SPECTRUM HEALTH

Community Health Needs Assessment for:

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

And

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

The “hospital facilities” listed above are part of Spectrum Health System. Spectrum Health is a not-for-profit health system in West Michigan offering a full continuum of care through the Spectrum Health Hospital Group, which is comprised of 11 hospitals; the Spectrum Health Medical Group which employs more than 1,200 physicians and advanced practice providers; and Priority Health, a health plan with 590,000 members. Spectrum Health System is West Michigan’s largest employer with more than 21,700 employees. The organization provided $294.6 million in community benefit during its 2014 fiscal year. Spectrum Health was named one of the nation’s Top Health Systems in 2014 by Truven Health Analytics.

Community Health Needs Assessment – Exhibit A

The focus of this Community Health Needs Assessment attached in Exhibit A is to identify the community needs as they exist during the assessment period (late 2014-early 2015), understanding fully that they will be continually changing in the months and years to come. For purposes of this assessment, “community” is defined as the county in which the hospital facility is located. This definition of community based upon county lines, is similar to the market definition of Primary Service Area (PSA). The target population of the assessment reflects an overall representation of the community served by this hospital facility. The information contained in this report is current as of the date of the CHNA, with updates to the

assessment anticipated every three (3) years in accordance with the Patient Protection and Affordable Care Act and Internal Revenue Code 501(r). This CHNA report complies with the requirements of the Internal Revenue Code 501(r) regulations either implicitly or explicitly.

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

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

Spectrum Health United/Kelsey Hospitals Community-Wide Health Needs Assessment

Research Results from the 2014-15 Community-Wide Health Needs Assessment

A Research Project for

SPECTRUM HEALTH
United Hospital

SPECTRUM HEALTH
Kelsey Hospital

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VP RESEARCH AND EVALUATION
VISION · INSIGHT · PRAXIS

May 1, 2015

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INTRODUCTION

Background and Objectives

- VIP Research and Evaluation was contracted by Spectrum Health to conduct a Community Health Needs Assessment (CHNA), which included a Behavioral Risk Factor Survey (BRFS) for Spectrum Health United Hospital and Spectrum Health Kelsey Hospital (SHUKH).

- The Patient Protection and Affordable Care Act (PPACA) passed by Congress in March of 2010 set forth additional requirements that hospitals must meet in order to maintain their status as a 501(c)(3) Charitable Hospital Organization. One of the main requirements states that a hospital must conduct a Community Health Needs Assessment (CHNA) and must adopt an implementation strategy to meet the community health needs identified through the assessment. The law further states that the assessment must take into account input from persons who represent the broad interests of the community, including those with special knowledge of, or expertise in, public health.

- In response to the PPACA requirements, organizations serving both the health needs and broader needs of Spectrum Health United and Spectrum Health Kelsey communities began meeting to discuss how the community could collectively meet the requirement of a CHNA.

Background and Objectives (Cont'd.)

- The objective of the BRFS is to obtain information from SHUKH area residents about a wide range of behaviors that affect their health. More specific objectives include measuring each of the following:
  - 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/nutrition, and physical activity
  - Clinical preventative measures, such as routine physical checkups, cancer screenings, oral health, and immunizations
  - Chronic conditions, such as diabetes, asthma, heart disease and cancer, and the management of chronic conditions

- The overall objectives of CHNA include:
  - Gauge the overall health climate or landscape of the regions primarily served by Spectrum Heath United Hospital and Spectrum Health Kelsey Hospital, including Montcalm County, southern Mecosta County, and eastern Newaygo 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 information collected will be used to:
  - Prioritize health issues and develop strategic plans
  - Monitor the effectiveness of intervention measures
  - Examine the achievement of prevention program goals
  - Support appropriate public health policy
  - Educate the public about disease prevention through dissemination of information

EXECUTIVE SUMMARY

Executive Summary

In 2014, VIP Research and Evaluation was contracted by Spectrum Health to conduct a Community Health Needs Assessment (CHNA), which included a Behavioral Risk Factor Survey (BRFS), for Spectrum Health United and Kelsey Hospitals (SHUKH).

The primary goal of the study was to identify key health and health service issues in the SHUKH service area, which focused primarily on Montcalm County. The results will be used to assist in planning, implementation of programs and services, evaluating results, allocation of resources, and achieving improved health outcomes, specifically related to identified needs.

Data was gathered from a variety of sources and using multiple methodologies. Resident feedback was obtained via a Behavioral Risk Factor Survey (BRFS) (n=663) of the broader adult population in the SHUKH area, as well as a self-administered survey (n=38) to more targeted subpopulations of underserved or vulnerable residents (e.g., single mothers with children, uninsured/underinsured/ Medicaid). Health care professionals and other community leaders, known as Key Stakeholders or Key Informants, provided input via in-depth interviews (n=5) and an online survey (n=27). Secondary data gathered from state and national databases was also used to supplement the overall findings.

Executive Summary (Cont'd.)

Some of the characteristics that make the SHUKH area a great place to live and raise a family, such as being a small, close-knit rural community with farm fresh food/gardens, parks, and recreation areas, also contribute to problems of high unemployment and poverty rates.

Most adult residents in the SHUKH area consider themselves to be in good to excellent overall health. Residents are satisfied with their lives, and a large majority are able to access social and emotional support when needed.

Montcalm County fares better than peer counties on many mortality and morbidity measures, including adult overall health, male and female life expectancy, and deaths from diabetes or Alzheimer's disease.

While Montcalm County men and women enjoy longer life expectancy than those in peer counties, life expectancies for men and women in the service area overall are lower than state and national averages.

Chronic conditions, such as asthma, cancer, COPD, heart attacks, and stroke are more prevalent among adults in the SHUKH area than in Michigan and the U.S. Further, one in ten area adults has diabetes.

The majority of area adults are overweight or obese. Though obesity rates are lower than the state or the nation, more than one-fourth of adults are obese and this is a major area that is perceived to have an insufficient community response.

Executive Summary (Cont'd.)

The rates for both high cholesterol and high blood pressure are lower than the state or the nation, however, adults do not have their cholesterol checked as often as they should.

In terms of risk behaviors, smoking stands out as a trouble spot, with three in ten area adults classified as smokers. Area health care workers feel that the high incidence of smoking is not being adequately addressed in the community.

Rates for heavy drinking are lower than the state and nation but roughly one in six participate in binge drinking.

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

Area youth have lower rates for risk behaviors such as sex, smoking, binge drinking, and marijuana use compared to youths across the state or the nation.

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 health and greater satisfaction with life, and are more likely to have health coverage, visit a dentist, refrain from smoking, and exercise regularly. They are less likely to have chronic health conditions, high blood pressure, or high cholesterol.

Executive Summary (Cont'd.)

Health care coverage has expanded in the last several years to where almost nine in ten area adults have health care coverage. This proportion is much better than state and national levels.

More than eight in ten have a personal health care provider, and most adults engage in clinical preventive practices such as routine physical checkups and cancer screenings.

Dental care is an area that many neglect, with one-third of area residents reporting no dental cleanings in the past year.

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

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

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

Executive Summary (Cont'd.)

Further, 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 or any type of preventive service.

Additional barriers to care include a shortage of providers – both primary care and specialists – particularly those accepting Medicaid, and transportation issues pose enormous challenges for many area residents.

Additional areas identified by Key Stakeholders and Key Informants as needing more services and programming are management and prevention of chronic disease/health conditions (although most adults with chronic conditions say they receive information on how to manage their disease), prevention and wellness in general, transportation, and programs targeting uninsured/underinsured and low income residents.

Since the last CHNA conducted in 2011, Key Stakeholders report improvements to the health landscape by way of increased recruitment of physicians, collaboration with schools to address health literacy, adding health department workers to better coordinate community based resources to address issues that prevent patients from complying with treatment plans, ensuring providers know what services are available, and developing a plan to address gaps in specialty services.

Executive Summary (Cont'd.)

Community members (both residents and health care professionals) suggest further strategies to improve the health care landscape. Priorities include:

- Increase coordination and information sharing among service providers
- Address mental health concerns through increased collaboration among health care providers, public health, and community agencies
- Make better use of services and programs that are currently in place – through increased access (e.g., transportation; flexible hours), increased awareness among residents about available services, and stronger partnerships among existing services/providers
- Increase efforts to address more primary care physicians/physician extenders
- Conduct screenings to promote early treatment of cancer and early detection of mental health
- Increase utilization of telemedicine and telepsychiatry
- Increase prevention and wellness programs and services and offering financial incentives for wellness behaviors
- Prioritize creative transportation ideas/services, such as creating a volunteer transportation network
- Provide more options and support for exercise (e.g., places to walk in winter months, creating programs with exercise partners, providing free day care for mothers who want to exercise)
- Create more community programs to educate and engage individuals and families in healthy pursuits (exercise events, cooking classes, education about nutrition and accessing healthy foods)
- Bring additional PCPs, specialists, and urgent care facilities into the community
- Increase mental health services (particularly outpatient services)

Executive Summary (Cont'd.)

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.

Executive Summary – **Strengths**

Social Indicators

- ✓*Lower violent crime and homicide rates than MI/US*
- ✓*Lower child abuse/neglect rates than MI/US*
- ✓*Safe, walkable, and family-friendly community*
- ✓*Numerous walking/hiking/biking trails, parks*
- ✓*Farm fresh food, Farmer's Markets, gardens*
- ✓*Active organizations that promote health such as fitness centers*
- ✓*Strong community foundations, colleges, churches*
- ✓*Strong volunteer force*

Health Care Access

- ✓*Four hospitals in Montcalm County and numerous health care professionals serving the area*
- ✓*Very good health resources, services, and programs*
- ✓*More adults have health insurance and medical home (PCPs) than MI/US (84.3% have medical home)*
- ✓*More residents have health care coverage now compared to 2011*
- ✓*Fewer have had to forego medical care due to cost than MI/US*
- ✓*Most adults are confident they can navigate the health care system*
- ✓*Health partnerships are collaborative and cooperative (but could do better)*
- ✓*Prevalent services such as emergency care, cardiology, general surgery, OBGYN, orthopedics, ambulatory /emergency transport, and nursing home care*

Health Indicators

- ✓*Overall health status better than peer counties and MI*
- ✓*Lower prevalence of adults with poor physical and mental health vs. MI/US*
- ✓*Female and male life expectancy rates higher than peer counties*
- ✓*High satisfaction with life, higher than MI*
- ✓*Strong social and emotional support networks*
- ✓*Death rate from cancer lower than MI (but higher than US)*
- ✓*Most pregnant women receive timely prenatal care and begin prenatal in first trimester (better than MI)*
- ✓*Proportion of low birth weight lower than MI/US and preterm births better than peer counties*
- ✓*Prevalence of obesity lower and prevalence of healthy weight higher than MI/US*
- ✓*Lower prevalence of chronic disease such as angina/CHD and skin cancer compared to MI/US*
- ✓*Almost all adults (90%+) with chronic diseases receive information on how to manage their condition*
- ✓*HIV rate lower than peer counties*
- ✓*Cancer, diabetes, and heart disease are viewed as prevalent but the satisfaction with the community response to them is high*

Executive Summary – **Strengths (Cont'd.)**

Preventive Practices

- ✓*Higher proportion of immunized children than MI/US*
- ✓*Majority have routine checkups (higher than MI/US) and health screenings/tests*
- ✓*Timely breast screening and ever having cervical cancer screening (not timely) higher than MI*
- ✓*Flu and pneumonia vaccine for 65+ higher than MI/US*

Risk Behaviors

- ✓*Fewer youth having sex than MI/US*
- ✓*Lower prevalence of youth risk behaviors such as smoking, binge drinking, and marijuana use compared to MI/US*
- ✓*Lower rates of heavy drinking for adults compared to MI*
- ✓*Most adults say they always have enough to eat*
- ✓*Lower prevalence of HBP and high cholesterol than MI/US*
- ✓*Fewer motor vehicle deaths than peer counties*

Executive Summary – **Opportunities for Improvement**

Social Indicators

- ✓*Poverty rates higher for individuals and families than MI/US*
- ✓*Two-thirds of single female families with children under 5 live in poverty*
- ✓*More children receiving WIC or eligible for free/reduced lunch vs. MI*
- ✓*More Medicaid births than MI*
- ✓*Unemployment rate higher than MI, US, and peer counties*
- ✓*Jobs/economy/unemployment is a top concern of area adults and many believe it impacts health*
- ✓*Adults less educated than adults throughout MI/US*
- ✓*Higher housing costs/stress than peer counties*

Preventive Practices

- ✓*Fewer adults have prostate and colorectal cancer screenings than MI*
- ✓*Appropriately time Pap test rate worse than MI*
- ✓*More than one-third don't visit a dentist for a cleaning, worse than MI/US*
- ✓*One in five not taking medication for high cholesterol*

Health Care Access

- ✓*Even though more insured, high deductibles and co-pays preventing many residents from utilizing coverage*
- ✓*Additional out-of-pocket expenses, such as the cost of prescriptions, is problematic*
- ✓*Transportation is another major barrier to services*
- ✓*General lack of all services for most vulnerable and underserved subpopulations (low income, uninsured, underinsured, Medicaid)*
- ✓*Far fewer PCPs per capita than MI and access to PCPs worse than in peer counties*
- ✓*Lack of adequate mental health care services in general (from mild to severe) and those that accept multiple forms of insurance*
- ✓*Lack of affordable oral health care and available dentists for uninsured, low income, and Medicare/Medicaid residents*
- ✓*One in seven have problems getting needed dental care due to cost*
- ✓*One in five people have Medicaid, two in five for children*
- ✓*One in seven adults visited ER/ED two or more times in the past year*
- ✓*Lack of dermatology, oral surgery, substance abuse, urgent care services*
- ✓*Need for more focus on prevention and wellness, self-care, and general health literacy through community programming*
- ✓*Lack of programs/services for substance abuse in general and those that accept multiple forms of insurance*
- ✓*Less than half of Key Informants are satisfied with the overall health climate in the area*

Executive Summary – **Opportunities for Improvement (Cont'd.)**

Risk Behavior Indicators

- ✓***Half of adults physically inactive****
- ✓***Three in ten smoke cigarettes, higher than MI/US***
- ✓***Fewer adults have cholesterol checked than MI/US***
- ✓***Eight in ten adults consume inadequate amounts of fruits and vegetables***
- ✓***Higher prevalence of adult binge drinking compared to US***
- ✓***More mothers smoke during pregnancy compared to MI***
- ✓***More teen births than MI/US***
- ✓***Almost half of youth report inadequate physical activity***
- ✓***Lack of adequate fruits and vegetables in diets of both youth and adults, combined with a lack of affordable, healthy food***
- ✓***Lack of personal responsibility and motivation to engage in behavioral changes***
- ✓***Smoking, alcohol abuse, illicit drug use, and licit substance abuse are viewed as highly prevalent but Key Informant dissatisfaction with community response to them also great***

Health Indicators

- ✓***Lower life expectancy for women and men compared to MI***
- ✓***Higher mortality rates than MI***
- ✓***Infant mortality rate higher than US (but lower than MI)***
- ✓***Death rates from heart disease, stroke, and unintentional injuries higher than MI/US***
- ✓***Cancer diagnosis rate higher than MI/US***
- ✓***One in ten adults has diabetes, higher than US and peer counties***
- ✓***Nearly one in six report fair/poor general health, worse than U.S.***
- ✓***More adults rarely/never receive social or emotional support they need compared to MI adults***
- ✓***Almost 1 in 5 adults have experience some form of psychological distress (mild to severe)***
- ✓***Older adult depression rates higher than peer counties***
- ✓***Only between one-fourth of adults with severe psychological distress and one-third of adults considered to have poor mental health are currently taking medication or receiving treatment for a mental condition/emotional problem***
- ✓***3 in 10 youth reporting depression, higher than MI and on par with US***
- ✓***Prevalence of overweight adults higher than MI/US***
- ✓***Youth suicide attempts higher than MI/US***
- ✓***Higher youth obesity rates than MI/US***
- ✓***Obesity, depression, anxiety, and COPD are viewed as highly prevalent but Key Informant dissatisfaction with community response to them also great***
- ✓***Rates for chronic diseases such as asthma, heart attack, stroke, COPD, and cancer worse than MI/US***

*Residents reported their level of activity during the 30 days prior to taking the survey, which was administered in the winter months (December-February), when fewer opportunities for outdoor activity are present.

Key Findings

Health Care Access

+ Nearly nine in ten adults in the SHUKH area have health insurance, and more than eight in ten have a medical home.
+ More people have health care coverage now compared to 2011, largely due to the Affordable Care Act and the Healthy Michigan Plan.
- The SHUKH area has far fewer primary care physicians per capita than Michigan as a whole.
- Even though one in five residents has Medicaid, and two in five children are on Medicaid, provider options are especially limited.
- Despite the increase in insured residents, several barriers prevent citizens from obtaining needed care, most notably cost barriers, which can include the high cost of co-pays and/or deductibles for insured residents. The cost barrier is particularly prominent among the underserved population.
- Transportation is a major barrier, to not only getting to appointments, but to getting from one provider/agency to the next when multiple appointments are scheduled.
- In addition to barriers to medical care, more than one in ten face barriers to obtaining needed dental care, and these barriers are nearly always cost-related.

Key Findings (Cont'd.)

Health Care Access (Cont'd.)

+ Key Informants report the SHUKH area is strong in services such as emergency care, cardiology, general surgery, OBGYN, orthopedics, ambulatory/emergency transport, and nursing home care.
- Service gaps identified by health care workers as most critical include mental/behavioral health services, substance abuse treatment, prevention and wellness programs, and programs that specifically serve the underserved population (uninsured, underinsured, Medicaid, low income).
- Additionally, Key Informants see a need for more/better services such as dermatology, oral surgery, mental treatment from mild to severe, substance abuse treatment, and urgent care services.
- Both Key Stakeholders and Key Informants are cognizant of gaps in services, but they also stress that existing programs and services could be better utilized by: (1) increasing awareness of their existence, what they are, how they work, and who they serve; (2) providing transportation so all residents can access needed services; and (3) enhancing hours of operation enabling more residents to access services, especially those who find it difficult to leave their job or get to services during a typical 8-5 daytime window.

Key Findings (Cont'd.)

Health Status

+ Montcalm County women and men enjoy higher life expectancy than those in peer counties
- However, life expectancy among area residents is lower than the state and national averages.
- Age adjusted mortality rates are also higher in Montcalm County vs. MI/US.
+ Overall health status is better among area residents compared to residents of peer counties and the U.S.
- Still, overall health status is lower than state averages and especially low among the underserved subpopulation.
- Health professionals are dissatisfied with the community response to anxiety, depression, and obesity.
+ Area residents have higher satisfaction with life than Michigan residents.
+ Rates for poor physical and poor mental health are lower for area adults compared to adults across the state, and local adults are less likely to report activity limitation due to poor physical/mental health than MI adults.
+ Lower rates for adult obesity and higher rates of adults who are at a healthy weight compared to the state and nation as a whole.

Key Findings (Cont'd.)

Health Status (Cont'd.)

- On the other hand, there are greater proportions of adults who are overweight than there are for MI or U.S., and taken as a whole, almost two-thirds of SHUKH area adults are either obese or overweight.

Chronic Disease

+ Adult rates of skin cancer and angina/CHD are lower than rates in MI or U.S.
- On the other hand, rates for asthma, cancer, COPD, heart attacks, and stroke are all higher among area adults than the state or the nation.
- One in ten adults has diabetes and this rate is worse than peer counties.
- One in four area adults has arthritis.
- Health professionals are dissatisfied with the community response to COPD.
+ However, health professionals are satisfied with the community response to cancer, diabetes, and heart disease.
+ Deaths from Alzheimer's Disease and diabetes lower than in peer counties.

Key Findings (Cont'd.)

Clinical Preventive Practices

+ More than eight in ten adults have visited a physician for a routine checkup within the past year, a far greater percentage than in the state or nation.

+ The majority of older adults recommended to receive cancer screening (breast, cervical, prostate, and colon) are doing so, and rates for appropriately timed mammograms and ever having a Pap test are better than the state and nation.

- That said, fewer area adults are being screened for prostate and colorectal cancer than adults across MI or the U.S., and fewer woman are having appropriately timed (last three years) cervical cancer screening compared to the state or nation as a whole.

+ Most adults age 65 or older have received a flu vaccine in the past year and most have received a pneumonia vaccine at some time and the rates are higher than MI or the U.S.

- Dental care lags behind the state and nation, with one-third of area adults having had no dental cleaning within the past year. Among those with the lowest household incomes and those with less than a high school education**, two-thirds have not visited a dentist in the past year**.

+ Rates for both high cholesterol and high blood pressure are lower among area adults compared to rates for adults across the state and the nation.

Key Findings (Cont'd.)

Lifestyle Choices/Behaviors

+ Most people know what they need to do to live a healthier lifestyle, such as exercising, eating healthier foods, and getting plenty of sleep.
- Thus, advocating for more education about healthy lifestyle choices is probably not the best way to utilize resources.
+ Residents recognize that what prevents them from making positive changes is cost, as well as lack of energy, time, and willpower.
+ Therefore, if policies are to focus on ways to encourage residents to make lifestyle changes, then the following four approaches are worth investigating: (1) find ways to incentivize people to make changes, (2) increase access to affordable and healthy foods, (3) educate people on quick, easy ways to prepare delicious healthy meals, and (4) increase access (affordable, convenient location, ease of use) to gyms, recreation areas, and community exercise programs and activities, especially in the winter months.
+ Education delivered in person at easily-accessible community sites is likely to be more successful with underserved residents than education delivered online.

Key Findings (Cont'd.)

Risk Behaviors

+ Area adults are more physically active than those in peer counties, and area youth are more active than those in the state and nation as a whole.
- However, area adults are far less active compared to those state-wide or nation-wide.*
- Nearly three in ten area adults are considered to be smokers, considerably higher than statewide and nationwide rates.
+ Incidence of adult heavy drinking is lower than MI or U.S.
- Binge drinking is lower than the state but on par with the nation, where on in six participate in binge drinking.
+ The prevalence of youth smoking, binge drinking, and marijuana use is lower than the state or nation.
- Eight in ten area adults do not eat an adequate amount of fruits and vegetables daily.
- Although fewer adults have high cholesterol compared to MI or U.S., fewer also have their cholesterol checked compared to the state or nation.

*Residents reported their level of activity during the 30 days prior to taking the survey, which was administered in the winter months (December-February), when fewer opportunities for outdoor activity are present.

Key Findings (Cont'd.)

Disparities in Health

- There continue to be disparities in health, particularly with respect to education and income. There is a direct relationship between health outcomes and either education or income on a number of key measures. For example, those with lower incomes or levels of education are less likely to:
  - Report good/very good/excellent general health
  - Report good physical and mental health
  - Be psychologically well
  - Be satisfied with life
  - Receive adequate social and emotional support
  - Be at a healthy weight
  - Have health coverage
  - Avoid visiting the ER/ED
  - Exercise
  - Refrain from smoking cigarettes
  - Consume adequate amounts of fruits and vegetables
  - Be screened for breast and cervical cancer
  - Visit a dentist and have their teeth cleaned
  - Avoid chronic health conditions, including diabetes, heart disease, COPD, and arthritis
  - Avoid high blood pressure and high cholesterol

- The link between both education and income and health outcomes goes beyond the direct relationship. Those in the very bottom groups, for example, having no high school education and/or earning less than $20K in household income, are most likely to experience the worst health outcomes.

Summary Tables – **A Comparison of Montcalm County to Peer Counties**

MORTALITY

Better (Most Favorable Quartile)	Moderate (Middle Two Quartiles)	Worse (Least Favorable Quartile)
Alzheimer's disease deaths	Cancer deaths	
Diabetes deaths	Chronic kidney disease deaths	
Female life expectancy	Chronic lower respiratory deaths (CLRD)	
Male life expectancy	Coronary heart disease deaths	
Motor vehicle deaths	Stroke deaths	
Unintentional injury (including motor vehicle)		

MORBIDITY

Better (Most Favorable Quartile)	Moderate (Middle Two Quartiles)	Worse (Least Favorable Quartile)
Adult overall health status	Adult obesity	Adult diabetes
HIV	Alzheimer's disease/dementia	Cancer
Preterm births	Gonorrhea	Older adult depression
	Older adult asthma	Syphilis

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

Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Community Health Profile, Montcalm County.

Summary Tables – **A Comparison of Montcalm County to Peer Counties (Cont'd.)**

ACCESS

Better (Most Favorable Quartile)	Moderate (Middle Two Quartiles)	Worse (Least Favorable Quartile)
Cost barriers to care	Older adult preventable hospitalizations	Primary care provider access
Uninsured		

HEALTH BEHAVIORS

Better (Most Favorable Quartile)	Moderate (Middle Two Quartiles)	Worse (Least Favorable Quartile)
Adult female routine pap tests	Adult binge drinking	
Adult physical inactivity		
Adult smoking		
Teen births		

Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Community Health Profile, Montcalm County.

Summary Tables – **A Comparison of Montcalm County to Peer Counties (Cont'd.)**

SOCIAL FACTORS

Better (Most Favorable Quartile)	Moderate (Middle Two Quartiles)	Worse (Least Favorable Quartile)
Inadequate social support	Children in single parent households	High housing costs
Poverty	On time high school graduation	Unemployment
	Violent crime	

ENVIRONMENT

Better (Most Favorable Quartile)	Moderate (Middle Two Quartiles)	Worse (Least Favorable Quartile)
Drinking water violations	Access to parks	Housing stress
	Annual average PM2.5 concentration	
	Limited access to healthy food	
	Living near highways	

Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Community Health Profile, Montcalm County.

DETAILED FINDINGS

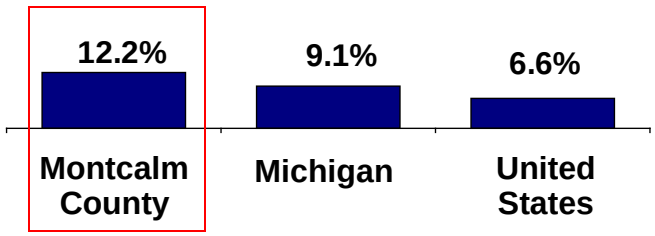
Secondary Data Sources

Social Indicators

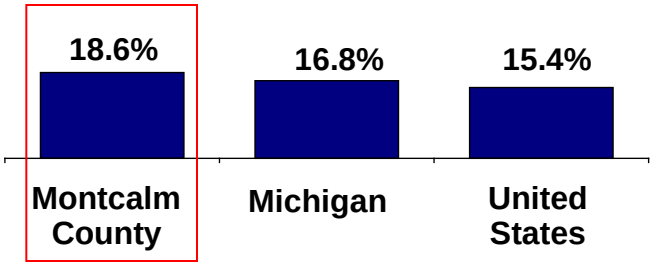
The unemployment rate is significantly higher in Montcalm County than in Michigan and the U.S. overall. Additionally, almost one in five people live in poverty in Montcalm County, higher than the proportions for Michigan or the U.S.

Unemployment and Poverty Rates

Population Age 16+ Unemployed and Looking for Work



Percentage of People in Poverty

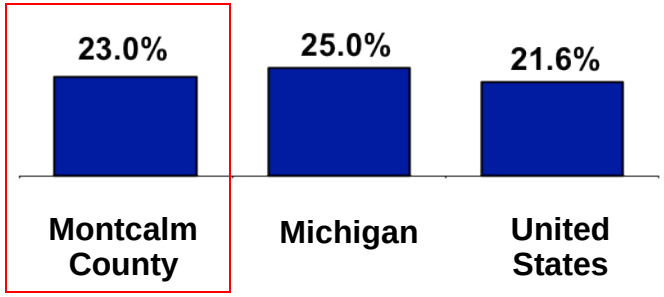


Source: Bureau of Labor Statistics, Local Area Unemployment Statistics; County Health Rankings. Montcalm Co. and MI 2014; County Health Rankings. 2009-2013 American Community Survey 5-Year Estimates. Counties and MI and US 2014. Data compiled from various sources and dates.

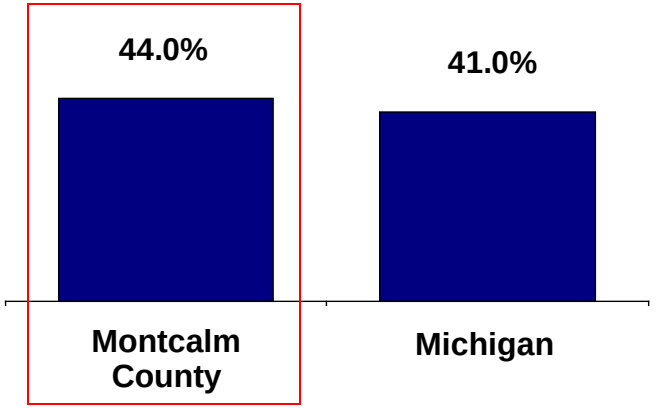
The proportion of Montcalm County children living in poverty is higher than the U.S. average but lower than the state. Still, more than one in five Montcalm County children live in poverty. Further, the proportion of students eligible for free or reduced school lunches is higher compared to Michigan.

Children Living in Poverty

Percentage of Children (< Age 18) in Poverty



Percentage of Students Eligible for Free/Reduced Price School Lunches

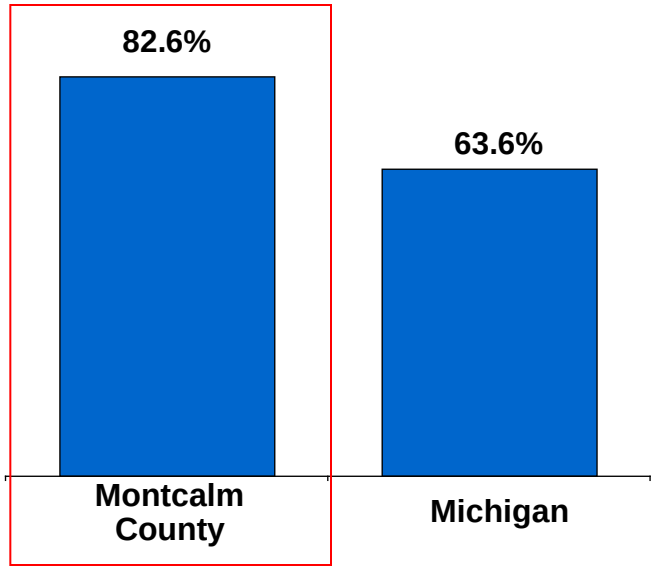


Source: County Health Rankings. Montcalm Co. and MI 2014; US Data: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

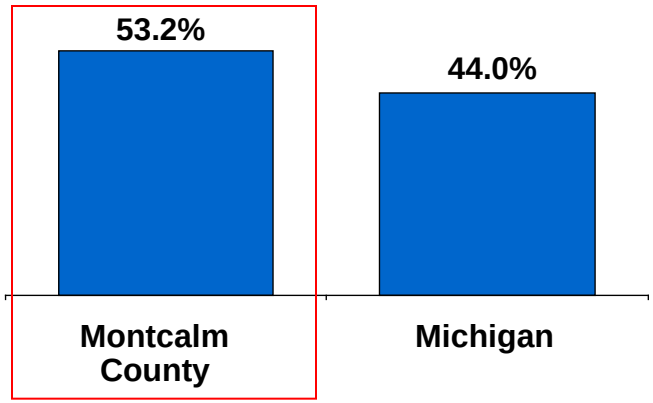
The proportion of children aged 1-4 receiving WIC and the proportion of Medicaid paid births are much higher in Montcalm County than across Michigan.

Children Born Into Poverty

Children Ages 1-4 Receiving WIC (2013)



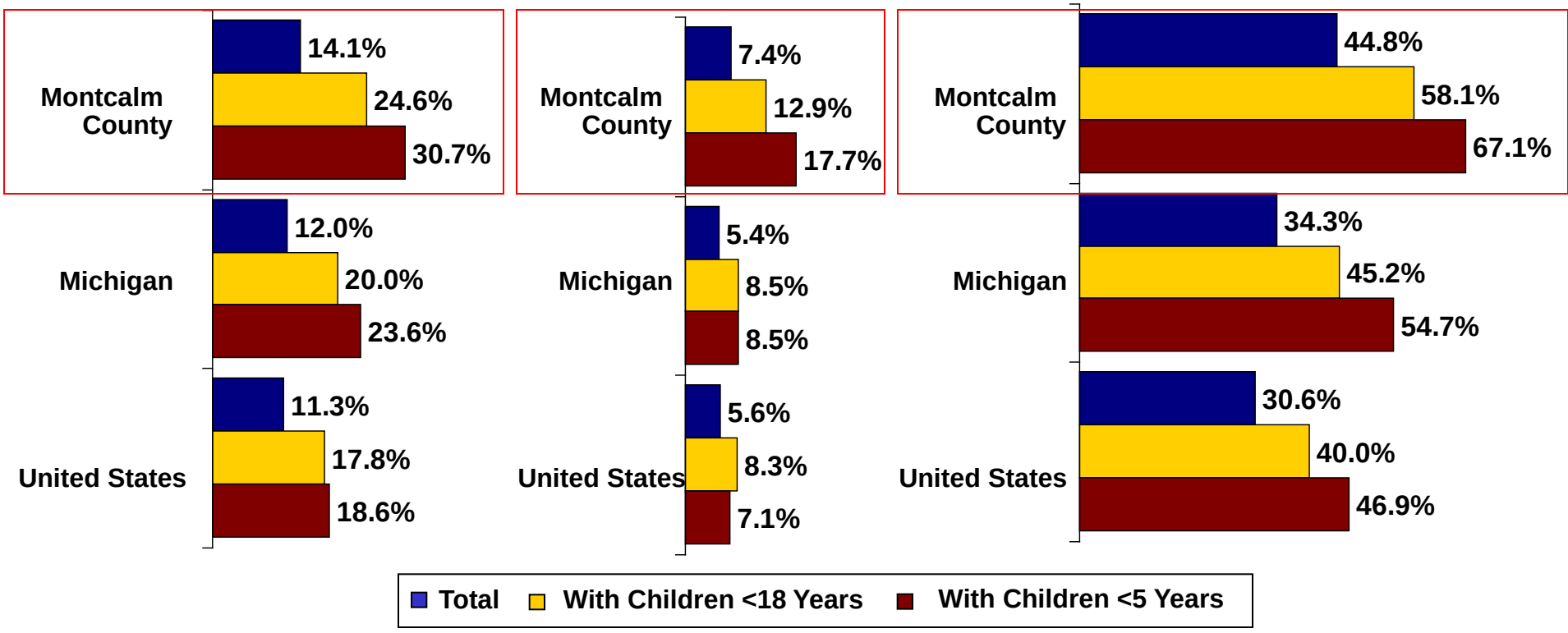
Medicaid Paid Births (2012)



Source: Kids Count Data Book. Montcalm Co. and MI 2013. .

The proportion of families living in poverty in Montcalm County is higher than in Michigan and the U.S. One in four (24.6%) Montcalm County families with children live in poverty. This proportion rises drastically for single female families, where two-thirds (67.1%) of single female families with children under 5 years of age live in poverty. Moreover, this is considerably higher than the proportions for Michigan or the United States.

Poverty Status of Families by Family Type (% Below Poverty)



Source: US Census, 2013 American Community Survey, Data Profiles, Selected Economic Characteristics

For both men and women, fewer Montcalm County residents graduate high school compared to the state or the nation. Furthermore, Montcalm County lags behind the state and the nation for undergraduate and graduate degrees.

Educational Level Age 25+

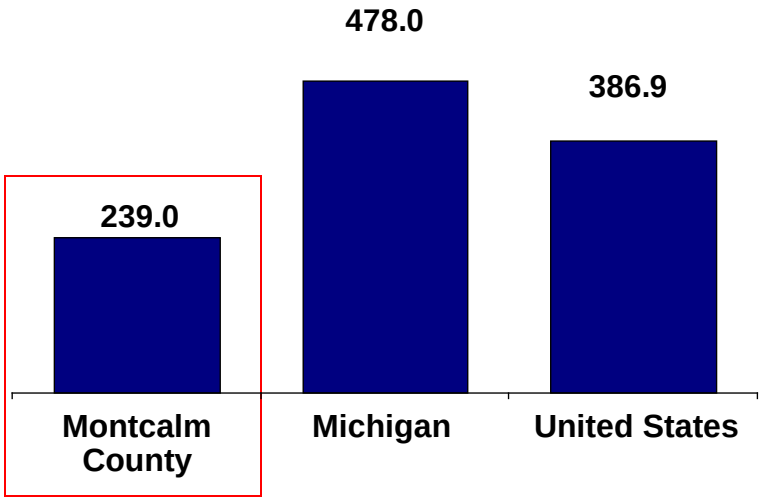
	Men			Women		
	Montcalm County	Michigan	U.S.	Montcalm County	Michigan	U.S.
No Schooling Completed	1.3%	3.6%	1.4%	0.6%	3.3%	1.4%
Did Not Graduate High School	12.9%	8.4%	12.6%	10.3%	7.3%	11.4%
High School Graduate, GED, or Alternative	40.7%	30.9%	28.4%	38.9%	30.6%	27.2%
Some College, No Degree	25.0%	23.8%	20.8%	25.6%	24.2%	21.4%
Associate's Degree	7.7%	7.2%	7.2%	10.1%	9.5%	8.9%
Bachelor's Degree	8.1%	15.8%	18.3%	8.7%	15.7%	18.6%
Master's Degree	3.2%	6.9%	7.3%	4.5%	8.0%	8.5%
Professional School Degree	0.8%	2.1%	2.3%	0.8%	1.2%	1.6%
Doctorate Degree	0.3%	1.4%	1.7%	0.5%	0.8%	1.0%

Source: U.S. Census Bureau, American Community Survey, 1-year estimates

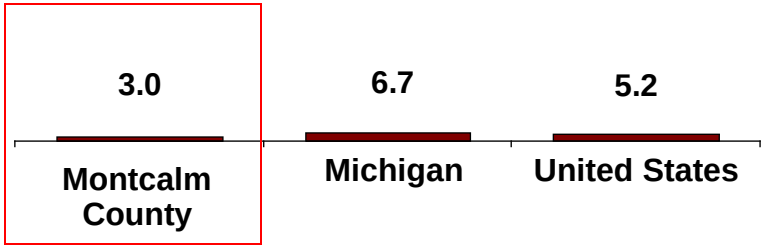
Montcalm County residents enjoy the safety of their community. In fact, Montcalm County has far fewer violent crimes and homicides, per capita, compared to Michigan or the U.S. Moreover, child abuse/neglect rates in Montcalm County are also lower than the state or nation.

Crime Rates

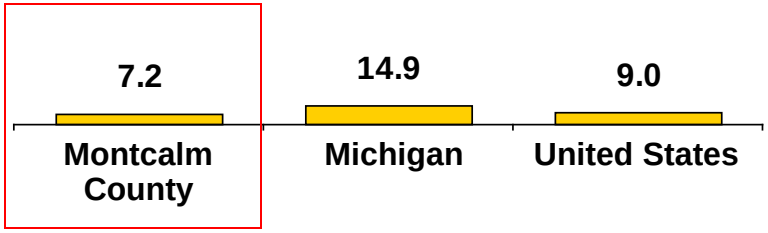
Violent Crime Rate Per 100,000 Population



Homicide Rate Per 100,000 Population



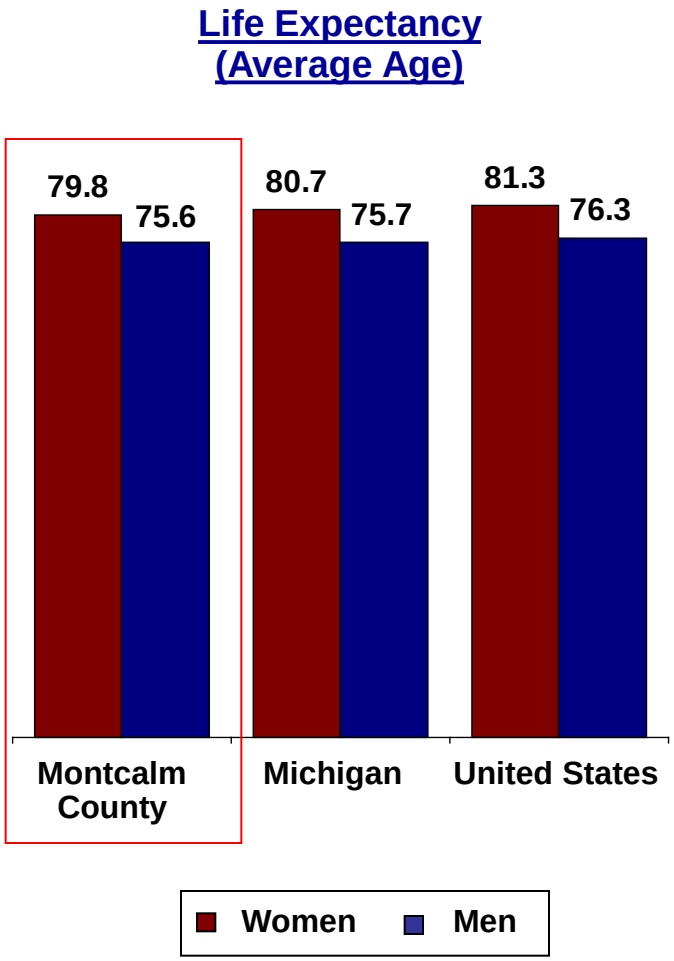
Confirmed Victims of Child Abuse/Neglect Rate Per 1,000 Children <18



Source: County Health Rankings. Montcalm Co. and MI 2013; Note: Data compiled from various sources and dates; US FBI Website 2012; County Health Rankings/MDCH, Division of Vital Records. Montcalm and MI 2012; United States Census Bureau 2012; Kids Count Data Book. Montcalm Co., MI, and US 2012.

Health Indicators

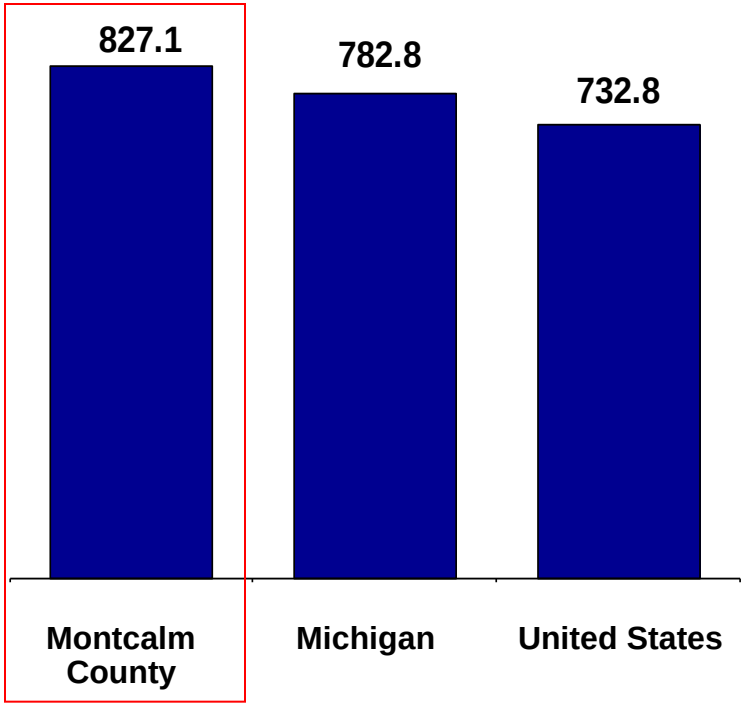
Both Montcalm County men and women have lower life expectancy rates (when adjusted for age) compared to men and women across Michigan or the U.S.



Source: Institute for Health Metrics and Evaluation at the University of Washington. Uses 2010 mortality data for Montcalm, MI, and US.

Montcalm County's age adjusted mortality rate is much higher than the rates for Michigan and the U.S.

Age Adjusted Mortality Rate
Per 100,000 Population

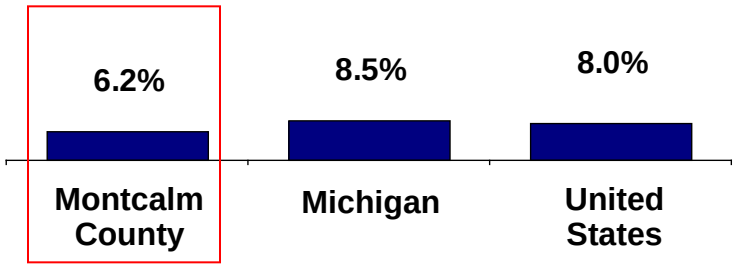


Source: Michigan Resident Death File, Vital Records & Health Statistics Section, Michigan Department of Community Health. Montcalm Co. 2012; MI 2012 and US 2011; US: Kaiser Family Foundation 2011; Kids Count Data. MI 2012

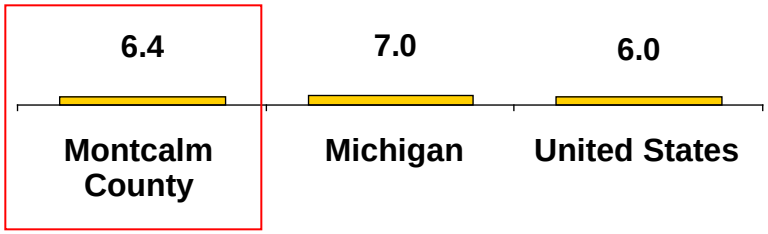
Montcalm County has fewer live births with low birth weight compared to Michigan or the U.S. Although the infant mortality rate in Montcalm County is lower than in Michigan, it is higher than the national average.

Low Birth Rates and Infant Mortality Rates

Proportion of Live Births with Low Birth Weight (<2500g)



Infant Mortality Rate Per 1,000 Live Births



Source: Kids Count Data Book/MDCH Vital Records Division, Resident Birth Files. Montcalm County, MI, and US 2012.

Like Michigan and the nation, **heart disease** and **cancer** are the two leading causes of death in Montcalm County. **Unintentional injuries** result in death more often in Montcalm County, compared to the state or nation. Conversely, **CLRD** tends to be a cause of death more in the state and the nation than in Montcalm County.

Top 10 Leading Causes of Death

	Montcalm County		Michigan		United States	
	RANK	Rate	RANK	Rate	RANK	Rate
Heart Disease	1	203.1	1	197.9	1	173.7
Cancer	2	170.1	2	174.9	2	168.6
Unintentional Injuries	3	53.7	5	36.6	4	38.0
Chronic Lower Respiratory Disease	4	48.1	3	45.2	3	42.7
Stroke	5	42.9	4	37.2	5	37.9
Alzheimer's Disease	6	*	6	25.6	6	24.6
Diabetes Mellitus	7	*	7	15.5	7	21.5
Kidney Disease	8	*	8	13.5	9	13.4
Pneumonia/Influenza	9	*	9	13.3	8	15.7
Intentional Self-Harm (Suicide)	10	*	10	12.2	10	12.0
All Other Causes		193.6		194.9		192.2

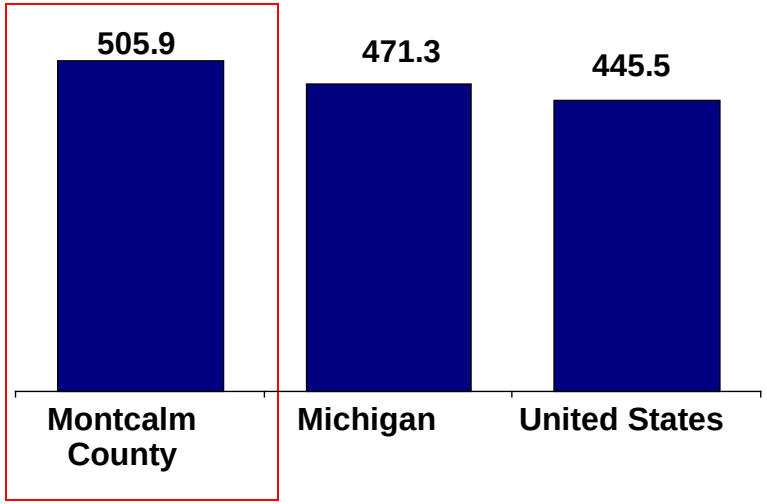
**: An asterisk (*) indicates that the data do not meet standards of reliability or precision.*

Source: Michigan Department of Community Health, Montcalm Co. and MI 2012; U.S. Census Bureau. US 2010.

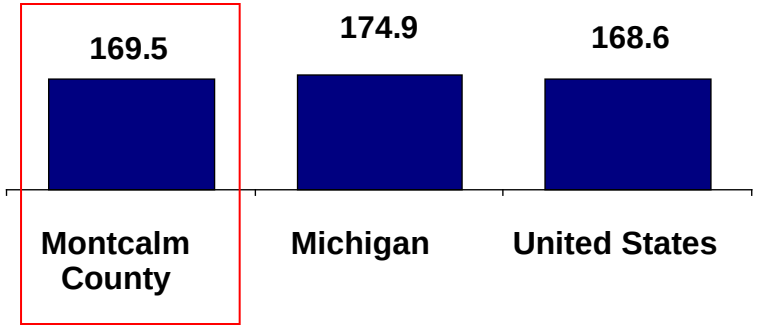
Although Montcalm County residents are more likely to be diagnosed with cancer compared to either Michigan or the United States, they are slightly less likely to die from cancer compared to Michigan residents.

Cancer Rates

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



Overall Cancer Death Rate Per 100,000 Population



Source: MDCH Cancer Incidence Files. Montcalm County and MI 2011, US 20010; MDCH/ County Health Rankings.

In total, preventable hospitalizations as a percentage of all hospitalizations is roughly the same for Montcalm County (19.2%) compared to the state of Michigan (20.2%). **Bacterial pneumonia** is the leading cause of preventable hospitalization in Montcalm County, whereas the leading cause in Michigan is **congestive heart failure**. Montcalm County residents are also more likely to be hospitalized for **COPD** than Michigan residents.

Top 10 Leading Causes of Preventable Hospitalizations

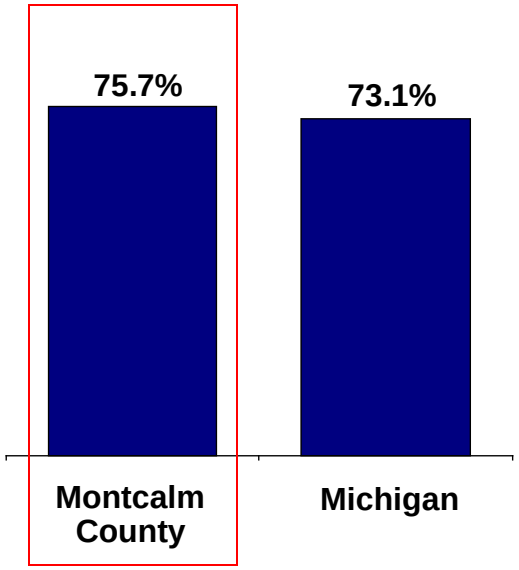
	Montcalm County		Michigan	
	RANK	% of All Preventable Hospitalizations	RANK	% of All Preventable Hospitalizations
Bacterial Pneumonia	1	16.8%	2	10.7%
Chronic Obstructive Pulmonary	2	13.4%	3	9.8%
Congestive Heart Failure	3	13.2%	1	12.8%
Kidney/Urinary Infections	4	7.1%	4	7.1%
Cellulitis	5	6.9%	5	6.5%
Diabetes	6	4.3%	6	5.6%
Asthma	7	3.4%	7	5.3%
Grand Mal and Other Epileptic Conditions	8	3.2%	8	3.2%
Convulsions	9	1.4%	--	--
Dehydration	10	1.3%	9	2.2%
Gastroenteritis	--	--	10	1.6%
All Other Ambulatory Care Sensitive Conditions		29.6%		35.3%
Preventable Hospitalizations as a % of All Hospitalizations		19.2%		20.2%

Source: MDCH Resident Inpatient Files, Division of Vital Records. Montcalm Co. and MI 2012.

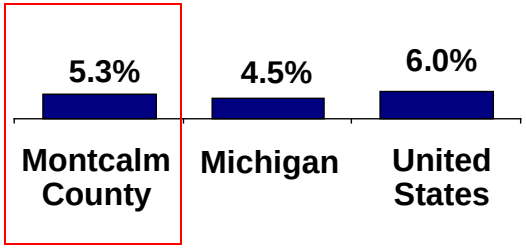
Montcalm County women are slightly more likely to begin prenatal care in the first trimester than women elsewhere in Michigan. Further, almost all (94.7%) of Montcalm County women received prenatal care at some point. Also, children aged 19-35 months are more likely to be fully immunized in Montcalm County than children of the same age elsewhere in the state or the nation.

Prenatal Care and Childhood Immunizations

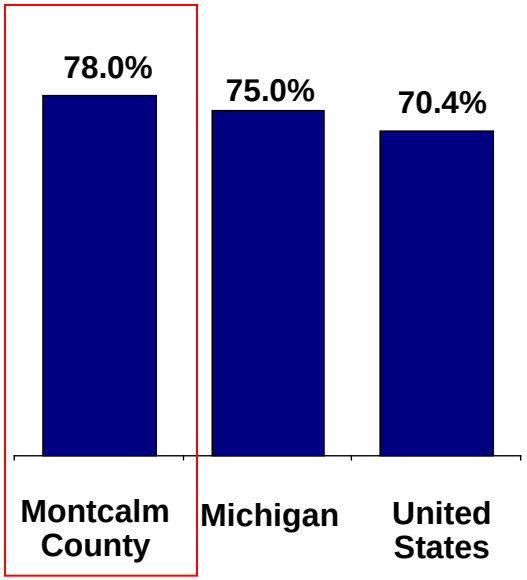
Proportion of Women Who Begin Prenatal Care in First Trimester



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



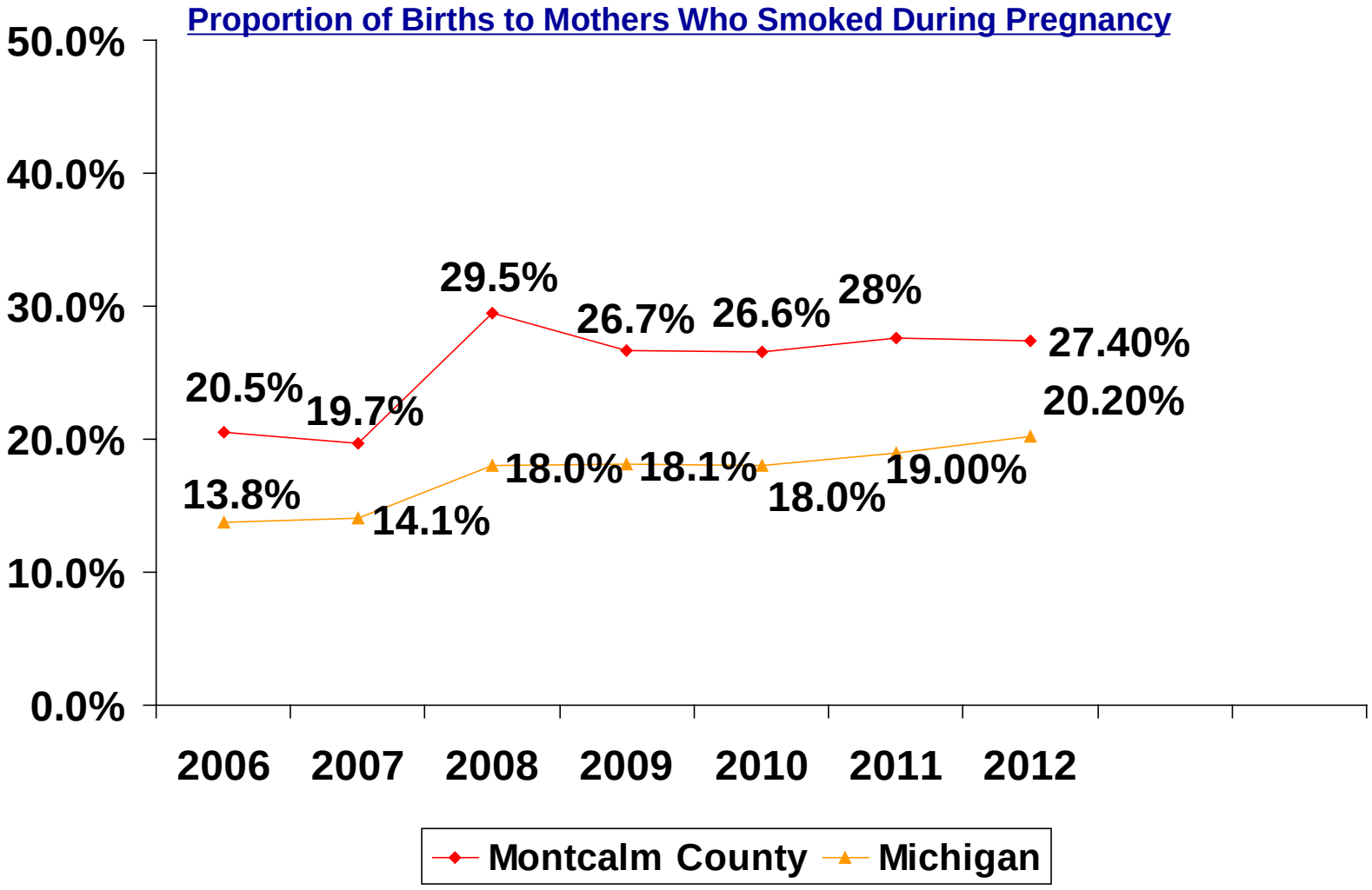
Proportion of Children Aged 19-35 Months Fully Immunized



Source: MDCH Vital Records Montcalm Co and MI 2013; Kids Count Data Book/MDCH Vital Statistics. Montcalm Co. and MI 2014; Local and MI % from MICR. National data at CDC National Immunization Survey.

Adult Risk Behaviors

From 2006 to 2012, the proportion of Montcalm County mothers who smoke during pregnancy has been consistently higher than the proportion of smoking mothers across Michigan.



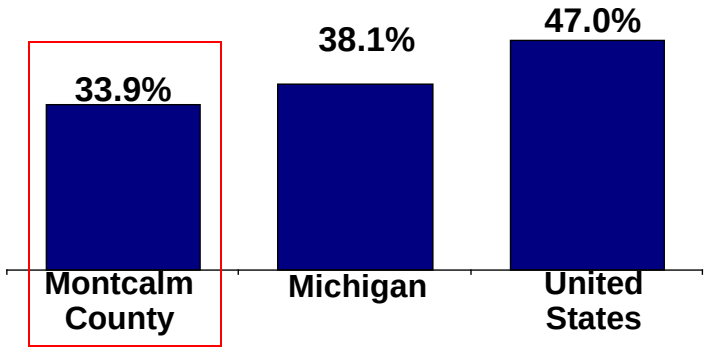
Source: Michigan League for Human Services;. Kids Count Data, 2006-2012.

Youth Risk Behaviors

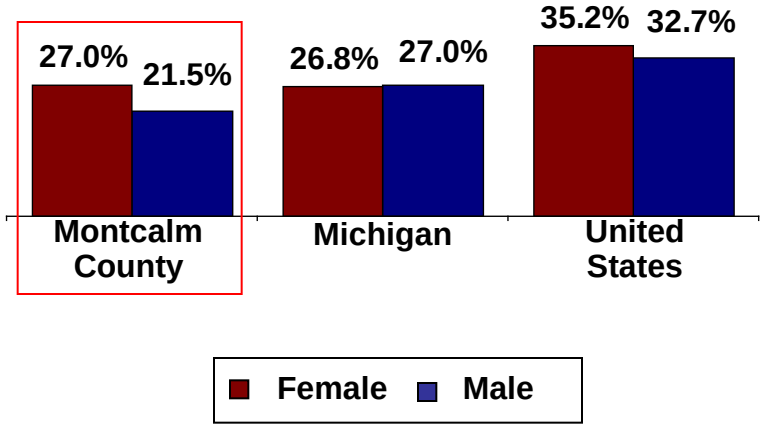
Montcalm County teens are less likely to engage in sexual intercourse than teens across Michigan or the U.S. Still, one in three (33.9%) Montcalm County youths have had sexual intercourse and 24.2% have had it in the past three months.

Teenage Sexual Activity

Youth Who Have Ever Had Sexual Intercourse



Youth Who Have Had Intercourse in Past 3 Months

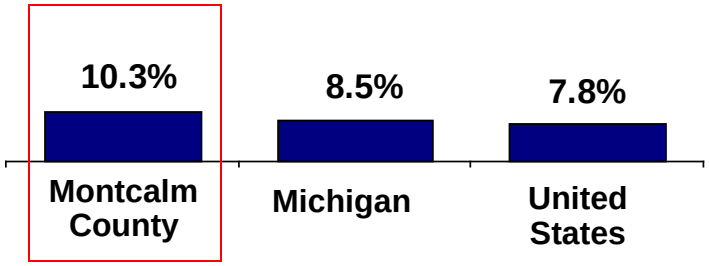


Source: Michigan YRBS; Montcalm: MiPhy 2013-2014- Sexual Behavior. NOTE: YAS includes grades 8, 10, and 12, while MiPhy includes grades 9 and 11. MiPhy Data groups Montcalm County data in with that of Mason County.

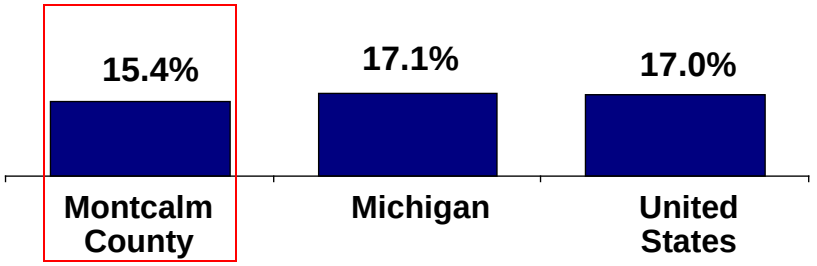
As a percentage of all births, teen births are slightly higher in Montcalm County (10.3%) than in Michigan (8.5%) or the U.S (7.8%). The repeat teen birth rate in Montcalm County is slightly lower than the rates in Michigan and the U.S.

Teenage Pregnancy

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



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

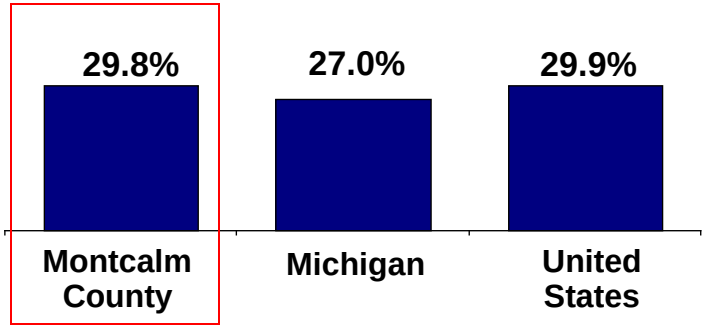


Source: MDCH Vital Records. Montcalm Co. and MI 2012; Kids Count Data Book. Montcalm Co., MI , and US 2012.

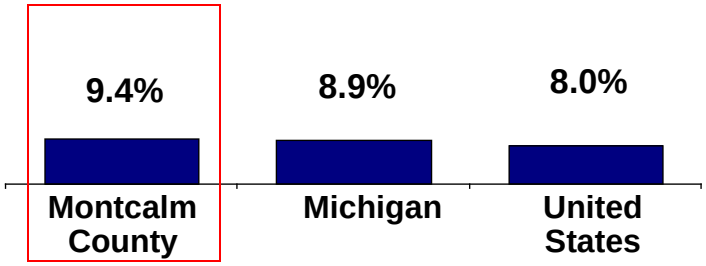
Three in ten Montcalm County youths reported depression in 2013, while 9.4% reported attempting suicide. Both of these indicators are as high or higher than Michigan or the U.S. and warrant serious concern.

Mental Health Indicators Among Youth

Proportion of Youth Reporting Depression in Past Year



Proportion of Youth Reporting Suicide Attempt in Past Year

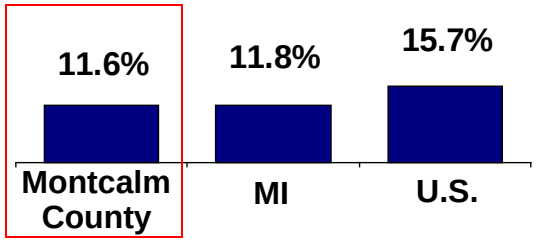


Source: Michigan YRBS; Michigan Profile for Healthy Youth (MiPhy) 2013-2014 NOTE: YAS includes grades 8, 10, and 12, while MiPhy includes grades 9 & 11. US & MI: YRBS 2013

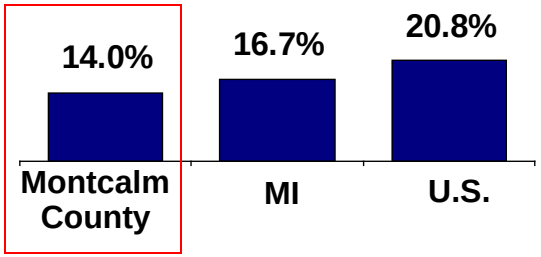
More than one in ten (11.6%) Montcalm County youths currently smoke cigarettes, a rate on par with the state but lower than the U.S. Fewer Montcalm County youths report binge drinking or marijuana use compared to Michigan or the U.S.

Tobacco, Alcohol and Marijuana Use Among Youth

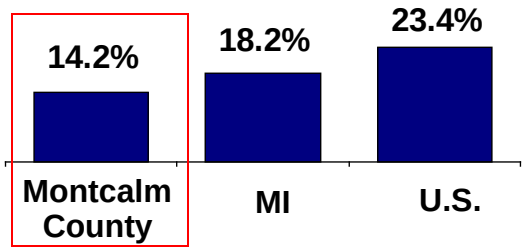
Proportion of Youth Who Report Current Smoking (Past 30 Days)



Proportion of Youth Reporting Binge Drinking (5+ Drinks, Past 30 Days)



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

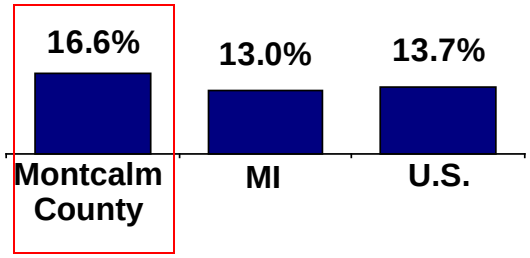


Source: Michigan YRBS; Michigan Profile for Healthy Youth (MiPhy) 2013-2014 NOTE: YAS includes grades 8, 10, and 12, while MiPhy includes grades 9 & 11. MiPhy. MI and US: YBRS 2013

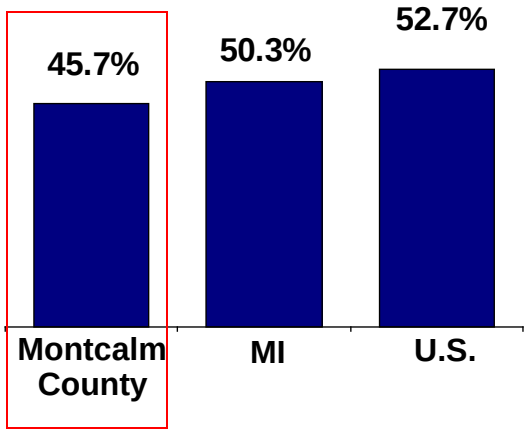
Despite fewer youth reporting physical inactivity, more Montcalm County youth are obese compared to MI or to the U.S. Further, fewer report inadequate consumption of fruits and vegetables compared to youth from across Michigan. These are clear areas of opportunity, especially since almost half (45.7%) of Montcalm County youth are not adequately partaking in physical activity and eight in ten (84.3%) are not consuming adequate amounts of fruits or vegetables.

Obesity, Physical Activity and Diet

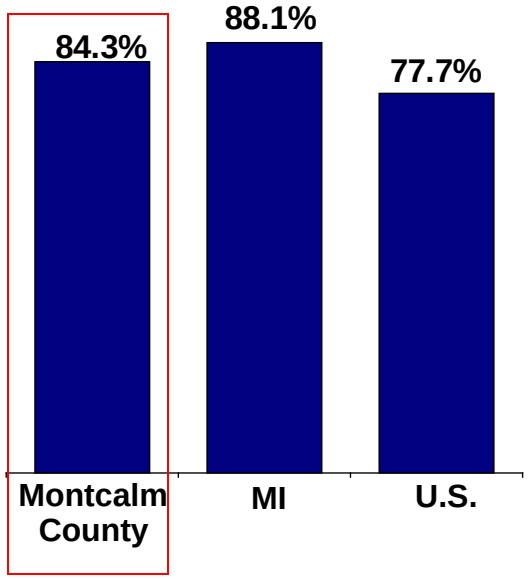
Youth Who Are Obese (>95th Percentile BMI for Age and Sex)



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



Youth Reporting Inadequate Fruits & Vegetables Consumption (< 3-5 Servings Per Day in Past 7 Days)



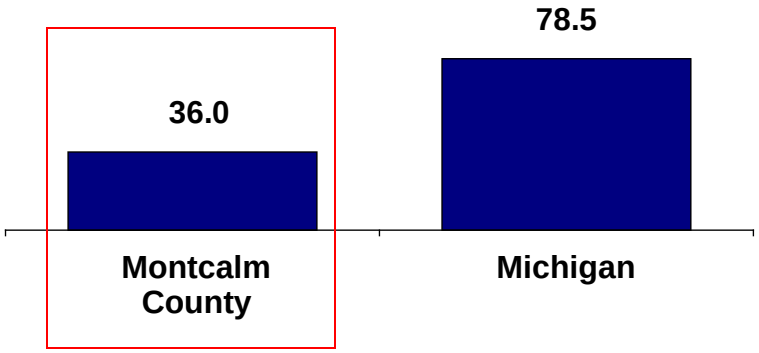
Source: Montcalm: 2013 Youth Assessment Survey and 3rd Grade BMI Surveillance; Michigan YRBS; Michigan Profile for Healthy Youth (MiPhy) 2013-2014
NOTE: YAS includes grades 8, 10, and 12, while MiPhy includes grades 9 and 11. Counties: <5 Servings Fruit/Veg per day; MI and US from 2013 YBRS, < 3 Servings Fruit/Vegetable per day

Health Care Access

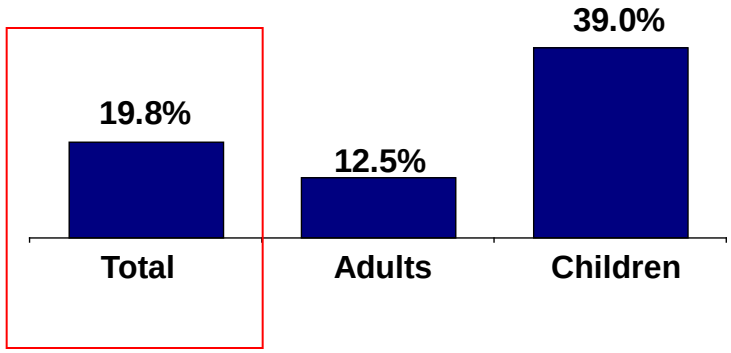
There are far fewer primary care physicians (PCP) per capita in Montcalm County – despite having four hospitals – compared to the state. Additionally, one in five residents receives Medicaid, and this rate jumps to two in five for children.

Primary Care Physicians and Medicaid Patients

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



Proportion of Medicaid Patients in Montcalm County



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

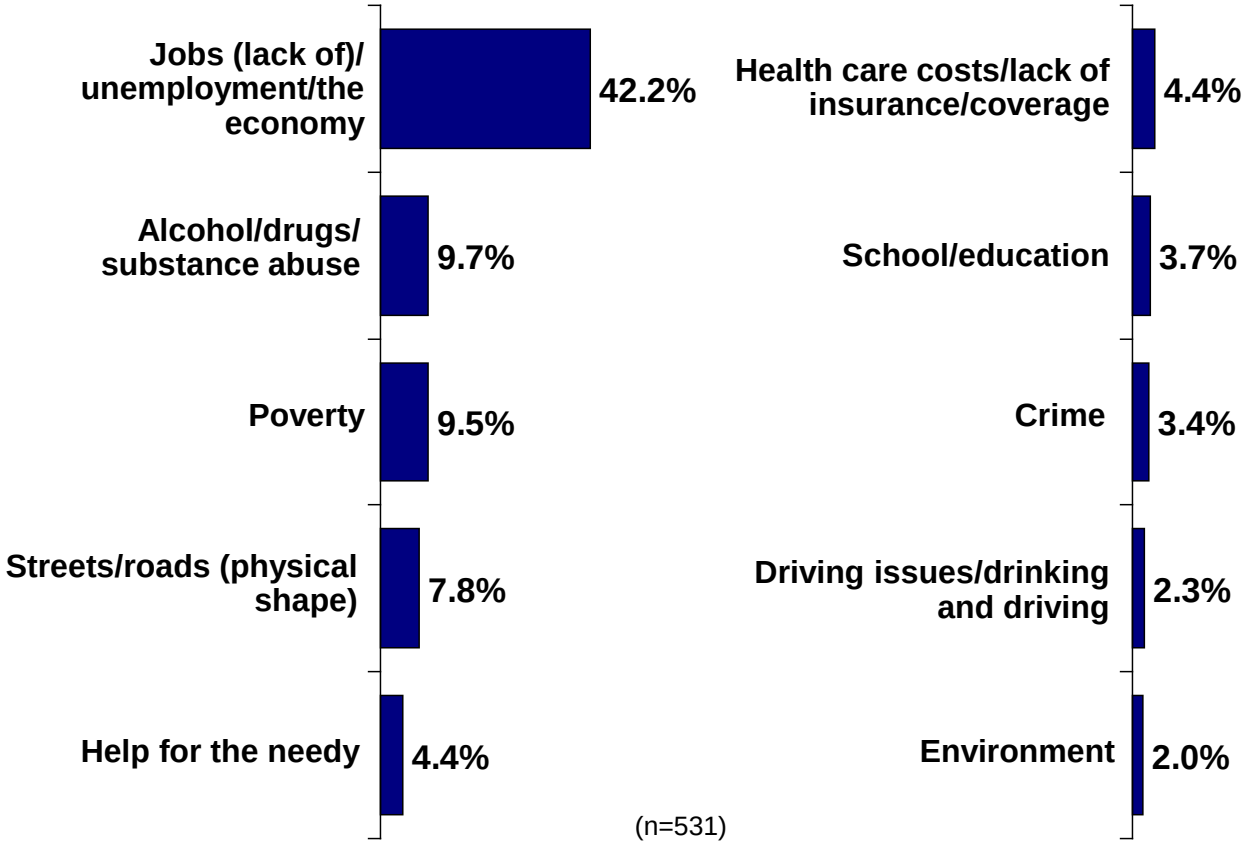
Source: PCP: County Health Rankings, 2013. Medicaid: US Census ACS 2013 estimate. Michigan Department of Human Services Annual Report and monthly Green Book of Statistics (Dec 2014),

Behavioral Risk Factor Survey

Perception of Community Problems

When asked to give their top of mind response to addressing the community's most important problems, Spectrum Health United Kelsey (SHUKH) area adults cite a myriad of issues, but the most pressing and prevalent is **the lack of jobs or the economy**. Other community problems include **substance abuse**, **poverty**, the **physical conditions of the roads/streets**, **help for the needy**, and **health care costs**, including the lack of coverage which makes health care even more of a barrier for some.

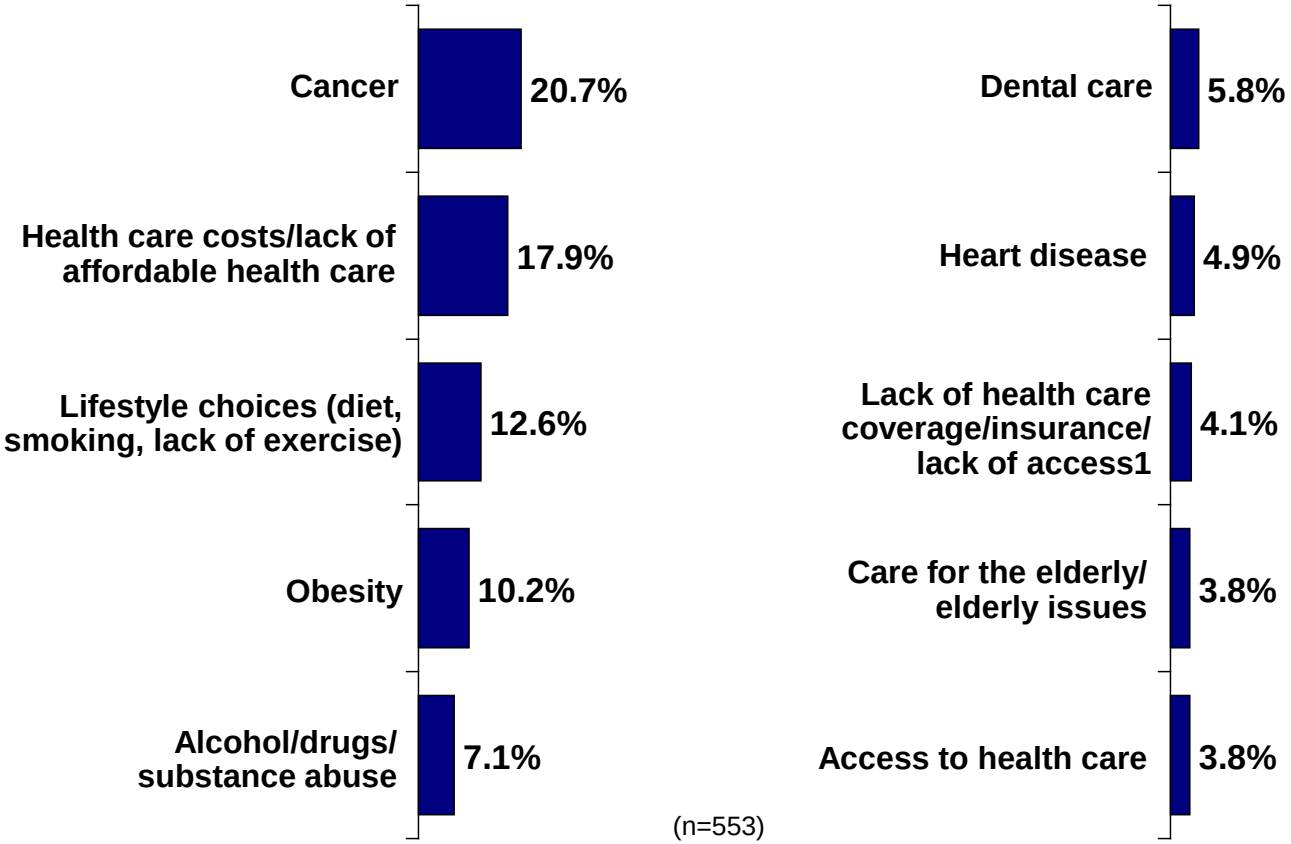
Top 10 Most Important Problems in the Community Today



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

Area adults perceive the top health problem to be **cancer**, followed by **health care costs or lack of affordable health care**, **lifestyle choices** that lead to health problems, and **obesity**. Related to health care costs is a general problem of **health care access**, which can mean many things (e.g., transportation, inability to afford co-pays, etc.), including **lack of health insurance**.

Top 10 Most Important *Health* Problems in the Community Today



(n=553)

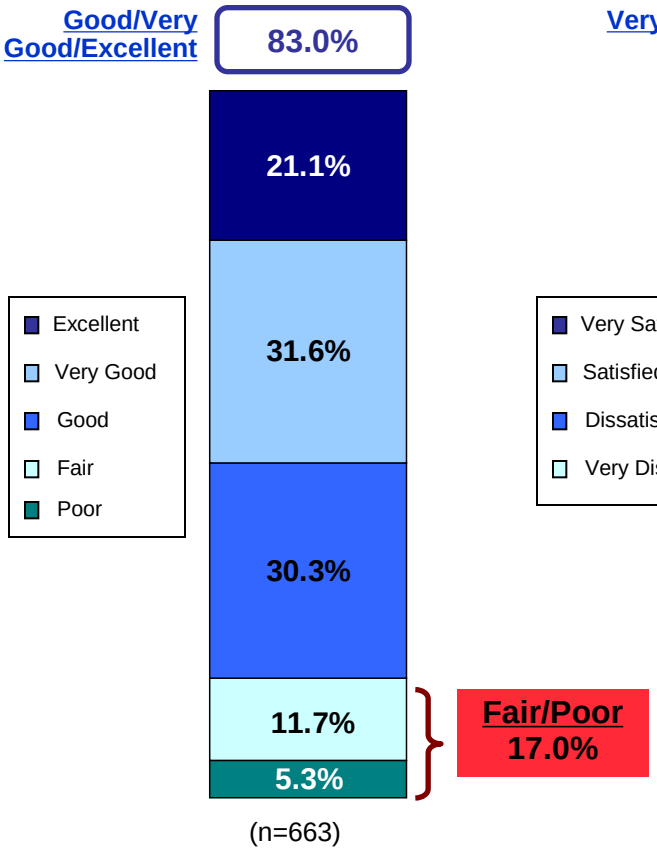
Q1.2: What do you feel is the most important health problem in your community today?

