **we have is both ends of the spectrum**. I think I could find you a host of people in our community who are what I would call **hyper-fit**, the triathletes or the yogis - people on that end of the spectrum, but I could find you a **much bigger bucket of people on the other end of the spectrum**. I think what we're losing is what I would have used to have called the regular people - moderately active, trying to watch what they eat, could lose five pounds and be healthy - I think that set of the population is disappearing, and **we're either hyper-fit or hyper-fat**.

Depends what population you're talking about. Ottawa County's the **highest-educated county in the state**, it has the **healthiest overall lifestyle in the state**, and it's identified as **one of the healthier communities in the state**, so from that perspective, **comparing to others**, we're pretty fortunate. Do we still have major pockets? Yes, just like every other community, we have **challenges with behavioral health**, we have **challenges with prescription drug and non-prescription drug abuse**. We still have our challenges. We **have strong jobs**, so we're very fortunate to have an economic engine. If you think of any community that's successful, they have three things: they have **jobs**, they have **education**, and they have **good health care**, and we're very fortunate to have those three things.

I think if you **compare us to other counties**, we do **have a lot of qualities that contribute to health**, but **we still have a long way to go**. I still think there's kind of a **great divide between the people who are struggling financially and therefore don't have resources that they need in order to have that quality of life**, so **we're not there yet** - not at the utopian state yet.

I think it's a relative question. I think **it's healthier than a lot of communities**. I don't think we have quite the level of inner-city problems that larger cities have, so **on a whole**, I think **we're a healthier community than others**. I think we have a very large segment of our population that is very religious, and so **smokes less, drinks less**, has **promiscuous sex less**, so I would say if you were to **compare us to other communities in the US**, you'd probably say yes. I do think, and I think **anyone who does this job knows that there are pockets and there are segments for which I would say no**.

Well, I think **we have all the tools to be a healthy community**. I think based on the information that is available to us from the public health department, we're probably healthier than others, but as [the epidemiologist] has said in the past, **we're just getting sicker slower**, so **we may be the best of the worst**, but I don't think that's something to say, "Well, we checked that box, and we can go onto something else." I think **we have to be careful that we don't look at the fact that our rankings say one thing, but when you really look what you're ranking against, we probably shouldn't be too proud**.



Characteristics That Make Ottawa County Healthy (Key Stakeholders)

- Characteristics that make Ottawa County a healthy community are its **collaborative spirit**, having a large **faith-based** sector, **access to natural resources**, **philanthropy** of many residents, and a **robust economy**.

Collaborative spirit	I would say it's the collaboration, the ability to work very closely together. I think we've broken down some silos that have been here in the past. People are willing to step up and work on some pretty tough issues, like the thing with the substance abuse task force and the housing crisis. People really want to help and provide a safe community and a healthy community for people to live in. I think clearly there is a very collaborative spirit within Ottawa County that those organizations and people and places that are charged with impacting health in whatever ways tend to be willing to work together because the sum of everyone's efforts is greater than the individual effort.
Faith-based	I think there is a priority on church - the higher power and family in this area that causes people to understand life gratification and the importance of eating right, not smoking, not drinking to excess, caring about other people, etc. I think there is a lot of benefit from the religious influence on this area.
Natural resources	I think we have a lot of natural resources, so there's an awful lot to do here that could improve your health that doesn't cost a lot of money. We've got natural parks, we've got places to go where you could get physical activity and enjoy it.
Philanthropy	We have tremendous philanthropy, where people are very generous and providing money for resources. We've got lots of wealth, I guess.
Strong economy	A healthy economy most certainly is a major asset. It's an asset to the school systems, it's an asset to the healthcare system, and it creates opportunities for citizens to have a reason to pursue educational objectives and then have the opportunity to put that effort to work by having a career interest that they can pursue. I would just say a healthy economy is foundational.



Characteristics That Make Ottawa County Unhealthy (Key Stakeholders)

- Conversely, characteristics that make Ottawa County an unhealthy community are its **families trapped in negative cycles, lack of access to affordable and healthy food**, the **stigma of mental illness** that prevents people from seeking treatment, and **economic disparity** that prevents many residents from accessing needed resources.

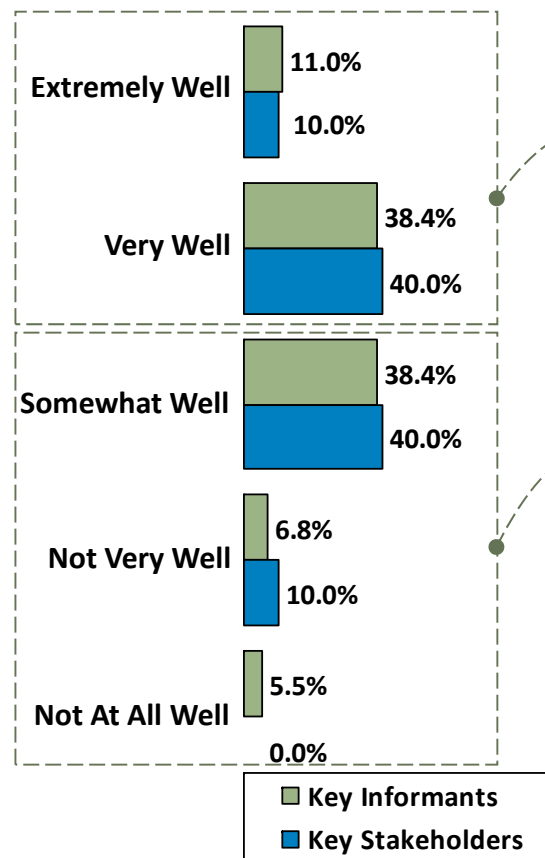
Family cycles	I think the flipside to those pockets of relatively functional groups and spirituality is a tendency to be judgmental and an almost willful lack of understanding of the other side of the community. The communities of families that are trapped in dysfunctional patterns. I think that a large part of our community is unaware of their existence and unable to, or don't have the tools to, reach out to them appropriately. You get into the whole discussion of family cycle, where family development/family advancement in troubled families seems to generate more troubled families in the next generation thereon, so it's a generational issue that's brought on by themselves, not by the community, not by the County.
Lack of access to affordable and healthy food	Food access for people is a problem that we continue to hear about. That was prioritized in our last Assessment and CHIP - access to healthy food, and that's something that we're working on.
Mental health/illness stigma	I think of stigma and things, and I think of mental health and things like that, so I think that's still an issue. It prevents them from seeking treatment and preventative health care because they have a hard time. The patient population that does have severe mental diagnoses, they tend to be discharged from other practices within the community, and that behavior isn't sometimes in line with what the community would expect, I guess.
Economic disparity	We've got a bit of economic disparity here, so all of the things that the higher-income populations enjoy and are available are technically unavailable to that lower population. So the only thing that you can do with no money is go out for a walk in this beautiful place we live. You can't afford to take the \$12 yoga class three times a week, you can't get to Muskegon to take the meditation class. It's available, but only if you have access.



Collaboration and Coordination

- A sizeable majority of Key Stakeholders and Key Informants believe that community organizations and agencies collaborate and coordinate together somewhat well to very well.
 - ❖ Improved collaboration/coordination could come about through **better focus on issues** and **better integration** of the **medical community**

How Well Organizations/Agencies Collaborate and Coordinate Together



Reasons for Rating

As evidence, the **substance abuse task force** - they're like, "Bam! This is an issue," and a **whole slew of different agencies came together** to say, "Okay, how are we tackling this problem?" Same with **housing**; we had a community conversation about housing and boom - we've got **all these agencies and entities that are willing to come together**. Everyone's trying to share the burdens and find ways together to work on issues. – *Key Stakeholder*

I experience this collaboration and partnership personally and professionally, but I've also had the privilege of **hearing from visiting partners regarding their pleasure and surprise at how well our community works together to accomplish big and small changes**. – *Key Informant*

I think I'm connected to an awful lot of agencies that **genuinely pool resources or share people** - share ideas and share programs to serve. – *Key Stakeholder*

I would say that this is our **biggest challenge** and it is only complicated when we **introduce new players/people changing roles**, etc. There are pockets of activity happening, but it is **not well coordinated with the medical community**. – *Key Informant*

I would say maybe somewhat, only because we're doing a Community Needs Assessment together, and we do have some goals that we set together, and we created some new programming over the last couple years. Because of that, we're kind of going down the right direction. **We have to get more focused; we have to narrow our focus even more**. We come up with three things, and we really need to **zero in tighter and have metrics and work together, have equal accountability**. – *Key Stakeholder*

Everyone wants their own clients and feels like they are competing with each other. They do not want to give up clients because the more clients that are served = more funding. – *Key Informant*

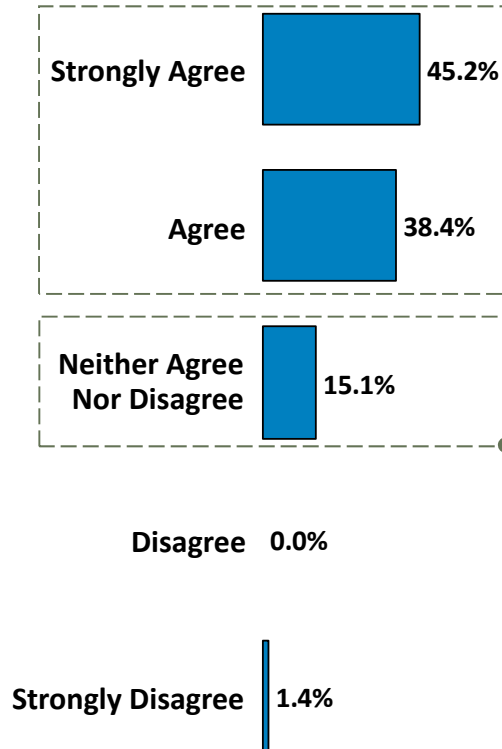
Source: KIOS – Q9/KSI – Q5: How well do organizations and agencies in Ottawa County collaborate and coordinate together in order to make programs and services more accessible to area residents? Would you say...? (n=73)/n=10); KIOS – Q9a/KSI – Q5a: Why do you say that? Please be as detailed as possible.; (n=71)/n=10)



Holistic/Biopsychosocial Approach (Key Informants)

- The vast majority of Key Informants see the benefit in serving area residents' health and health care needs via a comprehensive, integrated, and/or holistic manner; a biopsychosocial approach.
 - ❖ They understand that health, or illness, depends on physical, mental, spiritual, and social well-being

"Area residents would be better served with respect to their health needs if area programs and services took a more comprehensive, integrated, and/or holistic approach to residents' health care."



Reasons for Rating

To paraphrase the CDC - **health is not merely the absence of disease or infirmity but it is the complete state of physical, mental, spiritual, and social well being.**

Things are never just black and white; issues and every situation is unique. We **need to look at the whole picture, the whole person, and the whole situation for each case.**

Right now care is fragmented. If agencies were working together to solve problems, the **clients would be helped in a more holistic approach.**

Health care is multifactorial requiring an approach that brings **many disciplines to serve the patient.**

Care can be very fragmented, the system needs to **work on better continuity and streamlining care.**

Because lifestyle choices, behaviors, and community affect an individual's mental and physical health. The body, mind, and soul are one and the community you live in impacts your overall health.

There are a lot of **popular buzzwords** in that statement but there is **little concrete meaning** in it.

Not sure that this starts with the community vs. at the patient's medical home or doctor's office.

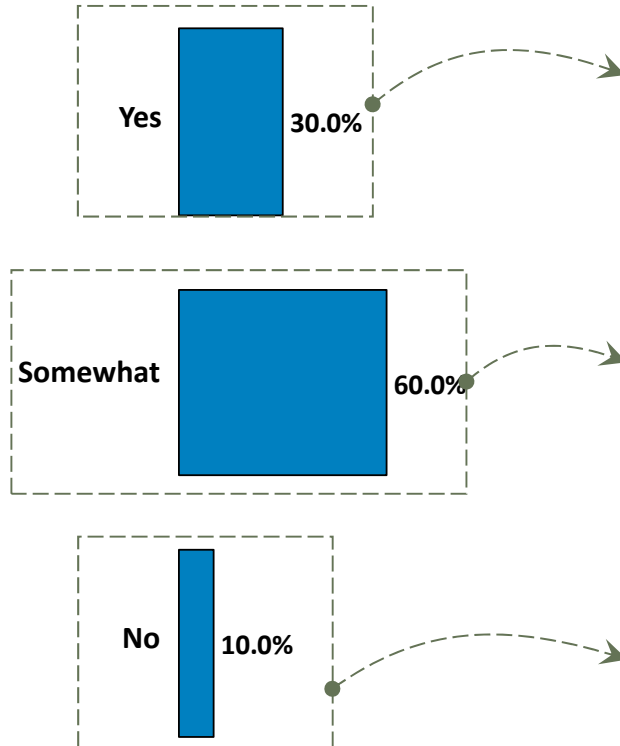
The statement is **just opinion** if there is **not research to support it.**



Holistic/Biopsychosocial Approach (Key Stakeholders)

- Almost all Key Stakeholders believe area organizations and agencies are currently taking, at least somewhat, a comprehensive, integrated, and/or holistic approach to serving residents' health and health care needs.
 - ❖ **Pathways to Better Health** is just one example of this perspective put into action

Area Programs/Services Take a Comprehensive, Integrated, and/or Holistic Approach to Serving Health of Residents



People are truly looking at a full perspective of someone's life, like, "What supports can be provided to you? What other things can we put into place besides just 'Here, take this med' kind of thing?" We also have **Pathways to Better Health** that's just starting, we've got **Pathways to Potential** in the schools, we've got **circles**, we've got **resource networks**, we've got a **lot of different entities that are doing more of a wrap-around** with a family, **really looking at not just meeting one need in their life but really looking at the whole person** and trying to find those things that not only just plug the one hole.

I would say that **some do it really well**, and **some don't do it at all**.

It's still evolving. It's **new**, but the approach - the **intent is there**. **InterCare does that**; they **collaborate with Trinity Mental Health** and **different agencies** and the **Health Department**; they have **different initiatives they're working on in the hospital**, too.

I don't think our healthcare system does that at all. You go in, you have a symptom, **they treat your symptom**, then **they send you on their way**, and they're **not addressing any of the social/emotional/environmental factors**, so, **the social determinants of health**. **Pathways is attempting to do that**, but that is an enormous need. We know that if a person doesn't have adequate housing, they're probably not paying attention to their high blood pressure or whatever. If they can't feed their children, they're probably not worrying about their diabetes, so absolutely **we need to be more holistic as a society and as a healthcare system**. I think that the **agency people are getting that** because that's kind of what we're doing, **but the healthcare system becomes a barrier for us because they're so bound in that medical model**.

Source: KSI – Q5b: In your opinion, do area programs and services take a comprehensive, integrated, and/or holistic approach to serving the health and health care needs of area residents? (n=10); KSI – Q5c: Why do you say that? (n=10)



Barriers to Care Coordination (Key Stakeholders)

- Almost all Key Stakeholders believe there are barriers to care coordination, such as the **lack of someone/some organization to lead** the coordination, **issues of confidentiality** when sharing information, **regulations** and **bureaucratic red-tape**, **individual compliance**, and the **medical model itself**.

No clear leader/coordinator	There's not really a single leader . I think the PHO would be a great vehicle, and it's not county-wide. As we're integrating between our offices, we're really still not well integrated with the county health department system, so somewhere there needs to be an organization or administration or a recognized leader for this type of thing .
Issues of confidentiality in sharing information	Yes, from a confidentiality and sharing information perspective. From a technology standpoint, my electronic health records being able to talk to your electronic health record is a problem in some cases. Reimbursement for that care coordination service is not what it should be . I think it's getting better, and I think it will improve, but there are still some major hurdles to true collaborative coordinated care .
Regulations/ bureaucratic hurdles	Yeah, I'm thinking of all the regulations that hit the staff . I'm thinking of planners, whether the flow of the money - is it private, local, state, federal? There's a lot of red tape and regulations that have to be followed , and sometimes that gets in the way of real collaboration and service delivery . I would say governmental because most of the money that we're talking about is governmental. We don't have the capacity to get past all of the red tape . How do you do the record keeping? What's the level of service you're providing? Is it care service or is it just case management? Are we prescribing? Is the nurse involved? It's just a very complicated world when you start to talk to medical as opposed to just health. I think Pathways has been very successful , and I think going slow is a good idea .
Compliance	Compliance , and I'm just pondering how to say this. In general, behaviors are hard to change . The care coordination or the Pathways - any of these models where we're working with people and linking them to services only work if people are motivated to become healthier and want to change some of their behaviors , whether it's taking a pill every day or taking a walk every day. It's still - we're still dealing with human behavior here, and that is difficult to change, especially when we have cultural, emotional, all those factors involved .
Medical Model	I think a barrier is the medical model ; recognizing that all of these social, environmental, and emotional factors are important and that we as community organizations can help them. They still don't really want to recognize their existence ; I think that's a huge barrier . And the systems that are in place don't even support it [non-medical view].

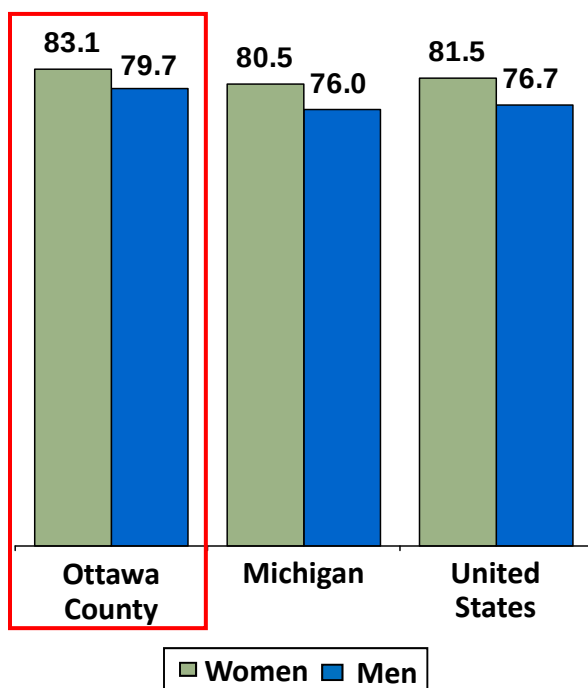
Health Status Indicators



Life Expectancy and Years of Potential Life Lost

- Both men and women in Ottawa County have longer life expectancy rates (when adjusted for age) compared to men and women across Michigan or the U.S.
- With regard to rates for years of potential life lost, Ottawa County is better on 14 of the top 15 conditions compared to the state.
 - ❖ Ottawa County residents are more likely to have years of potential life lost due to malignant neoplasm of lymphoid compared to residents across Michigan, whereas residents across Michigan are far more likely to have years of potential life lost due to diabetes than residents in Ottawa County

Life Expectancy (Average Age)



Rates of Years of Potential Life Lost (YPLL) (Below Age 75)

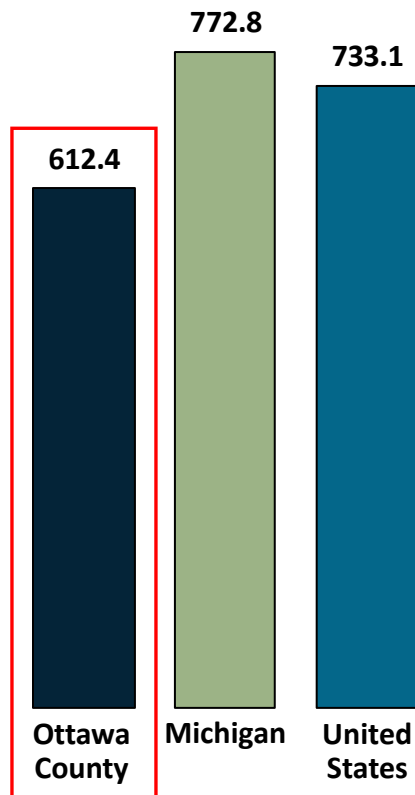
	Ottawa County		Michigan	
	RANK	Rate	RANK	Rate
Malignant Neoplasms (All)	1	1272.9	1	1620.8
Accidents	2	808.1	3	1136.4
Diseases of the heart	3	555.0	2	1276.0
Drug-Induced Deaths	4	388.7	4	791.0
Intentional Self-Harm (Suicide)	5	344.5	5	428.4
Malignant Neoplasm of Trachea/Bronchus/Lung	6	261.2	6	418.9
Malignant Neoplasm of Lymphoid	7	164.8	17	140.9
Chronic Liver Disease and Cirrhosis	8	130.6	13	209.1
Chronic Lower Respiratory Disease	9	111.4	9	255.4
Malignant Neoplasm of Colon/Rectum/Anus	10	107.5	16	143.1
Malignant Neoplasm of Breast	11	96.0	18	132.8
Cerebrovascular diseases	12	94.1	15	175.8
Diabetes Mellitus	13	53.8	12	212.4
Influenza and pneumonia	14	51.9	19	88.7
Nephritis, nephrotic syndrome, and nephrosis	15	46.1	20	85.4



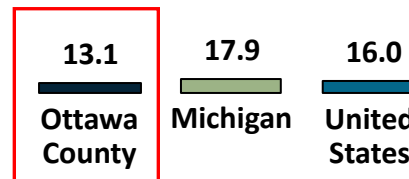
Mortality Rates

- Ottawa County's age adjusted mortality rate is far better than the state or the national rates and the child mortality rate is slightly better than the rates in MI or the U.S.
- On the other hand, **Ottawa County's infant mortality rate is slightly worse than the national rate.**

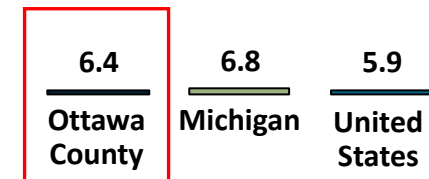
Age Adjusted Mortality Rate
Per 100,000 Population



Child Mortality Rate (Age 1-14)
Per 100,000 Population



Infant Mortality Rate
Per 1,000 Live Births





Top 10 Leading Causes Of Death

- **Cancer** is the leading cause of death in Ottawa County, compared to heart disease for the state and the nation. **Alzheimer's disease leads to death far more often in Ottawa County than it does in the state and the nation.** Conversely, chronic lower respiratory disease and diabetes tend to be causes of death more in the state and the nation than in Ottawa County. **Of note, as a leading cause of death, diabetes moved down from 7th three years ago to 9th this year.**

Age Adjusted, Rates Per 100,000

	Ottawa County		Michigan		United States	
	RANK	Rate	RANK	Rate	RANK	Rate
Cancer	1	140.4	2	164.9	2	158.5
Heart Disease	2	131.7	1	195.5	1	168.5
Alzheimer's Disease	3	43.7	6	29.7	6	29.4
Unintentional Injuries	4	37.2	4	42.9	3	43.2
Stroke	5	32.8	5	36.8	5	37.6
Chronic Lower Respiratory Diseases	6	30.2	3	46.7	4	41.6
Pneumonia/Influenza	7	15.7	9	15.0	8	15.2
Intentional Self-Harm (Suicide)	8	9.9	10	13.6	10	13.3
Diabetes Mellitus	9	9.5	7	22.2	7	21.3
Kidney Disease	10	7.4	8	15.4	9	13.4
All Other Causes		153.9		190.1		191.1



Top 10 Leading Causes Of Preventable Hospitalizations

- Preventable hospitalizations are roughly the same proportion of all hospitalizations in Ottawa County (19.2%) compared to the state of Michigan (20.2%). **Congestive heart failure** and **bacterial pneumonia** are the leading causes of preventable hospitalization in Ottawa County and Michigan, **but the proportion for both are higher in Ottawa County** compared to the state. COPD is more common throughout Michigan compared to Ottawa County.

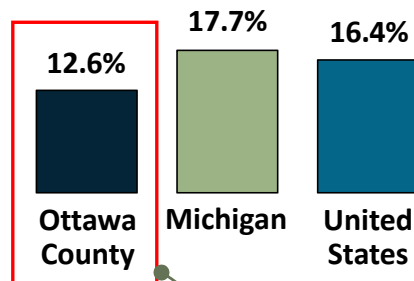
	Ottawa County		Michigan	
	RANK	% of All Preventable Hospitalizations	RANK	% of All Preventable Hospitalizations
Congestive Heart Failure	1	16.5%	1	14.0%
Bacterial Pneumonia	2	11.7%	2	9.7%
Kidney/Urinary Infections	3	6.7%	4	6.8%
Cellulitis	4	6.2%	5	6.5%
Diabetes	5	5.9%	6	5.9%
Chronic Obstructive Pulmonary Disease	6	5.7%	3	9.1%
Grand Mal and Other Epileptic Conditions	7	5.3%	8	3.3%
Asthma	8	3.4%	7	5.3%
Convulsions	9	2.2%	--	--
Dehydration	10	1.8%	9	1.8%
Gastroenteritis	--	--	10	1.7%
All Other Ambulatory Care Sensitive Conditions		34.8%		36.1%
Preventable Hospitalizations as a % of All Hospitalizations		<u>19.2%</u>		<u>20.2%</u>



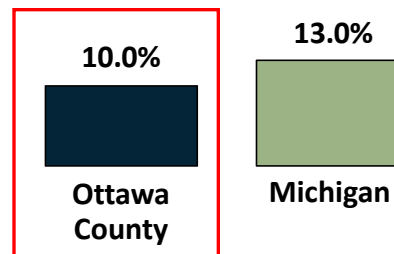
Health Status, Physical Health, and Mental Health

- Although over half of Ottawa County adults report very good or excellent health, 12.6% report fair or poor health.
- This rises to 30.3% for underserved residents.
- One in ten (10.0%) Ottawa County adults have poor physical health and one in eleven (8.8%) area adults have poor mental health; both rates are better than the state rates.

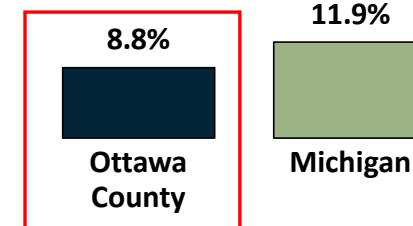
Perception of General Health as Fair/Poor (Adults)



Poor Physical Health (Adults)



Poor Mental Health (Adults)



Underserved = 30.3%

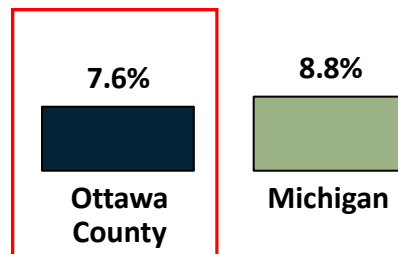
Source: BRFS – Q1.2: Would you say that in general your health is... (n=1,318); URS – Q1: To begin, would you say your general health is...? BRFS – Q2.1: Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good? (n=1,307); BRFS – Q2.2: Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good? (n=1,311)



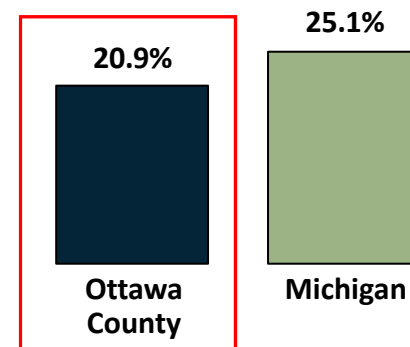
Activity Limitation and Disability

- Overall, 7.6% of area adults are prevented from doing their usual activities (e.g., self-care, work, recreation) due to poor physical or mental health.
- One in five (20.9%) area adults is considered to be disabled, meaning they experience either limited activity because of a physical, mental, or emotional problem, or require the use of special equipment (e.g., wheelchair, cane).
- Both Ottawa County rates are lower than the state rates.

Activity Limitation (Adults)



Disability (Adults)



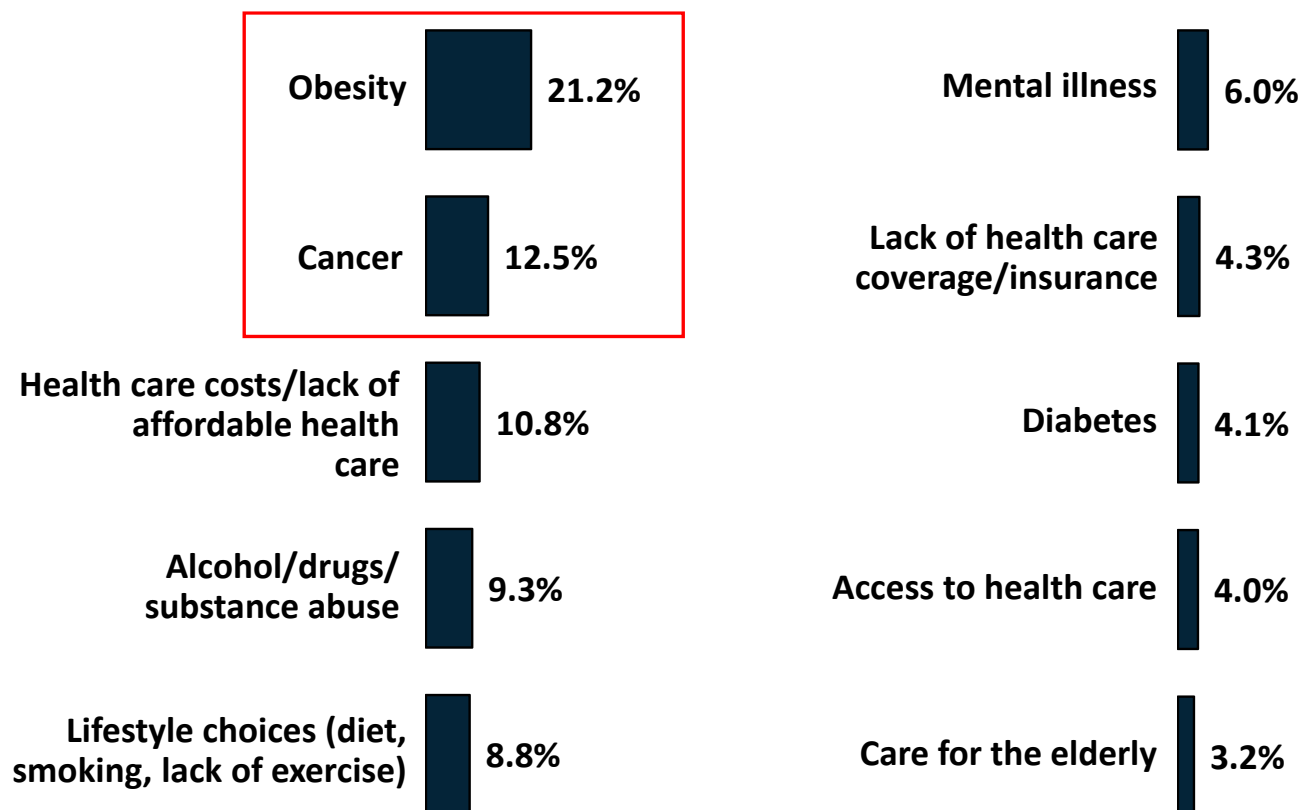
Source: BRFSS – Q2.3: During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation? (n=1,314); BRFSS – Q15.1: Are you limited in any way in any activities because of physical, mental, or emotional problems? (n=1,313); BRFSS – Q15.2: Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone? (n=1,314)



Most Important Health Problems in the Community Today (BRFS Adults)

- Area adults consider **obesity** to be the top health problem in Ottawa County, followed by **cancer**, **health care costs**, **substance abuse**, and **lifestyle choices** such as lack of exercise, smoking, and diet.

