Mason County and Northern Oceana County Behavioral Risk Factor Survey

Research Results from the 2012 Community-Wide Health Needs Assessment

A Research Project for

Memorial Medical Center of West Michigan



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August 2012



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INTRODUCTION

Background and Objectives

- The Carl Frost Center for Social Science Research was contracted by Memorial Medical Center of West Michigan to conduct a Behavioral Risk Factor Survey (BRFS) as part of their larger community-wide health needs assessment for Mason County and northern Oceana County.
- 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 takes into account input from persons who represent the broad interests of the community including those with special knowledge or, or expertise in, public health.

Background and Objectives (Cont'd.)

- Information collected from this research will meet the Community Health Needs Assessment required by the IRS to the Memorial Medical Center of West Michigan in Mason County.
- Specific objectives include:
 - Gauge the overall health climate or landscape in Mason County, northern Oceana County, as well as Lake County
 - Determine positive and negative health indicators
 - Identify risk behaviors
 - Discover clinical preventive practices
 - Measure the prevalence of chronic conditions
 - Establish accessibility of health care
 - Ascertain barriers and obstacles to health care
 - Uncover gaps in health care services or programs
 - Identify health disparities

Background and Objectives (Cont'd.)

- The overall goal or objective of the Behavioral Risk Factor Survey (BRFS) is to obtain information from Mason and northern Oceana County residents about a wide range of behaviors that affect their health. More specific objectives include gauging:
 - Health status indicators, such as perception of general health, satisfaction with life, weight (BMI), and levels of high blood pressure
 - Health risk behaviors, such as smoking, drinking, diet, and physical activity
 - Clinical preventative measures, such as cancer screenings, oral health, and immunizations
 - Chronic conditions and their management, such as diabetes, asthma, and cancer
- The information collected will be used to:
 - Determine priority 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
 - Develop community partnerships and collaboration to achieve meeting the health needs of the population

EXECUTIVE SUMMARY

Executive Summary

In 2012, Memorial Medical Center of West Michigan (MMCWM) commissioned the Carl Frost Center for Social Science Research at Hope College to conduct an independent Community Health Needs Assessment (CHNA).

The primary goal of the MMCWM was to identify key health and health service issues in their patient area. The results will be used to assist in planning, implementation of programs and services, evaluating results, allocation of resources, and achieving improved health outcomes, specifically related to identified needs.

Primary data were gathered from a variety of sources using multiple methodologies and focused on Mason County and northern Oceana County. Resident feedback was obtained via a Behavioral Risk Factor Survey (BRFS) (n=1,043). Health care professionals and other community leaders, known as Key Stakeholders or Key Informants, provided input via in-depth interviews (n=7) and an online survey (n=36). Secondary data gathered from state and national databases was also used to supplement the overall findings. In addition to Mason and Oceana, the secondary data explores Lake County as well.

The findings from the CHNA paint a picture of a community that has many strengths but because of certain social characteristics (e.g., rural/isolation, economy) has even more areas of opportunity for improvement. The MMCWM area is considered to be safe with low crime rates (especially violent), comprised of caring and compassionate people, with resources that are somewhat limited but better than many comparable communities. Health care is accessible to most people and most residents report good or better health, satisfaction with life, and adequate social and emotional support.

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Overall, this research identifies the pressing and prevalent health needs and concerns in the MMCWM service area as the following: health care access - primary and oral care - for the uninsured or low income, chronic disease care especially concerning diabetes, mental health care services (including substance abuse treatment), levels of obesity, and preventative activities. These issues are organized by each identified need.

On average, Mason and Oceana County residents can expect to live as long as people across the state or nation. Although the local mortality rate is lower than Michigan's it is higher than the national average. The proportion of both adults and children receiving immunizations is high. The prevalence of risk behaviors such as smoking or heavy drinking are lower than the state; however, binge drinking is on par with the state and higher than the nation. The most pressing risk behavior is dietary in nature, as there is a general lack of fruit and vegetable consumption among adults. This coincides with an adult population where the majority are overweight (36.0%) or obese (28.1%).

Most adults engage in clinical preventive practices such as Pap tests, mammograms, and colonoscopies. On the other hand, residents are less likely to visit a dentist, especially if they are low income or have no health care coverage.

The prevalence of many chronic conditions is higher than the state or nation. Arthritis, asthma, and diabetes are most prevalent and the latter is considered a problem among health care professionals because it is linked to obesity and many other health problems. Moreover, Key Informants are less than satisfied with the community response to diabetes (as well the responses to obesity and depression).

Of concern is that cancer death rates are higher in Mason, Oceana, and Lake counties compared to MI or the U.S., however the cancer diagnosis rates are lower than the state or nation. This could indicate the greater number of death per capita are the result of the lack of timely screening/diagnoses.

The MMCWM area receives high marks for having excellent chiropractic care, emergency care, ophthalmology, prenatal care, and orthopedics. Still, Key Stakeholders and Key Informants were clear in their perspective that there is a lack of services, especially for certain subpopulations, and that there are also gaps in services because existing services do not meet the demand.

Services that are lacking include substance abuse treatment, dermatology, nonemergency transportation, oral surgery, and mental health treatment for mild, moderate, severe, and persistent cases.

Many health care professionals believe, and secondary data supports, there is a lack of primary care providers for both adults and children and this has the greatest impact on the underserved.

Although many programs and services exist, residents often have to travel outside of the area to access care. Usually this is due to a referral for specialized care or to get second opinions on health issues.

For the most part, there is a direct relationship between positive health outcomes and both education and income; those with higher incomes and more education are likely to report better general health status, better physical and mental health, that they have health coverage and a personal care provider, do not engage in risk behaviors such as smoking, are more likely to visit a dentist and receive health screenings, and less likely to be obese or have chronic conditions.

Feedback from this assessment demonstrates there is much <u>room for improvement</u>. For example, although health care is accessible to most residents, specific subpopulations experience barriers to health care programs and services. The populations considered <u>underserved</u> are <u>low income</u>, <u>uninsured</u>, <u>underinsured</u>, and <u>Hispanic</u>.

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

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Traditional health insurance often doesn't cover ancillary services such as prescription drugs, vision, or dental care. Thus, if consumers have to pay for these services, plus deductibles and co-pays, the cost burden can be great and residents will avoid seeking necessary treatment.

Key Stakeholders and Key Informants suggest strategies to improve the health care landscape. Specifically, they prioritize: (1) increasing access to primary care via more acceptance of Medicaid, better reimbursement rates, or the creation of a free/sliding scale clinic, (2) supporting and expanding agency resources, as well as better communicating/marketing existing services, to address community health needs, (3) providing more opportunities to focus on wellness and prevention, and (4) more educational opportunities to encourage knowledge of healthy lifestyle activities, self-care, and existing support services in the community.

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

STRENGTHS

- √ Low violent crime rates
- ✓ Lower mortality rates than the state
- √ High life expectancy rates
- ✓ Safe, walkable, and family-friendly community with beaches, trails, parks
- ✓ Active organizations and professionals dedicated to promoting health (e.g., hospital, fitness centers, senior centers)
- √ Caring and compassionate community members
- ✓ Strong, committed volunteer force
- ✓ Good health resources, services, and programs compared to like counties
- √ Health partnerships are collaborative and cooperative
- ✓ Excellent ambulatory/emergency care, prenatal care, chiropractic, orthopedics, and ophthalmology
- ✓ Most have health coverage and a PCP, both rates better than MI or US
- √ High prenatal care among women
- ✓ High proportion of immunized children and adults (flu)
- ✓ Majority have health (cancer) screenings/tests, such as PAP tests, breast exams, PSA, colonoscopies
- ✓ Proportion of youth active and eating fruits/vegetables higher than MI and US
- ✓ Most residents report good or better general health
- √ High satisfaction with life
- ✓ Low consumption of sweetened beverages
- ✓ Lower prevalence of poor mental health and clinical depression among adults compared to MI
- ✓ Lower prevalence of youth risk behaviors such as smoking and drinking compared to MI or US
- ✓ Fewer people with high cholesterol than the state or nation

OPPORTUNITIES FOR IMPROVEMENT

- ✓ High unemployment rate and high poverty rates, especially for single-female households with children
- ✓ Large proportion of children living in poverty, receiving WIC, and free/reduced lunch
- ✓ Large proportion of Medicaid-paid births and the proportion of people with Medicaid higher than the state
- ✓ Child abuse/neglect cases on par with the state and higher than the US Lake County much higher
- ✓ Fewer college educated residents than MI or US
- ✓ Number of primary care providers per capita far lower than MI
- ✓ Dissatisfaction with community response to depression, obesity, diabetes, substance abuse (licit and illicit)
- √ Teen pregnancy rates higher than MI or US
- √ Teen depression and suicide rates (for Mason and Lake) higher than MI or US
- ✓ Cancer death rates higher than MI or US, while the diagnosis rate is lower
- ✓ Proportion who view their health as fair/poor higher than MI or US
- ✓ Proportion of adults with poor physical health higher than MI or US
- ✓ Lack of adequate fruit and vegetable consumption and the proportion of inactive adults higher than MI or US
- √ Obesity rates among adults and youth higher than US
- ✓ Lack of adequate substance abuse treatments, mental health services, dermatology, and oral surgery
- ✓ Lack of affordable oral health care and available dentists for uninsured, low income, and Medicare/Medicaid residents
- ✓ Lack of health care access for unemployed, uninsured, and Medicare/Medicaid residents
- ✓ Lack of Spanish-speaking health care professionals
- ✓ Need for more focus on prevention and wellness, self-care, and general health literacy through community programming
- ✓ Not enough health care services/providers to meet community demand for uninsured/Medicaid residents
- ✓ Chronic conditions such as asthma, arthritis, angina/CHD, diabetes, higher than MI or US
- ✓ High proportion of women smoke during pregnancy
- √ Three in ten adults haven't visited a dentist in past year
- √ Higher disability rates than MI
- √ More than half not getting enough sleep (at least 8 hours)



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DETAILED FINDINGS

Secondary Data Sources

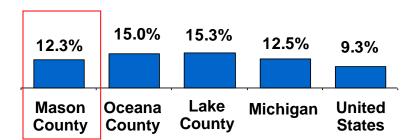
Social Indicators

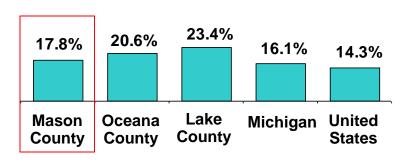
While the unemployment rate in Mason County is on par with the state, the rate is much higher in both Oceana and Lake counties compared to Michigan or the U.S. Moreover, one in five Oceana and Lake County residents live in poverty, a rate much higher than the state or nation. The proportion of people living in poverty in Mason County is lowest of the three counties representing the MMCWM area, but still higher than the U.S. or the state.

Unemployment and Poverty Rates

Population Age 16+ Unemployed and Looking for Work

Percentage of People in Poverty



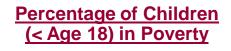


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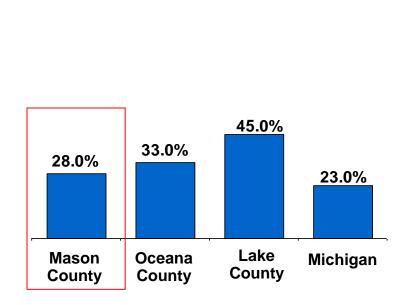
Source: Bureau of Labor Statistics, Local Area Unemployment Statistics, County Health Rankings. Counties and MI 2012, U.S., 2010. Data compiled from various sources and dates. Kids Count Data Book, 2009.

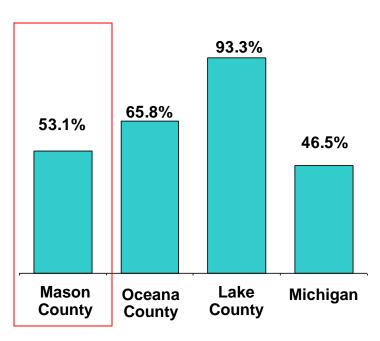
Compared to Michigan, the proportion of children living in poverty is greater in Mason, Oceana, and Lake counties. The proportion of students eligible for free or reduced price school lunches is somewhat higher in Mason County compared to the state; Lake is substantially higher than the state.

Children Living in Poverty







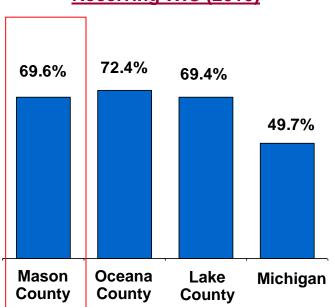


Source: Kid's Count Data Book, 2010, 2009.

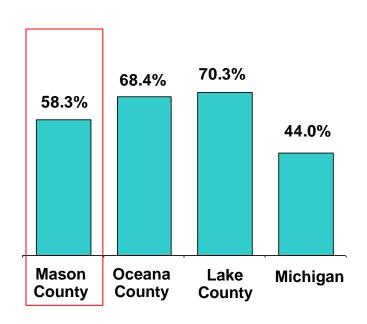
The proportion of children aged 0-4 receiving WIC and the proportion of Medicaid paid births are much higher in Mason, Oceana, and Lake counties compared to Michigan. In fact, seven in ten children aged 0-4 in the tri-county region receive WIC assistance.

Children Born Into Poverty





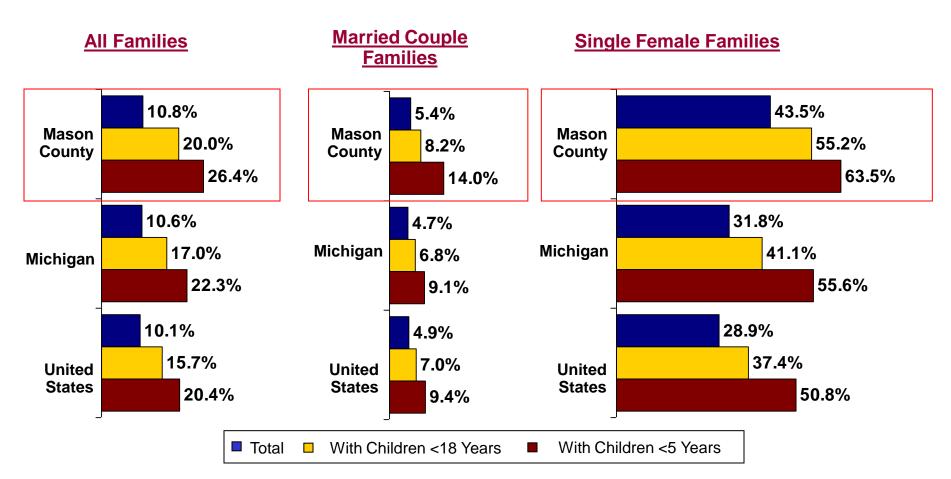
Medicaid Paid Births (2009)



Source: Kid's Count Data Book. Counties and MI 2010, 2009.

In general, more families with children under age 18 live below the poverty line in Mason County compared to the state or nation. Further, poverty rates for single female families with children are much higher in Mason County than MI or the U.S. For example, over half (55.2%) of single female families with children under 18 live in poverty vs. 41.1% for MI and 37.4% for the U.S. More than six in ten single female families with children under age 5 in Mason County live in poverty.

Poverty Status of Families by Family Type in Mason County (% Below Poverty)

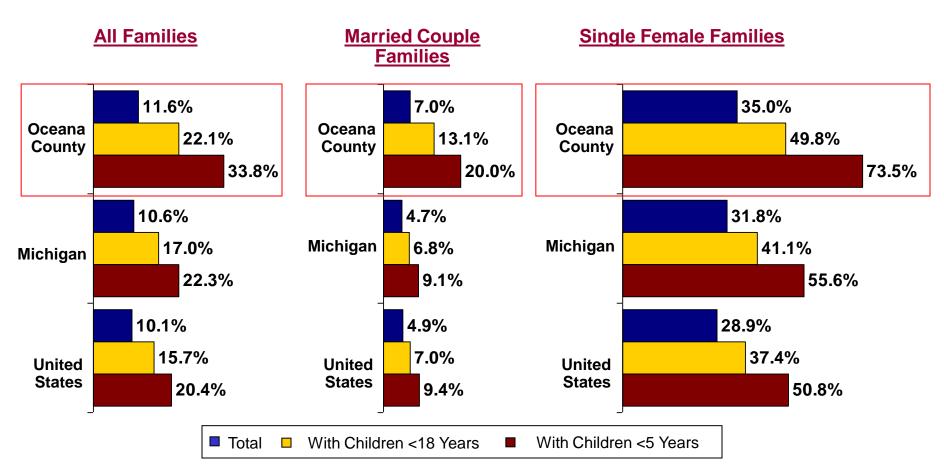


Source: US Census, 2010 American Community Survey, Data Profiles, Selected Economic Characteristics



The proportion of all families living in poverty in Oceana County is higher than in Michigan and the U.S. Poverty rates for Oceana County married couples are much higher than in the state or nation. Rates for single female households in Oceana County are comparable to MI and the U.S., except for those with children. Nearly three-fourths (73.5%) of single-female families with children under age 5 live in poverty.

Poverty Status of Families by Family Type in Oceana County (% Below Poverty)

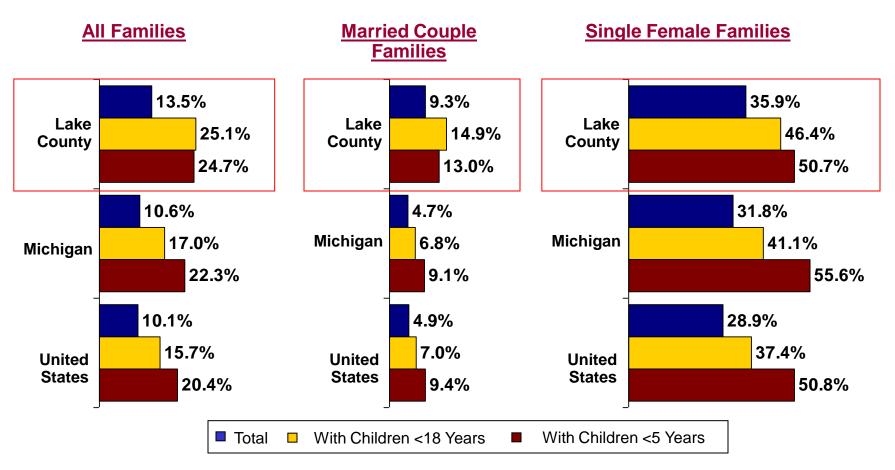


Source: US Census, 2010 American Community Survey, Data Profiles, Selected Economic Characteristics



The proportion of all families living in poverty in Lake County is higher than in Michigan and the U.S. One in four Lake County families with children lives in poverty. The county exceeds both the state and nation in families living in poverty with children under 18 years of age. In fact, for single female families with children under 18, almost half (46.4%) live in poverty.

Poverty Status of Families by Family Type in Lake County (% Below Poverty)



Source: US Census, 2010 American Community Survey, Data Profiles, Selected Economic Characteristics

Greater proportions of Oceana and Lake County men and women have not graduated from high school in comparison to Michigan or the U.S. All three counties have lower proportions of residents with Bachelor's and higher degrees than the state or nation. The greatest disparity in Bachelor degrees is seen between Lake County residents and their state and national peers.

Educational Level Age 25+

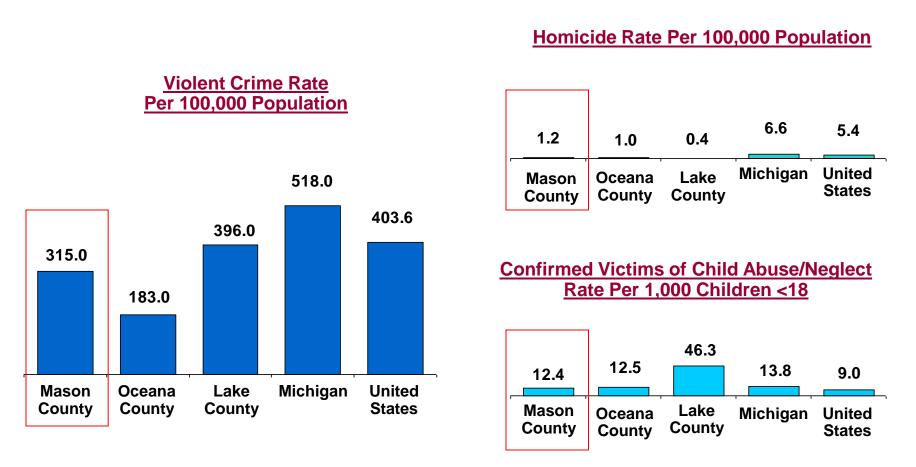
		Men					Women				
	Mason	Oceana	Lake	Mich.	U.S.	Mason	Oceana	Lake	Mich.	U.S.	
No Schooling Completed	0.8%	1.4%	0.6%	0.8%	1.1%	0.9%	2.4%	1.8%	0.8%	1.1%	
Did Not Graduate High School	12.4%	17.5%	23.5%	12.6%	15.0%	10.5%	13.9%	14.5%	9.5%	11.9%	
High School Graduate, GED, or Alternative	34.6%	37.3%	45.5%	31.5%	29.2%	33.3%	35.2%	43.5%	32.1%	29.4%	
Some College, No Degree	25.9%	23.0%	17.9%	23.0%	19.8%	27.1%	23.2%	24.2%	23.2%	20.8%	
Associate's Degree	5.9%	7.1%	4.5%	6.9%	6.7%	10.7%	10.3%	7.1%	8.9%	8.1%	
Bachelor's Degree	12.2%	7.5%	6.3%	15.3%	17.6%	11.5%	10.2%	5.9%	15.0%	17.3%	
Master's Degree	5.9%	3.5%	1.4%	6.6%	6.8%	5.4%	4.4%	3.0%	6.9%	7.3%	
Professional School Degree	1.5%	1.7%	0.1%	2.2%	2.5%	0.3%	0.3%	0.1%	1.2%	1.5%	
Doctorate Degree	0.7%	1.0%	0.1%	1.2%	1.5%	0.4%	0.1%	0.0%	0.6%	0.8%	

Source: U.S. Census Bureau, American Community Survey, 2010 1-year estimates for Michigan and U.S. 2008-2010 3 and 5-year estimates for county level



According to violent crime and homicide rates, Mason, Oceana, and Lake County are safer communities than the state or nation. However, child abuse/neglect rates in Mason and Oceana counties are higher than the national average, while the rate in Lake County is distressingly high.

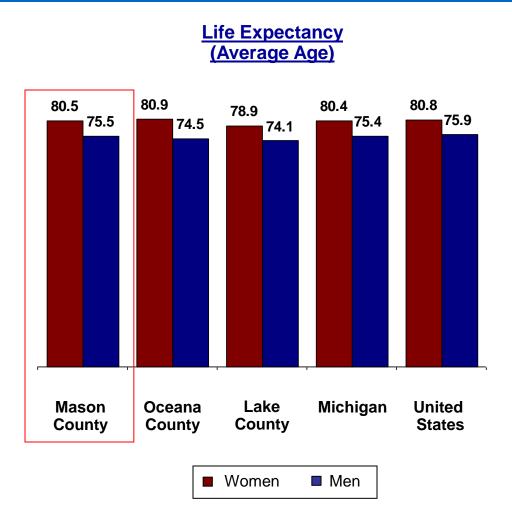
Crime Rates



Source: County Health Rankings. Counties and MI 2012, US FBI Website 2010; MDCH, Division of Vital Records, Counties and MI 2008, United States Census Bureau 2008; Kids Count Data Book. 2010, 2009. Note: Data compiled from various sources and dates

Health Indicators

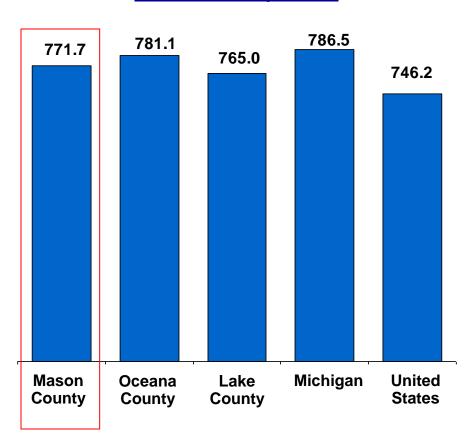
The average life expectancy for both men and women in Mason and Oceana counties is on par with Michigan and the U.S. On the other hand, the life expectancy of Lake County residents is slightly lower than both Mason and Oceana counties, as well as the state and nation.



Source: Institute for Health Metrics and Evaluation at the University of Washington. Uses 2007 mortality data for counties, 2009 MI, 2008 US

Mason, Oceana, and Lake counties have lower age adjusted mortality rates than Michigan but higher than the U.S. average.

Mortality Rates, Age Adjusted Per 100,000 Population



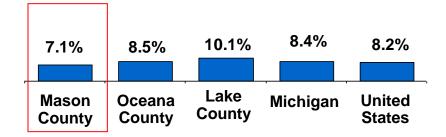
Source: Michigan Resident Death File, Vital Records & Health Statistics Section, Michigan Department of Community Health. Counties 2010; MI 2010; CDC NCHS Data Briefs, US 2010.

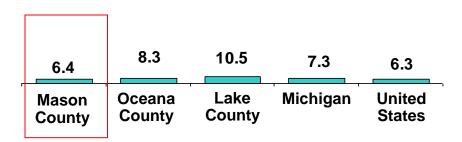
Mason County has slightly fewer live births with low birth weight than Oceana County, Lake County, the state or nation. Mason County's infant mortality rate is the same as the national rate, but Oceana and Lake counties are higher than MI or US.

Low Birth Rates and Infant Mortality Rates

Proportion of Live Births with Low Birth Weight

Infant Mortality Rate Per 1,000 Live Births





Source: MDCH Vital Records Division, Resident Birth Files, 2010.

The top two leading causes of death – cancer and heart disease – are the same for all three counties, Michigan, and the U.S. Deaths from Diabetes Mellitus are more than twice as prevalent in Mason County than in the U.S. or Michigan. Further, diabetes is the fifth leading cause of death in Mason County but outside the top five in Oceana and Lake counties, Michigan, and the U.S.

Top 5 Leading Causes of Death

	Mason (Mason County		higan	United States	
	RANK	Rate	RANK	Rate	RANK	Rate
Cancer	1	289.1	2	208.6	2	185.9
Heart Disease	2	243.9	1	236.0	1	192.9
Chronic Lower Respiratory Diseases	3	87.1	3	51.4	3	44.6
Stroke	4	52.3	4	45.3	4	41.8
Diabetes Mellitus	5	48.8	7	27.3	7	22.3

	Oceana	Oceana County		nigan	United States		
Heart Disease	1	284.8	1 236.0		1	192.9	
Cancer	2	218.3	2	208.6	2	185.9	
Stroke	3	67.7	4	45.3	4	41.8	
Unintentional Injuries	4	60.2	5	38.0	5	38.2	
Chronic Lower Respiratory Diseases	5	56.5	3	51.4	3	44.6	

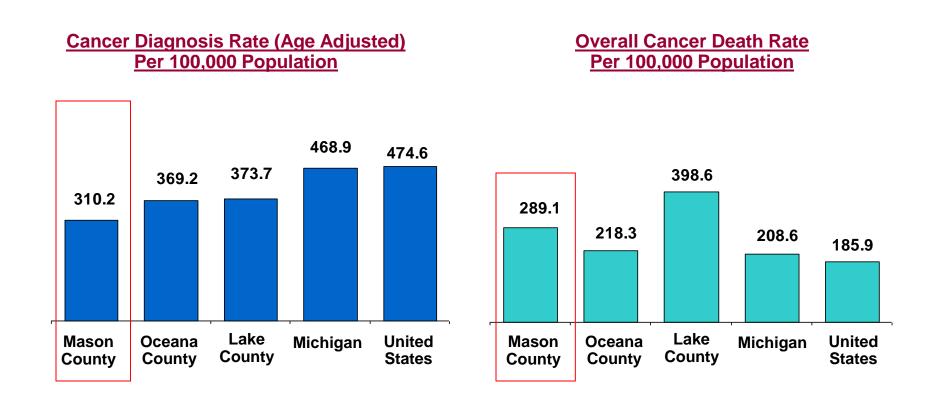
	Lake C	Lake County Michigan		United States		
Cancer	1	398.6	2	208.6	2	185.9
Heart Disease	2	268.7	1	236.0	1	192.9
Chronic Lower Respiratory Diseases	3	86.7	3	51.4	3	44.6
Stroke	4	52.0	4	45.3	4	41.8
Unintentional Injuries	5	43.3	5	38.0	5	38.2

Source: Michigan Department of Community Health, MI 2010; CDC, National Vital Statistics Report, 2010.



Compared to the state or the nation, cancer diagnosis rates are lower for Mason and Oceana county residents, while the Lake County rate is slightly higher. The cancer death rate is notably higher for Mason and Lake counties compared to Oceana, Michigan and the U.S. These figures are key since it is an indication that local residents may not be diagnosed early enough to prevent a terminal outcome.

Cancer Rates



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Source: MDCH Cancer Incidence Files, Counties, MI, 2009; US CDC Cancer Registry, 2010.

Bacterial pneumonia is the leading cause of preventable hospitalization in Mason, Oceana, and Lake counties, followed by **chronic obstructive pulmonary disease (COPD)** and **congestive heart failure**, the latter of which is the leading cause in Michigan. **Diabetes** is in the top five leading causes for hospitalization in the MMCWM area, whereas it ranks seventh for the state.

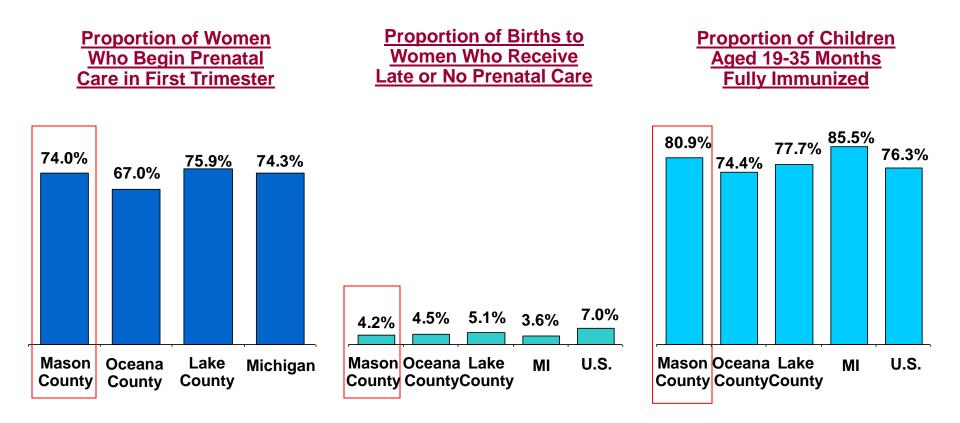
Top 10 Leading Causes of Preventable Hospitalizations

	Mas	son County	Oce	eana County	La	ike County	ı	Michigan
	RANK	% of All Preventable Hospitalizations						
Bacterial Pneumonia	1	16.2%	1	20.3%	1	18.8%	2	11.5%
Chronic Obstructive Pulmonary Disease (COPD)	2	14.4%	3	12.3%	3	10.3%	3	9.8%
Congestive Heart Failure	3	13.6%	2	17.1%	2	18.1%	1	13.8%
Kidney/Urinary Infections	4	4.6%	4	5.4%	5	5.3%	4	6.8%
Diabetes	5	4.2%	5	5.1%	4	8.2%	7	5.1%
Cellulitis	6	3.4%	6	4.0%	6	4.3%	5	6.1%
Dehydration	7	2.1%			8	2.1%	9	2.4%
Gastroenteritis	7	2.1%	7	2.9%	9	1.4%	10	1.5%
Asthma	9	1.8%	8	2.2%	7	3.6%	6	5.8%
Angina	10	1.6%						
Grand Mal and Other Epileptic Conditions			9	1.8%			8	2.9%
Convulsions			10	1.1%	9	1.4%		
All Other Ambulatory Care Sensitive Conditions		36.2%		27.8%		26.6%		34.2%
Preventable Hospitalizations as a % of All Hospitalizations		<u>12.6%</u>		<u>18.1%</u>		<u>19.4%</u>		<u>20.5%</u>

Source: MDCH Resident Inpatient Files, Division of Vital Records, 2009.

Mason and Lake counties are on par with Michigan in the proportion of women receiving prenatal care in the first trimester, while Oceana County lags behind. More importantly, most women have timely prenatal care, and the proportion of women having late or no prenatal care in the three county area is better than the national average. Oceana and Lake fully immunize about the same proportion of children aged 19-35 months as the nation but are below state averages. Mason County does a better job of immunizing children than Oceana and Lake counties but still lags behind the state.

Prenatal Care and Childhood Immunizations

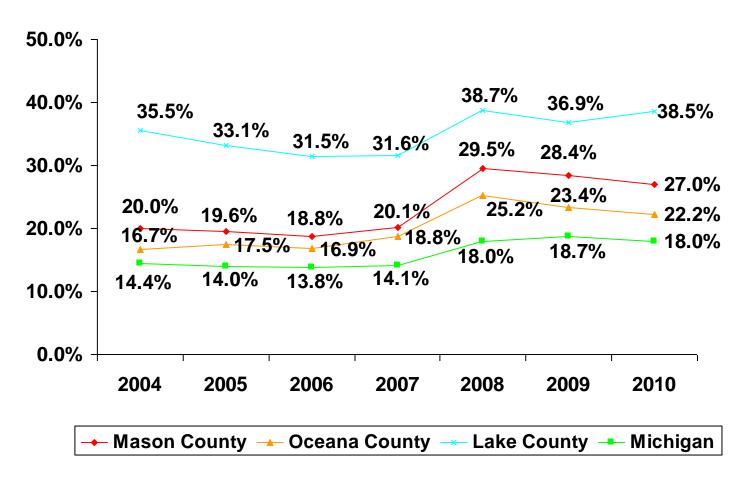


Source: MDCH Vital Records Counties and MI 2010; Kids Count Data, Counties and MI 2010, U.S., 2009. Kids Count Data Book, 2009...

Adult Risk Behaviors

The proportion of Lake County mothers who smoke during pregnancy is more than double the proportion across Michigan. The proportion of Mason and Oceana County births to mothers who smoke is also higher than for Michigan. Although rates for Mason, Oceana, and the state are trending slightly downward since 2008, they are still noticeably higher than 2007 and previous years.

Proportion of Births to Mothers Who Smoked During Pregnancy

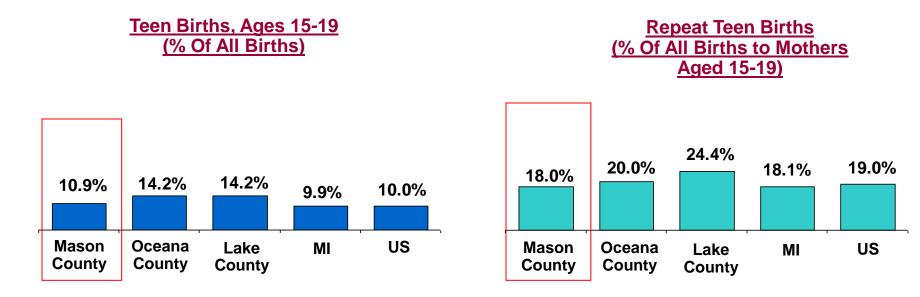


Source: Michigan League for Human Services; Mason and Oceana counties Health Profile, District Health Department #10, 2011 (2004-2008). Kids Count Data, 2009-2010.

Youth Risk Behaviors

Teen births are slightly higher in Mason, Oceana, and Lake counties compared to Michigan or the U.S. Repeat teen births in Mason County are comparable to state and national figures, while Lake and Oceana counties rates of repeat teen births are higher.

Teenage Pregnancy



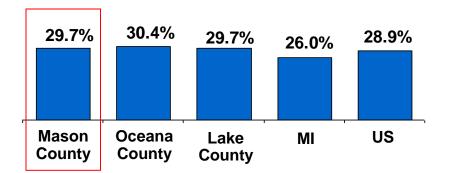
Source: Kids Count Data Book. Counties and MI 2010.

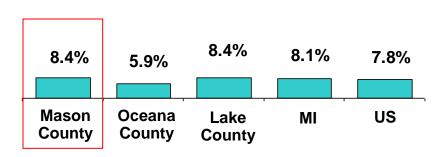
The prevalence of depression among youth is higher in the MMCWM area than Michigan or the U.S., with approximately three in ten reporting depression. Youth suicide attempts are also more prevalent in Mason and Lake counties vs. the state or nation.

Mental Health Indicators Among Youth

Proportion of Youth Reporting
Depression in Past Year

Proportion of Youth Reporting Suicide Attempt in Past Year





Source: MiPHY, 2011-2012, Mason and Lake reported together. National YRBS, 2011.

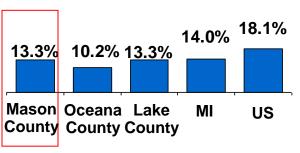
Far fewer Mason, Oceana, and Lake County youth currently smoke cigarettes or engage in binge drinking compared to youth across Michigan or the U.S. Youth reported marijuana use in Mason and Lake counties is on par with MI but less than the U.S.

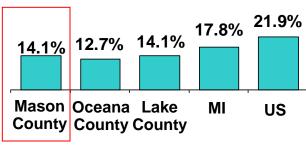
Tobacco, Alcohol and Marijuana Use Among Youth

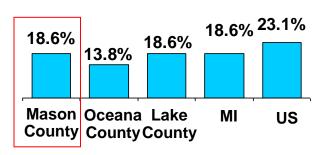




Proportion of Youth
Reporting Current Marijuana Use
(Past 30 Days)



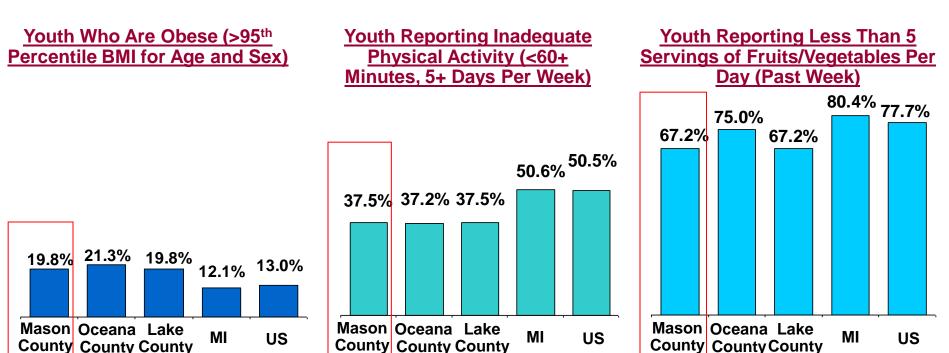




Source: MiPHY, Mason and Lake Counties reported together, 2011-2012. Youth Risk Behavior Survey (YRBS), 2011.

The proportion of obese youth in the MMCWM area far exceeds that of the state or the nation. On the plus side, Mason, Oceana, and Lake youth report higher levels of leisure time physical activity and fruit/vegetable consumption than their Michigan and U.S. peers.



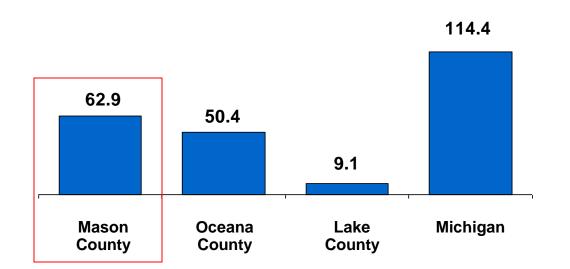


Source: Michigan Profile for Healthy Youth (MiPHY) 2011-2012 cycle. Mason and Lake Counties are reported in combined format. MI and US from 2011 YBRS.

Health Care Access

With regard to the number of primary care physicians per capita, the disparity between the state and all three counties is great. Although Mason is better than Oceana and Lake, the state has almost twice as many PCPs per capita compared to Mason County. Lake County has the fewest PCPs of any county in Michigan.

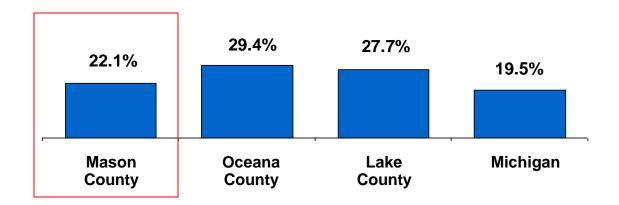
Primary Care Physicians (MDs and DOs) Per 100,000 Population



Source: County Health Rankings, 2011.

The proportion of residents with Medicaid for health care coverage is higher in all three counties compared to the state. According to the latest figures, almost three in ten Oceana County residents receives Medicaid.

Proportion of Residents Receiving Medicaid



Source: US Census, Green Book (July 2011), 2011 estimate.

Hospital Data

Respiratory system disorders top the diagnostic categories for MMCWM patients, and it is far more common among those from Mason and Oceana counties compared to those from Lake or Manistee counties. On the other hand, mental illness diagnoses are far more common among residents of Lake and Manistee counties vs. those from Mason and Oceana.