Health Status Indicators

Eight in ten (83.0%) SHUKH area adults cite good or better general health and 94.8% say they are satisfied with their lives. More than eight in ten say they usually or always receive the emotional support they need. Almost one in five report fair or poor health, 5.2% report dissatisfaction with life, and 7.2% rarely or never receive the emotional support they need.

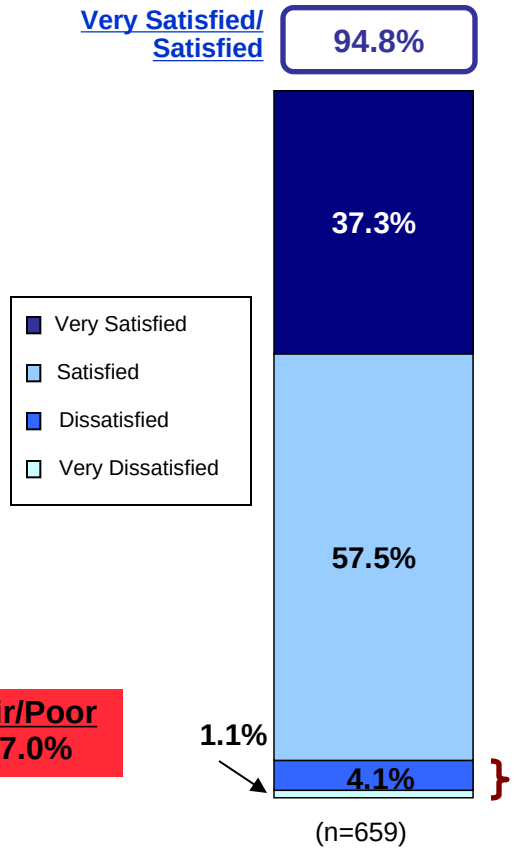
Perception of General Health, Life Satisfaction, and Social Support

Perception of General Health



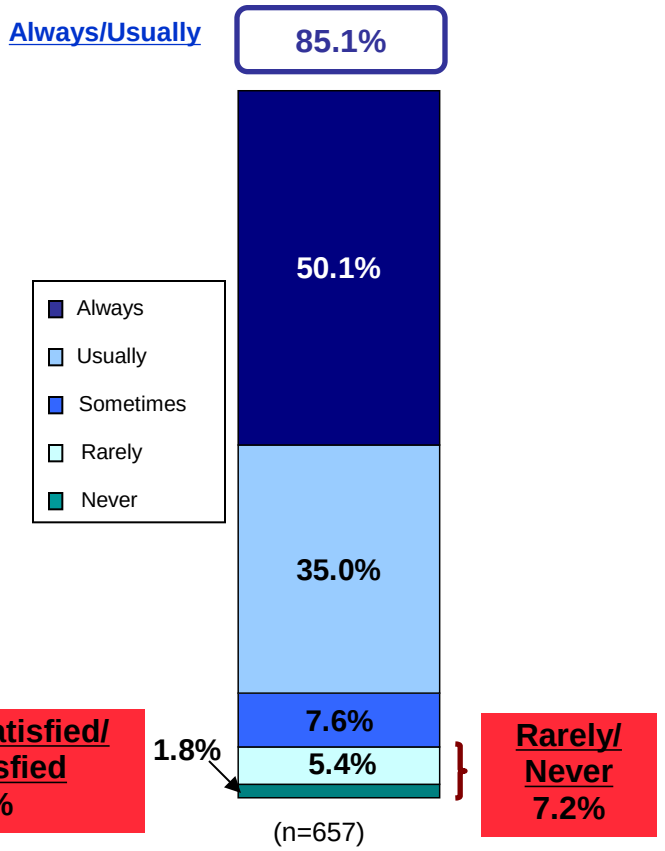
(n=663)

Overall Satisfaction with Life



(n=659)

Frequency of Emotional Support



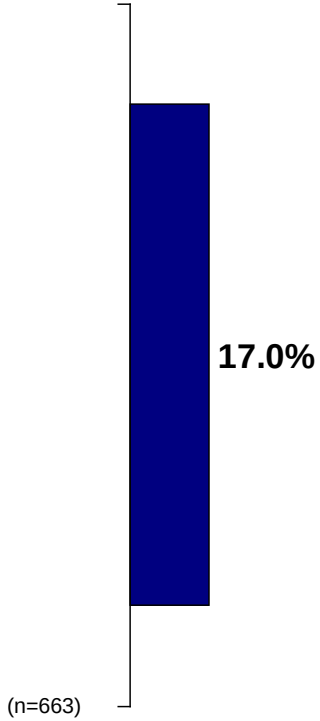
(n=657)

Q1.3: Would you say that in general your health is…
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 inversely related to level of education. For example, 30.4% of adults who have less than a high school education report their general health as fair or poor, compared to 8.1% of those with a college degree. Moreover, adults most likely to report their health as fair or poor experience the greatest financial limitations; 33.3% for those with household incomes below $20K and 33.8% for those living below the poverty line. Significantly more Whites report fair or poor health than non-Whites. Adults under the age of 35 are less likely to report fair or poor health compared to older adults.

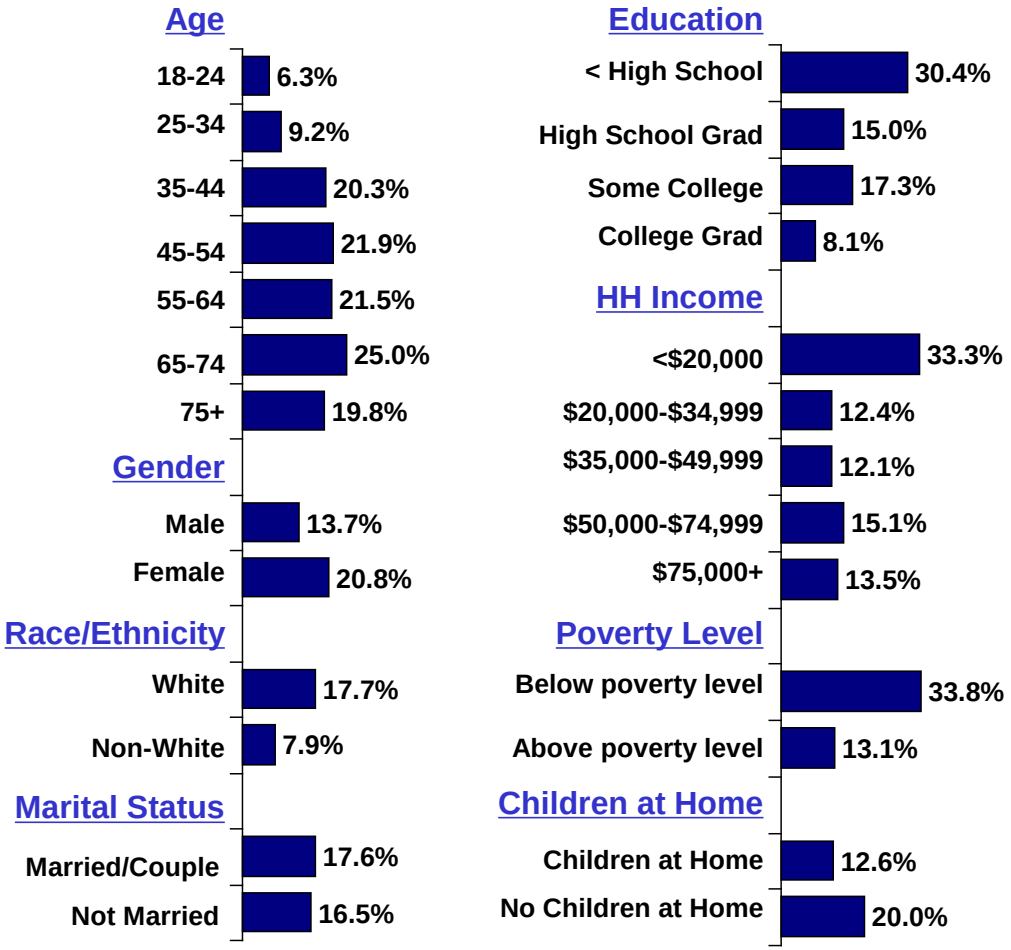
General Health Status

General Health Fair or Poor* (Total Sample)



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

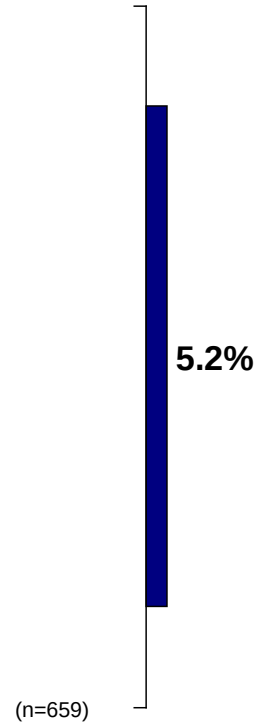
Health Fair or Poor by Demographics



SHUKH area adults in households with incomes below $20,000 and/or living below the poverty line are least likely to be satisfied with their lives. Adults under age 35, college graduates or those with household incomes $75K are most likely to be satisfied with their lives.

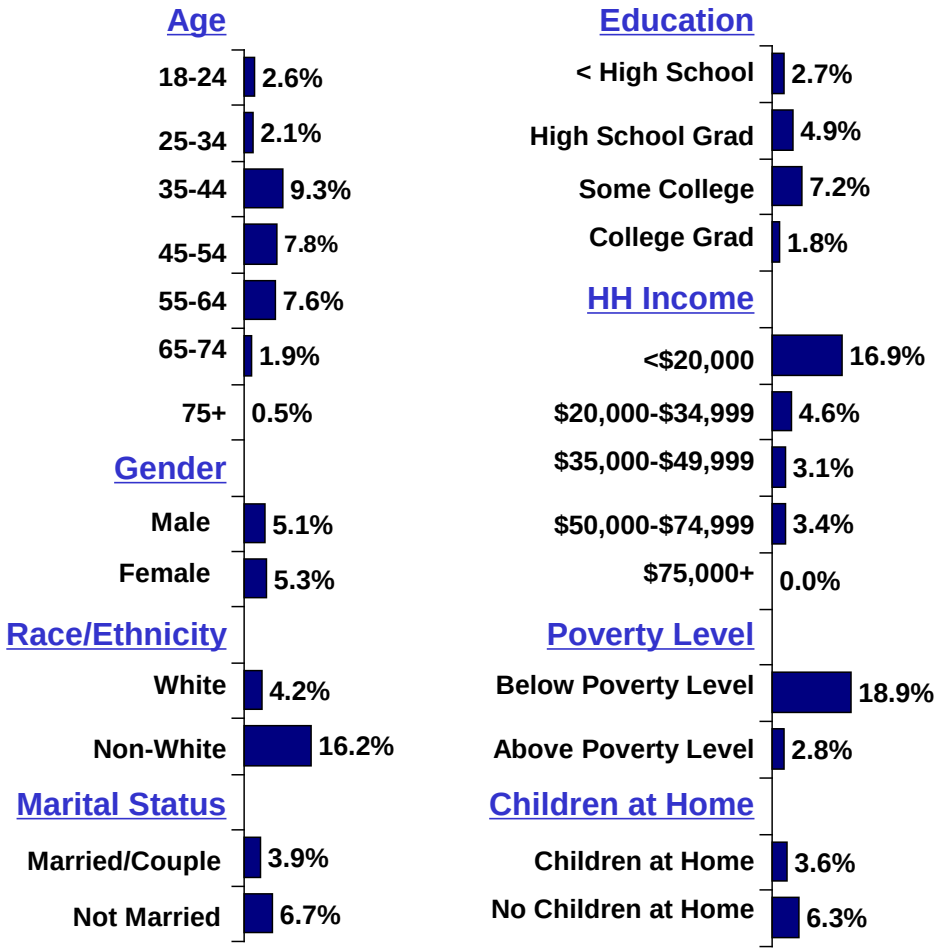
Life Satisfaction

Dissatisfied or Very Dissatisfied With Life* (Total Sample)



*Among all adults, the proportion who reported either "dissatisfied" or "very dissatisfied" to the following question: "In general, how satisfied are you with your life?

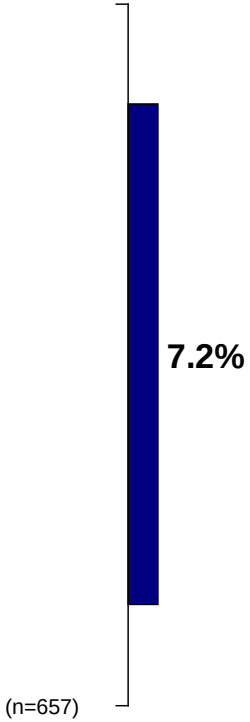
Dissatisfied/Very Dissatisfied by Demographics



Adults most likely to report lacking the social and emotional support they need come from groups that are age 18-24, unmarried, have household incomes less than $20,000, and are living below the poverty line.

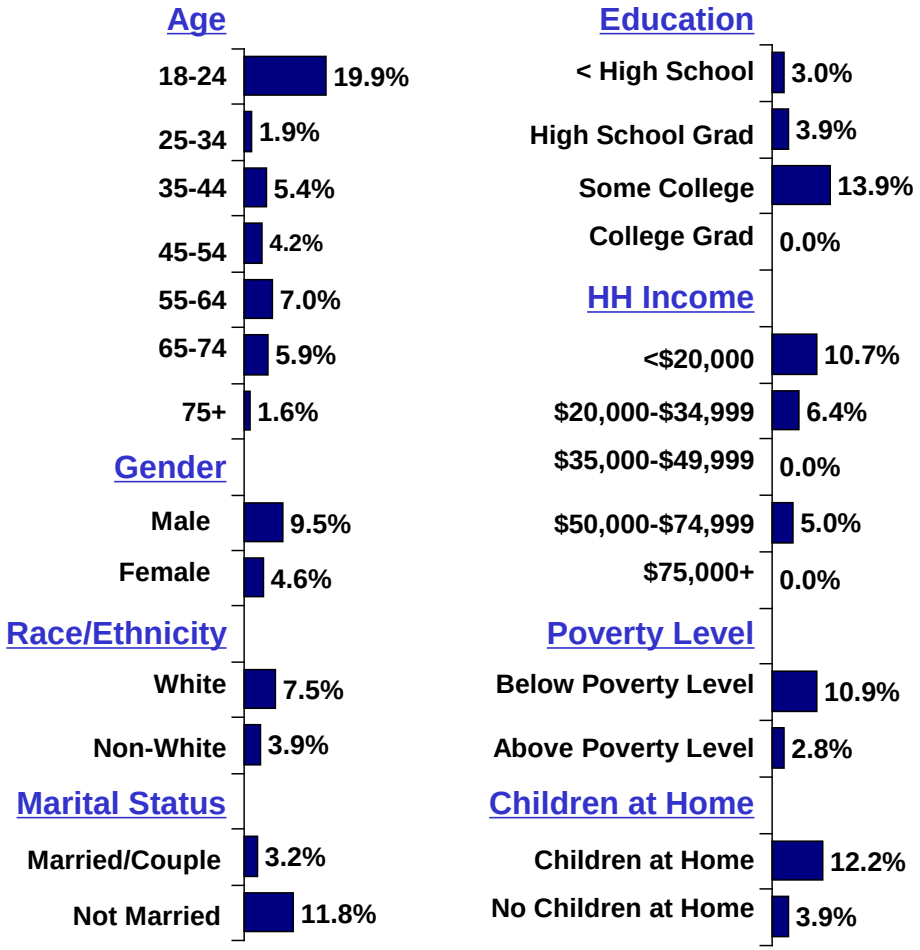
Social and Emotional Support

Rarely or Never Receive the Social and Emotional Support That is Needed* (Total Sample)



*Among all adults, the proportion who reported either "rarely" or "never" to the following question: "How often do you get the social and emotional support you need?

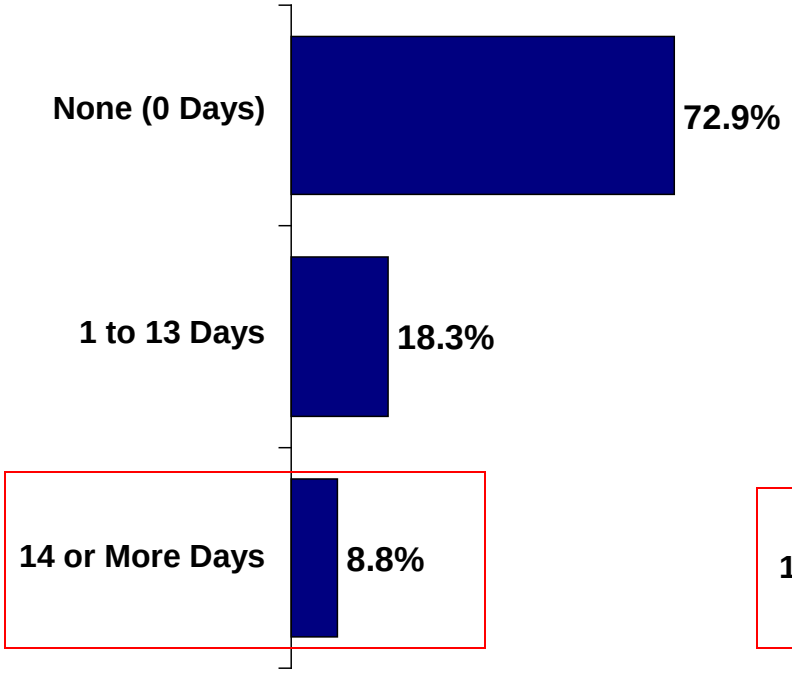
Rarely/Never Receive Support by Demographics



Over one-fourth (27.1%) and just under one-fifth (17.4%) of SHUKH area adults have experienced at least one day in the past month where their physical and mental health was not good, respectively. Further, 8.8% are classified as having poor physical health and 6.1% have poor mental health. Among all adults, the average number of days where their physical or mental health is not good is between two and three. However, among those who experience bad days, the average is at least ten days (one-third of the month) where their physical or mental health was not good in the past month.

Physical and Mental Health During Past 30 Days

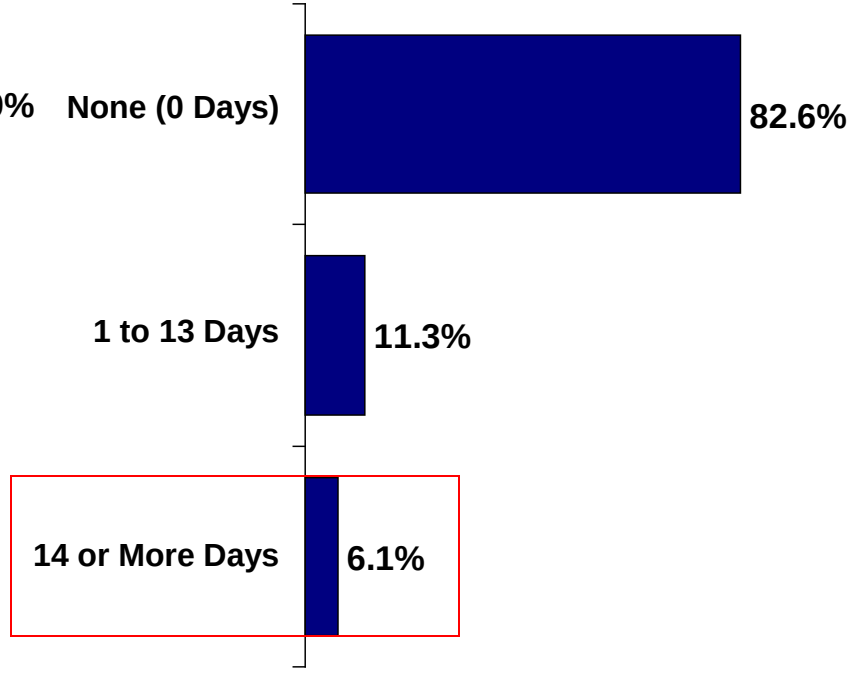
Number of Days Physical Health Was Not Good in Past 30 Days



Mean Days (Including Zero) = 2.9
Mean Days (Without Zero) = 10.6

(n=658)

Number of Days Mental Health Was Not Good in Past 30 Days



Mean Days (Including Zero) = 2.1
Mean Days (Without Zero) = 12.0

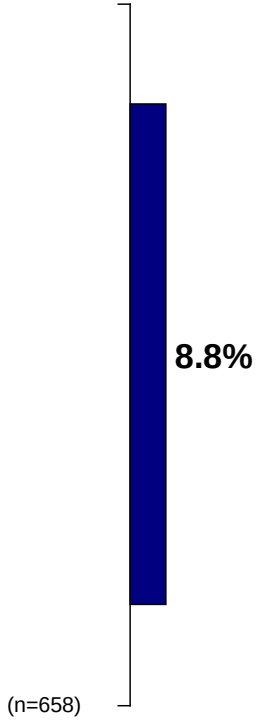
(n=657)

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 related to age, where it is more common among adults between ages 45-75. It is more common among Whites compared to non-Whites, and more common among women than men. It is also highest among adult residents with the lowest household incomes (21.7%) and those with less than a high school diploma (13.7%). Prevalence is lowest among adults under age 35 and those with incomes of $75K or more.

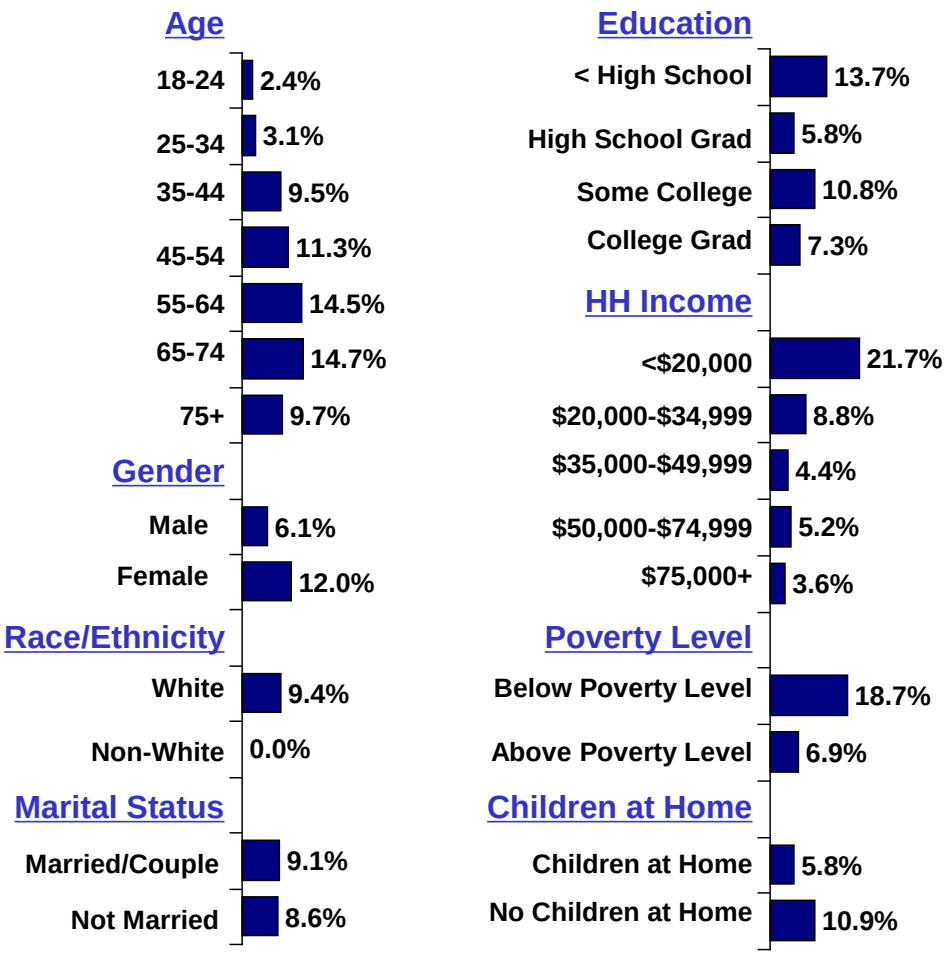
Physical Health Status

Poor Physical Health* (Total Sample)



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

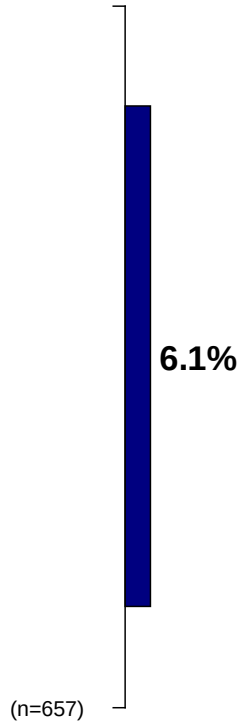
Poor Physical Health by Demographics



The prevalence of poor mental health is most common among those with the lowest incomes and those living below the poverty line. It is least common among non-Whites and those with a college degree.

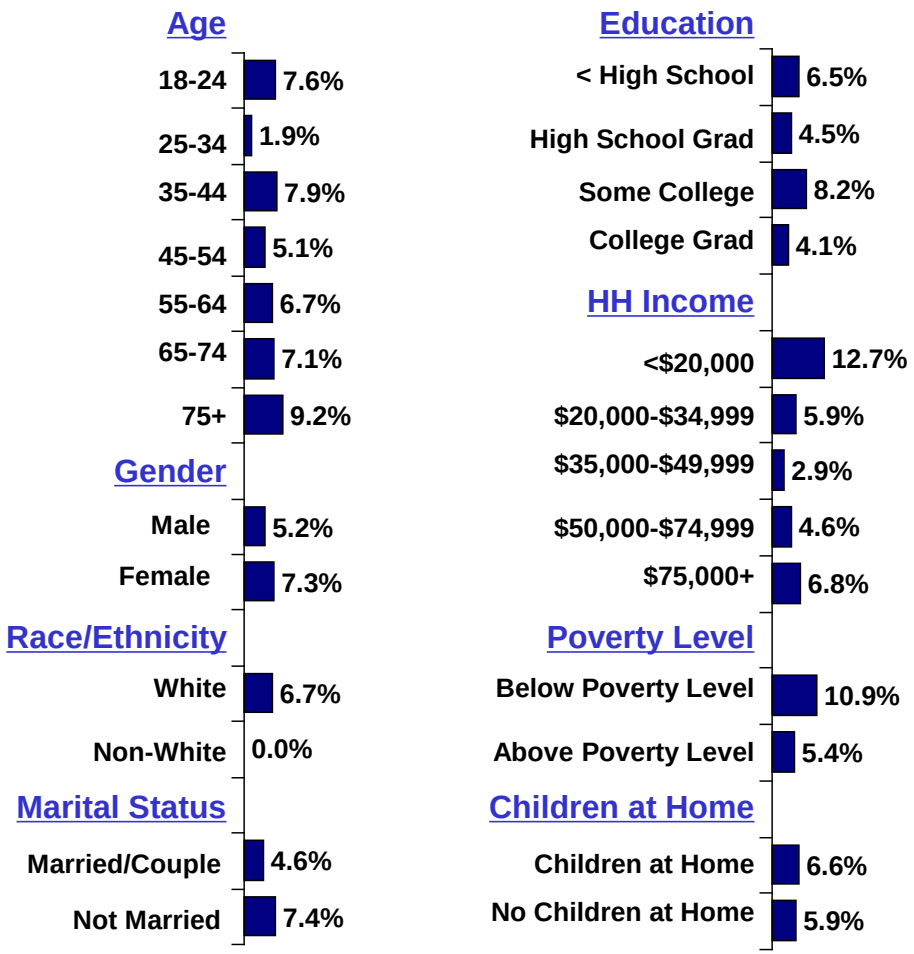
Mental Health Status

Poor Mental Health* (Total Sample)



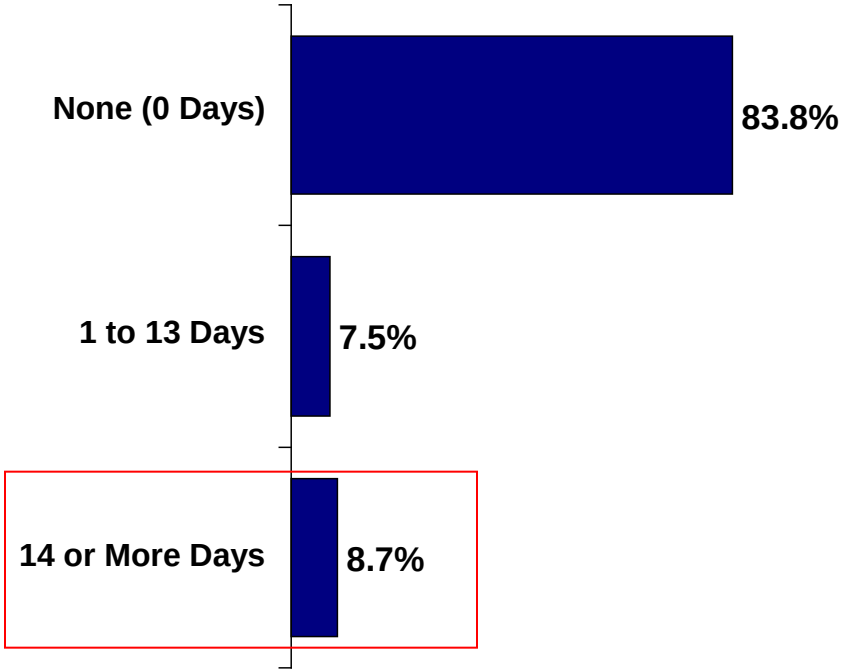
*Among all adults, the proportion who reported 14 or more days of poor mental health, which includes stress, depression, and problems with emotions, during the past 30 days.

Poor Mental Health by Demographics



Less than one in ten (8.7%) area adults experience limited activity due to poor physical or mental health. Those who experience this limitation average almost half the days per month (13.7 days) where they are prevented from doing their usual activities.

Activity Limitation During Past 30 Days



Mean Days (Including Zero) = 2.2
Mean Days (Without Zero) = 13.7

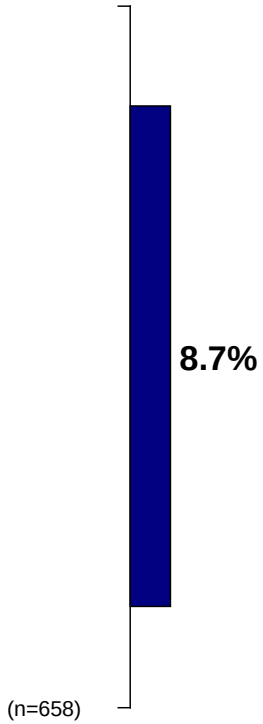
(n=658)

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?

Activity limitation due to poor mental or physical health is most common among the poorest adults; those living below the poverty or those living in households with annual incomes of less than $20K.

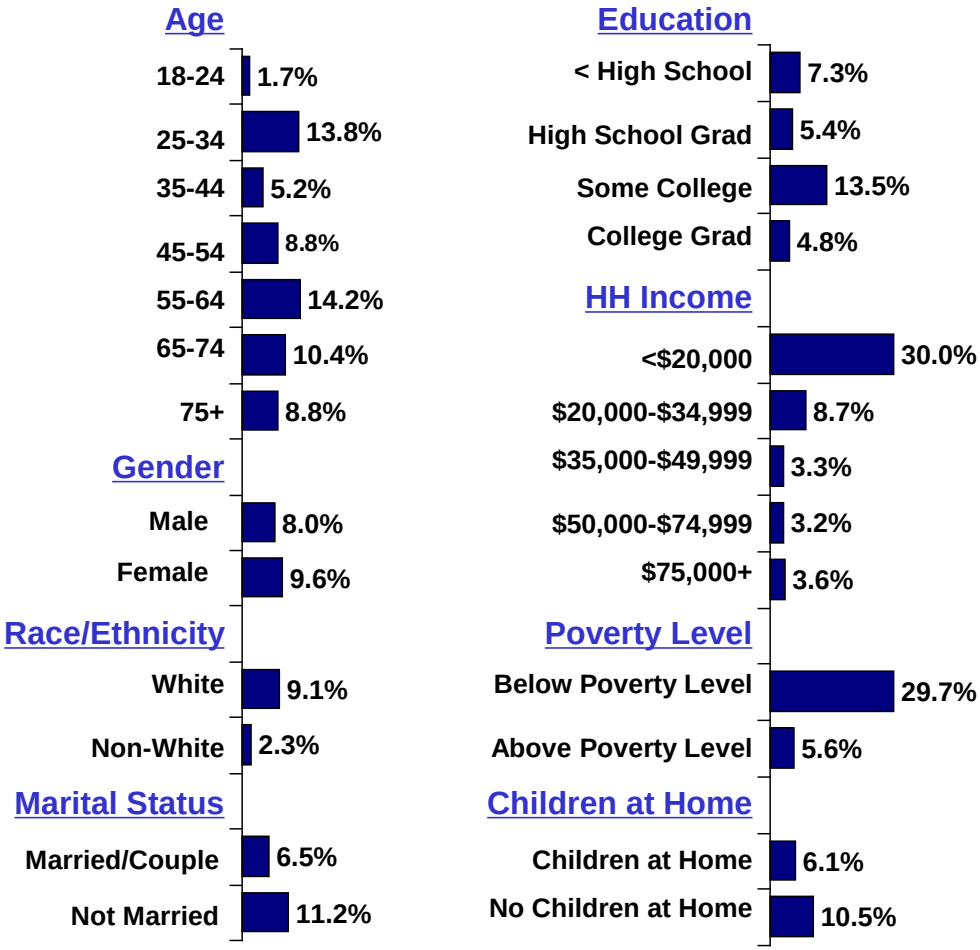
Activity Limitation

Activity Limitation* (Total Sample)



*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.

Activity Limitation by Demographics



More than eight in ten (81.5%) area adults are considered to be mentally healthy according to the Kessler 6 Psychological Distress Questionnaire. Conversely, 16.4% experience mild to moderate psychological distress while 2.1% are severely distressed.

Psychological Distress

	During the Past 30 Says, About How Often Did You….					
Frequency of Feeling	**Feel Nervous (n=661)**	**Feel Hopeless (n=660)**	**Feel Restless or Fidgety (n=659)**	**Feel So Depressed That Nothing Could Cheer You Up (n=660)**	**Feel That Everything Is An Effort (n=656)**	**Feel Worthless (n=657)**
None of the time	52.5%	81.6%	54.8%	86.8%	71.3%	87.8%
A Little	24.5%	11.2%	20.4%	8.4%	16.0%	6.7%
Some of the time	16.2%	4.8%	15.7%	3.5%	6.4%	3.3%
Most of the time	4.3%	1.3%	5.2%	1.1%	3.4%	1.0%
All of the time	2.5%	1.1%	3.8%	0.3%	2.9%	1.2%

Mentally Healthy (Well) = 81.5%

Mild to Moderate Psychological Distress = 16.4%

Severe Psychological Distress = 2.1%

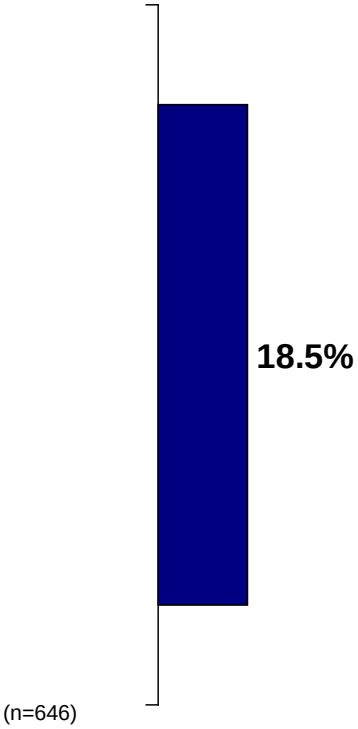
*Calculated from responses to Q. 22.1- 22.6, where none of the time =1, a little = 2, some of the time =3, most of the time =4, and all of the time =5. Responses were summed across all six questions with total scores representing the above categories: mentally well (6-11), mild to moderate psychological distress (12-19), and severe psychological distress (20+).

Q22.1-Q22.6 About how often over the past 30 days did you feel….

Among SHUKH area adults, the groups most likely to be diagnosed with mild to severe psychological distress include those who: are unmarried, have children at home, have less than a high school education, have household incomes less than $20K, and are living below the poverty line. Conversely, those least likely to have psychological distress are found in groups that have a college degree and have incomes of $75K or more.

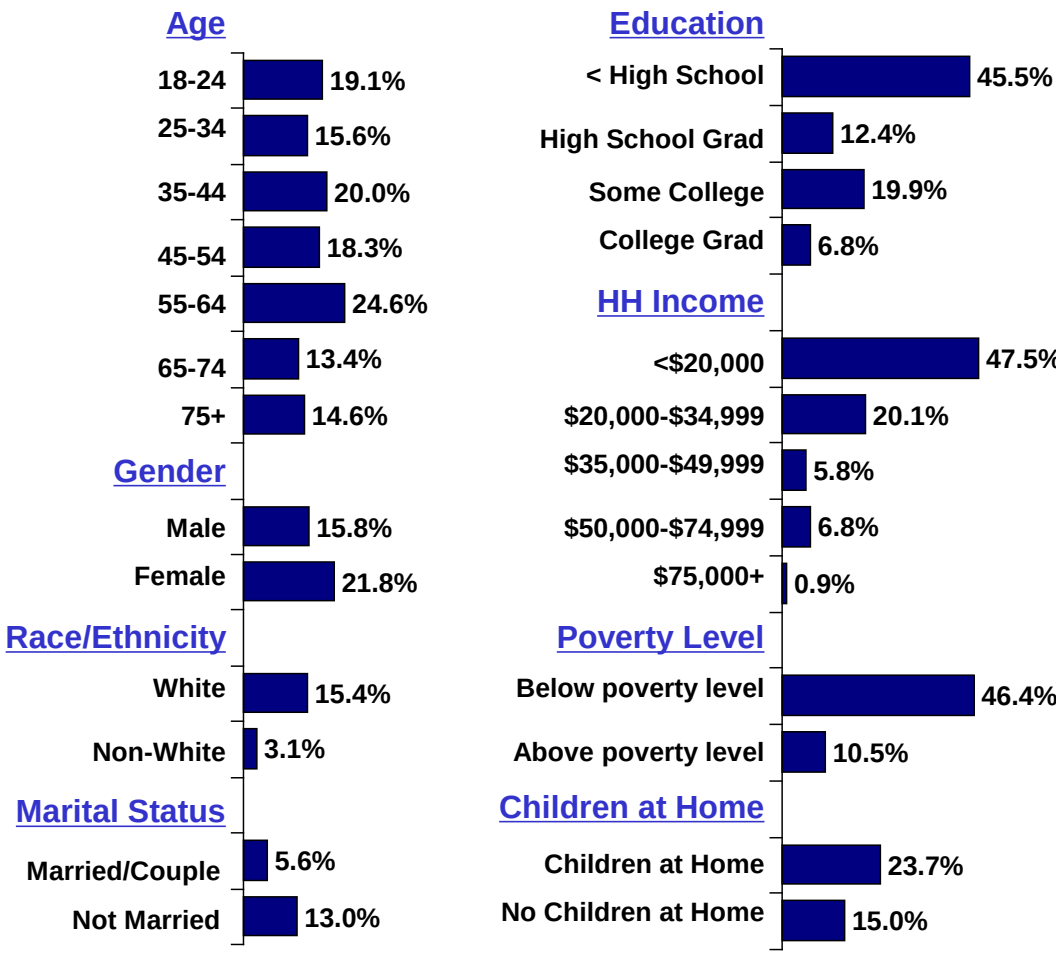
Psychological Distress

Mild to Severe Psychological Distress* (Total Sample)



*Calculated from responses to Q. 22.1- 22.6 where respondents scored 12 or more across the six items on the Kessler 6 scale.

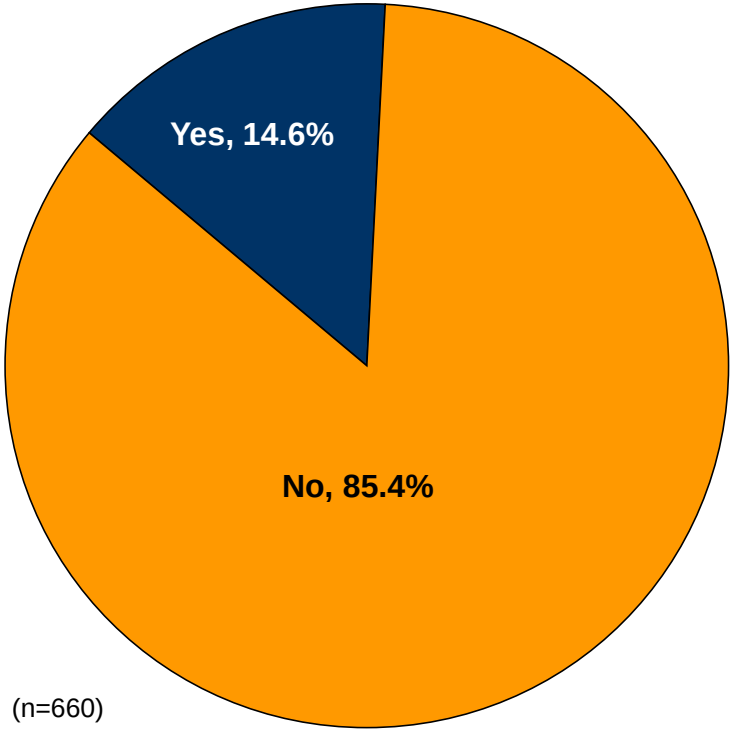
Mild to Severe Psychological Distress by Demographics



Of all SHUKH area adults, 14.6% currently take medication or receive treatment for a mental health condition or emotional problem. However, those who could benefit the most from medication/treatment are not getting it as often as they should: just over one-fourth (28.5%) of adults classified as having "severe psychological distress" and 37.3% of those with "poor mental health" currently take medication or receive treatment for their mental health issues.

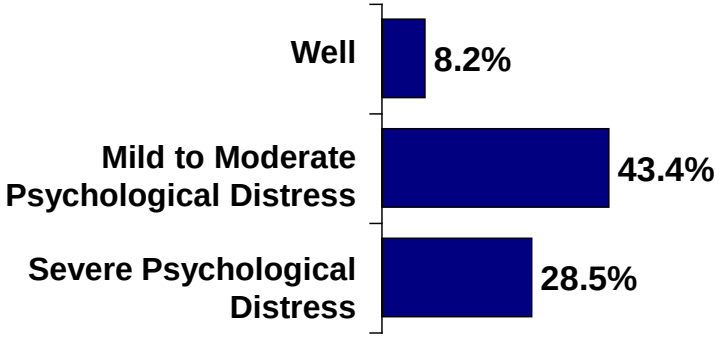
Medication and Treatment for Psychological Distress

Taking Medication or Receiving Treatment for Mental Health Condition or Emotional Problem

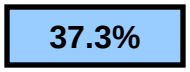


(n=660)

Percent Taking Medication/Receiving Treatment by Psychological Distress Category



Percent of Those Classified as "Poor Mental Health" That are Taking Medication/Receiving Treatment

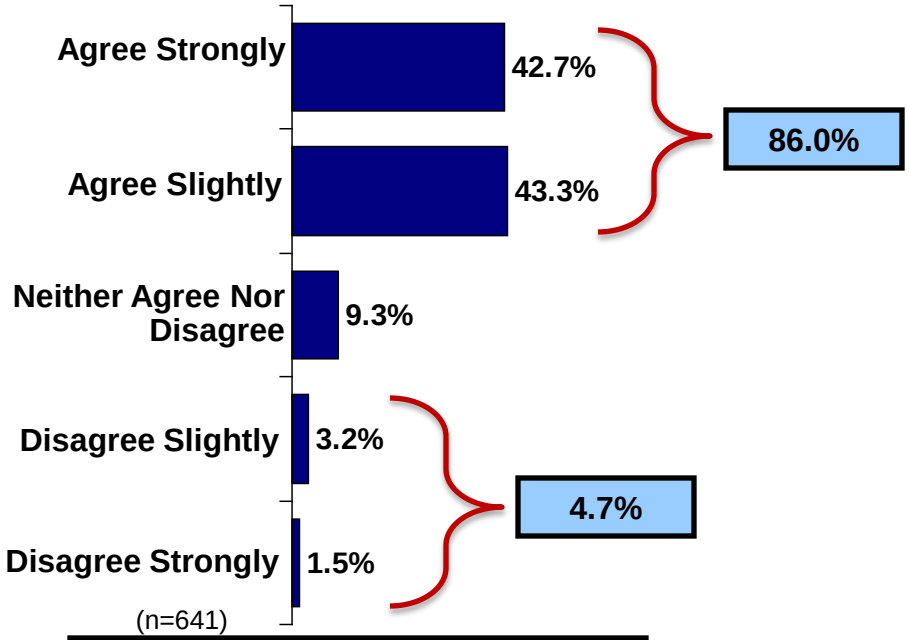


Q22.7: Are you now taking medicine or receiving treatment from a doctor or other health care professional for any type of mental health condition or emotional problem.

The vast majority (86.0%) of area adults believe treatment can help people with mental illness lead normal lives. On the other hand, only one-third (34.1%) believe people are generally caring and sympathetic toward people with mental illness and this drops to 13.9% among those with severe psychological distress. This stigma could be a reason that although the vast majority of people with mild to severe psychological distress believe treatment works, far fewer seek it.

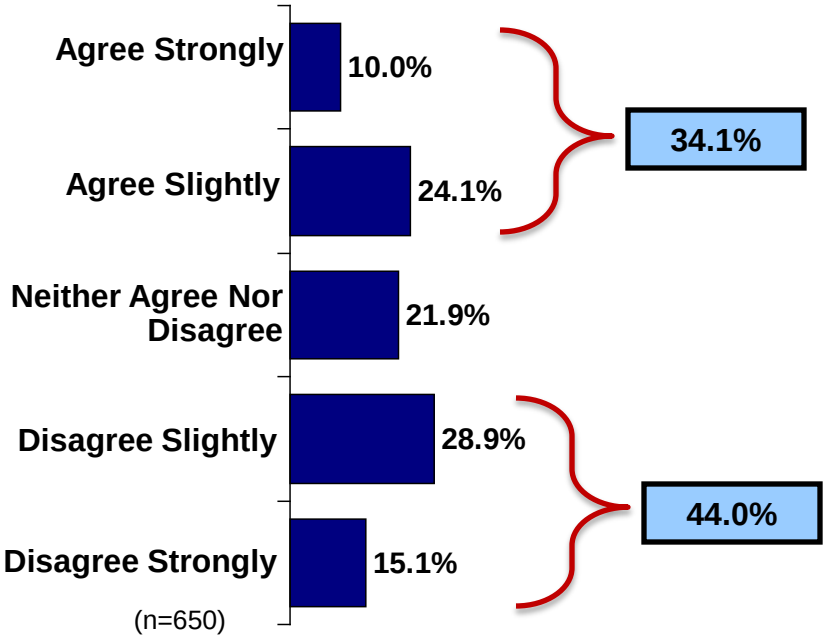
Perceptions of Mental Health Treatment and Mental Illness

"Treatment Can Help People With Mental Illness Lead Normal Lives"



Agree by Psychological Distress
- Well (86.1%)
- Mild to Moderate (87.4%)
- Severe (86.1%)

"People Are Generally Caring and Sympathetic to People With Mental Illness"



Agree by Psychological Distress
- Well (34.6%)
- Mild to Moderate (36.0%)
- Severe (13.9%)

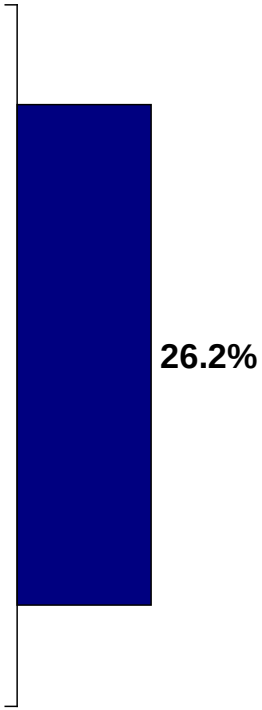
22.8 What is your level of agreement with the following statement? "Treatment can help people with mental illness lead normal lives." Do you – agree slightly or strongly, or disagree slightly or strongly?

22.9 What is your level of agreement with the following statement? "People are generally caring and sympathetic to people with mental illness." Do you – agree slightly or strongly, or disagree slightly or strongly?

Almost two-thirds (63.4%) of SHUKH area adults are considered to be either overweight or obese per their BMI. More than one-third (34.6%) are at a healthy weight.

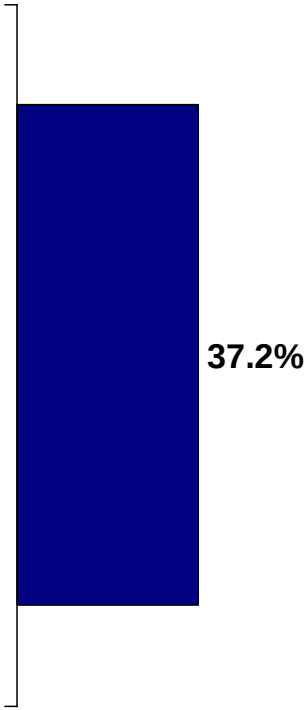
Weight Status

Obese* (Total Sample)



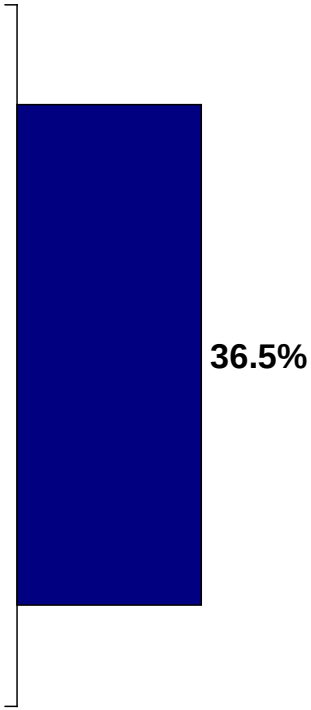
*Among all adults, the proportion of respondents whose BMI was greater than or equal to 30.0.

Overweight* (Total Sample)



*Among all adults, the proportion of respondents whose BMI was greater than or equal to 25.0, but less than 30.0

Not Overweight or Obese* (Total Sample)



Healthy Weight = 34.6%
Underweight = 1.9%

*Among all adults, the proportion of respondents whose BMI was less than 25.0.

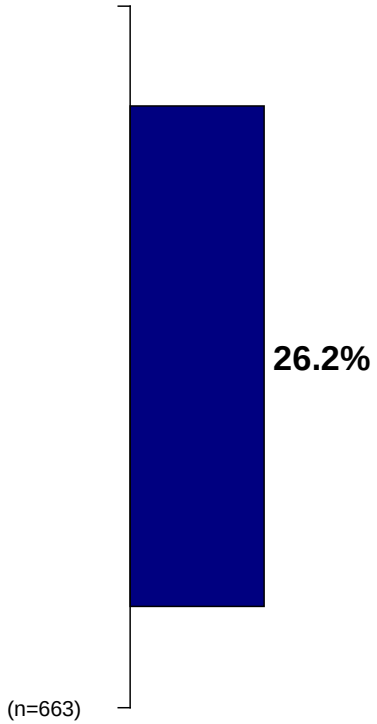
Q13.10: About how much do you weigh without shoes?
Q13.11: About how tall are you without shoes?

(n=663)

Obesity is a condition that affects adults regardless of socioeconomic or socio-demographic characteristics. That said, obesity is inversely related to level of education. Further, adults most likely to be obese come from groups that include non-Whites and those living below the poverty line. Obesity tends to be a health problem for adults at least 35 years old.

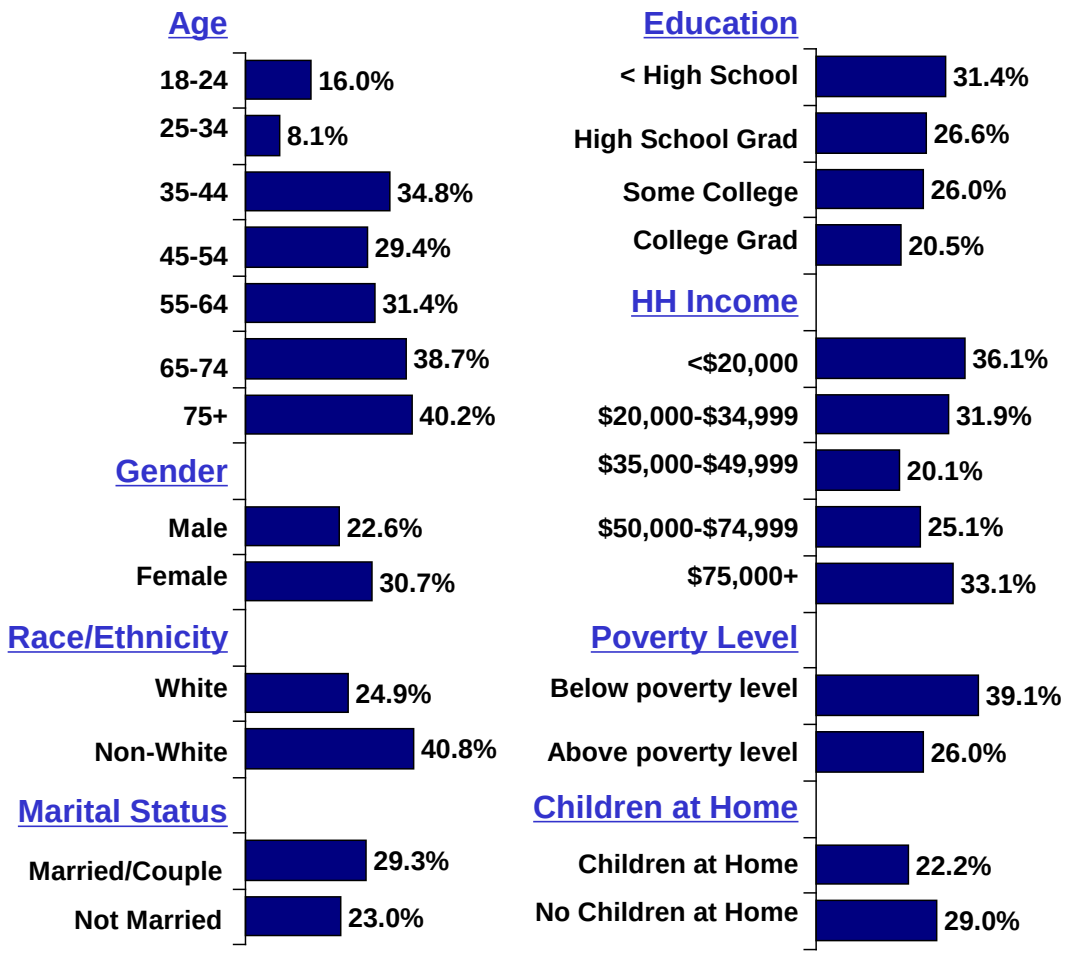
Weight Status (Cont'd.)

Obese* (Total Sample)



*Among all adults, the proportion of respondents whose BMI was greater than or equal to 30.0.

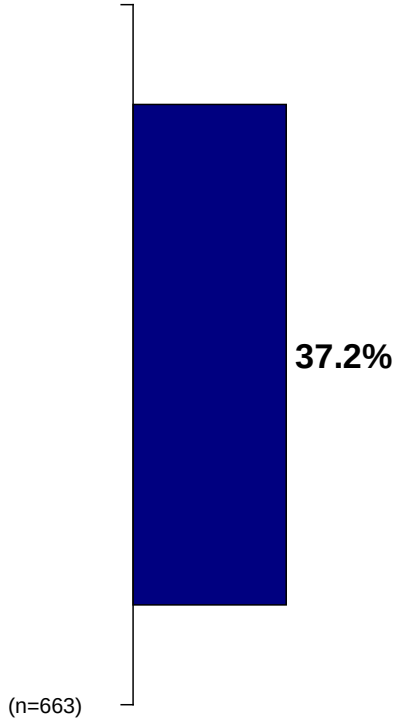
Obese by Demographics



Men are far more likely to be considered overweight (but not obese) than women. Adult residents with the lowest incomes and those with the lowest levels of education are less likely to be overweight than others who are better off financially or have more education.

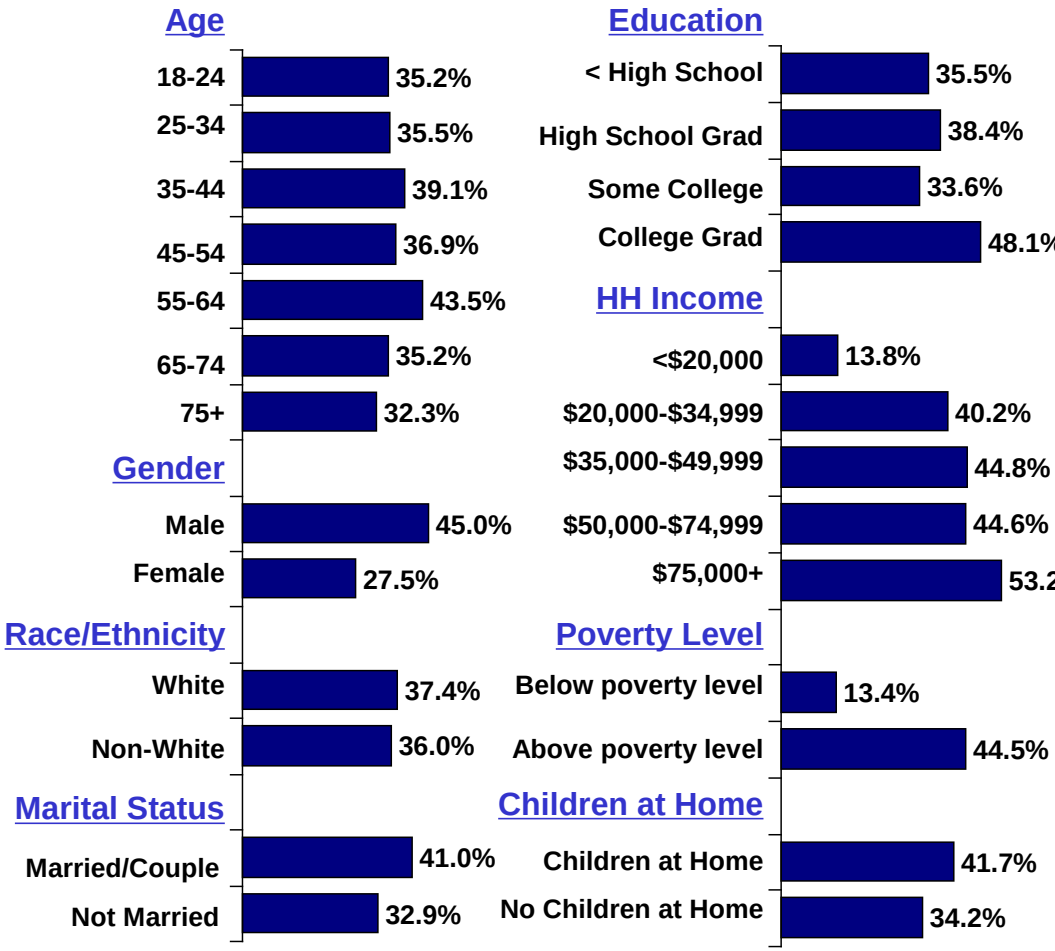
Weight Status (Cont'd.)

Overweight* (Total Sample)



*Among all adults, the proportion of respondents whose BMI was greater than or equal to 25.0, but less than 30.0.

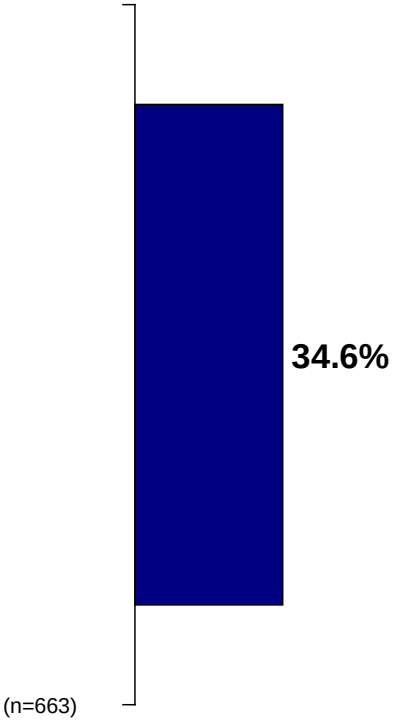
Overweight by Demographics



Women and Whites are more likely to be at a healthy weight than men and non-Whites, respectively. The youngest adults (18-34) are also most likely to be at a healthy weight, as are people with financial limitations.

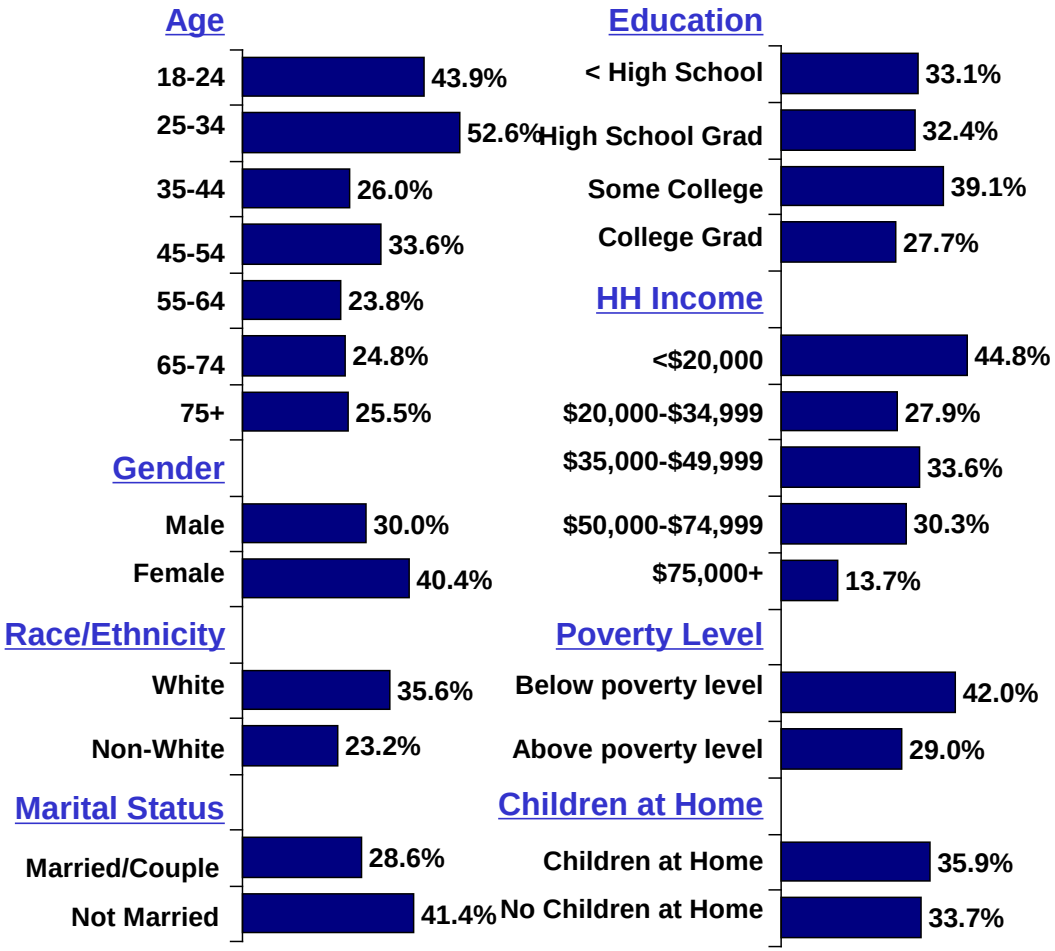
Weight Status (Cont'd.)

Healthy Weight* (Total Sample)



*Among all adults, the proportion of respondents whose BMI was greater than 18.5 but less than 25.0.

Healthy Weight by Demographics

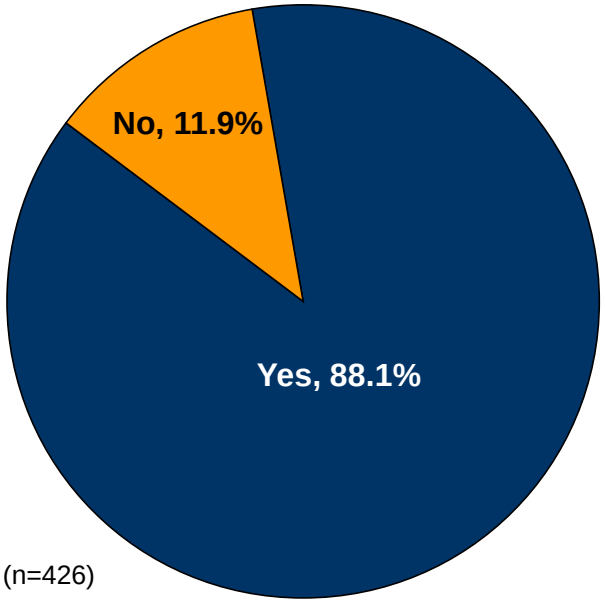


Health Care Access

Almost nine in ten (88.1%) adults under age 65 have health care coverage. The primary source of health coverage for all adults is a plan purchased through an employer or union. Roughly one in six (15.9%) purchase health coverage on their own.

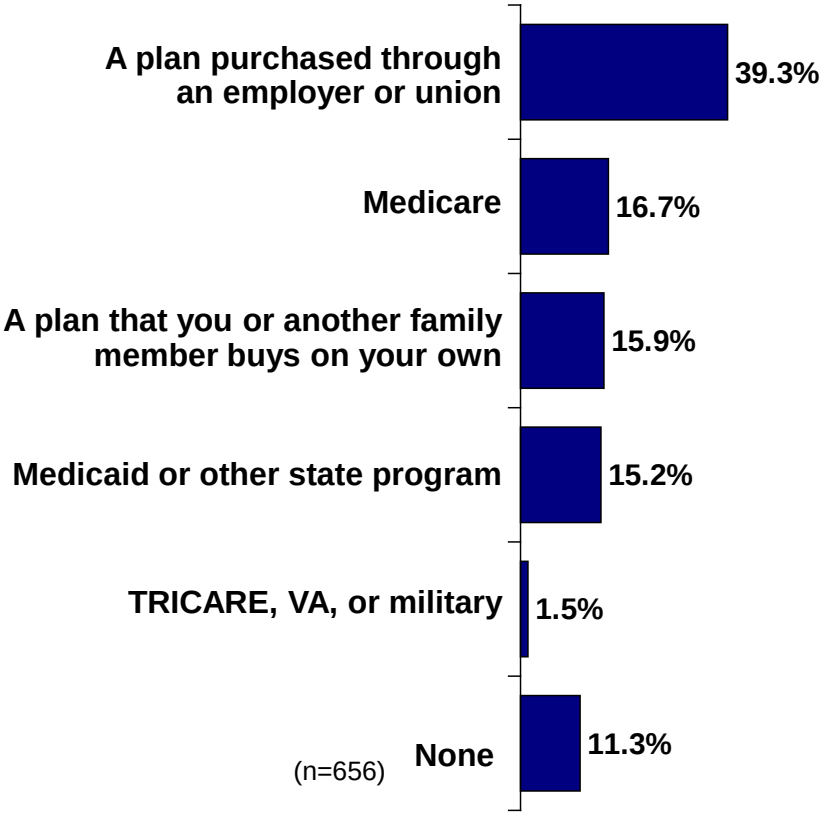
Health Care Coverage

Currently Have Health Coverage (Among Adults 18-64)



(n=426)

Primary Source of Health Coverage (Total Sample)



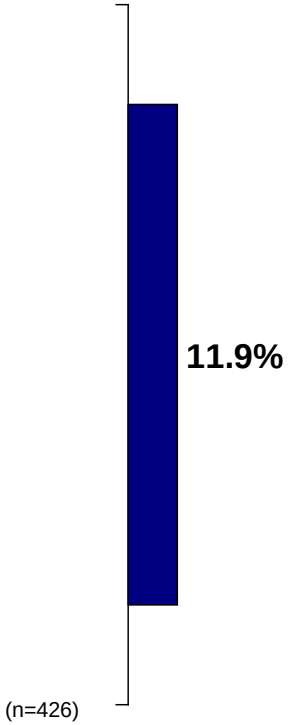
(n=656)

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?
Q3.2: What is the primary source of your health coverage? Is it….?

Having health care coverage is greatly associated with education and income; adults with the highest levels of education and incomes are most likely to have health care coverage. Additionally, the youngest residents (aged 18-24) are most likely to lack coverage compared to older residents, non-Whites report lacking coverage more than Whites, and men lack coverage more than women. Further, and perhaps more alarming, those with children at home are less likely to have coverage than those with no children at home.

Health Care Coverage Among Adults Aged 18-64 Years

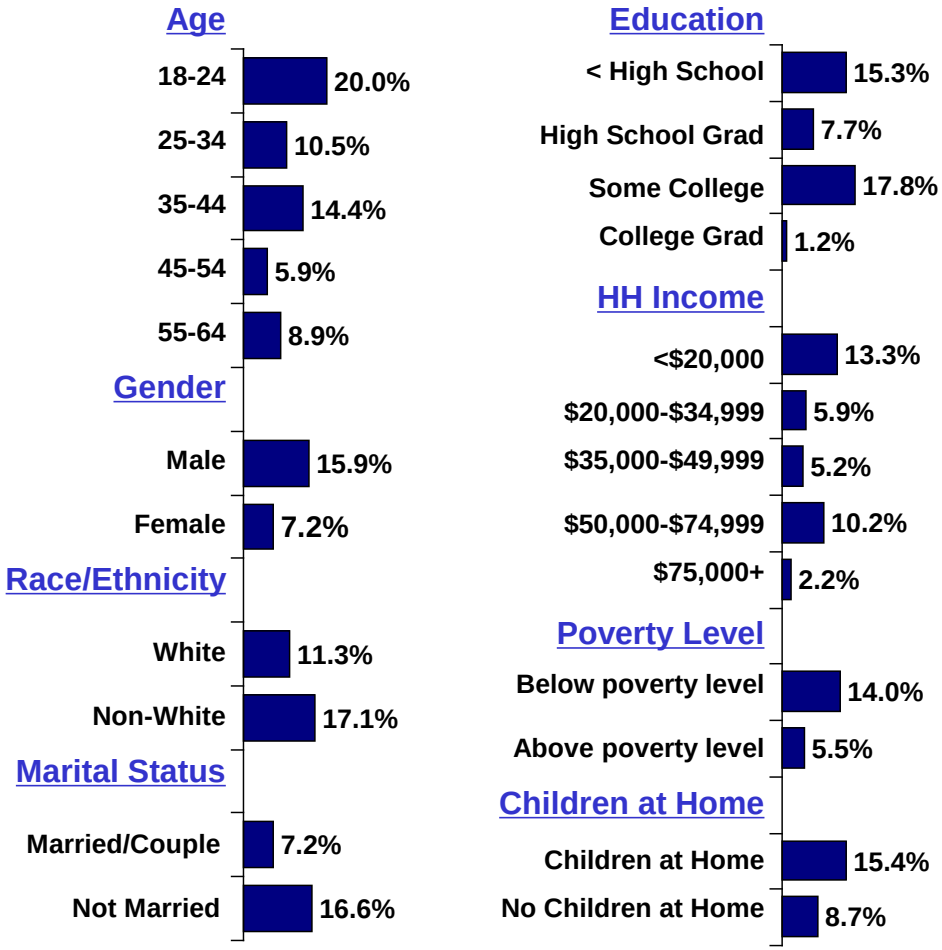
No Health Care Coverage* (Among Adults 18-64)



(n=426)

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

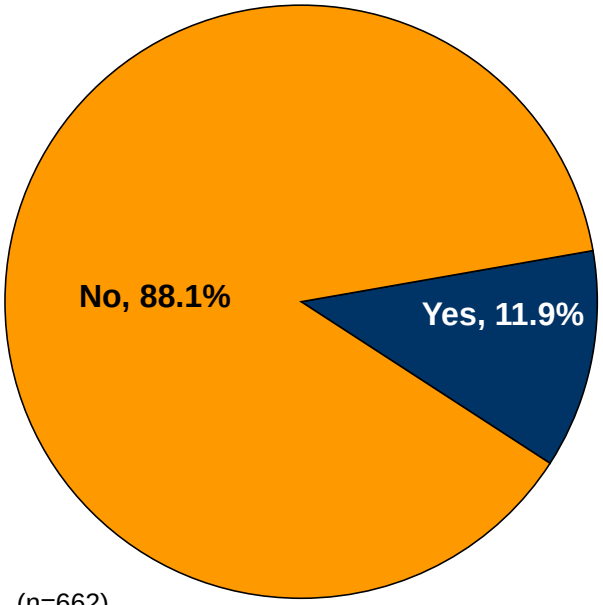
No Coverage by Demographics



Slightly more than one in ten (11.9%) area adults have foregone health care in the past 12 months because of cost. For those who delayed needed medical care this past year, there are myriad reasons cited, however **cost**, for co-pays and deductibles or in general terms, is the greatest factor. Further, 5.5% could not take prescribed medication in the past year due to cost.

Problems Receiving Healthcare

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

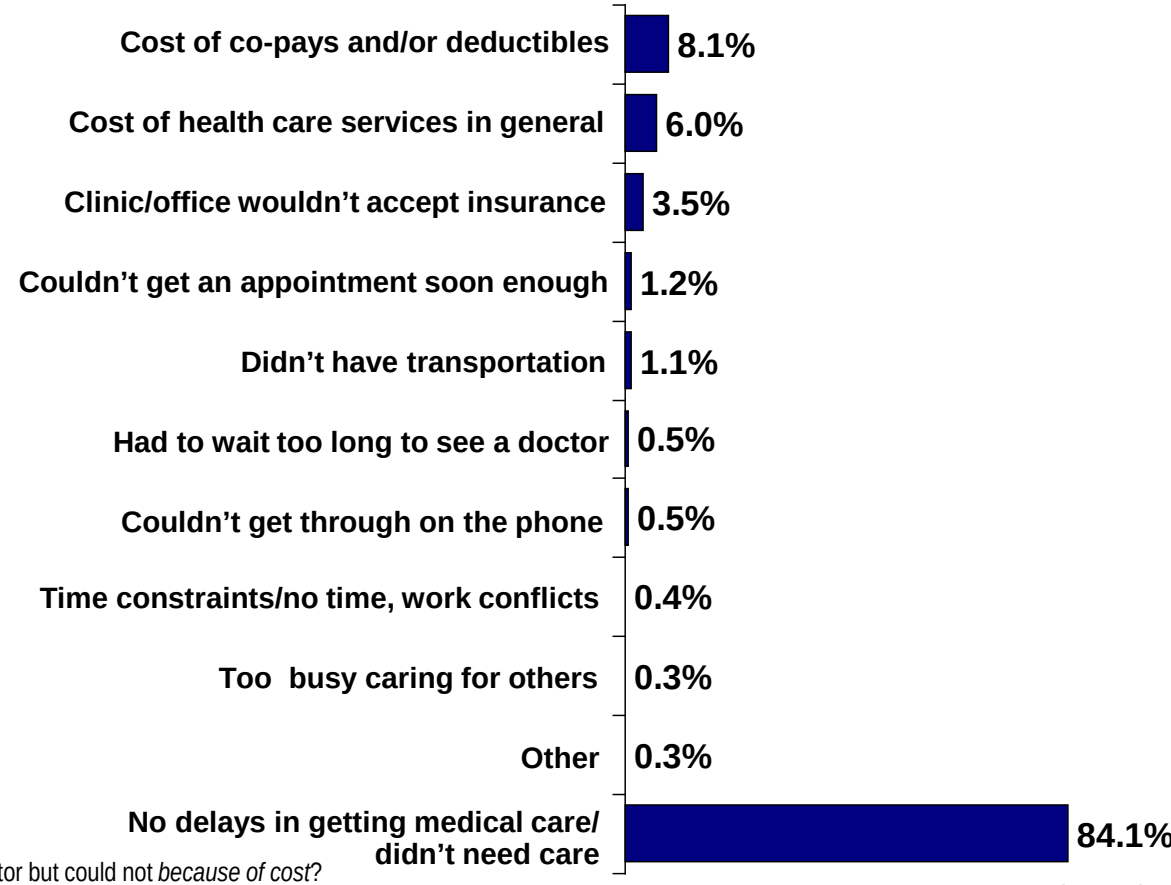


(n=662)

Could Not Take Medication Due to Cost = 5.5%

(n=663)

Reasons for Delays in Getting Needed Medical Care



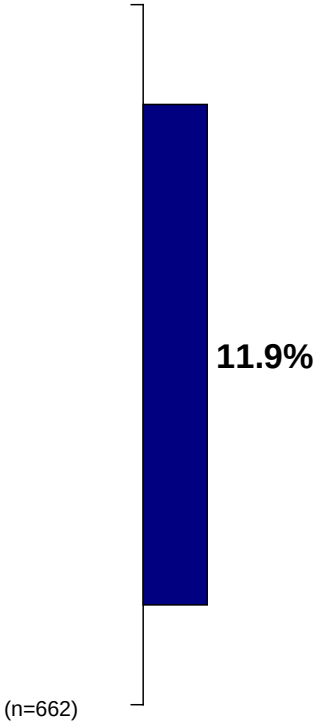
(n=662)

Q3.4: Was there a time in the past 12 months that you needed to see a doctor but could not *because of cost*?
Q3.5: There are many reasons people delay getting needed medical care. Have you delayed getting needed medical care for any of the following reasons in the past 12 months?
Q3.9: Was there a time in the past 12 months when you did not take your medication as prescribed because of cost? Do not include over the counter (OTC) medication.

Cost, as a barrier to health care, is inversely related to income; those who more often find it a barrier come from groups with incomes below $20K and come from groups below the poverty level. Additionally, cost is more likely to prevent unmarried adults and/or those with children at home from seeking health care than married adults or those without children at home, respectively.