Top 10 Most Important Health Problems in the Community Today

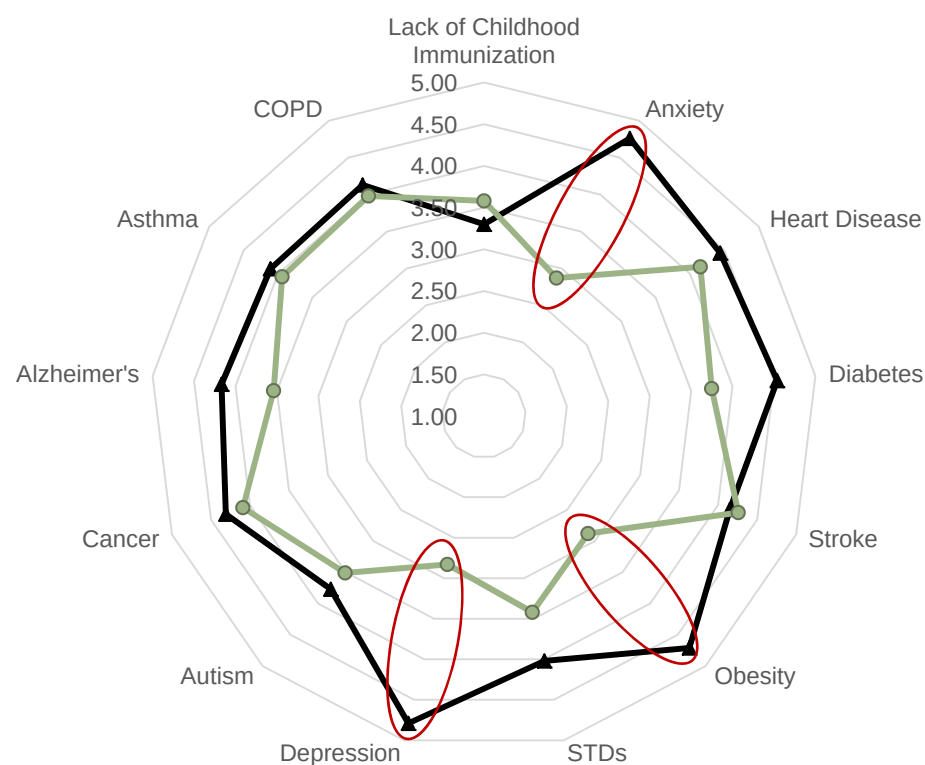




Perceived Prevalence Of Health Issues and Satisfaction With Community Response

- Key Informants view **depression** and **anxiety** as the **top two health issues most prevalent** in Ottawa County, followed by **obesity, diabetes, and heart disease**.
 - ❖ Ratings for the perceived prevalence of depression and anxiety are much higher this year compared to 2014 and both have overtaken obesity which was the top perceived health issues at that time.
- Further, Key Informants are **least satisfied with the community's response to depression, anxiety, and obesity**.

Health Issues



Prevalence Scale: 1=not at all prevalent, 2=not very prevalent, 3=slightly prevalent, 4=very prevalent, 5=extremely prevalent

▲ Perceived Prevalence

● Satisfaction with Community Response

Satisfaction Scale: 1=not at all satisfied, 2=not very satisfied, 3=slightly satisfied, 4=very satisfied, 5=extremely satisfied

Source: KIOS – Q2: Please tell us how prevalent the following health issues are in Ottawa County. If you are unsure, please select “don’t know.” (n=47-82); KIOS – Q2a: How satisfied are you with your community’s response to these health issues? (n=43-75).



Additional Perceived Health Issues (Key Informants)

- Key Informants see additional health issues such as **mental health beyond anxiety and depression**, the **prevalence of STDs such as chlamydia** and the need for **sexual health education** that could assist in driving the rate down, and programs or services that **assist people in accessing and navigating the health care system**.

Affording treatment and medications.

Chlamydia rates have been increasing and it is the most prevalent reportable disease.

Groups of **children** with **malnourishment**.

Kidney disease, flu, pneumonia.

I feel like **access to sexual health education** and **family planning services** is a challenge that often goes unnamed in our community - particularly for the young adult population (late teens through about age 25). I've worked with many teens and after they graduate high school many go on to have children within a couple of years - almost always unintentionally.

I think we try and like to say we are doing our duty. Some healthcare professionals are doing an amazing job but could use **better resources and support for difficult issues** that many people in the community want to ignore.

Inability/unwillingness to talk openly about drug abuse.

Increase in **mental health crisis**.

Long term care issues for Alzheimer's and dementia patients.

Mental health issues (other than anxiety, depression) (2).

Mental Health continues to be a concern although we are making progress.

Most people have regular visits to PCPs and dentists, but there is still a sense that **a significant group of people find it difficult to navigate and coordinate the needs and demands of insurance coverage, health care cost, appointments** to more than one provider and the **differing plans of care** developed by each provider (often with follow up labs and medications).

Safety.

Stress.

Teen pregnancy, suicidal behaviors, STDs.

There are **opportunities for improvement related to Chlamydia screenings**.

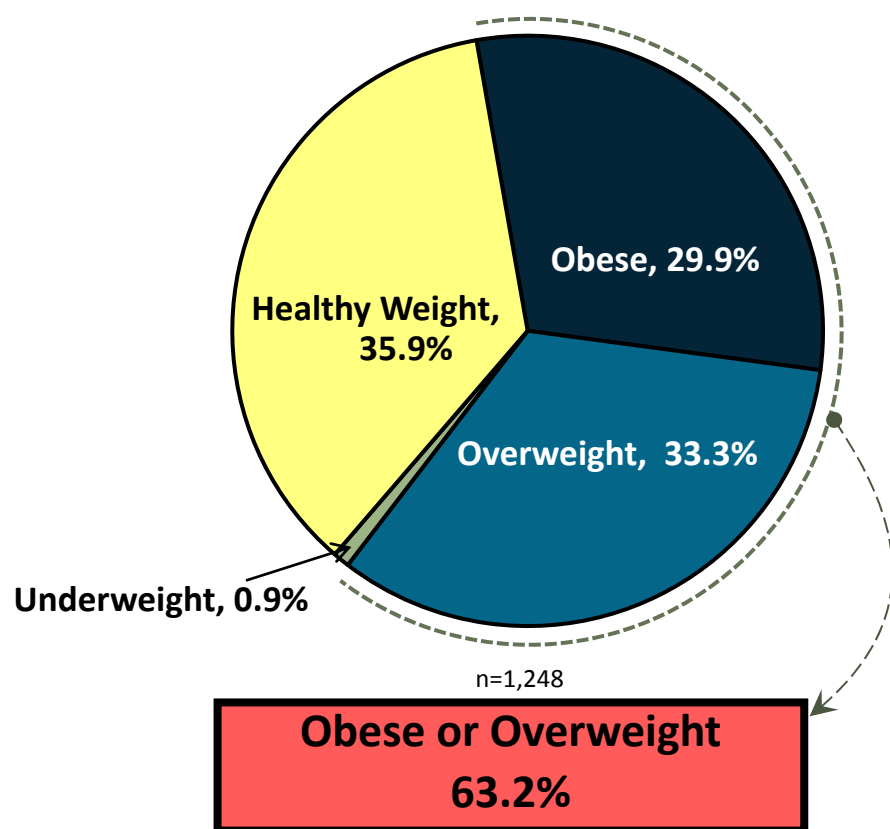
Toxic chemical exposure.



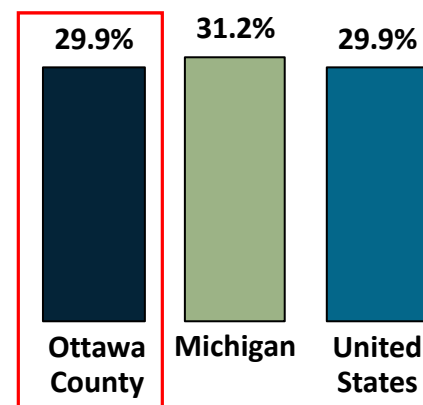
Weight Status Among Adults and Youth

- **More than six in ten (63.2%) Ottawa County adults are considered to be either overweight or obese** per their BMI, while more than one-third (35.9%) are at a healthy weight.
- In addition to **three in ten area adults being obese, one in ten youth** are as well

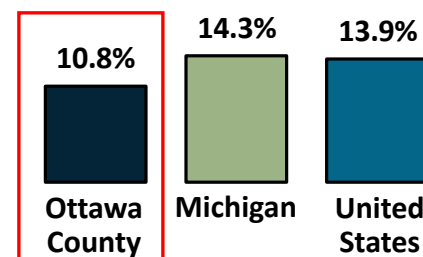
Weight Status Among Area Adults



Obese Adults



Obese Youth



Obese = among all adults, the proportion of respondents whose BMI was greater than or equal to 30.0.
Overweight = among all adults, the proportion of respondents whose BMI was greater than or equal to 25.0, but less than 30.0.
Healthy weight = among all adults, the proportion of respondents whose BMI was greater than or equal to 18.5 but less than 25.0.
Underweight = among all adults, the proportion of respondents whose BMI was less than 18.5

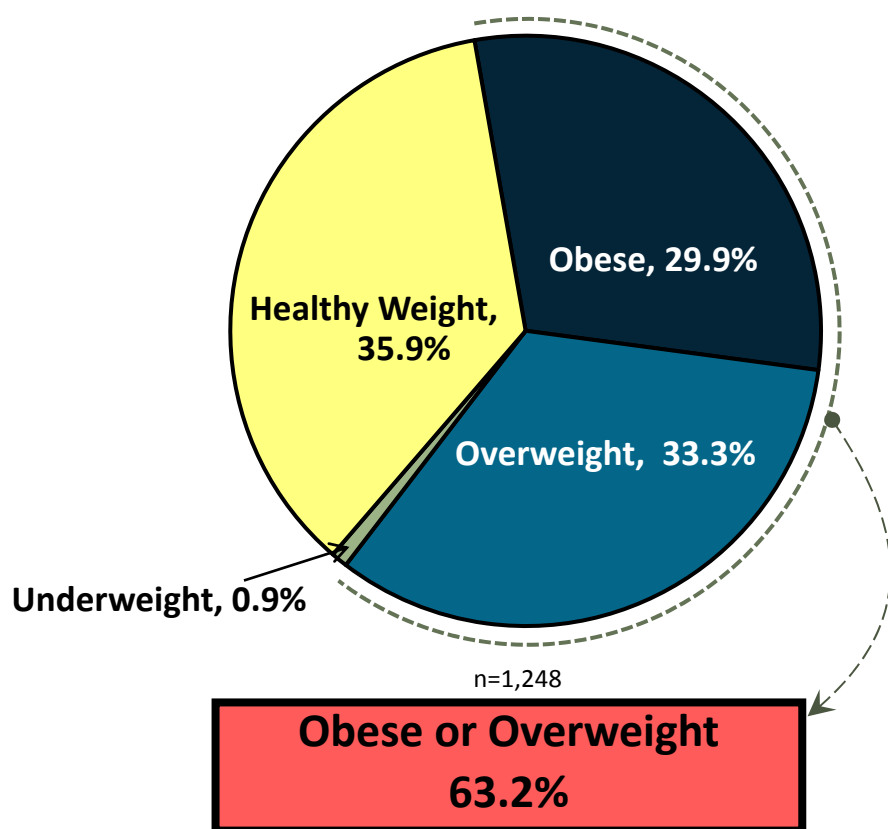
Source: BRFS – Q10.12: About how much do you weigh without shoes? (n=1,250);
BRFS – Q10.13: About how tall are you without shoes? (n=1,297); Ottawa Youth
Assessment Survey 2015, MI YRBS 2015.



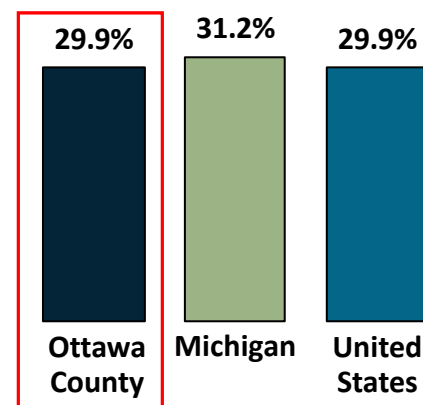
Weight Status Among Adults and Youth

- **More than six in ten (63.2%) Ottawa County adults are considered to be either overweight or obese** per their BMI, while more than one-third (35.9%) are at a healthy weight.
- In addition to **three in ten area adults being obese**, roughly **one in ten area youth** are as well

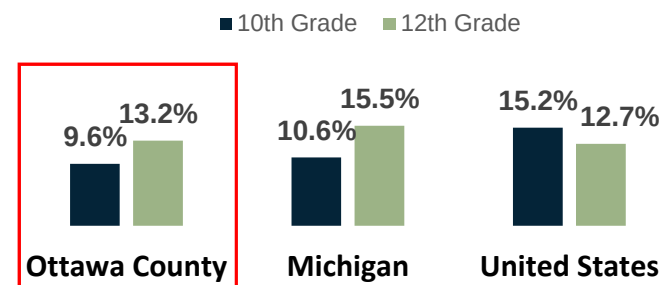
Weight Status Among Area Adults



Obese Adults



Obese Youth



Source: BRFSS – Q10.12: About how much do you weigh without shoes? (n=1,250); BRFSS – Q10.13: About how tall are you without shoes? (n=1,297); Ottawa Youth Assessment Survey 2015, MI and U.S. YRBS 2015.

Obese = among all adults, the proportion of respondents whose BMI was greater than or equal to 30.0.
Overweight = among all adults, the proportion of respondents whose BMI was greater than or equal to 25.0, but less than 30.0.
Healthy weight = among all adults, the proportion of respondents whose BMI was greater than or equal to 18.5 but less than 25.0.
Underweight = among all adults, the proportion of respondents whose BMI was less than 18.5



Obesity – A Top Concern Of Key Stakeholders and Key Informants

- Key Stakeholders and Key Informants consider **obesity to be one of the most pressing or concerning health issues** in Ottawa County, not only because it's highly prevalent, but more importantly: (1) it's **highly co-morbid with other conditions, or negative outcomes**, such as diabetes, heart disease and stroke, and (2) it **can often be prevented through lifestyle changes** in diet, exercise, and avoidance of alcohol.
 - ❖ Further, Ottawa County adults report obesity as the **most important health problem** in the community.

Prevalence	Like childhood obesity - we're seeing more of that. I don't know if it's being addressed. – <i>Key Stakeholder</i> Although we might not have as high a percentage as other areas, the rate of obesity is still a major concern. – <i>Key Informant</i> It seems as though the majority of my patients are overweight. I realize I may have a skewed sample, as overweight/obese people tend to be less healthy. – <i>Key Informant</i>
Co-morbidity	Obesity is at the core of multiple PREVENTABLE chronic health conditions, including diabetes and heart disease. If we could reverse the obesity trend we would, without doubt, and by default, lower the incidence of heart disease, diabetes, stroke, etc. – <i>Key Informant</i> Obesity is very prevalent and leads to many preventable causes of death. – <i>Key Informant</i>
Lifestyle choices	Another completely different thing in health I think is a big issue is lifestyle choices certainly our eating - very poorly still and overweight and obesity, even though the numbers are better than other parts of the state, they're just terrible. – <i>Key Stakeholder</i> Obesity is a national problem but I think here it is partially cultural. The Midwest doesn't put as high of a value on eating healthy and fitness. – <i>Key Informant</i>

Source: KSI – Q1: What do you feel are the two or three most pressing or concerning health issues facing residents in Ottawa County, especially the underserved? (n=10); KIOS – Q1: To begin, what are one or two most pressing health issues or concerns in Ottawa County? (n=91); KIOS – Q1a: Why do you think it's a problem in Ottawa County? Please be as detailed as possible. (n=91); BRFSS – Q1: What do you feel is the most important **health** problem in your community today?



Mental Health (Behavioral Health) – The Top Concern Of Key Stakeholders and Key Informants

- Key Stakeholders and Key Informants offer countless reasons why mental/behavioral health is their top concern, but four main themes rise to the top. First, there is a **lack of programs, services, and resources** to deal with the problem. Second, there is a **lack of trained personnel** to serve people with these issues, **especially psychiatrists**. Third, there is **continually a lack of funding** for such programs/services, which makes it appear to be a lower priority. Finally, there is still a **stigma attached to mental illness**, which may explain its lower priority status.

Lack of services/ resources	Behavior health is still very underserved. It's not just access, we struggle with treating behavioral health patients all the time; whether they're insured or not insured. The challenge is you don't have a lot of services for them, and the community and people aren't - new businesses aren't popping up to serve that population for only one reason because it's not economically feasible to serve that population. You can't run a good business model, and so without economics to support it, it just goes underserved. It's just been history for a long, long time. – <i>Key Stakeholder</i> I don't think we have adequate resources (funds, and facilities) to deal with the problem. I don't think the government takes it seriously enough to fund it. – <i>Key Informant</i>
Lack of therapists/ psychiatrists	I would say certainly there's an access issue there with mental/behavioral health; there's not enough therapists or psychiatrists, especially in our area. There's a few more resources in the Kent County/Grand Rapids area, but it's difficult for those patients to go out to Grand Rapids. – <i>Key Stakeholder</i> Limited number of psychiatrists (National problem, not just locally). – <i>Key Informant</i>
Lack of funding	1 in 5 Americans have a mental health diagnosis. I work on a psychiatric unit and see 100's of people every year with untreated or under-treated mental illness in Ottawa County. People are admitted in a worsened state since Ottawa County Community Mental Health lost some of its funding. – <i>Key Informant</i> Cutbacks on mental health funding, not enough available appointments. – <i>Key Informant</i>
Stigma	The data we see from the YAS survey and anecdotal information suggests mental illness continues to be a major concern for both kids and adults. It is difficult to know all the reasons this is an issue but I do think stigma remains a significant barrier to people recognizing they are struggling with a mental health issue and seeking the help they need. – <i>Key Informant</i>

Source: KSI – Q1: What do you feel are the two or three most pressing or concerning health issues facing residents in Ottawa County, especially the underserved? (n=10); KIOS – Q1: To begin, what are one or two most pressing health issues or concerns in Ottawa County? (n=91); KIOS – Q1a: Why do you think it's a problem in Ottawa County? Please be as detailed as possible. (n=91)



Psychological Distress

- More than eight in ten (83.8%) Ottawa County adults are considered to be mentally healthy according to the Kessler 6 Psychological Distress Questionnaire.*
 - ❖ Conversely, **13.6% experience mild to moderate psychological distress** and **2.5% are severely distressed**.

	<i>During the Past 30 Days, About How Often Did You....</i>					
<i>Frequency of Feeling</i>	Feel Nervous (n=1,307)	Feel Hopeless (n=1,305)	Feel Restless or Fidgety (n=1,307)	Feel So Depressed That Nothing Could Cheer You Up (n=1,307)	Feel That Everything Is An Effort (n=1,301)	Feel Worthless (n=1,305)
None of the time	53.6%	83.4%	56.2%	83.6%	64.1%	86.9%
A Little	27.4%	9.9%	22.5%	10.0%	19.1%	7.7%
Some of the time	13.7%	4.3%	13.4%	4.9%	10.7%	4.3%
Most of the time	3.5%	1.1%	3.6%	1.0%	2.6%	0.8%
All of the time	1.7%	1.3%	4.2%	0.5%	3.6%	0.2%

Mentally Healthy (Well) = 83.8%

Mild to Moderate Psychological Distress = 13.6%

Severe Psychological Distress = 2.5%

*Calculated from responses to Q. 18.1- 18.6, where none of the time = 1, a little = 2, some of the time = 3, most of the time = 4, and all of the time = 5. Responses were summed across all six questions with total scores representing the above categories: mentally well (6-11), mild to moderate psychological distress (12-19), and severe psychological distress (20+).

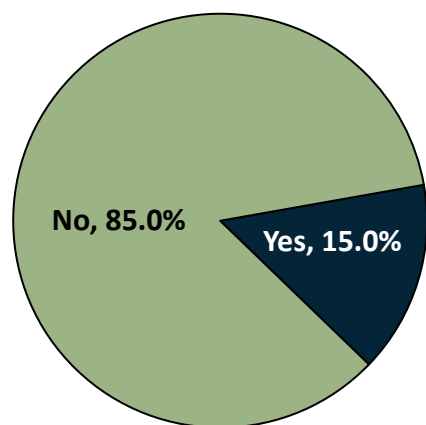
Source – BRFS Q18.1-Q18.6 During the past 30 days, about how often did you feel....



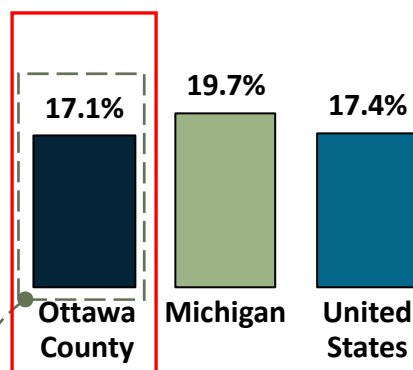
Anxiety and Depression

- Among all area adults, 15.0% report having anxiety disorder and 17.1% report having depression.
 - ❖ The rate of depression for Ottawa County adults is lower than the state and the nation.
 - ❖ Of the Ottawa County women who have been told by a health care professional they have depression, 12.7% were told so following the birth of a child or related to pregnancy
- Approximately one in four Ottawa County youth have reported feeling sad or hopeless in the past year, a rate also lower than Michigan or the U.S.

Told By Health Care Provider I Have Anxiety Disorder (All Adults)

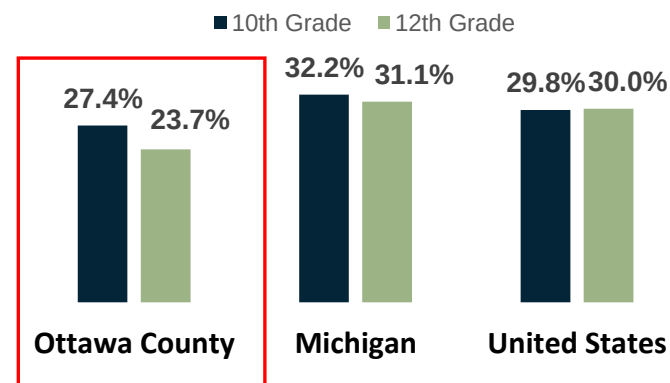


Told By Health Care Provider I Have Depressive Disorder (All Adults)



**Depressive Disorder Related to Pregnancy/Childbirth = 12.7%
(Among Women Who Had Been Diagnosed With Depression)**

Proportion of Youth Reporting Being Sad/Feeling Hopeless in Past Year



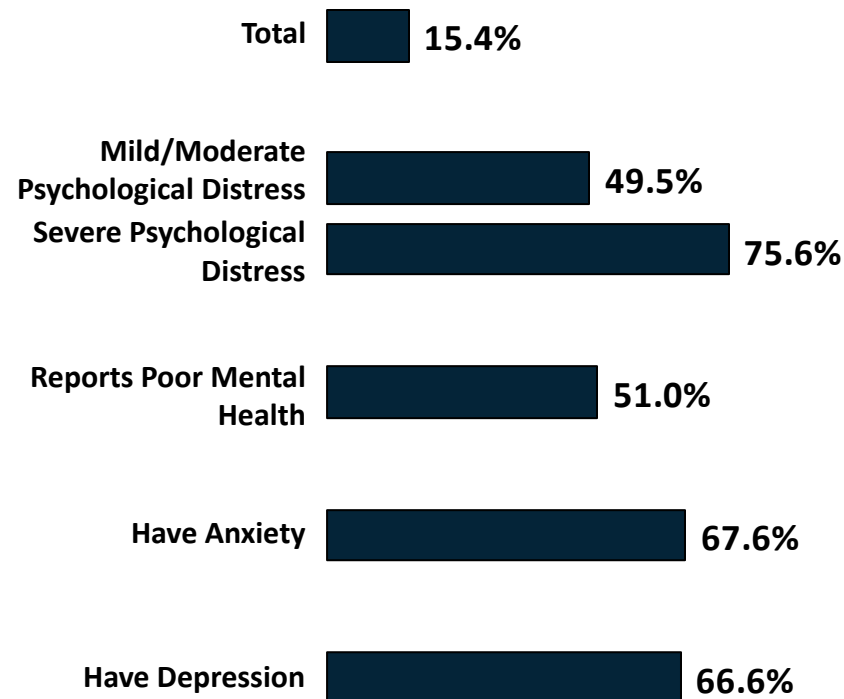
Source: BRFs – Q4.12 Has a doctor or other healthcare provider EVER told you that you have an anxiety disorder (including acute stress disorder, anxiety, generalized anxiety disorder, obsessive-compulsive disorder, panic disorder, phobia, posttraumatic stress disorder, or social anxiety disorder)? (n=1,309); BRFs – Q4.13 Has a doctor or other healthcare provider EVER told you that you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)? (n=1,308); Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Selected Tables, Michigan BRFs, 2015, Centers for Disease Control and Prevention (CDC); Behavioral Risk Factor Surveillance System Survey Data, Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2016; BRFs – Q4.14: (IF FEMALE and 4.13=YES) Was this following the birth of a child or related to pregnancy? (n=160); Ottawa County Youth Assessment Survey, 2015; Michigan and U.S. YRBS, 2015.



Medication and Treatment for Psychological Distress

- Of all Ottawa County adults, 15.4% currently take medication or receive treatment for a mental health condition or emotional problem.
 - ❖ However, **many of those who could benefit the most from medication/treatment are not receiving it:**
 - 50.5% of those classified as having “mild to moderate psychological distress”
 - 24.4% of those classified as having “severe psychological distress”
 - 49.0% of those classified as having “poor mental health”
 - 32.4% of those with anxiety
 - 33.4% of those with depression

Taking Medication or Receiving Treatment for Mental Health Condition or Emotional Problem (Among Adults, % Yes)



Source: BRFSS – Q18.7: Are you now taking medicine or receiving treatment from a doctor or other health professional for any type of mental health condition or emotional problem? (n=1,299)

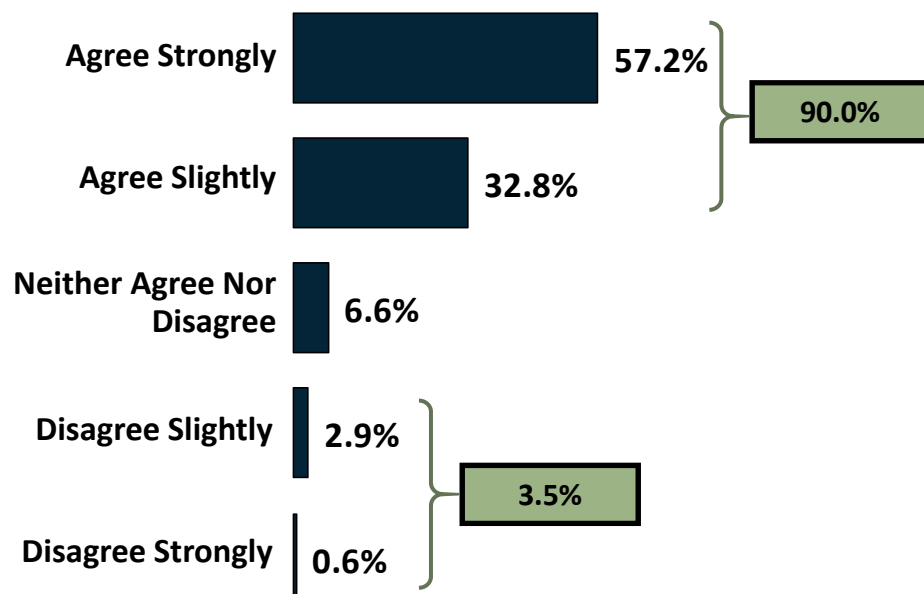


Perceptions of Mental Health Treatment and Mental Illness

- Even though nine in ten (90.0%) Ottawa County adults believe treatment can help people with mental illness lead normal lives, just half (52.8%) think people are generally caring and sympathetic to people with mental illness, and this drops to 13.9% among those with severe psychological distress.

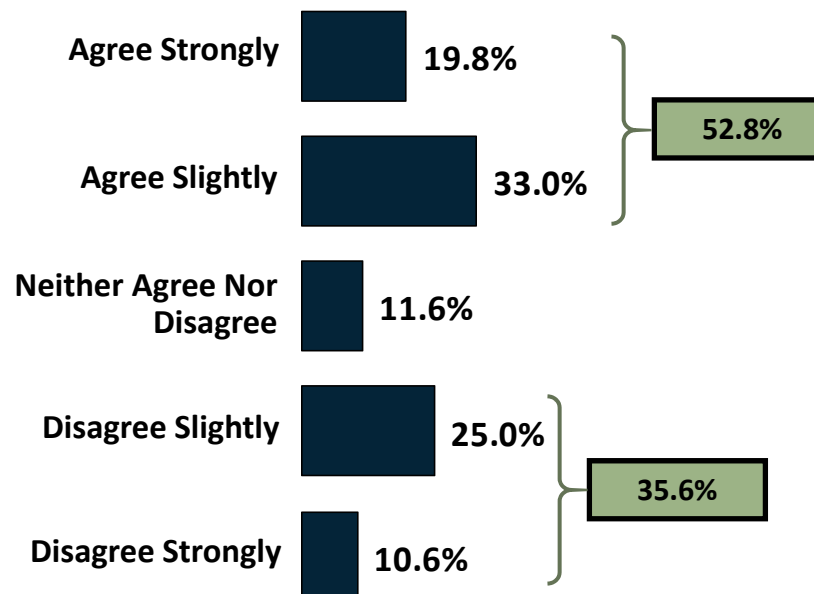
❖ This continued stigma could be the reason more people don't seek treatment even though they could benefit from it

"Treatment Can Help People With Mental Illness Lead Normal Lives" (Among Adults)



Agree by Psychological Distress Category
Well (90.0%)
Mild to Moderate (91.1%)
Severe (83.4%)

"People Are Generally Caring and Sympathetic to People With Mental Illness" (Among Adults)



Agree by Psychological Distress Category
Well (56.1%)
Mild to Moderate (41.0%)
Severe (13.9%)

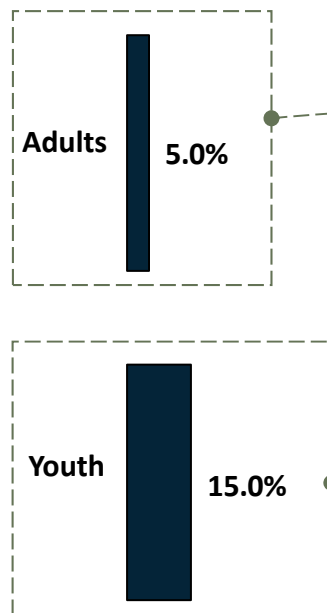
Source: BRFs – Q18.8 What is your level of agreement with the following statement? "Treatment can help people with mental illness lead normal lives." Do you – agree slightly or strongly, or disagree slightly or strongly? (n=1,291); BRFs – Q18.9 What is your level of agreement with the following statement? "People are generally caring and sympathetic to people with mental illness." Do you – agree slightly or strongly, or disagree slightly or strongly? (n=1,294)



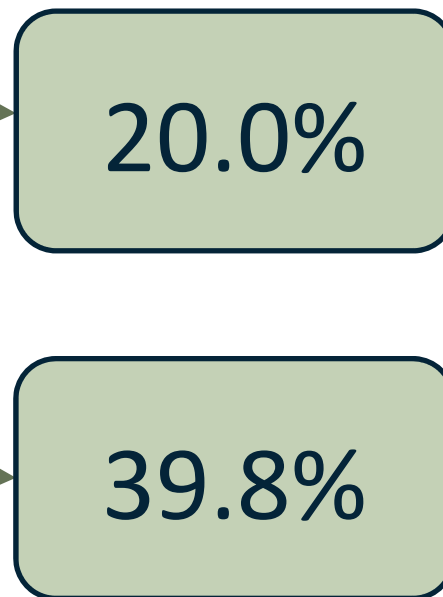
Suicide

- One in twenty (5.0%) area adults have thought about taking their own life in the past year.
 - ❖ Of these, one in five have actually attempted suicide in the past year.
- Compared to adults, three times as many youth (15.0%) have thought about suicide and twice as many (39.8%) have attempted it in the past year.

Thought of Taking Own Life in Past 12 Months



Attempted Suicide in Past 12 Months (Among Those Who Thought About Suicide)



Verbatim Comments on Suicide

We are finding that **suicide** among youth are **occurring at younger ages** in the past one-two years. – *Key Informant*

Apparently the **teen suicide rate is very high and access to care is a challenge**. This is the same throughout the country. – *Key Informant*

I think what we're seeing is, from a behavioral standpoint, in our schools, with **the amount of teen suicides or attempted suicides in our area. It's just heartbreaking**, and I know that this is something that schools are very, very worried about. – *Key Stakeholder*

Source: BRFS – Q20.1: Has there been a time in the past 12 months when you thought of taking your own life? (n=1,265); Ottawa County Youth Assessment Survey, 2015. (n=4913); BRFS – Q20.2: During the past 12 months, did you attempt to commit suicide (take your own life)? Would you say... (n=43); Ottawa County Youth Assessment Survey, 2015. (n=736)

Health Care Access



Overall State Of Health Care Access (Key Stakeholders)

- According to Key Stakeholders, the overall state of health care access in Ottawa County can be characterized as a case of those who **have** vs. those who **have not**. Those with insurance and the ability to afford out-of-pocket expenses such as co-pays and deductibles have access to almost any kind of service imaginable. Those without insurance, or with insurance but unable to afford copays/deductibles, have trouble accessing needed services.
- There continue to be issues regarding the **lack of primary care providers** in general, **lack of providers accepting all insurances** or **providers accepting new patients**, **lack of mental health care**, **lack of dental care**, cultural *issues* such as **system distrust**, **language barriers** for the Hispanic subpopulation, and **health illiteracy**.