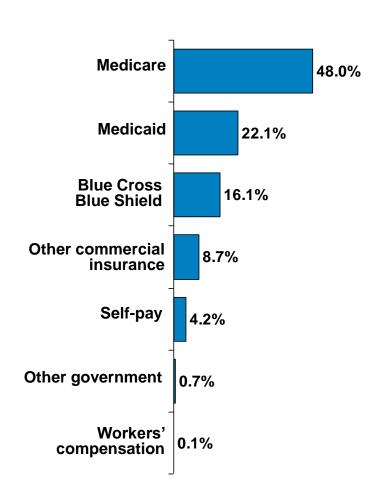
Top 15 Hospital Diagnostic Categories for FY 2010-2011

	TOTAL		Lake County		Manistee County		Mason County		Oceana County	
Condition	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
Respiratory system	15.1	1	7.8	6	4.9	9	16.3	1	12.5	3
Pregnancy/delivery/puerperium	12.7	2	14.8	1	11.5	3	11.7	2	17.5	1
Normal NB/perinatal	12.1	3	14.8	2	11.5	4	11.2	3	16.0	2
Digestive system	10.9	4	9.4	4	8.2	5	11.1	4	11.1	4
Musculoskeletal system	9.3	5	8.6	5	13.1	2	9.2	5	9.3	5
Circulatory system	6.7	6	3.9	8	NA	NA	6.9	6	7.6	6
Mental diagnoses	6.4	7	13.3	3	26.2	1	5.3	8	6.1	7
Infectious/parasitic	5.2	8	4.7	7	8.2	7	5.5	7	2.9	10
Female reproductive system	4.0	9	3.9	10	8.2	6	4.3	9	1.7	14
Liver/gall bladder/pancreas	3.5	10	3.9	9	1.6	10	3.6	10	3.2	8
Kidney/urinary tract	2.9	11	3.1	13	6.6	8	2.9	11	2.3	11
Integumentary system	2.4	12	3.1	12	NA	NA	2.6	12	1.7	13
Nervous system	2.4	13	3.1	11	NA	NA	2.4	13	2.0	12
Endocrine/metabolic	2.2	14	NA	NA	NA	NA	2.3	14	2.9	9
Injury/poison/toxicology	1.7	15	0.8	17	NA	NA	2.0	15	0.9	17
ALL OTHERS	2.5		NA		NA		2.7		2.0	

Source: Memorial Medical Center of West Michigan, 2010-2011.

Considering all MMCWM hospital discharges for FY 2011, seven in ten are public payer types, followed by 24.8% private insurance and 4.2% uninsured. Patients from Mason and Manistee counties are more likely to have private insurance than patients from Lake or Oceana counties.

Payer Type Per Hospital Discharge



	Hospital Discharge Payer Type By County of Residence							
	Total (n=2,419)	Lake County (n=128)	Manistee County (n=63)	Mason County (n=1,885)	Oceana County (n=343)			
Payer Type	%	%	%	%	%			
Public	70.9	82.0	63.5	69.7	75.6			
Private	24.8	16.4	30.2	26.1	19.8			
Uninsured	4.2	1.5	6.3	4.2	4.7			

(n=2,419)

Source: Memorial Medical Center of West Michigan, 2010-2011.

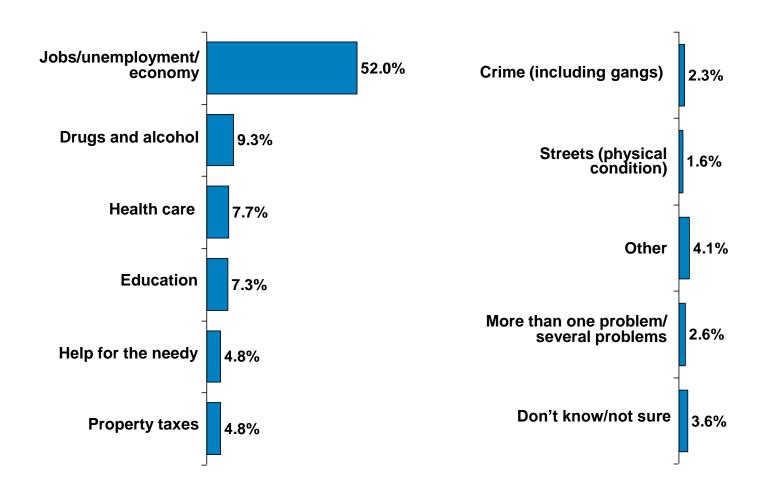


Behavioral Risk Factor Survey 2012

Perception of Community Climate

According to MMCWM area residents, the *lack of jobs* is by far the single most important community problem. Other problems, on a much smaller scale, include drugs and alcohol, health care, education, help for those in need, and property taxes.

Most Important Community Problem



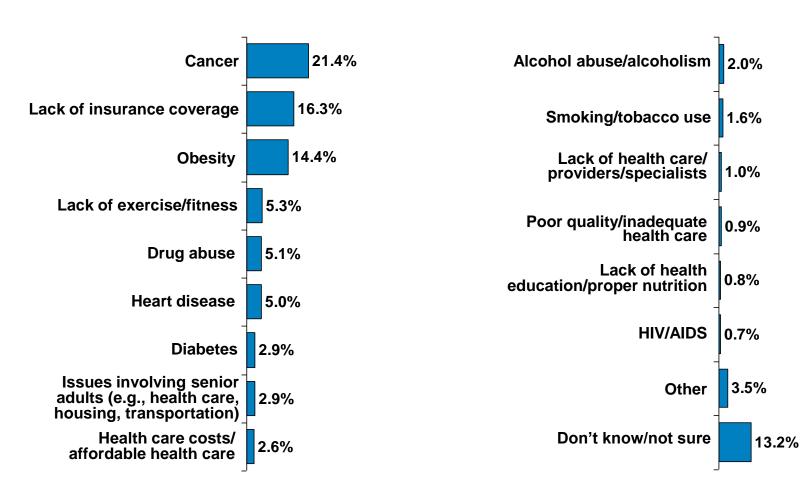
52

(n=1,043)

Q1.1: What do you feel is the most important problem in your community today?

Area residents see a variety of community health problems, most notably *cancer*, *lack* of *insurance coverage*, and *obesity*.

Most Important Community Health Problem



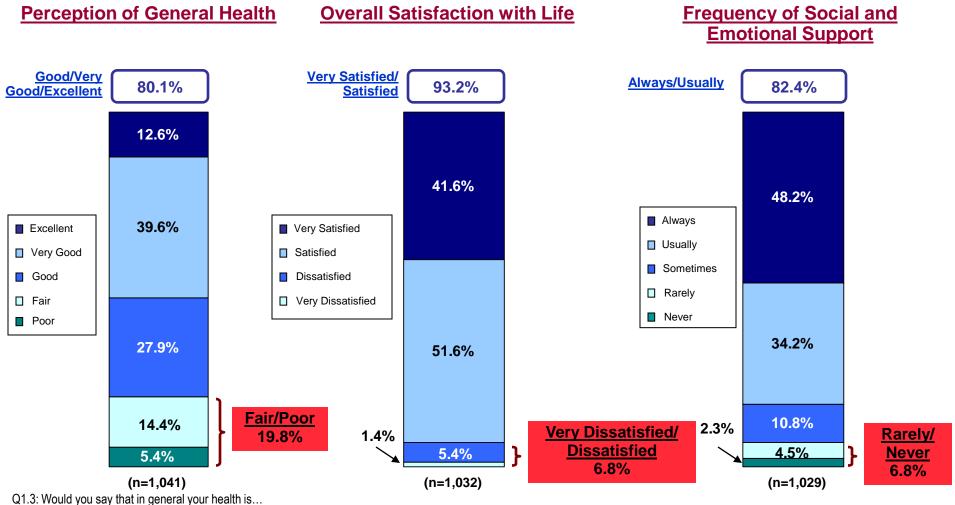
(n=1,043)

Q1.2: What do you feel is the most important HEALTH problem in your community today?

Health Status Indicators

At least eight in ten area adults cite <u>good</u> or better general health and they <u>usually</u> or <u>always</u> receive the emotional support they need. More than nine in ten report they are satisfied with their lives. One in twenty report <u>fair</u> or <u>poor</u> health, and roughly 7% report dissatisfaction with life and/or <u>rarely</u> or <u>never</u> receiving the emotional support they need.

Perception of General Health, Life Satisfaction, and Social Support

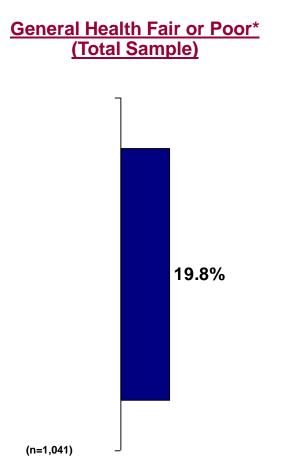


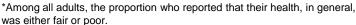
Q21.2: In general, how satisfied are you with your life?

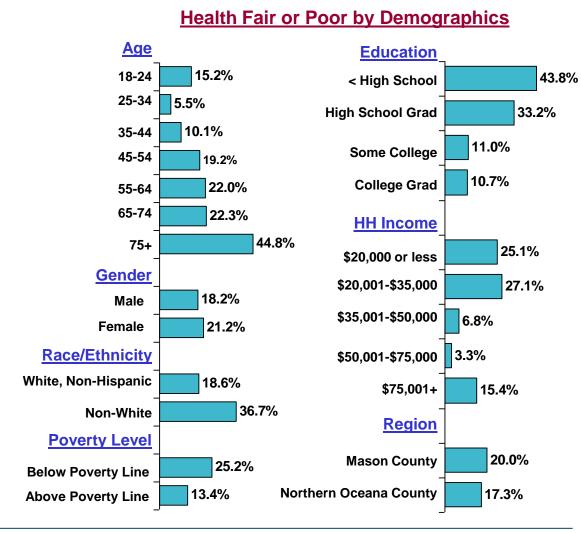
Q21.1: How often do you get the social and emotional support you need?

The proportion of adults who perceive their health as fair or poor is indirectly related to level of education and household income, where those with less education and income are more likely to report their health as fair or poor than those with more education and income. Not surprisingly, people living below the poverty line are far more likely to report fair or poor health than people living above the poverty line. Far more non-Whites report fair or poor health than Whites.

General Health Status

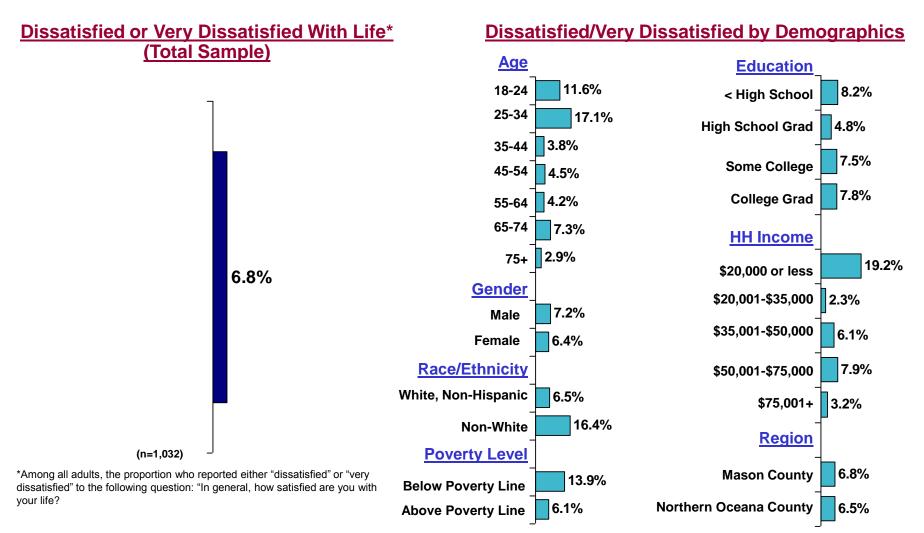






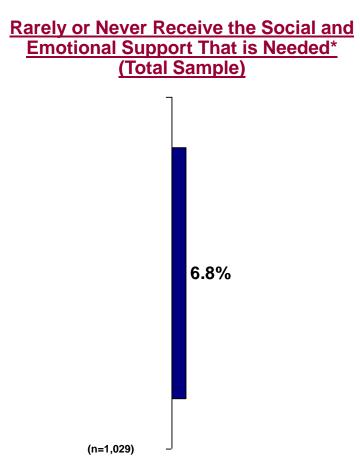
MMCWM area adults in households with the lowest annual incomes (<\$20,000) are least likely to be satisfied with their lives. People under the age of thirty-five are less likely to be satisfied with their lives compared to those who are older, and non-Whites are less likely to be satisfied than Whites.

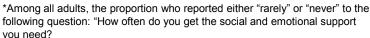
Life Satisfaction

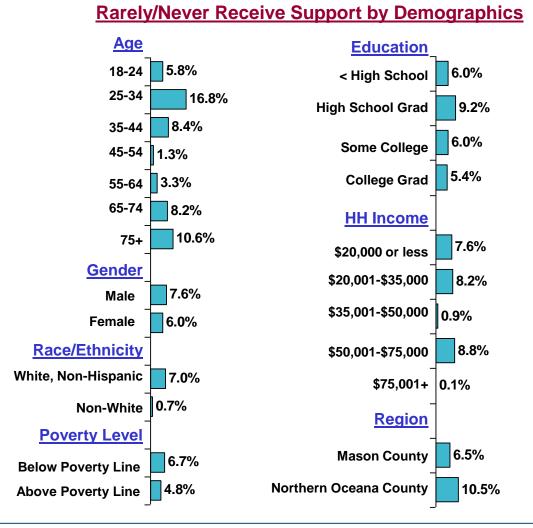


Whites more often lack the social and emotional support they need compared to non-Whites, and residents in northern Oceana County report less support than Mason County residents.

Social and Emotional Support



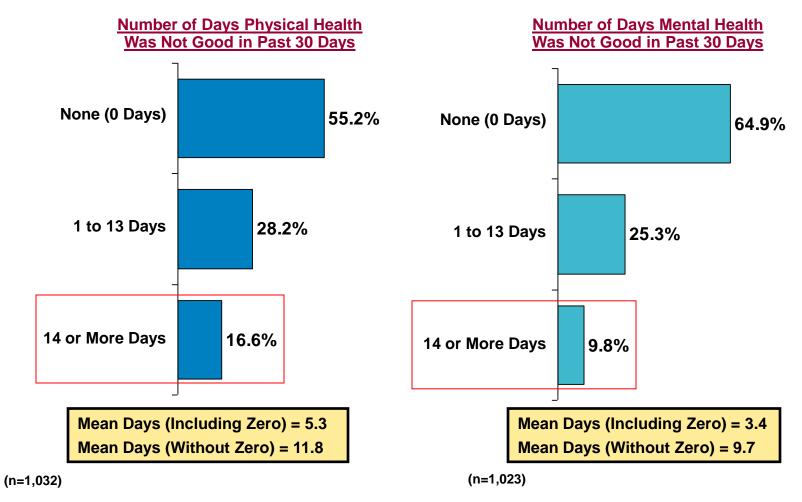




58

More than four in ten MMCWM area adults have experienced at least one day in the past month where their physical or mental health was not good. In fact, more than 16% are classified as having <u>poor</u> physical and/or mental health, and they average between 10-12 days per month where their physical or mental health is not good.

Physical and Mental Health During Past 30 Days

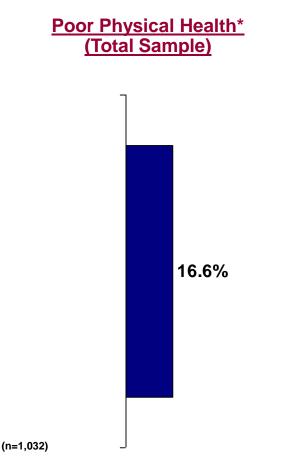


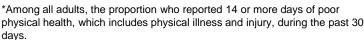
Q2.1: Now thinking about your physical health, which includes physical illness and injury. For how many days during the past 30 days was your physical health not good?

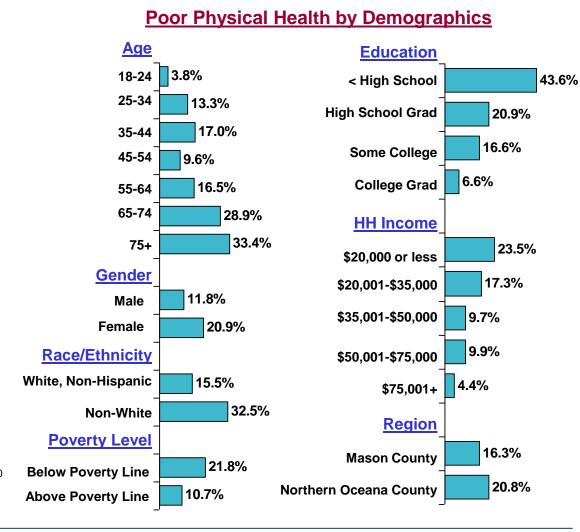
Q2.2: Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?

Prevalence of poor physical health is highest among residents with less than a high school education (43.6%) and those with the lowest household income (23.5%). It is also higher among non-Whites compared to Whites. Prevalence is lowest among college graduates (6.6%), the highest income group (4.4%), and 18-24 year olds (3.8%).

Physical Health Status

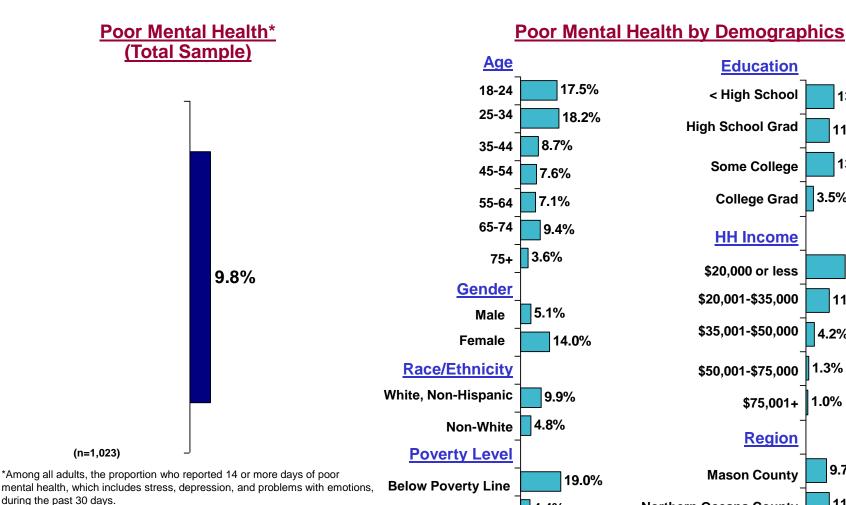






The prevalence of poor mental health is inversely related to age. It is highest among adults from households with low incomes and those without a college degree. Poor mental health is more common in women than men and more common in adults younger than age 35.

Mental Health Status



Above Poverty Line

4.4%

13.3%

11.2%

13.2%

18.6%

11.3%

3.5%

4.2%

1.3%

1.0%

Northern Oceana County

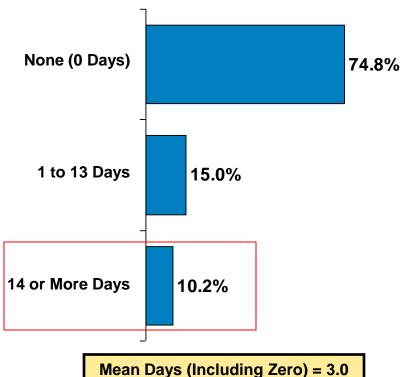
9.7%

11.3%

One in ten area adults experience activity limitation (14 or more days per month) due to poor physical or mental health. Those who experience any activity limitation average almost 12 days per month.

Activity Limitation During Past 30 Days





Mean Days (Including Zero) = 3.0 Mean Days (Without Zero) = 11.8

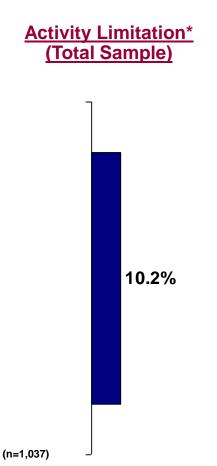
62

(n=1,037)

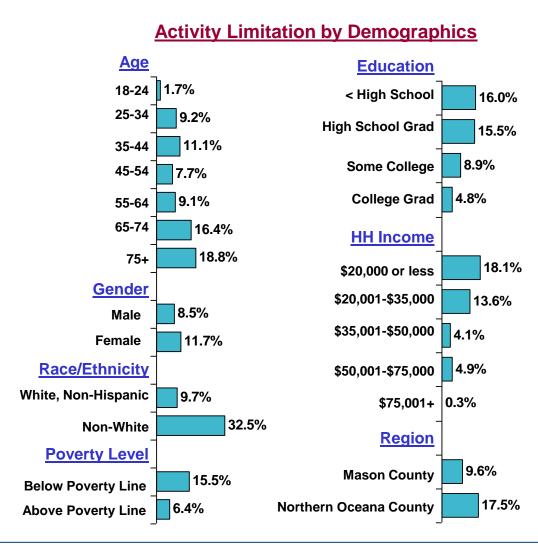
Q2.3: During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?

The prevalence of activity limitation is highest, by far, among people who live in households with low incomes, have less education, live in northern Oceana County, and are non-White.

Activity Limitation

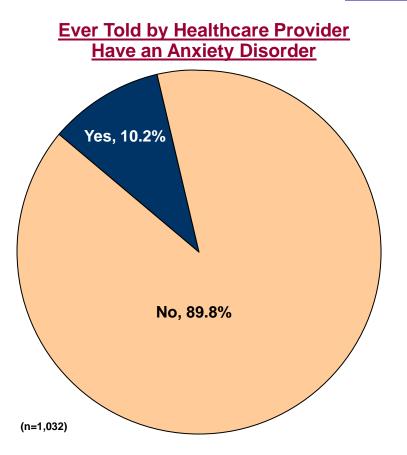


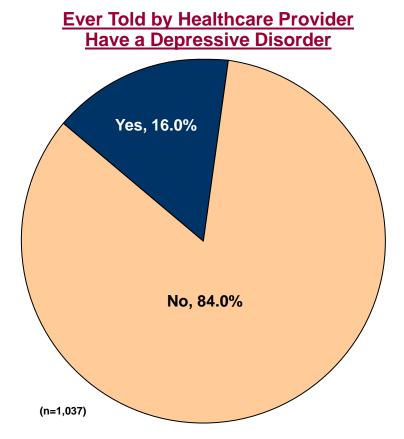
*Among all adults, the proportion who reported 14 or more days in the past 30 days in which either poor physical health or poor mental health kept respondents from doing their usual activities, such as self-care, work, and recreation.



One in ten (10.2%) adults have ever been told by a doctor or healthcare provider that they have an anxiety disorder. Slightly more (16.0%) have been told they have a depressive disorder.

Anxiety and Depression





Q20.10: 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, phobia, posttraumatic stress disorder, or social anxiety disorder)?

Q6.9: Has a doctor or other healthcare provider EVER told you that you have a depressive disorder (including depression, major depression, dysthymia, or minor depression)?

Roughly one in fourteen (7.0%) adults would be classified as clinically depressed (major depression). In examining the various symptoms of anxiety or depression, adults are more likely to have trouble sleeping and/or feeling tired or having little energy.

Anxiety and Depression

Number of Days in Past 2 Weeks	Over the Last 2 Weeks, How many Days Have You								
	Had Little Interest or Pleasure in Doing Things (n=1,016)	Felt Down, Depressed or Hopeless (n=1,030)	Had Trouble Falling Asleep or Staying Asleep or Sleeping Too Much (n=1,025)	Felt Tired or Had Little Energy (n=1,021)	Had a Poor Appetite or Eaten Too Much (n=1,025)	Felt Bad About Yourself or That You Were a Failure or Had Let Yourself or Your Family Down (n=1,021)	Had Trouble Concentrating on Things, Such as Reading the Newspaper or Watching the TV (n=1,028)		
None	65.5%	77.0%	55.8%	30.8%	58.3%	81.0%	77.0%		
1 to 2 Days	14.8%	11.5%	15.3%	31.2%	16.2%	9.0%	8.1%		
3 to 6 Days	10.4%	4.2%	10.7%	14.1%	15.1%	3.1%	6.7%		
7 to 13 Days	6.7%	4.5%	6.9%	7.6%	4.3%	3.2%	4.2%		
14 Days	2.7%	2.7%	11.3%	16.2%	6.0%	3.7%	4.1%		
Mean (w/zero)	1.57	1.09	2.83	4.10	2.05	1.03	1.33		
Mean (w/o zero)	4.56	4.74	6.41	5.93	4.92	5.41	5.79		

Major Depression* = 7.0%

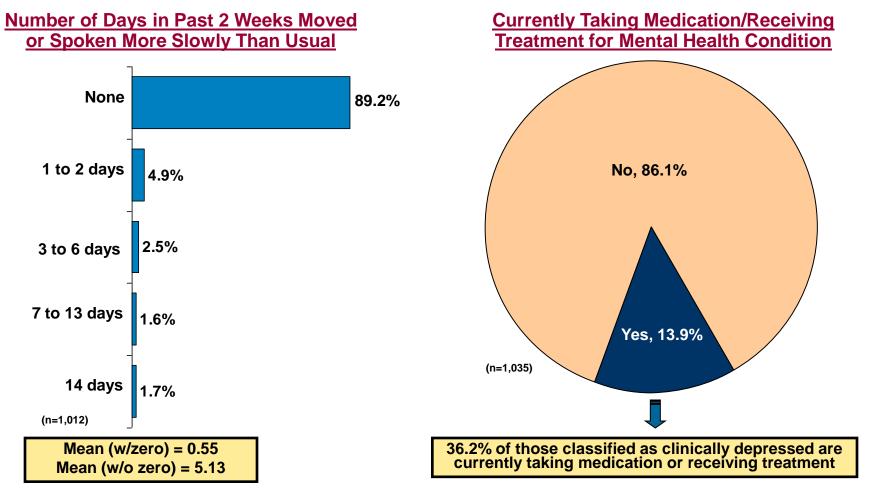
*Calculated from responses to Q20.1-Q20.7 where responses in number of days out of the past 14 were summed across all seven questions. A total of 48 points or greater, and either Q20.1 or Q20.2 greater than or equal to 7 days, is classified as Current Major Depression.

Q20.1-Q20.7 Over the last 2 weeks, how many days have you....



One in ten adults have experienced at least one day in the past two weeks where they moved or spoke more slowly than usual. More than one in ten (13.9%) are currently taking medication or receiving treatment for a mental health condition, however, only 36.2% of those classified as clinically depressed are taking medication or receiving treatment.

Anxiety and Depression (Cont'd.)

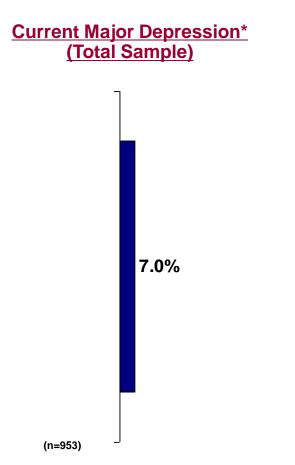


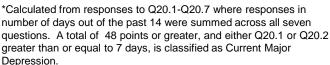
Q20.8: Over the last two weeks, how many days have you moved or spoken so slowly that other people could have noticed? Or the opposite – being fidgety or restless that you were moving around a lot more than usual?

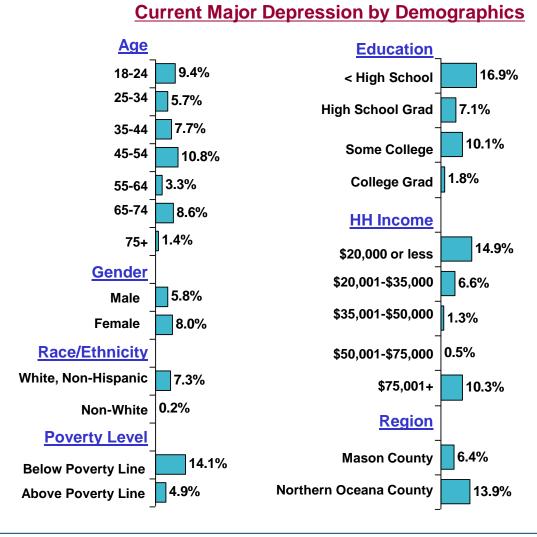
Q20.9: Are you now taking medicine or receiving treatment from a doctor or other health professional for any type of mental health condition or emotional problem?

Adults most likely to be diagnosed with major depression tend to be White, have less than a high school education, and/or have the lowest household income (\$20K or less). The most glaring demographic difference is between those who live below the poverty line (14.1%) and those who live above it (4.9%).

Major Depression

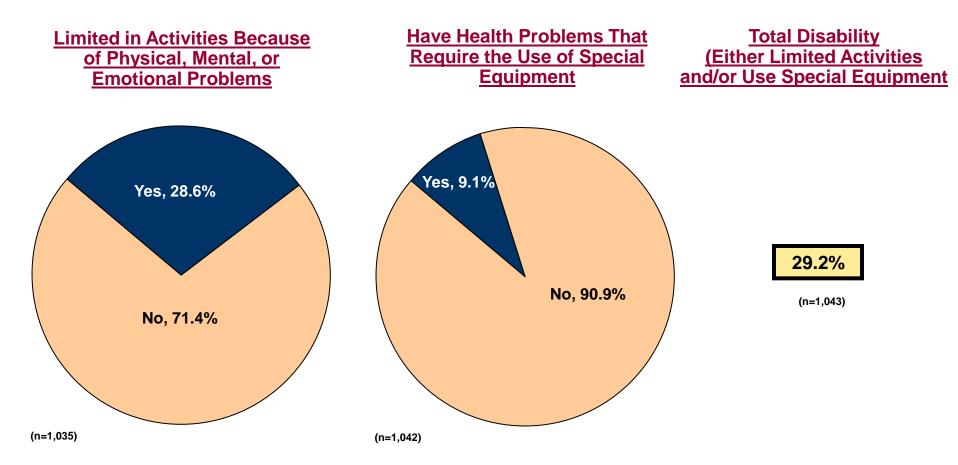






More than one in five area adults (28.6%) are limited in their activities due to physical, mental, or emotional problems, and 9.1% require the use of special equipment such as a cane or wheelchair. The prevalence of total disability – where someone experiences either one of these disability types – is 29.2% among all adults in the MMCWM area.



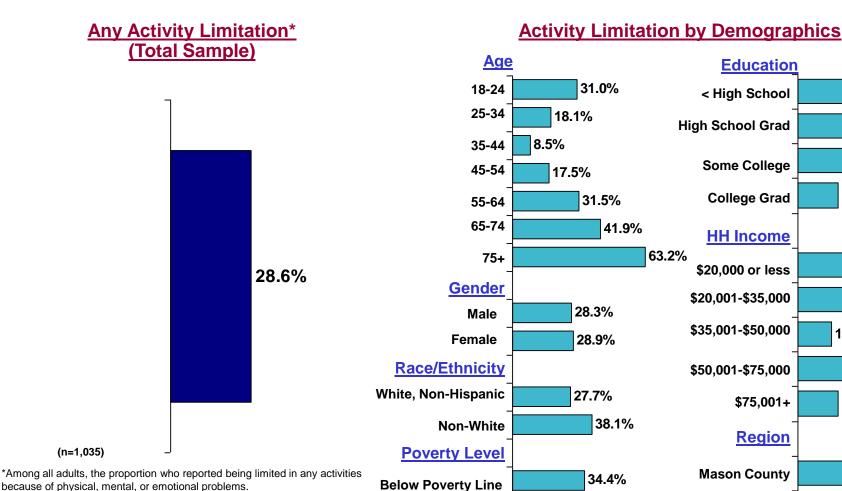


Q11.1: Are you limited in any way in any activities because of physical, mental, or emotional problems?

Q11.2: 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?

In general, the proportion of adults who experience activity limitation due to physical, mental, or emotional problems increases with age. More than one-third of adults in households with incomes less than \$20K, or who live below the poverty line, experience this limitation, much higher than other socioeconomic groups. Almost half (48.3%) of adults without a high school education experience activity limitation.

Disability



Above Poverty Line

23.6%

Northern Oceana County

48.3%

35.9%

38.4%

32.8%

26.8%

19.0%

16.2%

21.9%

19.1%

28.6%

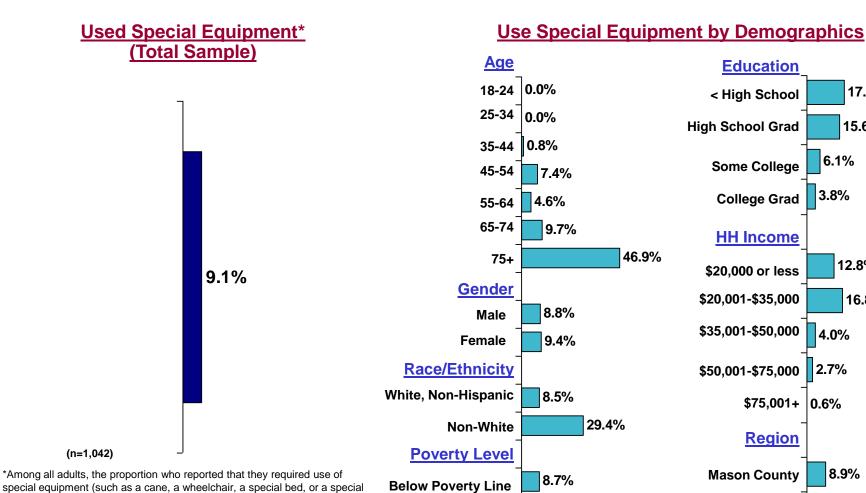
29.4%

The proportion of adults required to use special equipment also increases with age and with declining household incomes. Additionally, adults with no college education are more likely to use equipment compared to adults with at least some college education. Non-Whites are notably more likely to require the use of special equipment than Whites.

Disability (Cont'd.)

7.1%

Above Poverty Line



telephone) due to a health problem.

Education

< High School

Some College

College Grad

HH Income

\$20,000 or less

\$20,001-\$35,000

\$35,001-\$50,000

\$50,001-\$75,000

Mason County

Northern Oceana County

High School Grad

17.7%

15.6%

12.8%

16.8%

6.1%

3.8%

4.0%

2.7%

8.9%

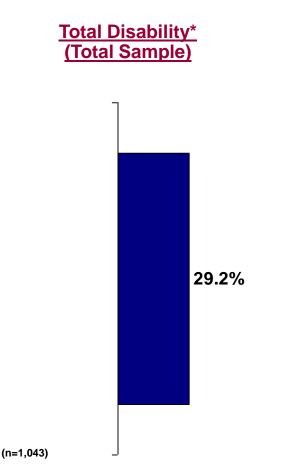
11.6%

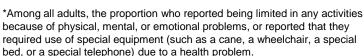
\$75,001+ 0.6%

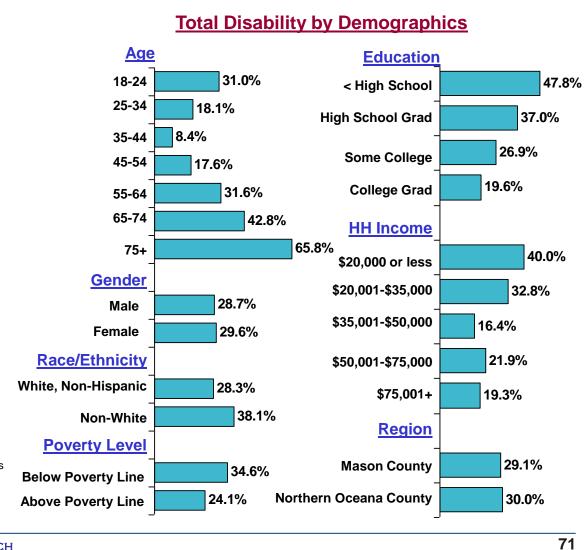
Region

Almost three in ten (29.2%) area adults are considered disabled. Not surprisingly, this proportion increases with age. Disability decreases with increases in education and income. For example, 40.0% of people in households with incomes less than \$20K and 47.8% of people with less than a high school education are disabled, compared to 19.3% or people with household incomes of \$75,000+ and 19.6% of people with a college degree, respectively.

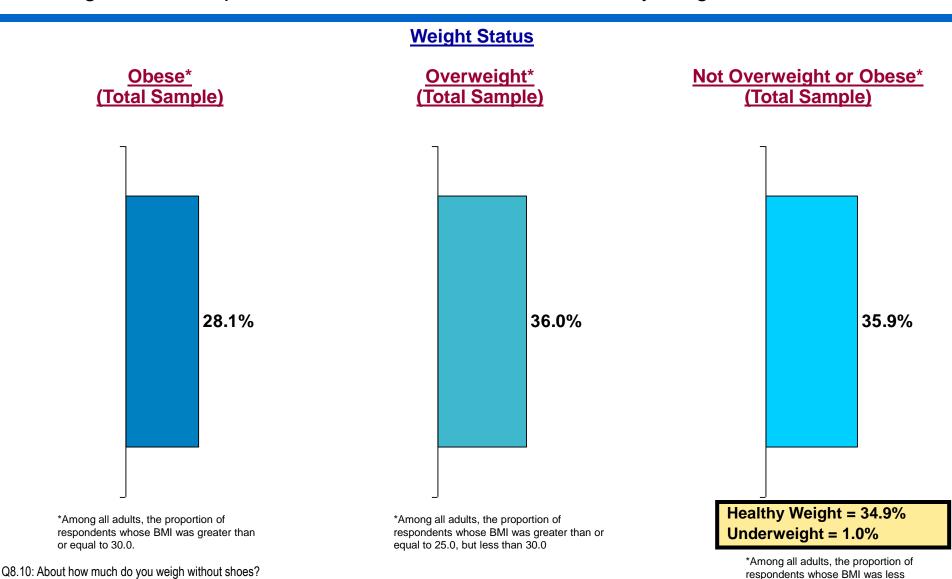
Disability (Cont'd.)







More than six in ten (64.1%) MMCWM area adults are considered to be either overweight or obese per their BMI. One-third are at a healthy weight.



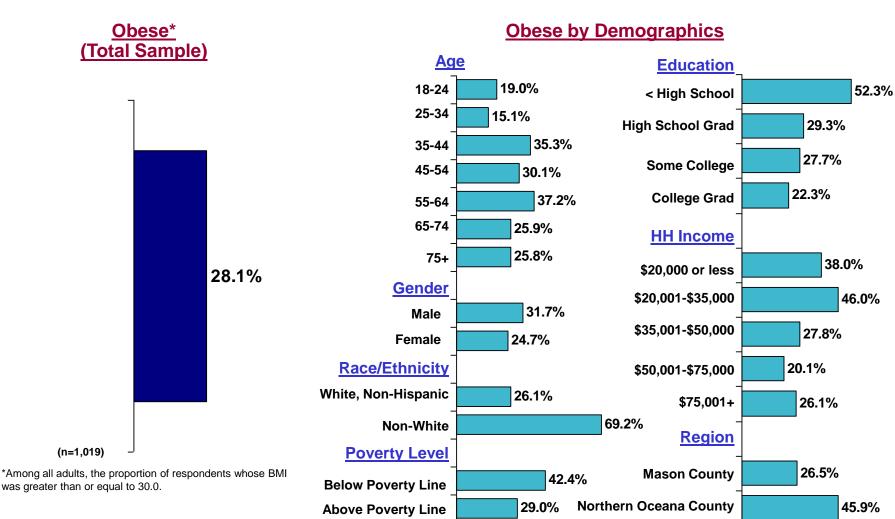
(n=1,019)

than 25.0.

Q8.11: About how tall are you without shoes?

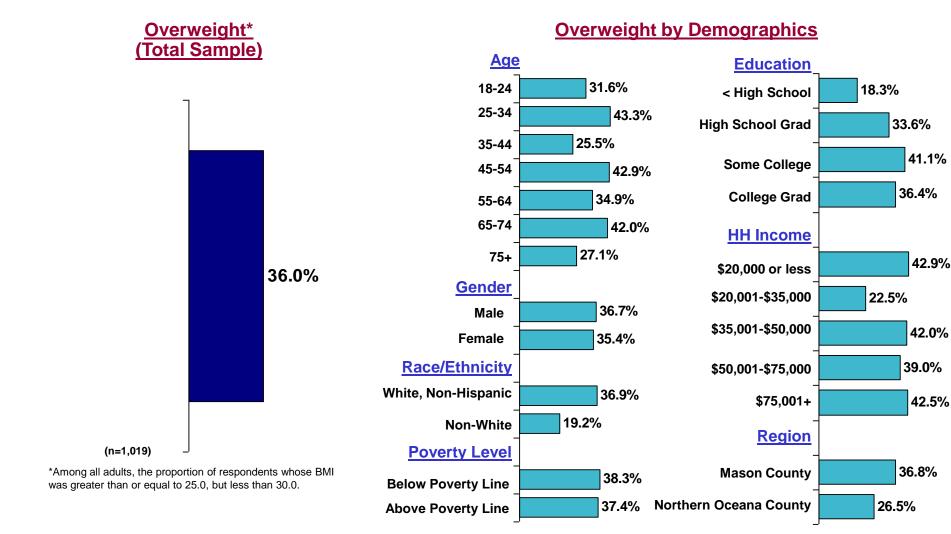
MMCWM area adults most likely to be obese include those who have less than a high school education, are Non-Whites, live below the poverty line, and live in northern Oceana County.





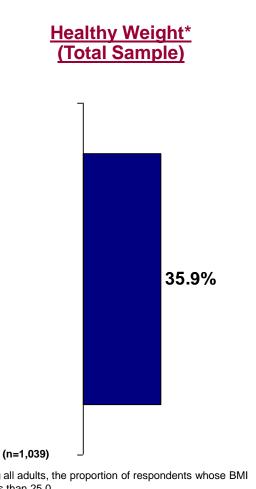
There are fewer demographic differences among adults with regard to being overweight and some of the more noticeable differences exist because of the corresponding differences in demographics with regard to being obese. For example, in the charts below, Whites are more likely to be overweight than non-Whites, however, the previous slide demonstrated this difference exists because non-Whites are far more likely to be obese than Whites.

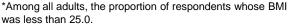


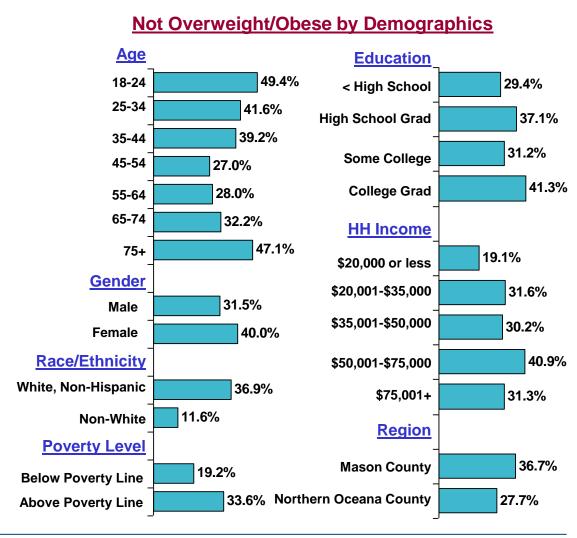


Adult area residents most likely to be at a healthy weight tend to be female, White, younger than age 45, have annual household incomes over \$20K, live above the poverty line, and live in Mason County.

