



Sanford Health Network  
2016 Community Health  
Needs Assessment

**SANFORD**  
HEALTH

**Sanford Chamberlain Medical Center**  
**Community Health Needs Assessment**  
**2016**

Dear Community Members,

Sanford Chamberlain is pleased to present the 2016 Community Health Needs Assessment.

Part of the comprehensive assessment work is to formally identify unmet health needs in the community. Community stakeholders helped to prioritize the unmet needs for further implementation strategy development. We are grateful to all the community members who joined us in this important work.

During 2015 members of the community were asked to complete a survey to help identify unmet health needs. Researchers at the Center for Social Research at North Dakota State University analyzed the survey data. Sanford further analyzed the data, identified unmet needs, and partnered with key community stakeholders to develop a list of resources and assets that were available to address each need. A gap analysis and prioritization exercise was also conducted to identify the most significant health needs, and to further address these needs through the implementation strategies that are included in this document.

Sanford Chamberlain has set strategy to address the following community health needs:

- Physical Health
- Mental Health

The report focuses on community assets as well as community health needs. The asset map/resource list is included in this document along with the actions that will be taken to address each identified need.

At Sanford Chamberlain, patient care extends beyond our bricks and mortar. As a not-for-profit organization, ensuring that the benefits of health care reach the broad needs of our communities is at the core of who we are. Through our work, we can bring health and healing to the people who live and work in our communities. Together, we can fulfill this mission.

Sincerely,



Erica Peterson  
Chief Executive Officer  
Sanford Chamberlain Medical Center

**Sanford Chamberlain Medical Center**

**Community Health Needs Assessment**

**2016**

**EXECUTIVE SUMMARY**

## Sanford Chamberlain Medical Center

### Community Health Needs Assessment 2016

#### Purpose

A community health needs assessment is critical to a vital community benefit program that builds on community assets, promotes collaboration, improves community health, and promotes innovation and research. A community health needs assessment helps the community build capacity to support policy, systems, environmental changes and community health improvement. A community health needs assessment also serves to validate progress made toward organizational strategies and provides further evidence for retaining not-for-profit status.

The purpose of this community health needs assessment is to develop a global view of the population's health and the prevalence of disease and health issues within our community. Findings from the assessment serve as a catalyst to align expertise and to develop a community Benefit plan of action. There is great intrinsic value in a community health needs assessment when it serves to validate, justify and defend not-for-profit status and create opportunity to identify and address public health issues from a broad perspective.

#### Study Design and Methodology

##### 1. Non-Generalizable Survey

A non-generalizable survey was conducted as an on-line survey through a partnership between Sanford and the Center for Social Research (CSR) at North Dakota State University. CSR developed and maintained links to the on-line survey tool. The website address for the survey instrument was distributed via e-mail to various community stakeholders and agencies, at times using a snowball approach. Data collection occurred throughout the month of April 2015 and a total of 55 respondents participated in the on-line survey.

The purpose of this non-generalizable survey of community leaders in the greater Chamberlain area was to learn about the perceptions of area community leaders regarding community health, their personal health, preventive health, and the prevalence of disease. This group included community leaders and agency leaders representing chronic disease and disparity.

A Likert scale was developed to determine the respondent's highest concerns, with 1 as not at all and 5 meaning a great deal. Needs ranking 3.5 and above were included in the needs to be

addressed and prioritized. Many of the identified needs that ranked below 3.5 are being addressed by Sanford and community partners. However, 3.5 and above was used as a focus for the purpose of the required prioritization.

## 2. Community Stakeholder Meeting

Community stakeholders were invited to a meeting to review the findings from assessment research and to discuss the top health issues facing the community. Community stakeholders discussed the findings and helped to determine key priorities for the community. Those priorities will be addressed in the implementation strategies for 2017-2019.

## 3. Community Asset Mapping

Asset mapping was conducted by reviewing the data and identifying the unmet needs from the various surveys and data sets. Each unmet need was researched to determine what resources were available in the community to address the need. Once gaps were determined the group proceeded to the prioritization process. The multi-voting methodology was implemented to determine what top priorities would be further developed into implementation strategies.

## 4. Secondary Research

The secondary data includes the 2015 County Health Rankings for Brule, Buffalo and Lyman counties.

## Key Findings – Primary Research

The key findings are based on the non-generalizable survey data and secondary research. Key indicators were ranked on a 1-5 Likert scale, with 5 being the highest concern ranking. Survey results ranking 3.5 or higher are considered to be high-ranking concerns for the key stakeholder non-generalizable survey. While Sanford is addressing many of the concerns that ranked less than 3.5, the top priorities for prioritization are those that rank 3.5 and above.

Safety: The presence of street drugs and alcohol in the community (4.53) is the top overall concern among survey respondents. The presence of drug dealers in the community (4.33) and child abuse and neglect are also high safety concerns of the respondents.

Substance use and Abuse: Drug use and abuse (4.47) is the second highest concern overall among survey respondents. Underage drug use and abuse (4.13), alcohol use and abuse (4.13), underage drinking (4.13), and tobacco use (3.82) are all high concerns of the survey respondents. Secondary research indicates a binge drinking rate of 28% and driving deaths have alcohol involvement in 100% of the cases.

Physical Health: Cancer (4.16), inactivity (4.15), poor nutrition (4.07), obesity (4.04), and chronic disease (3.95) are the highest physical health concerns.

Children and Youth: Bullying (3.87), youth crime (3.81), the availability of quality child care (3.72), and quality infant care (3.70) are the highest concern among survey respondents. Secondary research finds teen births to be ranked high in the greater Chamberlain area.

Mental Health/Behavioral Health: Stress (3.80), depression (3.69), anxiety, and a high number of ACEs (adverse childhood experiences) are high concerns for the area.

Health Care: Access to affordable health care (3.690) is a high concern among survey respondents.

## Key Findings – Secondary Research based on the 2015 County Health Rankings

### Health Outcomes

Premature death: The premature death indicator is defined as years of potential life lost before age 75 per 100,000 population. The mortality health outcome for the state of South Dakota is 6,738 per 100,000. Brule County has a higher rate at 9,148 per 100,000, Buffalo County is at 22,353, and Lyman County is at 10,846.

Poor or fair health: 13% of adults in Brule County, 21% in Buffalo County, and 12% in Lyman County report poor or fair health compared to 10% nationally and 11% in South Dakota.

The average number of days reported in the last 30 as unhealthy mental health days is 3.4 in Brule County, 4.0 in Buffalo County, and 2.0 in Lyman County. South Dakota as a state reports 2.6 days.

The percent of live births with low birth weight (less than 2,500 grams) is 5.0% in Brule County, 4.8% in Buffalo County, and 6.9% in Lyman County. The state of South Dakota is at 6.5%.

### Health Factors

The percent of adults who are currently smoking is 14% in Brule County, 42% in Buffalo County, and 21% in Lyman County. 18% of adults are current smokers in South Dakota.

36% of the adult population in Brule County, 44% in Buffalo County, and 35% in Lyman County are considered to be obese with a BMI over 30. 29% of the population in South Dakota is obese.

The percent of adults reporting excessive or binge drinking is 16% in Brule County, 28% in Buffalo County, and 20% in Lyman County. South Dakota reports 19% are binge drinkers statewide. Driving deaths that have alcohol involvement is at 33% in Brule County, 100% in Buffalo County, and 58% in Lyman County. Alcohol involvement in driving deaths is at 37% in South Dakota.

Sexually transmitted infections rank substantially higher than the national benchmark (138) for South Dakota (471) and Brule County (321). STDs are at 1,584 in Buffalo County and 845 in Lyman County. The teen birth rate is higher in South Dakota (37) than the national benchmark (20). The teen birth rate is 28 in Lyon County, 98 in Buffalo County, and 74 in Lyman County.

The clinical care outcomes indicate that the percentage of uninsured adults is 17% in South Dakota, 17% in Brule County, 21% in Buffalo County, and 21% in Lyman County.

The ratio of population to primary care physicians is 1,045:1 in South Dakota. Brule County's ratio is 588:1, Buffalo County is 2,020:1, and Lyman County is 3,789:1. The ratio of population to mental health providers is 664:1 in South Dakota. Brule County's ratio is 671:1, Buffalo County's ratio is 675:1, and Lyman County's ratio is not available.

The number of professionally active dentists in South Dakota is 1,813:1; and in Brule County the ratio is 5,366:1. The ratio is 675:1 in Buffalo County and 3,892:1 in Lyman County.

Preventable hospital stays are 73 in Brule County, 66 in Lyman County, 57 in South Dakota, and 41 nationally. There is no data for this indicator in Buffalo County.

Diabetic screening is at 84% in Brule County, 90% in Buffalo County, 81% in Lyman County, and 84% in South Dakota as a whole. Mammography screening is at 59.3% in Brule County, 67.9% in Lyman County, and 66.5% in South Dakota.

The social and economic factor outcomes indicate that South Dakota is at 84% for high school graduation. There is no county data available for this indicator. Post-secondary education (some post-secondary education) is at 58.3% in Brule County, 39.7% in Buffalo County, 55.6% in Lyman County, and 66.7% in South Dakota.

The unemployment rate is 3.3% in Brule County, 12.7% in Buffalo County, 4.5% in Lyman County, and 3.8% in South Dakota. The percentage of child poverty is 20% in Brule County, 48% in Buffalo County, and 32% in Lyman County. The child poverty rate is 19% in South Dakota.

Social associations are defined as the number of membership associations per 10,000 population and links to social and economic support. The national benchmark for social associations is 22. The ranking is lower in Brule County at 18.9, zero in Buffalo County, and 7.9 in Lyman County. The state of South Dakota ranks at 17.4.

The percentage of children in single parent households is 42% in Brule County, 46% in Buffalo County, 42% in Lyman County, and 31% in South Dakota.

Violent crime is 214 in Brule County, and 282 per 100,000 populations in South Dakota. The data is not available for Buffalo and Lyman counties.

The following needs were brought forward for prioritization:

- Economics – severe housing problems
- Safety – presence of street drugs and alcohol in the community, presence of drug dealers in the community, child abuse and neglect
- Health Care Access – access to affordable health care
- Physical Health – chronic disease, inactivity, cancer and obesity, poor nutrition, STDs
- Mental Health/Behavioral Health – stress, depression, anxiety, drug use and abuse, underage drug use and abuse, alcohol use and abuse, and tobacco use



- Children and Youth – bullying, youth crime, the availability of quality child care and quality infant care, high rates of teen pregnancy

Members of the collaborative determined that children and youth are a top unmet need. Community stakeholders also rated mental illness a top priority.

- Physical Health
- Mental Health

Sanford has determined the 2017-2019 implementation strategies for the following needs:

- Priority 1: Physical Health
- Priority 2: Mental Health

## Implementation Strategies

### Priority 1: Physical Health

Physical health consists of many components, including rest and sleep, nutrition, physical activity, and self-care. Primary prevention is a way to remain physically healthy.

Sanford has set strategy to help the community improve their physical health and chronic health conditions. A goal of this strategy is to fully integrate the Medical Home model into the clinic setting.

Sanford Chamberlain will focus on quality measures for patients with diabetes, elevated lipids and asthma. A patient advisory council will be convened to improve patient and clinic communications.

Additionally, Sanford Chamberlain will leverage Sanford *fit* among local school districts. Sanford *fit* is an on-line community health activation initiative created by Sanford Health that provides engaging programs and resources to kids, families, leaders and role models across numerous settings to promote and activate healthy choices. The four key factors of healthy choices, a healthy body and healthy life included in *fit* are, MOOD – Emotions and Attitudes, RECHARGE – Sleep and Relaxation, FOOD – Mindful Nutrition Choices, and MOVE – Physical Activity Levels.

### Priority 2: Mental Health/Behavioral Health

Mental health includes emotional, psychological, and social well-being. It affects how people think, feel and act. It also helps determine how we handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood.

Many factors contribute to mental health problems, including:

- Biological factors, such as genes or brain chemistry
- Life experiences, such as trauma or abuse
- Family history of mental health problems

Mental health problems are common but people with mental health problems can get better and many recover completely.

Sanford has prioritized mental/behavioral health as a top priority and has set strategy to improve access to mental health services by integrating Medical Home into the clinics. Sanford will utilize the PHQ-9 assessment tool to evaluate for depression. Health Coaches and a Master's prepared social worker will be dedicated to mental health/behavioral health services. Additionally, Sanford has set a goal to increase participation in their facilitated support group.

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## Purpose

A community health needs assessment is critical to a vital community benefit program that builds on community assets, promotes collaboration, improves community health, and promotes innovation and research. A community health needs assessment helps the community build capacity to support policy, systems, environmental changes and community health improvement. A community health needs assessment also serves to validate progress made toward organizational strategies and provides further evidence for retaining not-for-profit status.

The purpose of this community health needs assessment is to develop a global view of the population's health and the prevalence of disease and health issues within our community. Findings from the assessment serve as a catalyst to align expertise and to develop a community benefit plan of action. There is great intrinsic value in a community health needs assessment when it serves to validate, justify and defend not-for-profit status and create opportunity to identify and address public health issues from a broad perspective.

### Our Guiding Principles:

- All health care is a community asset
- Care should be delivered as close to home as possible
- Access to health care must be provided regionally
- Integrated care delivers the best quality and efficiency
- Community involvement and support is essential to success
- Sanford Health is invited into the communities we serve

## Acknowledgements

Sanford Health would like to acknowledge and thank the Steering Committees for their assistance and expertise while performing the assessment and analysis of the community health data. The assessment provides support for the future direction of our work.

### Sanford Enterprise Steering Group:

- JoAnn Kunkel, CFO, Sanford Enterprise
- Michelle Bruhn, CFO, Health Services Division
- Tiffany Lawrence, CPA, Fargo Region Co-Lead, CFO, Sanford Medical Center Fargo
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- Steve Goetsch, CFO, Sioux Falls Region
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- Joy Johnson, COO Bemidji Region
- Kirk Christy, CFO, Bismarck Region

- Carrie McLeod, MBA, MS, LRD,CDE, Enterprise Lead, Enterprise Community Health/Community Benefit

**Sanford Chamberlain Steering Group:**

- Carrie McLeod, MBA, MS, LRD, CDE Enterprise Lead, Enterprise Community Health /Community Benefit
- Erica Peterson, Chief Executive Officer, Sanford Chamberlain Medical Center

**We express our gratitude to the following community collaborative members for their expertise with the planning, development and analysis of the community health needs assessment.**

- Alicia Collura, Sioux Falls Public Health
- Anita Cardinal, Pennington County Public Health
- Ann Malmberg, Essentia Health
- Becky Secore, Beltrami County Public Health Unit
- Brenda Stallman, Traill County Public Health
- Brie Taralson, Essentia Health
- Brittany Ness, Steele County Public Health
- Caitlin Hurley, Avera Health
- Carrie McLeod, Sanford Health
- Dan Heinemann, MD, CMO, Sanford Health Network, Sioux Falls Region
- Gina Nolte, Partnership4Health, Clay County
- Jac McTaggart, Sanford Health
- Jessica Spaeth, City of Halstad
- Joy Johnson, Sanford Health
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- Julie Miller, South Dakota Department of Health
- Juli Ward, Avera Health
- Kathy McKay, Clay County Public Health
- Katie Olson, South Dakota State University
- Kay Schwarzwalter, Center for Social Research, North Dakota State University
- Kim Jacobson, Traill County Public Health
- Kip Littau, South Dakota State University
- Marnie Walth, Sanford Health
- Mary Michaels, Sioux Falls Public Health
- Nancy Fahrenwald, South Dakota State University
- Renae Moch, Burleigh County Public Health
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- Sandra Melstad, Public Health Consultant, South Dakota Department of Health
- Stan Kogan, Sioux Falls Public Health
- Stephen Pickard, PhD., North Dakota Department of Health
- Susan Kahler, Burleigh County Public Health
- Teresa Miller, Avera Health

We extend special thanks to the community and county leaders, public health administration, physicians, nurses, representatives from the community and diverse populations for their participation

in this work. Together we are reaching our vision “to improve the human condition through exceptional care, innovation and discovery”.

The following Chamberlain community stakeholders participated in community discussions and helped to formulate the priorities for future work.

- Sherry Lulf, Fort Thompson I.H.S Case Manager
- Brad Carlson, Sanford Chamberlain Board of Directors and Brule County
- Christy Graves, Quality Coordinator
- Sarah Talbott, CNO
- Paul Miller, DOO
- Patty Juhnke, MSW
- Deb Arbogast, LTC DON
- Erica Peterson, CEO, Sanford Chamberlain Medical Center

## Description of Sanford Chamberlain Medical Center



Sanford Chamberlain Medical Center is a 25-bed private room facility that provides a variety of high-quality health care services in the tri-county area of Brule, Buffalo and Lyman counties. Inpatient and outpatient care include emergency/trauma, therapies, radiology and lab. Other services offered through Sanford Health include dialysis, home care and durable medical equipment.

Two clinic sites in Chamberlain and Kimball provide family medicine, behavioral health and OB/GYN services, outreach services, training programs and education resources. Sanford Chamberlain Care Center provides 24-hour nursing care for older adults.

## Description of the Community Served



Chamberlain, with a population of 2,600, is the largest community in the tri-county area. Brule, Buffalo and Lyman counties are situated in central South Dakota along the banks of the Missouri River. All three counties are primarily rural in nature, with Buffalo County being the least densely populated. Agriculture is the primary industry. Primary employers in the Chamberlain community include the public school system, St. Joseph's Indian School, and Sanford Health.



## Study Design and Methodology

### 1. Non-Generalizable Survey

An on-line non-generalizable survey was conducted of residents in Chamberlain, Buffalo County, Lyman County, and Brule County in South Dakota. The survey instrument was developed in partnership with public health leaders from across the enterprise, and researchers at the Center for Social Research (CSR) at North Dakota State University (NDSU). The CSR developed and maintained links to the on-line survey tool. The website address for the survey instrument was distributed via e-mail to various community stakeholders and community agencies, at times using a snowball approach. Data collection occurred throughout the month of April 2015 and a total of 20 respondents participated in the on-line survey.

The purpose of the non-generalizable survey of residents in the greater Chamberlain area was to learn about the perceptions of area community leaders regarding community health, their personal health, preventive health, and the prevalence of disease. This group included community leaders and agency leaders representing public health, city government, chronic disease and disparity.

A Likert scale was developed to determine the respondent's highest concerns, with 1 as not at all and 5 meaning a great deal. Needs ranking 3.5 and above were included in the needs to be addressed and prioritized. Many of the identified needs that ranked below 3.5 are being addressed by Sanford and community partners. However, 3.5 and above was used as a focus for the purpose of the required prioritization.

### 2. Community Stakeholder Meeting

Community stakeholders were invited to a meeting to review the early findings from the generalizable survey and to discuss the top health issues or health related issues facing the community. The community stakeholders helped to determine key priorities for the community.

### 3. Community Asset Mapping

Asset mapping was conducted by reviewing the data and identifying the unmet needs from the various surveys and data sets. The process implemented in this work was based on the McKnight Foundation model - Mapping Community Capacity by John L. McKnight and John P. Kretzmann, Institute for Policy Research at Northwestern University.

Each unmet need was researched to determine what resources were available in the community to address the needs. The community stakeholder group conducted an informal gap analysis to determine what needs remained after resources were thoroughly researched. Once gaps were determined the group proceeded to the prioritization process. The multi-voting methodology was implemented to determine what top priorities would be further developed into implementation strategies.

#### 4. Secondary Research

The secondary data includes County Health Rankings for Brule, Buffalo and Lyman counties.

### Limitations of the Study

The findings in this study provide an overall snapshot of behaviors, attitudes, and perceptions of residents living in Chamberlain, South Dakota, and in Brule, Buffalo and Lyman counties. A good faith effort was made to secure input from a broad base of the community. The survey was sent electronically to community stakeholders. Additionally, invitations were extended to county and community leaders, organizations and agencies representing diverse populations and disparities. Additional data was reviewed through secondary research. The data for the secondary research was secured from the County Health Rankings.

The Internal Revenue Code 501 (r) statute requires that a broad base of key community stakeholders have input into the needs of the community. Those community members specified in the statute include: persons who represent the broad interests of the community served by the hospital facility including those with special expertise in public health; Federal, tribal, regional, state and or local health or other departments or agencies with information relevant to the health needs of the community served; leaders, representatives, or members of medically underserved, low-income, and minority populations.

Sanford extended a good faith effort to engage all of the aforementioned community representatives in the survey process. In some cases there were surveys that were submitted without names or without a specified area of expertise or affiliation. We worked closely with public health experts throughout the assessment process.

Public comments and response to the community health needs assessment and the implementations strategies are welcome on the Sanford website under “About Sanford” in the Community Health Needs Assessment section.

# Key Findings

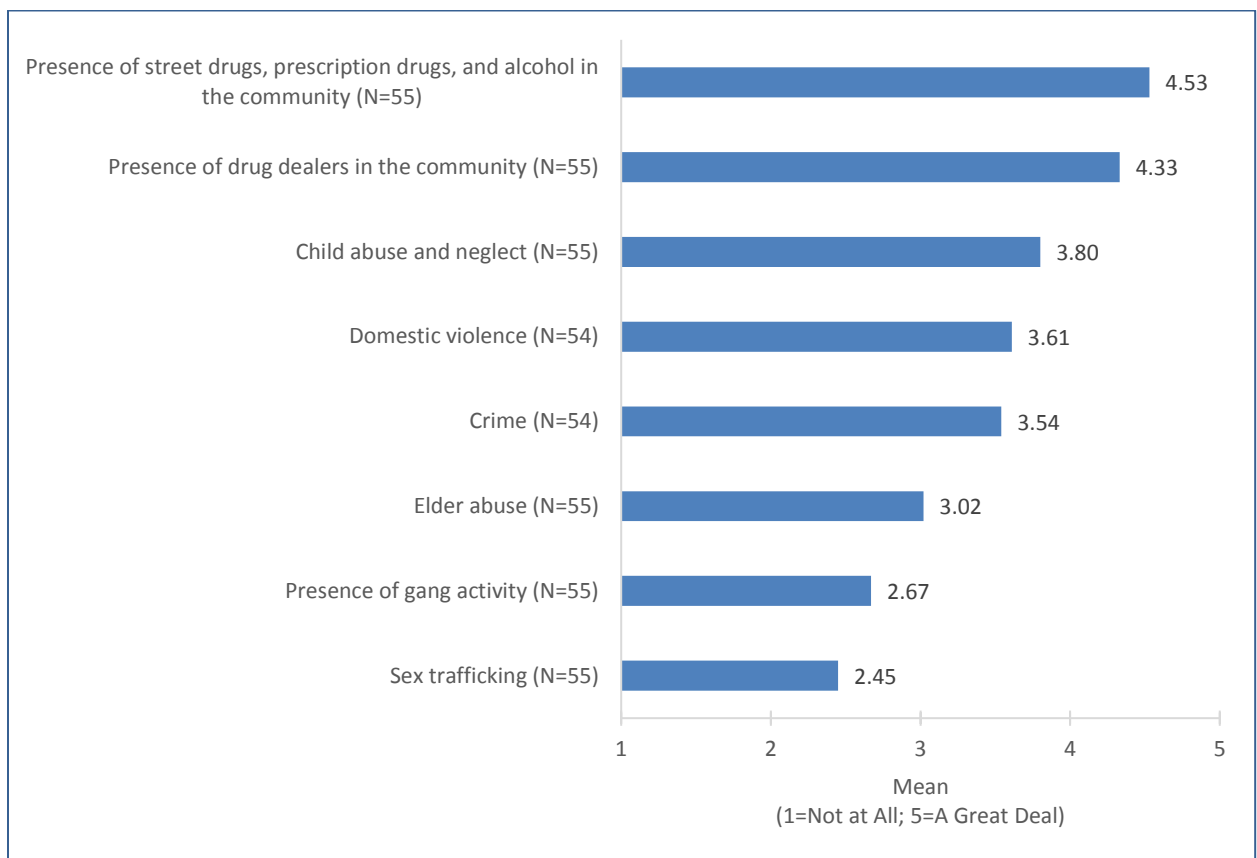
## Primary Research

### Community Health Concerns

The following concerns ranked highest of all the indicators on the non-generalizable (community stakeholders) surveys.

**Safety:** Safety is a high concern for the respondents of the non-generalizable survey regarding the presence of street drugs and alcohol in the community and drug dealers in the community. Child abuse, domestic violence, and crime are additional high concerns.

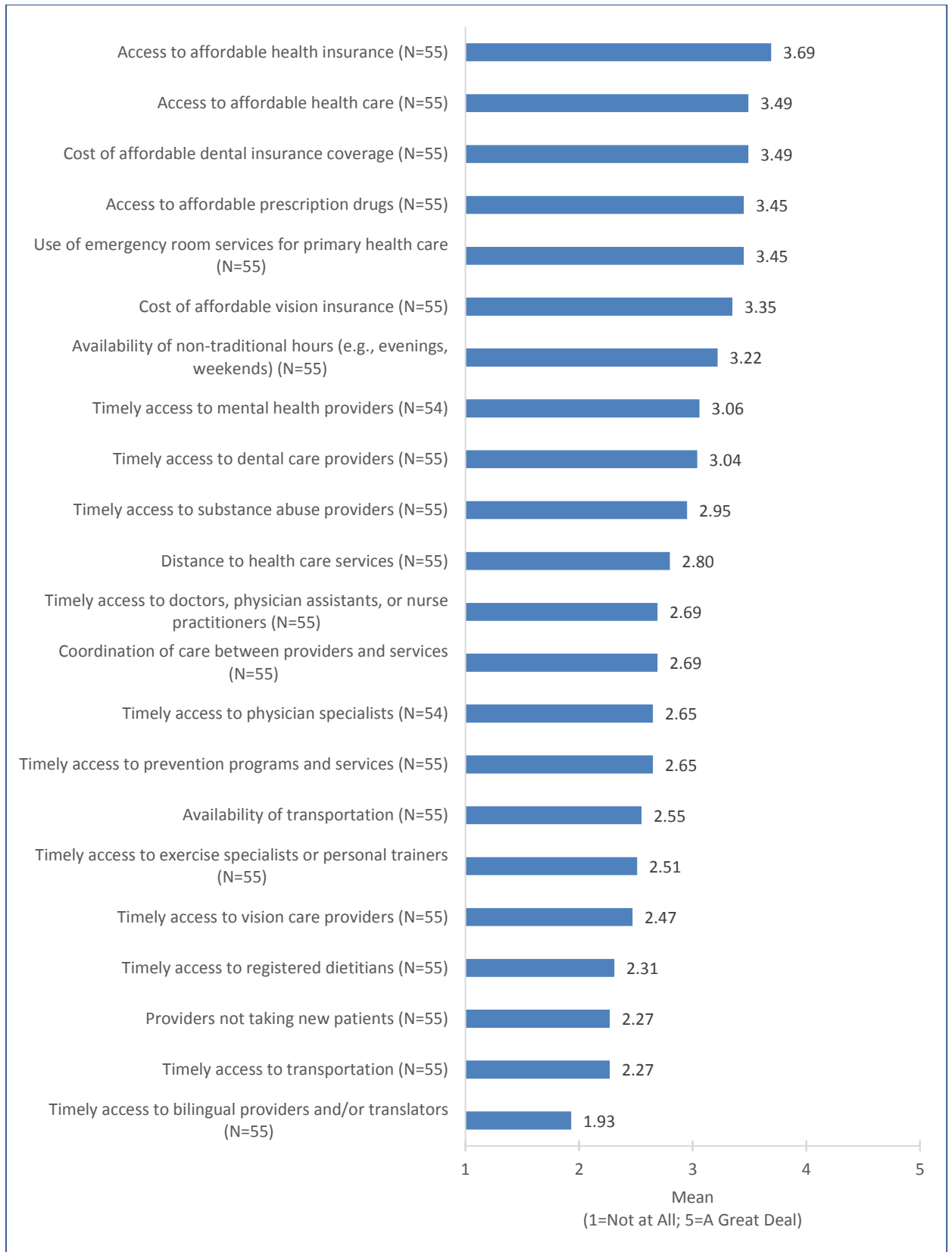
#### **Level of concern with statements about the community regarding SAFETY**



Sanford screens patients for substance abuse on admission to the emergency department.

**Health Care Access:** Community stakeholders ranked the access to affordable health insurance, access to affordable health care, and the cost of affordable dental insurance as the top concerns under health care access.

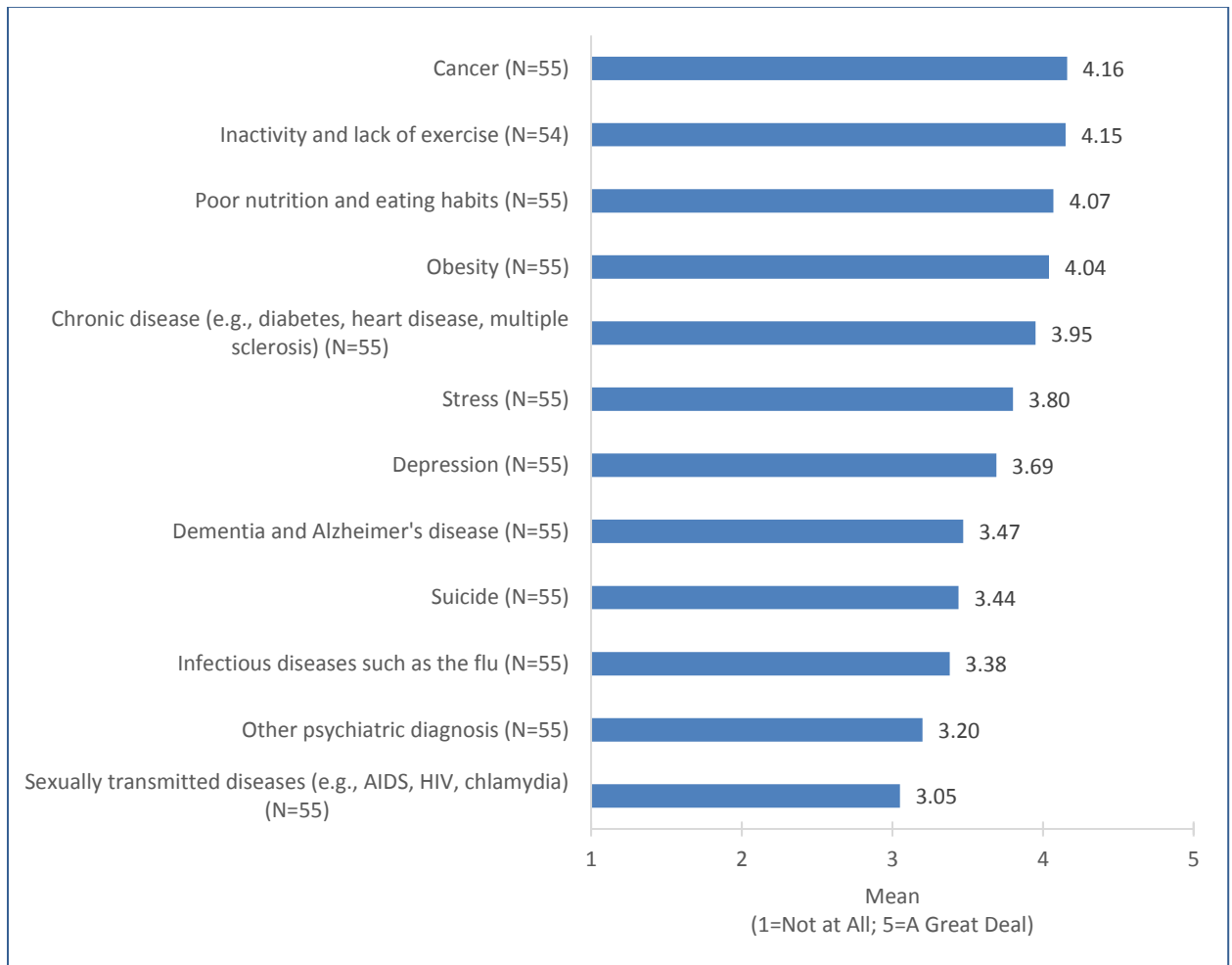
### Level of concern with statements about the community regarding HEALTH CARE



Sanford Chamberlain offers charity care to patients unable to pay for medical treatment. Sanford’s community care policy defines qualifications and financial counselors are available to assist patients who qualify for free or subsidized care. Financial counselors also assist with enrollment for patients who qualify for public programs. Prescription drugs are made available at a free or reduced rate for patients who are unable to pay. The Sanford Health Plan is also available to community members.

**Physical Health:** The top physical health concerns among the community stakeholders are cancer, inactivity, poor nutrition, obesity and chronic disease. The mental health concerns in this graph are discussed in the next section.

**Level of concern with statements about the community regarding PHYSICAL AND MENTAL HEALTH**



Sanford offers health screening for early detection of cancer and chronic disease. Sanford also provides education through local service clubs and organizations to promote the importance of mammography for a woman's health. Chronic disease is supported by the Health Coach and Medical Home.

The chronic disease self-management Better Choices, Better Health Program is offered free of charge to community members. Better Choices, Better Health is modeled after Stanford University's chronic disease self-management program. The workshops are 2 ½ hours long and meet weekly for 6 weeks. The program is facilitated by two trained lay leaders, and one or both of them have chronic condition themselves. Research has found that after participating in the program individuals are better able to manage their symptoms, communicate more easily with their doctors, are less limited by the disease, and generally feel better.

The Sanford Health *fit* initiative, <http://sanfordfit.org/> a childhood obesity prevention initiative, continues to grow and mature as we work to refine the offerings and enable broad replication and meaningful use. Supported by the clinical experts of Sanford Health, *fit* educates, empowers and motivates families to live a healthy lifestyle through a comprehensive suite of resources for kids, parents, teachers and clinicians. *fit* is the only initiative focusing equally on the four key contributing factors to childhood obesity: Food (nutrition), Move (activity), Mood (behavioral health), and Recharge (sleep). Sanford's *fit* Initiative has come a long way since its inception in 2010. Through *fit* we are actively working to promote healthy lifestyles in homes, schools, daycares, our clinical settings, and throughout the community by way of technology, engaging programs, and utilizing key role models in a child's life.