I think **access has improved**, especially since the Affordable Care Act was implemented. There are more and more people that are covered by insurance. Certainly the Medicaid expansion for the population I serve in mental health was a huge benefit to getting people health insurance so that they could then get services and treatment. **There's still folks out there who don't have insurance or have insurance but cannot afford the deductibles so don't really have it.**

There are **differences in subpopulations**. Our uninsured population did decrease with the Affordable Care Act, so the **number of people insured went up**, but I would say that **pure access did not go up**. We **still need more primary care physicians to be able to serve the people with insurance** now, so our situation improved on paper – that **people have affordable care for the catastrophic stuff** – but **I wouldn't say that we're accessing preventive measures** as much as I hoped we would with the Affordable Care Act. **Doctors aren't taking new patients; dentists are full a month out; mental health care access**; it didn't do anything to the cost of healthy food and choices like that, so I think for some subpopulations, I think we still have **enormous access barriers**.

I would just say on the provider side, there's certainly an **opportunity to enhance communication**. We **don't have a lot of Spanish-speaking health care providers**, and I think that creates the potential issues. It might be a barrier to care, but it probably is a barrier to the right kind of care if we had the provider base more balanced in that regard. We also see a **barrier with some of those populations**, and especially with some of the **migrant workers** and some of the **potentially illegal aliens** that we have here - really working with us to even provide information so we can get them qualified for Medicaid and that kind of stuff. Often, **they won't supply the information to us**, which would help them gain access to care for **fear of deportation**, so we really struggle working with some populations because **they choose not to access care because they're fearful of the system**, and **will only do it when they're in really a bad, bad state**.

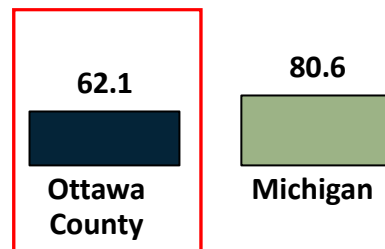
There's **lots of issues with health care access**. One is, people continue to **struggle with navigating the healthcare system**, which can create access issues. I think **health care literacy continues to be a challenge** and just gets complicated especially as health care changes so quickly. I think we have **primary care holes**. It might not be that we don't have a primary care provider here that someone can get into, but it **takes so long to get in**. **Getting into an OB/GYN appointment might take a year to get in**, and that just seems kind of crazy, and we have a lot of women that come here to the Health Department for family planning services because they can't wait a year, so I think timing and ability to get in to see somebody in a reasonable amount of time is a problem, so **we still have pockets of people that either don't have care, or it's not affordable if they have to go in for a visit** - the copay - so **they go to the emergency room**. I think that **mental health access** - the ER folks will say that the **ER department** is still kind of that go-to place where a lot of **people are coming in with mental health issues**, and they're **not really accessing the appropriate kind of care**.



Primary Care Providers

- There are far fewer primary care physicians (PCP) per capita in Ottawa County compared to the state.
- Among Key Stakeholders and Key Informants, there are mixed perceptions as to whether or not there is a shortage of primary care providers in Ottawa County; however, the majority of them would agree that there is definitely a lack of primary health care providers for the underserved: those who are uninsured, underinsured, on Medicaid, or on Medicare.

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



Key Stakeholder and Key Informant Comments on the State of Primary Care Physicians

Well, frankly, it **depends on the insurance that you have**. I mean, if we're just being frank. **Choice is available to those insured commercially, but there is not as much choice for those uninsured or insured by Medicare/Medicaid.** – *Key Stakeholder*

For a while, we had issues, but honestly I haven't heard much. We have three different healthcare systems right in our county, three different hospitals, so my understanding is that **between all of those options, we're not running into issues**. For a while, we had issues with foster kids that had certain Medicaid – that they couldn't get into certain doctors. I really haven't heard that in a little while, so if it is an issue, it's just not coming to my attention. – *Key Stakeholder*

I work in Urgent Care and many **patients say they cannot find a PCP or cannot get into a new PCP in a timely manner**. Many doctors are scheduling months out for a new patient appointment. **We need more primary care providers**. Also need more access to counselors for mental health and substance abuse issues. – *Key Informant*

There is a **paucity of primary care providers** to the extent that if a patient is looking to establish a doctor, the 'first available' **intake appointment is often months away**. And the more likely scenario is that the existing **primary care providers in the system are not accepting new patients**. – *Key Informant*

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

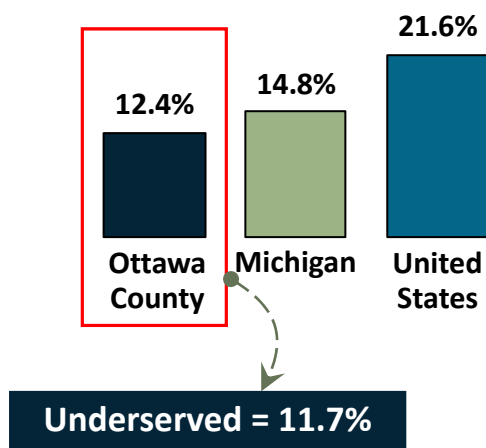
Source: PCP: County Health Rankings, 2017; KSI – Q3a: Is there a wide variety/choice of primary health care providers? (n=10); KIOS – Q1a: Why do you think [insert most pressing health concern from Q1] is a problem in Ottawa County? Please be as detailed as possible.



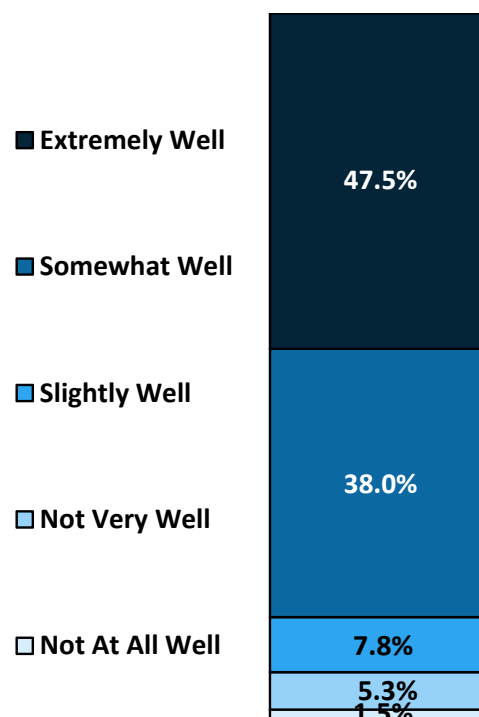
Personal Health Care Provider

- Nearly one in eight adults (12.4%) have no personal health care provider – or **medical home** – and this proportion is only slightly better for underserved adults (11.7%).
- The vast majority (85.5%) of underserved adults believe health care providers communicate with them well.

Have No Personal Health Care Provider (All Adults)



How Well Do Health Care Providers Communicate With You (Underserved Adults)



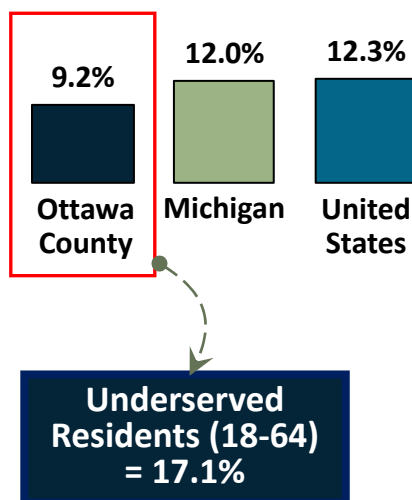
Source: BRFSS – Q3.4: Do you have one person you think of as your personal doctor or health care provider? (n=1,317); URS – Q2: Do you and your family members have a primary care physician that you can visit for questions or concerns about your health? (n=471); URS – Q8: How well do you feel health care providers communicate with you about your health care? (n=474)



Health Care Coverage

- Almost one in ten (9.2%) area adults under age 65 have no health care coverage, a rate better than MI or the U.S.
 - ❖ However, **this rate increases to 17.1% for residents considered to be underserved**
- The most widespread primary source of health coverage for all adults, by far, is a plan purchased through an employer or union.
 - ❖ This differs markedly from **underserved** adults, who are **more likely to have Medicaid** than any other coverage
 - ❖ Nearly **one-fourth of children aged 0-18 are covered by Medicaid**

No Health Coverage (Among Adults 18-64)



Primary Source of Health Coverage (All Adults)

	Ottawa County	
	Adults (BRFS)	Adults (Underserved)
A plan purchased through an employer or union	58.8%	21.5%
Medicare	12.2%	27.9%
A plan that you or another family member buys on your own	11.3%	4.6%
Medicaid or other state program	8.9%	40.2%
Tricare, VA, or military	0.6%	2.3%
Medicare supplement	NA	11.9%
None	8.1%	14.4%

Children Age 0-18 Covered

With Insurance = 96.4%
With **Medicaid** = 23.5%

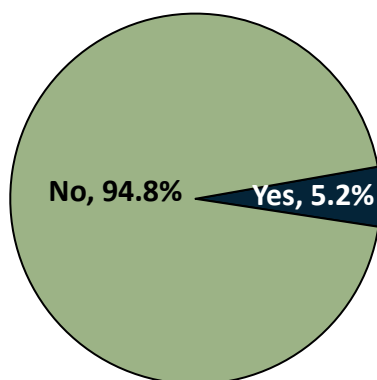
Source: BRFS – Q3.1: Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare or Indian Health Services? (n=904); BRFS – Q3.2: What is the primary source of your health coverage? Is it....? (n=1,304); URS – Q9: Which of these describes your health insurance situation? (n=480); Kids Count Data Book, 2016.



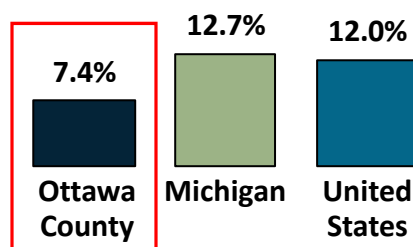
Problems Receiving Health Care (All Adults)

- Among those currently insured, one in twenty (5.2%) Ottawa County adults have gone without health care coverage in the past year.
- Among all Ottawa County adults, 7.4% have foregone health care in the past year due to cost, a rate better than the state or national rate.
- Those who have had to delay needed care in the past year cite the **general cost of health care**, and more specifically, **out-of-pocket expenses such as co-pays and deductibles**, as reasons for putting it off.
- Further, among all adults who take medication, **8.0% did not take their medication as prescribed due to costs**.

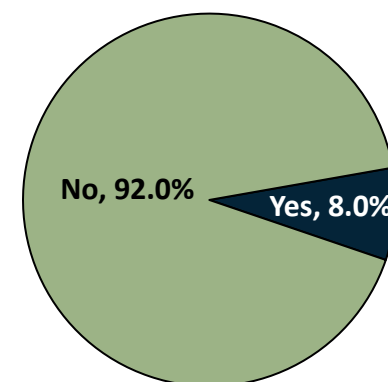
Any Time Without Health Insurance in Past 12 Months (Among Those Currently Insured)



Could Not Receive Needed Medical Care in Past 12 Months Due to Cost



In Past 12 Months, Did Not Take Medication Due to Cost (Among Those Who Took Medication)



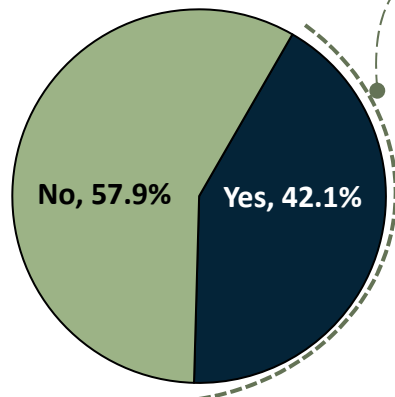
Source: BRFSS – Q3.3: In the past 12 months, was there any time when you did NOT have ANY health insurance or coverage? (n=1,248); BRFSS – Q3.5: Was there a time in the past 12 months that you needed to see a doctor but could not because of cost? (n=1,318); BRFSS – Q3.6: There are many reasons why people delay getting needed medical care. Have you delayed getting needed medical care for any of the following reasons in the past 12 months? (n=1,309); BRFSS – Q3.10: Was there a time in the past 12 months when you did not take your medication as prescribed, such as skipping doses or splitting pills, in order to save on costs? Do not include over the counter (OTC) medication. (n=1,186)



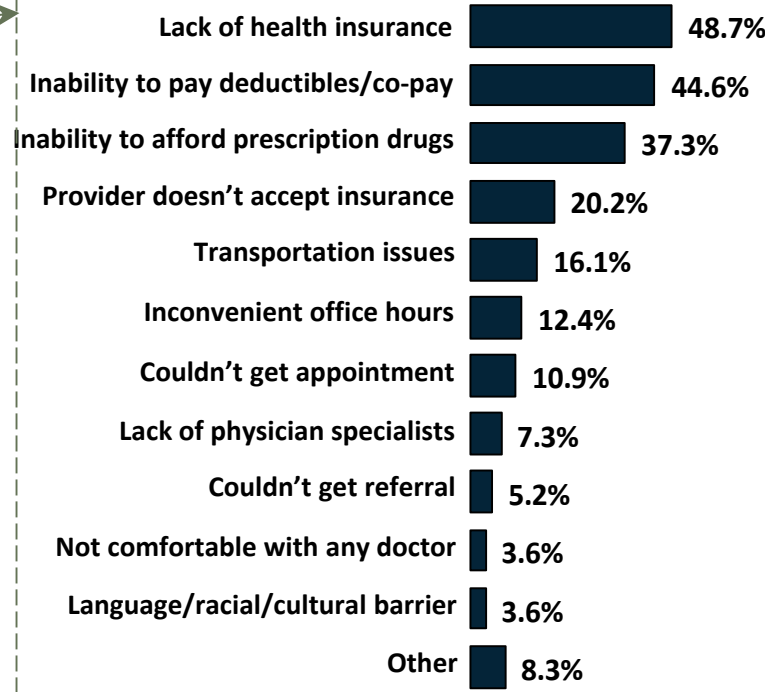
Problems Receiving Health Care (Underserved Adults)

- On the other hand, **four in ten (42.1%) underserved adults have had trouble meeting** their own, or their family's, **health care needs** in the past two years.
 - ❖ The greatest barriers to meetings these needs were **lack of insurance**, the **inability to afford out-of-pocket expenses** such as **deductibles, co-pays, or prescription drugs**, **providers not accepting insurance**, and **transportation issues**
- One-third (34.6%) of underserved adults have had to skip, or stretch, their medication in order to save on costs.

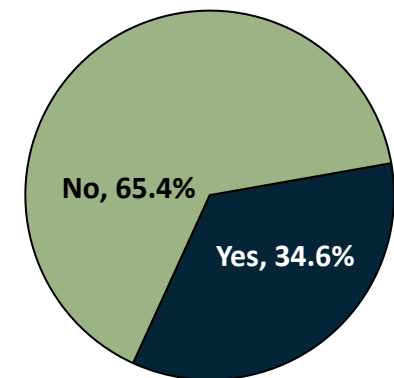
Any Time Had Trouble Meeting Health Care Needs in Past 2 Years



Reasons Had Trouble Meeting Health Care Needs in Past 2 Years



Have Skipped/Stretched Medication in Order to Save Costs



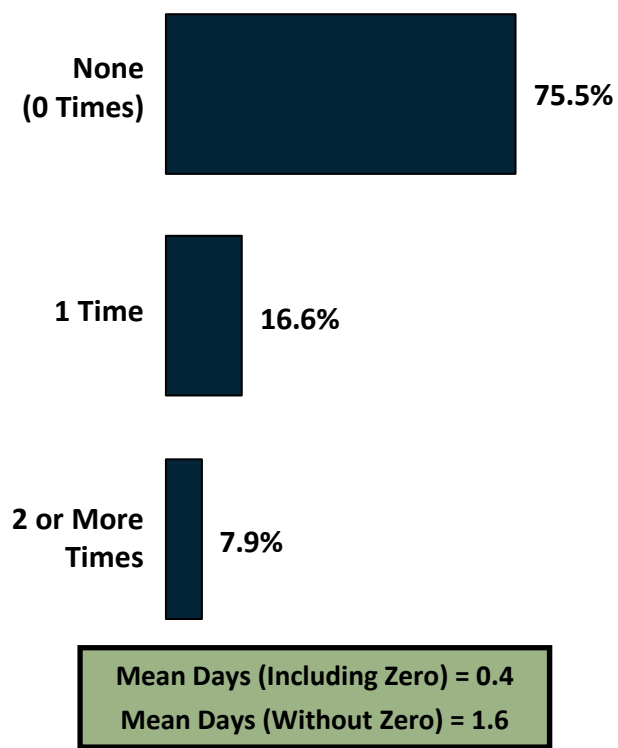
Source: URS – Q10: In the past two years, was there a time when you had trouble meeting the health care needs of you and your family? (n=468); URS – Q11: (If yes) What are some of the reasons you had trouble meeting the health care needs of you and your family? (n=193); URS – Q12: Have you ever skipped your medication, or stretched your supply of medication, in order to save costs? (n=474)



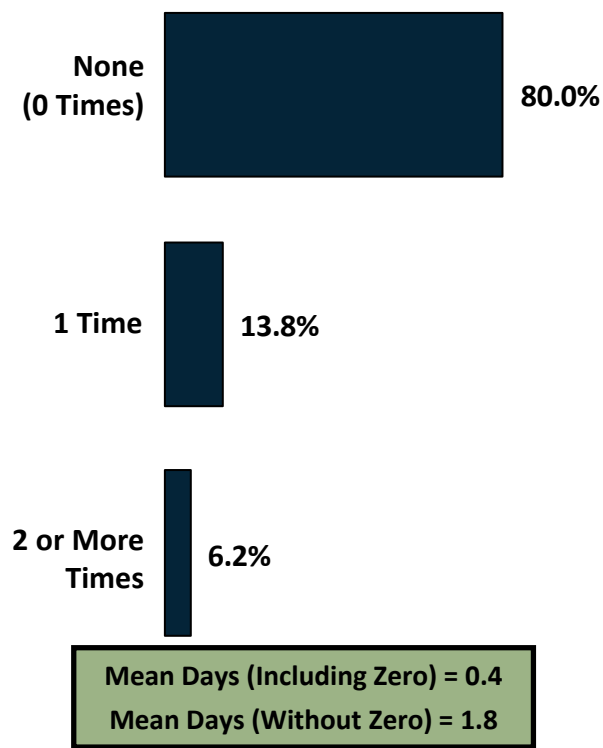
Use of Urgent Care and ER/ED

- Among all Ottawa County adults, 24.5% and 20.0% have visited an Urgent Care Center and the Emergency Room, respectively, in the past 12 months.
- Among underserved adults, six in ten (60.2%) report they, or a family member, have visited the ER at least once in the past year.

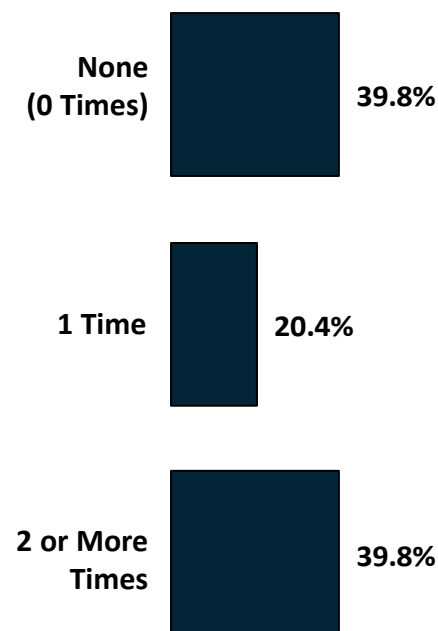
Number of Times Visited Urgent Care Center in Past 12 Months (All Adults)



Number of Times Visited ED/ER in Past 12 Months (All Adults)



Number of Times You/Family Member Visited ER in Past 12 Months (Underserved Adults)



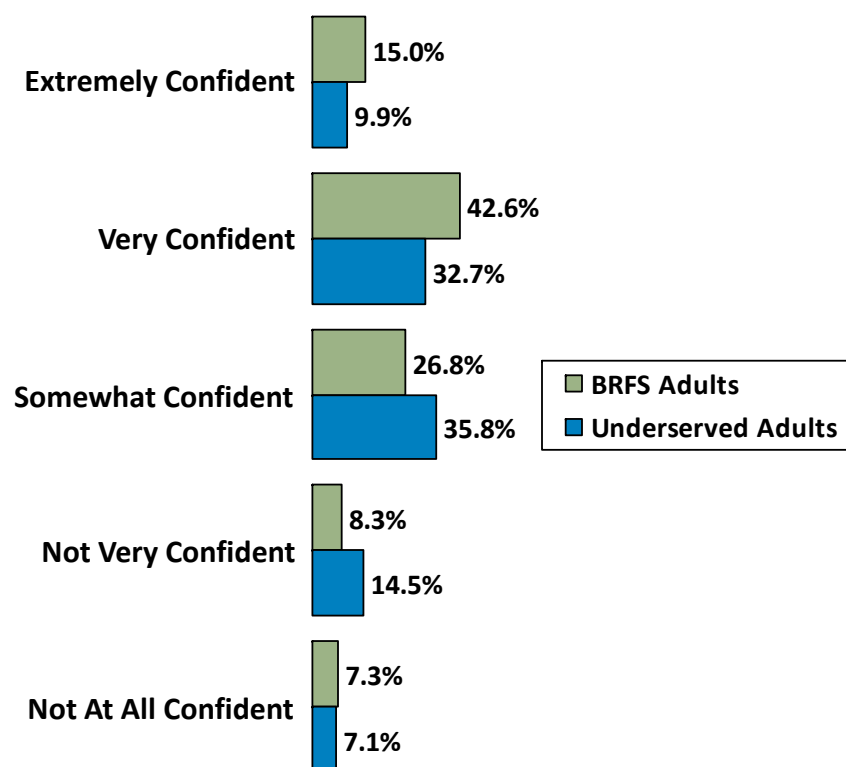
Source: BRFs – Q3.8: How many times have you been to an Urgent Care Center in the past 12 months? (n=1,315); BRFs – Q3.9: How many time have you been to an Emergency Department/Room in the past 12 months? (n=1,317); URS – Q13: In the past 12 months, how many times have you, or an immediate family member, visited the Emergency Room (ER)? (n=480)



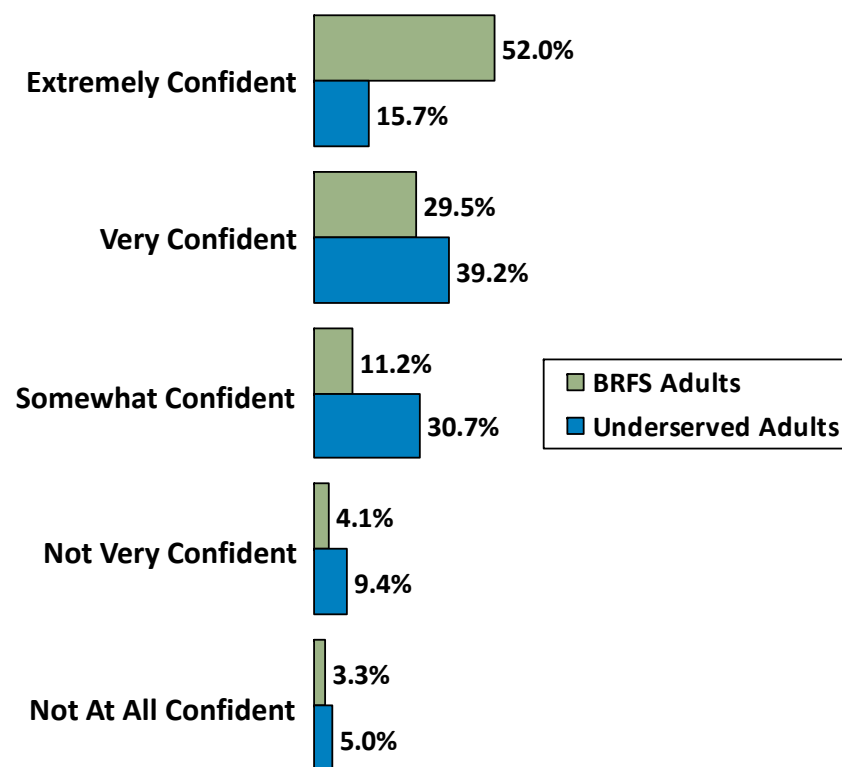
Health Literacy

- A large majority (84.4%) of all adults are at least somewhat confident they can successfully navigate the health care system; however, 15.6% are not very or not at all confident.
 - ❖ Underserved adults are less confident; 21.6% are not very or not at all confident
- Underserved adults are also less confident in completing medical forms compared to BRFS adults.

Level of Confidence in Navigating the Health Care System



Level of Confidence in Filling out Medical Forms



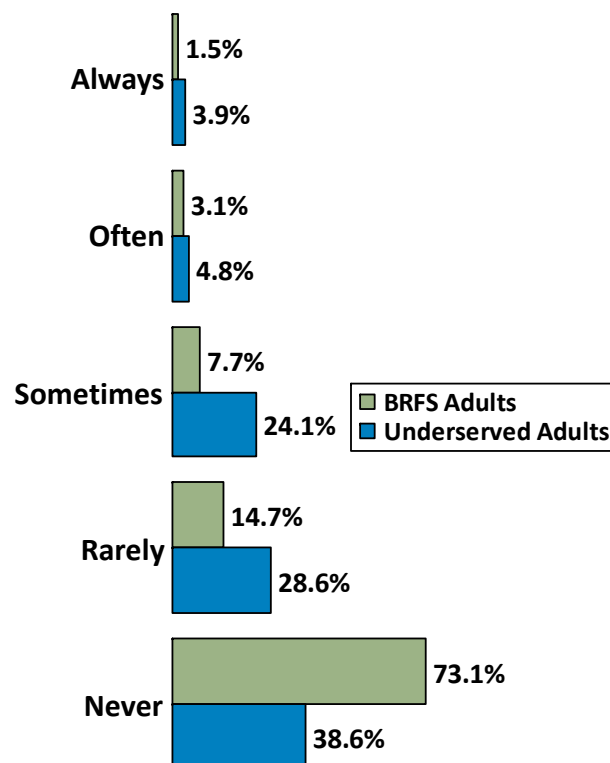
Source: BRFS – Q3.11/URS – Q18: How confident are you that you can successfully navigate the health care system? By navigating the health care system, we mean knowing: how to use your health plan or insurance, what your plan covers, how to read your statements, where to go for services, how to find a primary care provider, what your options are for treatment, etc. Would you say...? (n=1,306/n=477); BRFS – Q7.1/URS – Q19: How confident are you in filling out medical forms by yourself? For example, insurance forms, questionnaires, and doctor's office forms. Would you say... (n=1,312/n=479)



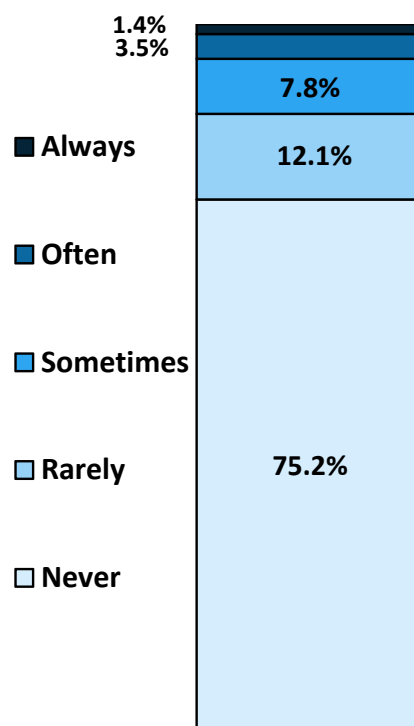
Health Literacy (Continued)

- The vast majority of all Ottawa County adults rarely or never have problems either (1) learning about their health condition because of difficulty understanding written information or (2) understanding written or verbal information provided by their health care provider.
 - ❖ However, one-third (32.8%) of underserved adults at least sometimes experience problems learning about their health condition because of difficulty understanding written information and need someone to help them read written materials (32.0%)

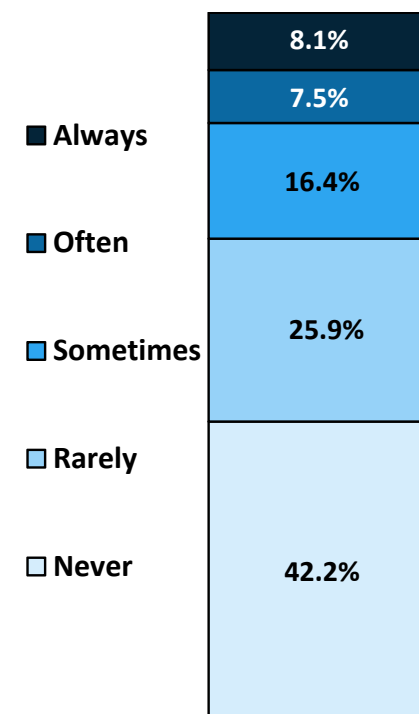
Frequency of Problems Learning About Health Condition



Frequency of Difficulty Understanding Written/Verbal Information from Provider (All Adults)



Frequency of Having Someone Help You Read Medical Materials (Underserved Adults)



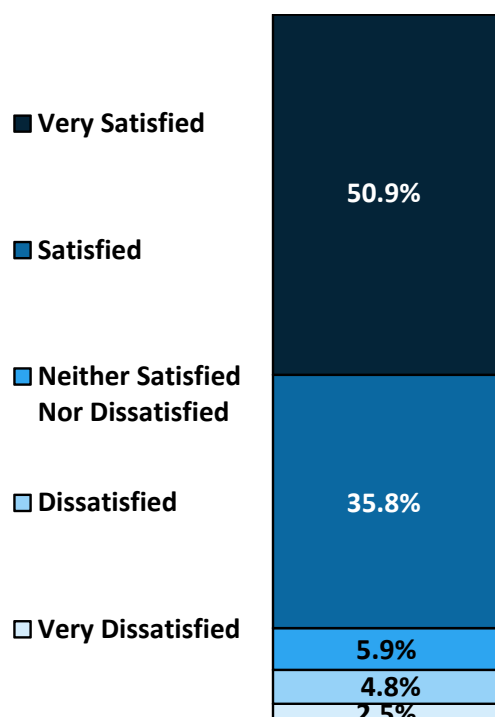
Source: BRFs – Q7.2/URS – Q21: How often do you have problems learning about your health condition because of difficulty in understanding written information? Would you say... (n=1,312/n=482); Q7.3: How often do you have difficulty understanding written or verbal information your health care provider (doctor, nurse, nurse practitioner) gives you? (n=1,313); URS – Q20: How often do you have someone help you read medical materials? For example, a family member, friend, caregiver, doctor, nurse, or other health professional? Would you say...? (n=483)



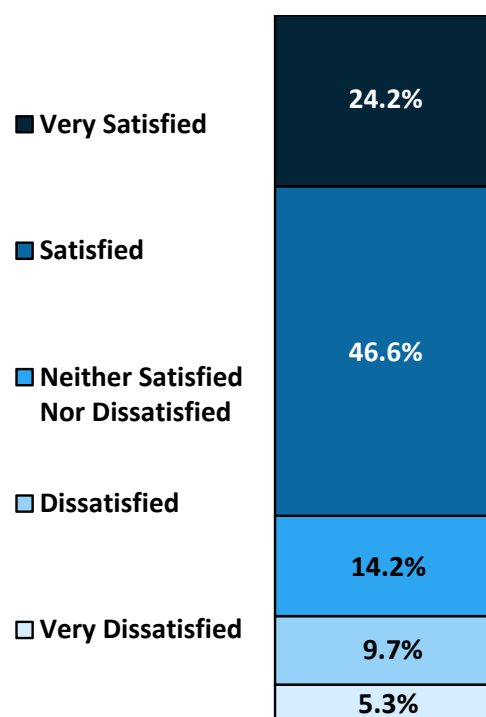
Satisfaction With Health Care (Underserved Adults)

- The vast majority (86.7%) of underserved residents are satisfied with their last health care visit and half are very satisfied.
- Their enthusiasm drops somewhat for the health care system overall, with three in ten (29.2%) being less than satisfied.

Satisfaction With Last Health Care Visit



Satisfaction With Health Care System Overall





Reasons for Satisfaction With Last Health Care Visit (Underserved Residents)

- Underserved residents who are satisfied with their last health care visit **appreciate providers who truly care, listen** to their concerns and **answer all questions, solve their problems**, have a **great demeanor**, and are **knowledgeable**.