Problems Receiving Health Care Due to Cost

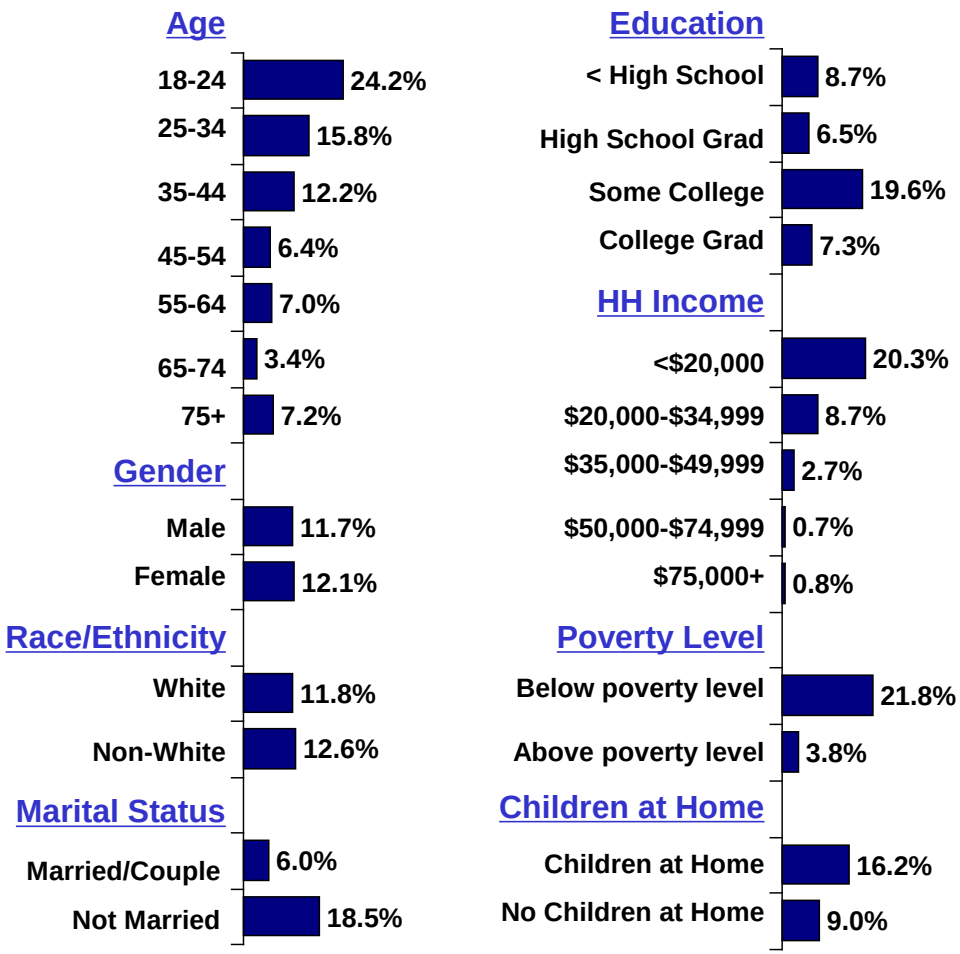
No Health Care Access During Past 12 Months Due to Cost* (Total Sample)



(n=662)

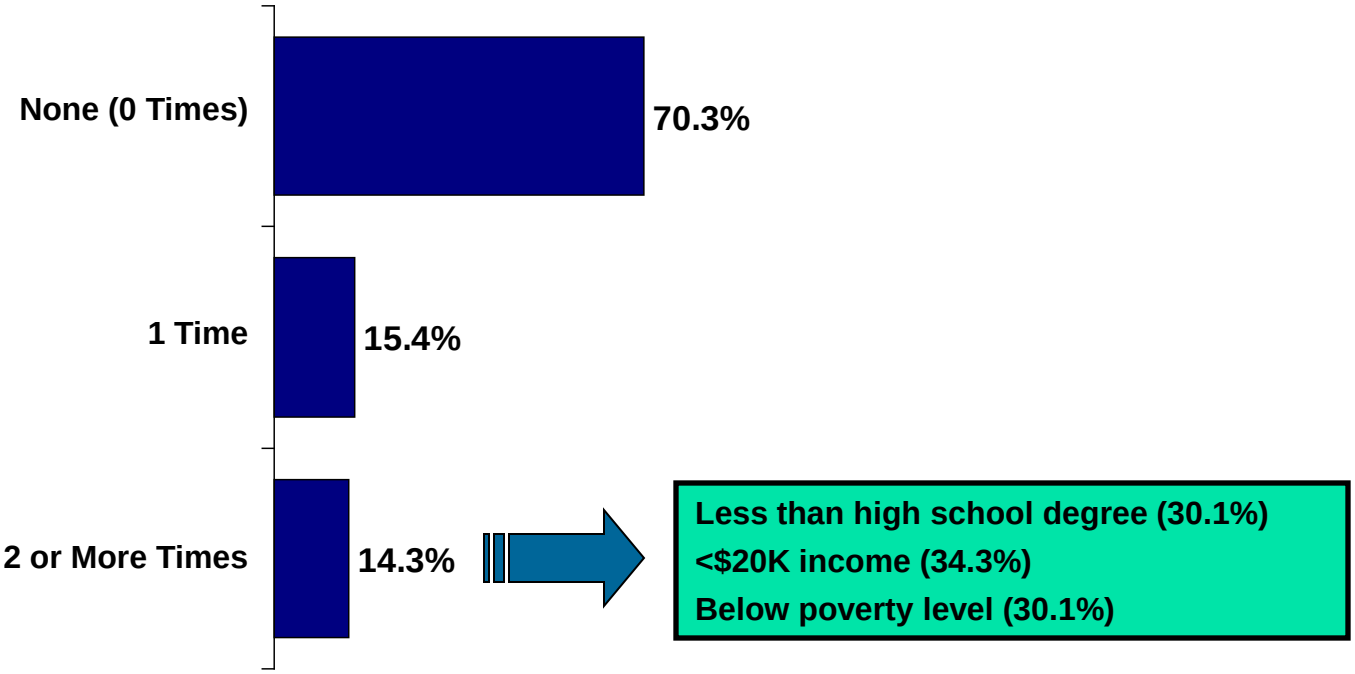
*Among all adults, the proportion who reported that in the past 12 months, they could not see a doctor when they needed to due to the cost.

No Health Care Access Due to Cost by Demographics



Among SHUKH area adults, three in ten (29.7%) visited an ER/ED in the past 12 months. Those who used these facilities averaged almost two visits during the year. Those who use the ER the most come from groups that have less than a high school diploma and are in the lowest income groups.

Number of Times Visited ER/ED in Past 12 Months



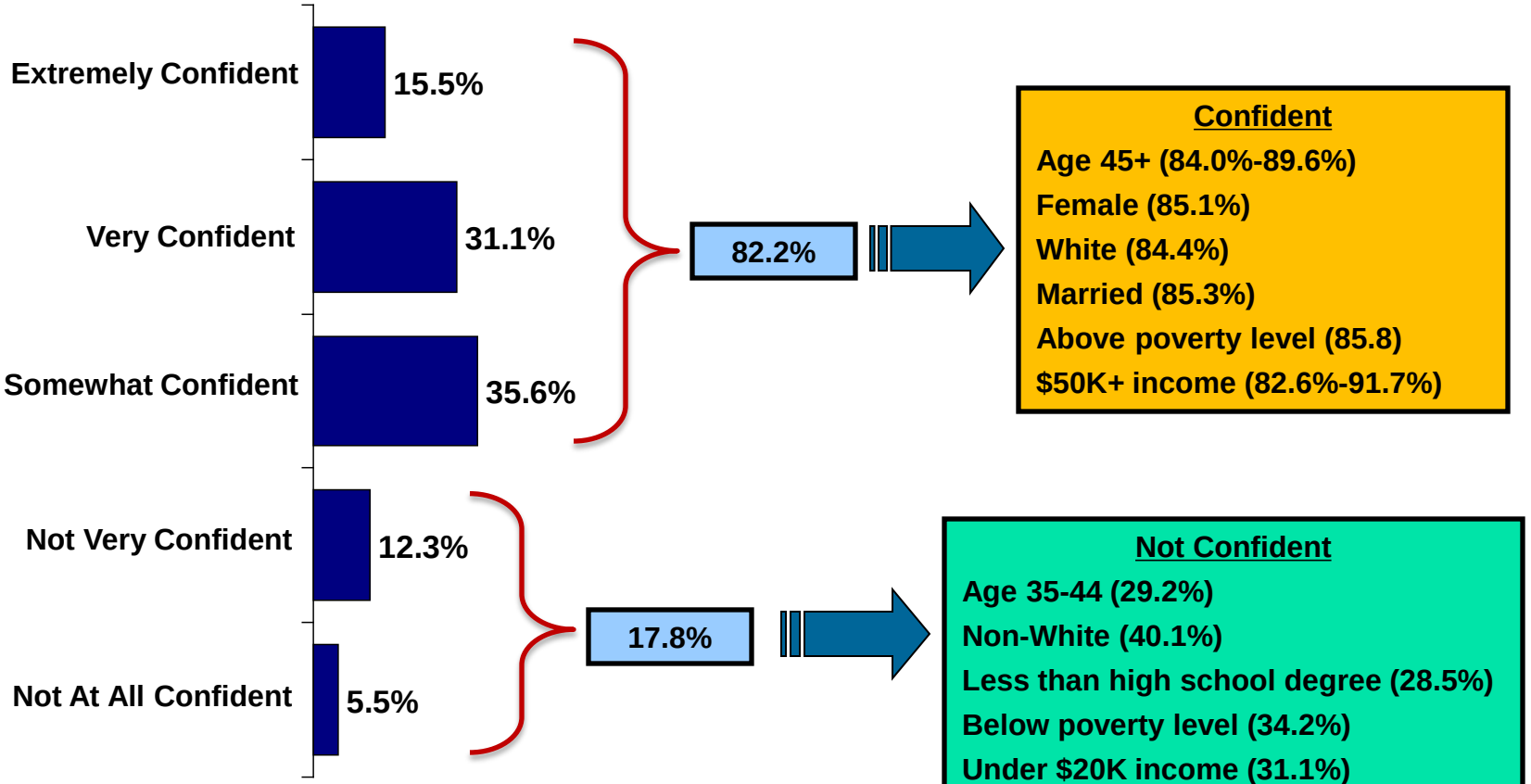
Mean Days (Including Zero) = 0.5
Mean Days (Without Zero) = 1.8

(n=659)

Q3.8: How many time have you been to an Emergency Department/Room in the past 12 months?

A large majority (82.2%) of adults are at least somewhat confident they can successfully navigate the health care system, however, 17.8% are not very or not at all confident. The most confident groups are 45 years or older, women, White, married, have incomes of $50K or more, and are living above the poverty level. Conversely, those least confident groups are aged 35-44, non-White, have less than a high school degree, have incomes below $20K, and live below the poverty level.

Confidence in Navigating the Health Care System



(n=653)

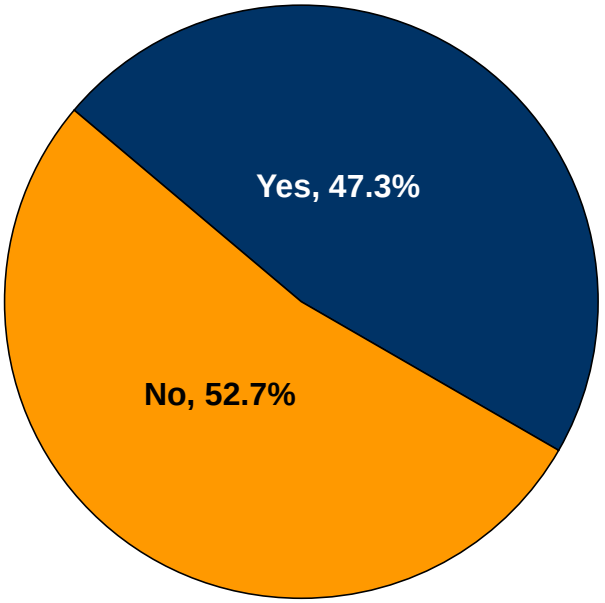
Q3.10: How confident are you that you can successfully navigate the health care system? Would you say….?

Risk Behavior Indicators

Almost half (47.3%) of area adults engaged in leisure time physical activity such as running, walking, or golf in the past 30 days. Of those who did, more than three-fourths (77.1%) participated at least three times per week. Further, more than one-third (36.1%) participated for at least four hours per week, while 21.3% participated for six hours or more.

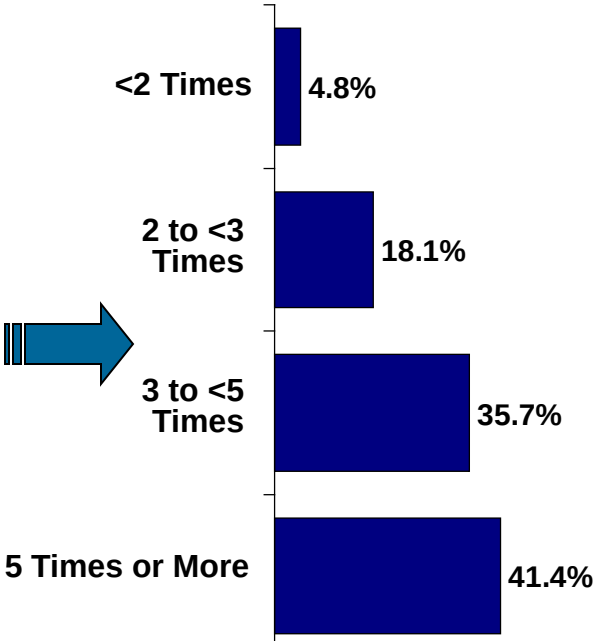
Participation in Physical Activity

Participation in Leisure Time Physical Activity/Exercise



(n=660)

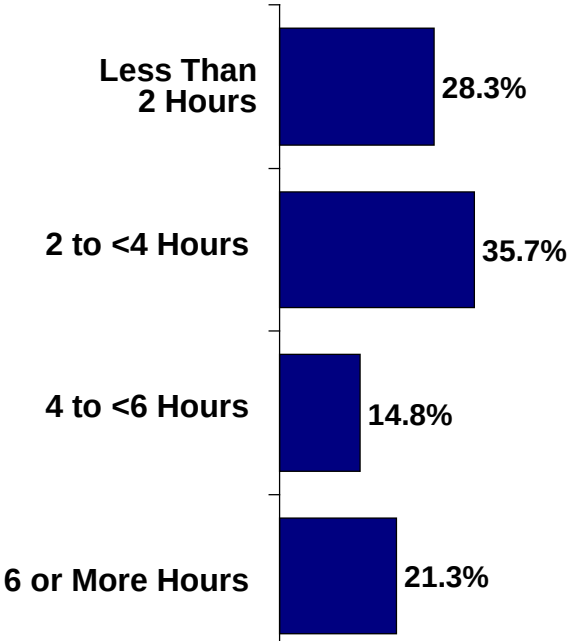
Number of Times Performed Physical Activity Per Week (Among Those Who Participate)



(n=290)

Mean = 4.4
Median = 4.0

Number of Hours Performed Physical Activity Per Week (Among Those Who Participate)



(n=282)

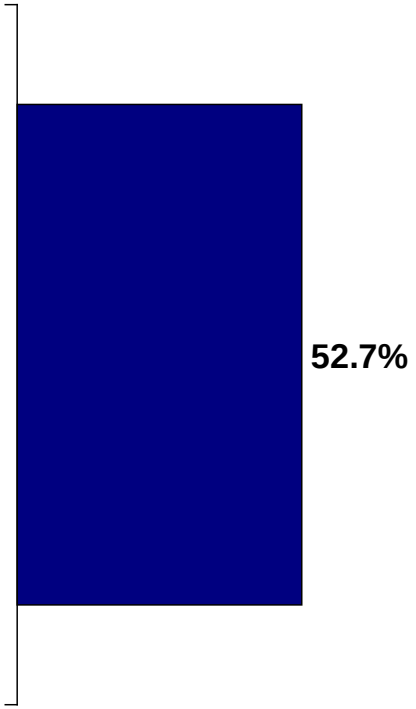
Mean = 3.8
Median = 3.0

Q18.1: During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?
Q18.2: (If yes) How many times per week or per month did you take part in physical activity during the past month?
Q18.3: And when you took part in physical activity, for how many minutes or hours did you usually keep at it?

The amount of leisure time physical activity area adults engage in is directly related to education and income; those with the most education and highest incomes are most active. The least active groups include adults with less than a high school diploma and those earning between $20K and $50K annually.

Leisure Time Physical Activity

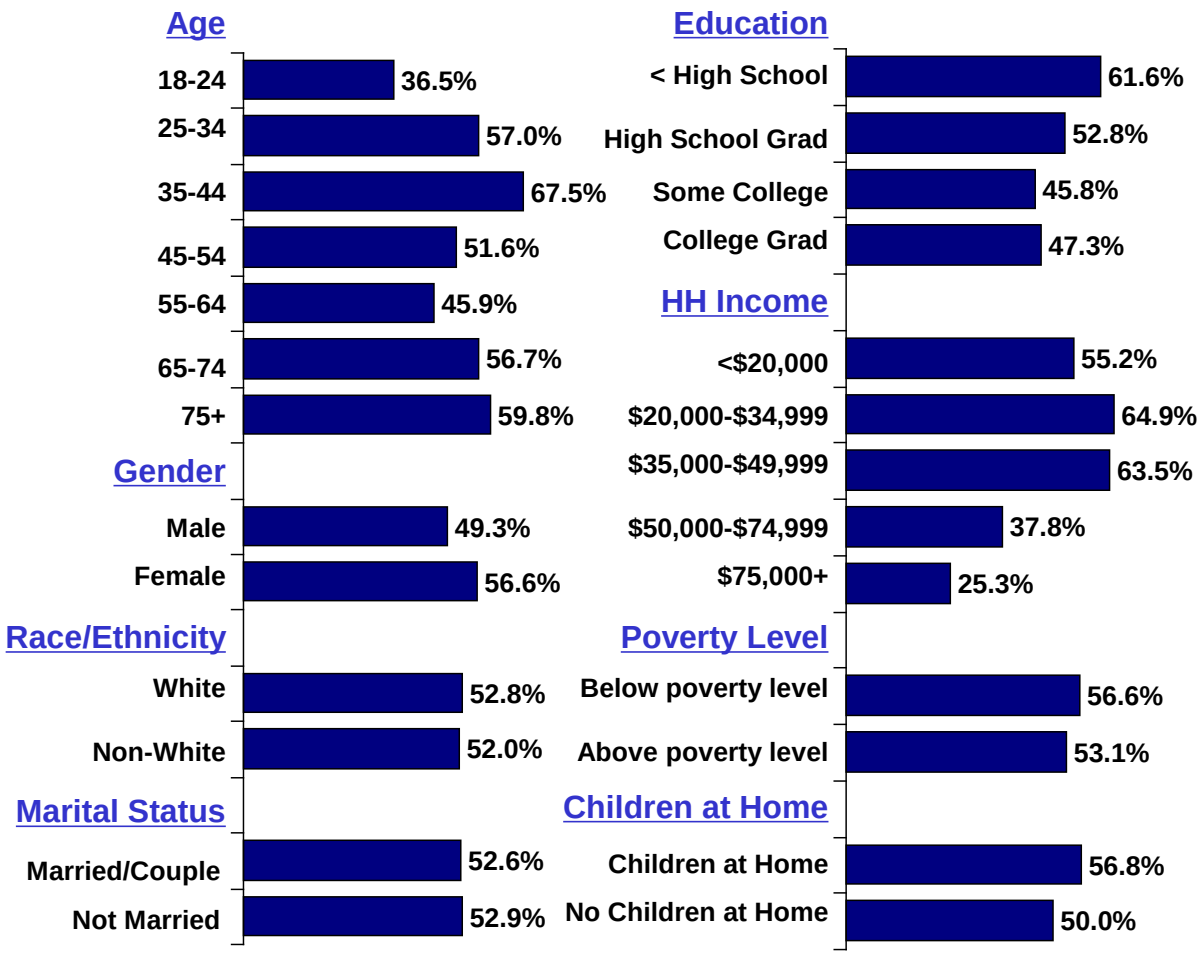
No Leisure Time Physical Activity* (Total Sample)



(n=660)

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

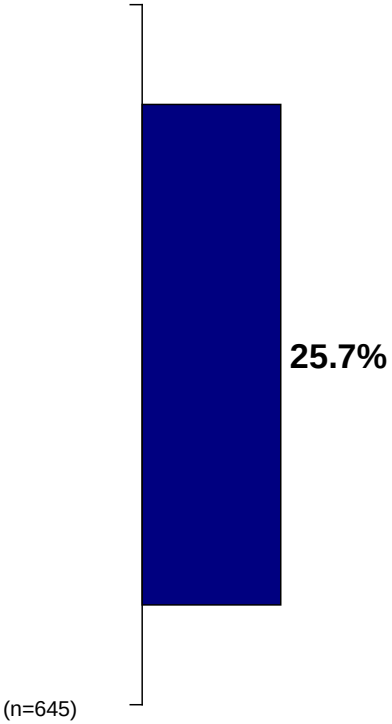
No Leisure Time Activity by Demographics



Similarly, participating in adequate amounts of aerobic physical activity is strongly associated with income; adults in the highest income groups are most likely to engage in adequate amounts of activity. Men are more likely to participate in adequate amounts of physical activity compared to women. The youngest adults (18-24) are most likely, by far, to engage in aerobic activity.

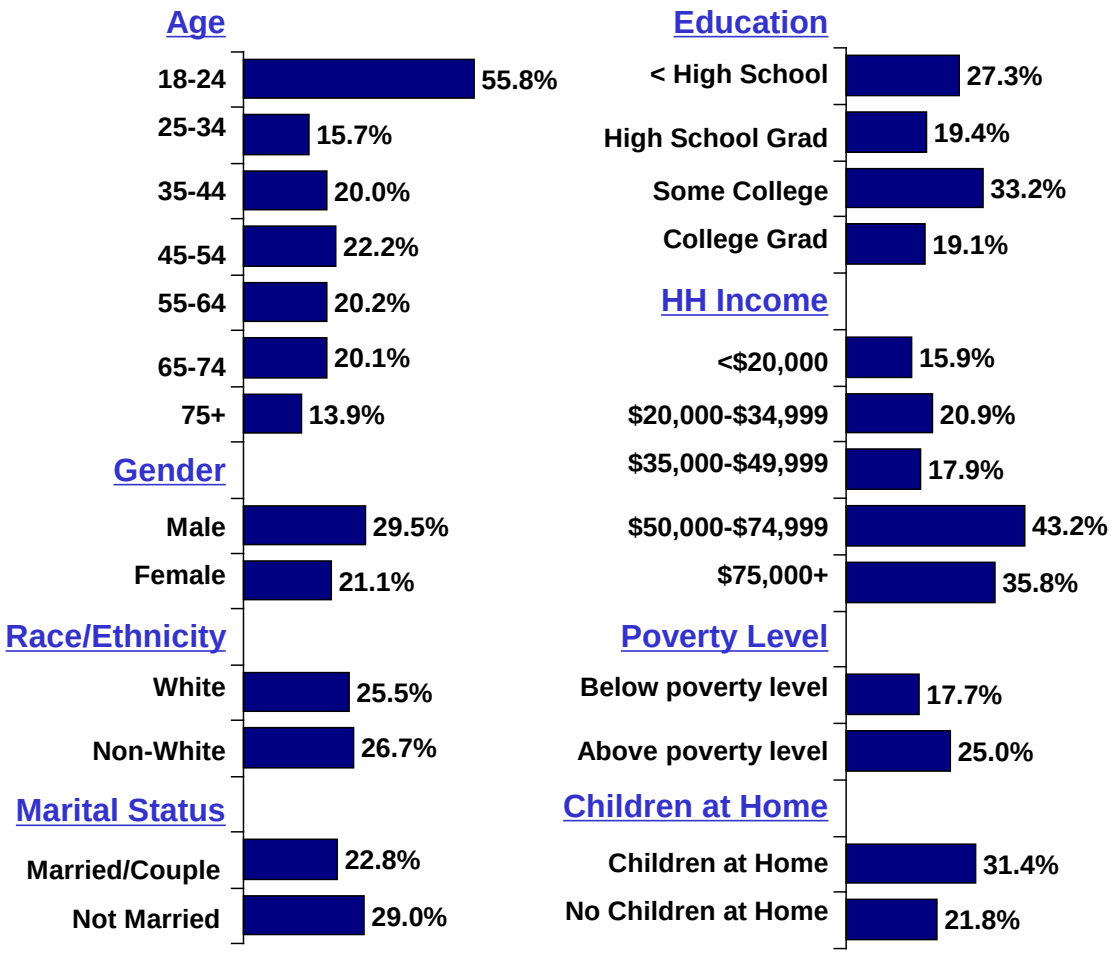
Leisure Time Physical Activity (Cont'd.)

Adequate Aerobic Physical Activity* (Total Sample)



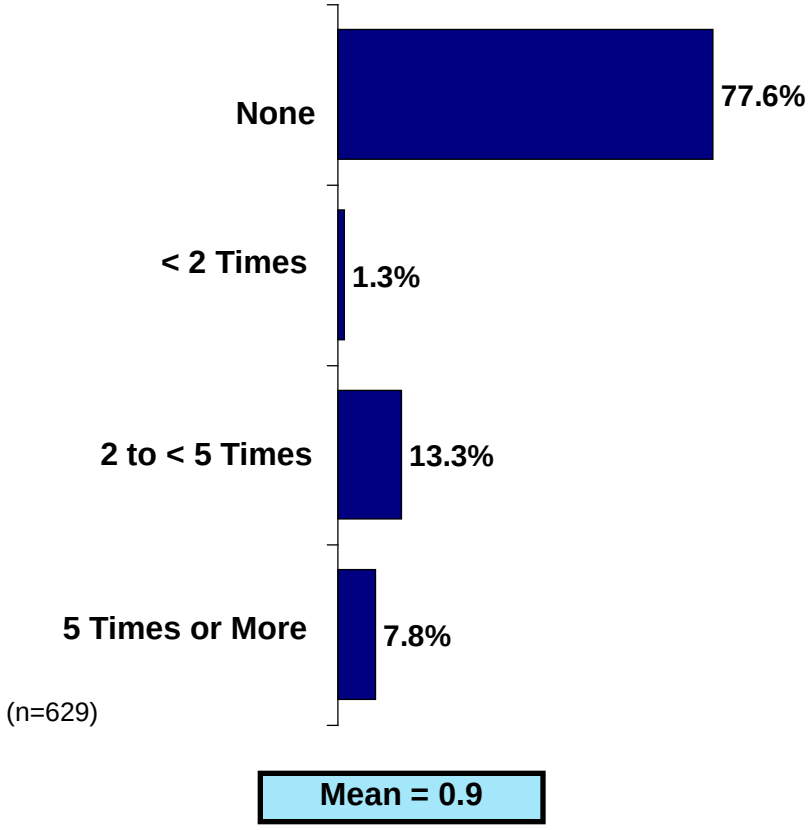
*Among all adults, the proportion who reported that they do either moderate physical activities for at least 150 minutes per week, vigorous physical activities for at least 75 minutes per week, or an equivalent combination of moderate and vigorous physical activities.

Adequate Aerobic Physical Activity by Demographics



Among SHUKH area adults, more than three-fourths (77.6%) do not engage in muscle strengthening activities. On the other hand, one in five (21.1%) perform muscle-strengthening activities at least twice a week.

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

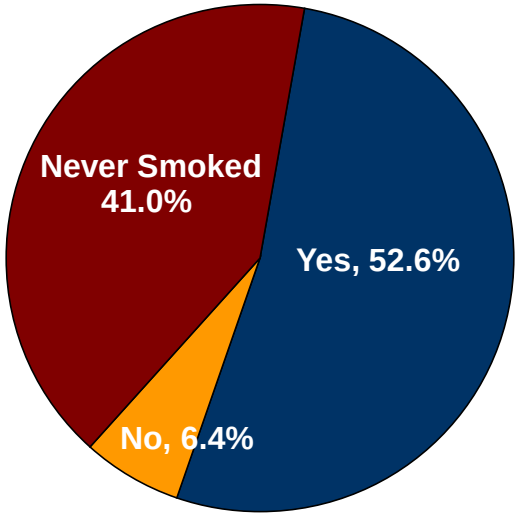


Q18.4: During the past month, how many times per week, or per month, did you do physical activities or exercises to STRENGTHEN your muscles? DO NOT count aerobic activities like walking, running, or bicycling. Count activities using your body weight like yoga, sit-ups or push-ups and those using weight machines, free weights, or elastic bands.

More than half (52.6%) of area adults have smoked at least 100 cigarettes in their lifetime. Of these, 45.2% currently smoke every day and 10.4% smoke some days; these individuals are classified as smokers. Three in ten (29.2%) area adults are smokers and 23.3% are considered former smokers (smoked at least 100 cigarettes in their life but currently do not smoke at all).

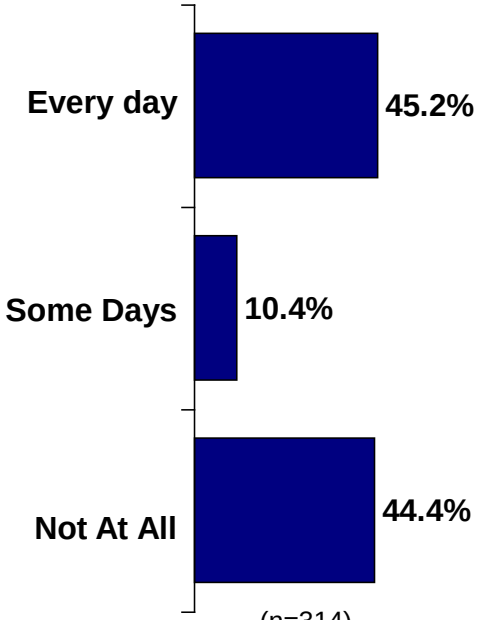
Cigarette Smoking

Smoked 100 Cigarettes in Lifetime



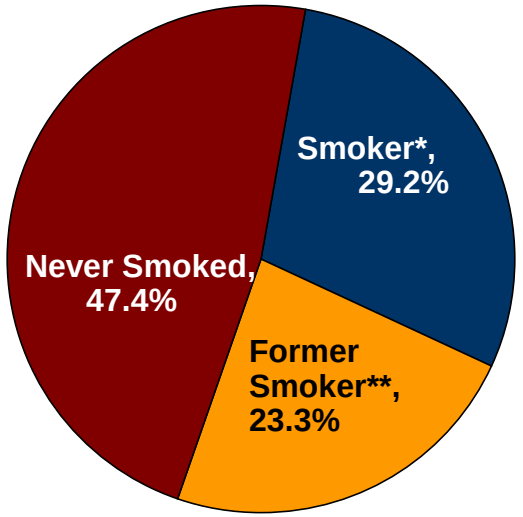
(n=663)

Frequency of Current Use (Among Those Who Smoked at Least 100 Cigarettes in Their Lifetime)



(n=314)

Smoking Status



(n=663)

Q12.1: Have you smoked at least 100 cigarettes in your entire life?
Q12.2: Do you now smoke cigarettes everyday, some days, or not at all?

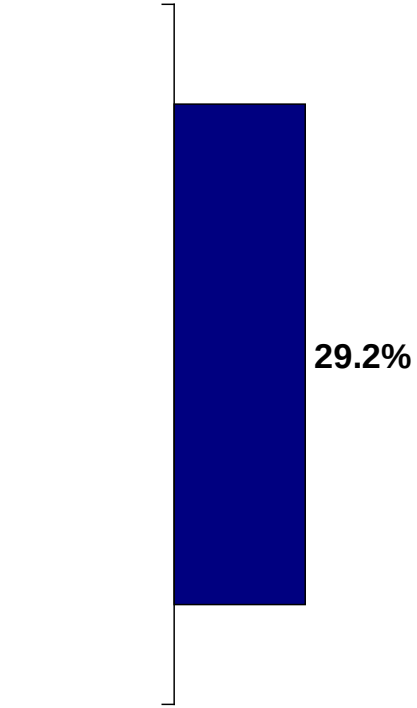
*Among all adults, the proportion who reported that they had ever smoked at least 100 cigarettes (5 packs) in their life and that they smoke cigarettes now, either every day or on some days.

**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.

Cigarette smoking is inversely related to income and greatly associated with level of education. For example, smokers are most likely found among adults with incomes below $20K and those living below the poverty line, and least likely found among college graduates and those with incomes of $75K or more. Additionally, smoking is also more common among non-Whites than Whites, and more common among men than women.

Cigarette Smoking (Cont'd.)

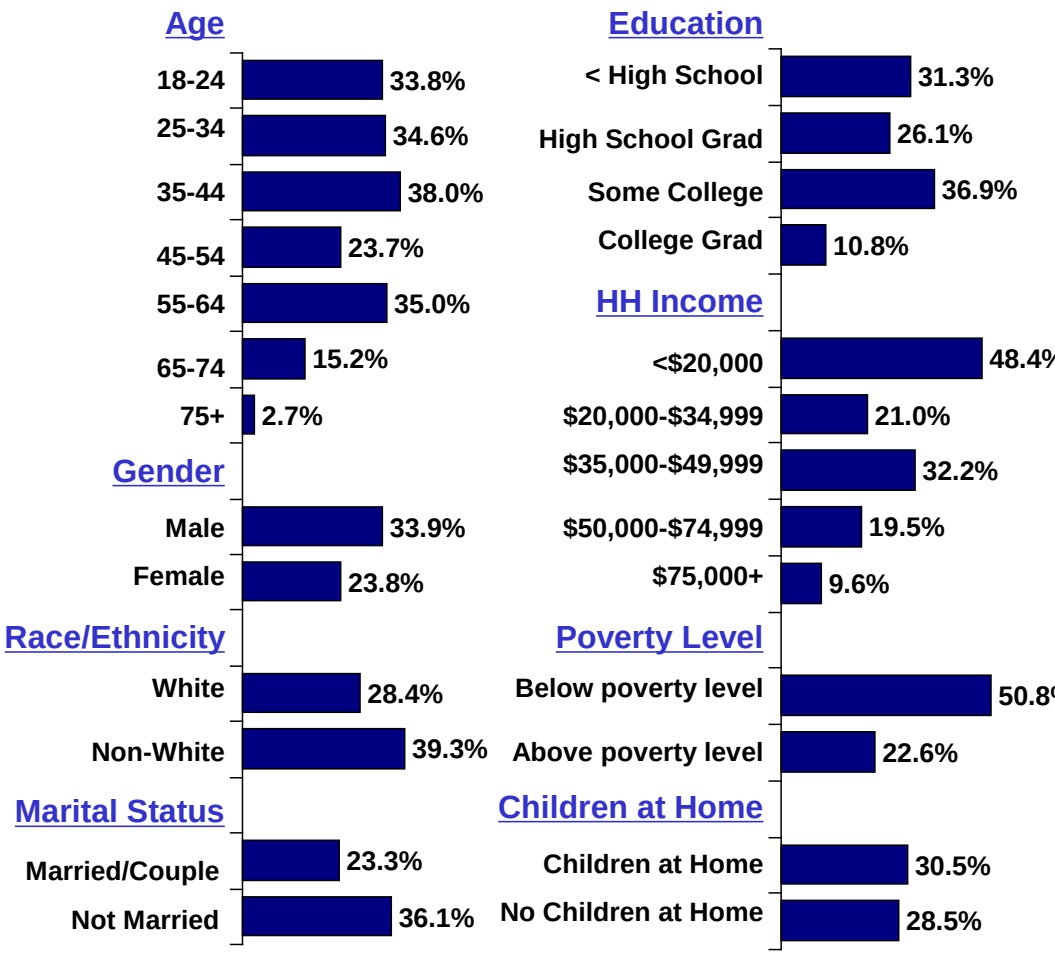
Current Cigarette Smoking* (Total Sample)



(n=663)

*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.

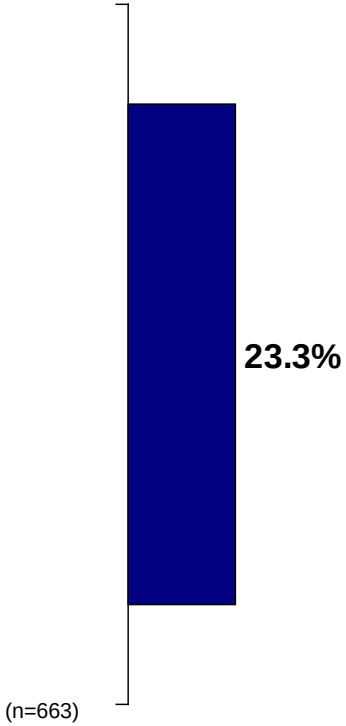
Current Cigarette Smoking by Demographics



Area adults most likely to be former smokers come from groups that are age 65 or older, while college graduates are least likely to be considered former smokers.

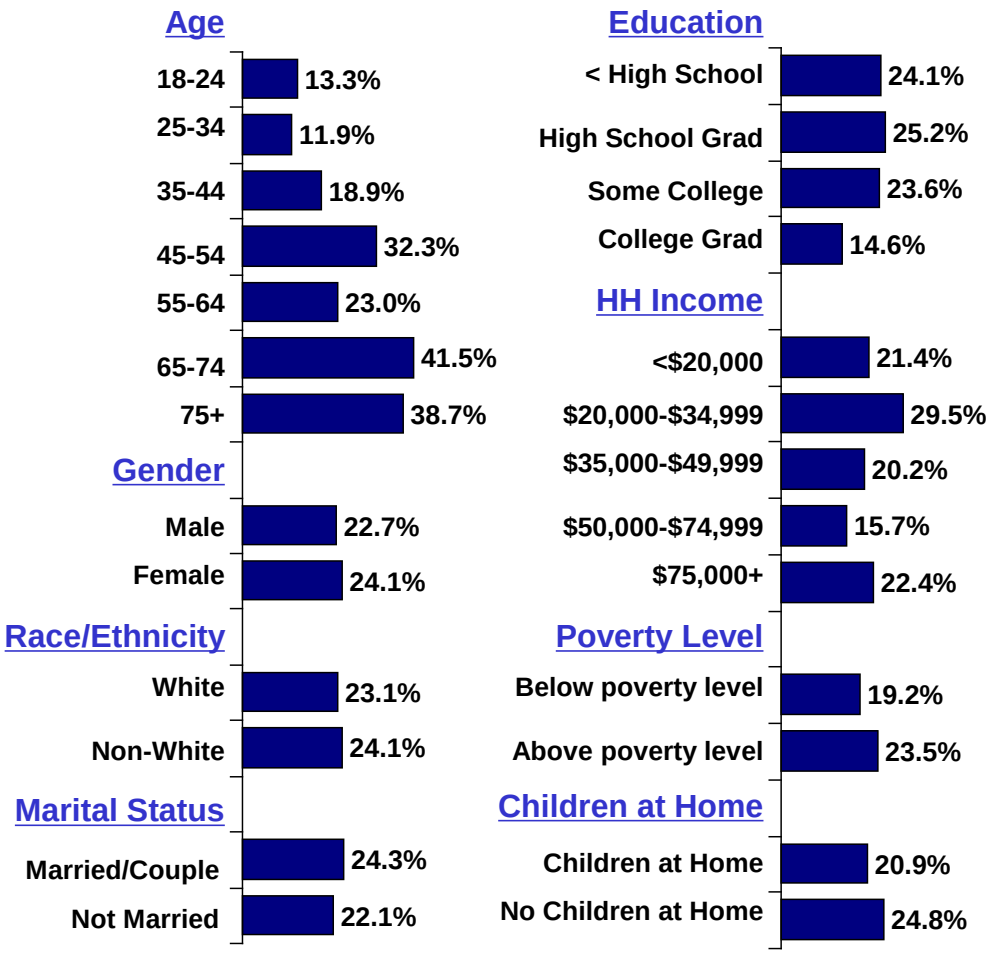
Cigarette Smoking (Cont'd.)

Former Cigarette Smoking* (Total Sample)



*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.

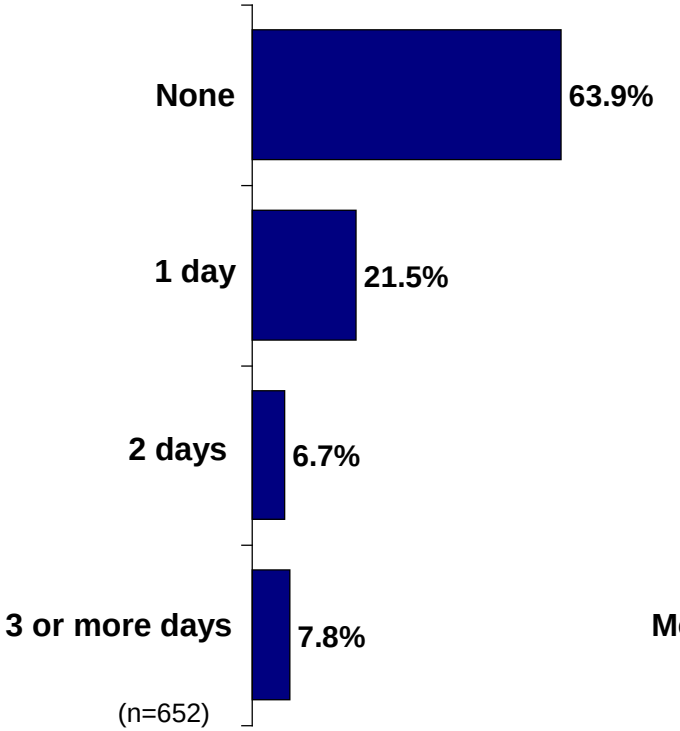
Former Cigarette Smoking by Demographics



With regard to alcohol consumption, six in ten (63.9%) area adults are considered non-drinkers because they did not have a drink of alcohol in the past 30 days. Additionally, three in ten (30.9%) are considered to be light to moderate drinkers. Heavy drinkers comprise 4.6% of area adults, meaning they consume an average of more than eight (if female) or fourteen drinks (if male) per week.

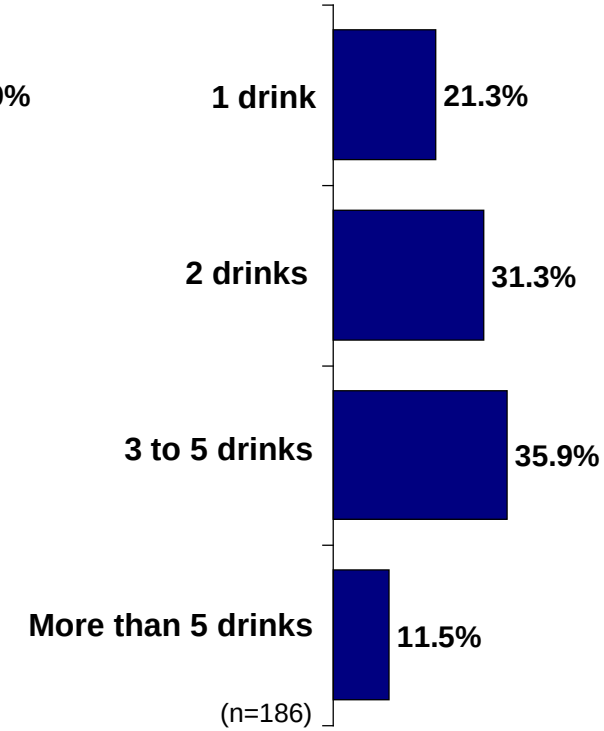
Alcohol Consumption in Past 30 Days

Number of Days Per Week Drank Alcohol in Past 30 Days



Mean (All) = 0.7
Mean (Drinkers) = 1.9

Average Number of Drinks When Drinking



Mean = 3.0

Drinking Status

Non Drinker	**64.5%**
Light/Moderate Drinker	**30.9%**
Heavy Drinker	**4.6%**

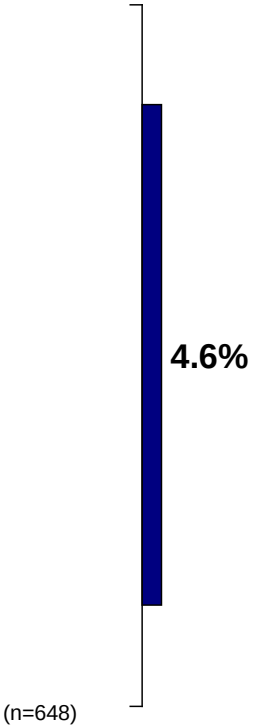
(n=648)

Q20.1: 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?
Q20.2: 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?

Heavy drinking is more common among men and non-Whites than women and Whites, respectively. It is also more common among adults between the ages of 25-44. Heavy drinking is most common among adults with limited financial means, where 8.9% of those with incomes below $20K and 9.3% of those living below the poverty line, engage in heavy drinking.

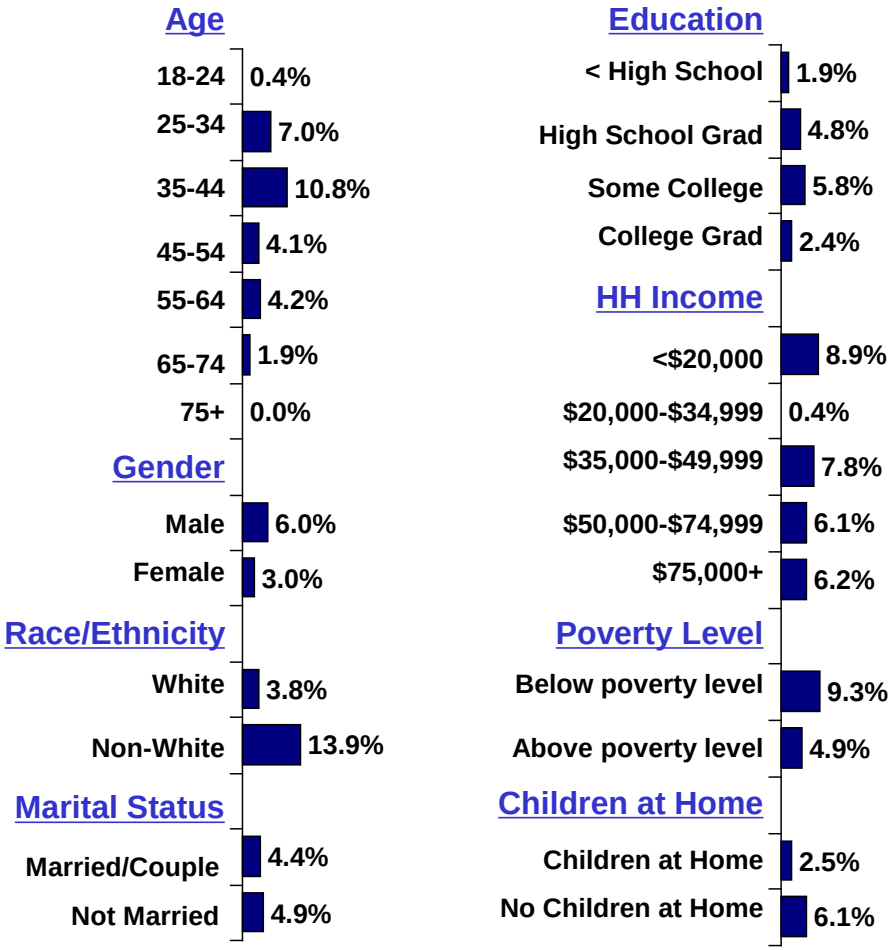
Alcohol Consumption (Cont'd.)

Heavy Drinking* (Total Sample)



*Among all adults, the proportion who reported consuming an average of more than two alcoholic drinks per day for men and one per day for women in the previous month.

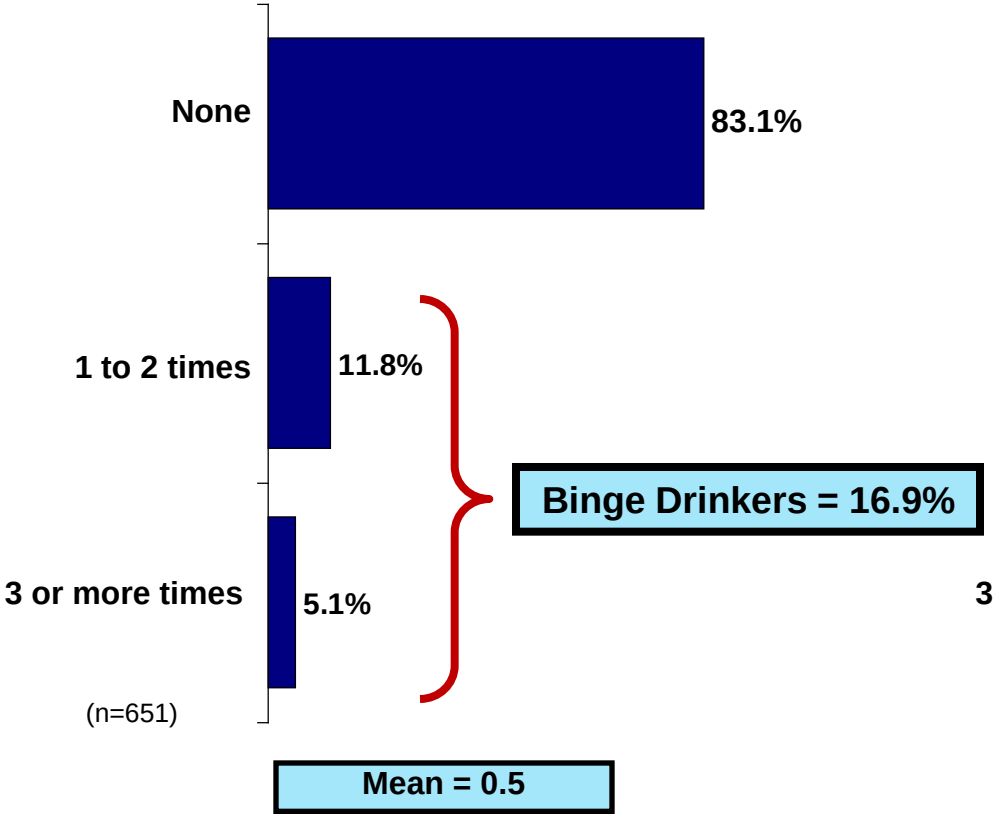
Heavy Drinking by Demographics



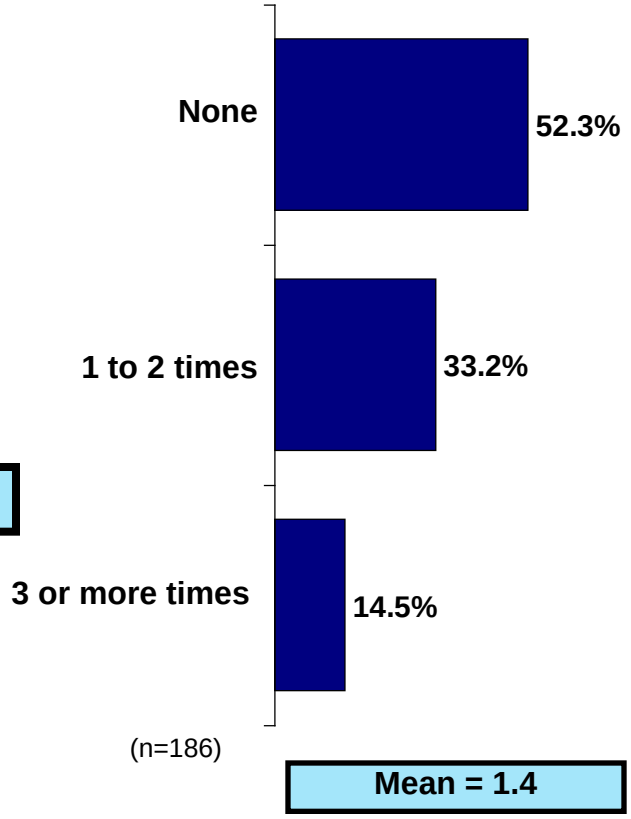
Among all adults, almost one in six (16.9%) have engaged in binge drinking in the past 30 days. **Among those who drink, this proportion rises almost half (47.7%)**.

Binge Drinking

Number of Times Consumed 5 or More (Men)/4 or More (Women) Drinks on an Occasion in Past 30 Days (All Adults)



Number of Times Consumed 5 or More (Men)/4 or More (Women) Drinks on an Occasion in Past 30 Days (Drinkers)

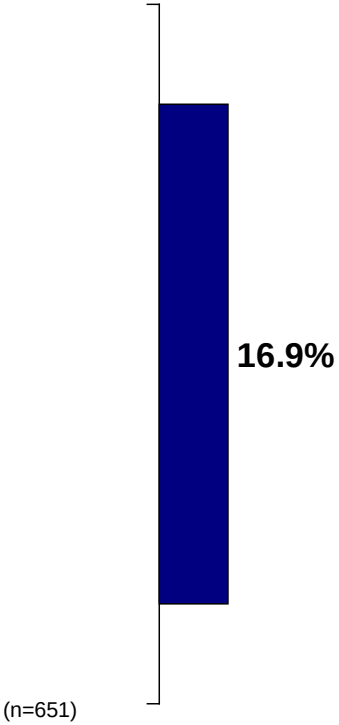


Q20.3: Considering all types of alcoholic beverages, how many times during the past 30 days did you have X (x=5 for men, x=4 for women) or more drinks on an occasion?

The prevalence of binge drinking is higher among adults from the following groups: age 18-44, men, non-Whites, unmarried, and those with children living at home. Binge drinking is more common among adults with a college education compared to those without. Binge drinking is also strongly associated with income, where adults earning the highest incomes engage in binge drinking the least.

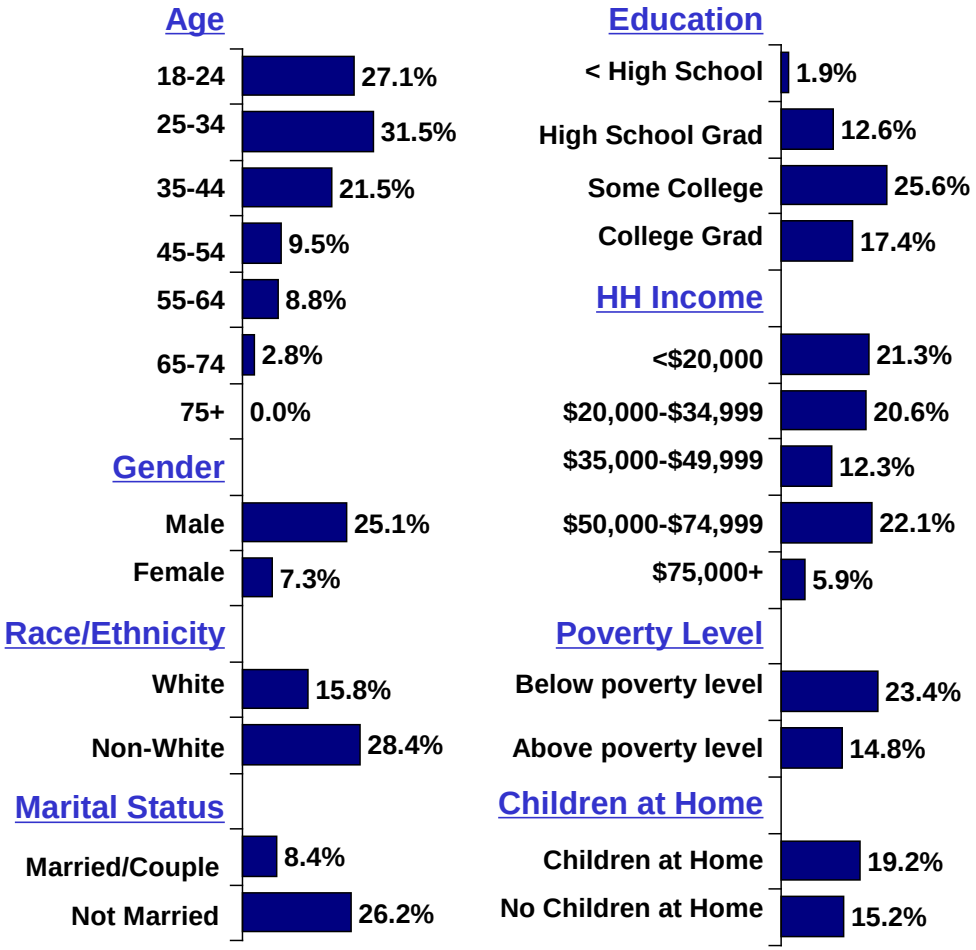
Alcohol Consumption

Binge Drinking* (Total Sample)



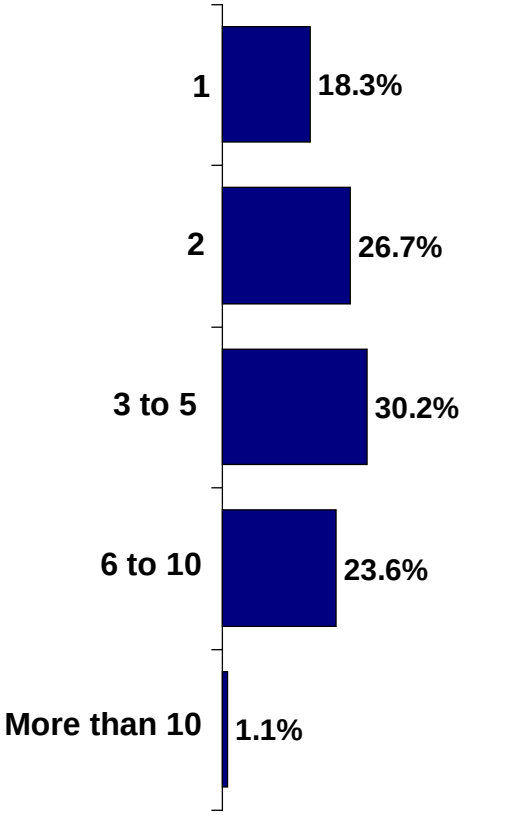
*Among all adults, the proportion who reported consuming five or more drinks per occasion (for men) or four or more drinks per occasion (for women) at least once in the previous month.

Binge Drinking by Demographics



Among SHUKH area adults who drink alcohol, 45.0% have at most consumed one to two drinks on any occasion in the past 30 days, while almost half (24.7%) have consumed six or more drinks on any one occasion.

Largest Number of Drinks Consumed on One Occasion in Past 30 Days (Among Drinkers)



(n=182)

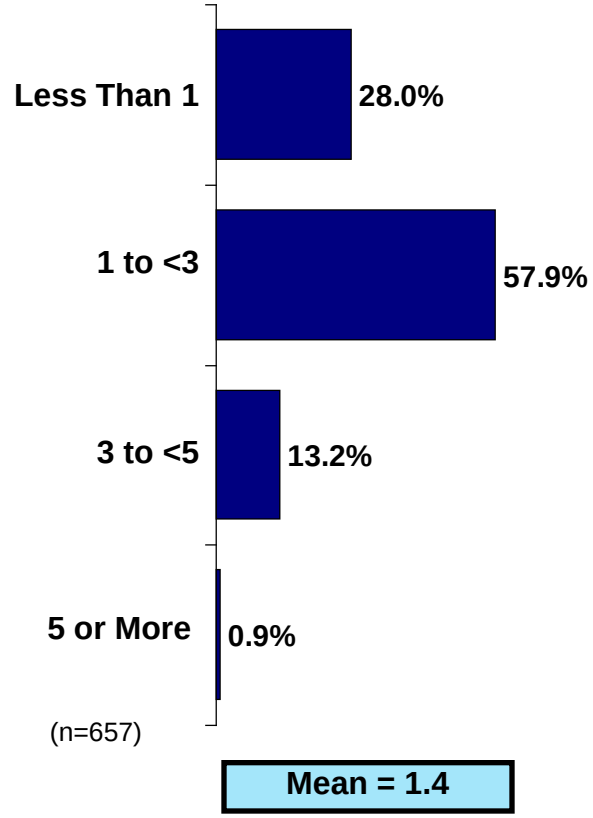
Mean = 3.9
Median = 3.0

Q20.4: During the past 30 days, what is the largest number of drinks you had on any occasion?

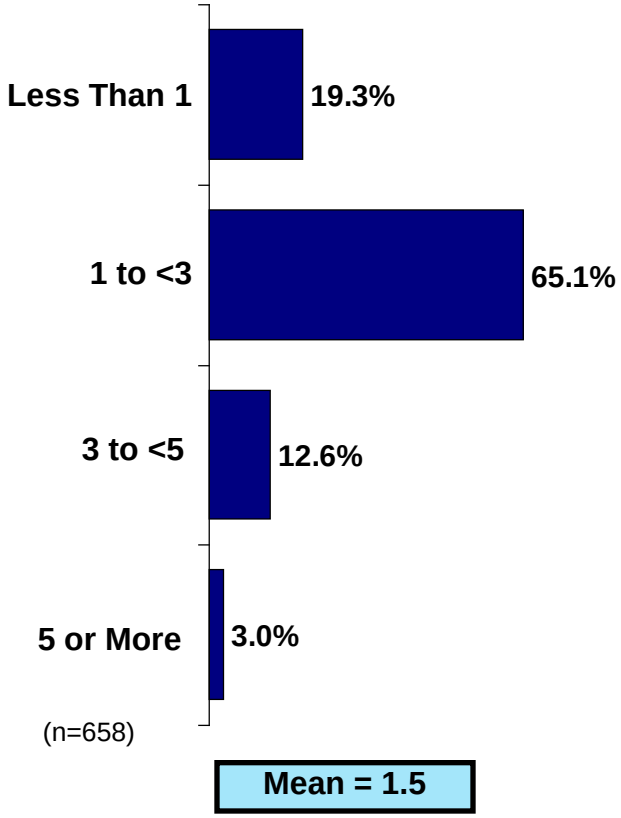
Area adults consume minor quantities of fruit (including 100% fruit juice) and vegetables per day, averaging less than two times a day for each. Taken together, fruits and vegetables are consumed on average three times per day. Still, only 17.2% of adults consume adequate amounts (five times) of fruits and vegetables per day.

Consumption of Fruit and Vegetables

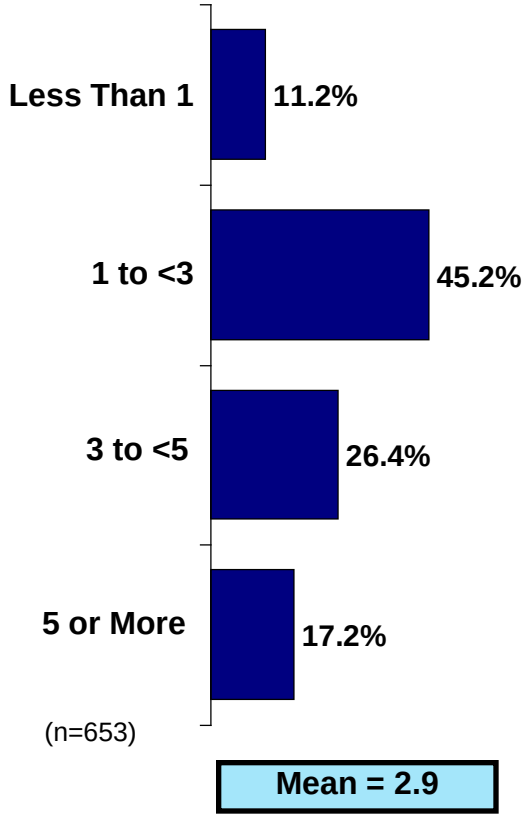
Number of Times Consumed Fruit/Fruit Juice Per Day



Number of Times Consumed Vegetables Per Day



Number of Times Consumed Fruits or Vegetables Per Day



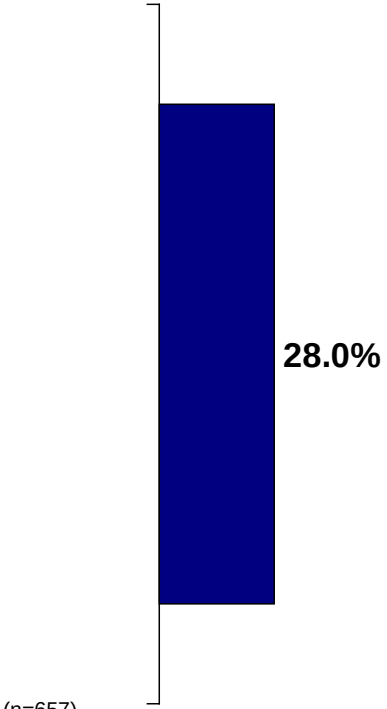
Q15.1: During the past month, how many times per day, week, or month did you eat fruit or drink 100% PURE fruit juices? Do not include fruit flavored drinks with added sugar or fruit juice you made at home and added sugar to. Only include 100% juice.

Q15.2: During the past month, how many times per day, week, or month did you eat vegetables, for example broccoli, sweet potatoes, carrots, tomatoes, V-8 juice, corn, cooked or fresh leafy greens including romaine, chard, collard greens, or spinach?

Adults most likely to consume fruits less than one time per day come from groups that are limited financially (make less than $20K annually, below the poverty level). Additionally, the likelihood of consuming fruit less than once per day is indirectly related to level of education.

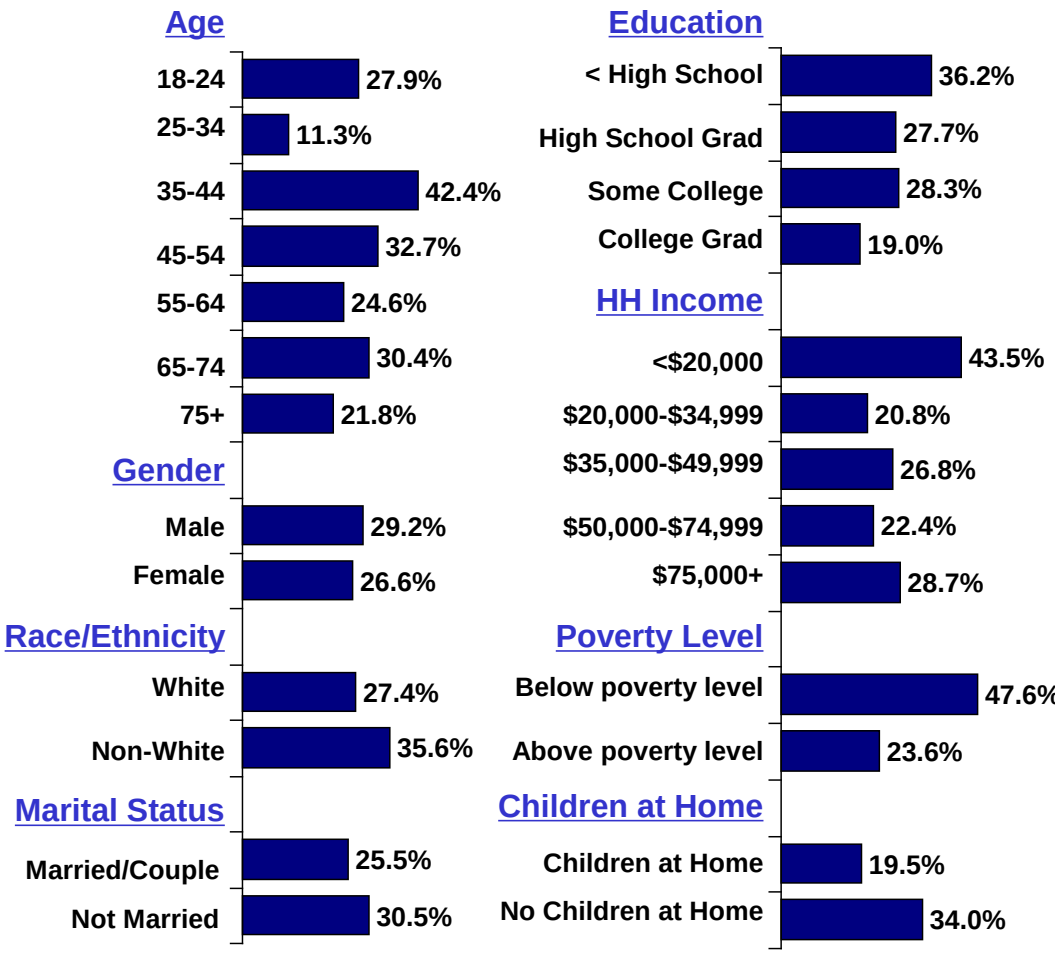
Fruit Consumption

Consumed Fruits <1 Time Per Day* (Total Sample)



*Among all adults, the proportion whose total reported consumption of fruits (including juice) was less than one time per day.

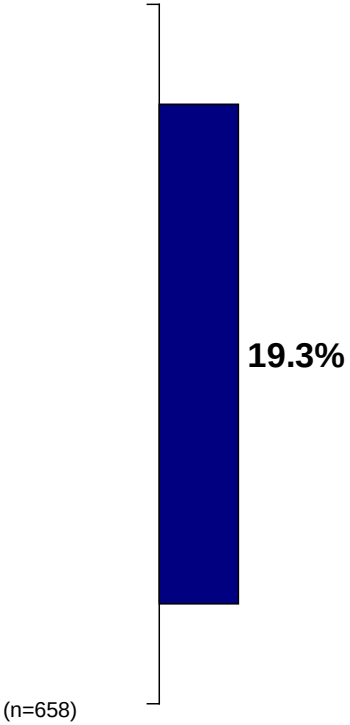
Consumed Fruits <1 Time Per Day by Demographics



Similarly, those most likely to consume vegetables less than one time per day come from lower income groups, but also come from groups that are the youngest (18-44), male, unmarried, and non-White.

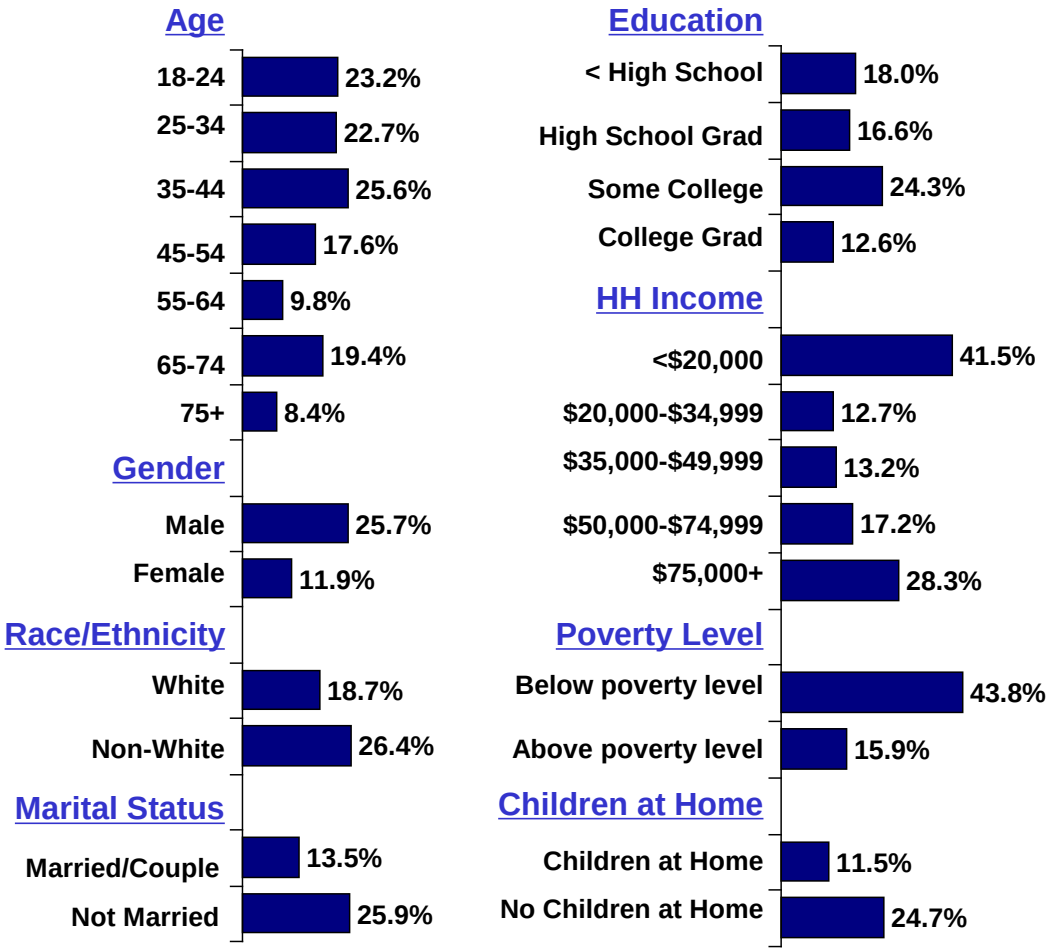
Vegetable Consumption

Consumed Vegetables <1 Time Per Day* (Total Sample)



*Among all adults, the proportion whose total reported consumption of fruits (including juice) was less than one time per day.

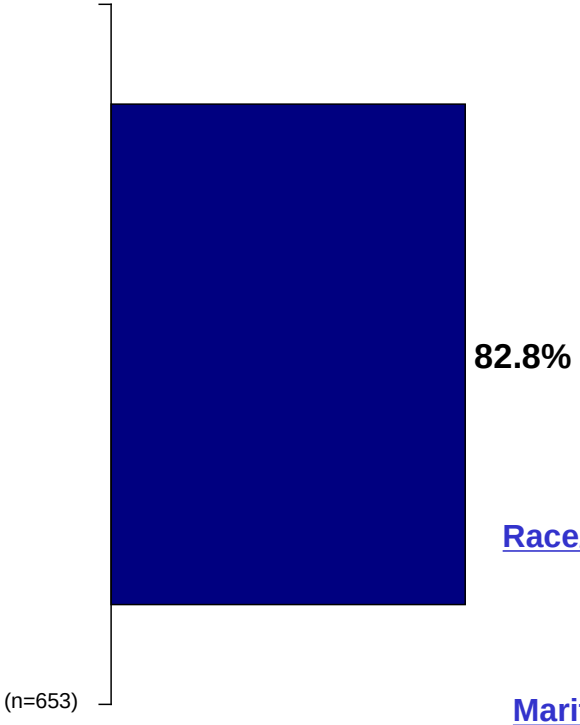
Consumed Vegetables <1 Time Per Day by Demographics



Inadequate fruit and vegetable consumption is prevalent in the SHUKH area across demographics. Adequate fruit and vegetable consumption is directly related to education and income, and women tend to consume adequate amounts of fruits and vegetables more than men.

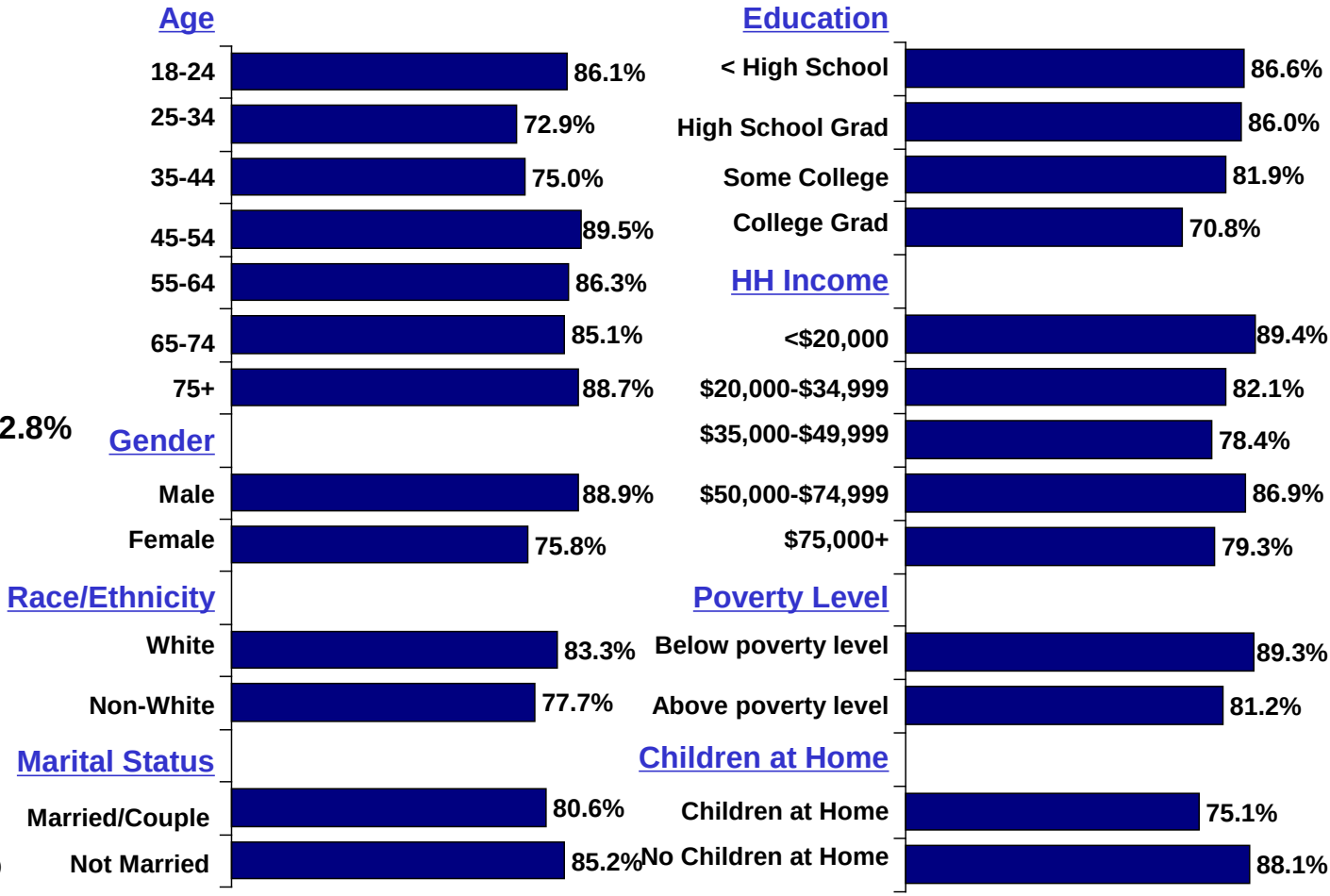
Fruit and Vegetable Consumption

Inadequate Fruit and Vegetable Consumption* (Total Sample)



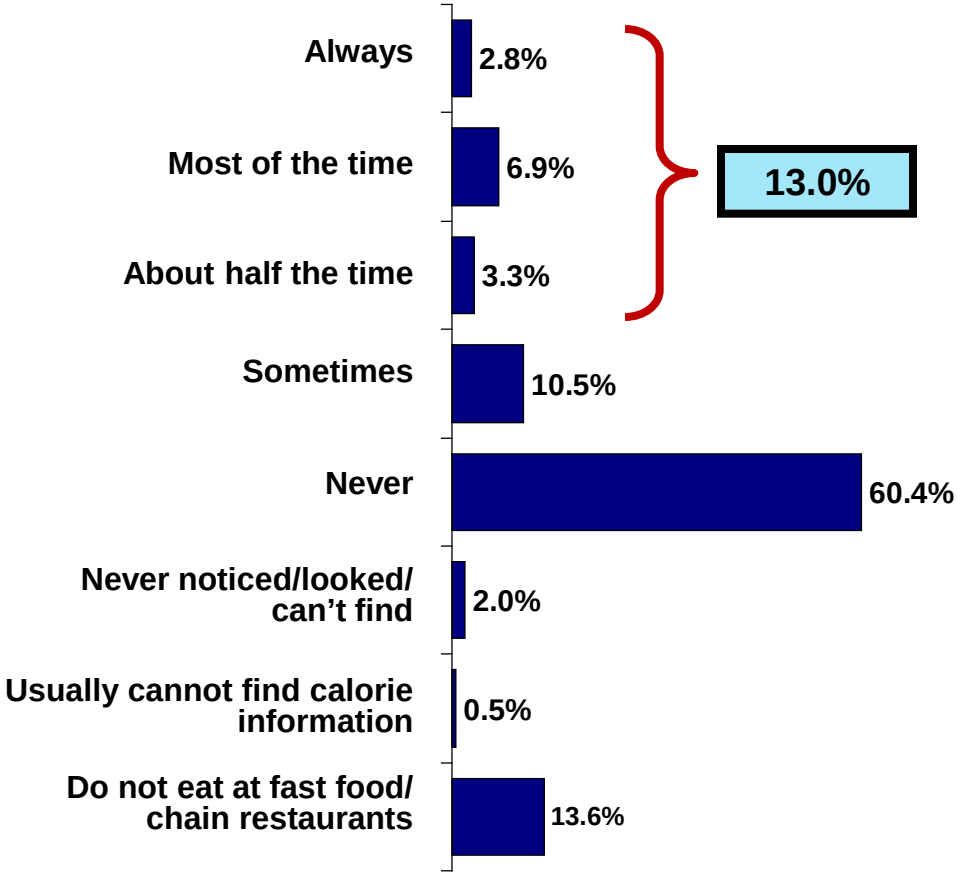
*Among all adults, the proportion whose total frequency of consumption of fruits (including juice) and vegetables was less than five times per day.

Inadequate Consumption by Demographics



More than one in ten (13.0%) adults report that when eating at fast food restaurants, listed calorie information impacts their decision on what to order at least half the time. However, six in ten (60.4%) say calorie information never impacts their decision.

Frequency Calorie Information Helps in Deciding What to Order When Dining Out



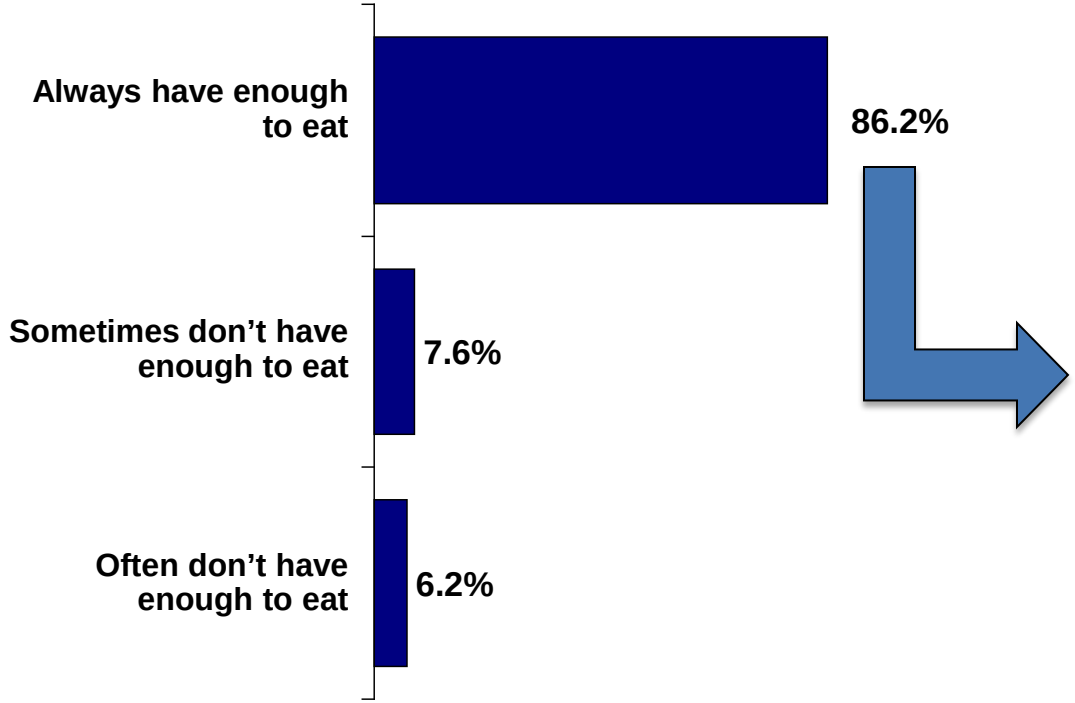
(n=659)

Q16.1: The next question is about eating out at fast food and chain restaurants. When calorie information is available in the restaurant, how often does this information help you decide what to order?