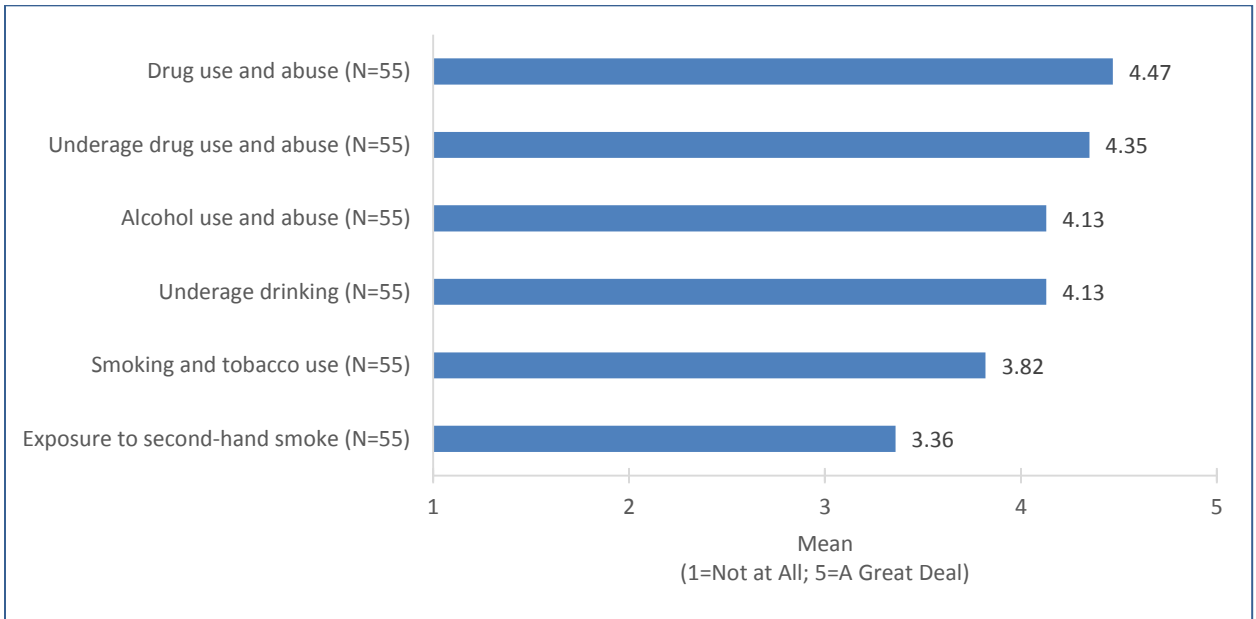
- The *fit* website for Juniors, Kids and Teens creates an entertaining and interactive on-line environment where they can play games, watch videos and take daily challenges. Parents benefit from their own set of resources where they can find tips and tools on becoming healthy role models and raising *fit* kids. To date, the children's and parent's sites have received more than 7.5 million visitors. Over 700 pieces of content have been added to the sites, including videos, slideshows, games, articles, and even *fit* songs.
- In addition to the web, *fit* is developing meaningful school resources to bring value and fun into the primary education setting. We are doing this by integrating *fit* points into science and math components to provide health promotion, an avenue into the classroom without taking valuable time away from those critical subjects.
- *fit* 4 schools [fit4schools@sanfordhealth.org](mailto:fit4schools@sanfordhealth.org) is an on-line school resource with unique lessons integrated into daily classroom activities. *fit*4schools incorporates topics into math and science curriculum. The on-line resource for the classroom has 14 STEM (integrating science, technology, engineering, and math) unit plans that can be downloaded for classroom use.
- Community
  - The *fit* friends, Denny, Abby, Sam, Alex and Marty, along with the *fit* team have been making a variety of appearances at events across the Sanford footprint. *fit* has been at over 2 dozen events interacting with more than 15,000 children and parents to spread the word about the *fit* platform and resources.

- Smartphone Apps – Through a series of fun and engaging apps, *fit* will continue to activate kids at the touch of a fingertip to live a fit and healthy lifestyle related to Mood, Recharge, Food and Move.
  - MOVE2Draw is a simple and fun way for kids to move and create their own unique drawings. Once a drawing is completed, it can be stored on the MOVE2Draw website.
  - eMOODicam is a photo application that allows the user to enhance a photo and bring the mood to life and share with others.
- Looking Forward
    - *fit* is continuing to look to the future for ways to continue to make a meaningful impact on children and families both on-line and off-line. Other exciting expansions that are in the works include:
      - Clinical Setting – Resources for the clinical setting to spur actionable and understandable discussions between health care providers and families.
      - Health Coaches – Exploring meaningful ways for health coaches to promote healthy choices with children and adults.
      - Engage Key Role Models – Firefighters and youth sport coaches are role models and have a big influence on children so that's why *fit* is developing resources for them to teach the principles of *fit* along with sports fundamentals and other outreach efforts.
      - *fit*Club 4 Boys – 10-week after school program for boys, ages 8-12, to develop knowledge of *fit* principles and healthy behavior choices.
      - *fit* Parent/child – Class for parents and children to understand healthy choices and the benefits of living a healthy lifestyle.

**Mental Health /Behavioral Health:** The top behavioral health concerns are stress, depression, drug use and abuse, underage drinking, alcohol use an abuse, underage drinking, and smoking and tobacco use.



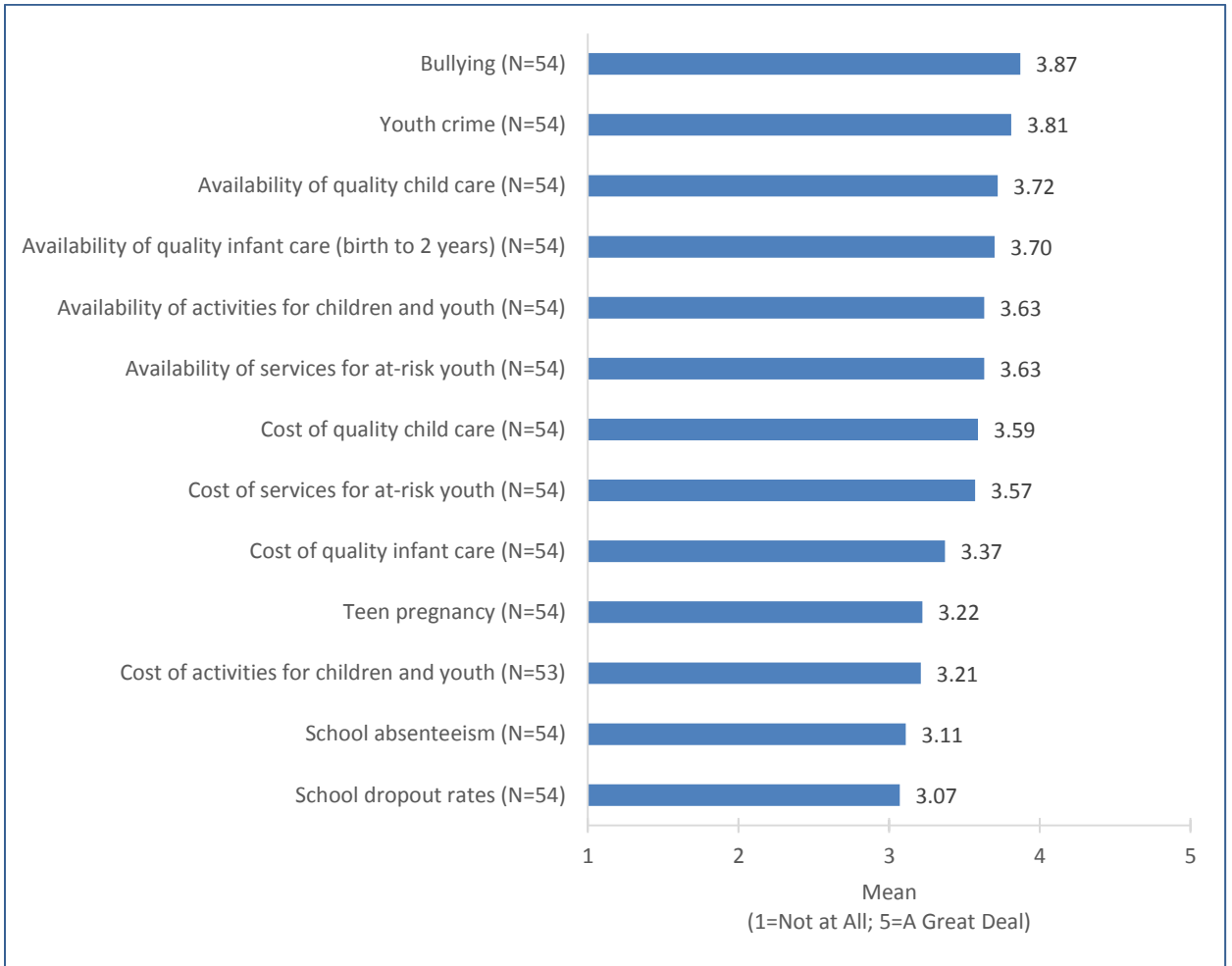
**Level of concern with statements about the community regarding SUBSTANCE USE AND ABUSE**



Sanford screens patients for depression on admission to the emergency department. Behavioral health services are embedded into the clinic. Primary care providers assess for depression and refer to mental health providers. A Master’s prepared social worker is on staff to assist with behavioral health support. A behavioral health triage therapist is available in the clinic.

**Children and Youth:** The top concerns for children and youth are bullying, youth crime, the availability and cost of quality child care and quality infant care, the availability of activities for children and youth, and the availability of services for at-risk youth.

**Level of concern with statements about the community regarding CHILDREN AND YOUTH**

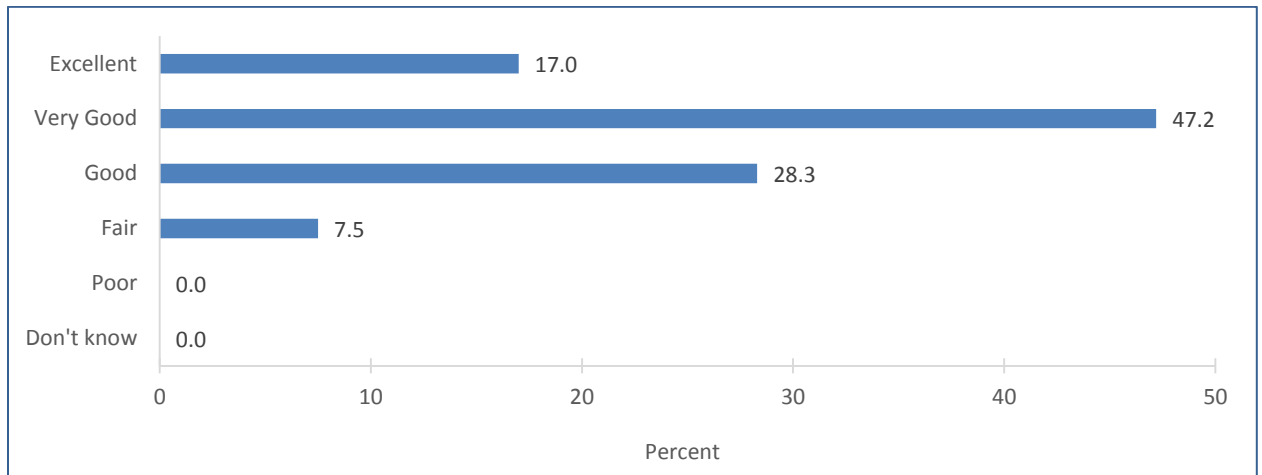


## Personal Health Concerns

### **Respondents' Personal Health Status**

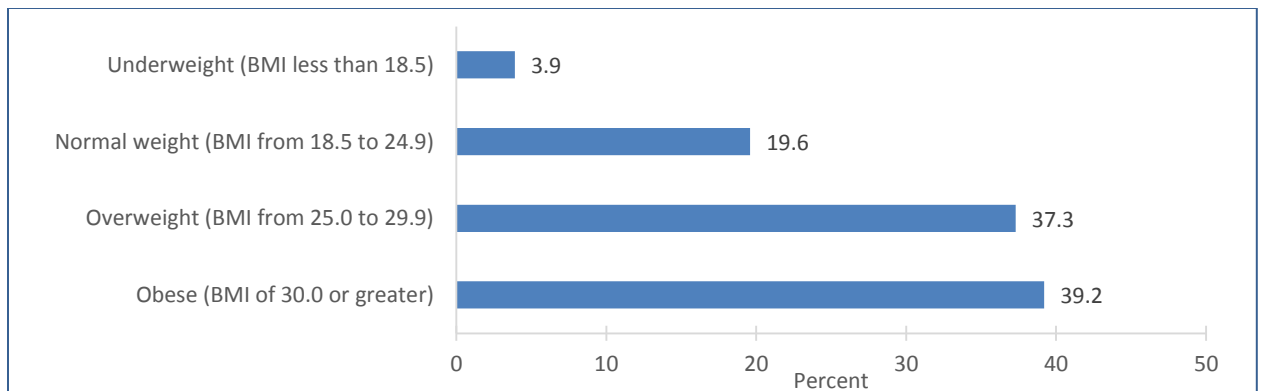
The study results suggest possible discrepancies between respondents' perceived personal health and their actual health status as determined by objective measures. For example, using the Body Mass Index (BMI) which calculates weight status using an individual's weight and height, the majority of respondents in the area (76.5%) are overweight or obese. However, the vast majority (92.5%) of community respondents rate their own health as excellent, very good, or good. With good overall health habits in mind, it is important to note that within the past year, over 66.7% of respondents visited a doctor or health care provider for a routine physical and over 68.6% visited a dentist or dental clinic.

### **Respondents' rating of their health in general**



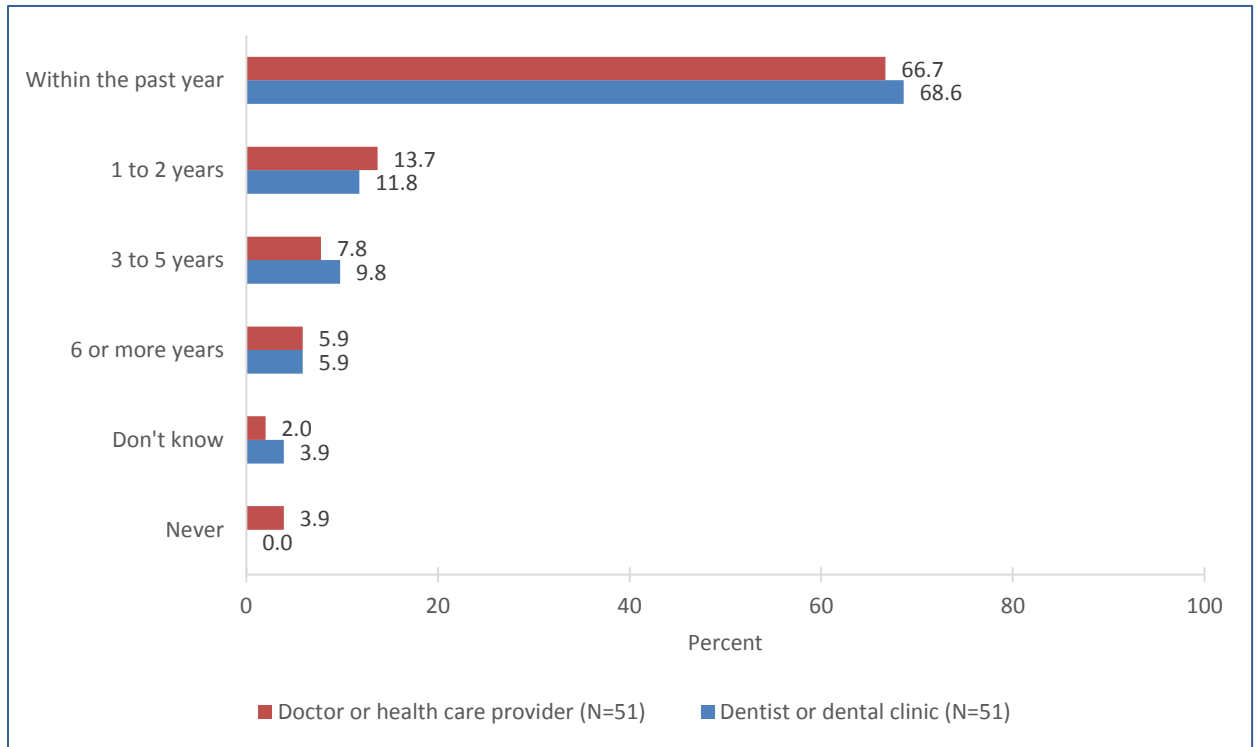
92.5% of the community stakeholders (non-generalizable) rate their health as good or better

### **Respondents' weight status based on the Body Mass Index (BMI) scale**



76.5% of the key stakeholders report a BMI that is overweight or obese.

**Length of time since respondents last visited a doctor or health care provider for a routine physical exam and length of time since they last visited a dentist or dental clinic for any reason**



**Preventive Health**

Preventive health care promotes the detection and prevention of illness and disease and is another important component of good health and well-being. Community results indicate that within the past year, the majority of respondents had a blood pressure screening, blood sugar screening, cholesterol screening, and dental screening.

There are many screenings and tests that a majority of respondents did not receive (i.e., bone density test, cardio screening, glaucoma test, hearing screening, immunizations, STD test, vascular screening, colorectal cancer screening, and skin cancer screening) in the past year. Many tests and screenings may be conditional upon guidelines, which can be age sensitive/appropriate.

**Whether or not respondents had preventive screenings in the past year, by type of screening**

Type of screening	Percent of respondents		
	Yes	No	Total
<b>GENERAL SCREENINGS</b>			
Blood pressure screening (N=51)	80.4	19.6	100.0
Blood sugar screening (N=51)	51.0	49.0	100.0
Bone density test (N=51)	15.7	84.3	100.0
Cardiovascular screening (N=51)	25.5	74.5	100.0
Cholesterol screening (N=51)	54.9	45.1	100.0
Dental screening and X-rays (N=51)	66.7	33.3	100.0
Flu shot (N=51)	54.9	45.1	100.0
Glaucoma test (N=51)	35.3	64.7	100.0
Hearing screening (N=51)	3.9	96.1	100.0
Immunizations (N=51)	25.5	74.5	100.0
Pelvic exam (N=35 Females)	51.4	48.6	100.0
STD (N=51)	7.8	92.2	100.0
Vascular screening (N=51)	7.8	92.2	100.0
<b>CANCER SCREENINGS</b>			
Breast cancer screening (N=34 Females)	58.8	41.2	100.0
Cervical cancer screening (N=34 Females)	44.1	55.9	100.0
Colorectal cancer screening (N=49)	16.3	83.7	100.0
Prostate cancer screening (N=14 Males)	28.6	71.4	100.0
Skin cancer screening (N=50)	12.0	88.0	100.0

**Of respondents who have not had preventive screenings in the past year, reasons why they have not, by type of screening**

Type of screening	Percent of respondents*						
	Not necessary	Doctor hasn't suggested	Cost	Fear of procedure	Fear of results	Unable to access care	Other reason
<b>GENERAL SCREENINGS</b>							
Blood pressure screening (N=10)	50.0	10.0	10.0	0.0	10.0	0.0	10.0
Blood sugar screening (N=25)	52.0	36.0	4.0	0.0	0.0	0.0	4.0
Bone density test (N=43)	48.8	46.5	2.3	0.0	0.0	0.0	2.3
Cardiovascular screening (N=38)	47.4	36.8	5.3	0.0	0.0	0.0	7.9
Cholesterol screening (N=23)	52.2	21.7	4.3	0.0	0.0	0.0	8.7
Dental screening and X-rays (N=17)	29.4	0.0	23.5	11.8	0.0	5.9	29.4
Flu shot (N=23)	47.8	0.0	4.3	4.3	0.0	4.3	30.4
Glaucoma test (N=33)	48.5	33.3	6.1	0.0	0.0	0.0	9.1
Hearing screening (N=49)	63.3	16.3	2.0	0.0	0.0	0.0	8.2
Immunizations (N=38)	71.1	13.2	2.6	2.6	0.0	0.0	10.5

Type of screening	Percent of respondents*						
	Not necessary	Doctor hasn't suggested	Cost	Fear of procedure	Fear of results	Unable to access care	Other reason
Pelvic exam (N= 17 Females)	23.5	23.5	5.9	0.0	0.0	0.0	29.4
STD (N=47)	76.6	6.4	2.1	0.0	0.0	0.0	6.4
Vascular screening (N=47)	53.2	25.5	6.4	0.0	0.0	0.0	6.4
<b>CANCER SCREENINGS</b>							
Breast cancer screening (N=14 Females)	35.7	28.6	7.1	14.3	0.0	0.0	14.3
Cervical cancer screening (N=19 Females)	42.1	21.1	5.3	0.0	0.0	0.0	26.3
Colorectal cancer screening (N=41)	58.5	17.1	7.3	2.4	0.0	0.0	7.3
Prostate cancer screening (N=10 Males)	50.0	20.0	20.0	0.0	0.0	0.0	10.0
Skin cancer screening (N=44)	36.4	45.5	9.1	0.0	2.3	4.5	6.8

\*Percentages do not total 100.0 due to multiple responses.

- For most types of screenings, the most common reasons for not getting the test or procedure are that it is not necessary and the doctor has not suggested one.
- For the flu shot screening, most respondents cite that it was not necessary or other reasons for not getting the shot.  
35.3% of the non-generalizable respondents were under 45 years of age. Over 31.5% were in the 55 years or above category.

**Breast cancer screening:** According to the Center for Disease Control (CDC), a mammogram is an x-ray of the breast. Mammograms are the best way to find breast cancer early, when it is easier to treat and before it is big enough to feel or cause symptoms. Having regular mammograms can lower the risk of dying from breast cancer. The U.S. Preventive Services Task Force recommends that if you are 50 to 74 years old, be sure to have a screening mammogram every two years. If you are 40 to 49 years old, talk to your doctor about when to start and how often to get a screening mammogram.

**Cervical cancer screening:** Cervical cancer is the easiest gynecologic cancer to prevent, with regular screening tests and follow-up. Two screening tests can help prevent cervical cancer or find it early:

- The Pap test (or Pap smear) looks for *pre-cancers*, cell changes on the cervix that might become cervical cancer if they are not treated appropriately.
- The HPV test looks for the virus (human papillomavirus([http://www.cdc.gov/cancer/hpv/basic\\_info/](http://www.cdc.gov/cancer/hpv/basic_info/))) that can cause these cell changes.

The Pap test is recommended for all women between the ages of 21 and 65 years old, and can be done in a doctor's office or clinic.

Colorectal cancer screening: Colorectal cancer almost always develops from *precancerous polyps* (abnormal growths) in the colon or rectum. Screening tests can also find colorectal cancer early, when treatment works best. Regular screening, beginning at age 50, is the key to preventing colorectal cancer. The U.S. Preventive Services Task Force (USPSTF) recommends screening for colorectal cancer using high-sensitivity fecal occult blood testing, sigmoidoscopy, or colonoscopy beginning at age 50 years and continuing until age 75 years.

Prostate cancer screening: The American Cancer Society (ACS) recommends that men have a chance to make an informed decision with their health care provider about whether to be screened for prostate cancer. The decision should be made after getting information about the uncertainties, risks, and potential benefits of prostate cancer screening. Men should not be screened unless they have received this information. The discussion about screening should take place at:

- Age 50 for men who are at average risk of prostate cancer and are expected to live at least 10 more years.
- Age 45 for men at high risk of developing prostate cancer. This includes African Americans and men who have a first-degree relative (father, brother, or son) diagnosed with prostate cancer at an early age (younger than age 65).
- Age 40 for men at even higher risk (those with more than one first-degree relative who had prostate cancer at an early age).

After this discussion, those men who want to be screened should be tested with the prostate-specific antigen (PSA) blood test. The digital rectal exam (DRE) may also be done as a part of screening.

If, after this discussion, a man is unable to decide if testing is right for him, the screening decision can be made by the health care provider, who should take into account the patient's general health preferences and values.

Assuming no prostate cancer is found as a result of screening, the time between future screenings depends on the results of the PSA blood test:

- Men who choose to be tested who have a PSA of less than 2.5ng/mL may only need to be retested every 2 years.
- Screening should be done yearly for men whose PSA level is 2.5 ng/mL or higher.

Because prostate cancer often grows slowly, men without symptoms of prostate cancer who do not have a 10-year life expectancy should not be offered testing since they are not likely to benefit. Overall health status, and not age alone, is important when making decisions about screening.

Even after a decision about testing has been made, the discussion about the pros and cons of testing should be repeated as new information about the benefits and risks of testing becomes available. Further discussions are also needed to take into account changes in the patient's health, values and preferences.

Skin cancer screening: The U.S. Preventive Services Task Force (USPSTF) has concluded there is not enough evidence to recommend for or against routine screening (total body examination by a doctor) to find skin cancers early. The USPSTF recommends that doctors:

- Be aware that fair-skinned men and women aged 65 and older, and people with atypical moles or more than 50 moles, are at greater risk for melanoma.
- Look for skin abnormalities when performing physical examinations for other reasons.

### **Flu Vaccines**

The Center for Disease Control's Advisory Committee on Immunization Practices (ACIP) recommends that everyone six months and older receive a flu vaccine annually. Findings from the generalizable survey indicate that 37% of respondents did not have a flu shot last year.

The Center for Disease Control states that influenza is a serious disease that can lead to hospitalization and sometimes even death. Even healthy people can get sick from the flu and spread it to others. Flu vaccines cause antibodies to develop in the body about two weeks after vaccination. These antibodies provide protection against infection with the viruses that are in the vaccine.

Sanford Health employees are required to have an annual flu vaccine as a protective measure for our patients as well as our staff.

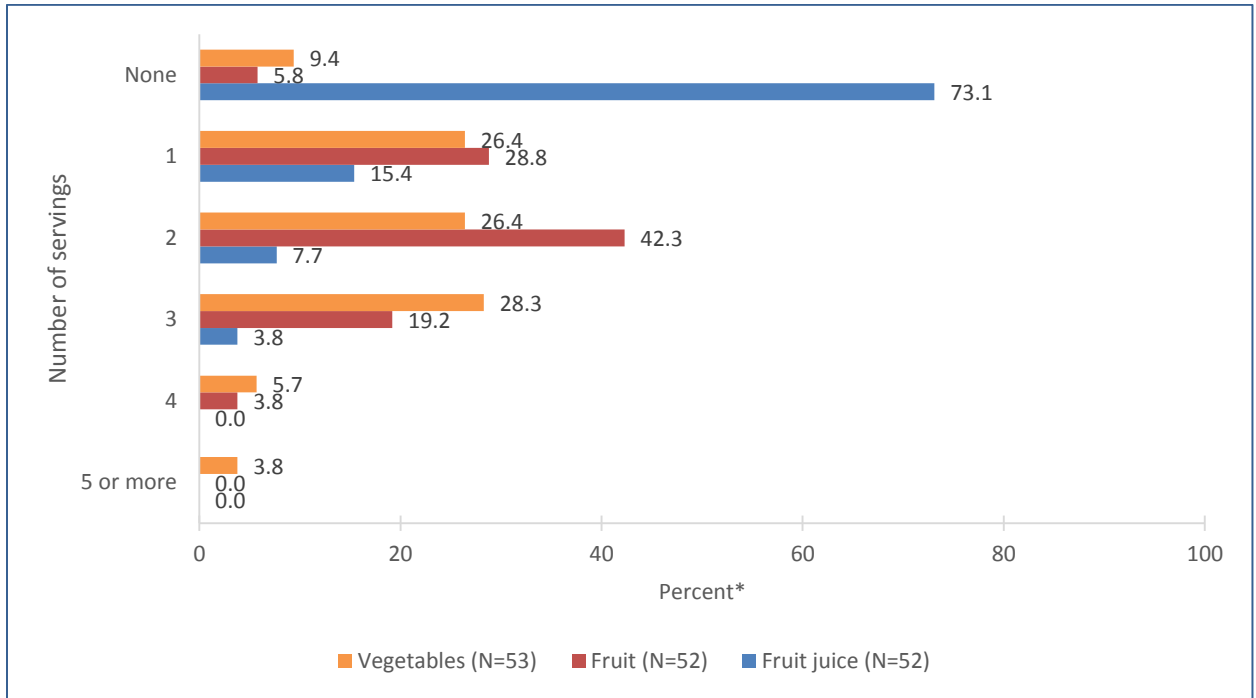
### **Fruit and Vegetable Intake**

The study results suggest that the majority of respondents do not meet vegetable and fruit recommended dietary guidelines. Only 37% of respondents reported having 3 or more servings of vegetables the prior day. Only 23% reported having 3 or more servings of fruits the prior day.

According to the U.S. Department of Health and Human Services, U.S. Department of Agriculture - Dietary Guidelines for Americans, it is recommended that individuals consume 3 to 5 servings of vegetables per day and 2 to 4 servings of fruit per day depending on age. A meal plan high in fruits and vegetables is associated with decreased risk for chronic diseases. In addition, because fruits and vegetables have low energy density (i.e., few calories relative to volume), eating them as part of a reduced-calorie meal plan can be beneficial for weight management.



**Number of servings of vegetables, fruit, and fruit juice that respondents had yesterday**

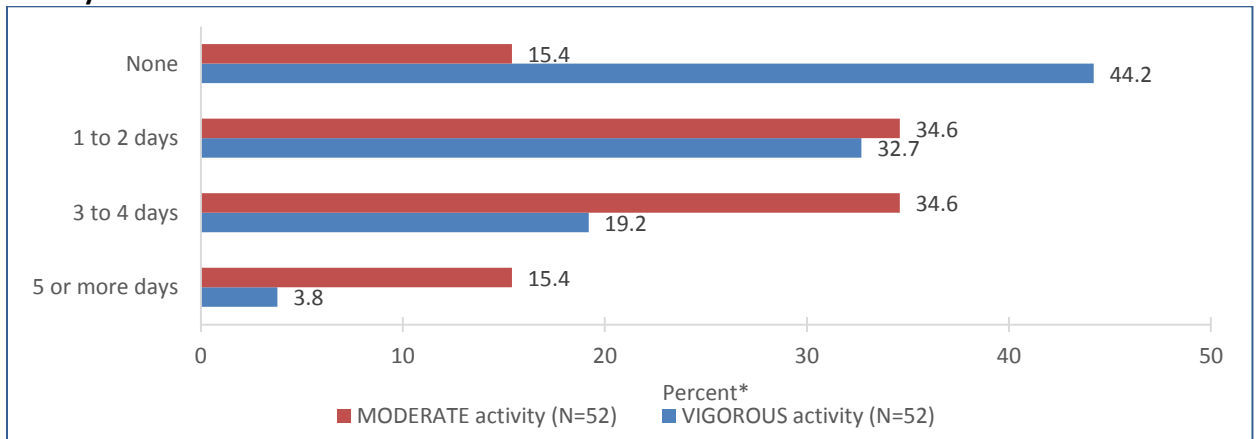


**Physical Activity Levels**

Study results suggest that 50% of respondents do meet physical activity guidelines. 50% of respondents have 3 or more days per week with moderate activity.

Guidelines from the Centers for Disease Control and Prevention recommend that individuals participate in 150 minutes of moderate physical activity per week or 75 minutes of vigorous physical activity per week to help sustain and improve health.

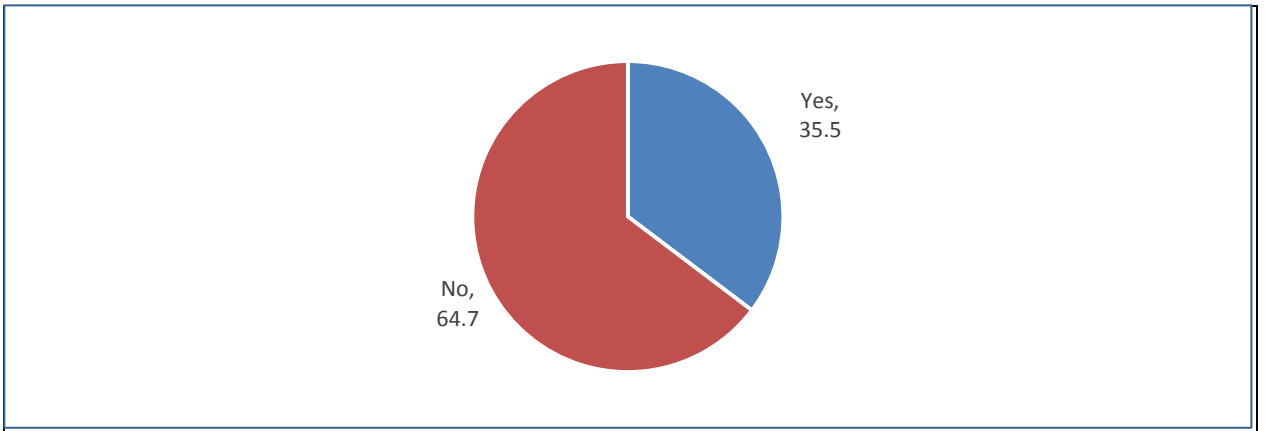
**Number of days in an average week respondents engage in MODERATE and VIGOROUS activity**



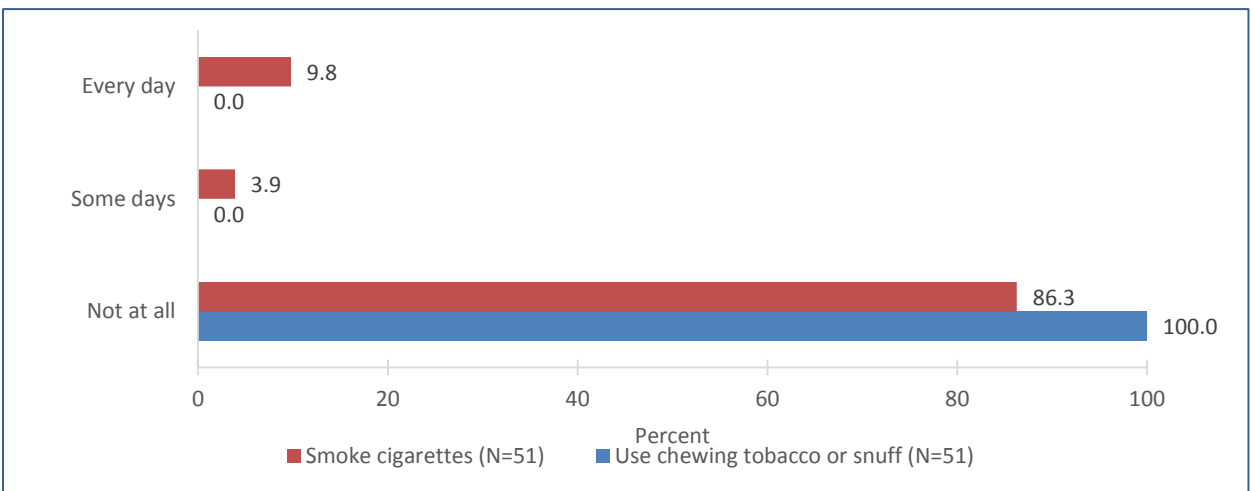
## **Tobacco Use**

Study results indicate that the vast majority of community respondents are not currently tobacco users. However, 35.5% of respondents have smoked at least 100 cigarettes in their lifetime, which indicates a former smoker status according to the Centers for Disease Control and Prevention.