Cares/has patient's best interest	My doctor is really helpful and seems like she really cares for my health and well-being to provide me the best options for my health. The provider called to check up on us. Showed us they really cared.
Listens and answers questions	My primary care physician is very caring about all aspects of my health. She provides information via print-outs or brochures for me. She listens when I have questions and concerns and explains things and answers my questions thoroughly.
Met needs/solved the problem	She took the time to diagnose me and gave me the right treatment options for asthma. Diagnosis was accurate and appropriately executed.
Great demeanor	They're nice, happy looking, friendly, great with kids. Cordial, friendly atmosphere - caring, patient with me, discussed alternatives to my care. Made arrangements for extra care.
Knowledgeable	We have been going to our doctor for 12 years. He knows our history, he is friendly and extremely knowledgeable.



Reasons for Dissatisfaction With Last Health Care Visit (Underserved Residents)

- Conversely, those dissatisfied cite **misdiagnoses, incorrect treatment, incompetency, feeling like a number, and waiting too long to be seen** as reasons for their low ratings.

Misdiagnosis	I have consistently had abnormal CBCs and my physicians have been unable to coordinate all findings and arrive at a clean diagnosis and treatment plan. Having symptoms that point to a specific diagnosis and was told it was not the problem - had to go through numerous other tests that were a waste of resources.
Incorrect treatment	He went and gave me narcotics and overdosed me but can't control mental health concerns. He gave me an Rx that made me sick and wouldn't change it.
Incompetent staff	Office staff seems to never know what they are talking about. I have to do things twice and they are always apologizing. The nurses in the office kept confusing my file with someone else's.
Rushed/not personable	Too rushed, only want to address one issue at each visit. Gets too expensive to go.
Wait time too long	Waited 40 minutes for the doctor and she only stayed 15 or 10 minutes and quickly left.



Reasons for Satisfaction With Health Care System Overall (Underserved Residents)

- Underserved residents who are satisfied with the health care system overall cite the **quality of care**, having **good insurance/coverage**, **providers who listen** and **care**, and the fact that it's **easily accessible** as reasons to like it. (It should be noted here that many participants, even though they were satisfied with the system overall, mentioned criticisms in additions to compliments).

Quality of care	We've been blessed with great doctors, in other parts of the country they may not have the same experiences. Confidence in care I receive. I trust their ability to meet my family's needs. All of my needs have been and are always met. As I have a Care Manager, he handles additional needs.
Good insurance	We are immigrants and although we are a very healthy family we have Medicaid for insurance and it works very well. Because when it came to our daughter we didn't have to pay out-of-pocket a lot of money, so that goes a long way.
Attentive providers	They don't disregard what we say and they treat us like their family. They take the time to listen to my concerns.
Easily accessible	Readily available and local, or within a reasonable distance. Current in profession. Willing to make referrals. We have an abundance of physicians and hospitals to choose from.



Reasons for Dissatisfaction With Health Care System Overall (Underserved Residents)

- Conversely, those who are dissatisfied report **high costs**, a **bad model**, **flawed relationships** between the provider and patient, and a **slow system** as reasons for their concern.

High costs	It's so expensive and the state says I make too much money for my son to be on Medicaid so he's uninsured because I can't afford it. Insurance is very discriminating and way too expensive. Rx are too expensive.
Bad model	I come from Germany, where patients get the care that is needed; it is not determined by your insurance. Health care is in crisis. Doctors are disempowered corporate drones. Pharmaceuticals are criminal. Insurance dictates 1-to-1 patient/physician care and time with patient is ineffective. Fragmented, expensive, poor outcomes, people still not getting quality care.
Flawed doctor-patient relationship	A lot of doctors I have come in contact with have no bedside manner and do not follow a care plan, they just do whatever they want, regardless of other doctors' opinions.
System is slow	Last visit I had CT scan and it took 2 weeks to get results! I finally called lab myself and results were faxed to clinic!



Most Important Qualities In A Health Care Provider (Underserved Residents)

- Underserved residents seek providers who are: **good listeners, knowledgeable, caring, honest, friendly, accessible** and **available** to see them, and **thorough**. Being a good listener also means they should communicate well; they should **ask questions and answer questions**, be **attentive**, and **explain** things as thoroughly as necessary. Additionally, providers should **show genuine concern**, have a **good bedside manner**, and **take time to visit with patients** without making them feel rushed.
- Interestingly, unlike in 2014, there were several mentions this year about being **holistic**, or being open to **alternative** treatment options.





Health Care Programs, Services, or Classes Lacking in the Community (Underserved Residents)

- Underserved adults report numerous programs, services, or classes that are lacking in the community; however, the **four greatest areas** of need are **nutrition** (focused on healthier eating), **access to fitness or exercise options**, **access to mental health services**, and **assistance in finding affordable health insurance options** or **alternative treatment options** for those who lack insurance.

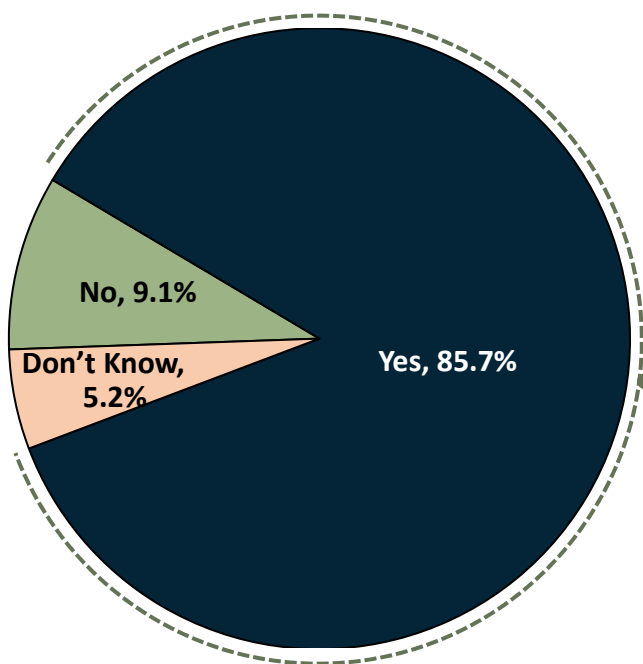
Nutrition/healthy eating	Free, attainable teaching on eating healthy and how to prepare healthy, easy, fast, inexpensive meals my kids will eat. I believe that what a person eats has a powerful impact on health. Teach nutrition and health connection. Nutrition classes for children and families with low resources. Healthy alternatives, vitamins, free health food vouchers, etc.
Fitness/exercise	Possibly exercise classes, or a way for health insurance to cover gym memberships to promote healthy living. Weight loss help (exercise programs) for low income people.
Mental health	Could be more mental health options that are affordable. Getting counseling/therapy is extremely cost prohibitive and not covered by insurance very well. Need more help with mental services, like impulse awareness and anxiety.
Health insurance	Assistance with some payments or help finding economical medical insurance. We need better medical insurances that covers our medications.



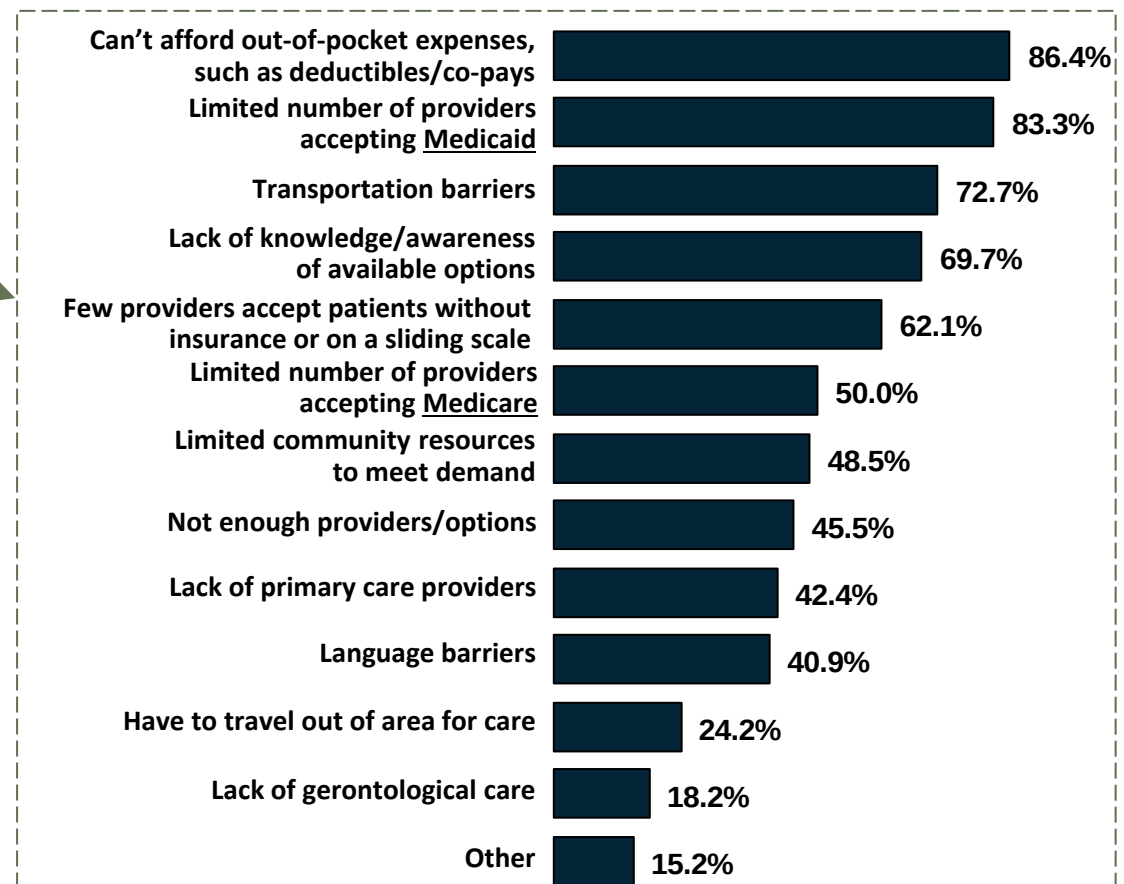
Barriers To Health Care Access (Key Informants)

- The vast majority (85.7%) of Key Informants believe access to health care is a critical issues for some Ottawa County residents and this is **up from 73.0% in 2014**.
- ❖ The greatest barriers are an **inability to afford deductibles and co-pays**, **transportation** issues, and **providers' unwillingness to accept Medicaid, Medicare, or treat people without insurance** or on a sliding scale.

Access to Health Care is a Critical Issue for Some Ottawa County Residents



Reasons Access to Care is an Issue



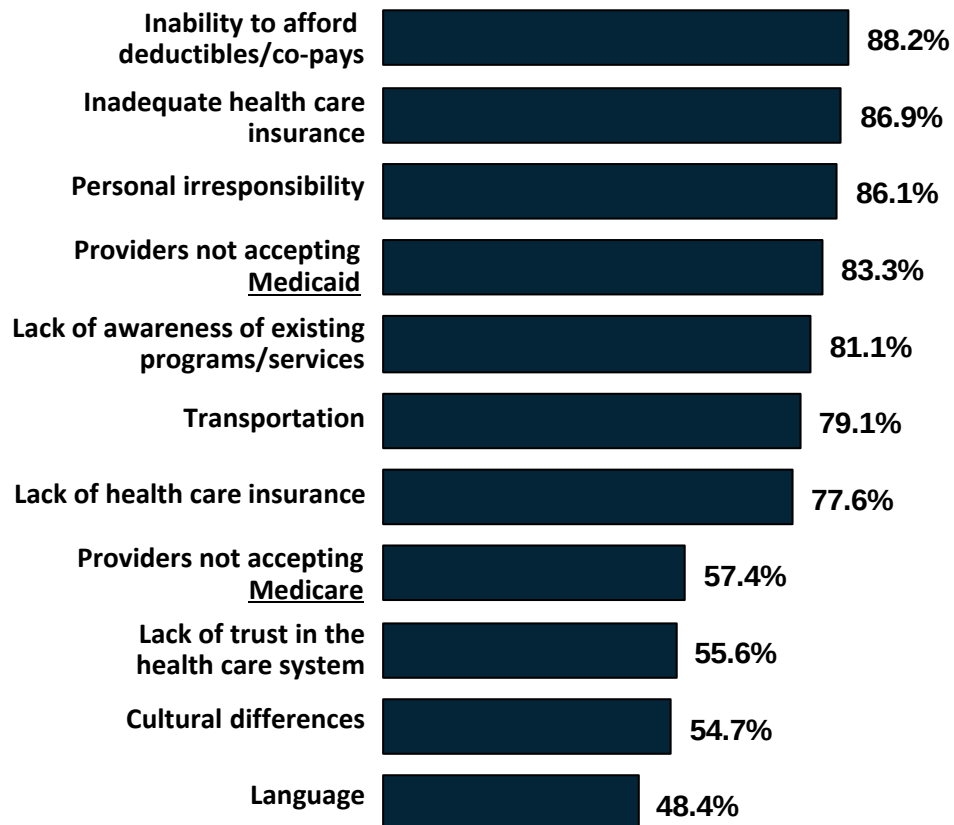
Source: KIOS – Q4: Do you believe that access to health care is a critical issue for some residents in Ottawa County? (n=77); KIOS – Q4a: In your opinion, why is access to care an issue for some Ottawa County residents? (n=66)



Barriers To Health Care Access

- When rating the extent to which something is a barrier to health care, Key Informants place **out-of-pocket costs** at the top, followed by **inadequate insurance, personal irresponsibility, providers not accepting Medicaid, lack of awareness of existing programs/services, transportation, and lack of health insurance.**
- Key Stakeholders reinforce these ratings.

Barriers to Health Care Programs/Services (% Saying Somewhat/Very Much a Barrier)



Key Stakeholder Comments on Barriers to Care

I think the **inability to afford the spend-down** does affect Medicaid people, definitely. For Medicaid people, **the spend-down can be a barrier and they never really take advantage of that insurance.**

That's becoming a growing problem for everybody as employers are feeling the **burden of increasing health care costs**, which we keep trying to minimize as much as we can. That **burden is being increasingly shifted to employees**, so if they see **higher out-of-pocket costs, copays, deductibles, high-deductible plans**, we are seeing that burden on the population in general. It's incremental, and it's kind of modest incremental growth per year that we're seeing the effect of that, but **some individuals are feeling the effect of that much more significantly.**

The **greatest barrier would be insurance - access to insurance and affordability** of that.

Cost is certainly one, so affordability. I think **transportation** is still a barrier. We've done some transportation studies, and it depends on who you talk to. Personally, I think it **continues to be a barrier for some people**, especially once you get out of the area where we have public transportation.

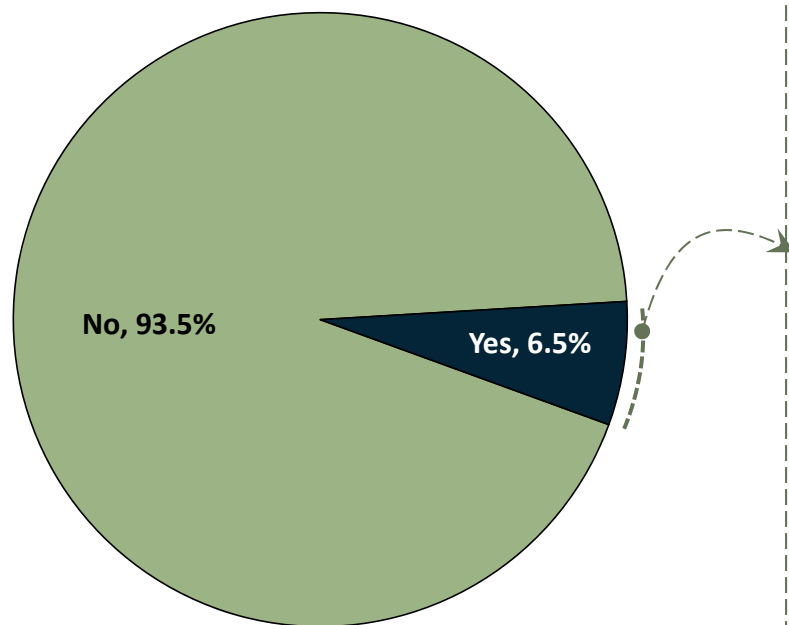
Source: KIOS – Q8: To what extent is each of the following a barrier or obstacle to health care programs and services? If you are unsure, please select “don't know.”; KSI – Q7: Are there any barriers or obstacles to health care programs/services in your community?; KSI – Q7a: (If yes) What are they?



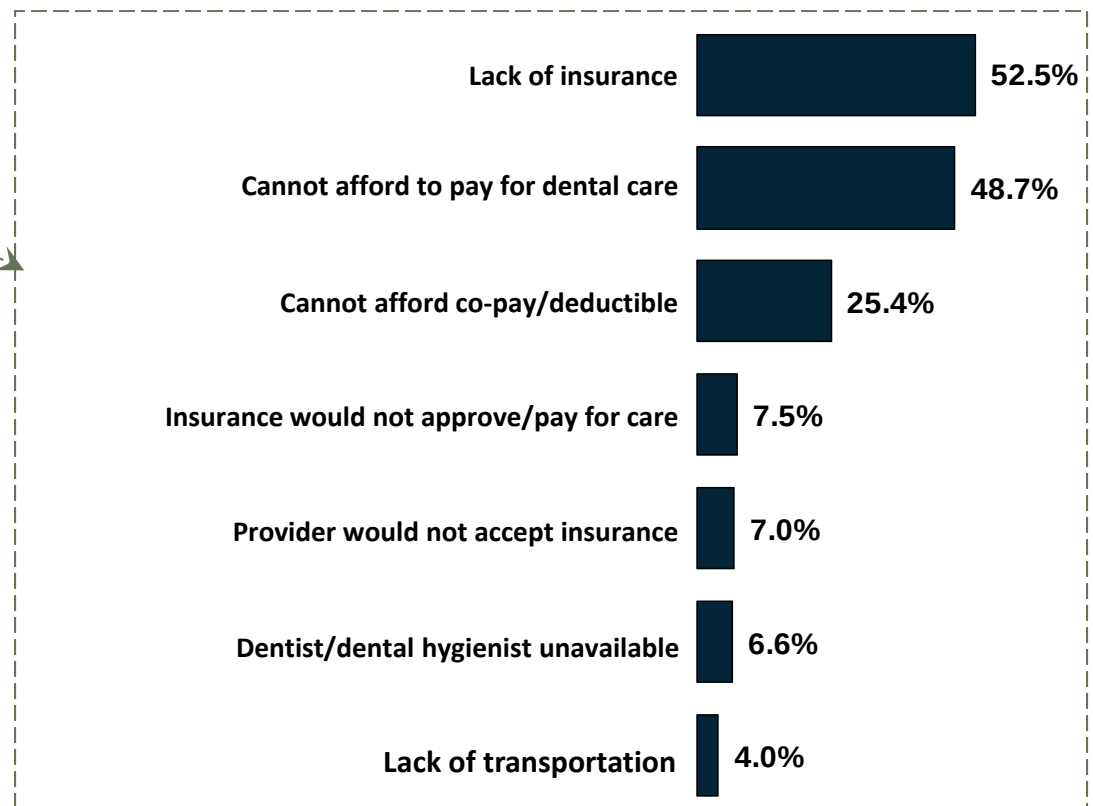
Barriers to Dental Care

- A small proportion (6.5%) of adults have had problems getting needed dental care in the past year.
 - ❖ Those who have had problems cite **lack of insurance** and an **inability to pay for services** as the top barriers to receiving dental care.

Problems Getting Needed Dental Care



Reasons for Difficulty in Getting Dental Care (Among Those Who Reported Problems Getting Care)



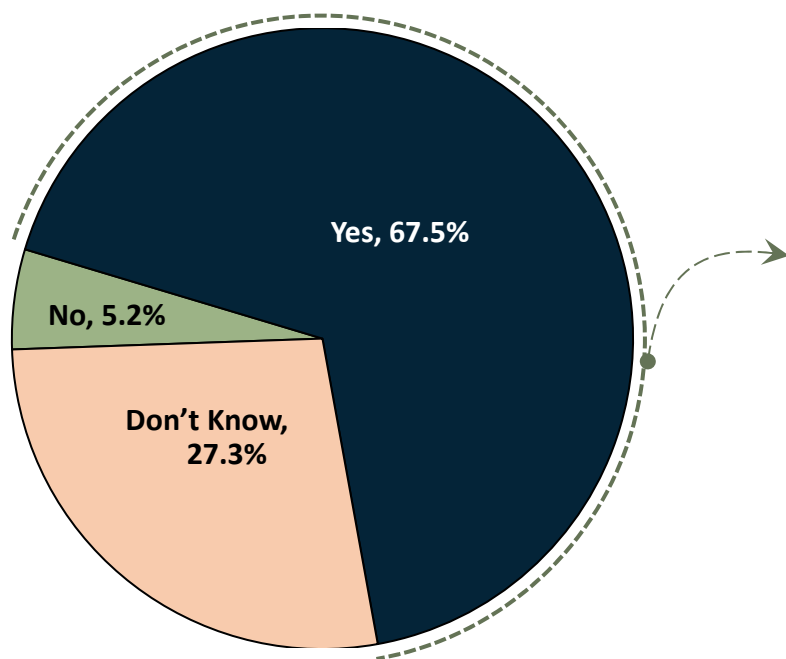
Source: BRFSS – Q19.3: In the past 12 months, have you had problems getting needed dental care? (n=1,304); BRFSS – Q19.4: Please provide the reason(s) for the difficulty in getting dental care. (Multiple responses allowed) (n=76)



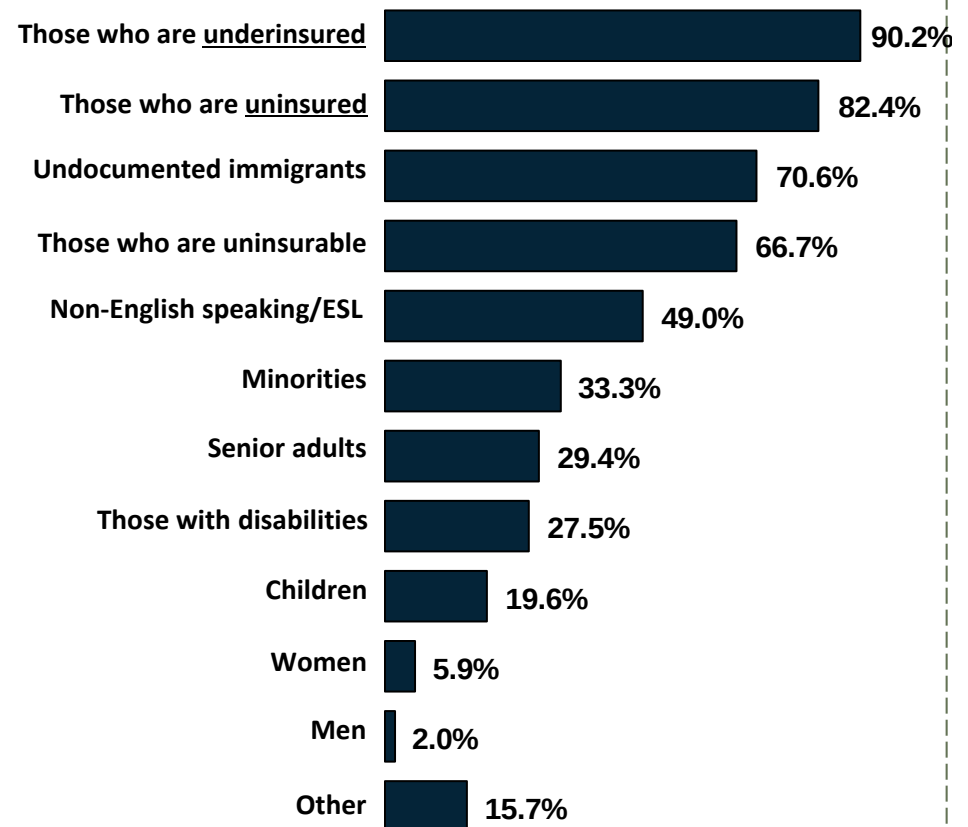
Underserved Sub-Populations

- Two-thirds (67.5%) of Key Informants believe specific subpopulations in Ottawa County are underserved with regard to health care.
 - ❖ Residents most underserved are those who are **underinsured**, **uninsured**, **undocumented immigrants**, and those who are **uninsurable**

Underserved Subpopulations in Ottawa County



Specific Subpopulations Underserved



Source: KIOS – Q5: Are there specific subpopulations or groups of people in Ottawa County that are underserved with regard to health care? (n=77); KIOS – Q5a: Which of the following subpopulations are underserved? (n=51)



Access Issues For Underserved And Vulnerable Subpopulations Reported By Key Stakeholders and Key Informants

- Key Stakeholders and Key Informants believe access to health care programs and services is a critical issue for vulnerable and/or underserved subpopulations, because in addition to experiencing obstacles receiving care even when they have coverage, there are **numerous other barriers preventing them from living optimally healthy lives**. In addition to lack of services for mental health and substance abuse, there is a **dearth of dental services for underserved residents**.

Insurance not accepted	Many providers do not accept patients with no insurance or Medicaid. Many times these are the most complex patients to provide care for and it can be frustrating when there is no primary care physician directing. We have a few clinics in Ottawa County; i.e. Intercare, but they are short staff and overworked. Time and attention needed for complex patients is limited. – <i>Key Informant</i> Spectrum Pediatricians only take Priority Health Medicaid and no other. – <i>Key Informant</i> I think lack of access to primary care physicians – of their choice – I should say. There's probably always some accepting insurance, some are not accepting certain insurances, and then specifically [not accepting] Medicaid. -- <i>Key Stakeholder</i>
Too many barriers to overcome	I think uninsured/under-insured and other vulnerable residents have difficulty finding and keeping a medical home. There are many challenges/barriers to access - costs for patients, having enough doctors to serve those in need (and their compensation rates for serving these populations), hours, transportation, patients' ability to follow through/follow up on medical guidance, etc. – <i>Key Informant</i> Clients tell me all the time that they can't come as often as recommended or they would like due to a lack of resources (paying for services directly), missing income if they miss work to come, gas money, etc. – <i>Key Informant</i>
Lack of treatment options for dental care	The other thing I hear fairly consistently from folks really relates to dental care for certain populations that don't have access to health plans or can't financially afford the kind of dental care that's available to kind of most residents, but for the underserved and lower-income, that can definitely be a challenge. – <i>Key Stakeholder</i> High cost of service which also prevents low income individuals to pay cash and or use their limited coverage (Medicare). There are only a few organizations that provide dental care for the undeserved within the entire county. No private practice dentists are taking Medicaid clients county wide. – <i>Key Informant</i>

Source: KSI – Q1: What do you feel are the two or three most pressing or concerning health issues facing residents in Ottawa County, especially the underserved? (n=10); KIOS – Q1: To begin, what are one or two most pressing health issues or concerns in Ottawa County? (n=91); KIOS – Q1a: Why do you think it's a problem in Ottawa County? Please be as detailed as possible. (n=91)



Effectiveness of Existing Programs And Services

- Key Stakeholders say the existing programs and services meet Ottawa County residents' needs and demands somewhat well because, although there are numerous programs and services available, not all residents are being served for various reasons (e.g., lack of awareness, lack of access, personal choice, etc.)

If you're comparing Ottawa County to other counties, we're performing much better, we're much higher on that rung than most. **Is there opportunity for improvement? Yes.**

Because **I think we do have resources available**. The **barriers to accessing services and treatment - there might be other things at play other than the availability of services**, meaning it could be insurance, it could be transportation, it could be just unwillingness to access - go to the doctor.

We serve a lot of people; **we don't serve all the people. We don't serve all the people that need it, or we don't serve them to the level that they need it**. We serve a lot of people, and we serve them well, but **there's more need than we have resources to serve**.

I say "very well" because we have a lot of new access to emergent care and so on and so forth, **but we're a long ways away from that top bucket that you mentioned**.

Just because I'm trying to think of the **whole county**, and I know there are just pieces missing, like **Allendale, Grand Haven** area - not sure about Hudsonville, but **they don't have a lot of options** as far as primary health care from what we're told. We get patients from Allendale frequently, too.

Part of it is going to be access, and part of it is going to be an understanding of what is available and using it correctly.

Oral health services are still really difficult to access if you're uninsured or on Medicaid. The safety net providers are somewhat overloaded. I think **we have a lot of services**, and I think the services that we have are really good. I know all these agency people, and I know the people that work in our organization and mental health and the kind of world that I live in, and they're doing a fantastic job. We have exceptionally compassionate people who are always trying to raise the bar and get people the help that they need. I think **connecting people to our services continues to be a challenge**, and the **Pathways to Better Health project is supposed to help with that**. I think **fragmentation is kind of a problem**, so Pathways should help with that.

Depends on the people in the community you're referring to. If you're thinking about those that are economically sound, I think it'd be somewhat well, if not very well or exceptionally well. **For those people that are economically challenged, I think that, again, far less because of the high deductibles** that has a major impact.

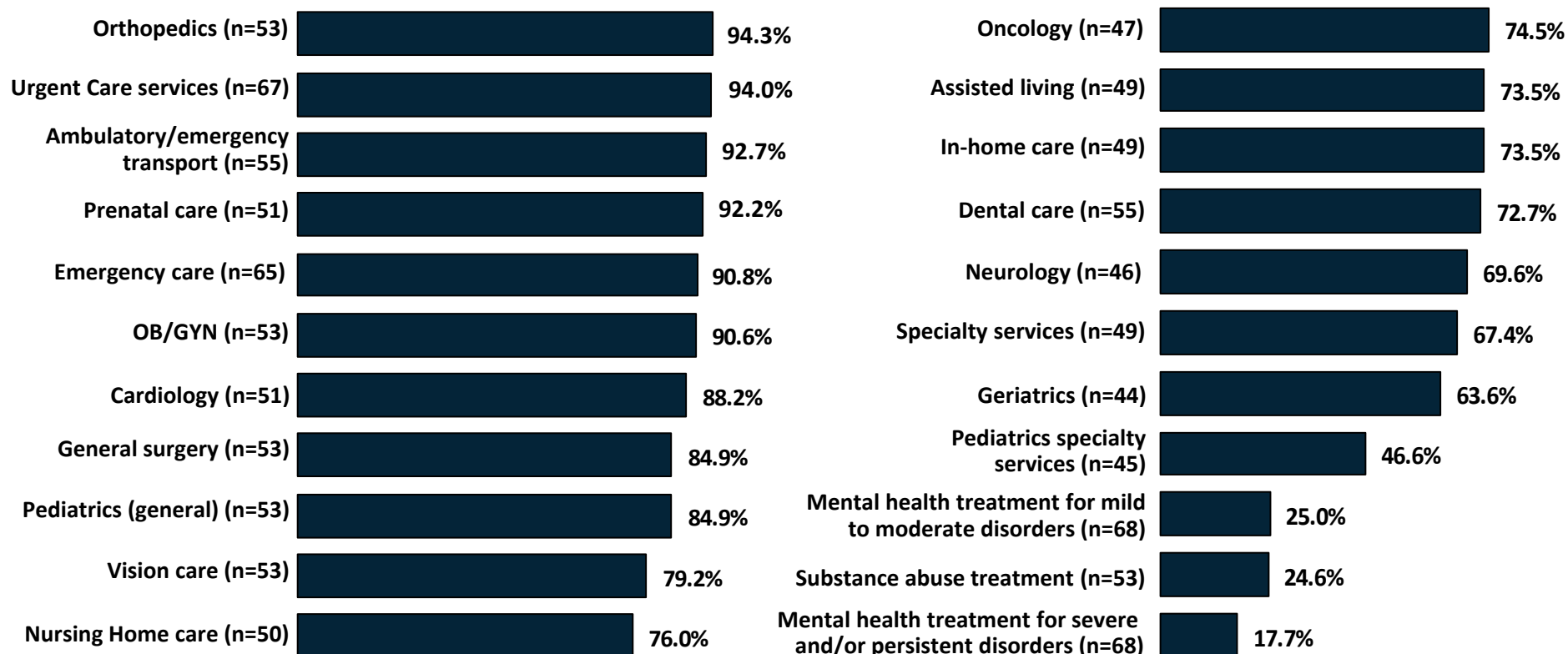
I think there is emerging an **increasing level of use of community services**, and integration across services, and **awareness of how to access those services** - care managers in offices knowing they exist. I feel like in the last couple of years, **there's been a significant uptick in use of services**. If you would have asked me this question five years ago, I would have said that we had a much less adequate use of community services; I think it's improving.



Gaps In Health Care Services

- Key Informants say the programs and services that most meet Ottawa County residents' needs and demands well include **orthopedics, Urgent Care services, ambulatory/emergency transport, prenatal care, emergency care, and OB/GYN.**
- Conversely, **mental health treatment for all disorders (from mild to severe), substance abuse treatment, and pediatric specialty services** do not meet the needs and demands at all well.