Weight Status (Cont'd.)

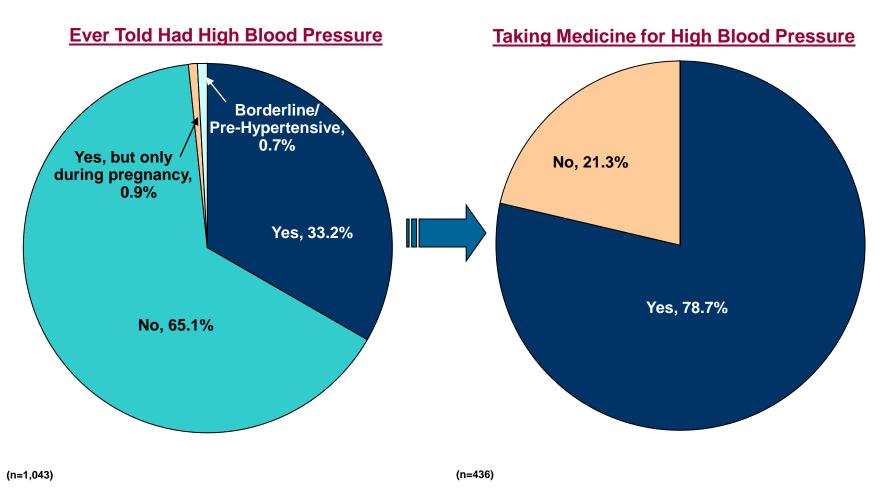






One-third (33.2%) of MMCWM area adults have ever been told by a health care professional they have high blood pressure (HBP). Of those, more than three-fourths (78.7%) currently take medication for their HBP.

Hypertension

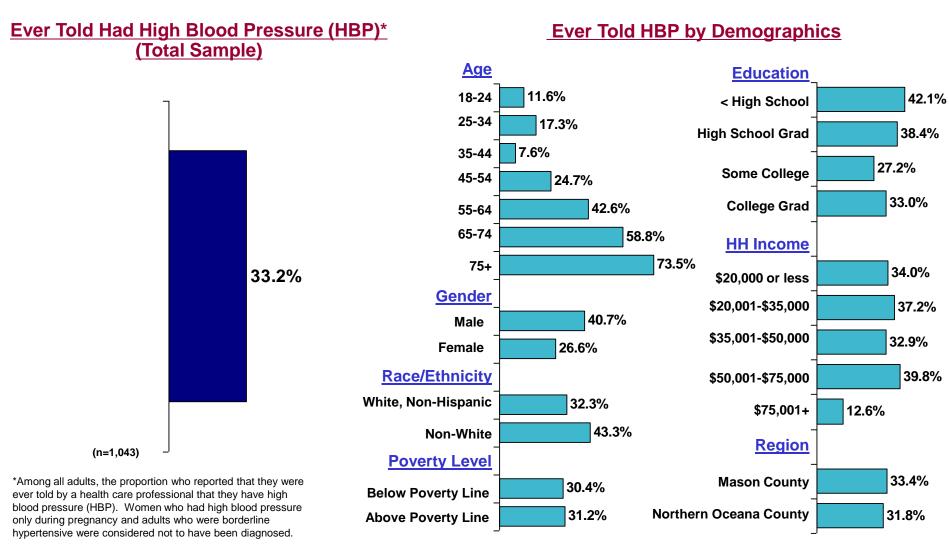


Q4.1: Have you EVER been told by a doctor, nurse, or other health professional that you have high blood pressure?

Q4.2: Are you currently taking medicine for your high blood pressure?

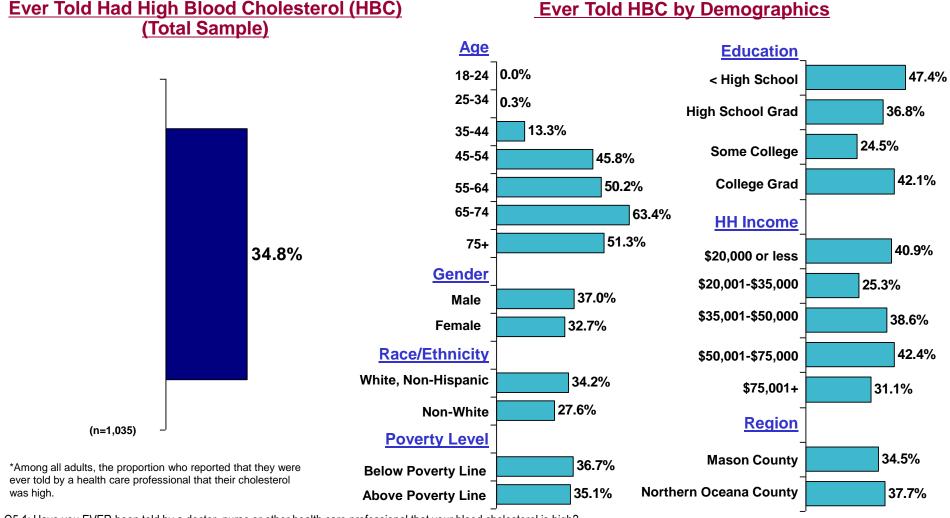
As expected, HBP is more common in older adults (55+). It is also more common in men than women, non-Whites than Whites, and in adults who have less than a high school education.

Hypertension Awareness



Slightly more than one-third (34.8%) of area adults have ever been diagnosed with high blood cholesterol (HBC). The only differences in demographics occur with age; not surprisingly, adults aged 45 or older are far more likely to have HBC than younger adults.



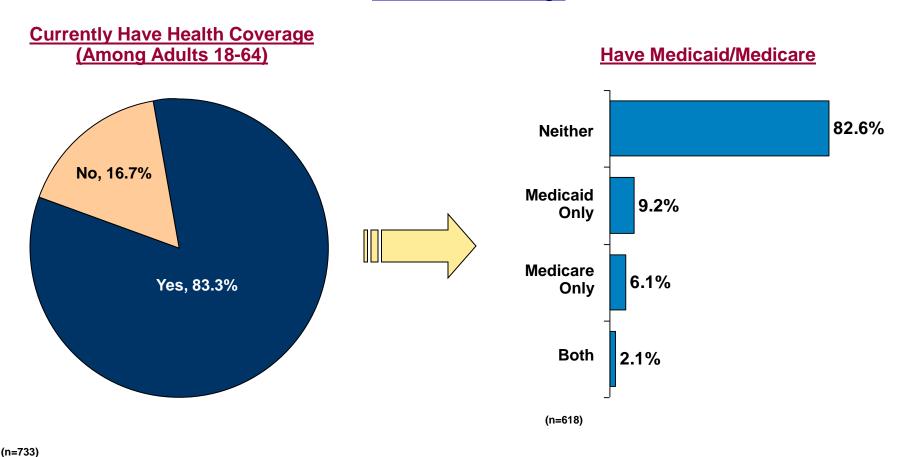


Q5.1: Have you EVER been told by a doctor, nurse or other health care professional that your blood cholesterol is high?

Health Care Access

More than eight in ten (83.3%) adults under age 65 have health care coverage, and 17.4% of those with coverage have Medicaid and/or Medicare.

Health Care Coverage



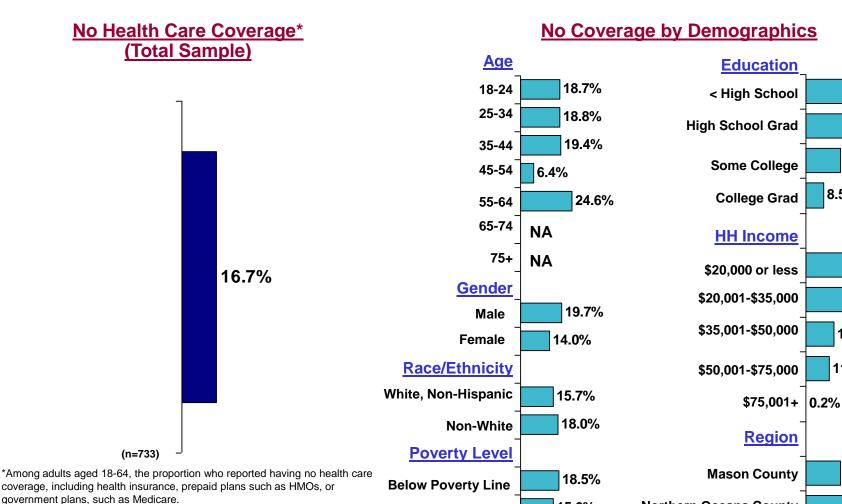
Q3.1: Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare or Indian Health Services? Q3.1a: (If yes) Do you personally have Medicaid or Medicare Insurance?

Having health care coverage is directly related to education and strongly related to income, where those with less education and income are less likely to have health care coverage.

Health Care Coverage Among Adults Aged 18-64 Years

15.6%

Northern Oceana County



Above Poverty Line

34.5%

22.8%

22.6%

13.3%

11.3%

16.7%

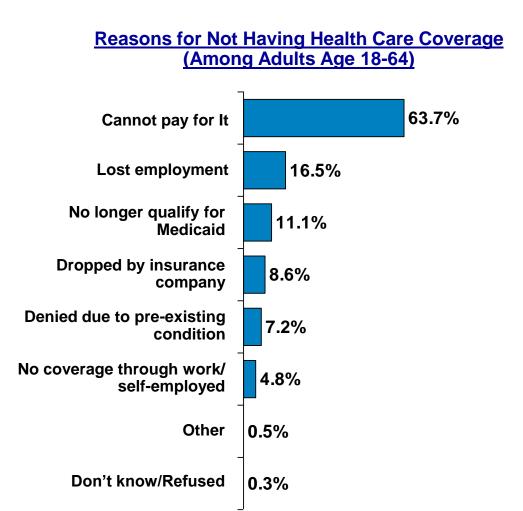
17.2%

39.7%

16.6%

8.5%

For those without health care coverage, the greatest barrier is *cost*. More than one in ten adults also do not have coverage as a result of lost employment and/or no longer qualifying for Medicaid.

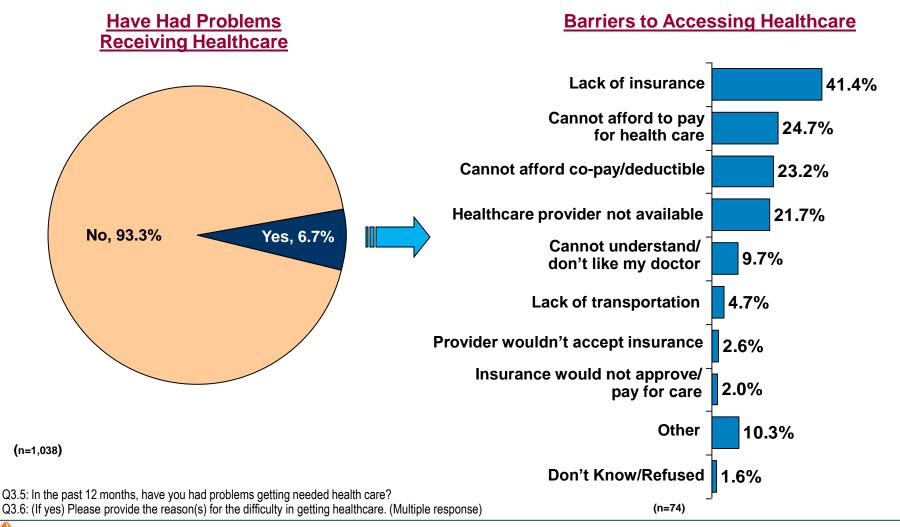


(n=105)

Q3.2: If you do not have health insurance is it because you (mark all that apply)...

Most MMCWM area adults (93.3%) have had no trouble receiving health care when they needed it in the past year. However, those who have had problems mention a variety of reasons, the most common of which are the *lack of insurance* for healthcare and the *inability to pay* for care, including the co-pays and deductibles.

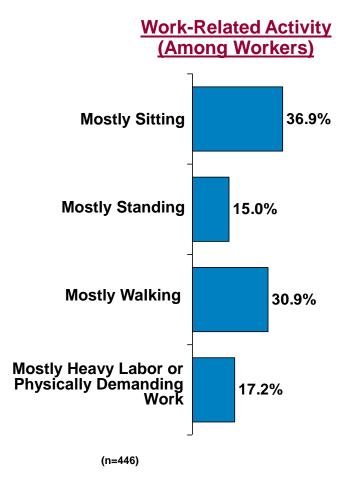
Problems Receiving Healthcare



Risk Behavior Indicators

Among adult workers, six in ten (63.1%) perform work-related activity other than sitting, such as standing, walking, or physically demanding work.

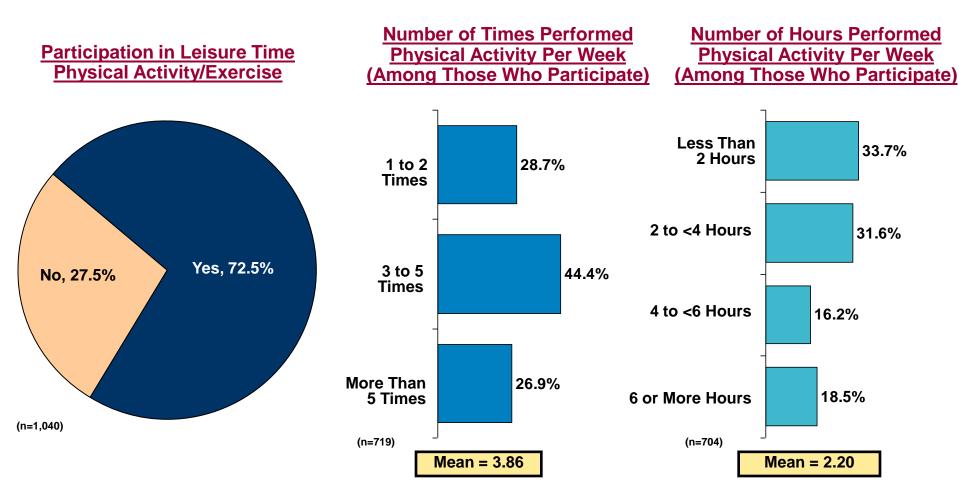
Exercise and Physical Activity



Q10.1: When you are at work, which of the following best describes what you do? Would you say...

Almost three-fourths (72.5%) of area adults participate in leisure time physical activity such as running, walking, or golf. More than seven in ten (71.3%) participate at least three times per week. More than six in ten (65.3%) participate for less than four hours per week, while 18.5% participate for six hours or more.

Participation in Physical Activity



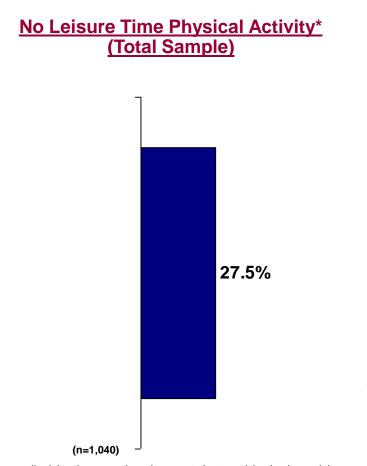
Q10.2: During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?

Q10.3: (If yes) How many times per week or per month did you take part in physical activity during the past month?

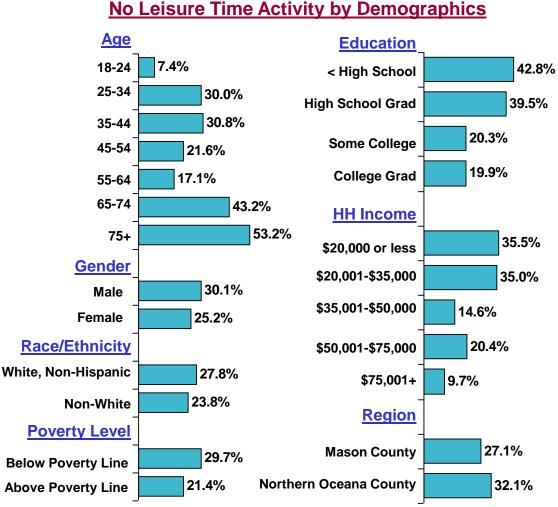
Q10.4: And when you took part in physical activity, for how many minutes or hours did you usually keep at it?

Participation in leisure time physical activity is directly related to education and income. In fact, roughly four in ten (42.8%) adults without a high school degree and more than a third of residents with household incomes of \$35K or less do not participate in any leisure time physical activity.

Leisure Time Physical Activity



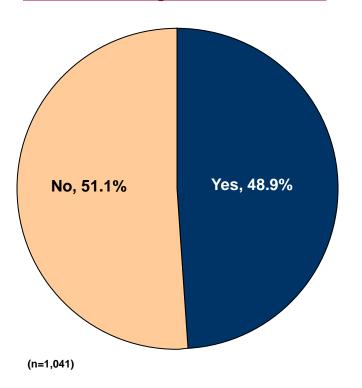
^{*}Among all adults, the proportion who reported not participating in any leisuretime physical activities or exercises, such as running, calisthenics, golf, gardening, or walking, during the past month.



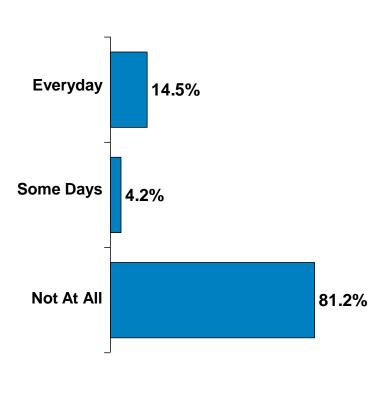
Half (48.9%) of MMCWM area adults have smoked at least 100 cigarettes in their lifetime. Among all adults, 81.2% currently do not smoke at all, while 14.5% currently smoke cigarettes every day and another 4.2% smoke on some days.

Cigarette Smoking

Smoked 100 Cigarettes in Lifetime







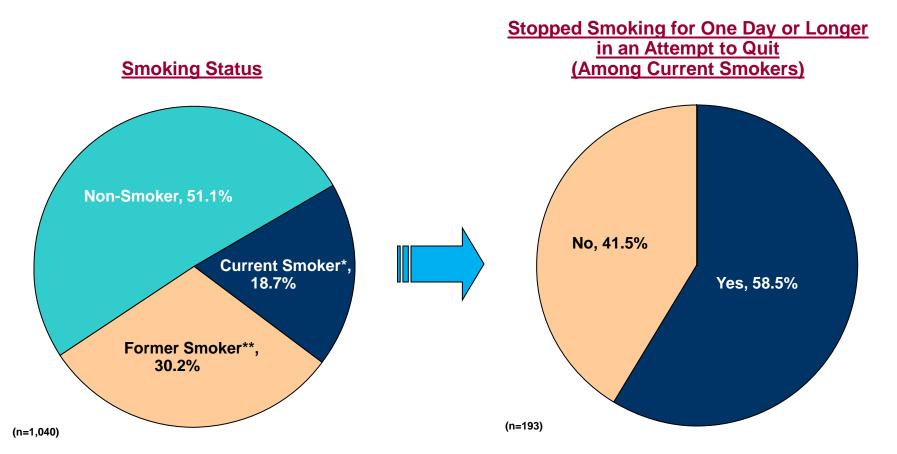
(n=1,040)

Q7.1: Have you smoked at least 100 cigarettes in your entire life? Q7.2: Do you now smoke cigarettes everyday, some days, or not at all?



Half (51.1%) of area adults are <u>non-smokers</u>, meaning they never smoked or smoked less than 100 cigarettes in their lifetime. Current smokers make up 18.7% of area adults, while another 30.2% are considered former smokers. Among current smokers, 58.5% have attempted to quit smoking within the past year.

Smoking Status and Attempts to Quit



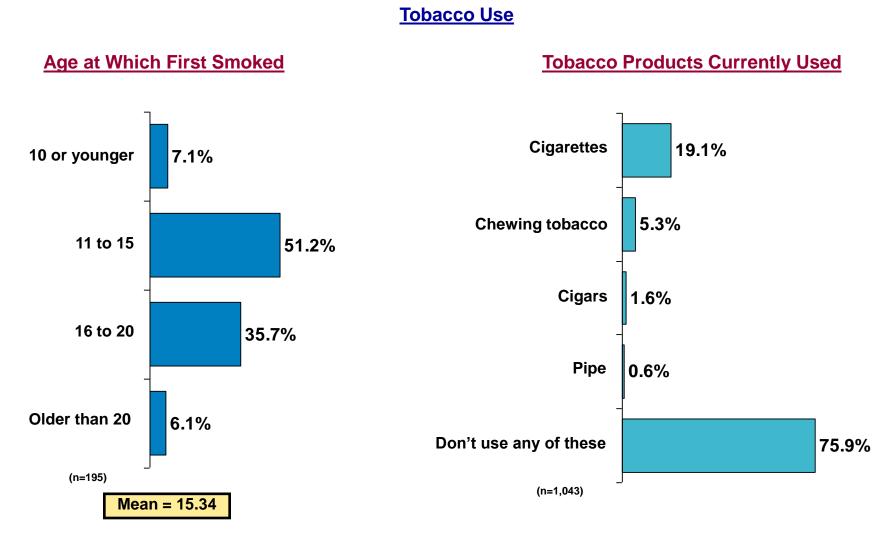
^{*}Among all adults, the proportion who reported that they had ever smoked at least 100 cigarettes (5 packs) in their life and that they smoke cigarettes now, either every day or on some days.

^{**}Among all adults, the proportion who reported that they had ever smoked at least 100 cigarettes (5 packs) in their life but they do not smoke now.

Q7.1: Have you smoked at least 100 cigarettes in your entire life? Q7.2: Do you now smoke cigarettes everyday, some days, or not at all?

Q7.5: During the past 12 months, have you stopped smoking for one day or longer because you were trying to guit smoking?

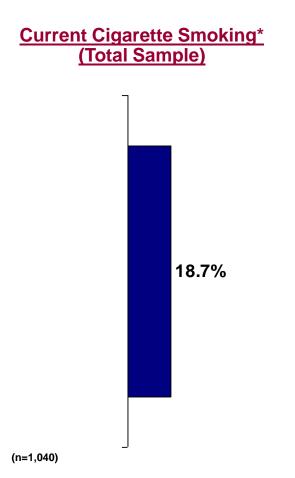
Almost six in ten (58.3%) current cigarette smokers took their first puff before age 16. Three-fourths of area adults don't use any tobacco products. Those who do, prefer cigarettes by far, followed by chewing tobacco.



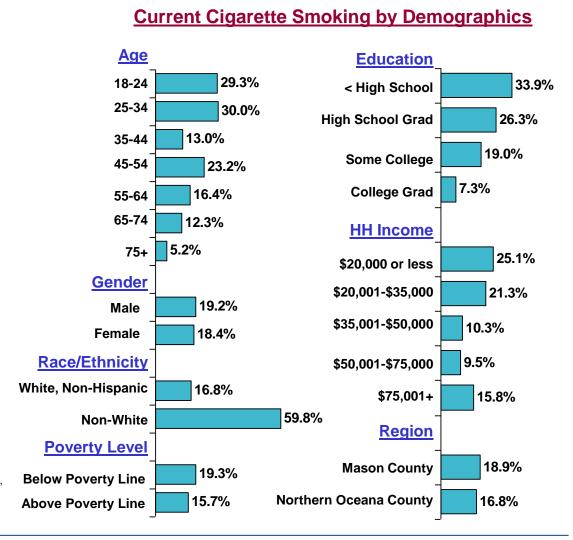
Q7.3: If you currently smoke cigarettes, how old were you the first time you smoked, even one or two puffs? Q7.4: Which tobacco products do you use, if any?

Cigarette smoking is inversely related to education and income; 33.9% of residents with less than a high school diploma and 25.1% of those living in a household with annual income of \$20K or less currently smoke cigarettes. Non-Whites are dramatically more likely to smoke than Whites.

Cigarette Smoking

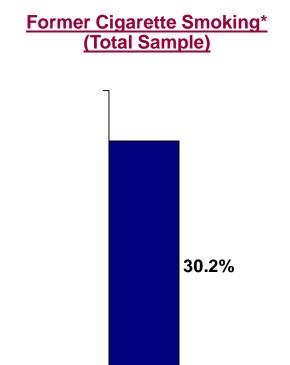


^{*}Among all adults, the proportion who reported that they had ever smoked at least 100 cigarettes (5 packs) in their life and that they smoke cigarettes now, either every day or on some days.



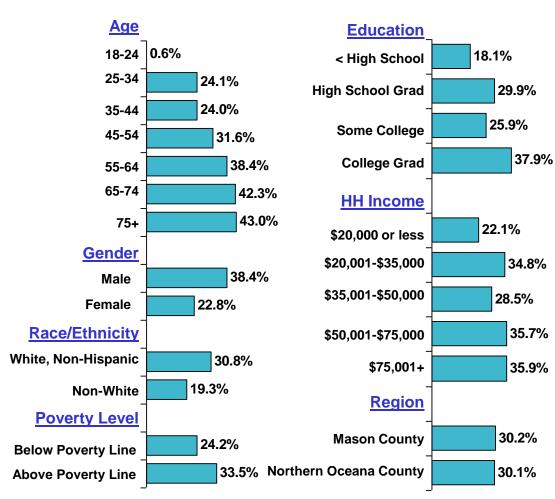
Former smokers are more likely to be men than women and more likely to be White than non-White. Older MMCWM residents are more likely to be former smokers than younger residents.

Cigarette Smoking (Cont'd.)



(n=1,040)

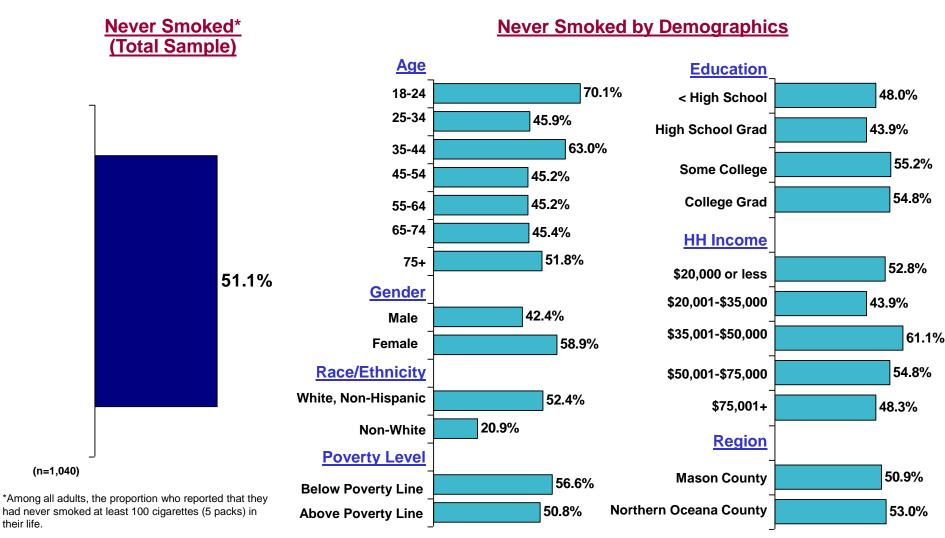
Former Cigarette Smoking by Demographics



^{*}Among all adults, the proportion who reported that they had ever smoked at least 100 cigarettes (5 packs) in their life but they do not smoke now.

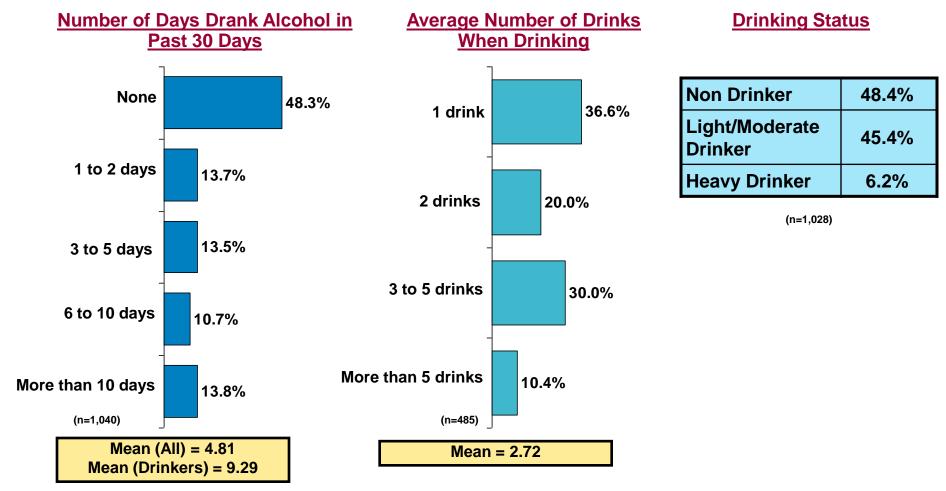
Women are more likely than men, and Whites are more likely than non-Whites, to have never smoked cigarettes.





With regard to alcohol consumption, almost half (48.3%) of area adults are classified as non-drinkers while 45.5% are considered to be light to moderate drinkers. Less than one in fifteen (6.2%) are classified as heavy drinkers, meaning they consume an average of more than one (if female) or two drinks (if male) per day.

Alcohol Consumption in Past 30 Days

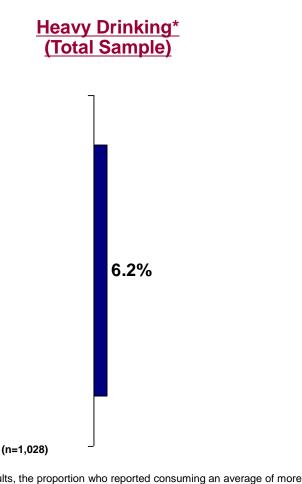


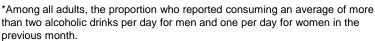
Q14.1: During the past 30 days, how many days per week, or per month did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage, or liquor?

Q14.2: 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?

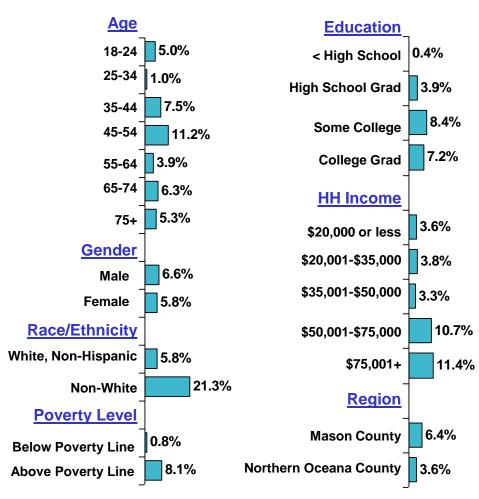
Non-Whites are noticeably more likely to engage in heavy drinking compared to Whites. Area adults with a college education and/or with household incomes greater than \$50K are more likely to engage in heavy drinking than adults with less education and/or from households with lower incomes, respectively.

Alcohol Consumption (Cont'd.)

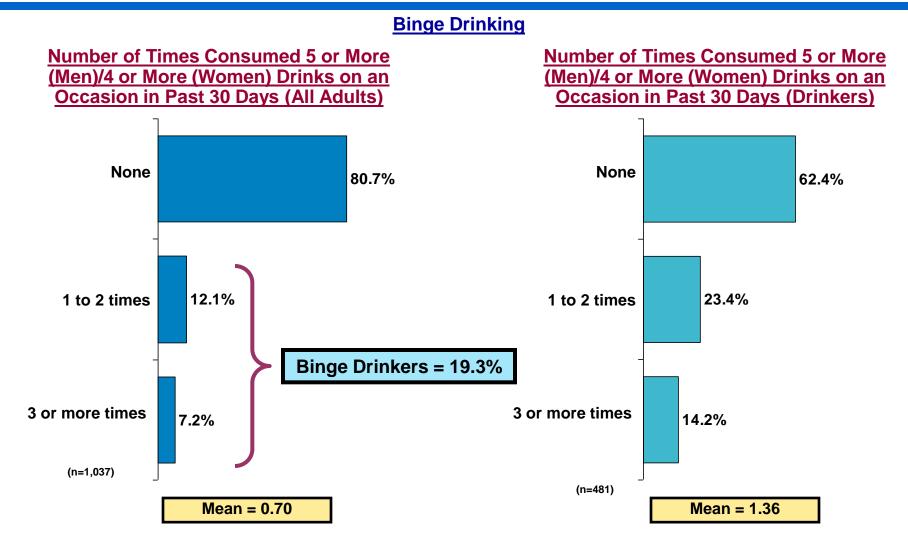








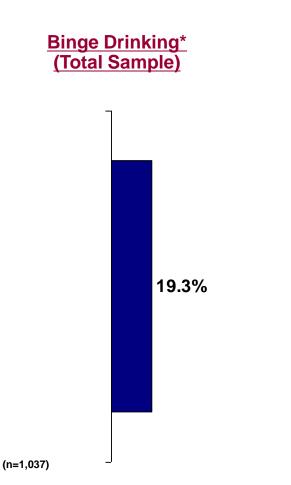
Among all adults, one in five (19.3%) have engaged in binge drinking in the past 30 days. Among just drinkers, this proportion rises to more than one-third (37.6%).

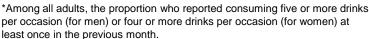


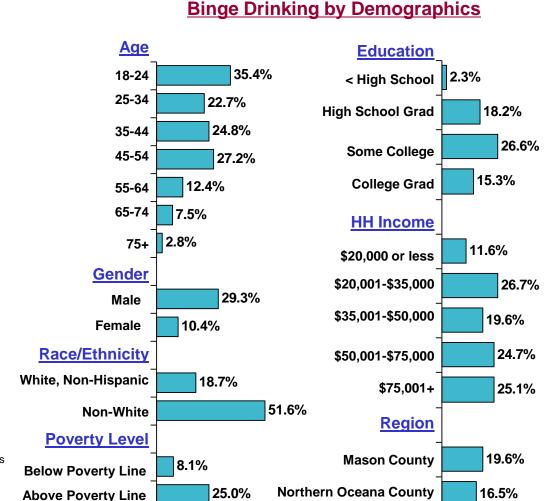
Q14.3: Considering all types of alcoholic beverages, how many times during the past 30 days did you have X (x=5 for men, x=4 for women) or more drinks on an occasion?

The prevalence of binge drinking is higher among men than women, non-Whites than Whites, and those living above the poverty line vs. those below. The prevalence of binge drinking declines sharply after age 54.

Alcohol Consumption



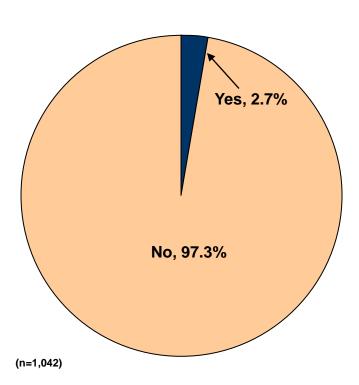




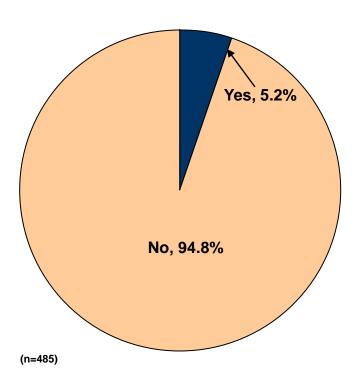
Among area adults who drink alcohol, very few (5.2%) report driving when they have had too much to drink.

Drinking and Driving Under the Influence

Ever Driven When Had Too Much to Drink in Past 30 Days (All Adults)



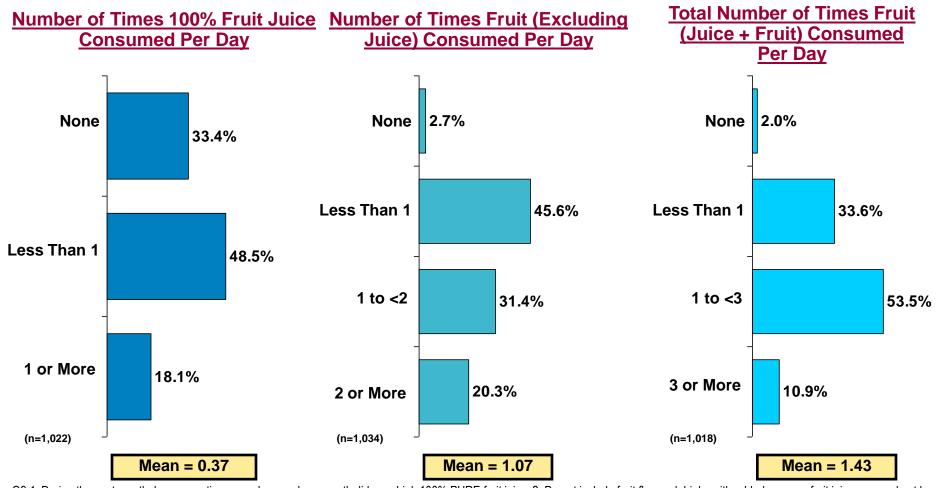
Ever Driven When Had Too Much to Drink in Past 30 Days (Among Drinkers)



Q14.4: During the past 30 days, have you ever driven when you've had too much to drink?

MMCWM area adults consume minor quantities of 100% fruit juice, averaging less than an once (0.37) a day. They consume more solid fruit, although they still average modest amounts (just over once per day). Over half (53.5%) of all adults consume fruit (juice and/or solid) between one and three times per day.

Consumption of Fruit

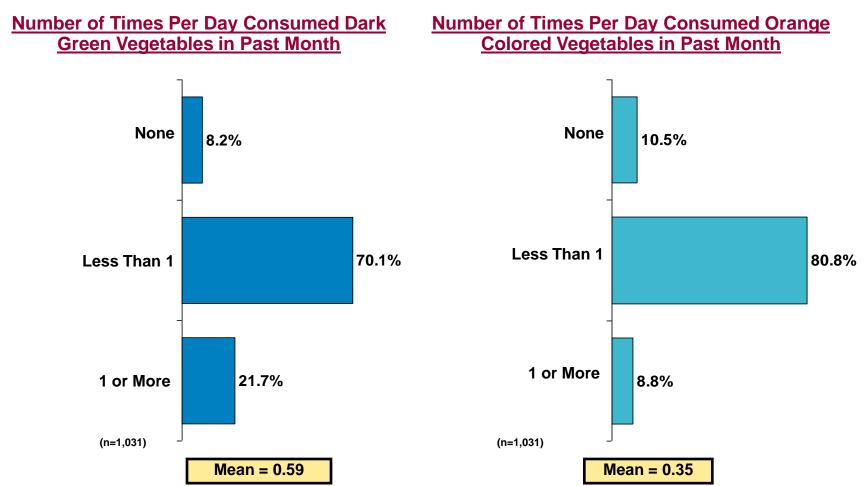


Q9.1: During the past month, how many times per day, week, or month did you drink 100% PURE fruit juices? Do not include fruit flavored drinks with added sugar or fruit juice you made at home and added sugar to. Only include 100% juice.

Q9.2: During the past month, not counting juice, how many times per day, week, or month did you eat fruit? Count fresh, frozen, or canned fruit.

On average, area adults consume dark green vegetables less than once a day (0.59), while one in five (21.7%) consume one or more times per day. Orange vegetables are consumed even less frequently. In fact, 10.5% consume no orange vegetables.

Vegetable Consumption

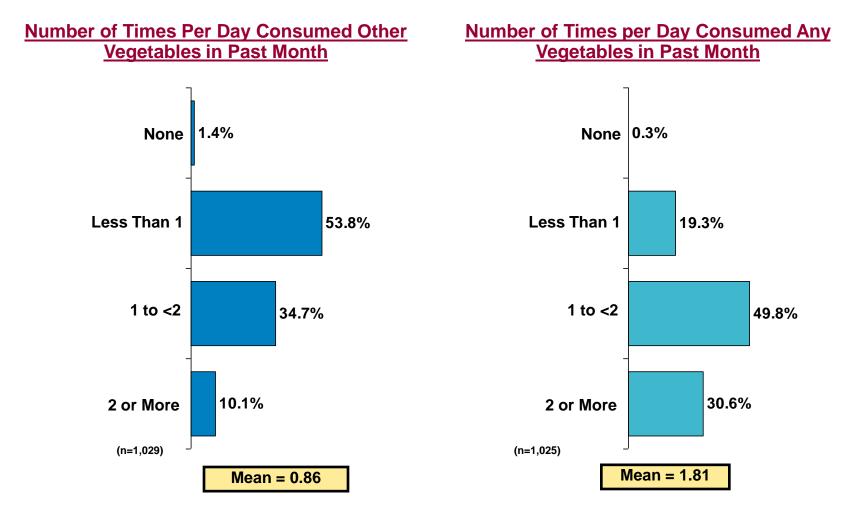


Q9.3: During the past month, how many times per day, week, or month did you eat dark green vegetables, for example broccoli or dark leafy greens including romaine, chard, collard greens or spinach?

Q9.4: During the past month, how many times per day, week, or month did you eat orange colored vegetables such as sweet potatoes, pumpkin, winter squash, or carrots?

Adults consume greater quantities of vegetables other than those that are dark green or orange. More than four in ten (44.8%) consume "other" vegetables one or more times per day. Considering all vegetables combined, one-third (30.6%) of adults consume two or more times per day.