### **Whether respondents have smoked at least 100 cigarettes in their entire life**



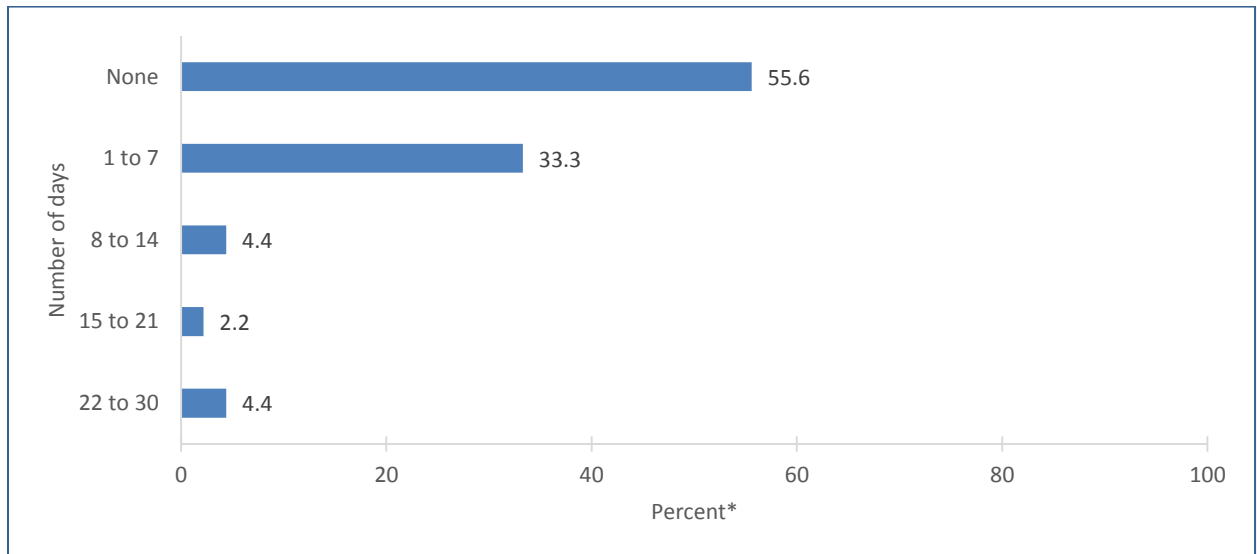
### **How often respondents currently smoke cigarettes and use chewing tobacco or snuff**



## **Mental Health**

Mental health is an important component of well-being at every stage of life and impacts how we think, act and feel. Mental health influences our physical health, how we handle stress, how we make choices, and how we relate to others. Among Chamberlain respondents, mental health is a moderately high area of concern, particularly depression, and stress. 18% of respondents have been told or diagnosed by a doctor or health professional that they have anxiety or stress and 12.7% have been told they have depression. In addition, 44.3% of respondents self-report that in the last month, there were days when their mental health was not good.

### **Number of days in the last month that respondents' mental health was not good**

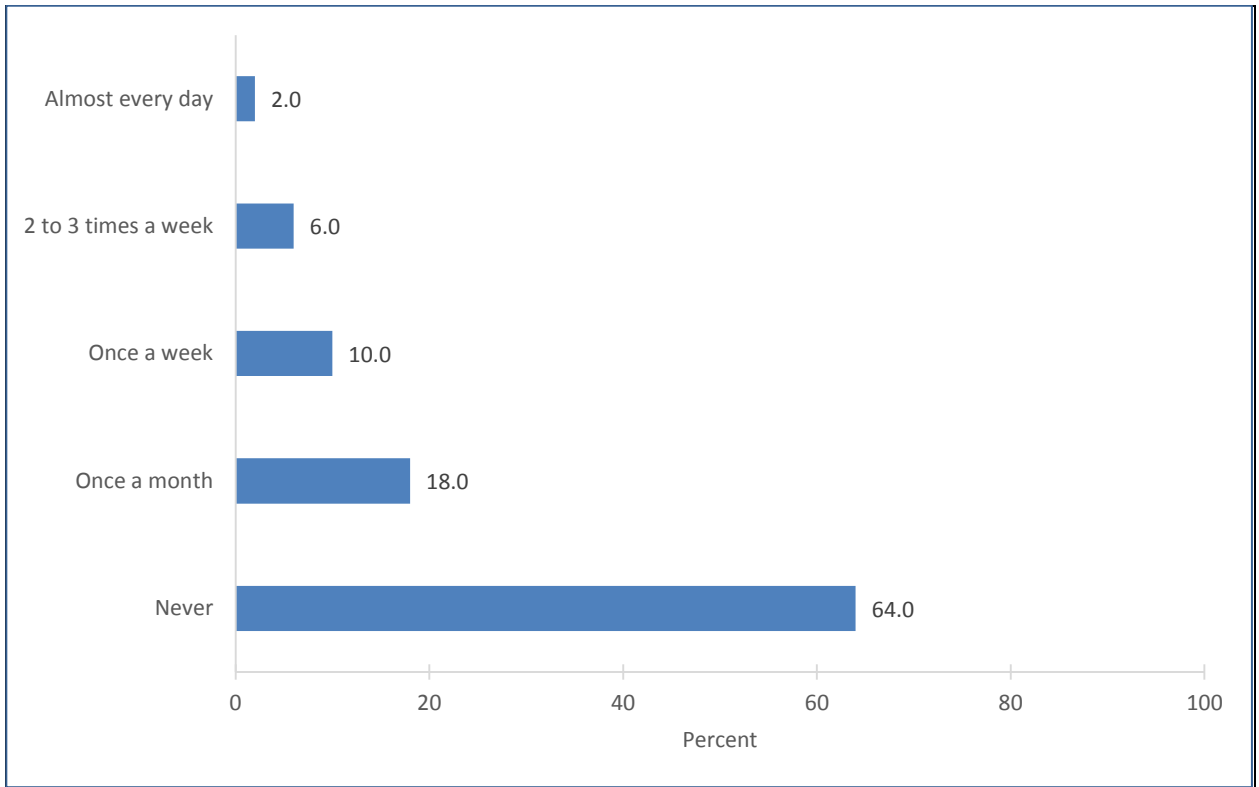


## **Substance Abuse Responses**

Substance abuse is also a mental health disorder, as defined by the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV), and can stem from mental health concerns. In Chamberlain, 79.6% of the community stakeholder's respondents drank alcoholic beverages on at least one of the days in the last month. On days they drank, 26.3% of respondents drank an average of 3 or more drinks per day. In regards to binge drinking, 36% of community stakeholder's respondents report binge drinking at least once per month,

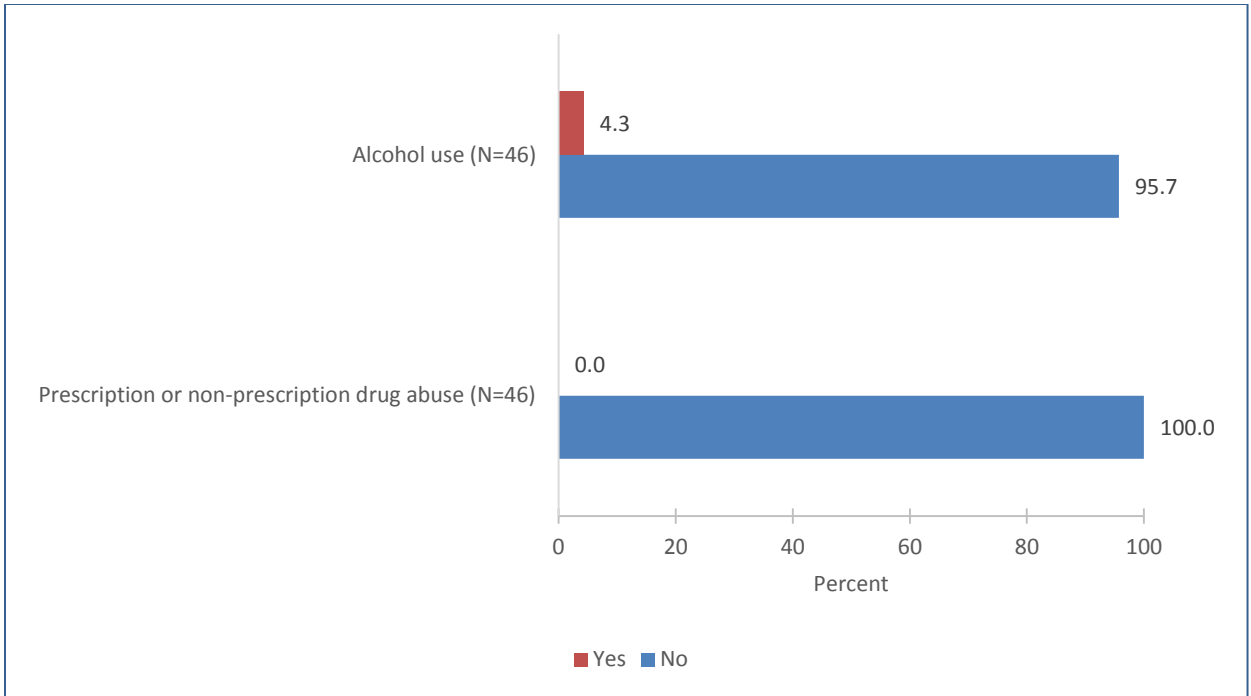
Secondary research through the 2015 County Health Rankings found that 16% of residents in Brule County, 28% in Buffalo County, and 20% in Lyman County report excessive drinking. 33% of the driving deaths indicated alcohol involvement in Brule County. The rate is 100% in Buffalo County and 58% in Lyman County. (See Appendix)

**Number of times during the past month that respondents consumed at least 4 or 5 alcoholic drinks (Binge drinking is defined by the CDC as 4 drinks for females, 5 drinks for males) on the same occasion**



N=50

**Whether respondents have ever had a problem with alcohol use or prescription or non-prescription drug abuse**



4.3% percent of respondents reported having a problem with alcohol although earlier reporting indicated a higher level of binge drinking (36%).

Other forms of substance abuse include the use of prescription or non-prescription drugs. 0% of the community stakeholder's respondents reported having had a problem with prescription or non-prescription drug abuse.

## Demographics

Total Population – 2010 U.S. Census Bureau

- Brule County: 5,255
- Buffalo County: 1,912
- Lyman County: 3,755

### Population by Age and Gender

	Number	Percent	Males	Percent	Females	Percent
<b>&lt;5 years</b>	Brule: 369	7.0	183	3.5	186	3.5
	Buffalo: 226	11.8	95	5.0	131	6.9
	Lyman: 283	7.5	169	4.5	114	3.0
<b>5-9</b>	Brule: 338	6.4	166	3.2	172	3.3
	Buffalo: 232	12.1	123	6.4	109	5.7
	Lyman: 304	8.1	164	4.4	140	3.7
<b>10-14</b>	Brule: 381	7.3	192	3.7	189	3.6
	Buffalo: 181	9.5	90	4.7	91	4.8
	Lyman: 312	8.3	174	4.6	138	3.7
<b>15-19</b>	Brule: 375	7.1	174	3.3	201	3.8
	Buffalo: 194	10.1	103	5.4	91	4.8
	Lyman: 301	8.0	161	4.3	140	3.7
<b>20-24</b>	Brule: 223	4.2	117	2.2	106	2.0
	Buffalo: 123	6.4	60	3.1	63	3.3
	Lyman: 210	5.6	117	3.1	93	2.5
<b>25-29</b>	Brule: 292	5.6	154	2.9	138	2.6
	Buffalo: 145	7.6	74	3.9	71	3.7
	Lyman: 216	5.8	112	3.0	104	2.8
<b>30-34</b>	Brule: 285	5.4	140	2.7	145	2.8
	Buffalo: 103	5.4	54	2.8	2.6	2.6
	Lyman: 213	5.7	108	2.0	105	2.8
<b>35-39</b>	Brule: 277	5.3	128	2.4	149	2.8
	Buffalo: 105	5.5	57	3.0	48	2.5
	Lyman: 194	5.2	115	3.1	79	2.1
<b>40-44</b>	Brule: 322	6.1	152	2.9	170	3.2
	Buffalo: 106	5.5	55	2.9	51	2.7
	Lyman: 204	5.4	102	2.7	102	2.7
<b>45-49</b>	Brule: 370	7	175	3.3	195	3.7
	Buffalo: 104	5.4	43	2.2	61	3.2
	Lyman: 255	6.8	124	3.3	131	3.5
<b>50-54</b>	Brule: 430	8.2	211	4.0	219	4.2
	Buffalo: 121	6.3	59	3.1	62	3.2
	Lyman: 286	7.6	150	4.0	136	3.6
<b>55-59</b>	Brule: 405	7.7	223	4.2	182	3.5
	Buffalo: 74	3.9	35	1.8	39	2.0
	Lyman: 238	6.3	132	3.5	106	2.8
<b>60-64</b>	Brule: 274	5.2	148	2.8	126	2.4
	Buffalo: 61	3.2	30	1.6	31	1.6
	Lyman: 191	5.1	91	2.4	100	2.7
<b>65-69</b>	Brule: 212	4	94	1.8	118	2.2
	Buffalo: 57	3.0	24	1.3	33	1.7
	Lyman: 179	4.8	78	2.1	101	2.7

	Number	Percent	Males	Percent	Females	Percent
<b>70-74</b>	Brule: 216	4.1	104	2.0	112	2.1
	Buffalo: 43	2.2	20	1.0	23	1.2
	Lyman: 131	3.5	69	1.8	62	1.7
<b>75-79</b>	Brule: 174	3.3	73	1.4	101	1.9
	Buffalo: 14	0.7	8	0.4	6	0.3
	Lyman: 112	3.0	49	1.3	63	1.7
<b>80-84</b>	Brule: 128	2.4	53	1.0	75	1.4
	Buffalo: 9	0.5	3	0.2	6	0.3
	Lyman: 74	2.0	32	0.9	42	1.1
<b>85 and over</b>	Brule: 184	3.5	66	1.3	118	2.2
	Buffalo: 14	0.7	4	0.2	10	0.5
	Lyman: 52	1.4	19	0.5	33	0.9
<b>Median age</b>	Brule: 41.3		40.9		41.7	
	Buffalo: 25		24.8		25.2	
	Lyman: 36.1		34.2		38.8	

### Population by Race

	Brule	Percent	Buffalo	Percent	Lyman	Percent
White	4,646	88.4	283	14.8	2,191	58.3
Black or African American	12	0.2	4	0.2	3	0.1
American Indian or Alaska Native	445	8.5	1,607	84	1,436	38.2
Asian	9	0.2	1	0.1	10	0.3
Native Hawaiian or other Pacific Islander	1	0.0	0	0.0	1	0.0
Hispanic or Latino	75	1.4	35	1.8	42	1.1

The per capita personal income in Brule County, South Dakota is \$22,083. 16% of individuals 15 years and older in Brule County are living below the poverty level. The unemployment rate in Brule County is 3.3% (2015 data).

The per capita personal income in Buffalo County, South Dakota is \$11,719. 16% of individuals 15 years and older in Buffalo County are living below the poverty level. The unemployment rate in Buffalo County is 12.7% (2015 data).

The per capita personal income in Lyman County, South Dakota is \$20,923. 18.9% of individuals 15 years and older in Lyman County are living below the poverty level. The unemployment rate in Lyman County is 4.5% (2015 data).

## Health Needs and Community Resources Identified

One of the Internal Revenue Service requirements for a community health needs assessment is to identify the resources that are available in the community to address unmet needs. Sanford Health conducted asset mapping by reviewing the primary and secondary research and identifying the unmet needs from the various surveys and data sets. Each unmet need was researched to determine what resources are available in the community to address the needs.

Sanford Health and community partners developed the asset map. The group conducted an informal gap analysis to determine what needs remained after resources were thoroughly researched. Once gaps were determined the group proceeded to the prioritization process. The multi-voting methodology was implemented to determine what top priorities would be further developed into implementation strategies.

The process implemented in this work was based on the McKnight Foundation model - Mapping Community Capacity by John L. McKnight and John P. Kretzmann, Institute for Policy Research at Northwestern University.

The asset map process includes identified needs from the following:

- The non-generalizable survey
- Concerns expressed by the key stakeholder group
- Secondary research data
- Community resources that are available to address the need(s)

See the Asset Map in the Appendix.

## Prioritization

The following needs were brought forward for prioritization:

- Economics – severe housing problems
- Safety – presence of street drugs and alcohol in the community, presence of drug dealers in the community, child abuse and neglect
- Health Care Access – access to affordable health care
- Physical Health – chronic disease, inactivity, cancer, obesity, poor nutrition, STDs
- Mental Health/Behavioral Health – stress, depression, anxiety, drug use and abuse, underage drug use and abuse, alcohol use and abuse, and tobacco use
- Children and Youth – bullying, youth crime, the availability of quality child care and quality infant care, high rates of teen pregnancy

Sanford is addressing all of the assessed needs that fall within our scope of work. In some cases the need is one where we do not have the expertise to adequately address the need. However, Sanford leaders will communicate these findings to community leaders and experts who can best focus on a solution to the concern.

A document that shares what Sanford is doing to address the need or defends why Sanford is not addressing the need can be found in the next section.



Members of the collaborative determined that physical health and mental health are top unmet needs for further implementation strategy development.

Sanford has determined the 2016-2019 implementation strategies for the following needs:

- Physical Health
- Mental Health

## How Sanford Chamberlain is Addressing the Needs

Identified Concerns	How Sanford Chamberlain is Addressing the Needs
<p>Safety</p> <ul style="list-style-type: none"> <li>• Presence of street drugs and alcohol in the community</li> <li>• Presence of drug dealers in the community</li> <li>• Child abuse and neglect</li> </ul>	<p>Sanford will share the results of the CHNA with community leaders.</p> <p>Sanford <i>fit</i> program integration with school district. This includes family <i>fit</i> night during spring parent teacher conferences. The night includes information about health for kids, games about being healthy and ways to talk to kids about healthy lifestyles.</p>
<p>Substance Use and Abuse</p> <ul style="list-style-type: none"> <li>• Drug use and abuse</li> <li>• Underage drug use and abuse</li> <li>• Alcohol use and abuse</li> <li>• Binge drinking up to 28%</li> <li>• Underage drinking</li> <li>• Alcohol impaired deaths up to 100% in Buffalo County</li> <li>• Smoking and tobacco</li> </ul>	<p>Sanford <i>fit</i> program integration with school district. This includes family <i>fit</i> night during spring parent teacher conferences. The night includes information about health for kids, games about being healthy and ways to talk to kids about healthy lifestyles.</p>
<p>Physical Health</p> <ul style="list-style-type: none"> <li>• Cancer</li> <li>• Inactivity and lack of exercise</li> <li>• Poor nutrition and eating habits</li> <li>• Obesity</li> <li>• Chronic Disease <ul style="list-style-type: none"> <li>↑BP ↑ Chol ↑rates of DB</li> </ul> </li> <li>• ↑STDs</li> <li>• Preventive Health – Flus shots and immunizations</li> <li>• Mammograms</li> </ul>	<ul style="list-style-type: none"> <li>• Sanford <i>fit</i> program integration with school district. This includes family <i>fit</i> night during spring parent teacher conferences. The night includes information about health for kids, games about being healthy, and ways to talk to kids about healthy lifestyles.</li> <li>• Partnerships with area I.H.S and community leadership, holding lunch and learns about healthy lifestyles, offering free cholesterol checks and other wellness promotional items.</li> <li>• Heart screenings offered in Chamberlain and Kimball communities.</li> <li>• Summer kids camp is offered to service area &amp; held at Sanford Chamberlain. Camp is a three-day long camp, free of charge, and focuses on the importance of healthy eating, healthy lifestyle choices and physical exercise.</li> <li>• Free flu shot clinic held each fall in conjunction with community Harvest Festival.</li> <li>• Promotion of Women’s Breast Health in October. Education through community Kiwanis, Chamber of Commerce, and local women’s extension clubs on the importance of mammograms and women’s health. Wear Pink promotions at local sporting events.</li> <li>• Medical Health Home model – including integrated Health Coach and focus on quality dashboard measures that include diabetic management, hypertension, vascular, and mammography standard protocols and targets.</li> </ul>
<p>Children and Youth</p> <ul style="list-style-type: none"> <li>• Bullying</li> <li>• Youth crime</li> <li>• Availability of quality child care</li> <li>• Availability of quality infant care</li> <li>• High rates of teen births</li> </ul>	<ul style="list-style-type: none"> <li>• Sanford <i>fit</i> program integration with school district. This includes family <i>fit</i> night during spring parent teacher conferences. The night includes information about health for kids, games about being healthy and ways to talk to kids about healthy lifestyles.</li> <li>• Host annual summer babysitting course (free of charge), teaching CPR basics and other child care curriculum.</li> </ul>
<p>Mental Health</p> <ul style="list-style-type: none"> <li>• Stress</li> <li>• Depression</li> <li>• Anxiety</li> <li>• High ACEs</li> <li>• Poor mental health days</li> </ul>	<ul style="list-style-type: none"> <li>• Sanford <i>fit</i> program integration with school district. This includes family <i>fit</i> night during spring parent teacher conferences. The night includes information about health for kids, games about being healthy and ways to talk to kids about healthy lifestyles.</li> <li>• Integrated one MSW on site for behavioral health support. Added a second part time Behavioral Health Triage Therapist to clinic.</li> <li>• Medical Health Home model – including integrated Health Coach and focus on quality dashboard measures that include identifying mental health needs early on.</li> </ul>
<p>Health Care</p> <ul style="list-style-type: none"> <li>• Access to affordable health care</li> <li>• Need for medical care</li> <li>• Need for prescription medications</li> <li>• Unmet mental health needs</li> </ul>	<ul style="list-style-type: none"> <li>• Host site for health insurance exchange sign up.</li> <li>• Partnership with Horizon’s clinic in Fort Thompson. Horizon’s is an FQHC, staffed with one APP. Sanford Chamberlain provides physician oversight to that clinic and is working to establish telemedicine connectivity with the clinic to enhance patient care.</li> <li>• Integrated one MSW on site for behavioral health support. Added a second part time Behavioral Health Triage Therapist to clinic.</li> <li>• Medical Home model – including integrated Health Coach and focus on quality dashboard measures that include identifying mental health needs early on.</li> </ul>

# 2016 Implementation Strategy

### **Priority 1: Physical Health**

Physical health consists of many components, including rest and sleep, nutrition, physical activity, and self-care. Primary prevention is a way to remain physically healthy.

Sanford has set strategy to help the community improve their physical health and chronic health conditions. A goal of this strategy is to fully integrate the Medical Home model into the clinic setting.

Sanford Chamberlain will focus on quality measures for patients with diabetes, elevated lipids and asthma. A patient advisory council will be convened to improve patient and clinic communications.

Additionally, Sanford Chamberlain will leverage Sanford *fit* among local school districts. Sanford *fit* is an on-line community health activation initiative created by Sanford Health that provides engaging programs and resources to kids, families, leaders and role models across numerous settings to promote and activate healthy choices. The four key factors of healthy choices, a healthy body and healthy life included in fit are, MOOD – Emotions and Attitudes, RECHARGE – Sleep and Relaxation, FOOD – Mindful Nutrition Choices, and MOVE – Physical Activity Levels.

### **Priority 2: Mental Health/Behavioral Health**

Mental health includes emotional, psychological, and social well-being. It affects how people think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood.

Many factors contribute to mental health problems, including:

- Biological factors, such as genes or brain chemistry
- Life experiences, such as trauma or abuse
- Family history of mental health problems

Mental health problems are common but people with mental health problems can get better and many recover completely.

Sanford has prioritized mental/behavioral health as a top priority and has set strategy to improve access to mental health services by integrating Medical Home into the clinics. Sanford will utilize the PHQ-9 assessment tool to evaluate for depression. Health Coaches and a Master's prepared social worker will be dedicated to mental health/behavioral health services. Additionally, Sanford has set a goal to increase participation in their facilitated support group.

**Community Health Needs Assessment  
Implementation Strategy for Sanford Chamberlain Medical Center  
FY 2017-2020 Action Plan**

**Priority 1: Physical Health**

**Projected Impact:** Improved management of patients/community members with chronic health conditions

**Goal 1:** Fully integrate medical home model into Chamberlain and Kimball Clinics

Actions/Tactics	Measureable Outcomes	Dedicated Resources	Leadership	Community partnerships and collaborations
Continued roll out of Medical Home Quality Measures	<ul style="list-style-type: none"> <li>• Improved % of patients meeting diabetic optimization quality measures</li> <li>• Improved % of patient meeting asthma quality measures</li> <li>• Roll out of lipid protocols for quality measures</li> </ul>	Increased Health Coach position from part time to full time	CEO Clinical Lead	
Begin Patient Advisory Council	Improved patient/clinic communication	Quarterly meeting space	CEO/ Health Coach/ Clinical Lead/ Clerical Lead	

**Goal 2:** Encourage active lifestyle for youth in the communities we serve

Actions/Tactics	Measureable Outcomes	Resources	Leadership	Community partnerships and collaborations
Partner with local school districts during parent teacher conferences and other events to encourage health initiatives promoted by <i>fit</i> kids	Increased participation of school districts in area with <i>fit</i> program	<i>fit</i> program	CEO/ Marketing Coord.	Schools

**Priority 2: Mental Health**

**Projected Impact: Improve access to mental health services for communities we serve**

**Goal 1: Integrate Medical Home model into Chamberlain and Kimball clinics**

Actions/Tactics	Measureable Outcomes	Resources	Leadership	Community partnerships and collaborations
Roll out of Medical Home model for behavioral health	PQH-9 – increase % of patients meeting quality measure	PT Health Coach increased to full time  ½ MSW increased to full time dedication to behavioral health	CEO/Clinical Lead/MSW	

**Goal 2: Increase participation and awareness of support groups facility offers**

Actions/Tactics	Measureable Outcomes	Resources	Leadership	Community partnerships and collaborations
Utilize digital media to further engage communities in awareness of support groups and mental health services	Increase participation in grief support group and other awareness activities	Digital media	CEO/Marketing/MSW	

# 2013 Implementation Strategy Impact

## Demonstrating Impact

The 2013 Community Health Needs Assessment served as a catalyst to lift up access/urgent care and mental health services as implementation strategies for the 2013-2016 timespan. The following strategies were implemented.

### **Implementation strategy to address *Urgent Care/Access to Providers***

- Extend hours of clinic 2 days per week (until 6 p.m.).
- Walk-in clinic 2 days/week from 4 p.m. to 6:30 p.m.
- Create advertising to educate customers on walk-in clinic (i.e. not to be used for annual physicals).

### **Implementation strategy to address *Mental Health/Substance Abuse***

- Fully implement mental health strategies in coordination with Sanford One Mind – including psychiatrist and behavioral health support professionals.
- Utilize internal resources already available through on-staff MSW.

The 2013 strategies have served as a base for reaching out and utilizing resources and implementing resources in the Chamberlain community. The impact has been positive and the work will continue into the future through new or continued programming and services on the strategies.

### Impact of the Strategy for *Urgent Care After Hours*

The strategy of adding after hours has been completed. An urgent care clinic has not been established; however, additional hours have been added to the clinic schedule and the clinic remains open until 5:30 p.m.

### Impact of the Strategy to *Address Mental Health*

Sanford Chamberlain has added a Master's prepared social worker (MSW) to allocate 70% of the time to behavioral health and 30% case management. This has helped with patients being able to use specialized services and identify needs that can be referred. Sanford Chamberlain has also added a behavioral health triage therapist to further integrate mental health into the Medical Home model.



## **Community Feedback from the 2013 Community Health Needs Assessment**

Sanford Health is prepared to accept feedback on the 2013 Community Health Needs Assessment and has provided on-line comment fields for ease of access on our website. There have been no comments to date.

