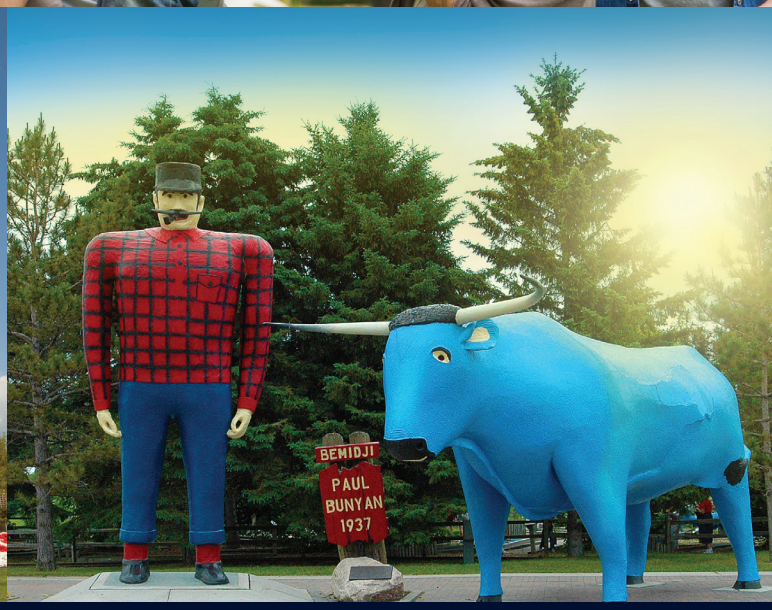


Sanford Health Network

2016 Community Health Needs Assessment

SANFORD HEALTH

dba Canton-Inwood Medical Center EIN # 46-0388596

SANFORD HEALTH

Sanford Canton-Inwood Medical Center

Community Health Needs Assessment 2016

Dear Community Members,

Sanford Canton-Inwood 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.

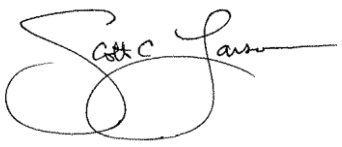
Sanford Canton-Inwood has set strategy to address the following community health needs:

- Children and Youth
- Physical 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 action steps that will be taken to address each identified need.

At Sanford Canton-Inwood, 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 communities is at the core of who we are. Through our work with communities, we can bring health and healing to the people who live and work across our communities. Together, we can fulfill this mission.

Sincerely,



Scott Larson
Chief Executive Officer
Sanford Canton-Inwood Medical Center

Sanford Canton-Inwood Medical Center

Community Health Needs Assessment 2016

EXECUTIVE SUMMARY

SANFORD HEALTH

Sanford Canton-Inwood 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 on-line during 2015. The Center for Social Research at North Dakota State University developed and maintained links to the on-line survey tool. The website address for the survey instrument was distributed via e-mail to various key community stakeholders and agencies, at times using a snowball approach**.** Data collection occurred throughout the month of March 2015 and a total of 28 respondents participated in the on-line survey.

   The purpose of this non-generalizable survey of community stakeholders is to learn about the perceptions of area community leaders regarding community health, their personal health, preventive health, and the prevalence of disease.

   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 survey and to discuss the top health issues or health-related issues facing the community. 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. Each unmet need was researched to determine what resources were available in the community to address the needs. 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 South Dakota Health Study for Lincoln County and the Robert Wood Johnson County Health Rankings for both Lincoln County, South Dakota and Lyon County, Iowa.

Key Findings – Primary Research

The key findings are based on the non-generalizable survey data. Key indicators were ranked on a 1-5 Likert scale, with 5 being the highest concern ranking. The survey results that rank 3.5 or higher are considered to be high ranking and are included in the prioritization process.

1. **Economics:** Respondents were most concerned about affordable housing (4.07).

2. **Transportation:** Respondents ranked availability of good walking or biking options highest (3.81).

3. **Aging:** Respondents ranked the cost of long term care the highest (4.41), followed by the availability of memory care (4.11), availability of long term care (3.96), availability of resources to help the elderly stay safe in their homes (3.85), availability of activities for seniors (3.81), availability of resources for family/friends caring for and making decisions for elders (3.81), and the cost of activities for seniors (3.74).

4. **Children and Youth:** Respondents ranked availability of activities for children and youth the highest (4.36) followed by availability of services for at-risk youth and the cost of activities for children and youth (3.88), bullying (3.85), availability of quality infant care (3.69), cost of services for at-risk youth (3.68), cost of quality infant care (3.62), cost of quality child care (3.60), and availability of quality child care (3.54).

5. **Safety:** Respondents ranked the presence of street drugs, prescription drugs, and alcohol in the community the highest (4.04) followed by the presence of drug dealers in the community (3.75).

6. **Health Care:** Respondents ranked access to affordable health insurance highest (3.79) followed by the use of emergency room services for primary health care (3.54).

7. **Physical Health:** Respondents ranked obesity the highest(3.96), followed by poor nutrition and eating habits (3.88), inactivity and lack of exercise (3.81), cancer (3.77), chronic disease (3.63), depression (3.62), and dementia, Alzheimer's disease and stress (3.54).

Key Findings – Secondary Research Based on the Focus on South Dakota – A Picture of Health Study

The South Dakota Health Survey was a statewide health assessment designed to provide a picture of county and statewide health needs. The survey included a representation of rural and American Indian subpopulations. Additionally, homeless, immigrant and refugee, and housing insecure populations were included in this study.

Prevalence of Mental Health and Substance Use Conditions: The study found that 18.4% of Lincoln County respondents have been told by a doctor that they have depression, 20.4% have anxiety, and 1% has PTSD. Based on the clinical results, 43.2% screened positive for alcohol abuse, 8% are current smokers, and 5.8% have used marijuana in the past year.

Health Care Access and Utilization: The study found that in the past year 78.6% of survey respondents had a need for medical care, 87.7% had a need for prescription medications, 8% had a need for mental health care, and 0.9% had a need for alcohol or drug treatment.

Adverse Childhood Experiences: A growing body of research indicates that adverse childhood experiences (ACEs) of abuse, neglect, and household dysfunction are linked to both short and long-term physical and behavioral health consequences. In Lincoln County, 15.9% reported three or more ACEs, and 6% reported five or more ACEs.

Health Profile: The health profile for Lincoln County finds that 31.8% of respondents have high blood pressure, 29.5% have high cholesterol, and 11.8% have asthma.

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. Lincoln County has a lower rate at 3,451 per 100,000. The mortality health outcome for the state of Iowa is 5,911 per 100,000. Lyon County has a lower rate at 4,810 per 100,000.

Poor or Fair Health: Poor to fair health was reported by 8% in Lincoln County and 11% for the state of South Dakota as a whole. Data was not available for poor or fair health in Lyon County; however, 10% of adults nationally and 11% in Iowa report poor or fair health.

The average number of days reported in the last 30 as unhealthy mental health days is 1.8 in Lincoln County and 1.0 in Lyon County. South Dakota as a state reports 2.6, and Iowa as a state reports 2.6 days.

The percent of live births with low birth weight (less than 2,500 grams) is 6% in Lincoln County and 6.0% in Lyon County. The state of South Dakota is at 6.5%, and Iowa is at 6.8% for low weight births.

Health Factors

The percent of adults who are currently smoking is 11% in Lincoln County and 17% in Lyon County. 18% of adults are current smokers in both South Dakota and Iowa.

28% of the population in Lincoln County and 32% of the adult population in Lyon County is considered obese with a BMI over 30%. 29% of the South Dakota population and 30% of the population in Iowa is obese.

The percent of adults reporting excessive or binge drinking is 23% in Lincoln County and 16% in Lyon County. South Dakota reports 19% and Iowa reports 20% are binge drinkers statewide.

Driving deaths that have alcohol involvement is at 46% in Lincoln County and 40% in Lyon County. Alcohol involvement in driving deaths is at 37% in South Dakota and 23% in Iowa.

Sexually transmitted infections rank substantially higher than the national benchmark (138) for South Dakota (471) and for Iowa (370), and are high in Lincoln County at 174 but lower in Lyon County at 102.

The teen birth rate is higher in South Dakota (37) and Iowa (33) than the national benchmark (20). The teen birth rate is 16 in Lincoln County and 15 in Lyon County.

The clinical care outcomes indicate that the percentage of uninsured adults is 14% in South Dakota, 10% in Iowa, 7% in Lincoln County, and 11% in Lyon County.

The ratio of population to primary care physicians is 1,302:1 in South Dakota and 1,375:1 in Iowa. Lincoln County's ratio is 743:1 and Lyon County's ratio is 3,919:1.

The ratio of population to mental health providers is 664:1 in South Dakota and 904:1 in Iowa. Lincoln County's ratio is 393:1 and Lyon County's ratio is 11,712:1.

The number of professionally active dentists in South Dakota is 1,813:1, Iowa is 2,342:1; Lincoln County is 1,108:1, and in Lyon County it is 2,342:1.

Preventable hospital stays are 44 in Lincoln County, 50 in Lyon County, 57 in South Dakota, 56 in Iowa, and 41 nationally.

Diabetic screening is at 89% in Lincoln County, 88% in Lyon County, 84% in South Dakota, and 89% in Iowa as a whole.

Mammography screening is at 71% in Lincoln County, 77.4% in Lyon County, 66.5% in South Dakota, and 66.4% in Iowa.

The social and economic factor outcomes indicate that South Dakota has a high school graduation of 78% and Iowa is at 89%. The graduation rate for Lincoln County is 87% and Lyon County data is not available on the County Health Rankings.

Post-secondary education (some post-secondary education) is at 82% in Lincoln County, 69.1% in Lyon County, 66.7% in South Dakota and 69.1% in Iowa.

The unemployment rate is 2.9% in Lincoln County, 2.6% in Lyon County, 3.8% in South Dakota and 4.6% in Iowa.

The percentage of child poverty is 5% in Lincoln County and 10% in Lyon County. The child poverty rate is 19% in South Dakota and 16% in Iowa.

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 Lincoln County at 12.6 and higher in Lyon County at 28.9%. The state of South Dakota ranks at 17.4 and Iowa ranks at 15.6%.

The percentage of children in single parent households is 20% in Lincoln County and 13% in Lyon County. The percentage is 31% in South Dakota and 29% in Iowa.

Violent crime is higher in Lincoln County at 216 and Lyon County at 239 per 100,000 population than the national rate of 59. South Dakota had 282 cases and Iowa has 263 cases per 100,000 population.

The following needs were brought forward from the prioritization process, and are considered to be the top needs to address during the 2017-2019 implementation strategy cycle.

- Children and Youth
- Physical Health

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

- Children and Youth
- Physical Health

Implementation Strategies

Priority 1: Children and Youth

According to the American Congress of Obstetricians and Gynecologists, pregnant teens are at higher risk of certain health problems (such as high blood pressure or anemia) than pregnant women who are older. Pregnant teens are more likely to go into labor too early. This is called *preterm* birth. These risks are even greater for teens who are younger than 15 years or for those who do not get prenatal care. Teen pregnancies carry extra health risks to both the mother and the baby. Often, teens don't get prenatal care soon enough, which can lead to problems later on. They have a higher risk for pregnancy-related high blood pressure and its complications. Risks for the baby include premature birth and a low birth weight.

Sanford has made children and youth a significant priority and has developed strategies to improve the health of newborns and young children, and to enhance the level of care that is available for high risk infants.

Additionally, 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 and RECHARGE – Sleep and Relaxation, FOOD – Mindful Nutrition Choices, and MOVE – Physical Activity Levels.

Priority 2: Physical Health

We will work with the community to offer timely topics at our local health fair held in the spring each year. Increase publicity on our Direct Access lab for individuals who do not have insurance or a high deductible so they can get basic lab tests at a reasonable price. These items can be monitored with our quality programs to see if improvement has occurred over time. We also participate in community events such as a wellness challenge and we can monitor the number of participants annually to see if the number is increasing.

Sanford Canton-Inwood Medical Center

Community Health Needs Assessment 2016

Table of Contents

Purpose of the Community Health Needs Assessment

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
- Bruce Viessman, Sioux Falls Region Co-Lead, CFO, Sanford Health Network
- Martha Leclerc, MS, Vice President, Revenue Management
- Randy Bury, CAO, Health Services Division
- Steve Goetsch, CFO, Sioux Falls Region

- Jane Heilmann, Senior Corporate Communications Strategist
- Joy Johnson, COO Bemidji Region
- Kirk Christy, CFO, Bismarck Region
- Carrie McLeod, MBA, MM, LRD,CDE, Enterprise Lead, Enterprise Community Health/Community Benefit

Sanford Canton-Inwood Steering Group:

- Carrie McLeod, MBA, MS, LRD, CDE, Enterprise Lead, Office of Health Care Reform, Community Health/Community Benefit
  Paul Gerhart, Director of Fiscal Services

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 Public Health
- 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
- Hannah Shirkey, Sanford Health
- Jac McTaggart, Sanford Health
- Jessica Spaeth, City of Halstad
- Joy Johnson, Sanford Health
- Julie Jeske, CHI-St. Alexius Health
- Julie Miller, South Dakota Department of Health
- Julie 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
- Roger Baier, Sanford Health
- Ruth Bachmeier, Fargo Cass Public Health
- 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

The following Canton-Inwood and surrounding area Key Community Stakeholders participated in community discussions and helped to formulate the priorities for future work.

- Lisa Alden, Chamber of Commerce
- Amanda Wallner, Retail Branch Manager First Bank and Trust
- Liz Bauer, Health Coach
- Melissa Schutte, Marketing Specialist
- Linda Hill, DON
- Pat Halverson, CNO
- Scott Larson, CEO
- Paul Gerhart, Director of Fiscal Services

Description of Sanford Canton-Inwood Medical Center

Sanford Canton-Inwood Medical Center is an 11-bed Critical Access Hospital located in a beautiful rural setting just east of Canton, SD. Through a partnership of Canton-Inwood Memorial Hospital Association and Sanford Health, the community established a health care facility focused on providing quality health care close to home.

Sanford Canton-Inwood employs 5 clinicians, including physicians and advanced practice providers and over 100 employees.

Description of the Community Served

Canton, SD, population 3,000, is located 10 miles east of Interstate 29 on U.S. Highway 18. The community is surrounded by Newton Hills State Park, Big Sioux River, and the rolling hills of the Sioux Valley. Canton is the county seat of Lincoln County.

The earliest known visitor was Lewis P. Hyde, who first came to the area in 1866. By 1868, there were 35 people living in Lincoln County. The residents named the community Canton, believing the location to be the exact opposite of Canton, China. In 1880, the Chicago, Milwaukee, St. Paul and Pacific Railroad crossed the Big Sioux River to reach Canton. The city still has an active rail freight service and many historic homes and buildings dating back to the late 1800s. Two of Canton's historical sites are the Lincoln County Courthouse built in 1889 and the Canton Lutheran Church which was built in 1908.

Canton is home to six industries: Eastern Farmers Co-op, Adams Thermal Systems, Bid-Well, a Terex Company, Johnson Feed, Inc., Fastek Products and Legacy Electronics. The community has several restaurants and approximately 200 businesses.

Study Design and Methodology

1. **Non-Generalizable Survey**
   A non-generalizable on-line survey was conducted by Sanford Health with the assistance of public health leadership and the Center for Social Research (CSR) at North Dakota State University. 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 community stakeholders and various agencies, at times using a snowball approach**.** Data collection occurred throughout the month of March 2015 and a total of 253 respondents participated in the on-line survey.

   The purpose of this non-generalizable survey of community members and key stakeholders in the greater Canton-Inwood 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. Needs ranking 3.5 and above were included in the needs to be addressed and prioritized. As stated in the generalizable survey methodology, many of the identified needs that ranked below 3.5 are being addressed by Sanford. 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. Community stakeholders discussed the community needs and 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. Sanford and community stakeholders performed the asset mapping review. 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.

4. **Secondary Research**
   The secondary data includes the South Dakota Health Study for Lincoln County and the Robert wood Johnson County Health Rankings for Lincoln County, South Dakota and Lyon County Iowa.

Limitations of the Study

The findings in this study provide a limited snapshot of behaviors, attitudes, and perceptions of residents living in the Canton-Inwood primary service area. A good faith effort was made to secure input from a broad base of the community. Invitations were extended to county and city leadership, local legislators, organizations and agencies representing diverse populations and disparities.

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

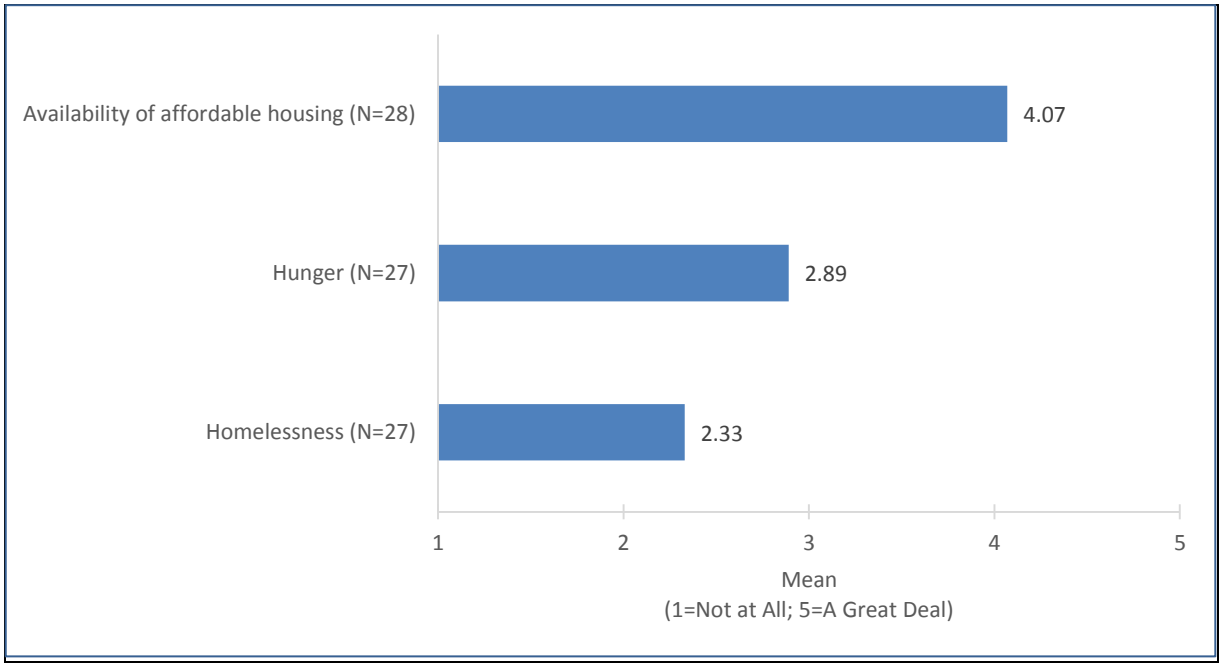
Community Health Concerns

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

Economics

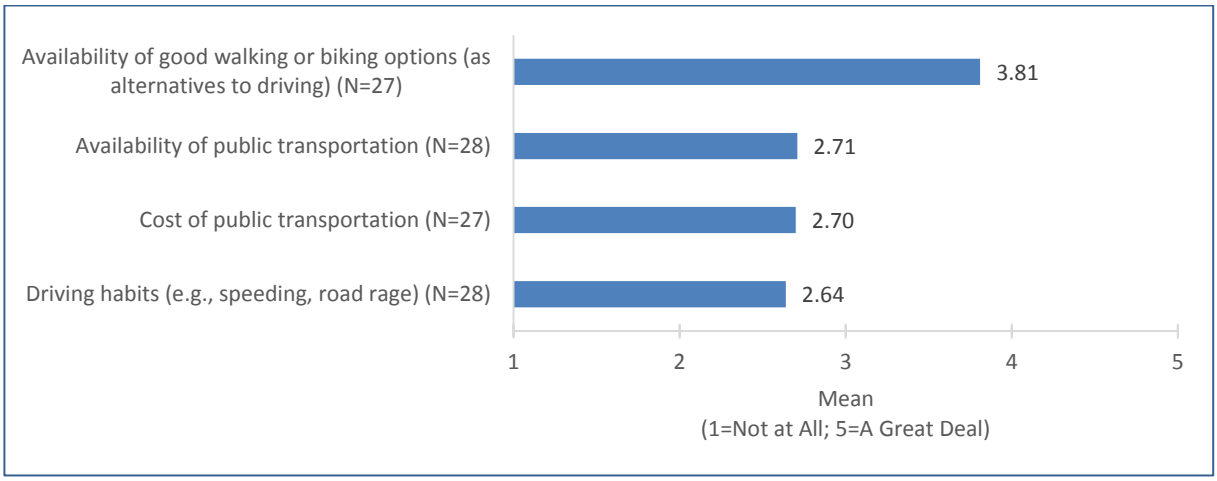
The availability of affordable housing ranks highest of concerns among community stakeholders. Homelessness and hunger also rank as high concerns among community stakeholders.