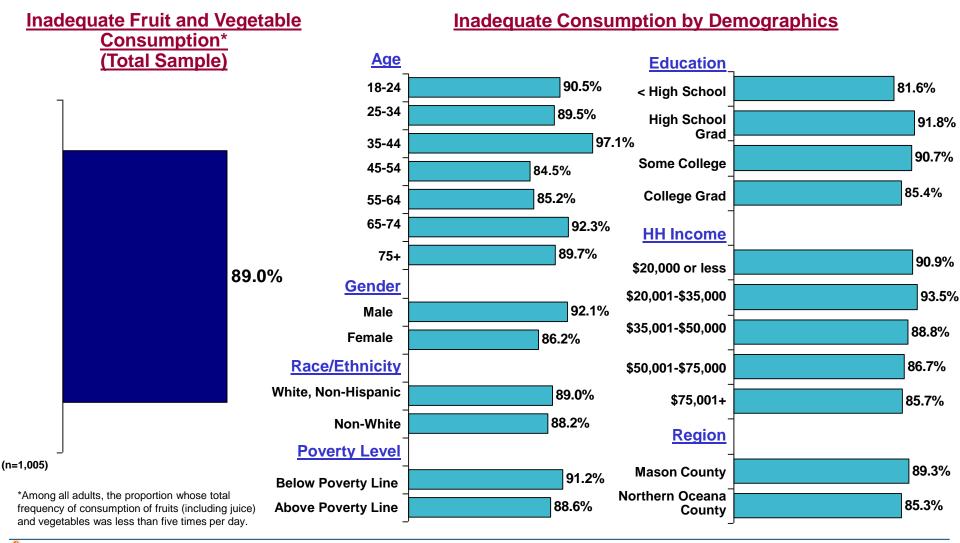
Vegetable Consumption (Cont'd.)



Q9.5: Not counting what you just told me about, during the past month, about how many times per day, week, or month did you eat OTHER vegetables? Examples of other vegetables include tomatoes, tomato juice or V-8 juice, eggplant, peas, lettuce, cabbage, and with potatoes that are not fried such as baked or mashed potatoes.

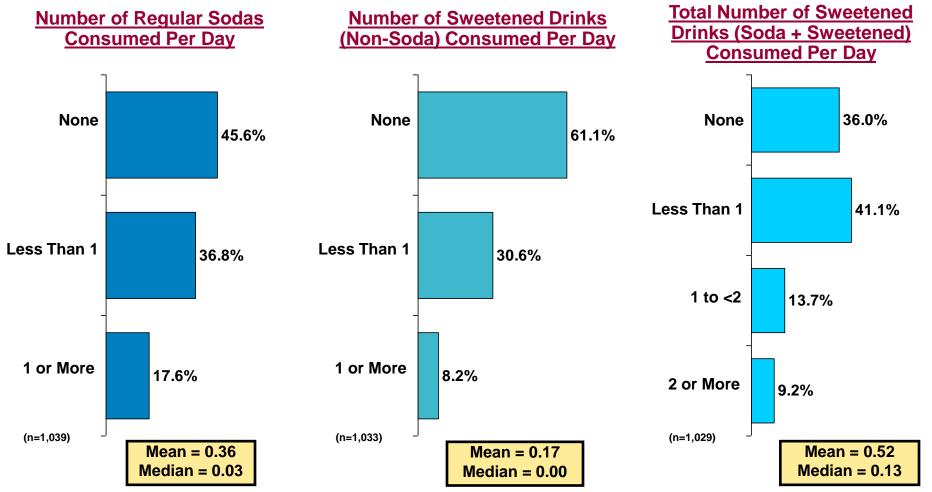
Inadequate fruit and vegetable consumption is common in Mason and northern Oceana counties, where 89.0% consume fruits or vegetables less than five times per day. Women eat slightly higher quantities of fruits and vegetables per day than men, but on the whole there are few demographic differences. Inadequate consumption of fruits and vegetables is high across the board.

Fruit and Vegetable Consumption



Area adults consume sweetened beverages, including sodas, in minimal quantities. More than four in ten (45.6%) consume no soda and six in ten (61.1%) consume no sweetened beverages such as juice or Kool-Aid. Over three-fourths (77.1%) consume sweetened drinks overall (soda and/or sweetened drink) less than once a day.

Consumption of Sugar Sweetened Beverages



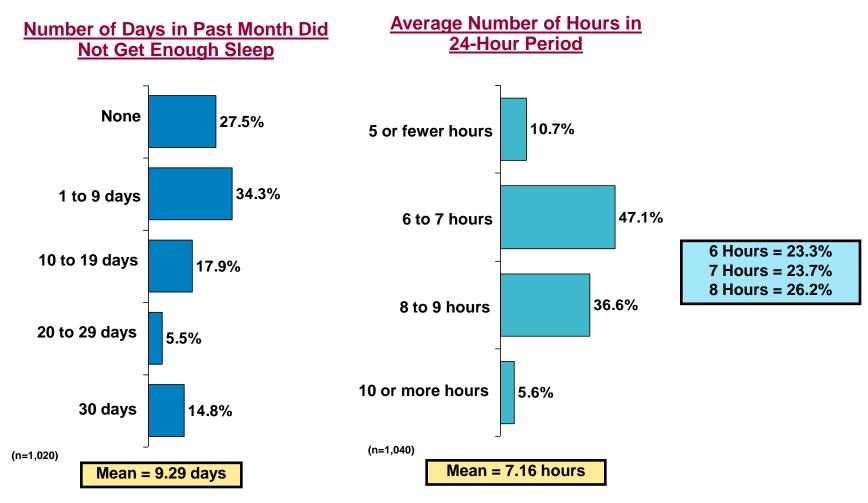
Q15.1: About how often do you drink regular soda or pop that contains sugar? Do not include diet soda or diet pop.

Q15.2: About how often do you drink sweetened drinks, such as Kool-aid, cranberry, and lemonade? Include fruit drinks you made at home and added sugar to.



Area adults average almost two nights per month where they do not get adequate sleep. Over one-fourth (27.5%) get enough sleep every night, however, 14.8% do not get enough sleep on any given night. Adults average just over seven hours of sleep per night and three-fourths (73.2%) get between six and eight hours of sleep per night.





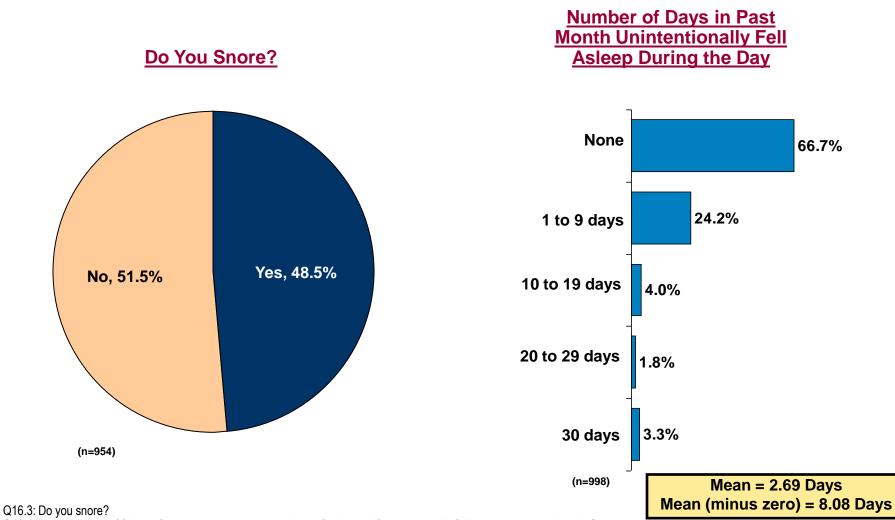
Q16.1: During the past 30 days, for about how many days have you felt you did not get enough rest or sleep?

Q16.2: On average, how many hours do you get in a 24-hour period? Think about the time you actually spend sleeping or napping, not just the amount of sleep you think you should get.



About half (48.5%) of area adults report they snore. Although two-thirds of adults do not unintentionally fall asleep during the day, those who do average eight days per month where they fall asleep unintentionally.

Sleeping Patterns (Cont'd.)

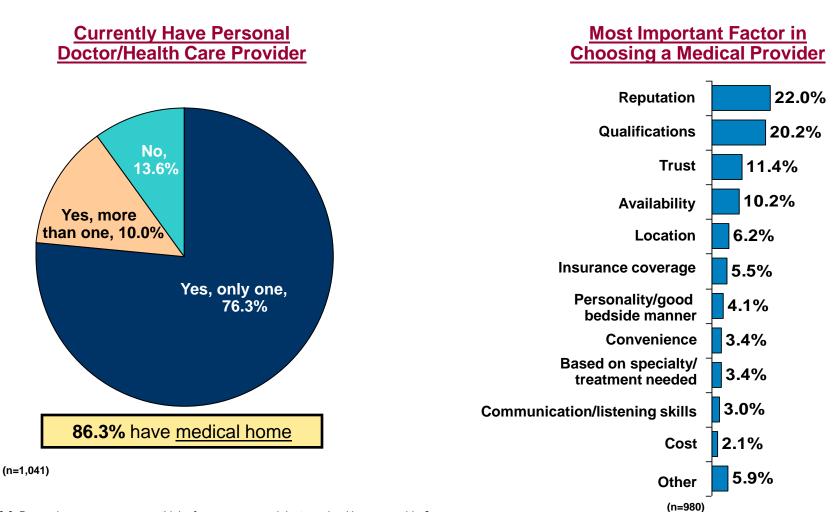


Q16.4: During the past 30 days, for about how many days did you find yourself unintentionally falling asleep during the day?.

Clinical Preventative Practices

Nearly nine in ten adults (86.3%) have a medical home (personal physician). Several factors impact a person's decision to select a personal physician; however, the two most important are *reputation* and *qualifications*.

Personal Physician and Choosing a Provider

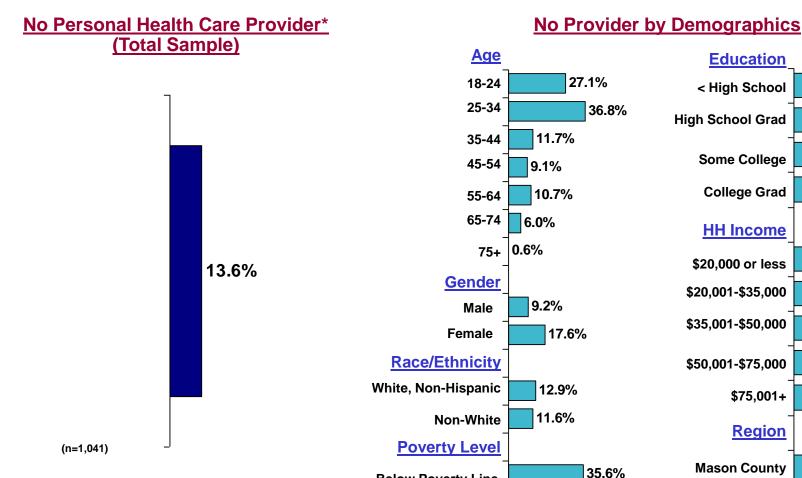


Q3.3: Do you have one person you think of as your personal doctor or health care provider?

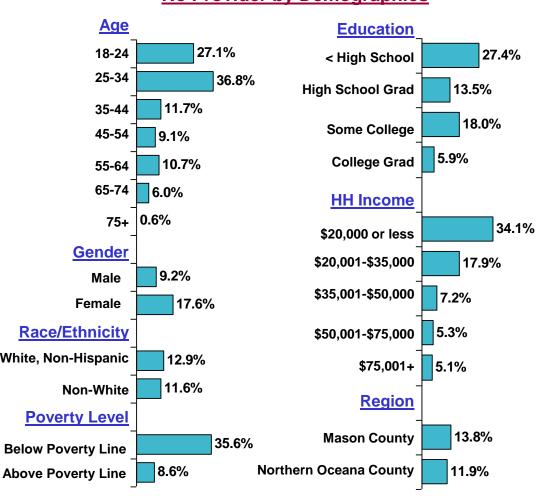
Q3.4: What is the most important factor you would consider when you are deciding which doctor or medical service you are going to use?

More than one in ten (13.6%) area adults are without a medical home (no PCP). Those most likely to be without a medical home are younger (aged 18-34), female, have less than a high school education, and are living below the poverty line. In fact, whether or not one has a medical home is directly related to household income, where the likelihood of having a PCP increases with income.

Personal Health Care Provider

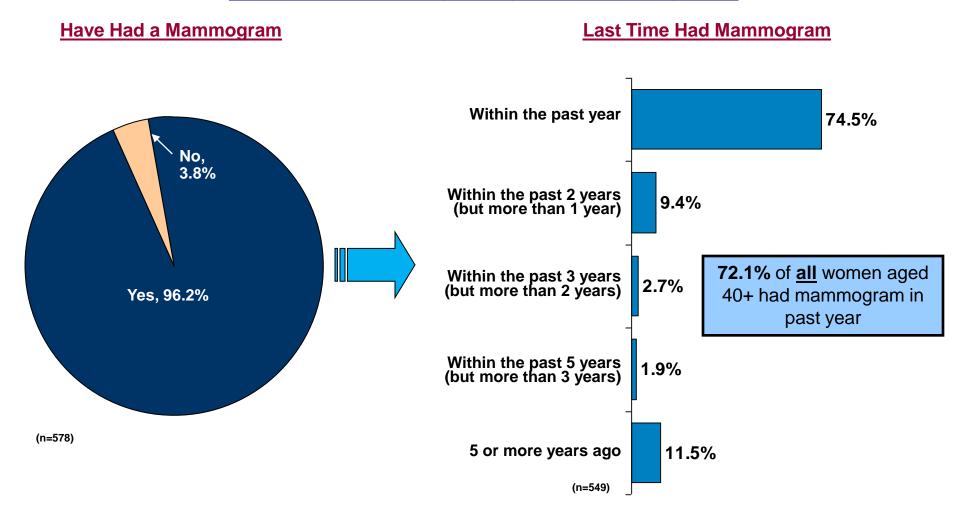


^{*}Among all adults, the proportion who reported that they did not have anyone that they thought of as their personal doctor or health care provider.



Almost all (96.2%) area women aged 40+ have had a mammogram to screen for breast cancer. Of those, most (74.5%) have had one within the past year. Of <u>all</u> women aged 40+, 72.1% have had a mammogram in the past year.

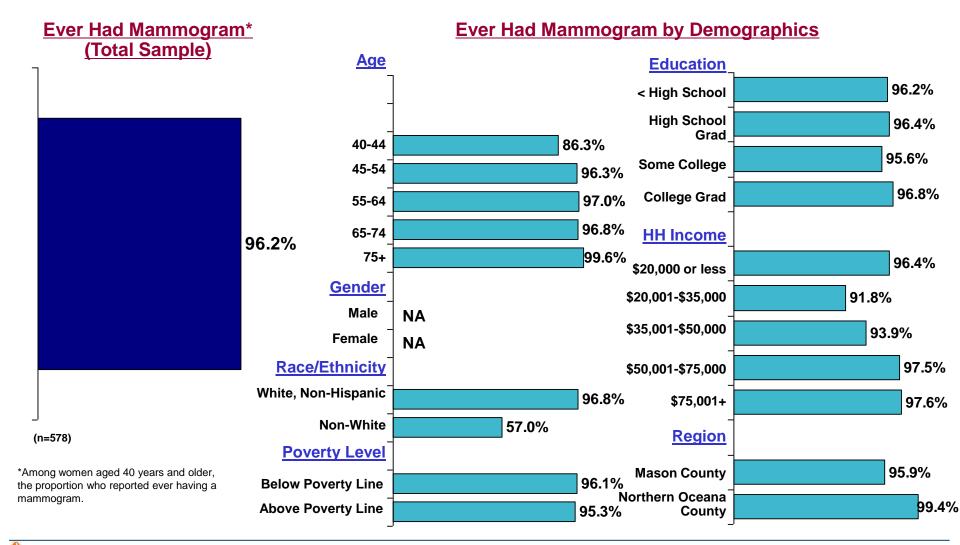
Breast Cancer Screening Among Adult Females Aged 40+



Q17.1: A mammogram is an x-ray of each breast to look for breast cancer. Have you ever had a mammogram? Q17.2: (If yes) How long has it been since you had your last mammogram?

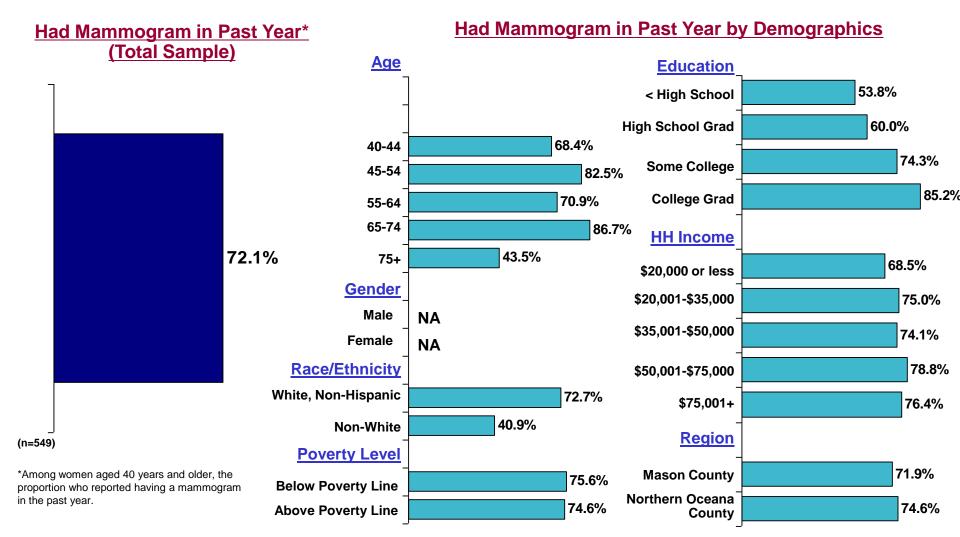
Since most women 40 years of age or older in the MMCWM area have had a mammogram at some point, there is very little difference regardless of demographics. Non-White women are far less likely than White women to have ever had a mammogram.

Mammography Indicators Among Women Aged 40 Years or Older



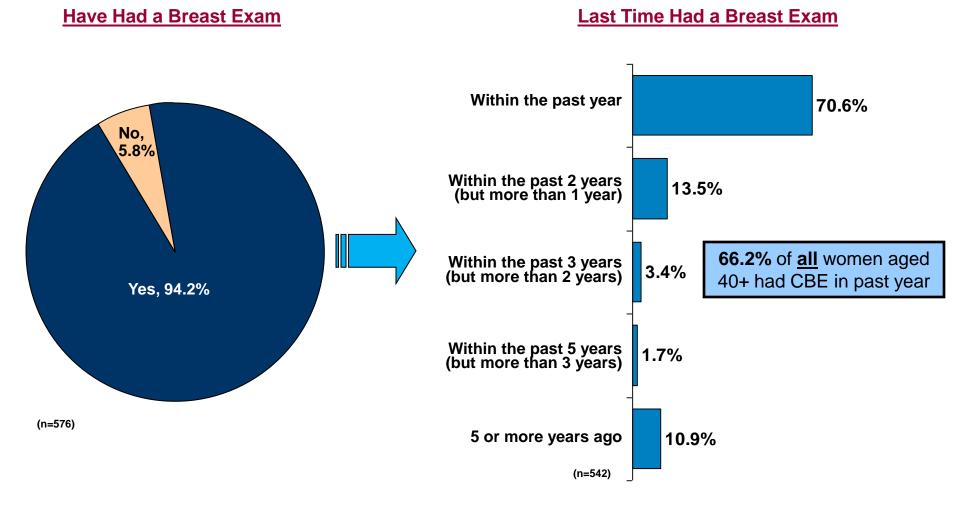
Having a mammogram within the past year is directly related to education. Further, White women are far more likely to have mammograms than non-White women.

Mammography Indicators Among Women Aged 40 Years or Older (Cont'd.)



Further, almost all (94.2%) area women aged 40+ have had a clinical breast exam to screen for breast cancer. Of those, the majority (70.6%) have had one within the past year. Of <u>all</u> women aged 40+, 66.2% have had a clinical breast exam in the past year.

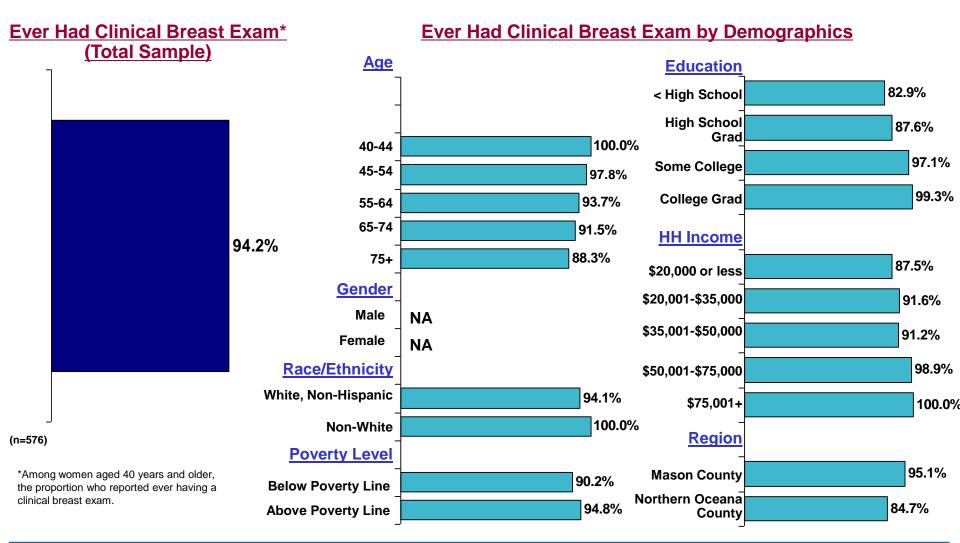
Breast Cancer Screening Among Adult Females Aged 40+ (Cont'd.)



Q17.3: A clinical breast exam is when a doctor, nurse, or other health care professional feels the breast for lumps. Have you ever had a clinical breast exam? Q17.4: (If yes) How long has it been since you had your last breast exam?

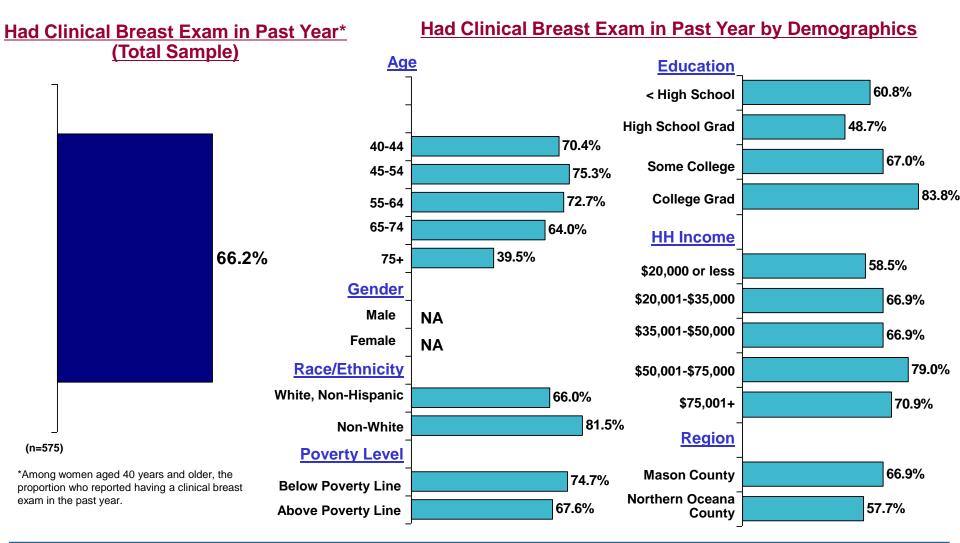
Having a clinical breast exam is directly related to education and income.

Clinical Breast Exam Indicators Among Women Aged 40 Years or Older



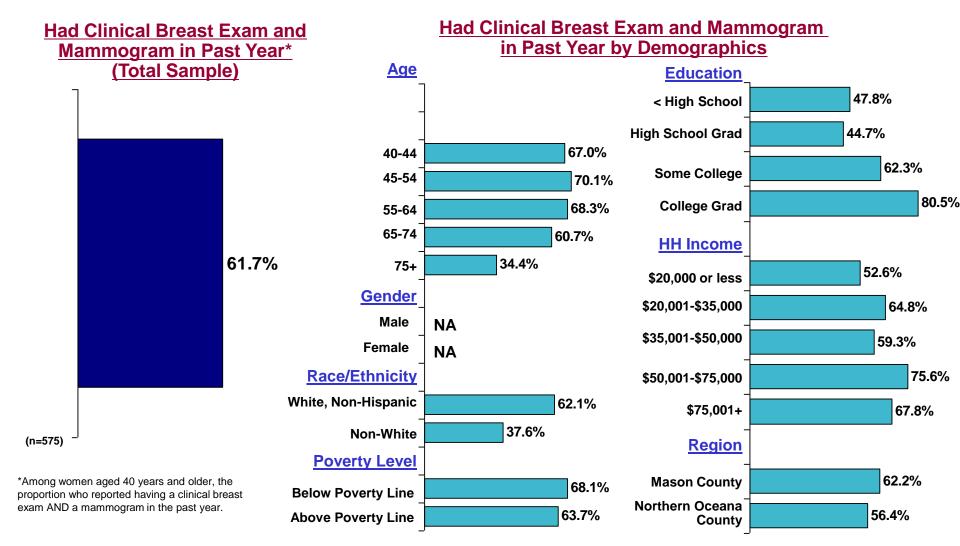
Having a clinical breast exam in a timely manner (within past year) is more likely to occur among women with college degrees and from households with more than \$50K in annual income. White women are far less likely to have timely breast exam than non-White women.

Clinical Breast Exam Indicators Among Women Aged 40 Years or Older (Cont'd.)



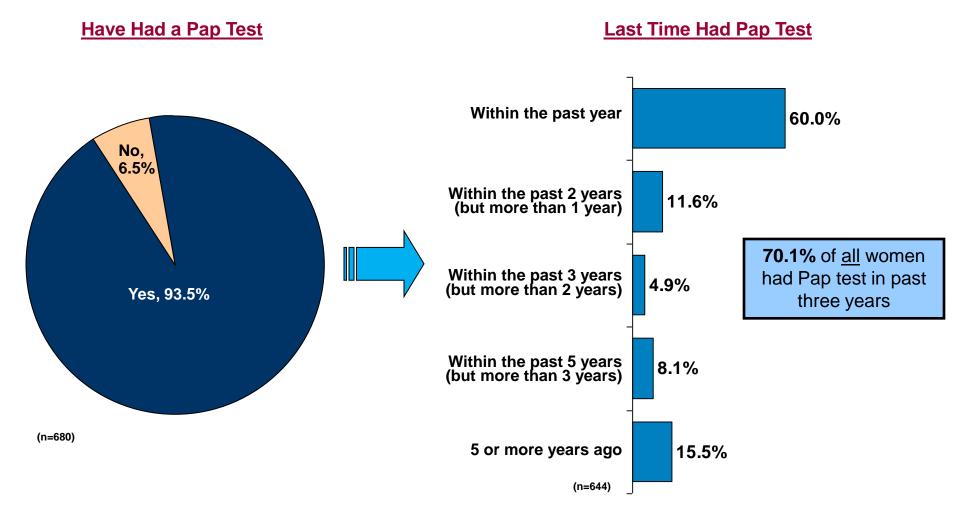
Six in ten (61.7%) area women 40 years or older have had both a mammogram and clinical breast exam in the past year. Having both in a timely manner is more likely to occur among women with college degrees and from households with more than \$50K in annual income. White women are far more likely to have both in a timely manner than non-White women.

Clinical Breast Exam and Mammogram Indicators Among Women Aged 40 Years or Older (Cont'd.)



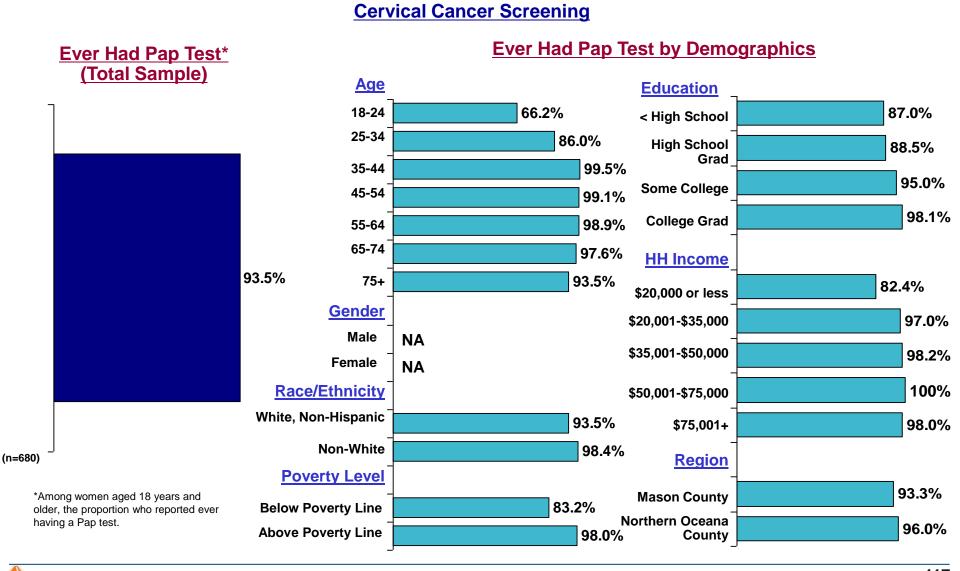
Further, almost all (93.5%) area adult women have had a Pap test to screen for cervical cancer. Of those, the majority (60.0%) have had one within the past year. Of <u>all</u> adult women, 70.1% have had a Pap test within the past three years.

Cervical Cancer Screening Among Adult Females



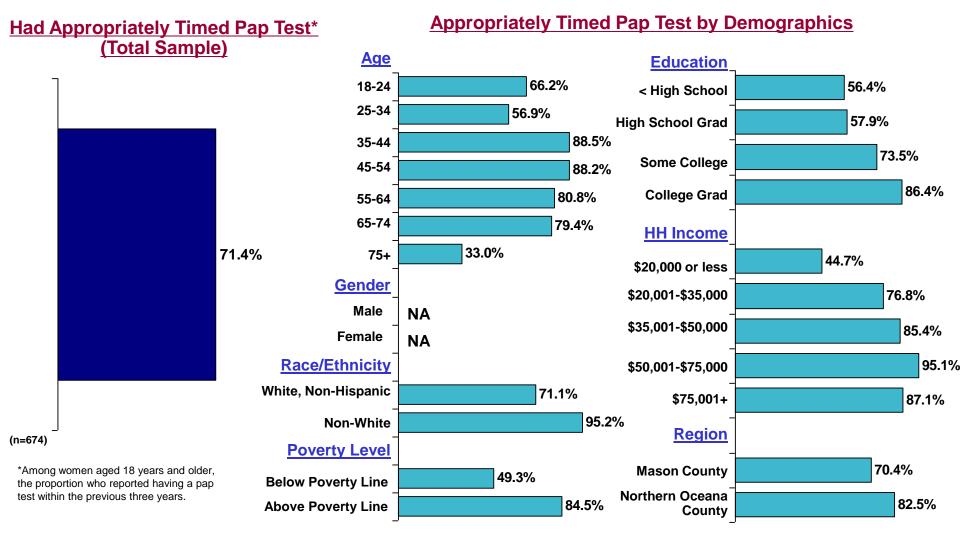
Q17.5: A Pap test is a test for cancer of the cervix. Have you ever had a Pap test? Q17.6:(If yes) How long has it been since you had your last Pap test?

Pap test rates are lowest among women aged 18-24 and those in the lowest income groups.



Adult women least likely to have appropriately timed (past three years) Pap tests are in the youngest (18-34) and oldest (75+) ages groups, are White/non-Hispanic, and/or live below the poverty line. Further, having an appropriately timed Pap test is directly related to education and income.

Cervical Cancer Screening (Cont'd.)

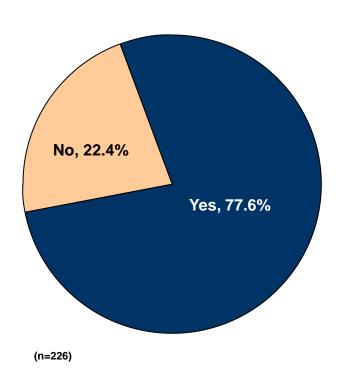


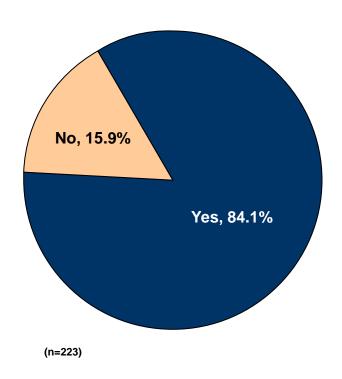
More than three-fourths (77.6%) of MMCWM area males aged 50 or older have been recommended to have a prostate screening test such as PSA and more than eight in ten (84.1%) have actually received the test.

Prostate Cancer Screening Among Adult Males Aged 50+



Ever Had PSA Test

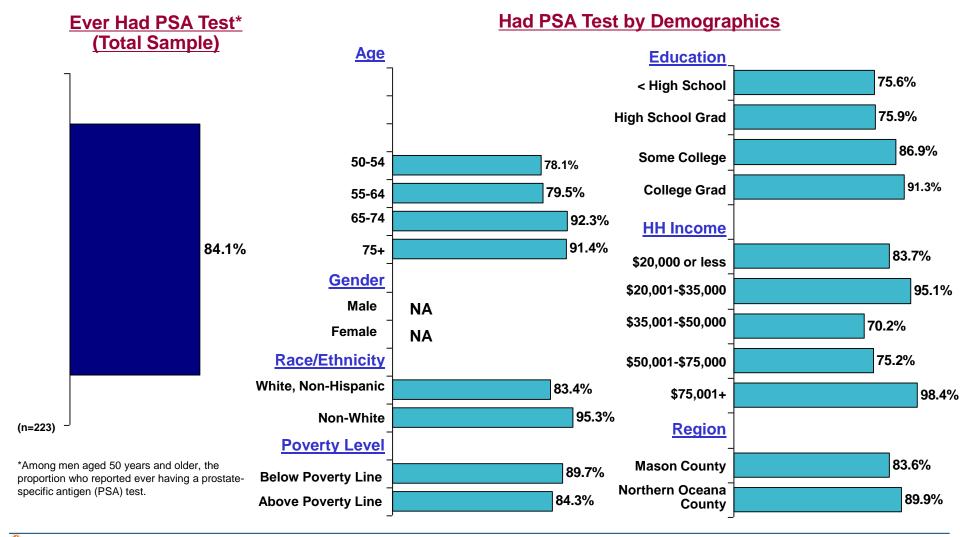




Q18.1: A prostate-specific antigen test, also called a PSA test, is a blood test used to check men for prostate cancer. Has a doctor EVER recommended that you have a PSA test? Q18.2: Have you EVER had a PSA test?

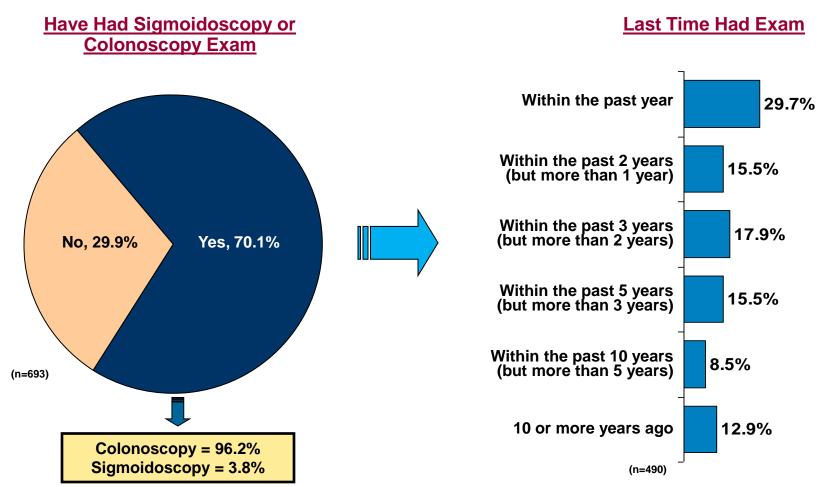
Among men aged 50 years or older, the lowest rates of prostate cancer screening are found in men between the ages of 50-64 and those with less than a college education.

Prostate Cancer Screening Among Men Aged 50 Years and Older



Seven in ten (70.1%) area adults aged 50 or more have had an exam to screen for colon cancer, and almost all of these were colonoscopies. Six in ten (63.1%) of those who have had an exam did so in the past three years, while 78.6% have had one within the past five.

Colorectal Cancer Screening Among Adults Aged 50+

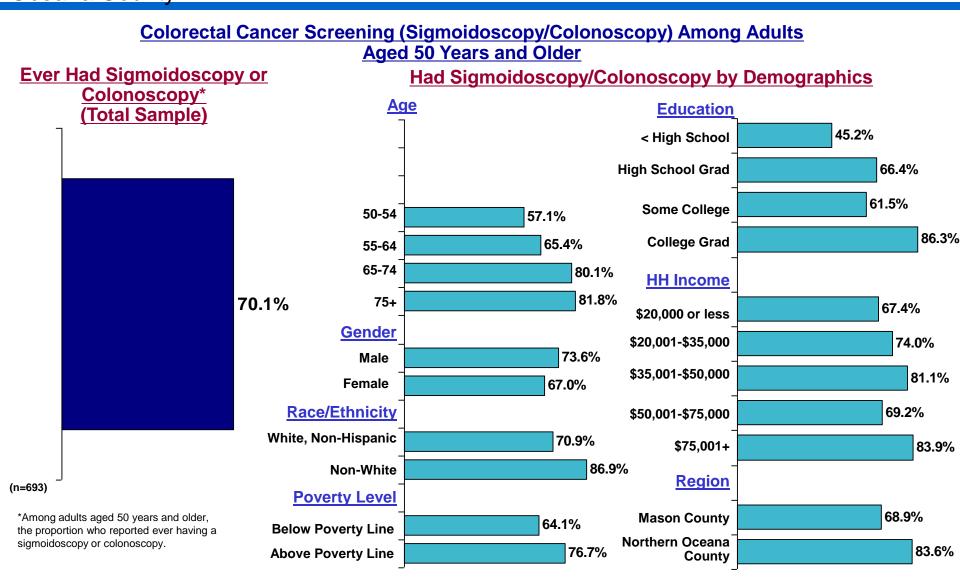


Q19.1: Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams?

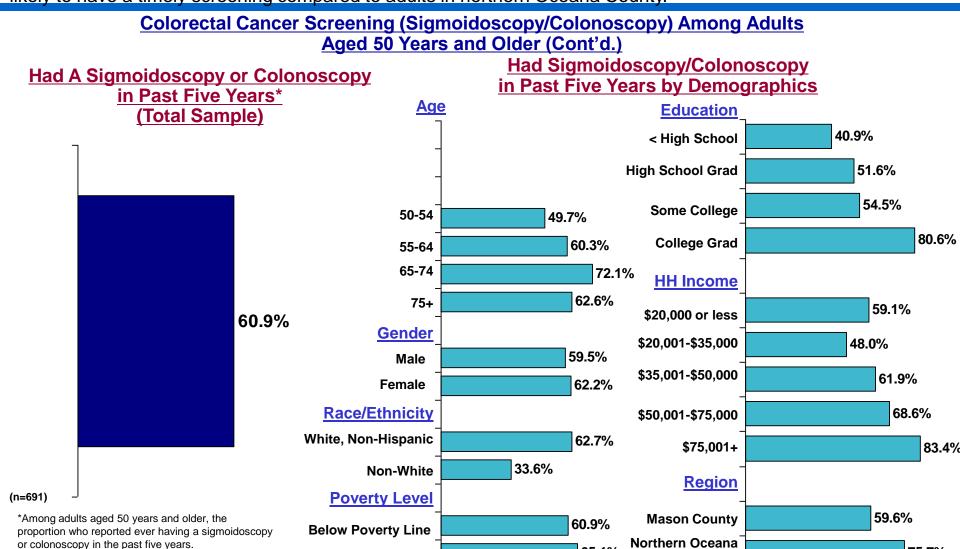
Q19.2: (After definition of each) Was your most recent exam a sigmoidoscopy or a colonoscopy?

Q19.3 :How long has it been since you had your last sigmoidoscopy or colonoscopy?

Demographic groups least likely to be screened for colorectal cancer are people aged 50-64, non-White, with less than a high school degree, and/or living below the poverty line. Adults in Mason County are less likely to be screened than those in northern Oceana County.



When looking at all adults aged 50 or older, six in ten (60.9%) have had a timely screening for colorectal cancer (in the past five years). Least likely to have been screened in the past five years are people aged 50-54, non-Whites, and with less than a college degree. The prevalence of timely colorectal cancer screening is by far highest among people with a college degree and incomes of \$75K+. Once again, those in Mason County are less likely to have a timely screening compared to adults in northern Oceana County.



Above Poverty Line

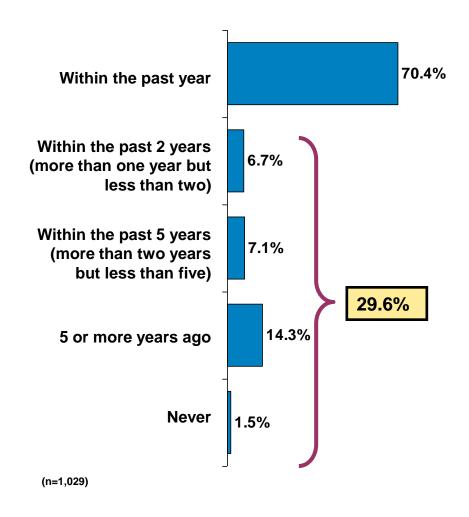
65.1%

County

75.7%

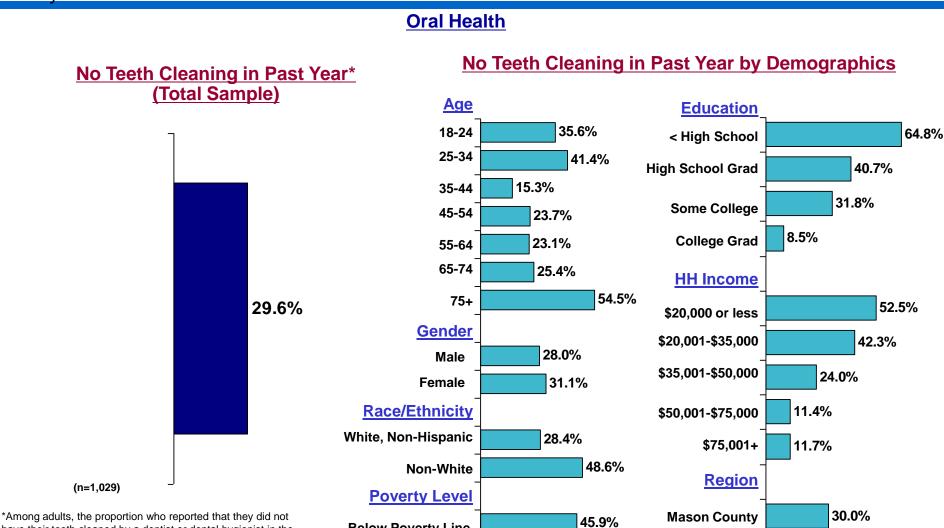
Seven in ten area adults have visited the dentist in the past year for a teeth cleaning. On the other hand, 14.3% have not had their teeth cleaned for 5 or more years and 1.5% have never had them cleaned.