# Appendix

# Primary Research

## Chamberlain 2016 CHNA Asset Map

Identified concern	Specific areas of concern	Key stakeholder Focus group	Secondary data County Rankings (CR); Focus on SD – Helmsley Study (HS)	Community resources that are available to address the need	Gap ?
<b>Economics 3.96</b>	Availability of affordable housing		Severe housing problems; 11% in Brule Co compared to 9% nationally (CR)  15.3% live below the 100% FPL (HS)	Lake Francis Case Economic Development Corp.  District III planning	X
<b>Children and Youth 3.87-3.57</b>	Bullying 3.87 Youth crime 3.81 Availability of quality child care 3.72 Availability of quality infant care 3.70 Availability of activities for children and youth 3.63 Availability of services for at-risk youth 3.63 Cost of quality child care 3.59 Cost of services for at-risk youth 3.57		Teen births were 28 /1000 female population ages 15-19, compared to 20 national average and 37 in SD (CR)	Sanford One Care Sanford WebMD Fit Kids Camp Fuel Subsidize daycare building for Children’s Ark Daycare	X
<b>Aging population 3.78</b>	Cost of long term care	Related to knowledge about purchasing LTC insurance		Sanford Health Plan provides community Medicare information sessions 2 x per year	X
<b>Safety 4.53- 3.54</b>	Presence of street drugs, prescription drugs, and alcohol in the community 4.53  Presence of drug dealers in the community 4.33  Child abuse and neglect 3.80	Need education in the community about the drugs and substance abuse		Sanford One Care Missouri Valley Crisis Center  Project Safe	X

Identified concern	Specific areas of concern	Key stakeholder Focus group	Secondary data County Rankings (CR); Focus on SD – Helmsley Study (HS)	Community resources that are available to address the need	Gap ?
	Domestic violence 3.61  Crime 3.54				
<b>Health Care 3.69-3.49</b>	Access to affordable health insurance 3.69  Access to affordable health care 3.49  Cost of affordable dental insurance coverage 3.49		98.5% report that they have a usual place to go for care (HS)  60.3% report they have a personal doctor/provider (HS) 33.3% report that they have unmet mental health needs (HS)	Developing community presence by Sanford Health Plan Horizons, Inc. partnership to provide clinic services at Fort Thompson Sanford outreach Telehealth services	X
<b>Physical and Mental Health 4.16-3.69</b>	Cancer 4.16 Inactivity and lack of exercise 4.15 Poor nutrition and eating habits 4.07 Obesity 4.04 Chronic disease 3.95 Stress 3.80 Depression 3.69 BMI – overweight or obese – 76.5% Only 37.8% have 3 or more veggies/day and only 23% have 3 or more fruits /day Only 50% have 3 or more days with moderate activity, and 23% have 3 or more days of vigorous activity 44.3% of respondents reported 1 or more days in the last month when mental health was not good. 18.2% report they have been told by a doctor that they have anxiety or		High incidence of premature death (% of potential life lost before age 75 per 100,000 population) (CR)  Hypertension  Poor mental health days per month is at 3.4 compared to the US benchmark of 2.3 (CR)  Adult obesity 36% compared to the national rate of 25% ( BMI greater than 30) (CR)  Physical inactivity 31% compared to the national 20% ( % of adults ages 20 or over reporting no leisure time physical activity) (CR)  13.9% report three or more ACEs (adverse childhood	Sanford Cancer Biology Research Center Sanford dietitians Sanford WebMD Fit Kids Sanford One Care Camp Fuel Expanded Sanford Chamberlain social work services	X

Identified concern	Specific areas of concern	Key stakeholder Focus group	Secondary data County Rankings (CR); Focus on SD – Helmsley Study (HS)	Community resources that are available to address the need	Gap ?
	<p>stress, and 12% have been told that they are depressed. 12.7% of respondents reported high cholesterol 9.1% reported hypertension</p>		<p>experiences) (HS)            4.6% report five or more ACEs (HS)             64.7% report a need for medical care (HS)            68% report a need for prescription medications (HS)             5.2% report a need for mental health care (HS)             0% report a need for alcohol or drug treatment (HS)             8.4% report they have diabetes (HS)             4.9% report they have asthma (HS)             33% report they have high blood pressure (HS)             13.5% report they have heart disease (HS)             33.7% report they have high cholesterol (HS)             1.6% report they have COPD (HS)             5.9% report they have cancer (HS)             11.5% report they have depression (HS)             14.5% report they have anxiety (HS)</p>		

Identified concern	Specific areas of concern	Key stakeholder Focus group	Secondary data County Rankings (CR); Focus on SD – Helmsley Study (HS)	Community resources that are available to address the need	Gap ?
			<p>3.7% report they have PTSD (HS)</p> <p>1% report they have bipolar disorder (HS)</p> <p>0% report addiction issues (HS)</p>		
<p><b>Substance Use and Abuse</b></p> <p><b>4.47-3.82</b></p>	<p>Drug use and abuse 4.47</p> <p>Underage drug use and abuse 4.35</p> <p>Alcohol use and abuse 4.13</p> <p>Underage drinking 4.13</p> <p>Smoking and tobacco 3.82</p> <p>35.5% of respondents have smoked at least 100 cigarettes in their life.</p> <p>26.3% of respondents reported consuming 3 or more alcoholic drinks/day, 18% reported drinking 4-5 alcoholic drinks per at least once per week and 18% reported drinking 4-5 alcoholic drinks once per month.</p> <p>Only 4.3% report having a problem with alcohol use</p> <p>31.4% report that alcohol use had harmful effects on the family, and 17.6% reported that drug abuse had harmful effects.</p>		<p>Adult smoking 14% (CR); current smoker 32% (HS)</p> <p>Excessive drinking is 16% compared to the national rate of 10% the SD state rate of 19% (CR)</p> <p>Alcohol abuse 30.8% (HS)</p> <p>Alcohol-impaired driving deaths are at 33% compared to 14% nationally and 37% in SD (CR)</p> <p>Marijuana use 14.2% (HS)</p> <p>Sexually transmitted infections – 321 compared to 138 nationally and 471 in SD (# of newly diagnosed chlamydia cases per 100,000 population) (CR)</p>	<p>Sanford One Care Medical Home model (Health Coach)</p>	<p>X</p>

Identified concern	Specific areas of concern	Key stakeholder Focus group	Secondary data County Rankings (CR); Focus on SD – Helmsley Study (HS)	Community resources that are available to address the need	Gap ?
<b>Preventive Health</b>	<p>45.1% did not receive a flu shot within the last year</p> <p>74.5% did not have immunizations within the last year</p> <p>20% of respondents reported that children living in their household did not receive flu shots</p>			<p>Flu shot promotion at annual Harvest Festival</p> <p>Presence of education &amp; information at school parent/teacher conferences</p>	X



## Chamberlain 2016 Community Health Needs Assessment Prioritization Worksheet

### Criteria to Identify Priority Problem

- Cost and/or return on investment
- Availability of solutions
- Impact of problem
- Availability of resources (staff, time, money, equipment) to solve problem
- Urgency of solving problem (H1N1 or air pollution)
- Size of problem (e.g. # of individuals affected)

### Criteria to Identify Intervention for Problem

- Expertise to implement solution
- Return on investment
- Effectiveness of solution
- Ease of implementation/maintenance
- Potential negative consequences
- Legal considerations
- Impact on systems or health
- Feasibility of intervention

Health Indicator/Concern	Round 1 Vote	Round 2 Vote	Round 3 Vote
<b>Safety</b> <ul style="list-style-type: none"> <li>• Presence of street drugs and alcohol in the community 4.53 <b>(1)</b></li> <li>• Presence of drug dealers in the community 4.33<b>(4)</b></li> <li>• Child abuse and neglect 3.80 <b>(15)</b></li> </ul>			
<b>Substance Use and Abuse</b> <ul style="list-style-type: none"> <li>• Drug use and abuse 4.47 <b>(2)</b></li> <li>• Underage drug use and abuse 4.13 <b>(3)</b></li> <li>• Alcohol use and abuse 4.13 <b>(7) Binge drinking up to 28%</b></li> <li>• Underage drinking 4.13 <b>(8)</b></li> <li>• <b>Alcohol impaired deaths up to 100% in Buffalo County</b></li> <li>• Smoking and tobacco 3.82 <b>(13) up to 42%</b></li> </ul>			
<b>Physical Health</b> <ul style="list-style-type: none"> <li>• Cancer 4.16 <b>(5)</b></li> <li>• Inactivity and lack of exercise 4.15 <b>(6) up to 33%</b></li> <li>• Poor nutrition and eating habits 4.07 <b>(9)</b></li> <li>• Obesity 4.04 <b>(10) up to 44%</b></li> <li>• Chronic Disease 3.95 <b>(11)</b>  <ul style="list-style-type: none"> <li>↑BP ↑ Chol ↑rates of DB</li> </ul> </li> <li>• <b>↑STDs</b></li> <li>• <i>Preventive Health – Flus shots and immunizations</i></li> <li>• <i>Mammograms</i></li> </ul>	XXXXX		
<b>Children and Youth</b> <ul style="list-style-type: none"> <li>• Bullying 3.87 <b>(12)</b></li> <li>• Youth crime 3.81 <b>(14)</b></li> <li>• Availability of quality child care 3.72 <b>(17)</b></li> <li>• Availability of quality infant care 3.70 <b>(18)</b></li> <li>• <b>High rates of teen births</b></li> </ul>			
<b>Mental Health</b> <ul style="list-style-type: none"> <li>• Stress 3.80 <b>(16)</b></li> <li>• Depression 3.69 <b>(17)</b></li> <li>• <b>Anxiety</b></li> <li>• <b>High ACEs ( 3, 5 or higher)</b></li> <li>• <i>Poor mental health days</i></li> </ul>	XXXX		
<b>Health Care</b> <ul style="list-style-type: none"> <li>• Access to affordable health care 3.69 ( 20)</li> <li>• <b>Need for medical care</b></li> <li>• <b>Need for prescription medications</b></li> <li>• <b>Unmet mental health needs</b></li> </ul>			

*Italicized notes are based on County health Rankings*  
**Bold based on Helmsley Report**

# Sanford Chamberlain Medical Center

Community Health Needs Assessment  
Results from a March 2015 Non-generalizable

Online Survey

August 2015

## **STUDY DESIGN and METHODOLOGY**

The following report includes non-generalizable survey results from a March 2015 on-line survey conducted through a partnership between the Community Health Collaborative and the Center for Social Research (CSR) at North Dakota State University. The CSR developed and maintained links to the online survey tool. Members of the Community Health Collaborative invited viewers to access the online survey by distributing the survey link via e-mail to various agencies, at times using a snowball approach. Therefore, it is important to note that the data in this report are not generalizable to the community. Data collection occurred throughout the month of April 2015 and a total of 55 respondents participated in the online survey.

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Figure 15. Number of days in the last month that respondents' mental health was not good

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Figure 17. Whether respondents have smoked at least 100 cigarettes in their entire life

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Figure 21. During the past month on days that respondents drank, average number of drinks per day respondents consumed

Figure 22. Number of times during the past month that respondents consumed at least 4 or 5 alcoholic drinks (4 for females, 5 for males) on the same occasion

Figure 23. Whether respondents ever had a problem with alcohol use or prescription or non-prescription drug abuse

Figure 24. Of respondents who ever had a problem with alcohol use or prescription or non-prescription drug abuse, whether respondents got the help they needed

Figure 25. Whether alcohol use or prescription or non-prescription drug abuse has had harmful effects on respondents or a family member over the past two years

**Preventive Health**..... 85

- Table 1. Whether or not respondents had preventive screenings in the past year, by type of screening
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- Figure 38. Whether respondents have health insurance (private, public, or governmental) and oral health or dental care insurance coverage
- Figure 39. Whether respondents have one person who they think of as their personal doctor or health care provider
- Figure 40. Facilities that respondents go to most often when sick and take their children when they are sick

Figure 41. Number of children younger than 18 and number of adults age 65 or older living in respondents' household

Figure 42. Whether all children in home are current on their immunizations and all children age 6 months or older get a flu shot or flu mist each year

Table 3. Zip code of respondents

# SURVEY RESULTS

## General Health and Wellness Concerns about the Community

Using a 1 to 5 scale, with 1 being “not at all” and 5 being “a great deal,” respondents were asked to rate their level of concern with various statements regarding ECONOMICS, TRANSPORTATION, the ENVIRONMENT, CHILDREN AND YOUTH, the AGING POPULATION, SAFETY, HEALTH CARE, PHYSICAL AND MENTAL HEALTH, and SUBSTANCE USE AND ABUSE.

Figure 1. Level of concern with statements about the community regarding ECONOMICS

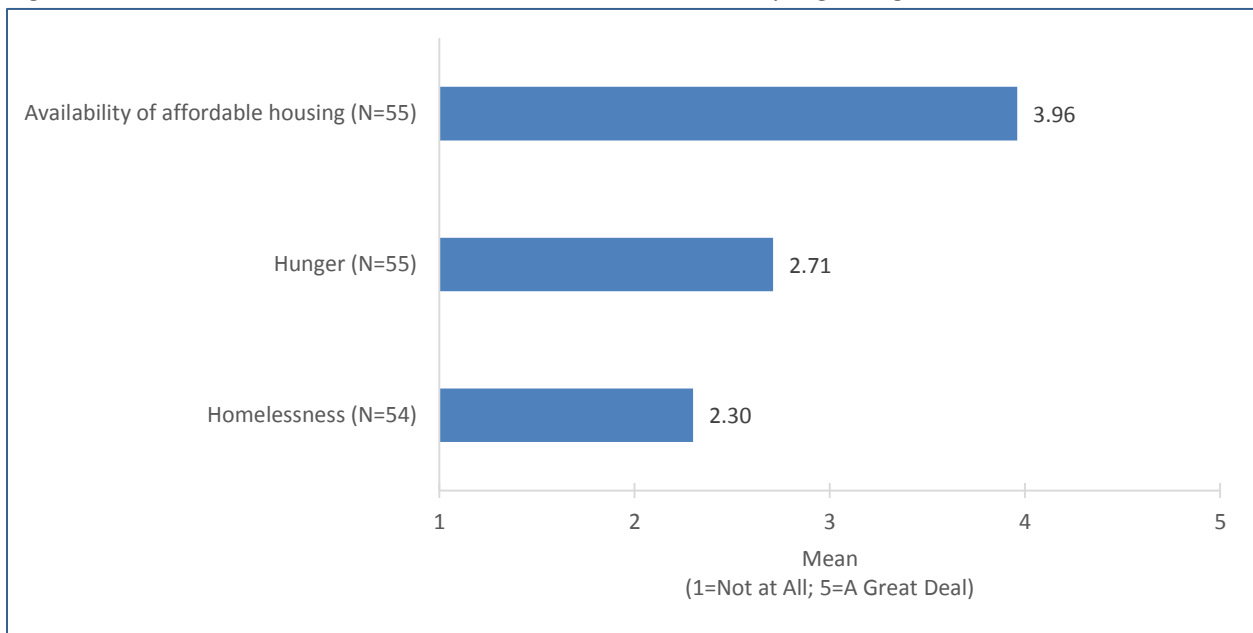




Figure 2. Level of concern with statements about the community regarding TRANSPORTATION

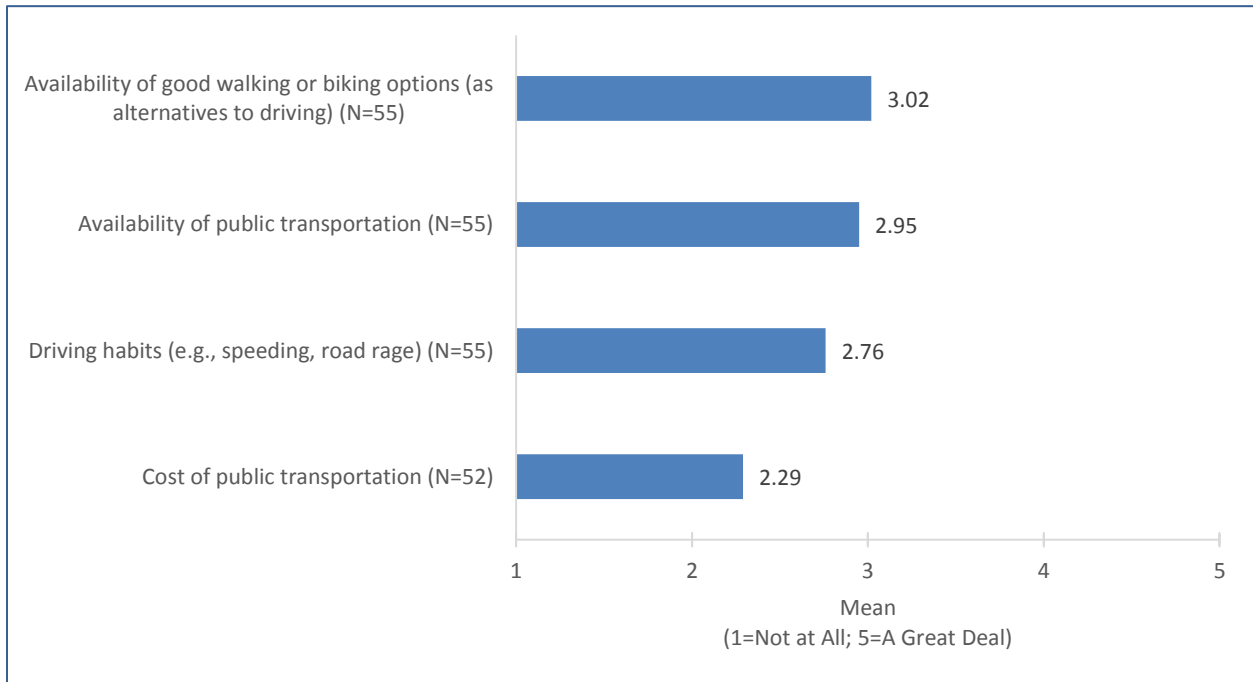


Figure 3. Level of concern with statements about the community regarding the ENVIRONMENT

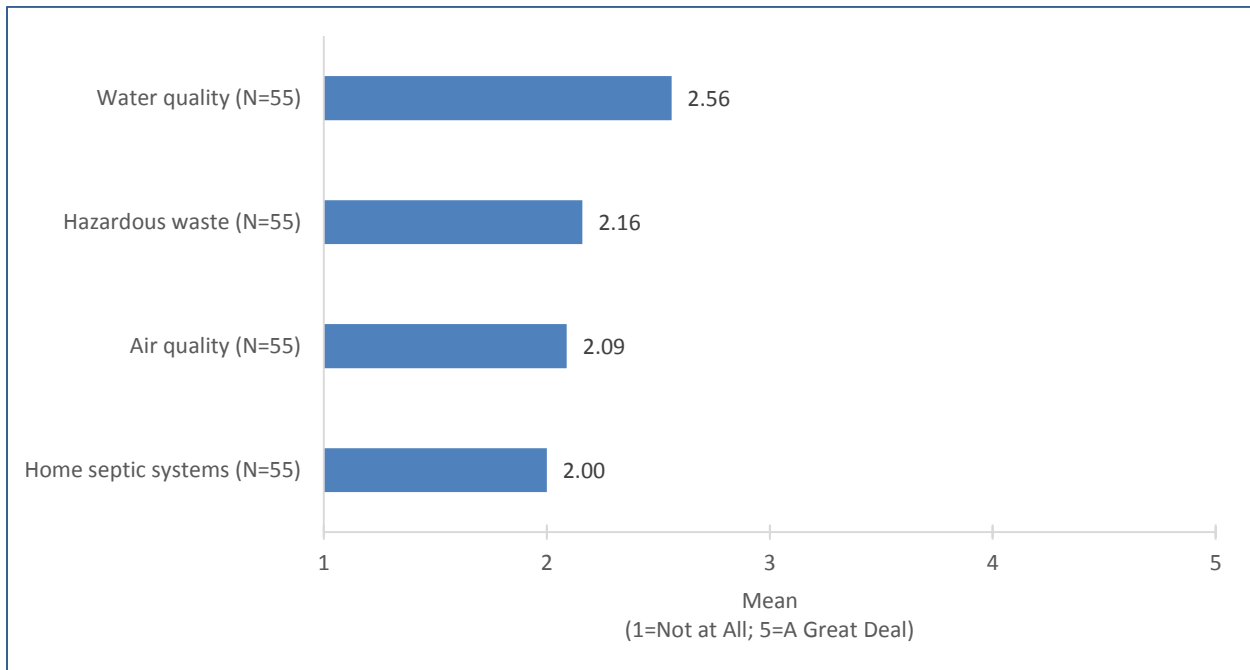


Figure 4. Level of concern with statements about the community regarding CHILDREN AND YOUTH

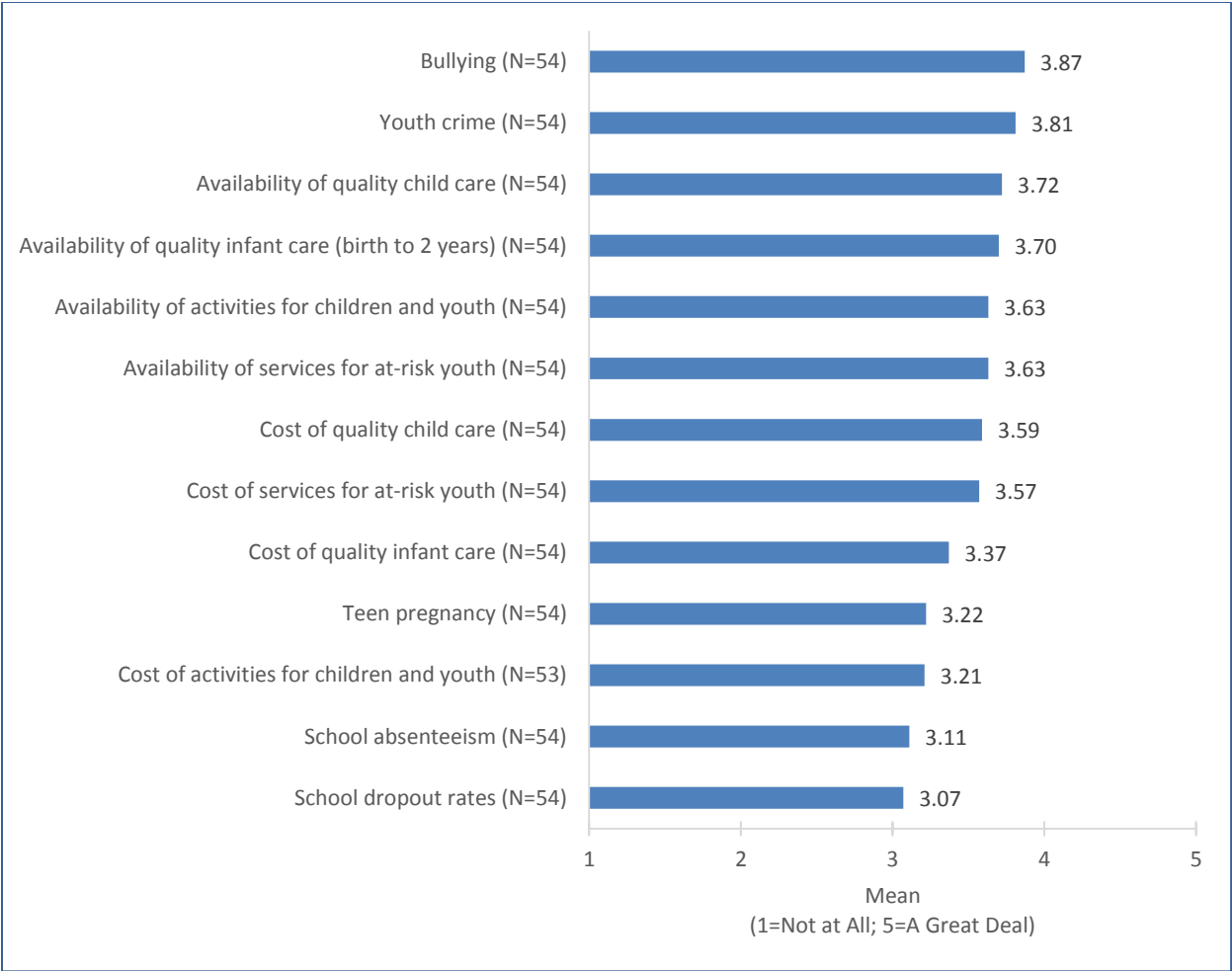


Figure 5. Level of concern with statements about the community regarding the AGING POPULATION

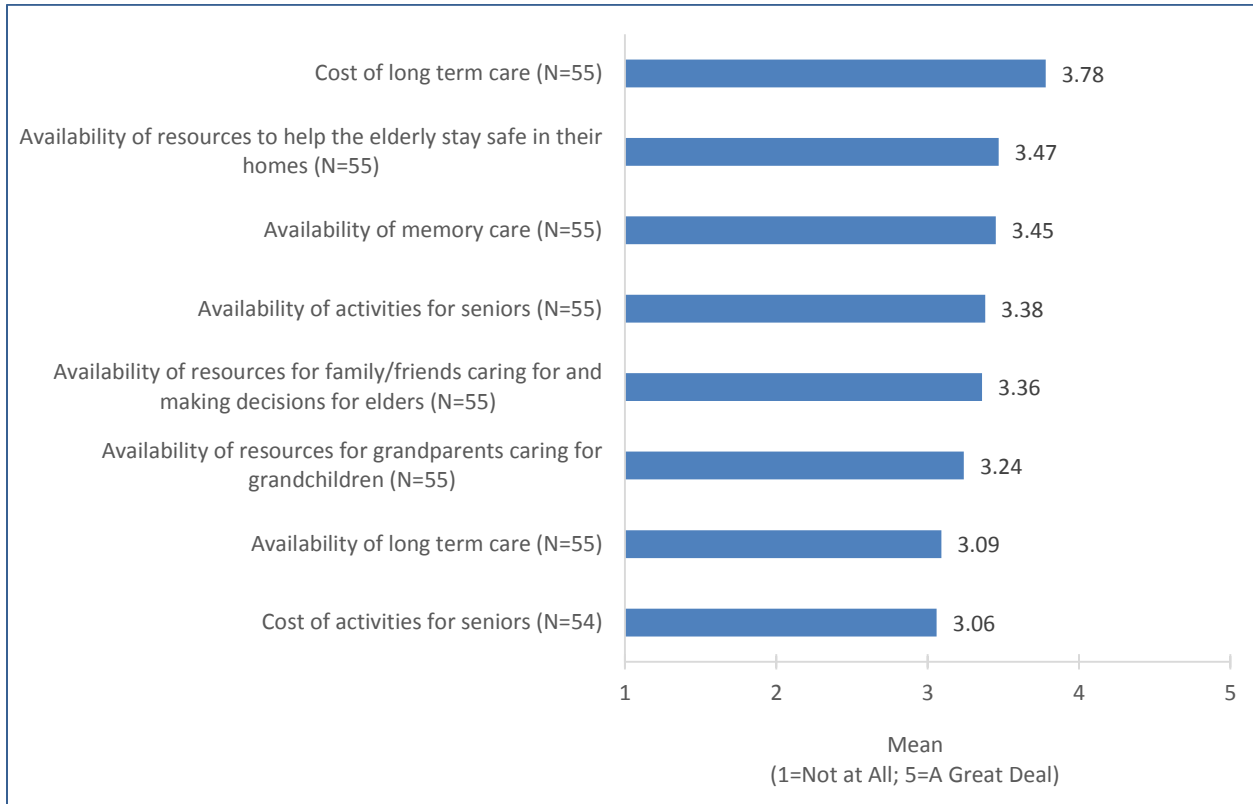


Figure 6. Level of concern with statements about the community regarding SAFETY

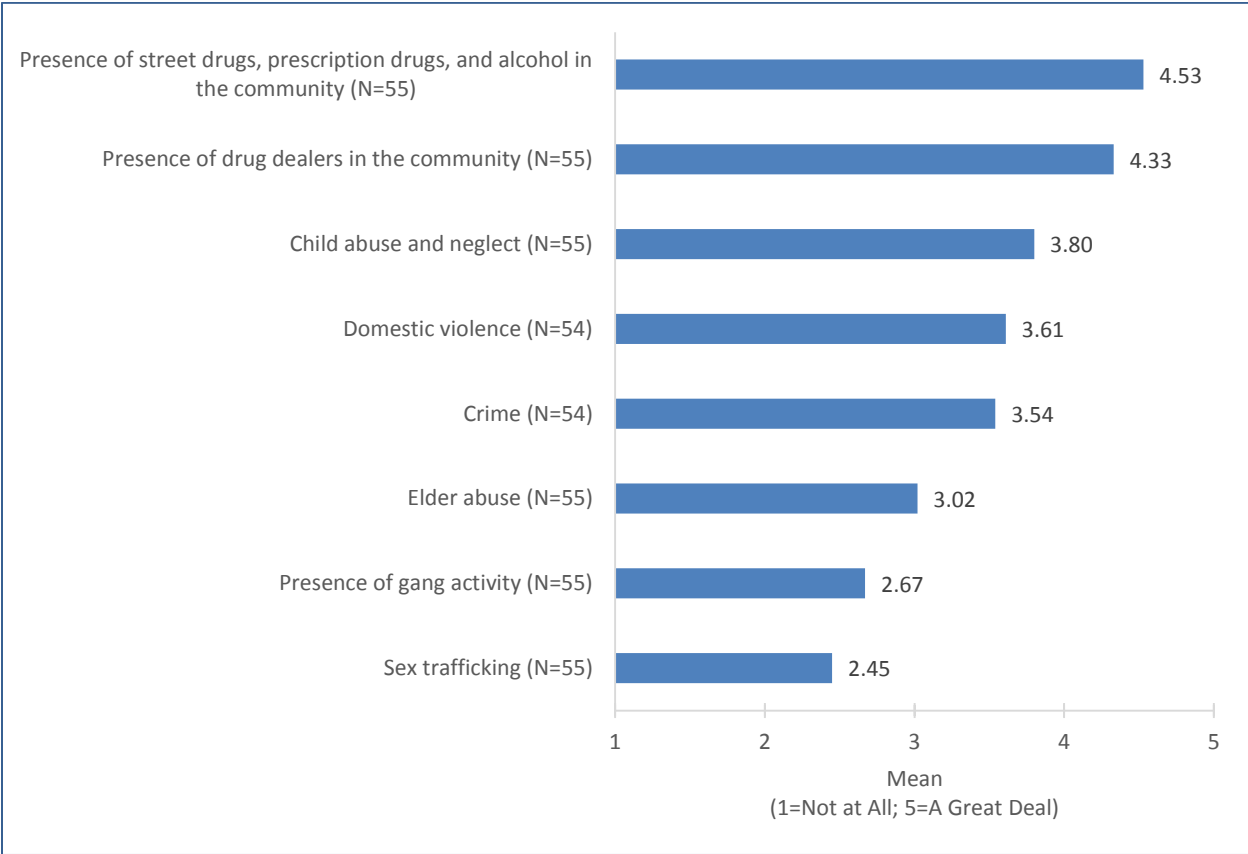


Figure 7. Level of concern with statements about the community regarding HEALTH CARE

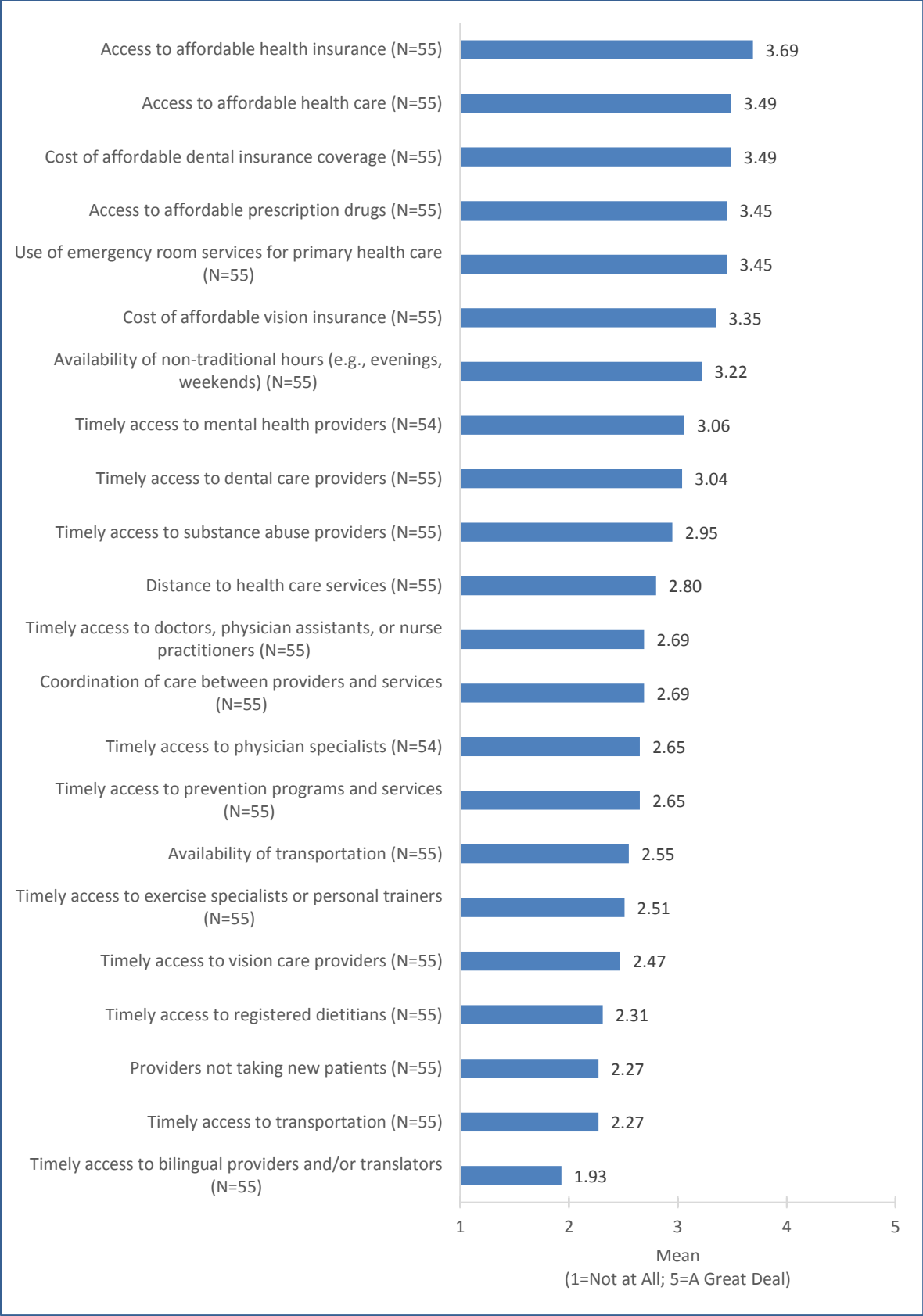


Figure 8. Level of concern with statements about the community regarding PHYSICAL AND MENTAL HEALTH