Almost nine in ten adults (86.2%) say they always have enough to eat, and of these, more than nine in ten (95.9%) are able to eat the foods they want.

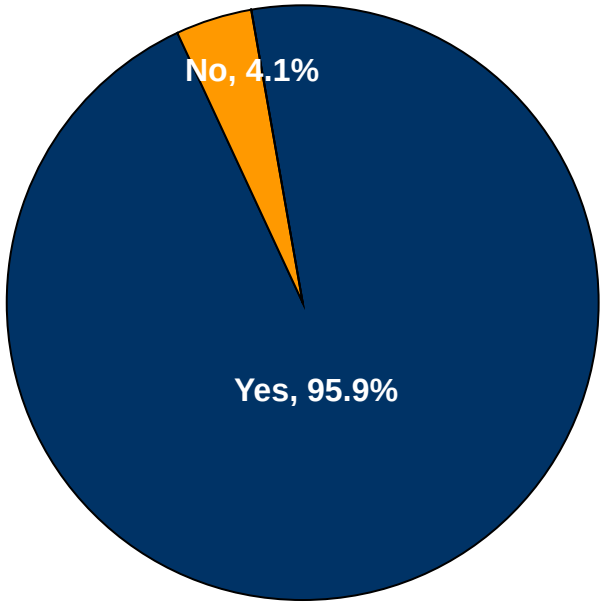
Food Access and Sufficiency

Food Sufficiency



(n=661)

Access to Foods Wanted



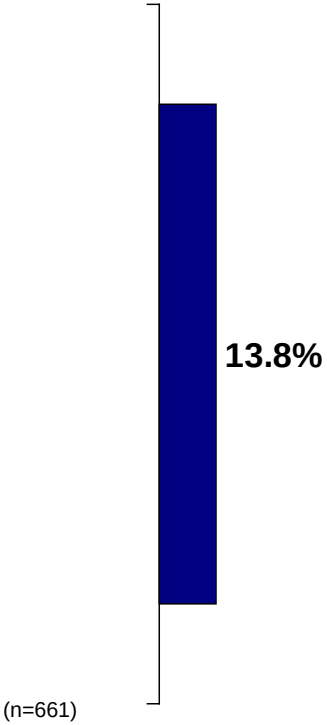
(n=611)

Q17.1: Which of the following statements best describes the food eaten in your household within the last 12 months? Would you say that…
Q17.2: Were these foods always the kinds of foods that you wanted to eat?

Among area adults, the groups most likely to experience food insufficiencies are: younger (18-44), non-White, unmarried, and financially limited (income below $20K, below the poverty line).

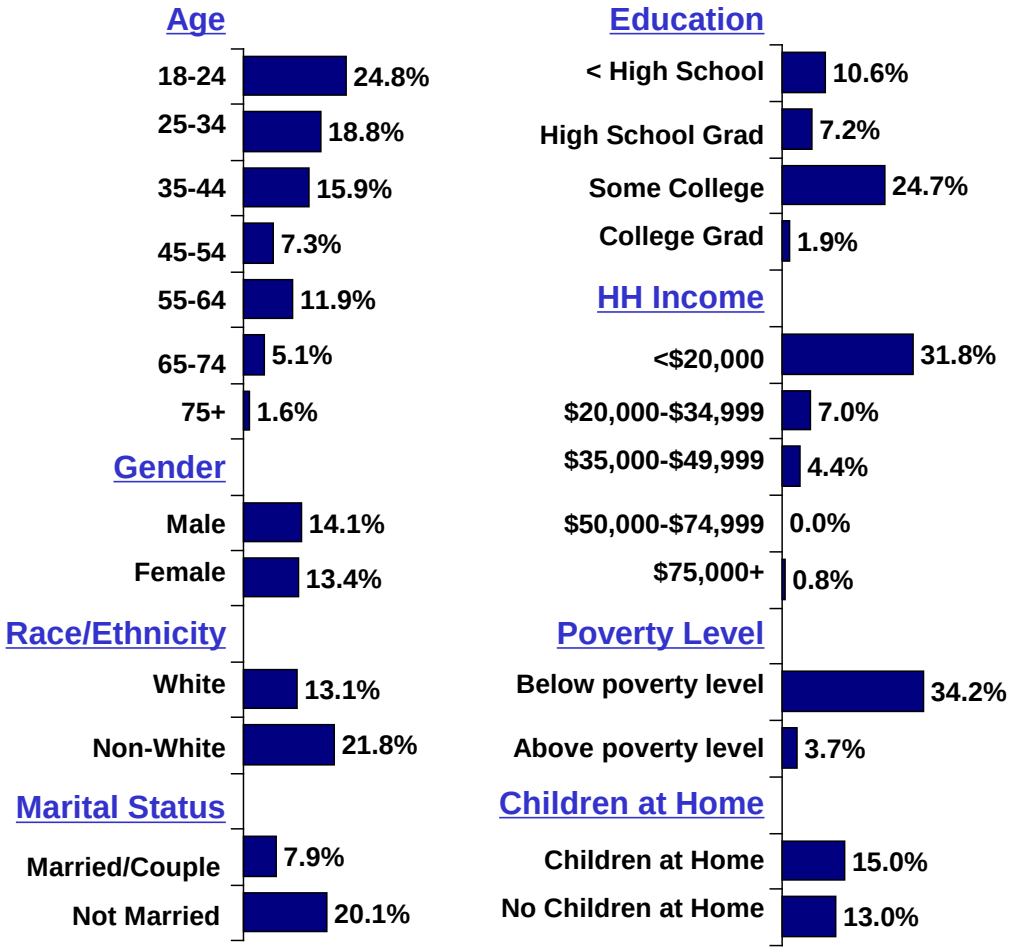
Food Sufficiency

Sometimes/Often Don't Have Enough to Eat* (Total Sample)



*Among all adults, the proportion who reported they sometimes or often do not have enough to eat.

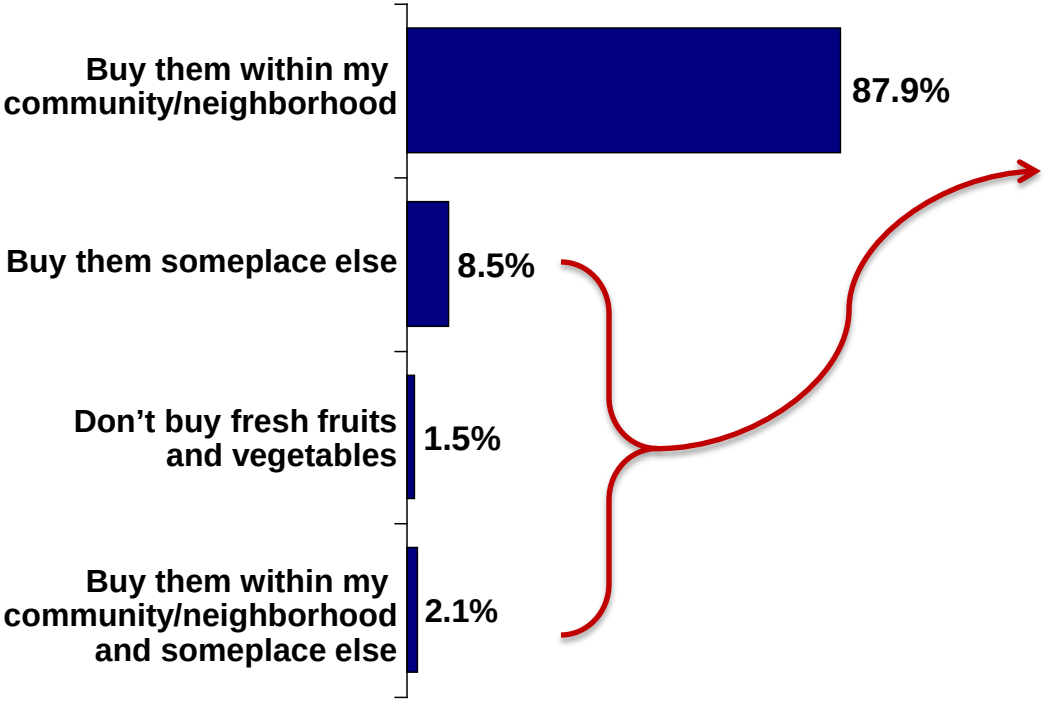
Sometimes/Often Don't Have Enough to Eat by Demographics



Almost nine in ten adults (87.9%) say they purchase fresh fruits and vegetables within their community. Those who don't say the *stores in their community have poor quality produce* or there are *no stores in their community.*

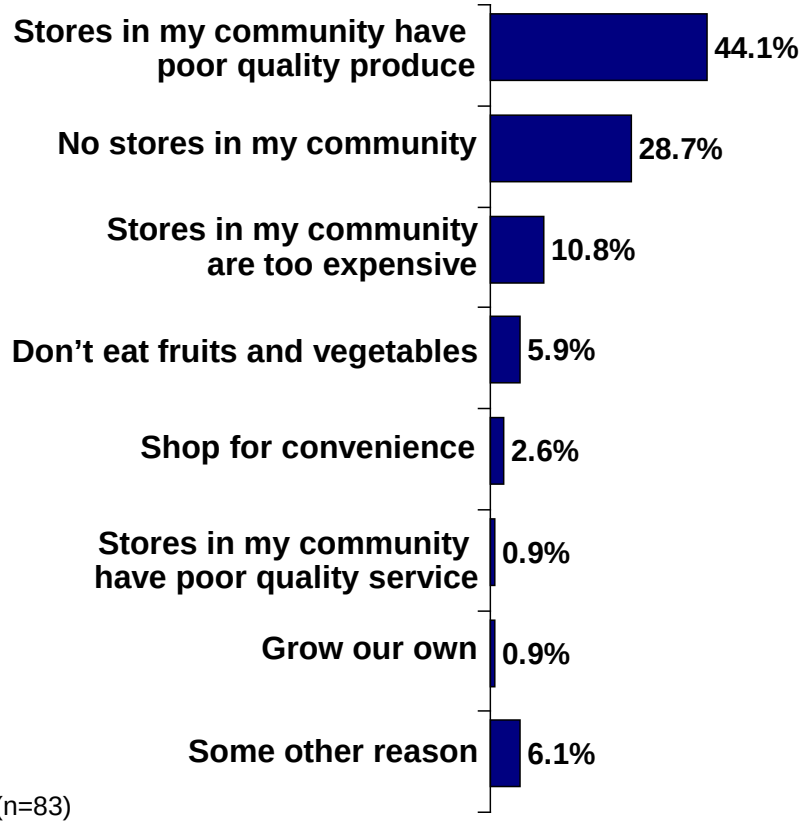
Purchasing Fresh Fruits and Vegetables

Location of Fresh Fruits/ Vegetables Purchased



(n=661)

Reasons for Not Purchasing All Fresh Produce Locally



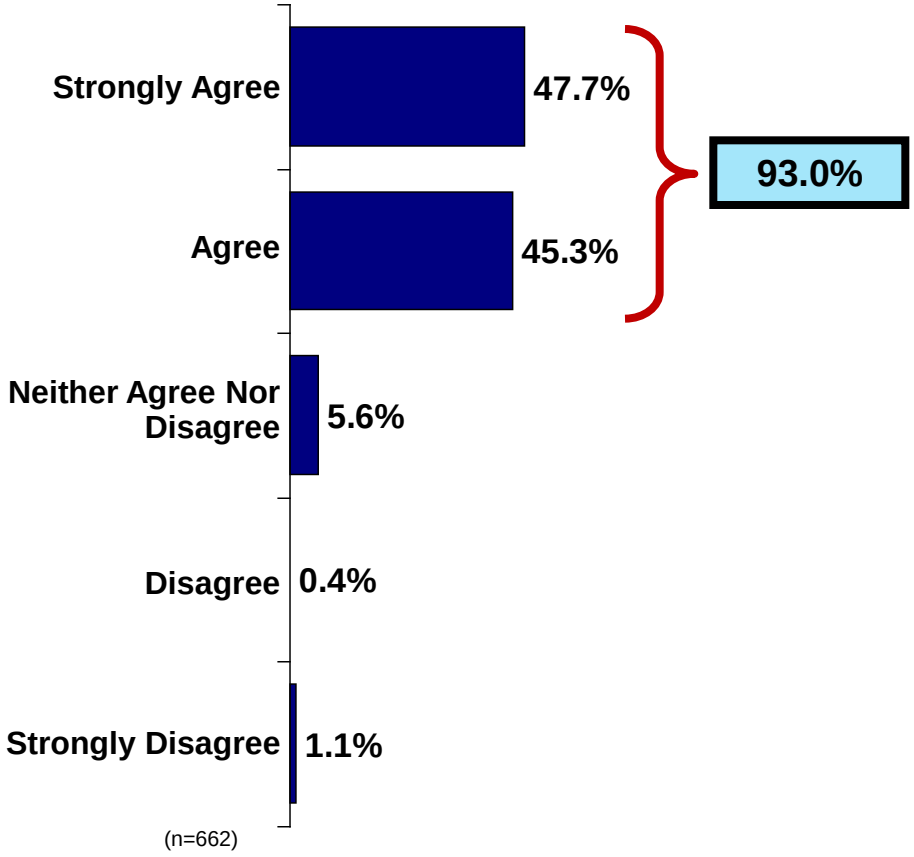
(n=83)

Q17.3: When you or someone in your household shops for fresh fruits and vegetables, would you say that…Which of the following statements best describes the food eaten in your household within the last 12 months? Would you say that…

Q17.4 What is the main reason you or someone in your household does not buy all your fresh fruits and vegetables within your community or neighborhood?

More than nine in ten (93.0%) report that fruits and vegetables are easy to find in their community or neighborhood.

Availability of Fruits and Vegetables in the Community

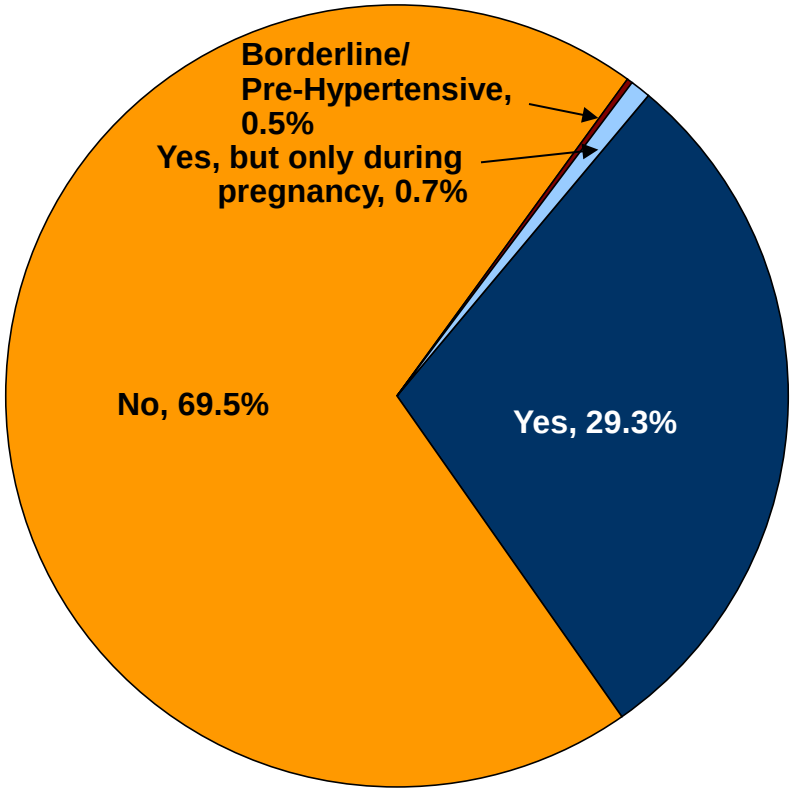


Q17.5: Please tell me how much you agree or disagree with the following statement. "It is easy to find fresh fruits and vegetables within your community or neighborhood." Would you say that you…

Three in ten (29.3%) area adults have been told by a health care professional they have high blood pressure (HBP). Among those who have HBP, 84.2% are currently taking medication for it.

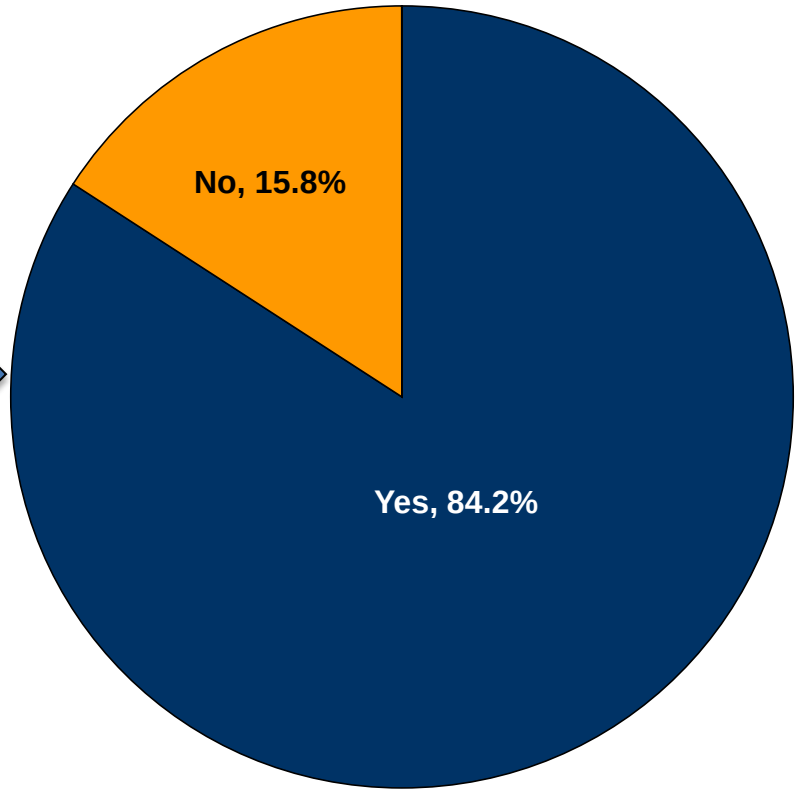
Hypertension Awareness

Ever Been Told You Have High Blood Pressure (Total Sample)



(n=662)

Currently Taking Medication for HBP (Among Those Who Have Been Told They Have HBP)



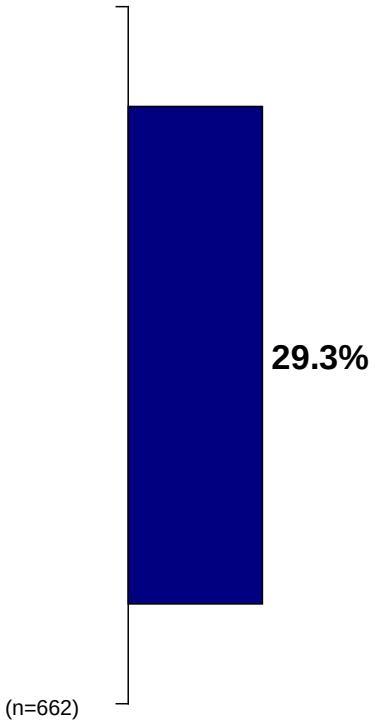
(n=258)

Q4.1: Have you EVER been told by a doctor, nurse, or other health professional that you have high blood pressure?
Q4.2: (IF YES) Are you currently taking medicine for your high blood pressure?

Having HBP is directly related to age. It is also significantly more common in adults with no high school degree compared to those with more education, and far more common in adults with incomes below $20K than those with higher incomes. Additionally, HBP is more common in White adults compared to non-White adults and more common in married adults than unmarried.

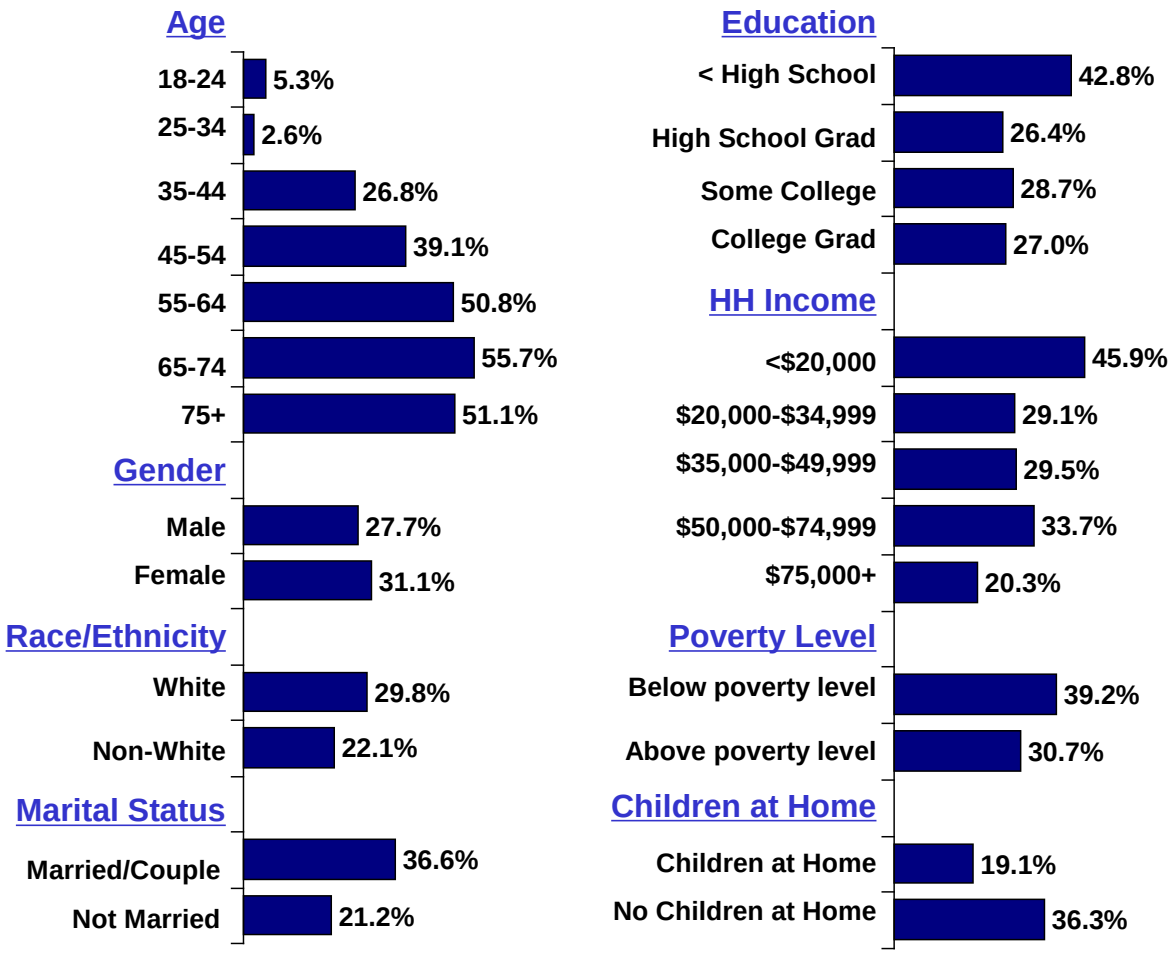
Hypertension Awareness (Cont'd.)

Ever Told Had High Blood Pressure (HBP)* (Total Sample)



*Among all adults, the proportion who reported that they were ever told by a health care professional that they have high blood pressure (HBP). Women who had high blood pressure only during pregnancy and adults who were borderline hypertensive were considered not to have been diagnosed.

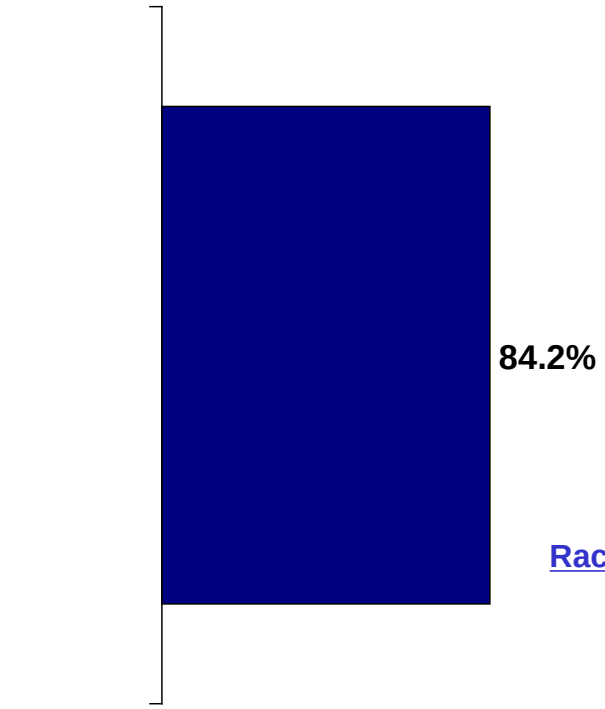
Ever Told HBP by Demographics



Because the vast majority of area adults take medication for their high blood pressure, there is very little difference, or pattern, among demographics with regard to who takes their HBP medication. The greatest difference is found between adults who are married compared to those who are unmarried, where the former group is more likely to take medication for their HBP.

Hypertension Awareness (Cont'd.)

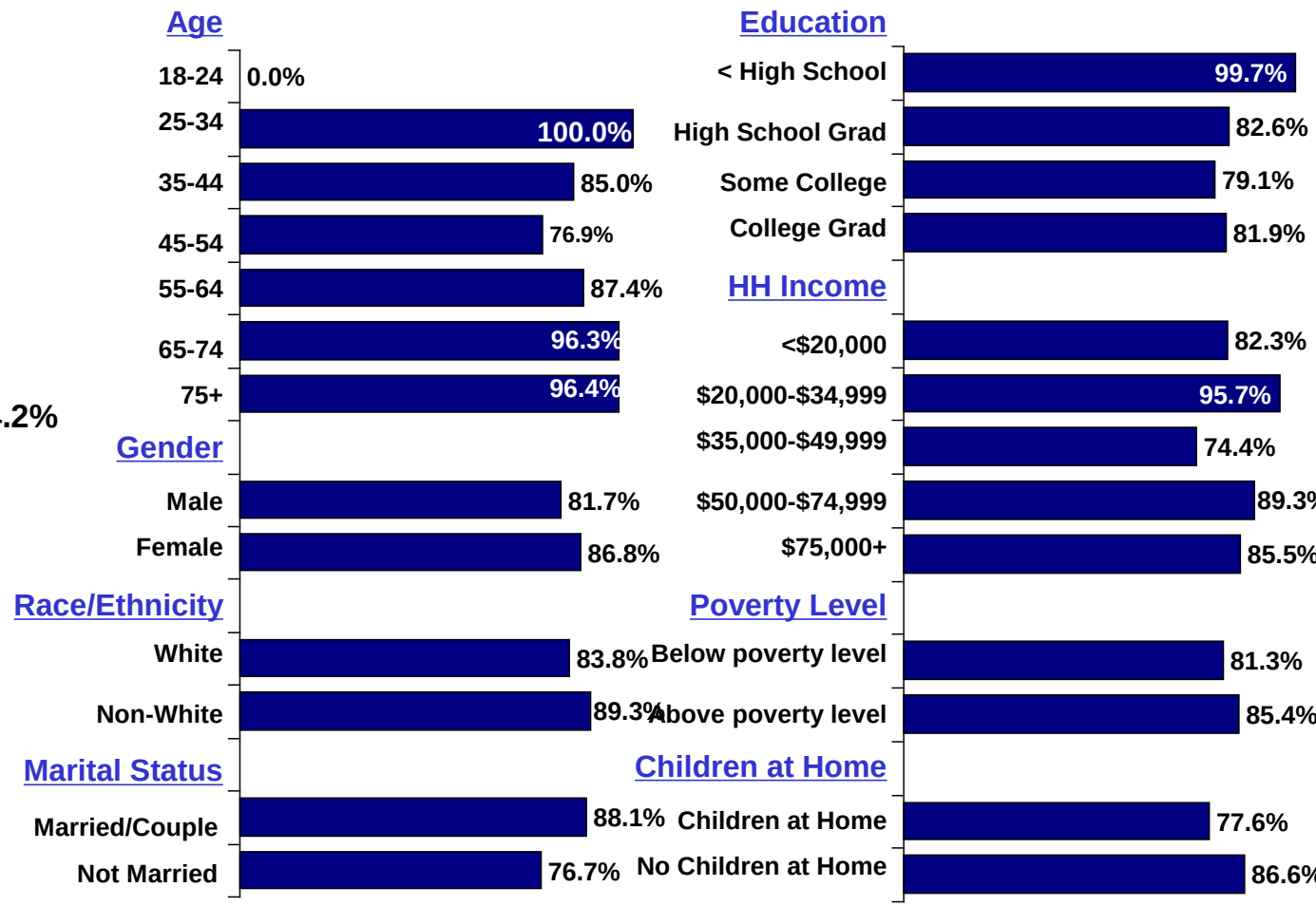
Currently Take Medication for High Blood Pressure (HBP)* (Total Sample)



(n=258)

*Among all adults who were ever told they had HBP, the proportion who reported they were currently taking blood pressure (BP) medicines for their HBP.

Currently Take Medication for HBP by Demographics

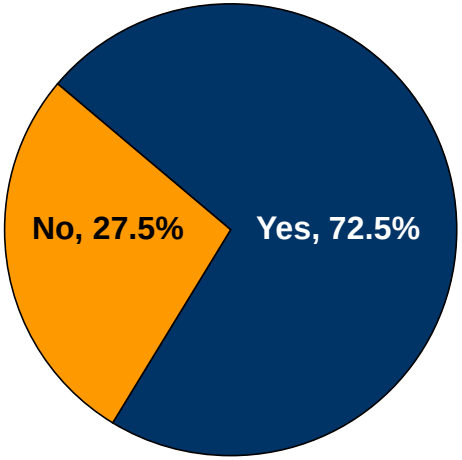


Clinical Preventative Practices

Seven in ten (72.5%) area adults have had their cholesterol checked, and the vast majority of them have had it done within the past year. More than one-fourth (28.2%) have been told by a health care professional that their cholesterol is high. Of these, more than three-fourths (78.2%) are currently taking medication to lower their cholesterol.

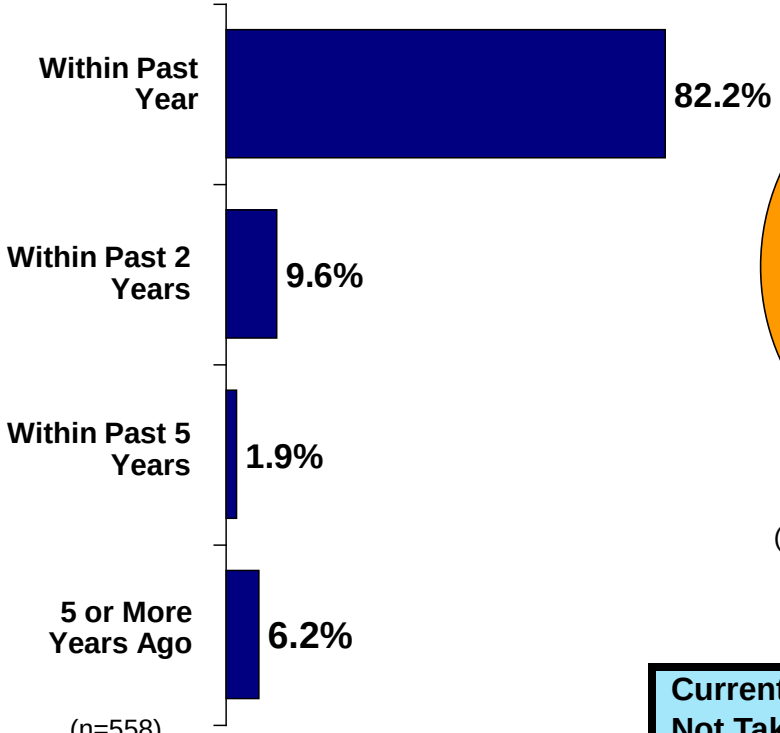
Cholesterol Awareness

Ever Had Blood Cholesterol Checked



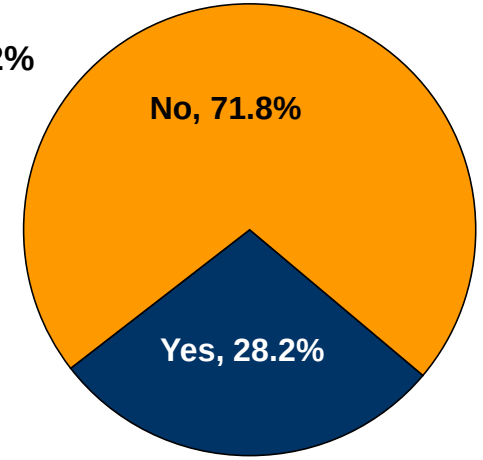
(n=645)

Last Time Had Blood Cholesterol Checked



(n=558)

Ever Told Blood Cholesterol is High



(n=558)

Currently Taking Medication = 78.2%
Not Taking Medication = 21.8%

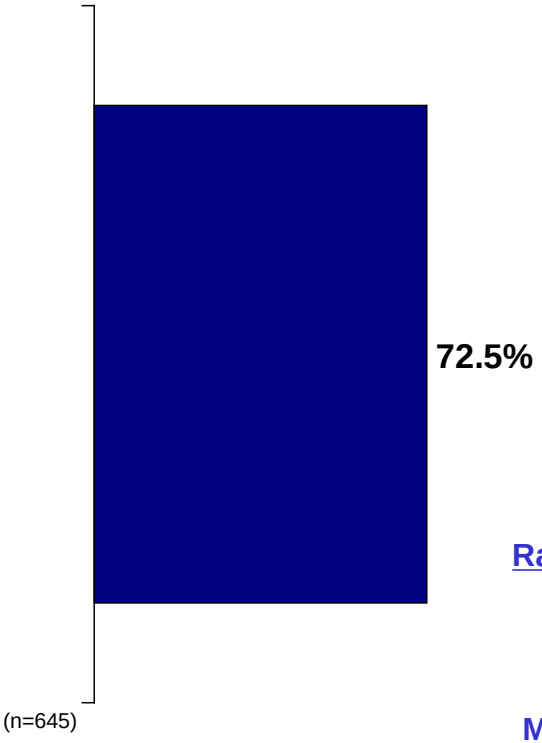
(n=180)

Q5.1: Blood cholesterol is a fatty substance found in the blood. Have you EVER had your blood cholesterol checked?
Q5.2: (If yes) About how long has it been since you last had your blood cholesterol checked?
Q5.3: (If yes) Have you EVER been told by a doctor, nurse or other health care professional that your blood cholesterol is high?
Q5.4: (If yes) Are you currently taking medicine for your high cholesterol?

The largest proportions of area adults most likely to have had their cholesterol checked are found among those age 45+, college graduates, and those who have annual incomes of $75K or more. Women are more likely than men to have their cholesterol checked, and married adults are far more likely to have it checked compared to unmarried adults.

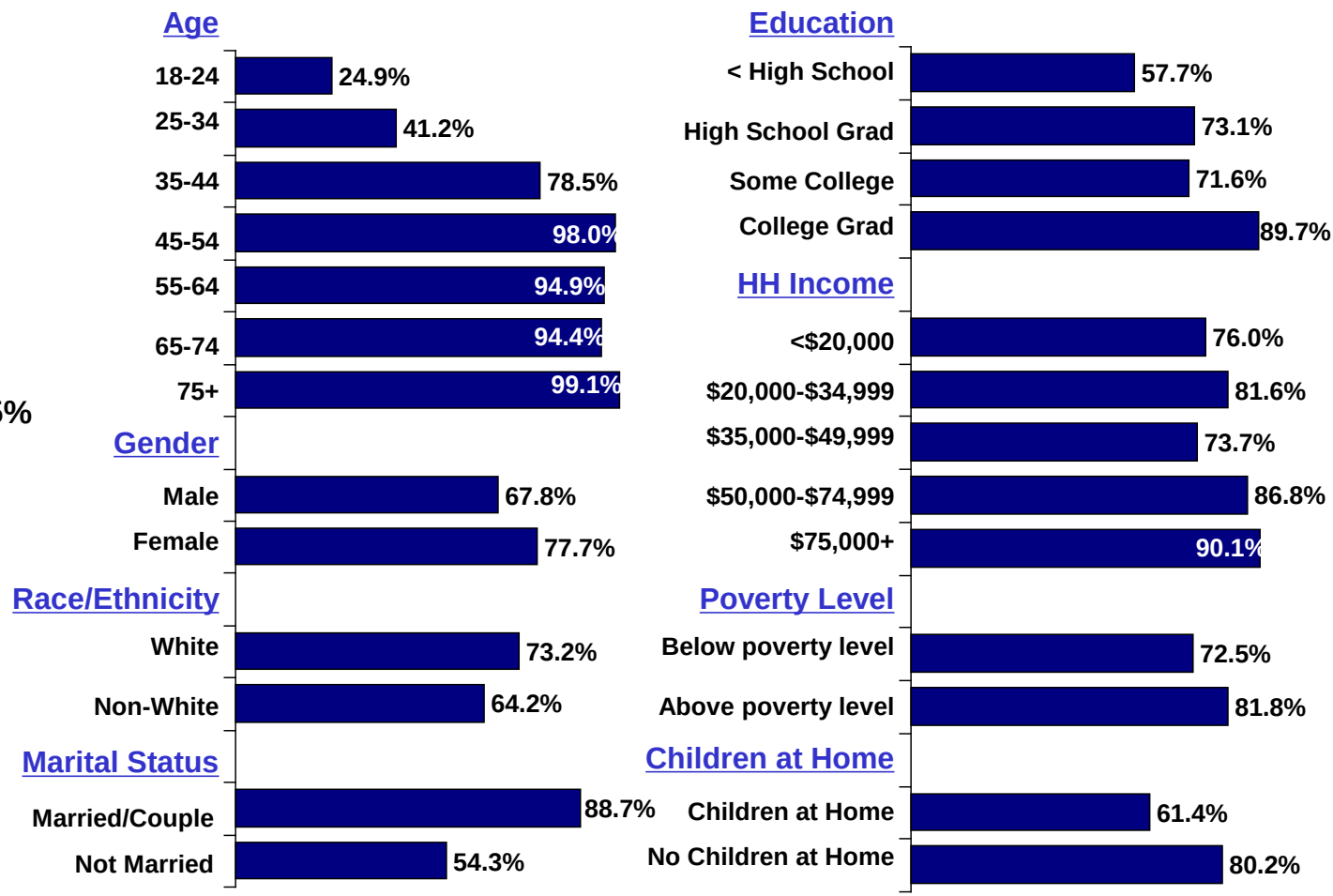
Cholesterol Awareness (Cont'd.)

Ever Had Blood Cholesterol Checked* (Total Sample)



*Among all adults, the proportion who reported having had their blood cholesterol checked.

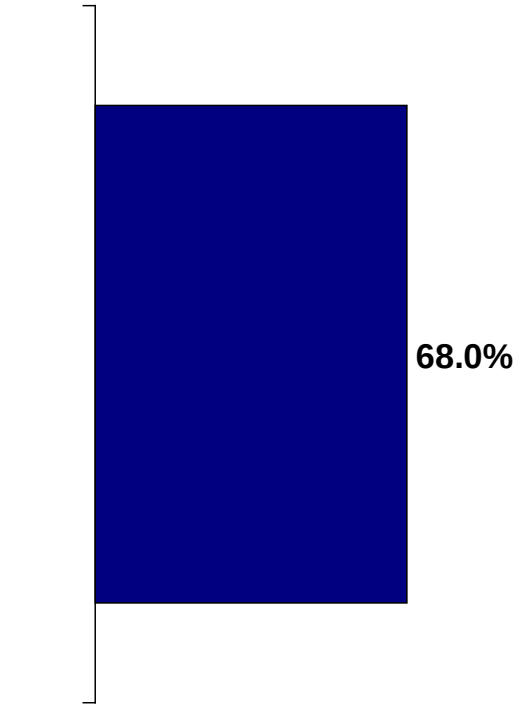
Ever Had Blood Cholesterol Checked by Demographics



Similarly, adults most likely to have their cholesterol checked within the past five years are adults from the following groups: age 45+, female, married, with college degrees, and have incomes of $50K or more.

Cholesterol Awareness (Cont'd.)

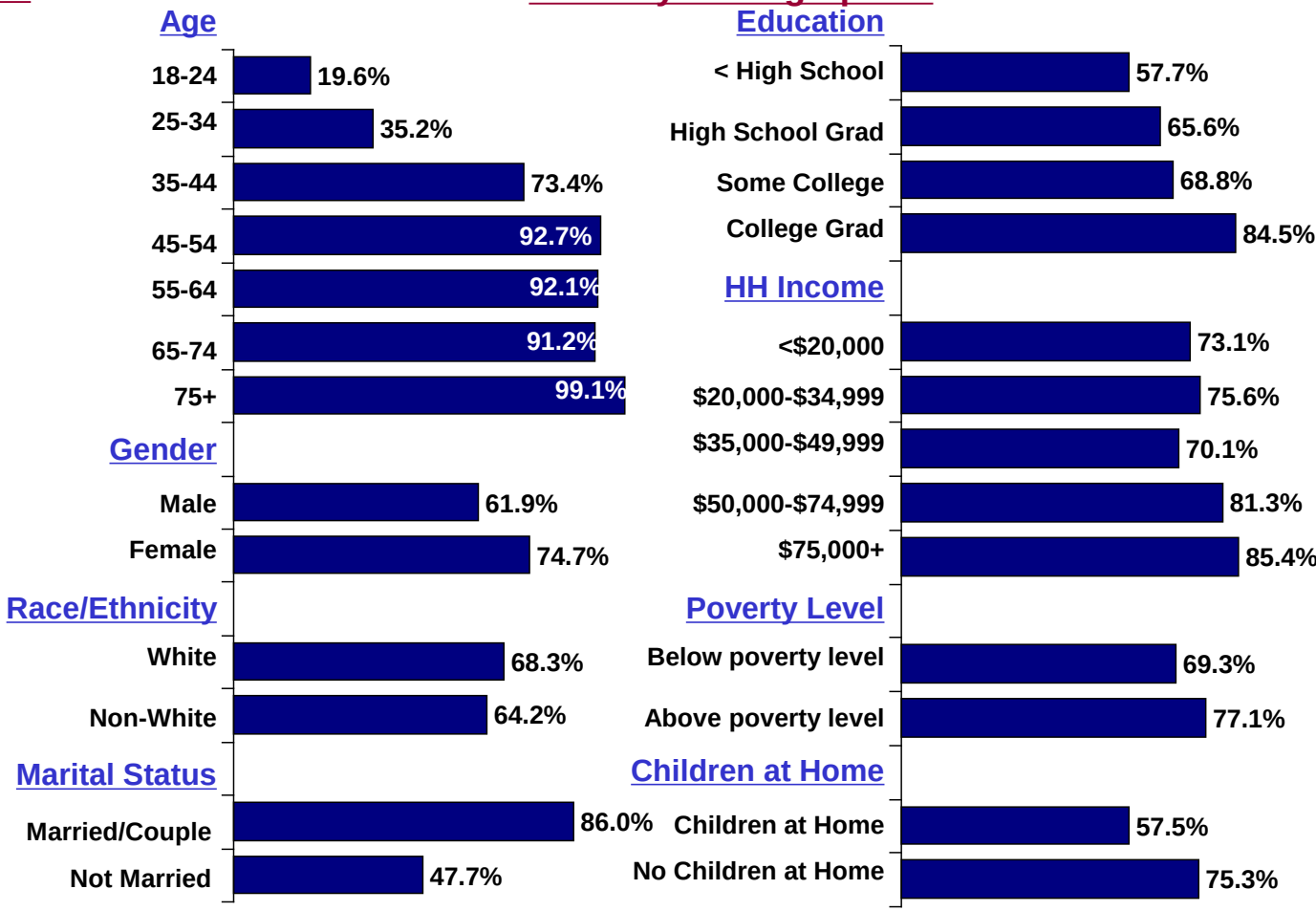
Had Blood Cholesterol Checked Witching Past Five years* (Total Sample)



(n=642)

*Among all adults, the proportion who reported they have had their blood cholesterol checked within the past five years.

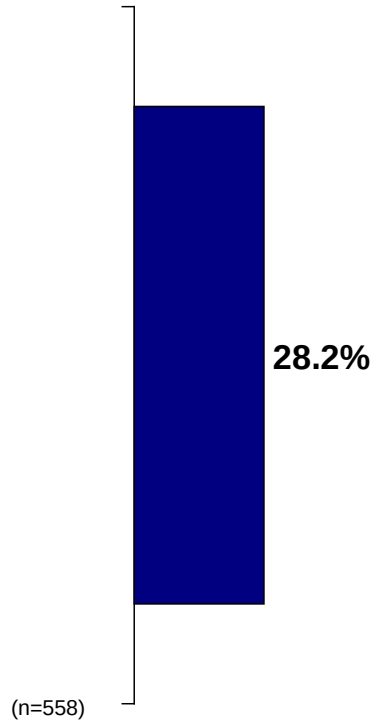
Had Blood Cholesterol Checked Within Past Five Years by Demographics



Area adults most likely to have high cholesterol come from groups that are age 55+, White, have no high school degree, and have limited financial resources (incomes below $20K, living below poverty line).

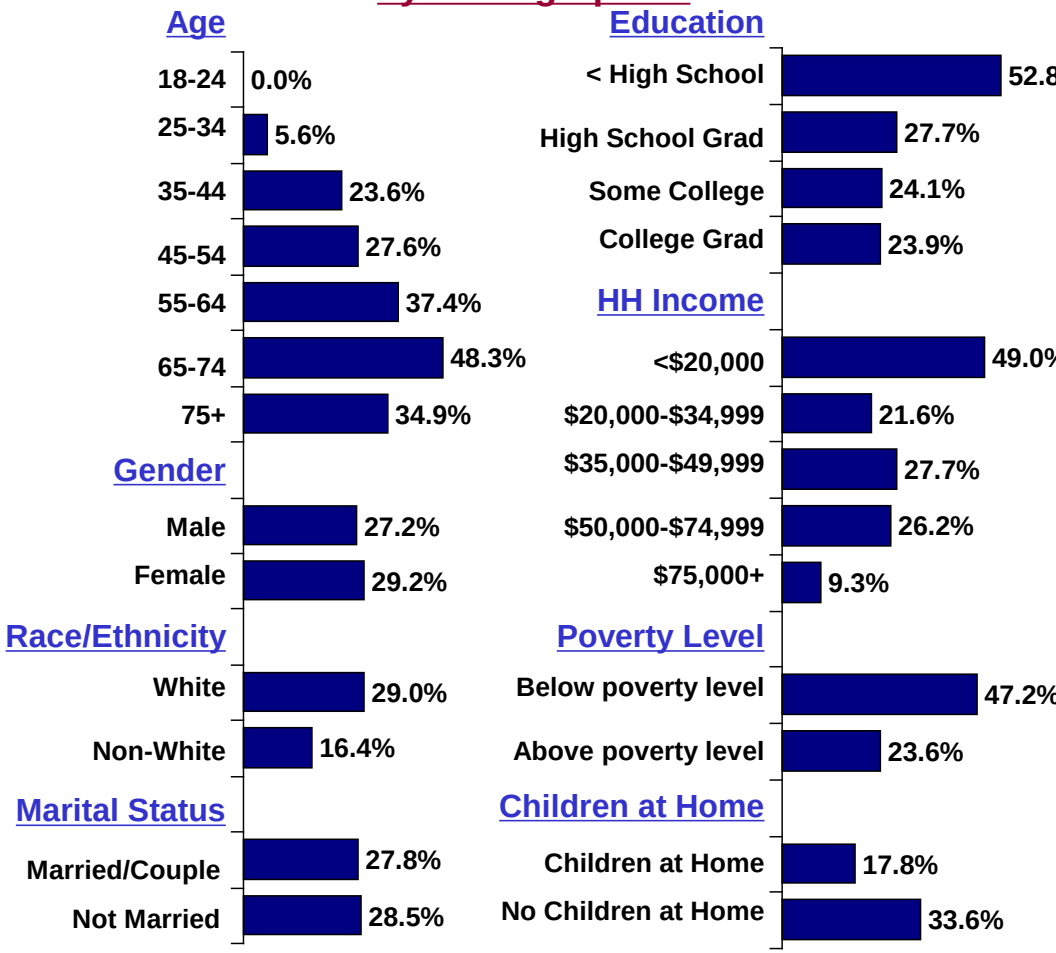
Cholesterol Awareness (Cont'd.)

Ever Told Blood Cholesterol High* (Total Sample)



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

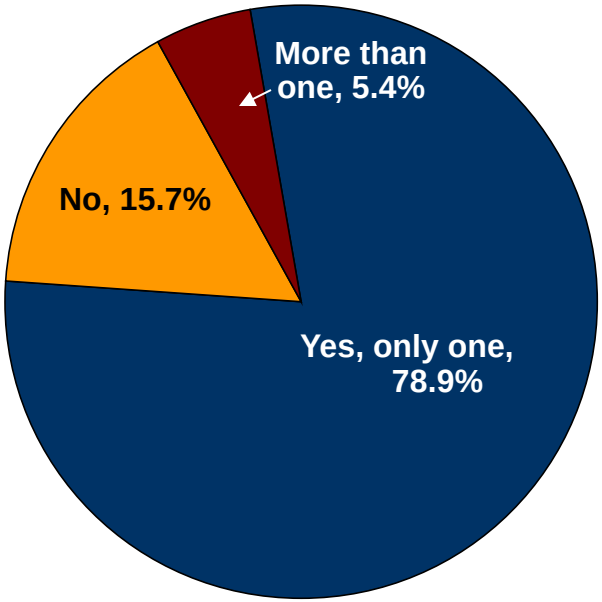
Ever Told Blood Cholesterol High by Demographics



More than eight in ten adults (84.3%) have a medical home (personal physician) and eight in ten (82.4%) have visited a physician for a routine checkup within the past year.

Personal Physician and Routine Checkups

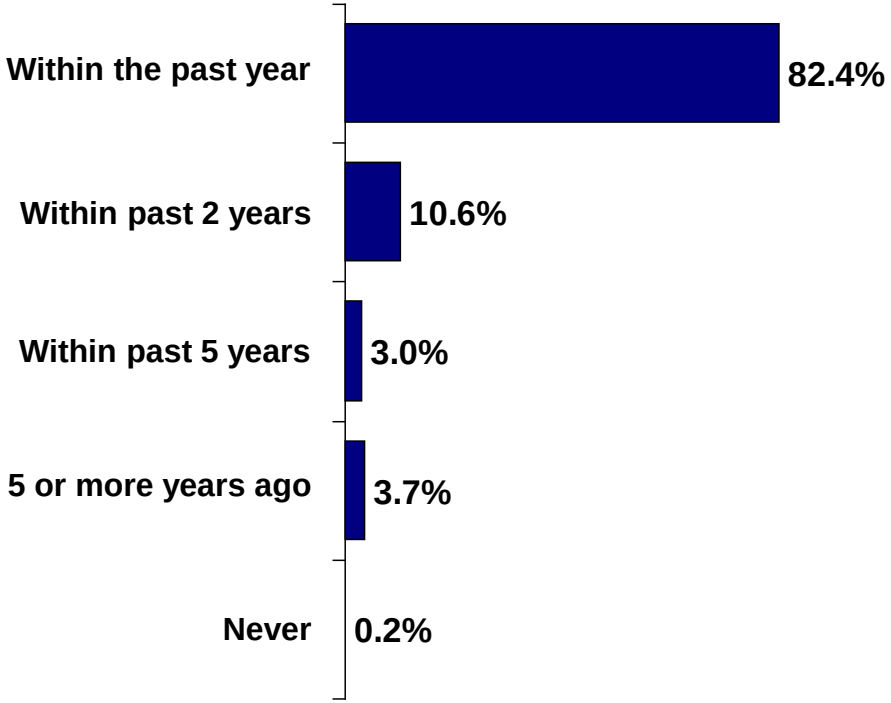
Currently Have Personal Doctor/Health Care Provider



84.3% have medical home

(n=662)

Last Time Visited Doctor for Routine Checkup



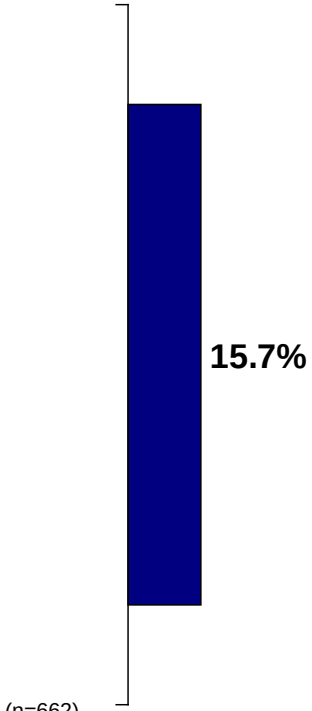
(n=658)

Q3.3: Do you have one person you think of as your personal doctor or health care provider?
Q3.6: About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury, illness, or condition.

Roughly one in six (15.7%) area adults have no medical home (no personal health care provider). Those least likely to have a medical home are found in groups who are: younger (aged 18-24), male, non-White, unmarried, least educated (have not graduated from high school), and living with financial limitations (income below $20K, live below poverty line).

Personal Health Care Provider

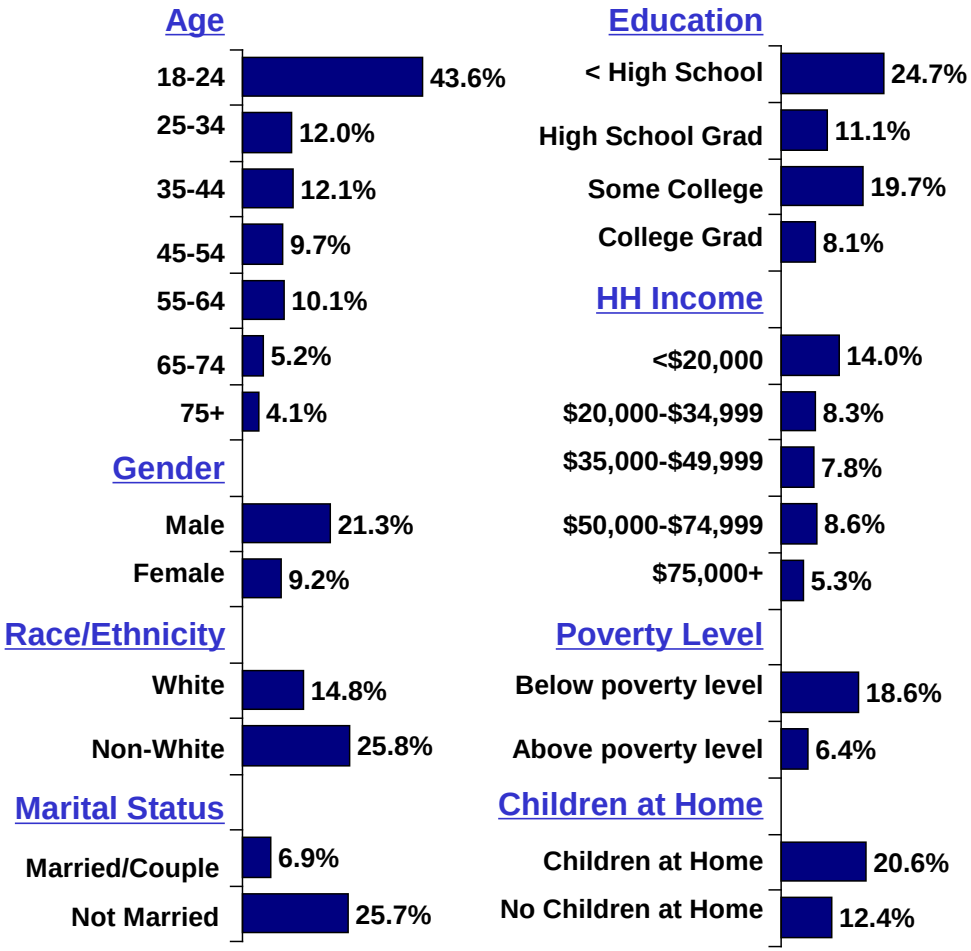
No Personal Health Care Provider* (Total Sample)



(n=662)

*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.

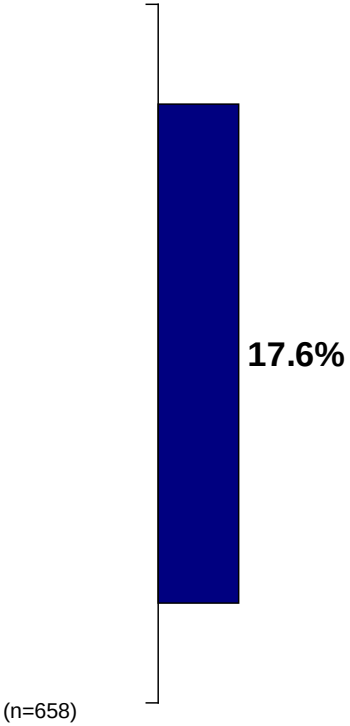
No Provider by Demographics



One in six (17.6%) adults have not had a routine physical checkup in the past year. Having a timely routine physical checkup is related to age, where those least likely to have a timely physical exam are between the ages of 18-34 and those most likely are age 65 or older. Non-White adults are more likely to have a routine exam than White adults.

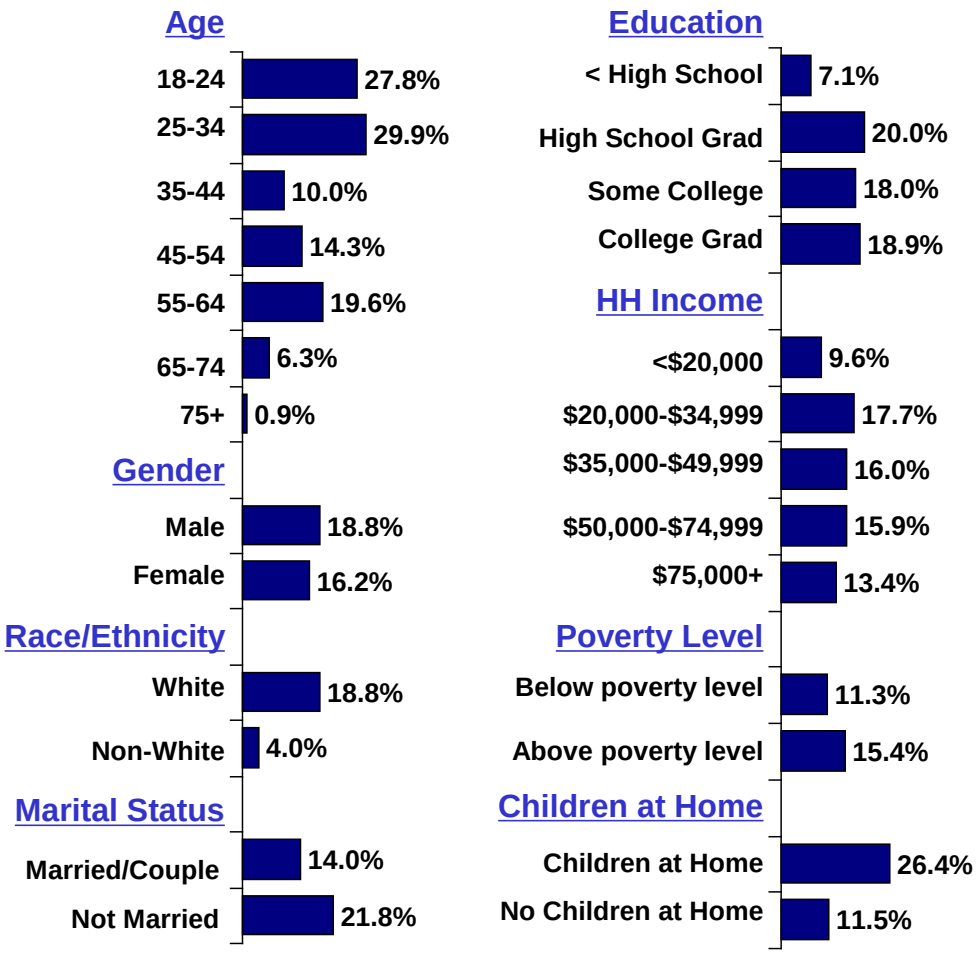
Routine Physical Checkup in Past Year

No Routine Physical Checkup in Past Year* (Total Sample)



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

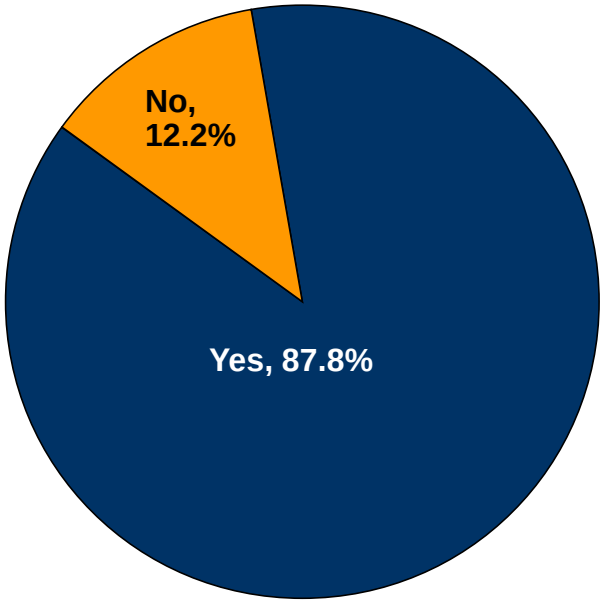
No Checkup by Demographics



Almost nine in ten (87.8%) SHUKH area women aged 40+ have had a mammogram to screen for breast cancer. Of those, the vast majority (70.8%) have had one within the past year. Of all women aged 40+, 62.1% have had a mammogram in the past year.

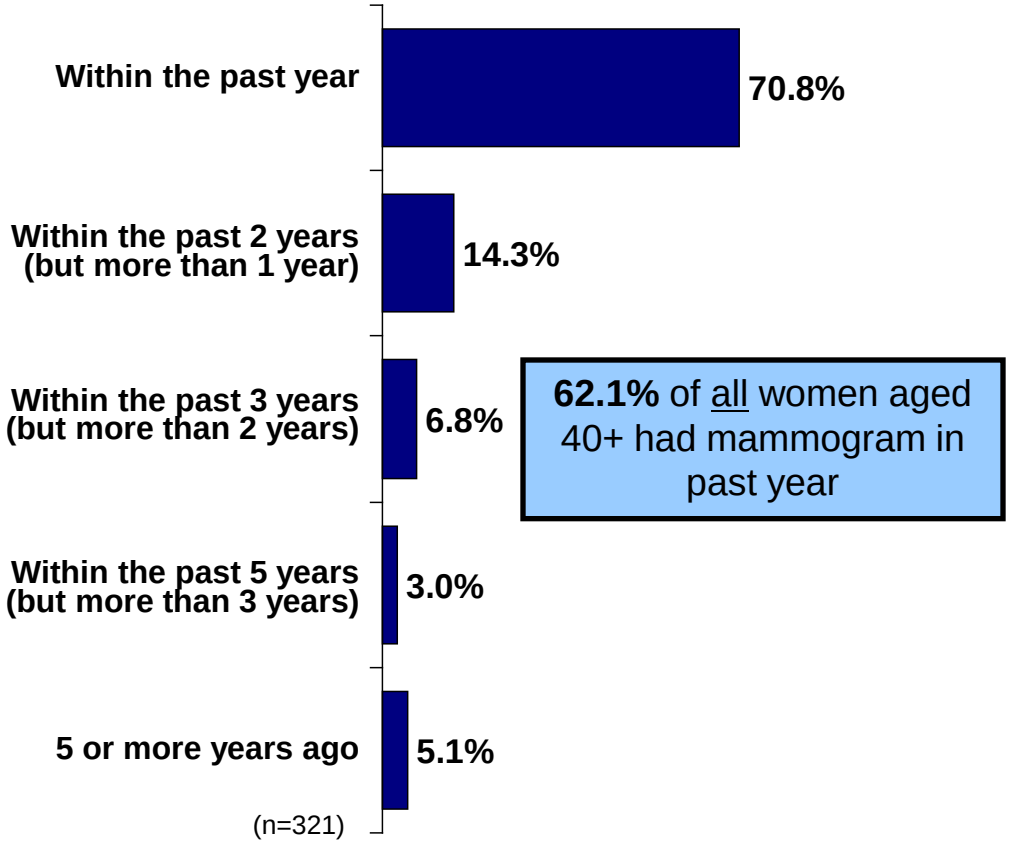
Breast Cancer Screening Among Adult Females Aged 40+

Have Had a Mammogram



(n=350)

Last Time Had Mammogram



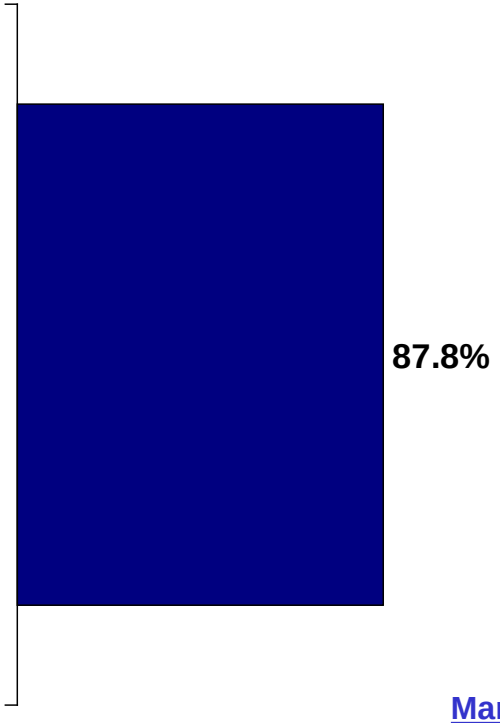
62.1% of all women aged 40+ had mammogram in past year

Q6.1: A mammogram is an x-ray of each breast to look for breast cancer. Have you ever had a mammogram?
Q6.2: (If yes) How long has it been since you had your last mammogram?

Since most women 40 years of age or older in the SHUKH area have had a mammogram at some point, there is very little difference among demographic groups. That said, women 40 years and older who are least likely to have mammogram come from the following groups: age 40-44, non-White, income below $20K, and those living below the poverty line.

Mammography Indicators Among Women Aged 40 Years or Older

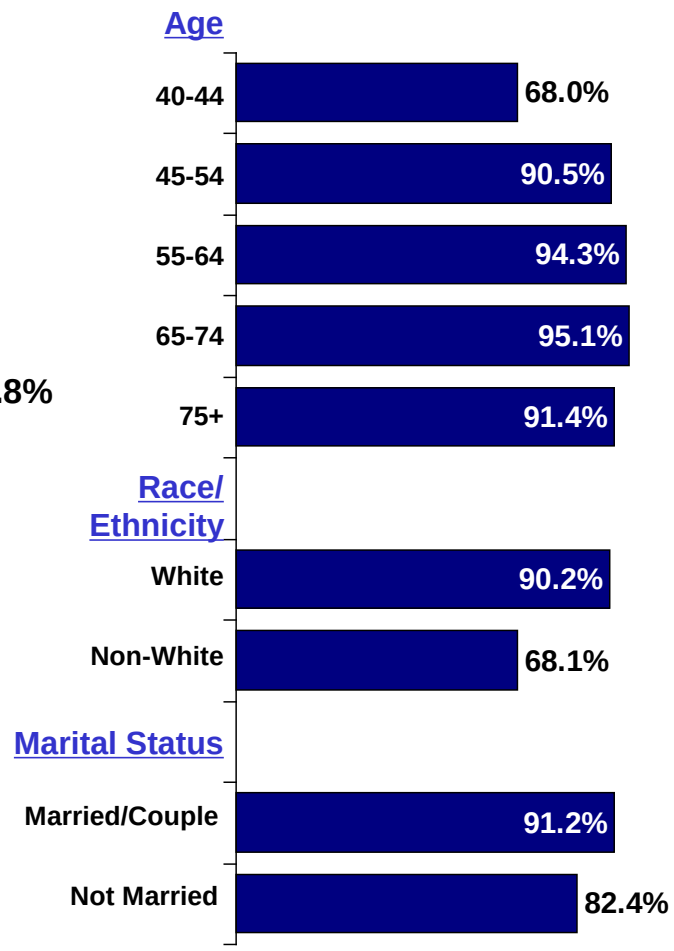
Ever Had Mammogram* (Total Sample)

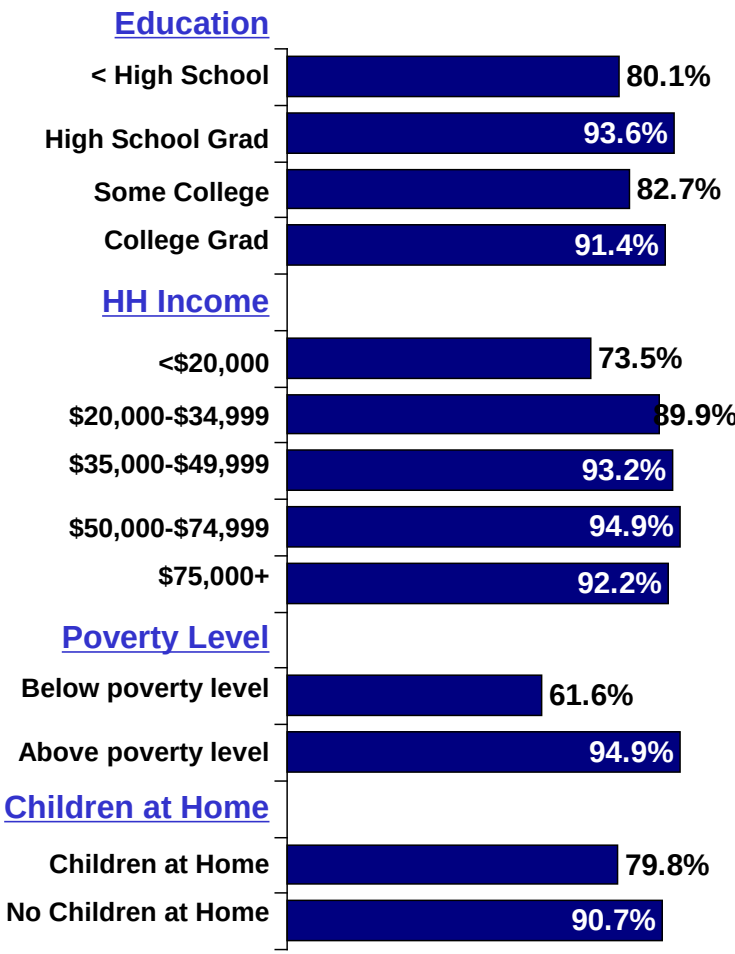


(n=350)

*Among women aged 40 years and older, the proportion who reported ever having a mammogram.

Ever Had Mammogram by Demographics

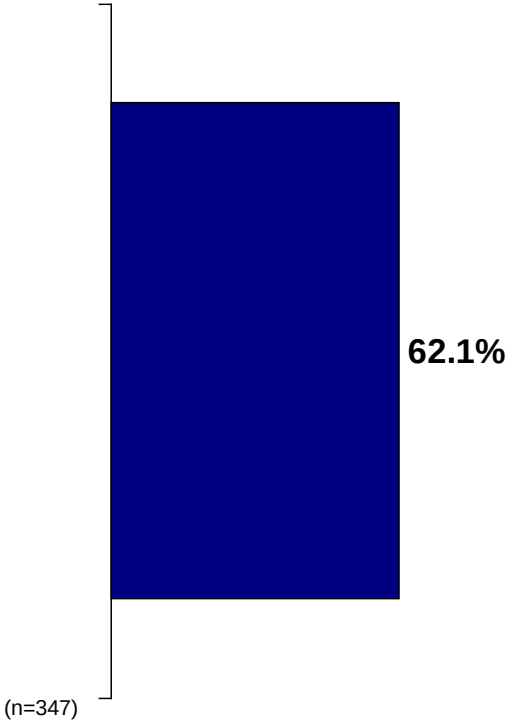




Having a timely mammogram is directly related to household income; 48.2% of women from households with incomes less than $20K have had a mammogram within the past year, compared to 74.5% of women in households with incomes $75K+. Women between 40-44 years of age are least likely, by far, to have timely mammograms.

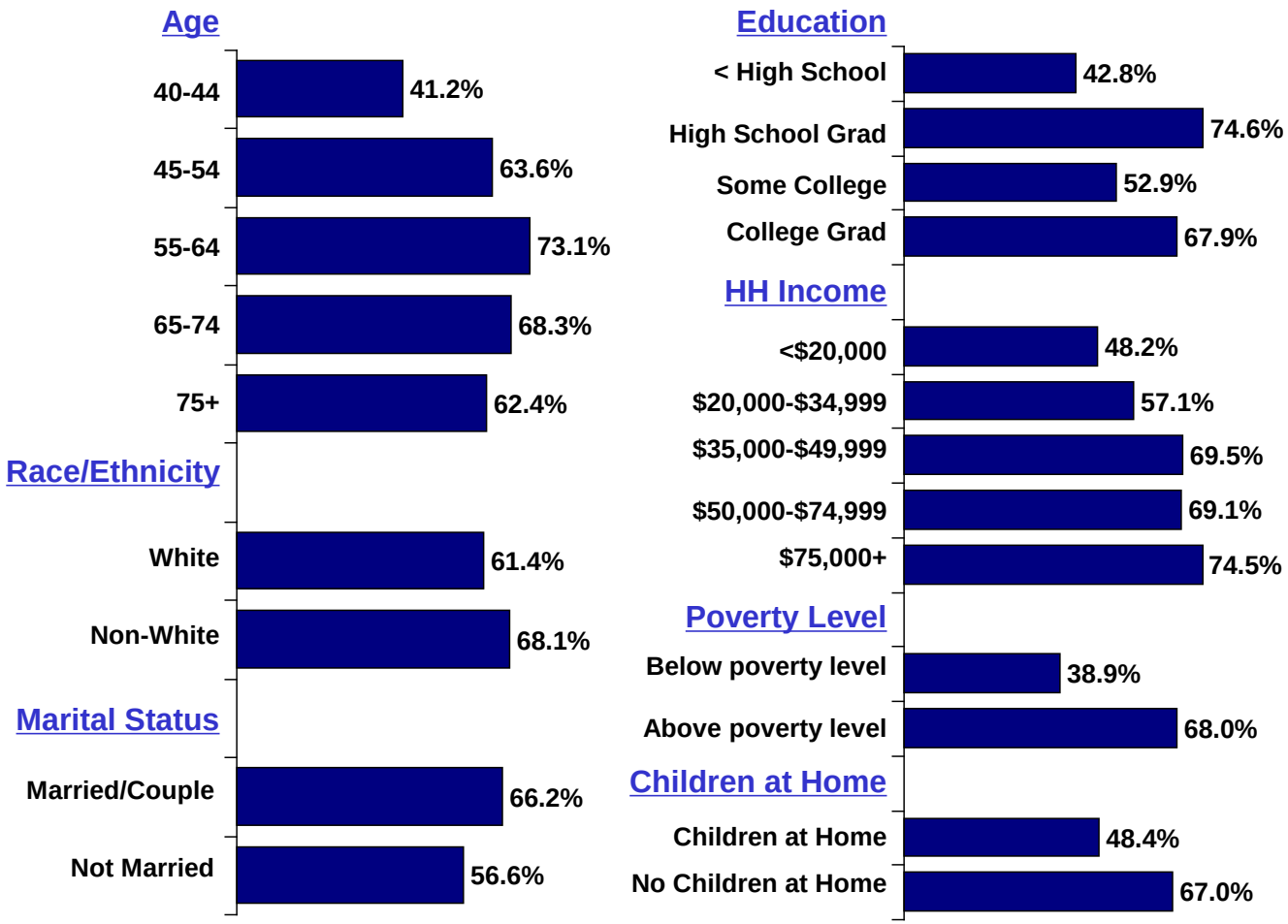
Mammography Indicators Among Women Aged 40 Years or Older (Cont'd.)

Had Mammogram in Past Year* (Total Sample)



*Among women aged 40 years and older, the proportion who reported having a mammogram in the past year.

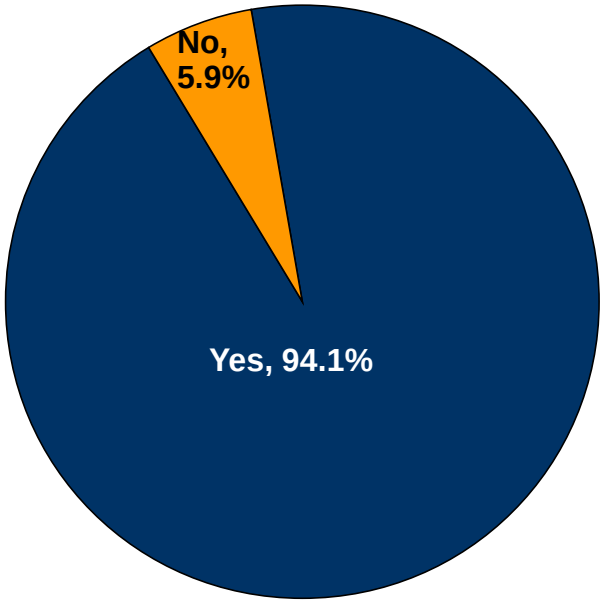
Had Mammogram in Past Year by Demographics



More than nine in ten (94.1%) area adult women have had a Pap test to screen for cervical cancer. Of those, almost half have had one within the past year and 77.4% have had one in the past three years. Of all adult women, 72.8% have had a Pap test within the past three years.

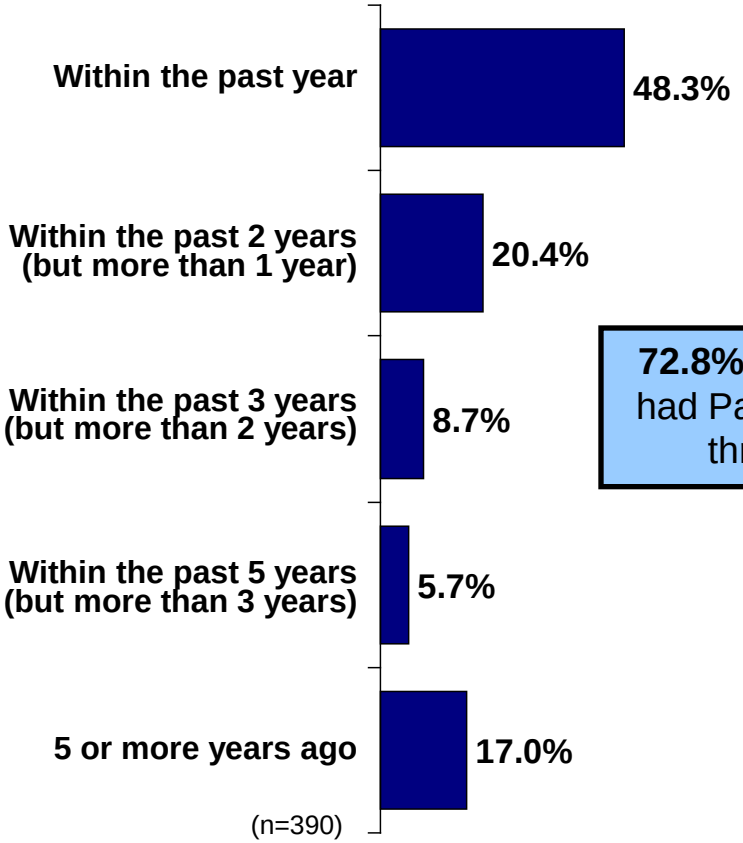
Cervical Cancer Screening Among Adult Females

Have Had a Pap Test



(n=427)

Last Time Had Pap Test



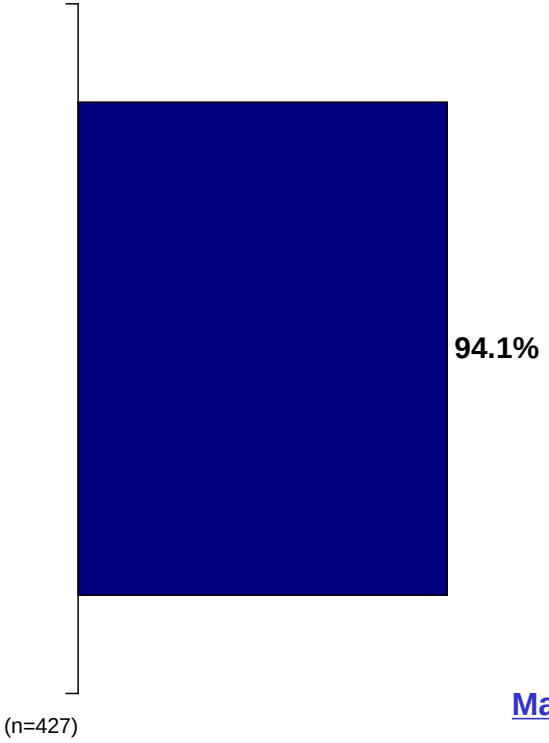
72.8% of all women had Pap test in past three years

Q6.3: A Pap test is a test for cancer of the cervix. Have you ever had a Pap test?
Q6.4:(If yes) How long has it been since you had your last Pap test?