Level of concern with statements about the community regarding the ECONOMICS



Transportation The availability of good walking or biking options is a concern of the community stakeholders.

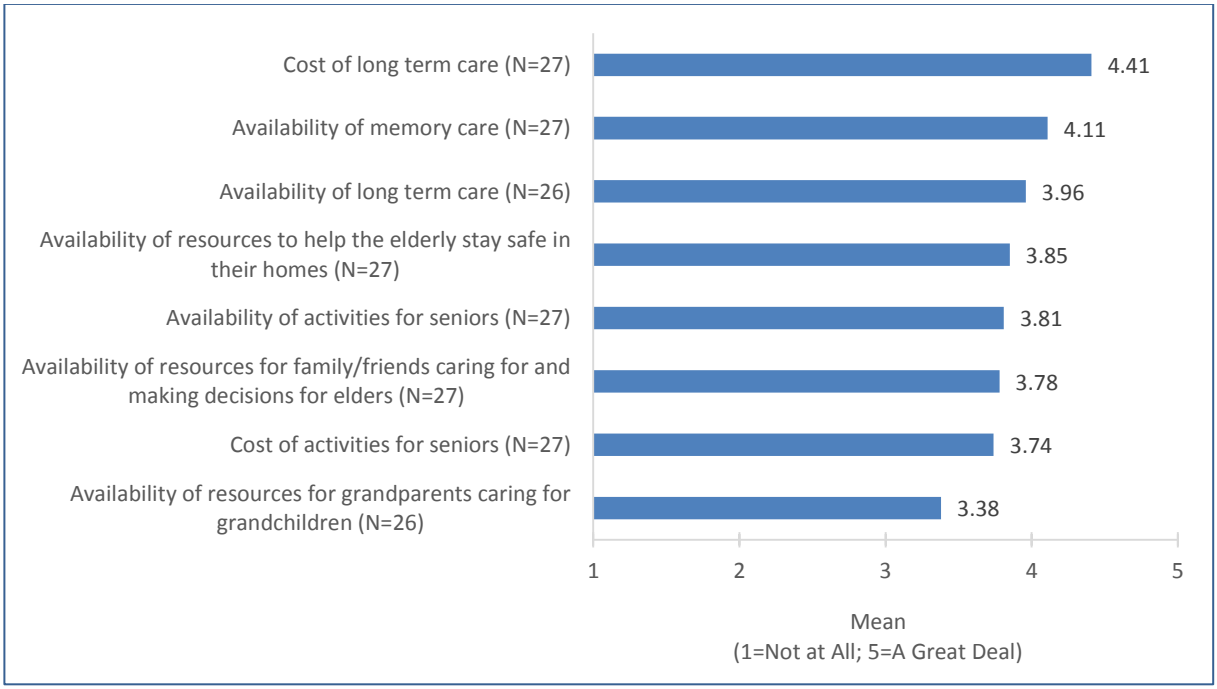
Level of concern with statements about the community regarding the TRANSPORTATION



Aging Population

The cost of long term care is the highest concern for both the community stakeholders. The availability of memory care is a concern. Additionally there are high concerns about the availability of resources to help caregivers making decisions for their elders, the availability of resources to help the elderly stay in their homes, and the availability of resources for grandparents caring for grandchildren.

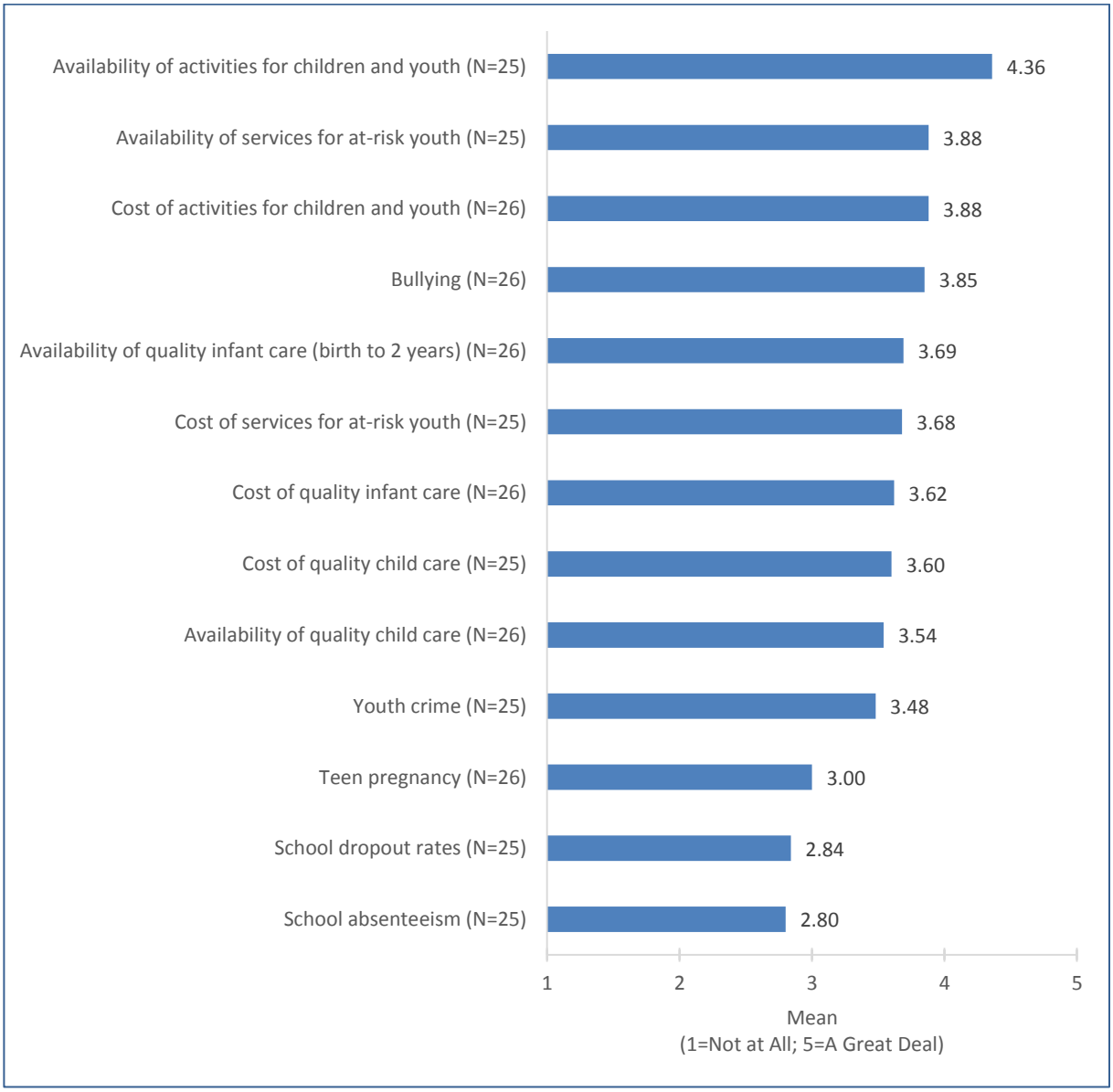
Level of concern with statements about the community regarding the AGING POPULATION



Children and Youth

The survey respondents have very high concerns for the children and youth of the community. Availability of activities for children and youth is the highest of concerns, followed by the availability of services for at-risk youth. Most of the indicators in the children and youth category is a high concern for the community stakeholders.

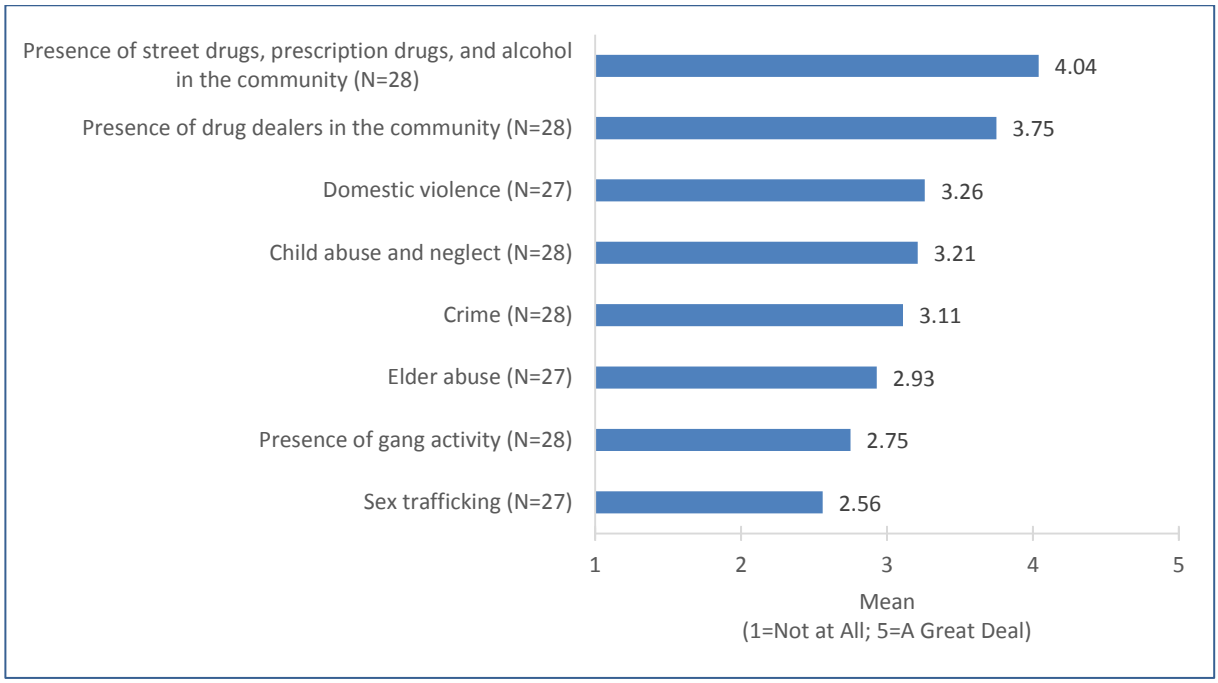
Level of concern with statements about the community regarding CHILDREN AND YOUTH



Safety

Safety was the highest of concerns for the respondents of the non-generalizable survey and also ranked very high for the generalizable survey. The presence of street drugs, prescription drugs, and alcohol and drug dealers in the community are the top concerns. Child abuse and neglect, crime and domestic violence, the presence of gang activity, elder abuse and sex trafficking are all concerns that rank high among the survey respondents.

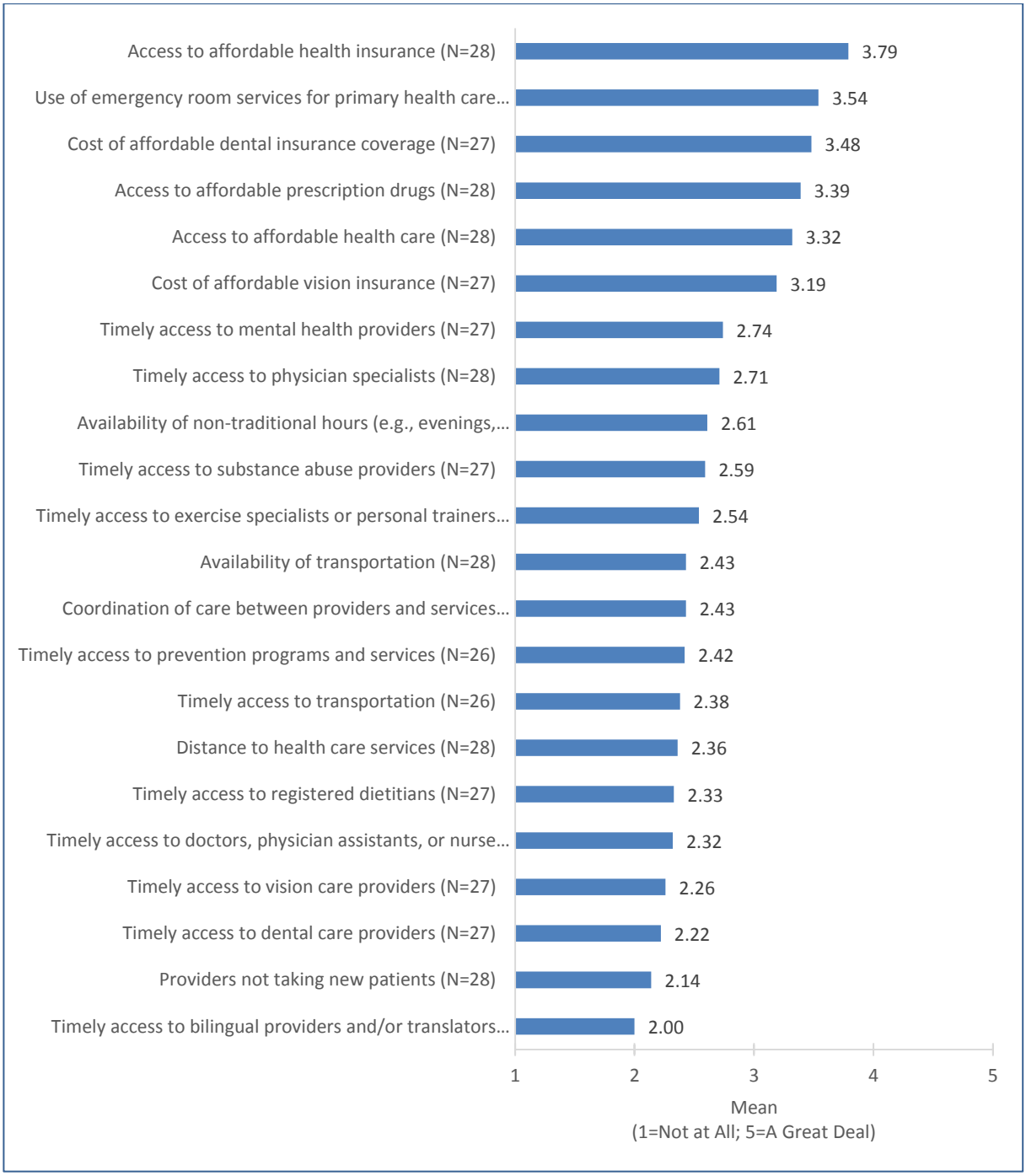
Level of concern with statements about the community regarding SAFETY



Health Care Access and Cost

Community stakeholders ranked the use of the emergency department for primary care as the top concern in the access category. Community stakeholders ranked timely access to mental health providers as the second highest concern. The results of the survey indicate that it is timely access to services that ranks high among the community stakeholders.

Level of concern with statements about the community regarding HEALTH CARE



Sanford is addressing the utilization of the emergency department for primary care by connecting patients to primary care providers. Walk-in clinic hours are expanding to offer alternatives to the overuse of the emergency department.

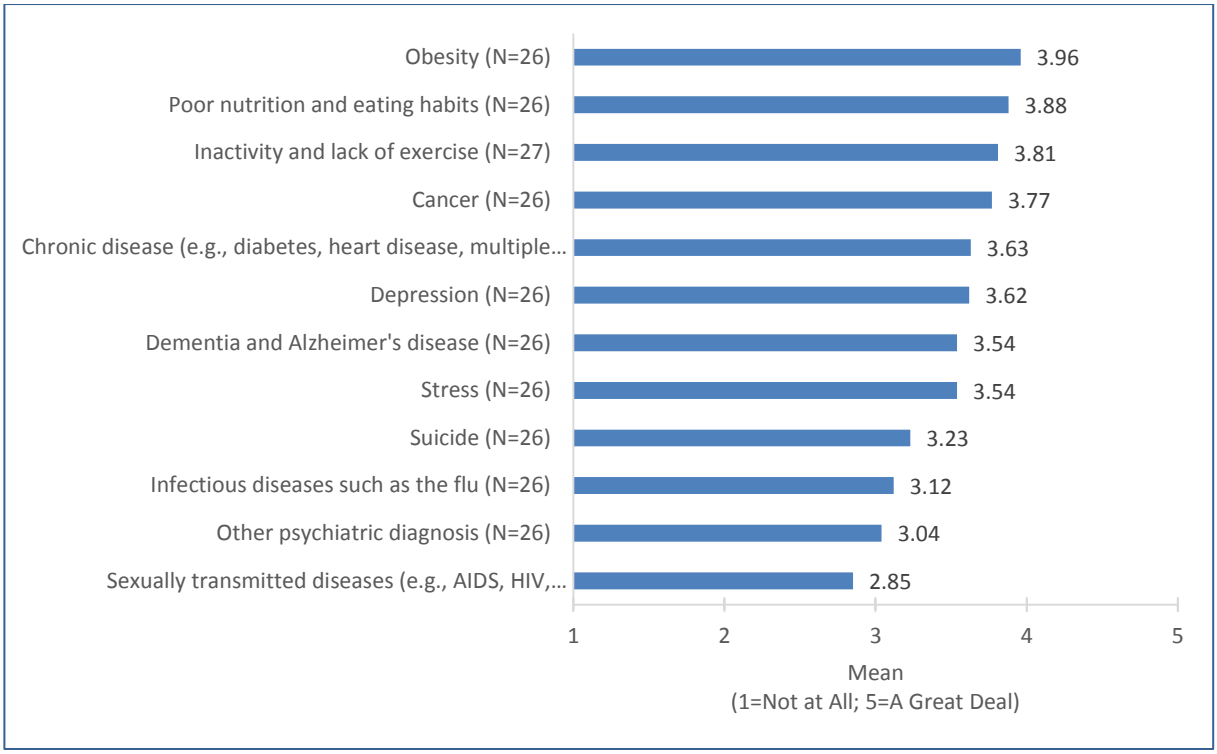
Prescription drugs are made available at a free or reduced rate for patients who are unable to pay. Sanford Bemidji offers charity care to patients unable to pay for medical treatment. Sanford's community care policy defines qualifications and financial counselors are available to assist patients who qualify for free or subsidized care. Financial counselors also assist with enrollment for patients who qualify for public programs. Sanford employs a financial counselor in the oncology program to assist uninsured and underinsured cancer patients with applications for reduced rates or community care for chemotherapy medications.

Sanford is expanding mental health services in primary care clinics and at the medical center to offer psychiatric telehealth services. Social workers, case managers and discharge planners work collaboratively with area service providers to assure that safe discharges and possible and appropriate resources are engaged. Finally, Sanford is promoting video and on-line visits 24/7 for health plan members.

Physical and Mental Health

The top physical health concern among the community stakeholders is obesity, followed by poor nutrition and eating habits. Chronic disease and cancer are also high ranking concerns among this group. The respondents to the generalizable survey rank cancer as their highest concern, followed by inactivity and obesity, poor nutrition and chronic disease.