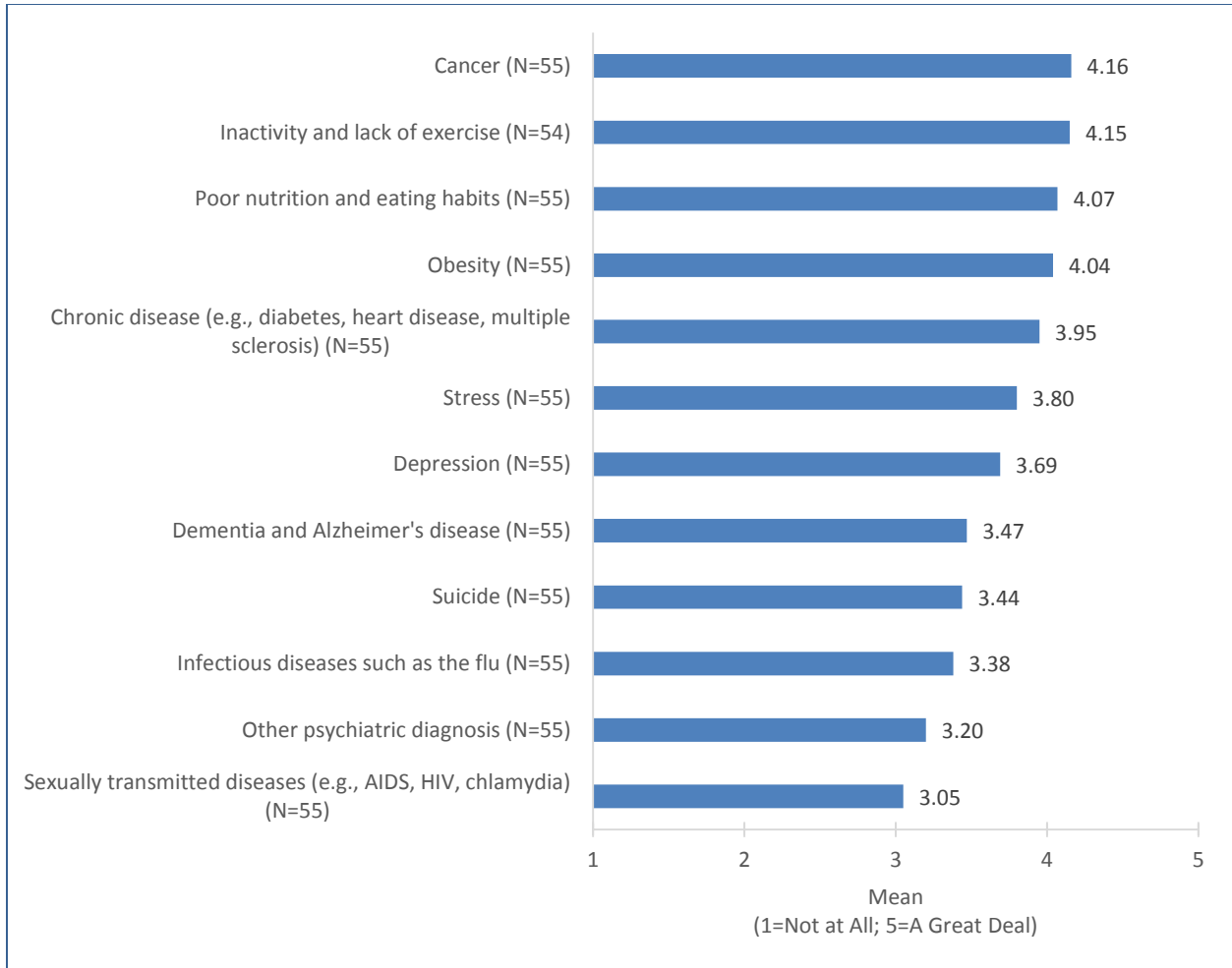
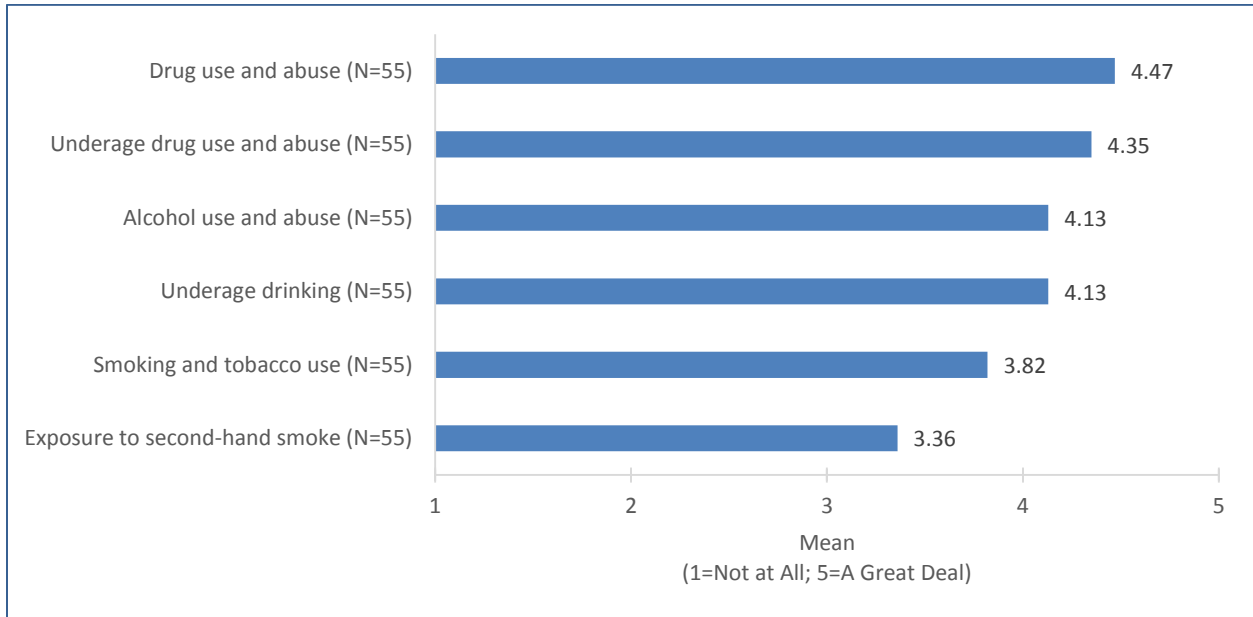
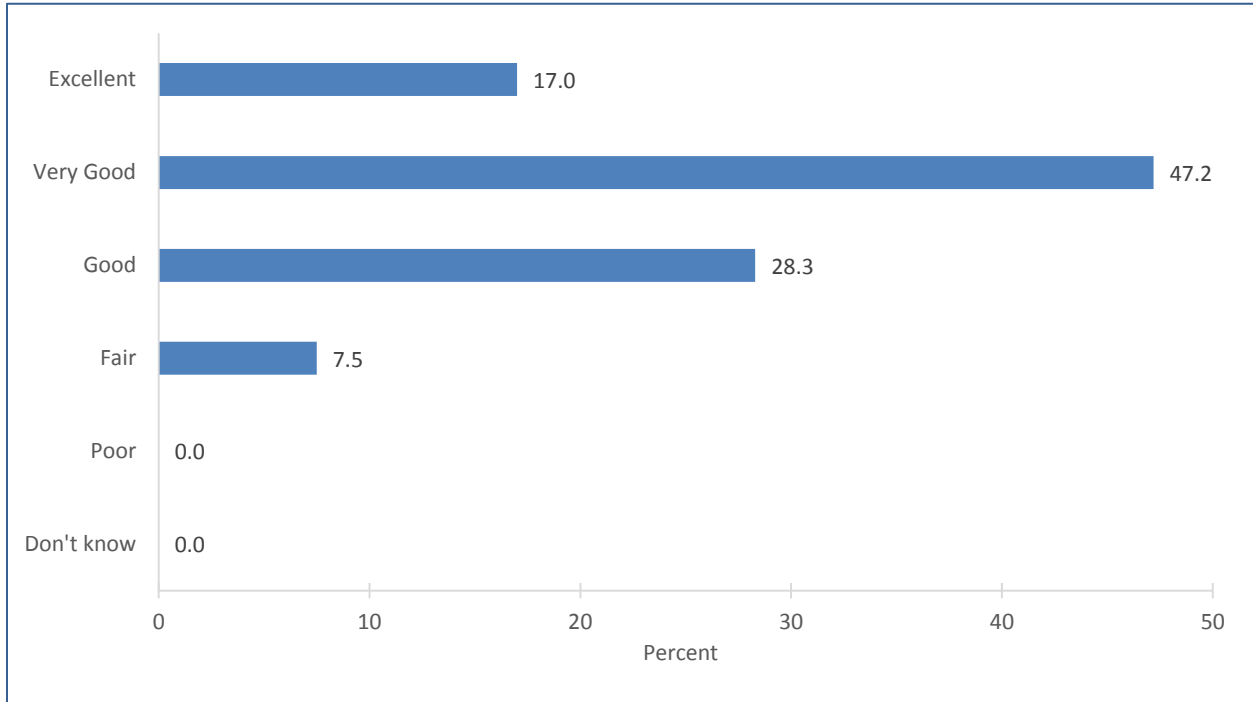


Figure 9. Level of concern with statements about the community regarding SUBSTANCE USE AND ABUSE



### General Health

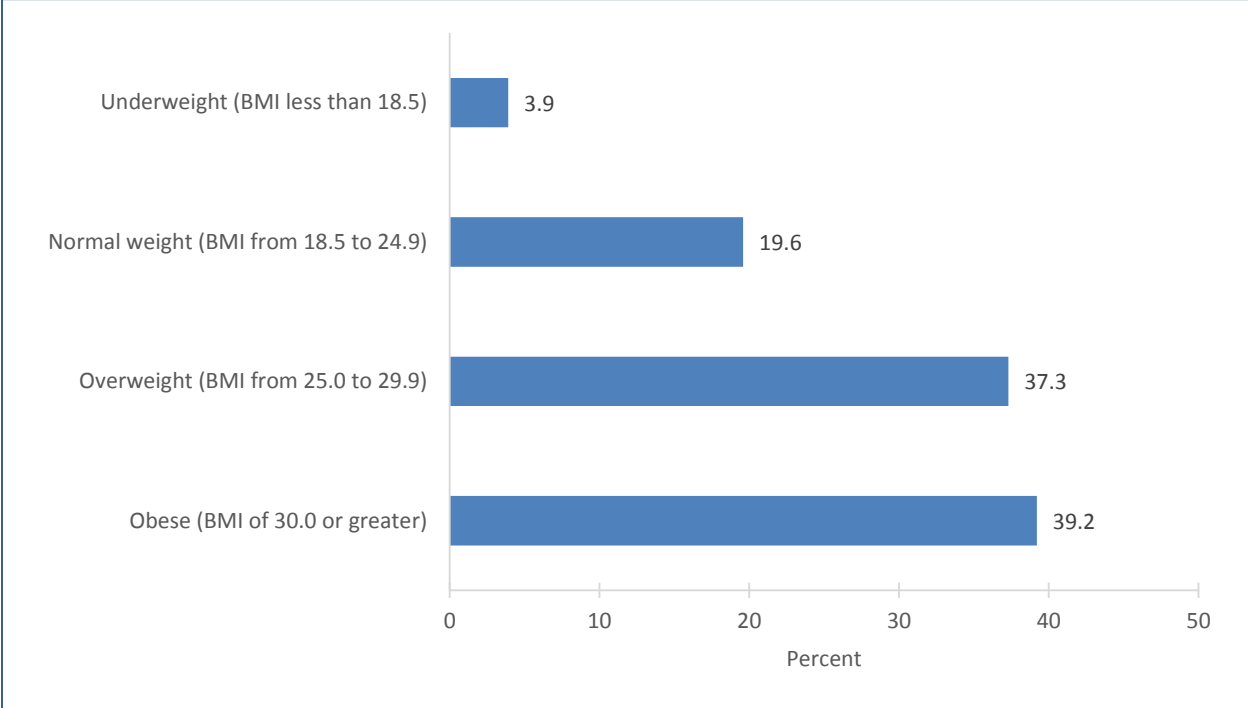
Figure 10. Respondents' rating of their health in general



N=53



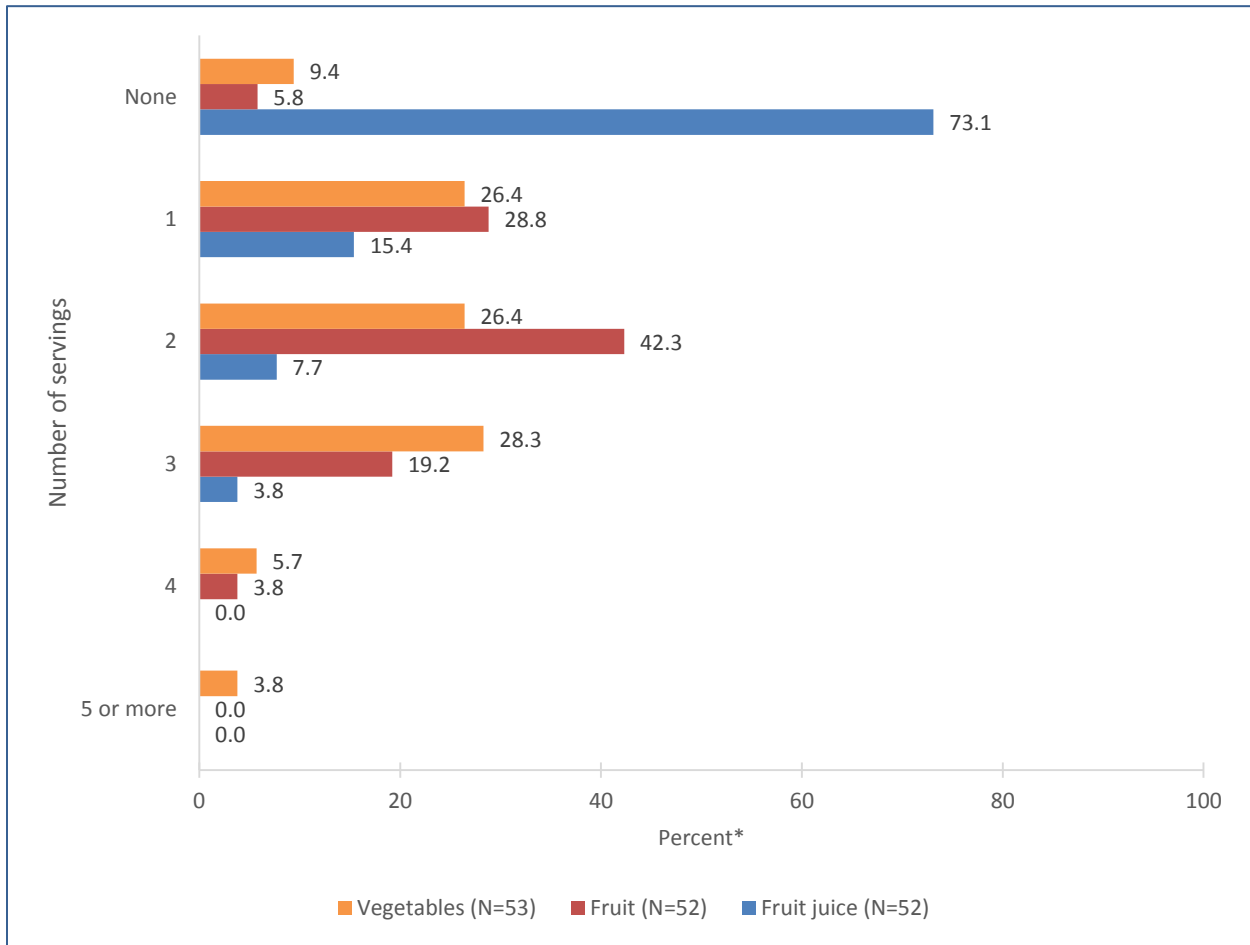
Figure 11. Respondents' weight status based on the Body Mass Index (BMI)\* scale



N=51

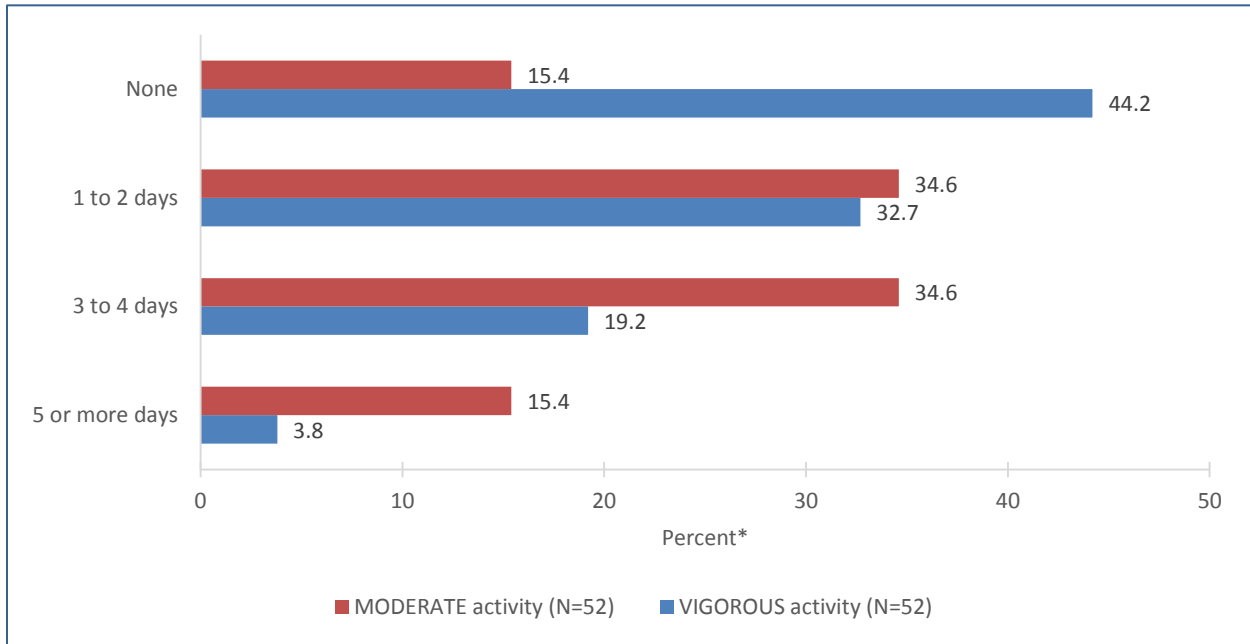
\*For information about the BMI, visit the Centers for Disease Control and Prevention, *About BMI for Adults*, [http://www.cdc.gov/healthyweight/assessing/bmi/adult\\_bmi/](http://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/).

Figure12. Number of servings of vegetables, fruit, and fruit juice that respondents had yesterday



\*Percentages may not total 100.0 due to rounding.

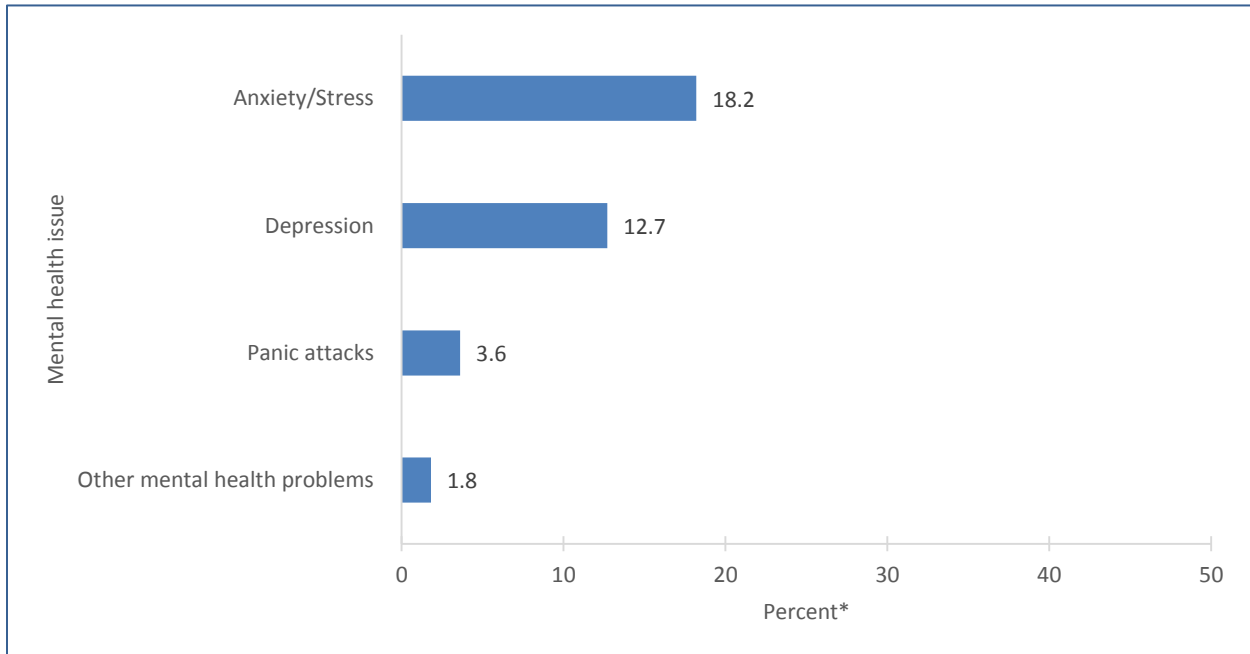
Figure 13. Number of days in an average week respondents engage in MODERATE and VIGOROUS activity



\*Percentages may not total 100.0 due to rounding.

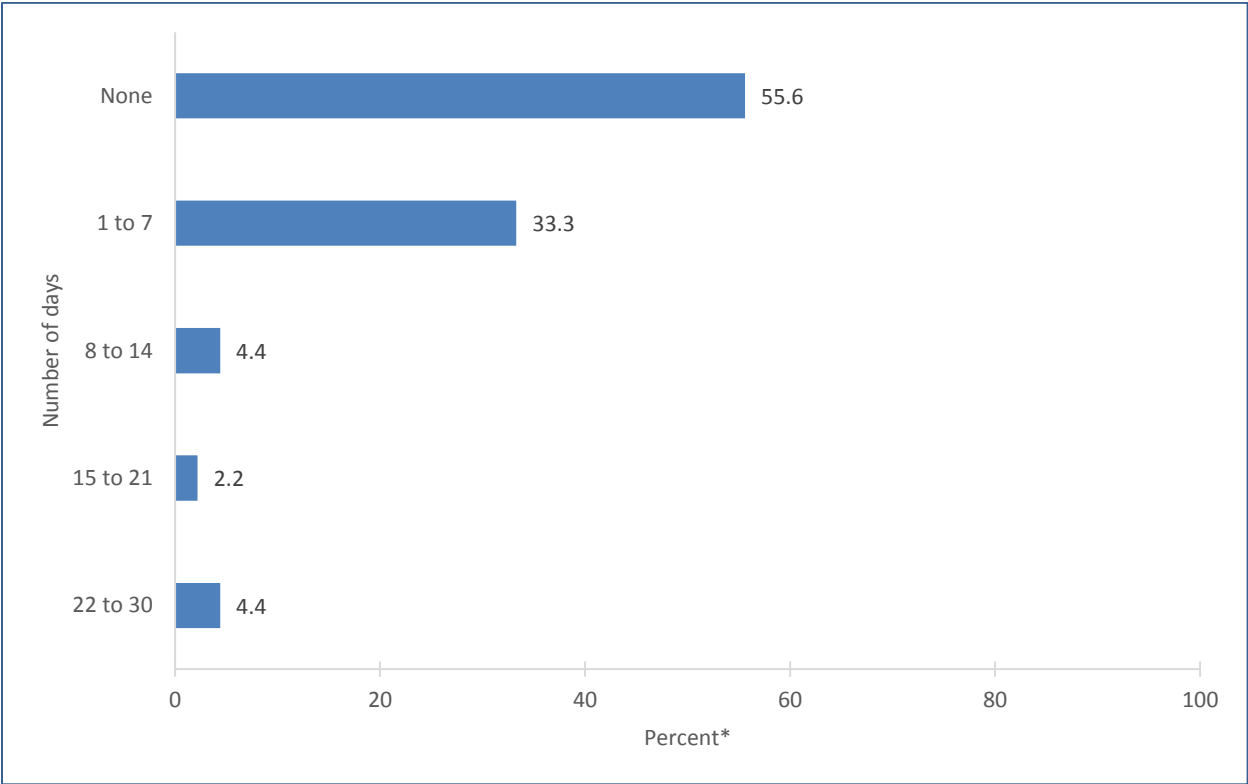
### Mental Health

Figure 14. Percentage of respondents who have been told by a doctor or health professional that they have a mental health issue, by type of mental health issue



N=55 Percentages do not total 100.0 due to multiple responses.

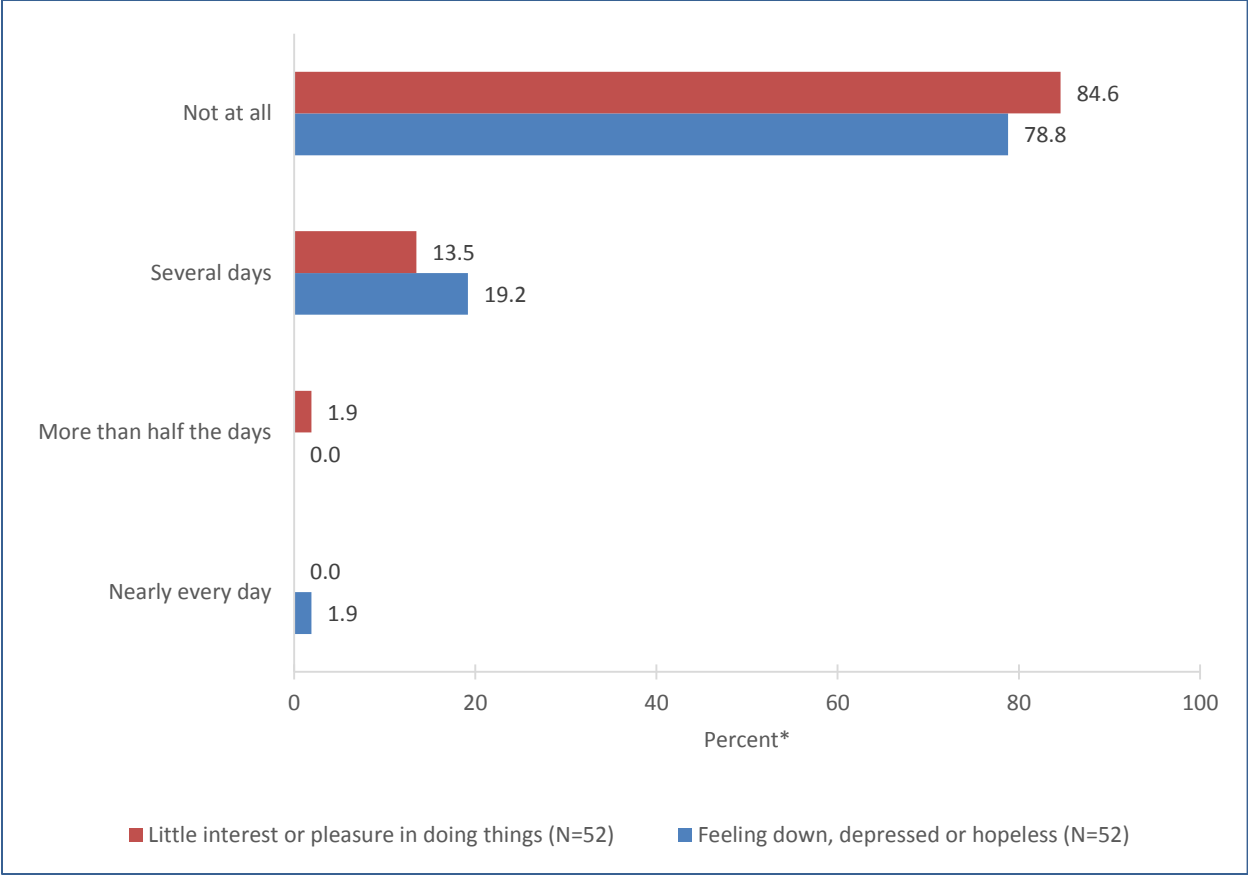
Figure 15. Number of days in the last month that respondents' mental health was not good



N=45

\*Percentages do not total 100.00 due to rounding.

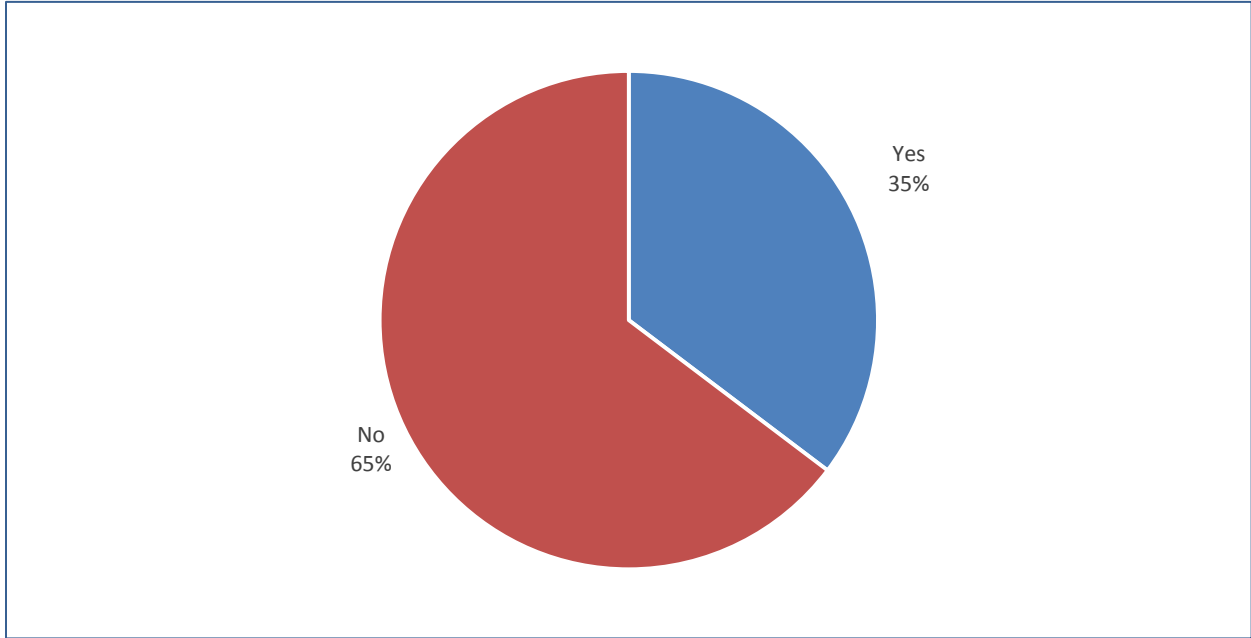
Figure 16. How often, over the past two weeks, respondents have been bothered by mental health issues



\*Percentages may not total 100.0 due to rounding.

## Tobacco Use

Figure 17. Whether respondents have smoked at least 100 cigarettes in their entire life



N=51

Figure 18. How often respondents currently smoke cigarettes and use chewing tobacco or snuff

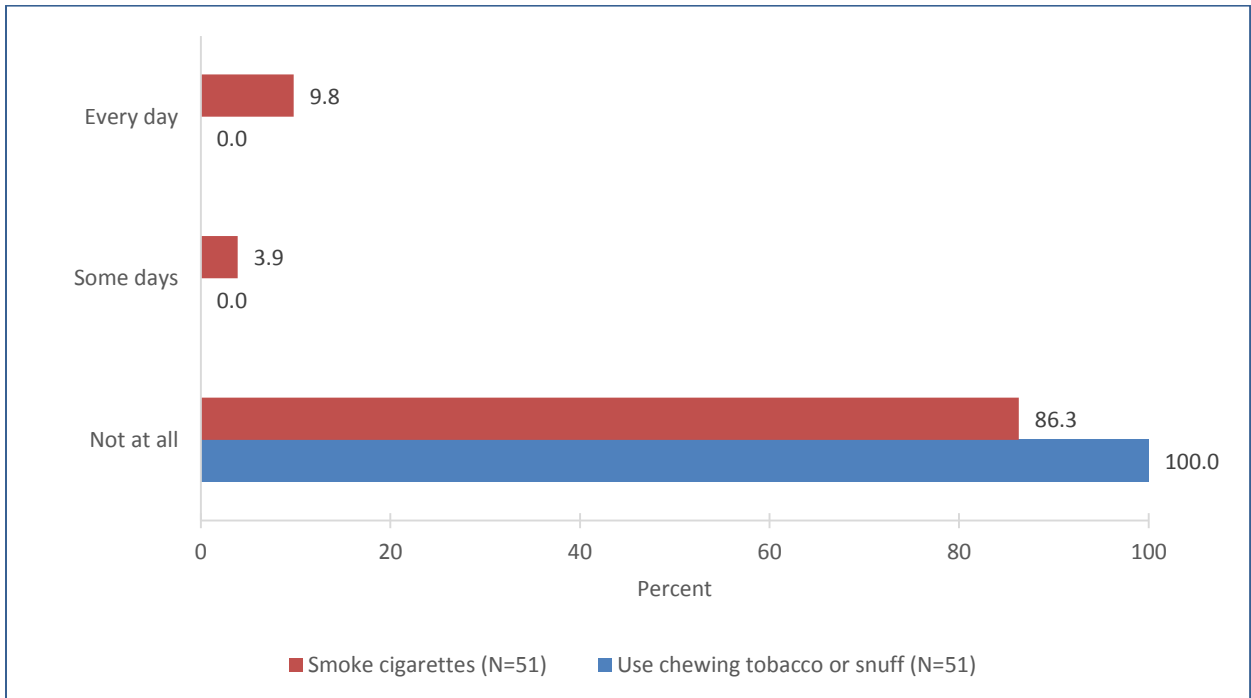
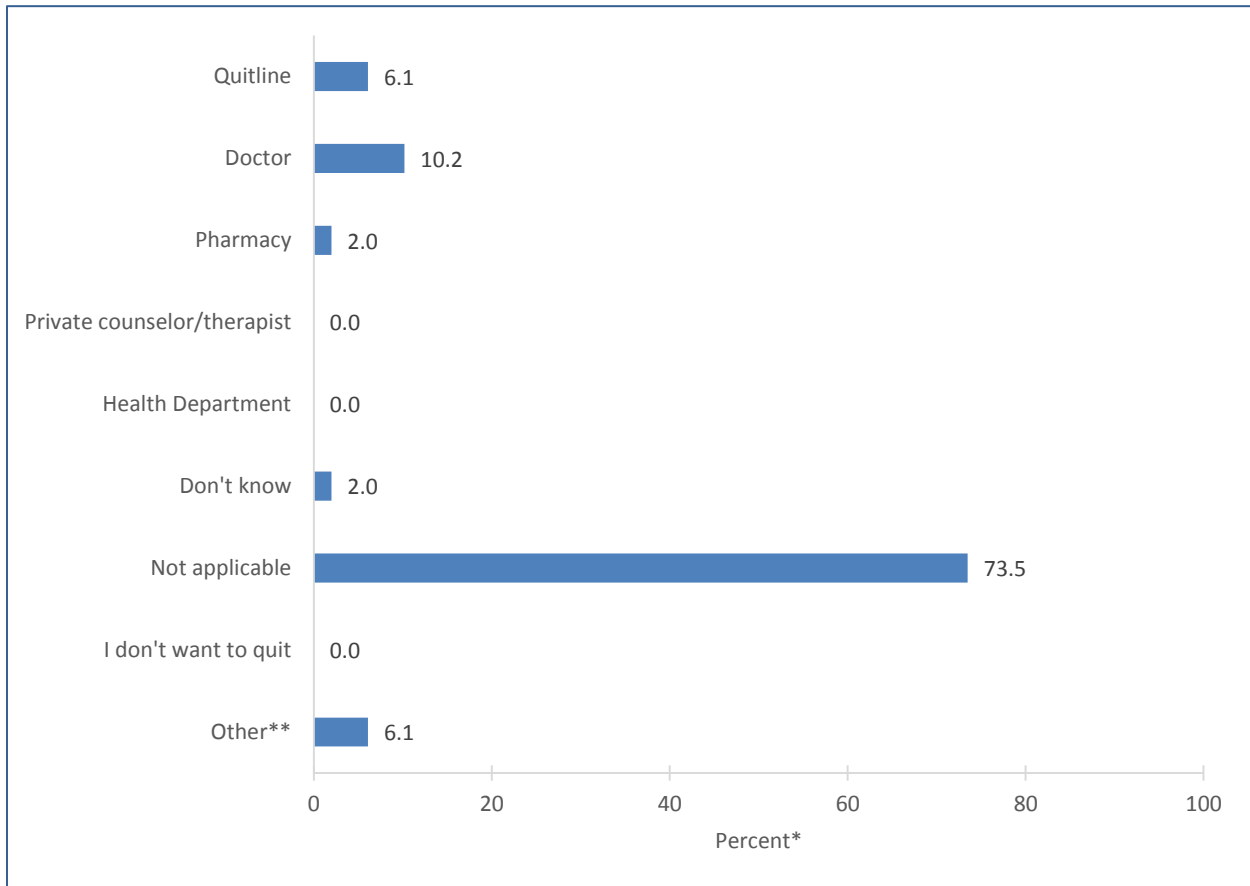


Figure 19. Location respondents would first go if they wanted help to quit using tobacco



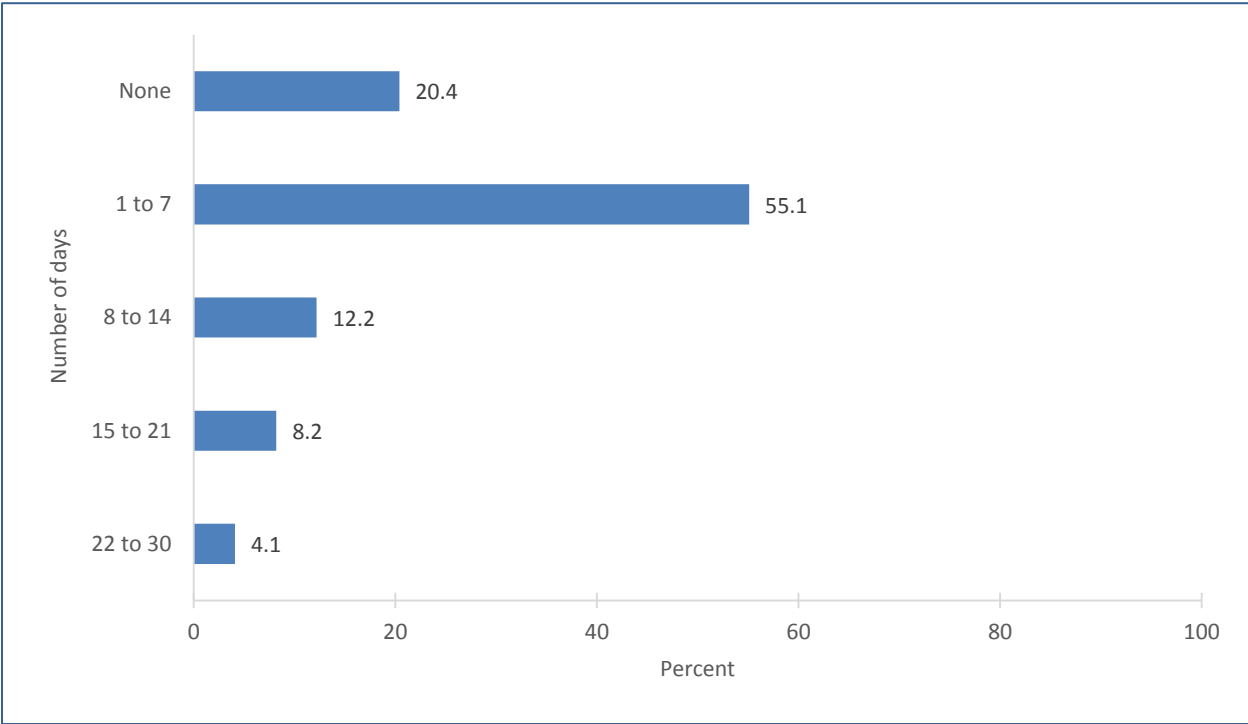
N=49

\*Percentages do not total 100.0 due to rounding.