When Last Visited Dentist/Dental Hygienist for Teeth Cleaning



Q22.1: How long has it been since you had your teeth cleaned by a dentist or dental hygienist?

Visiting a dentist in a timely manner for a teeth cleaning is directly related to education and income. In fact, more than six in ten people with less than a high school education and half of those living in a household with income less than \$20K have not visited a dentist in the past year. Further, 45.9% of adults living below the poverty line have not visited a dentist in comparison to 23.6% of those living above the poverty line.



23.6%

Northern Oceana County

Below Poverty Line

Above Poverty Line

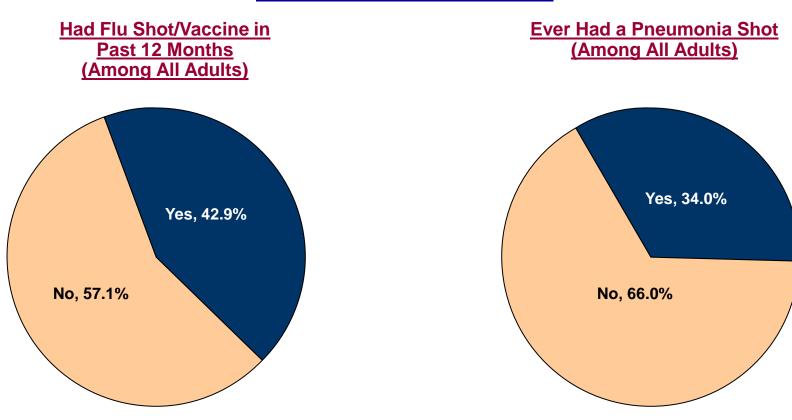
previous year.

25.4%

have their teeth cleaned by a dentist or dental hygienist in the

Among all adults, four in ten (42.9%) have been vaccinated against the flu and one-third (34.0%) have received a pneumonia shot.

Flu and Pneumonia Immunization



(n=988)

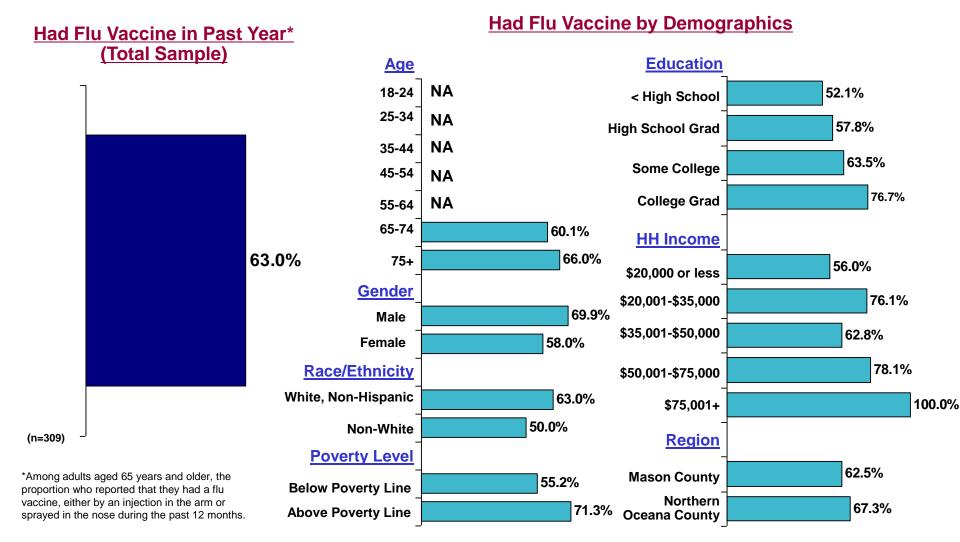
(n=1,039)

Q13.1: During the past 12 months, have you had either a seasonal flu shot or a seasonal flu vaccine that was sprayed in your nose?

Q13.2: A pneumonia shot or pneumococcal vaccine is usually given only nonce or twice in a person's lifetime and is different from the flu shot. Have you ever had a pneumonia shot?

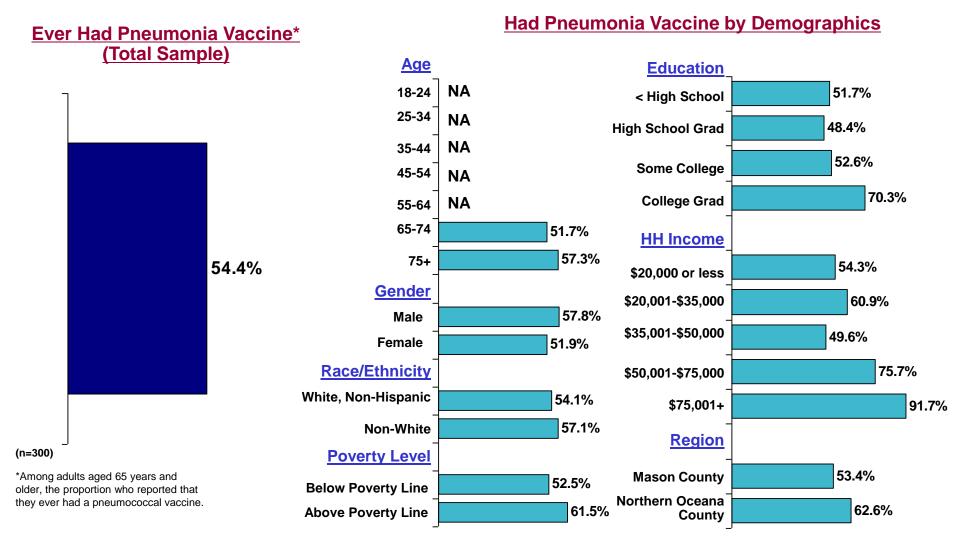
Among adults age 65 or older, six in ten (63.0%) have received a flu vaccine in the past year. The likelihood of getting a vaccine increases with level of education. Additionally, men are more likely to get vaccinated than women, Whites more likely than non-Whites, and those living above the poverty line are more likely than those living below.

<u>Immunizations Among Adults 65 Years and Older</u>



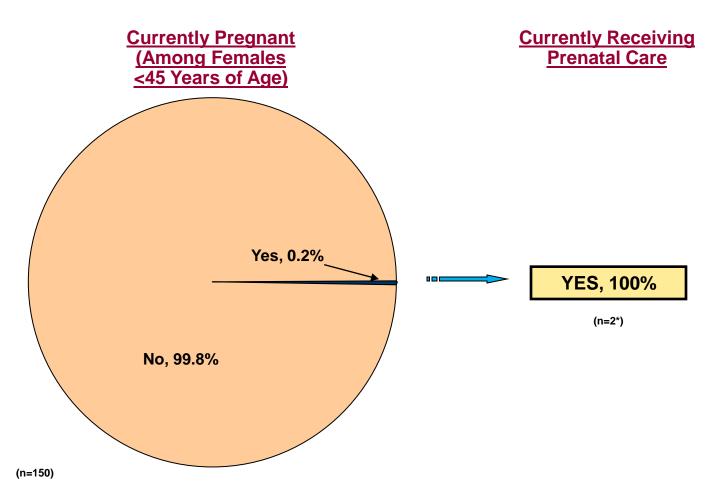
Among this same age group, just over half (54.4%) have received a pneumonia vaccine at some point. The highest rates are among college graduates, those with household incomes over \$50K, and residents of northern Oceana County.

Immunizations Among Adults 65 Years and Older (Cont'd.)



Only two females under age 45 were pregnant during this study and both are receiving prenatal care.

Pregnancy and Prenatal Care



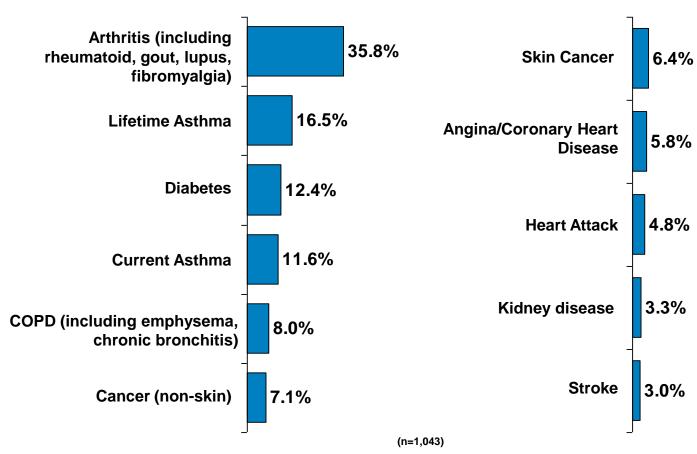
Q8.15: To your knowledge, are you now pregnant? Q8.15a: (If yes) Are you currently receiving prenatal care?

*Caution: small base size

Chronic Conditions

<u>Arthritis-related conditions</u> are by far the most prevalent chronic conditions among MMCWM area adults, followed by <u>asthma</u> and <u>diabetes</u>. Prevalence is low for heart conditions, stroke, and kidney disease.

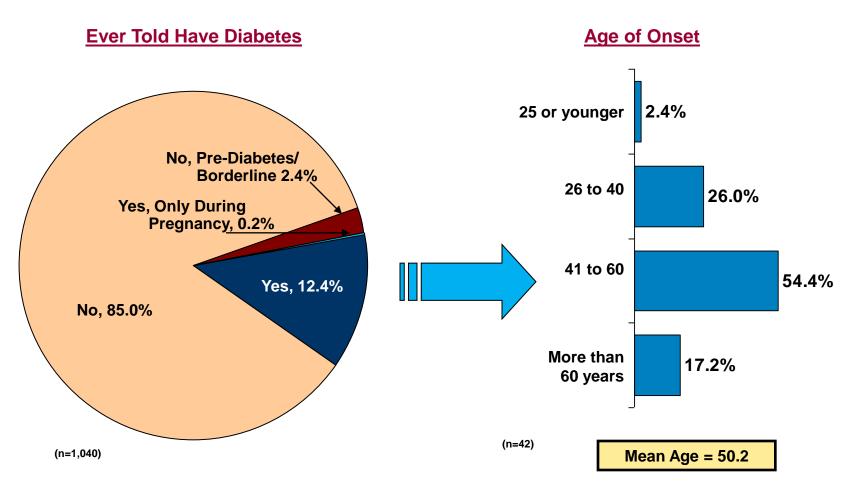
<u>Prevalence of Chronic Health Conditions</u> (% Have Been Told They Have)



Q6.1-Q6.11: Has a doctor, nurse, or other health professional EVER told you that you had.... Q6.2: Do you still have asthma?

More than one in ten (12.4%) area adults have diabetes, and of these the vast majority have Type II. The average age of onset is 50 and over half (54.4%) were told by a health care professional that they had diabetes for the first time between the ages of 41 and 60.

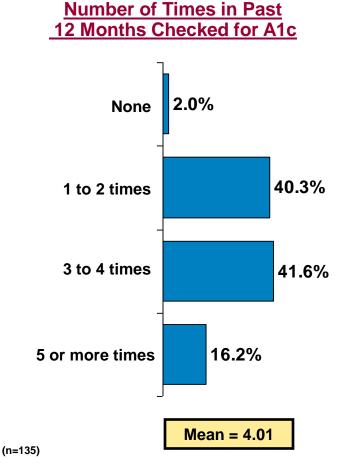
Prevalence of Diabetes and Age of Onset



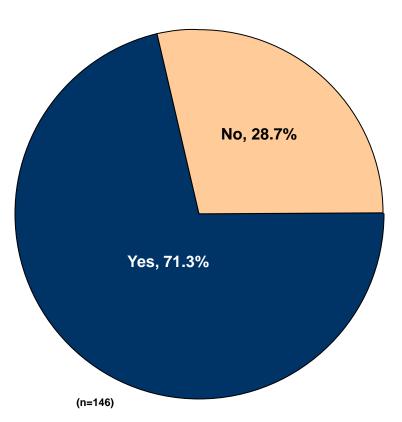
Q6.11: Has a doctor, nurse, or other health professional EVER told you that you had diabetes? Q6.11a: How old were you when you were told you have diabetes?

On average, those with diabetes see a health professional and are checked for A1c an average of four times a year. Seven in ten (71.3%) have taken a course or class in ways to self-manage their diabetes.

Prevalence of Diabetes (Cont'd.)



Have Taken a Course to Self-Manage Diabetes



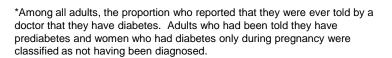
Q6.11b: A test for "A one C" measures the average level of blood sugar over the past three months. About how many times in the past 12 months have a doctor, nurse, or other health professional checked you for "A one C?"

Q6.11c. Have you ever taken a course or class in how to manage your diabetes yourself?

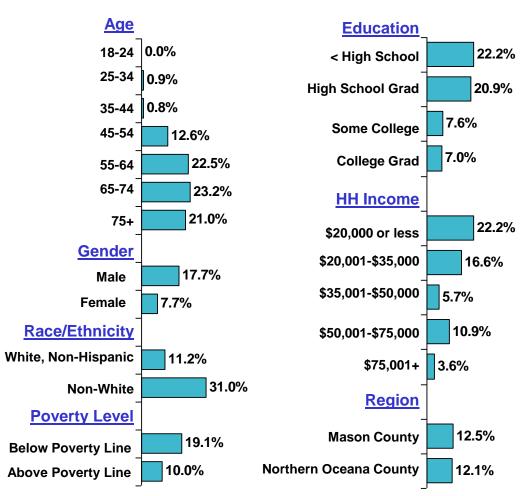
The prevalence of diabetes is higher for men, non-Whites, older adults (45+), those with less than a college education, and those with lower incomes.

Diabetes

Ever Told Have Diabetes* (Total Sample) 12.4%



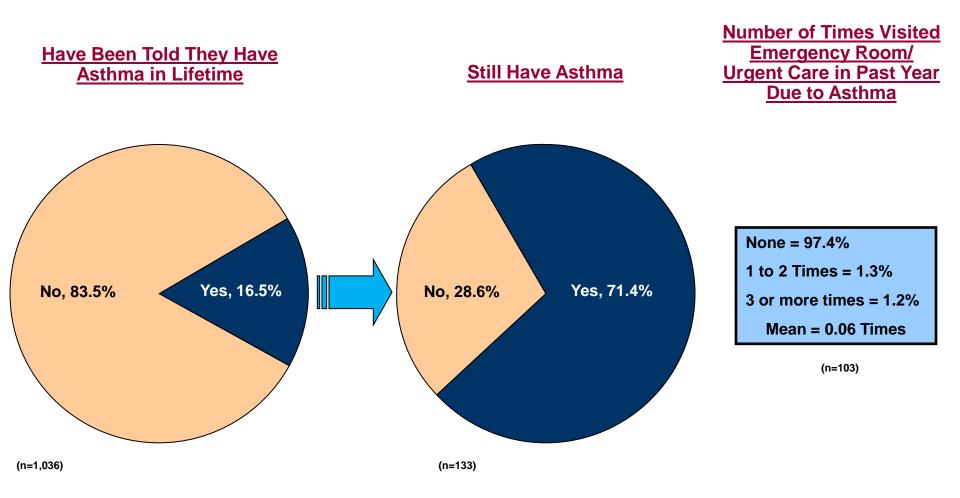
Told Have Diabetes by Demographics



(n=1,040)

Approximately one in six (16.5%) adults have been diagnosed with asthma in their lifetime. Fewer (11.6%) adults <u>currently have</u> asthma. Having asthma rarely results in a trip to the emergency room or urgent care.

Asthma Among Adults



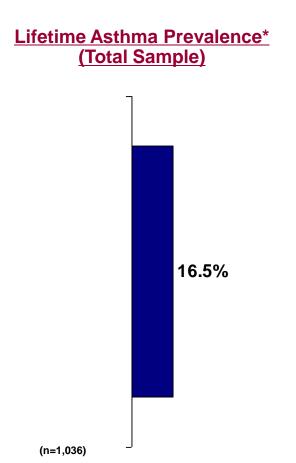
Q6.1: Has a doctor, nurse, or other health care professional EVER told you that you had asthma?

Q6.1a: Do you still have asthma?

Q6.1b: During the past 12 months, how many times did you visit an emergency room or urgent care center because of your asthma?

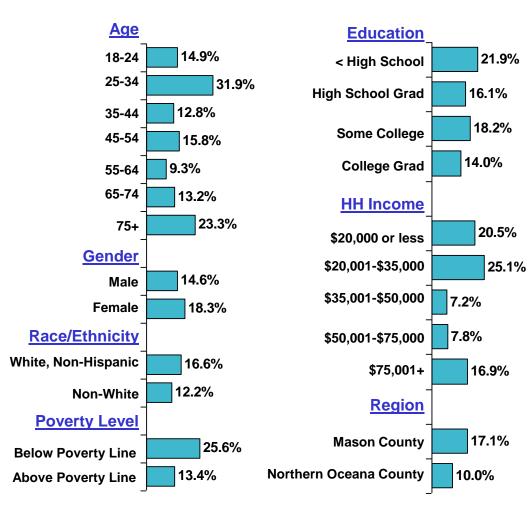
The rate for lifetime asthma is far greater for those living below the poverty line. Also, the rate is greater for those with household incomes \$35K or less and for those in Mason County vs. those in northern Oceana County.

Asthma Among Adults (Cont'd.)



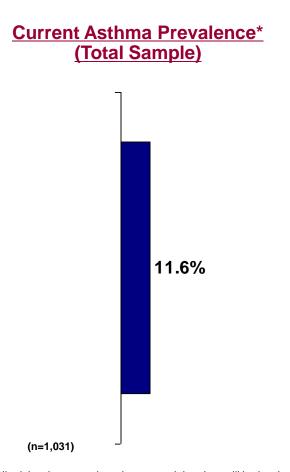
^{*}Among all adults, the proportion who reported that they were ever told by a doctor, nurse, or other health care professional that they had asthma.

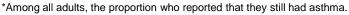
Lifetime Asthma by Demographics



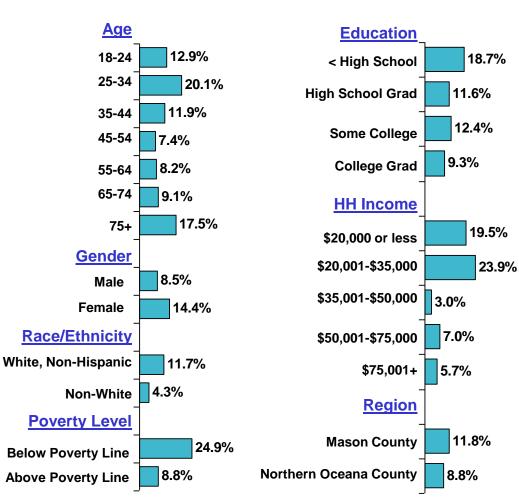
Women are more likely to have asthma than men, and those living below the poverty line are more likely to have asthma than those living above. The highest prevalence of asthma can be found in adults in households making \$35K or less annually.

Asthma Among Adults (Cont'd.)



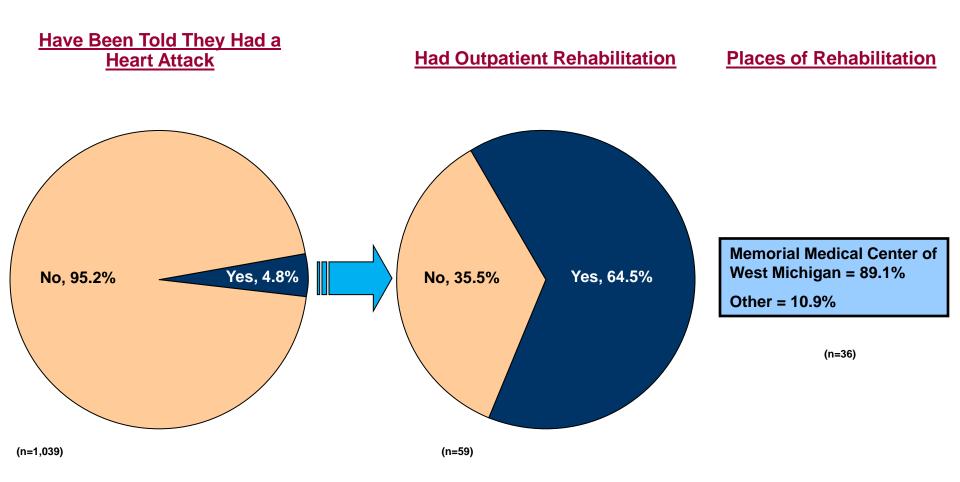


Current Asthma by Demographics



Less than one in twenty (4.8%) area adults have had a heart attack. Almost two thirds (64.5%) of those who have had a heart attack also had outpatient rehabilitation. The vast majority of outpatient rehabilitation was completed at MMCWM.

Cardiovascular Disease

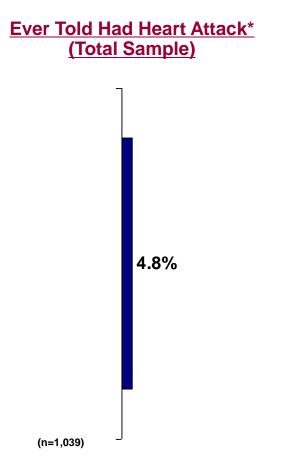


Q6.2: Has a doctor, nurse, or other health care professional EVER told you that you had a heart attack also called a myocardial infarction? Q6.2a: (If yes) Following your diagnosis, did you go to any kind of outpatient rehabilitation, sometimes called "rehab?" Q6.2b: (If yes) Where did you go for that rehab?



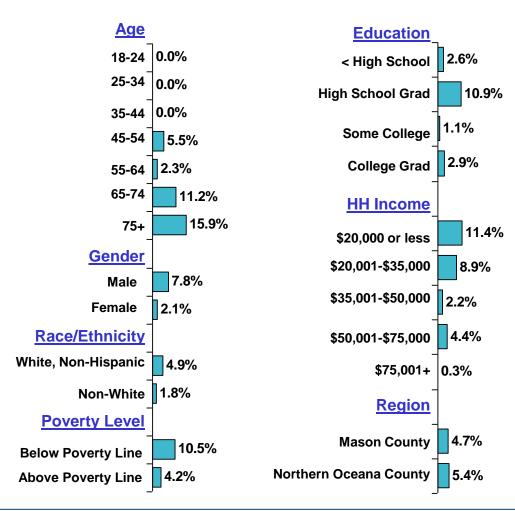
Not surprisingly, the prevalence of heart attacks increases with age. Men are more likely to have had a heart attack than women and Whites are more likely to have had one than non-Whites. Adults living below the poverty line are twice as likely to have had a heart attack than those living above it.

Cardiovascular Disease (Cont'd.)



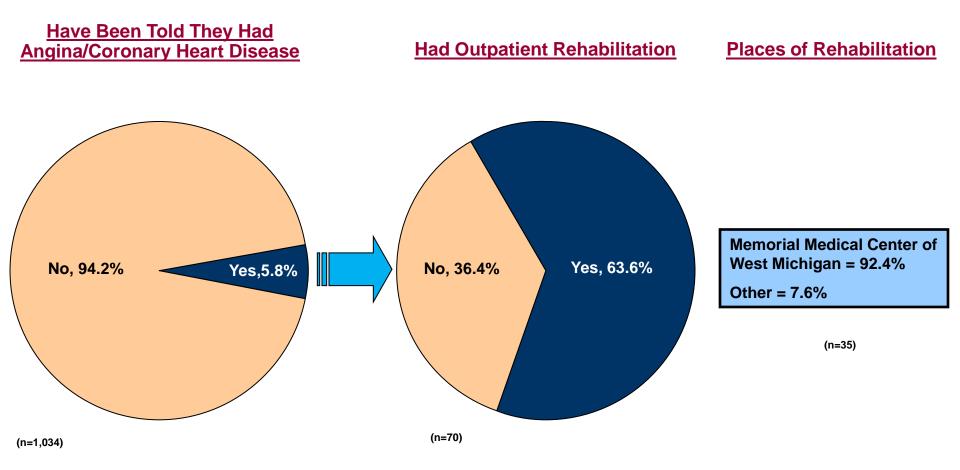
^{*}Among all adults, the proportion who had ever been told by a doctor that they had a heart attack or myocardial infarction.

Told Had Heart Attack by Demographics



Similarly, 5.8% of area adults have been told they have angina or coronary heart disease and more than six in ten (63.6%) of them have had outpatient rehabilitation for their angina. Again, the vast majority of outpatient rehabilitation was completed at MMCWM.

<u>Cardiovascular Disease (Cont'd.)</u>



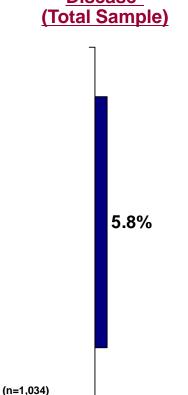
Q6.3: Has a doctor, nurse, or other health care professional EVER told you that you had angina or coronary heart disease? Q6.3a: (If yes) Following your diagnosis, did you go to any kind of outpatient rehabilitation, sometimes called "rehab?" Q6.3b: (If yes) Where did you go for that rehab?



The rate for angina is higher for adults aged 55+, with lower incomes, and those with less than a college education.

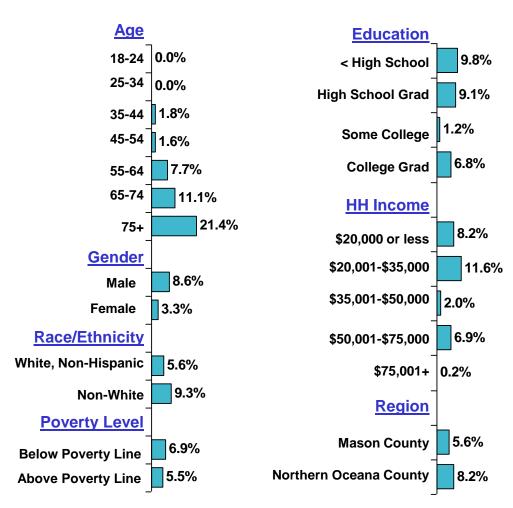
Cardiovascular Disease (Cont'd.)

Ever Told Have Angina/Coronary Heart <u>Disease*</u> (Total Sample)



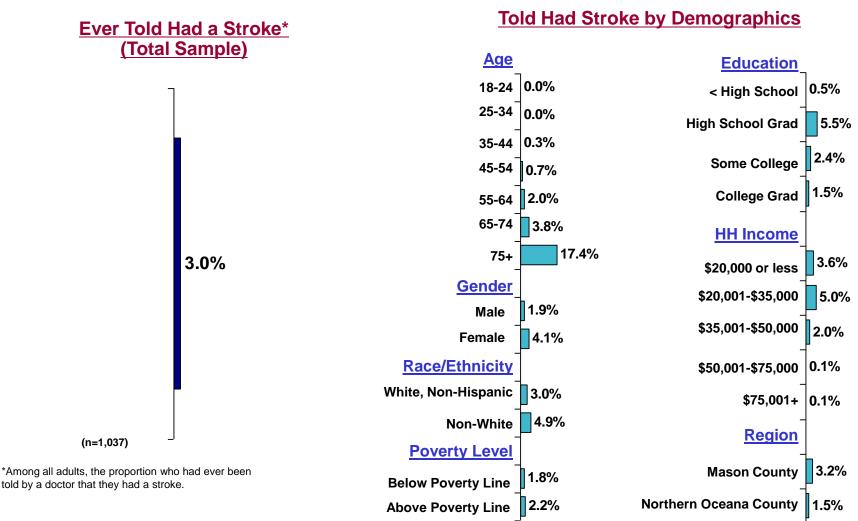
^{*}Among all adults, the proportion who had ever been told by a doctor that they had angina or coronary heart disease.

Told Have Angina/Coronary Heart Disease by Demographics



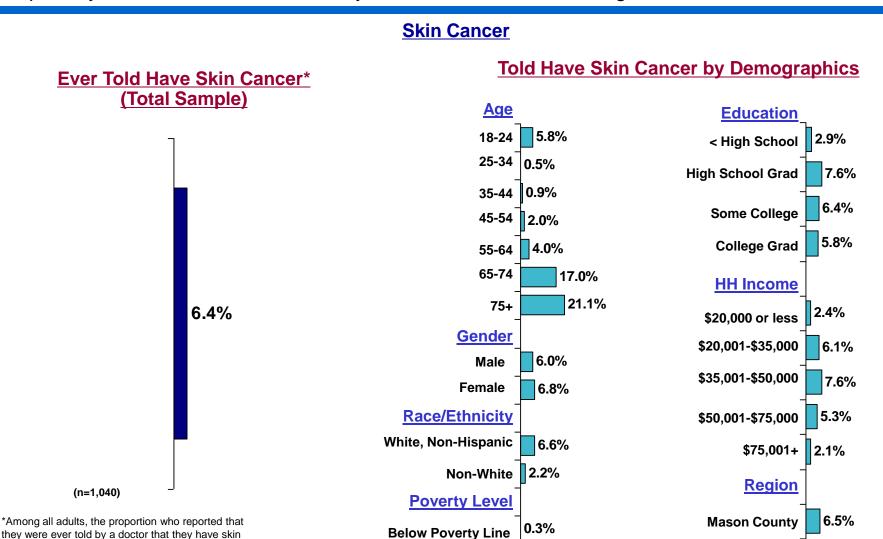
Even fewer area adults have had a stroke (3.0%). The highest prevalence of stroke can be found in the highest age group (75+) and lowest income groups (\$35K or less).

<u>Cardiovascular Disease (Cont'd.)</u>



Q6.4: Has a doctor, nurse, or other health care professional EVER told you that you had a stroke?

Roughly one in fifteen (6.4%) area adults have been told by a doctor they have skin cancer. Expectedly, this proportion is highest among those aged 65 or older. People living above the poverty line are significantly more likely to be diagnosed with skin cancer than people living below the poverty line. Whites are more likely than non-Whites to be diagnosed with skin cancer.



Above Poverty Line

5.6%

Q6.5: Has a doctor, nurse, or other health care professional EVER told you that you had skin cancer?

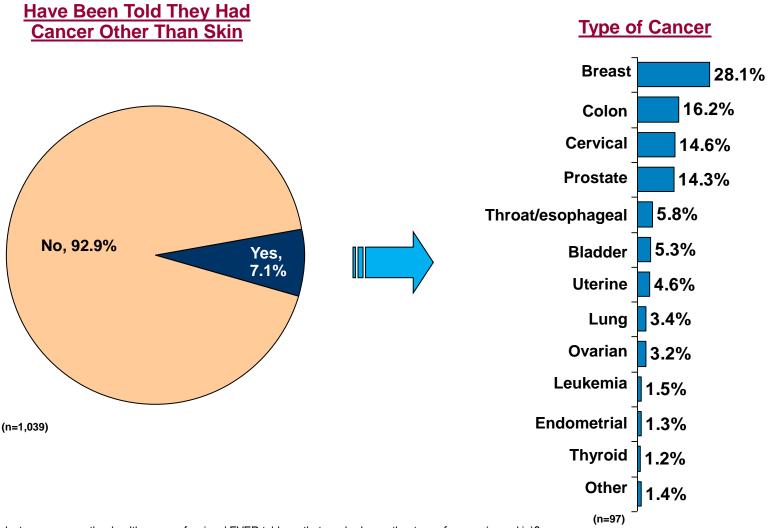
cancer.

5.2%

Northern Oceana County

The prevalence of cancer other than skin is 7.1%. Although the types of non-skin cancer are wide ranging, the most common types of cancer are breast, colon, cervical, and prostate.

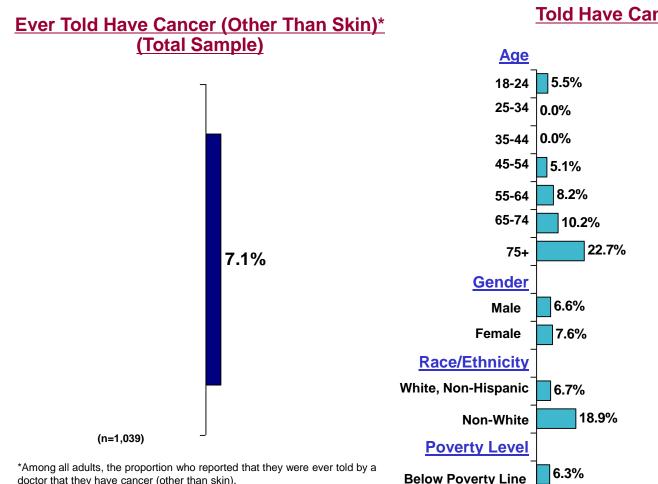
Other Types of Cancer (Non-Skin)



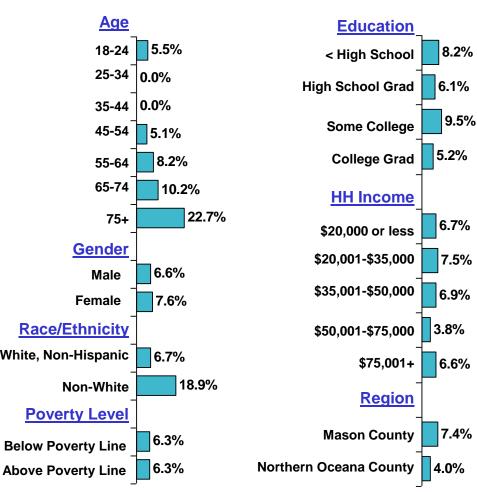
Q6.6: Has a doctor, nurse, or other health care professional EVER told you that you had any other type of cancer (non-skin)?

The proportion of adults with cancer other than skin rises dramatically with age; 22.7% of residents aged 75 or older have been diagnosed with some form of cancer other than skin. The rate is also higher among non-Whites compared to Whites.

Cancer (Non-Skin) (Cont'd.)

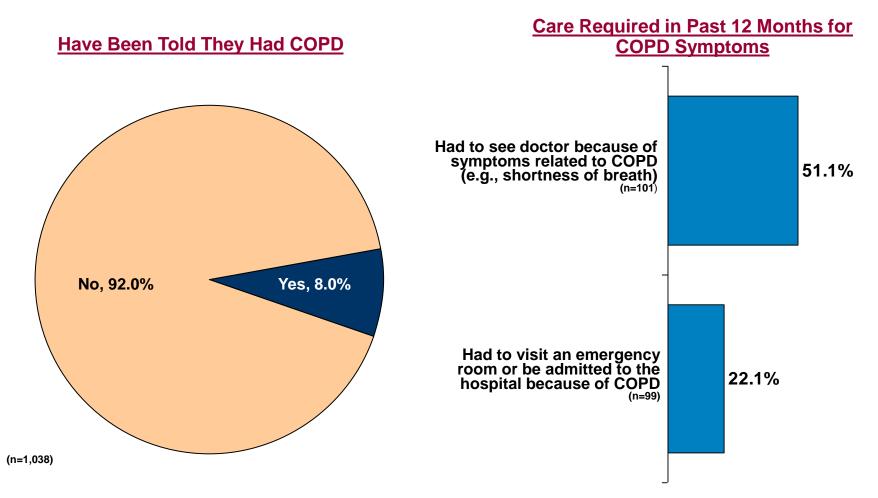


Told Have Cancer by Demographics



Roughly one in twelve (8.0%) area adults have COPD, emphysema, or chronic bronchitis. Over half of them have had to visit their doctor in the past twelve months because of symptoms. Moreover, over one-fifth (22.1%) had to visit the ER/ED or were admitted to the hospital because of their COPD.

COPD, Emphysema or Chronic Bronchitis



Q6.7: Has a doctor, nurse, or other health care professional EVER told you that you had COPD (chronic obstructive pulmonary disease), emphysema, or chronic bronchitis?

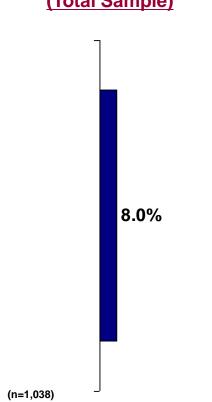
Q6.7a: (If yes) Other than a routine visit, have you had to see a doctor in the past 12 months for symptoms related to shortness of breath, bronchitis, or other COPD, or emphysema flare?

Q6.7b: (If yes) Did you have to visit an emergency room or be admitted to the hospital in the past 12 months because of your COPD, chronic bronchitis, or emphysema?

COPD is more common among residents who are older (65+), have lower annual household incomes (\$35,000 or less), and are White.

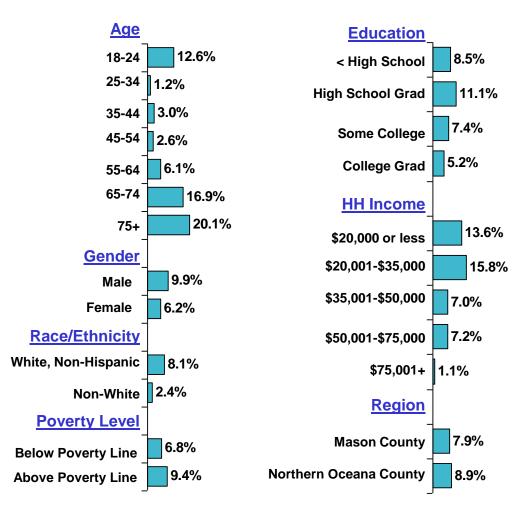
COPD (Cont'd.)

Ever Told Have COPD* (Total Sample)



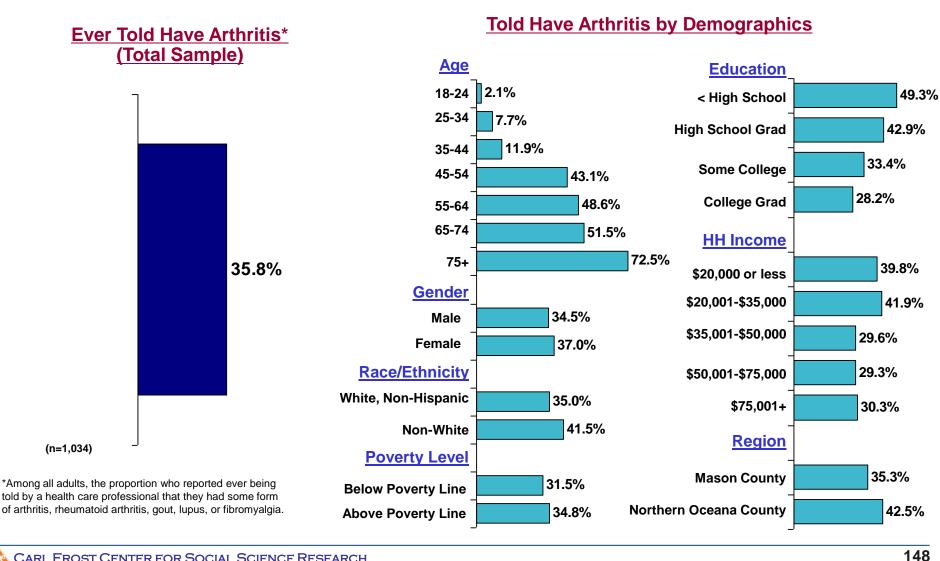
*Among all adults, the proportion who reported that they were ever told by a doctor that they have chronic obstructive pulmonary disease (COPD), emphysema, or chronic bronchitis.

Told Have COPD by Demographics



More than one-third (35.8%) of area adults have ever been told by a health care professional they have arthritis. This rate, not surprisingly, rises dramatically with age. The rate also drops with level of education. The lowest income groups have higher rates of arthritis than those with higher incomes.

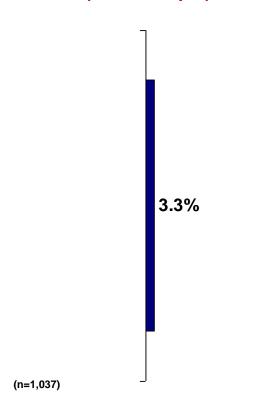




With regard to kidney disease, other than adults aged 75+ having far higher rates than younger adults, there are few demographic differences.

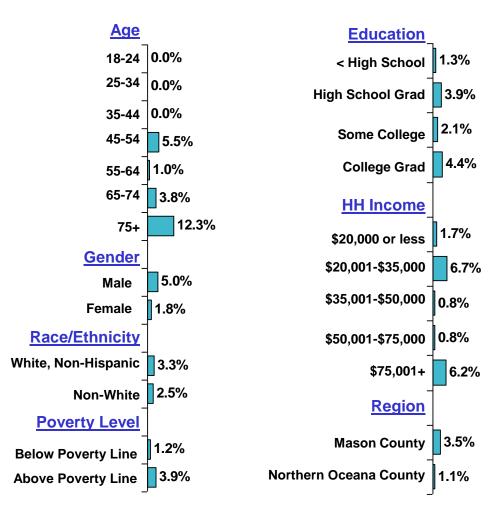
Kidney Disease

Ever Told Have Kidney Disease* (Total Sample)



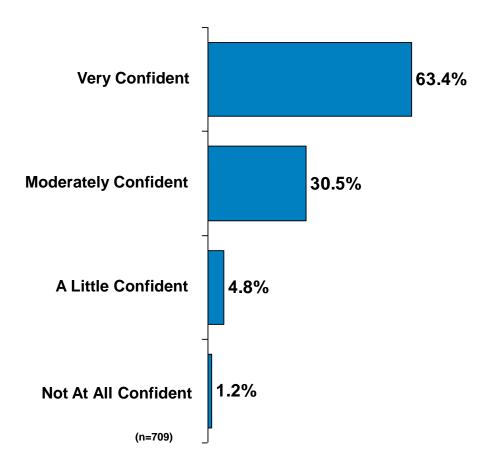
^{*}Among all adults, the proportion who reported ever being told by a health care professional that they had kidney disease.