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



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*4Schools – *fit*4Schools includes unique *fit*-based lessons integrated into daily classroom activities. *fit*4schools.sanfordfit.org is an on-line school resource that incorporates topics into math and science curriculum. To date the program has 14 STEM (integrating science, technology, engineering, and math) unit plans that can be downloaded for classroom use. To date it has:
    - Reached 50,000 schools
    - 180,000 page views from educators across the country
    - 12,000 lesson plan downloads, representing 600,000+ students

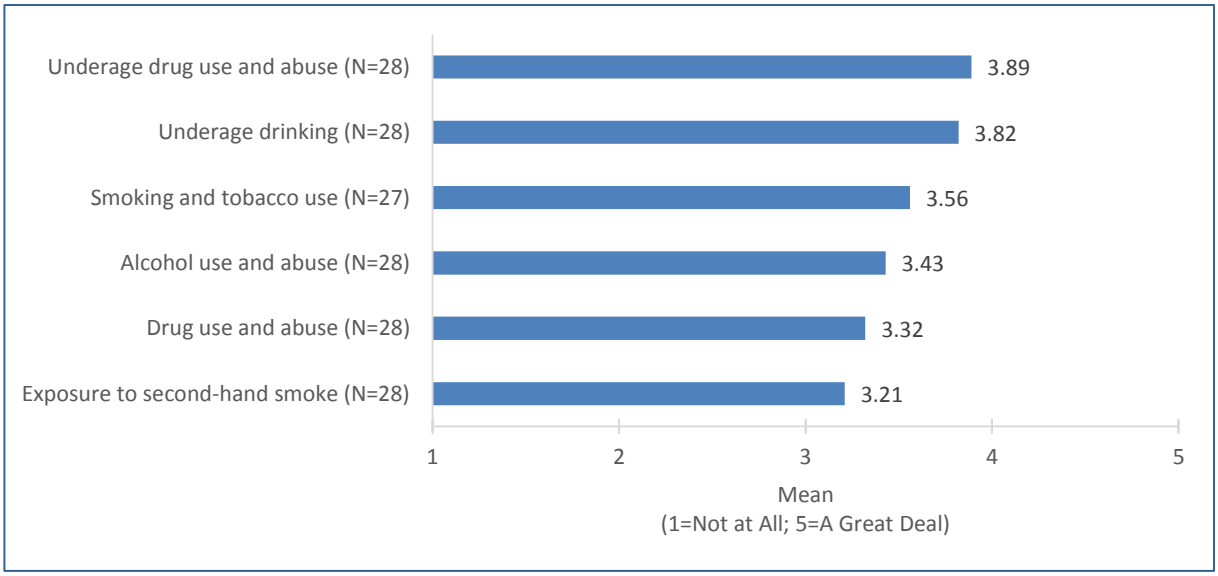
- Community
    - The *fit* friends, Denny, Abby, Sam, Alex and Marty, along with the *fit* team, have been making a variety of appearances at events across the Sanford footprint. *fit* has been at over 2 dozen events interacting with more than 15,000 children and parents to spread the word about the *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.

Substance Use and Abuse

Underage substance abuse ranks as the top concern of survey respondents. Tobacco and alcohol use are also high concerns.

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

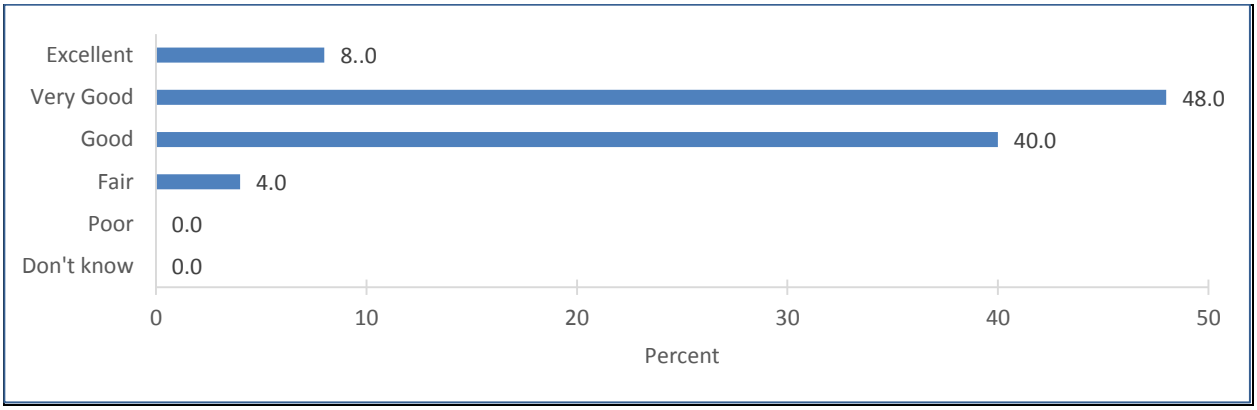


Personal Health Concerns

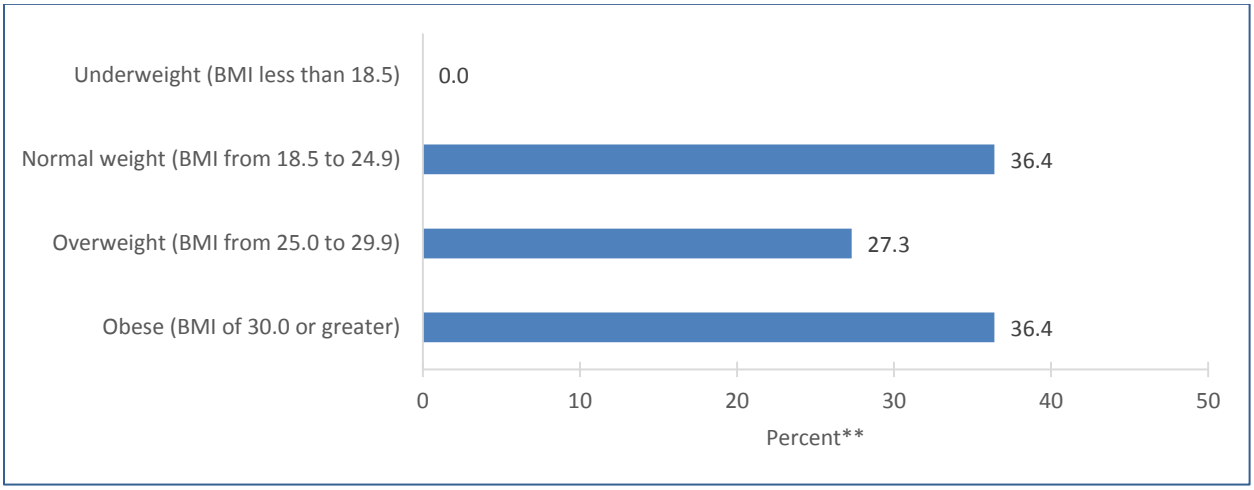
Respondents' Personal Health Status

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 are overweight or obese. However, the vast majority 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, 73.9% of respondents visited a doctor or health care provider for a routine physical and over 81.8% visited a dentist or dental clinic.

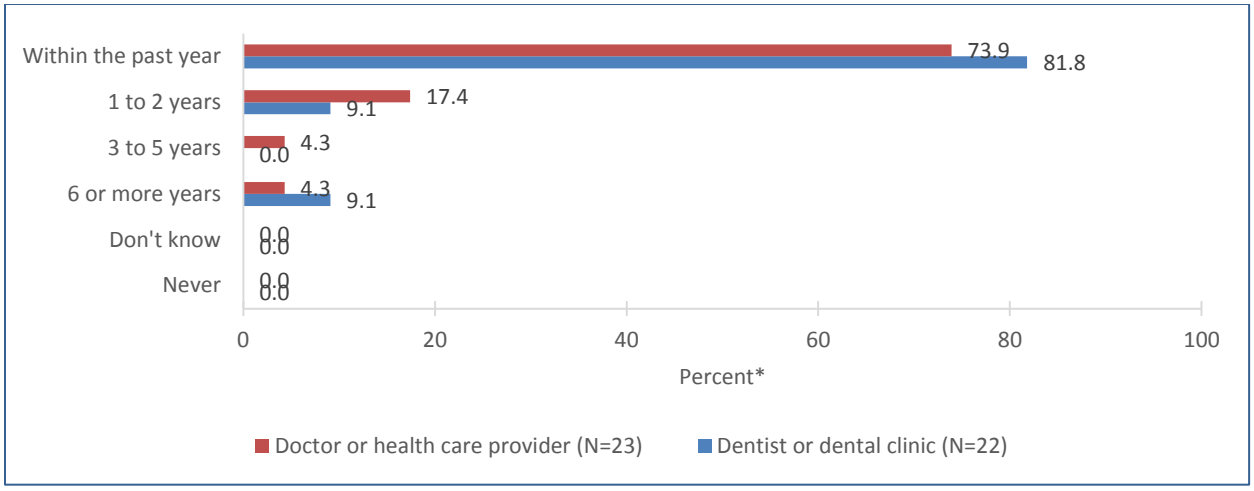
Respondents' rating of their health in general



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



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 a high percentage of respondents have had blood pressure, blood sugar, cholesterol, and dental screenings.

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

Type of screening	Percent of respondents		
	Yes	No	Total
GENERAL SCREENINGS			
Blood pressure screening (N=23)	95.7	4.3	100.0
Blood sugar screening (N=23)	60.9	39.1	100.0
Bone density test (N=23)	13.0	87.0	100.0
Cardiovascular screening (N=23)	26.1	73.9	100.0
Cholesterol screening (N=23)	60.9	39.1	100.0
Dental screening and X-rays (N=23)	73.9	26.1	100.0
Flu shot (N=23)	87.0	13.0	100.0
Glaucoma test (N=23)	43.5	56.5	100.0
Hearing screening (N=23)	4.3	95.7	100.0
Immunizations (N=23)	30.4	69.6	100.0
Pelvic exam (N=16 Females)	68.8	31.3	100.0
STD (N=23)	8.7	91.3	100.0
Vascular screening (N=23)	4.3	95.7	100.0
CANCER SCREENINGS			
Breast cancer screening (N=16 Females)	75.0	25.0	100.0
Cervical cancer screening (N=16 Females)	68.8	31.3	100.0
Colorectal cancer screening (N=23)	21.7	78.3	100.0
Prostate cancer screening (N=7 Males)	14.3	85.7	100.0
Skin cancer screening (N=23)	26.1	73.9	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
GENERAL SCREENINGS							
Blood pressure screening (N=1)	0.0	0.0	0.0	0.0	100.0	0.0	0.0
Blood sugar screening (N=9)	44.4	33.3	0.0	0.0	11.1	0.0	0.0
Bone density test (N=20)	45.0	40.0	10.0	0.0	0.0	0.0	0.0
Cardiovascular screening (N=17)	35.3	41.2	5.9	0.0	0.0	5.9	0.0
Cholesterol screening (N=9)	22.2	55.6	0.0	0.0	0.0	11.1	0.0
Dental screening and X-rays (N=6)	0.0	0.0	16.7	0.0	33.3	16.7	16.7
Flu shot (N=3)	66.7	0.0	0.0	0.0	0.0	0.0	33.3
Glaucoma test (N=13)	38.5	15.4	0.0	0.0	0.0	0.0	23.1
Hearing screening (N=22)	63.6	18.2	0.0	0.0	0.0	0.0	4.5
Immunizations (N=16)	56.3	31.3	0.0	0.0	0.0	0.0	0.0
Pelvic exam (N=5 Females)	60.0	0.0	20.0	0.0	0.0	0.0	20.0
STD (N=21)	66.7	9.5	0.0	0.0	0.0	0.0	0.0
Vascular screening (N=22)	36.4	27.3	4.5	0.0	4.5	4.5	4.5
CANCER SCREENINGS							
Breast cancer screening (N=4 Females)	25.0	0.0	25.0	0.0	0.0	0.0	75.0
Cervical cancer screening (N=5 Females)	60.0	0.0	20.0	0.0	0.0	0.0	40.0
Colorectal cancer screening (N=18)	72.2	11.1	5.6	11.1	0.0	0.0	5.6
Prostate cancer screening (N=6 Males)	50.0	50.0	0.0	0.0	0.0	0.0	0.0
Skin cancer screening (N=17)	41.2	29.4	0.0	0.0	0.0	5.9	23.5

*Percentages may not total 100.0 due to multiple responses.

Screenings

- 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 United States 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 that can cause these cell changes (human papillomavirus) (http://www.cdc.gov/cancer/hpv/basic_info/)
    - 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 and continuing until age 75.

- 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 2.5 ng/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.

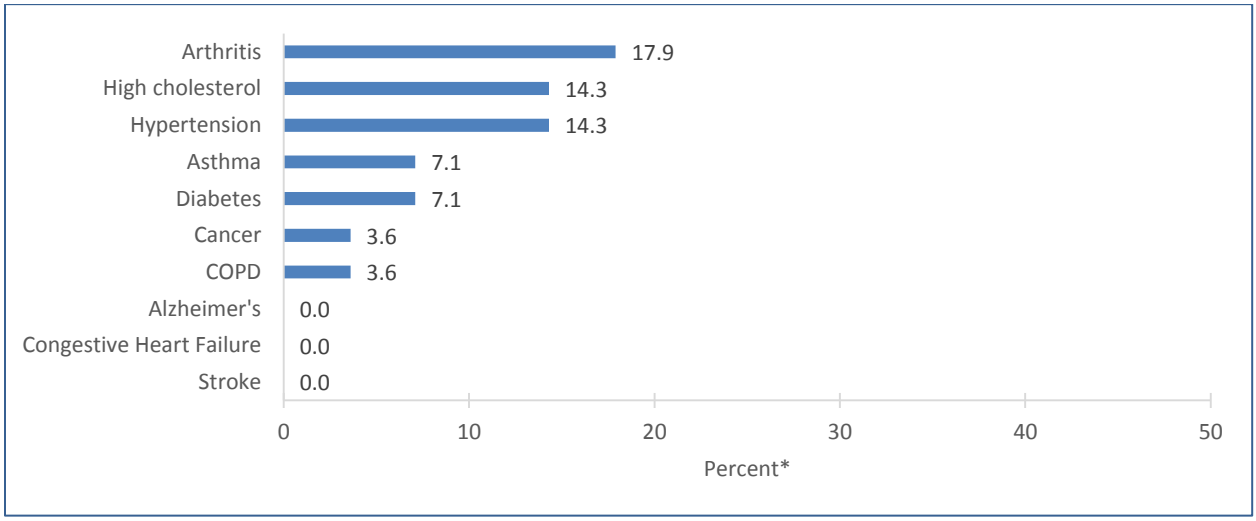
- Skin cancer screening: The U.S. Preventive Services Task Force (USPSTF) has concluded there is not enough evidence to recommend for or against routine screening (total body examination by a doctor) to find skin cancers early. The USPSTF recommends that doctors:
    - Be aware that fair-skinned men 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 13% 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.

Whether respondents have any of the following chronic diseases

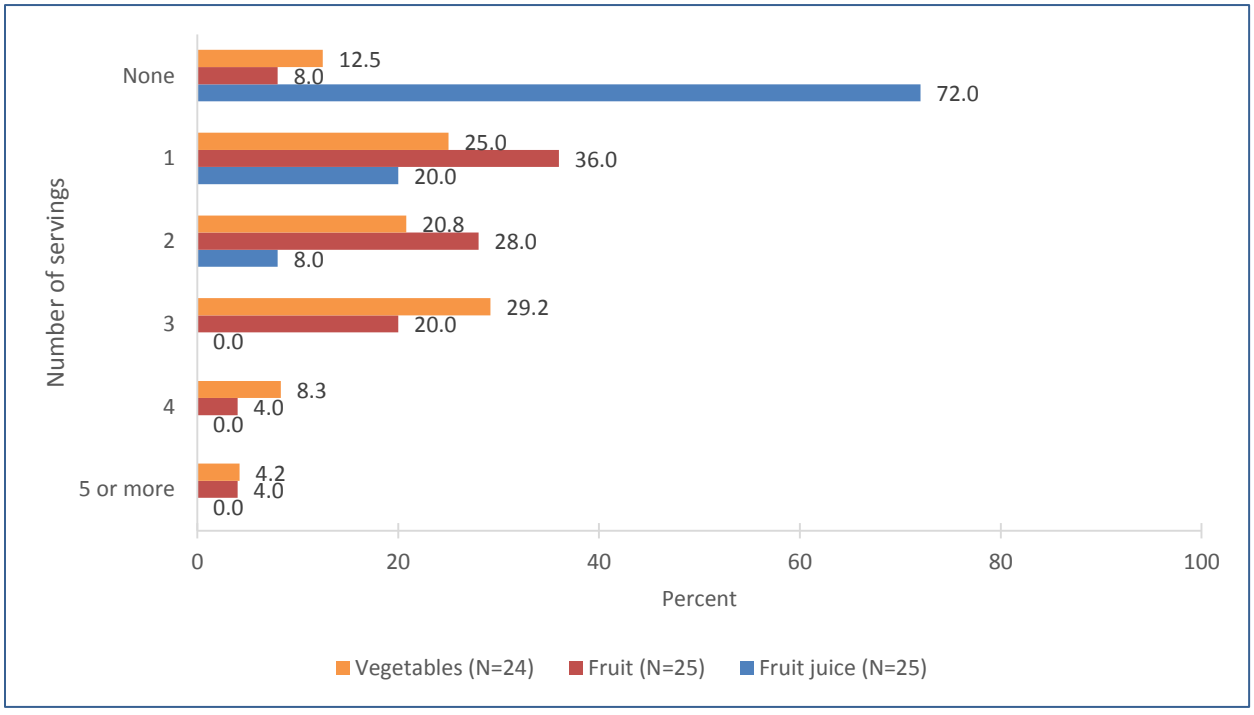


Fruit and Vegetable Intake

The study results suggest that the majority of respondents do not meet vegetable and fruit recommended dietary guidelines. Only 41% of respondents in the group reported having 3 or more servings of vegetables the prior day, while only 28% of the group 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 diet 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 diet can be beneficial for weight management.

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

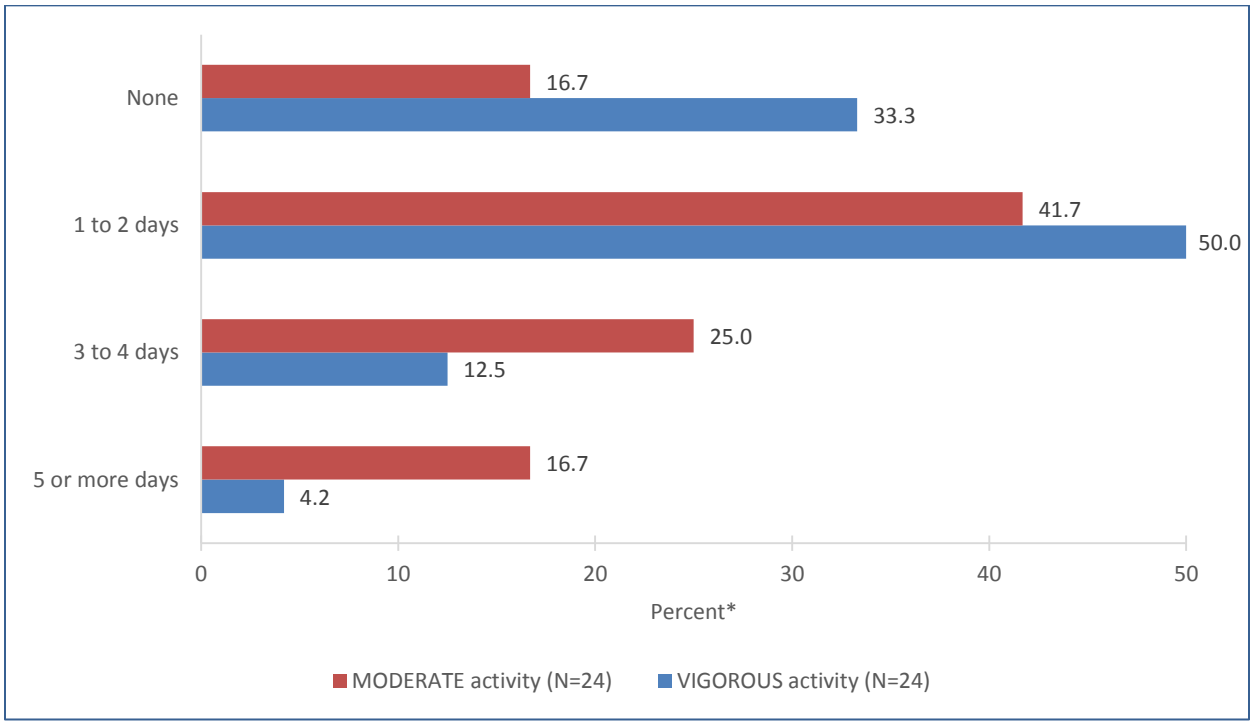


Physical Activity Levels

Study results suggest that the majority of respondents do not meet physical activity guidelines. In the group, 41% of respondents engage in moderate activity 3 or more times per week and 17% engage in vigorous activity 3 or more times per week.