\*\*Other responses are that respondents would quit by themselves (3).

**Alcohol Use and Prescription Drug/Non-prescription Drug Abuse**

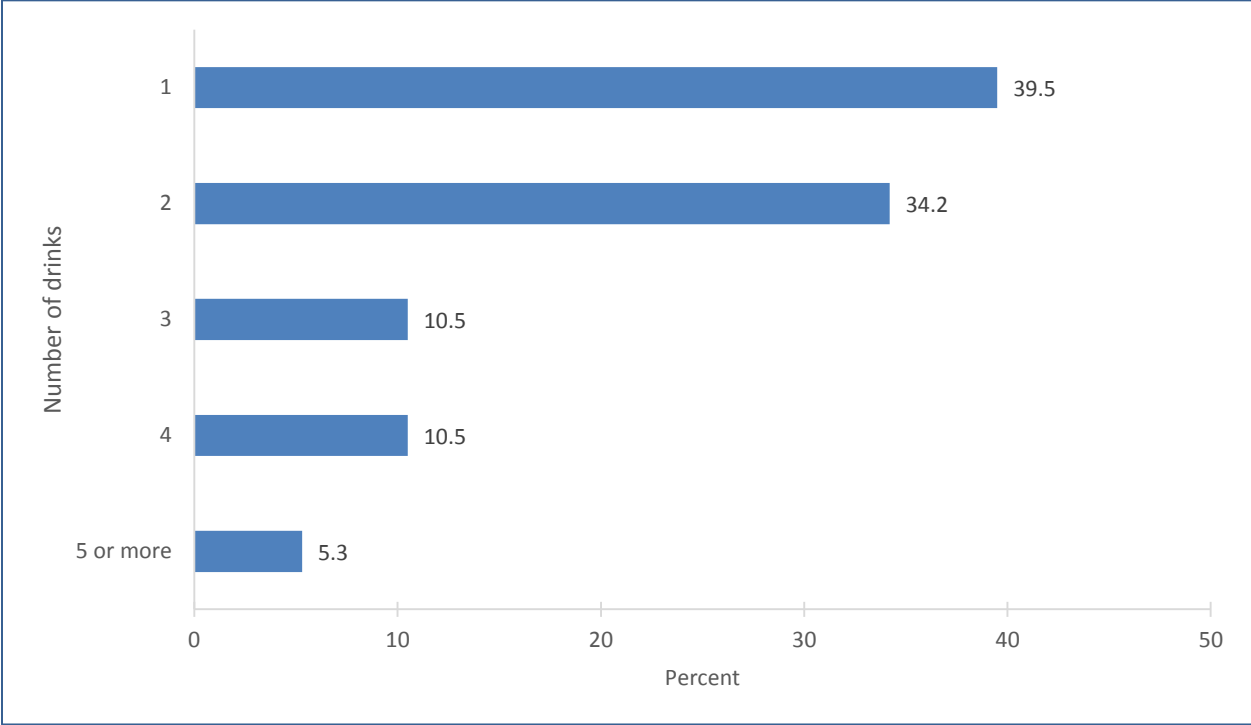
Figure 20. Number of days during the past month that respondents had at least one drink of any alcoholic beverage



N=49

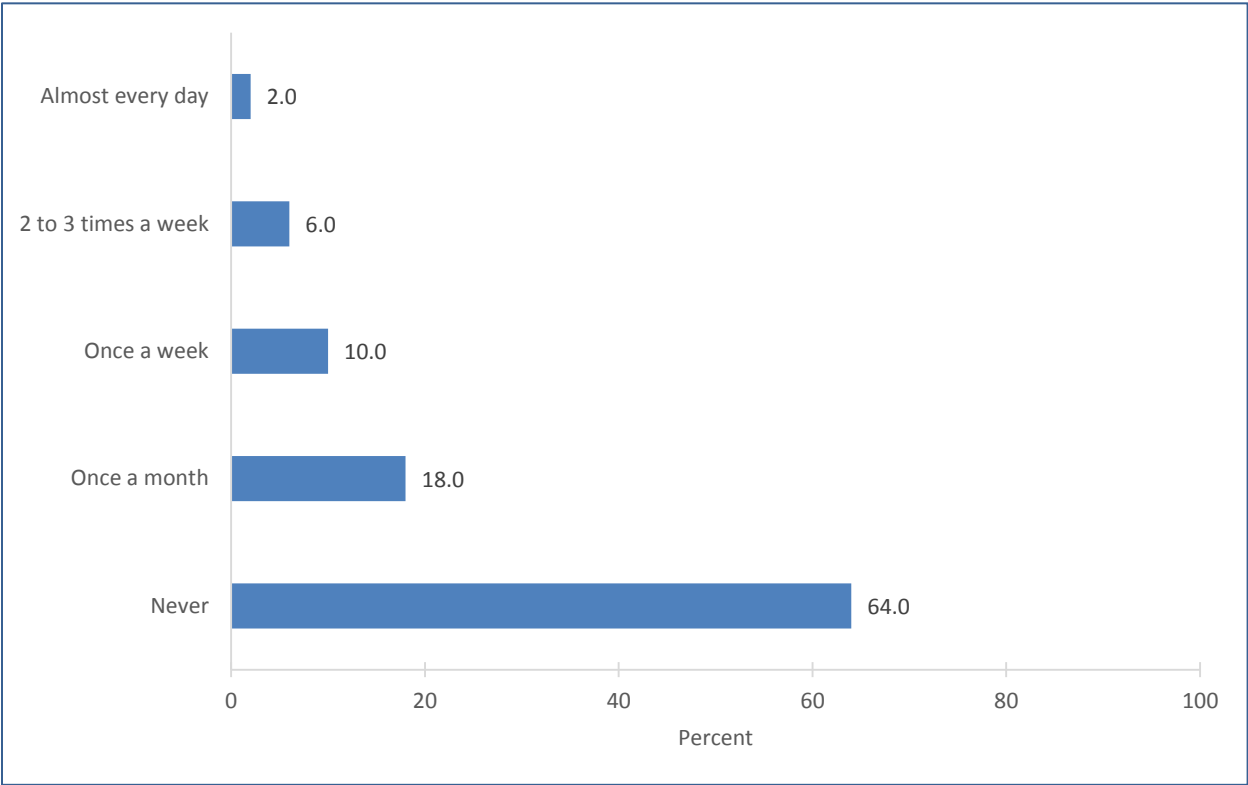


Figure 21. During the past month on days that respondents drank, average number of drinks per day that respondents consumed



N=38

Figure 22. Number of times during the past month that respondents consumed at least 4 or 5 alcoholic drinks (4 for females, 5 for males) on the same occasion



N=50

Figure 23. Whether respondents had a problem with alcohol use or prescription or non-prescription drug abuse

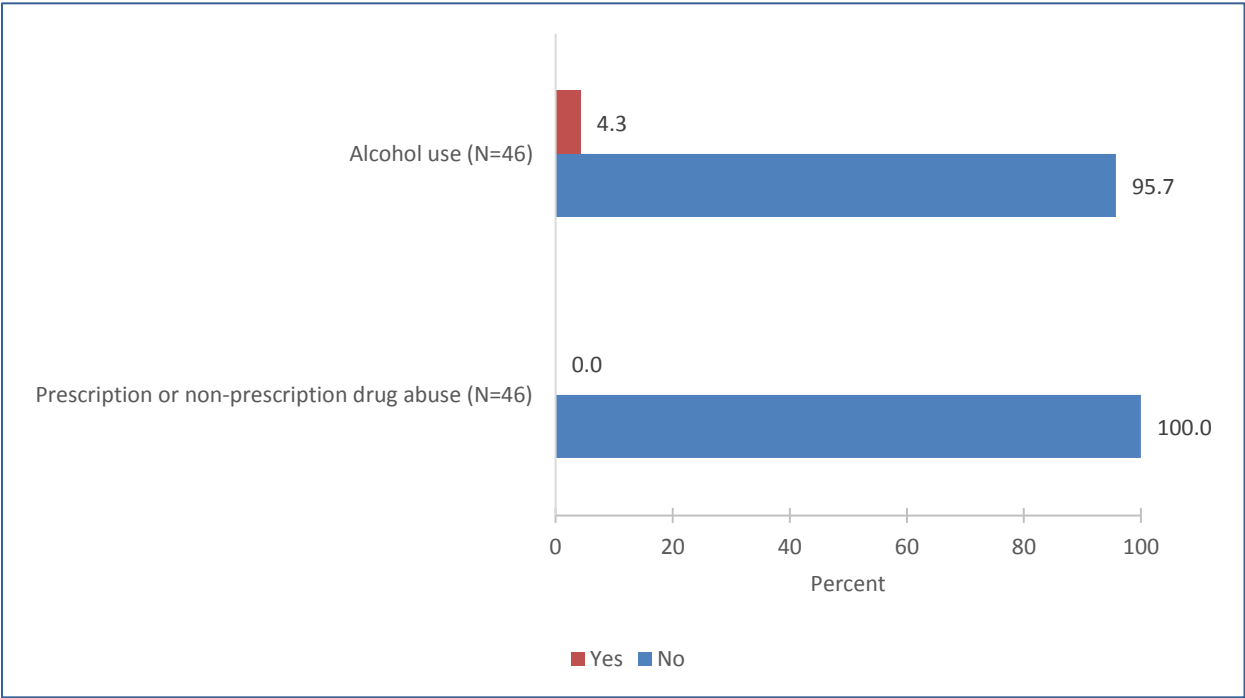


Figure 24. Of respondents who ever had a problem with alcohol use or prescription or non-prescription drug abuse, whether respondents got the help they needed

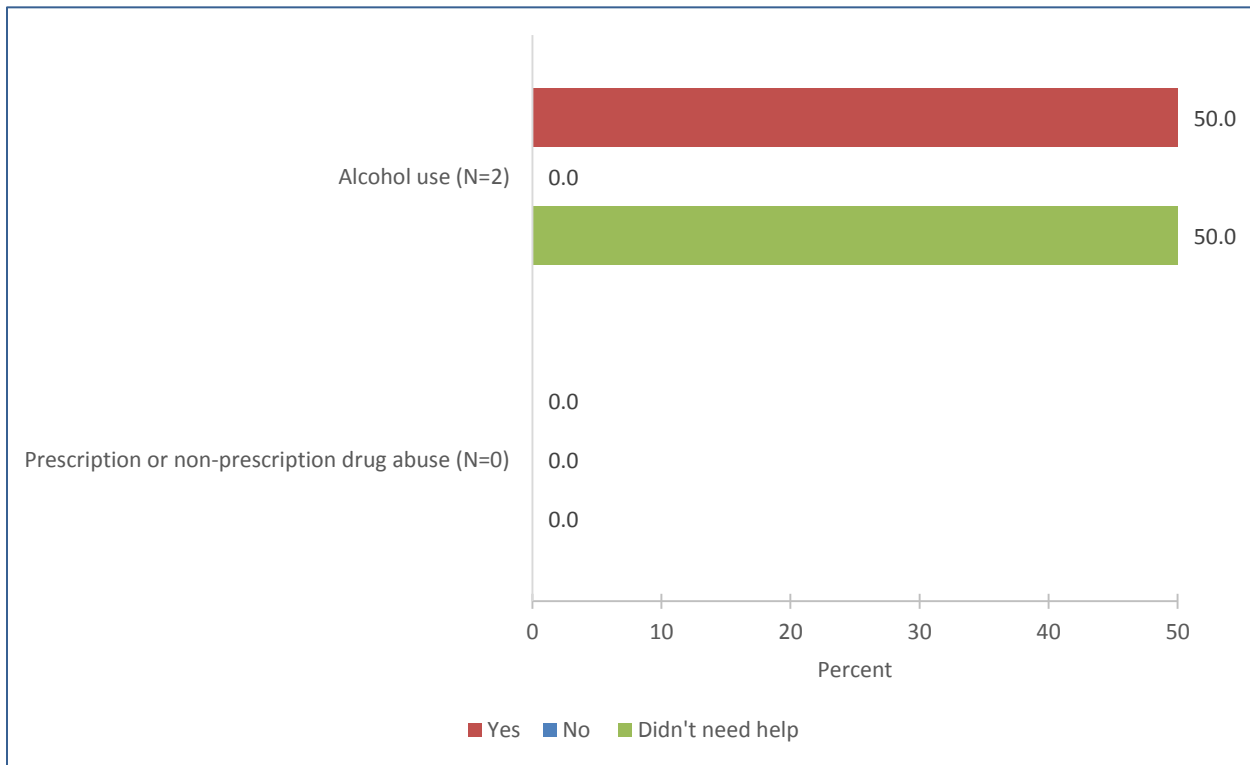
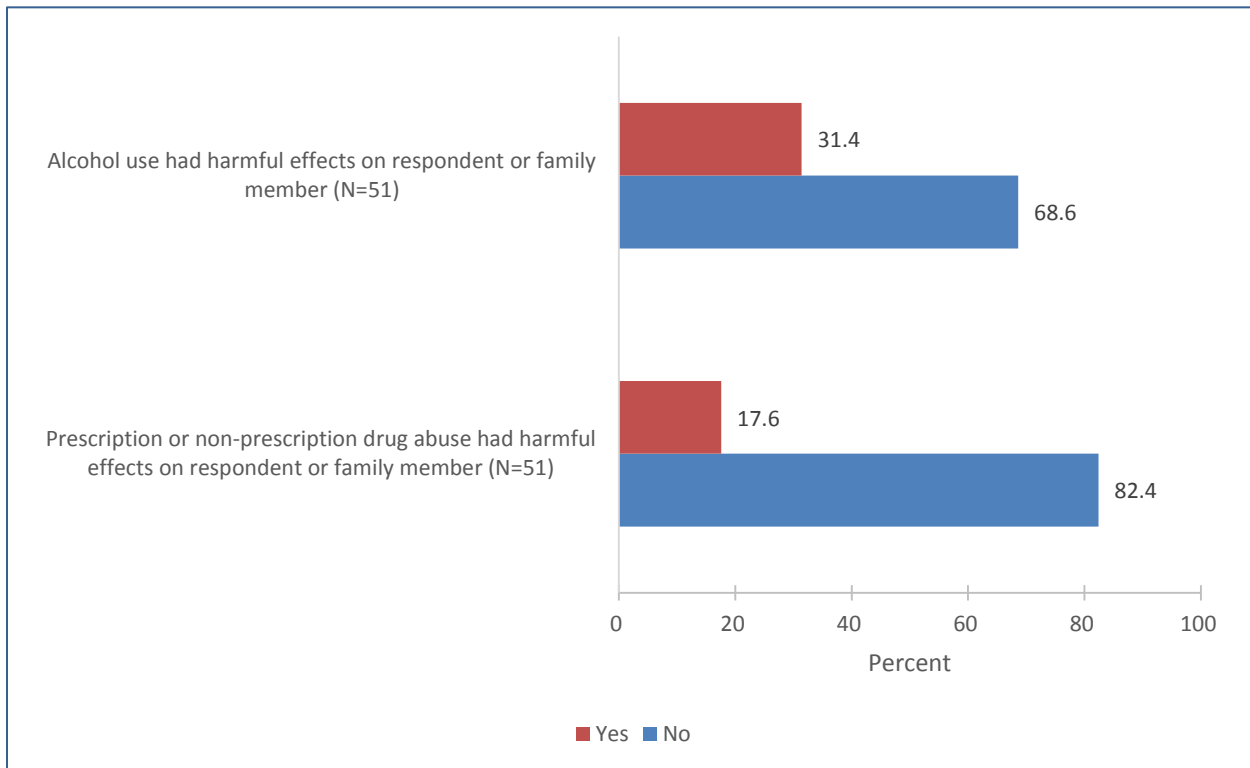


Figure 25. Whether alcohol use or prescription or non-prescription drug abuse has had harmful effects on respondents or a family member over the past two years



## Preventive Health

Table 1. Whether or not respondents had preventive screenings in the past year, by type of screening

Type of screening	Percent of respondents		
	Yes	No	Total
<b>GENERAL SCREENINGS</b>			
Blood pressure screening (N=51)	80.4	19.6	100.0
Blood sugar screening (N=51)	51.0	49.0	100.0
Bone density test (N=51)	15.7	84.3	100.0
Cardiovascular screening (N=51)	25.5	74.5	100.0
Cholesterol screening (N=51)	54.9	45.1	100.0
Dental screening and X-rays (N=51)	66.7	33.3	100.0
Flu shot (N=51)	54.9	45.1	100.0
Glaucoma test (N=51)	35.3	64.7	100.0
Hearing screening (N=51)	3.9	96.1	100.0
Immunizations (N=51)	25.5	74.5	100.0
Pelvic exam (N=35 Females)	51.4	48.6	100.0
STD (N=51)	7.8	92.2	100.0
Vascular screening (N=51)	7.8	92.2	100.0
<b>CANCER SCREENINGS</b>			
Breast cancer screening (N=34 Females)	58.8	41.2	100.0
Cervical cancer screening (N=34 Females)	44.1	55.9	100.0
Colorectal cancer screening (N=49)	16.3	83.7	100.0
Prostate cancer screening (N=14 Males)	28.6	71.4	100.0
Skin cancer screening (N=50)	12.0	88.0	100.0

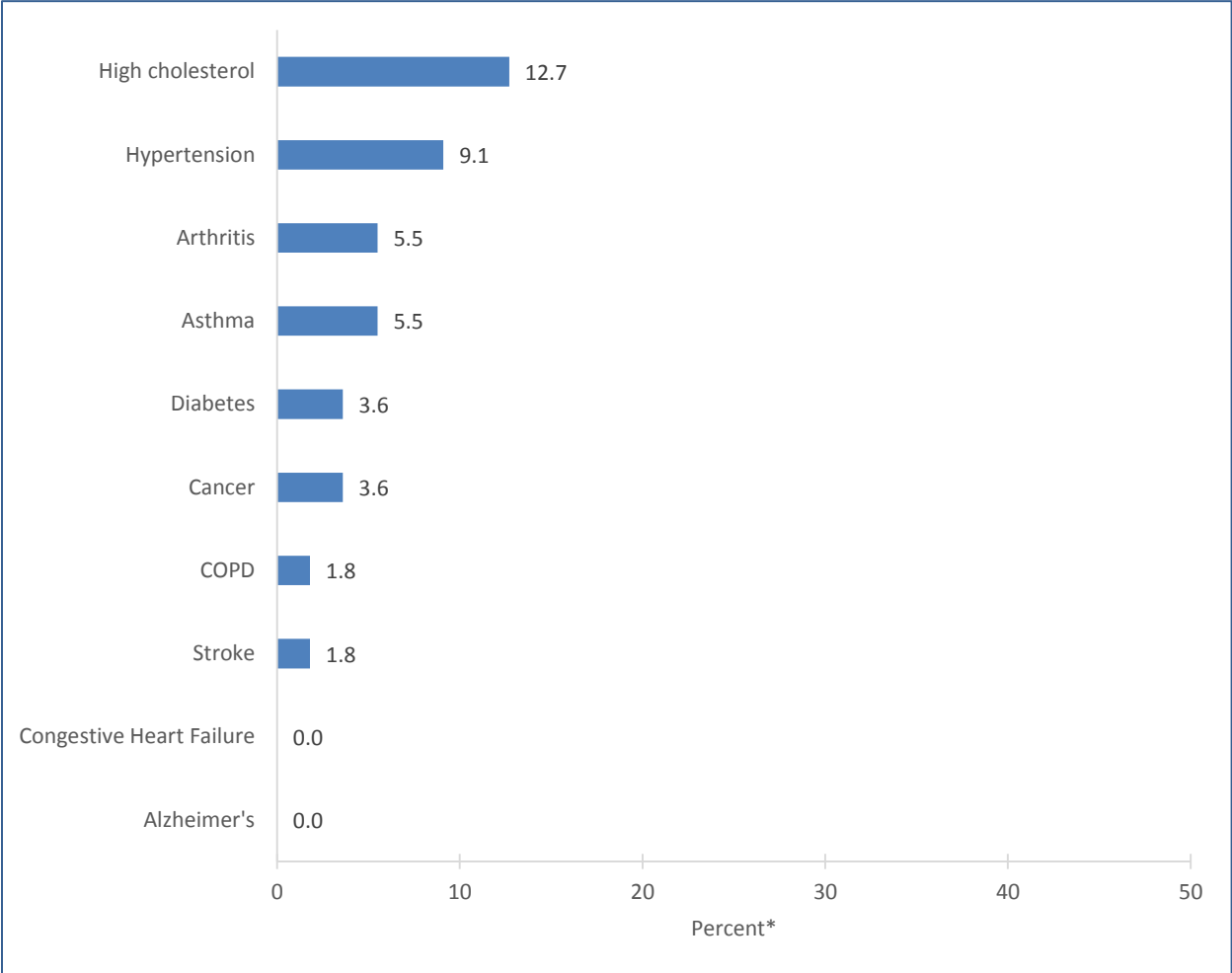
Table 2. Of respondents who have not had preventive screenings in the past year, reasons why they have not, by type of screening

Type of screening	Percent of respondents*						
	Not necessary	Doctor hasn't suggested	Cost	Fear of procedure	Fear of results	Unable to access care	Other reason
<b>GENERAL SCREENINGS</b>							
Blood pressure screening (N=10)	50.0	10.0	10.0	0.0	10.0	0.0	10.0
Blood sugar screening (N=25)	52.0	36.0	4.0	0.0	0.0	0.0	4.0
Bone density test (N=43)	48.8	46.5	2.3	0.0	0.0	0.0	2.3
Cardiovascular screening (N=38)	47.4	36.8	5.3	0.0	0.0	0.0	7.9
Cholesterol screening (N=23)	52.2	21.7	4.3	0.0	0.0	0.0	8.7
Dental screening and X-rays (N=17)	29.4	0.0	23.5	11.8	0.0	5.9	29.4
Flu shot (N=23)	47.8	0.0	4.3	4.3	0.0	4.3	30.4
Glaucoma test (N=33)	48.5	33.3	6.1	0.0	0.0	0.0	9.1

Type of screening	Percent of respondents*						
	Not necessary	Doctor hasn't suggested	Cost	Fear of procedure	Fear of results	Unable to access care	Other reason
Hearing screening (N=49)	63.3	16.3	2.0	0.0	0.0	0.0	8.2
Immunizations (N=38)	71.1	13.2	2.6	2.6	0.0	0.0	10.5
Pelvic exam (N= 17 Females)	23.5	23.5	5.9	0.0	0.0	0.0	29.4
STD (N=47)	76.6	6.4	2.1	0.0	0.0	0.0	6.4
Vascular screening (N=47)	53.2	25.5	6.4	0.0	0.0	0.0	6.4
<b>CANCER SCREENINGS</b>							
Breast cancer screening (N=14 Females)	35.7	28.6	7.1	14.3	0.0	0.0	14.3
Cervical cancer screening (N=19 Females)	42.1	21.1	5.3	0.0	0.0	0.0	26.3
Colorectal cancer screening (N=41)	58.5	17.1	7.3	2.4	0.0	0.0	7.3
Prostate cancer screening (N=10 Males)	50.0	20.0	20.0	0.0	0.0	0.0	10.0
Skin cancer screening (N=44)	36.4	45.5	9.1	0.0	2.3	4.5	6.8

\*Percentages do not total 100.0 due to multiple responses.

Figure 26. Whether respondents have any of the following chronic diseases



N=55

\*Percentages do not total 100.0 due to multiple responses.



Figure 27. Length of time since respondents last visited a doctor or health care provider for a routine physical exam and length of time since they last visited a dentist or dental clinic for any reason

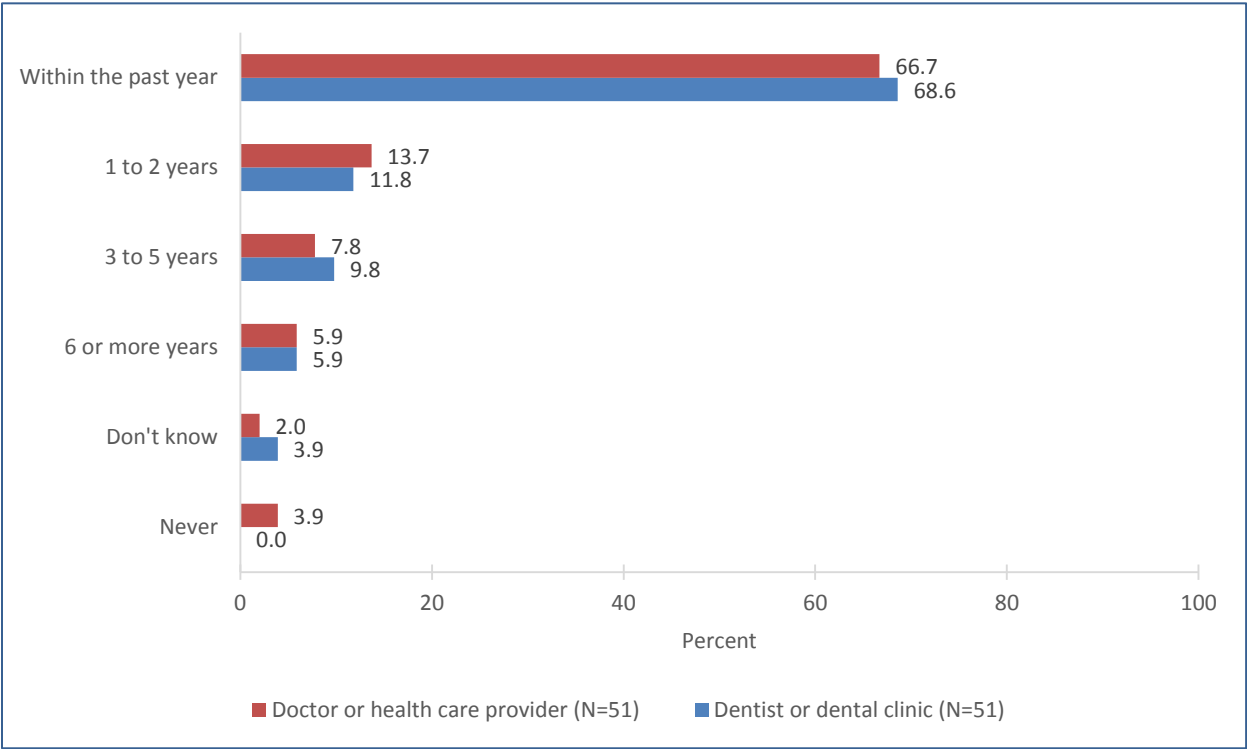
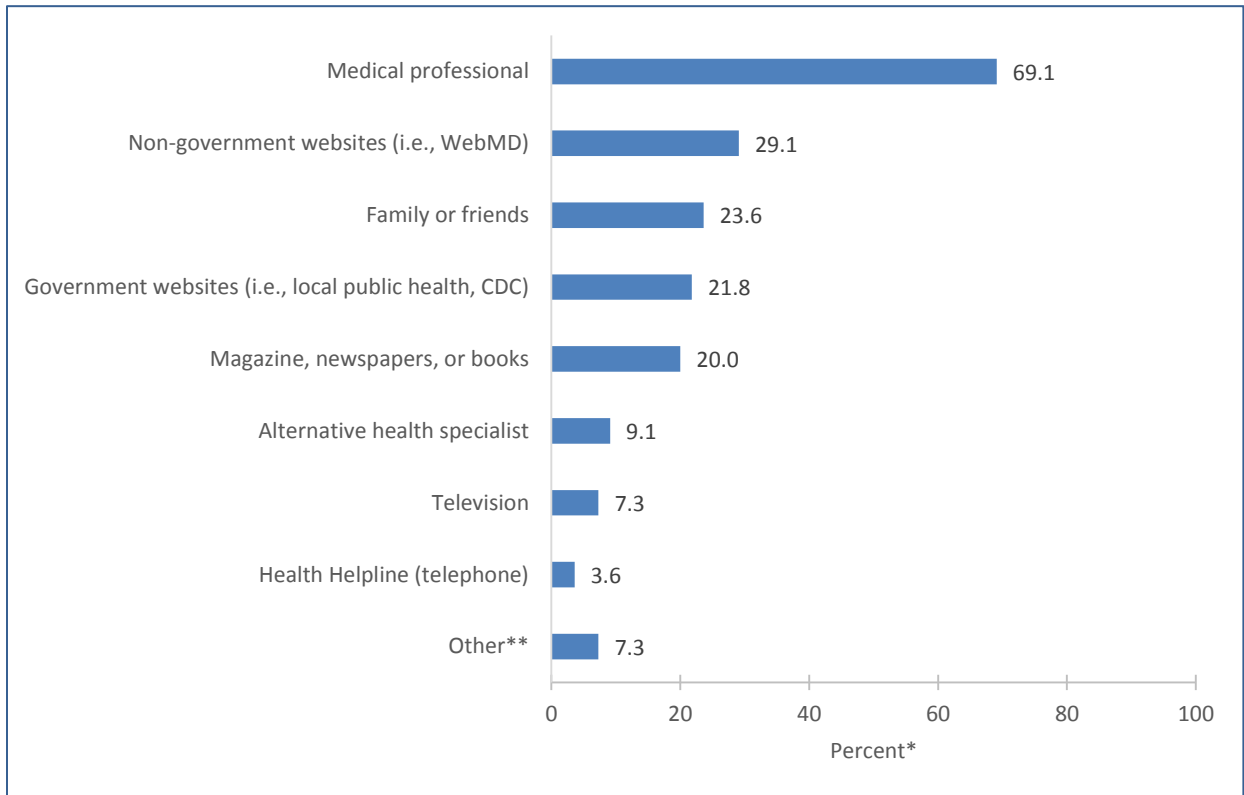


Figure 28. Where respondents get most of their health information

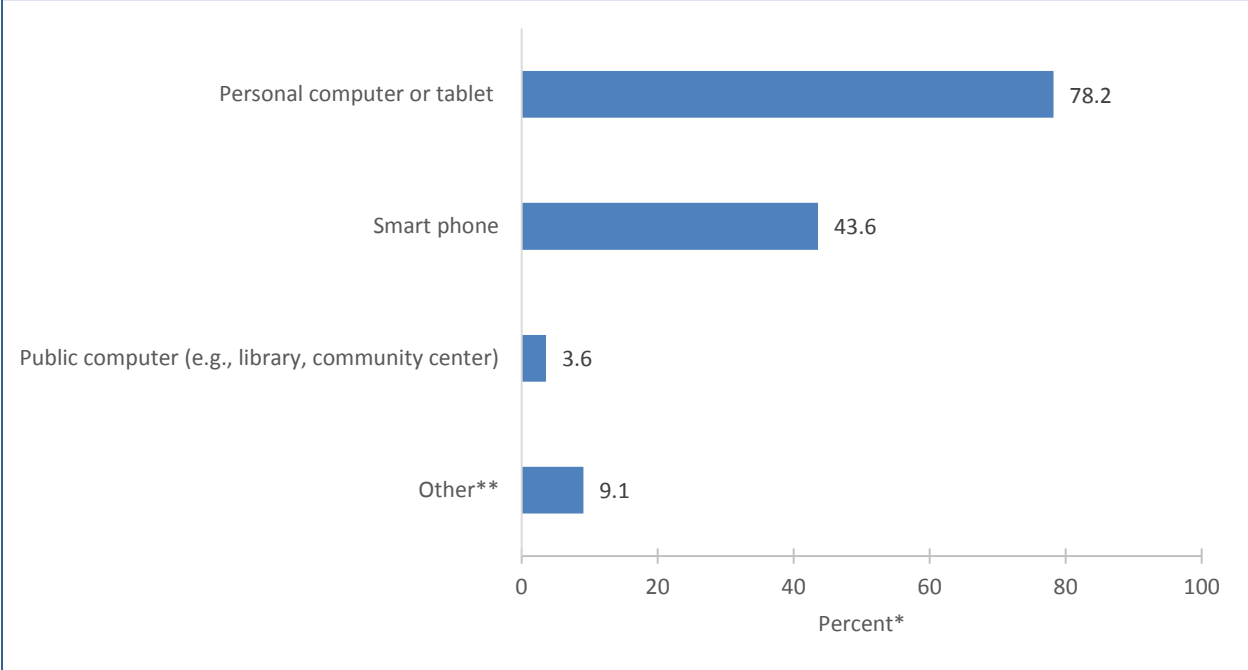


N=55

\*Percentages do not total 100.0 due to multiple responses.