Extent to Which Existing Programs and Services Meet the Needs and Demands of Area Residents (% Somewhat Well/Very Well)





Specialty Program And Services That Are Lacking

- Key Informants cite many specialty programs and services that are lacking in Ottawa County, but clearly, in addition to a **lack of pediatric specialty services** and **mental health treatment** (including psychiatry and substance abuse treatment), there is a lack of **neurology, oncology, and endocrinology**.

All **pediatric specialists**. Adequate **nephrology, pulmonary, neurology**. We have no ID and limited **invasive cardiology**.

Cardiothoracic surgeon, open heart surgery, vascular surgeon, pediatric specialty areas.

Custodial help for people at home at a low/no cost. Many older adults could stay at home if they had just a few hours of help. Instead Medicaid has to pay thousands to place them in nursing homes.

Transportation – Holland has a bus route, some busing in Allendale for GVSU but most of Ottawa County is not serviceable for people without transportation.

Drug rehab. Mental health services are stretched and underfunded.

Full-time **endocrinologist**.

Gastroenterology, dermatology.

Mental health.

Mental health, substance abuse.

Neurology clinics that help patients with neurological diseases such as ALS. True neurological center, not just doctors in town one day a week. Offer more clinic time and staff to support local programs.

Oncology, pediatrics.

Pediatric services currently provided by Helen DeVos Children's Hospital (**pulmonology, child development [BRAINS]**), **endocrinology**, etc.

Pediatric specialists, not enough **oncology** or **hematology** practitioners.

Pediatric specialty services.

Psychiatry.

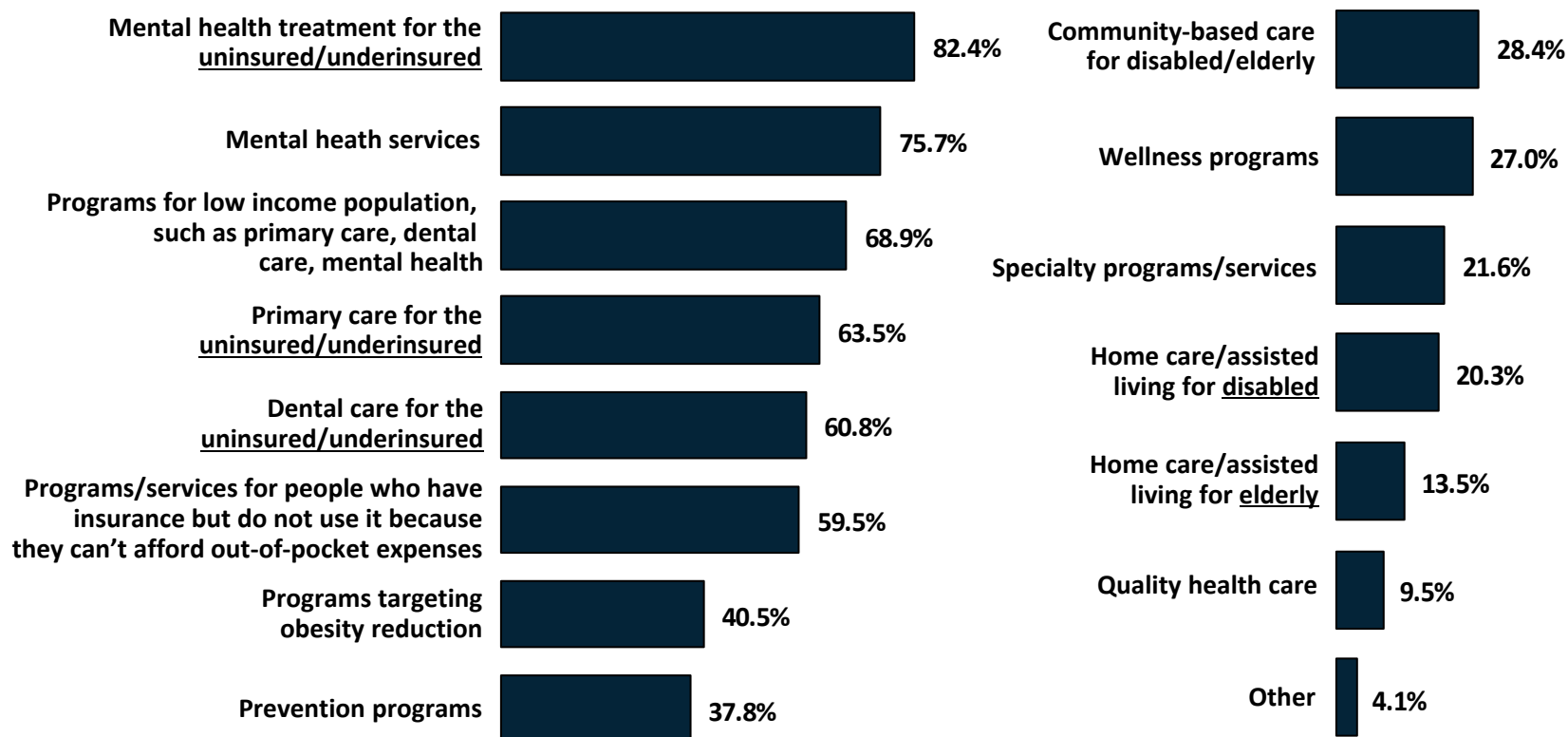
Psychiatry services for people with Medicaid as CMH takes very few and other providers don't usually accept Medicaid. (Pine Rest and Holland hospital behavioral health).

Specialized doctors for **autism** kids- **psychiatry, psychology, developmental pediatricians, OT, PT, speech**. The last 3 are getting better, but the first 3 are still lacking. And there are SO many ASD kids in Ottawa County!



Programs And Services That Are Lacking

- According to Key Informants, Ottawa County most **lacks programs or services for the uninsured/underinsured and low income groups, including primary care, mental health care, and dental care**, as well as **mental health services in general**.
- **There is also a lack of services that would assist those who have insurance but may not use it because they cannot afford deductibles and co-pays.**





Programs And Services That Are Lacking (Continued)

- Similar to Key Informants, Key Stakeholders report Ottawa County **lacks programs and services related to behavioral health**, including **mental health and substance abuse treatment**. Other needs include **housing, case management** to coordinate holistic care, and **more affordable gym/recreation programs**.

There is a **shortage of psychiatry**. It's very difficult to access the **psychiatrist either with private insurance or Medicaid**. For my population, again, **dental services continue to be a difficult service to access**, in that there are some providers who take Medicaid, but they're not always local to where a person lives. So, **someone might live in Grand Haven and have to drive to Holland to Intercare to go to the dentist**.

The one thing that is lacking is a **hospital-subsidized or a medically-subsidized health gym/workout area/exercise area**. We have health clubs here, but when I was in Kankakee, Illinois, the hospital had a health club that was part of the hospital, which **was much more affordable and much more accessible** to the general public for exercise equipment and stuff like that. They don't have that in our area.

I don't know about **transportation** out in those areas. We have a transportation system here in Holland, but **it doesn't go beyond Quincy Street**, so it doesn't hit a lot of north Ottawa County. So, transportation is still a barrier to care.

I'm so tuned into this **case management** stuff right now because of our Pathways project. I think that is a **huge need**, and **there's not enough of it**. Pathways is more of a community health worker model. I think that is lacking. It's the **ability to work with people and link them to the services they need within the community and work with their healthcare provider to assist with resources to better manage diseases and improve health behaviors and help people to manage their own health**.

The **behavioral health** element – I think that's probably the number one priority. There's some **substance abuse treatment** - that's necessary - it's not really strong up here for chemical dependency, but **it's more than chemical dependency. It is true mental health challenges**. There's still a stigma with that. It's access to the folks who can help with the treatment plan; the **psychiatry** component. I think **we need more access to outpatient counseling and real-time assessment** of these issues for patients and community members.

I think **providers who are willing and able to take care of opiate addiction** - I think there's a lack of that. There is **not enough Suboxone providers**, so, again, that comes down to bandwidth and lack of primary care access and whatnot. **Sometimes the addicts have to travel out of county for that. There is no methadone clinic in Ottawa County** that I'm aware of. The closest ones are in Kent and Muskegon. For Suboxone providers - there has historically been only two or three in Holland.

There are **two major issues** that we have right now - **having enough places** - landlords that are willing to rent at a reasonable rate, which, again, if people are spending a lot of money in that area, they might not be spending money in healthcare, and **businesses being able to pay people a livable wage**. Then, **making sure that we're truly able to serve the population that has those substance use issues**. Being able to **provide medical transportation to appointments**, that's probably the biggest complaint that we've had just recently.

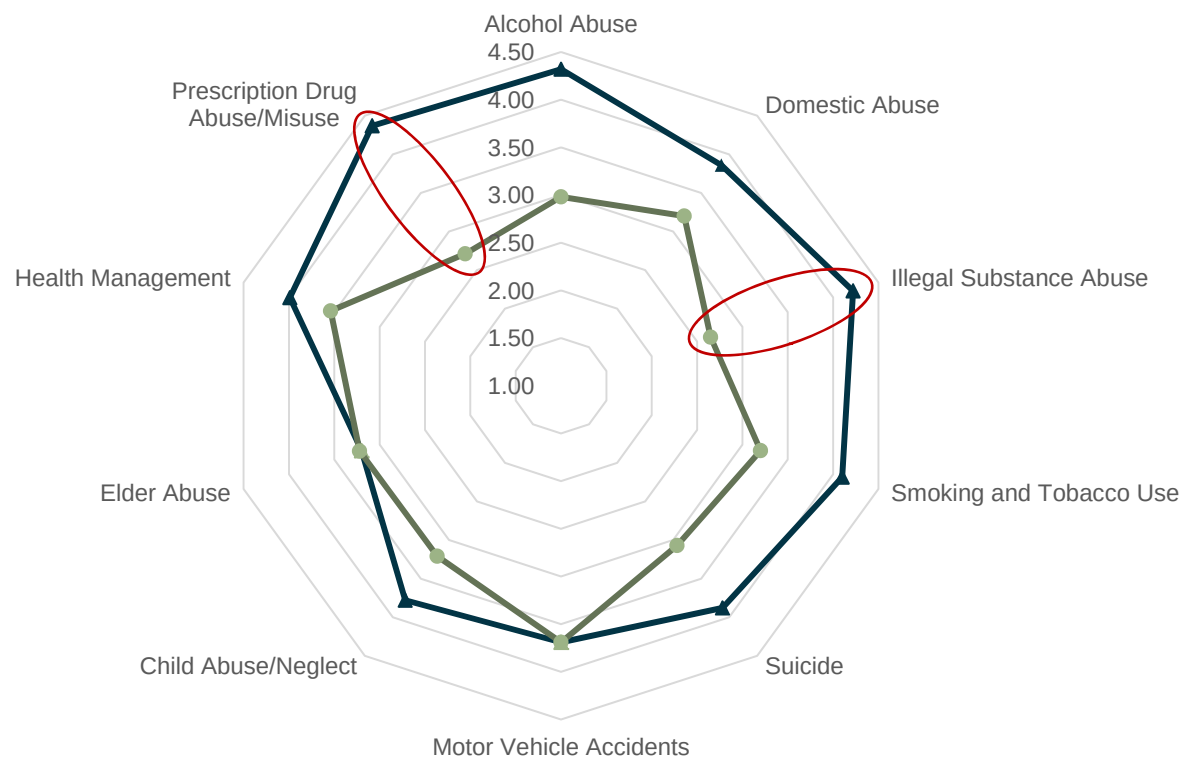
Risk Behavior Indicators



Perceived Prevalence Of Health Behaviors and Satisfaction With Community Response

- Key Informants view **prescription drug abuse** and **alcohol abuse** as the top two health behaviors most prevalent in Ottawa County, followed by **illegal substance use**, **smoking/tobacco use**, and **health management issues**.
 - ❖ The rating for perceived prevalence of prescription drug use is much higher this year compared to 2014 and has vaulted this issue to the top spot, overtaking smoking from 2014
- Key Informants aren't thrilled with the community's response to any of these health behaviors, but the **lowest ratings go to the community's response to illegal substance abuse and prescription drug abuse**.

Health Behaviors



Prevalence Scale: 1=not at all prevalent, 2=not very prevalent, 3=slightly prevalent, 4=very prevalent, 5=extremely prevalent

—▲— Perceived Prevalence

—●— Satisfaction with Community Response

Satisfaction Scale: 1=not at all satisfied, 2=not very satisfied, 3=slightly satisfied, 4=very satisfied, 5=extremely satisfied

Source: KIOS – Q3: Please tell us how prevalent the following health **behaviors** are in Ottawa County. If you are unsure, please select “don’t know.” (n=40-71); KIOS – Q3a: How satisfied are you with your community’s response to these health **behaviors**? (n=36-67).



Additional Perceived Health Behavior Issues (Key Informants)

- Key Informants report additional health behavior issues such as what they see as **abuse and misuse of the system**, including **visiting the ER/ED instead of a primary health care provider**. Further, they report a **lack of personal responsibility** in living a healthier lifestyle, **issues related to driving** (DUI, seatbelt usage), and felt a need to mention **opioid use/abuse** specifically outside of substance abuse.

Abuse of the Medicaid system - people should be required to work to receive Medicaid benefits. A Medicaid co-pay for ED would be helpful to **reduce frivolous visits**. **Over-diagnosis of 'disabled'** (e.g., elbow pain) may prevent you from doing one job but not every job. There are so many services and assistance programs that **people move to this area to get free help**. It encourages them to stay unemployed and dependent.

As a society we still are **not taking adequate responsibility for our own healthy behaviors**. (Exercise, diet, weight, smoking, etc.)

Bullying/cyber bullying.

Drinking and driving.

Inappropriate utilization of EMS.

Lack of healthy lifestyles.

Lack of physical activity, extremely poor food choices.

Lack of self-care, lack of proper nutrition and exercise, lack of health management knowledge.

Misuse of ED/Urgent care by patients versus using their PCP office.

Misuse of Medicaid funds, using the emergency department as a PCP.

Not choosing or utilizing preventative care/ not knowing about it.

Opiate use (2)

Opioid abuse and deaths are growing.

Oral health - **high sugar consumption.**

Poor dental hygiene. Medication noncompliance.

Seatbelt usage and distracted driving.

Sexting (2).

Sun exposure.



Substance Abuse – The Second Most Concerning Issue Among Key Stakeholders and Key Informants

- Key Stakeholders and Key Informants place substance abuse, just under mental health, as the most pressing or concerning health issue in Ottawa County. Not only is there **abuse of illicit drugs**, such as **heroin** and other opiates, but there is an **abuse of prescription drugs** (largely opiates) resulting from **providers over-prescribing** these narcotics. One result, of both, is an **increase in overdoses**. Unfortunately, there is a **lack of treatment options to deal with these issues**.

Opioid/ prescription drug abuse	Heroin addiction in particular appears to be affecting teens through older adults. – <i>Key Informant</i> I think there's a growing need to address the opiate/prescription drug misuse problem that is slowly but surely increasing here in Ottawa County, and both of those concerns - they can affect everyone in the county, but they certainly are more problematic for people who are underserved or don't necessarily have the resources or the knowledge to access those services. Prescription drugs, opiate, heroin use, it's definitely a growing issue. – <i>Key Stakeholder</i>
Over- prescribing opiates	Narcotics are being prescribed too frequently and unnecessarily, then people are giving them to other people to take. People don't realize they shouldn't take someone else's Rx medication and that it is addictive. – <i>Key Stakeholder</i> Physicians continue to prescribe narcotic pain meds unnecessarily. – <i>Key Stakeholder</i>
Lack of treatment options	Access to treatment is likely a problem in most communities. For individuals who are uninsured or have Medicaid they need to go through Pathways or OAR for first time appointment to access detox, residential, intensive outpatient and outpatient. Typically those appointments are booked out more than a week. For individuals with insurance, outpatient appointments through local providers are also more than a week out. To access detox or residential with insurance you have to leave the area. – <i>Key Informant</i> The frequency that these patients end up in the ED puts a significant strain on resources and uses excessive health care dollars that could be put to better use. – <i>Key Informant</i>
Overdoses	Overdoses are becoming commonplace in area emergency rooms. – <i>Key Informant</i> The issue is getting increasingly alarming as the overdoses increase and the ages of the patients become younger. – <i>Key Informant</i>

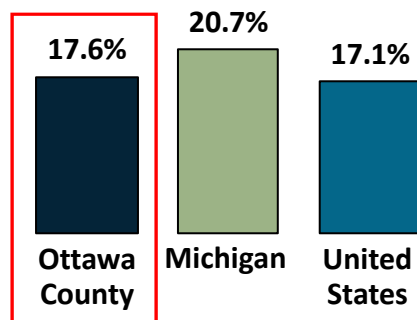
Source: KSI – Q1: What do you feel are the two or three most pressing or concerning health issues facing residents in Ottawa County, especially the underserved? (n=10); KIOS – Q1: To begin, what are one or two most pressing health issues or concerns in Ottawa County? (n=91); KIOS – Q1a: Why do you think it's a problem in Ottawa County? Please be as detailed as possible. (n=91)



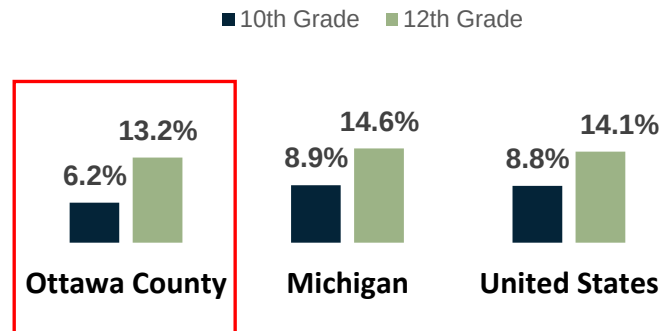
Tobacco Use

- Using 100 cigarettes as the minimum to be classified as a current or former smoker, 17.6% of Ottawa County adults are considered to be current smokers, a rate lower than the state but higher than the national average.
- The rate of smoking among Ottawa County youth is lower than the state or national rates.
- Small proportions of area adults currently use tobacco products other than cigarettes (5.6%), currently use e-cigarettes (6.1%), and/or have used vaping devices for products other than tobacco or nicotine (7.2%).

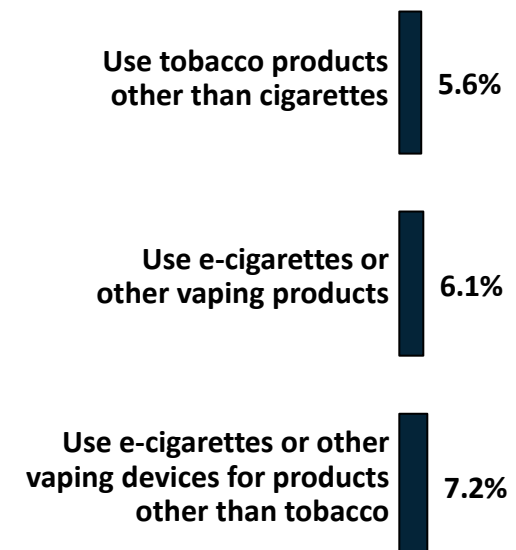
Cigarette Smoking (Adults)



Cigarette Smoking (Youth)



Other Tobacco Use and Vaping (Adult)



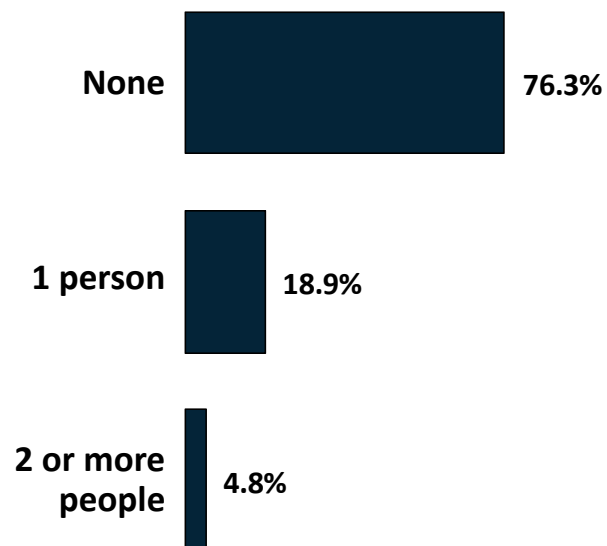
Source: BRFSS – Q8.1: Have you smoked at least 100 cigarettes in your entire life? (n=1,317); BRFSS – Q8.2: Do you now smoke cigarettes everyday, some days, or not at all? (n=503); Ottawa Youth Assessment Survey 2015, MI YRBS 2015; BRFSS – Q8.3: Do you currently use any tobacco products other than cigarettes, such as chew, snuff, cigars, pipes, bidis, kreteks, or any other tobacco product? (n=1,317); BRFSS – Q8.7: Do you now use e-cigarettes or other electronic “vaping” products every day, some days, or not at all? (n=1,1315); BRFSS – Q8.8: Have you ever used e-cigarettes or other electronic “vaping” devices for a product other than tobacco or nicotine? (n=1,315).



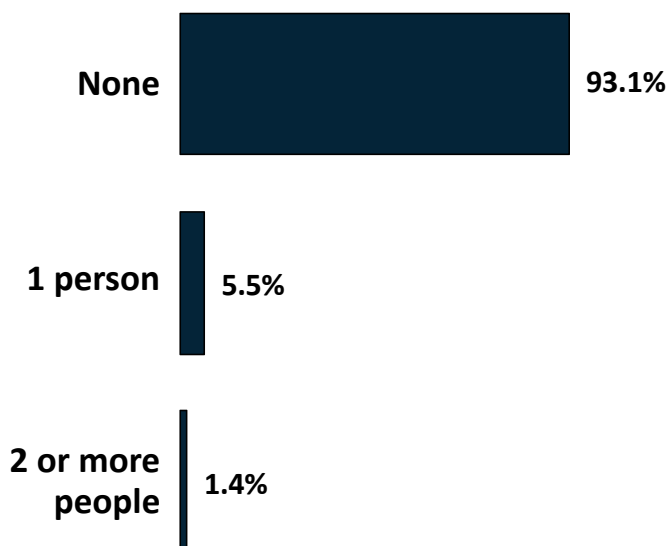
Secondhand Smoke

- Almost one-fourth (23.7%) of Ottawa County adults report that at least one person in their household smokes.
 - ❖ A small proportion of area adults report smoking inside the home

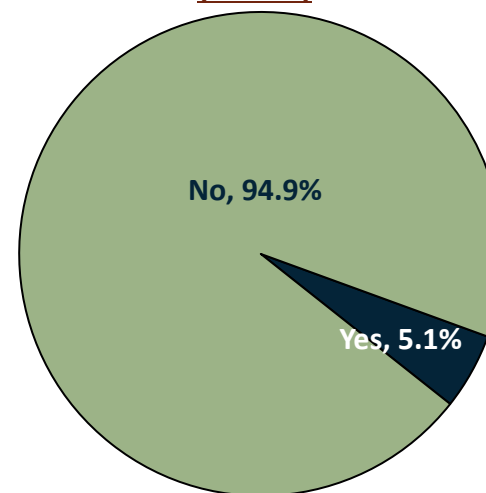
Number of People in Household Who Smoke (Adults)



Number of People in Household Who Smoke Inside the Home (Adults)



Anyone Besides Self Smoked Cigarettes, Cigars, or Pipes Inside Home in Past 7 Days (Adults)



Among Smokers, yes = 19.5%

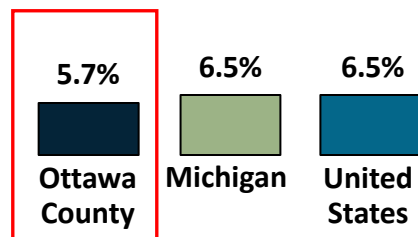
Source: BRFSS – Q8.4: How many people that live with you smoke cigarettes, cigars, little cigars, pipes, water pipes, hookah, or any other tobacco products? (n=1,316); BRFSS – Q8.5: Not counting decks, porches, or detached garages, how many of these people smoke cigarettes, cigars, little cigars, pipes, water pipes, hookah, or any other tobacco product inside your home? (n=1,316); BRFSS – Q8.6: Next I am going to ask you about exposure to smoke from other people's cigarettes, cigars or pipes. Please do not include yourself. In the past seven days, did anyone smoke cigarettes, cigars, or pipes anywhere inside your home? (n=1,317)



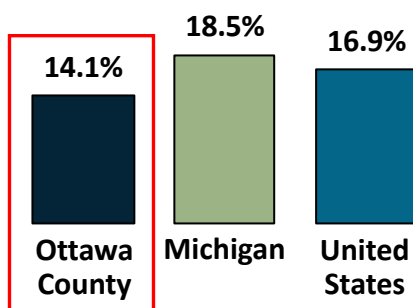
Alcohol Use

- With regard to alcohol consumption, 5.7% of Ottawa County adults are considered to be heavy drinkers, meaning they consume an average of more than seven (if female) or fourteen drinks (if male) per week.
 - ❖ This rate is lower than both the state and national rates
- Among all adults, 14.1% have engaged in binge drinking in the past 30 days; among those who drink, this proportion rises to 28.7%.
- Far fewer Ottawa County youths report binge drinking compared to youth across Michigan or the U.S.
 - ❖ Among youth, 12th graders are more likely to engage in binge drinking than 10th graders

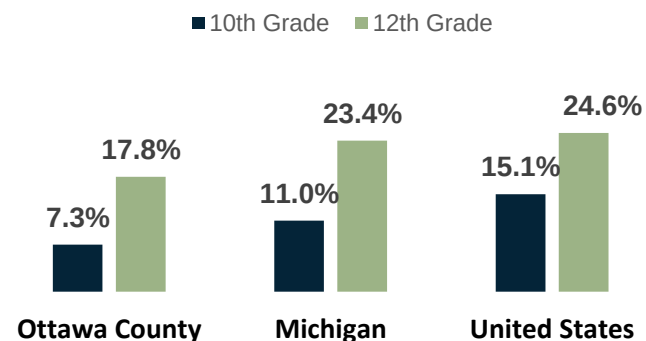
Heavy Drinking (Adults)



Binge Drinking (Adults)



Binge Drinking (Youth)



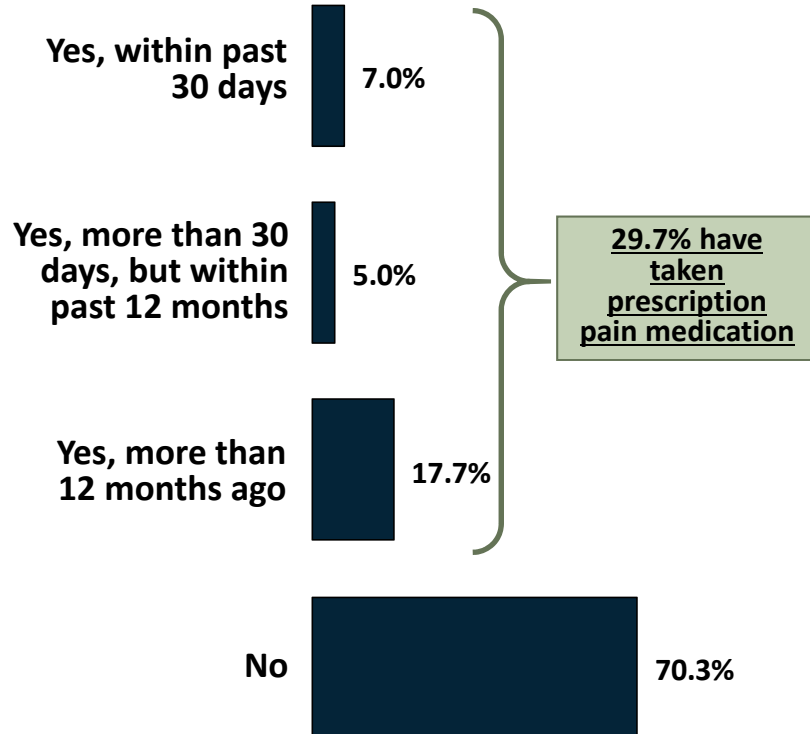
Source: BRFSS – Q17.1: During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage, or liquor? (n=1,294); BRFSS – Q17.2: One drink is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or a drink with one shot of liquor. During the past 30 days, on the days when you drank, about how many drinks did you drink on the average? (n=601); BRFSS – Q17.3: Considering all types of alcoholic beverages, how many times during the past 30 days did you have X (x=5 for men, x=4 for women) or more drinks on an occasion? (n=1,273); Ottawa County Youth Assessment Survey, 2015, Michigan YRBS, 2015.



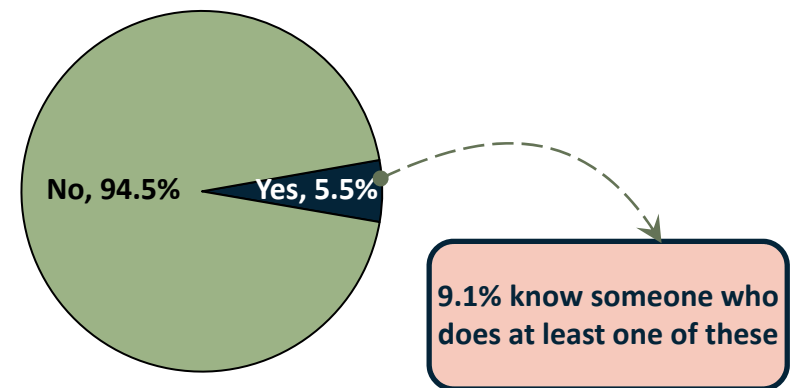
Prescription Drug Use

- Three in ten (29.7%) Ottawa County adults have taken prescription pain medication at some point.
- Very few Ottawa County adults say they know anyone who takes pain medication, stimulants, or amphetamines that are not prescribed to them.

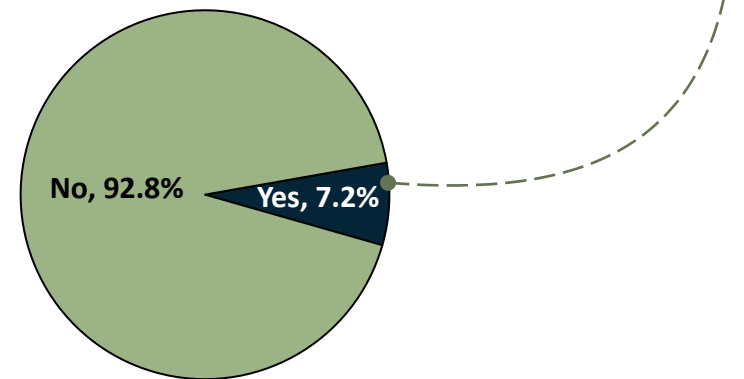
Have Taken Prescription Pain Medication (Adults)



Know Anyone Who Currently Takes Pain Medication That Is Not Prescribed to Them



Know Anyone Who Currently Takes Stimulants or Amphetamines That Are Not Prescribed to Them



Source: BRFs – Q6.1: Have you taken prescription pain medication, such as OxyContin, Percocet, Vicodin, or codeine? (n=1,307); BRFs – Q6.2: Do you know anyone who currently takes pain medication that is not prescribed to them? (n=1,313); BRFs – Q6.3: Do you know anyone who currently takes stimulants or amphetamines, such as Ritalin, Adderall, Dexedrine, or Concerta, that is not prescribed to them? (n=1,311).



Youth Drug Use

- One in ten Ottawa County youth have used marijuana in the past 30 days and more than one in ten report vaping.
- Fewer youth have used prescription drugs without a doctor's permission, hallucinogens, or over-the-counter drugs to get high, and very few have used ecstasy, cocaine, inhalants, heroin, or methamphetamines.
- That said, several Key Informants reports teen substance abuse as alarming.