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

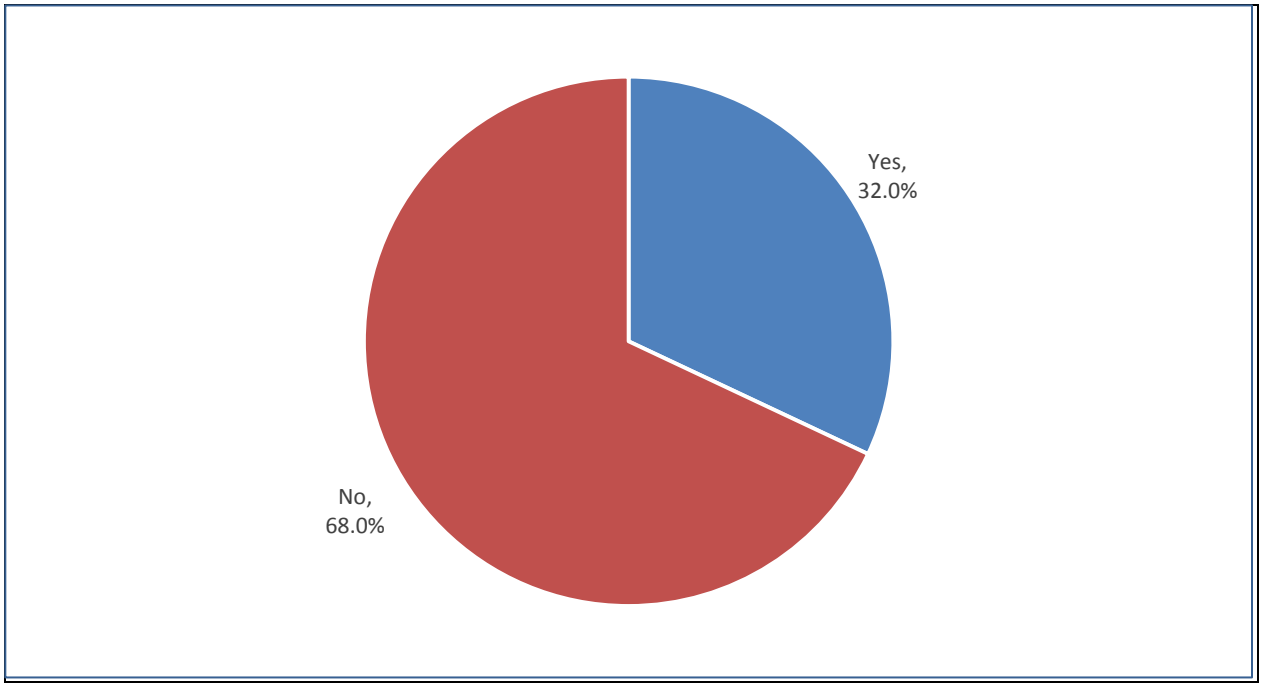


Tobacco Use

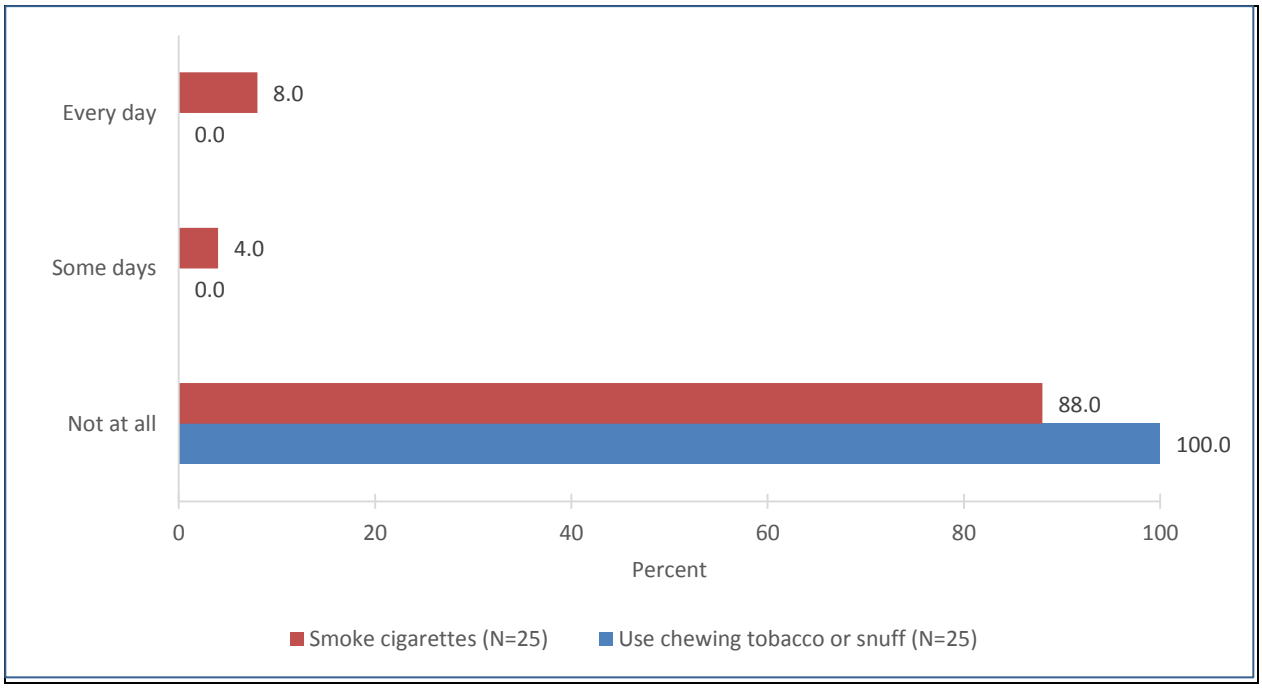
Study results indicate that the vast majority of community respondents are not currently tobacco users. However, 8 in 25 respondents has smoked at least 100 cigarettes in their lifetime, which indicates former smoker status according to the Centers for Disease Control and Prevention.

Secondary research through the South Dakota Focus on Health Study finds that 17 % of Lyon County and 11% of Lincoln County residents are current smokers.

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



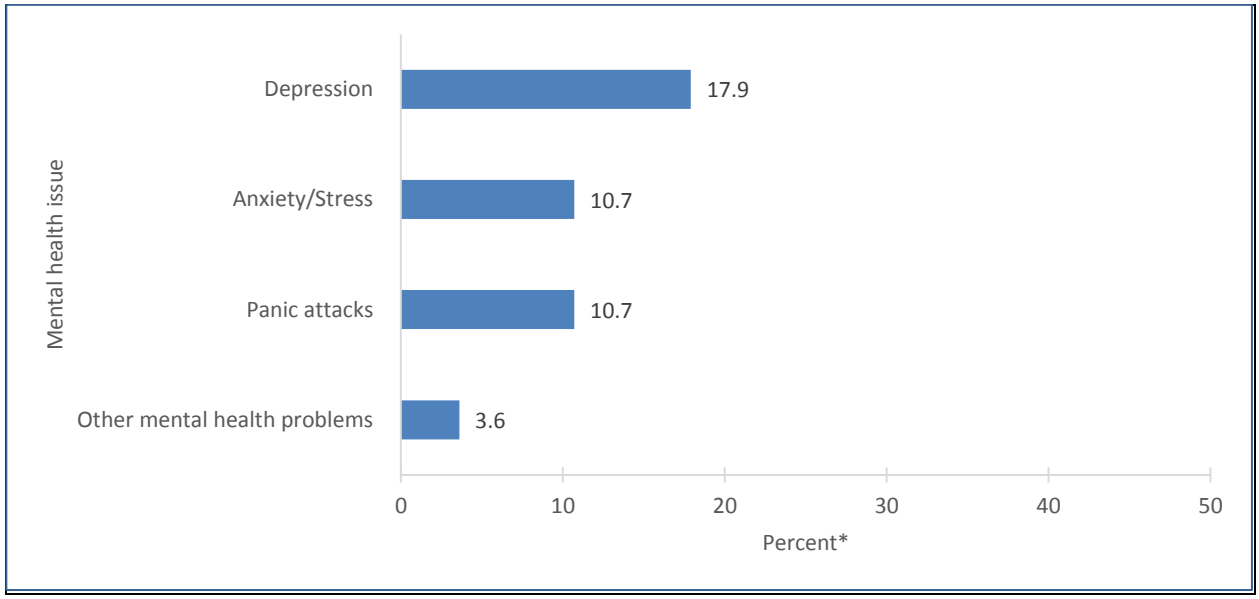
How often respondents currently smoke cigarettes and use chewing tobacco or snuff



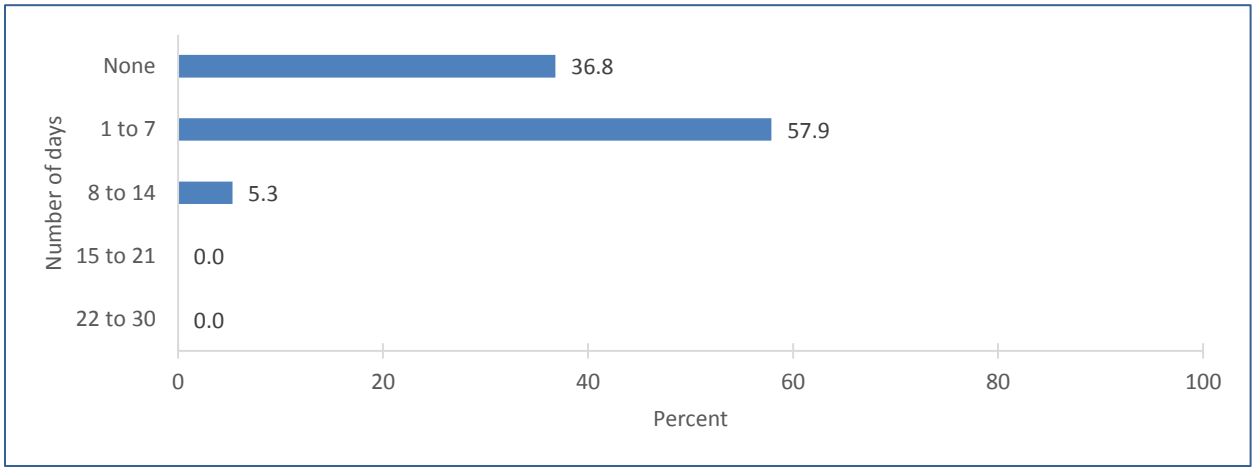
Mental Health

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 the survey respondents, mental health is a moderately high concern. Over 63% of survey respondents report that they have had one or more days in the past month when their mental health was not good.

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



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

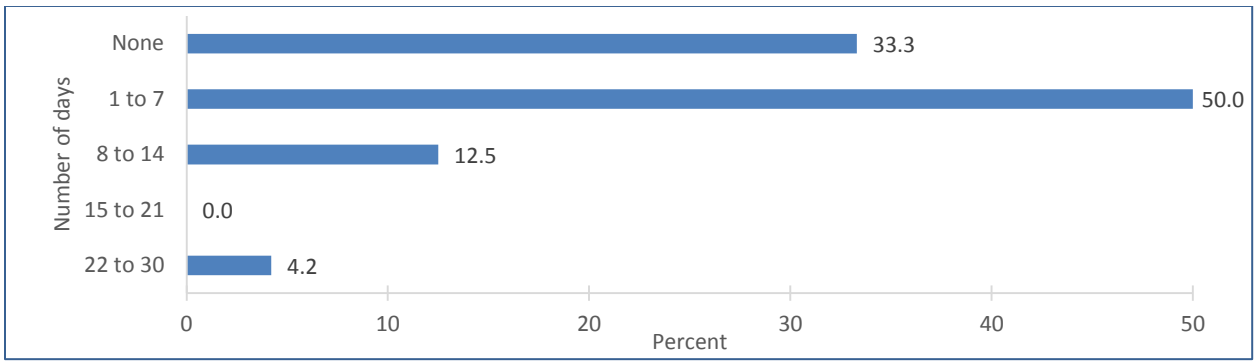


Substance Abuse Responses

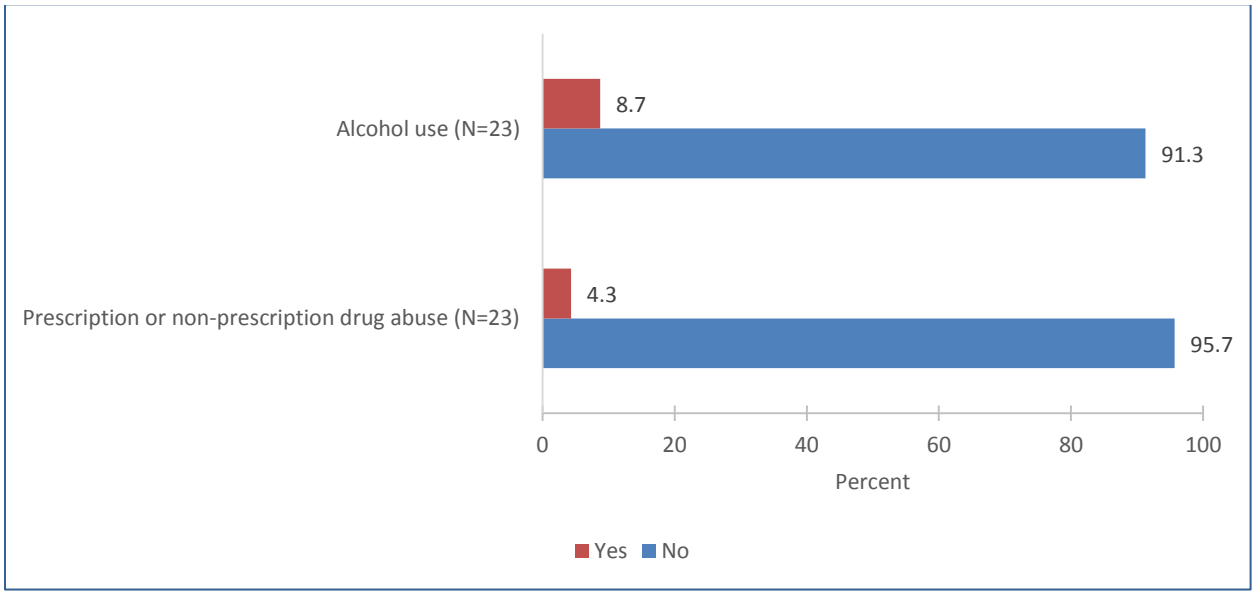
Substance abuse is also a mental health disorder, as defined by the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV), and can stem from mental health concerns. In the Canton-Inwood community, over 66% of survey respondents report consuming alcohol, and 25% report that they consume at a binge level.

Secondary research indicates that 23% of Lincoln County and 16% of Lyon County residents report binge drinking. (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



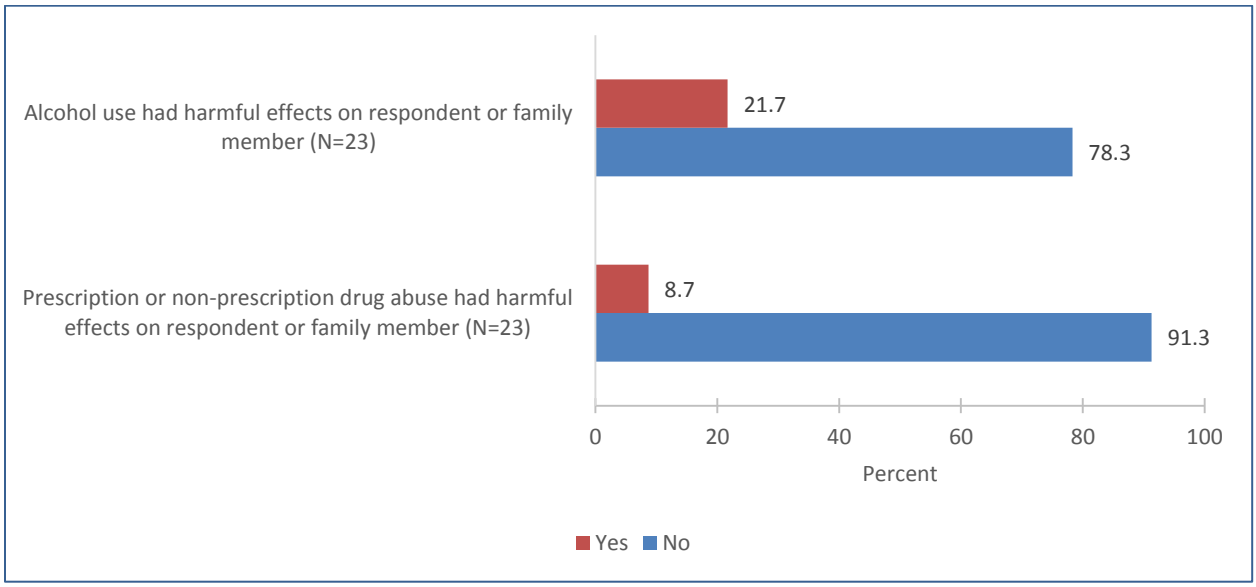
Whether respondents have ever had a problem with alcohol use or prescription or non-prescription drug abuse



Less than 9% of respondents reported having a problem with alcohol although earlier reporting indicated a higher level of binge drinking. Overall, 5 in 23 respondents report alcohol use has had harmful effects on themselves or a family member.

Other forms of substance abuse include the use of prescription or non-prescription drugs. No respondents in the metro area reported having had a problem with prescription or non-prescription drug abuse. However, respondents say prescription or non-prescription drug abuse has had harmful effects on themselves or a family member.