\*\*Other responses include “I work at a hospital, my family works in medicine and nutrition”, “my insurance company”, “researching”, and “work”.

Figure 29. Best way for respondents to access technology for health information



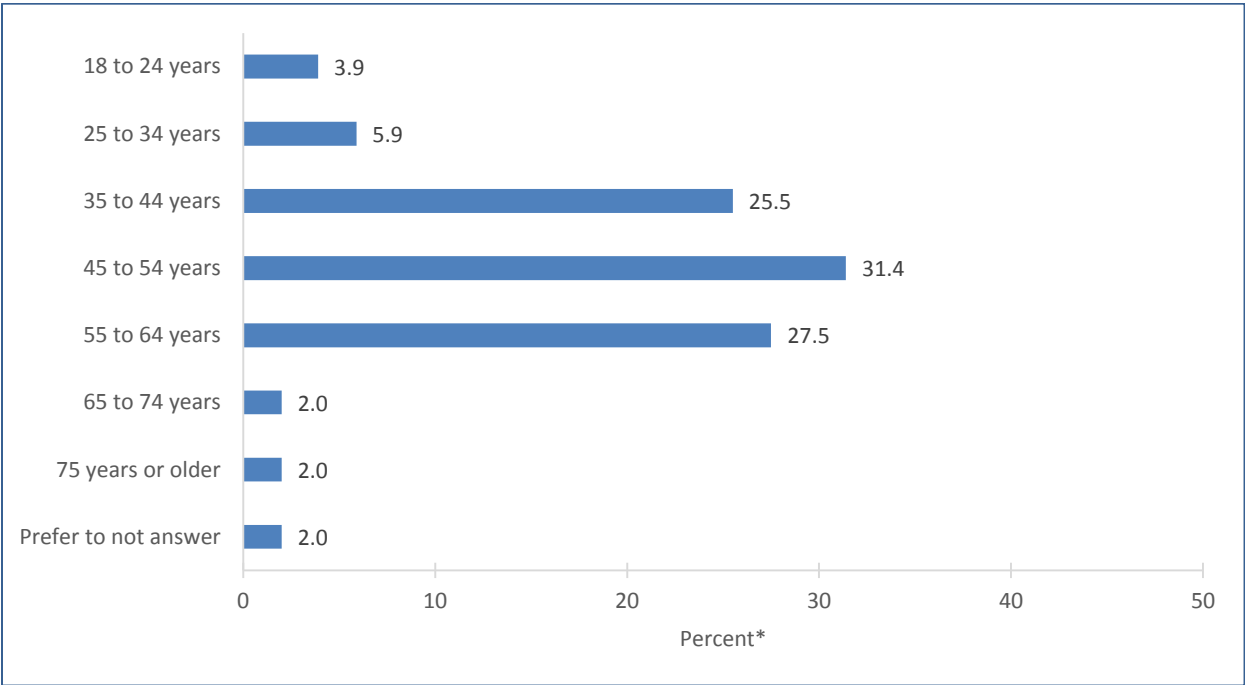
N=55

\*Percentages do not total 100.0 due to multiple responses.

\*\*Other responses include “Calling the doctor’s office”, “family members who are nurses”, “father is a doctor”, “I am a nurse working in a hospital”.

**Demographic Information**

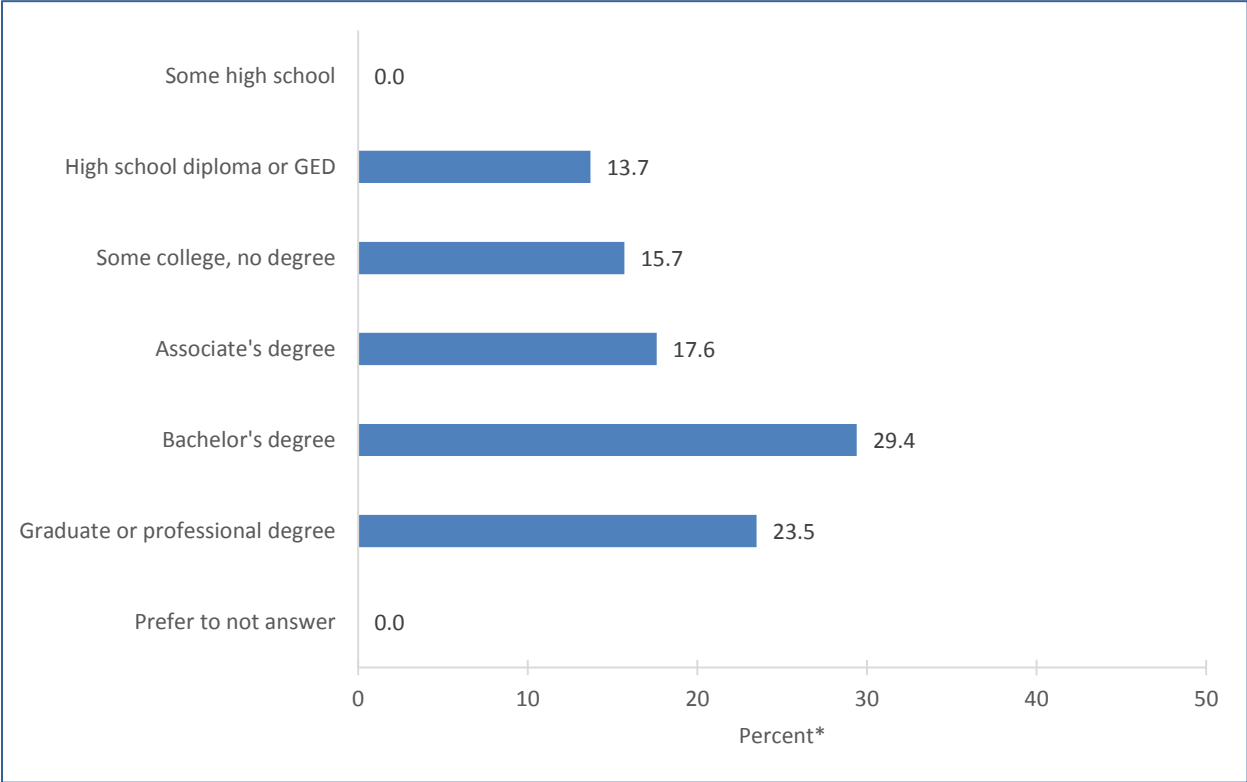
**Figure 30. Age of respondents**



N=51

\*Percentages do not total 100.0 due to rounding.

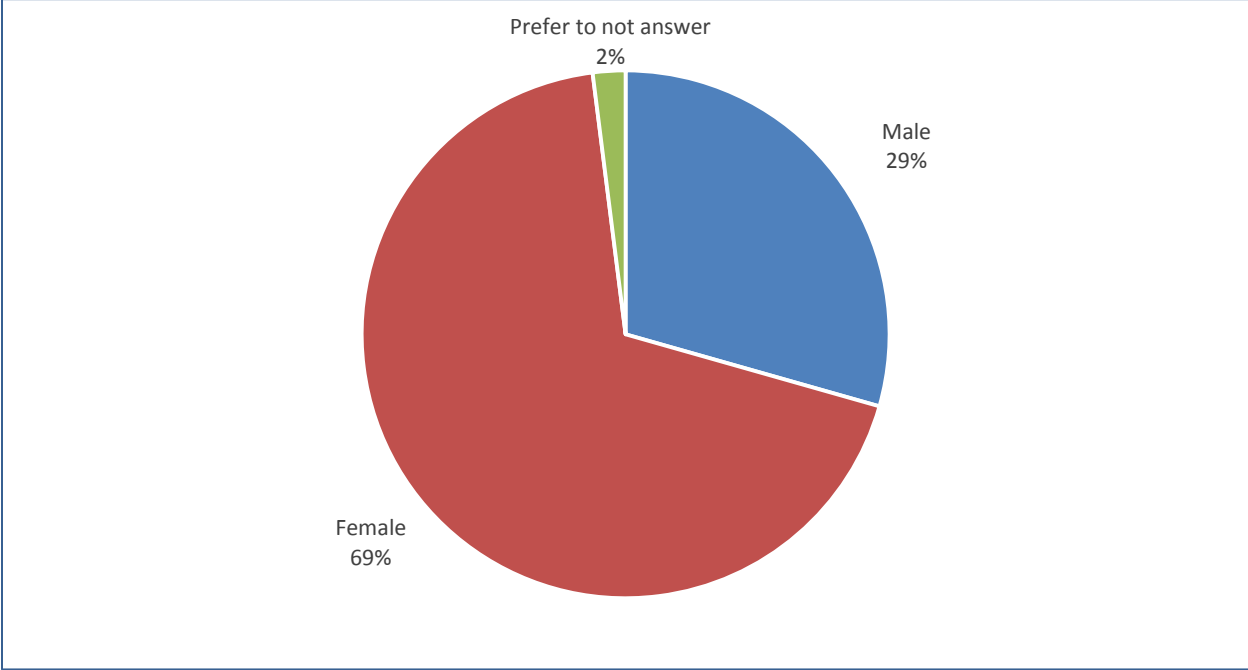
Figure 31. Highest level of education of respondents



N=51

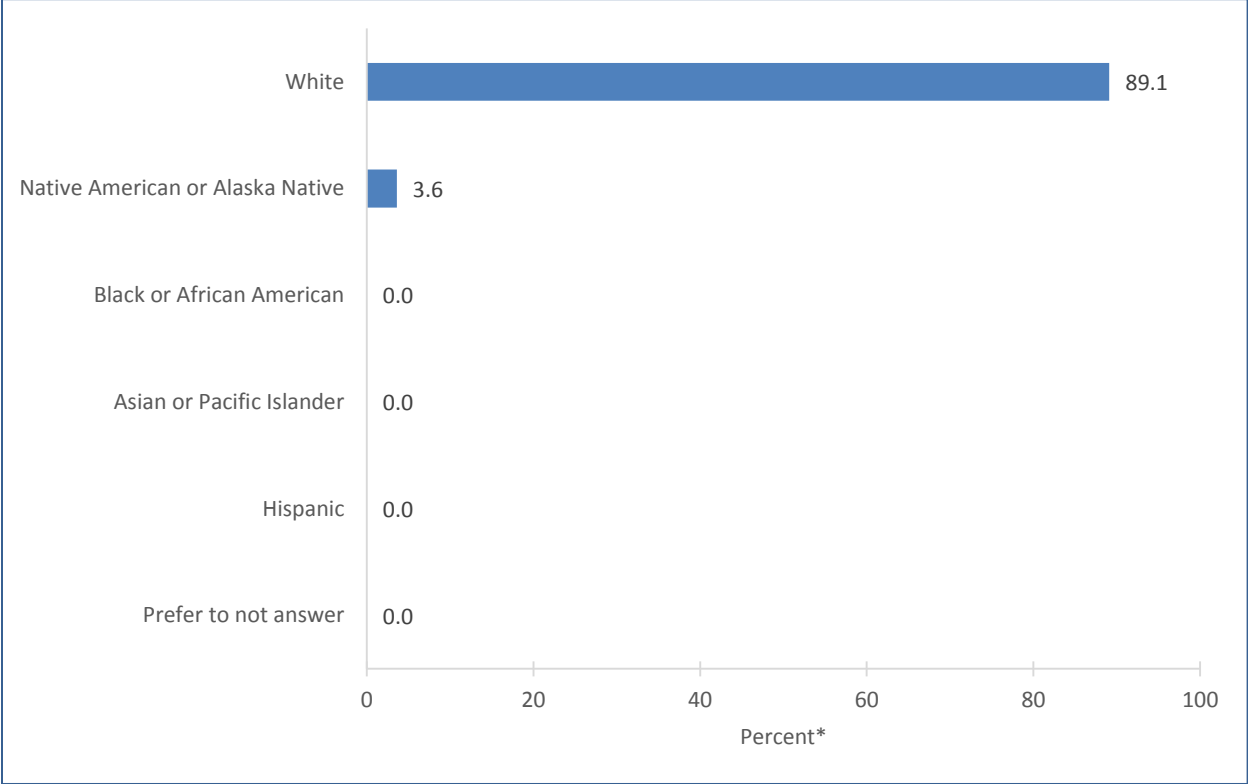
\*Percentages do not total 100.0 due to rounding.

Figure 32. Gender of respondents



N=51

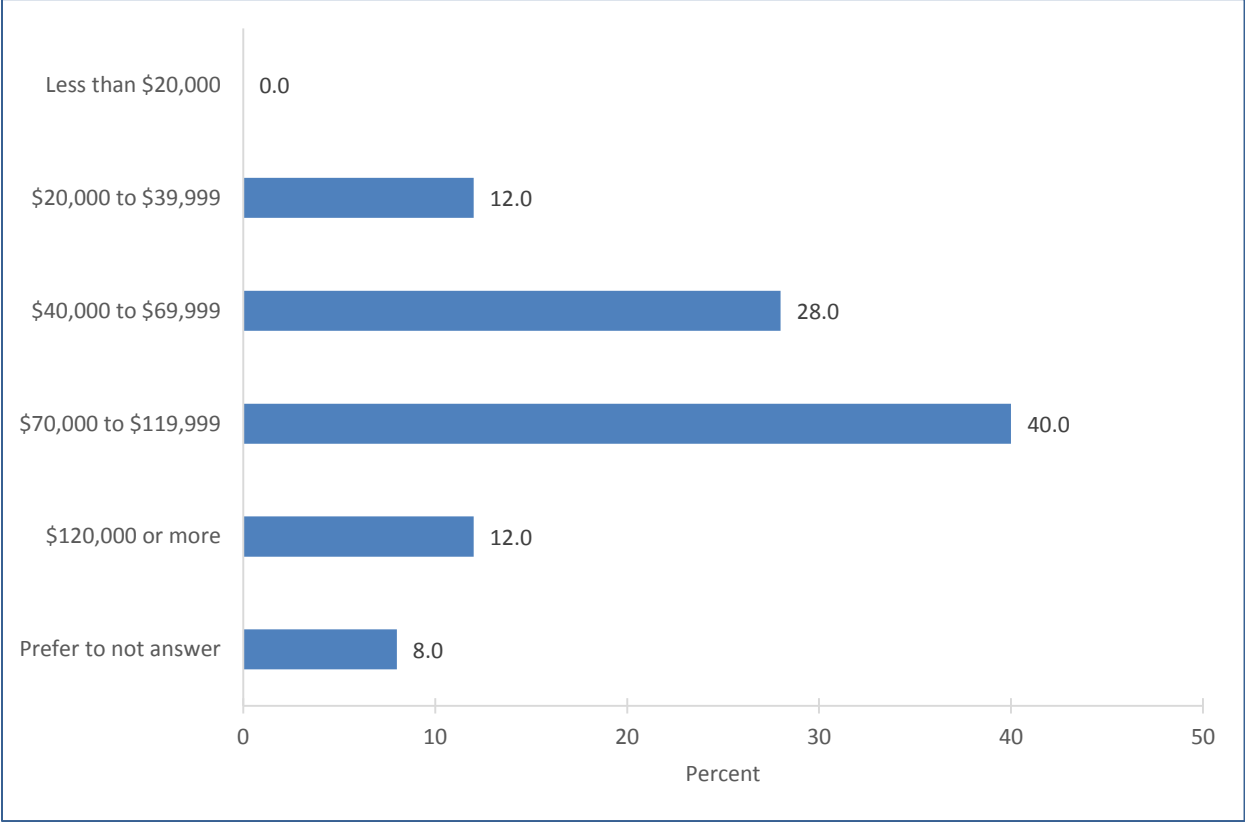
Figure 33. Race and ethnicity of respondents



N=55

\*Percentages do not total 100.0 due to multiple responses.

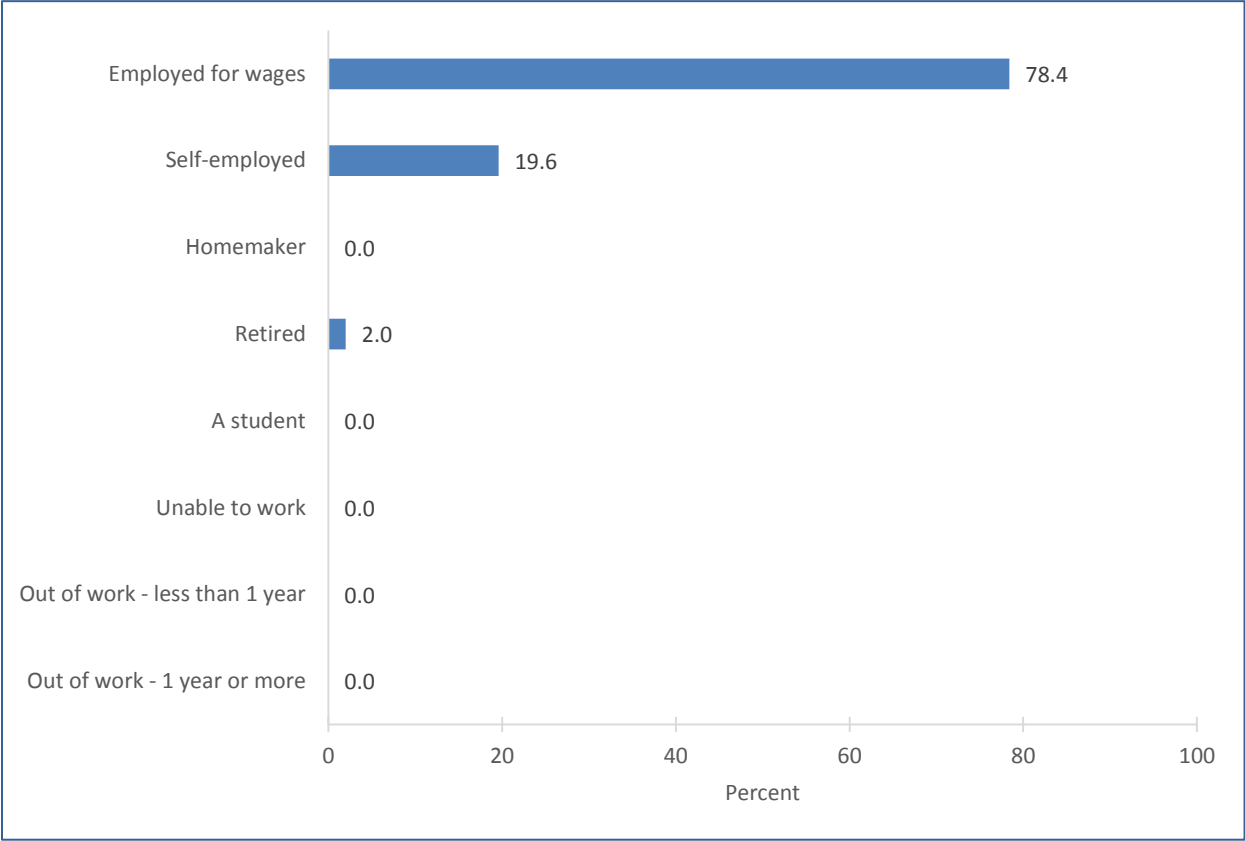
Figure 34. Annual household income of respondents



N=50

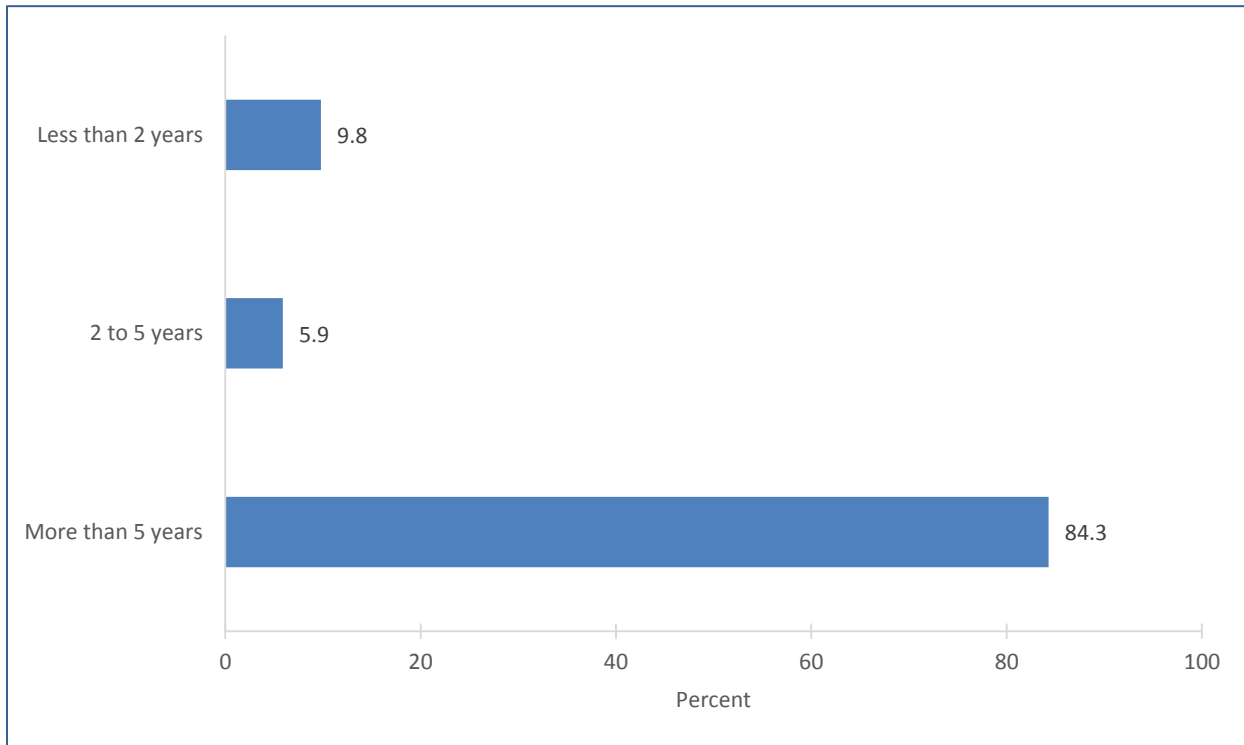


Figure 35. Employment status of respondents



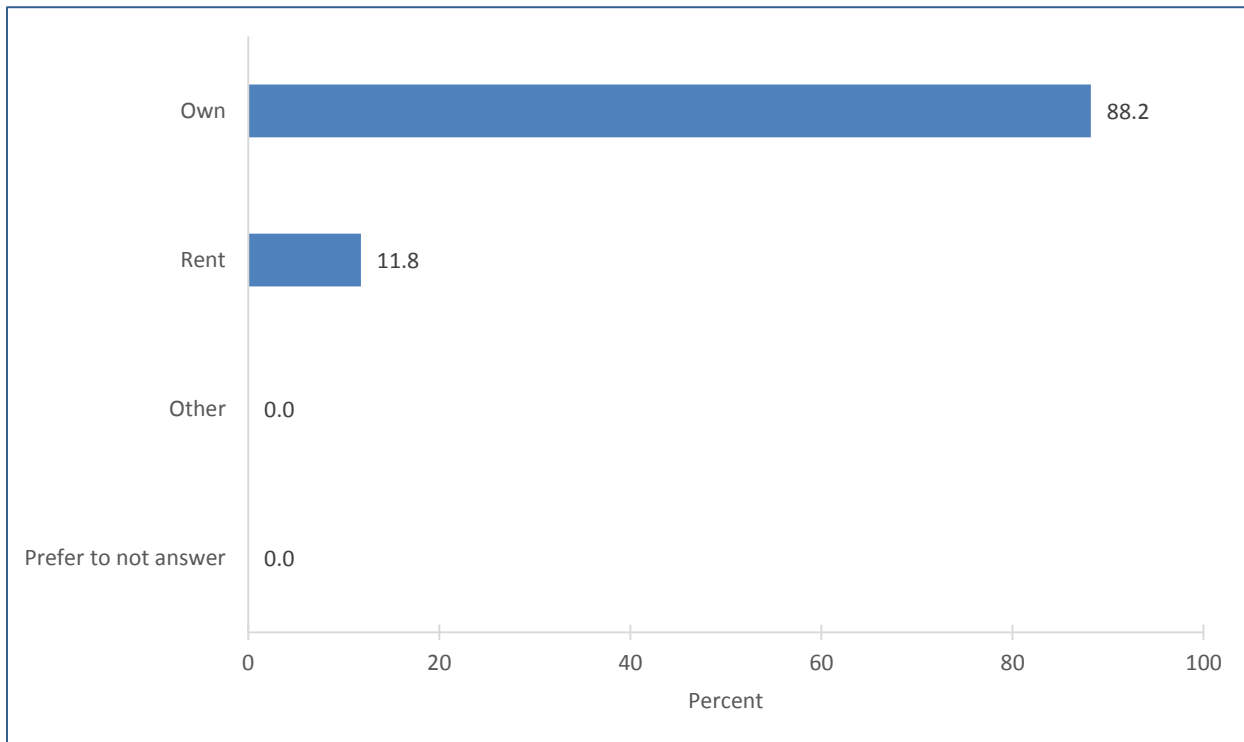
N=51

Figure 36. Length of time respondents have lived in their community



N=51

Figure 37. Whether respondents own or rent their home



N=51

Figure 38. Whether respondents have health insurance (private, public, or governmental) and oral health or dental care insurance coverage

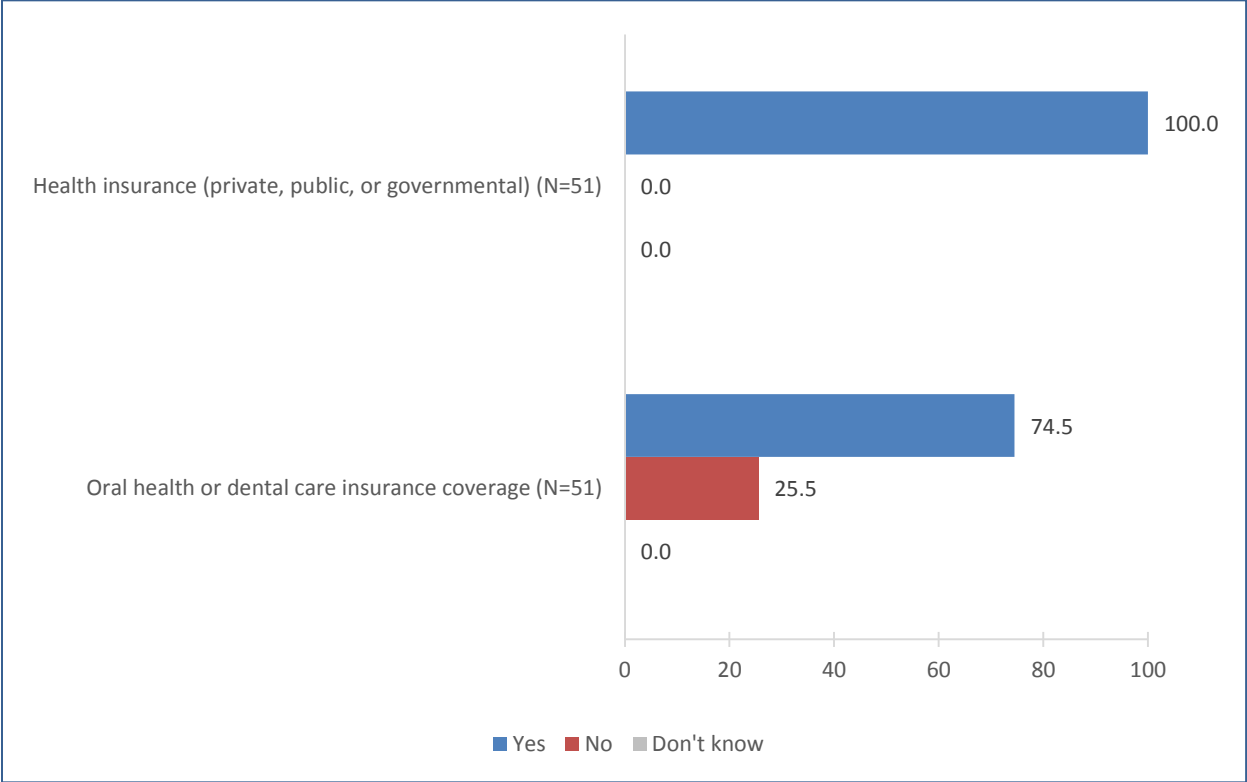
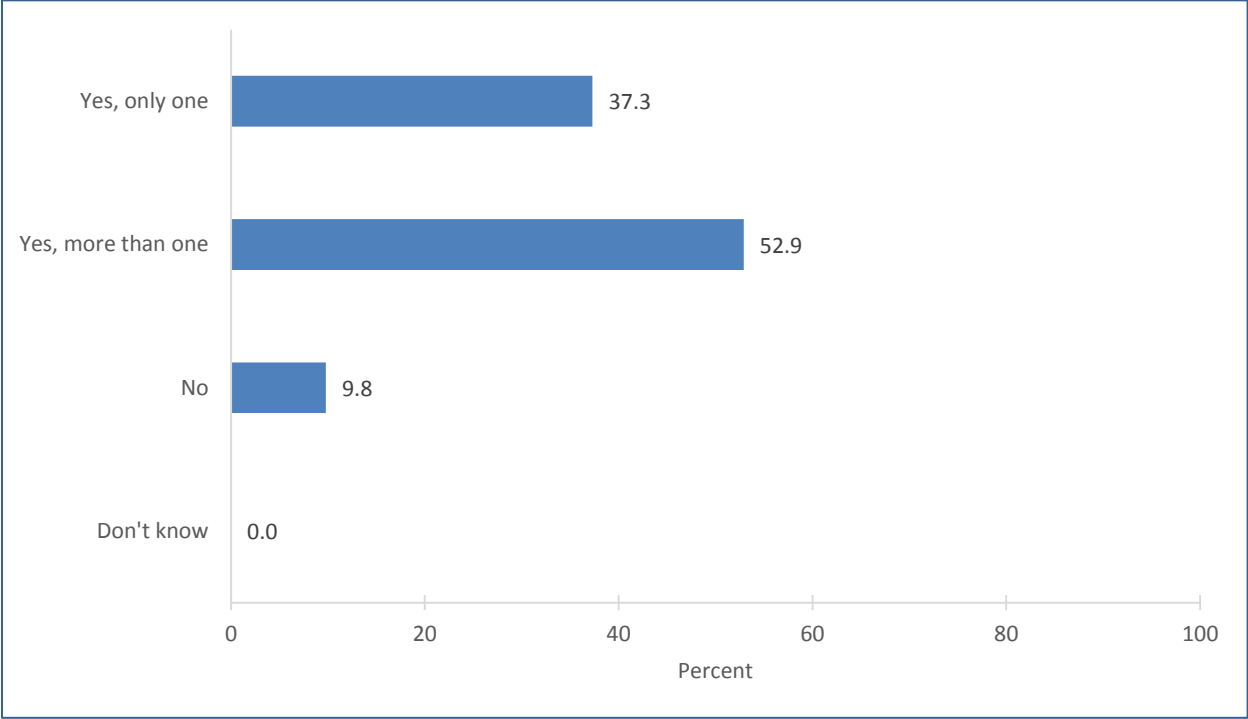
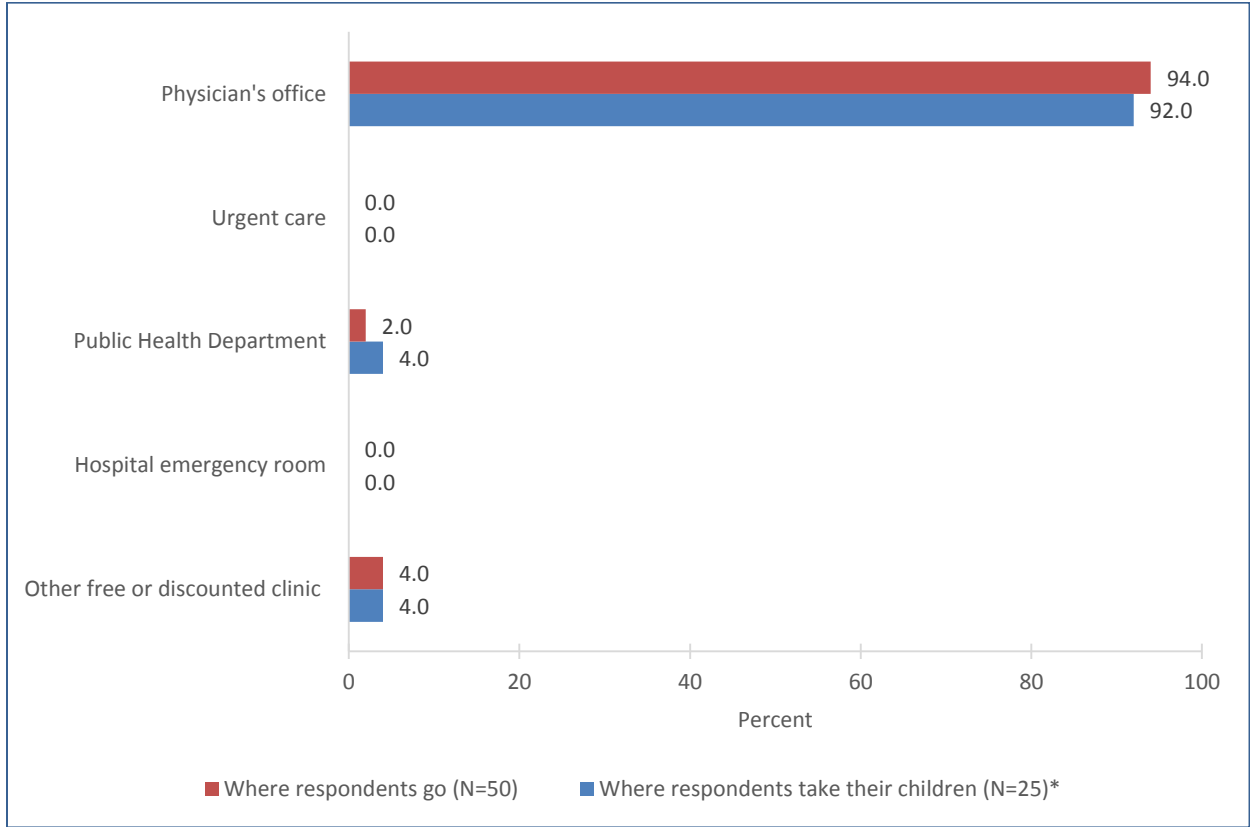


Figure 39. Whether respondents have one person who they think of as their personal doctor or health care provider



N=51

Figure 40. Facilities that respondents go to most often when sick and take their children when they are sick



\*Of respondents who have children younger than 18 years of age living in their household.