Substance	2015 %
I used an electronic vapor product in the past 30 days	14.3%
I have used marijuana on one or more of the past 30 days	10.3%
I used a prescription drug without a doctor's permission in the past 30 days	5.7%
I have used a hallucinogen (LSD, PCP, shrooms, or acid)	3.9%
I used over the counter drugs only for the experience or feeling that they cause on one or more of the past 30 day	3.5%
I have used ecstasy (also called extacy, X, MDMA)	2.4%
I used a hallucinogen (LSD, PCP, shrooms, or acid) in the past 30 days	1.8%
I have used cocaine in any form including powder, crack, or freebase	1.8%
I have used an inhalant to get high in the past 30 days	1.6%
I have used heroin (also called smack, junk, or China White)	1.6%
I have used methamphetamines (also called speed, crystal, crank, ice, chalk, fire, or glass)	1.6%

I have my first **13 year old** patient who is 'vaping'. **Smoking THC using a hand held vaporizer.** Apparently this is all the 'rage' with our very young teens giving them exposure to benzene and heavy metals in the vape liquid. – *Key Informant*

Overdoses are becoming common place in area emergency rooms. **Heroin addiction in particular appears to be affecting teens through older adults.** – *Key Informant*

Working with young **teens to educate on the danger and to teach life skills and coping skills to help prevent drug/alcohol abuse.** – *Key Informant*

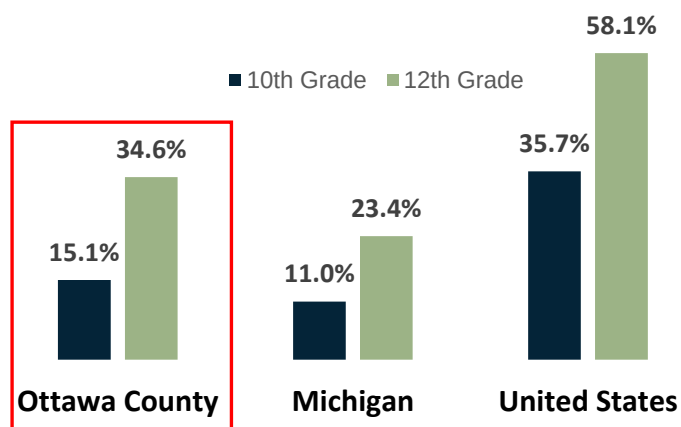
Source: Ottawa County Youth Assessment Survey, 2015. (n=4833); KIOS – Q1: To begin, what are one or two most pressing health issues and concerns in Ottawa County? (n=90); KIOS – Q1a: Why do you think it's a problem in Ottawa County? Please be as detailed as possible. (n=90); KIOS – Q1c: What ideas do you have, if any, to resolve this issue. Please be as detailed as possible. (n=90); KIOS – Q3b: What additional health behaviors are prevalent in Ottawa County, if any? (n=28)



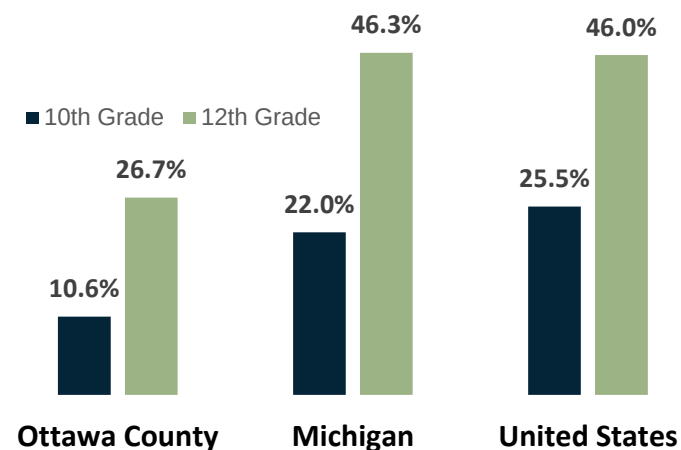
Teenage Sexual Activity and Teen Pregnancy

- Ottawa County teens are much more likely to have ever engaged in sexual intercourse compared to teens across Michigan but far less likely than teens across the U.S. However, far fewer Ottawa County youths have had sexual intercourse in the past three months vs. youths across the state or nation.
- As a percentage of all births, teen births are lower in Ottawa County (4.9%) than in Michigan (6.9%) or the U.S (5.8%). Further, repeat teen births are also slightly lower in Ottawa County than in the state or the nation.

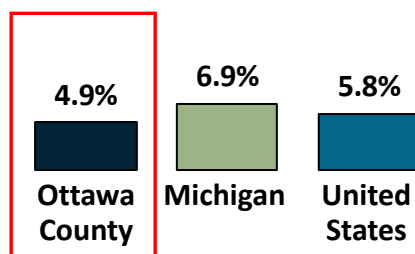
Youth Who Have Ever Had Sexual Intercourse



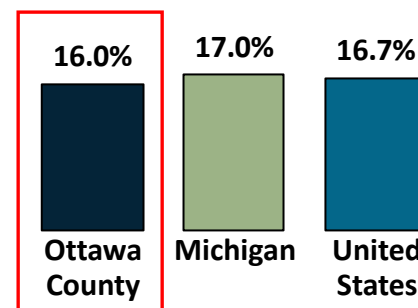
Youth Who Have Had Intercourse in Past 3 Months



Teen Births, Ages 15-19 (% of All Births)



Repeat Teen Births (% of All Births to Mothers Aged 15-19)



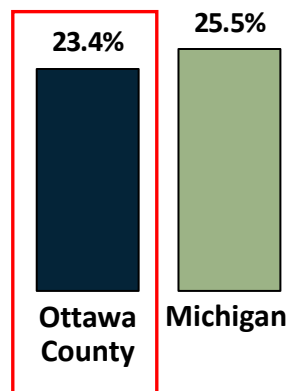
Source: Ottawa County Youth Assessment Survey, 2015, Michigan YRBS, 2015; Ottawa County Youth Assessment Survey, 2015, Michigan YRBS, 2015; MDHHS Vital Records, Ottawa County and MI 2015, CDC NCHS U.S., 2015; Kids Count Data Book, Ottawa County and MI 2014, CDC NCHS U.S., 2015.



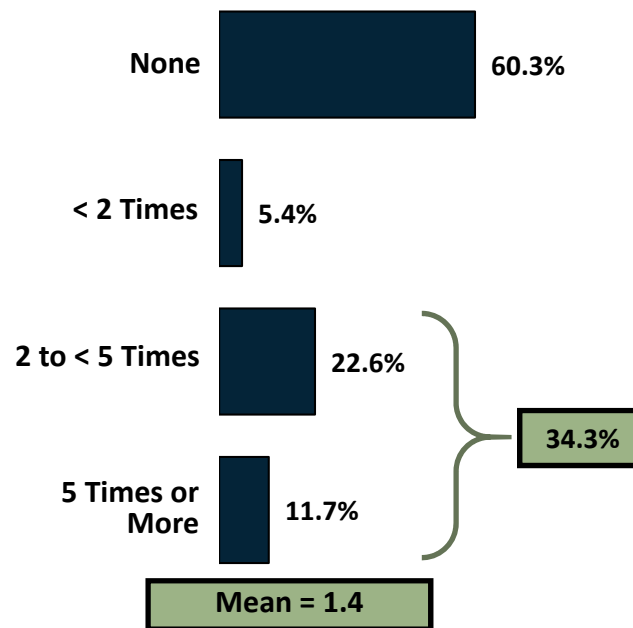
Physical Activity

- Almost one-fourth (23.4%) of area adults participate in no leisure time physical activity outside of their job.
 - ❖ This rate is slightly better than the state rate
- Further, six in ten (60.3%) do not engage in any muscle strengthening activities, while 34.3% perform muscle-strengthening activities at least twice a week.
- More than four in ten Ottawa County youths engage in inadequate amounts of physical activity, which means they fall below the threshold of being active for 60 minutes or more at least five days per week.

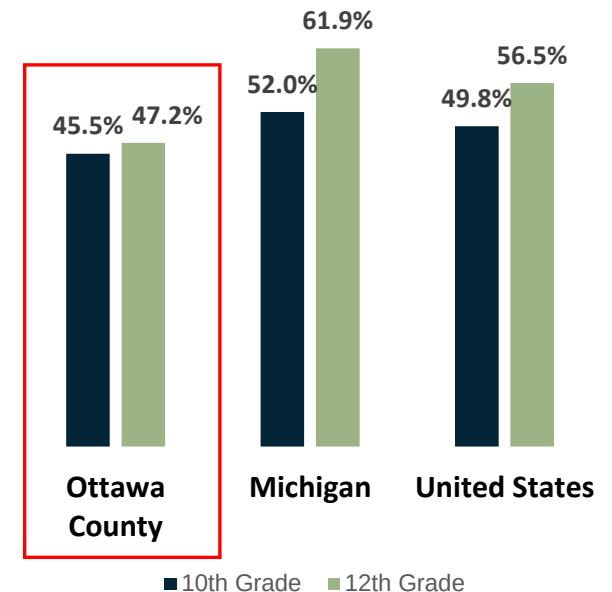
No Leisure Time Physical Activity (Adults)



Number of Times Performed Physical Activities to Strengthen Muscles Per Week in Past Month



Inadequate Physical Activity (Youth)



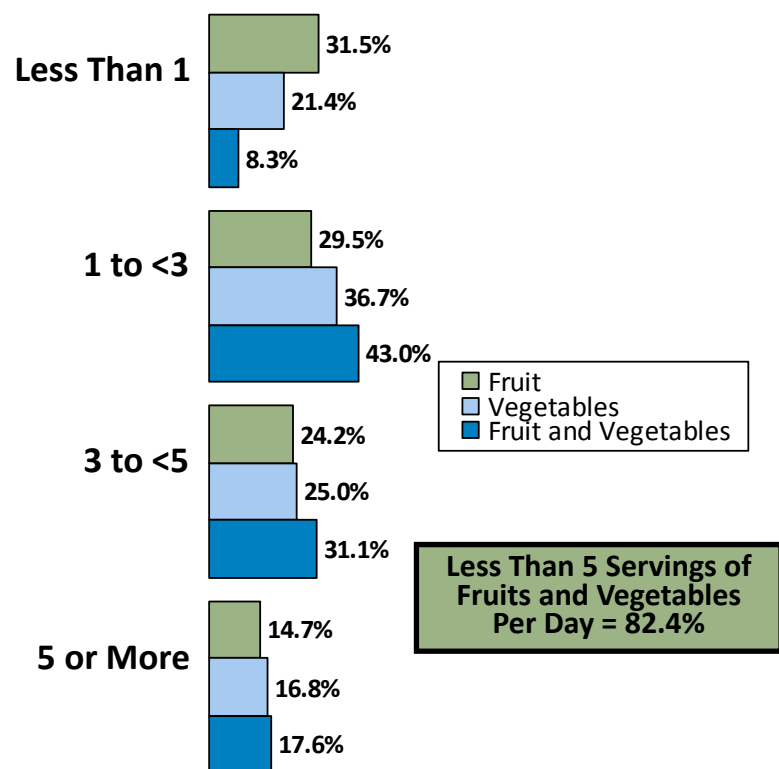
Source: BRFSS – Q14.1: During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise? (n=1,312); BRFSS – Q14.4: During the past month, how many times per week, or per month, did you do physical activities or exercises to STRENGTHEN your muscles? (n=1,299); Ottawa County Youth Assessment Survey, 2015, Michigan YRBS, 2015.



Fruit and Vegetable Consumption

- Fewer than one in five (17.6%) Ottawa County adults consume adequate amounts of fruits and vegetables per day, which is defined as five or more servings per day.
 - ❖ Youth fare better – 32.2% consume five or more cups of fruits and vegetables per day – but there is still much room for improvement

Adult Fruit and Vegetable Consumption Per Day



Youth Fruit and Vegetable Consumption Per Day

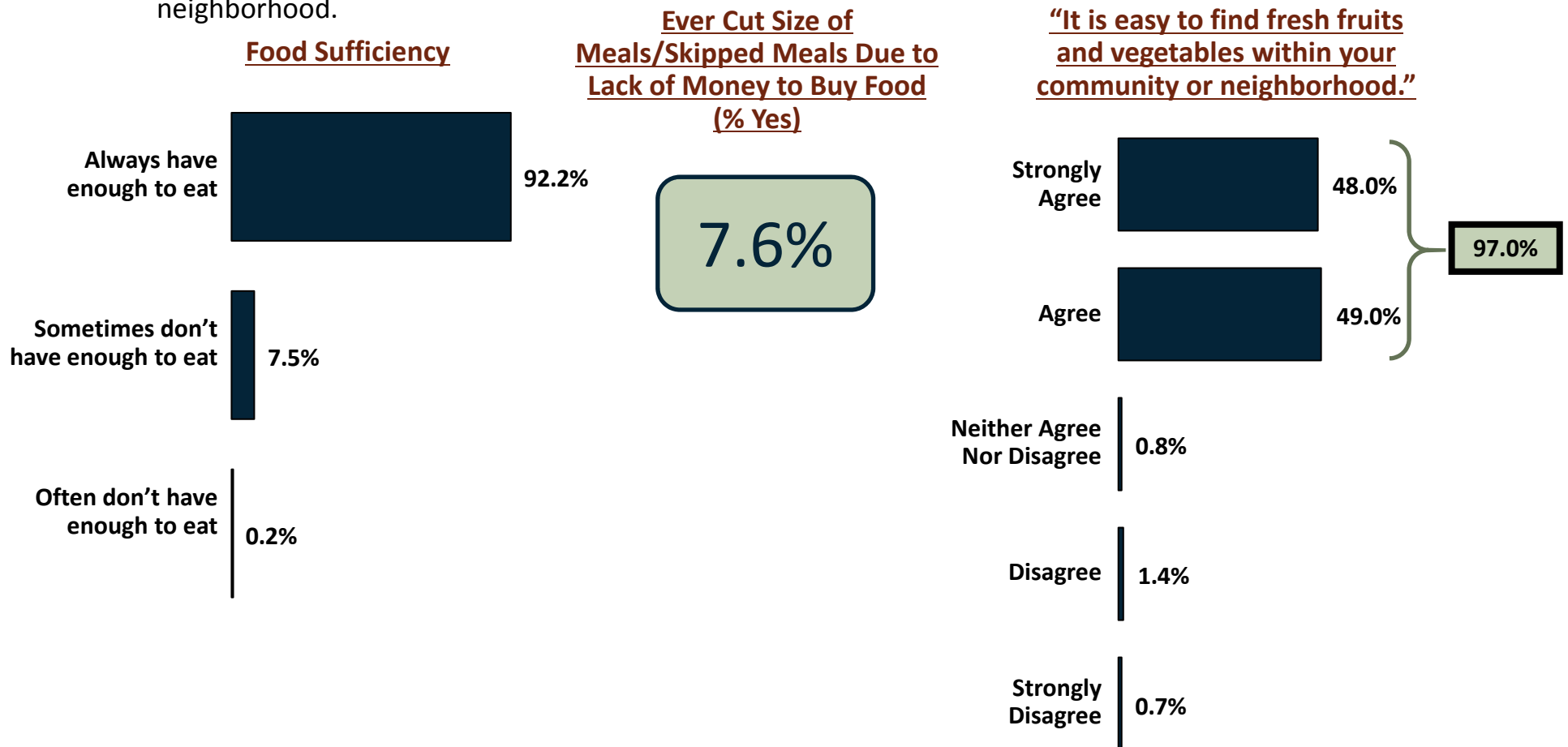
	%
Consume zero cups of fruit on an average day	9.8%
Consume zero cups of vegetables on an average day	17.6%
Consume less than five servings of fruits and vegetables on an average day	67.8%

Source: BRFS – Q12.1: During the past month, how many times per day, week, or month did you eat fruit or drink 100% PURE fruit juices? (n=1,305); BRFS – Q12.2: During the past month, how many times per day, week, or month did you eat vegetables, for example broccoli, sweet potatoes, carrots, tomatoes, V-8 juice, corn, cooked or fresh leafy greens including romaine, chard, collard greens, or spinach? (n=1,308); Ottawa County Youth Assessment Survey, 2015. (n=4833)



Food Sufficiency

- Just under 8% of area adults report they sometimes or often don't have enough food to eat and an equal proportion say they've had to cut the size of meals or skip meals due to lack of money.
 - ❖ Not surprisingly, those who are more likely to experience food insufficiency have the lowest incomes
- Nearly all (97.0%) adults report that fresh fruits and vegetables are easy to find in their community or neighborhood.

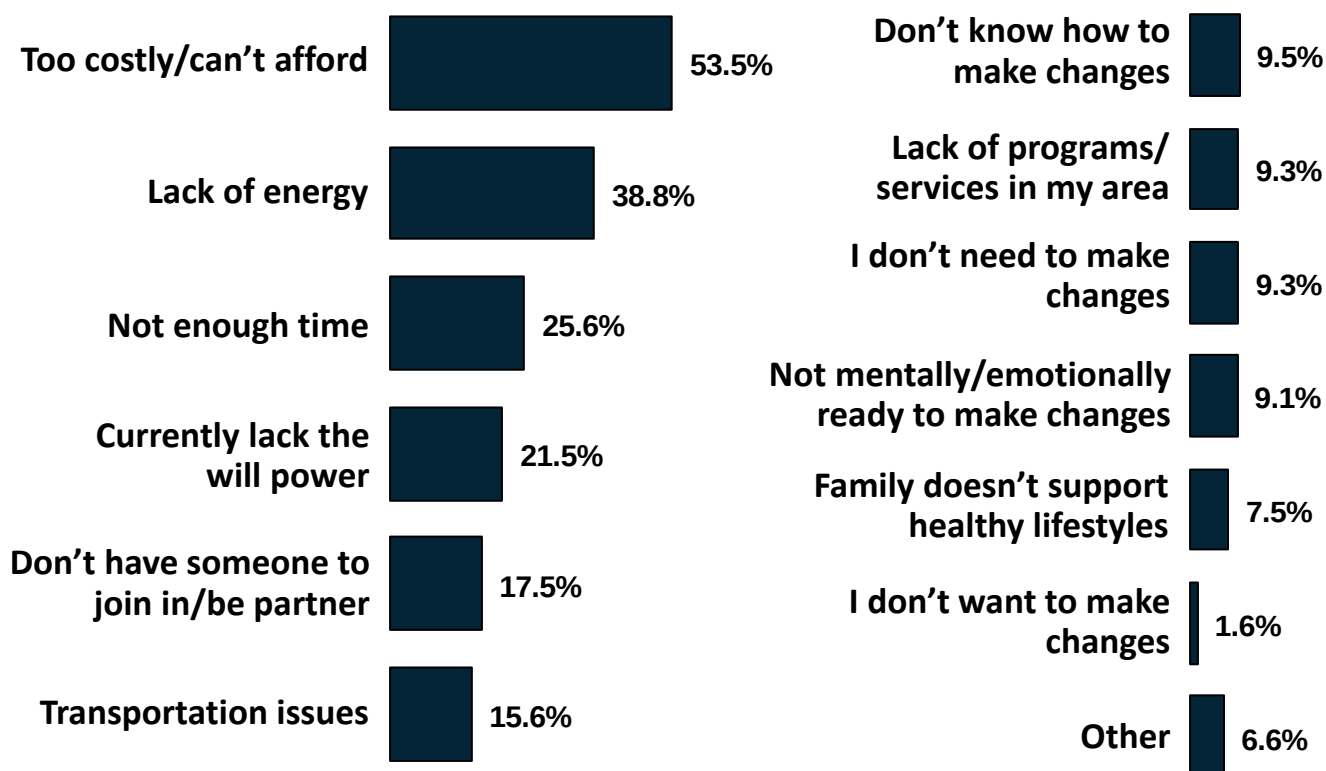


Source: BRFS – Q13.1: Which of the following statements best describes the food eaten in your household within the last 12 months? Would you say that you... (n=1,316); BRFS – Q13.2: In the past 12 months, did you or others in your household ever cut the size of your meals or skip meals because there wasn't enough money for food?; (n=1,315); BRFS – Q13.3: Please tell me how much you agree or disagree with the following statement. "It is easy to find fresh fruits and vegetables within your community or neighborhood." Would you say that you... (n=1,305).



Barriers To Living A Healthier Lifestyle (Underserved Residents)

- Underserved adults face many barriers when trying to live a healthier lifestyle, especially **cost**.
- Lack of energy, time, and lack of will power as also substantive barriers.



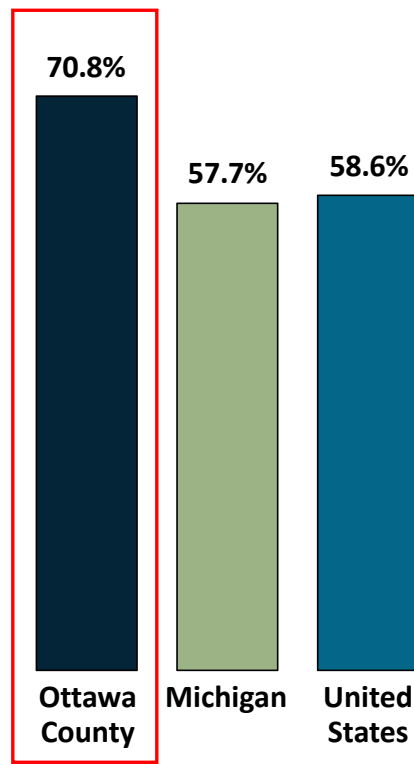
Clinical Preventive Practices



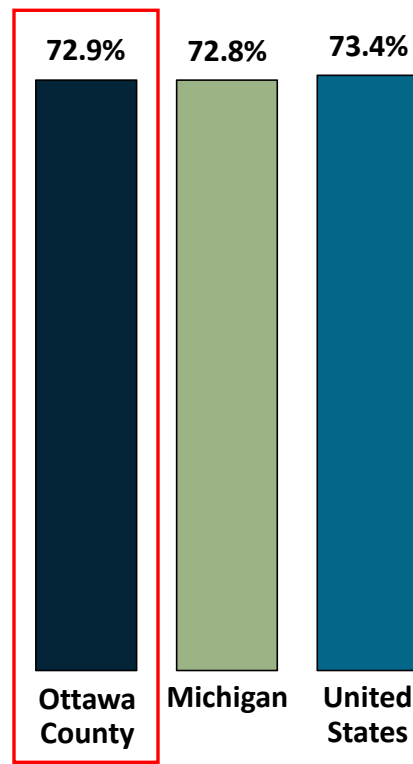
Immunizations

- Among area adults aged 65 or older, seven in ten (70.8%) have had a seasonal flu shot within the past year and a similar proportion has had a pneumonia vaccine at one time.
- The vast majority (84.0%) of children aged 19-35 months have been fully immunized, a rate higher than state or national rates.

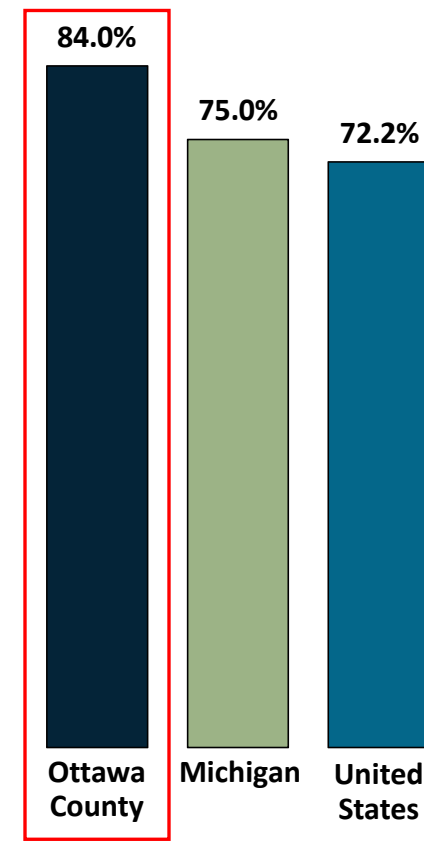
Had Flu Vaccine in Past 12 Months
(Adults Age 65+)



Ever Had Pneumonia Vaccine
(Adults Age 65+)



Proportion of Children Aged 19-35
Months Fully Immunized



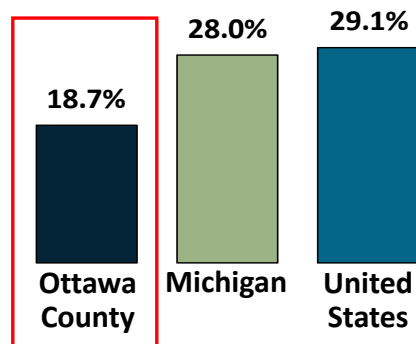
Source: BRFSS – Q16.1: During the past 12 months, have you had a seasonal flu shot? (n=396); BRFSS – Q16.2: A pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person's lifetime and is different from the flu shot. Have you ever had a pneumonia shot? (n=388); Local and MI % from MICR June, 2017, National data at CDC National Immunization Survey, 2015.



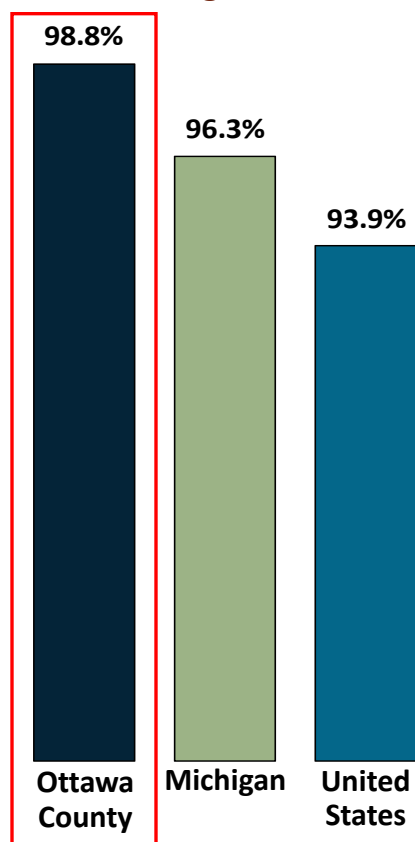
Routine Checkups

- Almost one in five area adults had no routine physical exam, and an equal proportion did not visit a dentist, in the past year; both of these proportions are better than the nation.
- On the other hand, almost all children aged 0-17, have received a routine checkup in the past year.

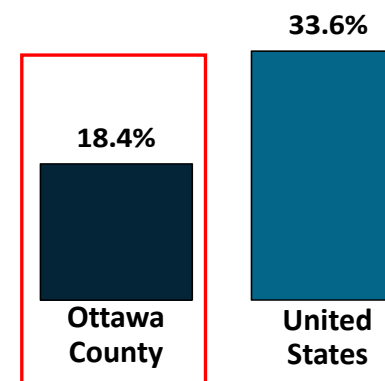
No Routine Checkup in Past Year (Adults)



Ottawa County Children (Aged 0-17) Who Had a Routine General Physical Exam/Well-Being Exam in Past Year



No Dental Visit in Past Year (Adults)



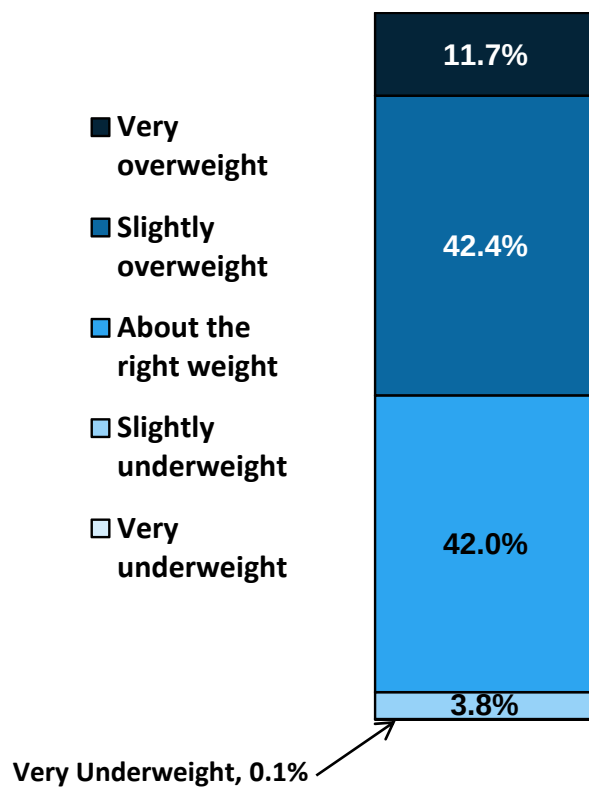
Source: BRFSS – Q3.7: About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition. (n=1,314); BRFSS – Q10.7: (For those with children living at home) About how long has it been since [CHILD/AGE] last visited a doctor (health care provider) for a routine checkup? (n=338); BRFSS – Q19.1: How long has it been since you last visited a dentist or dental clinic for any reason? (n=1,297)



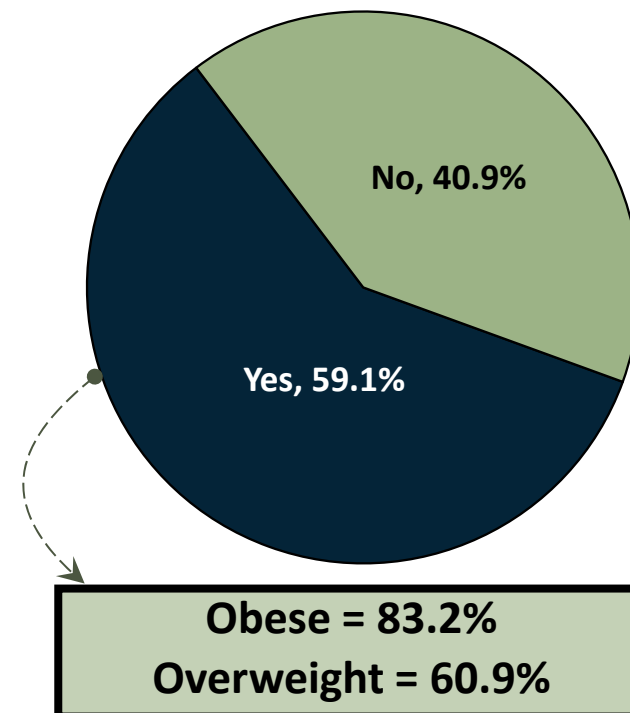
Weight Control

- Four in ten area adults (42.0%) see themselves at about the right weight, while an equal proportion of adults think they are slightly overweight and 11.7% report being very overweight.
- Six in ten (59.1%) adults are currently trying to lose or maintain their current weight.
 - ❖ Although a large majority of obese adults are trying to maintain or lose weight, only six in ten (60.9%) overweight adults are doing the same

Self-Described Weight Status



Currently Trying to Lose or Maintain Weight

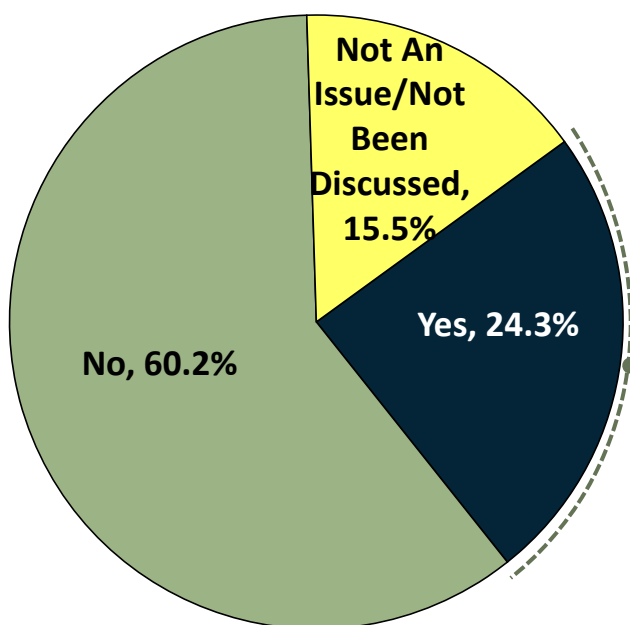




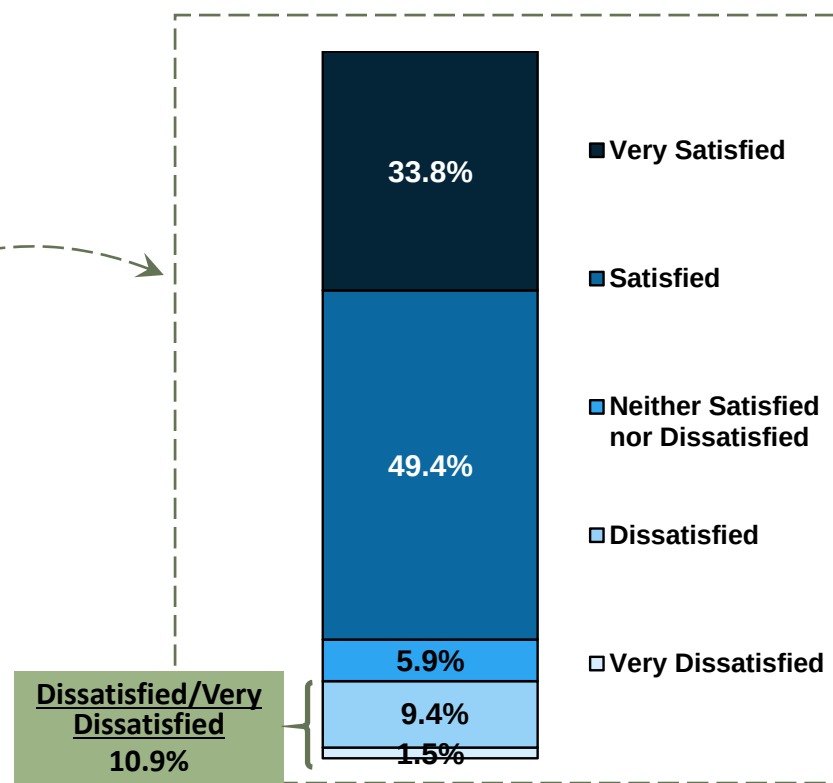
Weight Control (Continued)

- One in four Ottawa County adults has received advice from a healthcare professional regarding their weight.
 - ❖ Of these, the vast majority (83.2%) are satisfied with that advice.