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



Demographics

Total Population – 2010 U.S. Census Bureau

- Lincoln County: 44,828
- Lyon County: 11,581

Population by Age and Gender

	Number	Percent	Males	Percent	Females	Percent
<5 years	Lyon: 929 Lincoln: 4414	Lyon: 8.0 Lincoln: 9.8	Lyon: 468 Lincoln: 2259	Lyon: 4.0 Lincoln: 5.0	Lyon: 464 Lincoln: 2155	Lyon: 4.0 Lincoln: 4.8
5-9	Lyon: 916 Lincoln: 3932	Lyon: 7.9 Lincoln: 8.8	Lyon: 501 Lincoln: 1997	Lyon: 4.3 Lincoln: 4.5	Lyon: 415 Lincoln: 1935	Lyon: 3.6 Lincoln: 4.3
10-14	Lyon: 846 Lincoln: 3197	Lyon: 7.3 Lincoln: 7.1	Lyon: 448 Lincoln: 1673	Lyon: 3.9 Lincoln: 3.7	Lyon: 398 Lincoln: 1524	Lyon: 3.4 Lincoln: 3.4
15-19	Lyon: 779 Lincoln: 2503	Lyon: 6.7 Lincoln: 5.6	Lyon: 412 Lincoln: 1322	Lyon: 3.6 Lincoln: 2.9	Lyon: 367 Lincoln: 1181	Lyon: 3.2 Lincoln: 2.6
20-24	Lyon: 500 Lincoln: 2326	Lyon: 4.3 Lincoln: 5.2	Lyon: 249 Lincoln: 1027	Lyon: 2.2 Lincoln: 2.3	Lyon: 251 Lincoln: 1299	Lyon: 2.2 Lincoln: 2.9
25-29	Lyon: 625 Lincoln: 3863	Lyon: 5.4 Lincoln: 8.6	Lyon: 324 Lincoln: 1873	Lyon: 2.8 Lincoln: 4.2	Lyon: 301 Lincoln: 1990	Lyon: 2.6 Lincoln: 4.4
30-34	Lyon: 723 Lincoln: 3918	Lyon: 6.2 Lincoln: 8.7	Lyon: 350 Lincoln: 1939	Lyon: 3.0 Lincoln: 4.3	Lyon: 373 Lincoln: 1979	Lyon: 3.2 Lincoln: 4.4
35-39	Lyon: 629 Lincoln: 3430	Lyon: 5.4 Lincoln: 7.7	Lyon: 328 Lincoln: 1689	Lyon: 2.8 Lincoln: 3.8	Lyon: 301 Lincoln: 1741	Lyon: 2.6 Lincoln: 3.9
40-44	Lyon: 677 Lincoln: 3051	Lyon: 5.8 Lincoln: 6.8	Lyon: 345 Lincoln: 1560	Lyon: 3.0 Lincoln: 3.5	Lyon: 332 Lincoln: 1491	Lyon: 2.9 Lincoln: 3.3
45-49	Lyon: 776 Lincoln: 2995	Lyon: 6.7 Lincoln: 6.7	Lyon: 403 Lincoln: 1512	Lyon: 3.5 Lincoln: 3.4	Lyon: 373 Lincoln: 1483	Lyon: 3.2 Lincoln: 3.3
50-54	Lyon: 819 Lincoln: 2813	Lyon: 7.1 Lincoln: 6.3	Lyon: 432 Lincoln: 1406	Lyon: 3.7 Lincoln: 3.1	Lyon: 387 Lincoln: 1407	Lyon: 3.3 Lincoln: 3.1
55-59	Lyon:790 Lincoln: 2475	Lyon: 6.8 Lincoln: 5.5	Lyon: 395 Lincoln: 1182	Lyon: 3.4 Lincoln: 2.6	Lyon: 395 Lincoln: 1293	Lyon: 3.4 Lincoln: 2.9
60-64	Lyon: 624 Lincoln: 1879	Lyon: 5.4 Lincoln: 4.2	Lyon: 304 Lincoln: 936	Lyon: 2.6 Lincoln: 2.1	Lyon: 320 Lincoln: 943	Lyon: 2.8 Lincoln: 2.1
65-69	Lyon: 412 Lincoln: 1293	Lyon: 3.6 Lincoln: 2.9	Lyon: 211 Lincoln: 647	Lyon: 1.8 Lincoln: 1.4	Lyon: 201 Lincoln: 646	Lyon: 1.7 Lincoln: 1.4
70-74	Lyon: 421 Lincoln: 846	Lyon: 3.6 Lincoln: 1.9	Lyon: 169 Lincoln: 405	Lyon: 1.5 Lincoln: 0.9	Lyon: 252 Lincoln: 441	Lyon: 2.2 Lincoln: 1.0
75-79	Lyon: 422 Lincoln: 704	Lyon: 3.6 Lincoln: 1.6	Lyon: 182 Lincoln: 322	Lyon: 1.6 Lincoln: 0.7	Lyon: 240 Lincoln: 382	Lyon: 2.1 Lincoln: 0.9
80-84	Lyon: 331 Lincoln: 553	Lyon: 2.9 Lincoln: 1.2	Lyon: 140 Lincoln: 234	Lyon: 1.2 Lincoln: 0.5	Lyon: 191 Lincoln: 319	Lyon: 1.6 Lincoln: 0.7
85 and over	Lyon: 362 Lincoln: 636	Lyon: 3.1 Lincoln: 1.4	Lyon: 125 Lincoln: 210	Lyon: 1.1 Lincoln: 0.5	Lyon: 237 Lincoln: 426	Lyon: 2.0 Lincoln: 1.0
Median age	Lyon: 38.7 Lincoln: 32.8		Lyon: 37 Lincoln: 32.4		Lyon: 40.5 Lincoln: 33	

Population by Race

	Lyon	Percent	Lincoln	Percent
White	11,340	97.9	43,068	96.1
Black or African American	10	0.1	320	0.7
American Indian or Alaska Native	9	0.1	228	0.5
Asian	25	0.2	462	1.0
Native Hawaiian or other Pacific Islander	0	0.0	7	0.0
Hispanic or Latino	212	1.8	553	1.2

The per capita personal income in Lyon County is $25,578; in Lincoln County it is $34,624. Those living below the poverty level are 7.9% in Lyon County and 4.5% in Lincoln County. The unemployment rate in Lyon County is 2.6% and in Lincoln County is 2.9%.

Health Needs and Community Resources Identified

One of the requirements for a community health needs assessment is to identify the resources that are available in the community to address unmet needs. Asset mapping was conducted 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 were available in the community to address the needs.

The community stakeholders participated in the asset mapping and reviewed the research findings. 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 includes identified needs from the following:

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

Prioritization

The following needs were brought forward for prioritization:

- Economics
- Transportation
- Aging Population
- Children and Youth
- Safety
- Mental Health/Behavioral Health
- Physical Health

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 with 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 Appendix.

Members of the collaborative determined that children and youth and physical health are the top unmet needs.

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

- Children and Youth
- Physical Health

Addressing the Needs
Sanford Canton-Inwood Medical Center

Identified Concerns	How Sanford Canton-Inwood is Addressing the Needs
Economics • Availability of affordable housing	Nothing we can do in this area
Transportation • Availability of good walking or biking options (as alternatives to driving)	Nothing we can do in this area
Aging • Cost of long term care • Availability of memory care • Availability of LTC • Availability of resources to help the elderly stay safe in their homes • Availability of activities for seniors • Availability of resources for family/friends caring for and making decisions for elders • Cost of activities for seniors	Working with the city and other groups in town to build a new building for the golf course and the senior citizens of Canton as well as other groups. Sanford would be donating the land for the project.
Children and Youth • Availability of activities for children and youth • Availability of services for at-risk youth • Cost of activities for children and youth • Bullying • Availability of quality infant care • Cost of quality child care Availability of quality child care	Working with local schools and daycares to implement the *fit* program
Safety • Presence of street drugs and alcohol in the community • Presence of drug dealers in the community	Have a social worker on staff available to help if questions
Health Care • Access to affordable health insurance • Cost of affordable vision insurance • Use of the emergency room services for primary health care	Offer a Direct Access Lab for reduced price lab tests. Have run articles in paper about using health care correctly
Physical Health • Poor nutrition and eating habits • Obesity • Poor nutrition and eating habits • Inactivity and lack of exercise • Cancer	The clinic is working on a BMI project with its patients

Identified Concerns	How Sanford Canton-Inwood is Addressing the Needs

• Chronic Disease
  ○ Arthritis
  ○ High Cholesterol
Hypertension	

Mental Health /Behavioral Health • Underage drug use and abuse • Underage drinking • Depression • Smoking and tobacco use • Stress • Dementia and Alzheimer's • Binge drinking	We offer mental health clinical services at least one time a month with a provider

SANFORD HEALTH

2016-2019 Implementation Strategies

Implementation Strategies

Priority 1: Children and Youth

Children and youth are at a very vulnerable stage in life as they develop. We need to make sure they are able to get the help they need from a medical standpoint at that age. We need to make sure they stay active and involved.

Sanford *fit* will be able to help youth stay active. It works on four areas of health: Mood, Food, Recharge, and Move. The plan is to get this introduced to school age people through the school and daycares in the area.

Priority 2: Physical Health

As health care changes, we are increasingly working with well individuals to maintain their health rather than only working with those who are ill. People need to be active and watch what they eat to maintain a healthy lifestyle and live longer.

We have started a community wellness challenge that has tried to promote a healthy lifestyle. We also have a program that lets individuals get reduced price lab tests if they have a high deductible plan or no insurance. We proactively call patients to remind them of preventive tests that they should have done. We meet with chronically ill patients to help improve their health.

Sanford Canton-Inwood Medical Center

FY 2017-2019 Action Plan

Priority 1: Children and youth

Projected Impact: The Sanford *fit* on-line modules are available for the schools and daycare centers in the community – serving a broad base of students and their families

Goal 1: Provide health and wellness opportunities to area students and families

Actions/Tactics	Measureable Outcomes	Dedicated Resources	Leadership	Note any community partnerships and collaborations (if applicable)
Implement Sanford *fit* in local schools and daycares	# of classrooms using the program at the end of the time period	Clinic Health Coach	Sanford *fit* Leadership Executive Team Oversight	Schools and daycares
Secure grant funding to help with printing costs and promotional items	# of printed materials distributed to schools and daycare centers # of events to create community awareness	Sanford Grant Office	Sanford *fit* Leadership Executive Team Oversight	Schools and daycares

Priority 2: Physical Health

Projected Impact: Community members are more active and physically fit

Goal 1: Increase opportunities to improve physical activity

Actions/Tactics	Measureable Outcomes	Resources	Leadership	Community partnerships and collaborations - if applicable
Develop a wellness challenge	Increase the number of teams in participation	Clinic Health Coach	Executive Team Oversight	Partner with local businesses for prizes and participation
Community Health Fair and Bike Rodeo	Increase residents' participation in these events	Sanford Departments Display at Health Fair	Executive Team Oversight	Partner with Chamber to make sure these events grow

SANFORD HEALTH

2013 Implementation Strategy Impact

Demonstrating Impact

The 2013 Community Health Needs Assessment served as a catalyst to lift up the strategies of **Cost Involved Preventing Individuals from Seeking Medical Services** and **Obesity in Children as** implementation strategies for the 2013-2016 timespan.

The 2013 strategies have served a broad reach across our community and region. The impact has been positive and the work will continue into the future through new or continued programming and services.

Impact of the Strategy Cost Involved Preventing Individuals from Seeking Medical Services

We have started a Direct Access Lab to lower the cost of lab tests for people with high deductible health plans or no insurance. There is some usage of this and we will continue to try to increase knowledge that the program exists. We have run articles about where to go depending on your illness. The Health Coach works with individuals to get them to the clinic before their illness gets out of hand to reduce their cost.

Impact of the Strategy Obesity in Children

The clinic has worked with the school to offer programs to school-aged children. We have worked on getting the *fit* program into the school and will continue to work on this.

Community Feedback from the 2013 Community Health Needs Assessment

Sanford Health is prepared to accept feedback on our 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 aside from a question asked about the service area for this report.

APPENDIX

Primary Research

Canton-Inwood Asset Mapping

Identified concern	Non-Generalizable Survey Specific areas of concern	Specific areas of concern Shared by key stakeholders	Secondary Data Focus on South Dakota Report	Community resources that are available to address the need	Gap?
Economics	• Availability of affordable housing 4.07		• 10.7% live below the FPL	Canton Housing Agency 605-764-5722 Canton Housing & Redevelopment Commission 605-764-5722 Inter-Lakes Community Action Partnership 605-940-1909 Old Main Apts. – 605-987-4300 Low income apartments: • Elms Apts. 605-334-6379 • Canton Villa Apts. 605-427-0190	X
Transportation	• Availability of good walking or biking options (as alternatives to driving) 3.81			Newton Hills State Park 605-987-2263 Canton Cycling Classic 605-987-2972 Independence Day Bike Parade 605-987-2263 / 605-987-2972	X
Aging Population	• Cost of LTC 3.41 • Availability of memory care 4.11 • Availability of LTC 3.96 • Availability of resources to help the elderly stay safe in their homes 3.85 • Availability of activities for seniors 3.81 • Availability of resources for family/friends caring for and making decisions for elders 3.78 • Cost of activities for seniors 3.74		• 13.9% are 65 or older	SD Department of Social Services 605-367-5444 Canton Good Samaritan Center 605-987-2696 Lincoln Co. Home Health Agency & Public Health 605-987-2695 Sanford Canton-Inwood Medical Center 605-764-1400 Sanford Home Medical Eqmt. - 605-987-0061 Senior Meals 605-336-6722 Meals on Wheels 605-987-5520 Senior Citizens Center 605-987-5520 Activities for seniors: • Assist with 4-H Club 605-764-2756 • Assist with Boy Scouts 605-987-5773	X

Identified concern	Non-Generalizable Survey Specific areas of concern	Specific areas of concern Shared by key stakeholders	Secondary Data Focus on South Dakota Report	Community resources that are available to address the need	Gap?
				• Assist with Girl Scouts 605-987-2314 • Assist with Cub Scouts 605-940-1261 • Ducks Unlimited 605-764-6811 • Garden Club 605-764-3874 • Community Education 605-310-3417 • Hiawatha Golf Club 605-987-2474 • Historical Society 605-659-6501 • Lions Club 605-366-6805 • Meals on Wheels – 605-987-5520 • Optimist Club 605-987-2750 • PEO Sisterhood 605-764-6328 • Red Hat Society 605-764-4235 • Rotary Club 605-201-1551 • Sioux River Sportsmen's Club 605-764-7746 • Sons of Norway 605-987-0069 • VFW/Legion 605-987-5449	
Children and Youth	• Availability of activities for children and youth 4.36 • Availability of services for at-risk youth 3.88 • Cost of activities for children and youth 3.88 • Bullying 3.85 • Availability of quality infant care 3.62 • Cost of quality child care 3.60 • Availability of quality child care 3.54		• 15.9% have 3 or more ACEs • 6% have 5 or more ACEs	Mental Health Counselors: • Keystone Treatment Center 877-762-3740 • Crawford Counseling Center 605-941-4848 • Southeastern Behavioral HealthCare 605-336-0503 / 605-336-0510 • Dakota Oak Counseling 605-759-8359 • Sioux Falls Psychological Services 605-334-2696 • Great Plains Psychological Services 605-323-2345 Child Care resources: • Kids' Castle 605-987-5244 • Noah's Ark 605-764-3361 • Blessed Wonders 605-558-1010 • Connie Lamp 605-558-1010 • Laurel Laubach 605-764-5196 • Michelle Sehr 605-310-0033 • Taylor Swanson 605-940-8760	X

Identified concern	Non-Generalizable Survey Specific areas of concern	Specific areas of concern Shared by key stakeholders	Secondary Data Focus on South Dakota Report	Community resources that are available to address the need	Gap?
				Activities for youth: • Parks Dept. 605-987-2972 • School Athletic Dept. – 605-764-2706 • Summer Recreation 605-987-2972 • Swimming Pool 605-987-2972 • School system after school activities 605-764-2706 • 4-H Club 605-764-2756 • Boy Scouts 605-987-5773 • Girl Scouts 605-987-2314 • Cub Scouts 605-940-1261 • River of Life Community Church 605-764-7700 • Newton Hills State Park – activities for children/youth 605-987-2263	
Crime/Safety	• Presence of street drugs, prescription drugs and alcohol 4.04 • Presence of drug dealers in the community 3.75			Canton Police 605-987-5612 Lincoln Co. Sheriff 605-764-5651 Children's Inn (services for family violence, child abuse) 605-338-0116 Substance Abuse resources: • Glory Home 605-332-3273 • Keystone Outreach 605-413-1493 • Sioux Falls VAMC 605-336-3230 • Tallgrass Recovery 605-368-5559 • Bartels Counseling 605-310-0032 • Choices Recovery 605-334-1822 • Counseling Resources 605-331-2419 • Dakota Drug & Alcohol Prevention 605-331-5724 • First Step 605-361-1505 • Carroll Institute 605-336-2556 • Sioux Falls Urban Indian Health 605-339-0420 • Transitional Living Corp. 605-368-5559 • Sioux Falls Treatment Center 605-332-3236	X

Identified concern	Non-Generalizable Survey Specific areas of concern	Specific areas of concern Shared by key stakeholders	Secondary Data Focus on South Dakota Report	Community resources that are available to address the need	Gap?
				• Arch Halfway House 605-332-6730 • Changes & Choices Recovery Center 605-332-9257 • Face it Together 605-274-2262	
Access to Health Care Cost of Health Care	• Access to affordable health insurance 3.79 • Use of the emergency room services for primary health care 3.54		• 97.6% have a place to go for healthcare • 88.5% have a personal doctor • 4.2% have unmet medical needs • 2.7% have unmet prescription drug needs • 24.4% have unmet mental health needs • 100% have unmet alcohol or drug abuse needs	Sanford Health Community Care Program Medical Home Program Sanford Health Case Managers Sanford Health Parish Nurses Sanford Health Social Workers Lincoln Co. Public Health 605-987-2695 Sanford Canton-Inwood Medical Center 701-764-1400 Sanford Home Medical Eqmt. - 605-987-0061 Prescription Assistance programs: • CancerCare co-payment assistance 866-552-6729 • Freedrugcard.us • Rxfreecard.com • Medsavercard.com • Yourrxcard.com • Medicationdiscountcard.com • Needymeds.org/drugcard • Caprxprogram.org • Southdakotarxcard.com • Gooddaysfromcdf.org 877-968-7233 • NORD Patient Assistance Programs 800-999-6673 • SD Partnership for Prescription Asst. 888-477-2669 • Patient Access Network (PAN) Foundation 866-316-7263 • Pfizer RX Pathways 866-776-3700 • RXhope.com	X

Identified concern	Non-Generalizable Survey Specific areas of concern	Specific areas of concern Shared by key stakeholders	Secondary Data Focus on South Dakota Report	Community resources that are available to address the need	Gap?
				Home Care resources: • Sanford Home Care Mental Health resources: • Keystone Treatment Center 877-762-3740 • Crawford Counseling Center 605-941-4848 • Southeastern Behavioral HealthCare 605-336-0503 / 605-336-0510 Respite Care facilities: • SD Dept. of Human Services Respite Care Program 800-265-9684	
Physical Health	• Obesity 3.96 63.7% of respondents report being overweight or obese • Poor nutrition and eating habits 3.88 41.7% report consuming 3 or more vegetables/day, 28% report consuming 3 or more fruits/day • Inactivity and lack of exercise 3.81 41% report having moderate exercise 3 or more times/week, 16.7% have vigorous exercise 3 or more times/week • Cancer 3.77 • Chronic Disease 3.63 ○ Arthritis ○ High Cholesterol ○ Hypertension		• 6.6% have diabetes • 11.8% have asthma • 31.8% have hypertension • 8% have heart disease • 29.5% have high cholesterol • 1.5% have COPD • 6.6% have cancer • 84.6% rate their health status as good or better	Sanford Dietitians Better Choices Better Health – for chronic disease Canton Farmers Market 605-987-2972 Health Care resources: • Sanford Canton-Inwood Medical Center 605-764-1400 • Lincoln County Public Health 605-987-2695 Exercise resources: • Parks Dept. 605-987-2972 • School Athletic Dept. – 605-764-2706 • Summer Recreation 605-987-2972 • Swimming Pool 605-987-2972 • Swenson Fitness Center 605-987-2829	X

Identified concern	Non-Generalizable Survey Specific areas of concern	Specific areas of concern Shared by key stakeholders	Secondary Data Focus on South Dakota Report	Community resources that are available to address the need	Gap?
Mental Health/ Behavioral Health	• Underage drug use and abuse 3.89 • Underage drinking 3.82 • Depression 3.62 63.2% report having 1 or more days in the last month when their mental health was not good • Smoking and tobacco use 3.56 • Stress 3.54 Dementia or Alzheimer's 3.54 25% that they drink at a level that is equivalent to binge drinking		• 8% need mental health care • 4.2% have depression • 2.2%% have anxiety • 4.1% deal with PTSD • 0% are bipolar • .9% report addiction issues • 8% are current smokers • 43.2% abuse alcohol • 5.8% used marijuana in the past year	Substance Abuse resources: • Glory Home 605-332-3273 • Keystone Outreach 605-413-1493 • Sioux Falls VAMC 605-336-3230 • Tallgrass Recovery 605-368-5559 • Bartels Counseling 605-310-0032 • Choices Recovery 605-334-1822 • Counseling Resources 605-331-2419 • Dakota Drug & Alcohol Prevention 605-331-5724 • First Step 605-361-1505 • Carroll Institute 605-336-2556 • Sioux Falls Urban Indian Health 605-339-0420 • Transitional Living Corp. 605-368-5559 • Sioux Falls Treatment Center 605-332-3236 • Arch Halfway House 605-332-6730 • Changes & Choices Recovery Center 605-332-9257 • Face it Together 605-274-2262 • Minnehaha Co. Detox Center 605-367-5297 Mental Health resources: • Keystone Treatment Center 877-762-3740 • Crawford Counseling Center 605-941-4848 • Southeastern Behavioral HealthCare 605-336-0503 / 605-336-0510 • Dakota Oak Counseling 605-759-8359 • Sioux Falls Psychological Services 605-334-2696 • Great Plains Psychological Services 605-323-2345 • Catholic Family Services 605-988-3775 • Heuermann Counseling Clinic 605-336-1974	X

Identified concern	Non-Generalizable Survey Specific areas of concern	Specific areas of concern Shared by key stakeholders	Secondary Data Focus on South Dakota Report	Community resources that are available to address the need	Gap?
				• LifeMarks Behavioral Health 605-334-1414 PTSD resources: • VA / Vet Center 605-330-4552 • Avera 605-322-8000	

Canton-Inwood 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 (Ebola 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
Economics • Availability of affordable housing 4.07			
Transportation • Availability of good walking or biking options (as alternatives to driving) 3.81			
Aging • Cost of LTC 3.41 • Availability of memory care 4.11 • Availability of LTC 3.96 • Availability of resources to help the elderly stay safe in their homes 3.85 • Availability of activities for seniors 3.81 • Availability of resources for family/friends caring for and making decisions for elders 3.78 • Cost of activities for seniors 3.74			
Children and Youth • Availability of activities for children and youth 4.36 • Availability of services for at-risk youth 3.88 • Cost of activities for children and youth 3.88 • Bullying 3.85 • Availability of quality infant care 3.62 • Cost of quality child care 3.60 • Availability of quality child care 3.54			
Safety • Presence of street drugs, prescription drugs and alcohol 4.04 • Presence of drug dealers in the community 3.75			
Access to Health Care • Access to affordable health insurance 3.79 • Use of the emergency room services for primary health care 3.54			

Health Indicator/Concern	Round 1 Vote	Round 2 Vote	Round 3 Vote

Physical Health
• Obesity 3.96
  ○ 63.7% of respondents report being overweight or obese
• Poor nutrition and eating habits 3.88
  ○ 41.7% report consuming 3 or more vegetables/day
  ○ 28% report consuming 3 or more fruits/day
• Inactivity and lack of exercise 3.81
  ○ 41% report having moderate exercise 3 or more times/week
  ○ 16.7% have vigorous exercise 3 or more times/week
• Cancer 3.77
• Chronic Disease 3.63
  ○ Arthritis
  ○ High Cholesterol
  Hypertension			

Mental Health
• Underage drug use and abuse 3.89
• Underage drinking 3.82
  ○ 25% that they drink at a level that is equivalent to binge drinking
• Depression 3.62
  ○ 63.2% report having 1 or more days in the last month when their mental health was not good
• Smoking and tobacco use 3.56
• Stress 3.54
• Dementia or Alzheimer's 3.54			

Present: Lisa Alden, Amanda Wallner, Scott Larson, Paul Gerhart, Pat Halverson, Linda Hill, Melissa Schutte, Liz Bauer

SANFORD HEALTH

Sanford Canton-Inwood 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 online 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 March 2015 and a total of 28 respondents participated in the online survey.