Told Have Kidney Disease by Demographics



Nearly all (93.9%) MMCWM area adults with any of the previously discussed medical conditions are at least moderately confident, 63.4% <u>very confident</u>, that they can do all things necessary to manage their chronic condition on a regular basis.

Confidence in Ability to Manage Chronic Condition on a Regular Basis (All Diseases)



Q6.12: Having an illness often means doing different tasks and activities to manage your condition. How confident are you that you can do all the things necessary to manage your condition(s) on a regular basis?

Comparison of BRFS Measures Across Regions

Health Status Indicators*

			<u></u>			
	Region					
	MMCWM Target Area 2012	MI 2011	U.S. 2010			
General Health Fair/Poor	19.9%	17.2%	18.1%			
Poor Physical Health (14+ days)	16.6%	13.1%	12.0%			
Poor Mental Health (14+ days)	9.8%	13.1%	12.0%			
Activity Limitation (14+ days)	10.2%	9.4%	15.3%			
Dissatisfied/Very Dissatisfied with Life	6.8%	6.1% (2009)				
Rarely/Never Receive Social and Emotional Support	6.8%	6.5% (2009)				
Total Disability	29.2%	28.2%				
Any Activity Limitation	28.6%	26.4%	23.3%			
Use Special Equipment	9.1%	8.4%	7.7%			
Obese	28.1%	31.3%	24.7%			
Overweight	36.0%	34.2%	35.8%			
Not Overweight or Obese	35.9%	34.6%	36.7%			
No Health Care Coverage (18-64)	16.7%	18.3%	21.7%			
No Personal Health Care Provider	13.6%	15.5%	22.0%			

⁼ worst measure among the comparable groups

Sources: Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Selected Tables, Michigan BRFS, 2010 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, 2010

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^{*}Caution should be used when comparing Mason/Oceana County measures to those from Michigan or the U.S. because they include cell-phone population.

Comparison of BRFS Measures Across Regions (Cont'd.)

Risk Behavior Indicators*

	Region		
	MMCWM Target Area 2012	MI 2011	U.S. 2010
No Leisure Time Physical Activity	27.5%	23.6%	24.4%
Inadequate Fruit and Vegetable Consumption	89.0%	83.2%	76.6% (2009)
Current Cigarette Smoking	18.7%	23.3%	20.0%
Former Cigarette Smoking	30.2%	25.7%	24.6%
Current Smokers who Tried to Quit	58.5%	62.4%	59.3%
Smokeless Tobacco	5.3%	4.4%	3.7%
Binge Drinking	19.3%	19.7%	16.7%
Heavy Drinking	6.2%	7.0%	6.0%
Ever Told High Cholesterol	34.8%	41.8%	38.5%
Ever Told High Blood Pressure	33.2%	34.2%	31.5%

= worst measure among the comparable groups

*Caution should be used when comparing Mason/Oceana County measures to those from Michigan or the U.S. because they include cell-phone population.

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Sources: Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Selected Tables, Michigan BRFS, 2010 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, 2010, 2009 (*=Michigan figures are from U.S. CDC Tables for Michigan)



Comparison of BRFS Measures Across Regions (Cont'd.)

Clinical Preventive Practices*

	Region		
	MMCWM Target Area	MI 2010	U.S. 2010
Ever Had Breast Exam (Females, 40+ only)	94.2%		
Had Breast Exam in Past Year (Females, 40+ only)	66.2%		
Ever Had Mammogram (Females, 40+ only)	96.2%	94.2%	
Had Mammogram in Past Year (Females, 40+ only)	72.1%	61.4%	
Had Mammogram in Past 2 Years (Females, 40+ only)	83.9%	78.2%*	75.2%
Ever Had Pap Test	93.5%	93.6%	
Had Appropriately Timed Pap Test	74.4%	77.7%	81.3%
Ever Had PSA Test (Males, 50+ only)	84.1%	83.1%	
Ever Had Sigmoidoscopy or Colonoscopy (50+ only)	70.1%	70.9%	62.0%
Had Sigmoidoscopy /Colonoscopy in Past 5 Years (50+)	60.9%	57.4%	
No Teeth Cleaning in Past Year	29.6%	29.2%	
Had Flu Vaccine in Past Year (65+ only)	63.0%	58.0% (2011)	53.5%
Ever Had Pneumonia Vaccine (65+ only)	54.4%	67.1% (2011)	59.2%

⁼ worst measure among the comparable groups

Sources: Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Selected Tables, Michigan BRFS, 2010 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, 2010 (*=Michigan figures are from U.S. CDC Tables for Michigan)

^{*}Caution should be used when comparing Mason/Oceana County measures to those from Michigan or the U.S. because they include cell-phone population.

Comparison of BRFS Measures Across Regions (Cont'd.)

Chronic Conditions*

	Region		
	MMCWM Target Area 2012	MI 2011	U.S. 2010
Lifetime Asthma Prevalence	16.5%	14.8%	13.5%
Current Asthma Prevalence	11.6%	9.9%	8.8%
Ever Told Had Arthritis	35.8%	31.0%	24.6%
Ever Told Had Heart Attack	4.8%	5.3%	4.3%
Ever Told Had Angina/Coronary Heart Disease	5.8%	5.0%	4.3%
Ever Told Had Stroke	3.0%	3.3%	2.9%
Ever Told Had Diabetes	12.4%	10.0%	9.8%
Current Major Depression	7.0%	9.4% (2010)	
COPD	8.0%	8.0%	6.3%
Kidney Disease	3.3%	3.0%	2.5%
Skin Cancer	6.4%	5.6%	5.7%
Other Cancer (Non-Skin)	7.1%	7.3%	6.5%

⁼ worst measure among the comparable groups

Sources: Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Selected Tables, Michigan BRFS, 2010 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, 2010, 2009

^{*}Caution should be used when comparing Mason/Oceana County measures to those from Michigan or the U.S. because they include cell-phone population.

**The measure for major depression was calculated differently for MMCWM area and Michigan.

Key Stakeholder Interviews



Health care access, particularly access to primary care (including a lack of affordable care for underinsured/uninsured/Medicaid residents), obesity (including childhood obesity), chronic disease, mental health issues (including substance abuse), and access to specialty care, particularly for uninsured, underinsured, and Medicaid individuals are identified by Key Stakeholders as the most pressing health issues for MMCWM area residents.

Most Pressing Health Needs or Issues

- Less frequently mentioned needs or issues are:
 - Addressing unhealthy behavior (e.g., smoking)
 - High suicide rate
 - Infertility
 - Lack of assisted living facilities specifically concerning those with Alzheimer's units

- Lack of physicians accepting Medicaid
- Lack of system coordination
- Poor nutrition
- Poverty
- Substance abuse
- Teen pregnancy
- The majority feel these are county-wide issues and also feel those with an inability to afford health care services (low income, uninsured, underinsured, and Medicaid recipients) are most affected by these issues.

Q1. What do you feel are the most pressing health needs or issues in Mason/Oceana County? (PROBE FOR DIFFERENCES BETWEEN SUB-POPULATIONS, GROUPS. ALSO, CLARIFY ISSUES ARE THE SAME/DIFFERENT FOR COUNTY VS. THEIR LOCAL COMMUNITY)



Verbatim Comments on Most Pressing Health Needs or Issues

I think access to care is an issue for low-income, uninsured, Medicaid clients, other than kids. We have a wonderful pediatrician in that county that is good about serving the Medicaid population but it's really for adults and uninsured individuals and people, adults, who have Medicaid that we really struggle just getting them in for care. And then on the public health side, it's really trying to address the chronic disease issues, risk reduction behaviors, that center around diabetes and cardiovascular disease and cancer. Trying to create that sense of personal responsibility and change that mindset with people, that we're going to have a quick fix.

I would say affordable health care, because of the uninsured population. And also the physician's willingness to take Medicaid recipients. I guess I am somewhat concerned about the obesity rate, especially among teens or youth.

My biggest concern is related to access for under and uninsured. And I include Medicaid as underinsured by the way. Lack of access and lack of coordination. Those are probably my biggest concerns and then obviously there's a lack of specialty care on the local level. There's only one pediatrician's office in three counties and those are all concerns.

Substance abuse. I would say alcohol and misuse of prescribed drugs or children accessing their parents' drugs.

We have a lot of obesity and poor nutrition in the county. Many times I've thought there's a lot of infertility in the county among the women. We're a small community and we don't have the specialty services – everybody has to go somewhere else for neurology or somewhere else for cardiology or any of the specialty services we don't have around here.

Q1. What do you feel are the most pressing health needs or issues in Mason/Oceana County? (PROBE FOR DIFFERENCES BETWEEN SUB-POPULATIONS, GROUPS. ALSO, CLARIFY ISSUES ARE THE SAME/DIFFERENT FOR COUNTY VS. THEIR LOCAL COMMUNITY)



While most Key Stakeholders feel the issues of **obesity**, **poor nutrition**, and to some extent **chronic disease**, are being addressed through **wellness and prevention programs** (e.g., Healthy Communities, Win with Wellness), most feel the issues of behavioral health and health care access are not being adequately addressed. Overall, the majority feel current solutions do not meet existing needs due to **a general lack of resources** (e.g., funding, available providers).

How Issues Are Being Addressed & Who is Affected

- Most mention these issues <u>can be</u> addressed by:
 - Community collaboration
 - Establish federally-qualified health center
 - Implementing a satellite clinic model
 - Increased community dialogue
 - More mid-level providers engaged in the delivery of care
 - Non-traditional hours for health care services.

- Payment reform for physicians
- Programs that change mindset/culture around personal responsibility
- Recruiting additional primary care physicians
- Systemic coordination of processes and services
- Most feel the issues of access and behavioral health are not addressed due to a lack of resources and reimbursement limitations for physicians.
- Although unable to specifically speak to size and scope of the most pressing issues, the majority of Key Stakeholders discussed these problems with a general awareness that there is a current lack of a health care system in place for MMCWM area residents and that many problems stem from life style choices and must be addressed to avoid larger community health problems in the future.
- These issues are thought to be important for all of the MMCWM area residents but are <u>most affecting</u> lower income, underinsured, uninsured, and Medicaid populations.

Q1a. Is there anything currently being done to address these issues? Q1b. (If yes) How are these issues being addressed? (PROBE FOR EFFECTIVENESS) Q1c. (If no) In your opinion, why aren't these issues being addressed? Q1d. (If no) In what ways have these issues been addressed in the past, if any? (PROBE FOR EFFECTIVENESS) Q2. What is the size and scope of the most pressing issue/problem? (PROBE FOR NUMBER/PROPORTION OF PEOPLE TOUCHED, SPECIFIC GROUP TOUCHED. IF HEALTH CARE ACCESS MENTIONED, PROCEED WITH Q5, THEN COME BACK TO Q3)



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Verbatim Comments on How Issues Are or Could be Being Addressed and Who is Affected

I guess with the obesity rate, they are addressing it, although I'm not sure it's capturing the population it needs to capture. Most of the people that attend the "Win with Wellness" have the financial resources to deal with their obesity problem or their lack of exercise, verses people that may be economically disadvantaged.

I just think the lack of resources. Our closest clinic is in Baldwin. It's based on a sliding fee scale.

I know the elderly population continues to grow. And I think that we need to be better prepared to meet the needs of those people when they have a need and I think that's what, in Oceana County, I think that's what they're trying to do but the money just isn't there. I'm not saying it's an immediate need right now, but in the near future it will be a need as the aging population continues to grow.

I think basic access is really important. That you have doctors that take Medicaid. Then I think access to health care at times that families can actually use it, so non-traditional hours for health care is really important because if you can't get people to go to the doctor, you can have the best health care system in the world but it's not going to achieve its outcome.

It's also, really, trying to just get people thinking – the issue of getting people moving – even people who are used to being very sedentary and may have arthritis, may already be extremely overweight.

There are a couple of initiatives that are going on. I don't think they are as strategic as maybe they could be and also trying to, public health isn't going to do this by themselves.

There could be a satellite clinic here of a federally qualified health center which would improve access for under and uninsured, and Medicaid folks. There could be a joint indigent clinic model could be done here in Mason County or barring that, some sort of creative collaboration with physician practices but again the challenge is they're all kind of independent and relatively small practices in Mason County.

Q1a. Is there anything currently being done to address these issues? Q1b. (If yes) How are these issues being addressed? (PROBE FOR EFFECTIVENESS) Q1c. (If no) In your opinion, why aren't these issues being addressed? Q1d. (If no) In what ways have these issues been addressed in the past, if any? (PROBE FOR EFFECTIVENESS) Q2. What is the size and scope of the most pressing issue/problem? PROBE FOR NUMBER/PROPORTION OF PEOPLE TOUCHED, SPECIFIC GROUP TOUCHED...)



Monitoring health care access and chronic disease rate reductions are most frequently mentioned as important measures for health-related outcomes, followed by monitoring of wellness/screening rates, immunizations, morbidity, and obesity rates. One Key Stakeholder specifically mentions the importance of capturing local data to compare to state and national data.

Important Health Outcomes

- Stakeholders identify the following <u>as important measures</u> for health-related outcomes:
 - Child immunizations
 - Chronic disease rates
 - Health education
 - Evaluating local data to state and national norms
 - Healthy lifestyle choices
 - Increase in access to health care
 - Morbidity rates
 - Rate reductions (long-term in chronic disease and obesity)
 - Wellness/screening issues
 (e.g., yearly physicals,
 mammograms, colonoscopies)

As we start to look at incidents per 100,000 in the population, what I would hope is as health care providers are wrestling with improving population health, that we find a way to engage people who are going to continue to make individual lifestyle choices, so that we engage them in such a way that provides them the tools, so we start to see lower incidents of the chronic health issues that go on.

I think access is critical. Your main chronic illness markers like blood glucose levels, BMI, but again back to my fundamental concern – "Do you have a primary care physician who you actually see on a regular basis?" I think if you don't have access you won't have outcomes.

I think you'd want to evaluate your wellness issues – what's the percentage of women that get mammograms on a regular basis? What is the percentage of people that get colonoscopies on a regular basis?

I'm really concerned about access points - where are the health care professionals, and do people have a way to get there and are they open at times that people want to access health care?

Whatever you evaluate, it needs to be something that you can take your local data and evaluate it against state and national norms, and that you can establish benchmarks that hopefully maybe you've got some targets.

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Q3. What are the health outcomes that should be evaluated? (PROBE FOR MORTALITY, MORBIDITY, RISK BEHAVIOR)

The majority of Key Stakeholders believe health care access is good, except for those individuals who are using Medicaid, are uninsured, or for those who have a severe and consistent mental illness. They also mention there are not enough primary care physicians accepting Medicaid, language barriers, and lack of transportation as obstacles to access.

The State of Health Care Access

- * Most believe health care access is good for individuals with private insurance, but much worse *for those individuals who are using Medicaid or are uninsured*.
- Specifically, Key Stakeholders identify the following limitations to health care access for residents in the MMCWM target area:
 - Lack of access for persons with severe, consistent mental illness
 - Lack of access for underinsured/uninsured
 - Lack of physicians taking Medicaid
 - Language barriers
 - Supply/demand issues need more providers (physicians and mid-level)
 - Transportation
- The view on disability services is mixed: 29% say there are adequate disability services, specifically regarding rehabilitation and long-term care. However, 42% say services are inadequate, citing the population has multiple needs and most have to travel out of county for services. Additionally, 29% are unsure. While one individual thinks the disabled population is not large enough for in-county services, another suggests partnering with behavioral health caretakers to help develop a network of support for disabled residents.
- Q5. Describe the current state of health care <u>access</u> in Mason/Oceana County. (PROBE FOR ISSUES OF TRANSPORTATION, HEALTH COVERAGE, DIFFERENCES IN SUB-POPULATIONS, GROUPS. ALSO, CLARIFY ISSUES ARE THE SAME/DIFFERENT FOR COUNTY VS. THEIR LOCAL COMMUNITY) Q6g. Are there <u>adequate disability service programs</u>? Q5h. (If no) <u>What can be done</u> to address this inadequacy?

Verbatim Comments on the State of Health Care Access and Disability Resources

I don't know if you can consider assisted living a health care access issue, but I don't think there's any problem with nursing homes other than the fact that we need to have separate units for people who have Alzheimer's disease to protect them from wandering.

I think there actually is a network that could serve, for instance, veterans, and there's no real magic of serving someone with a disability. If we know how to work with someone with a developmental disability, we can work with someone with a physical disability. I think by and large there is probably an adequate network or [there] could without too much difficulty be an adequate network. I think the major issues are around coverage and authorization more than ability to deliver.

If you have Medicaid in [MMCWM target area] with adults we have people enrolled in these qualified health plans and unless you have a relationship with a health care provider, and maybe that started when you were younger, it's very hard for individuals with Medicaid or with our county health plan coverage to get in. There is one access [point] and that doesn't create a lot of options for these individuals.

Physicians don't seem to take Medicaid patients so where are they supposed to go? There's some insurance package through the Health Department and again it's some kind of Medicaid supplement, but there's no place to go. Or one physician will take you, or one clinic will take you and that's it. If you have a major issue and have to go to some kind of specialist, then what are you supposed to do? These people won't have the money to pay for it.

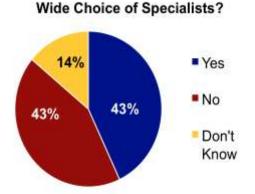
We have the hospital, we have a couple clinics, and we've got the health department. But I know access to people on Medicaid is very limited. Access for people without insurance at all is almost nonexistent.

Q5. Describe the current state of health care <u>access</u> in Mason/Oceana County. (PROBE FOR ISSUES OF TRANSPORTATION, HEALTH COVERAGE, DIFFERENCES IN SUB-POPULATIONS, GROUPS. ALSO, CLARIFY ISSUES ARE THE SAME/DIFFERENT FOR COUNTY VS. THEIR LOCAL COMMUNITY) Q6g. Are there <u>adequate disability service programs</u>? Q5h. (If no) <u>What can be done</u> to address this inadequacy?



While most feel there is a wide variety or choice of primary care physicians, the majority think **there is little or no choice for the underinsured, uninsured, and Medicaid recipients** due to **low reimbursement rates** for servicing such residents. Stakeholders also mention that many physicians are not taking new patients, the challenges of recruiting physicians to the area, and the nation-wide decline in primary care physicians as many choose to work in more lucrative specialty fields. Key Stakeholders also see **limits to specialty care** due to the **rural nature of their communities**, although two Key Stakeholders feel the hospital provides good specialty services to residents in the MMCWM target area.

Wide Choice of Providers? 14% Yes No Don't Know



Choice of Providers

Because the individual can't afford it. Because it's a business. It's their business and I think they're going to accept so many Medicaid recipients because it doesn't pay the same rate of return as somebody with private insurance and so they're only going to accept so many Medicaid patients and after that, that's going to be it.

I actually live in Oceana, and it seems as though the hospital has done a nice job of providing specialty care on a personal basis.

I think that's only available to the uninsured if they can pay up front. Which means if they don't have any money, they can't pay for it, therefore they end up accessing the emergency room, which is very costly.

People are not going into that [primary care] field, because you'd be an idiot to go into that field – things like pediatrics and primary care, your reimbursement stinks, so the incentives are not aligned to promote growth in that field.

The practices can't afford it due to payer mix. The Medicaid and the uninsured, that's a go broke issue I think. Some of the other barriers, if there's already a little bit of a limit, a person with a severe and persistent mental illness, when you're operating a private office, might make other patients uncomfortable as well. There are stigma issues, there are compliance issues, there are risk issues for physicians.

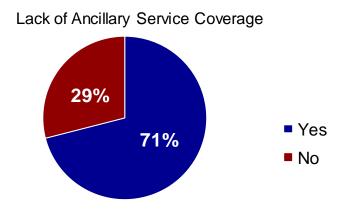
There are fewer specialists and the economic model doesn't fit here. You give up some things to live on the beach.

Yes. I wouldn't say a wide variety – there is a variety of choice, but I wouldn't say it's a wide variety. And I know many of our physicians aren't taking new patients. Their practices are full.

Q4a. Is there a wide variety/choice of primary health care providers? 4b. (If yes) Is this variety/choice available to both insured and uninsured people? 4c. (If no) In your opinion, why is there a lack of primary health care providers? 4d. Is there a wide variety/choice of specialist care/specialist care providers?

The majority of Key Stakeholders also see a general *lack of insurance coverage for ancillary services* such as for prescriptions or dental coverage as well as an *inability to pay out-of-pocket expenses* such as deductibles or co-pays for MMCWM area residents.

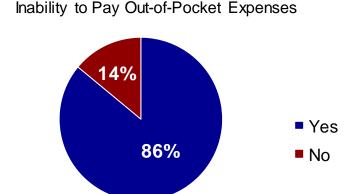
Ancillary Service Coverage and Inability to Pay Out-of-Pocket Expenses



I would tell you traditionally every community struggles with that. Unless you have a federally qualified health clinic or some kind of subsidized dental clinic, it's usually a challenge.

Oh yes. Dental is definitely. And we have a dental clinic in Manistee and Oceana County that just serves the Medicaid population. For Medicaid, Mason County will be moving to Healthy Kids Delta Dental and that will hopefully increase more of the private dentists serving that population.

Where do you get your dental work done if you're a Medicaid person? The further out you go, the less access there is.



I think in these rural communities, if someone does have health insurance and they are working at a smaller industry that might have insurance. I think there're people that are making choices whether to even join that health plan because they're having to pay the portion they're having to pay.

I would say yes, because I've had experiences with members in the community indicating that the spend-downs that they have for Medicaid impact their ability to use the Medicaid. For example, they're making too much money to be eligible for Medicaid without spending a certain amount out-of-pocket and they don't feel they have that money to spend out of pocket.

We've seen our bad debt expense go up year after year significantly... and not from uninsured patients.

Q4e. Is there a lack of insurance coverage for ancillary services, such as prescriptions or dental care? Q4f. Is there an inability to afford out-of-pocket expenses, such as co-pays and deductibles?

Existing Programs and Services

All Key Stakeholders think existing programs and services are meeting the MMCWM target area's needs and demands at least <u>somewhat well</u>, and 29% say needs are met <u>very well</u>. However, most also believe there are many services that are lacking, particularly for the **uninsured**, **those with a limited income**, and **Medicaid populations**.

Programs/Services Meeting Needs & Programs/Services Lacking

- Stakeholders believe the MMCWM target area has many dedicated people and organizations addressing community health needs, but feel the population is often hard to reach and that there is a lack of coordination among services. Many still stress an overall lack of resources to meet needs.
- Services identified most often as lacking are programs targeting the uninsured and Medicaid populations and programs comprehensively targeting chronic diseases. Specifically, Stakeholders identify the following as lacking:
 - Baby health programs
 - Increased resources for already existing programs
 - Programs on general health and wellness (e.g., diabetic & nutrition programs)
 - Programs targeting adolescents

- Programs targeting chronic disease
- Programs targeting the uninsured/underinsured/Medicaid recipients
- Subservices (e.g., dermatology, rheumatology

Three Stakeholders believe there are unneeded services or service duplication in the MMCWM target area - for occupational therapy services, needs claims processing, and private entities performing services for chronic pain management.

Q5. How well do existing programs and services meet the needs and demands of people in your community? Would you say they meet them exceptionally well, very well, somewhat well, not very well, or not at all well? Q5a. Why do you say (INSERT RESPONSE)? (PROBE FOR DIFFERENCES IN SUB-POPULATIONS, GROUPS) Q5b. What programs or services are lacking in the community? (PROBE FOR PROGRAMS/SERVICES THAT ADDRESS SPECIFIC SUB-POPULATIONS, GROUPS, PRIMARY CARE, CHRONIC DISEASE) Q5c. Are there any programs/services that currently exist that aren't needed? Q5d. (If yes) What are theses programs/services? Why aren't they needed? Q5e. Is there any duplication of services? Q5f. (If yes) What services are duplicated?

Verbatim Comments on Programs/Services Meeting Needs & Programs/Services Lacking

Programs/Services Meeting Needs

I think that the basic services are there and that people understand that they need to provide those services, but you have people that are overextended or overstressed within their position of service delivery and so our staff are indicating that our clients aren't getting the level of attention that they need. Not because people don't care or aren't competent, but because they're unable to provide it to as many people as they need to.

The hard part is that you may have a program, like a [screening program], it's a very specific target population you deal with so you may have a program that is serving only uninsured or underinsured so some of the programs have limitations because of income requirements or caseload requirements, they've met the caseload. I think there's always room to improve but with cutbacks in everybody's program areas, I think it continues to be a struggle. But I think there's a real commitment to work together and try to look at ways things can be approved upon.

While I believe that we have a lot of programs and services, I think as a whole, our community lacks coordination and the ability to streamline services to be more effectively delivered.

Programs/Services Lacking

Health information exchange is pretty darn archaic here. If you can't exchange information, it makes coordination that much harder. It's pretty simple, it's just hard to fix.

I think a comprehensive, evidence-based program targeting chronic disease reduction targeting adults. And I think the other piece is the adolescent population. Just the other thing would be adding primary care access.

I think there could be more programs on general health and wellness to bring people in and I think there could be more diabetic programs – I think that's a big problem, everywhere not just here. Diabetes seems to be on the increase. I think probably more well baby programs because I think many people, especially those that are uninsured, or have related insurance issues, use the ER for sick children.

The programs that are there probably need to be beefed up. Just more resources applied so that people can actually do complete assessment.

The reality is this density of population isn't going to support certain specialists and if we want full time access, then the hospital has to subsidize them.

Stakeholders would like to see more patients provided with **a medical home**, programs **inclusive of mental health**, **increased dialogue and partnerships**, **evidence-based action** on the health needs and concerns across agencies and disciplines, and increased outreach to populations most need of care.

Recommendations for Service Improvement & Improvement Plans

A willingness to come together and give up some of their turf and have a little bit more trust... we need multiple people to be able to step forward and take the risk and I think that's really what it comes down to. And people look at it as "Really, we don't have time to do more in addition to what we're already doing." And I'm looking at it as, "I don't want you to do anything in addition to what you're doing, I want to change what you're doing to make it better." We're operating under a very old model that just doesn't work in today's economy.

Before you start something new, maybe have the dialogue of is this needed, how well will it work, and ensuring that it's evidence-based – that there's a foundation for why you are investing those dollars in that project. Relying on research and proven outcomes before our gut tells us this would be a nice thing to do, before we expend those dollars.

The idea of patients in medical homes or health homes for a more chronic need, properly implemented with the right kind of design, I think could be huge for all of health care. The Holy Grail I think of total health care inclusive of behavioral, is one health care plan that all the practitioners are working off of.

We could probably do a better job trying to partner or work with some of the existing primary care health providers that aren't a part of our system. Maybe provide a better blanket covering the community for access.

Half of Key Stakeholders have the following future plans or recommendations for programs they would like to see: state-wide health and wellness programs, a broader, more coordinated, and community-wide focus on health, expanded services, more screening services, more Alzheimer's beds in a current care facility, state-wide obesity and infant mortality plans, and more health fairs.

There's a statewide obesity prevention plan and infant mortality [plan] that was just developed. I would like to see us look at how we implement those strategies not just in Mason County but in our whole jurisdiction. And the governor has come out with a 4X4 proposal of our own health and wellness so how do we take those recommendations and build upon them?

Q5i. In your opinion, how could any of the existing services/programs in your community be implemented better? Q7. Do you have any recommendations or plans for implementation of new programs or services that are currently lacking in the community? Q7a. (If yes) What are your recommendations or plans?



Barriers to Health Care Access

Many barriers to accessing health care programs and services are linked directly to the high cost for services and lack of affordable access to services for the uninsured/underinsured/Medicaid residents. Additionally, Stakeholders see lack of transportation as a significant barrier across the MMCWM target area. Further, language and cultural barriers exist for Hispanic residents as well as migrant workers in Oceana County. The majority do not feel these barriers have been adequately addressed and believe more community members and social service providers should get involved in planning and that an increased coordination of efforts needs to take place.

Barriers & How They Can Be Addressed

- All Key Stakeholders were able to identify the following access barriers existing for MMCWM area residents:
 - Cost
 - Cultural and language barriers specifically in Oceana County
 - Lack of transportation

- Lack of access for Medicaid and uninsured
- State and federal regulations on nursing homes
- Traditional hours for health care
- Stakeholders have many ideas on how these barriers can be addressed such as: implementing a mobile health care unit, provide community-based services (e.g., in a school setting), provide care in a more integrated setting, provide public transportation to health care services through different agencies, policy change, more high quality translation services, services during non-traditional service hours, and increased awareness and development of trust.
- Only one Stakeholder feels all relevant stakeholders are involved in planning. Those who don't see them involved want <u>more community members</u>, <u>service users</u>, <u>human resource</u> <u>department representatives</u>, and <u>social service agencies</u> at the table. Most see some involvement, but not in an ongoing or structured manner. Additionally, they would like to see <u>more community-level planning</u> to look at overall community health.

Q8: Are there any barriers or obstacles to health care programs/services in your community? (If yes) What are they? (PROBE FOR ACCESS ISSUES, COST, LANGUAGE BARRIER, CULTURAL)
Q8a: Have any of these barriers been addressed? (IF YES, PROBE FOR DEGREE OF EFFECTIVENESS) 8b. Are there any effective solutions to these issues? 8c. (If yes) What are they?
Are they cost effective? 8d. Have any solutions been tried in the past? (IF YES, PROBE FOR DEGREE OF EFFECTIVENESS) 10. With regard to health and health care issues, are relevant stakeholders or community residents involved in planning and decision making? 10a. (If yes) Who is involved? (PROBE FOR TITLES/ROLES, NOT NAMES) 10b. (If no) Should they be? 10c. (If yes) Who should be?

Verbatim Comments on Barriers & How They Can Be Addressed

Barriers

I don't think it [language] is a huge barrier maybe like it is in Oceana County. Sometimes I think it's just the hours we operate. We have the working poor that they don't have opportunities like maybe you and I have to take the afternoon off to go to the doctor or go to the dentist and take our kids to the immunization clinic. So trying to assure that we're making access points for individuals that are beyond the traditional 8-4:30 or 8-5 schedule. I think that's where many of our families get lost and I think opportunities to look at how we do more one-stop shopping – that we have some integrated services. If people need to go to radiation treatment or something, and they don't have any form of transportation, and they're not 60 years or older, there is nothing really for them. We do have Dial-A-Ride but it's not county-wide.

Their cars aren't always reliable, sometimes they don't have a car, sometimes they have a car but they don't have the money to put in the gas tank so access is a concern.

We're working with a lot of people who can be intimidated by having to use an answering service to get to their doctor, those kinds of things. Sometimes they are better if they're in relationship with somebody who can connect with them or they're much more likely to just go where they can be seen.

Addressing Barriers

I think awareness is a first step always. I wonder if physicians and hospitals and service providers of all types have had a conversation about that. So engaging the service population to find out what would be helpful, I think that would, that's always a part of reducing a barrier – first, understand it well. And then just the openness of adapting to the changing needs of a client population. But I think that can go a long way. Resources for transportation, I think that's almost a county-wide discussion. I understand they did have a transportation initiative awhile back that was almost successful, so maybe they need to readdress that.

I think if there's an opportunity to provide community-based services – to try to get them to it, whether it's a senior center or a school.

You need to have really quality translation and ability to translate when you get down to medical terms, it's even harder. It's a whole separate language.

Q8: Are there any barriers or obstacles to health care programs/services in your community? (If yes) What are they? (PROBE FOR ACCESS ISSUES, COST, LANGUAGE BARRIER, CULTURAL)
Q8a. Have any of these barriers been addressed? (IF YES, PROBE FOR DEGREE OF EFFECTIVENESS) 8b. Are there any effective solutions to these issues? 8c. (If yes) What are they?
Are they cost effective? 8d. Have any solutions been tried in the past? (IF YES, PROBE FOR DEGREE OF EFFECTIVENESS)



Verbatim Comments on Key Stakeholder Involvement

Honestly, I think just the general population, I think they get it, I just don't think they're asked for their opinion. I don't know about any one specific group. I don't think they all really work well together – we don't really cross systems. We don't really talk to each other.

I think there needs to be a voice for health care practitioners in the area, separate from the hospital. I also think the hospital should be involved. I clearly think [CMH] should be involved as the mental health and substance abuse provider in the area. Because I think behavioral health should be part of health. The Health Department for sure but right now we don't have a real ongoing health dialogue.

I would think there should be a physician base involved. I think there should be nursing people involved as well. And some of the hospital people, board people, and possibly the social agencies related to the health care issues.

Just getting the voice of that low-income individual – that person who's getting food stamps, that's working the \$9/hour job. Those people who have lost their home. So how do we assure that we get, when we're doing community health needs assessments, or looking at stakeholders, that it's not me, as the health officer thinking this is what this community needs, but we're also having a voice from that underserved population.

My belief is that everybody's a relevant stakeholder and so I would say that it's very difficult to get everybody involved unless you really have a plan to reach out to not only people that are in positions of responsibility but people that are, by the fact that they're citizens, in the system. So it's to figure out how do we get the more silent voices into the research.

United Way would be helpful and they do get involved in some risk and health behavior surveys. I think, business leaders are sporadically involved – the Chamber would be a great partner. Also local employers have a Human Resources group that meets regularly. And that group has been involved with the wellness [program]. A lot of work around employee health comes through the HR departments. I do think it's an economic development issue.

We all serve the same families, we just serve them in a different way, so we all need to be talking to each other. Health systems ask a lot of questions, but then I think they go behind their own doors to make their decision.

We have to assure that we do have that voice – that we are looking at the low-income population, the at-risk population, because they are, in many cases, the individuals who are the high utilizers of services or they are utilizing a more expensive service.

Q10. With regard to health and health care issues, are relevant stakeholders or community residents involved in planning and decision making? 10a. (If yes) Who is involved? (PROBE FOR TITLES/ROLES, NOT NAMES) 10b. (If no) Should they be? 10c. (If yes) Who should be?



Community Resources and the Future of Health Care

Key Stakeholders believe they live in a caring community with an **engaged hospital**, **caring community foundations**, and a **committed volunteer force**. However, people feel the MMCWM target area **lacks funding** as well as the number of necessary programs and the resources to get people involved in such programs.

Community Resources & Resource Limitations

- Stakeholders feel residents can depend on the community for addressing community health care needs and issues as the following resources exist:
 - > 2-1-1
 - Council on Aging
 - Department of Human Services
 - Health Department
 - Recreational, resort-like, outdoor environment
 - The hospital
 - United Way
 - Volunteer services providing personal assistance (e.g., transportation)
- Resource limitations include:
 - > A lack of capacity for services
 - Cultural barriers (Oceana County)
 - Funding lack of and also preference of funding
 - Resident isolation (Oceana County)

Q9. What resources currently exist in your community beyond programs/services just discussed? (PROBE FOR FINANCIAL, SOCIAL CAPITAL, PEOPLE) Q9a. What are any resource limitations, if any? (PROBE FOR FINANCIAL, SOCIAL CAPITAL)



Verbatim Comments on Community Resources

Community Resources

Clearly the hospital is engaged and involved and is the closest thing we have to a medical hub, I still don't think it really is that from a health care perspective but they're a definite asset.

For Mason County, the fact that they truly are recreational – I think they could use their environment to champion healthy lifestyles which I think really goes a long way to supporting the outcomes that the health care systems are after. They're a community that is small enough that we should be able to understand how to help each other.

I think the growth of the community foundations has been strong so that is an opportunity. Mason County is one of our more industrialized counties. I think building upon agricultural environments, we have a strong agricultural foundation.

They [Council on Aging] provide transportation, they provide home health care for people that need some assistance in their homes, take residents to their appointments, do their shopping, clean their homes, they also provide meals at the center. They do a lot of good things for the elderly in this [Oceana] county.

Resource Limitations

I just don't think there's enough available for people. I don't think there are enough programs and I don't think there are enough resources to get people involved in the programs. Educating them to the value of wellness care for one thing.

I think that many of our non-profits who rely upon contributions have struggled over the last few years of getting donations but yet I do think rural communities really rally around individuals who are in a significant need and probably one of the challenges is sometimes that rally point is dependent on how well that individual is known or how involved they are in their communities in terms of doing targeted fundraising for a person or family in need.

I think there's financial resource limitations to a degree. It always seems like the same people are tapped for everything. The same people are tapped to serve on a board, the same people are tapped to give, so sometimes I don't think we look out far enough maybe.

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There are cultural issues in Oceana, and we see that all the time. There's also more isolation in Oceana, I do see the city center in Mason County being a little bit more of a hub than in Oceana and that's a strength they could build on.

Q9. What resources currently exist in your community beyond programs/services just discussed? (PROBE FOR FINANCIAL, SOCIAL CAPITAL, PEOPLE) Q9a. What are any resource limitations, if any? (PROBE FOR FINANCIAL, SOCIAL CAPITAL)



While most are unsure of the impact of Federal Health Care Reform on their community, they are cautiously optimistic that **it will help with the community's access issues**, **emphasize prevention**, and **get people more involved in caring for their own health**. Some are also concerned that an increase in coverage will not solve the supply problem – until reimbursement rates change, there will still be a lack of physicians to service the Medicaid population.

The Future of Health Care

- Specifically, stakeholders think health care reform will result in:
 - More adult children can be covered through parent insurance
 - More focus on evidence-based approaches
 - More reporting on quality measures and impact of therapies
 - An increase in coverage of residents through Medicaid
 - Concern over who will provide the care resulting from an increase in coverage
 - More focus on preventative health and wellness
 - More focus on individual responsibility for health and wellness
 - Payment forms that better align incentives
 - Reduced chronic disease rates
- While many are unsure of how this reform will impact health outcomes, they are hopeful that reform will result in better clinical and cost-effective outcomes.
- Key Stakeholders stress that: (1) health care must increasingly focus on educating people to make lifestyle changes, and (2) taking an approach that emphasizes increased access and personal responsibility is the best way to move forward.
- A few Stakeholders concluded their interviews with requests to publically share the results of the needs assessment to get a conversation started to get the health care community more involved with the health of the community.

Q11. What, if any, impact do you think Federal Health Care Reform will have on health care in your community? Q11a. What do you think the future of health care might be? Q11b. What impact will Federal Health Care Reform have on health outcomes, if any? Q12. In concluding, do you have any additional comments on any issues regarding health or health care in your community or Mason/Oceana County that we haven't discussed so far?

Verbatim Comments on The Future of Health Care

I do think there are some opportunities if people build things correctly under the current health care legislation or whatever form it might take. What I'm most excited about is the opportunity to do payment forms that better align incentives because our incentives right now do not align for health.

I think some of the challenge is that it will be important to reach out to those individuals and get them enrolled and get them involved a little more in taking control of their own health care.

I'm hopeful that it will have an impact on health outcomes, but I don't know. Is the health care going to be available to them? We're limited as far as physicians go right now. They are not taking new patients... If everybody can access health care, who's going to provide it?

I'm hoping it will impact some of the morbidity around cancer, cardiovascular disease, and diabetes as we can get those individuals to have better control.

I'm pleased to see the focus on health and wellness. The way we pay for healthcare is through widgets and the more widgets you do, the more money you make. The more widgets you provide doesn't mean that you're making that individual healthier. So we're now going to focus on more tracking of those diabetics, and those people that are hypertensive... and I think that's important. I think you're going to see a renewed emphasis on really trying to get people out and involved in their own health care.

If, in fact, these newly insured people or the individuals who have the employer-sponsored health care, it goes back to, what are going to be the reimbursement rates of those changes?

My understanding of it suggests that it really has a focus on prevention. And our whole medical system right now is set up to take care of disease and less focus on prevention so I absolutely believe it would improve outcomes if it was actually implemented with its intent.

We're all kind of tied to what we've always done and what we think is right. And what a big initiative like health care reform does, is it makes you rethink what you believe, what you're doing, and who you're doing it with. And there's a lot of risk in that but there's also a tremendous amount of opportunity.

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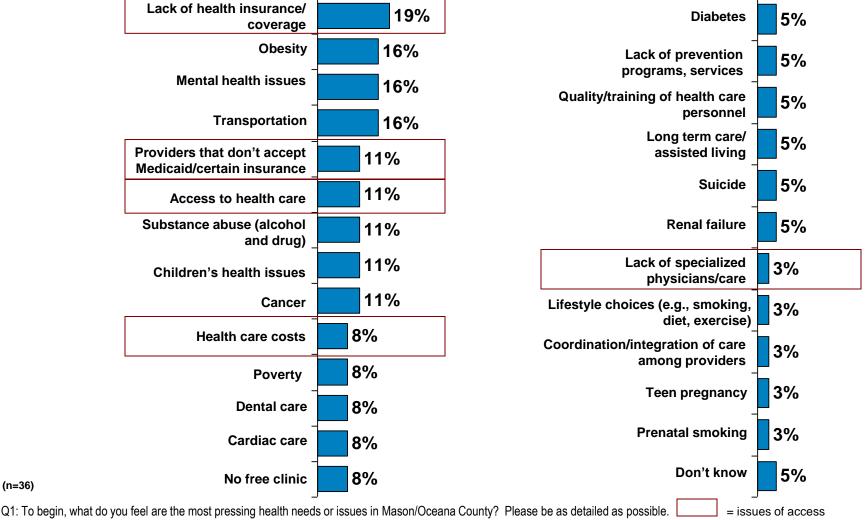
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Key Informant Survey

Health Conditions

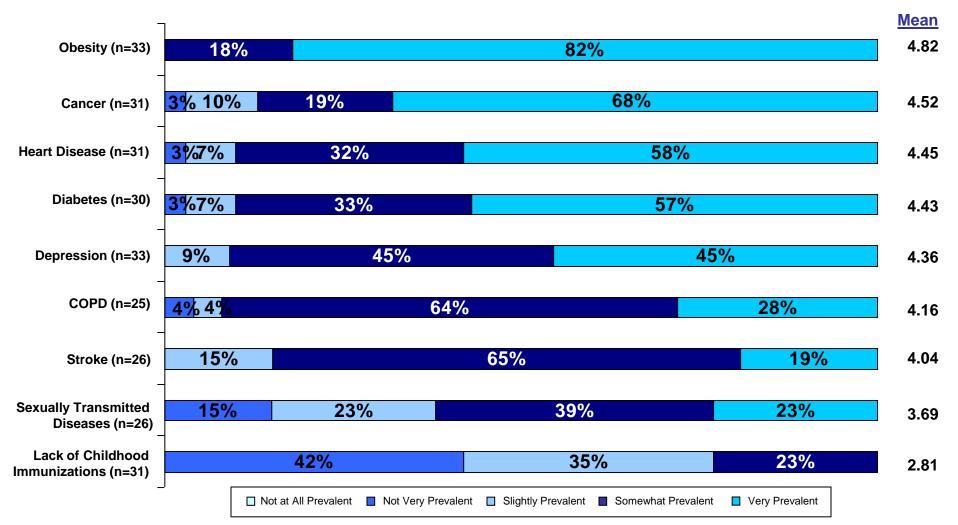
The most pressing health issues or needs that are top of mind to Key Informants revolve around the issue of *access to health care*. *Lack of health care insurance/coverage* is considered the single most pressing issue. Other issues include *obesity*, *mental health issues*, and *transportation*.