Pap test rates are lowest among women aged 18-24 but extremely high (90%+) among all other demographic groups.

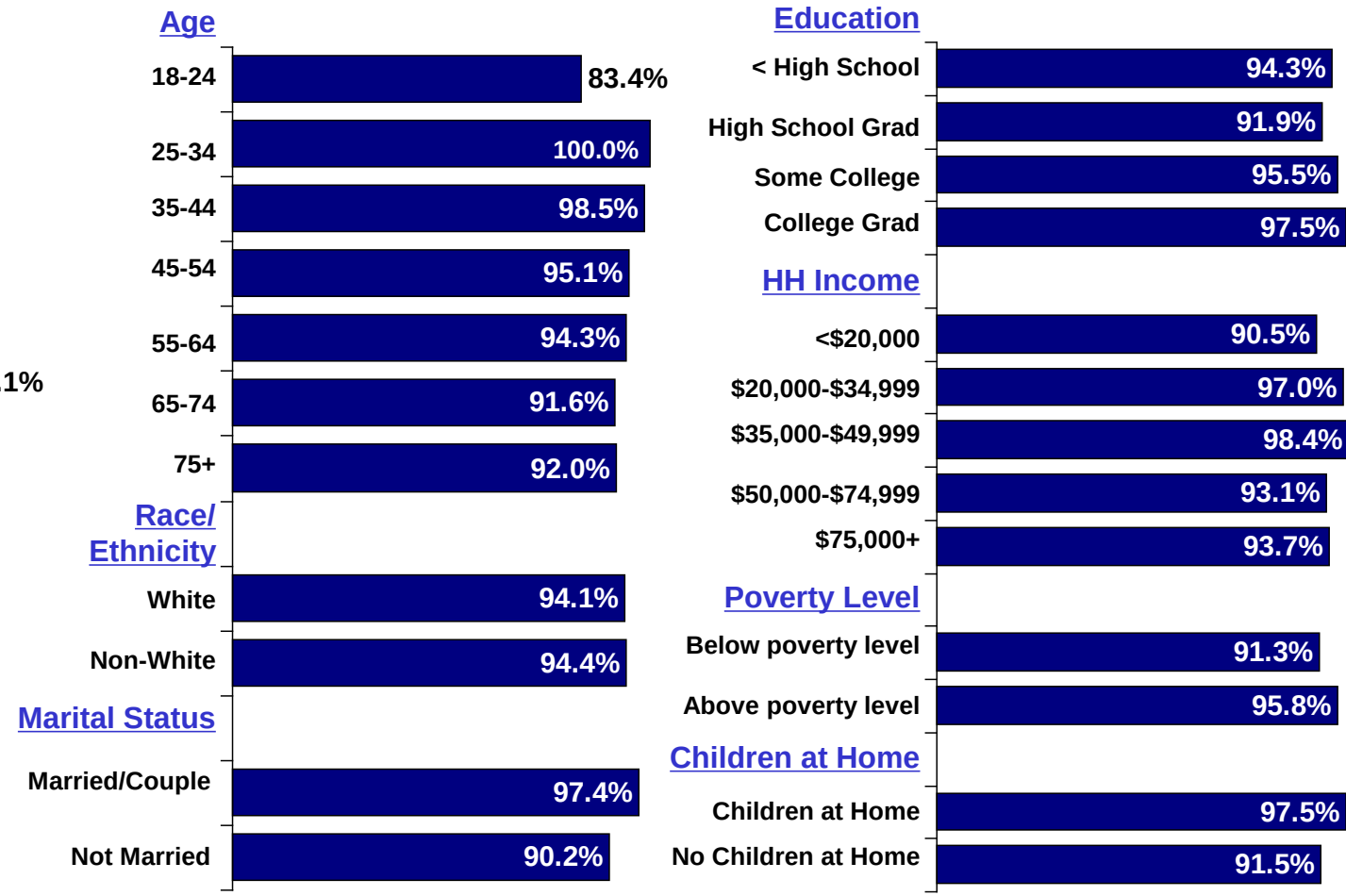
Cervical Cancer Screening

Ever Had Pap Test* (Total Sample)



*Among women aged 18 years and older, the proportion who reported ever having a Pap test.

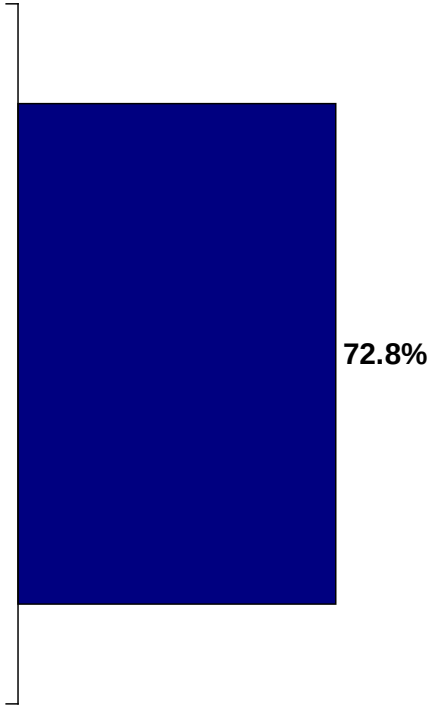
Ever Had Pap Test by Demographics



Having an appropriately timed Pap test (within past three years) is directly related to education and income. Adult women least likely to have appropriately timed Pap tests are in the oldest (55+) ages groups. Non-White women are more likely to have an appropriately timed Pap than White women.

Cervical Cancer Screening (Cont'd.)

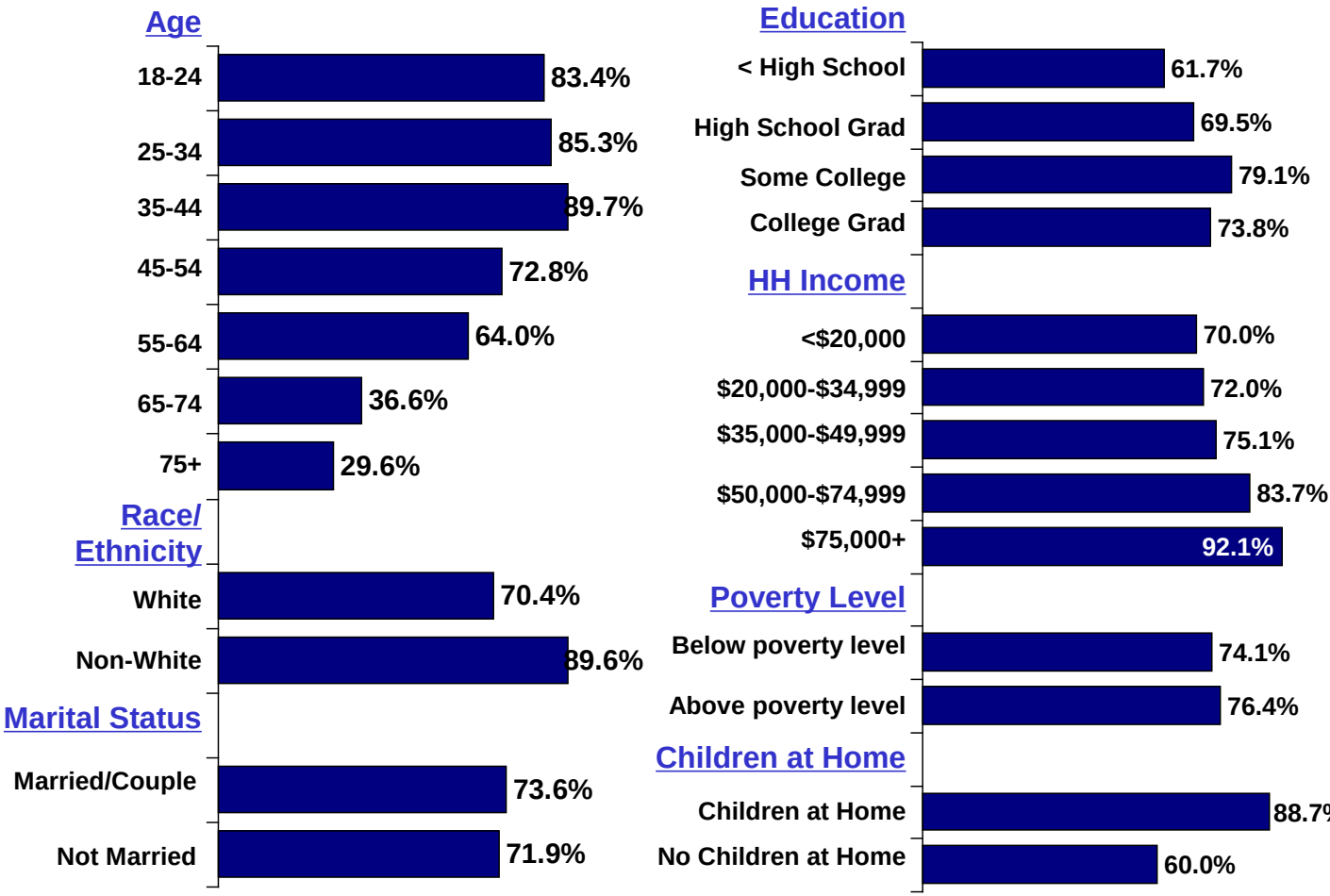
Had Appropriately Timed Pap Test* (Total Sample)



(n=418)

*Among women aged 18 years and older, the proportion who reported having a pap test within the previous three years..

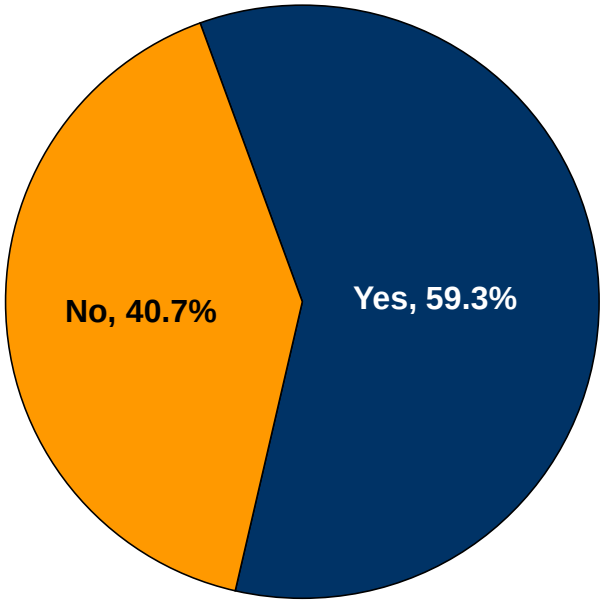
Appropriately Timed Pap Test by Demographics



Almost six in ten area men aged 50 or more have had a doctor recommend a prostate screening test such as PSA and a comparable proportion have actually received the test.

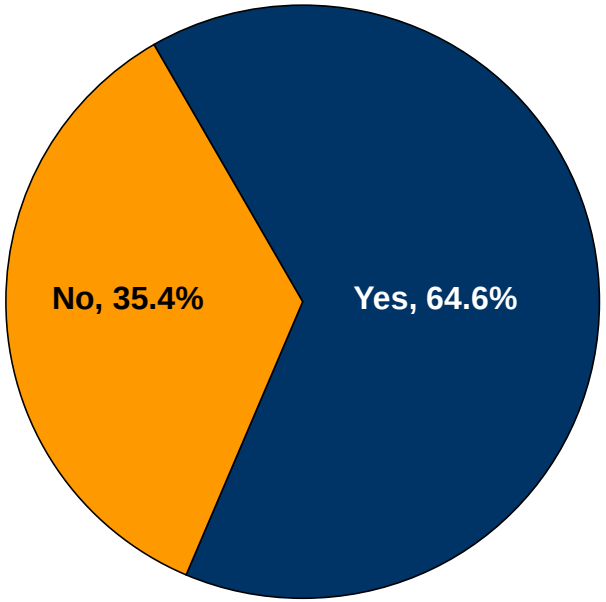
Prostate Cancer Screening Among Adult Males Aged 50+

PSA Test Ever Recommended



(n=136)

Ever Had PSA Test



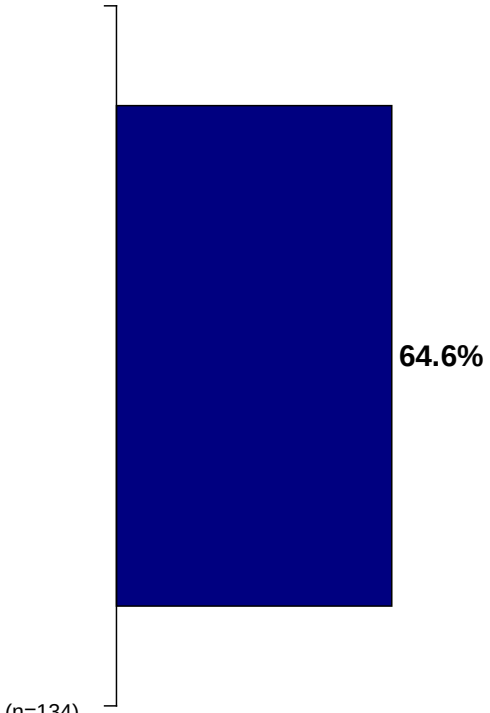
(n=134)

Q7.1: 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?
Q7.2: Have you EVER had a PSA test?

Almost two-thirds (64.6%) of men in the SHUKH area, aged 50 years or older, have had a PSA test screening for prostate cancer. The rate falls sharply for men with limited financial resources (income below $20K, living below the poverty level) and college graduates. Among area men, having a PSA test is inversely related to education.

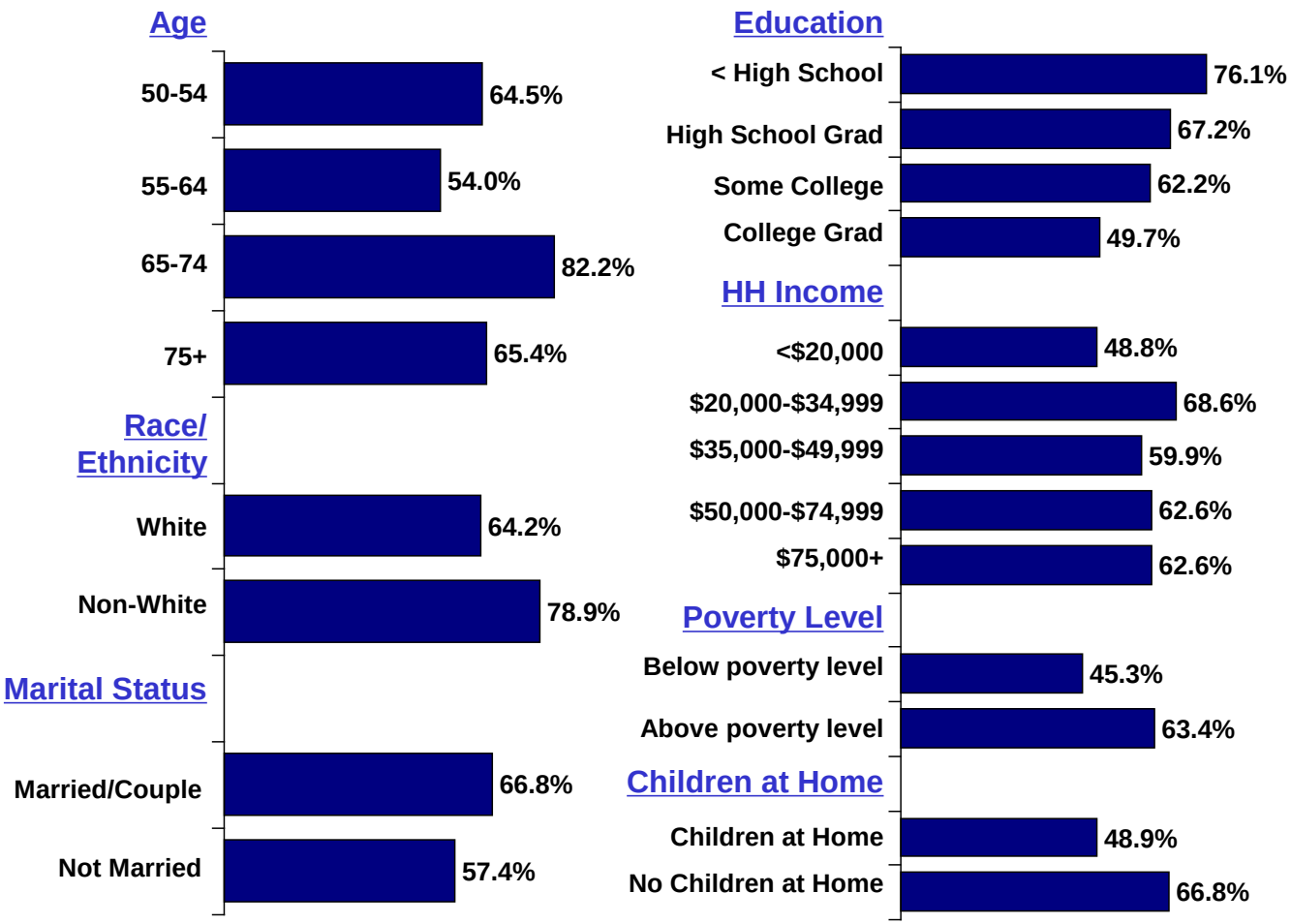
Prostate Cancer Screening Among Men Aged 50 Years and Older

Ever Had PSA Test* (Total Sample)



*Among men aged 50 years and older, the proportion who reported ever having a prostate-specific antigen (PSA) test.

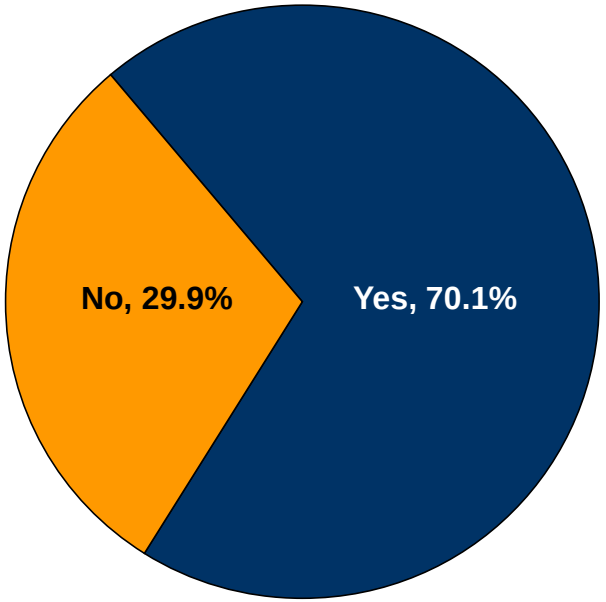
Had PSA Test by Demographics



Seven in ten (70.1%) area adults aged 50 or more have had an exam to screen for colon cancer. Six in ten (59.2%) of those who have had an exam have had one in the past three years, while 76.6% have had one within the past five.

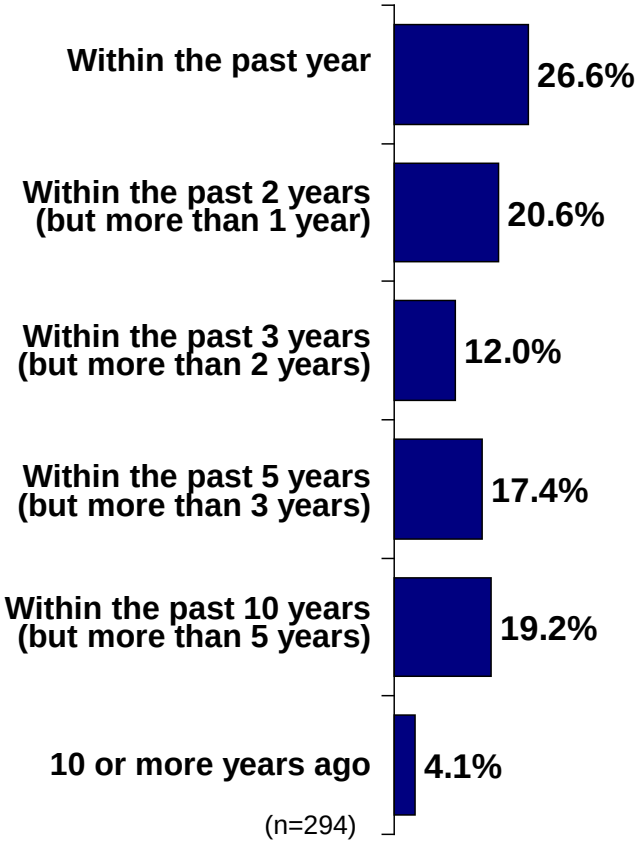
Colorectal Cancer Screening Among Adults Aged 50+

Have Had Sigmoidoscopy or Colonoscopy Exam



(n=412)

Last Time Had Exam



(n=294)

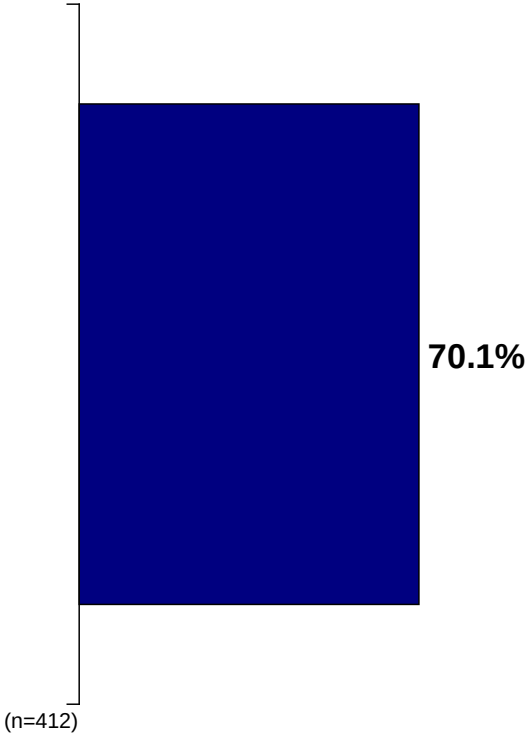
Q8.1: Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams?

Q8.2:How long has it been since you had your last sigmoidoscopy or colonoscopy?

Non-Whites are more likely to have a screening for colorectal cancer compared to Whites. Surprisingly, college graduates are the group least likely to have been screened.

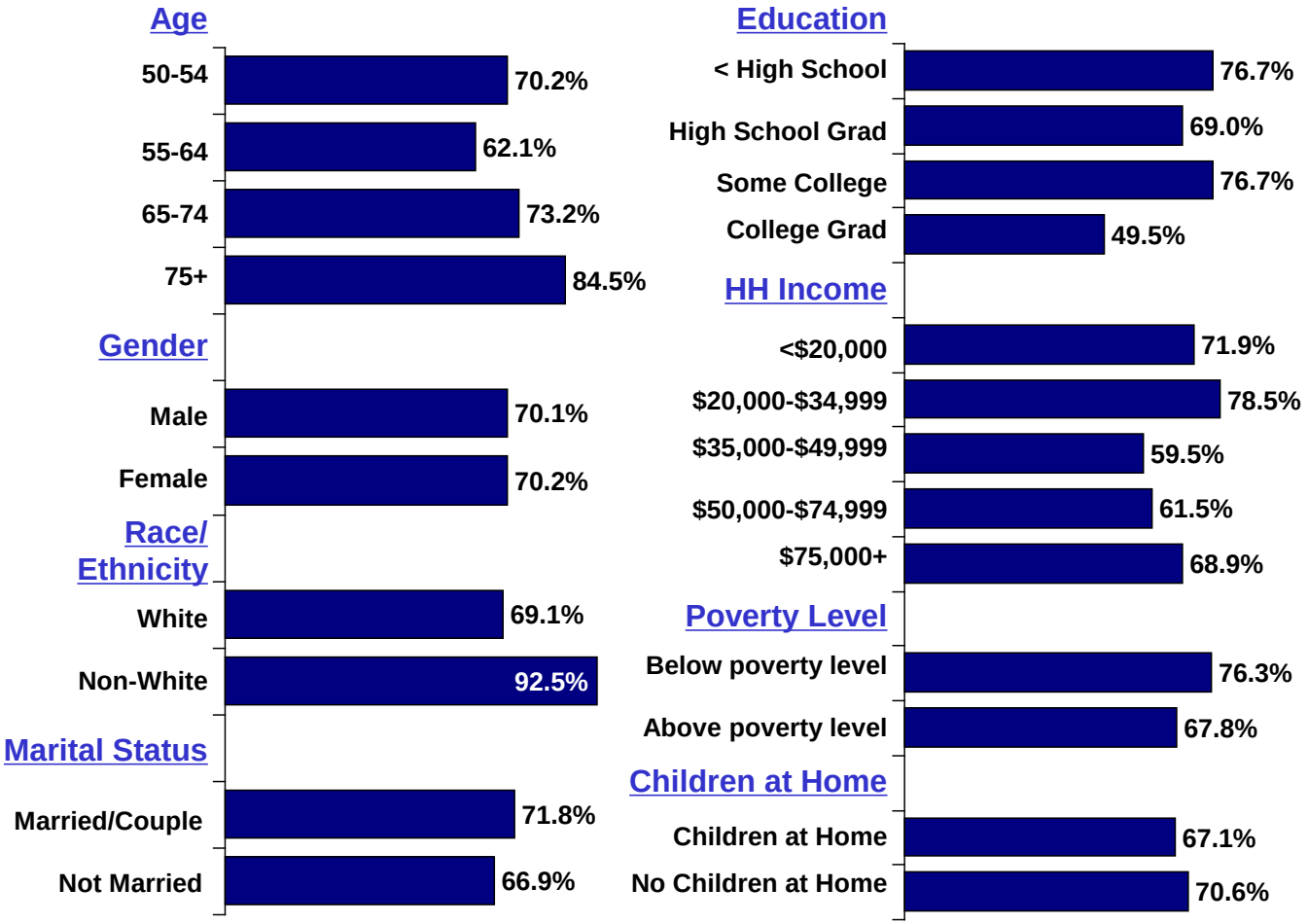
Colorectal Cancer Screening (Sigmoidoscopy/Colonoscopy) Among Adults Aged 50 Years and Older

Ever Had Sigmoidoscopy or Colonoscopy* (Total Sample)



*Among adults aged 50 years and older, the proportion who reported ever having a sigmoidoscopy or colonoscopy.

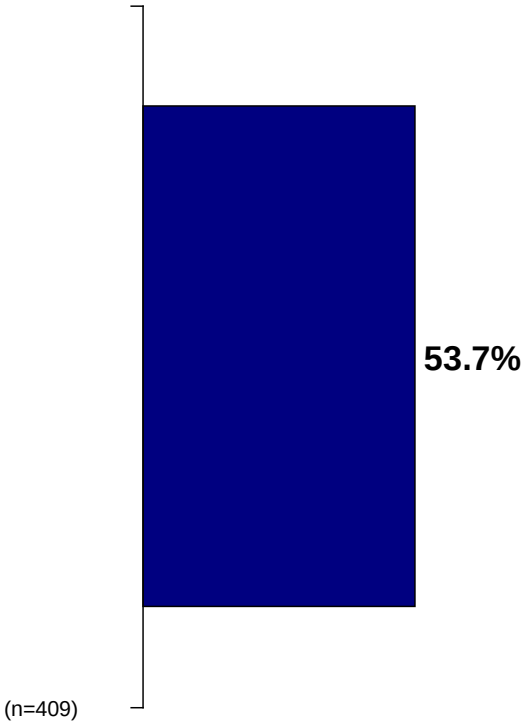
Had Sigmoidoscopy/Colonoscopy by Demographics



When looking at all adults aged 50 or older, half (53.7%) have been screened for colorectal cancer in the past five years. Least likely to have been screened in the past five years are college graduates. Non-Whites are more likely to have had a timely colorectal screening compared to Whites.

Colorectal Cancer Screening (Sigmoidoscopy/Colonoscopy) Among Adults Aged 50 Years and Older (Cont'd.)

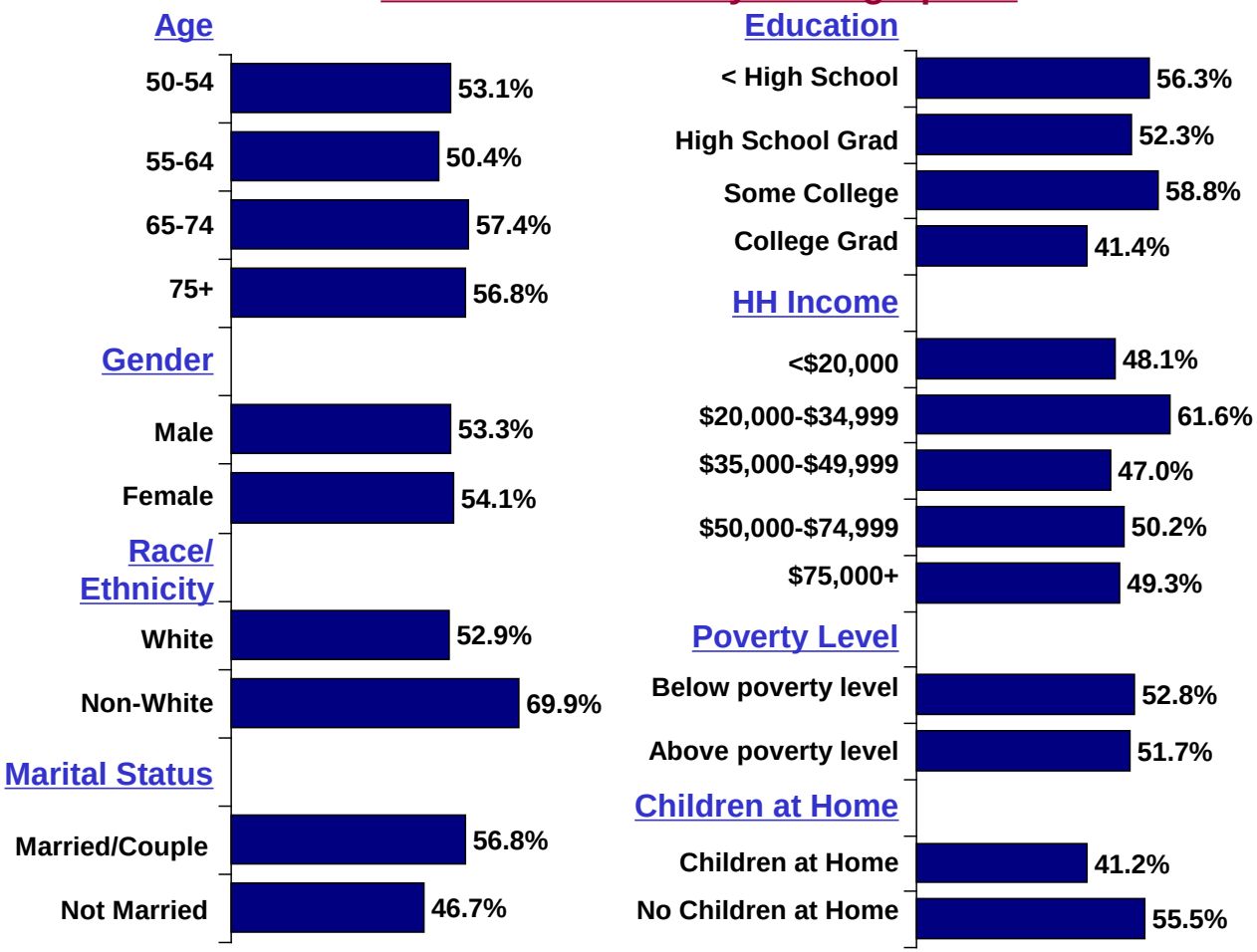
Had A Sigmoidoscopy or Colonoscopy in Past Five Years* (Total Sample)



(n=409)

*Among adults aged 50 years and older, the proportion who reported ever having a sigmoidoscopy or colonoscopy in the past five years.

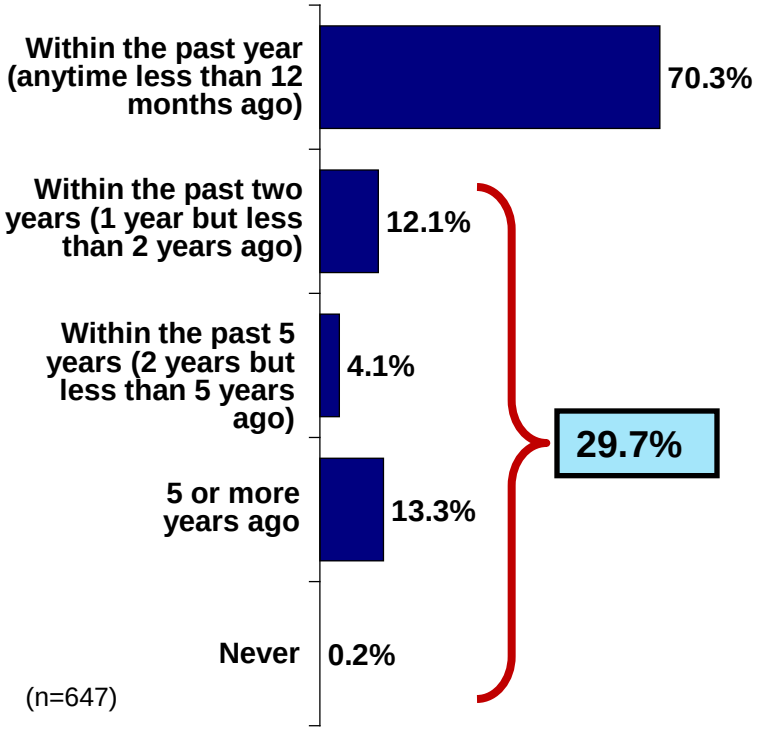
Had Sigmoidoscopy/Colonoscopy in Past Five Years by Demographics



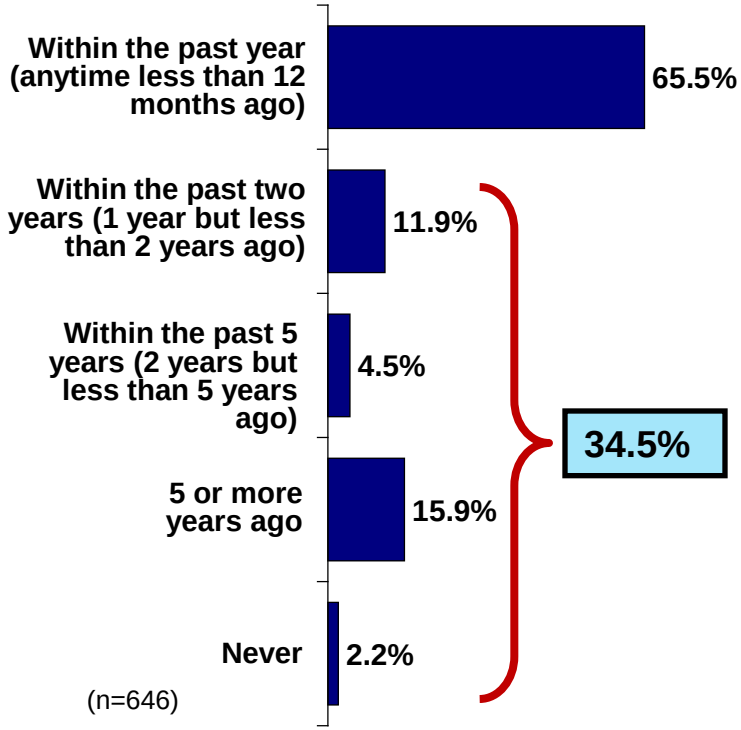
Seven in ten area adults have visited a dentist or dental specialist in the past year. However, more than one-third (34.5%) are not exercising preventive oral health care, in other words, have not visited the dentist in the past year for a teeth cleaning.

Oral Health

When Last Visited Dentist for Any Reason



When Last Visited Dentist for Teeth *Cleaning*

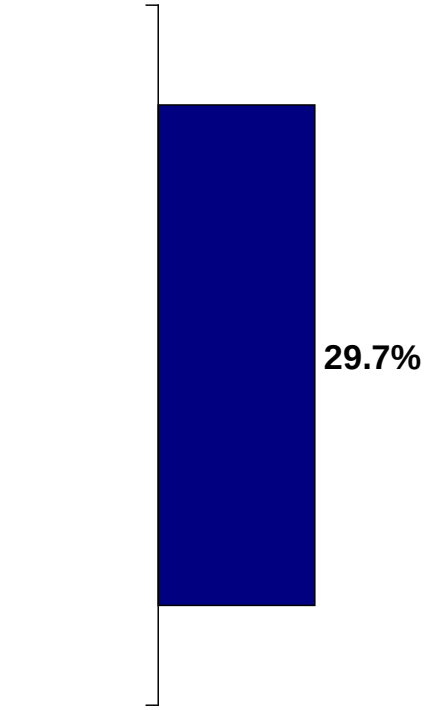


Q23.1: How long has it been since you last visited a dentist or dental clinic for any reason? Include visits to dental specialists, such as orthodontists.
Q23.2: How long has it been since you had your teeth cleaned by a dentist or dental hygienist?

Visiting a dentist in a timely manner is directly related to income. In fact, six in ten (59.4%) adults living in households with incomes below $20K have not visited a dentist in the past year, compared to 15.4% for those with incomes of $75K or more. Woman are more likely than men to visit a dentist and non-Whites are more likely to visit than Whites.

Oral Health (Cont'd.)

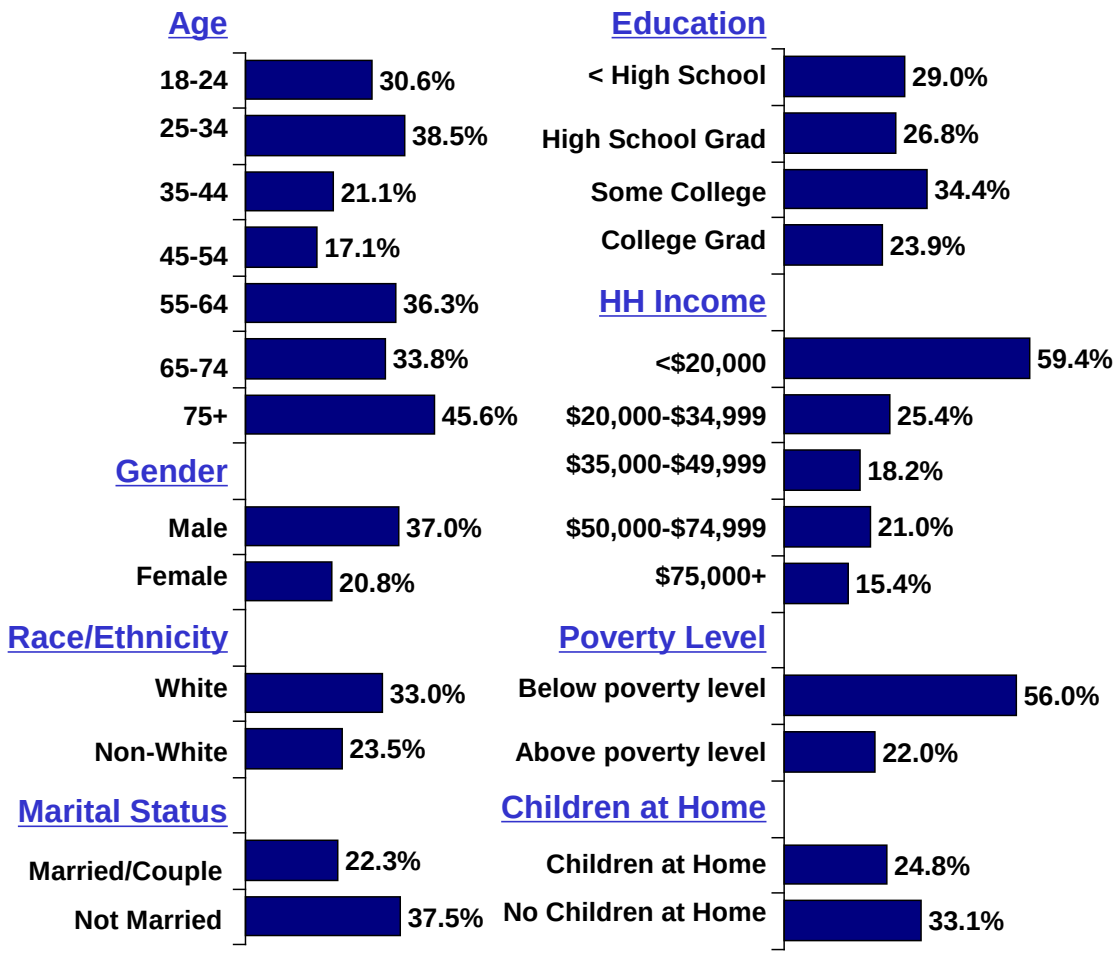
No Dental Visit in Past Year* (Total Sample)



(n=647)

*Among adults, the proportion who reported that they had not visited a dentist or dental clinic for any reason in the previous year.

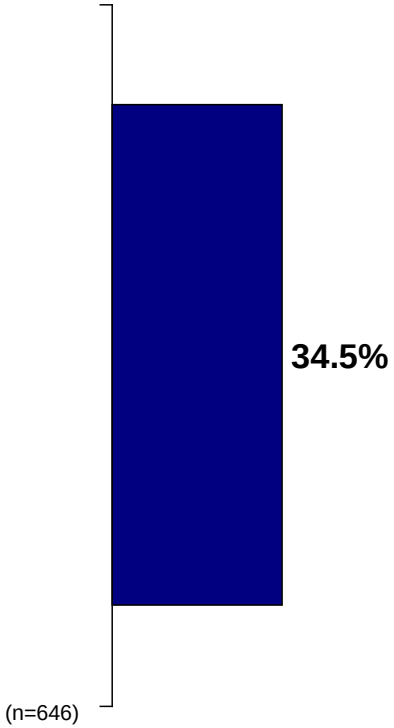
No Dental Visit in Past Year by Demographics



Similarly, having a recent teeth cleaning is directly related to education and income. Least likely to have a timely cleaning are those who have less than a high school education and those who are the poorest. Again, men and Whites are less likely to have a teeth cleaning in the past year compared to women and non-Whites, respectively.

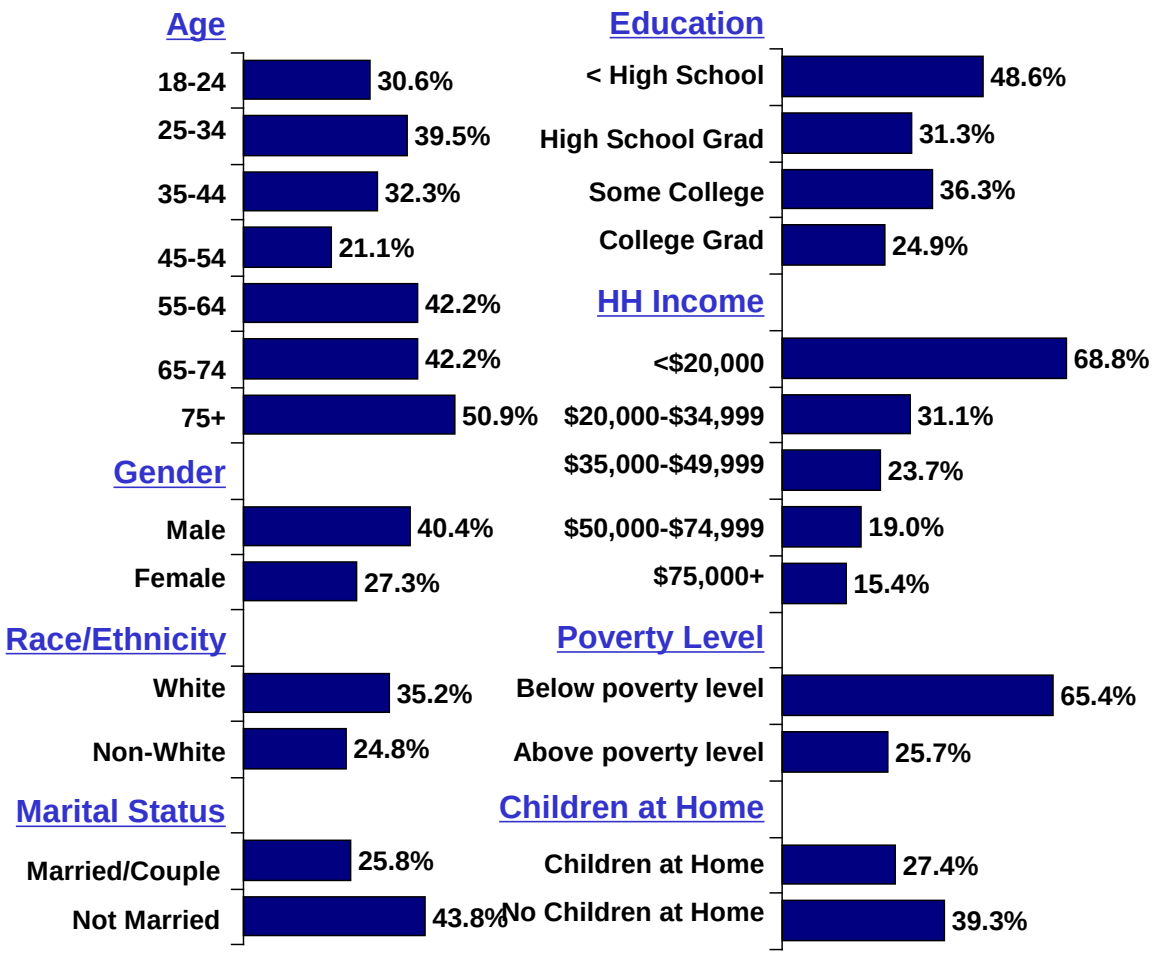
Oral Health (Cont'd.)

No Teeth Cleaning in Past Year* (Total Sample)



*Among adults, the proportion who reported that they did not have their teeth cleaned by a dentist or dental hygienist in the previous year.

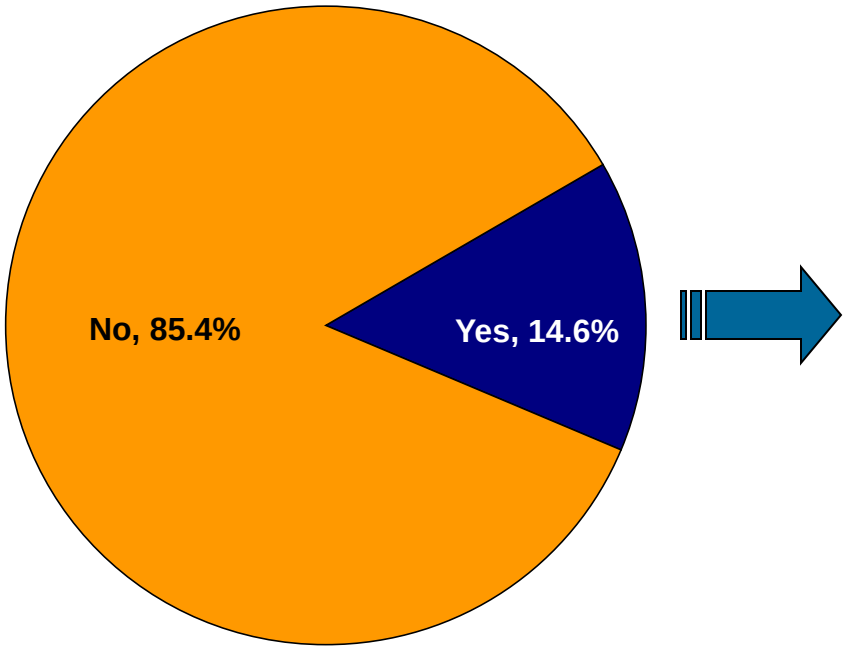
No Teeth Cleaning in Past Year by Demographics



More than one in ten (14.6%) area adults have experienced problems receiving needed dental care. Those who have had problems cite an inability to pay for services and lack of insurance as the top barriers to receiving dental care.

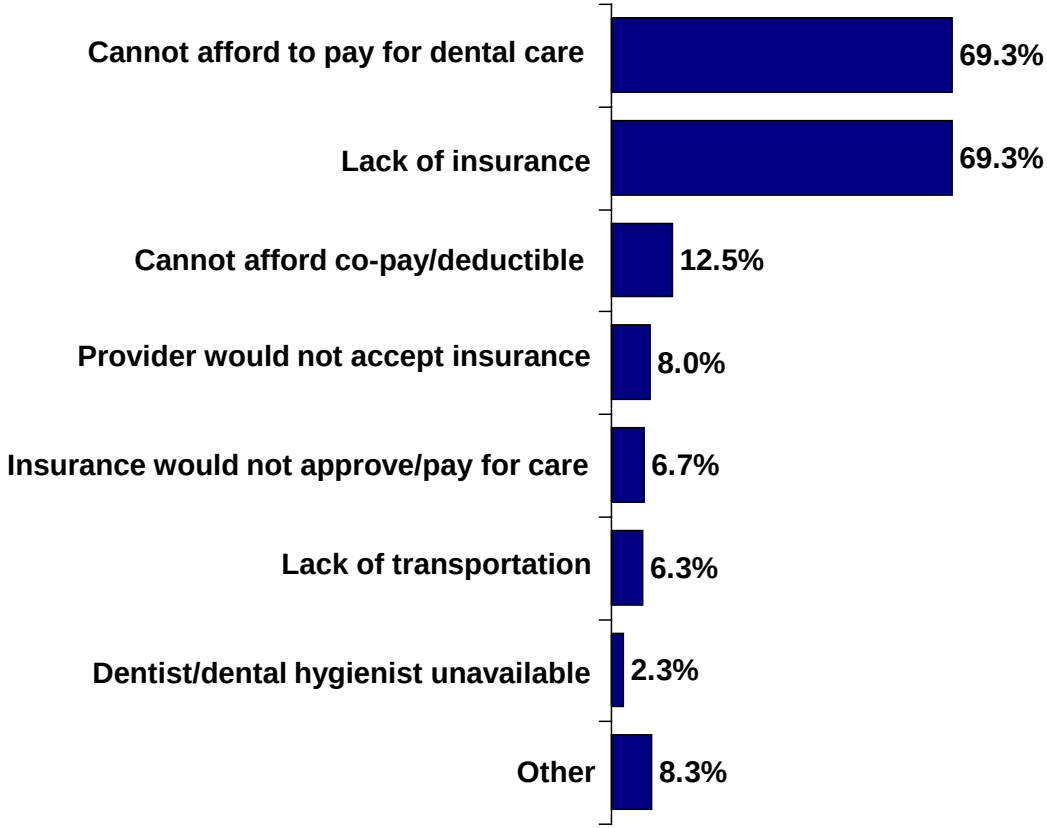
Barriers to Dental Care

Problems Getting Needed Dental Care



(n=654)

Reasons for Difficulty in Getting Dental Care



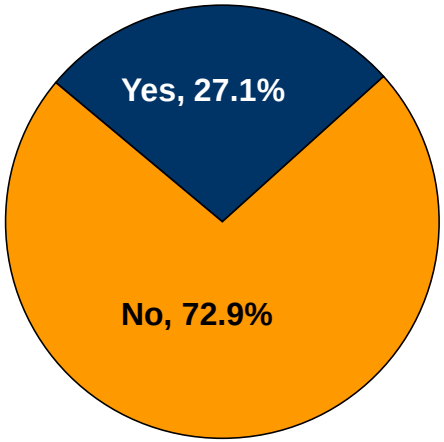
(n=77)
Base=had trouble getting needed dental care

Q23.3: In the past 12 months, have you had problems getting needed dental care?
Q23.4: Please provide the reason(s) for the difficulty in getting dental care. (Multiple responses allowed)

Among all area adults, 27.1% have received a pneumonia shot at some point. One-third (34.8%) have received a flu shot or vaccine in the past 12 months, and half of them received it at a physician's office/HMO. Other common places to receive flu shots are at a store or at work.

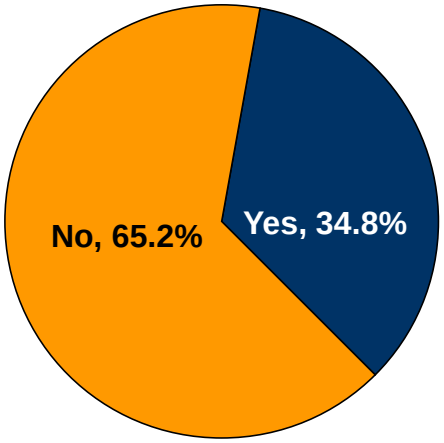
Flu and Pneumonia Immunization

Ever Had a Pneumonia Shot



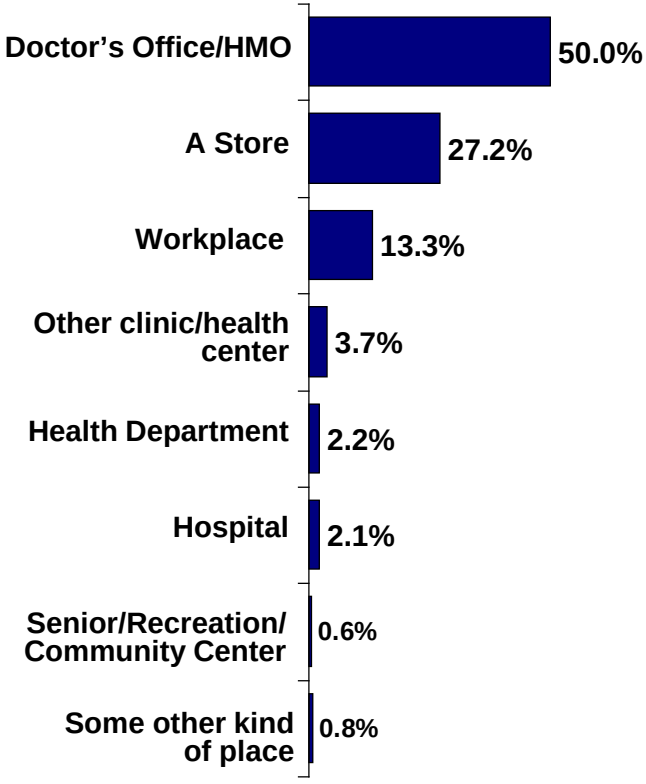
(n=650)

Had Flu Shot/Vaccine in Past 12 Months



(n=660)

Place Where Received Flu Shot/Vaccine



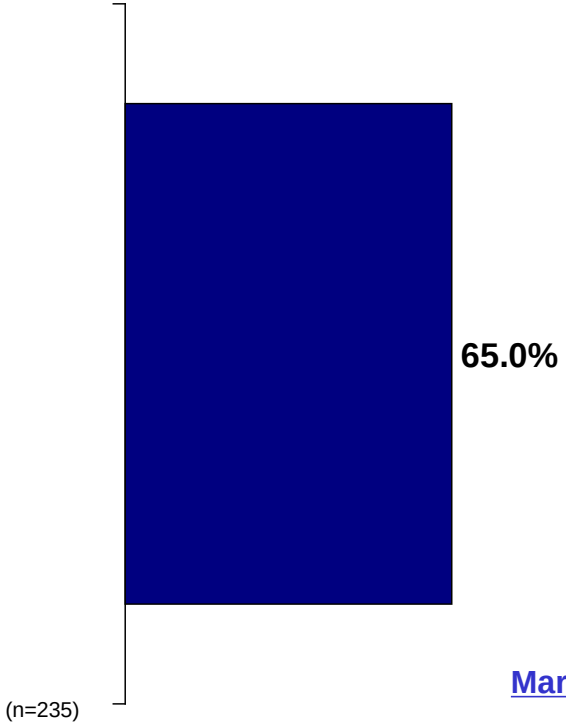
(n=308)

Q19.3: A pneumonia shot or pneumococcal vaccine is usually given only once or twice in a person's lifetime and is different from the flu shot. Have you ever had a pneumonia shot?
Q19.1: During the past 12 months, have you had either a seasonal flu shot or a seasonal flu vaccine that was sprayed in your nose?
Q19.2: At what kind of place did you get your last seasonal flu shot/vaccine?

Two-thirds (65.0%) of adults aged 65 or older have received a flu vaccine in the past year. Adults aged 75+ are more likely to have received one in the past year than those aged 65-74. Senior White adults are far more likely than non-White adults to have received a flu vaccine in the past year. Those with incomes of $75K or more are most likely to have a flu vaccine.

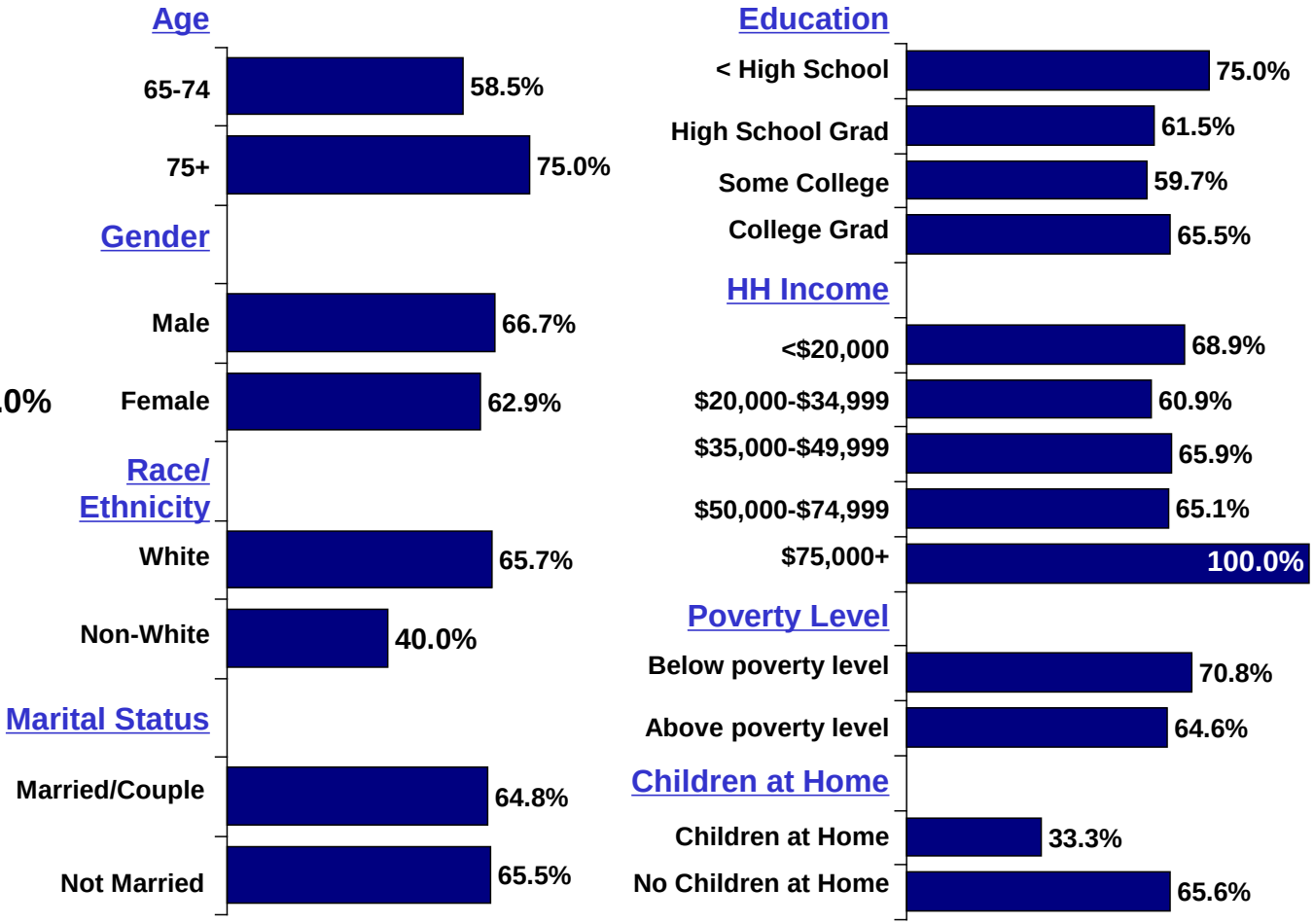
Immunizations Among Adults 65 Years and Older

Had Flu Vaccine in Past Year* (Total Sample)



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

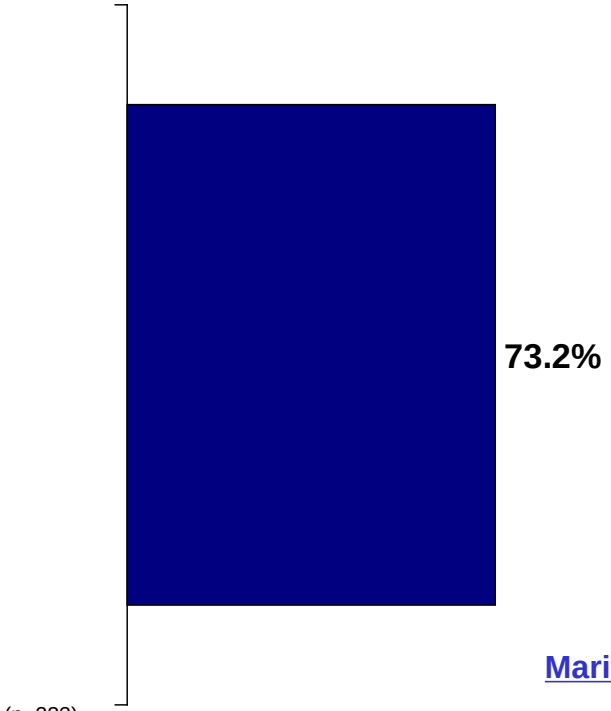
Had Flu Vaccine by Demographics



Additionally, seven in ten (73.2%) adults aged 65 or older received a pneumonia vaccine at some point and this rate is higher for White senior adults compared to non-Whites. Also, senior adults in the highest income group are most likely to receive a pneumonia vaccine.

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

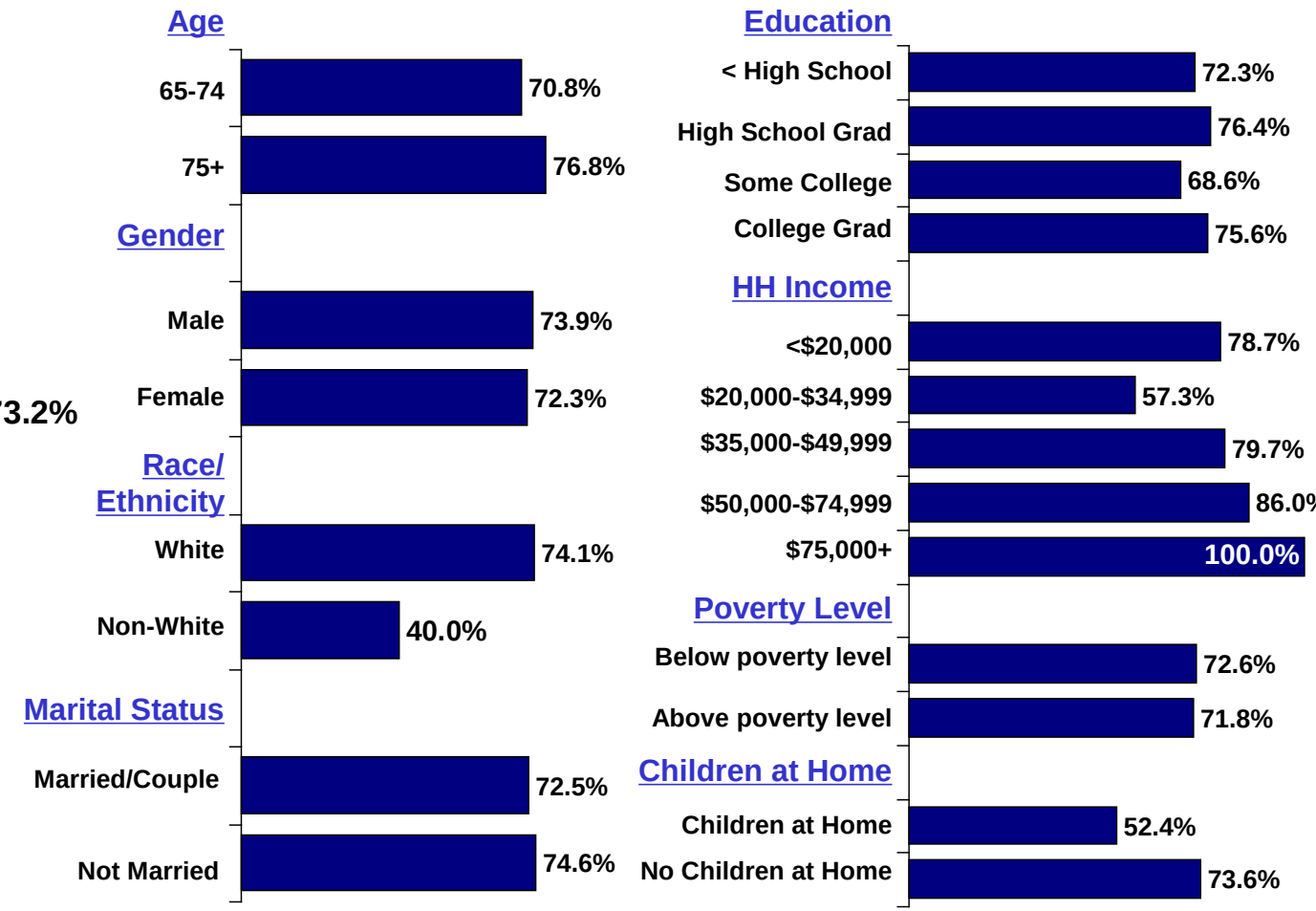
Ever Had Pneumonia Vaccine* (Total Sample)



(n=232)

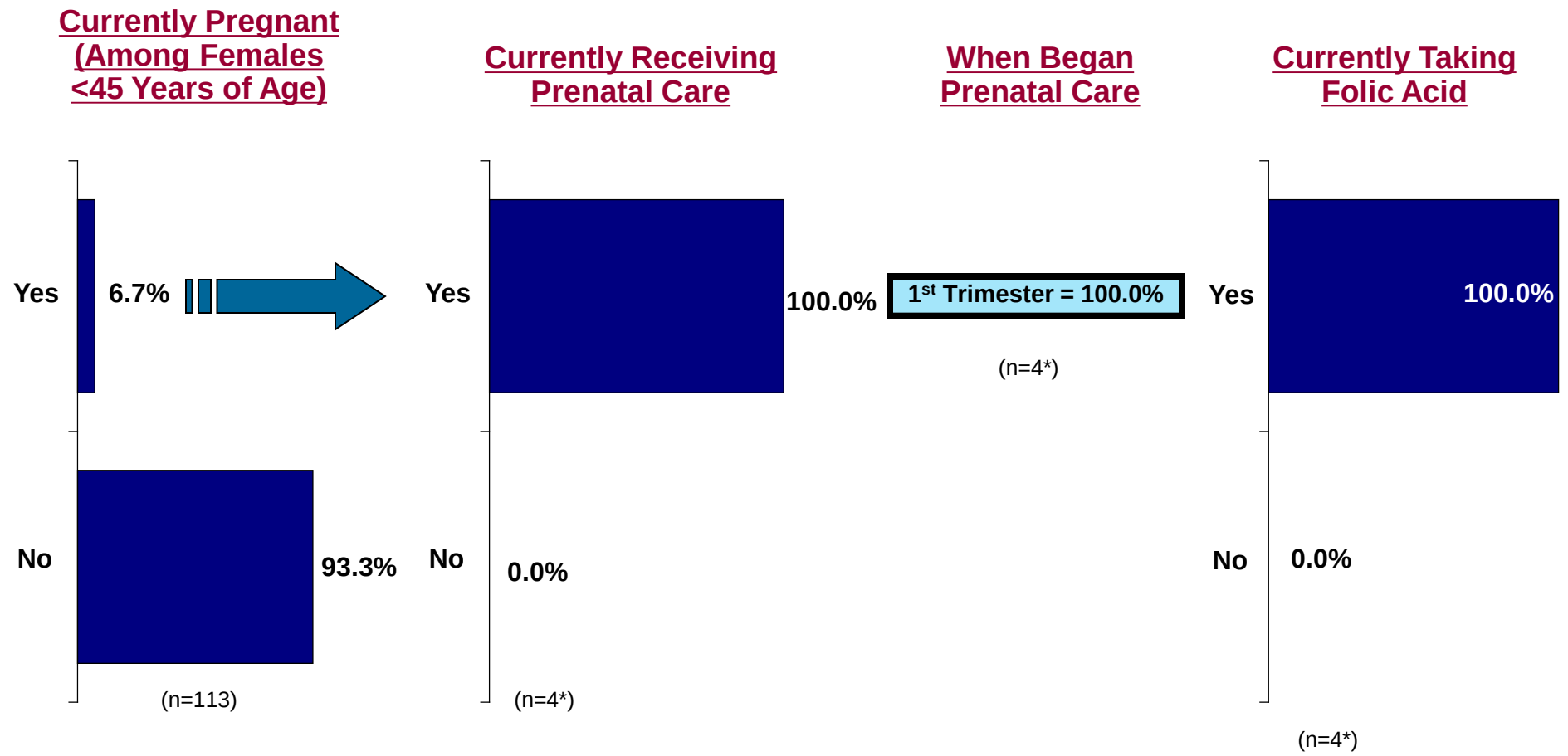
*Among adults aged 65 years and older, the proportion who reported that they ever had a pneumococcal vaccine.

Had Pneumonia Vaccine by Demographics



Among pregnant females, all are currently receiving prenatal care, all began their care in the first trimester, and all currently take a vitamin or supplement that contains folic acid.

Pregnancy and Prenatal Care



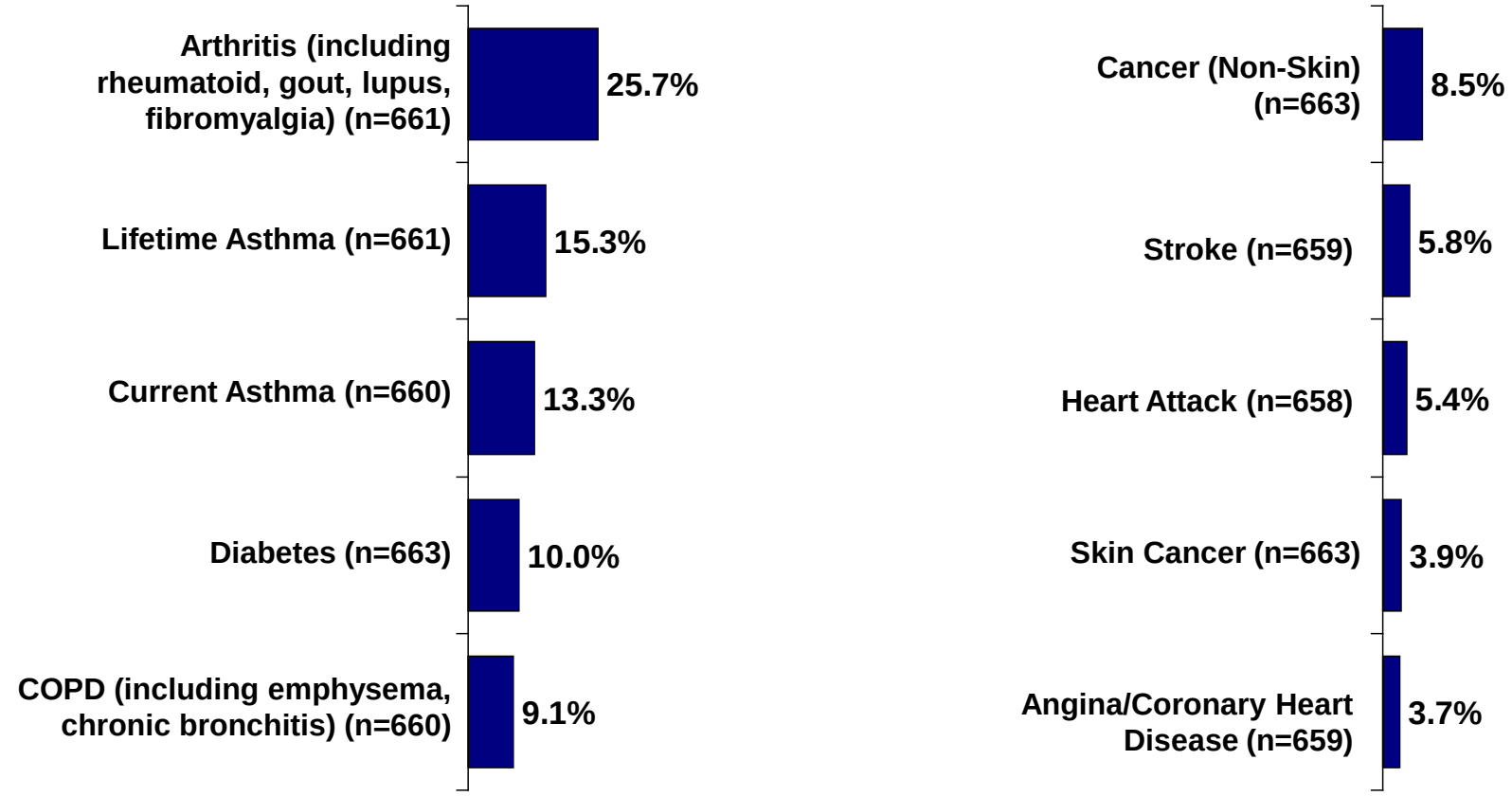
Q13.17: To your knowledge, are you now pregnant?
Q14.1 (If yes) Are you currently receiving prenatal care?
Q14.2: (If yes) When did you start receiving prenatal care?
Q14.3: (If yes) Are you currently taking a vitamin or supplement that contains folic acid?

*Caution: small n size

Chronic Conditions

Arthritis-related conditions are the most prevalent chronic conditions among SHUKH area adults, by far, followed by asthma and diabetes. Prevalence is low for heart conditions, skin cancer, and stroke.

Prevalence of Chronic Health Conditions (% Have Been Told They Have)

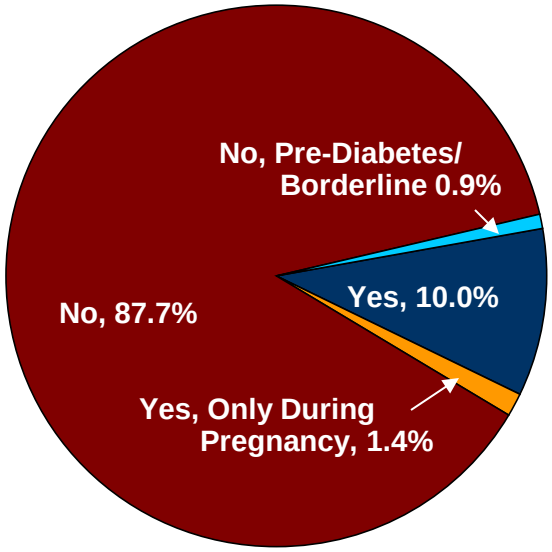


Q9.1-Q9.10: Has a doctor, nurse, or other health professional EVER told you that you had….
Q9.2: Do you still have asthma?

One in ten (10.0%) area adults has been told by a health professional they have diabetes. On average, those with diabetes see a health professional and/or are checked for A1c approximately four times a year.

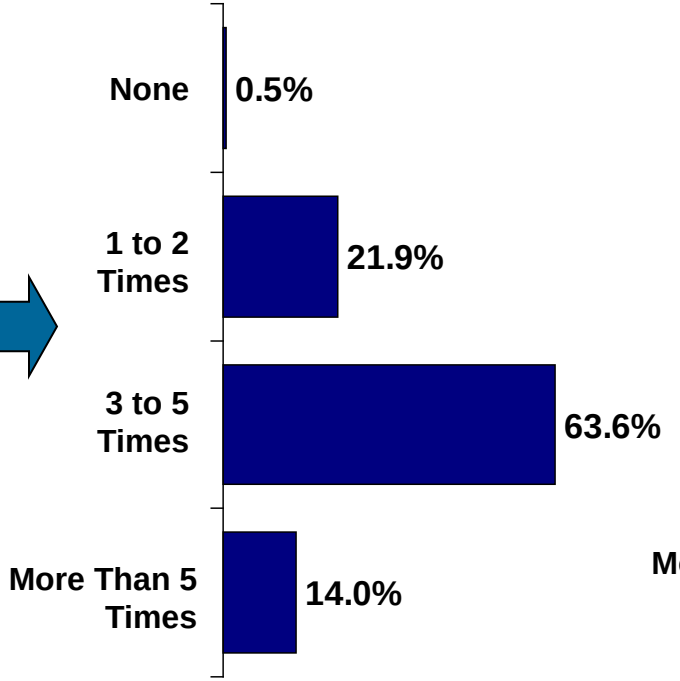
Prevalence of Diabetes

Ever Told Have Diabetes



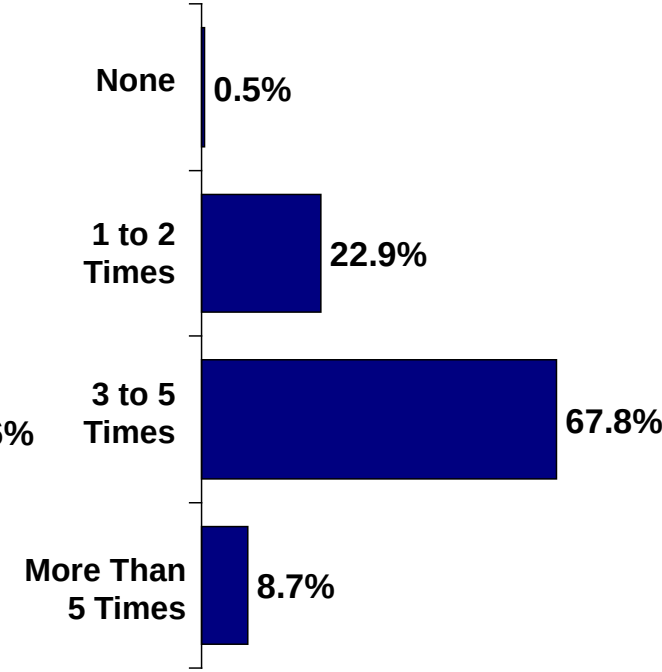
(n=663)

Number of Times in Past 12 Months Seen Health Professional for Diabetes



(n=98) Mean = 4.3

Number of Times in Past 12 Months Checked for A1c



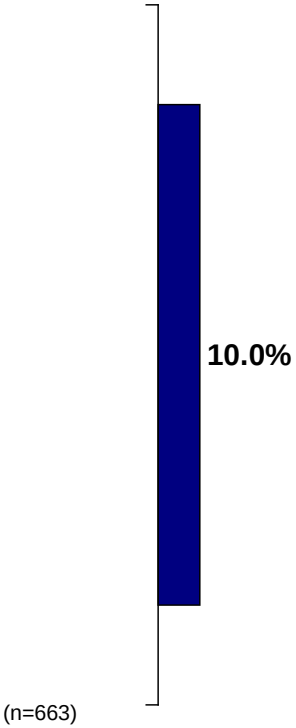
(n=97) Mean = 3.9

Q9.10: Has a doctor, nurse, or other health professional EVER told you that you had diabetes?
Q10.1: About how many times in the past 12 months have you seen a doctor, nurse, or other health professional for your diabetes?
Q10.2: 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?"

The prevalence of diabetes is greater for adults who: are older (55+), have no high school diploma, have incomes below $20K, and live below the poverty line.