Received Advice Regarding Weight from Health Professional



Satisfaction with Advice Regarding Weight



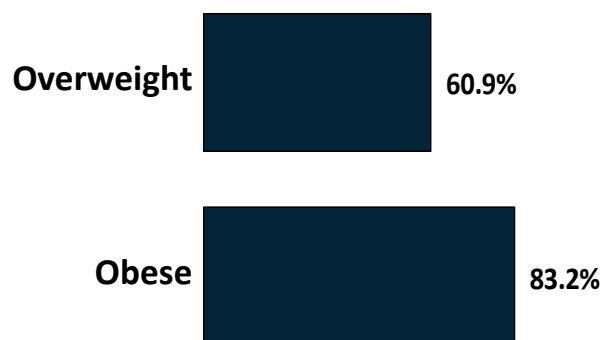
Source: BRFSS – Q11.3: Has a doctor, nurse, or other health professional given you advice about your weight? (n=1,307); BRFSS – Q11.4: How satisfied were you with that advice? (n=332)



Weight Control (Continued)

- In light of the fact that nearly two-thirds of adults in Ottawa County are either overweight or obese per this BRFs, it is surprising that **many are not receiving advice from health care professionals regarding their weight.**
- Further, **many of those overweight or obese see themselves in a slightly better image;** for example, 54.1% of those considered obese per their BMI see themselves as only slightly overweight, and 39.6% of those who are overweight view themselves as about the right weight.

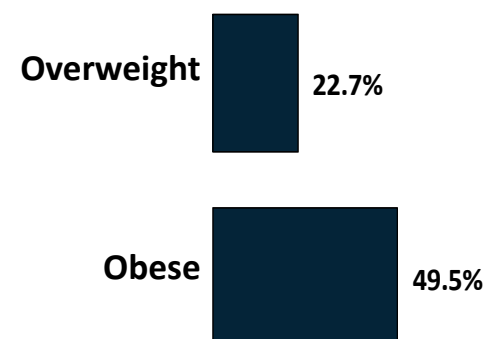
Trying to Lose/Maintain Weight by BMI Category “Overweight” or “Obese”



Self-Described Weight Status by BMI Category “Overweight” or “Obese”

	BMI Category	
Self-Described Weight	Overweight (n=424)	Obese (n=397)
Underweight	0.6%	0.1%
About the right weight	39.6%	10.3%
Slightly Overweight	57.0%	54.1%
Very Overweight	2.9%	35.5%

Received Advice Regarding Weight from Health Professional by BMI Category “Overweight” or “Obese”

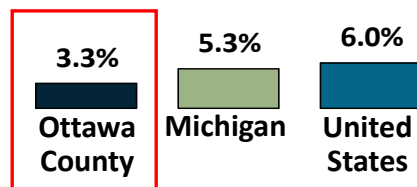




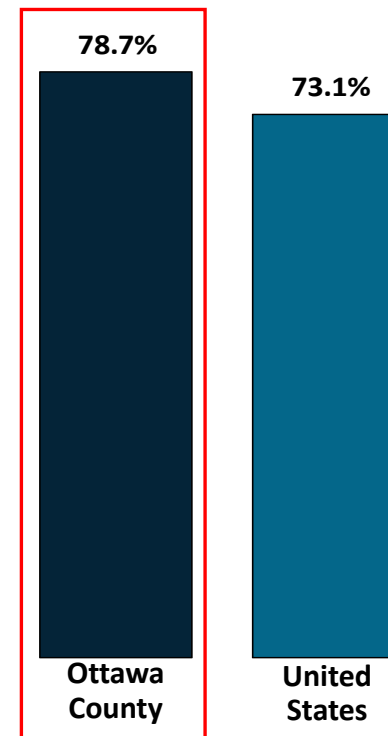
Prenatal Care

- Almost all Ottawa County women receive prenatal care at one point.
- Further, more than three-fourths (78.7%) of pregnant women begin prenatal care in the first trimester.
- Both of these rates are better than national rates.

Proportion of Births to Women Who Receive Late or No Prenatal Care



Proportion of Women Who Begin Prenatal Care in First Trimester



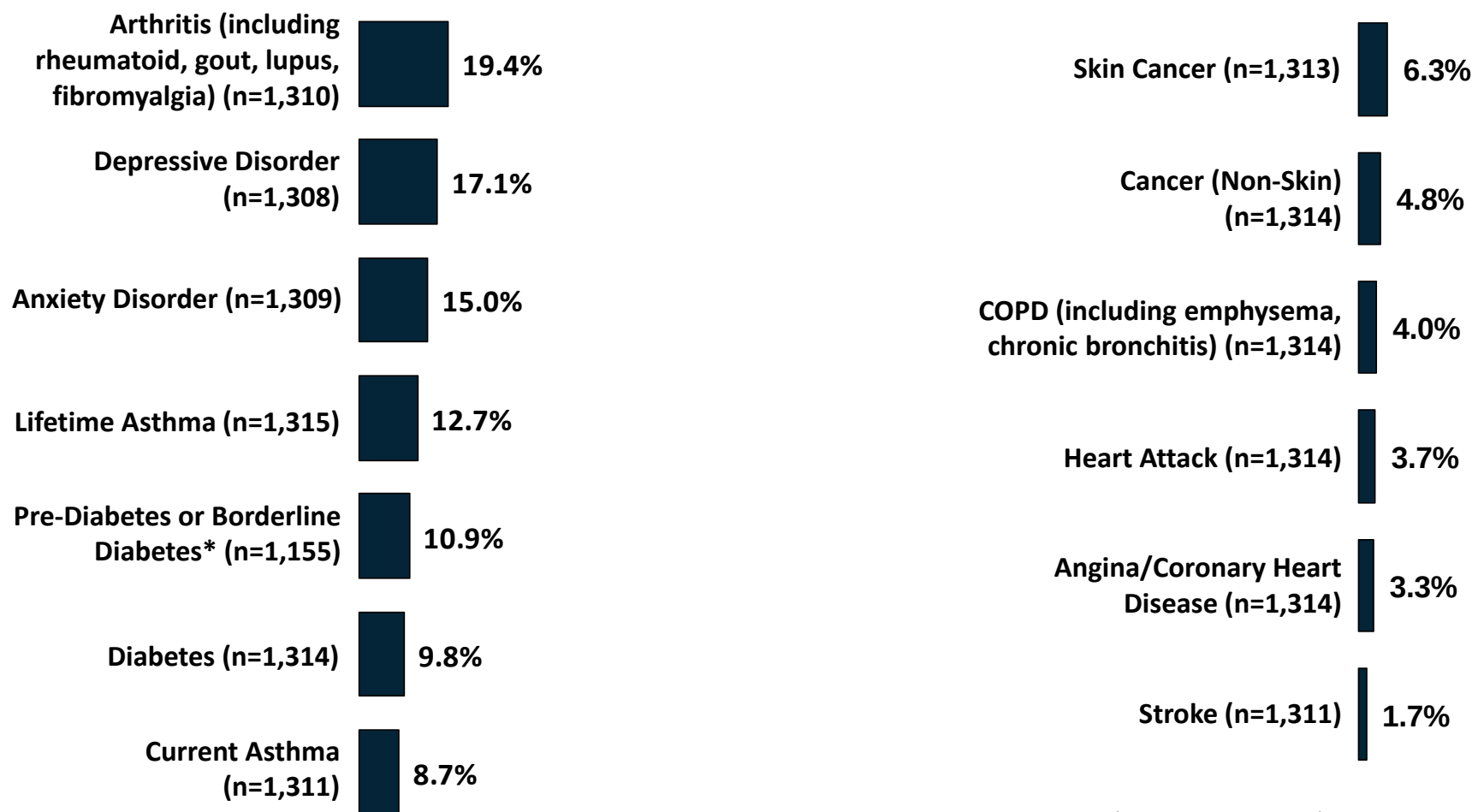
Chronic Conditions



Prevalence of Chronic Health Conditions

- **Arthritis, depression, and anxiety** are the most prevalent chronic conditions among adults in Ottawa County, followed by diabetes and asthma. Prevalence of heart related problems remains low.

❖ One in ten (9.8%) adults have been told they have diabetes and an additional 10.9% have pre-diabetes.



*Base=those who don't currently have diabetes.



Prevalence of Chronic Health Conditions (Continued)

- Prevalence of all chronic conditions, with the exception of skin cancer, is higher among Ottawa County adults in the lowest income groups (under \$35K) compared to adults with higher incomes.
 - ❖ This disparity is greatest for anxiety, depression, COPC, and cardiovascular disease

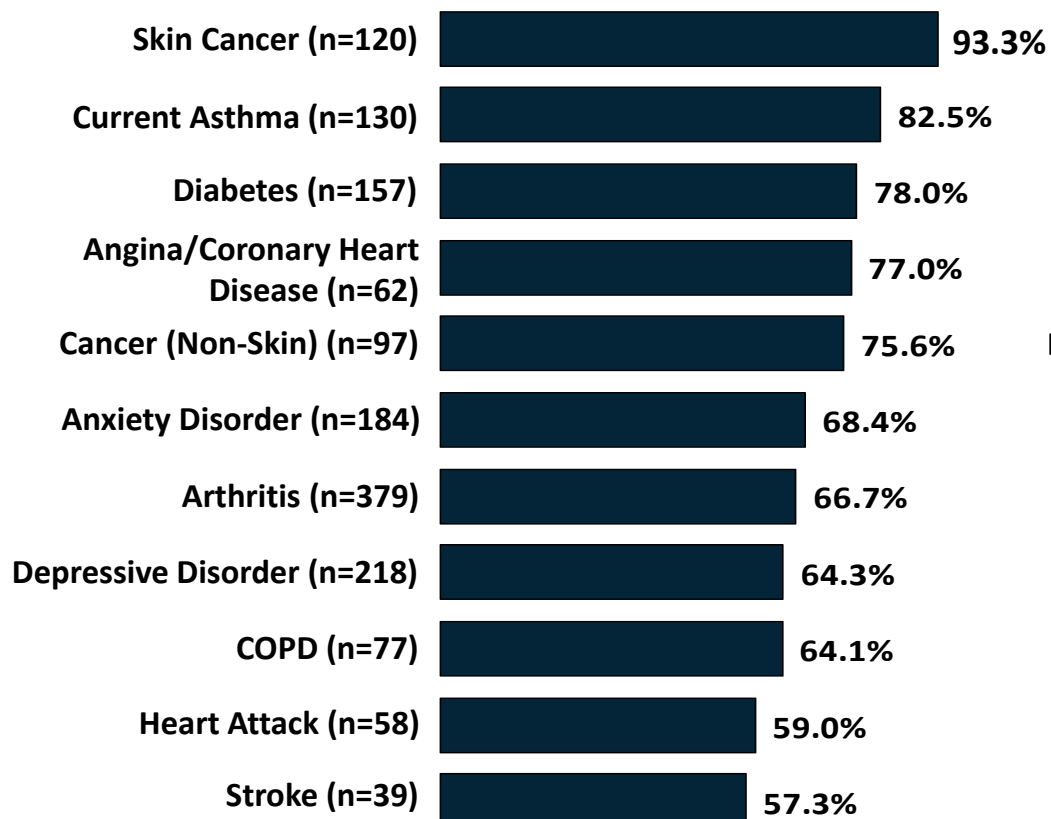
Chronic Condition	Prevalence of Chronic Conditions by Demographics								
	Annual Household Income					Race/Ethnicity		Health Insurance	
	Less Than \$20K	\$20K to Less Than \$35K	\$35K to Less Than \$50K	\$50K to Less Than \$75K	\$75K or More	White	Non-White	Have Health Insurance	No Health Insurance
Arthritis	26.7%	25.8%	21.6%	12.0%	17.0%	21.3%	7.4%	20.6%	6.2%
Depressive Disorder	32.8%	31.5%	10.9%	16.2%	8.0%	17.7%	13.5%	17.9%	7.9%
Anxiety Disorder	28.4%	24.7%	14.1%	12.0%	11.1%	15.0%	15.6%	15.3%	11.0%
Lifetime Asthma	17.3%	18.0%	14.2%	7.4%	11.5%	12.3%	15.0%	13.1%	7.5%
Pre-Diabetes	10.9%	12.6%	8.1%	15.3%	16.3%	13.2%	10.4%	13.4%	6.9%
Diabetes	15.7%	16.1%	6.4%	11.0%	6.4%	10.8%	3.4%	9.7%	11.5%
Current Asthma	12.4%	13.8%	9.7%	3.9%	8.9%	8.5%	9.7%	9.2%	3.7%
Skin Cancer	1.6%	5.4%	11.4%	5.6%	6.4%	7.3%	0.2%	6.5%	3.6%
Cancer (Non-Skin)	9.3%	6.4%	5.4%	3.2%	3.4%	5.5%	1.2%	5.3%	0.0%
COPD	12.8%	6.6%	4.1%	1.7%	1.6%	3.9%	3.4%	4.0%	3.5%
Heart Attack	4.4%	7.3%	3.4%	3.2%	0.2%	3.9%	1.5%	4.0%	0.0%
Angina/CHD	7.6%	6.5%	2.0%	4.6%	1.1%	3.4%	1.5%	3.6%	0.0%
Stroke	2.8%	3.6%	2.5%	1.1%	0.1%	2.0%	0.3%	1.9%	0.3%
Any cardiovascular	13.0%	12.0%	6.1%	6.5%	1.4%	7.2%	3.0%	7.3%	0.3%



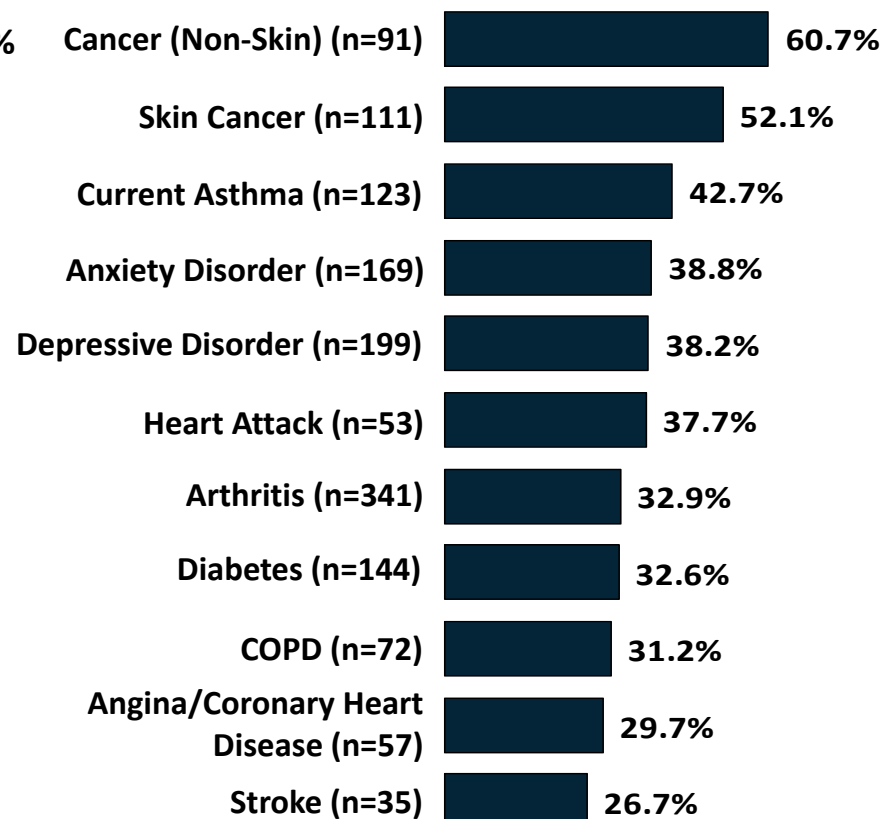
Management of Chronic Health Conditions

- A sizeable majority of adults with chronic conditions are confident in themselves to do all things necessary to manage their condition.
 - ❖ The greatest barriers to confidence are **inadequacy, or lack, of existing programs and services** and **multiple** chronic conditions
- On the other hand, they report that area programs and services are not highly effective in helping them in their management; this is especially true for **cardiovascular-related conditions, COPD, diabetes, and arthritis**.

Level of Confidence in Managing Condition (% Very/Extremely)



How Well Existing Programs/Services Help with Management (%Very/Extremely)



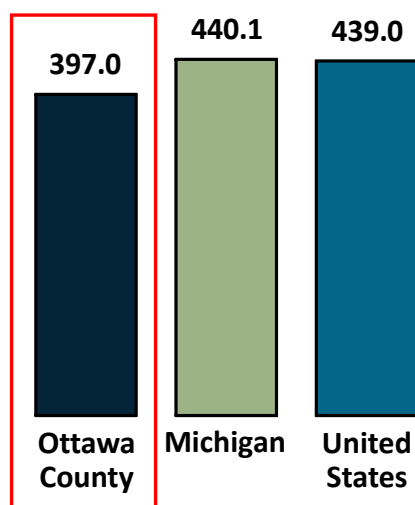
Source: BRFSS – Q5.1: How confident are you that you can do all the things necessary to manage your [insert condition]? Would you say you are...?; BRFSS – Q5.3: How well do you feel the existing programs and services in the community help you in managing your condition? Would you say...?



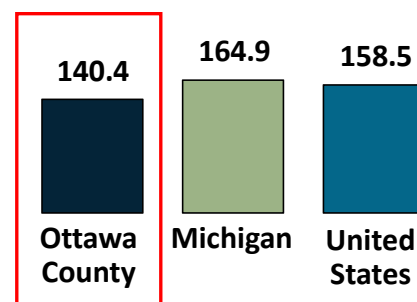
Cancer Diagnosis and Death Rates

- Compared to state and national rates, cancer diagnosis and death rates are lower for Ottawa County residents.

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



Overall Cancer Death Rate Per 100,000 Population

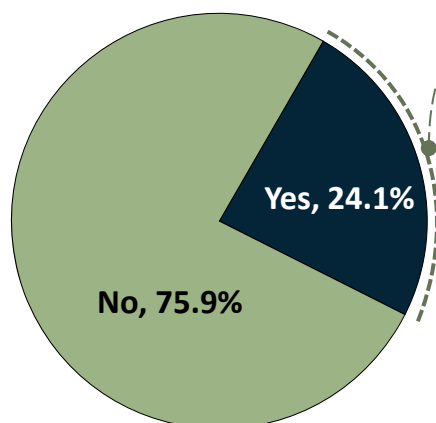




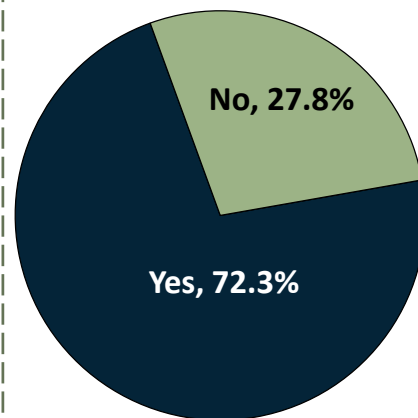
Chronic Pain And Its Management

- One-fourth (24.1%) of Ottawa County adults suffer from chronic pain, and of those 27.8% say their pain is not well managed.
- More than four in ten (42.4%) of those with chronic pain report myriad barriers to treating their pain, including **cost, multiple chronic issues, lack of programs** that could help them deal with the pain better, and **insurance issues**.

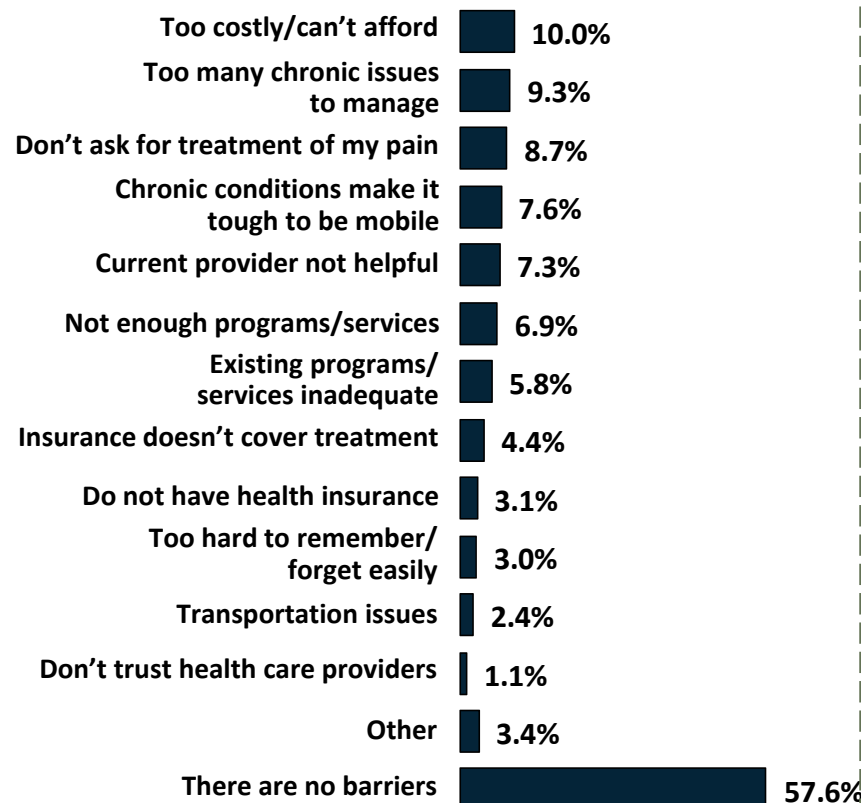
Suffer from Chronic Pain



Pain is Well Managed



Barriers to Treating Pain



Source: BRFS – Q6.4: Do you suffer from any type of chronic pain; that is, pain that occurs constantly or flares up frequently? (n=1,313); BRFS – Q6.5: Do you feel your pain is well managed? (n=368); BRFS – Q6.6: What are some of the barriers to treating your pain? (n=365)

Solutions and Strategies



Partnerships And Activities That Could Address Needs

- **Developing partnerships and involving organizations in activities** are strategies that would facilitate meeting community needs. For example, **providers need to consider the importance of the social determinants of health and be more involved** (especially dental and mental health) in **developing ways to provide care**. Also, Key Stakeholders view the current collaboration that is taking place positively but suggest that the **scope could be broadened to meets the needs of more people, more specific groups or subpopulations**.

Increased provider involvement

I think that there are a number of providers that volunteer in health clinics and primary care even and so on and so forth, but on the **dental side**, very, **very little** - I mean, **almost zero**.

I think **every single thing the healthcare community should be participating in**. I think I kind of covered my angst over how the **healthcare system is operating the medical model and not really recognizing the social determinants of health**, and I think that's critically important, and if we're ever going to make an impact on improving our health outcomes, **the medical folks are going to have to embrace some of the barriers that people have to be healthy - more holistically**, absolutely, or at least figure out how to link with us so that we can take care of that, and some of it means reallocating some of the resources - their resources.

Broaden existing models/ collaboration

Well, I do think that the **Pathways to Better Health model could be expanded beyond its current scope**. So, right now, it's got this very specific focus, that if you have this issue and that issue, then you can come in, and we'll do care coordination across a continuum of services to increase your overall holistic health. I think if we broadened that idea - that **community health worker/case manager/mentor-type idea**, I think **we could implement it across a much broader swath of individuals**, kind of **like the Good Sam Circles model**. I'm not saying expand actual Pathways, but **take that idea and expand it beyond** "if you have a chronic disease and X, Y, and Z."

We have this county collaboration, which I think is a great thing. I just think that **needs to expand and mature**. Honestly, I think it **needs kind of a leader to really drive it**, and I don't know who that is right now or how that really functions, but I think that if you want economic change in your community, you bring in an economic person, and so if you want to do the same thing here, I think you have to **put somebody in a position to try to align organizations and employers**. How do you not only align the non-for-profits, the hospitals, those that are actually doing that work, but how do we align with our companies and get them tied to that mission? I think that's where you **need to bring a person in that holds a community together to really drive us that one next level**.



Resources Available To Address Specific Issues

- Key Informants and Key Stakeholders mention several existing resources available for residents with mental health and/or substance abuse issues, or those considered to be underserved or vulnerable.
- The problem is that the demand outweighs the supply, especially for those without health insurance.

Mental/ behavioral health	Ottawa County Community Mental Health, Holland Hospital Behavioral Health Services (inpatient and outpatient), Pine Rest therapy clinics in various locations around the lakeshore, the Holland Drop-In Center. – <i>Key Informant</i> For mental health, in general, I think there are adequate resources; it goes back to some stigma around seeking treatment and perhaps a lack of completely understanding how to access services or when even to seek treatment. – <i>Key Stakeholder</i> Private providers, family physicians, pediatricians, community programs (e.g., Love Inc., etc.), Robert Brown. – <i>Key Informant</i>
Substance abuse	Ottawa County Community Mental Health, Holland Hospital outpatient Behavioral Health Services and substance abuse intensive outpatient program, OAR. – <i>Key Informant</i> With prescription drug misuse/opiate/heroin use, I don't think there are adequate resources at the moment to address that issue fully. People are aware of it, and there's a task force, and various agencies are addressing particular elements of what it might take to the job of dealing with that concern, but probably not enough effort. – <i>Key Stakeholder</i> Very limited, I don't believe there are any detox beds in the county. I only have the ER's to refer to, there is no walk in assessment available for people with addiction. – <i>Key Informant</i>
Underserved/ vulnerable groups	Dental services at Intercare, Holland Free Health Clinic, Love INC (Grand Haven), and recently Miles of Smiles target this population. Although these organizations do great work, capacity is limited, the need is much greater than what these places can provide. – <i>Key Informant</i> For access - cost - I think we have some things - we have some programs that really support people, but it's the numbers of people that need it - it's bigger than we have, so the need outweighs the resources. – <i>Key Stakeholder</i> Intercare, Holland Community Health Center, City on the Hill, Health Department. – <i>Key Informant</i>

Source: KSI – Q1a: Are there adequate area resources available to address these issues? (n=10); KIOS – Q1b: What are the resources available in the community to address/ resolve this issue? Please be as detailed as possible. (n=89)



Resources Available To Address Specific Issues (Continued)

- There are additional resources available to address obesity and diabetes but residents may lack awareness that these programs or services exist or lack motivation to utilize them.
- There are also existing services that assist residents in battling the high costs of care, especially prescription medications.

Obesity	Recreational facilities, the YMCA, the bariatric clinic at NOCH, farmers' market fresh food initiatives, dieticians. – <i>Key Informant</i> Many resources are available, but they either aren't fully effective or people are not using them. – <i>Key Informant</i> Hospitals all have fitness classes/programs. Several gyms and trails (access to fitness opportunities). Ottawa County Food Policy Council. – <i>Key Informant</i>
Diabetes	Hospital based programs, Center for Good Health, Evergreen Commons, individual doctor's practices, Holland Free Health Clinic, City on a Hill, Intercare. – <i>Key Informant</i> The National Diabetes Prevention Program can reduce the risk for diabetes by as much as 71%. – <i>Key Informant</i> There is some degree of intervention, but the resources are not well coordinated. – <i>Key Informant</i>
Cost of health care	Medical assistance is what we use at the hospital. We also call PCP's for samples and try to help the patient find the pharmacy that has the drug at the lowest cost. – <i>Key Informant</i> We have Medicaid Liaisons in the hospital that assist people in signing up for Medicaid. We have the Holland Community Health Center and Intercare that are primary care offices that assist lower income people afford their meds. However, there is very little assistance for those people who make too much money to qualify for Medicaid, but not enough money to pay for all their medications. This is particularly a problem for Medicare patients on a fixed income, especially when they enter the coverage gap. – <i>Key Informant</i>



Resources Available To Address Specific Issues (Continued)

- A summary of area resources available to address health and health care needs are as follows:
 - ✓ American Red Cross of West Michigan
 - ✓ Be Nice Campaign
 - ✓ City on a Hill
 - ✓ Community Health Improvement Plan (CHIP)
 - ✓ Community Mental Health Services
 - ✓ Evergreen Commons
 - ✓ Farmers markets
 - ✓ Greater Ottawa County United Way
 - ✓ Holland Free Health Clinic
 - ✓ Holland Hospital
 - ✓ Holland Physician Health Organization
 - ✓ Intercare Community Health Network
 - ✓ Love Inc
 - ✓ North Ottawa Community Health System
 - ✓ Ottawa County Food Policy Council
 - ✓ Ottawa County Health and Human Services
 - ✓ Ottawa County Department of Public Health
 - ✓ Pathways to Better Health
 - ✓ Pine Rest Holland Clinic
 - ✓ Priority Health
 - ✓ Spectrum Health Zeeland Community Hospital



Strategies Implemented Since First CHNA (2011)

- Three key strategies that emerged out of the results of the past two CHNAs and their corresponding implementation plans are: (1) **Pathways to Better Health**, which is a program that takes a holistic approach to health and designs ways to **increase access to services needed**, and the (2) **mental health millage** and (3) **Be Nice** campaign, both of which focus on mental health issues such as **increasing awareness of services, increasing access to services, and reducing stigma**.

Pathways to Better Health	So, Pathways came out of the last CHA, so the last Assessment is what I think really led the group to say, “Here’s a thing that we could do. Here’s something that’s worked in other communities; let’s do that here.” I think that’s been a big win that we actually did that because we saw it as a need. – <i>Key Stakeholder</i> I keep talking about the Pathways to Better Health project, and that was just an enormous lift by a lot of stakeholders. We’ve had the foundations that have brought money to the table, the United Way, the hospitals, the Health Department, the Community Mental Health Department that made financial commitments to this, but we’ve also had so many agencies, and SPOKE was very instrumental, and really kind of thinking it through and making sure we were focusing on the right thing, so that’s how we landed on Pathways to Better Health. It was a lot of voices around the table. – <i>Key Stakeholder</i>
Mental health millage	Our mental health millage, in part, gained traction from previous needs assessments.– <i>Key Informant</i> The mental health piece certainly has been really exciting. We were able to pass the mental health millage. There are some objectives that were developed after the last Community Health Needs Assessment around mental health that have resulted in things like doing mental health first aid and really trying to reduce stigma and increase people who are experiencing mental health issues to get in for care by kind of doing this broad-sweeping educational approach called Mental Health Day throughout the community. – <i>Key Stakeholder</i>
Be Nice campaign	The Be Nice campaign; that’s a mental health campaign that has really come from a couple issues that have merged: one is our Assessment and our plan and the unfortunate and sad death of a big community stakeholder - business/entrepreneur person in our community who really wanted to kind of walk alongside our efforts and kind of see what we could do to increase awareness of mental health and suicide. That culminates in this Be Nice campaign. – <i>Key Stakeholder</i>



Strategies Implemented Since First CHNA (2011) (Continued)

- Three additional strategies include: (1) formulation of the **Community Health Improvement Plan (CHIP)**, which spawned the **Pathways** and **Be Nice** campaigns, but more importantly **added health care workers on the ground**, (2) **improving access to affordable and healthy food** via the **Food Policy Council** partnering with groups such as schools and **farmer's markets**, and (3) **increased collaboration between organizations and agencies** to improve access to services.

Community Health Improvement Plan (CHIP)

The CHNA resulted in the **Community Health Improvement Plan** which focused on **three initiatives: access to health care, mental health, and healthy behaviors**. Two specific results that came out of this were: 1) **Community Health Workers** being instituted in Ottawa County and 2) the **Love in Action Free Health Clinic** opened for **daily hours to increase available care** for the **uninsured and underinsured** and is focused on **helping residents navigate the health scene and increase healthy behaviors**. – *Key Informant*

Yes, **CHIP** groups address the identified areas after the last report **created work groups focusing on topics** and worked on **ways to address the issues**. They facilitated an action to take with the end result being **Pathways to Better Health** initiative with the **hiring of 5 community health workers**. **Collaboration** between groups was an added bonus from this group. – *Key Informant*

Access to affordable and healthy food

We've also done a lot of outreach during the summer with the **food programs**, again, making sure that **healthy food options are available for kids that are on free and reduced lunch during the school year** but not during the summer, so those we increased over the last couple of years. – *Key Stakeholder*

The **Food Council** has also done a **great job of getting healthy nutrition options to the community**. – *Key Informant*

Food programs in partnership with farmer's markets. – *Key Informant*

Increased collaboration

The **health care collaboratives** right now in place in Ottawa County, **unlike in other counties - Ottawa County is unique and blessed to be able to have a lot of the resources and people behind them, unlike other counties**, so yes, there is a health care collaborative that is **very aggressive and making a lot of headway in Ottawa County** right now. I got to tell you because I do cover 12 counties now, **nobody is anywhere close to where Ottawa County is**. – *Key Stakeholder*



Suggested Strategies To Improve Overall Health Climate (Key Informants)

- Key Informants offer myriad suggestions for improving the overall health care of the community but the top four areas are: (1) **more/better resources for mental health**, (2) **increasing awareness** through **education** and a **communication campaign**, (3) **increasing resources for the underserved subpopulation**, and (4) **improving the already existing collaboration between agencies and organizations** through better integration and adopting a holistic/biopsychosocial/multi-disciplinary approach.