TABLE OF CONTENTS

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

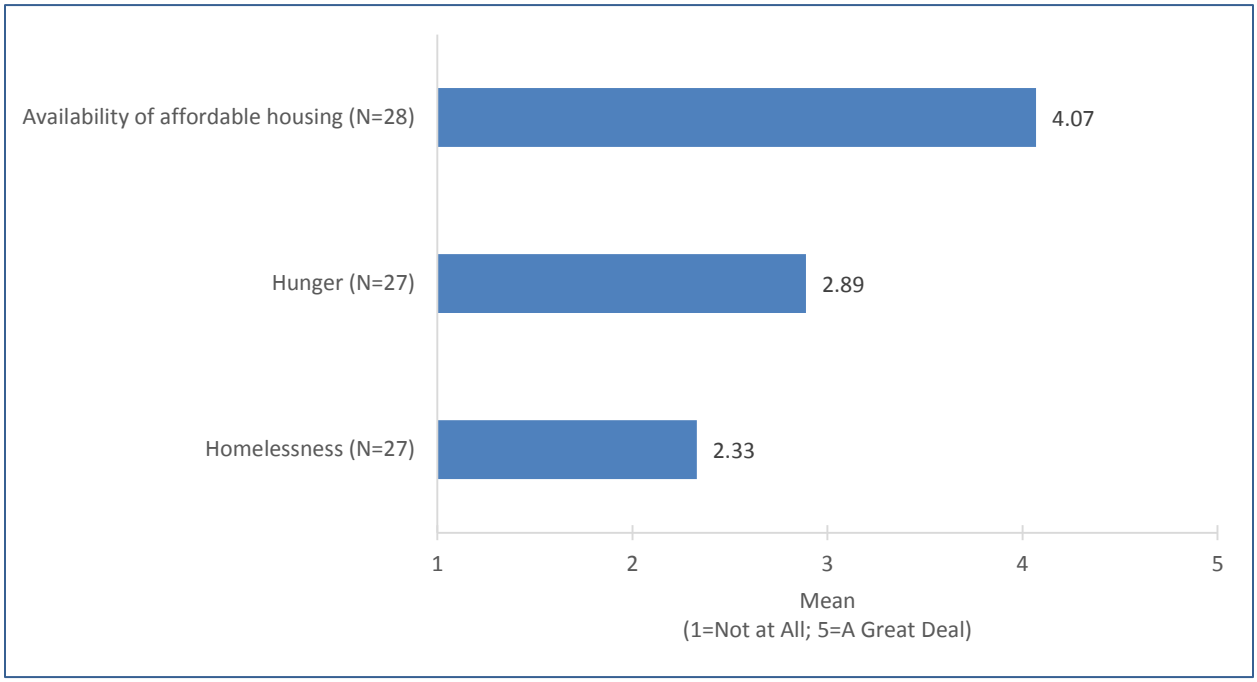


Figure 2. Level of concern with statements about the community regarding TRANSPORTATION

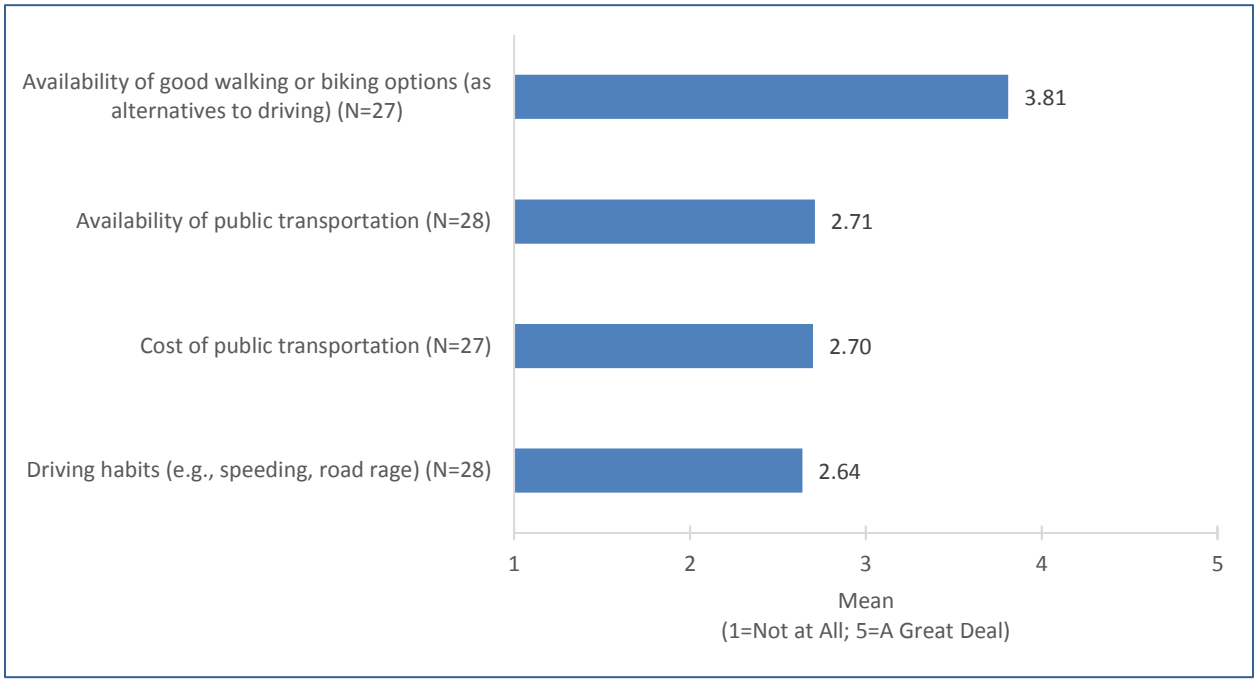


Figure 3. Level of concern with statements about the community regarding the ENVIRONMENT

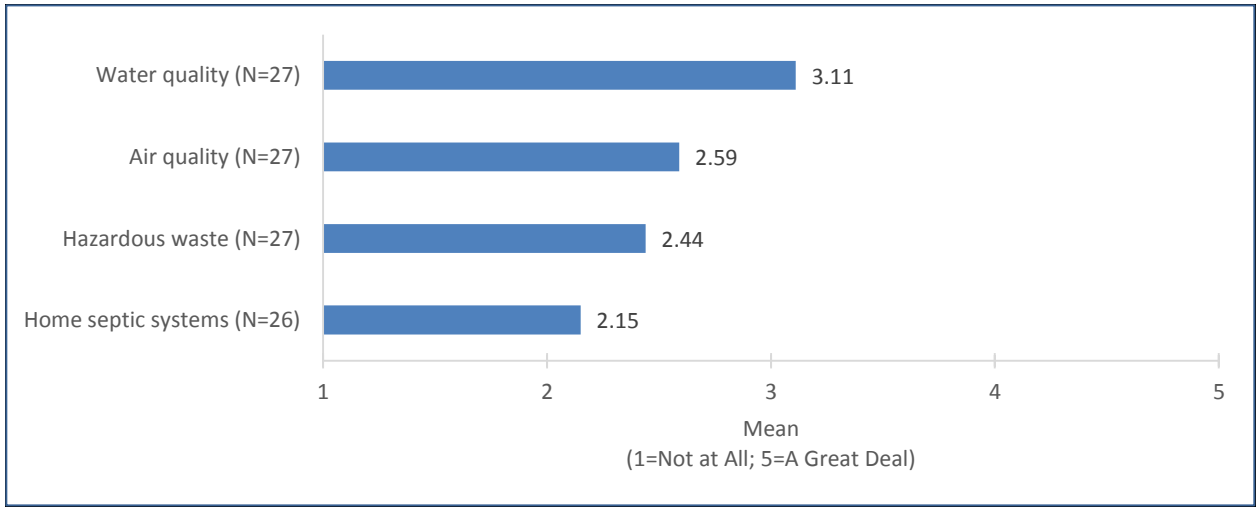


Figure 4. Level of concern with statements about the community regarding CHILDREN AND YOUTH

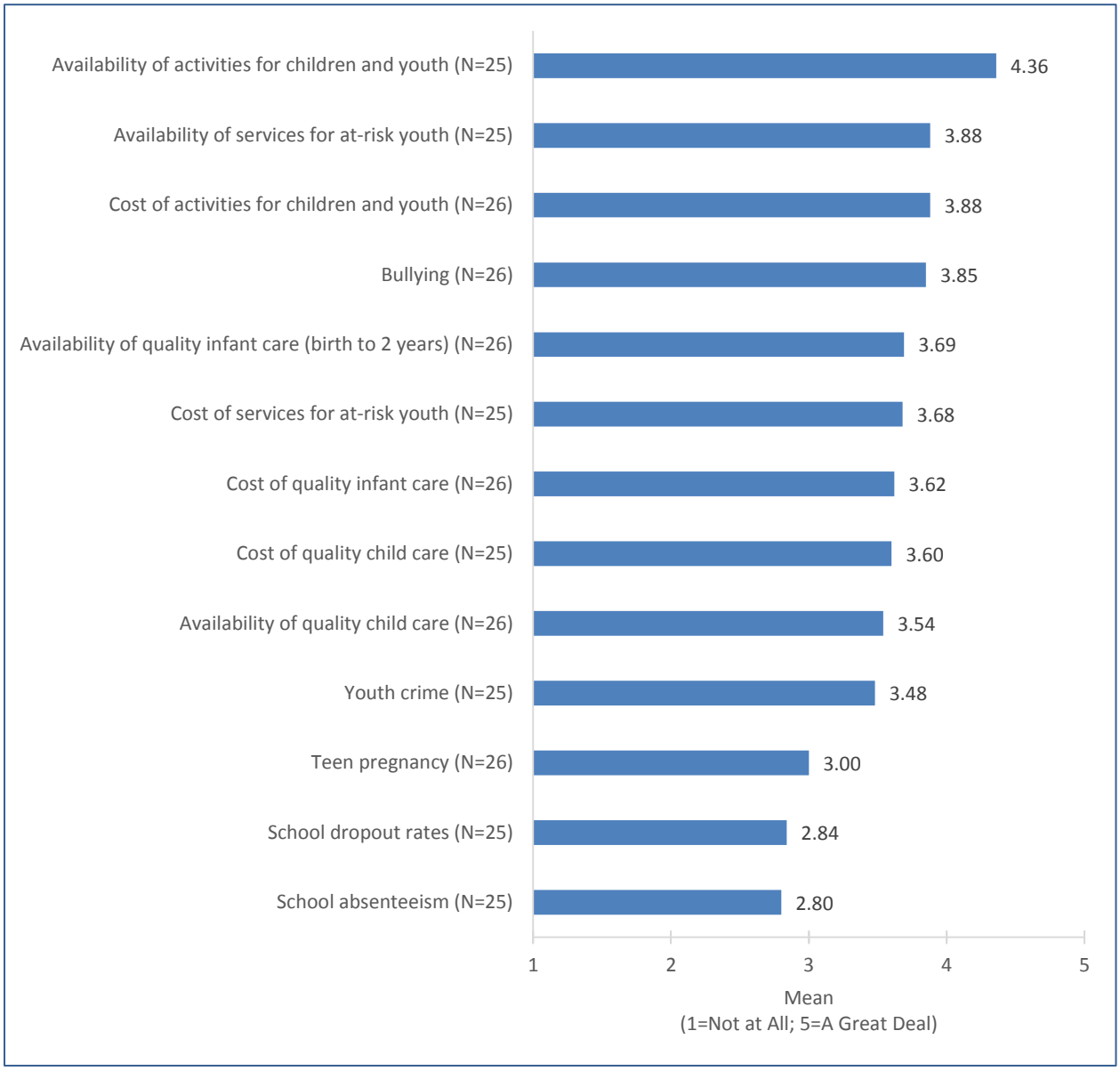


Figure 5. Level of concern with statements about the community regarding the AGING POPULATION

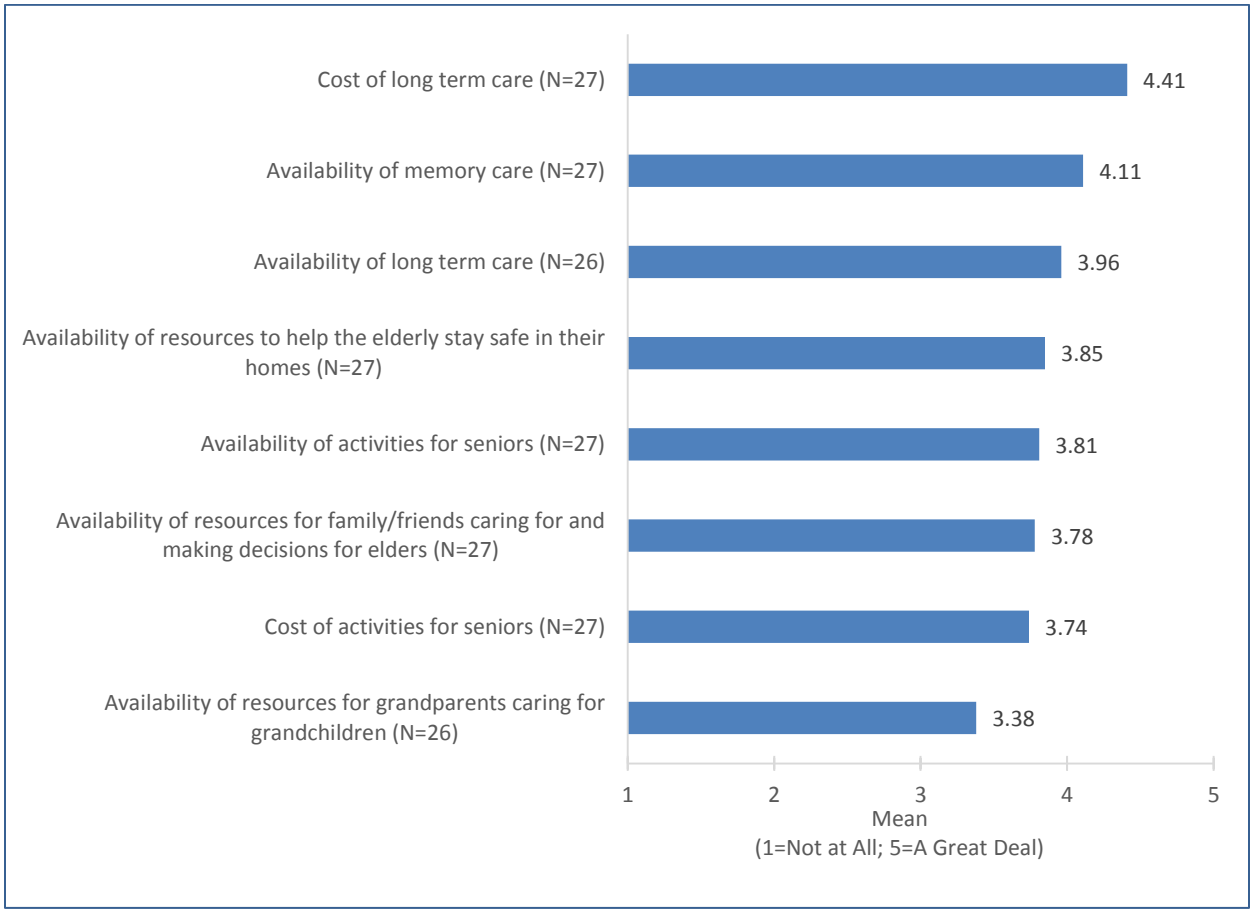


Figure 6. Level of concern with statements about the community regarding SAFETY

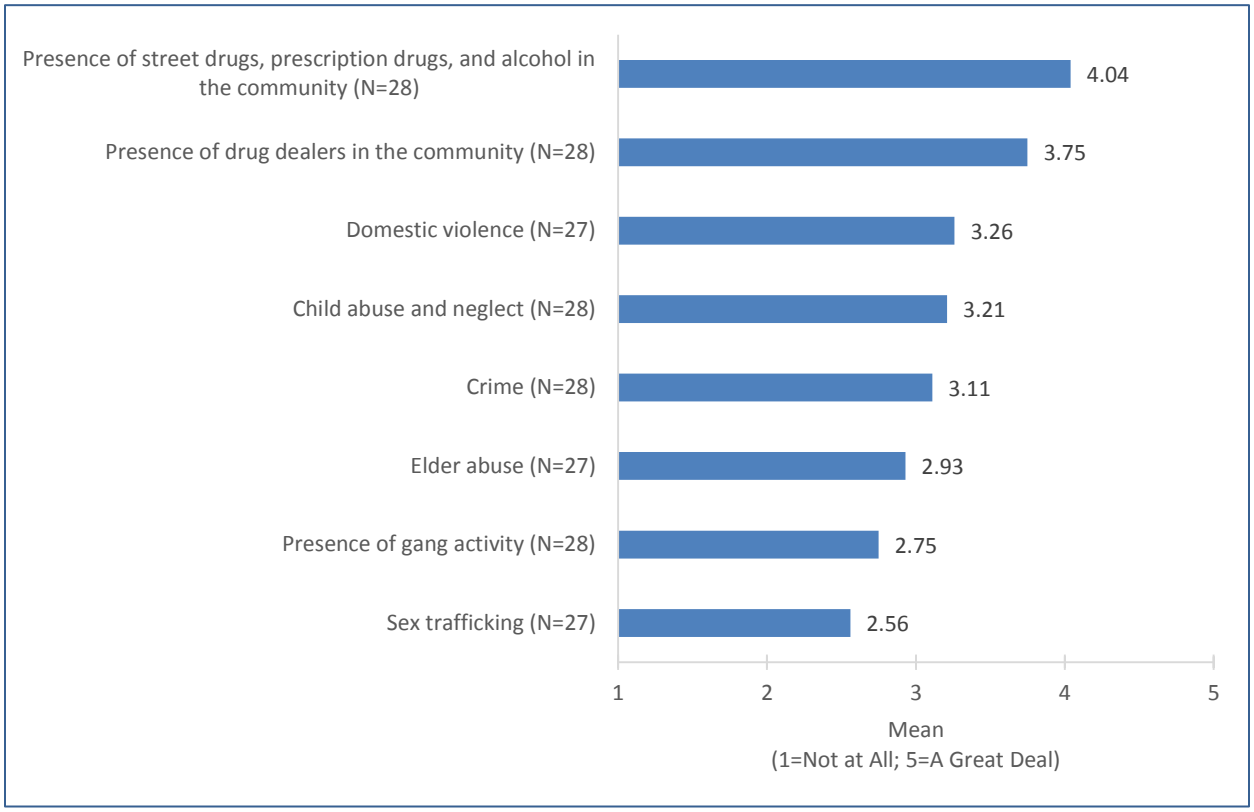


Figure 7. Level of concern with statements about the community regarding HEALTH CARE