Most Pressing Health Needs or Issues in Mason/Oceana Counties



Key Informants view *obesity* as, by far, the most prevalent <u>health issue</u> in the MMCWM target area, followed by *cancer*, *heart disease*, and *diabetes*. Childhood immunizations appear to occur fairly regularly and are not viewed as an issue.

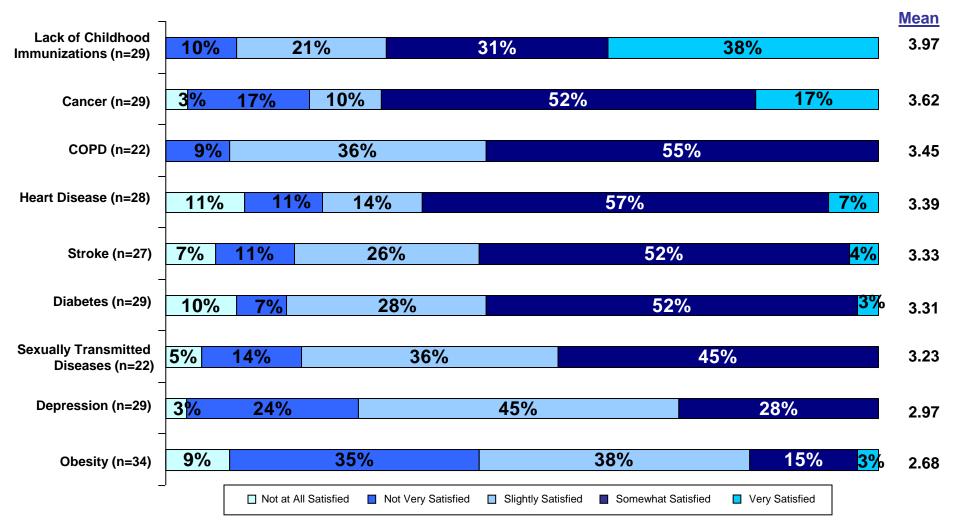
Perception of Prevalence of Health Issues in Mason/Oceana Counties



Q2: Please tell us how prevalent the following **health issues** are in Mason/Oceana County.

Key Informants are most satisfied with the community's responses to *childhood immunizations*, followed by *cancer* and *COPD*. Conversely, they are least satisfied with responses to *obesity* and *depression*.

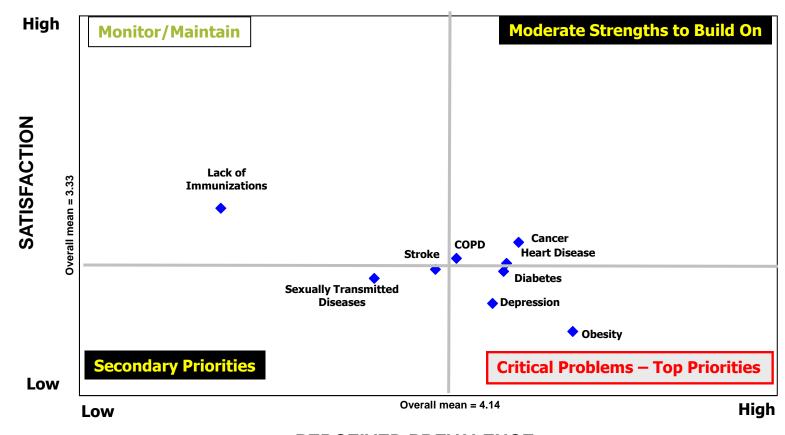
Satisfaction with Community's Responses to Health Issues in Mason/Oceana Counties



Q2a: How satisfied are you with the community's response to these **health issues**?

The quadrant chart below depicts both <u>problem areas and opportunities</u>. The community's responses to *cancer*, *heart disease*, and *COPD* are fairly strong because Key Informants perceive all three to be prevalent and they are satisfied with the community responses to these issues. Conversely, *obesity*, *diabetes*, and *depression* are critical problem areas because they are not only perceived as prevalent, but the community responses have been less than satisfactory.

Performance of Community in Response to Health Issues in Mason/Oceana Counties



PERCEIVED PREVALENCE

Q2: Please tell us how prevalent the following health issues are in Mason/Oceana County. Q2a: How satisfied are you with the community's response to these health issues?

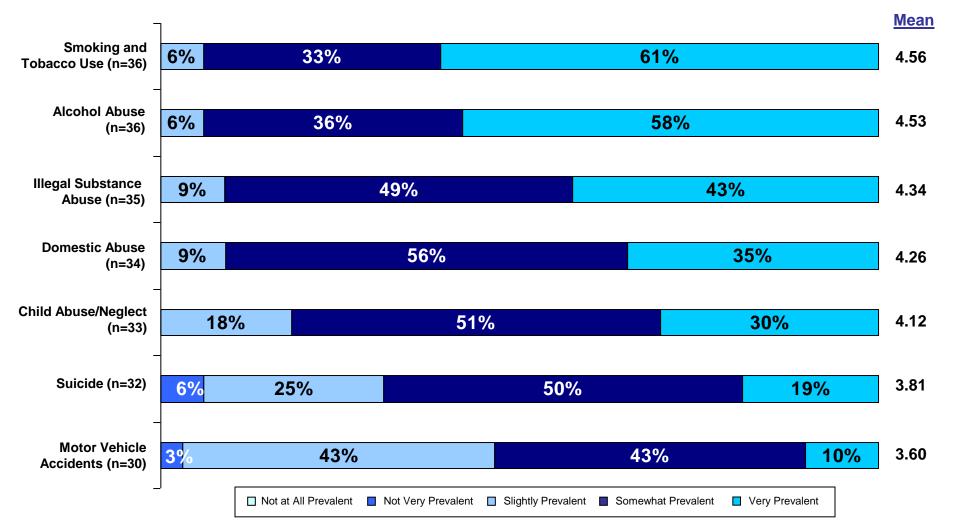


(n=36)

Health Behaviors

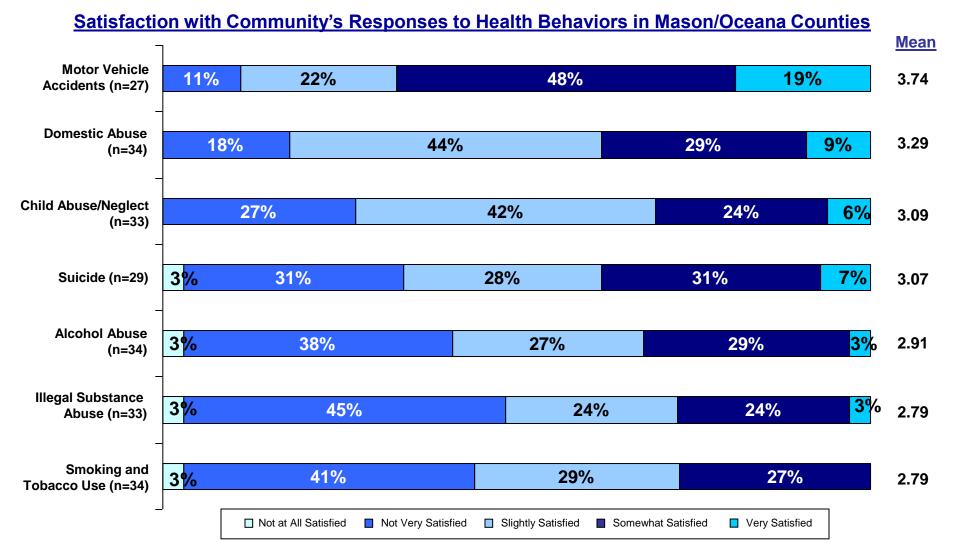
According to Key Informants, **smoking/tobacco use** is the most prevalent negative health behavior in the MMCWM service area, followed by **alcohol abuse**, **illegal substance abuse**, and **domestic abuse**. **Suicide** and **motor vehicle accidents**, although they exist, are not considered to be as prevalent as other health behaviors.

Perceived Prevalence of Health Behaviors in Mason/Oceana Counties



Q3: Please tell us how prevalent the following **health behaviors** are in Mason/Oceana County.

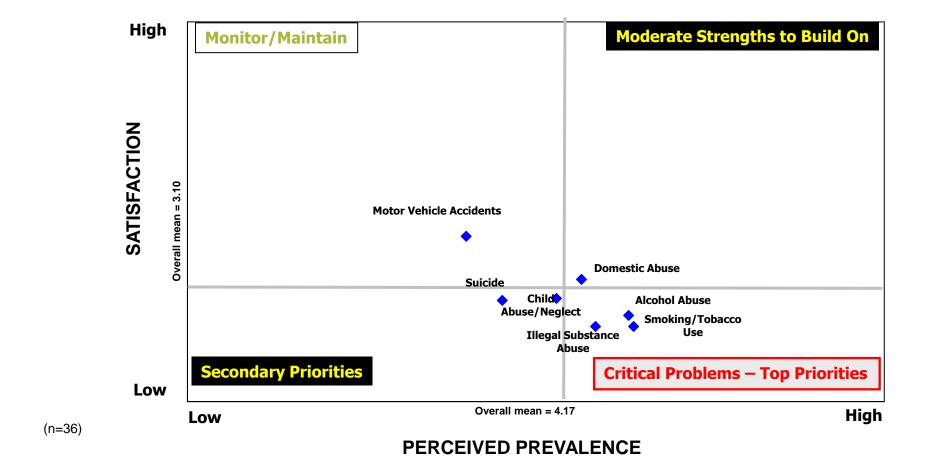
Key Informants are moderately satisfied with the community's responses to the health behaviors rated. Opportunities for improvement exist in all areas, but especially with **smoking/tobacco use** and **illegal substance abuse**.



Q3a: How satisfied are you with the community's response to these health behaviors?

The quadrant chart shows moderate satisfaction with community response to most all health behaviors. The three behaviors deemed most prevalent – **smoking/tobacco use**, **alcohol abuse**, and **illegal substance abuse** – are also the areas Key Informants are least satisfied with in terms of community response.

Performance of Community in Response to Health Behaviors in Mason/Oceana Counties

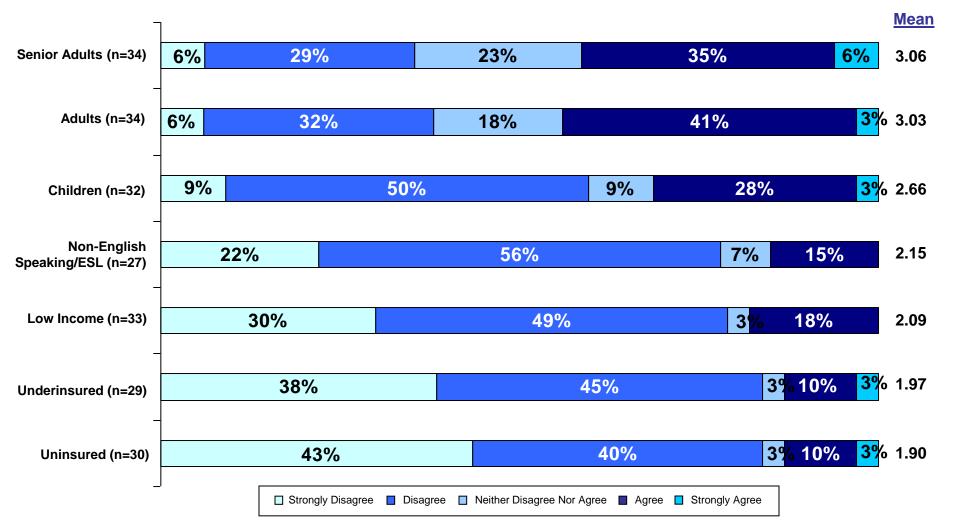


Q3: Please tell us how prevalent the following health behaviors are in Mason/Oceana County. Q3a: How satisfied are you with the community's response to these health behaviors?

Access to Health Care

Adults, including seniors, have the greatest variety and choice of primary medical care options, although there is room for improvement as more than one-third think otherwise. Residents who *lack insurance* (complete or partial), are *low income*, and/or are *non-* **English speaking** find their primary medical care options far more limited.

Perceptions of Variety and Choice of *Primary Medical Care Options*



Q4: Please tell us your level of agreement with the following statements about the variety and choices of primary medical care in Mason/Oceana County



Senior adults, although covered by Medicare, experience limitations with this form of coverage. Key Informants report that many providers in Mason and Oceana counties **do not accept Medicare**. The *limited gerontological care* that exists in the MMCWM service area forces many older adults to go elsewhere for care and this becomes more complicated when transportation is already a barrier.

Verbatim Comments on Lack of Primary Medical Care Options for Senior Adults

All physicians practicing in Oceana County are general practitioners. No one specializing (e.g., pediatrics, gerontology).

Because of the Government trying to make cuts in the Health Care systems, many of the Doctors are dropping Medicare patients or not taking new ones and with the rising numbers of Seniors this presents to be a real problem. Then what care is out there, partly because of the pay is not the best. Some doctors do not listen to the patient and this is becoming a real problem.

I feel there is a limited amount of doctors in the area.

I often hear from local people that they travel to Grand Rapids and Southeast MI to see their doctors.

I think we need a gerontologist in this area.

Limited knowledge on this population.

Limited number and quality of resources for seniors, lack of transportation, low number of specialists. Always long travel. One federal clinic which appears to be migrant oriented.

No specific doctor of gerontology.

Not enough primary physicians.

Primary care for seniors requires geriatric specialty.

There are very few MD's in this area and they don't appear to take an active role in medical care for the most part.

There seem to be more options for seniors, but still limited as compared to under and uninsured.

Think there could be more services for people that are homebound and not in a facility.

Very few doctors accepting new patients. Some don't accept Medicare some and/or Medicaid.

Q4a: (If Strongly Disagree/Disagree/Neutral) Why do you [INSERT RATING] that there is a wide variety and choice of primary care for senior adults?



Adults find similar barriers to primary medical care access as senior adults – the *limited number of physicians in the area* and for those that exist, *the reluctance to accept new patients.* Additionally, there is mention of consumers' lack of confidence in the ability of some area physicians.

Verbatim Comments on Lack of Primary Medical Care Options for Adults

Difficult for uninsured to find a provider, Limited number providers accept county health plan reimbursement or even see new plan patients.

I do not feel that we have enough physicians available and believe the ones available are over worked.

In listening to adults in the community, they frequently report being more confident in the results by going out of town for major testing and any major surgeries.

It is difficult to find a physician in this area.

I've heard that it is hard to find a primary care provider in this area.

Limited access and availability to get in to see a doctor.

My wife and I still visit our doctor two counties away as the reputation of Memorial Medical Center and its doctors is not positive. We have not heard positive feedback on local doctors enough to take the step to change from our current doctor.

Ratio of low income care to low income population is indicative.

Related to under and uninsured and limited providers.

There are very few family doctors who are open to new patients.

There are very few MD's in this area and they don't appear to take an active role in medical care.

There is only one hospital, and few doctors. Many doctors are not accepting new patients.

Very few doctors accepting new patients.

We had a difficult time finding a primary care physician because hardly anyone was accepting new clients and our own primary care physician is only in the office once every two weeks. Our primary care physician is actually a physician's aid.

Q4a: (If Strongly Disagree/Disagree/Neutral) Why do you [INSERT RATING] that there is a wide variety and choice of primary care for adults?



Reasons cited for lack of primary care options for children center around the *limited number of Pediatricians* in the area.

Verbatim Comments on Lack of Primary Medical Care Options for Children

All physicians practicing in Oceana County are general practitioners, no one specializing in pediatrics.

High percentage of low income children especially on east side of the county, and a very limited number of physicians, and one federal clinic which is not widely publicized.

I don't believe there are many pediatricians here in area to choose from.

I feel there is a limited amount of doctors in the area.

I think it is difficult to get in a practice pending insurance coverage type.

In listening to young parents in our community, it is frequently reported that they are more confident taking their children out of town for services.

Mason County has had difficulty keeping qualified pediatricians.

One group of pediatricians, all three work under one roof.

One pediatrician's office in three counties. Excellent work, but only one.

One practice for pediatrician located in Mason County. This disagreement is mainly for the underinsured or uninsured children that frequent the emergency room related to lack of need to pay an immediate bill. Again a sliding fee based clinic would be of benefit.

There are very few MD's in this area and they don't appear to take an active role in medical care for the most part.

There are very few pediatricians in the area.

There is only one doctors office that I am aware of for my children to receive consistently good care.

There is only one medical office in Mason County that specializes in pediatric care.

There is only one or two options for pediatrics. This is not a wide variety.

Q4a: (If Strongly Disagree/Disagree/Neutral) Why do you [INSERT RATING] that there is a wide variety and choice of primary care for children?



Overwhelmingly, the reason low income groups have limited choices in primary care is due to *lack* of providers accepting Medicaid or other government sponsored health plans. Additionally, providers won't accept people without insurance and the only free clinic is in the neighboring county.

<u>Verbatim Comments on Lack of Primary Medical Care Options for Low Income Residents</u>

Few providers accept new Medicaid or county health plan patients.

I work with many low income families and they find that many doctors do not take Medicaid. They have to go to whomever is willing to take their insurance.

Many people with whom I work with have low income and have to travel to Baldwin because hardly anyone here in Mason County will accept their Medicaid.

Many providers do not take Medicaid patients.

Many providers do not take state funded insurance.

Most people that I know that have low income do not have insurance thus they rarely go to a doctor, if they have one.

People have reported to me that if you can't pay or have an outstanding bill you cannot get an appointment.

Physician's can only take so many low income patients and remain in viable practice. There are no FQHC satellites or free clinics.

Some providers accept Medicaid and Medicare, others not.

There are choices but they are not available to those in those categories.

There is no good access to care for these individuals. Though they could be treated at primary care of the emergency room, many individuals of low-income status will avoid medical bills at all costs. An appropriate intervention and education on how to budget in medical expenses or an alternative to having to pay 100 % of their bill would be of benefit.

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Too few doctors in the area.

Unless receiving assistance, office visits for those who do not have insurance are not affordable with minimum wage paying jobs.

Q4a: (If Strongly Disagree/Disagree/Neutral) Why do you [INSERT RATING] that there is a wide variety and choice of primary care for low income?

For ESL patients, *cultural and language barriers* are the greatest hurdle, but this is compounded by the fact that they often have limited or no health coverage, especially migrant workers.

Verbatim Comments on Lack of Primary Medical Care Options for ESL Residents

A large segment of the population during agricultural harvest time is Spanish speaking and access, at times, to translators is limited.

Culturally Competent is something that I feel Mason County needs to work on as a whole.

Even though there are many residents whose primary language is Spanish, there aren't too many health care providers who can address this issue.

I am unaware of any medical office in this area that has the staff to communicate with non-English speaking patients.

In Mason County, there are few [if any] physicians who speak Spanish even though there are many Hispanics in the area during crop harvesting.

There are not any organizations that are able to provide a full-time interpreter for these individuals. It is difficult to communicate via the translation phone. It would be helpful to have a resource available for real time interpretation in the Mason County area.

There is only one ESL program in the region that I am aware of for Spanish speaking patients. If the language is other than Spanish, there is phone translation but I am not sure how effective that is.

Very few offices have staff who speak Spanish or any other language.

Very few Spanish-speaking practitioners.

Very limited diversity and very limited capacity for translation in Mason County.

We have a large percentage of ESL students at the school where I work and they really struggle to find bilingual medical help-especially in regards to therapists or psychologists.

A C

As with low income and ESL groups, the underserved, which includes the uninsured/underinsured, have limited PCP options for many reasons but primarily because of a *dearth of physicians willing to accept Medicaid patients or patients without coverage*. Ultimately this leads to avoidance of care (and certainly prevention) when it may be needed, or the use of expensive alternatives such as the ER.

Verbatim Comments on Lack of Primary Medical Care Options for Uninsured/Underinsured

An underinsured person has very limited health care options. If the insurance is limited, so is the health care.

As I mentioned before, my associates and friends who are underinsured have to travel outside of the county [like Baldwin] because these health care providers won't accept Medicaid [especially dentists].

Co-pays inhibit people from receiving proper care.

Doctors won't accept these patients.

Limited access, transportation, income and eligibility guidelines can be difficult for those who are underinsured. Many barriers for those to pay, not many options for charity care, etc.

Medicaid is the same as being underinsured. The physicians limit the number of patients because of time issues and poor level of reimbursement.

Most of the uninsured do not go to the doctor. When they do they go to the ER and the ER is overworked, understaffed with good physicians. I think that uninsured are not given the best care. Also some of these folks need more attention than the ER can provide or wants to provide. Sometimes those in the ER have preconceived opinions and that is a bad thing.

No choices but to only get essential services because they pay out of pocket.

No primary care choices for affordable quality care.

Office visits, etc., can be costly if you do not have adequate insurance.

One small Emergency room, lack of transportation, lack of physicians who accept Medicaid.

Several clinics do not gave a sliding scale fee schedule: people often go to the ED for "free" care instead.

There are few family doctors that are open to new patients with limited insurance.

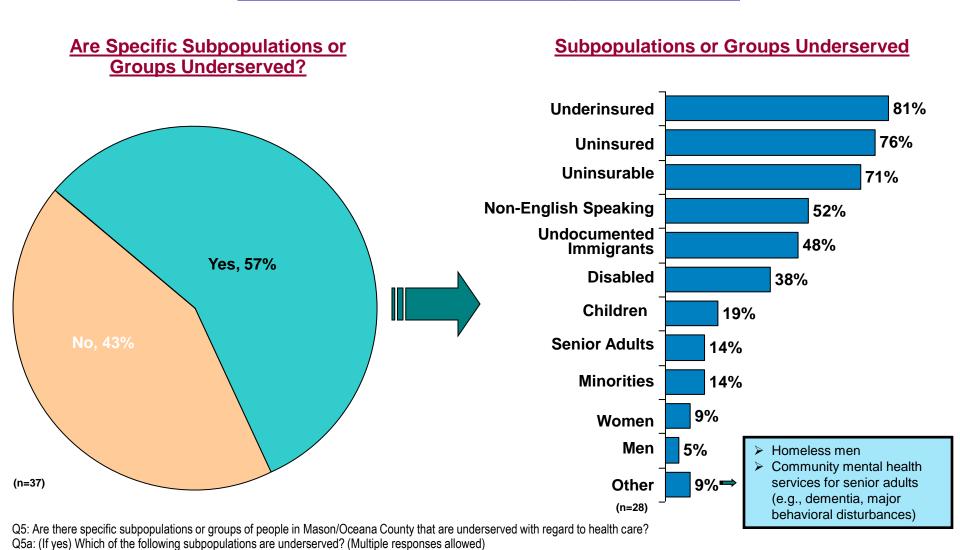
Unless they have money, health care is limited- they do not have a wide variety of options.

Q4a: (If Strongly Disagree/Disagree/Neutral) Why do you [INSERT RATING] that there is a wide variety and choice of primary care for uninsured/underinsured?



Over half (57%) of Key Informants recognize that certain subpopulations or groups in the MMCWM service area are underserved with respect to health care. *Those most at risk lack insurance, either completely or partially*. The ESL population, undocumented immigrants, and the disabled are also underserved.

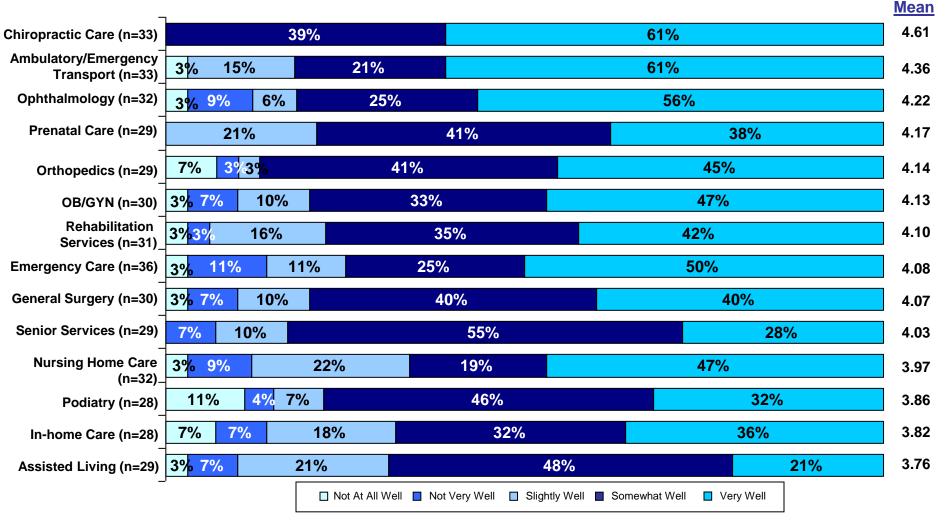
Subpopulations Underserved with Regard to Health Care



Gaps in Health Care

Mason/Oceana County programs or services receiving the highest marks for meeting the needs and demands of area residents involve *chiropractic care* and *ambulatory/emergency transportation*. A number of other programs, such as *ophthalmology*, *prenatal care*, *orthopedics*, *OB/GYN*, *rehabilitation services*, *emergency care*, *general surgery*, and *senior services* are also highly regarded.

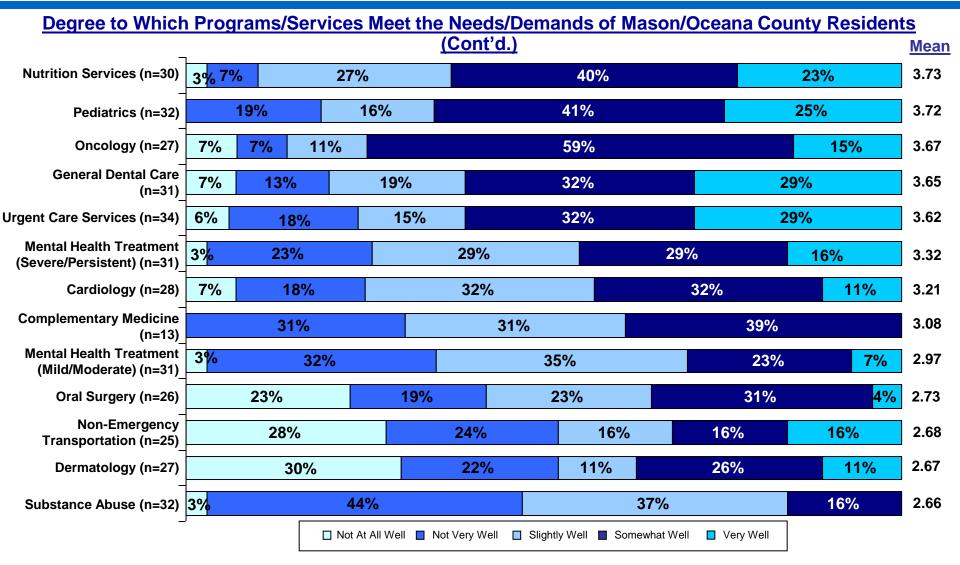




Q6: How well do the following programs and services meet the needs and demands of Mason/Oceana County residents?



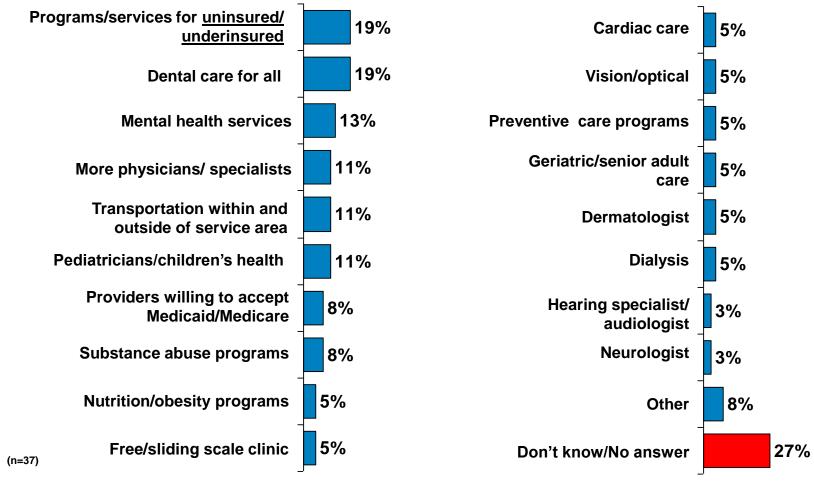
Roughly half of Key Informants believe programs or services in the areas of **substance abuse**, **dermatology**, and **non-emergency transportation** do not meet the needs or demands of MMCWM area residents well.



Q6: How well do the following programs and services meet the needs and demands of Mason/Oceana County residents?

Key Informants report that programs and services lacking in Mason and Oceana counties are those that *address the underserved*, the *uninsured/underinsured* and those with *Medicaid/Medicare*. More often this void is evident in **dental**, **mental health**, and **primary care** areas. More than one-fourth have no top-of-mind response for programs/services lacking in the MMCWM service area.

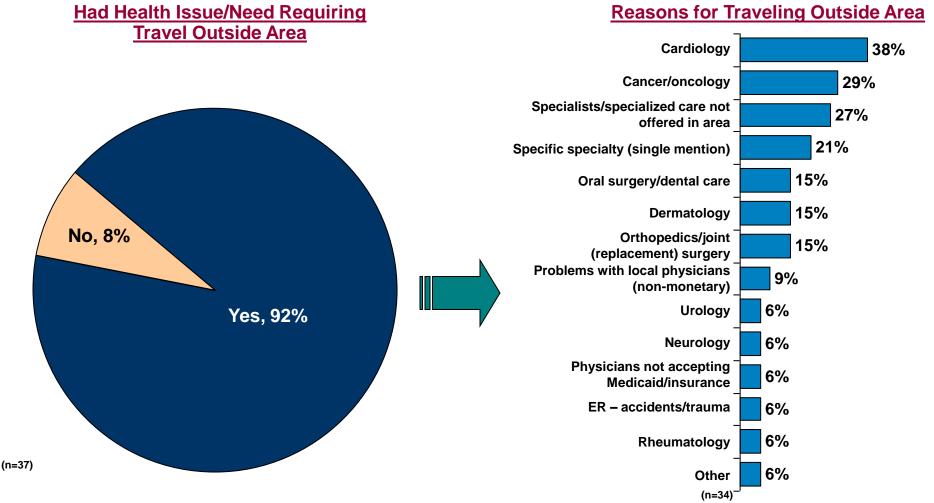
Programs/Services Lacking in Mason/Oceana Counties



Q7: What programs or services are lacking in the community, if any? Please be as detailed as possible.

Almost all (92%) Key Informants, or someone they know, has had to travel outside of the MMCWM service area for health care for a variety of conditions. Most commonly, residents travel to other counties for **specialized care**, especially for **cardiology** or **treatment of cancer**.

Traveling Outside of Mason/Oceana Counties for Health Care



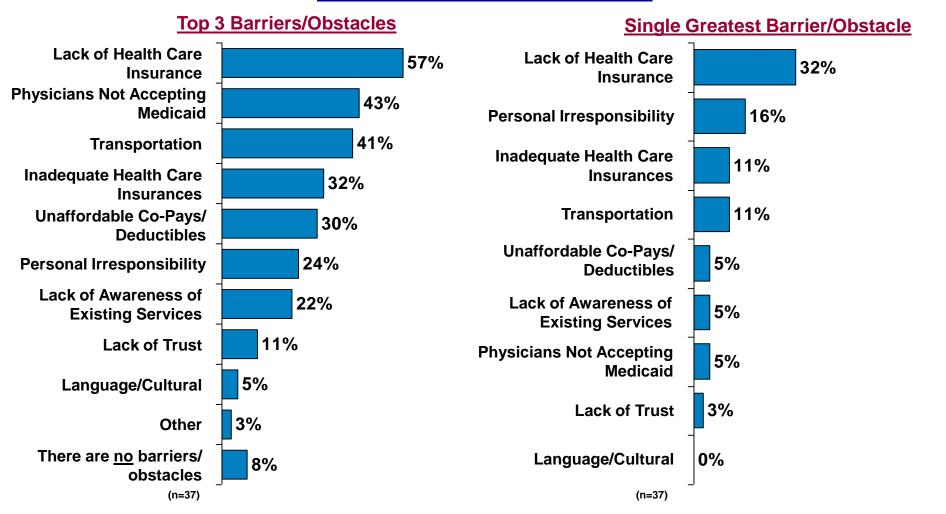
Q8: Have you, or someone you know, ever had a health issue or need that necessitated travel outside of Mason/Oceana County for health care?

Q8a: (If yes) What necessitated travel outside of Mason/Oceana County for health care, and why? Please be as detailed as possible.

Barriers to Health Care

According to Key Informants, *lack of health care insurance* is the top barrier or obstacle to health care programs and services. *Physicians declining Medicaid patients*, *transportation*, *inadequate health insurance*, and *unaffordable co-pays/deductibles* are also viewed as barriers. Conversely, no Key Informant considers *language or cultural* barriers to be the primary obstacle for receiving care.

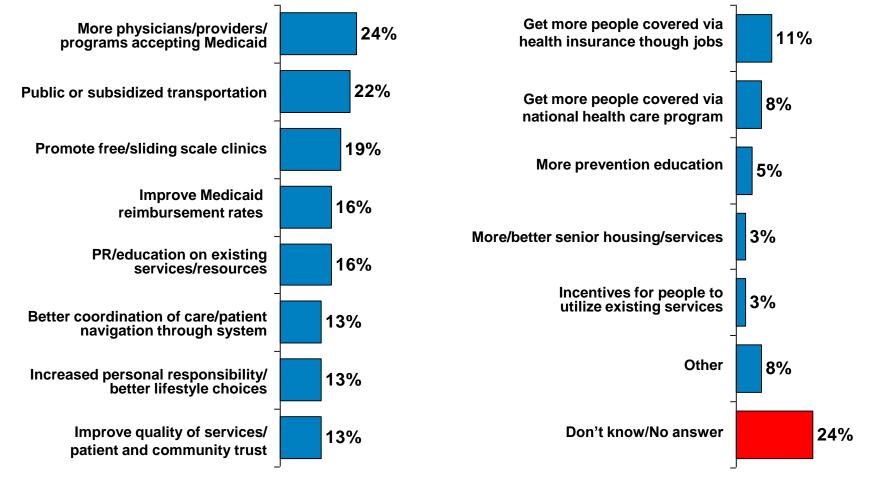
Barriers and Obstacles to Health Care



Q9: What are the top three barriers or obstacles to health care programs and services? Please rank from 1 to 3, where 1 is the greatest barrier, 2 is the second greatest barrier, and 3 is the third greatest barrier.

The most often cited solutions to barriers and obstacles to health care are *more providers accepting Medicaid* and *public or subsidized transportation*. Suggestions are varied and are targeted toward solving the problem of barriers, including *promoting free clinics*, *improving Medicaid reimbursement rates*, *increasing PR or education on existing services*, and *better coordination of existing services*. One in four offers no solutions.

Effective Solutions to Barriers and Obstacles to Health Care



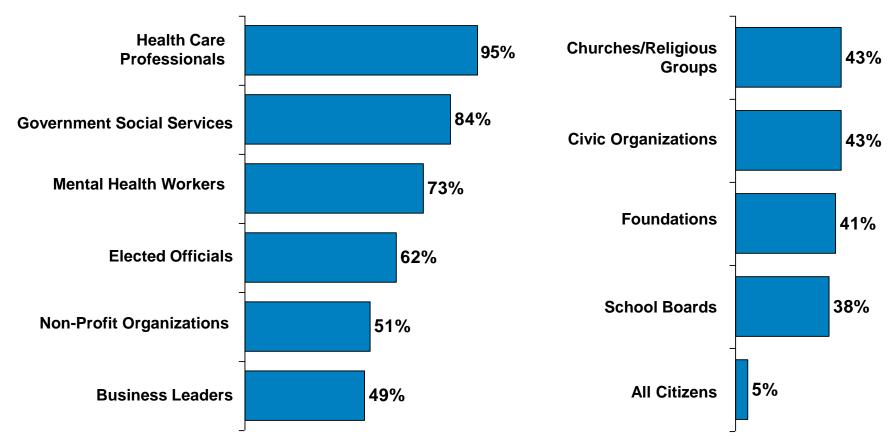
Q9a: What, if any, are the effective solutions to these barriers? Please be as detailed as possible and identify which problems you are referring to when discussing solutions.

(n=37)

Identifying and Addressing Needs

Key Informants believe input addressing health care needs should be spread across a variety of groups or individuals in the community, the most important being *health care professionals*, *government social services*, and *mental health workers*. Less important are *school boards* and *foundations*.

Individuals and Organizations that Should be Involved in Addressing Identified Health and Health Care Needs



(n=37)

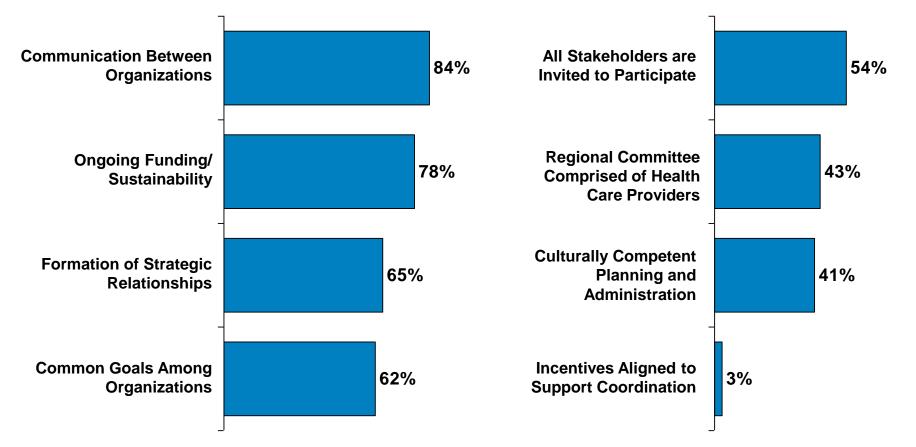
Q10: What individuals or organizations should be involved in addressing identified health and health care needs in the county? (Multiple responses allowed)



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The most important element to the success of health care programs or services is communication between organizations. Also important are ongoing funding or sustainability, the formation of strategic relationships, and common goals among organizations.

Elements Necessary for Success of Programs that Address Identified Needs



(n=37)

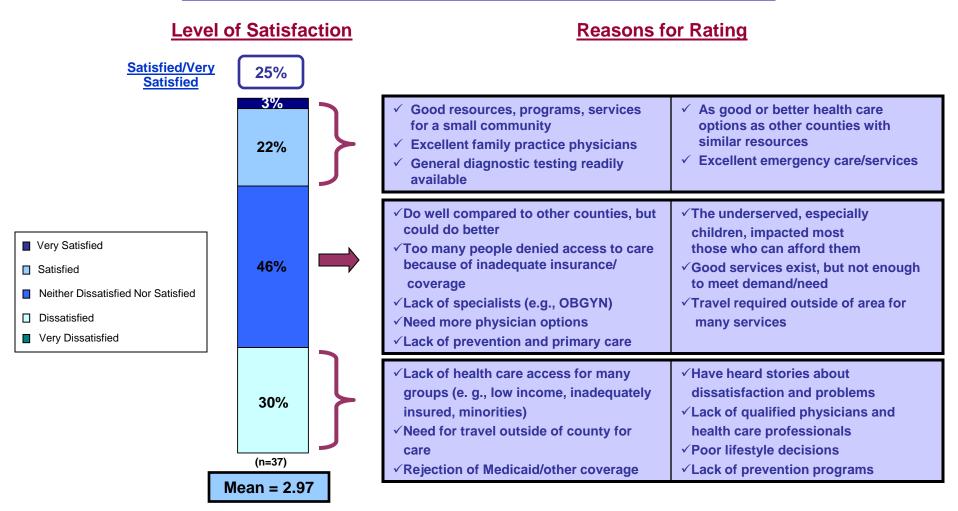
Q11: What elements are necessary to the success of programs to address identified needs? (Multiple responses allowed)



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Among Key Informants, overall satisfaction with the health climate in the MMCWM service area is less than moderate. In fact, more are dissatisfied than satisfied, Those who are satisfied cite **good resources**, **programs and services**, and believe as a county they fare better than others. Those dissatisfied see **lack of health care access for many people**, **word-of-mouth dissatisfaction with services/providers**, **lack of Medicaid acceptance**, and **the need to travel outside of the area for health care services**.