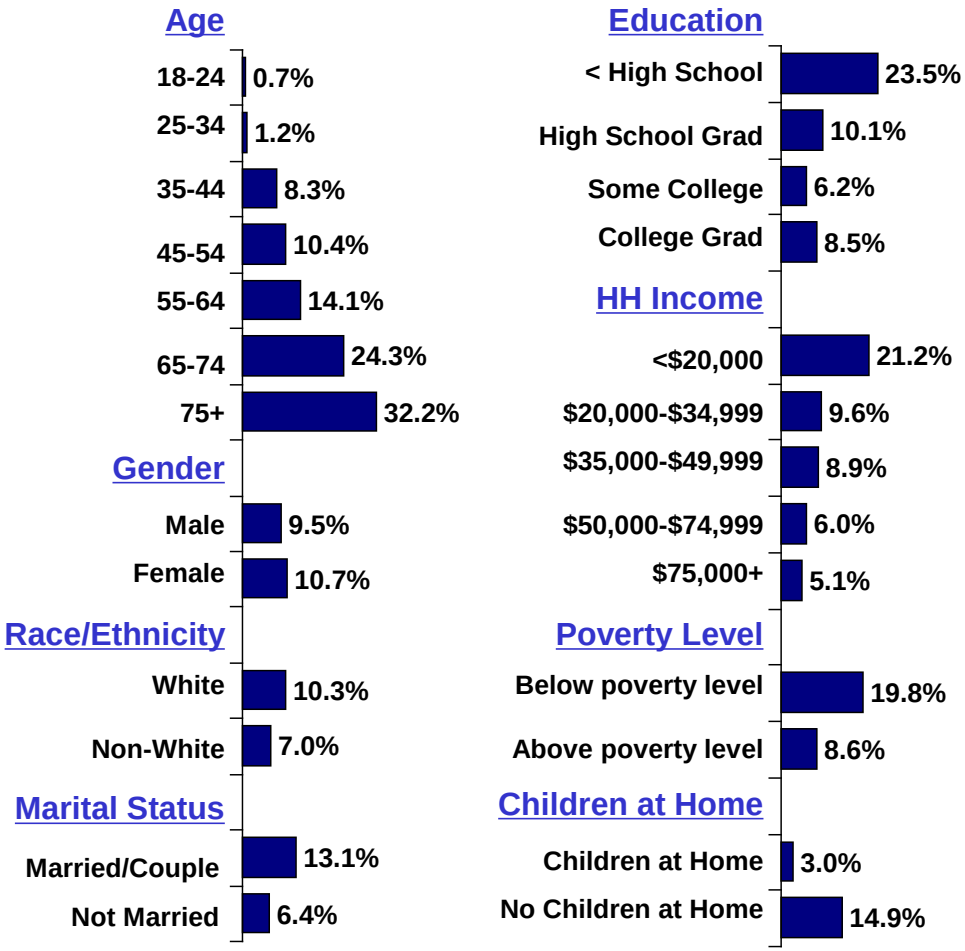
Diabetes

Ever Told Have Diabetes* (Total Sample)



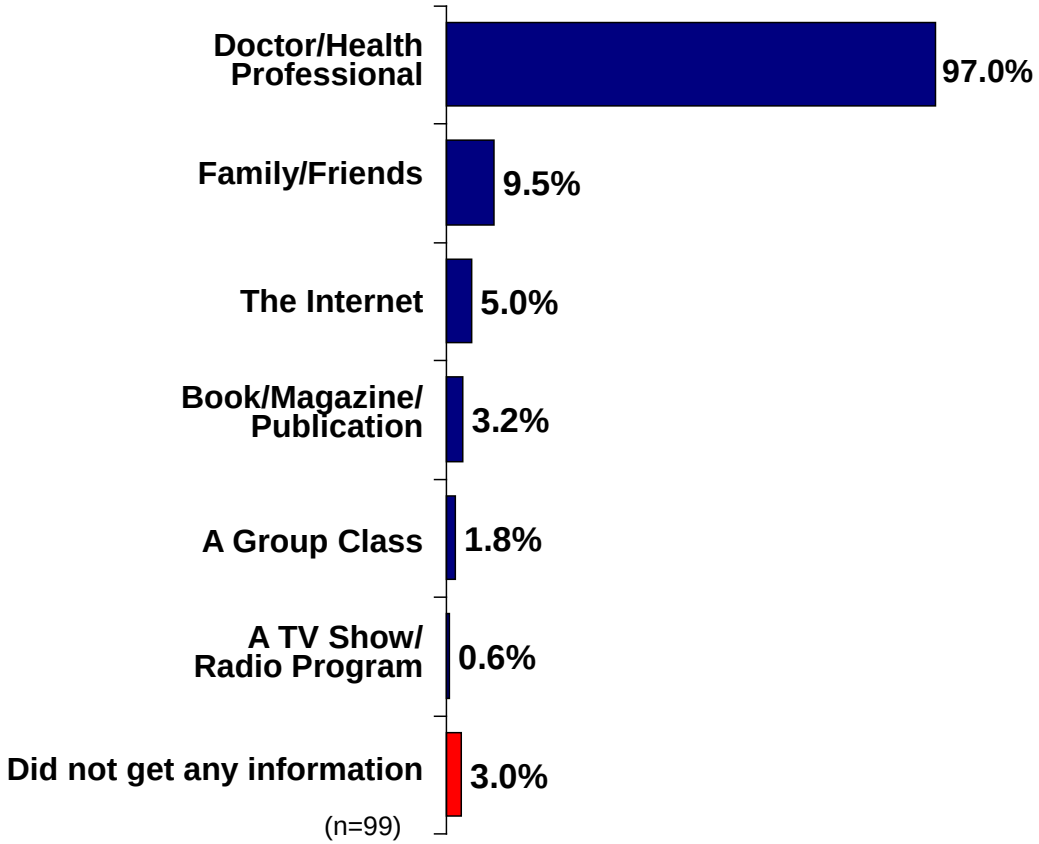
*Among all adults, the proportion who reported that they were ever told by a doctor that they have diabetes. Adults who had been told they have prediabetes and women who had diabetes only during pregnancy were classified as not having been diagnosed.

Told Have Diabetes by Demographics



Almost all (97.0%) adults who have diabetes have received information in the past 12 months on how to care for the condition and most, by far, have received it from a doctor or health care professional. Although used far less often, other information sources include family and friends, the Internet, books/periodicals, and a group class.

Information Sources for Management of Diabetes

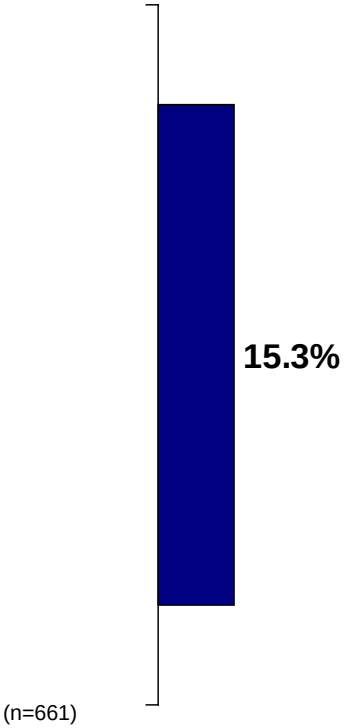


Q11.1: During the last 12 months, where did you get information about taking care of your [INSERT DISEASE]?

Almost one in seven (15.3%) area adults have been diagnosed with asthma in their lifetime. This rate is highest for adults age 18-24 and lowest for those aged 75 or older. It is also higher for Non-White adults, and higher for those living below the poverty level than those living above it.

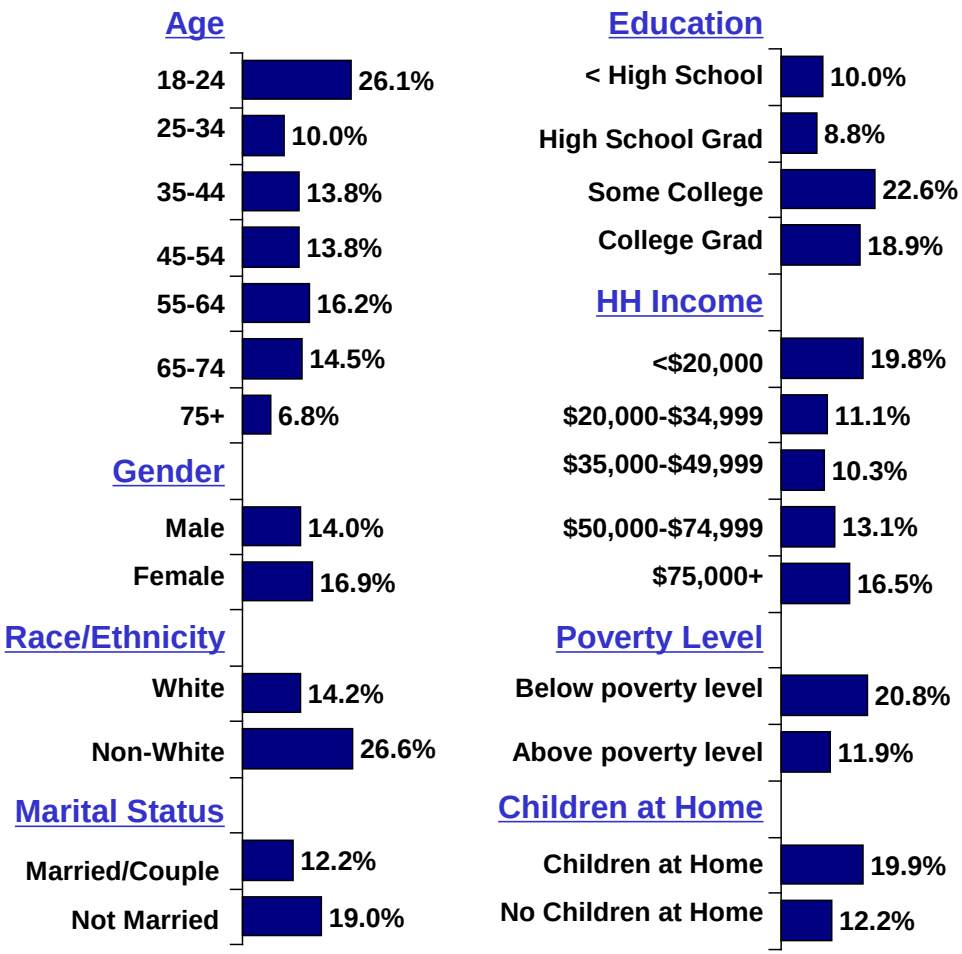
Asthma Among Adults

Lifetime Asthma Prevalence* (Total Sample)



*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.

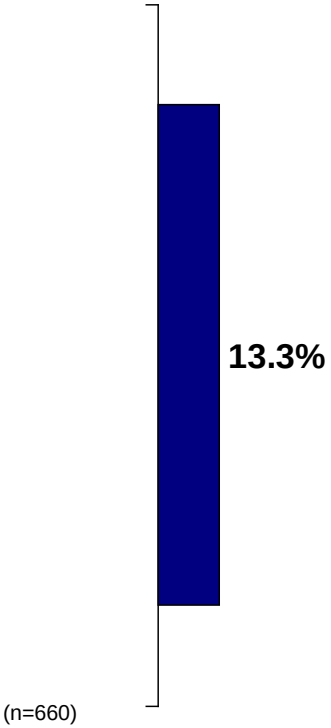
Lifetime Asthma by Demographics



More than one in ten (13.3%) adults in the SHUKH area currently have asthma. The rate is highest for those from the following groups: age 18-24, unmarried, income below $20K, and living below the poverty line.

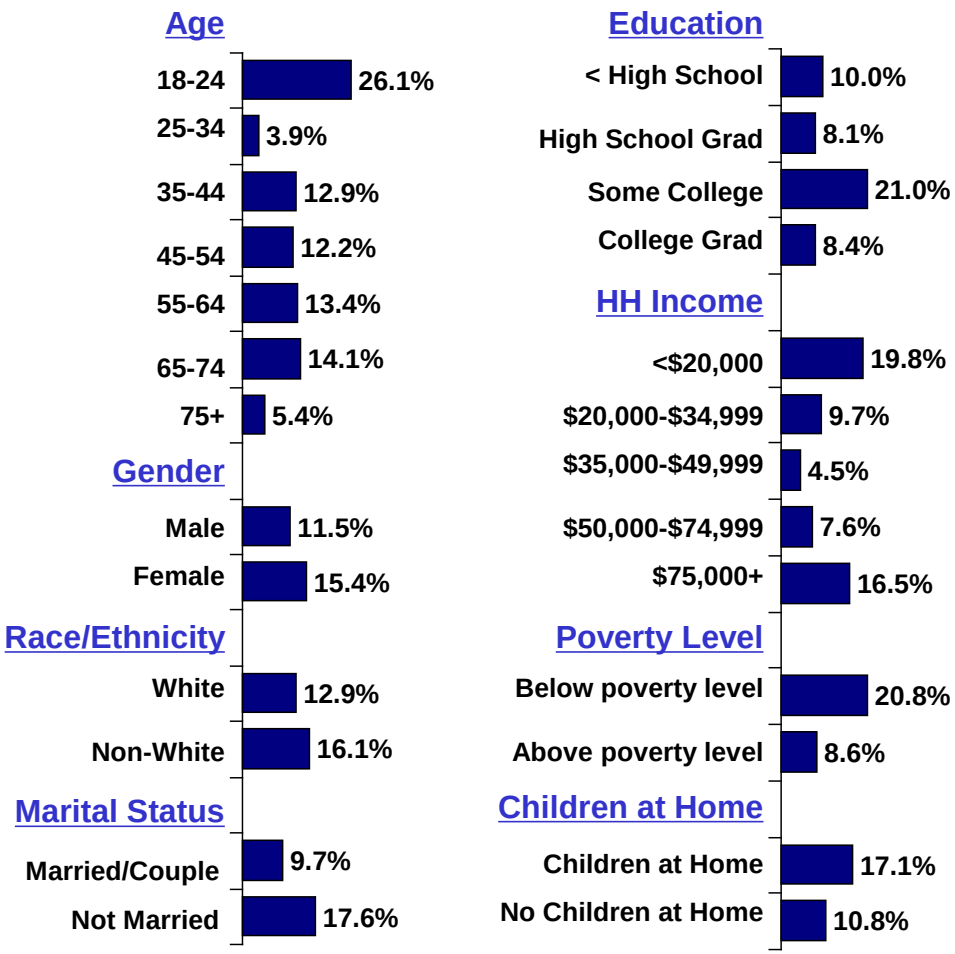
Asthma Among Adults (Cont'd.)

Current Asthma Prevalence* (Total Sample)



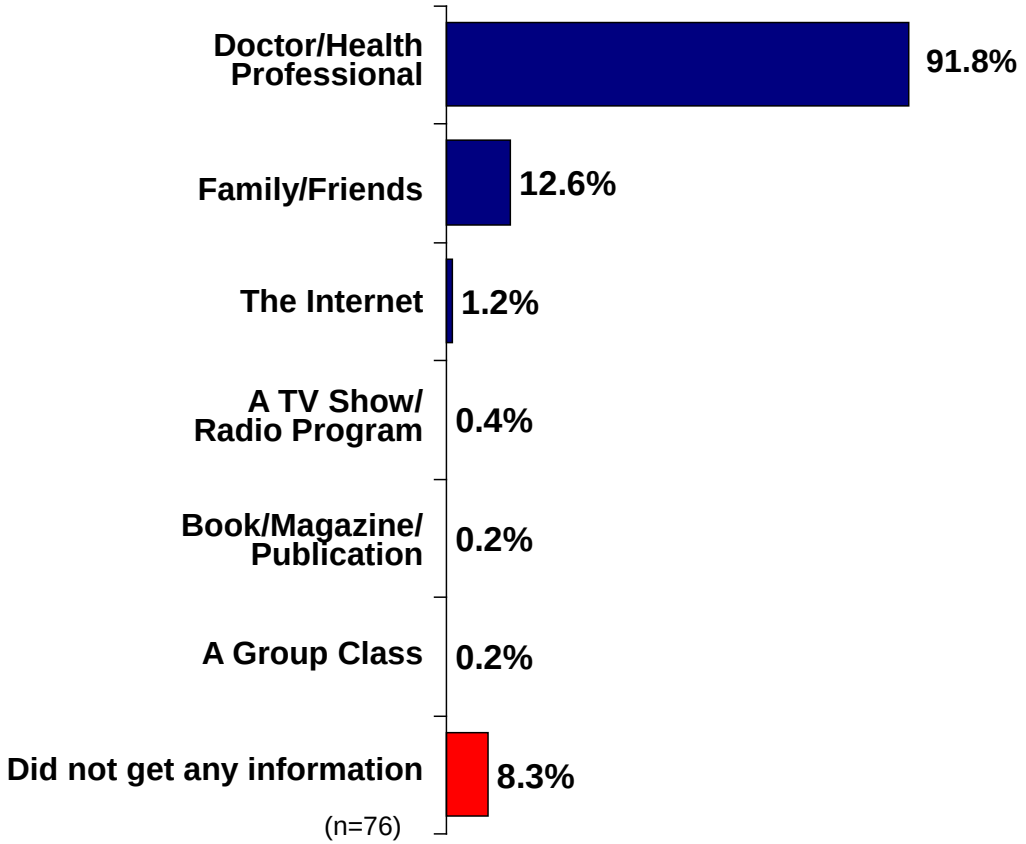
*Among all adults, the proportion who reported that they still had asthma.

Current Asthma by Demographics



More than nine in ten (91.7%) adults who have asthma have received information in the past 12 months on how to care for the condition. The greatest information source is the physician or health care professional. Additionally, more than one in ten receive information from family and friends.

Information Sources for Management of Asthma

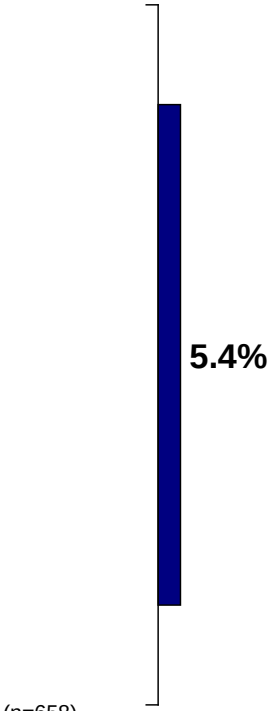


Q11.1: During the last 12 months, where did you get information about taking care of your [INSERT DISEASE]?

Very few area adults have had a heart attack, however, the condition is most common for adults from the following demographic groups: age 55+, men, no high school diploma, and income below $20K.

Cardiovascular Disease

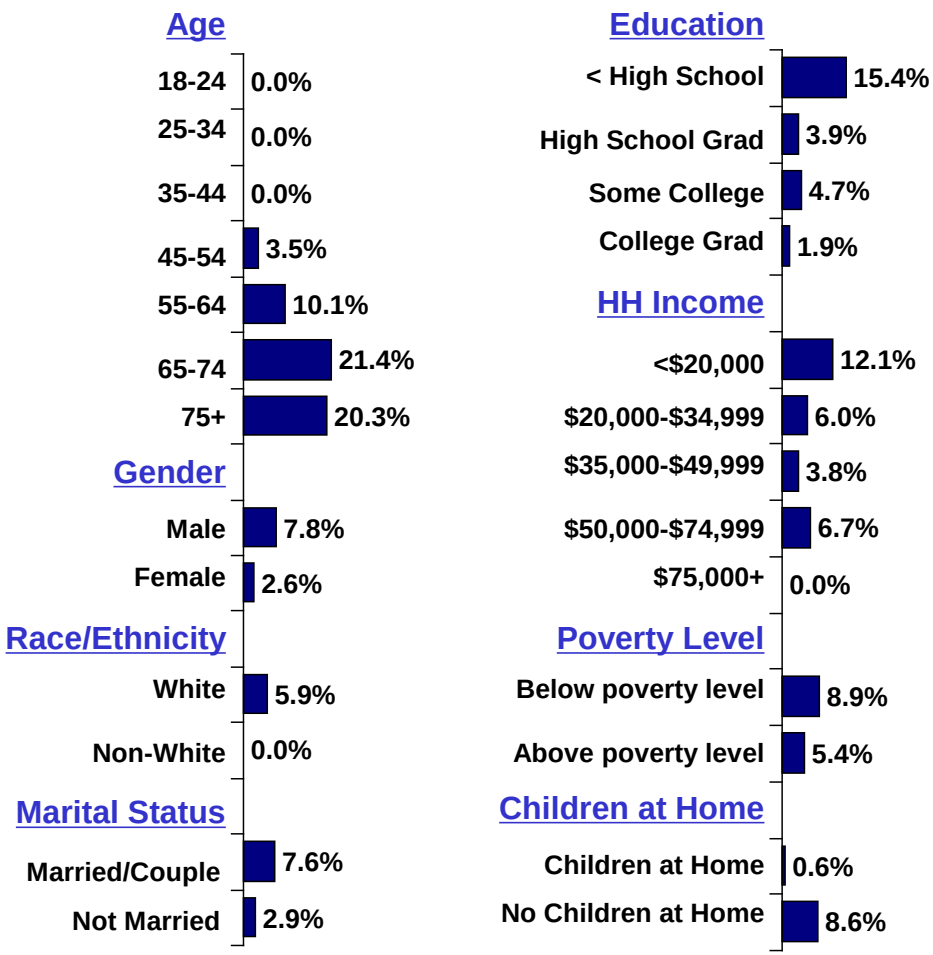
Ever Told Had Heart Attack* (Total Sample)



(n=658)

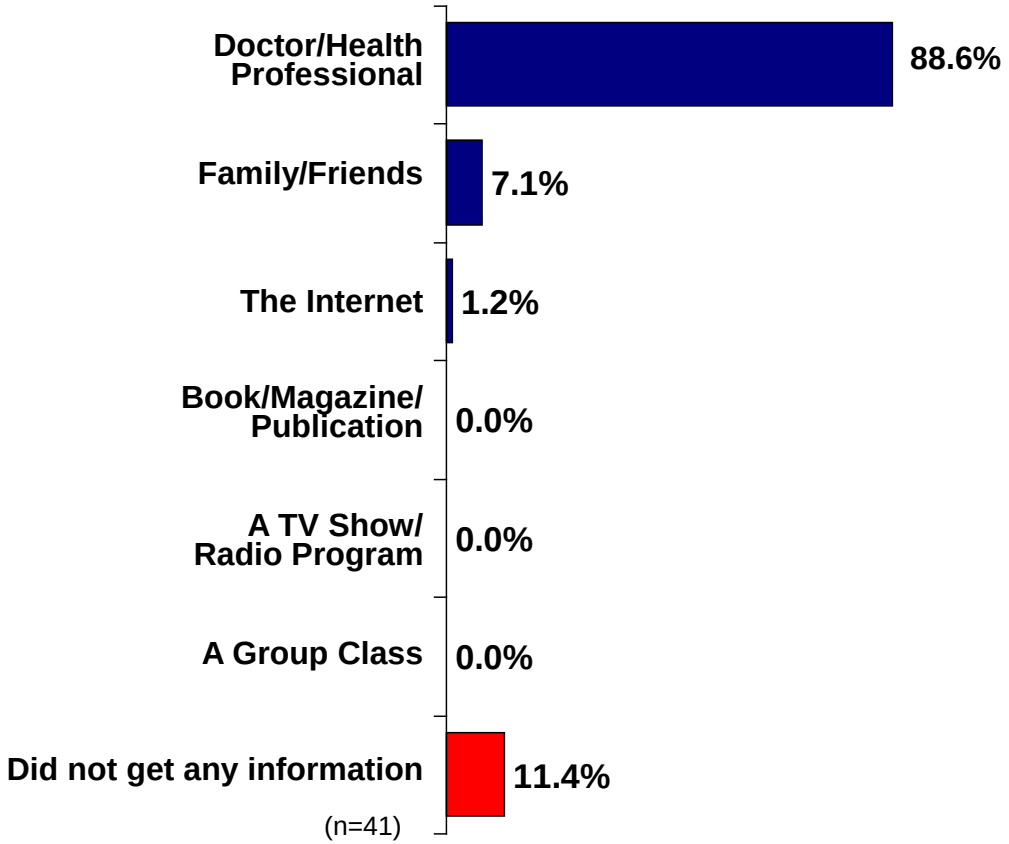
*Among all adults, the proportion who had ever been told by a doctor that they had a heart attack or myocardial infarction.

Told Had Heart Attack by Demographics



Almost nine in ten (88.6%) area adults who have had a heart attack have received information in the past 12 months on how to care for the condition. The greatest information source is the physician or health care professional. Other sources family and friends, and the Internet.

Information Sources for Management of Heart Attack/ Cardiovascular Disease

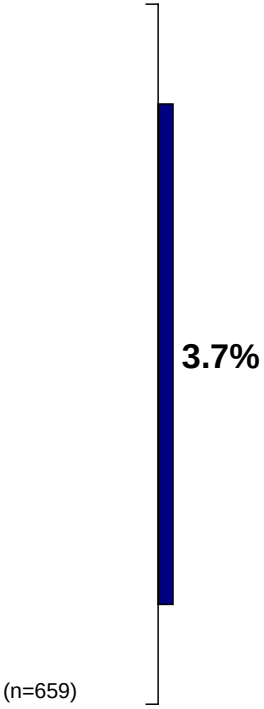


Q11.1: During the last 12 months, where did you get information about taking care of your [INSERT DISEASE]?

Very few area adults have ever been told they have angina or coronary heart disease. The rate is higher for adults aged 55+, those living in households with incomes less than $20K, and those living below the poverty level.

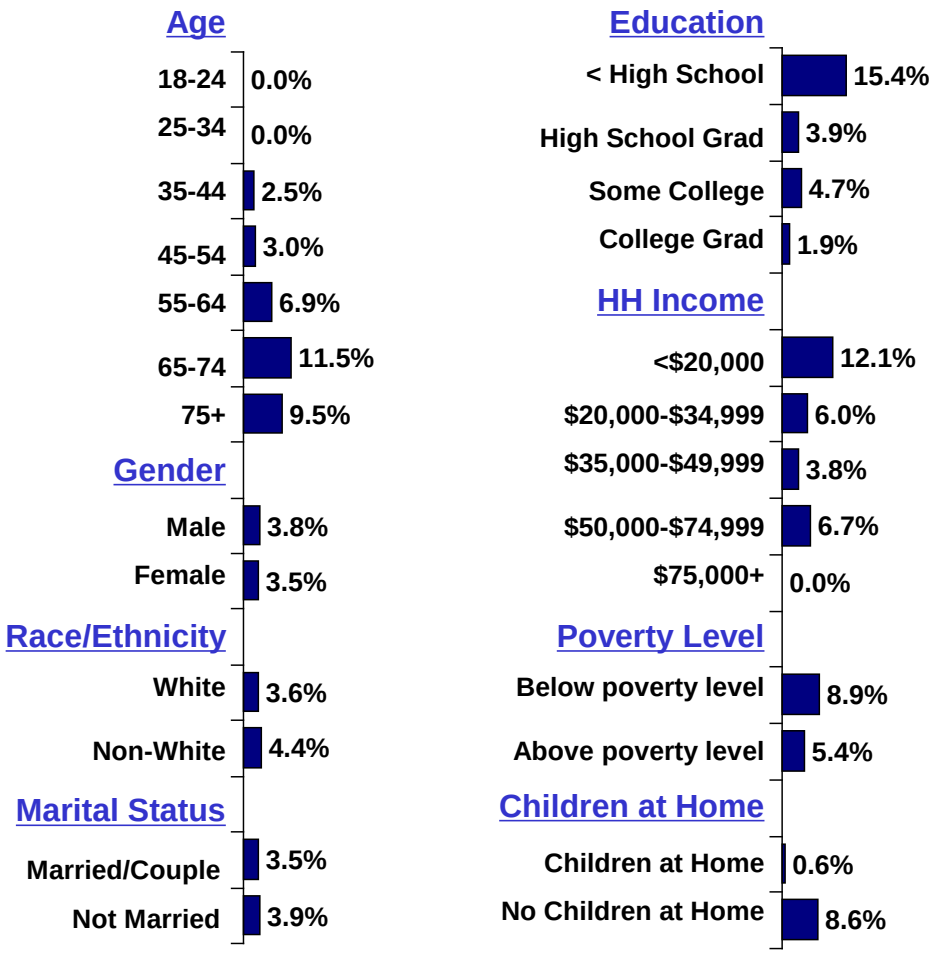
Cardiovascular Disease (Cont'd.)

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



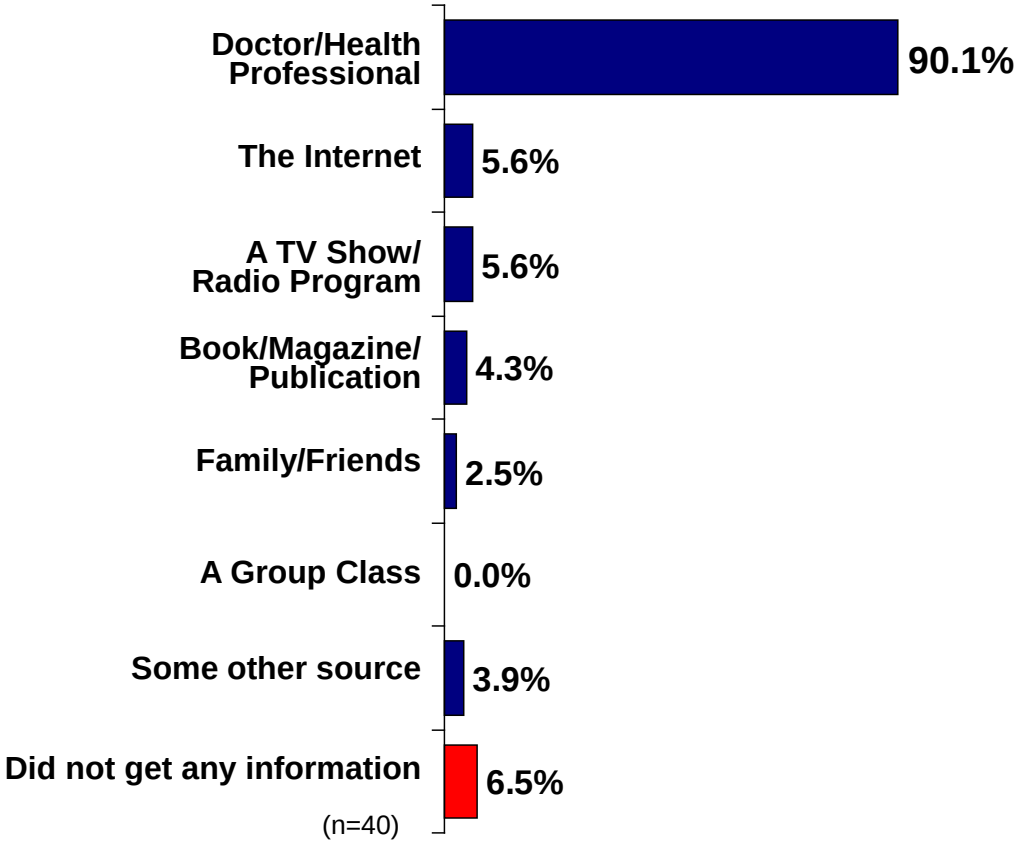
*Among all adults, the proportion who had ever been told by a doctor that they had angina or coronary heart disease.

Told Have Angina/Coronary Heart Disease by Demographics



Almost all (93.5%) SHUKH area adults who have angina or coronary heart disease have received information in the past 12 months on how to care for these conditions. The greatest information source is the physician or health care professional. Other sources include the Internet, television, books/publications, and family/friends.

Information Sources for Management of Angina

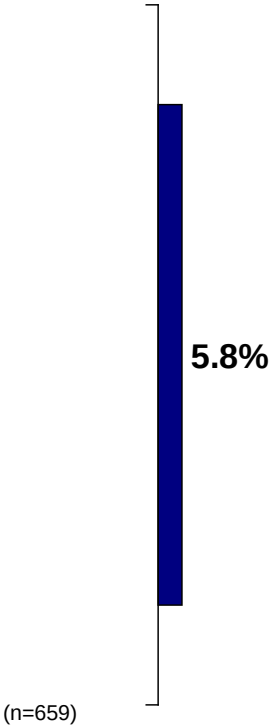


Q11.1: During the last 12 months, where did you get information about taking care of your [INSERT DISEASE]?

Roughly one in twenty area adults have had a stroke. The highest prevalence of stroke can be found in the highest age, lowest education, and lowest income groups.

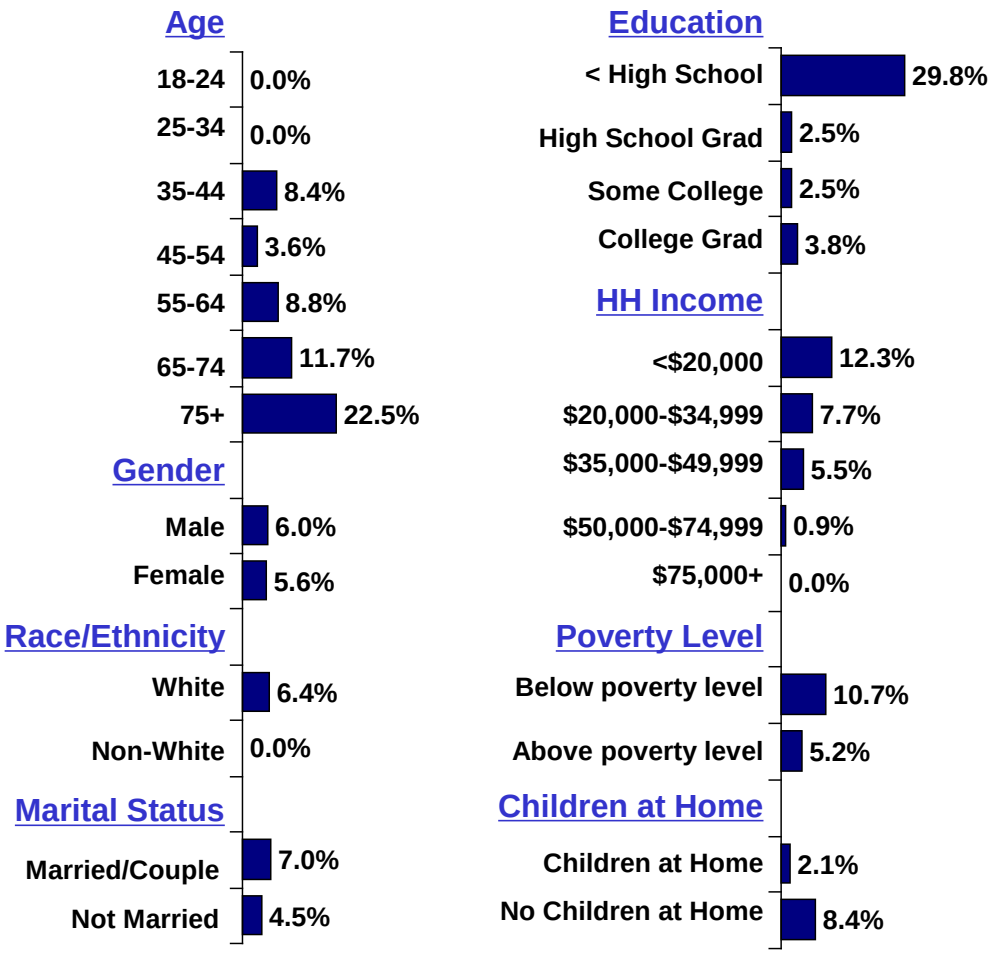
Cardiovascular Disease (Cont'd.)

Ever Told Had a Stroke* (Total Sample)



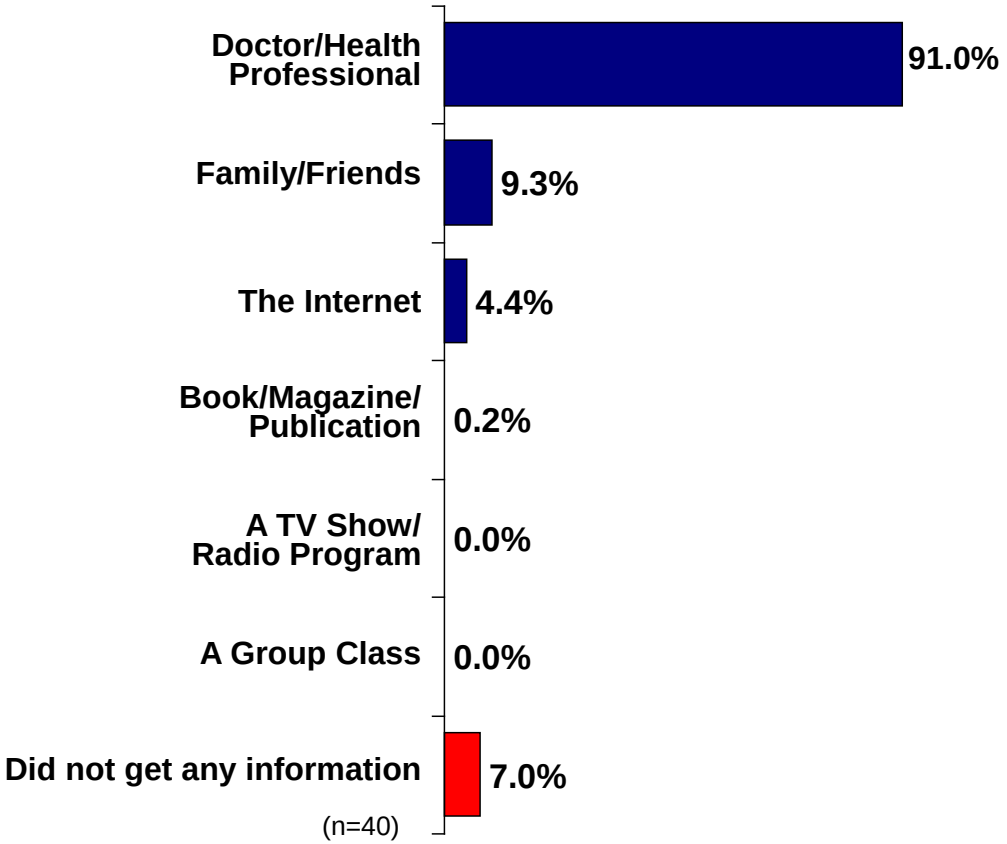
*Among all adults, the proportion who had ever been told by a doctor that they had a stroke.

Told Had Stroke by Demographics



More than nine in ten (93.0%) area adults who have had a stroke have received information in the past 12 months on how to care for the condition and the vast majority received their information from health care professionals. Other information sources include family and friends, and the Internet.

Information Sources for Management of Stroke

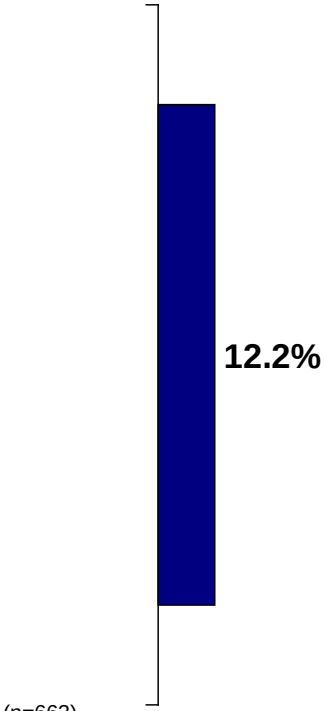


Q11.1: During the last 12 months, where did you get information about taking care of your [INSERT DISEASE]?

More than one in ten adults have had some form of cardiovascular disease (heart attack, angina, stroke). Having some form of cardiovascular disease is directly related to age and inversely related to income. It's also highly associated with level of education. For example, 11.8% of college graduates have experienced heart disease in some form, compared to 39.8% of those with less than a high school diploma. Men are slightly more likely than women to have some form of heart disease, and White adults are more likely than non-White adults to have cardiovascular disease.

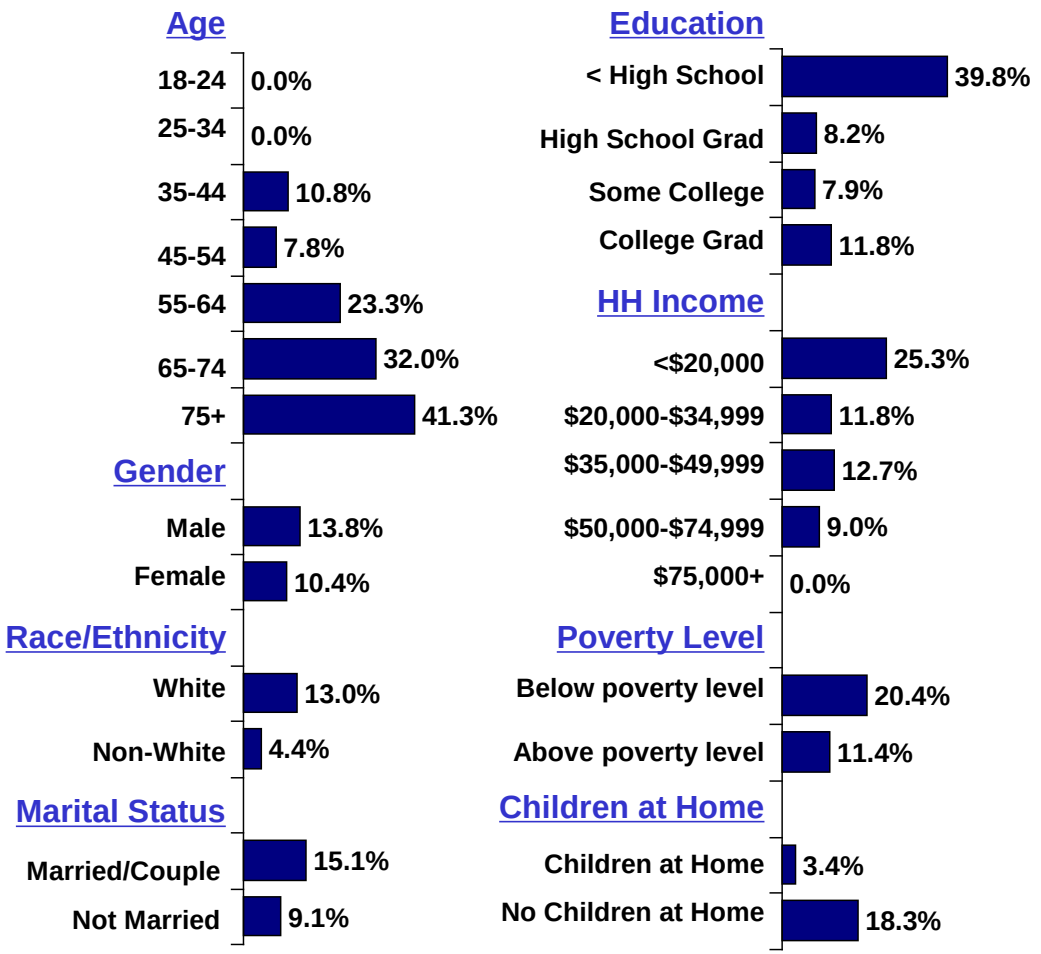
Any Cardiovascular Disease

Ever Told Had Heart Attack, Angina, or Stroke* (Total Sample)



*Among all adults, the proportion who had ever been told by a doctor that they had a heart attack, angina, or stroke.

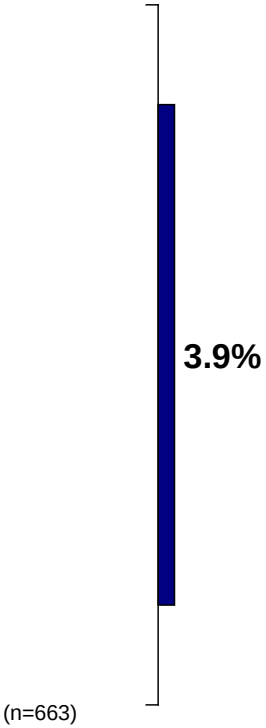
Told Had Heart Attack, Angina, or Stroke by Demographics



Few (3.9%) area adults have been told by a doctor they have skin cancer. Expectedly, this proportion rises dramatically with age; 16.5% of people aged 75 or older have been told they have skin cancer. Adults with less than a high school degree are more likely to be diagnosed with skin cancer than those with more education.

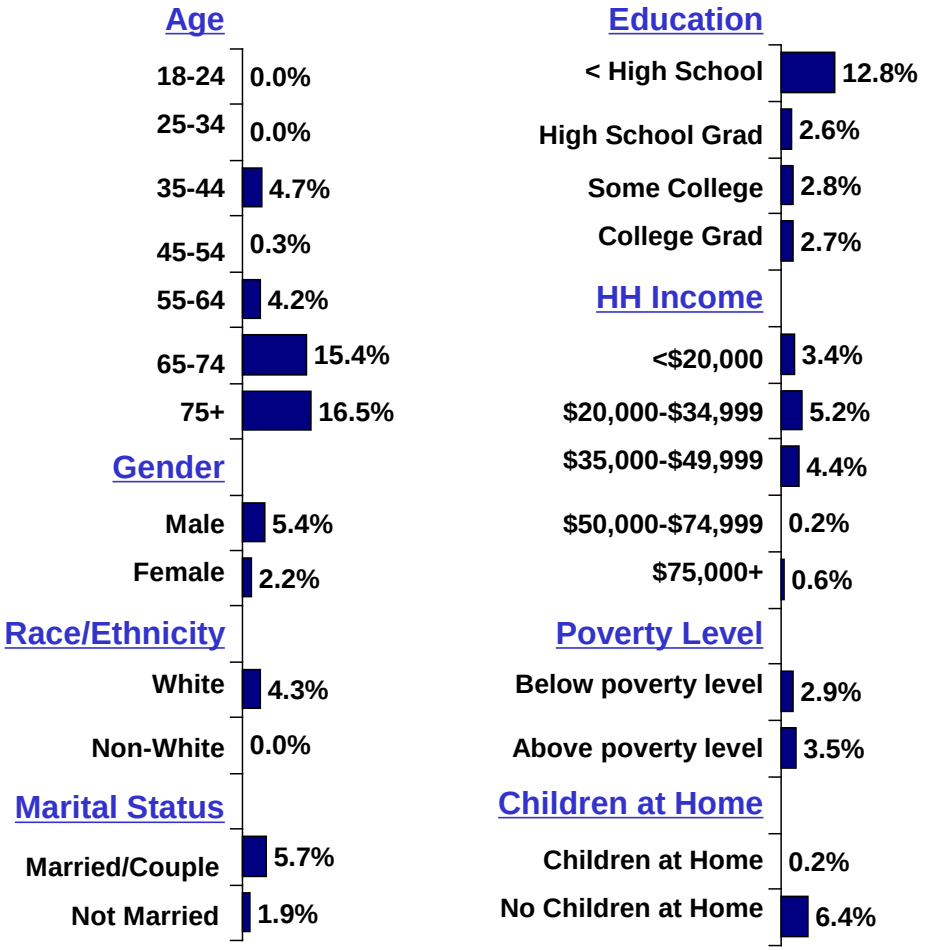
Skin Cancer

Ever Told Have Skin Cancer* (Total Sample)



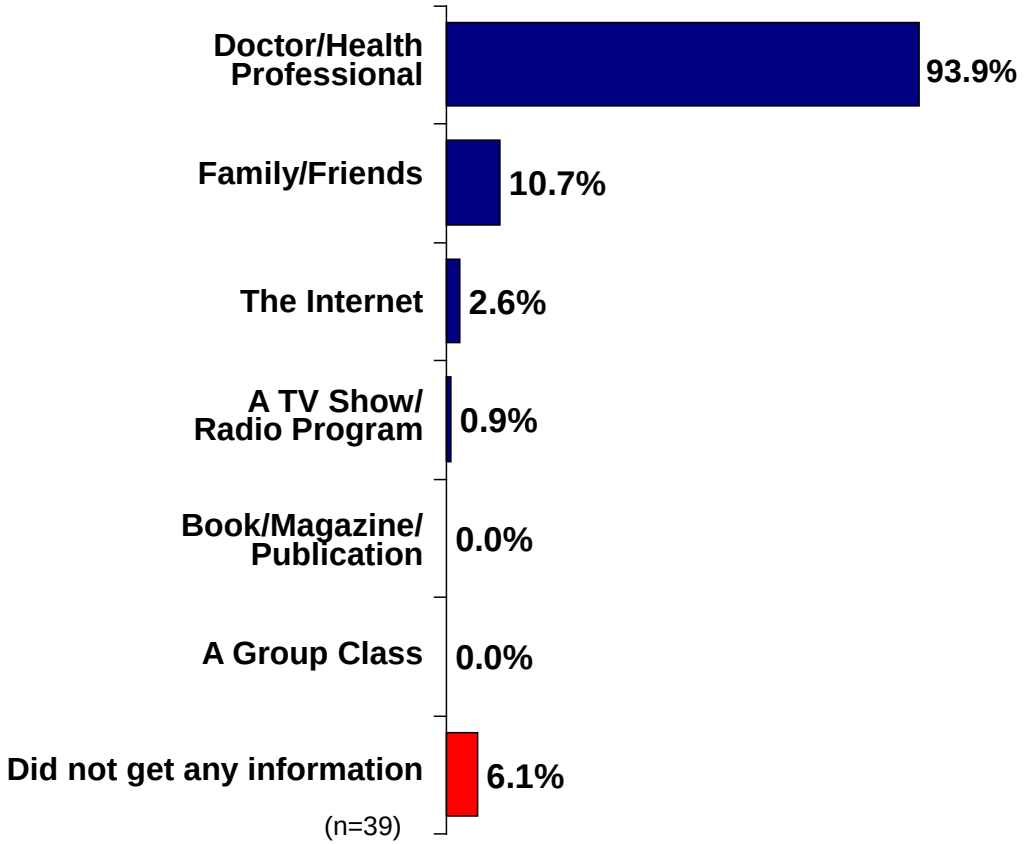
*Among all adults, the proportion who reported that they were ever told by a doctor that they have skin cancer.

Told Have Skin Cancer by Demographics



More than nine in ten (93.9%) area adults who have skin cancer have received information in the past 12 months on how to care for the condition and get the information primarily from physicians and health care professionals. Additionally, one in ten received information from family and friends.

Information Sources for Management of Skin Cancer

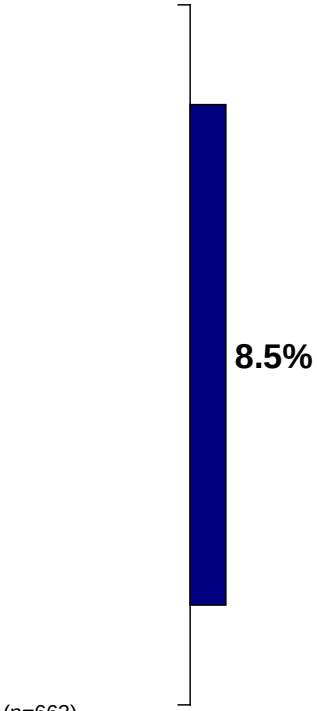


Q11.1: During the last 12 months, where did you get information about taking care of your [INSERT DISEASE]?

Fewer than one in ten (8.5%) adults have been told by a doctor they have non-skin cancer. This proportion also rises dramatically with age; 25.7% of residents aged 75 or older have been diagnosed with some form of non-skin cancer.

Cancer (Other Than Skin)

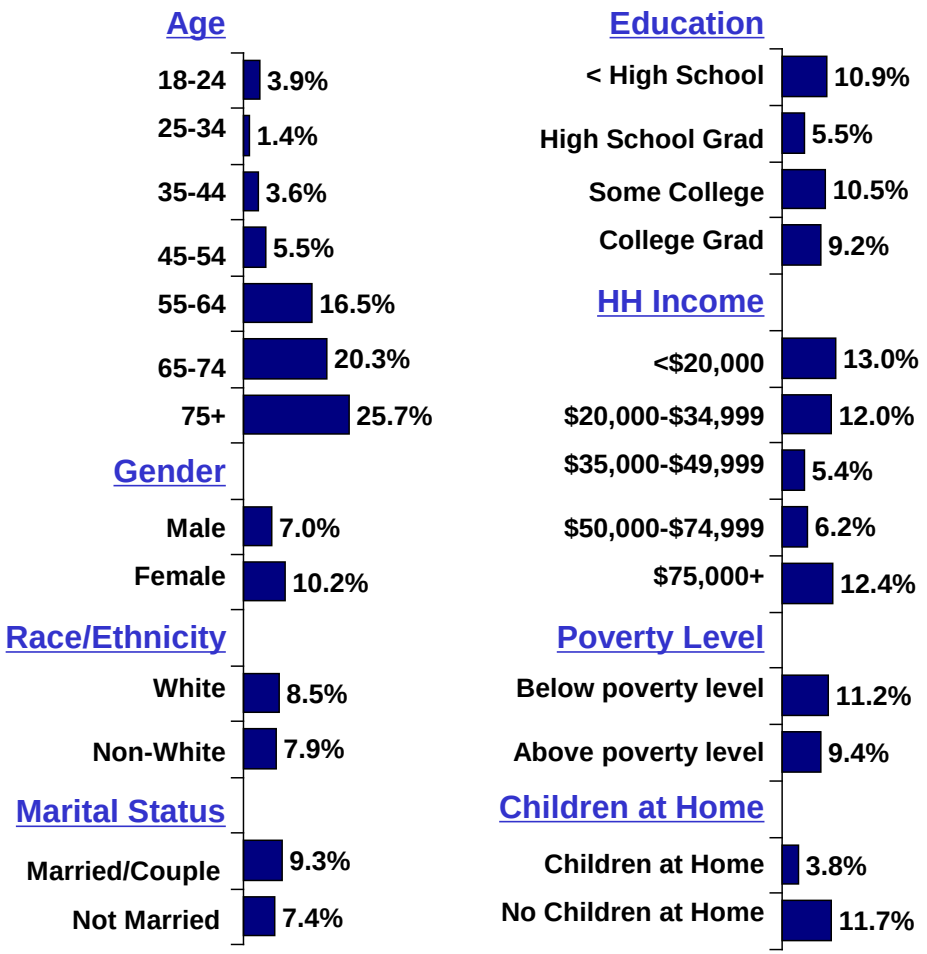
Ever Told Have Cancer (Other Than Skin)* (Total Sample)



(n=663)

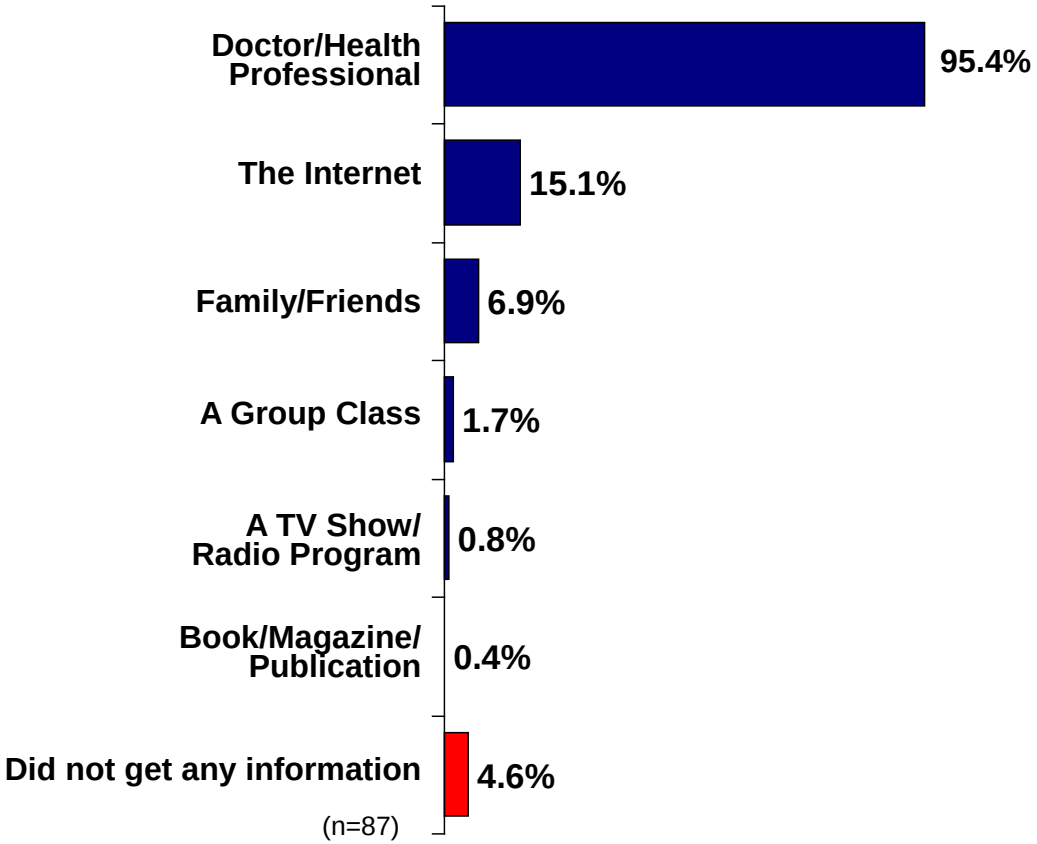
*Among all adults, the proportion who reported that they were ever told by a doctor that they have cancer (other than skin).

Told Have Cancer by Demographics



Almost all (95.4%) adults who have cancer (other than skin) have received information in the past 12 months on how to care for the condition. Physicians and health care professionals top the list of sources, however, 15.1% also use the Internet as an information source.

Information Sources for Management of Cancer (Other Than Skin)

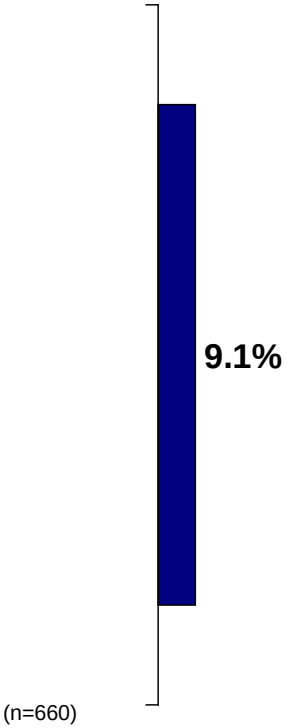


Q11.1: During the last 12 months, where did you get information about taking care of your [INSERT DISEASE]?

Almost one in ten (9.1%) area adults have been told they have chronic obstructive pulmonary disease (COPD). The disease is more common among residents who are older (55+), have less education, and who have financial limitations.

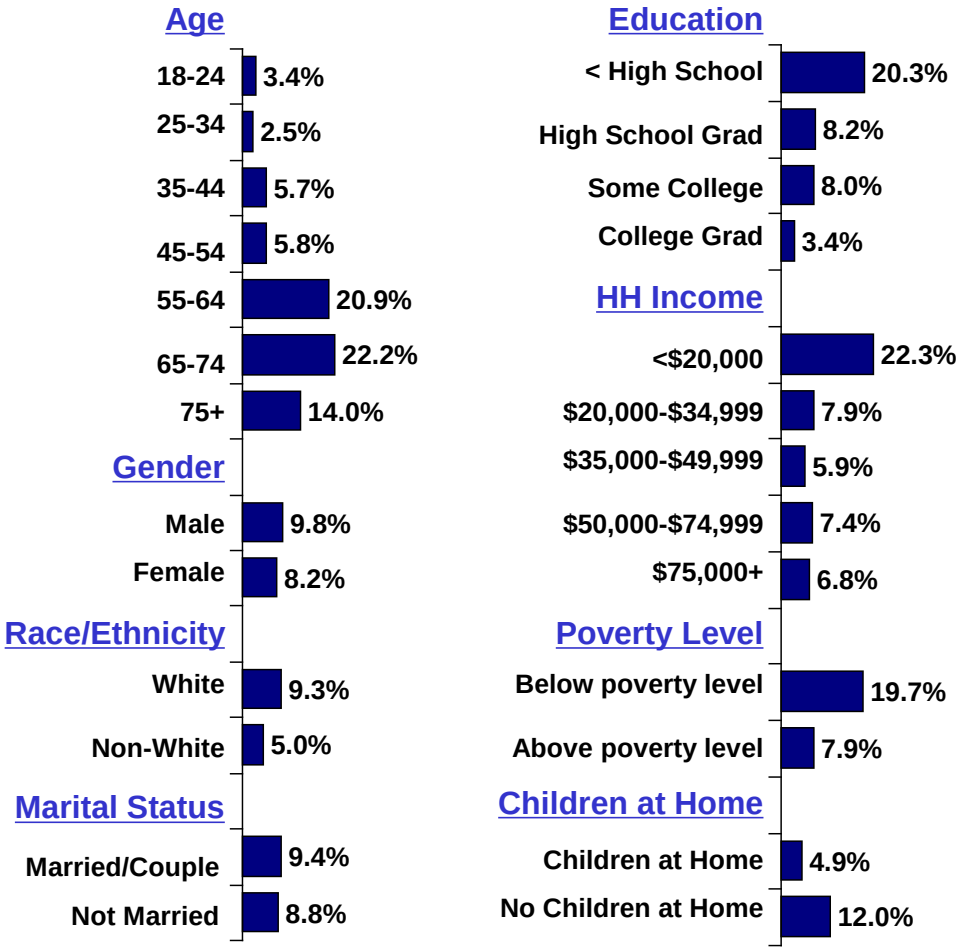
COPD

Ever Told Have COPD* (Total Sample)



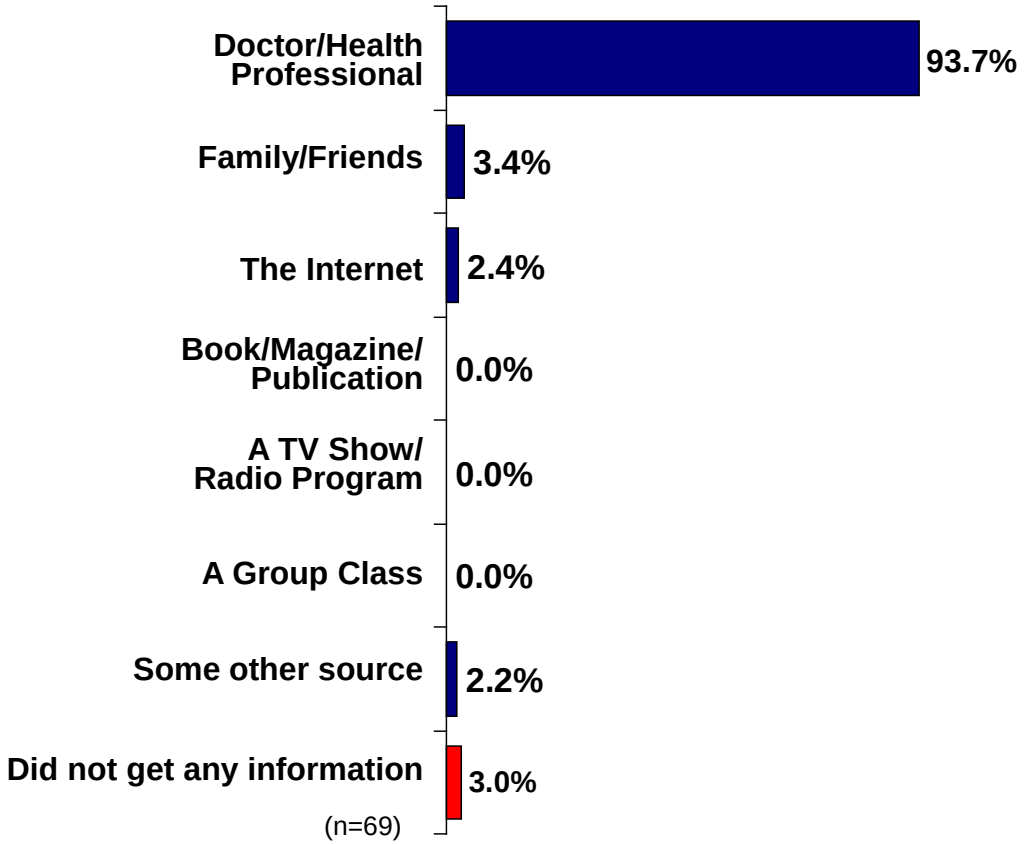
*Among all adults, the proportion who reported that they were ever told by a doctor that they have chronic obstructive pulmonary disease (COPD), emphysema, or chronic bronchitis.

Told Have COPD by Demographics



Almost all (97.0%) adults who have COPD have received information in the past 12 months on how to care for the condition. The greatest information source for management of COPD is health care professionals.

Information Sources for Management of COPD

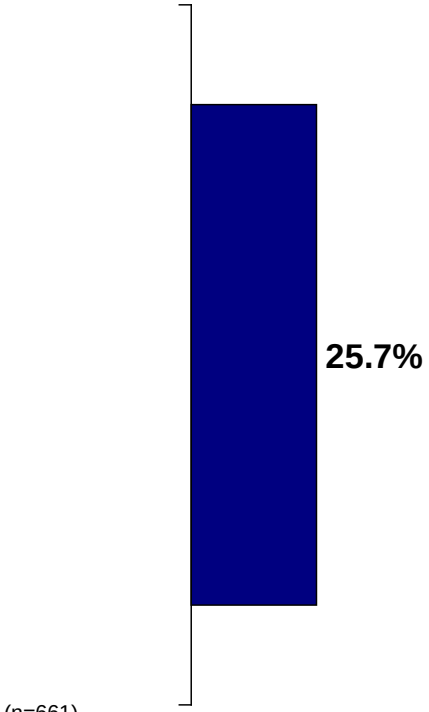


Q11.1: During the last 12 months, where did you get information about taking care of your [INSERT DISEASE]?

One-fourth (25.7%) of area adults have arthritis. This rate, not surprisingly, rises dramatically with age. Women are more likely to have arthritis than men, and non-Whites are more likely to have it than Whites. Having arthritis is more prevalent among adults with the least education and in the lowest income groups.

Arthritis

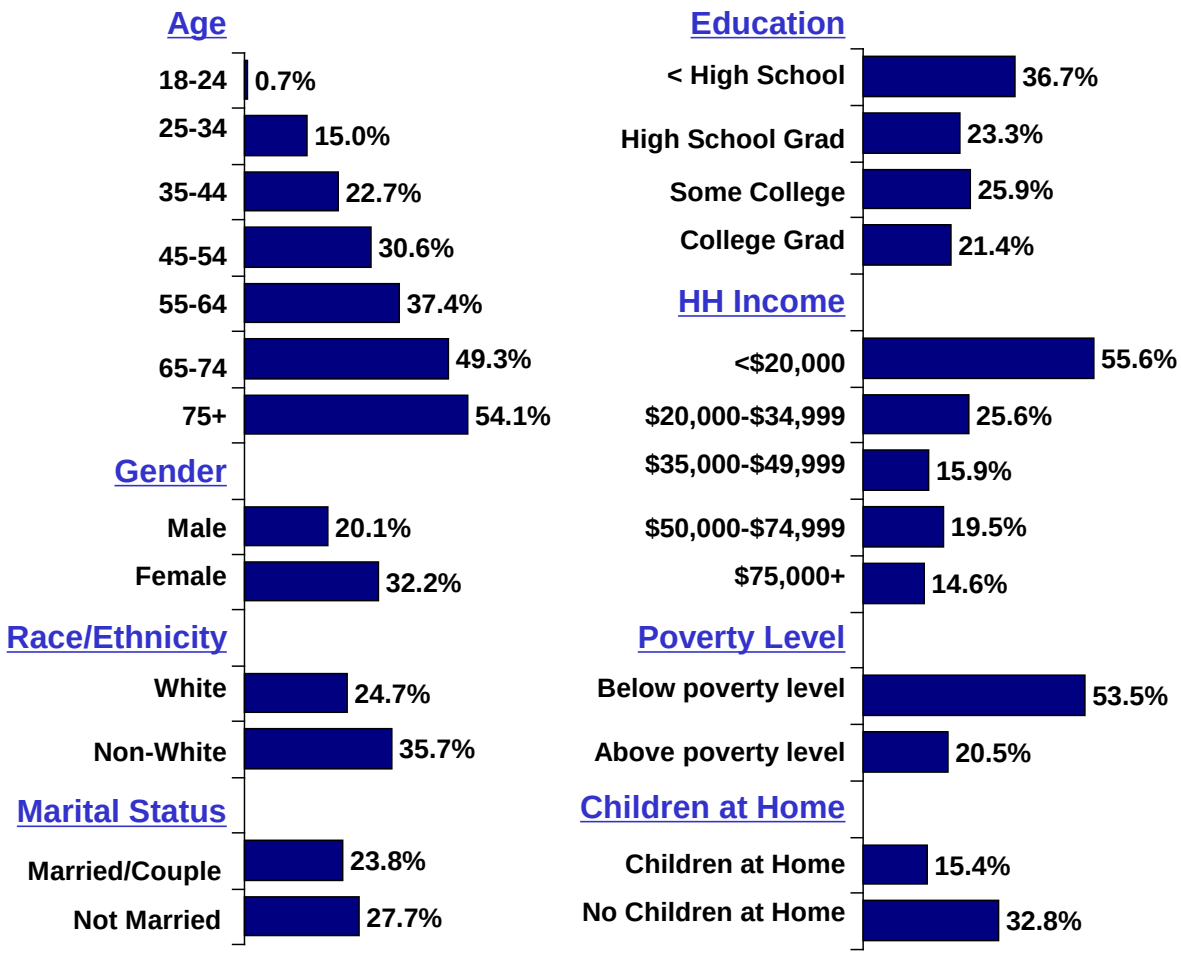
Ever Told Have Arthritis* (Total Sample)



(n=661)

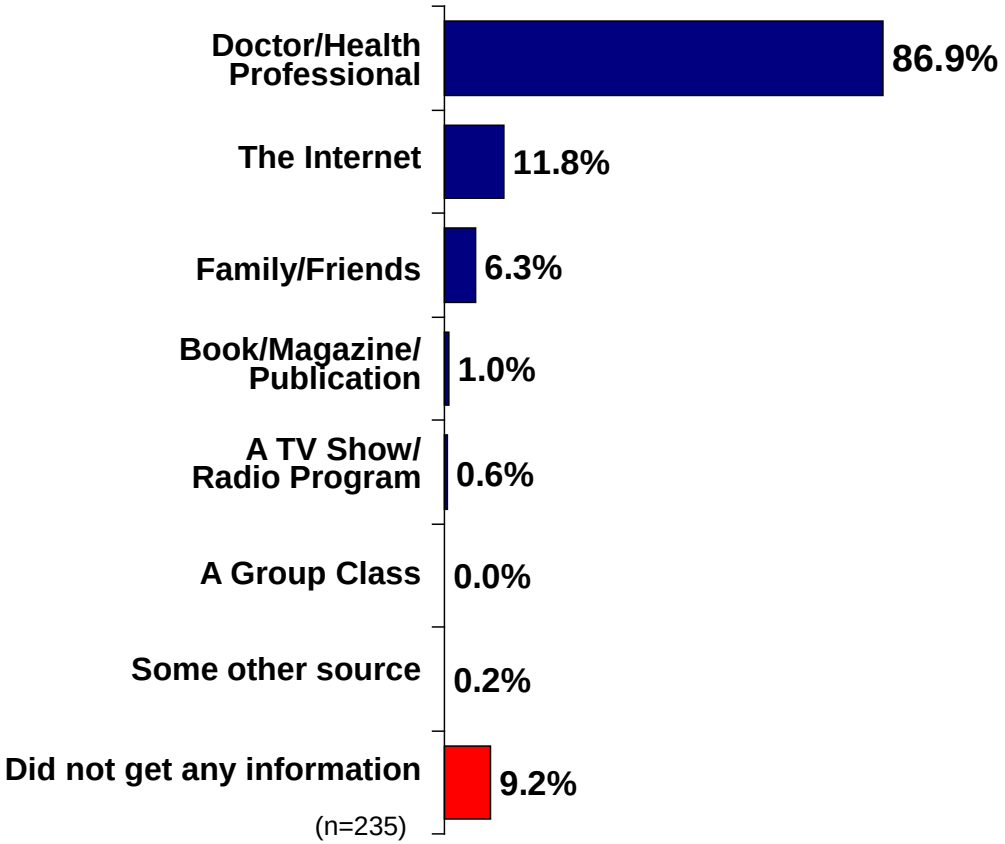
*Among all adults, the proportion who reported ever being told by a health care professional that they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.

Told Have Arthritis by Demographics



More than nine in ten (91.8%) adults who have arthritis have received information in the past 12 months on how to care for the condition. In addition to physicians and health care professionals, others sources include the Internet and family/friends.

Information Sources for Management of Arthritis



Q11.1: During the last 12 months, where did you get information about taking care of your [INSERT DISEASE]?

Comparison of BRFS Measures Between Spectrum Health United Kelsey Hospital Service Area, Michigan, and the United States

Health Status Indicators

	SHUKH Service Area	Michigan	U.S.
General Health Fair/Poor	17.0%	17.7%	16.9% (2013)
Poor Physical Health (14+ days)	8.8%	12.7%	--
Poor Mental Health (14+ days)	6.1%	12.0%	--
Activity Limitation (14+ days)	8.7%	8.8%	--
Dissatisfied/Very Dissatisfied with Life	5.2%	6.1% (2010)	--
Rarely/Never Receive Social and Emotional Support	7.2%	6.5% (2010)	--
Obese	26.2%	31.5%	28.9% (2013)
Overweight	37.2%	34.7%	35.4% (2013)
Healthy Weight	34.6%	32.5%	33.4% (2013)
No Health Care Coverage (18-64)	11.9%	17.4%	20.0% (2013)
No Personal Health Care Provider	15.7%	17.0%	22.9% (2013)
No Health Care Access Due to Cost	11.9%	15.5%	15.3% (2013)

= best measure among the comparable groups

= worst measure among the comparable groups

Sources: Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Selected Tables, Michigan BRFS, 2013
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, 2013

Comparison of BRFS Measures Between Spectrum Health United Kelsey Hospital Service Area, Michigan, and the United States (Cont'd.)

Risk Behavior Indicators

	SHUKH Service Area	Michigan	U.S.
No Leisure Time Physical Activity	52.7%	24.4%	25.5% (2013)
Inadequate Fruit and Vegetable Consumption (<5 Times Per Day)	82.8%	84.7%	76.6% (2009)
Consume Fruits <1 Time Per Day	28.0%	37.5%	39.2%
Consume Vegetables <1 Time Per Day	19.3%	23.9%	22.9%
Current Cigarette Smoking	29.2%	21.4%	19.0% (2013)
Former Cigarette Smoking	23.3%	27.0%	25.2% (2013)
Binge Drinking	16.9%	18.9%	16.8% (2013)
Heavy Drinking	4.6%	6.2%	6.2% (2013)
Ever Told High Blood Pressure	29.3%	34.6%	31.4% (2013)
Cholesterol Ever Checked	72.5%	83.2%	80.1% (2013
Ever Told High Cholesterol	28.2%	40.6%	38.4% (2013)

= best measure among the comparable groups

= worst measure among the comparable groups

Sources: Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Selected Tables, Michigan BRFS, 2013
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, 2013

Comparison of BRFS Measures Between Spectrum Health United Kelsey Hospital Service Area, Michigan, and the United States (Cont'd.)

Clinical Preventive Practices

	SHUKH Service Area	Michigan	U.S.
No Routine Checkup in Past Year	17.6%	30.1%	31.8% (2013)
Ever Had Mammogram (Females, 40+ only)	87.8%	94.5% (2012)	--
Had Mammogram in Past Year (Females, 40+ only)	62.1%	59.2% (2012)	--
Had Mammogram in Past 2 Years (Females, 40+ only)	74.7%	76.6% (2012)	75.6% (2010)
Ever Had Pap Test	94.1%	92.1% (2012)	--
Had Appropriately Timed Pap Test	72.8%	79.4% (2012)	--
Ever Had PSA Test (Males, 50+ only)	64.6%	72.2% (2012)	--
Ever Had Sigmoidoscopy or Colonoscopy (50+ only)	70.1%	74.0%	--
Had Sigmoidoscopy /Colonoscopy in Past 5 Years (50+)	53.7%	56.4%	52.8% (2010)
No Dental Visit in Past Year	29.7%	32.0% (2012)	30.0% (2008)
No Teeth Cleaning in Past Year	34.5%	29.2% (2010)	28.7% (2008)
Had Flu Vaccine in Past Year (65+ only)	65.0%	56.8%	62.6% (2013)
Ever Had Pneumonia Vaccine (65+ only)	73.2%	68.6%	69.4% (2013)

= best measure among the comparable groups

= worst measure among the comparable groups

Sources: Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Selected Tables, Michigan BRFS, 2013
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, 2013

Comparison of BRFS Measures Between Spectrum Health United Kelsey Hospital Service Area, Michigan, and the United States (Cont'd.)

Chronic Conditions

	SHUKH Service Area	Michigan	U.S.
Lifetime Asthma Prevalence	15.3%	15.2%	14.1% (2013)
Current Asthma Prevalence	13.3%	10.9%	9.0% (2013)
Ever Told Had Arthritis	25.7%	31.3%	25.1% (2013)
Ever Told Had Heart Attack	5.4%	5.2%	4.4% (2013)
Ever Told Had Angina/Coronary Heart Disease	3.7%	5.2%	4.1% (2013
Ever Told Had Stroke	5.8%	3.6%	2.8% (2013)
Ever Told Had Diabetes	10.0%	10.4%	9.8% (2013)
COPD	9.1%	8.8%	6.3% (2013)
Skin Cancer	3.9%	5.4%	6.0 (2013)
Other Cancer	8.5%	7.7%	6.7 (2013)

= best measure among the comparable groups

= worst measure among the comparable groups

Sources: Preliminary Estimates for Risk Factor and Health Indicators, State of Michigan, Selected Tables, Michigan BRFS, 2013
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, 2013

Key Stakeholder Interviews

Health Care Issues and Accessibility

Rates of **substance abuse** and **mental/behavioral health** issues are critical challenges facing Montcalm County, as are **access to care** and **chronic disease** rates.

Most Pressing Health Issues and How Issues are Being Addressed

- Top reported health issues are: substance abuse, poor mental/behavioral health and access to related care, health care access in general, and rates of chronic disease and obesity.
  - Access encompasses transportation, physician availability, and affordability of care.
- Less frequently mentioned issues are:
  - Gaps in health awareness/education
  - Unassigned patients (no medical home)
  - Injuries and car crash deaths
  - Violence and suicide
- Although Stakeholders cite efforts underway aimed at addressing key issues, several stress the enormity of the challenge.
  - Efforts to address mental health care access include:
    - Working with the county mental health agency to integrate behavioral health into primary care clinics
    - Investigating options for telepsychiatry
    - Disseminating information to all stakeholders regarding available resources
    - Improving processes to maximize effectiveness of limited resources
  - Efforts aimed at addressing other critical health issues include recruiting more primary care physicians/physician extenders and conducting screenings to promote early treatment of cancer.

Q1. What do you feel are the most pressing health needs or issues in your community? Q1a. Is there anything currently being done to address these issues? Q1b. (If yes) How are these issues being addressed? Q1c. (If no) In your opinion, why aren't these issues being addressed? Q1d. (If no) In what ways have these issues been addressed in the past, if any?

Verbatim Comments on Most Pressing Health Issues and How Issues are Being Addressed

"I think the things that were identified in the last [community health needs assessment] still ring true: mental health, substance abuse."

"We speculate thirty percent of our primary care visits are due to behavioral health issues. By that I mean loss of job, headaches and chronic illness because of stress, and so forth. We had an inpatient psychiatric facility here in the county. A year ago it closed. With that gone and with mental health being in the situation it is as far as the lack of beds, that's just a disaster in this county, just a gaping hole. On that front, we're just trying to work as much as we can with the county mental health agency and cobble together ways that we can put behavioral health into our primary care clinics."

"Access to primary care – the access meaning transportation, available providers, and low-cost or Medicaid."

"Unassigned patients. I don't know if it's the chicken or the egg, whether there is the availability of providers or just simply folks that don't see the tangible value and benefit of regular routine care."

"Overall cost of health care, cost of pharmaceuticals."

"We're making headway in all these other areas, but chronic disease problems are basically remaining stagnant and leading causes of death."

"I feel very frustrated that we're doing less than we used to. We're just not bending the curve."

Q1. What do you feel are the most pressing health needs or issues in your community? Q1a. Is there anything currently being done to address these issues? Q1b. (If yes) How are these issues being addressed? Q1c. (If no) In your opinion, why aren't these issues being addressed? Q1d. (If no) In what ways have these issues been addressed in the past, if any?

Important outcome measures include rates of mortality, morbidity, and obesity.