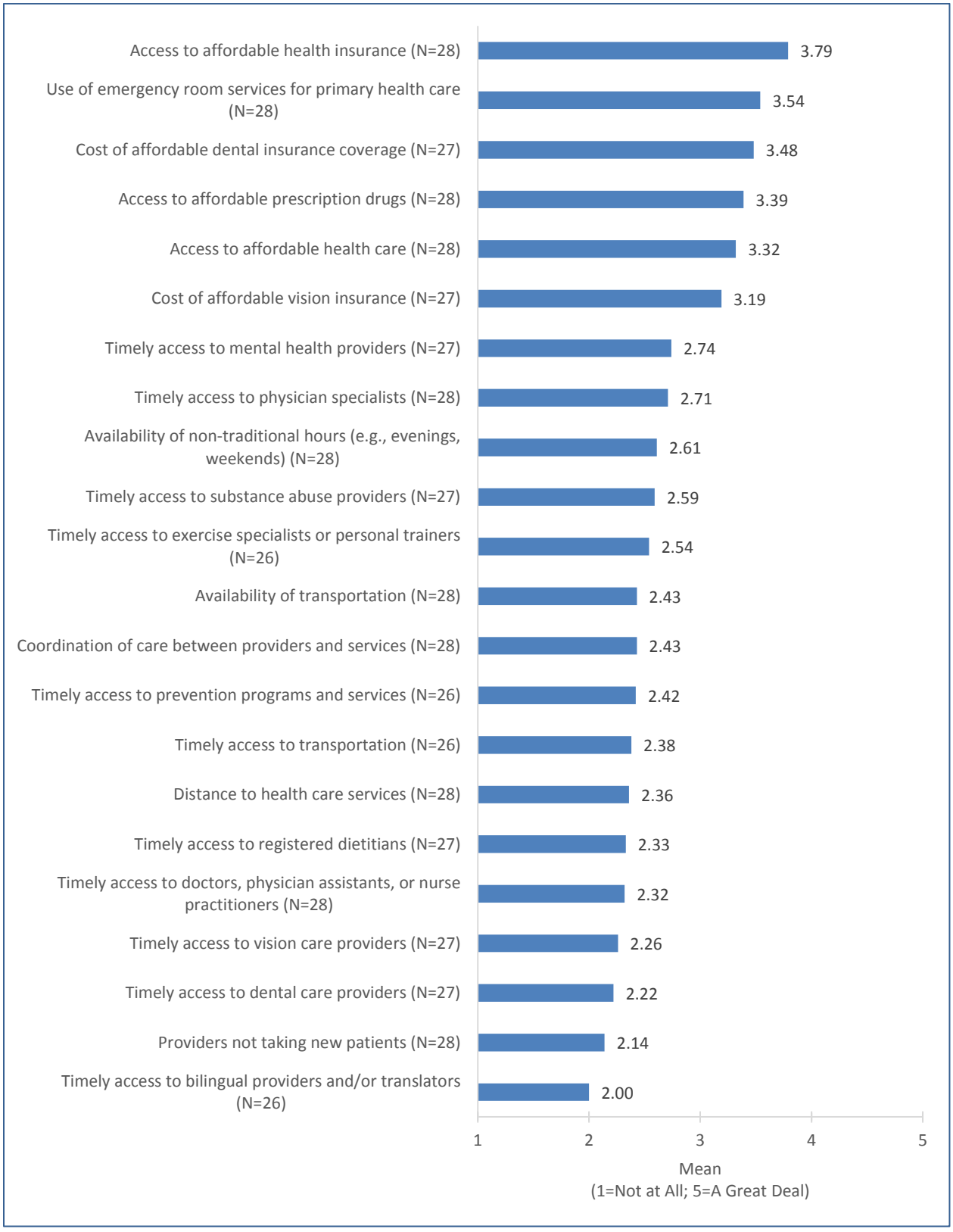


Figure 8. Level of concern with statements about the community regarding PHYSICAL AND MENTAL HEALTH

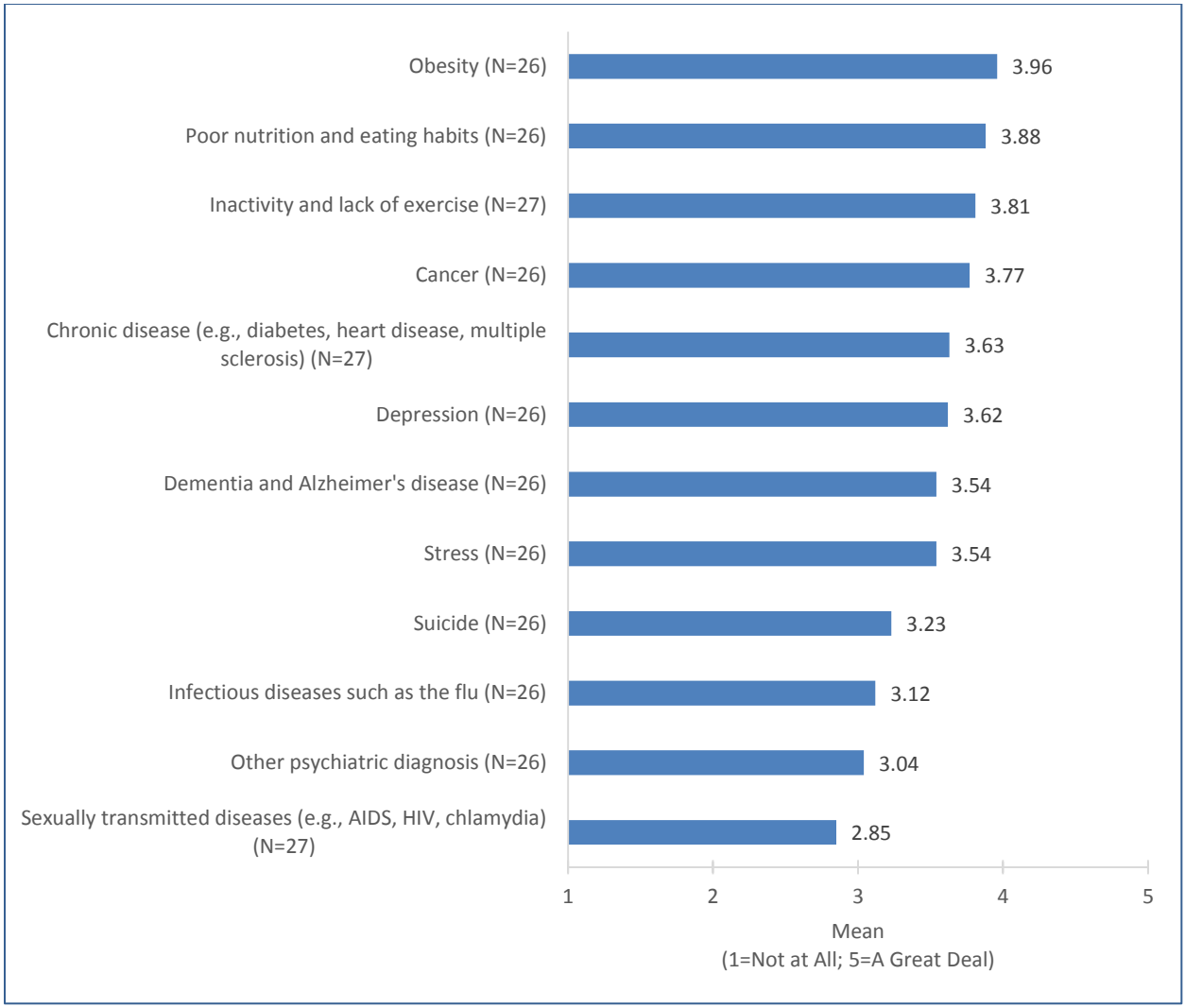
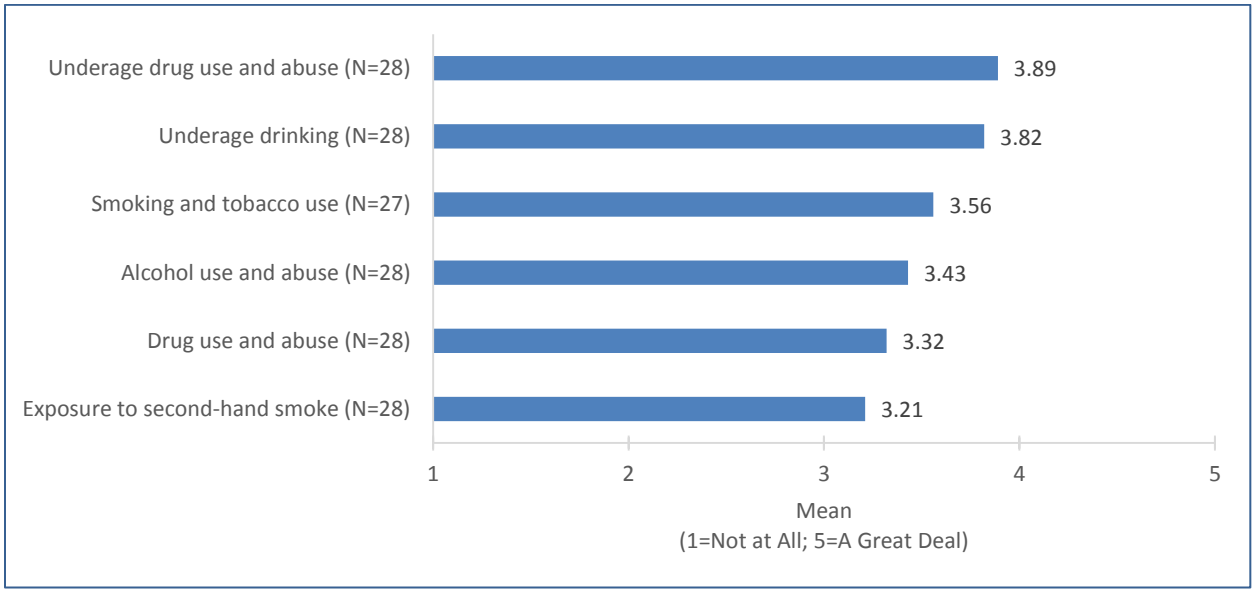
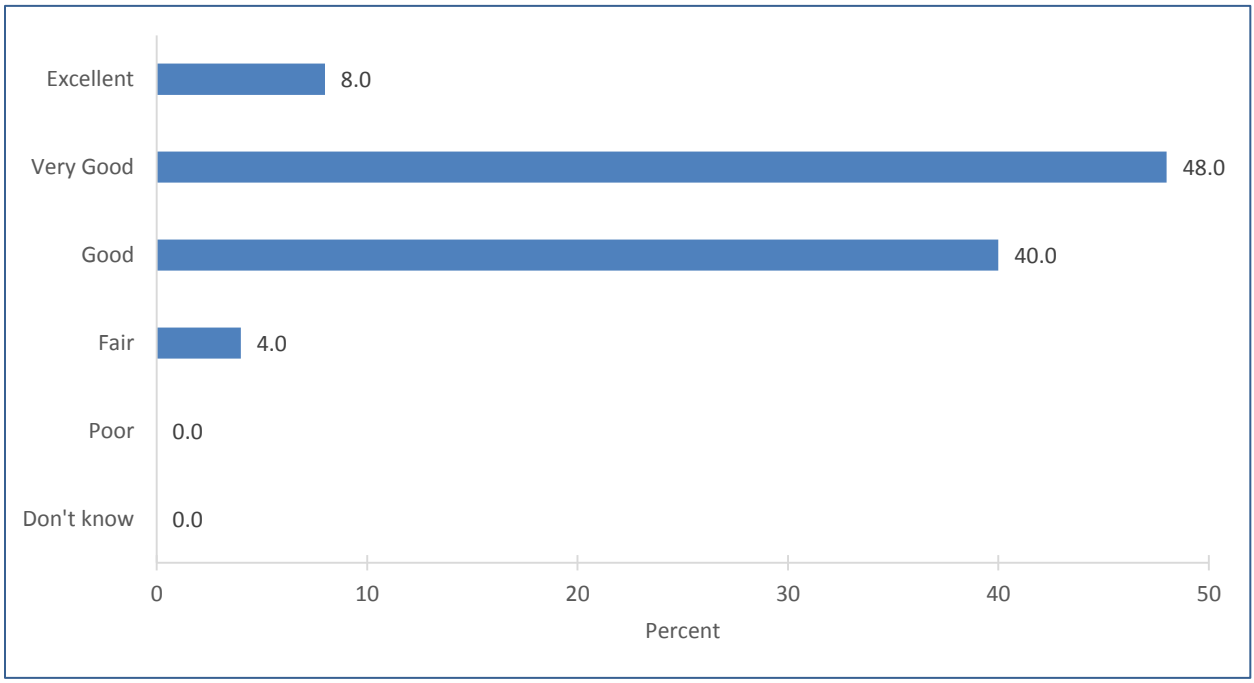


Figure 9. Level of concern with statements about the community regarding SUBSTANCE USE AND ABUSE



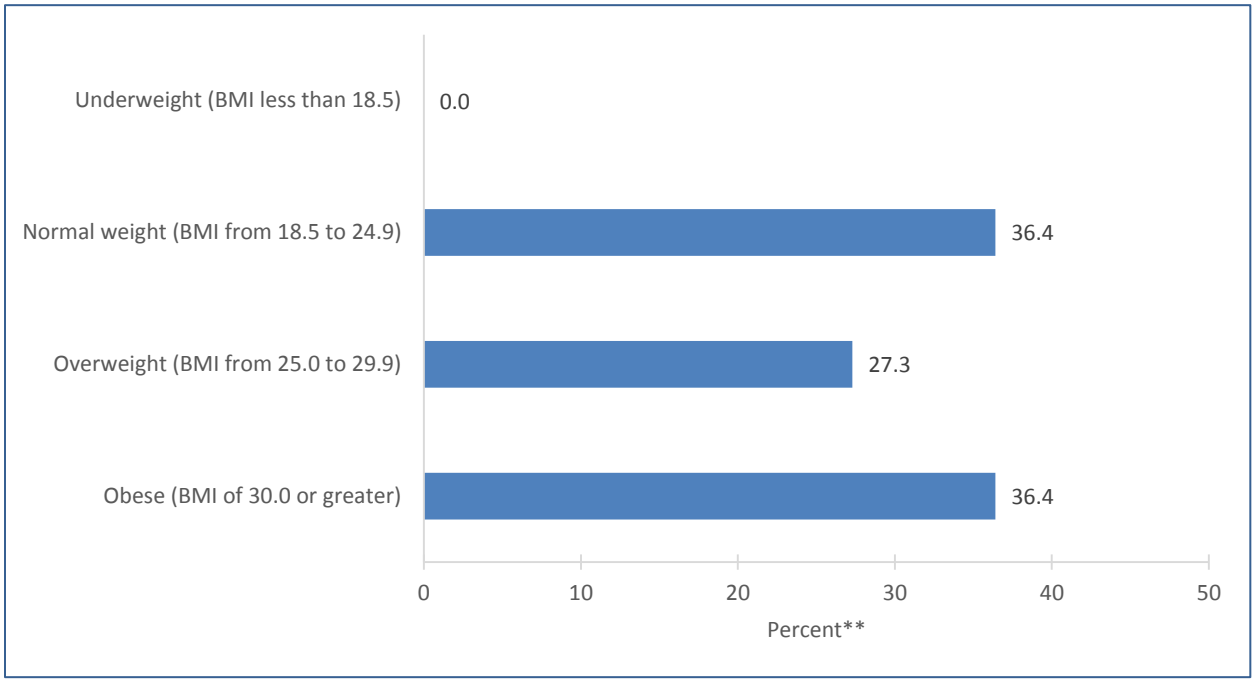
General Health

Figure 10. Respondents' rating of their health in general



N=25

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



N=22

*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/.

**Percentage do not total 100.0 due to rounding.

Figure 12. Number of servings of vegetables, fruit, and fruit juice that respondents had yesterday

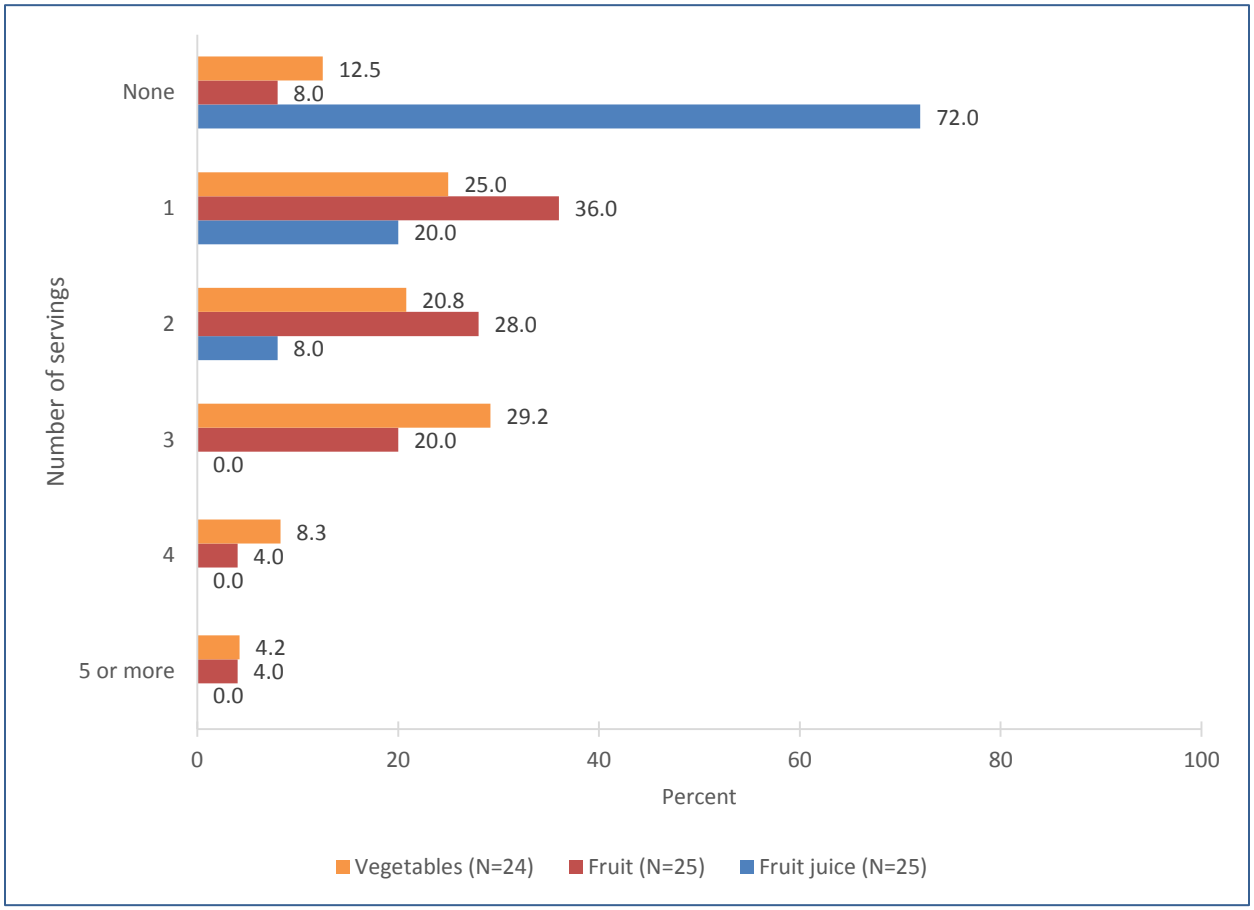
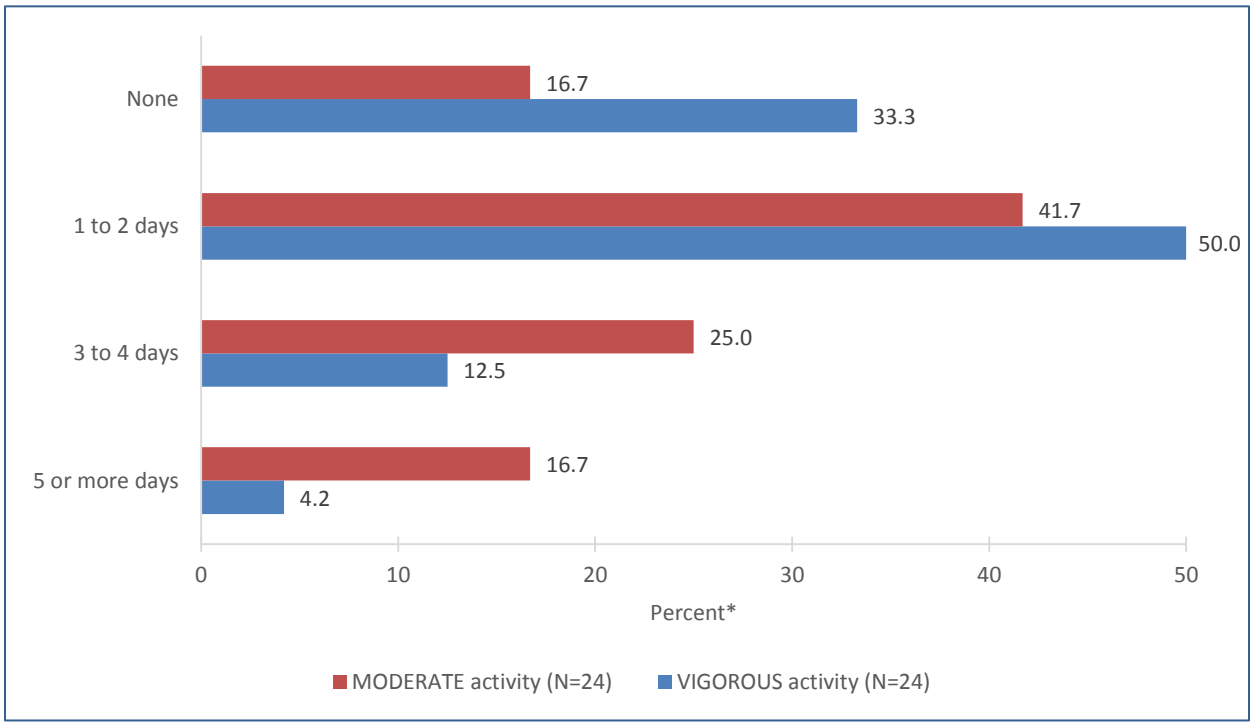