Overall Satisfaction with Health Climate in Mason/Oceana Counties



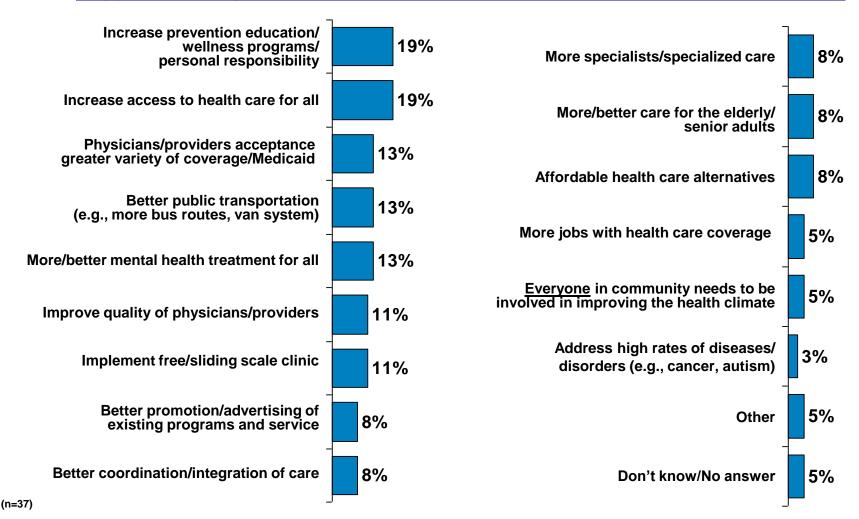
Q12: Taking everything into account, including health conditions, health behaviors, health care availability, and health care access, how satisfied are you overall with the health climate in Mason/Oceana County? Q12a: Why do you say that? Please be as detailed as possible.



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Key Informants offer a multitude of strategies for improving the overall health climate in Mason and Oceana counties. At the top of the list are *focusing on prevention and wellness* to address issues from lifestyle choices to treatment options. It's also evident that they support *increasing access to health care for all*.

Suggested Strategies to Improve the Overall Health Climate in Mason/Oceana Counties



Q13: What one or two things could be done in Mason/Ocean County that would improve the overall health climate in Mason/Oceana County? Please be as detailed as possible.



CONCLUSION/ SUMMARY OF FINDINGS

Summary of Findings

Social Indicators

- The MMCWM patient area is a region that has a number of social factors that negatively impact health and quality of life. For example:
 - The unemployment rate for Mason County is on par with the state and higher than the national rate, while the rate in Oceana and Lake counties are far higher than either the state or nation
 - The number of confirmed victims of child abuse or neglect is a greater problem in all three counties compared to the nation as a whole, and the rate for Lake County is far higher than the state and national averages
 - More students are eligible for free or reduced lunches in all three counties, compared to students around the state
 - Greater proportions of children receive WIC assistance and more births are Medicaid paid in all three counties when compared to rates across Michigan
- With regard to poverty, all three counties have greater proportions of people, overall, living in poverty compared to the state or nation. However, the problem is even more dire for children born into poverty:
 - The proportion of children under age 18 living in poverty is higher in all three counties than the state and Lake is almost double the state average
 - Single-female households are more at risk of living in poverty and in all three counties the rate of single female families with children under age 18 living in poverty is greater than the state and nation
 - The highest proportion of families living in poverty are those in Mason and Oceana counties headed by a single female with children under age 5

Summary of Findings

Social Indicators (Cont'd.)

- According to residents of Mason and northern Oceana counties who
 participated in the 2012 BRFS, jobs/unemployment/the economy are by far
 the most important community problems.
- Both men and women from Lake, Mason, and Oceana counties are less educated than men and women throughout the state of Michigan and across the nation.
 - The proportion of men and women who receive college degrees of BA or beyond is higher in MI and the US compared to all three MMCWM counties
 - The proportion of men and women who do not graduate high school is higher in both Lake and Oceana counties compared to the state or the nation
- Alternatively, certain community factors promote health, such as:
 - Lake, Mason, and Oceana counties are considered to be <u>safe communities</u> with far lower violent crime and homicide rates than the state or nation
 - Mason and Oceana counties are considered to be walkable and family friendly, offering aspects and services that promote health, such as farmer's markets, fitness centers, senior centers, beaches, paths/trails, parks, and organized sports

Summary of Findings (Cont'd.)

Overall Health Climate

- Key Informants are moderately satisfied overall, at best, with the health climate in the MMCWM service area. Those satisfied cite:
 - Good resources, programs, and services for a community of its size
 - As good, or better, health care options as communities with comparable resources
 - General diagnostic testing readily available
 - Excellent family practice physicians
 - Excellent emergency care/services
- Those less than satisfied cite:
 - Lack of health care access for many groups/subpopulations (e.g., low income, uninsured/underinsured, minorities)
 - Shortage of qualified physicians and health care professionals
 - Need for travel outside of area for care
 - Rejection of Medicaid/other coverage
 - Lack of prevention programs
- Top suggested strategies to improve the health climate in the area include an increased focus on prevention and wellness and an increase in access to health care for all. Other suggestions include greater acceptance of a variety of coverage, including Medicaid, better public transportation, more/better access to mental health treatment, better qualified health care professionals, and implementation of a free/sliding scale clinic.

Summary of Findings (Cont'd.)

Overall Health Climate (Cont'd.)

- Key Stakeholders say the most pressing health needs or issues in the area are:
 - Health care access, particularly to primary care
 - Lack of affordable health care for the underserved (uninsured/underinsured/Medicaid/low income)
 - Obesity, including childhood
 - Mental health issues, including co-morbidity with substance abuse
 - Access to specialty care
 - Chronic disease rates
- Most Key Stakeholders believe these issues are county/area-wide and have the most profound impact on the underserved.
- Lack of area resources, including funding limitations hinder the community's ability to deal with these issues as aggressively as necessary. However, because the community is comprised of caring and compassionate members and has a moderately sizeable volunteer force, these assets can be easily mobilized to causes that tackle community needs.
- Suggestions for ways to address these issues include more community collaboration, increased community dialogue, more mid-level providers engaged in the delivery of care, and increased personal responsibility.

Summary of Findings (Cont'd.)

Overall Health Climate (Cont'd.)

Although most health care professionals are unsure of the impact of Health Care Reform, they are optimistic that it will improve health care access, improve health outcomes, lead to an increased focus on prevention and wellness, and ultimately result in better clinical and cost-effective measures.

Health Indicators

- Mason and Oceana County residents have life expectancy rates on par with the state and nation. Further, compared to the state of Michigan or the U.S., Mason and Oceana County have far lower age adjusted mortality rates.
 - On the other hand, Lake County residents have slightly lower life expectancy rates and much higher age adjusted mortality rates than the U.S.
- The infant mortality rate in Mason County is lower than the state and on par with the national average.
 - However, the infant mortality rates in Oceana and Lake counties are far higher than the state or the nation
- The proportion of live births with low birth weight is slightly lower in all three counties compared to the state or the nation.
- The two leading causes of death are the same for all three counties, the state, and the nation: cancer and heart disease. The rates for death from cancer and heart disease are higher in Mason, Oceana and Lake counties than the state or nation. Rounding out the top five leadings causes of death, three additional differences for Mason County are worth noting:
 - The rates for diabetes, COPD, and stroke are much greater in Mason County compared to both Michigan and the U.S.

Health Indicators (Cont'd.)

- Preventable hospitalizations are a much lower proportion of all hospitalizations in all three counties compared to the state of Michigan.
- The proportion of pregnant women receiving late or no prenatal care is higher in all three counties compared to Michigan, but lower in all three vs. the U.S.
- Childhood immunizations are a strength in Mason County as 80.9% of children between the ages of 19-35 months are fully immunized and this rate is higher than Oceana or Lake counties.
 - On the other hand, this rate is lower than the state
- Residents of Mason and northern Oceana counties believe the most important community health problem is cancer, followed by lack of insurance coverage, and obesity.
- At least eight in ten MMCWM area adults report good or better general health status, satisfaction with their life, and that they receive enough social and emotional support.
 - Still, area residents are faring worse on these three measures when compared to those across the state

Health Indicators (Cont'd.)

- More area adults report poor physical health than adults across the state or nation.
- Conversely, fewer area adults report poor mental health than MI or US residents.
- Nearly three in ten adults in the MMCWM area are disabled to the extent that their daily activities are limited due to physical, mental, or emotional problems, or they require the use of special equipment.
- Over six in ten adults are considered to be at an unhealthy weight, with 36.0% overweight and 28.1% obese.
 - Obesity is a top pressing health issue in the area according to Key Informants and they are less than satisfied with the community response to obesity
 - Between 19.8%-21.3% of youth in Mason, Oceana, and Lake counties are considered obese, rates far higher than the state or nation
- One third of area adults have high blood pressure (HBP) and/or high blood cholesterol (HBC).
 - Of those who have HBP, nearly eight in ten take medication for it

Risk Behavior Indicators

- Three-quarters of adults participate in leisure time physical activity. Least likely to participate include those who:
 - Have less than a college education
 - Live in households with annual incomes of \$35K or less
 - Are age 65 and older
- Most adults (89.0%) lack an adequate diet of fruits and vegetables, and this is true regardless of demographics. More concerning is that this proportion is much higher than the state or nation.
- On the other hand, area adults consume small quantities of sweetened beverages per day, averaging about a half a drink per day (0.52).
- Only one-third (36.6%) of adults get 8 to 9 hours of sleep per night, an amount that is considered adequate for most adults. Moreover, they average just over 7 hours of sleep per night (7.16).
 - Adults report on average they don't get enough sleep roughly nine nights per month
 - Half of area adults report that they snore
 - One-third say they unintentionally fell asleep during the day at least once in the past month

Risk Behavior Indicators (Cont'd.)

- The current proportion of adult cigarette smokers is lower than the state and nation.
 - Even though over half of current smokers have tried to quit during the past year this proportion is lower than Michigan or the U.S.
 - Still, 18.7% of adults in the MMCWM area currently smoke cigarettes
 - > The age at which smokers took their first puff was less than 16 (15.34)
 - The likelihood of smoking is inversely related to education and income
- One smoking behavior bears watching; the proportion of births to mothers who smoked during pregnancy was higher for all three counties than the state the last time it was measured in 2008. More troubling are two other indicators from the 2008 data:
 - Nearly four in ten Lake County mothers smoked during pregnancy
 - The rate of women smoking during pregnancy increased sharply from 2007 to 2008 for all three counties and the state of Michigan
- The proportion of heavy drinkers is roughly one in fifteen (6.2%) and this rate is lower than the state but slightly higher than the nation. Further, the proportion of binge drinkers is slightly lower than the state but higher than the nation.
 - Binge drinking is linked to age (less than 25), gender (male), and ethnicity (non-White)

Risk Behavior Indicators (Cont'd.)

- Very few (2.7%) area adults report they have driven when they have had too much to drink.
- Key Informants consider smoking, alcohol abuse, and illicit substance abuse to be the top three concerning health behaviors in the MMCWM area. Of concern is that of the various health behavior issues, Key Informants are least satisfied with the community response to these three issues.

Youth Behavioral Risk Factors

- The teen (aged 15-19) birth rate is higher in Mason, Oceana, and Lake counties than in Michigan or the U.S., and the repeat teen birth rate in Oceana and Lake counties is higher than the state and the nation.
- With respect to substance use, Mason, Oceana, and Lake counties youth have lower levels of smoking and binge drinking than the state or nation.
- Teen marijuana use in Mason and Lake counties is on par with MI but lower than the U.S. Teen marijuana use in Oceana County is lowest of the tricounty area.
- Even though 37% of area youth report inadequate physical activity per week, these rates are better than the state or nation where over half the youth population is considered inactive.
- Although between two-thirds and three-fourths of area youth consume inadequate quantities of fruits and vegetables, these proportions are also better than the state or nation.

Clinical Preventive Practices

- Almost all women who fall within the recommended age guidelines for a mammogram, breast exam, and a Pap Test have had them.
 - Further, the majority (at least 66%) of women have had them in a timely manner
- Among adult men, the majority have had tests screening for prostate cancer, and the majority of both men and women have been screened for colon cancer.
 - Although the majority of men have received these cancer screening tests, the proportion taking these precautions are lower when compared to the proportion of women receiving comparable tests screening for cancer
- Between one-half and two-thirds of area residents aged 65 or older have been immunized for the flu and pneumonia.
- Oral health is an area that the health care community may want to address for several reasons:
 - Three in ten adults have not visited a dentist for a teeth cleaning in the past year and 15.8% have not visited one in at least five years or not at all
 - Both Key Stakeholders and Key Informants mention the lack of dental care available for the uninsured, those with Medicaid, and low income groups

Chronic Conditions

- The prevalence of the following chronic conditions is very low (5% or less of adults):
 - Stroke
 - Kidney disease
 - Heart attack
- Moreover, small proportions (10% or less) of adults have been told they have:
 - COPD, including emphysema or chronic bronchitis
 - Skin cancer
 - Cancer (non-skin)
 - Angina or coronary heart disease
- Of concern is that cancer death rates are higher in Mason, Oceana, and Lake counties compared to MI or the U.S., however the cancer diagnosis rates are lower than the state or nation. This could indicate the greater number of cancer deaths per capita are the result of the lack of timely screening or diagnoses.
- The prevalence of diabetes is greater than the state or the nation, and is recognized by both Key Stakeholders and Key Informants as an extremely important health issue in the area.
 - In fact, they are <u>less than satisfied with the community response to diabetes, depression, and obesity</u> compared to most other health issues

Chronic Conditions (Cont'd.)

- On the positive side, people with diabetes are being checked for A1c an average of four times a year, right in line with the recommendation from the American Diabetes Association.
- Moreover, seven in ten adults with diabetes have taken a course or class in ways to self-manage their disease.
- The prevalence of arthritis (35.8%) is highest among chronic conditions measured.
 - This proportion increases drastically after age 55
- More than one in ten adults have asthma, although very few (2.5%) have had to visit the ER or Urgent Care in the past year due to the disorder.
- One in ten MMCWM area adults has been diagnosed with anxiety disorder and 16.0% have been told by a health care professional they have a depressive disorder.
 - Further, 7% have major, or clinical, depression according to the 2012 BRFS, a proportion lower than the state of Michigan

Chronic Conditions (Cont'd.)

- More than one in ten adults report they are currently taking some form of medication or receiving treatment for a mental health condition.
 - However, only one third of the adults classified as clinically depressed are currently taking medication or receiving treatment
- More than six in ten of the adults who had a heart attack, angina, or coronary heart disease have had some form of outpatient rehabilitation. The rehabilitation has occurred predominantly at MMCWM.
- Of the few people who have COPD, emphysema, or chronic bronchitis, half have had to see a doctor in the past 12 months due to symptoms.
 - Further, more than one-fifth had to visit an ER or be admitted to the hospital
- Almost all (93.9%) adults living with a chronic condition are at least moderately confident of their ability to manage the condition on a regular basis.
 - More than six in ten (63.4%) are very confident

Health Care Access

- Most adults have health care coverage and have a personal health care provider. However, specific subpopulations are far less likely to have either of these, such as those who:
 - Have less than a high school degree
 - Live in households with annual incomes of \$35,000 or less
 - Live below the poverty line
- The primary reason people do not have health care coverage is <u>cost</u> they cannot afford to pay for it.
- Most adults have not experienced problems receiving needed health care in the past 12 months. Top barriers to accessing health care in the past 12 months include:
 - Lack of insurance
 - (For those with no insurance) Inability to pay for health care
 - (For those with insurance) Inability to pay for co-pays and deductibles
 - Health care provider unavailable

Health Care Access (Cont'd.)

- Key Stakeholders and Key Informants confirm these findings and suggest that the most pressing health issues revolve around the lack of health care programs and services for specific subpopulations, such as low income, ESL/non-English speaking, and those who are uninsured or underinsured.
 - This is especially true for primary care options
 - One of the biggest criticisms is that there are not enough physicians or providers who accept Medicaid, which is concerning since between 58%-70% of all births in Mason, Oceana, or Lake counties have Medicaid health coverage
 - In addition to primary care, programs and services most scarce for these populations are dental care and mental health treatment
 - Both Key Stakeholders and Key Informants report a lack of affordable health care options (e.g., sliding scale, more acceptance of Medicaid) or free clinics for these underserved groups
 - The primary obstacles to addressing these issues is lack of funding
 - However, another obstacle is obtaining buy-in from the entire community with regard to focusing the limited community resources on a subpopulation that may be perceived as a small, and possibly insignificant, proportion of the general population

Health Care Access (Cont'd.)

- Local hospital discharge data shows that seven in ten (70.1%) MMCWM patients are "public payer" types, meaning they have Medicare (48.0%) or Medicaid (22.1%).
 - Further, 4.2% are "uninsured"
- Even those with health care coverage find that their policies neglect to cover ancillary services such as prescriptions, vision, or dental care.
- There is also a lack of mental health care, especially for low income, uninsured, and Medicaid residents.
 - Key Informants report some dissatisfaction with the community response to depression
- Key Stakeholders and Key Informants point to a <u>lack of wellness and</u> prevention programs or services that could offset health costs.

Barriers or Obstacles to Health Care

- Key Informants say the <u>most pressing health need or issue</u> and the <u>single</u> greatest obstacle to health care programs or services, in the MMCWM area is lack of health insurance or coverage.
- Additionally, the lack of physicians and providers accepting Medicaid extends beyond mental illness to all realms of health care.
 - This impacts both adults AND children
- Further, some providers are now limiting the number of new patients they see with Medicare.
 - Senior adults are obviously impacted most because they often have to travel out of the MMCWM area for gerontological services because not only is there a dearth of services that focus on older adults but some of those that exist decline Medicare as a form of coverage
- In addition to providers not accepting Medicaid and Medicare, those with no or limited health care coverage have trouble finding providers who will see them if they have no insurance.
 - There is only one free clinic and it is in Lake County, thus the demand is greater than the supply

Barriers or Obstacles to Health Care (Cont'd.)

- Cost is a barrier as those without insurance or with limited insurance often cannot afford the high costs of care or the out-of-pocket costs such as deductibles and co-pays.
- Language barriers primarily impact the Hispanic population.
 - Key Informants and Key Stakeholders report a lack of not only Hispanic health care professionals, but also non-Hispanic professionals who speak Spanish and can translate
 - There is also a need for education/workshops on how to best address cultural differences that can become obstacles
- Transportation is an issue since large proportions of the MMCWM patient area are rural and isolated. Thus, not only do residents have to travel outside of the area for specific treatment or services but it also can be challenging to regularly engage in preventive care.
- A lack of physicians accepting Medicaid, transportation and cost are not only barriers to health care, they are <u>also barriers to good health</u> as they hinder people from visiting health care professionals for preventative measures such as physical exams/check-ups, immunizations, and screenings.

Barriers or Obstacles to Health Care (Cont'd.)

- Providers say there are also barriers and obstacles to providing health care, such as <u>Medicaid reimbursement rates</u> and <u>lack of patient motivation to</u> <u>engage in services</u>.
- Key Informants offer the following suggestions for effective solutions to health care barriers:
 - More acceptance of Medicaid by providers
 - Public or subsidized transportation
 - Promotion of free/sliding scale clinics
 - Improve Medicaid reimbursement rates
 - Better PR/education on existing programs, services, resources
- Key Stakeholders add the following suggestions for addressing barriers to health care programs and services:
 - Implementing a mobile health care unit
 - Provide community-based services (e.g., in a school setting)
 - Provide care in a more integrated setting
 - Offer services during non-traditional hours

Gaps in Health Care or Services/Programs Offered

- Health care professionals and Key Informants agree that the MMCWM area has a wealth of health care services and programs that meet the demand of the population, including:
 - Chiropractic care
 - Emergency services such as ambulatory/emergency transport and emergency care
 - Ophthalmology
 - Prenatal care
 - Orthopedics
- Conversely, there is a lack of programs and services to meet the demands of the population for:
 - Substance abuse
 - Dermatology
 - General dental care and oral surgery
 - Mental health treatment, whether for mild, moderate, severe, or persistent
 - Non-emergency transport (transportation barrier)
- The inability to meet the demand partly stems from a lack of coordination among providers and a general lack of resources to support existing programs. Better coordination and communication across services will result in a more effective referral system and increase access by the sharing of resources.

Gaps in Health Care or Services/Programs Offered (Cont'd.)

- Many health care professionals believe there is not a wide variety and choice of primary care physicians for both adults and children.
 - Again, the lack of primary care options hits the underserved the hardest
 - Lack of primary care options is attributed to the difficulty in recruiting primary care physicians to the area and the fact that fewer physicians overall are seeking a career in primary care
- Almost all Key Informants, or someone they know, has had to travel outside of the area for certain specialized services such as cardiology, oncology/cancer treatment, oral surgery/dental care, dermatology, or orthopedics.

Health Disparities

There is a direct relationship between health outcomes and both education and income, meaning positive outcomes are more prevalent with higher education and income levels on the same measure.

Examples include:

- General health status
- Physical health
- Mental health status
- Having a disability
- Obesity
- Having health care coverage
- Having a personal health care provider
- Engaging in leisure time activity
- Smoking cigarettes
- Having an appropriately timed breast exam and mammogram
- Having an appropriately timed Pap test
- Having a colonoscopy
- Visiting a dentist
- Having a flu vaccine
- Having diabetes, asthma, angina/coronary heart disease, COPD, and arthritis

Health Disparities (Cont'd.)

- The link between both education and income and positive health outcomes goes beyond the direct relationship. Those in the very bottom groups, for example no high school education and/or less than \$20K in household income, are most likely to experience the worst health outcomes.
- There is also a direct relationship between healthy outcomes and whether or not one lives above or below the poverty line; those who live above the poverty line are more likely to experience positive health outcomes than those who live below.
- Age is also a factor in certain measures where one would expect, such as: general health status, physical health, being disabled, having hypertension and high cholesterol, smoking, binge drinking, having a PCP, and having chronic diseases like arthritis, cancer, diabetes, heart disease, and stroke.
- Race/ethnicity was also a factor in many of the outcomes listed on the previous slide for education and income. However, since our base size for non-Whites was small (unweighted n=44) it is not highlighted here as a major finding, but it is important to note.

SUGGESTED PRIORITIES/ NEXT STEPS

Suggested Priorities/Next Steps

Overall, this research identifies the pressing and prevalent health needs and concerns in the MMCWM service area as the following: health care access - primary and oral care - for the uninsured or low income, chronic disease care especially concerning diabetes, mental health care services (including substance abuse treatment), levels of obesity, and preventative activities. These issues are organized by each identified need.

Health Care Access

Clearly, access to quality and affordable health care is a challenge for the MMCWM service area's low income and uninsured residents. Not only does this lead to unhealthy individuals and families (including infant mortality), it results in an overuse of other services, such as the emergency room, to address needs that grow more severe with neglect. Therefore, the following are suggested to address the issue of access:

- Encourage physicians in the MMCWM area to accept more Medicaid patients through incentives (e.g., increased Medicaid reimbursement rates, local government or community foundation-subsidized reimbursement).
- Increase Medicaid reimbursement for both primary and dental care.

- Establish a more team-oriented approach to care to increase effective communication between organizations within the same service area.
- Build upon existing safety net programs for dental health and primary care by increasing investment in existing providers of free or low-cost dental and primary care (such as free clinics) to enable them to better address the existing community need.
- Policy efforts should be made to incorporate dental care into the community's overall health care delivery system. For example, legislation at the state level could ensure dental care is accessible to all residents.
- Hire more bi-lingual health care providers to both hear and address the needs of the MMCWM service area's Hispanic residents. This may prove difficult thus, alternatively, hire more mid-level health care practitioners who speak Spanish and/or hire bilingual liaisons who can translate for ESL patients. The key is to hire quality translators who are highly fluent in both English and Spanish and can translate the more complex medical terminology.

- Implement transportation service options for residents in need (such as reimbursement system or nonprofit service provider). If this isn't possible, consider a mobile health care unit that can reach residents in remote areas of the region.
- Develop free/sliding-scale, or FQHC clinic, located in Mason County. Currently, the closest one is in Baldwin. The focus of this satellite model could be children, senior adults, and/or the underserved (e.g., uninsured, underinsured, low income, minority).
- Additionally, provide services (e.g., primary care, dental) through community avenues such as schools, senior centers, or hospital-based outpatient walk-in clinics.
- Finally, a strong effort should be made to recruit more primary care physicians, especially gerontologists, to the area. The challenges this brings are enormous, but investigating ways other, similar locations have done this might provide further insight.

- Explore the degree to which services can be provided by mid-level providers (e.g., nurse practitioners, physician's assistants) to increase health care access. Moreover, consider the development of a more team-oriented approach to care, such as physicians work with teams of mid-level providers to be able to see more patients and effectively address patient concerns.
- Expand insurance coverage opportunities in the county to include multi-share plans (MSPs), such as Access Health (Muskegon) that promote coverage for preventive services and provide access to wellness programs.
- If possible, provide services during non-traditional hours (e.g., nights, weekends).

Chronic Disease Care

Chronic disease care, especially in the cases of diabetes and cancer, is linked directly to future health outcomes and care for residents. It is important that residents receive consistent care, be knowledgeable about their disease, and take steps toward active self care, or conditions will worsen, creating greater health problems and more strain on health care delivery.

- Create a system in which walk-in clinics are linked to primary care physicians for information and follow-up opportunities that will increase communication between providers and refer patients with chronic conditions to education and support services.
- Make changes to policy and practice that improve patient self-management such as providing more education and support.
- Determine what types of specialist providers are needed in the community to improve the management of chronic conditions.
- We have already touched on the need for locally-based oncologists, or cancer treatment clinics, so that residents don't have to travel outside of the area for treatment. Having to travel is a barrier that may prevent some people from addressing a medical issue in a timely manner.

Mental Health Support

Residents are unsatisfied with how the community is addressing mental heath needs (e.g., depression, substance abuse). There is also a lack of affordable and available services for moderate mental health needs in the community. Therefore...

- Mental health diagnosis and care should be enhanced based upon the specific needs and resources available in the community.
- Provide more resources for services to residents with mild and moderate mental illness or substance abuse problems.
- Address the population who has been diagnosed with a clinical condition but has not yet received treatment services through outreach and education efforts.
- Mental health care needs to be integrated into the approach to primary care (e.g., co-location of such services, coordinating communication and treatment between mental health care provider and primary care physician).
- Coordinate the delivery of care across agencies to better meet the needs of residents with mental as well as physical health problems.

Addressing Obesity

Obesity is clearly recognized as a health problem existing in the community, and is linked to many undesirable health outcomes. The following recommendations are made to address this community issue, some of which come from recommendations identified by the Centers for Disease Control and Prevention.

- Encourage healthy eating, diets, and exercise through a public awareness campaign in the community. Consider using some of the statistics from this current research in any outreach campaign.
- Increase access to affordable, high quality, fresh vegetables.
- Provide insurance-based incentives to address self management education needs, increase the number of wellness programs in the service area, and provide support that motivates residents to address issues concerning weight.
- Increase the availability of healthy foods and beverages in public venues.
- Support physical education and nutrition classes in school systems by assisting in the evaluation and assessment of their effectiveness.

Preventative Education

Overall, there is a need to promote health literacy and increase prevention education and activities in the community. Therefore, the following recommendations are made to address this need:

- Continue with programs that have demonstrated their effectiveness, such as Healthy Communities and Win with Wellness.
- Make a strong attempt to have programs in place that change the mindset or culture around personal responsibility by engaging people more, or in better ways, and providing them with the tools to make changes and be successful in doing so.
- More community education opportunities that teach and promote healthy lifestyle choices promoted by local health organizations can benefit the community (e.g., Health Fairs, diabetic programs).
- Employee insurance policies should promote coverage for prevention services and activities (e.g., quitting smoking).

- More development of structured employee wellness programs that offer incentives (e.g., reduced insurance premiums, health challenges for prizes) to encourage the practice of healthy lifestyle choices.
- Free or subsidized gym memberships should be offered to increase access to exercise opportunities.
- Get people moving promote the use of treadmills and stationary bikes as ways of exercising that don't have to be aversive or inconvenient to consumers. Educate them to the fact that exercise is easier than they think and can be done in the comfort of their own home.

Developing a Coordinated Community Approach

A coordinated approach to community health and health care can enable the community to collaborate and focus on its most important targets for improvement, have a complete understanding of the services available and the extent of need, and allow for sharing of patient information across medical providers to ultimately increase access and make the process of accessing services easier for county residents. Communication between organizations and individuals is considered critical and necessary for the success of any programs addressing identified community needs. Therefore, the following ideas are recommended:

- Streamline the delivery of care by systematically coordinating processes and services, resulting in a more effective and efficient health care delivery system
- Create a community health care action plan that creates a plan to support efforts to improve community health. Community members want a coordinated community plan that allows people to strategize.
- Focus these coordinated efforts on increasing ease of use in order to encourage more engagement in the health care delivery system by community residents.

- Make technology improvements that allow for a regional system permitting local data exchange concerning patient care.
- Ultimately, the community must develop and agree upon population health outcomes and targets for intervention.
- At a minimum, the following should be invited to the table, to strategize better ways to collaborate and coordinate health care:
 - MMCWM
 - Community Mental Health
 - Health Department
 - Health care providers, including physicians, nurses, dentists
 - Department of Human Services
 - Council on Aging

Sub-population Focus

There are groups within the general population that deserve specific focus in implementing any improvements to the health care service delivery and overall health outcomes in the MMCWM service area.

- Hispanic residents Hispanic residents are more likely to report their health as fair or poor than other residents, and also face language barriers in accessing services. Consideration of this population's health needs and care is critical to improving community health. This may be more of an issue in northern Oceana County than Mason County.
- Low education and low income residents The majority of health care access and health outcomes identified in this needs assessment are directly or indirectly related to income as well as education. Considering these factors in any attempt to increase access or achieve desired health outcomes should improve the overall effectiveness of these efforts.

- Teen and single mothers the teen birth rate is high, as well as the number of single mothers with children under 18 living in poverty. This group is deserving of further investigation and efforts to increase access to care for these families will benefit the health of the community.
- More women than men tend to have regular screening for disease or chronic conditions. Therefore, the community must develop strategies to get more men to participate in this type of preventative health care.

General Next Steps

MMCWM could partner with other organizations that share their vision for improving the health climate in the region by offering **grants** to address certain designated community health issues. By working together, MMCWM will have a better chance of making an impact and will also foster community buy-in. MMCWM will also have the authority to fund only those programs they deem successful and sustainable.

Finally, next steps should include the creation of a <u>steering committee</u> to work on prioritizing and then developing a coordinated response to issues deemed most important to work on, within a specific time frame, such as 1 year, 3 year, and 5 year goals. Ideally, this committee will be comprised of a wide range of community members, representing the entire community: consumers, healthcare professionals, human resources representatives, social service agencies, civic agencies, educational professionals, volunteers, etc.

The information provided in this needs assessment should be considered evidence-based and a benchmark for going forward. It can be used to facilitate discussions with different community stakeholders on how to best address the needs identified here, in pursuit of funding for new efforts, and as a baseline to provide the community with its health profile. Above all, next steps involve the establishment of careful priorities for action that once implemented, will benefit the community for the long haul.

Suggested Priorities/Next Steps (Cont'd.)

In conclusion, a few Key Stakeholders suggested making the information in this report available to the community as a way of not only increasing awareness of the issues, but also as a catalyst for a collaborative community conversation on the health and health care climate in the area. Hopefully, this would lead to increased involvement by a diverse cross-section of the community, ultimately leading to more positive health outcomes.

METHODOLOGY

Methodology

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

	Data Collection Methodology	Target Audience	Number Completed
Key Stakeholders	In-Depth Telephone Interviews	Hospital Directors, Clinic Directors	7
Key Informants	Online Survey	Physicians, Nurses, Dentists	36
Community Residents	Telephone Survey (BRFS)	Mason County, Northern Oceana County Adults (18+)	1,043

- Secondary data was derived from local hospital (MMCWM) utilization data and various government and health sources such as the U.S. Census, Michigan Department of Community Health, County Health Rankings.
- Of note, the secondary data section compares Mason, Oceana, and Lake counties to Michigan and the U.S. where applicable. In this section, Oceana county refers to the entire county. In the primary data sections (e.g., BRFS resident survey, Key Stakeholder in-depth interviews, Key Informant online survey), any reference to Oceana County refers to northern Oceana County which falls in the MMCWM target area for consumers.

- Of the 9 Key Stakeholders invited to participate, 7 completed an in-depth interview (78% response rate). Key Stakeholders were defined as executivelevel community leaders who:
 - Have extensive knowledge and expertise on public health issues
 - Can provide a "50,000 foot perspective"
 - Are often involved in policy decision making
 - Examples include hospital administrators and clinic directors
- Of the 125 Key Informants invited to take the online survey, 36 completed it for a 29% response rate. Key Informants are also community leaders who:
 - > Have extensive knowledge and expertise on public health issues, or
 - Have experience with subpopulations impacted most by issues in health/health care
 - Examples include health care professionals or directors of non-profit organizations
- A Behavioral Risk Factor Survey (BRFS) was conducted via telephone with residents in Mason County and northern Oceana County. These regions were selected based on MMCWM's consumer reach. The areas selected for northern Oceana County represented the following zip codes:
 - 49420 (Hart)
 - 49436 (Mears)
 - 49449 (Pentwater)
 - 49459 (Walkerville)

- Disproportionate stratified random sampling (DSS) was used to ensure results could be generalized to the population of Mason and northern Oceana counties. Characteristics of DSS are:
 - Landline telephone numbers are drawn from two strata (lists) that are based on the presumed density of known telephone household numbers
 - Numbers are classified into strata that are either high density (listed) or medium density (unlisted)
 - Telephone numbers in the high density strata are sampled at the highest rate, in this case the ratio was 1.5:1.0
- Households were selected to participate subsequent to determining the number dialed was a landline number to a Mason or Oceana county residence. Vacation homes, group homes, institutions, and businesses were excluded.
- Respondents were screened to ensure they were at least 18 years of age and resided in Mason or Oceana county. If a household contained more than one adult, interviewers randomly selected one adult to participate based on who had the nearest birthday. In these cases, every attempt was made to speak with the randomly chosen adult and interviewers were instructed to not simply interview the person who answered the phone or wanted to complete the interview.

- A Spanish version of the BRFS instrument was utilized where necessary by trained, Spanish-speaking interviewers.
- A total of 1,043 residents participated in the BRFS survey. The response rate was 43%.
- In addition to landline telephone numbers, the design also targeted cell phone-only Mason and northern Oceana County residents. Of the 1,043 completed surveys:
 - 102 are cell-phone-only (9.8%)
 - 233 are landline only (22.3%)
 - > 708 have both cell and landline numbers (67.9%)
- The margin of error for the entire sample of 1,043, at a 95% confidence level, is +/- 2.98%. This is based on a population of roughly 31,937 Mason and northern Oceana County residents 18 years or older, according to the 2010 U.S. Census estimate.
- Unless noted, as in the Michigan BRFS, respondents who refused to answer a question or did not know the answer to specific questions were normally excluded from analysis in the section of the report pertaining to the BRFS. Thus, the base sizes vary throughout the section regarding the BRFS. This method was chosen in order to be consistent with the state of Michigan and the U.S. for comparison purposes.

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- Data weighting is an important statistical process that was used to remove bias from the BRFS sample. The formula consists of both design and poststratification weights. The purpose of weighting the data is to:
 - Correct for differences in the probability of selection due to non-response and non-coverage errors
 - Adjusts variables of age and gender between the sample and the entire adult population in Mason and Oceana counties
 - Allows the generalization of findings to the whole population, not just those who respond to the survey
- The formula used for weighting the BRFS data is:

FINALWT = STRWT * 1 OVER IMPNPH * NUMADULT * POSTSTR

- The components of the weighting formula are as follows:
 - STRWT accounts for differences in the basic probability of selection among strata (subsets of area code/prefix combinations)
 - IMPNPH the number of residential telephone numbers in the respondent's house
 - NUMADULT number of adults in the respondent's household
 - POSTSTR adjusts for noncoverage and nonresponse. It is the number of people in an age by sex category in the population of a region (in this case, Mason County), divided by the sum of the products of the preceding weights for the respondents in that same age by sex category

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APPENDIX

Definitions of Commonly Used Terms

Definitions of Commonly Used Words/Acronyms

- ESL means "English as a second language." For this population/group, English is not their primary language. For purposes of this report, it most often refers to the Hispanic population that has Spanish as their primary language.
- PCP refers to "primary care provider" or "primary care physician," but the key terms are "primary care." Examples of this are family physicians, internists, and pediatricians.
- Binge drinkers those who consume five or more drinks per occasion (for men) or four or more drinks per occasion (for women) at least once in the previous month.
- Heavy drinkers those who consume an average of more than two alcoholic drinks per day for men and one per day for women in the previous month.

Respondent Profiles

Key Stakeholder Interviews

Administrator at Oceana County Medical Care Facility

Director of Community Mental Health

Director of Department of Human Services

Executive Director of United Way in Mason County

Health Officer at Mason County Health Department

Interim Director of Nursing and Allied Health at West Shore Community College

President and CEO of Memorial Medical Center

Behavioral Risk Factor Survey

	TOTAL	Mason County	Northern Oceana County
Gender	(n=1,043)	(n=719)	(n=324)
Male	47.4%	47.6%	44.3%
Female	52.6%	52.4%	55.7%
Age	(n=1,043)	(n=719)	(n=324)
18 to 24	11.1%	11.5%	6.9%
25 to 34	11.7%	11.8%	10.1%
35 to 44	12.7%	11.9%	21.5%
45 to 54	22.2%	23.3%	9.1%
55 to 64	19.0%	19.1%	17.9%
65 to 74	11.8%	10.6%	26.6%
75 or Older	11.5%	11.8%	7.8%
Race/Ethnicity	(n=1,031)	(n=712)	(n=319)
White, non-Hispanic	97.3%	97.5%	95.4%
Non-White	2.7%	2.5%	4.6%

Behavioral Risk Factor Survey (Cont'd.)

	TOTAL	Mason County	Northern Oceana County
Marital Status	(n=1,039)	(n=715)	(n=324)
Married	59.9%	59.1%	69.8%
Divorced	9.3%	9.3%	9.8%
Widowed	7.0%	7.2%	4.5%
Separated	0.2%	0.1%	0.5%
Never married	17.9%	18.4%	10.8%
A member of an unmarried couple	5.8%	5.9%	4.8%
Number of Children Less Than Age 18 At Home	(n=1,043)	(n=719)	(n=324)
None	66.3%	66.0%	69.5%
One	12.5%	12.7%	10.0%
Two	14.3%	14.1%	16.3%
Three or more	6.9%	7.2%	4.2%
Number of Adults and Children in Household	(n=1,043)	(n=719)	(n=324)
One	11.2%	11.4%	8.6%
Two	33.7%	32.4%	49.4%
Three	18.5%	19.5%	6.5%
Four	19.6%	19.4%	22.0%
Five	12.0%	12.2%	9.8%
Six or more	5.0%	5.1%	3.7%

Behavioral Risk Factor Survey (Cont'd.)

	TOTAL	Mason County	Northern Oceana County
Education	(n=1,043)	(n=719)	(n=324)
Less than high school graduate	5.7%	5.6%	6.1%
High school graduate/GED	31.5%	30.5%	43.4%
Some college (1 year to 3 years)	34.1%	34.6%	28.1%
College graduate (4 years or more)	28.8%	29.3%	22.3%
Employment Status	(n=1,038)	(n=717)	(n=321)
Employed for wages	42.4%	42.6%	41.1%
Self-employed	8.1%	7.9%	10.7%
Out of work for more than a year	3.4%	3.4%	3.8%
Out of work for less than a year	7.0%	7.2%	4.9%
A homemaker	4.3%	4.4%	2.0%
A student	5.4%	5.8%	0.2%
Retired	23.7%	23.2%	30.3%
Unable to work	5.6%	5.5%	6.9%

Behavioral Risk Factor Survey (Cont'd.)

	TOTAL	Mason County	Northern Oceana County
Household Income	(n=824)	(n=569)	(n=255)
\$20,0000 or less	18.8%	19.0%	16.6%
\$20,001 to \$35,000	21.0%	21.6%	14.8%
\$35,001 to \$50,000	18.1%	17.2%	27.4%
\$50,001 to \$75,000	20.7%	20.8%	19.8%
More than \$75,000	21.5%	21.5%	21.4%
Poverty Status	(n=824)	(n=589)	(n=255)
Income under poverty line	18.8%	19.2%	14.0%
Income over poverty line	81.2%	80.8%	86.0%
Region	(n=1,043)	(n=719)	(n=324)
Mason County	92.3%	100%	
Northern Oceana County	7.7%		100%

Key Informant Surveys

4-H Program Secretary, Oceana County Extension Office

4-H Program Supervisor, Mason County Extension Office

4-H Program Supervisor, Oceana County Extension Office

Administrator, Oakview Medical Care Facility

Captain, Salvation Army

Chairperson, West Michigan Human Services

Deputy Health Officer, District 10 Public Health

Director, Hadley Center, Memorial Medical Center of West Michigan

Director, Ludington Senior Center

Director, OB/Clinical, Memorial Medical Center of West Michigan

Director of Home Care, Memorial Medical Center of West Michigan

Director of Infection Control, Memorial Medical Center of West Michigan

Director of Student Services, Mason County Central

Key Informant Surveys (Cont'd.)

Discharge Planner, Memorial Medical Center of West Michigan

Discharge Planner, Memorial Medical Center of West Michigan

District Manager, Social Security Administrator

Executive Director, Staircase

Executive Director, West Michigan Community Mental Health

Executive Director, West Shore Pregnancy Care Center

Guidance Counselor, Mason County Central

Health Educator, District 10 Health Department

Health Educator, District 10 Health Department

Manager, Shepherd's Staff and Services

MSU Extension Office Manager, Oceana County Extension Office

Occupational Therapist, Mason-Lake ISD

Key Informant Surveys (Cont'd.)

Pediatrician, Ludington

Pediatrician, Ludington

Principal, Hart Elementary School

Referral Manager, Tendercare of Ludington

Registered Nurse, Oceana County Council on Aging

Secretary, Catholic Charities of West Michigan

Secretary, Mason County Eastern

Social Worker, Mason County Central

Social Worker, Oakview Medical Care Facility

Supervisor, West Michigan Community Mental Health

Supervisor, Mason-Lake ISD

Village President, Pentwater