Important Health Outcomes

- Key Stakeholders identified the following *as important measures for health-related outcomes*:
  - Mortality and morbidity measures
  - Obesity rates; weight management; level of awareness about obesity
  - Risk behaviors; smoking rates
  - Length of time needed to obtain appointment, especially for uninsured/Medicaid patients
  - Level of awareness among residents and providers regarding the services that are available within the county
  - Suicide rates

Q2. What are the outcomes that should be evaluated?

Access to health care is limited by a lack of public transportation, a shortage of providers, and the high cost of seeking care among the insured due to high deductibles and co-pays.

The State of Health Care Access

- Key Stakeholders agree that a lack of public transportation and a shortage of local providers limit access to care for residents.
  - Several Stakeholders report a shortage of primary care providers, for both insured and uninsured residents, and some cite a shortage of specialists and subspecialists, such as pediatric psychiatric care providers.
- In addition, high deductibles and co-pays deter some insured residents from seeking needed care.
- Key Stakeholders report a lack of insurance coverage for ancillary services such as prescriptions and dental care.
  - Several mention efforts currently underway aimed at increasing access to dental services.
- Several Stakeholders voice concerns that some low-income residents did not sign up for the Healthy Michigan Plan and/or don't seek needed care, due to lack of awareness or mistrust of the health care system.
- Hospital access is noted as a strength, due to the county's four hospitals.

Q3. Describe the current state of health care access in your community. Q3a. Is there a wide variety/choice of primary health care providers? Q3b. (If yes) Is this variety/choice available to both insured and uninsured people? Q3c. (If no) In your opinion, why is there a lack of primary health care providers? Q3d. Is there a lack of insurance coverage for ancillary services, such as prescriptions or dental care? Q3e. Is there an inability to afford out-of-pocket expenses, such as co-pays and deductibles?

Verbatim Comments on the State of Health Care Access

"Transportation is a significant barrier, especially outside of the population centers."

"[Primary care providers] are difficult to recruit. If there is somebody who's looking to be independent, I don't know that they would choose a smaller community."

"It's hard to describe because it's changing so rapidly, especially with Healthy Michigan. We can look at numbers about how many people have signed up, but we are struggling to figure out if they're actually getting into care, are they having primary care visits, are they compliant with what happens from those visits."

"If you're middle income and you're on the Marketplace, you may not be able to get [prescriptions or dental care]. If you're upper income, you can afford a Cadillac plan. If you're on Healthy Michigan, you've got those things. It's that group in the middle. The co-pays and deductibles are just huge."

"There's also the whole socioeconomic chasm. There's just a big disconnect, a big void of trust between the most vulnerable, most low-income people and the institutions that are supposed to serve them, don't speak the same language, and don't see the world in the same way."

"In the one sense there's a shortage of providers, but on the other hand, I guess Montcalm has more providers than a county like this would have any right to expect. They've got these three hospitals, and that's a blessing that needs to be capitalized on. Even though Sheridan and Carson really struggle, they do good things in the community. Sheridan just opened a dental operatory for people who need general anesthesia to have oral health surgery. Most little hospitals shouldn't be making moves like that, but they are. In that one sense I guess we are fortunate."

Q3. Describe the current state of health care access in your community. Q3a. Is there a wide variety/choice of primary health care providers? Q3b. (If yes) Is this variety/choice available to both insured and uninsured people? Q3c. (If no) In your opinion, why is there a lack of primary health care providers? Q3d. Is there a lack of insurance coverage for ancillary services, such as prescriptions or dental care? Q3e. Is there an inability to afford out-of-pocket expenses, such as co-pays and deductibles?

Existing Programs and Services

Most Key Stakeholders think existing programs and services meet the community's needs somewhat well. While a number of needed improvements are cited, Stakeholders also recognize that the community hasn't made the most of existing services.

Programs/Services Meeting Needs & Programs/Services Lacking

- Stakeholders cite the county's several hospitals as a strength.
- The need for more mental health services and a stronger connection between physical and mental health care was a common theme.
  - Telemedicine was cited as one potential way to increase access to mental health care.
- Other services or types of care identified as lacking include:
  - Health education
  - Nurses in public schools
  - Post-acute care
  - Geriatric care
  - Hospice care
  - Advanced care planning
  - Dental care
  - Wellness programs
  - Support groups
- Lack of funding was noted as a limiting factor in terms of implementing programs.
- Several Stakeholders mentioned the need to make better use of services and programs that are currently in place – through increased access (e.g., transportation; flexible hours), increased awareness among residents about available services, and stronger partnerships among existing services/providers.
- Several note that some populations (closer to cities, higher income) fare better than others (rural, lower income).

Q4. How well do existing programs and services meet the needs and demands of people in your community? Would you say they meet them exceptionally well, very well, somewhat well, not very well, or not at all well? Q4a. Why do you say (INSERT RESPONSE)? Q4b. What programs or services are lacking in the community? Q4c. In your opinion, how could any of the existing services/programs in your community be implemented better?

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

"Carson just lost their inpatient mental health, so that was a big blow to the community."

"There's still a lack of awareness of the services that are here, and the services that are here need to, in some cases, be bolstered up so that they can [provide] more access to people that have needs."

"[If everyone was aware of services], we would probably see some decreases in the types of illnesses we're dealing with: diabetes, COPD, those types of things."

"Can people get over to Spectrum to take advantage of the diabetes management program? Things like that. That's a great program but we know attendance is disappointing."

"Funding is the problem. I'm really hoping this state innovation model funding will help to pay for some of the work that needs to be done, so that community programs can really support the health care system the way they should be able to do, to deal with a lot of the issues that I just mentioned: socioeconomic issues, transportation, mental and emotional health issues, substance abuse – things that cause people to be bad patients of primary care providers. If we can address those things better, we can heal the mind and the body at the same time."

"The majority of the population is employed, has insurance, has a car, and can get to some awesome programs that are out there, but that doesn't describe the whole population. Because of sociocultural, socioeconomic reasons, a big chunk of the population would have a different experience trying to get to the care, being able to comply with what the doctor wants them to do, and those kinds of things."

Q4. How well do existing programs and services meet the needs and demands of people in your community? Would you say they meet them exceptionally well, very well, somewhat well, not very well, or not at all well? Q4a. Why do you say (INSERT RESPONSE)? Q4b. What programs or services are lacking in the community? Q4c. In your opinion, how could any of the existing services/programs in your community be implemented better?

Mental health concerns are a key focus of Stakeholder suggestions for partnerships among health care providers, public health, and community-based organizations.

Recommendations for Partnerships

- Key Stakeholders see a benefit to addressing mental health concerns through increased collaboration among health care providers, public health, and community agencies.
  - Partnerships among these groups would drive a stronger, more focused effort to improve mental health outcomes, ensuring that patients have access to the community resources needed to comply with treatment plans.

"In our county we have four hospitals. How are we partnering with primary care, with community mental health, so that we are better managing chronic mental health concerns?"

"Partnerships between public health, mental health, health care providers, to really do a better job of care coordination, and, in particular, providing the resources back in the community that people need so they're able to comply with what their doctor wants them to do – they're able to get and they remember to take their medications, they actually can eat a little bit healthier and exercise from time to time. Those are the kinds of things that I think we could be doing a lot better at."

"What I would envision is not just people coming together voluntarily. If there was a way to institute some sort of collaborative organization where you have a community needs assessment driving a project, the project is overseen by an entity, and that entity is supported by the four hospitals and other community-based health care organizations, that would get us down the road on a lot of projects and get things sparked for us."

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

Barriers to Health Care Access

Lack of transportation and cost of care are key barriers to health care access.

Barriers & How They Can Be Addressed

- Key Stakeholders identified the following barriers or obstacles to obtaining care:
  - Lack of transportation
  - Cost (including out-of-pocket costs for insured residents)
  - Lack of awareness/education – i.e., not knowing what care is needed and/or where to get it
  - Sociocultural norms that impact health-related behaviors
- Several mentioned that the county has tried in the past to implement a public transportation system but without success.

"Transportation has been a county-wide focus for a while with very, very limited success. They brought it to the ballot a few years ago – that failed, so there's very little out there. It's not for lack of awareness but I don't know that anybody is currently championing it."

"Greenville has the little green busses. Belding has little blue busses. I've talked to Blue Cross about possibly getting a grant so we could have a van. If we were to take those individual projects, put aside some of the parochialisms, and knit together a program of units, I think we could get the county EMS to run it for us."

"Cost would be a barrier for many. If you've got a thousand dollar deductible and you've got ten bucks in your pocket, you're going to be pretty sick before you're going to take care of it."

"Just simple education – the value of showing up to a primary care clinic as opposed to waiting for an emergency. Knowing where the services are, what services are most necessary, and that hospitals aren't just for sick people."

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

Key Stakeholders agree that more involvement of the average consumer in health care planning and decision-making is needed.

Involvement of Relevant Stakeholders/Community Residents

- Some Stakeholders cite specific organizations where consumers participate on planning boards. However, the consensus is that, in most organizations, the consumer voice is not included to the extent it should be.

"[Typically], it would be the people who are visible in the community, and it's not the stay-at-home mom or the third shift maintenance guy. At the adolescent health clinic we have a community advisory board, which I think would be your average Joe."

"We don't have enough citizen representation. We have all the agency people. Great Start is one of the exceptions where you do have young moms who volunteer and work on that program. I wish there was more citizen engagement with health and wellbeing planning activities."

"Residents need to be more involved in planning, and I don't think that's the case. Business leaders, schools are not – they should be. Ministers, churches – very good opportunity to get them involved, and they know more of the needs than probably the hospitals do."

"[Community residents] ought to be there or somebody that's [an advocate for them]. At least someone who understands their challenges."

Q8. With regard to health and health care issues, are relevant stakeholders or community residents involved in planning and decision making? Q8a. (If yes) Who is involved? Q8b. (If no) Should they be? Q8c. (If yes) Who should be?

Community Resources

Key Stakeholders name a number of resources available to the community in support of residents' health, some of which are not being used to their full potential. Limited financial resources are a fundamental constraint, with the need to stimulate local economic development cited as a key underlying challenge.

Community Resources & Resource Limitations

- Stakeholders cite the following resources available to support health needs:
  - Community foundations – Greenville Community Foundation identified as particularly strong
  - Federal and state grants
  - Adolescent youth clinic
  - Local churches
  - Local colleges
  - MSU extension
  - United Way
  - EightCAP
  - Great Start collaborative
  - Montcalm Center for Behavioral Health
  - Healthy Michigan Plan – need to encourage qualifying residents to enroll
  - Physicians who will make house calls
  - Fitness centers, walking/biking trails, and parks for recreation
- Insufficient financial resources were widely cited as a limitation – from limited economic development to high unemployment/low median income to a lack of funding for health-related agencies.
- Some note that existing resources could be utilized more – for example, opportunities may exist for more collaboration with local churches and colleges.
- One Stakeholder noted that volunteerism in the community has declined over the years, and that there may be an opportunity to work with local high schools to get more students involved in volunteer efforts.

Q7. What resources currently exist in your community beyond programs/services just discussed? Q7a. What are any resource limitations, if any?

Verbatim Comments on Community Resources

"[The Greenville Community Foundation is] a good asset. They fund us every year. They fund Spectrum every year. They fund the United Way generously. They have a really well-managed endowment that's growing and I think down the road will be even more effective."

"There are a number of active community foundations across Montcalm County. For example, there's one targeted towards children's health. We do tap into those. We also look at other funding sources: federal grants, statewide grants, things like that. We have an adolescent youth clinic in the county that is very successful that is grant-funded through the state."

"I think the Montcalm Center for Behavioral Health is not well understood, what a good job they do, especially with their drop-in center in Greenville. They of course struggle with the issue of stigma. We run into people all the time who can self-identify for us that they have mental, emotional health or substance abuse issues but they won't go because they don't want people to think they're crazy. Dealing with stigma is a really big issue but the resource is there."

"The Great Start collaborative is really a fantastic suite of programs for low-income families with kids."

"[United Way] funds some programs. There's three or four or five other foundations that fund some things – perhaps that's an opportunity: Could all the funders in the county come together and agree upon a focus area that was health-related?"

"All of us providers could do a bit better job working with the colleges, both for urgent care needs and for future staffing needs."

Q7. What resources currently exist in your community beyond programs/services just discussed?

Verbatim Comments on Resource Limitations

"If you make a map of the poverty rate and lay on top of it a map of almost any health outcome, where poverty is high, the bad outcomes are high. Montcalm still has not recovered from the loss of its major employers. You need that economic vitality and everything else follows."

"We're running uphill of poverty, so it's not going to come from the households. I think the providers are somewhat limited. To get at what we've been talking about, we're going to need some business to step up in collaboration with community foundations, in collaboration with state grants."

"We have institutions like United Way and EightCAP that have a limited amount of resources to help folks. They usually run out before they get through the year. A lot of the organizations that serve our community are short-staffed, short of technology, and their staff need training to get better at their job."

Q7a. What are any resource limitations, if any?

Impact of Health Care Reform

Key Stakeholders agree that the Healthy Michigan Plan has expanded access to affordable health care for county residents. Several Stakeholders report that the Affordable Care Act has led to increased confusion, higher patient costs, and more bad debt for providers.

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

- The Healthy Michigan Plan has resulted in more Montcalm County residents with health insurance.
- Several Stakeholders expressed a negative view of federal reform, stating that it has led to more confusion, higher costs for the insured, and a drop in reimbursements for providers.

"As soon as people started signing up for Medicaid, we started seeing a decrease in some of our categorically funded programs: breast cancer screenings for low-income women, family planning, things like that. To us this was a real indication that a bunch of people were now getting those services through their primary care doctor. We don't want them to be dependent on public health for those services. I think positive things are happening."

"It has effectively expanded coverage – Healthy Michigan specifically. Federal health care reform – I don't know that it's had an impact other than adding a layer of confusion and causing more out-of-pocket expenses because people are kind of rolling the dice and taking the high deductible plans."

"Healthy Michigan has opened up the door for coverage and I applaud that. The Health Care Reform at the federal level has created a lot of confusion and fear and ultimately is raising the co-pays and deductibles, which is potentially creating barriers. Uncompensated bad debt is going up through the roof."

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

Impact of 2011 Community Health Needs Assessment

Hospitals and provider networks have added more physicians since the 2011 Community Health Needs Assessment.

Impact of 2011 Community Health Needs Assessment

- The main focus of improvement since the 2011 Community Health Needs Assessment has been the recruitment of additional physicians.
- Other initiatives include the following:
  - Collaborating with schools to address health literacy
  - Adding community health workers to the health department – these individuals will coordinate community-based resources to address issues that prevent patients from complying with treatment plans (lack of insurance, need for transportation, homelessness, substance abuse, etc.)
  - Making sure providers know what services are available
  - Developing a plan to address gaps in specialty services

Q10. Since the Community Health Needs Assessment conducted three years ago in 2011, what has been done locally to address any issues relating to the health or health care of residents in your community?

Verbatim Comments on Impact of 2011 Community Health Needs Assessment

"We set some very specific goals in terms of expanding access. We created a recruitment plan and have successfully met the targets that we set for expanding access. We have also collaborated with the schools to address health literacy."

"We took a very hard look at what our primary care base was and since that time have added probably close to seven primary care providers to the communities that we serve. The other thing we focused on was awareness – our awareness didn't really reach out to the general public. We focused on our providers to make sure our providers knew what different services my organization as well as the United Memorial in Greenville provided, as well as what Sparrow could provide, and it identified better for us the gaps in child psych and pulmonology and internal medicine and really helped us develop a more formalized plan [for] what to go after."

"The health department committed to hiring community health workers who would work on this partnership with the health care system trying to coordinate community-based resources so that people could comply with what their doctor wanted them to do. We get them in, get them covered, and then whatever the issue was, transportation, homelessness, substance abuse, whatever, we would get those issues resolved."

Q10. Since the Community Health Needs Assessment conducted three years ago in 2011, what has been done locally to address any issues relating to the health or health care of residents in your community?

Community Preparedness for a Communicable Disease Outbreak

With respect to community preparedness to handle an infectious disease outbreak such as Ebola, some Key Stakeholders feel well prepared while others express concerns or a lack of certainty as to how such a crisis would play out.

Community Preparedness for a Disease Outbreak

- Some Key Stakeholders cite rigorous systems in place for controlling an infectious disease outbreak.
- Others appear less confident that such an outbreak would be manageable.

"I think the hospitals and the physician provider groups are very well prepared for that kind of a response. We communicate on a regular basis. We do drills. We all have the same kind of emergency codes."

"I feel like we are well prepared, should it rear its head. The reality is we're not going to be ground zero for it – if that were to come, we would transfer it out to Grand Rapids. Understanding what our role is, understanding what that first response is, doing the drills, making sure we had all the equipment that we need in the ERs, giving education to our primary care sites – yes, I would say that we are well prepared."

"Better than we were, but it would be kind of clunky watching it happen."

"I worry about disease that has a high attack rate, a high mortality rate, and so far we haven't seen that. Someday we're going to hit one that will move fast, and I don't think we're ready for that. I don't necessarily think it's the providers' fault. This is an emergency preparedness question. We have decided not to modernize our system for manufacturing vaccines. We once had a vibrant system of national laboratories to work on issues like [producing vaccines rapidly], and they're expensive and so we defunded them. The public didn't want to pay it."

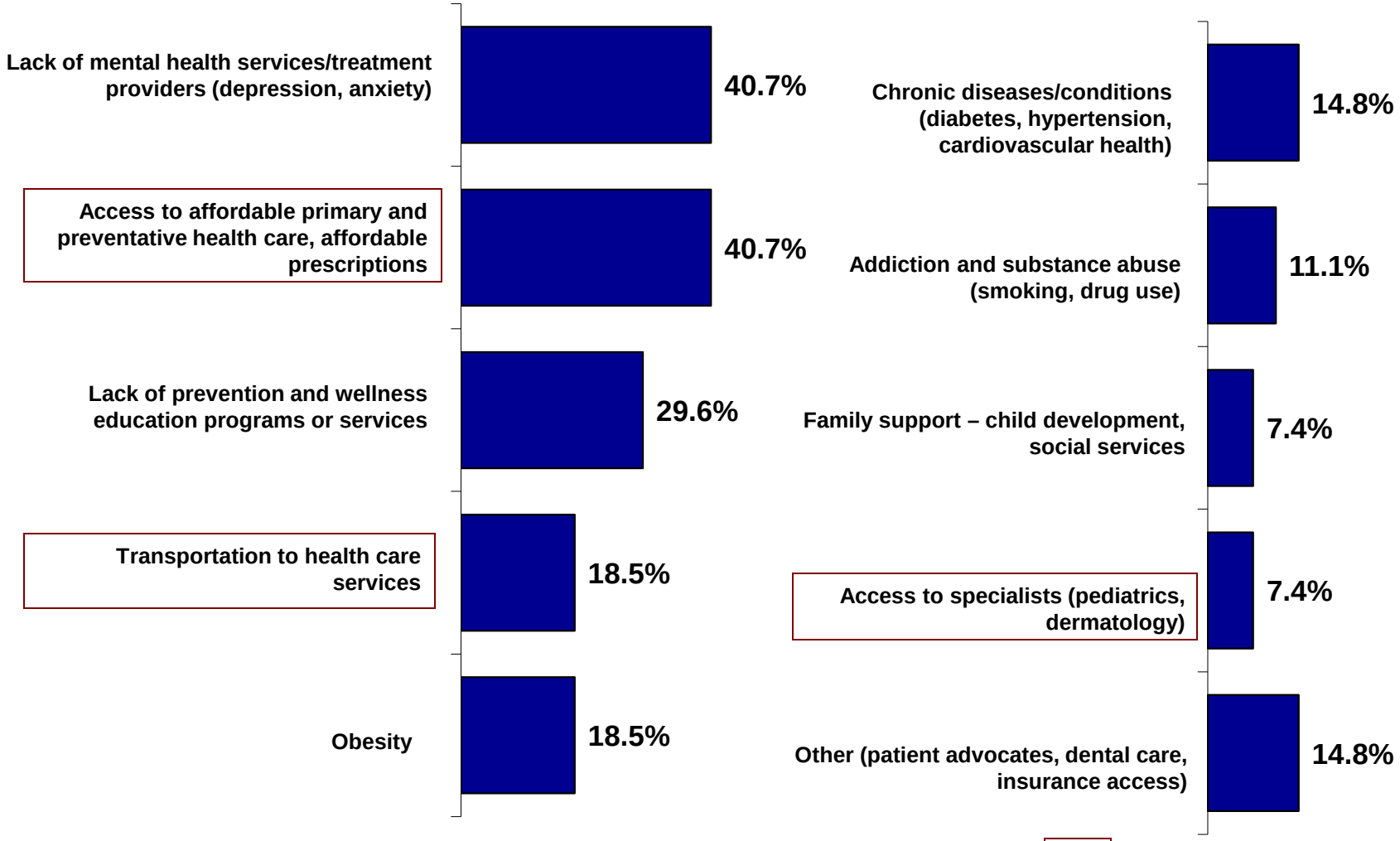
Q11. How well prepared are local health care professionals to deal with a communicable or infectious disease outbreak, such as Ebola? Would you say not at all well, not very well, somewhat well, very well, or extremely well? Why do you say that?

Key Informant Survey

Health Conditions

When asked to cite, top of mind, the most pressing health issues or needs in the SHUKH area, Key Informants identify many issues. Most often reported are issues revolving around **access to care**, **mental health,** and a need for more **prevention education**. More specific areas of concern are **transportation**, **obesity**, and **chronic disease management**.

Most Pressing Health Needs or Issues in SHUKH Service Area (Volunteered)



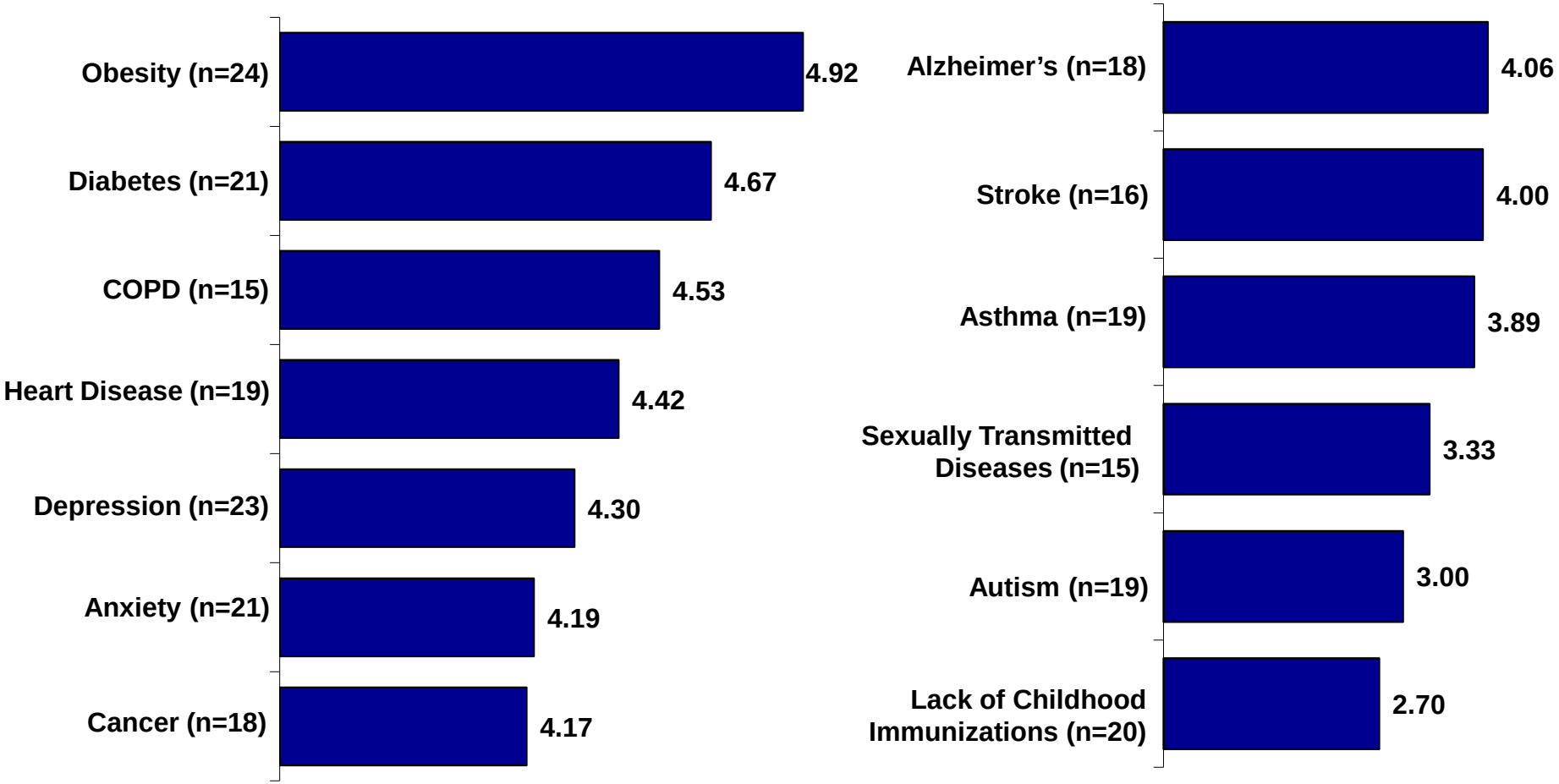
(n=27)

Q1: What do you feel are the most pressing health needs or issues in your community? Please be as detailed as possible.

= issues of health care access

Key Informants view **obesity** as the most prevalent health issue in the SHUKH area, followed by **diabetes**, **COPD**, **heart disease**, and **depression**. Lack of childhood immunizations and cases of autism are viewed as less prevalent health issues.

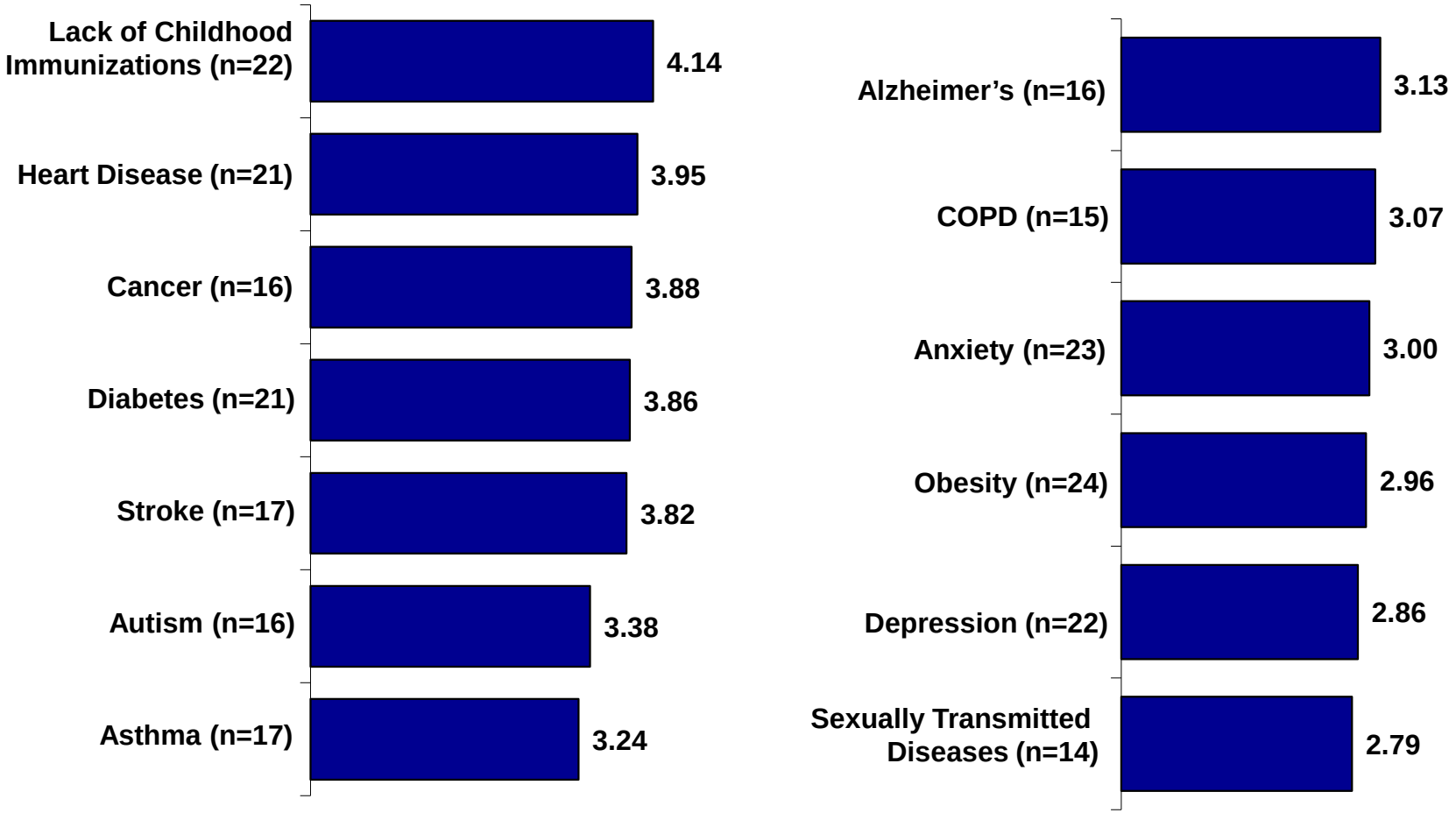
Perception of Prevalence of Health Issues in SHUKH Service Area



Q2: Please tell us how prevalent the following health issues are in your community. (1=not at all prevalent, 2=not very prevalent, 3=slightly prevalent, 4=somewhat prevalent, 5=very prevalent)

Key Informants are most satisfied with the community's response to **childhood immunizations**, followed by **heart disease**, **cancer**, **diabetes**, and **stroke**. They are least satisfied with the response to **sexually transmitted diseases**, **depression**, **obesity**, and **anxiety**.

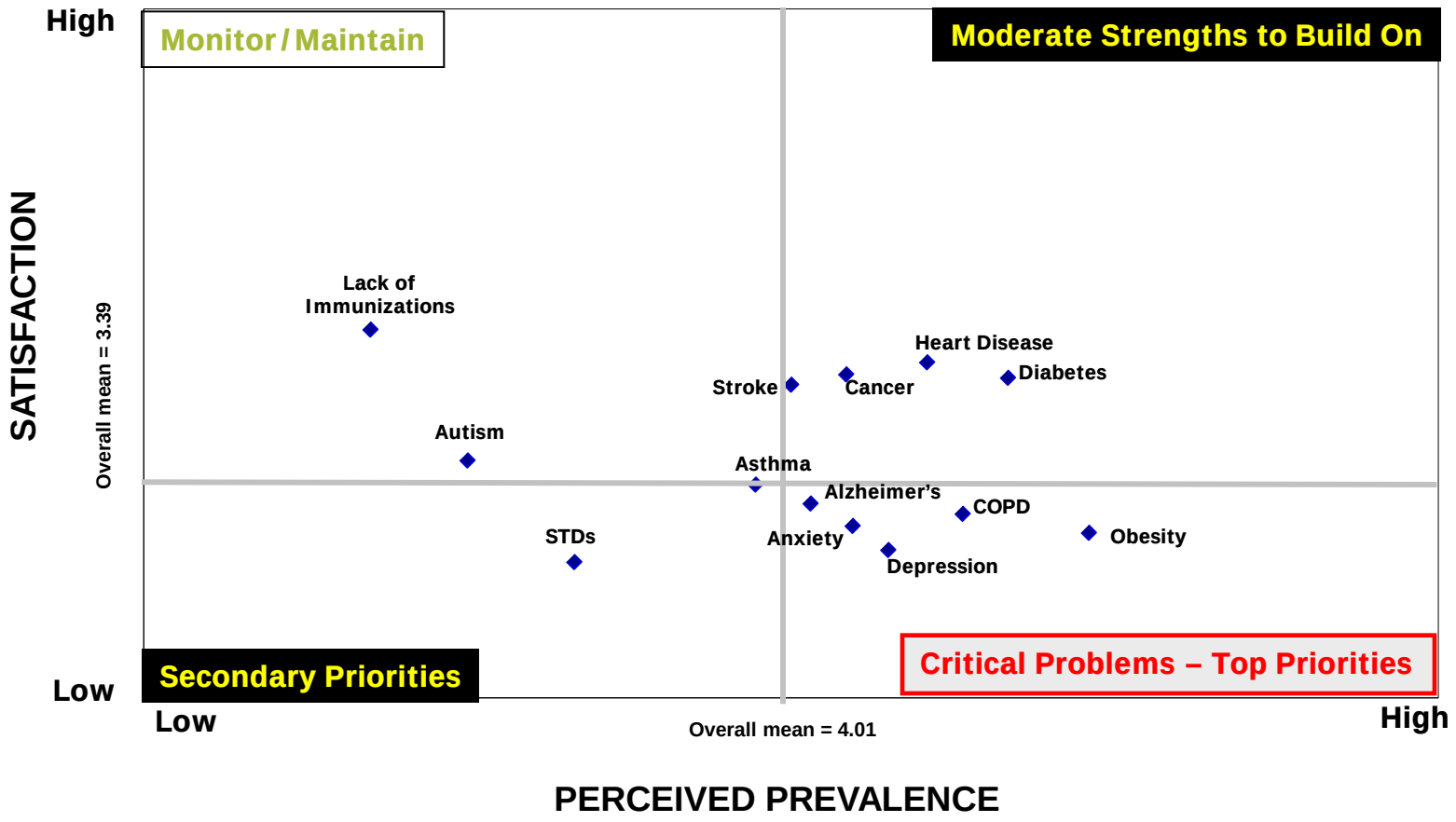
Satisfaction with Community's Response to Health Issues in SHUKH Service Area



Q2a: How satisfied are you with the community's response to these health issues? (1=not at all satisfied, 2=not very satisfied, 3=slightly satisfied, 4=somewhat satisfied, 5=very satisfied)

The quadrant chart below depicts both **problem areas and opportunities**. The community's response to **heart disease**, **cancer**, and **diabetes** is fairly strong, while **Alzheimer's**, **anxiety**, **depression**, **COPD**, and **obesity** are critical problem areas because they are not only perceived as prevalent, but the perceived response is less than satisfactory. Response to **sexually transmitted diseases** is an important, but secondary, priority.

Performance of Community in Response to Health Issues in SHUKH Service Area



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

Additional health issues deemed prevalent in the area are those involving **mental health** and **substance abuse**. More specifically, Key Informants identify a lack of mental health treatment options and lack of support for parents trying to raise healthy children. Additionally, Key Informants see a **need for education** in **general health and wellness** and the need to increase access by **raising awareness about existing services**. Poverty and lack of transportation are also concerning health issues.

Additional Health Issues Prevalent in SHUKH Service Area

Substance Abuse

"We are concerned over prescription drug abuse, drug production (including 'medical marijuana'), and even some evidence of heroin. There are engaged agencies, but there can never be enough support."

"Tobacco use, all ages, not very satisfied with the community response."

Mental Health

*"**Mental health issues - not satisfied with this because patient [is] scheduled for a long time to get in to an appointment with [a] mental health expert.**"*

"Mental Health – coping skills, general parenting, the "how to's." These may not be personal health issues, but are issues that affect the children."

Health Education

*"**Access to health care. People do not know what is available to them. Education**."*

"Need healthy lifestyle motivation and community education."

*"**Parents not having the resources needed to develop healthy children**. Healthy lifestyle opportunities are limited."*

Other Concerns

*"Forty percent of households struggle to afford the basic necessities of housing, child care, health care, and transportation. These households are forced to make difficult choices. **These choices threaten the health and safety of many**. See United Way ALICE (Asset limited, Income constrained, Employed) study."*

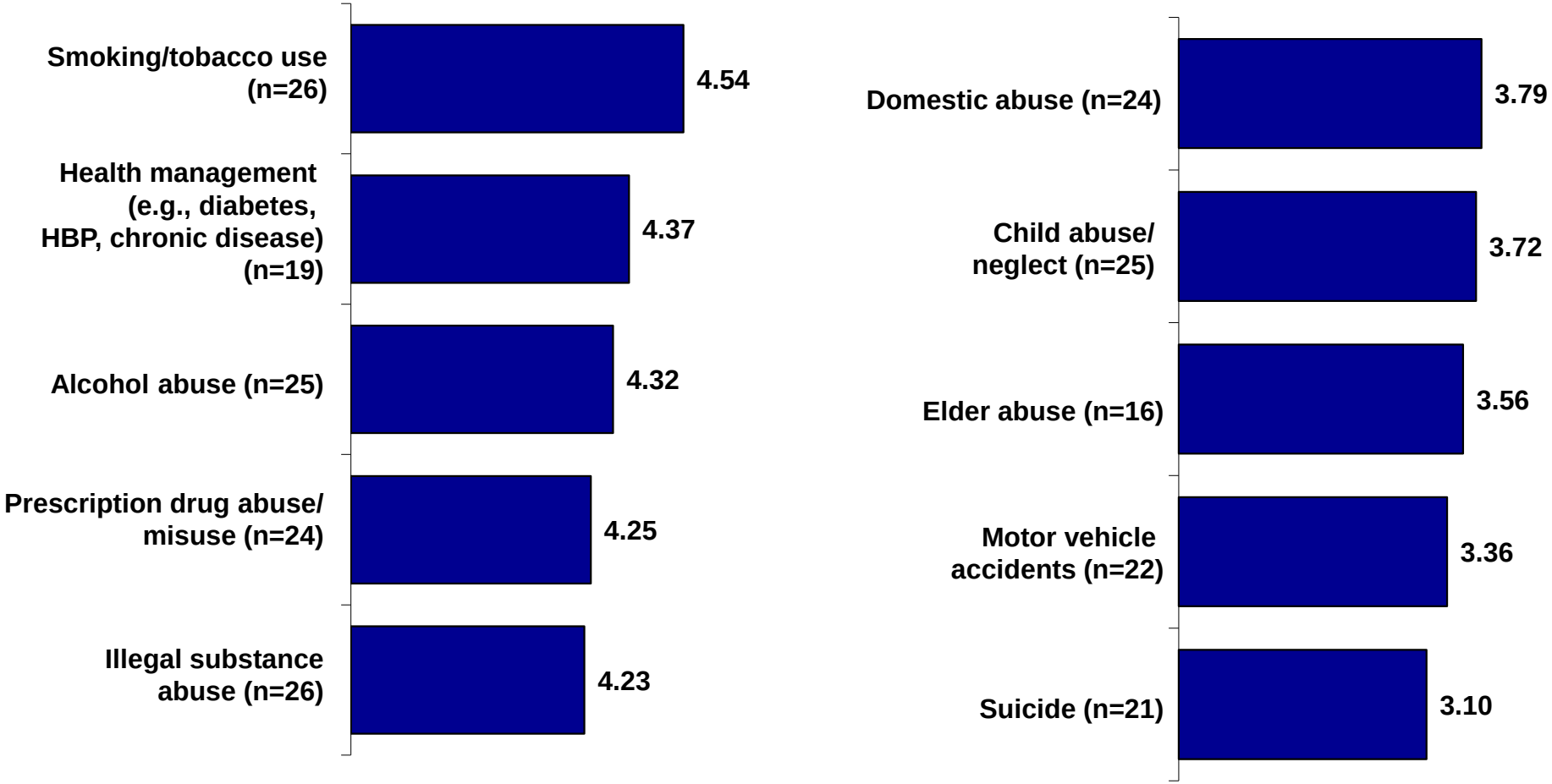
"Transportation to get to health visits is very scarce. The community does not have an adequate response."

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

Health Behaviors

Key Informants believe health behaviors involving the **misuse/abuse of substances** (tobacco, alcohol, illicit drugs, prescription drugs) and **health management issues** are most prevalent in the SHUKH service area.

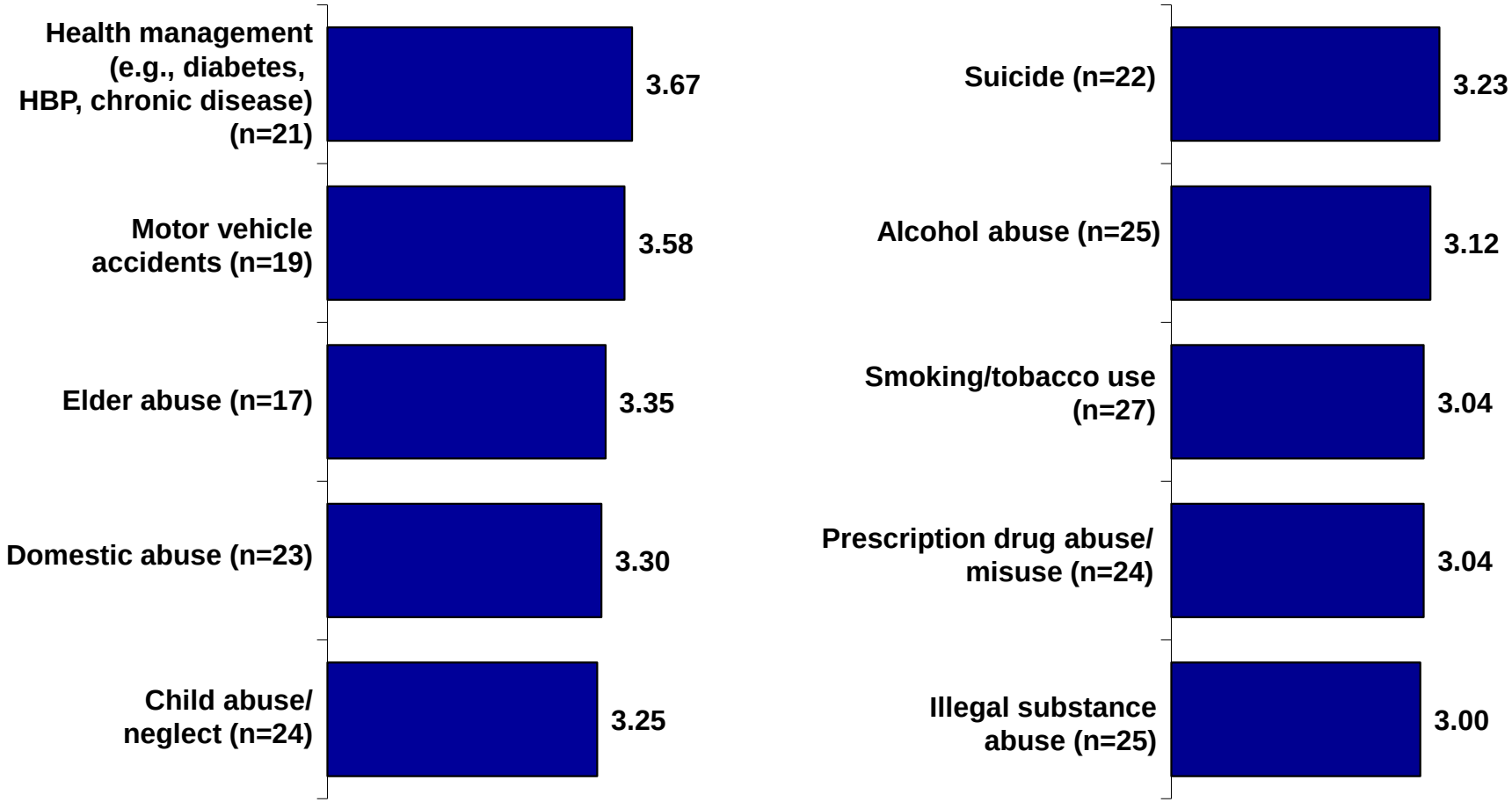
Perception of Prevalence of Health Behaviors in SHUKH Service Area



Q3: Please tell us how prevalent the following health behaviors are in your community.

Key Informants are only moderately satisfied with the community's response to the health behaviors rated. Opportunities for improvement exist with behaviors they consider to be prevalent, such as **drug use/substance abuse – both licit and illicit**.

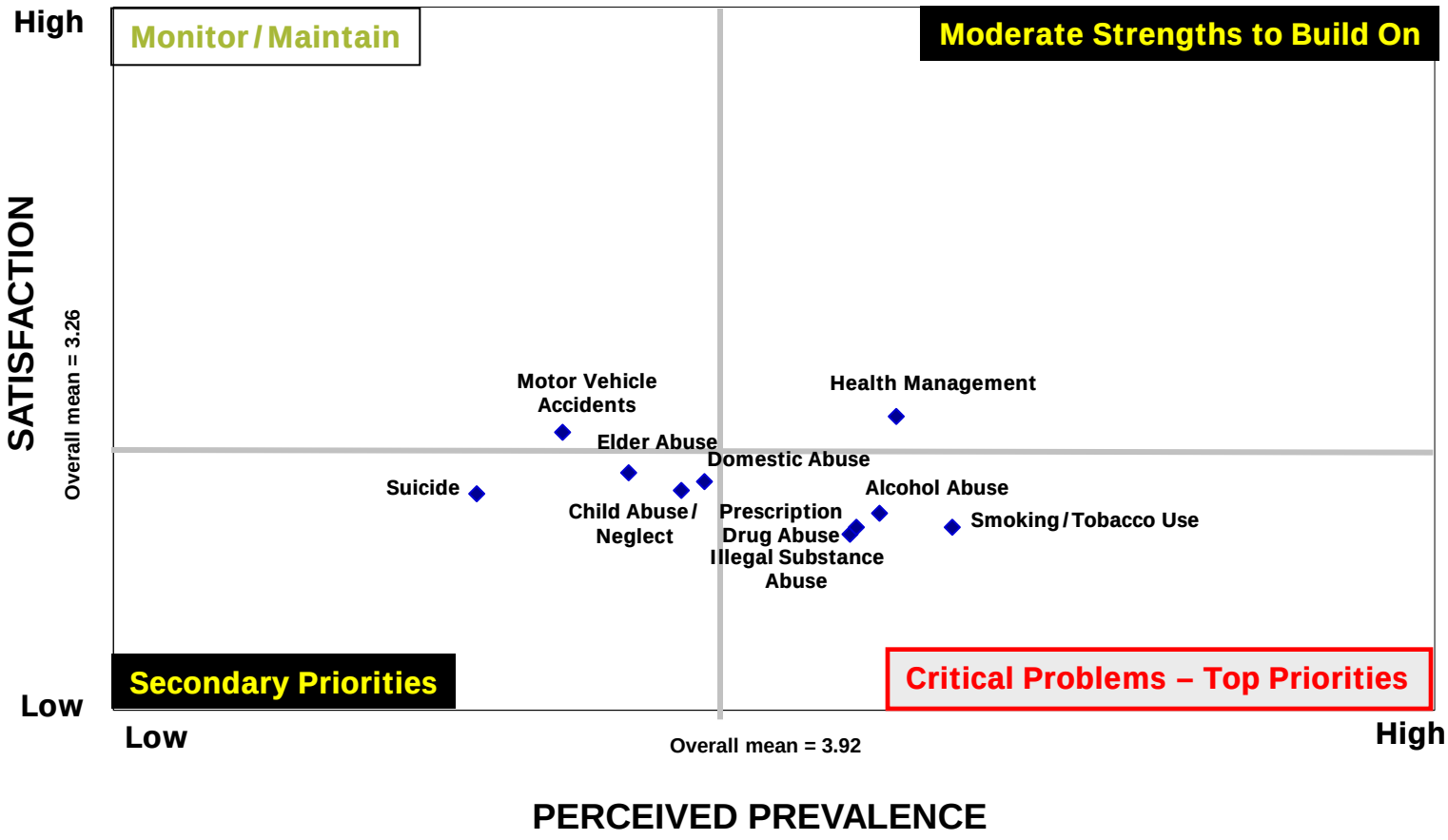
Satisfaction with Community's Response to Health Behaviors in SHUKH Service Area



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

The quadrant chart shows the most dissatisfaction and concern with responses to ***prescription drug abuse***, ***illegal substance abuse***, ***smoking/tobacco use***, and ***alcohol abuse***. Additionally, low satisfaction exists with the community response to ***child abuse/neglect***, ***suicide***, ***elder abuse***, and ***domestic violence*** - which represent important, secondary priorities.

Performance of Community in Response to Health Behaviors in SHUKH Service Area



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

Key Informants believe **sedentary lifestyle choices**, **mental health,** and **substance abuse** warrant further attention. A few Key Informants also mention concern about general health and wellness as well as lack of services for the disabled.

Additional Health Behaviors Prevalent in SHUKH Service Area

Lifestyle Choices

"Exercise - slightly satisfied."

"Need more smoking cessation where people are actually at as well as more Girls On The Run groups."

*"**Sedentary lifestyle, not very satisfied with community response**."*

"There is a general lack of awareness of the principles of harm reduction across the whole gamut of health behaviors whether we are talking about Christmas cookies being forced on the diabetics at the holiday party, or alcohol advertising, or the continuing stigmatization of mental health issues."

Mental Health/Substance Abuse

*"**Addictions, coping mechanisms, general self well-being**."*

"Drug abuse, dependency, depression, and anxiety."

"I think there is a need for more mental health services, especially for the elderly population. It seems a difficult process to get the elderly the appropriate mental health services when it is needed."

"Bullying - somewhat satisfied."

*"**All mental health issues, not satisfied with community's response - no funding**."*

"Mental health and disabilities."

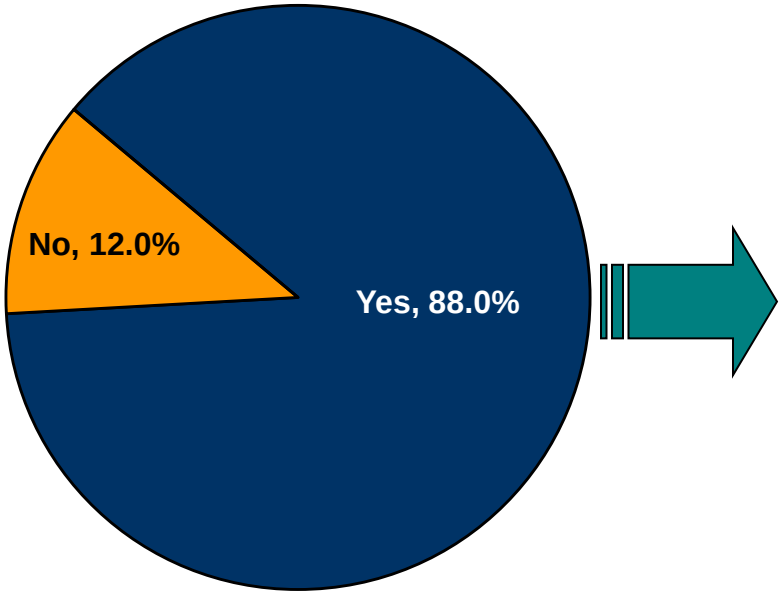
Q3b: What additional health behaviors are prevalent in your community, if any? For each listed, tell us how satisfied you are with the community's response to the health issue.

Access to Health Care

Almost nine in ten (88.0%) Key Informants believe access to health care is a pressing and prevalent issue in the SHUKH area. The greatest barriers to health care access center on an inability to **afford out-of-pocket expenses such as co-pays/deductibles**, **transportation**, **a lack of awareness of available options**, and **having to travel out of the area for care**.

Access to Health Care

Is Access to Health Care a Pressing and Prevalent Issue in SHUKH Service Area



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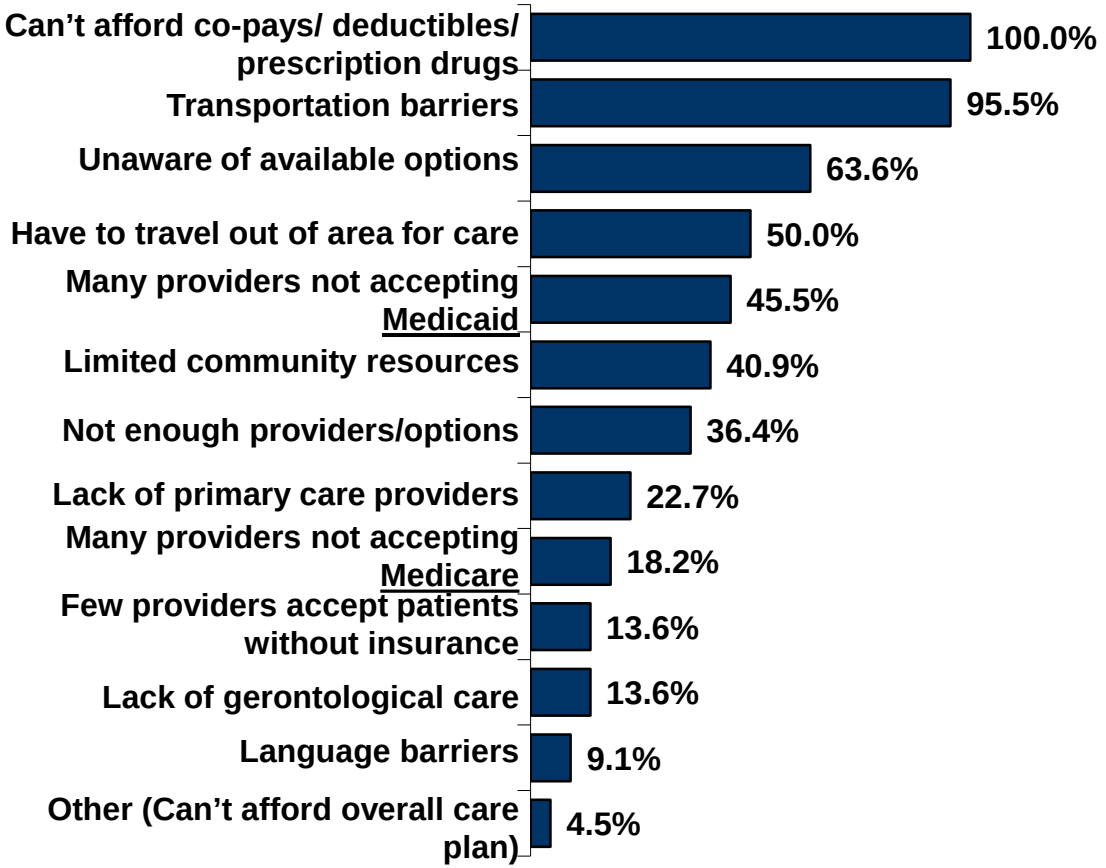
Reasons Access to Health Care is an Issue



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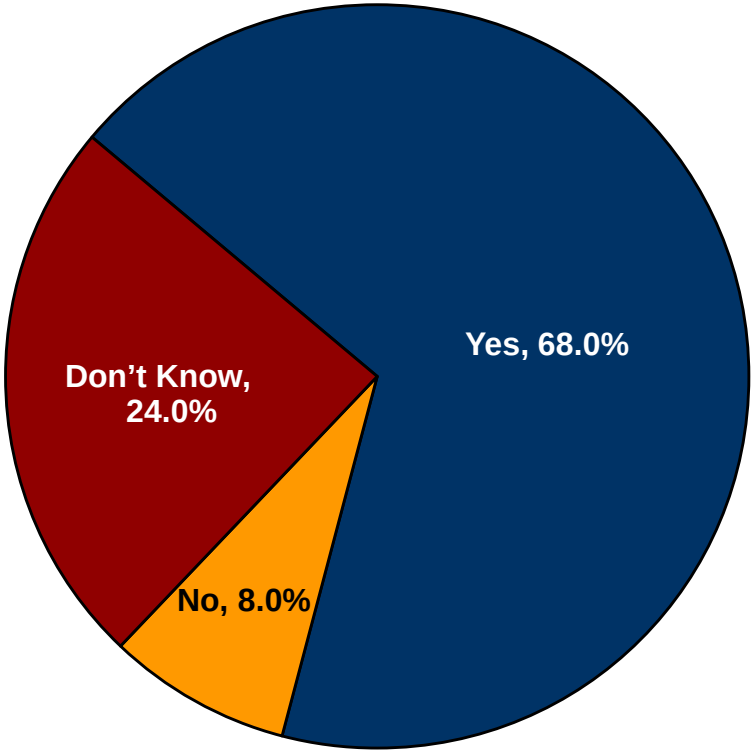
Q4: Do you believe that access to health care is a pressing and prevalent issue for some residents in your community?
Q4a: (If yes) In your opinion, why is access to health care an issues for some residents in your community? (Multiple responses allowed)

Almost seven in ten (68.0%) Key Informants recognize that certain subpopulations or groups in the SHUKH area are underserved with respect to health care, while one quarter (24.0%) do not know what groups may be underserved. Those most at risk **lack insurance (completely or partially)**, are **children**, **non-English speaking residents**, **senior adults**, **disabled**, or **minorities.**

Subpopulations Underserved with Regard to Health Care

Are Specific Subpopulations or Groups Underserved?



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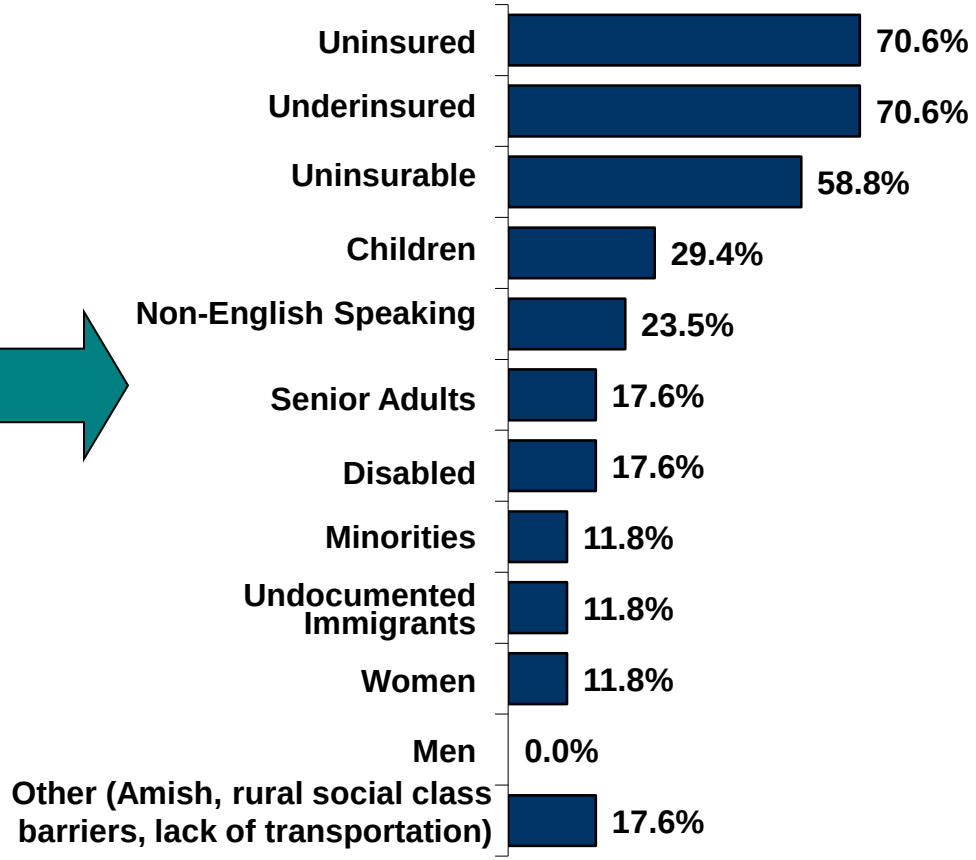
Subpopulations or Groups Underserved



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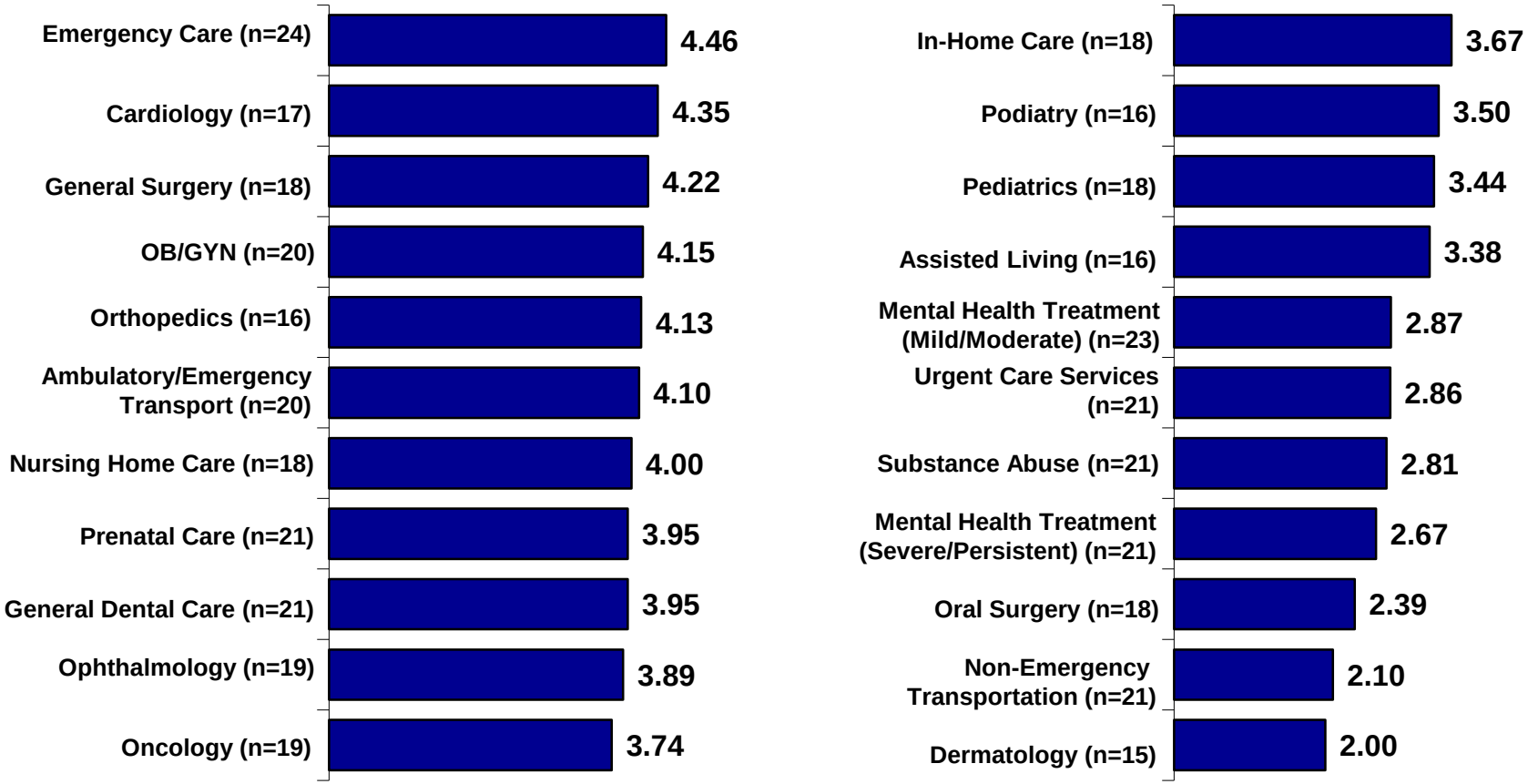
Q5: Are there specific subpopulations or groups of people in your community that are underserved with regard to health care?
Q5a: (If yes) Which of the following subpopulations are underserved? (Multiple responses allowed)

Gaps in Health Care

SHUKH area programs and services perceived to meet the needs/demands of residents well are **emergency care**, **cardiology**, **general surgery**, **OB/GYN**, and **orthopedics**. Conversely, **dermatology**, **non-emergency transport**, **oral surgery**, **mental health treatment (mild to severe)**, **substance abuse**, and **urgent care services** are perceived to be lacking.

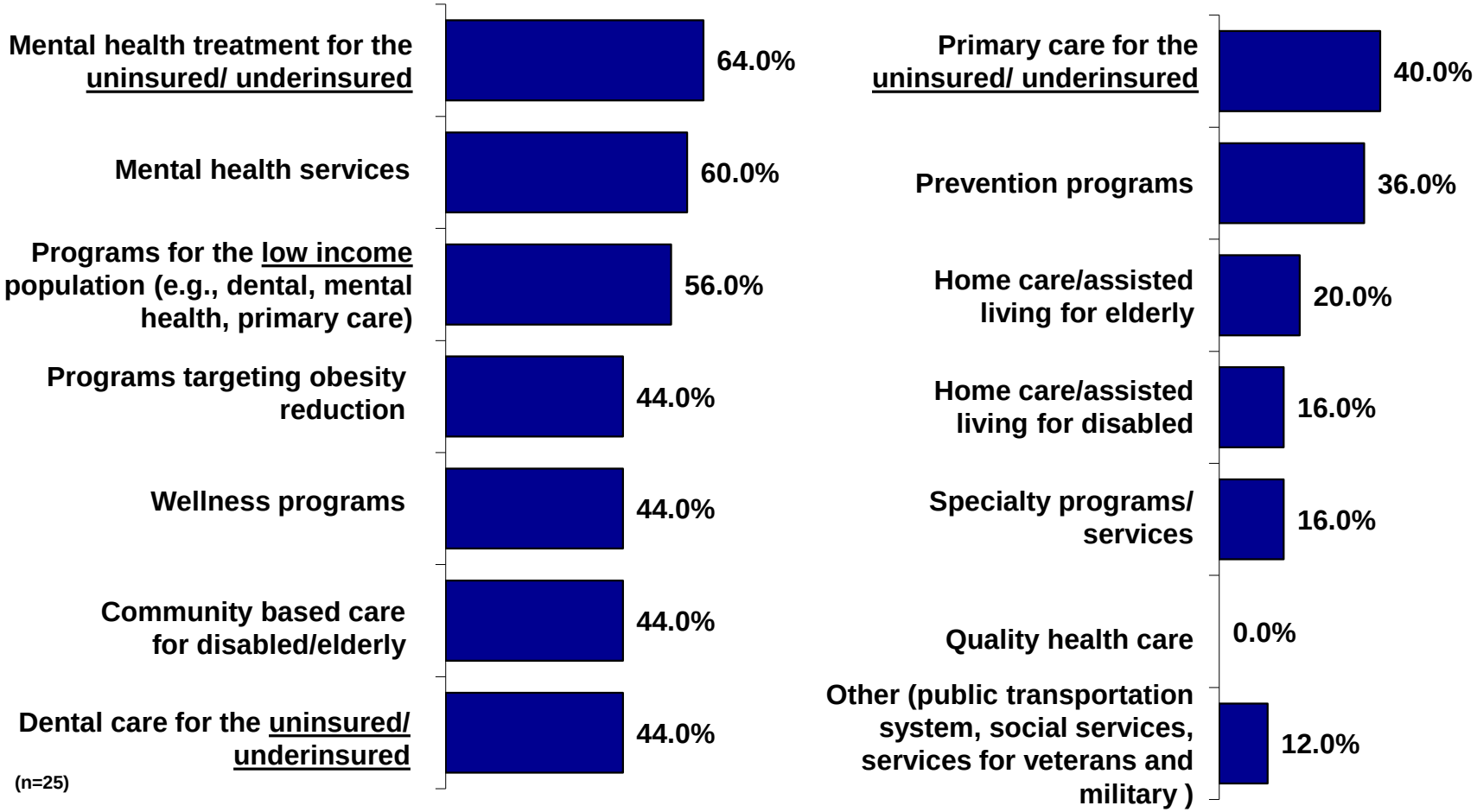
Degree to Which Programs/Services Meet the Needs/Demands of SHUKH Service Area Residents



Q6: How well do the following programs and services meet the needs and demands of residents in your community?

Key Informants report that the greatest void is found in **mental health treatment/services**, followed by **programs for the low income population** and **programs targeting obesity reduction**. **Wellness programs**, **community care for the disabled/elderly**, and **dental care for the uninsured/underinsured** are also found to be lacking in the community.

Programs/Services Lacking in SHUKH Service Area

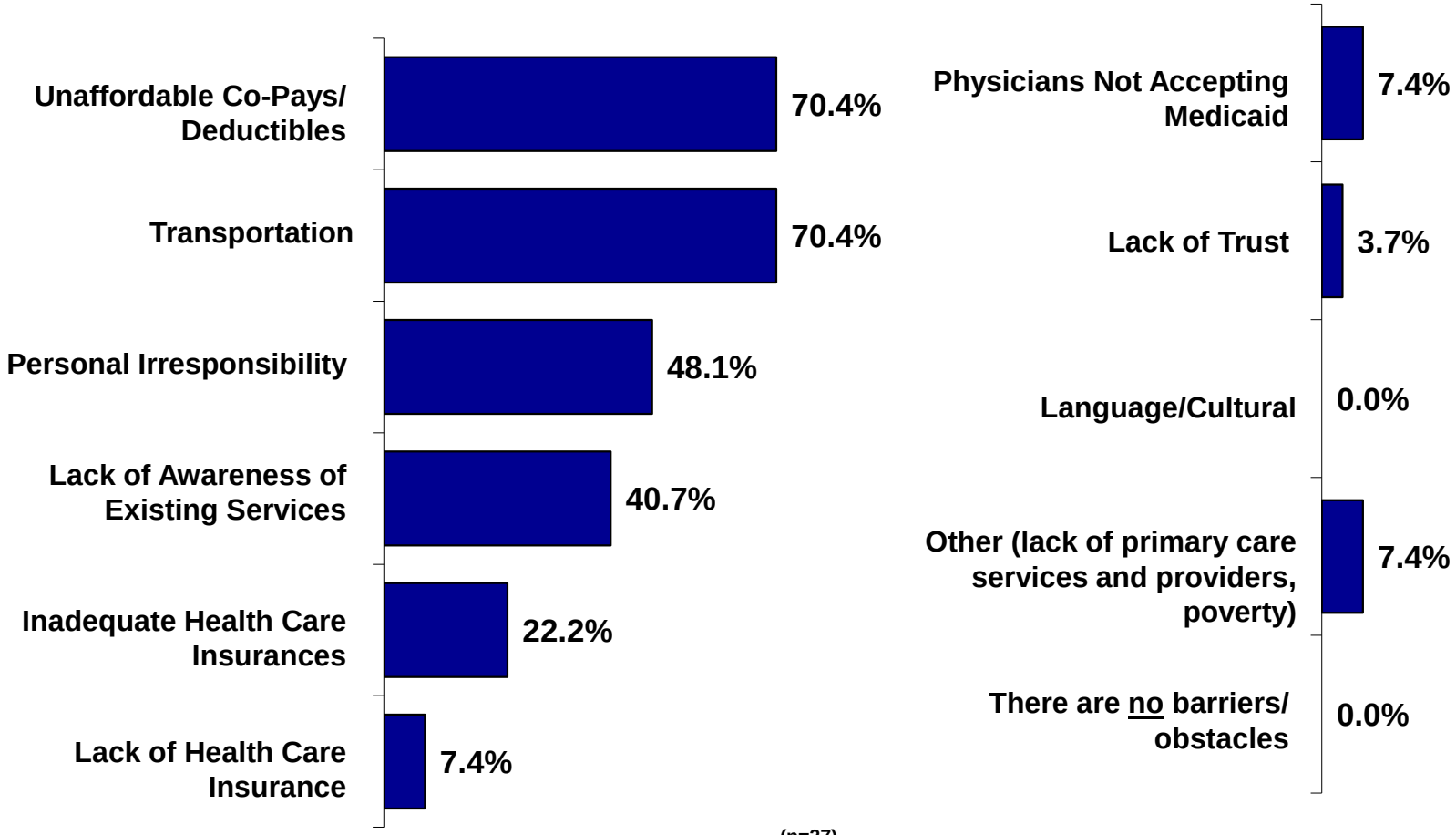


Q7: What programs or services are lacking in the community, if any? Please be as detailed as possible.

Barriers to Health Care

According to Key Informants, the top barriers to health care services are **an inability to afford out-of-pocket expenses such as co-pays and deductibles** and **transportation**. Further barriers include **personal irresponsibility**, a **lack of awareness of existing services**, and **inadequate health care insurances.**

Barriers and Obstacles to Health Care Programs/Services



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Q8: What are the top three barriers or obstacles to health care programs and services? Please rank from 1 to 3, where 1 is the greatest barrier, 2 is the second greatest barrier, and 3 is the third greatest barrier.

Key Informants offer many ideas to effectively remove health care barriers. Solutions to the top barriers involve **lowering the cost of deductibles, using telemedicine, creating a volunteer transportation network, increasing prevention and wellness services**, **financial incentives for wellness behaviors**, and **educating community members on healthy lifestyle decisions**.

Effective Solutions to Barriers and Obstacles to Health Care
Verbatim Comments

Inability to Afford Out-of-Pocket Expenses

"*A lower deductible strategy for the lower income levels*."

"*Increase Medicaid enrollment for those who qualify.*"

Transportation

"Transportation to and from appointments, in many cases, is not available. ***No county-wide transportation system or funding to pay existing programs.*"**

"An effective solution would be telemedicine for lack of transportation, lack of providers, and lack of specialists."

"Creation of an effective network of volunteer/stipend drivers to ensure access to primary/preventative care"

*"**Transportation seems to be an issue with children receiving the health care that they need. Maybe a partnership with the local schools where services can be provided at the school locations**."*

Personal Irresponsibility

"Education on."

"Volunteer drivers for elderly patients who need transportation to doctor appointments."

*"**Problem 1) lack of personal responsibility. Effective solution, education. Early and often - link good behavior with financial incentives.**"*

"Provide more effective incentives to better behavior, penalties for bad behavior."

Lack of Awareness of Existing Services

*"**More education about Healthy Michigan Plan**."*

"Develop programs to help patients be more engaged; get awareness out."

Q8a: What, if any, are the effective solutions to these barriers? Please be as detailed as possible and identify which problems you are referring to when discussing solutions.

Key Informants also want to see an **increase in mental health screenings,** an increase in the **number of available mental health services**, and **improved community collaboration and coordination**.

Effective Solutions to Barriers and Obstacles to Health Care Verbatim Comments (Cont'd.)

Mental Health Services

"Need more integrated care where physician's are screening for mental health needs."

*"**Mental health services rather than having to send [them] home to be put on a waiting list for those that request assistance,** especially those that want to "get clean" from an addiction. Family support and counseling for those living with a member that has a mental illness or addiction. Services available despite what insurance you carry."*

"We need access to mental health quickly - will need more providers who focuses on this."

Community Collaboration/Coordination

*"**Consistent messaging** regarding all partners: one common health message that all participate in collaboration and shared understanding."*

*"**Integration of public health and health care where public health addresses community issues like poverty, mental/emotional health, transport, etc. that keep people from attending preventive health care services**."*

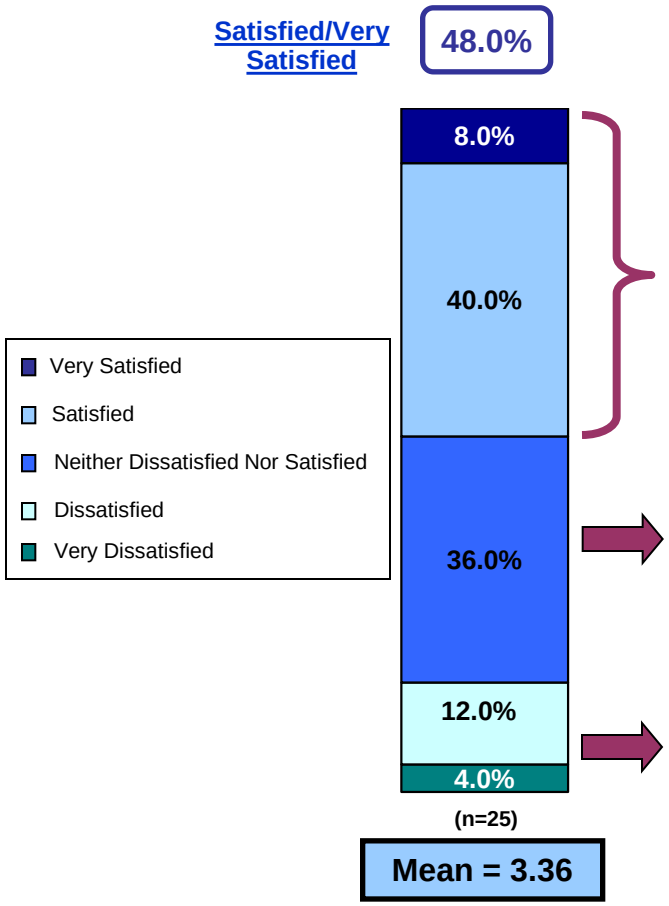
Q8a: What, if any, are the effective solutions to these barriers? Please be as detailed as possible and identify which problems you are referring to when discussing solutions.

Identifying and Addressing Needs

About half (48.0%) of Key Informants are satisfied overall with the health climate in the SHUKH service area, while only a few (16.0%) are largely dissatisfied with the climate. Those who are satisfied cite **good care, many existing care resources**, **visible** and **continual focus on eliminating barriers to access**, and co**mmunity partnerships**. Those that are dissatisfied view **transportation barriers**, **rural poverty**, **a lack of urgent care**, and **an inability to access specialized services** as priority concerns.

Overall Satisfaction with Health Climate in SHUKH Service Area

Level of Satisfaction



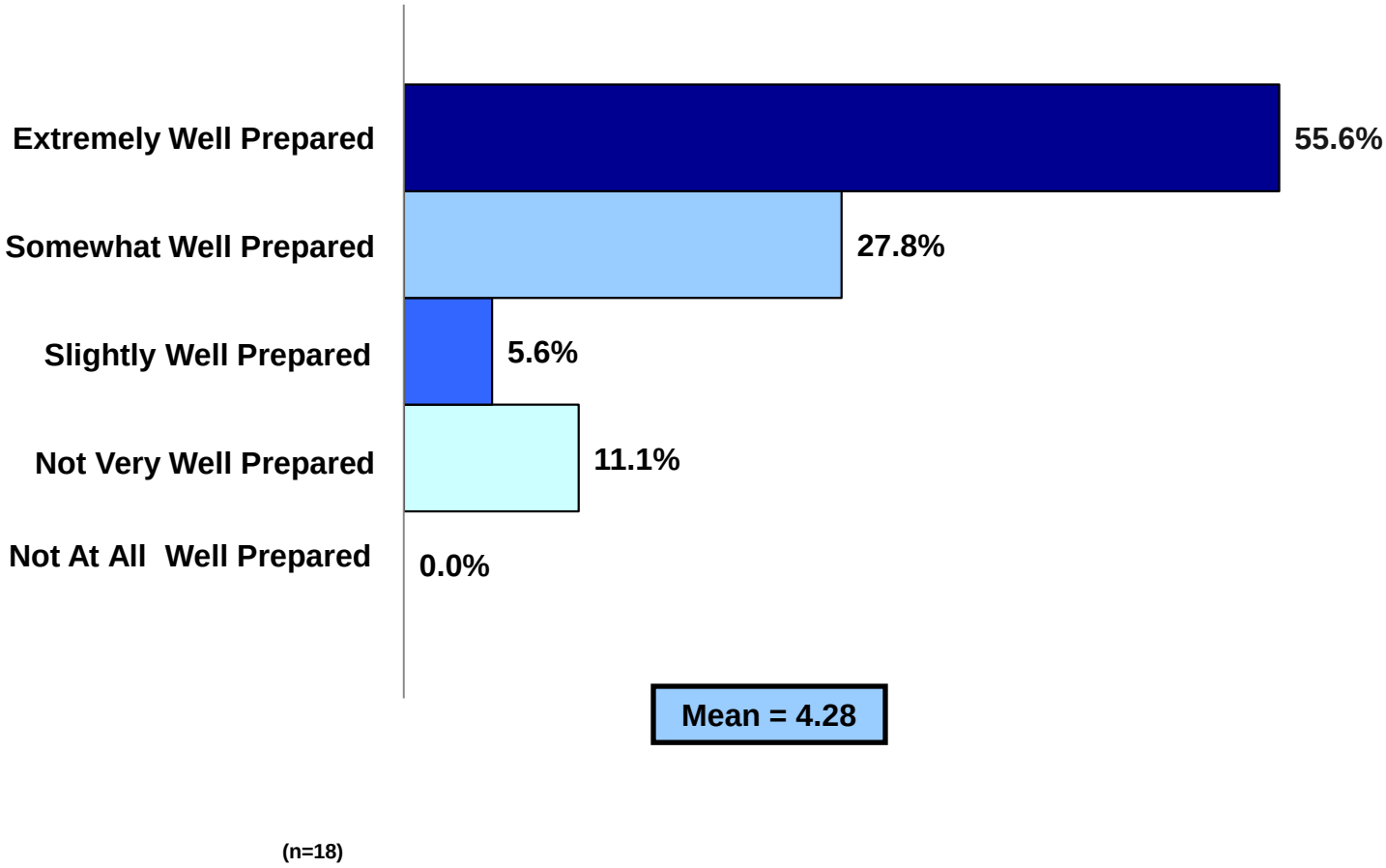
Reasons for Rating

✓ Access barriers are being continually addressed ✓ Collaboration among providers is the norm ✓ Continued improvement in outreach and services ✓ Doing best possible with available resources	✓ Increased offering of services than in past ✓ Good infrastructure created by 4 hospitals in county ✓ Many resources currently exist ✓ Spectrum Health is strong community partner
✓ Always room for improvement ✓ Care is good for those who can afford it ✓ Good care workers in poor, rural community with few resources	✓ Lack of mental health placement opportunities ✓ Need new ways to help increase access ✓ Too many residents abuse their health
✓High rates of poor chronic disease outcomes among vulnerable residents ✓Lack of urgent care, specialized services ✓Lack of public transportation	✓ Need to address problems of working poor (e.g., transportation) ✓ Not enough help for people in need

Q9: Taking everything into account, including health conditions, health behaviors, health care availability, and health care access, how satisfied are you overall with the health climate in your community? Q9a: Why do you say that? Please be as detailed as possible.