Resources for mental health	Better access to mental health providers. Possibly having them available at the prime care physician offices or in the schools. Partial hospitalization program for mental health patients, more intensive outpatient programs of mental health and substance abuse patients. Greater focus on mental health and helping parents raise their children in a fast moving and fast changing world.
Build awareness/ education	Visibility is a huge asset. Continued efforts to educate partner agencies regularly and to get the word out to the community about what is available. There should be no best kept secret agencies or services in Ottawa County. More effective public health announcements, social media postings regarding new physicians, listings with PCPs accepting new patients.
Resources for underserved/ Medicaid/ Medicare	Support and expand (through advocacy at the provider level with insurers, if possible) the Pathways to Better Health program and broaden the use of Community Health Workers in the healthcare model. Having specific case managers assigned to those who are having a hard time navigating the health care system for whatever reason. Helping them to get plugged into the proper PCP, specialists, home health nurse, managing their medications. Making sure they are refilling proper prescription, etc. Some people are just not educated enough to take charge of their own health care and that is where we see the breakdown.
Collaboration/ integration	Promote integrated behavioral health care. Expand telemedicine across all specialties, particularly psychiatry. Multi-discipline approach needed in view of limited professional and economic resources.



Suggested Strategies to Combat Barriers To Access

- Key Stakeholders and Key Informants offer a number of achievable solutions to some of the barriers to health care, such as **using grant money or incentives to encourage providers to accept more Medicaid patients, educating residents – beginning in childhood – about the health care system, increasing the use of telemedicine, delivering on-site mental health care where residents gather, expanding existing transportation routes (and increasing the use of Uber/curbside), and fostering cultural sensitivity among providers.**

Changes to Medicaid/Medicare, providers more accepting of Medicaid/Medicare	Increased Medicare/Medicaid payments to providers so they can afford to provide services. Find grant money to supplement those payments. – <i>Key Informant</i> Providers accepting Medicaid/Medicare, lowering costs of services, creating incentives for providers to take lower coverage. – <i>Key Informant</i>
Build awareness/education	I would go with education and drive that all the way down into an elementary level , that it would be an education system's interest to, as much as possible, engage students . You have to start that early, and so if they get opportunities to do hands-on projects and try internships and these sorts of things, then those barriers start to come down because a lot of those barrier are in fact psychological. – <i>Key Stakeholder</i>
Creative ways to provide access	Increase access to designated services through telemedicine. – <i>Key Informant</i>
Improve mental health services	Bring mental health services to where the community lives, community centers, churches, schools, etc. – <i>Key Informant</i>
Transportation	If the bus system that we have could expand , it would be very helpful, or if Grand Haven or Allendale or Hudsonville collaborated with them. – <i>Key Stakeholder</i>
Cultural sensitivity	Culturally sensitive healthcare with the approach of each provider understanding barriers to receiving health care for each culture . Having multi-cultural providers practice locally. – <i>Key Informant</i>

Source: KIOS – Q8a: What are some effective solutions with respect to these barriers? Please be as detailed as possible and identify which problems you are referring to when discussing solutions. (n=69); KSI – Q7c: Are there any effective solutions to these issues? (n=10)



Suggested Strategies Specific To Mental Health

- Area professionals offer a number of recommendations specific to addressing the issue of mental health, such as: (1) **providing more comprehensive and integrated care** realizing that the best way to address mental health is through a **multidisciplinary approach**, (2) **increasing awareness of existing services**, and having **local community champions speak out about mental illness making it more real and identifiable**.

Pine Rest has a presence in Ottawa County. It would be helpful if they could **look at developing a program in the county**. – *Key Informant*

More prevention in schools? Teaching coping strategies, healthy relationships, assertiveness training at different age levels at different points in schools may be helpful as a preventative approach, given that the tertiary approach is overloaded. – *Key Informant*

I think what we're doing with our **Pathways to Better Health model** is a **good start** - helping to kind of **identify**, number one, and try to **link people with services**. – *Key Stakeholder*

Further attempts to recruit mental health professionals utilizing an organized recruitment between North Ottawa Community Health System, employers, educators and public health services. – *Key Informant*

PCPs need to document and communicate mental health diagnosis better. Associate a diagnosis with prescription medications. – *Key Informant*

Having **more community programs and resources** for the mentally ill, **specifically for the population without insurance or low income**. – *Key Informant*

Promote integrated behavioral health care. Add **social work** into primary care offices. Do **telepsychiatry** to improve access. **Implement the PBM+ model** of integrated behavioral health care. – *Key Informant*

Increase funding to Community Mental Health, develop a **partial hospitalization program**, develop **more intensive outpatient programs**. – *Key Informant*

Community **awareness** of the **importance of mental health**. The road block we often come up against when assisting families is that the **parents do not see the need**. – *Key Informant*

More support groups. There are some in Holland and Grand Haven but more are needed. Support groups help people collaborate to know where resources are and access in addition to finding emotional support. – *Key Informant*

Having local community champions like Jeff Elhart help to **make mental health struggles more real and accessible**. Continuing to support the mental health millage. – *Key Informant*

I do think **people being willing to speak up and share their stories**, like the Elhart family, makes a huge difference in **helping people open up about this issue and feel comfortable seeking help** when they need it. – *Key Informant*

More information/prevention at the ground level: social media, TV, printed media, radio, **continued marketing of the Be Nice campaign** and others like it – **especially geared to the youth**. – *Key Informant*

More comprehensive care offered for psych/social issues knowing that **these issues affect every part of a patient's life** and **complicate other chronic illnesses significantly**. – *Key Informant*



Suggested Strategies Specific To Substance Abuse

- Suggested strategies for substance abuse issues include placing limits or constraints on providers to avoid over-prescribing drugs, especially opiates, (2) educating youth and teens on not only the dangers of drugs but also teaching coping, life, and job skills that will aid in substance abuse prevention, and (3) providing more programs for people dealing with addiction (e.g., walk-in programs, detox centers).

Primary care providers must discontinue prescribing these medications so readily. Some of these medications should not be available **unless in an hospital setting.** – *Key Informant*

Working with young teens to educate on the danger and to **teach life skills and coping skills** to help prevent drug/alcohol abuse. – *Key Informant*

Put better limits on narcotic prescriptions, e.g., only enough for 2-3 days if that is what is likely to be needed. – *Key Informant*

Make it easier for patients to return unused narcotic prescription meds to pharmacies or doctors offices. Doctors should be held accountable and start saying no to patients who aren't acutely in severe pain, requiring those types of prescriptions. – *Key Informant*

Each organization may have ideas about how to **decrease wait time between first call and first appointment.** When the need to access detox or residential treatment exists **people should wait no longer than 24 hours.** Ideally I would say the same about IOP or OP because addiction is an issue that overwhelms and leads to a sense of hopelessness resulting in vacillating levels of readiness for treatment. – *Key Informant*

Collaborative effort to re-train our medical community about dangers of addiction. **Simultaneously educating the community** on the dangers of certain drugs. – *Key Informant*

This **will require multiple disciplines and key players coming together** to coordinate a plan tailored for Ottawa County. It should include **school officials, doctors, nurses, community mental health, public health, law enforcement,** and the **public** to develop programs that attack this problem from many angles. **Doctors and pharmacist need to be vigilant in narcotic prescriptions.** Our youth **need to be educated about all addictions** in general. – *Key Informant*

Better knowledge on resources in the community. They are not interested in information from the provider at the office, but if we **had detailed resources in their local communities,** possibly they would be more inclined to attend. – *Key Informant*

Walk in programs for drug treatment information or health related issues that go with drug use. **Drug court is a huge success, family programs are helpful** – more could be developed. – *Key Informant*

Increased detox facilities to provide addiction treatment. – *Key Informant*



Suggested Strategies Specific To Obesity

- Although people know what they need to do to lose weight or stay in shape, the community must keep emphasizing the importance of exercise and healthy eating and this needs to begin early on in the life cycle. If classes and gyms/exercise areas were more affordable people may be more inspired to participate and, in turn, lose weight. It's also been suggested that area services, programs, and resources for obesity need to be advertised or communicated better as many people are not aware of existing options.

Continued community emphasis on exercise and healthy eating. – *Key Informant*

Need detailed list of health department programs and resources for the community at our fingertips to pass out to patients, **not online.** – *Key Informant*

It may help to **offer incentives in the workplace** for **practical nutrition classes** and **target health challenges that do not focus as much on the weight but on healthy living: food and activity ideas.** This would hopefully **translate into the home with parents choosing wholesome versus convenient foods** for children. **Daycare or birthing centers might be great places to start practical programs** in the area of nutrition and model it. – *Key Informant*

Affordable classes, workout options. – *Key Informant*

Campaign to stop stigma of obesity and to increase access to surgery and other weight loss methods. Some providers, employers and insurance companies do not think obesity is a disease that needs to be treated. – *Key Informant*

Community programs and outreach. Discussing it in the health care setting and not ignoring it. – *Key Informant*

Resume DAILY gym/personal health classes in all schools. Involve parents. Teach healthy eating. Ask teachers in other subject areas to be on-board with health. For example: Math can be illustrated by examining calorie and nutrient contents of food, basal metabolic rate, or other concepts, appropriate to the age of the student. – *Key Informant*

Need better information on resources in the community with specific contact information. – *Key Informant*



Suggested Strategies Specific To Vulnerable/Underserved Groups And Their Access To Care

- Suggested strategies to provide better access to care for vulnerable or underserved subpopulations include focusing on the issues as one requiring a multidisciplinary, or biopsychosocial, perspective. Finding creative ways to incent providers, especially psychiatrists, will help increase access. The most effective, or impactful, strategy might be finding ways to educate the public, including key leaders and the general community, on how to better navigate the system and find existing programs and resources.

More could be done to **engage employers, churches, neighborhoods** in healthy behaviors/practices that would address many common health issues. **Clinics providing outreach services at places where potential clients already spend time would address scheduling and transportation challenges** - I think we could be more user-oriented in designing/delivering some of these kinds of services. – *Key Informant*

Allow tax dollars to fund Psychiatrists that can see patients regardless of ability to pay. **CMH is tax funded but not meeting the need in Ottawa County.** – *Key Informant*

Perhaps **offer incentives for local practicing dentists to include pro-bono clients either on a single day or as a specific percentage of their general population.** – *Key Informant*

Education to the general community, people in government positions, legislators and to patients who need assistance in **navigating the system** with the information to get their medical/mental health needs met. **Some case management help or more access to get crisis help** other than the emergency room. – *Key Informant*

It would be great if all primary care physicians would have incentive to see a greater number of this type of patients. Since these patients are more complex, **maybe the incentive could be more nursing resources and on site social work for practices willing to accept more patients.** – *Key Informant*

Public access to The Know Book or something like that so people know where they can go to get the help they need. Make getting help easier and clearer for those with low education and special needs (the people who need the help the most). – *Key Informant*

Sub specialists on call at Level 1 centers need to have support from the county and hospital to be willing to see outside urgent referrals for days they are on call (e.g., infectious disease) and be **supplemented for their coverage.** – *Key Informant*

Encourage or create incentives for private practice physicians to accept Medicaid or uninsured cash payers, and or help these organizations increase their capacity. Providing transportation assistance as the need is throughout the county. – *Key Informant*

APPENDIX

Respondent Profile

Key Stakeholder Interviews

Chief Executive Officer/President of Holland Hospital

Chief Executive Officer/President of North Ottawa Community Health Systems

Chief Executive Officer/President of Spectrum Health Zeeland Community Hospital

Chief Operating Officer, American Red Cross of West Michigan

Director, Ottawa County Department of Human Services

Executive Director, Community Mental Health of Ottawa County

Executive Director, Greater Ottawa County United Way

Health Center Manager, Intercare Community Health Network

Health Officer, Ottawa County Department of Public Health

President/Medical Director, Holland Physician Health Organization (PHO)

Key Informant Online Survey

Registered Nurse (12)	Family Nurse Practitioner	Pediatric Psychologist
Physician/M.D. (6)	GNP-C	Ph.D./PA-C
Executive Director (5)	Health Educator	Physician/Medical Director
Registered Nurse (RN)/Care Manager (4)	Licensed Master Social Worker/Certified Alcohol and Drug Counselor	Practice Administrator
Nurse Practitioner (3)	LMSW	Practice Manager
Clinical Social Worker (2)	Manager	President
School Nurse (2)	Medical director, North Ottawa Urgent Care	Psychologist
Care Manager/Diabetic Educator	Medical Social Worker	Public Health Epidemiologist
Chief, Psychiatry and Behavioral Medicine (Spectrum Health Medical Group)	Mental Health Assistant	Quality Manager at Holland Physician Hospital Organization (PHO)
Clinic Director	MSN, RN	RN, Director of Community Outreach
Clinical Licensed Professional	Nurse Manager/Supervisor	RN, Health and Dental Clinic Director
Clinical Provider	Nursing supervisor	Social Worker
Counselor	Occupational Therapist	Superintendent of Schools
Director	Occupational Therapist Assistant	Vice President of Community Impact
Doctor of Podiatric Medicine	Pathologist	
Family Medicine Specialist/MD	Patient Care Assistant	

Underserved Resident Survey

	TOTAL
<u>Gender</u>	(n=485)
Male	20.6%
Female	79.4%
<u>Age</u>	(n=486)
18 to 24	9.3%
25 to 34	19.1%
35 to 44	21.4%
45 to 54	16.5%
55 to 64	14.6%
65 to 74	10.1%
75 or Older	9.1%
<u>Race/Ethnicity</u>	(n=485)
White/Caucasian	69.7%
Black/African American	6.0%
Hispanic/Latino	16.7%
Asian	1.6%
Native American	0.6%
Other	5.4%
<u>Adults in Household</u>	(n=459)
One	34.0%
Two	45.3%
Three	11.5%
Four	5.0%
Five or more	4.2%

	TOTAL
<u>Children in Household 6-17</u>	(n=460)
None	54.6%
One	18.7%
Two	15.7%
Three	7.6%
Four	2.4%
Five or more	1.1%
<u>Children in Household ≤5</u>	(n=451)
None	65.4%
One	22.2%
Two	7.8%
Three or more	4.7%
<u>Marital Status</u>	(n=484)
Married	43.8%
Divorced	19.8%
Widowed	6.6%
Separated	4.5%
Never married	20.7%
Member of an unmarried couple	4.5%
<u>Own or Rent</u>	(n=433)
Own	45.5%
Rent	40.9%
Other	13.6%

	TOTAL
<u>Education</u>	(n=482)
Never attended school or only Kindergarten	1.0%
Less than a 9 th grade education	4.4%
Grades 9-11 (some high school)	7.3%
Grade 1 or GED (high school grad)	36.1%
College 1 to 3 years (some college)	35.1%
College 4 years or more (college grad)	16.2%
<u>Employment Status</u>	(n=475)
Employed for wages	36.8%
Self-employed	5.7%
Out of work less than 1 year	7.6%
Out of work 1 year or more	1.9%
Homemaker	11.2%
Student	1.1%
Retired	20.2%
Unable to work/disabled	15.6%
<u>Household Income</u>	(n=465)
Less than \$10K	23.2%
\$10K to less than \$15K	12.5%
\$15K to less than \$20K	13.5%
\$20K to less than \$25K	13.1%
\$25K to less than \$35K	11.6%
\$35K to less than \$50K	14.8%
\$50K or more	11.1%

Behavioral Risk Factor Survey

	TOTAL	A. Northwest	B. Northeast	C. Central	D. Southwest	D. Southeast
Gender	(n=1318)	(n=410)	(n=96)	(n=160)	(n=446)	(n=206)
Male	49.5%	46.8%	69.6%	39.6%	55.8%	41.1%
Female	50.5%	53.2%	30.4%	60.4%	44.2%	58.9%
Age	(n=1307)	(n=407)	(n=95)	(n=158)	(n=443)	(n=204)
18 to 24	18.3%	9.7%	20.2%	16.5%	26.3%	11.9%
25 to 34	15.2%	12.2%	17.8%	7.9%	21.3%	10.8%
35 to 44	15.2%	14.1%	18.5%	13.3%	16.0%	15.0%
45 to 54	20.0%	19.1%	8.1%	30.7%	16.8%	23.0%
55 to 64	15.4%	20.6%	18.6%	14.8%	10.9%	18.4%
65 to 74	9.0%	14.1%	10.1%	8.1%	5.5%	11.0%
75 or Older	7.0%	10.3%	6.5%	8.8%	3.3%	9.7%
Race/Ethnicity	(n=1307)	(n=408)	(n=94)	(n=159)	(n=441)	(n=205)
White, non-Hispanic	85.9%	95.9%	95.7%	92.6%	70.0%	98.2%
Other, non-Hispanic	5.8%	1.8%	2.6%	5.6%	11.5%	0.0%
Hispanic	8.3%	2.2%	1.8%	1.7%	18.5%	1.8%
Section of Ottawa County	(n=1318)	(n=410)	(n=96)	(n=160)	(n=446)	(n=206)
Northwest	18.5%	100%				
Northeast	6.8%		100%			
Central	14.8%			100%		
Southwest	38.6%				100%	
Southeast	21.4%					100%

Behavioral Risk Factor Survey (Continued)

	TOTAL	A. Northwest	B. Northeast	C. Central	D. Southwest	D. Southeast
<u>Marital Status</u>	(n=1313)	(n=406)	(n=96)	(n=159)	(n=446)	(n=206)
Married	57.7%	63.2%	57.3%	68.7%	43.1%	72.1%
Divorced	7.3%	8.8%	8.3%	4.6%	8.9%	4.6%
Widowed	3.3%	4.5%	3.3%	2.9%	1.8%	5.0%
Separated	0.7%	0.3%	0.4%	0.5%	1.4%	0.0%
Never married	29.3%	21.2%	30.8%	22.0%	42.9%	16.1%
A member of an unmarried couple	1.7%	1.9%	0.0%	1.3%	1.8%	2.2%
<u>Number of Children Less Than Age 18 At Home</u>	(n=1316)	(n=410)	(n=96)	(n=159)	(n=446)	(n=205)
None	64.8%	70.3%	57.2%	70.2%	61.0%	65.5%
One	11.5%	9.4%	7.6%	11.0%	14.6%	9.2%
Two	13.7%	10.0%	25.3%	9.0%	14.7%	14.8%
Three or more	10.0%	10.3%	9.9%	9.8%	9.7%	10.5%
<u>Number of Adults and Children in Household</u>	(n=1316)	(n=410)	(n=96)	(n=159)	(n=446)	(n=205)
One	9.5%	8.2%	6.1%	6.5%	12.3%	8.4%
Two	31.8%	38.4%	30.3%	28.8%	29.1%	33.5%
Three	20.2%	20.5%	18.0%	19.5%	21.9%	17.8%
Four	17.7%	16.1%	13.5%	23.5%	15.7%	19.9%
Five	11.2%	11.2%	5.7%	14.4%	10.3%	12.3%
More than five	9.7%	5.6%	26.4%	7.2%	10.6%	8.8%

Behavioral Risk Factor Survey (Continued)

	TOTAL	A. Northwest	B. Northeast	C. Central	D. Southwest	D. Southeast
Education	(n=1313)	(n=408)	(n=95)	(n=159)	(n=445)	(n=206)
Never attended school, or only Kindergarten	0.7%	0.0%	11.0%	0.0%	0.0%	0.0%
Grades 1-8 (Elementary)	3.0%	2.0%	5.8%	4.7%	4.1%	0.0%
Grades 9-11 (Some high school)	5.0%	4.5%	6.5%	3.2%	7.1%	2.2%
Grade 12 or GED (High school graduate)	27.9%	26.6%	39.9%	24.6%	28.9%	25.6%
College 1 year to 3 years (Some college)	29.8%	30.3%	23.3%	30.5%	33.1%	24.8%
College 4 years or more (College graduate)	33.6%	36.6%	13.5%	36.9%	26.7%	47.4%
Employment Status	(n=1315)	(n=410)	(n=95)	(n=160)	(n=445)	(n=205)
Employed for wages	60.4%	48.1%	60.8%	60.1%	66.4%	60.4%
Self-employed	5.4%	6.4%	0.0%	6.7%	6.0%	4.3%
Out of work for a year or more	1.0%	1.4%	0.0%	2.0%	1.1%	0.3%
Out of work for less than a year	1.7%	1.4%	0.0%	2.2%	2.2%	1.3%
A homemaker	5.4%	7.1%	1.9%	5.6%	4.2%	6.8%
A student	2.7%	4.0%	4.0%	2.0%	3.7%	0.0%
Retired	18.1%	25.3%	31.4%	16.5%	10.2%	22.8%
Unable to work	5.3%	6.4%	1.9%	4.8%	6.3%	3.9%

Behavioral Risk Factor Survey (Continued)

	TOTAL	A. Northwest	B. Northeast	C. Central	D. Southwest	D. Southeast
<u>Household Income</u>	(n=1009)	(n=321)	(n=72)	(n=127)	(n=334)	(n=155)
Less than \$10,000	2.9%	1.3%	2.7%	3.7%	4.7%	0.3%
\$10,000 to less than \$15,000	3.7%	3.4%	1.2%	1.3%	5.2%	3.5%
\$15,000 to less than \$20,000	3.2%	3.3%	3.0%	6.2%	3.0%	1.5%
\$20,000 to less than \$25,000	6.1%	5.9%	4.3%	4.1%	6.6%	7.3%
\$25,000 to less than \$35,000	15.5%	20.6%	25.5%	10.7%	16.9%	8.3%
\$35,000 to less than \$50,000	15.2%	13.1%	26.3%	8.1%	15.7%	17.2%
\$50,000 to less than \$75,000	20.1%	16.3%	17.8%	25.6%	22.5%	16.4%
\$75,000 or more	33.4%	36.1%	19.2%	40.3%	25.4%	45.5%
<u>Poverty Status</u>	(n=1009)	(n=321)	(n=72)	(n=127)	(n=334)	(n=155)
Income under poverty line	11.1%	8.5%	23.6%	9.2%	14.4%	4.7%
Income over poverty line	88.9%	91.5%	76.4%	90.8%	85.6%	95.3%
<u>Home Ownership</u>	(n=1311)	(n=409)	(n=96)	(n=158)	(n=442)	(n=206)
Own	73.7%	80.3%	70.0%	74.5%	63.4%	87.1%
Rent	21.8%	14.3%	25.1%	22.5%	29.8%	12.2%
Other Arrangement	4.5%	5.4%	4.9%	3.0%	6.7%	0.8%
<u>Military Service</u>	(n=1318)	(n=410)	(n=96)	(n=160)	(n=446)	(n=206)
Served	7.0%	12.1%	6.2%	4.0%	6.3%	6.2%
Did not serve	93.0%	87.9%	93.8%	96.0%	93.7%	93.8%

Previous Implementation Plan Impact- Exhibit B

Spectrum Health Zeeland Community Hospital

This document serves as the tool to identify the impact of actions taken from 2015-2018 to address the significant health needs in the Implementation Plans created as a result from the previous 2014 CHNA.

Specific Health Need Goal	Metric	Impact of Implementation Plan Strategy
Access		
Insuring that patients have insurance provides better health outcomes both now and in the future. We will provide open enrollment education and information to the community promoting deadlines and information about insurance options and by providing assistance in signing up for insurance.	• Grow Medicaid/Marketplace signups annually • Increase signups by 5% by June 2017 • Increase signups by an additional 5% by June 2018	Marketplace education was held on November 14, 2015 at SHZCH and 7 participants attended. "It was a very rewarding experience in being able to provide one-on-one information and assisting them with any financial concerns." Another event was held on November 12, 2016 and six customers were assisted. During open enrollment, the financial counselors assisted approximately 200 customers by answering questions and/or providing the Affordable Care Act adjustment.
Wellness and Educational Opportunities		
Increase screening mammograms conducted at Spectrum Health Zeeland Community Hospital by providing cancer awareness campaigns and by hosting women's events that highlight cancer awareness.	Conduct cancer awareness campaigns by June 2016 and increase cancer screening mammograms by 5% by June, 2017 and by 7% by June, 2018	July-November 2014, SHZCH averaged 346 screening mammograms a month. January 2015-January 2017, SHZCH averaged 393 screening mammograms a month which is a 13.6% increase. In 2017, SHZCH averaged 426.5 screening mammograms a month, which is a 23.3% increase over baseline. In addition, 3-D tomography was added in 2016.
Increased Coordination		
Participate and support Ottawa County collaborative efforts to improve access to care as they explore the community health worker model within social service agencies and/or hospitals.	Ottawa County's task force was established in May, 2015. Implementation plans will be completed by December 2016 and metrics will follow	A new Community Health Worker (CHW) program was instituted. SHZCH Participated in a collaborative effort with 3 hospitals in the county and various community organizations to secure funding for a 3-year pilot CHW program that hired a clinical nurse supervisor and 5 CHW's in December, 2016. All organizations participating in the collaborative financially supported the CHW program and serve on the steering committee. The Ottawa Pathways to Better Health (OPBH) program began in February, 2017 and has received 447 referrals. Completed cases include assistance with: high blood pressure, depression, asthma, anxiety, assistance managing medications and fall prevention. Pre-program, clients indicated general health fair/poor 77% of the time. Post-program, clients indicated general

		health fair/poor 49% of the time. Also, greater than half of the past 30 days, physical health not good (pre-program) was 51%, post-program was 26%. Pre-program, 44% of clients indicated “not at all/not very confident in navigating the healthcare system” as opposed to 14% post-program.
Access and Resource Expansion		
Work with Ottawa County’s collaborative group to develop awareness brochure and education campaign for community members with information on how to recognize mental health warning signs, access appropriate services and deal with the stigma related to mental health. Brochures will be distributed through primary care providers (PCP’s), emergency department (ED), hospital units, workplaces, schools, churches and at community events. This brochure will be endorsed by the community and represents a collaborative effort of Ottawa County providers to increase mental health care access, awareness, and stigma reduction.	Brochure will be developed by the team and printed by December, 2016. SHZCH will distribute at least 5,000 brochures annually in 2017 and 2018 at community events, through programs and in the Emergency Department/Urgent Care Clinic. Ottawa County’s collaborative will determine an access center by December 2016, directing referrals and tracking the number of identified mental health referrals. Metrics will be established and could include items such as number of participants we would be able to reach, number of referrals made, etc.	Collaboratively designed and completed the mental health awareness brochure in October 2016. Brochures have been sent to over 100+ churches and are available at SHZCH and at various community events throughout the year
Explore on-line/telehealth support groups at SHZCH in partnership with local providers (such as Pine Rest) and SHZCH PCP’s	Develop plan to implement on-line support groups by December 2016 and conduct a pilot support group by June 2017.	On-line support groups and telehealth mental health options are not in development at this time because Pine Rest Christian Mental Health Services and SHZCH do not have sufficient providers or resources to offer those services. Instead, SHZCH hosts an in-person postpartum adjustment support group twice a month in partnership with Pine Rest Christian Mental Health Services and has also expanded hours for SHZCH medical social workers. Rather than distribute more brochures, SHZCH also offers Mental Health First Aid classes to the community 4 times a year to increase awareness. We hosted 6 classes to date with 108 participants attending. Of the class participants, 95% either agreed or strongly agreed that “I can apply knowledge of appropriate resources available to help someone with a mental health program treat and manage the problem and achieve recovery.” In addition, the Ottawa Pathways to Better Health (OPBH) program has helped clients with mental health issues. Pre-program, 44% of clients indicated “for more than half of the Past 30 days, Mental Health Not

		Good". Post-program, 21% of clients indicated "Mental Health Not Good." Of the 253 clients in the OPBH program, 162 self-reported anxiety/depression as a chronic condition, 53 reported Bipolar and 72 reported PTSD. There have been 27 pathways completed for anxiety, 17 for depression, and 2 for bipolar disorder in the program's first year (2017).
Offer a new brain health community education class to promote healthy brain development for aging citizens at SHZCH, local retirement facilities and churches. The brain health class would be an evidence-based program identified by SHZCH.	Conduct 1 pilot class by December 2016 and provide at least 2 classes in 2017 and 2018. Outcome will be measured in number of participants and improved quality of life for those participating.	SHZCH offered a pilot "Boost Your Brain" class in the spring of 2016 with 9 participants. 69% of participants said, "I have been taught techniques and/or skills to improve my memory," and 81% of class participants would recommend the class to others. There have been 7 classes to date with 69 participants attending. In the most recent 2 classes, 100% of participants either agreed or strongly agreed they have acquired knowledge on how to better improve their memory.
Wellness and Educational Opportunities		
Provide new mothers support by continuing to promote a pregnancy and post-partum hotline for mothers suffering from post-partum depression	The goals are to increase awareness and referrals to the depression support group and the hotline based on severity of the depression. Establish a baseline for number of referrals to the hotline in 2016 and grow referrals by 5% in both 2017 and 2018.	SHZCH determined that calls to the post-partum hotline were anonymous and successful referrals could not be tracked. While the metric was not met, a system was put in place in 2016 to screen patients who deliver at SHZCH using the Post-partum Mood Disorders Questionnaire and was deemed more effective. Since screening and data collection began in 2017, 25 moms scored high risk on their screening and were referred to medical social workers for follow-up. In addition, all patients in the Family Birth Center are given information on depression after delivery support groups at discharge.
The adult program is an evidence-based healthy lifestyle program that will help establish healthy lifestyle choices to enable weight loss in a safe, realistic, and sustainable way. The children's program is an evidence-based healthy lifestyle program for physician referred kids and their families to improve nutrition, decrease screen time and increase physical activity. 1. Continue and expand the weight management programs for children and adults by working with physicians to increase referrals and by providing support groups/programs for	• Increase physician referrals for programs by 10% in 2016, 10% in 2017 and another 10% 2018. • Increase the number of participants in the programs by 10% in 2016, 2017 and 2018. • Establish baseline for support group participation in 2016 and increase participation by 10% in 2017 and 2018. • Upon completion of the children's healthy lifestyle program, insure that at least 90% of participants improve lifestyle risk factors measured by the Family Nutrition and Physical Activity (FNPA) Screening Tool. The FNPA measures things like screen time, physical activity, family meals, etc.	In 2015, SHZCH discontinued the HealthyWeights and FitKids360 Programs due to lack of participation. SHZCH began 2 new healthy lifestyle programs in 2016-2017 that did not require a physician referral. Since both programs are new to SHZCH, new program outcomes were developed and include 10 research-based indicators of attitude and behavior change towards healthier lifestyles (fruit/vegetable consumption, screen time, physical activity, sleep/rest, sugary beverages, confidence in sustaining healthy changes, etc.). SHZCH piloted 3 eight-week sessions of HealthyMe and had 22 participants enrolled in the program. SHZCH held three eight-week sessions of Fit & Healthy Families with 19 families (70 people) attending. Families improved in 65% of the measures and improved or maintained in 100% of measures. SHZCH also began a new weight management support group in 2018 and averaged 11 participants attending.

participants.	• Upon completion of the adult healthy lifestyle program, insure that at least 90% of participants have reduced risk factors identified on the adult program post program assessments. Risk factors include family history, blood pressure, cholesterol, age, gender, sedentary lifestyle, smoking status, pre-diabetes status, and BMI.	
Access and Resource Expansion		
Support Ottawa County's collaborative efforts to support the SHAPE Michigan campaign coordinated by the United Way. The purpose of SHAPE Michigan is to align and coordinate systems so that healthy choices are the easier and more obvious choices by making healthy lifestyle programs readily available in the community.	SHZCH and community partners will align its' efforts with SHAPE Michigan (a 5-county initiative led by the United Ways of those counties). Progress will be measured on a community dashboard tracking each of five metrics: reduce obesity & overweight, increase physical activity, increase fruit & vegetable consumption, increase health screenings and increase the County Health Ranking. The Behavior Risk Factor Survey for Ottawa County and County Health Rankings will be used to measure improvements.	SHAPE Michigan, led by the Heart of West Michigan United Way, was discontinued. The Ottawa County Department of Public Health and Ottawa County Parks partnered to implement "Step it Up", a walking challenge to help increase physical activity. SHZCH supported program and promoted it to staff and community. In seven weeks, 404 people participated, walking 71,174 miles. In addition, 40% of participants reported an increase in their physical activity level. Also, SHZCH supported Meet Up and Eat Up in Zeeland in 2016 impacting more than 40 kids a week and supported Meet Up and Eat Up in Hudsonville at Presidential Estates in 2017 with 362 kids attending throughout the summer.