Figure 41. Number of children younger than 18 and number of adults age 65 or older living in respondents' household

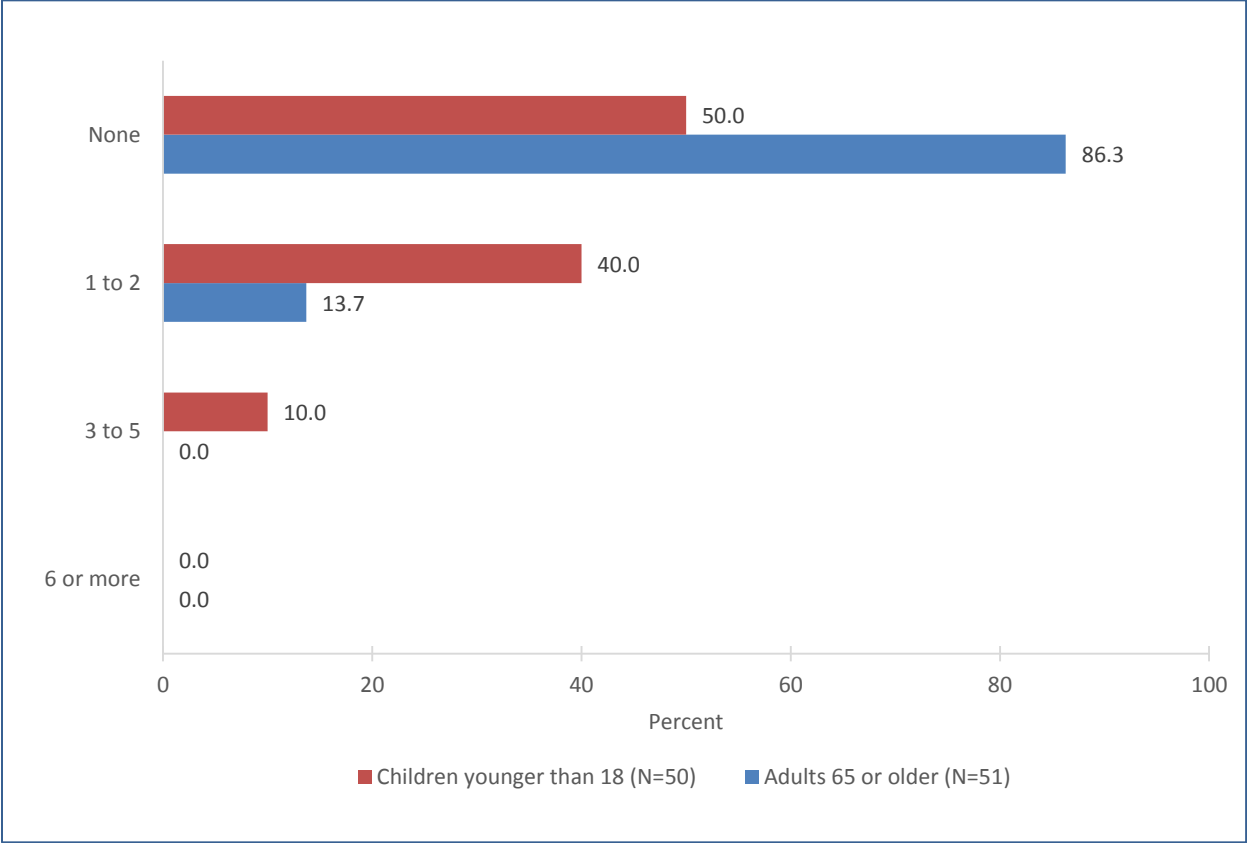
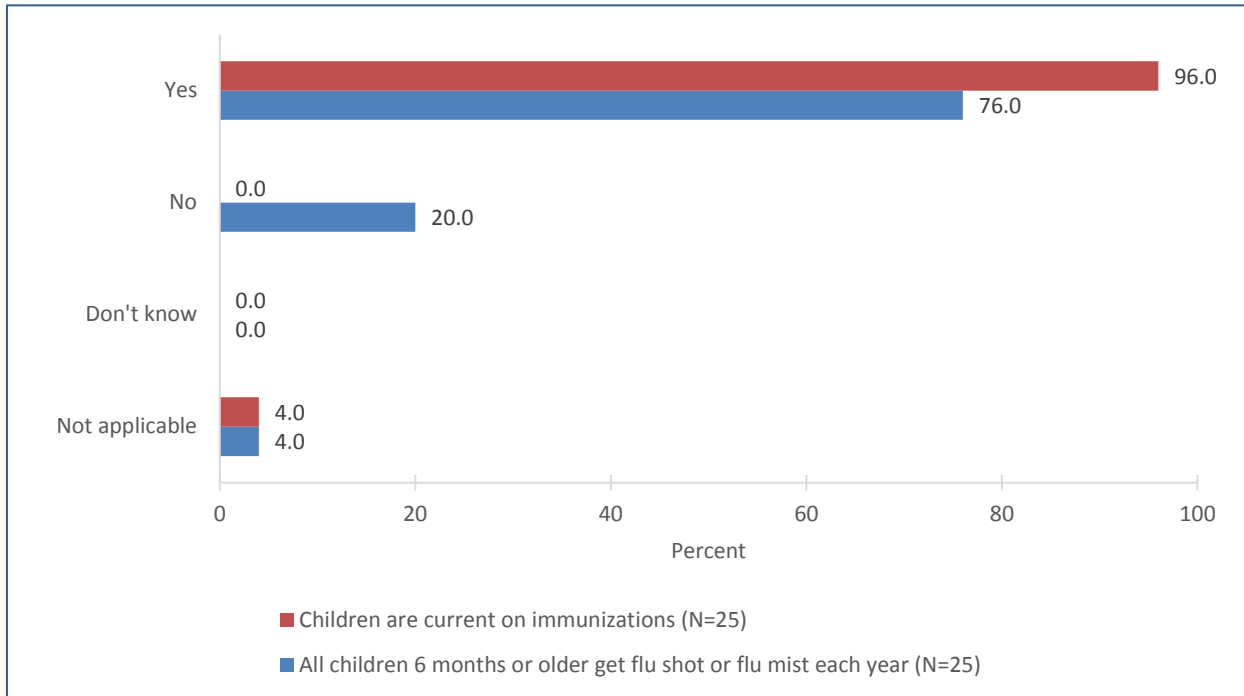


Figure 42. Whether all children in home are current on their immunizations and all children age 6 months or older get a flu shot or flu mist each year\*



\*Of respondents who have children younger than 18 years of age living in their household.

Table 3. Zip code of respondents

Zip code	Number of respondents
57325	26
57355	7
57370	6
57339	2
57341	2
57365	2
57328	1
57345	1
57369	1
57532	1
57568	1
57569	1

N=51

# Secondary Research



# Definitions of Key Indicators

**County Health  
Rankings & Roadmaps**

Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

A collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. This Excel file contains the ranks and scores for each county in your state and the underlying data details for the measures used in calculating the 2015 *County Health Rankings*. In addition, the file contains additional measures that are reported on the *County Health Rankings* web site for your state.

For additional information about how the *County Health Rankings* are calculated, please visit [www.countyhealthrankings.org](http://www.countyhealthrankings.org)

## Contents:

Outcomes & Factors Rankings

Outcomes & Factors Sub Rankings

Ranked Measures Data (including measure values, confidence intervals\* and z-scores\*\*)

Additional Measures Data (including measure values and confidence intervals\*)

Ranked Measure Sources and Years

Additional Measure Sources and Years

\* 95% confidence intervals are provided where applicable and available.

\*\* Z-scores are "adjusted" z-scores (e.g., multiplied by -1 if a positively framed measure, set to zero for missing and unreliable values for ranked counties, and truncated at -3 or +3 if county population is less than 20,000).

Measure	Data Elements	Description
Geographic identifiers	FIPS	Federal Information Processing Standard
	State	
	County	
Premature death	# Deaths	Number of deaths under age 75
	Years of Potential Life Lost Rate	Age-adjusted YPLL rate per 100,000
	95% CI - Low	95% confidence interval reported by National Center for Health Statistics
	95% CI - High	
	Z-Score	$(\text{Measure} - \text{Average of state counties}) / (\text{Standard Deviation})$
Poor or fair health	Sample Size	Number of respondents
	% Fair/Poor	Percent of adults that report fair or poor health
	95% CI - Low	95% confidence interval reported by BRFSS
	95% CI - High	
	Z-Score	$(\text{Measure} - \text{Average of state counties}) / (\text{Standard Deviation})$






Measure	Data Elements	Description
<b>Poor physical health days</b>	Sample Size	Number of respondents
	<b>Physically Unhealthy Days</b>	Average number of reported physically unhealthy days per month
	95% CI - Low	95% confidence interval reported by BRFSS
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Poor mental health days</b>	Sample Size	Number of respondents
	<b>Mentally Unhealthy Days</b>	Average number of reported mentally unhealthy days per month
	95% CI - Low	95% confidence interval reported by BRFSS
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Low birthweight</b>	Unreliable	Value reported but considered unreliable since based on counts of twenty or less.
	# Low Birthweight Births	Number of low birthweight births
	# Live births	Number of live births
	<b>% LBW</b>	Percentage of births with low birth weight (<2500g)
	95% CI - Low	95% confidence interval reported by National Center for Health Statistics
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Adult smoking</b>	Sample Size	Number of respondents
	<b>% Smokers</b>	Percentage of adults that reported currently smoking
	95% CI - Low	95% confidence interval reported by BRFSS
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Adult obesity</b>	<b>% Obese</b>	Percentage of adults that report BMI >= 30
	95% CI - Low	95% confidence interval reported by BRFSS
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Food environment index</b>	<b>Food Environment Index</b>	Indicator of access to healthy foods - 0 is worst, 10 is best
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Physical inactivity</b>	<b>% Physically Inactive</b>	Percentage of adults that report no leisure-time physical activity
	95% CI - Low	95% confidence interval
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Access to exercise opportunities</b>	# With Access	Number of people with access to exercise opportunities
	<b>% With Access</b>	Percentage of the population with access to places for physical activity
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Excessive drinking</b>	Sample Size	Number of respondents
	<b>% Excessive Drinking</b>	Percentage of adults that report excessive drinking
	95% CI - Low	95% confidence interval reported by BRFSS






Measure	Data Elements	Description
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Alcohol-impaired driving deaths</b>	# Alcohol-Impaired Driving Deaths	Number of alcohol-impaired motor vehicle deaths
	# Driving Deaths	Number of motor vehicle deaths
	<b>% Alcohol-Impaired</b>	Percentage of driving deaths with alcohol involvement
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Sexually transmitted infections</b>	# Chlamydia Cases	Number of chlamydia cases
	<b>Chlamydia Rate</b>	Chlamydia cases / Population * 100,000
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Teen births</b>	Teen Births	Teen birth count, ages 15-19
	Teen Population	Female population, ages 15-19
	<b>Teen Birth Rate</b>	Teen births / females ages 15-19 * 1,000
	95% CI - Low	95% confidence interval reported by National Center for Health Statistics
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Uninsured</b>	# Uninsured	Number of people under age 65 without insurance
	<b>% Uninsured</b>	Percentage of people under age 65 without insurance
	95% CI - Low	95% confidence interval reported by SAHIE
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Primary care physicians</b>	# Primary Care Physicians	Number of primary care physicians (PCP) in patient care
	PCP Rate	(Number of PCP/population)*100,000
	<b>PCP Ratio</b>	Population to Primary Care Physicians ratio
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Dentists</b>	# Dentists	Number of dentists
	Dentist Rate	(Number of dentists/population)*100,000
	<b>Dentist Ratio</b>	Population to Dentists ratio
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Mental health providers</b>	# Mental Health Providers	Number of mental health providers (MHP)
	MHP Rate	(Number of MHP/population)*100,000
	<b>MHP Ratio</b>	Population to Mental Health Providers ratio
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Preventable hospital stays</b>	# Medicare Enrollees	Number of Medicare enrollees
	<b>Preventable Hosp. Rate</b>	Discharges for Ambulatory Care Sensitive Conditions/Medicare Enrollees * 1,000
	95% CI - Low	95% confidence interval reported by Dartmouth Institute
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Diabetic monitoring</b>	# Diabetics	Number of diabetic Medicare enrollees

Measure	Data Elements	Description
	<b>% Receiving HbA1c</b>	Percentage of diabetic Medicare enrollees receiving HbA1c test
	95% CI - Low	95% confidence interval reported by Dartmouth Institute
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Mammography screening</b>	<b># Medicare Enrollees</b>	Number of female Medicare enrollees age 67-69
	<b>% Mammography</b>	Percentage of female Medicare enrollees having at least 1 mammogram in 2 yrs (age 67-69)
	95% CI - Low	95% confidence interval reported by Dartmouth Institute
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>High school graduation</b>	Cohort Size	Number of students expected to graduate
	<b>Graduation Rate</b>	Graduation rate
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Some college</b>	<b># Some College</b>	Adults age 25-44 with some post-secondary education
	Population	Adults age 25-44
	<b>% Some College</b>	Percentage of adults age 25-44 with some post-secondary education
	95% CI - Low	95% confidence interval
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Unemployment</b>	<b># Unemployed</b>	Number of people ages 16+ unemployed and looking for work
	Labor Force	Size of the labor force
	<b>% Unemployed</b>	Percentage of population ages 16+ unemployed and looking for work
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Children in poverty</b>	<b># Children in Poverty</b>	Number of children (under age 18) living in poverty
	<b>% Children in Poverty</b>	Percentage of children (under age 18) living in poverty
	95% CI - Low	95% confidence interval reported by SAIPE
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Income inequality</b>	80th Percentile Income	80th percentile of median household income
	20th Percentile Income	20th percentile of median household income
	<b>Income Ratio</b>	Ratio of household income at the 80th percentile to income at the 20th percentile
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Children in single-parent households</b>	<b># Single-Parent Households</b>	Number of children that live in single-parent households
	<b># Households</b>	Number of children in households
	<b>% Single-Parent Households</b>	Percentage of children that live in single-parent households
	95% CI - Low	95% confidence interval
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Social associations</b>	<b># Associations</b>	Number of associations






Measure	Data Elements	Description
	<b>Association Rate</b>	Associations / Population * 10,000
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Violent crime</b>	# Violent Crimes	Number of violent crimes
	<b>Violent Crime Rate</b>	Violent crimes/population * 100,000
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Injury deaths</b>	# Injury Deaths	Number of injury deaths
	<b>Injury Death Rate</b>	Injury mortality rate per 100,000
	95% CI - Low	95% confidence interval as reported by the National Center for Health Statistics
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Air pollution - particulate matter</b>	<b>Average Daily PM2.5</b>	Average daily amount of fine particulate matter in micrograms per cubic meter
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Drinking water violations</b>	Pop. In Viol	Average annual population affected by a water violation
	<b>% Pop in Viol</b>	Population affected by a water violation/Total population with public water
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Severe housing problems</b>	# Households with Severe Problems	Number of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities
	<b>% Severe Housing Problems</b>	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities
	95% CI - Low	95% confidence interval
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Driving alone to work</b>	# Drive Alone	Number of people who drive alone to work
	# Workers	Number of workers in labor force
	<b>% Drive Alone</b>	Percentage of workers who drive alone to work
	95% CI - Low	95% confidence interval
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
<b>Long commute - driving alone</b>	# Workers who Drive Alone	Number of workers who commute in their car, truck or van alone
	<b>% Long Commute - Drives Alone</b>	Among workers who commute in their car alone, the percentage that commute more than 30 minutes
	95% CI - Low	95% confidence interval
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)

# Brule County




	Brule County	Trend(Click for info)	Error Margin	Top U.S. Performers*	South Dakota	Rank (of 60)
<b>Health Outcomes</b>						<b>34</b>
<b>Length of Life</b>						<b>47</b>
Premature death	9,148		7,029-11,704	5,200	6,738	
<b>Quality of Life</b>						<b>19</b>
Poor or fair health	13%		9-18%	10%	11%	
Poor physical health days	2.4		1.4-3.3	2.5	2.7	
Poor mental health days	3.4		2.2-4.6	2.3	2.6	
Low birth weight	5.0%		3.2-6.9%	5.9%	6.5%	
<b>Health Factors</b>						<b>32</b>
<b>Health Behaviors</b>						<b>34</b>
Adult smoking	14%		10-20%	14%	18%	
Adult obesity	36%		30-43%	25%	29%	
Food environment index	7.6			8.4	7.4	
Physical inactivity	31%		25-38%	20%	25%	
Access to exercise opportunities	63%			92%	70%	
Excessive drinking	16%		11-23%	10%	19%	
Alcohol-impaired driving deaths	33%			14%	37%	
Sexually transmitted infections	321			138	471	
Teen births	28		20-39	20	37	
<b>Clinical Care</b>						<b>24</b>
Uninsured	17%		15-19%	11%	14%	
Primary care physicians	588:1			1,045:1	1,302:1	
Dentists	5,366:1			1,377:1	1,813:1	
Mental health providers	671:1			386:1	664:1	
Preventable hospital stays	73		55-91	41	57	

	Brule County	Trend(Click for info)	Error Margin	Top U.S. Performers*	South Dakota	Rank (of 60)
Diabetic monitoring	84%		62-100%	90%	84%	
Mammography screening	59.3%		38.7-79.8%	70.7%	66.5%	
<b>Social &amp; Economic Factors</b>						<b>38</b>
High school graduation					78%	
Some college	58.3%		45.4-71.2%	71.0%	66.7%	
Unemployment	3.3%			4.0%	3.8%	
Children in poverty	20%		14-25%	13%	19%	
Income inequality	3.5		2.9-4.1	3.7	4.2	
Children in single-parent households	23%		14-32%	20%	31%	
Social associations	18.9			22.0	17.4	
Violent crime	214			59	282	
Injury deaths	77		47-118	50	69	
<b>Physical Environment</b>						<b>23</b>
Air pollution - particulate matter	11.2			9.5	10.8	
Drinking water violations	8%			0%	3%	
Severe housing problems	11%		8-14%	9%	12%	
Driving alone to work	71%		66-75%	71%	78%	
Long commute - driving alone	14%		10-18%	15%	14%	
* 90th percentile, i.e., only 10% are better. Note: Blank values reflect unreliable or missing data						2015






# Buffalo County







	Buffalo County	Trend(Click for info)	Error Margin	Top U.S. Performers*	South Dakota	Rank (of 60)
<b>Health Outcomes</b>						<b>59</b>
<b>Length of Life</b>						<b>59</b>
Premature death	22,353		15,818-30,681	5,200	6,738	
<b>Quality of Life</b>						<b>59</b>
Poor or fair health	21%		17-27%	10%	11%	
Poor physical health days	4.2		3.1-5.4	2.5	2.7	
Poor mental health days	4.0		2.5-5.5	2.3	2.6	
Low birth weight	6.9%		4.3-9.4%	5.9%	6.5%	
<b>Health Factors</b>						<b>58</b>
<b>Health Behaviors</b>						<b>60</b>
Adult smoking	42%		31-53%	14%	18%	
Adult obesity	44%		37-50%	25%	29%	
Food environment index	4.6			8.4	7.4	
Physical inactivity	33%		28-39%	20%	25%	
Access to exercise opportunities				92%	70%	
Excessive drinking	28%		19-38%	10%	19%	
Alcohol-impaired driving deaths	100%			14%	37%	
Sexually transmitted infections	1,584			138	471	
Teen births	98		75-125	20	37	
<b>Clinical Care</b>						<b>44</b>
Uninsured	21%		18-24%	11%	14%	
Primary care physicians	2,020:1			1,045:1	1,302:1	
Dentists	675:1			1,377:1	1,813:1	
Mental health providers	675:1			386:1	664:1	



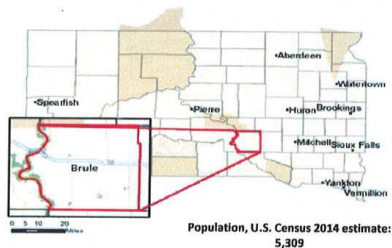
	Buffalo County	Trend(Click for info)	Error Margin	Top U.S. Performers*	South Dakota	Rank (of 60)
Preventable hospital stays				41	57	
Diabetic monitoring	90%		56-100%	90%	84%	
Mammography screening				70.7%	66.5%	
<b>Social &amp; Economic Factors</b>						<b>59</b>
High school graduation					78%	
Some college	39.7%		28.6-50.8%	71.0%	66.7%	
Unemployment	12.7%			4.0%	3.8%	
Children in poverty	48%		35-60%	13%	19%	
Income inequality	4.7		3.1-6.3	3.7	4.2	
Children in single-parent households	46%		33-59%	20%	31%	
Social associations	0.0			22.0	17.4	
Violent crime				59	282	
Injury deaths	164		94-267	50	69	
<b>Physical Environment</b>						<b>50</b>
Air pollution - particulate matter	10.8			9.5	10.8	
Drinking water violations				0%	3%	
Severe housing problems	27%		19-36%	9%	12%	
Driving alone to work	72%		61-83%	71%	78%	
Long commute - driving alone	24%		15-34%	15%	14%	
* 90th percentile, i.e., only 10% are better. Note: Blank values reflect unreliable or missing data						2015

## Lyman County

	Lyman County	Trend(Click for info)	Error Margin	Top U.S. Performers*	South Dakota	Rank (of 60)
<b>Health Outcomes</b>						<b>35</b>
<b>Length of Life</b>						<b>51</b>
Premature death	10,846		8,256-13,990	5,200	6,738	
<b>Quality of Life</b>						<b>10</b>
Poor or fair health	12%		8-18%	10%	11%	
Poor physical health days	2.7		1.6-3.9	2.5	2.7	
Poor mental health days	2.0		1.1-2.9	2.3	2.6	
Low birth weight	4.8%		2.8-6.9%	5.9%	6.5%	
<b>Health Factors</b>						<b>50</b>
<b>Health Behaviors</b>						<b>51</b>
Adult smoking	21%		15-28%	14%	18%	
Adult obesity	35%		28-42%	25%	29%	
Food environment index	5.9			8.4	7.4	
Physical inactivity	29%		23-35%	20%	25%	
Access to exercise opportunities	21%			92%	70%	
Excessive drinking	20%		14-28%	10%	19%	
Alcohol-impaired driving deaths	58%			14%	37%	
Sexually transmitted infections	845			138	471	
Teen births	74		58-93	20	37	
<b>Clinical Care</b>						<b>52</b>
Uninsured	21%		19-24%	11%	14%	
Primary care physicians	3,789:1			1,045:1	1,302:1	

	Lyman County	Trend(Click for info)	Error Margin	Top U.S. Performers*	South Dakota	Rank (of 60)
Dentists	3,892:0			1,377:1	1,813:1	
Mental health providers				386:1	664:1	
Preventable hospital stays	66		43-88	41	57	
Diabetic monitoring	81%		58-100%	90%	84%	
Mammography screening	67.9%		37.3-98.4%	70.7%	66.5%	
<b>Social &amp; Economic Factors</b>						<b>50</b>
High school graduation					78%	
Some college	55.6%			71.0%	66.7%	
Unemployment	4.5%			4.0%	3.8%	
Children in poverty	32%		23-40%	13%	19%	
Income inequality	4.4		3.4-5.4	3.7	4.2	
Children in single-parent households	42%		32-53%	20%	31%	
Social associations	7.9			22.0	17.4	
Violent crime				59	282	
Injury deaths	149		99-216	50	69	
<b>Physical Environment</b>						<b>16</b>
Air pollution - particulate matter	10.9			9.5	10.8	
Drinking water violations	3%			0%	3%	
Severe housing problems	9%		5-13%	9%	12%	
Driving alone to work	73%		68-79%	71%	78%	
Long commute - driving alone	18%		12-23%	15%	14	

SOUTH DAKOTA HEALTH STUDY: BRULE COUNTY RESULTS



SOUTH  
DAKOTA  
(n = 7,675)

BRULE  
COUNTY  
(n = 92)

**RESPONDENT PROFILE**

57.4%	Female	65.3%
11.3%	Non-White	19.0%
19.1%	Age 65 and older	19.9%
20.3%	Income ≤ 100% FPL (Federal Poverty Level)	15.3%
19.9%	Three or more ACEs (Adverse Childhood Experiences)	13.9%
8.5%	Five or more ACEs (Adverse Childhood Experiences)	4.6%

**NEED FOR CARE**

75.0%	Need Medical Care	64.7%
79.5%	Need Prescription Medications	68.0%
9.5%	Need Mental Health Care	5.2%
1.1%	Need Alcohol or Drug Treatment	0.0%

**ACCESS TO CARE**

94.2%	Have a usual place to go for care	98.5%
77.4%	Have a personal doctor/provider	60.3%
13.0%	Unmet medical needs	0.0%
6.4%	Unmet prescription needs	0.0%
35.8%	Unmet mental health needs	33.3%
45.6%	Unmet alcohol or drug abuse needs	N/A

**SURVEY RESPONSES**

South Dakota Responses: 7,675	Response Rate: 48%
Brule County Responses: 92	Response Rate: 47%

**HEALTH PROFILE**

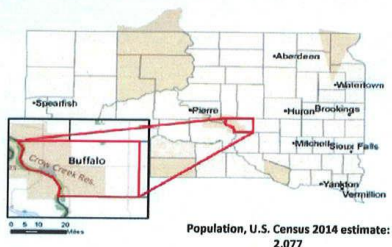
SOUTH DAKOTA (n = 7,675)	Percent who have been told by a doctor that they have...	BRULE COUNTY (n = 92)
11.4%	Diabetes	8.4%
10.9%	Asthma	4.9%
33.3%	High Blood Pressure	33.0%
8.9%	Heart Disease	13.5%
28.5%	High Cholesterol	33.7%
3.4%	COPD (Chronic Obstructive Pulmonary Disease)	1.6%
8.9%	Cancer	5.9%
54.7%	At least one of the above	38.6%
17.0%	Depression	11.5%
17.6%	Anxiety	14.5%
3.4%	PTSD (Post-Traumatic Stress Disorder)	3.7%
1.7%	Bipolar Disorder	1.0%
2.6%	Addiction Issues	0.0%
25.5%	At least one of the above	15.4%

**HEALTH RESULTS (SCREENINGS)**

Percent who screened positive for...		
83.4%	Overall health status (good, very good, excellent)	89.5%
5.5%	Depression	4.7%
7.5%	Anxiety	5.5%
6.0%	PTSD (Post-Traumatic Stress Disorder)	8.8%
17.0%	Current Smoker	32.0%
42.4%	Alcohol Abuse	30.8%
6.7%	Marijuana Use (past year)	14.2%



SOUTH DAKOTA HEALTH STUDY: BUFFALO COUNTY RESULTS



SOUTH DAKOTA  
(n = 7,675)

**RESPONDENT PROFILE**

BUFFALO COUNTY  
(n = 83)

57.4%	Female	56.9%
11.3%	Non-White	87.9%
19.1%	Age 65 and older	11.0%
20.3%	Income ≤ 100% FPL (Federal Poverty Level)	79.9%
19.9%	Three or more ACEs (Adverse Childhood Experiences)	57.0%
8.5%	Five or more ACEs (Adverse Childhood Experiences)	32.0%

**NEED FOR CARE**

75.0%	Need Medical Care	81.4%
79.5%	Need Prescription Medications	81.9%
9.5%	Need Mental Health Care	19.0%
1.1%	Need Alcohol or Drug Treatment	9.1%

**ACCESS TO CARE**

94.2%	Have a usual place to go for care	98.4%
77.4%	Have a personal doctor/provider	48.3%
13.0%	Unmet medical needs	9.9%
6.4%	Unmet prescription needs	0.0%
35.8%	Unmet mental health needs	100.0%
45.6%	Unmet alcohol or drug abuse needs	N/A

**SURVEY RESPONSES**

South Dakota Responses: 7,675 Response Rate: 48%

Buffalo County Responses: 83 Response Rate: 36%

**HEALTH PROFILE**

SOUTH DAKOTA  
(n = 7,675)

Percent who have been told by a doctor  
that they have...

BUFFALO COUNTY  
(n = 83)

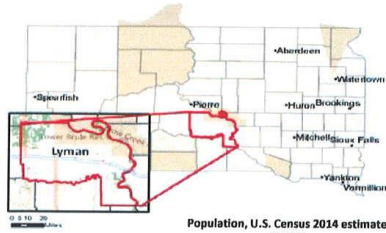
11.4%	Diabetes	17.9%
10.9%	Asthma	10.0%
33.3%	High Blood Pressure	34.1%
8.9%	Heart Disease	15.1%
28.5%	High Cholesterol	30.0%
3.4%	COPD (Chronic Obstructive Pulmonary Disease)	7.4%
8.9%	Cancer	6.9%
54.7%	At least one of the above	54.1%
17.0%	Depression	19.1%
17.6%	Anxiety	18.1%
3.4%	PTSD (Post-Traumatic Stress Disorder)	2.2%
1.7%	Bipolar Disorder	4.8%
2.6%	Addiction Issues	11.3%
25.5%	At least one of the above	8.6%

**HEALTH RESULTS (SCREENINGS)**

Percent who screened positive for...

83.4%	Overall health status (good, very good, excellent)	100.0%
5.5%	Depression	16.7%
7.5%	Anxiety	16.9%
6.0%	PTSD (Post-Traumatic Stress Disorder)	18.9%
17.0%	Current Smoker	0.0%
42.4%	Alcohol Abuse	45.9%
6.7%	Marijuana Use (past year)	30.2%

SOUTH DAKOTA HEALTH STUDY: LYMAN COUNTY RESULTS



SOUTH  
DAKOTA  
(n = 7,675)

LYMAN  
COUNTY  
(n = 86)

**RESPONDENT PROFILE**

57.4%	Female	46.9%
11.3%	Non-White	45.9%
19.1%	Age 65 and older	15.6%
20.3%	Income ≤ 100% FPL (Federal Poverty Level)	9.9%
19.9%	Three or more ACEs (Adverse Childhood Experiences)	54.8%
8.5%	Five or more ACEs (Adverse Childhood Experiences)	25.8%

**NEED FOR CARE**

75.0%	Need Medical Care	45.1%
79.5%	Need Prescription Medications	72.4%
9.5%	Need Mental Health Care	3.8%
1.1%	Need Alcohol or Drug Treatment	0.0%

**ACCESS TO CARE**

94.2%	Have a usual place to go for care	97.1%
77.4%	Have a personal doctor/provider	45.4%
13.0%	Unmet medical needs	23.7%
6.4%	Unmet prescription needs	6.4%
35.8%	Unmet mental health needs	74.0%
45.6%	Unmet alcohol or drug abuse needs	N/A

**SURVEY RESPONSES**

South Dakota Responses: 7,675 Response Rate: 48%

Lyman County Responses: 86 Response Rate: 45%

**HEALTH PROFILE**

SOUTH  
DAKOTA  
(n = 7,675)

Percent who have been told by a doctor  
that they have...

LYMAN  
COUNTY  
(n = 86)

11.4%	Diabetes	29.7%
10.9%	Asthma	6.3%
33.3%	High Blood Pressure	26.0%
8.9%	Heart Disease	6.7%
28.5%	High Cholesterol	38.8%
3.4%	COPD (Chronic Obstructive Pulmonary Disease)	4.3%
8.9%	Cancer	4.8%
54.7%	At least one of the above	56.3%
17.0%	Depression	4.2%
17.6%	Anxiety	3.8%
3.4%	PTSD (Post-Traumatic Stress Disorder)	0.4%
1.7%	Bipolar Disorder	0.0%
2.6%	Addiction Issues	0.9%
25.5%	At least one of the above	7.7%

**HEALTH RESULTS (SCREENINGS)**

Percent who screened positive for...

83.4%	Overall health status (good, very good, excellent)	91.7%
5.5%	Depression	3.0%
7.5%	Anxiety	2.4%
6.0%	PTSD (Post-Traumatic Stress Disorder)	1.2%
17.0%	Current Smoker	27.9%
42.4%	Alcohol Abuse	22.1%
6.7%	Marijuana Use (past year)	0.6%



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