More than eight in ten Key Informants (83.4%) feel local health care professionals in the SHUKH area are at least “somewhat well” prepared to deal with a communicable or infectious disease outbreak such as Ebola. Over half of the Key Informants feel health care professionals are “extremely well” prepared to handle such an outbreak.

Preparedness to Address Communicable Disease Outbreak in SHUKH Service Area



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Q12: How well prepared are local health care professionals to deal with a communicable or infectious disease outbreak such as Ebola?

When commenting on the impact of Federal Health Care Reform or the Healthy Michigan Plan, Key Informants are more likely to cite positive or mixed results, compared to negative or no observable results. Those who view the legislation as positive point to a **greater access to health care for the uninsured or underinsured** and **an expectation to see improved health outcomes in the future**.

Impact of Federal Health Care Reform/Healthy Michigan Plan in SHUKH Service Area
Positive Results Verbatim Comments

"More access, service has not changed, outcomes are too soon to tell."

"1) Immediately improved health care access. 2) Will predictably improve service delivery in the near future (no impact yet). 3) Will likely improve health outcomes in the long term (no impact yet)."

"Access has increased, though it may take some time for impact evidence."

"More people with some form of service has been helpful. Presence of FWHC and RHCs in the area have made access to citizens with Medicaid a reality. ***Too early to tell how health outcomes will be impacted, but suspect it will have a positive impact.*** *Higher out-of-pocket has raised awareness of consumers and have challenged providers to keep costs down."*

"More people are insured so hopefully they are accessing care. Integrated care will be beneficial for the community when providers start addressing or at least recognizing the connections between physical health, mental health, and social factors."

*"**More people probably are able to see a physician now that they have insurance and more likely to start using resources**."*

Q11: What has been the impact of Federal Health Care Reform od the Healthy Michigan Plan in your community? In other words, in what ways has it impacted the following: (1) access to health care, (2) service delivery, and (3) health outcomes? Please be as detailed as possible.

Those who view results as mixed say **more people are now covered, but that doesn't necessarily translate into access** for primarily two reasons: (1) many people still find insurance unaffordable or are purchasing insurance at an affordable premium yet this often comes with **high-deductibles and co-payments they cannot afford**, and (2) **quality of care** as well as **slower service delivery** still present important barriers to access. A few mention that **negative publicity of the ACA prevents people from enrolling in the program**.

Impact of Federal Health Care Reform/Healthy Michigan Plan in SHUKH Service Area
Mixed Results Verbatim Comments

*"**More people have started addressing their needs, however, the deductibles are still holding them back**."*

"Few people have signed up for health care on the Marketplace in Montcalm because of negative publicity. But Healthy Michigan sign ups have been booming. In spite of the lack of providers and other barriers, people are finding their way into care. They are being treated for their issues for the first time which is bound to manifest itself in better outcomes in the future."

*"**It has increased access to healthcare by increasing Medicaid enrollment, however, it is difficult to get an appointment with Medicaid as the insurer**."*

"I have heard a lot of negative things from people about this. One of the biggest has been cost. I had a patient tell me last week that they and their family have decided to pay the fines because the insurance that was offered under the reform plan was too expensive for them to pay and the fine was cheaper. I am not sure how accurate this is, but that was the perception of the patient and all of their family members who continue to have no insurance and plan on paying the fine."

"For some, this has enabled them to have insurance but I do not know whether or not they are using it? I can't speak to the service delivery. People cannot afford the co-pays or the premiums period. The cost also have gone up in just the first year."

*"The high deductibles have impacted those services that are considered "elective." Results are lower volumes in surgeries/outpatient services. **The upside is that people are attempting to take better care of themselves, but we don't have many programs that support that**."*

Q11: What has been the impact of Federal Health Care Reform od the Healthy Michigan Plan in your community? In other words, in what ways has it impacted the following: (1) access to health care, (2) service delivery, and (3) health outcomes? Please be as detailed as possible.

Those who view results as mixed say **more people are now covered, but that doesn't necessarily translate into access** for primarily two reasons: (1) many are purchasing insurance at an affordable premium yet this often comes with **high-deductibles and co-payments they cannot afford**, and (2) **quality of care** as well as **slower service delivery** still present important barriers to access. Those who view results as negative see a general lack of resources to meet existing needs combined with a high cost to consumers that still makes health care unattainable for many.

Impact of Federal Health Care Reform/Healthy Michigan Plan in SHUKH Service Area
Mixed/Negative Results Verbatim Comments

*"**More people have started addressing their needs, however, the deductibles are still keeping holding them back**."*

"Few people have signed up for health care on the Marketplace in Montcalm because of negative publicity. But Healthy Michigan sign ups have been booming. In spite of the lack of providers and other barriers, people are finding their way into care. They are being treated for their issues for the first time which is bound to manifest itself in better outcomes in the future."

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*"The high deductibles have impacted those services that are considered "elective." Results are lower volumes in surgeries/outpatient services. **The upside is that people are attempting to take better care of themselves, but we don't have many programs that support that**."*

"Higher needs with no resources to meet those needs. This has been what we have seen. A great lack of understanding and education of what resources are available and this has caused a lot of confusion to the general population."

Q11: What has been the impact of Federal Health Care Reform od the Healthy Michigan Plan in your community? In other words, in what ways has it impacted the following: (1) access to health care, (2) service delivery, and (3) health outcomes? Please be as detailed as possible.

Key Informants offer a multitude of strategies for improving the overall health climate in the SHUKH area. Addressing issues of **prevention education** and **raising awareness of existing services** top the list – particularly in **promoting community-wide events or initiatives** that bring education and services to "where the people are." Additionally, many prioritize **creating transportation services** for primary and specialized care.

Suggested Strategies to Improve the Overall Health Climate in SHUKH Service Area Verbatim Comments

*"**More access to traveling specialized services**. Bring the specialized service to where the patients are at."*

*"Providing more screenings to the community to identify those who would not otherwise access care is a good start. **Offer in grocery stores, churches and where people historically find transportation.** 'Get out of the box.'"*

*"**Health fairs**, community participatory health events, school health awareness."*

*"I think maybe more outreach to patients to let them know what health care opportunities are available. **It is difficult for people in the community to sometimes know what opportunities are there unless they happen to come to an appointment and find out.** I do see that sometimes people don't seek health care until they absolutely have to, so somehow getting the information out there may help someone seek preventative care rather than when it becomes urgent."*

*"**Transportation** to and from facilities and 'Free Clinics' based in existing facilities."*

*"Concentrated **effort to reduce tobacco use** and to **eliminate sedentary lifestyle**."*

Q10: What one or two things could be done in your community that would improve the overall health climate in your community? Please be as detailed as possible.

Additionally, Key Informants suggest **increased coordination of resources across agencies and community-wide collaborative effort to promote good health and wellness** as well as the importance of finding **funding** to support **affordable health care to those in need**, to develop **transportation services,** and to support **public health campaigns,** the **public health department,** and **prevention programs.**

Suggested Strategies to Improve the Overall Health Climate in SHUKH Service Area Verbatim Comments (Cont'd.)

"Greater collaboration between healthcare providers in the county is a good first step."

*"**Affordable health care, access and preventative/wellness programs that are grant funded and not to the cost of the patient**."*

"Continue to talk, plan and collaborate. The HUB worker will be a positive."

*"**Funding for transportation and awareness campaigns of what is available**."*

"Need more dollars available for programs to reach and engage the lower income level population."

*"**Culture change to make healthy decisions (exercise, diet, etc.) the norm and not the outlier**."*

"Greater funding for the health dept."

*"We should **leverage the reforms** under the ACA to **create sustainable models of community/health care coordination** that demonstrate real ROI and attract investment from providers and payers."*

*"**Less restrictions on who can receive needed help**."*

Q10: What one or two things could be done in your community that would improve the overall health climate in your community? Please be as detailed as possible.

Since the last CHNA conducted in 2011, Key Informants report **increased agency collaborative efforts** to address health issues, followed by **increased programming to address obesity, substance abuse**, and **general health awareness**, **expansion of general care** and **specialty services**, **more youth services**, and active **recruitment of more PCPs** to the area.

Activities Since CHNA Conducted in 2011
Verbatim Comments

*"**Recruitment of providers to the community has enhanced access dramatically**. Partnerships with community organizations - specifically schools - has provided increased education/awareness."*

"Awareness to the needs that were identified have been presented to numerous individuals all over the county. Existing and new programs have been identified and started to address the specific needs."

*"**Healthy Montcalm has been created to keep the needle moving. Addressing access, awareness, obesity, mental health, and substance abuse.** Progress has been made, but we still have a long way to go."*

"Spectrum Health annually collaborates with community agencies in its strategic planning initiatives. Care and services are continually updated and transformed to meet needs. The health dept. has also visited numerous agencies and collaborated with care providers to educate and exchange information."

"Increasing availability of care for adolescents via the Lakeview Youth Clinic."

"Expansion of United Lifestyles initiatives, community health clinics through Spectrum Health (Lakeview and now Belding too)."

"I have seen more collaboration with health agencies with schools to allow for health care access for children."

"Task forces and programs to address issues on obesity and abuse of prescription drugs are the two main new programs I have noticed in the last few years."

*"**There has been an increase in wellness-related programs**, programs are now being mainstreamed in our school systems as well, this is a key path for changing peoples view on their wellness."*

*"In our community **we are working on access issues through telehealth**."*

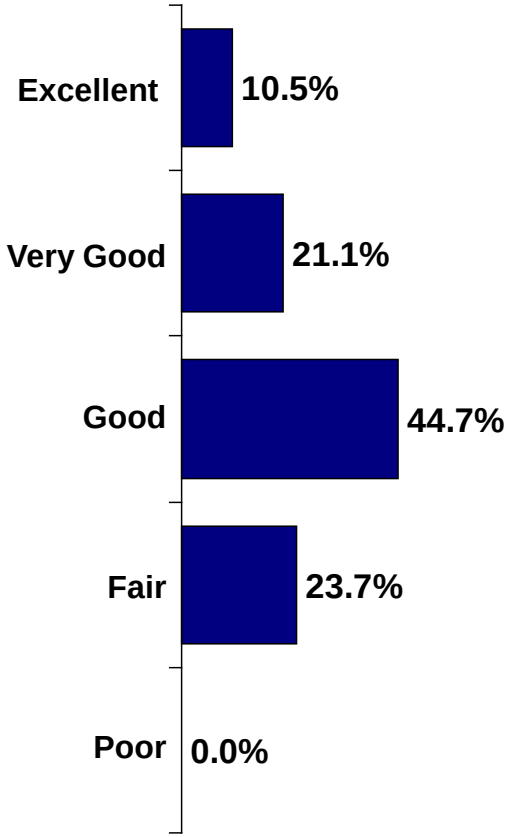
Q13: Since the Community Health Needs Assessment conducted three years ago in 2011, what has been done locally to address any issues relating to the health or health care of residents in your community? Please be as detailed as possible.

Underserved Resident Survey

Health Status

Almost one in four (23.7%) residents in the targeted subpopulations reports their health as fair, while none report their health as poor. This proportion is higher than the general population reporting fair or poor health in the BRFS.

Perception of General Health



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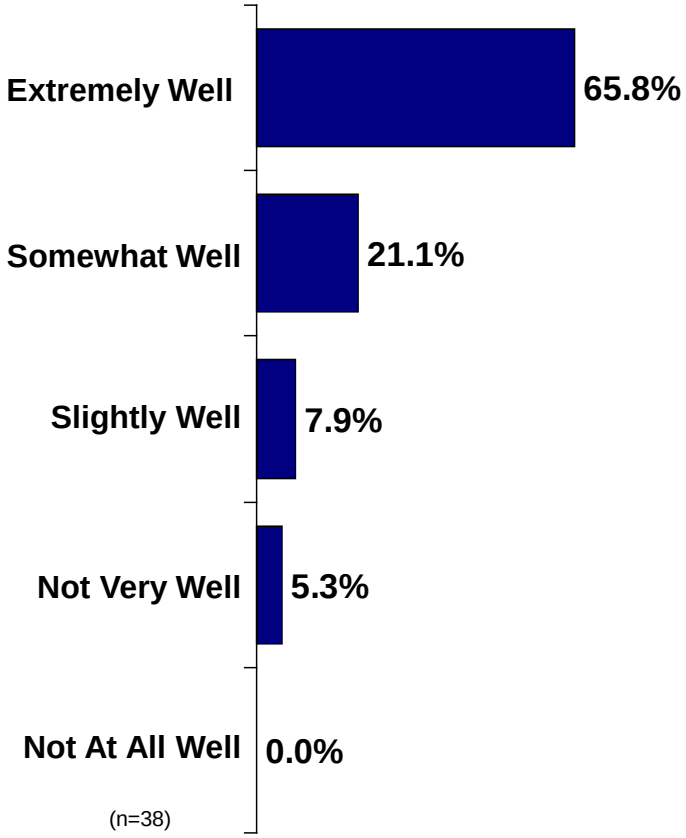
Q1: To begin, would you say your general health is….

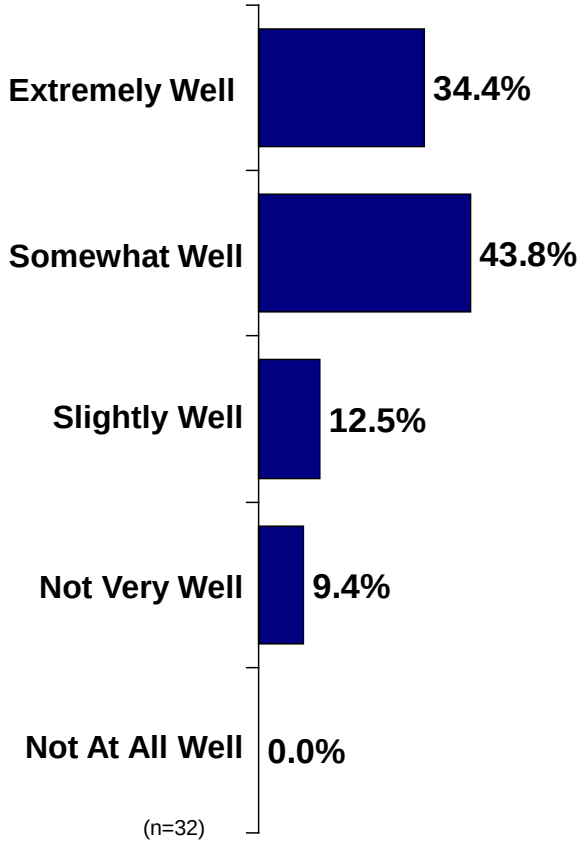
Nearly nine in ten (86.9%) underserved residents believe health care providers communicate somewhat or extremely well with them about their health, while more than three-fourths (78.2%) believe they communicate well with each other about patients' health.

Quality of Communication Among Health Care providers

Communication With *You* About Your Health



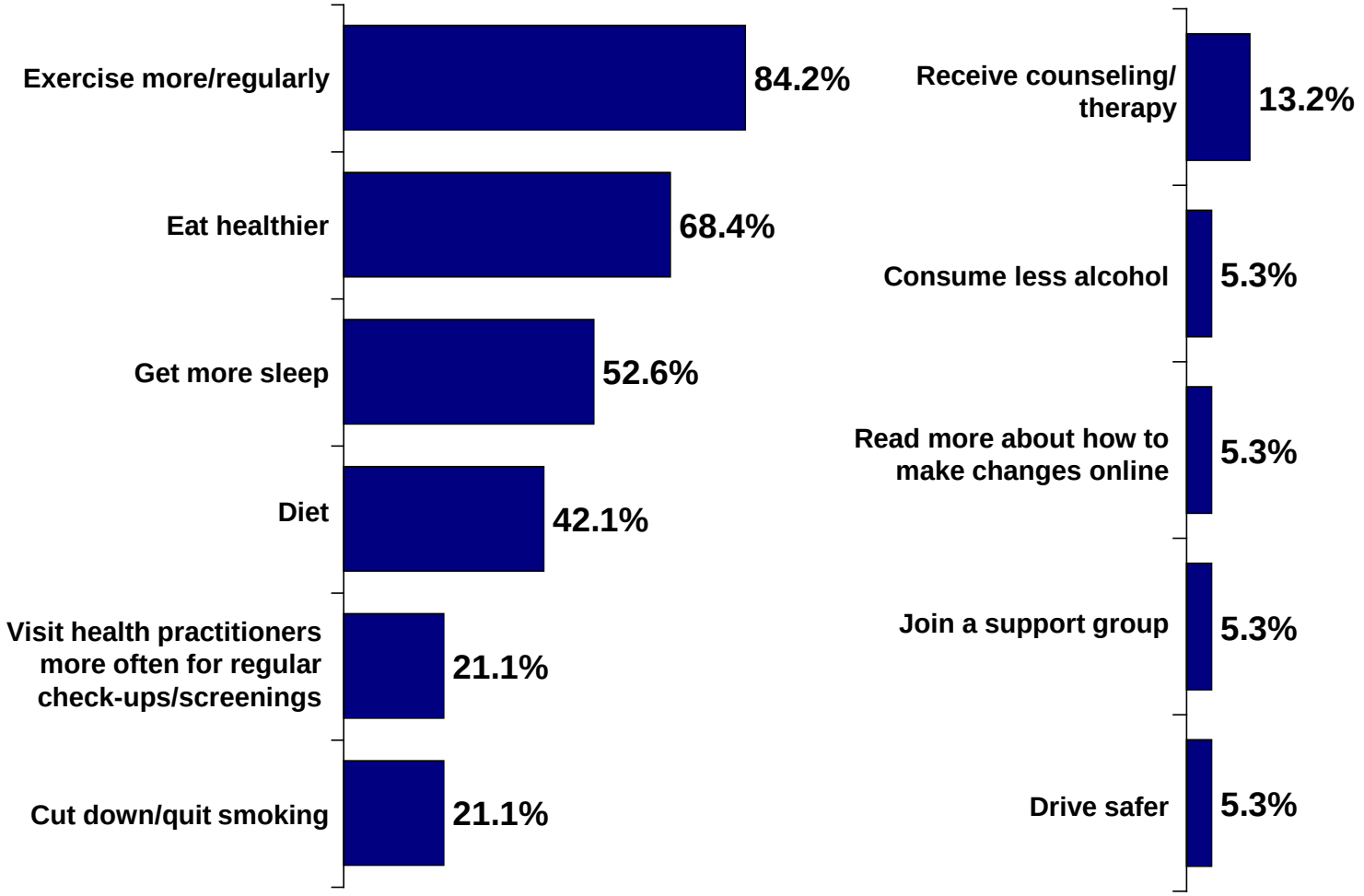
Communication With *Each Other* About Your Health



Q6: How well do you feel health care providers communicate with you about your health?
Q7: How well do you feel health care providers communicate with each other about your health?

The vast majority of the underserved know what they need to do to improve their health: **exercise more**, **eat healthier**, **get more sleep**, and **diet**. To a lesser degree, they are also willing to visit health practitioners more often, cut down or quit smoking, and receive counseling or therapy.

Behavioral Changes Needed to Improve Health



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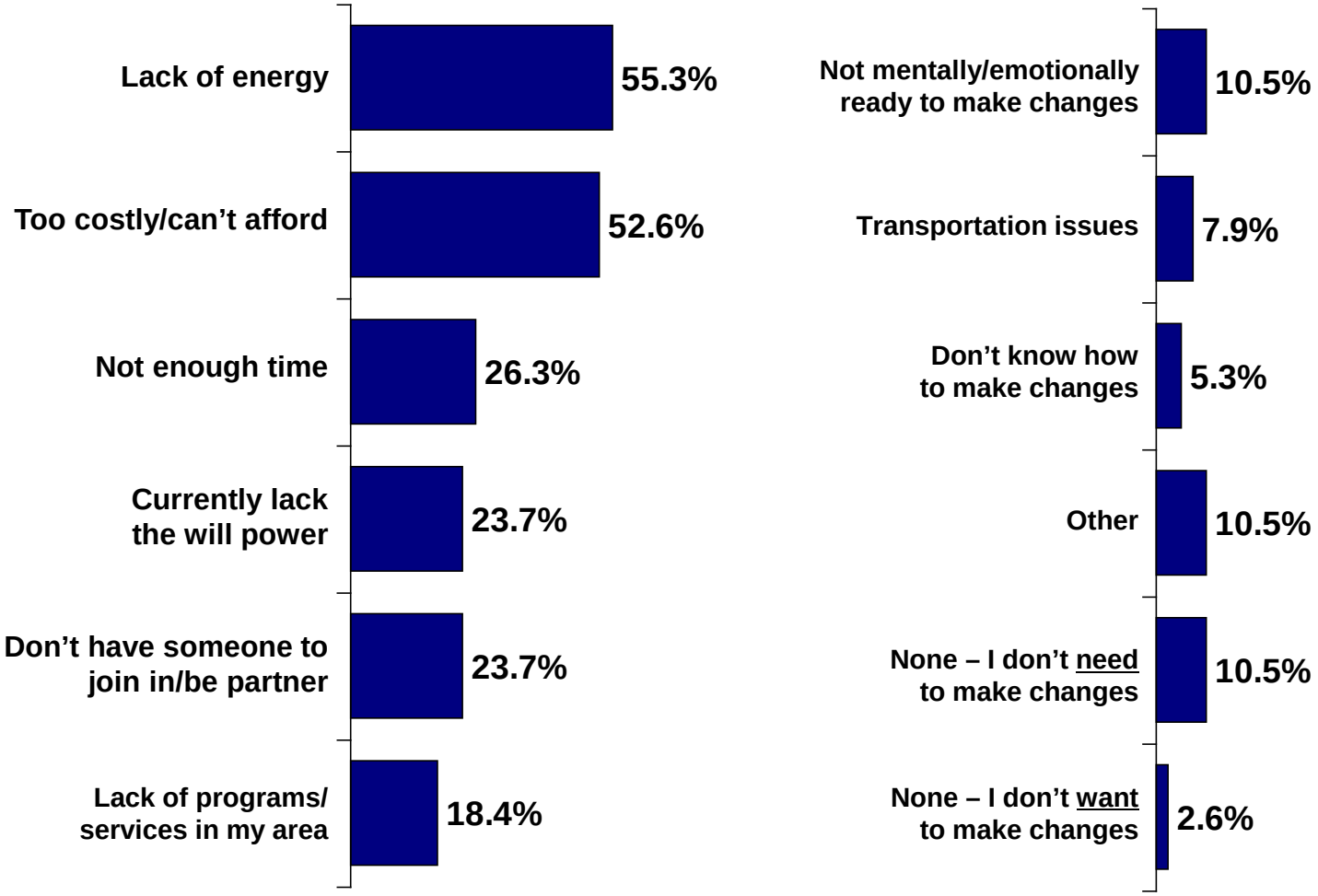
Q17: Which of the following behavioral changes do you believe you need to make to improve your health? (*Select all that apply*)

Although underserved residents know what they should do to improve their health, they face several barriers to living a healthy lifestyle, the greatest of which are **lack of energy** and **cost**. Further stumbling blocks include **lack** of the following**: time**, **will power**, **partner to join in**, and **programs or services** in the area. One in ten (10.5%) say they do not need to make any changes.

Barriers Preventing Living a Healthier Lifestyle



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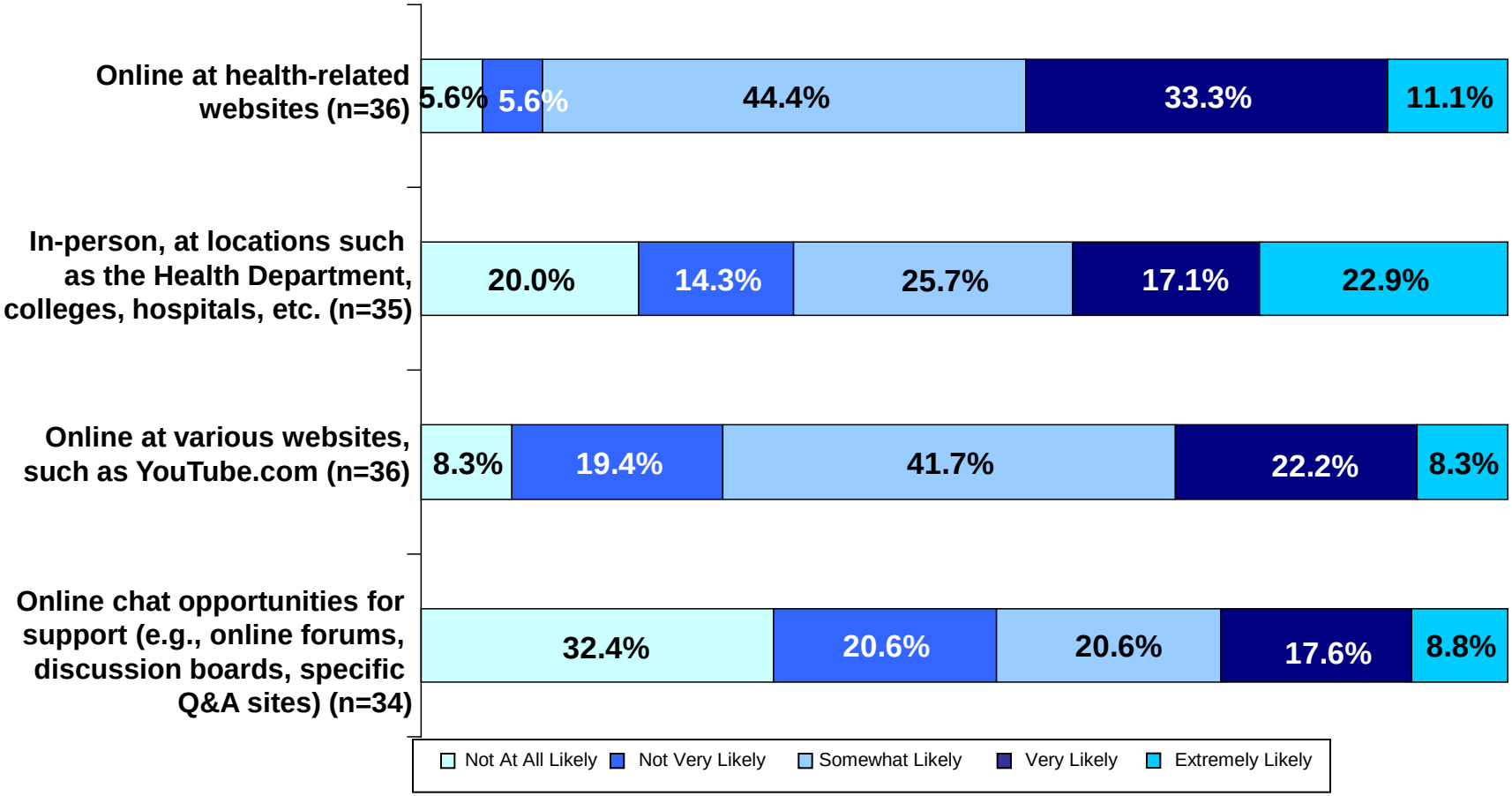
Q18: What are some of the barriers you face when trying to live a healthier lifestyle? (*Select all that apply*)

If education or instruction on ways to live healthier lifestyles were provided in various formats, underserved residents would most likely participate **online via health-related websites**, followed by **in-person at various locations**. They are less likely to visit online chat rooms.

Likelihood to Participate in Education/Instruction on Leading Healthier Lifestyles

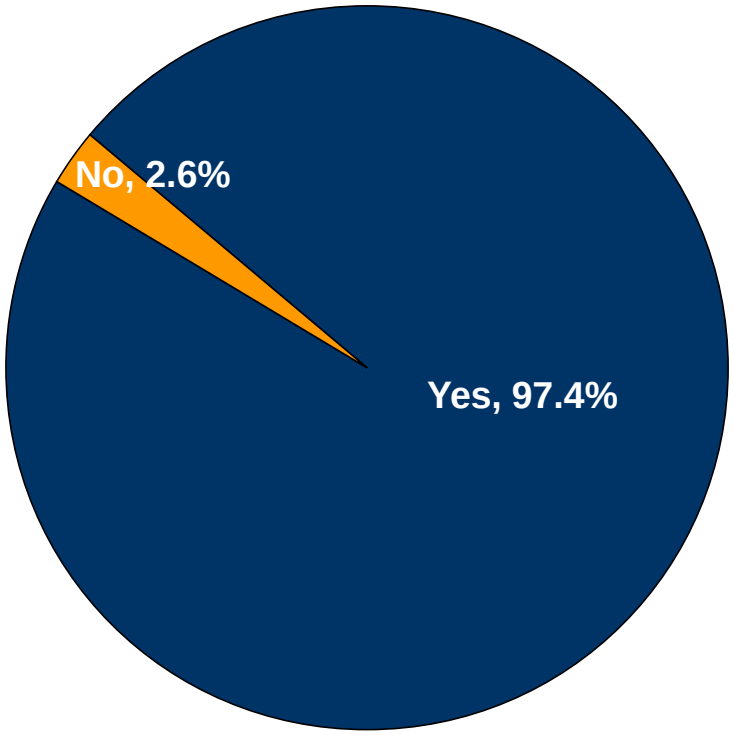


Q19: If education or instruction on how to **lead a healthier lifestyle** were available in different formats (below), please tell us **how likely** you would be to participate in these activities.

Health Care Access

Almost all (97.4%) of underserved residents report having a primary care physician (medical home) that they can visit with any questions or concerns about their health.

Have Primary Care Physician (Medical Home)



(n=38)

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

Underserved residents seek providers who: have a **good bedside-manner**, can **communicate well**, and are **honest**, **caring**, **thorough**, and **attentive**. Communicating well means they are **good listeners** and both **ask and answer questions** while interacting with patients. Additionally, providers should be **available for appointments** that are not pushed months out. Providers should **take time to visit with patients without making them feel rushed**, while also demonstrating the **proper respect** patients deserve.

Most Important Qualities in a Health Care Provider

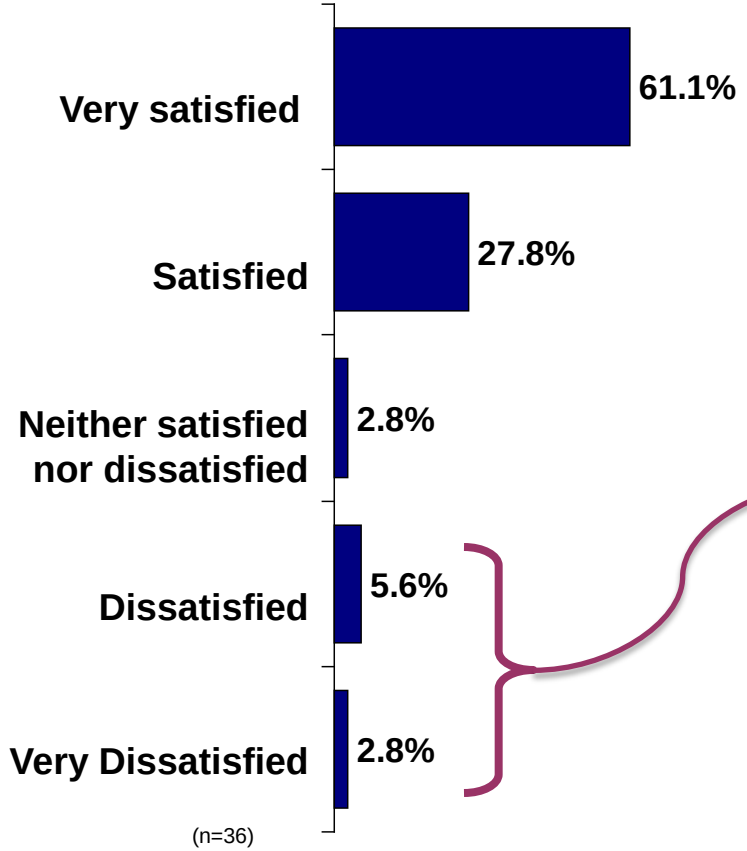
(n=35)

Q3: What is the most important quality you look for in a health care provider? (open end)

The vast majority (88.9%) of underserved residents are satisfied with their last visit for health care. The couple of people who were dissatisfied report not receiving timely vaccinations and a perceived failure to address their concern adequately.

Satisfaction with Last Health Care Visit and Reason for Rating

Satisfaction with Last Visit



Reasons for Dissatisfaction with Last Visit

"Still haven't got answers of when to get my second Hepatitis B vaccine. First one was 10-16-14. Hard time getting my medications."

"Felt that health concerns were not addressed adequately enough."

Q4: How satisfied were you with your last visit for health care?
Q5: Why do you say that? Please be as detailed as possible.

Underserved consumers who are satisfied with their last health care visit appreciate providers (physicians, nurses) who **discuss in detail their ailments/conditions** and develop a **plan** to address them. They like providers who **take time without rushing them** and **communicate well**, **listen**, **show empathy/concern** (care), ans**wer as well as ask questions**, are **knowledgeable** and **treat patients with respect**. Above all, they expect health care professionals to **explain any diagnoses in terms they can readily understand**.

Reasons for Satisfaction with Last Health Care Visit
Verbatim Comments

*"Because they **give me all the information** I need and **keep me informed**."*

*"He is very **nice** and **non-judgmental**."*

*"I feel the doctor **cares** about the family."*

*"She **answered all my questions**."*

*"Always get **questions answered** and a **understandable explanation of diagnosis**, if any."*

*"I appreciated the doctor's **personal care** and **concern** for me as an individual."*

*"**In very quick**."*

*"**Take their time** and are very **concerned**."*

*"I **trust** my doctor and feel like my doctor **listens** to my concerns."*

*"He sits down and **listens** to me; doesn't hesitate to run tests."*

*"Doctor **listens** to me."*

*"Doctor **answers questions** about my kids."*

*"**Good manners**, things **explained** to me in **terms I understand**."*

*"All staff was very **accommodating** and **helpful**."*

*"Because my doctor **cared** and was **concerned** about me or my family."*

*"PCP **looked at the chart and developed a plan**."*

*"Physician **talked to me for a long time**, **asked about home life**."*

*"He **referred to specialist when needed**."*

*"Staff very **patient**."*

*"The staff is wonderful and the **doctor explained everything so I can understand**."*

*"They seem **caring** and **make sure I'm healthy**."*

*"Very **detailed**."*

*"They are **nice**."*

*"Because the doctor **considered a new medication for my depression**."*

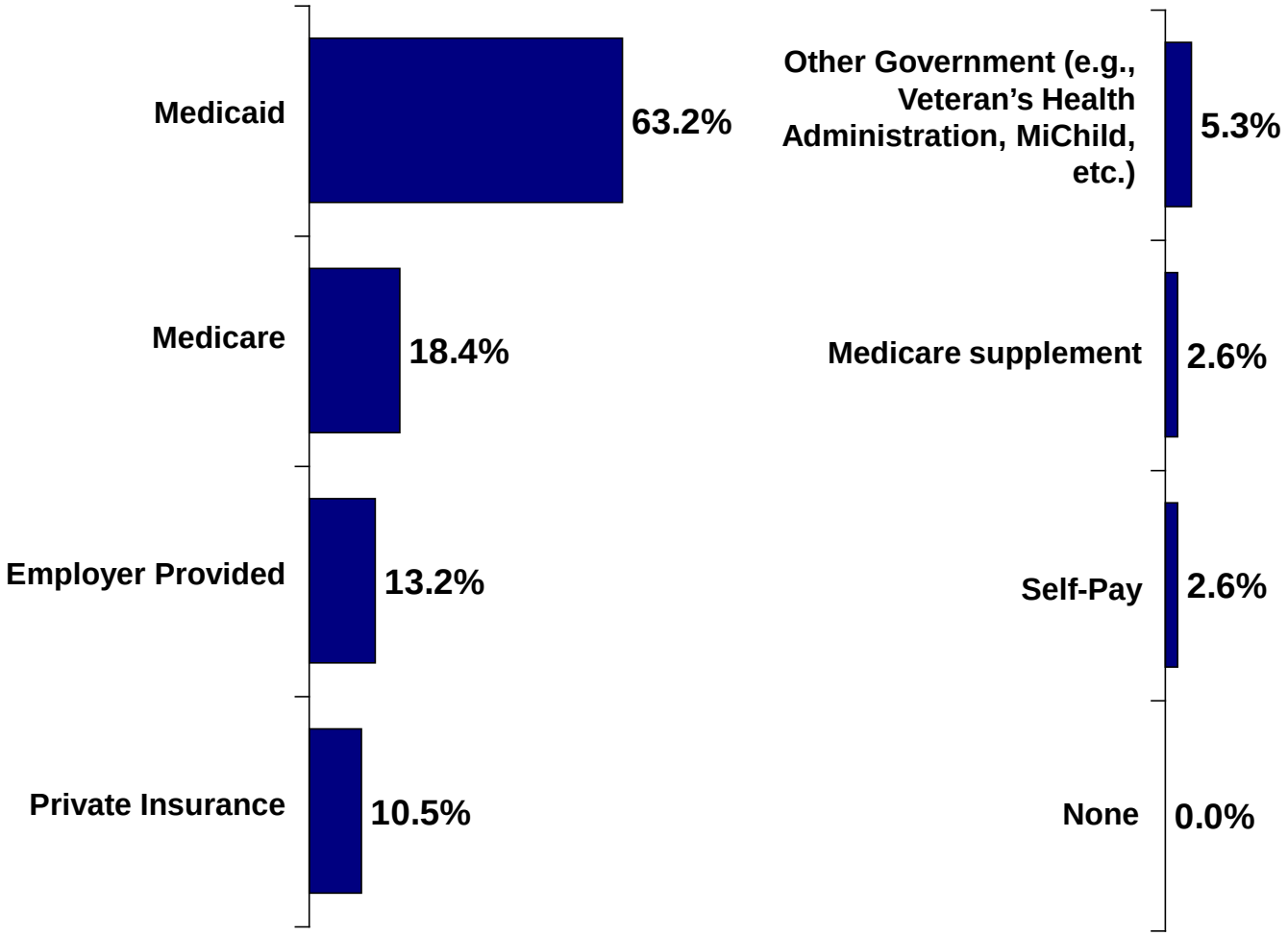
*"**Sense of humor**, **comfortable**, "good numbers."*

*"General office call -- **took care of immediate issue**."*

Q5: Why do you say that? Please be as detailed as possible.

More than six in ten (63.2%) of the underserved residents have Medicaid health coverage, while 18.4% have Medicare and 13.2% have employer provided health insurance. In sum, the vast majority (86.9%) have health insurance that is a government sponsored plan.

Current Health Insurance



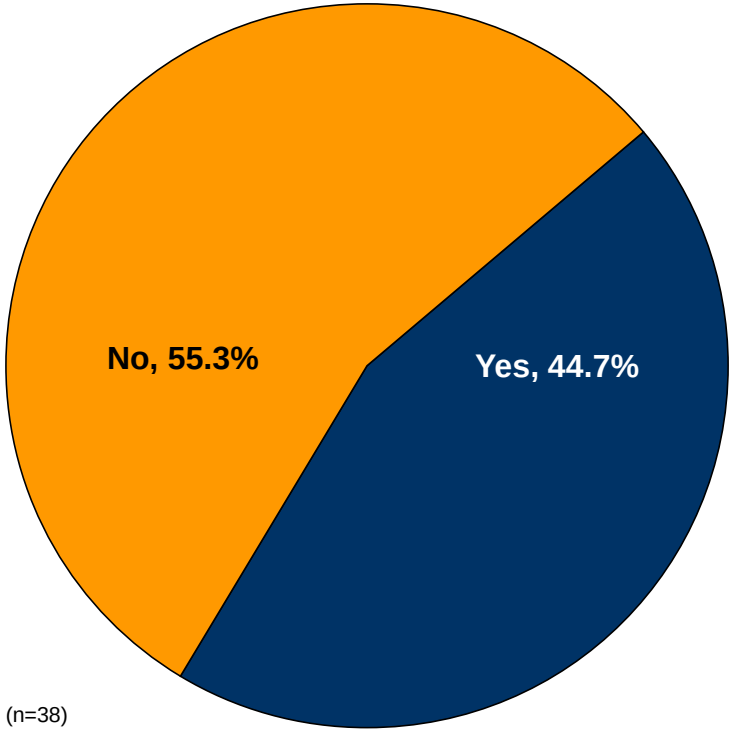
(n=38)

Q8: Which of these describes your health insurance situation? (*Select all that apply*)

More than four in ten (44.7%) of the underserved have had trouble getting needed health care for either themselves or their family in the past two years. The most prominent reason for this is the **lack of insurance** and the **inability to afford out-of-pocket expenses such as co-pays and deductibles**. Other notable barriers to care include **transportation issues** and **problems with health care professionals and their staff**.

Barriers to Meeting Health Care Needs

Had Trouble Meeting Health Care Needs in the Past Two Years



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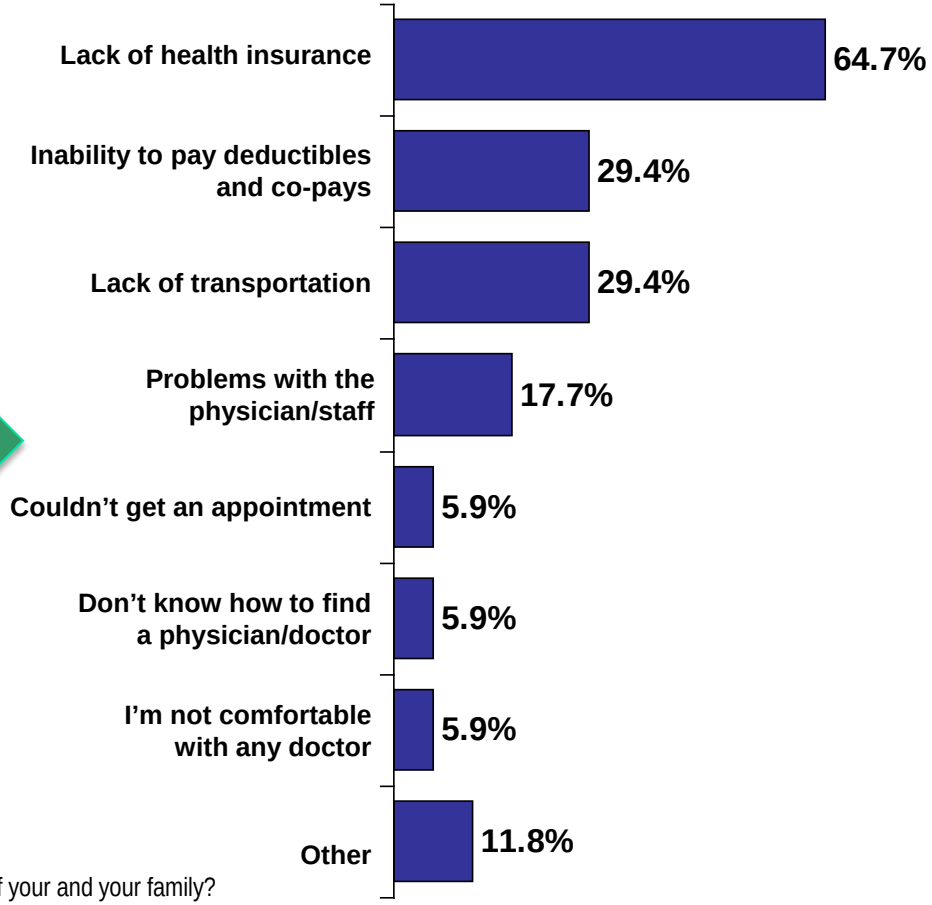
Reasons for Not Receiving Needed Health Care



(n=17)

Q9: In the past two years, was there a time when you had trouble meeting the health care needs of your and your family?
Q10: (If yes) What are some of the reasons you had trouble meeting the health care needs of you and your family? (Select all that apply)

In general, underserved residents seek **more information on various physical or social issues**. This can be accomplished via **classes** on **physical conditions** such as diabetes, COPD, asthma, congestive heart failure, and fibromyalgia or on **preventive practices** such as weight loss. There is also a need for **more/better general courses or workshops on general health education**.

Health Care Programs, Services, and Classes That are Lacking in the Community

*"Greenville Spectrum Health Hospital **needs more equipment for special needs**."*

*"**COPD education program**."*

*"**Teen programs**."*

*"**Weight loss** programs."*

*"**Classes on CHF, COPD, and asthma**."*

*"**Fibromyalgia** issues."*

*"**Diabetes education**."*

*"**Family park, water park**."*

*"Common, ordinary **health education**."*

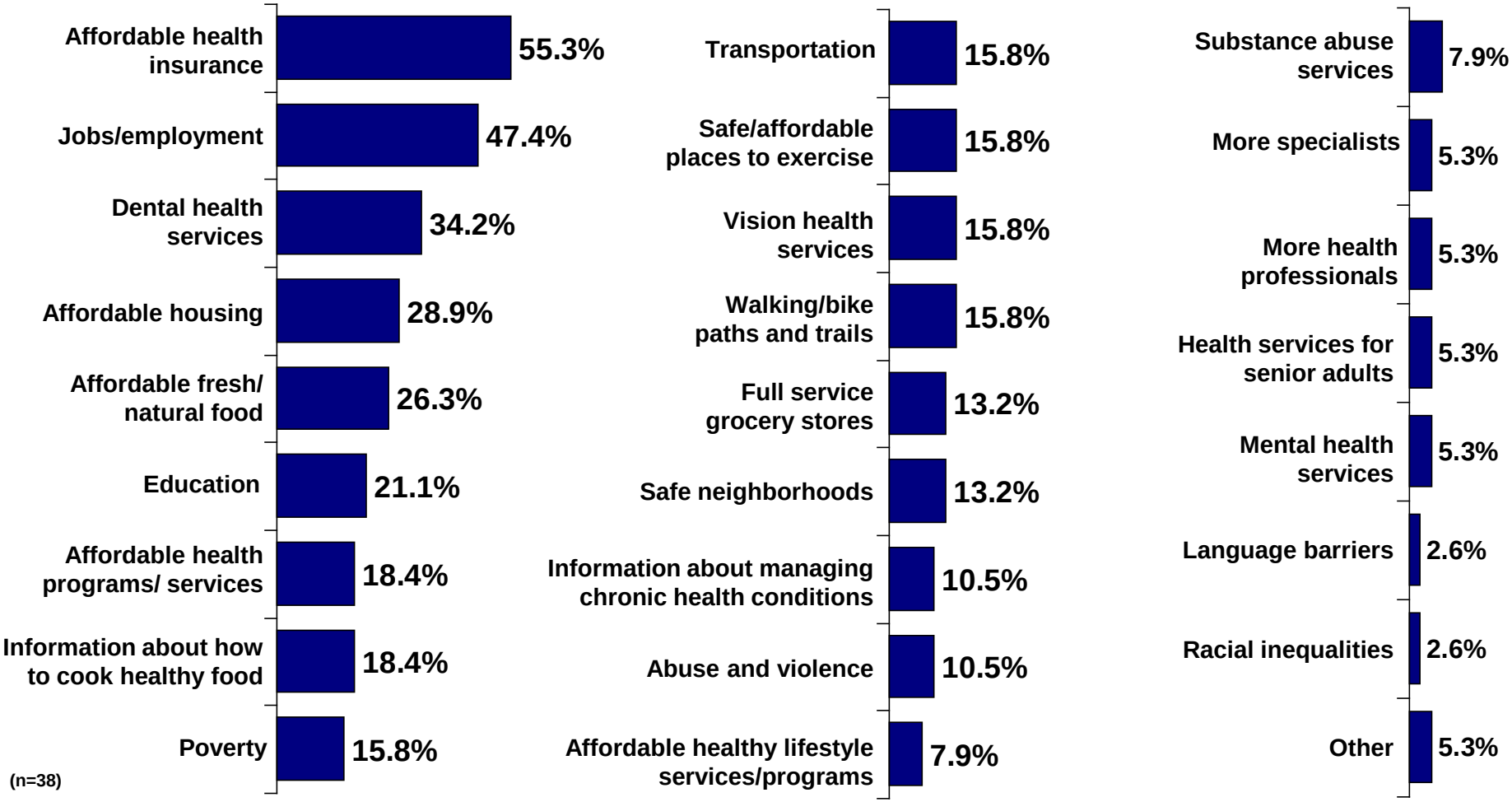
"[Lack of] volunteering for short hours during the day."

Q11: What health care related programs, services, or classes are lacking in your community? In other words, what programs, services, or classes do you want that are currently unavailable? Please be as detailed as possible.

Community Issues That Impact Health

There are numerous issues that underserved residents believe impact health in their community. At the top is **affordable health insurance**, followed by **jobs/unemployment/the economy**. Other impactful issues include **dental services**, **affordable housing**, **affordable fresh/natural food**, **education**, **affordable health programs/services**, and **information on how to cook healthy food**. **Racial inequalities** and **language barriers** are nonissues in the community.

Community Issues That Impact Health



Q12: What are the top five issues in your community that impact health?

Residents point to numerous community characteristics that make it easy for people to be healthy, such as **plenty of trails and paths for walking, hiking, and biking**, as well as **gyms and fitness centers**. Additionally, there are **Farmer's Markets** and grocery stores that have healthy food such as fresh produce. For medical assistance, the area has **hospitals**, **medical offices**, and **health professionals** in several locations.

Community Characteristics That Make it *Easy* to be Healthy

*"**Chiropractors handy**, **hospital easy to get to**."*

*"They offer **classes**."*

*"The **supermarkets are handy** for me. They're just around the corner."*

*"**Fitness clubs**, **trails**, plenty of **grocery stores**."*

*"Having **only one "fast food" option in town** and it has healthy options (Subway)."*

*"**Doctors**, **ER**, **everything we need** to take care of ourselves."*

*"**Insurance**, **many different places that accept so many different insurance plans**."*

*"Greenville has a **walking path**."*

*"Having **healthy food**."*

*"Grocery store and pharmacy is **a block away**."*

*"**Affordable gym**, **walking trails**."*

*"Beautiful **trailway for walking**."*

*"**Affordable** and **easy**."*

*"Lots of **farm fresh food**."*

*"**Walking/bike trails**, grocery store with **great produce**."*

*"**Fresh veggies**, **farmer's markets**."*

*"We have great places for **walking or biking** on the **trails**. We have **a few gyms**."*

*"We have **lots of places to walk**."*

*"Greenville has **nice places for walking**."*

*"**Farmer's Market**."*

*"Getting **assistance from WIC**."*

*"**Healthy food**, **fresh food**, and **medical offices**."*

*"**Great hospital**, **several fitness centers**, nice **nature trail**."*

*"**Larger grocery store**, make it easier."*

*"**Bike trails**, **farmer's market**, **parks**, **lakes**."*

Q13: What are the primary characteristics of your community that make it easy to be healthy? Please be as detailed as possible.

Conversely, some see the **overabundance of fast food restaurants** and **junk food in local stores** as a barrier to eating healthy. There is an acknowledgement that **fast food and junk food costs less than healthy food**. However, this problem goes deeper because not only is healthy food more expensive than unhealthy food, but the expense is preventing many people from purchasing healthy food at all. Others have commented on the **lack of jobs and unemployment** as obstacles to living healthy

Community Characteristics That Make it *Hard* to be Healthy

*"**No Whole Foods stores** or **affordable child care** for exercise."*

*"**Fast food restaurants** keep growing in number."*

*"**Cost of healthy food**."*

*"Yes, I **live too far away**."*

*"**Tobacco**, **alcohol**."*

*"**Cost of food** has gone up."*

*"**Cost of food**."*

*"**Fast food**, **no public pool**."*

*"Sometimes it is hard to rollerblade with the **broken sidewalks**."*

*"Too many **fast food places**."*

*"**Employment**."*

*"**Nothing to do here**."*

*"**Expensive** and not easy to fulfill as a mom."*

*"**No gyms**, ones that are close by are **too expensive**."*

*"**Expenses**."*

*"Our community **lacks jobs** which makes it **hard for members to have health insurance** and **transportation** for health care needs."*

*"We have **too many fast food restaurants**."*

*"Going to the store and **seeing all the chips**."*

*"**Lack of organic foods**."*

*"**Healthier foods are more expensive** and **gyms are expensive**."*

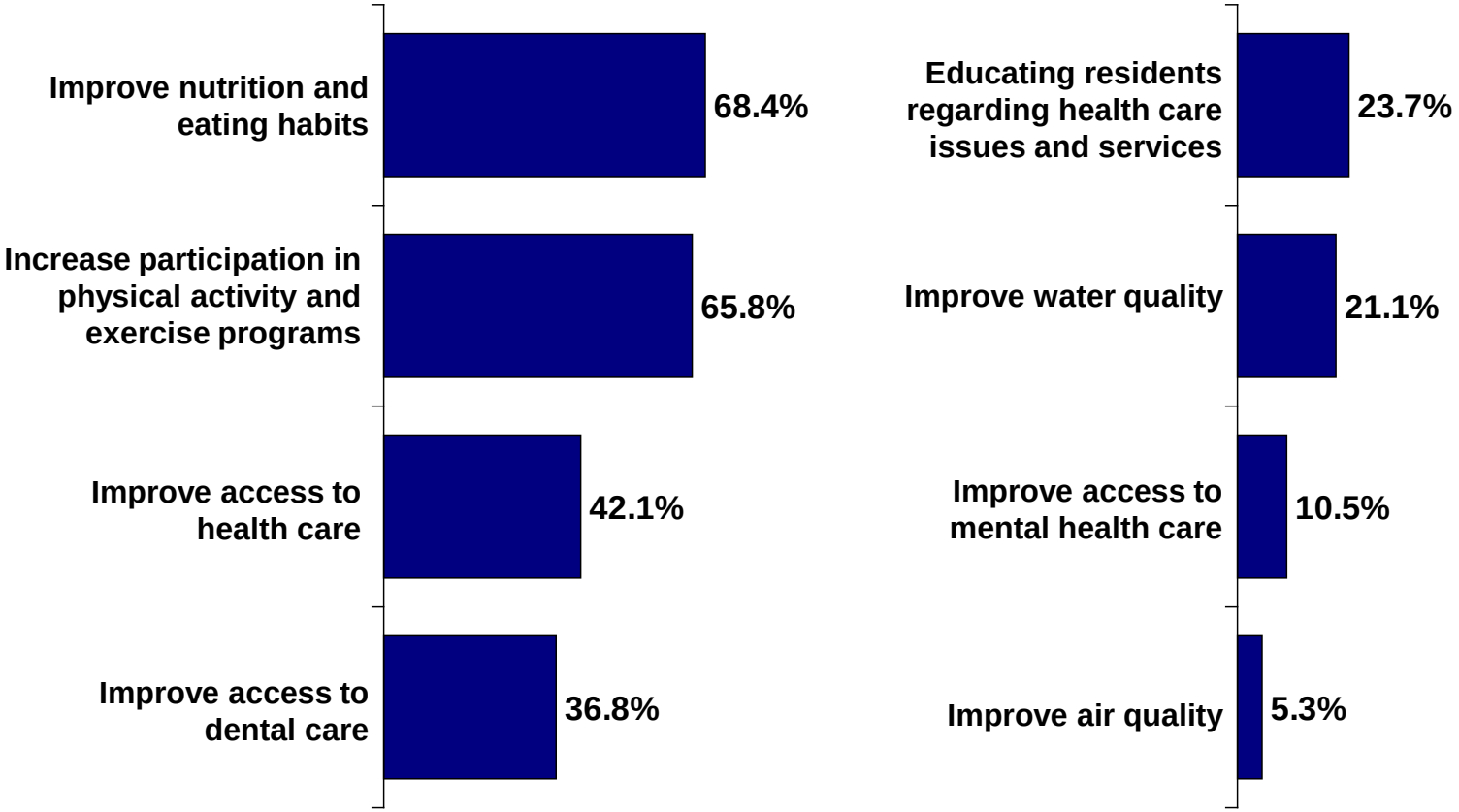
*"**Education**."*

*"All the **fast food places**."*

Q14: On the other hand, what are the primary characteristics of your community that make it hard to be healthy? Please be as detailed as possible.

Two-thirds of the underserved think the most important changes that could make the local community healthier are to **improve nutrition and eating habits** and **increase participation in physical activity and exercise programs**. Roughly four in ten also believe there is a need to **improve access to health care and dental care**. Of note, one in five (21.1%) cite a need to **improve water quality**, however improving air quality is not considered necessary.

Most Important Actions for Making Community Residents Healthier



(n=38)

Q15: From the following list, please rank the top three areas that are most important to making the people in your community healthier, For example, 1 would be your most important, 2 would be your second most important, and 3 would be your third most important.

Underserved residents' suggestions for making the community healthier include **more options for exercising**, including gyms or exercise centers that are **free or low cost**, **organized programs that pair people with partners** making exercise more of a social event, and **more classes or information on the topic of exercise**. Also, some seek **support groups** for both health behaviors such as exercise but also for heath conditions such as chronic disease. Finally, providing **free or low cost daycare** may increase the number of mothers who would like to exercise but cannot because of lack of child care.

Suggestions for Making Community Residents Healthier

*"**Whole Foods store** (affordable) with education."*

*"They have to want to **learn** and want to try to learn."*

*"**Exercising center - low to no cost**. Being able to **talk to someone about healthy choices**."*

*"If Howard City offered a **"walking" buddy program** or a group for people to join to help each other, I think people could benefit from it."*

*"**More exercise**, **more information on the topic**."*

*"**No more fast food**, **free membership to gyms** with **free daycare**."*

*"**Support programs for exercise**."*

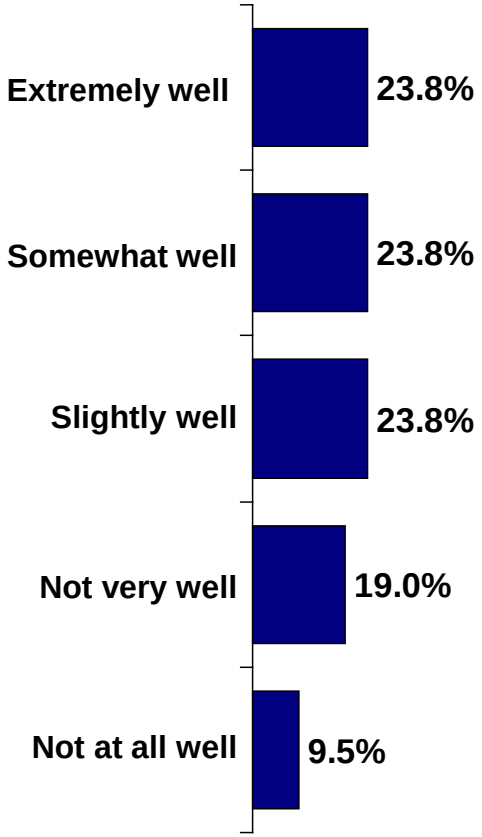
*"**More classes about exercising/health**."*

*"Start a **support group for people with health issues**."*

Q16: What other ideas do you have to make the people in your community healthier? Please be as detailed as possible.

When asked how well prepared they think local health professionals are for dealing with communicable or infectious disease outbreaks, many underserved residents are unable to answer. Of those who have an opinion, less than half (47.6%) think they are somewhat or very well prepared. More than one-fourth (28.5%) feel they are not very or not at all well prepared.

Preparedness for a Communicable or Infectious Disease Outbreak



(n=21)

Q20: How well prepared are local health care professionals to deal with a communicable or infectious disease outbreak, such as Ebola?

Underserved residents had a chance to provide concluding comments and the few who did took the opportunity to **reiterate the need for programs and services that are geared toward living healthier lifestyles**, such as health education, affordable gym memberships, community walk/run challenges, classes on ways to prepare foods, and community health days that highlight food, exercise, and ways to prepare food.

Concluding Verbatim Comments

"People have choices. ***Medicaid covered gym memberships*** *for moms."*

"I think it's awesome that there are ***so many programs****, and* ***so much information*** *to learn."*

*"****Community health days*** *(food, exercise, food prep, pros and cons of choices),* ***produce market difference****,* ***community night walk/run challenge****,* ***classes on how to prepare food and pros and cons of each****."*

"All ***health education*** *should be home visits.*

"Developing an ***Internet game to be healthier****."*

Q21: In concluding, do you have anything else you would like to add about health or health care issues? Please be as detailed as possible.

APPENDIX

Methodology

Methodology

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

	Data Collection Methodology	Target Audience	Number Completed
Key Stakeholders	In-Depth Telephone Interviews	Hospital Directors, Clinic Executive Directors	5
Key Informants	Online Survey	Physicians, Nurses, Dentists, Pharmacists, Social Workers	27
Community Residents (Underserved)	Self-Administered (Paper) Survey	Vulnerable and underserved sub-populations	38
Community Residents	Telephone Survey (BRFS)	SHUKH Area Adults (18+)	663

- Secondary data was derived from various government and health sources such as the U.S. Census, Michigan Department of Community Health, County Health Rankings, Youth Risk Behavior Survey, Youth Assessment Survey, Kids Count Data, and Bureau of Labor Statistics.

Methodology (Cont'd.)

- A total of 5 *Key Stakeholders* completed an in-depth interview. *Key Stakeholders* were defined as executive-level community leaders who:
  - Have extensive knowledge and expertise on public health issues
  - Can provide a "50,000 foot perspective"
  - Are often involved in policy decision making
  - Examples include hospital administrators and clinic executive directors

- A total of 27 *Key Informants* completed an online survey. *Key Informants* are also community leaders who:
  - Have extensive knowledge and expertise on public health issues, or
  - Have experience with subpopulations impacted most by issues in health/health care
  - Examples include health care professionals or directors of non-profit organizations

- There were 38 self-administered surveys completed by *targeted sub-populations* of vulnerable or underserved residents, such as single mothers with children, senior adults, those who are uninsured/underinsured/have Medicaid, and minority populations, if any.

Methodology (Cont'd.)

- A *Behavioral Risk Factor Survey* was conducted in the SHUKH catchment area via telephone with 663 adult (18+) residents. The response rate was 34%.

- Disproportionate stratified random sampling (DSS) was used to ensure results could be generalized to the population of each county from which the respondent resided. 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

- In addition to landline telephone numbers, the design also targeted cell phone users. Of the 663 completed surveys:
  - 240 are cell phone completes (36.2%), and 423 are landline phone completes (63.8%)
  - 130 are cell-phone-only households (19.6%)
  - 138 are landline phone-only completes (20.8%), and
  - 395 have both cell and landline numbers (59.6%)

Methodology (Cont'd.)

- For landline numbers, households were selected to participate subsequent to determining that the number was that of an SHUKH area 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 the SHUKH catchment area (determined by zip code). In households with more than one adult, interviewers randomly selected one adult to participate based on which adult had the nearest birthday. In these cases, every attempt was made to speak with the randomly chosen adult; interviewers were instructed to not simply interview the person who answered the phone or wanted to complete the interview.

- Spanish-speaking interviewers were used where Spanish translation/ interpretation was needed.

- Unless noted, as in the Michigan BRFS, respondents who refused to answer a question or did not know the answer to a specific question were normally excluded from analysis. Thus, the base sizes vary throughout the section regarding the BRFS.

Methodology (Cont'd.)

- Data weighting is an important statistical process that was used to remove bias from the BRFS sample. The formula consists of both design and iterative proportional fitting. The purpose of weighting the data is to:
  - Correct for differences in the probability of selection due to non-response and non-coverage errors
  - Adjust variables of age, gender, race/ethnicity, marital status, education, and section to ensure the proportions in the sample match the proportions in the population of adults from Mecosta, Montcalm, or Newaygo counties
  - Allow the generalization of findings to the adult population of the SHUKH catchment area

- The components of the design weighting formula are as follows:
  - STRWT – accounts for differences in the basic probability of selection among strata (subsets of area code/prefix combinations). STRWT = number of available phone numbers/number of phone numbers selected
  - IMPNPH – the number of residential telephone numbers in the respondent's house
  - NUMADULT – number of adults in the respondent's household

- The formula used for design weighting the BRFS data is:

Design Weight = STRWT * 1/IMPNPH * NUMADULT

Methodology (Cont'd.)

- Raking weighting ensures the data are representative of the population of adults in Mecosta, Montcalm, and Newaygo counties on a number of demographic characteristics, such as age, gender, race/ethnicity, marital status, and education. Raking weighting incorporates the known characteristics of the population into the sample. For example, if the sample is disproportionately female, raking will adjust the responses of females in the sample to accurately represent the proportion of females in the population. This is done in an iterative process, with each demographic characteristic introduced into the sequence. This process may require multiple iterations before the sample is found to accurately represent the population on all of the characteristics named above.

- The formula used for the final weight is: **Design Weight * Raking Adjustment**

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 fourteen alcoholic drinks per week for men and more than seven per week for women in the previous month.

Respondent Profiles

Behavioral Risk Factor Survey

Gender	(n=663)
Male	53.7%
Female	46.3%
Age	**(n=663)**
18 to 24	17.5%
25 to 34	16.0%
35 to 44	17.0%
45 to 54	19.5%
55 to 64	14.7%
65 to 74	9.3%
75 or Older	6.1%
Race/Ethnicity	**(n=662)**
White, non-Hispanic	91.8%
Non-White	8.2%
Marital Status	**(n=661)**
Married	51.9%
Divorced	11.9%
Separated	1.2%
Widowed	4.4%
Never married	29.7%
Member of an unmarried couple	1.0%

Number of Children Less Than Age 18 At Home	(n=662)
None	59.3%
One	15.2%
Two	18.1%
Three or more	7.4%
Number of Adults and Children in Household	**(n=662)**
One	8.4%
Two	33.7%
Three	22.5%
Four	17.2%
Five	7.6%
More than five	10.7%
Education	**(n=663)**
Never attended school, or only Kindergarten	0.7%
Grades 1-8 (Elementary)	2.0%
Grades 9-11 (Some high school)	9.2%
Grade 12 or GED (High school graduate)	39.0%
College 1 year to 3 years (Some college)	38.4%
College 4 years or more (College graduate)	10.6%

Behavioral Risk Factor Survey (Cont'd.)

Employment Status	(n=661)
Employed for wages	47.2%
Self-employed	5.2%
Out of work for more than a year	4.2%
Out of work for less than a year	1.3%
A homemaker	3.5%
A student	8.5%
Retired	19.6%
Unable to work	10.5%
Household Income	**(n=457)**
Less than $10,0000	9.2%
$10,000 to less than $15,000	6.7%
$15,000 to less than $20,000	7.9%
$20,000 to less than $25,000	5.7%
$25,000 to less than $35,000	18.5%
$35,000 to less than $50,000	27.5%
$50,000 to less than $75,000	11.6%
$75,000 or more	12.9%
Poverty Status	**(n=457)**
Income under poverty line	22.5%
Income over poverty line	77.5%

Military Service	(n=663)
Served	11.6%
Did not serve	88.4%
County	**(n=663)**
Montcalm	91.5%
Mecosta	7.1%
Newaygo	1.4%
Zip Code	**(n=651)**
48838	29.5%
49329	13.1%
48888	10.5%
48884	8.5%
48850	8.1%
49336	7.3%
48829	6.3%
49322	3.8%
48885	3.3%
48811	3.1%
48834	3.0%
49347	1.6%
49339	1.2%
49343	0.3%
49341	0.3%

Key Stakeholder Interviews

Chief Executive Officer, Carson Health

Chief Executive Officer, Sheridan Community Hospital

Executive Director, United Way of Montcalm and Ionia Counties

Health Officer, Mid-Michigan District Health Department

President, Spectrum Health Kelsey Hospital and Spectrum Health United Hospital

Key Informant Surveys

Director (4)	Health Educator (2)	County Commissioner
Nurse (RN) (3)	MD (2)	Executive Director
Physician Assistant (2)	City Council/Hospital Board Member	General Manager
Law Enforcement/Courts (2)	Clinical Practice Coordinator	Health Officer
School Superintendent/Administrator (2)	Coordinator	Social Worker

Resident (Underserved) Survey

	TOTAL
Gender	(n=38)
Male	5.3%
Female	94.7%
Age	(n=38)
18 to 24	36.8%
25 to 34	21.1%
35 to 44	15.8%
45 to 54	7.9%
55 to 64	7.9%
65 to 74	7.9%
75 or Older	2.6%
Race/Ethnicity	(n=38)
White/Caucasian	94.7%
Other (Bi-Racial)	5.3%
Adults in Household	(n=38)
1	15.8%
2	55.3%
3	26.3%
4 or More	2.6%

	TOTAL
Marital Status	(n=38)
Married	39.5%
Divorced	10.5%
Widowed	5.3%
Separated	2.6%
Never married	36.8%
Member of an unmarried couple	5.3%
Children in Household < 18	(n=38)
None	39.5%
1	26.3%
2	23.7%
3 or More	10.6%
Education	(n=38)
Less than High School	10.5%
Grades 12 or GED	42.1%
College 1 to 3 Years	36.8%
College Graduate	10.5%
County	(n=34)
Montcalm	76.5%
Ionia	14.7%
Kent	8.8%

	TOTAL
Children in Household <5	(n=38)
None	47.4%
1	34.2%
2	18.4%
3 or more	0.0%
Employment Status	(n=38)
Employed for wages	31.6%
Self-employed	5.3%
Out of work less than 1 year	10.5%
Out of work 1 year or more	10.5%
Homemaker	18.4%
Student	7.9%
Retired	5.3%
Unable to work/disabled	10.5%
Household Income	(n=35)
Less than $10K	31.4%
$10K to less than $15K	14.3%
$15K to less than $20K	8.6%
$20K to less than $25K	5.7%
$25K to less than $35K	25.7%
$35K to less than $50K	5.7%
$50K or more	8.6%

Previous Implementation Plan Impact- Exhibit B

Spectrum Health Kelsey Hospital

This document serves as the tool to identify the impact of actions taken to address the significant health needs in the Implementation Plans created as a result from the previous 2011 CHNA.

Specific Health Need Goal	Metric	Impact of Implementation Plan
Access		
Increase the number of service hours and the number of practicing primary care providers, especially accepting Medicare and Medicaid patients.	1. Implement recruitment strategy for specific disciplines and locations to increase providers or access by 10% from current supply or 3.8 FTEs in the United and Kelsey Hospital's primary service area achieved by the following actions in the northern area of the primary service area: o Recruit family medicine physician (1.0FTE). o Recruit advanced practice provider for the Lakeview Youth Clinic. 2. Improve current hours, location, accessibility and productivity o Implement Epic and measure productivity at Lakeview Family Medicine practice. o Determine patient origin and conduct survey of patient travel patterns. o Develop plan for primary care outreach and improved accessibility (varying hours and developing new.	1. Following a primary care needs analysis which demonstrates gaps in the Northern region of Montcalm County, a recruitment strategy was developed to increase our primary care physicians for Lakeview Family Medicine (LFM) as well as for the Lakeview Youth Clinic (LYC). Combined with the results of the United Hospital needs, it was determined that we needed to recruit more healthcare providers. At a minimum, an additional 10% (3.8 full time providers) were needed overall. This goal was achieved through recruiting a family medicine physician for the Lakeview Family Medicine practice. In addition, we added two Advanced Practice Providers to the practice. An Advanced Practice Provider and a Master Social Worker were successfully recruited for the Lakeview Youth Clinic. 2. Evaluation of the process to measure productivity at LFM resulted in modification of the existing reporting system to more accurately reflect productivity at that location. Final results of actual productivity are not yet available. o Patient origin and travel patterns were studied. Results included immigrations and outmigration patterns similar to results previously recorded. o Evaluation of current hours, location, and accessibility was completed and it was determined additional evening and early morning hours were needed for both the LFM practice and LYC in accordance to patient needs/wishes. Lakeview Family Medicine has 30% of appointments available for

Previous Implementation Plan Impact- Exhibit B

Spectrum Health Kelsey Hospital

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	locations if applicable) ○ With additional capacity, address access issues related to acceptance of Medicare, Medicaid and other insurers with new providers.	same day or urgent visits. Extended hours implemented Monday, Tuesday and Thursday 6:45 a.m. – 7 p.m. Wednesday and Friday 7 a.m. – 5:30 p.m. Lakeview Youth Clinic expanded its clinical hours from 24 to 30 hours each week and added evening appointments. ○ LFM accepts both Medicare and Medicaid and LYC accepts Medicaid. Billing processes have been amended in the LYC to ensure no financial barrier to care exists. ○ A business plan addressing the provider needs for Lakeview and surrounding area has been completed. Additional APP recruiting for Lakeview Family Medicine has been achieved while continuing to monitor ongoing patient needs.
Health Literacy		
Increase proportion of the county's elementary, middle and senior high schools that provide school health and wellness in the following area: education on the importance of health screenings and checkups	Evaluate community resources and coordinate with community partners to improve or increase the number of educational opportunities for screenings/checkups.	After a needs analysis was completed, it was determined that schools required increased access to food and wellness services for both students and staff. A county wide wellness team was created to work collaboratively on the identified initiatives. The need for on-site school health services was identified. A federal grant (HRSA) was applied for and awarded for a one-year planning grant. The program was to develop a Montcalm Integrated Rural Health Network to provide healthcare services to three targeted districts in Montcalm County. This model is unique in that it provides services through the utilization of nurses as well as paramedics. We are awaiting the announcement of awards for the implementation of

Previous Implementation Plan Impact- Exhibit B

Spectrum Health Kelsey Hospital

This document serves as the tool to identify the impact of actions taken to address the significant health needs in the Implementation Plans created as a result from the previous 2011 CHNA.

		this program.
Develop, implement and support wellness committees within the county's following districts: Lakeview Community Schools and Tri-County Area Schools	Improve the health and wellness activities offered in the Lakeview Community Schools and Tri-County Area School Districts.	Lakeview Community Schools has a well-functioning wellness team and a new team was created at Tri- County Area Schools. Representatives from both schools are on the countywide team to ensure collaboration and consistency across all activities offered. This remains a work in progress. Wellness teams have been created in the schools that have not previously had such and enhanced in those schools with the teams.
Work with the existing wellness committees, staff/administration from targeted school districts, parent teacher organizations, school nurses, health care providers, Montcalm Area Health Center, Mid-Michigan Health Department, Montcalm Human Services Coalition, Montcalm Center for Behavioral Health and interested community members to implement the objectives and strategies.	Establish a plan, including financial analysis, to provide education on the importance of screenings/checkups to at least 80% of targeted schools from a county-wide baseline of 60.6% • Implement the strategies with community partners. Implementation of the plan may vary slightly based on the school. • Evaluate effectiveness of wellness committees and education of health screenings and/or checkups.	100% of targeted schools are participating on the county wellness team. After the financial and needs analysis, it was decided to focus on the needs identified by the wellness team rather than screenings and checkups. Those identified needs are: school healthcare services, staff health education and provision of food to needy students. All partners are participating on the Montcalm Integrated Network of Health Services with the addition of Montcalm County Emergency Medical Services.

Previous Implementation Plan Impact- Exhibit B

Spectrum Health United Hospital

This document serves as the tool to identify the impact of actions taken to address the significant health needs in the Implementation Plans created as a result from the previous 2011 CHNA.

Specific Health Need Goal	Metric	Impact of Implementation Plan
Access		
Increase the number of service hours and the number of practicing primary care providers, especially accepting Medicare and Medicaid patients.	1.Implement recruitment strategy for specific disciplines and locations to increase providers or access by 10% from current supply or 3.8 FTEs in the United and Kelsey Hospital's primary service area achieved by the following actions in the northern area of the primary service area: o Recruit family medicine physician (1.0FTE) o Develop a Spectrum Health Family Medicine Practice and grow by 2-3 advance practice professionals or physicians over 3 years o Contract with the Spectrum Health Medical Group for full-time hospitalists to add more practice hours 2. Improve current hours, location, accessibility and productivity: o Develop plan for primary care outreach and improved accessibility (varying hours and developing new locations if applicable) o With additional capacity, address access issues related to acceptance of Medicare, Medicaid and other insurers with new	1. Following a primary care needs analysis, a recruitment strategy was developed to increase our primary care physicians for Greenville Family Medicine (GFM), Belding Family Medicine (BFM) and hospitalist services. Combined with the results of the Kelsey Hospital needs assessment, it was determined that we needed to recruit more healthcare providers. At a minimum, an additional 10% (3.8 full time providers) were needed overall. This goal was achieved through recruiting a family medicine physician for GFM and BFM. In addition, we added two Advanced Practice Providers to the practice at each facility. An Obstetrics Physician and a Nurse were also recruited for Women's Healthcare Services (OB/GYN). We also partnered with the Spectrum Health Medical Group (SHMG) to add 3 full-time hospitalists to United Hospital, enabling 3 SHMG physicians to spend more time in the SHMG Internal Medicine/Pediatrics practice. 2. Evaluation of the process to measure productivity at GFM, OB/GYN, and BFM resulted in modification of the existing reporting system to more accurately reflect productivity at that location. Final results of actual productivity are not yet available. • Evaluation of current hours, location, and accessibility was completed and it was determined additional evening and early morning hours were needed for the GFM, BFM and OB/GYN in accordance to patient needs/wishes. Additional time slots were added to the OB/GYN physician

Previous Implementation Plan Impact- Exhibit B

Spectrum Health United Hospital

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	providers	office schedule. Extended coverage was created for the existing and newly hired APPs. GFM expanded its hours with off-hours. Further, we anticipate opening a walk-in primary care clinic in FY16 for evening /weekends. • GFM, BFM, and OB/GYN now accept both Medicare and Medicaid. • We have received state funding for an Adolescent Health Clinic in Belding opening in June 2015. A business plan was completed that addresses provider needs in the Belding and Greenville communities. Current recruitment includes two Advance Practice Providers (APPs) in Greenville, and one physician and two APPs in Belding. Spectrum Health United Hospital is currently providing a part-time OB to Sheridan Community Hospital, a non-Spectrum Health facility.
Specific Health Need Goal	**Metric**	**Impact of Implementation Plan**
Health Literacy		
Increase proportion of the county's elementary, middle and senior high schools that provide school health and wellness in the following area: education on the importance of health screenings and checkups	Evaluate community resources and coordinate with community partners to improve or increase the number of educational opportunities for screenings/checkups.	After a needs analysis was completed, it was determined that schools required increased access to food and wellness services for both students and staff. A county wide wellness team was created to work collaboratively on the identified initiatives. The need for on-site school health services was identified. A federal grant (HRSA) was applied for and awarded for a one-year planning grant. The program was to develop a Montcalm Integrated Rural Health Network to provide healthcare services to three targeted districts in Montcalm County. This model is unique in that it provides services through the utilization of nurses as well as paramedics. We are awaiting the announcement of awards for

Previous Implementation Plan Impact- Exhibit B

Spectrum Health United Hospital

This document serves as the tool to identify the impact of actions taken to address the significant health needs in the Implementation Plans created as a result from the previous 2011 CHNA.

		the implementation of this program.
Develop, implement and support wellness committees within the county's following districts: Greenville Public Schools and Central Montcalm Public Schools	Improve the health and wellness activities offered in the Lakeview Community Schools and Tri-County Area School Districts	Greenville Public Schools has a well-functioning wellness team and a new team was created at Central Montcalm Schools. Representatives from both schools are on the county-wide team to ensure collaboration and consistency across all activities offered. This remains a work in progress. Wellness teams have been created in the schools that have not previously had such and enhanced in those schools with the teams.
Work with the existing wellness committees, staff/administration from targeted school districts, parent teacher organizations, school nurses, health care providers, Montcalm Area Health Center, Mid-Michigan Health Department, Montcalm Human Services Coalition, Montcalm Center for Behavioral Health and interested community members to implement the objectives and strategies.	Establish a plan, including financial analysis, to provide education on the importance of screenings/checkups to at least 80% of targeted schools from a county-wide baseline of 60.6% • Implement the strategies with community partners. Implementation of the plan may vary slightly based on the school. • Evaluate effectiveness of wellness committees and education of health screenings and/or checkups.	100% of targeted schools are participating on the county wellness team. After the financial and needs analysis, it was decided to focus on the needs identified by the wellness team rather than screenings and checkups. Those identified needs are: school healthcare services as well as staff health education and provision of food to needy students. All partners are participating on the Montcalm Integrated Network of Health Services with the addition of Montcalm County Emergency Medical Services.