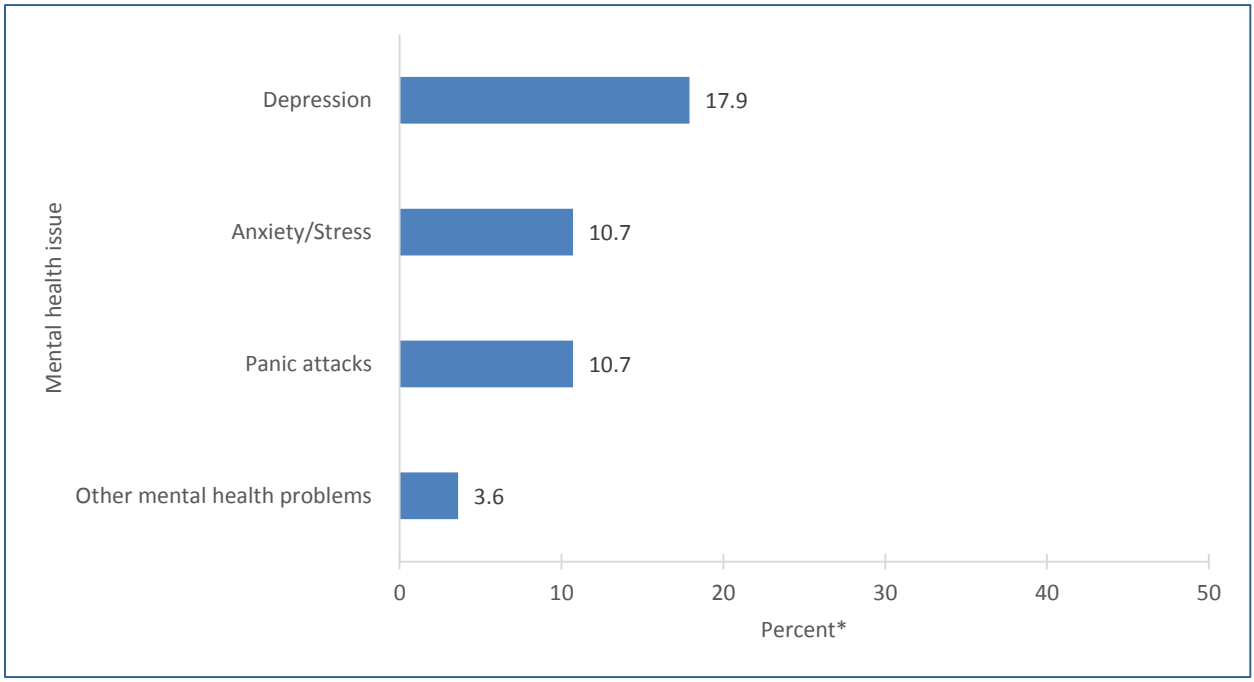
Figure 13. Number of days in an average week respondents engage in MODERATE and VIGOROUS activity



*Percentage may not total 100.0 due to rounding.

Mental Health

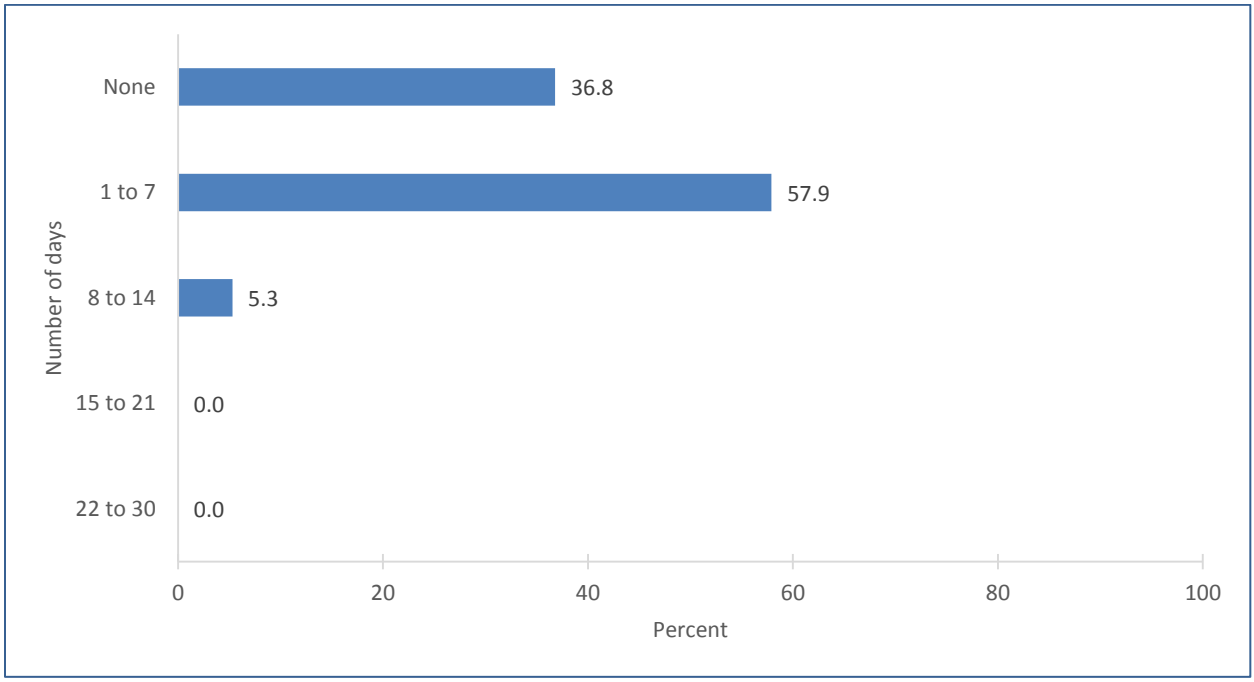
Figure 14. Percentage of respondents who have been told by a doctor or health professional that they have a mental health issue, by type of mental health issue



N=28

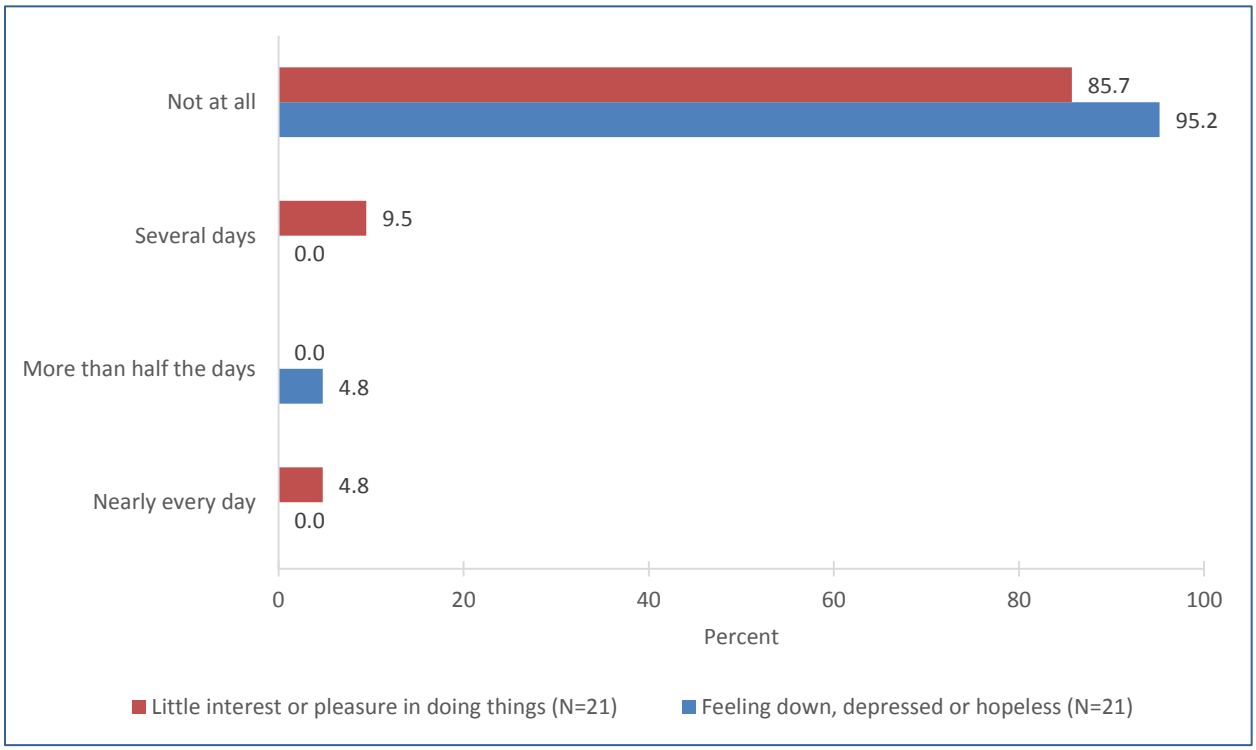
*Percentages do not total 100.0 due to multiple responses.

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



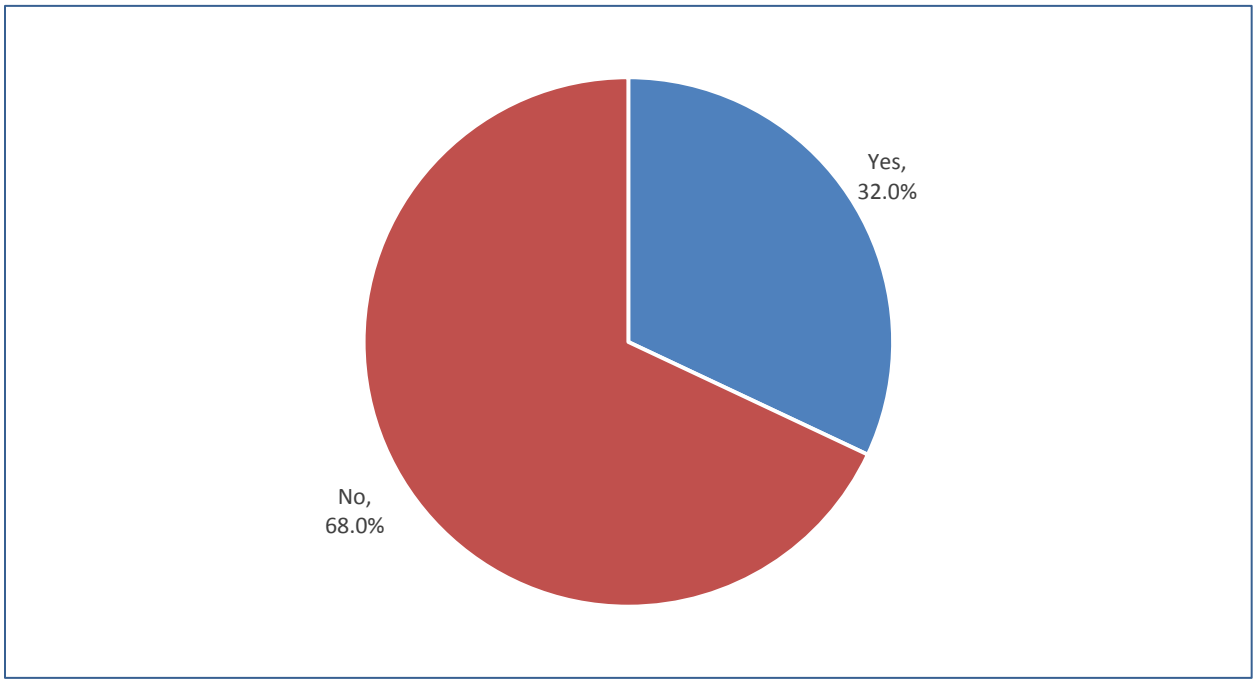
N=19

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



Tobacco Use

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



N=25

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

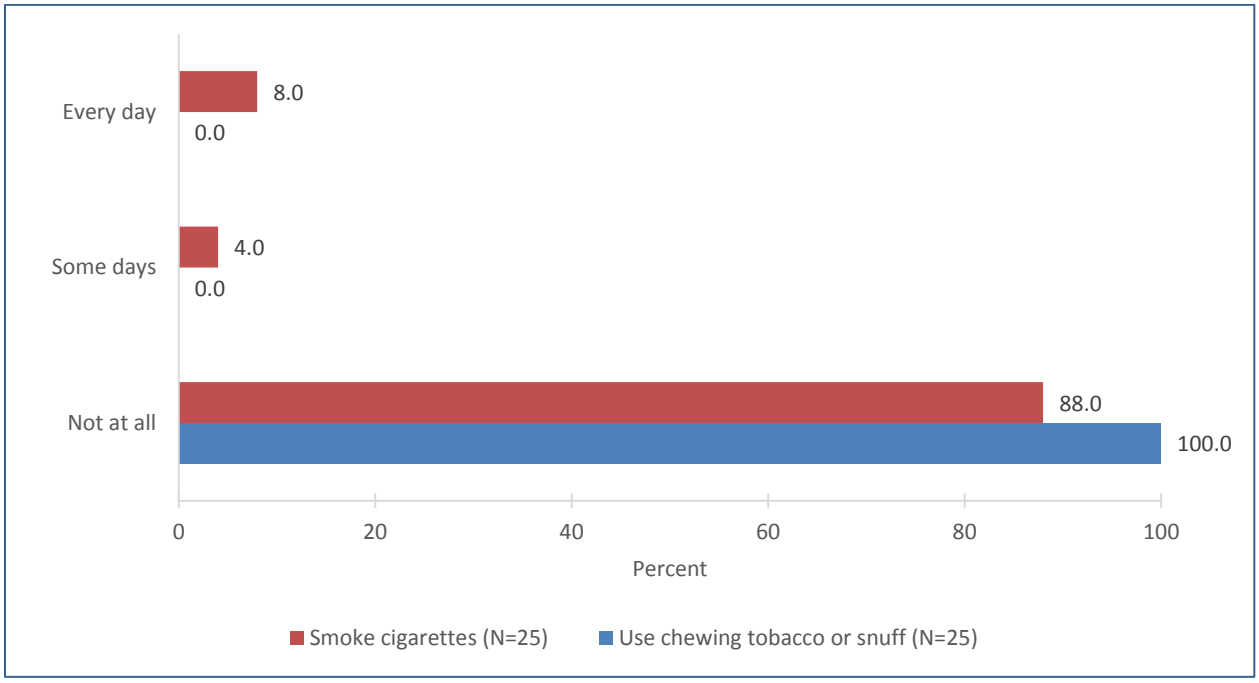
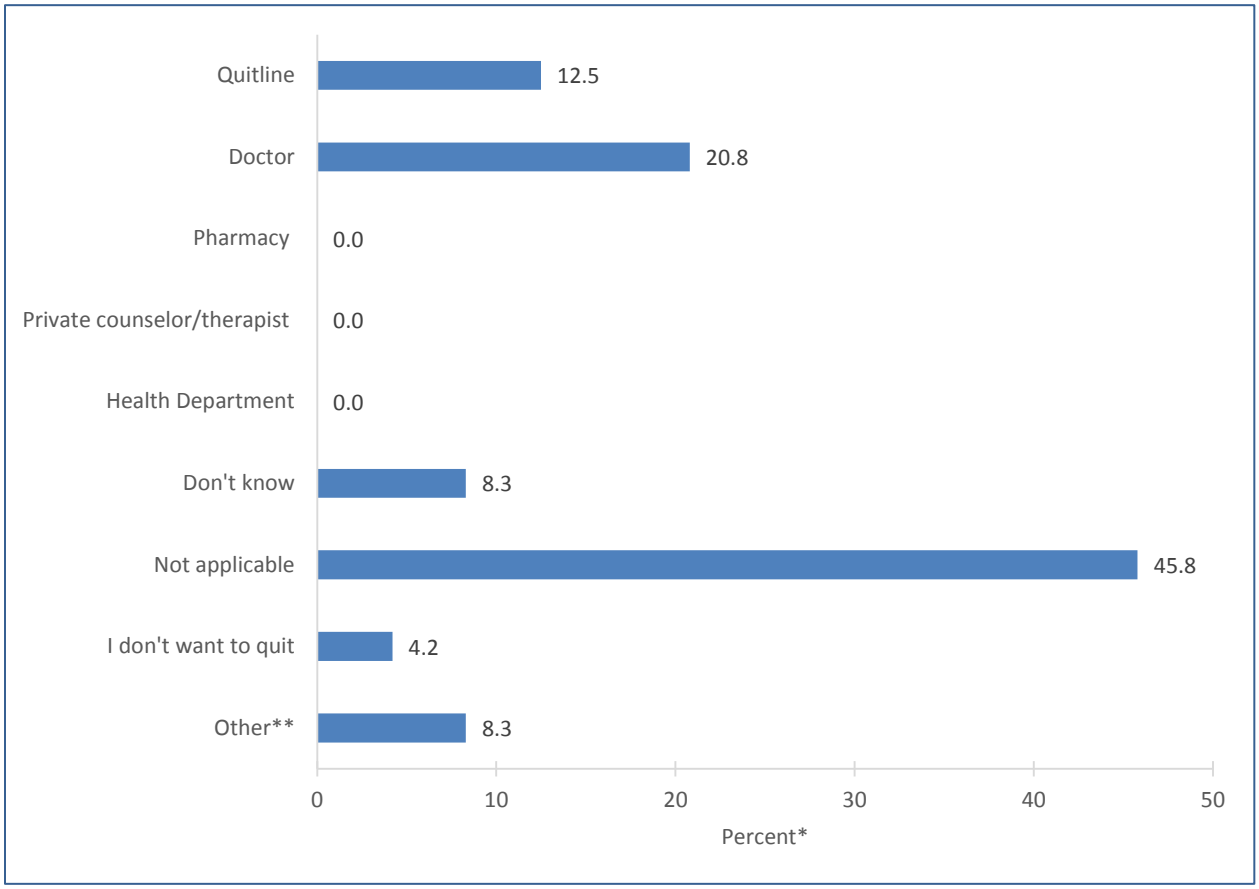


Figure 19. Location respondents would first go if they wanted help to quit using tobacco



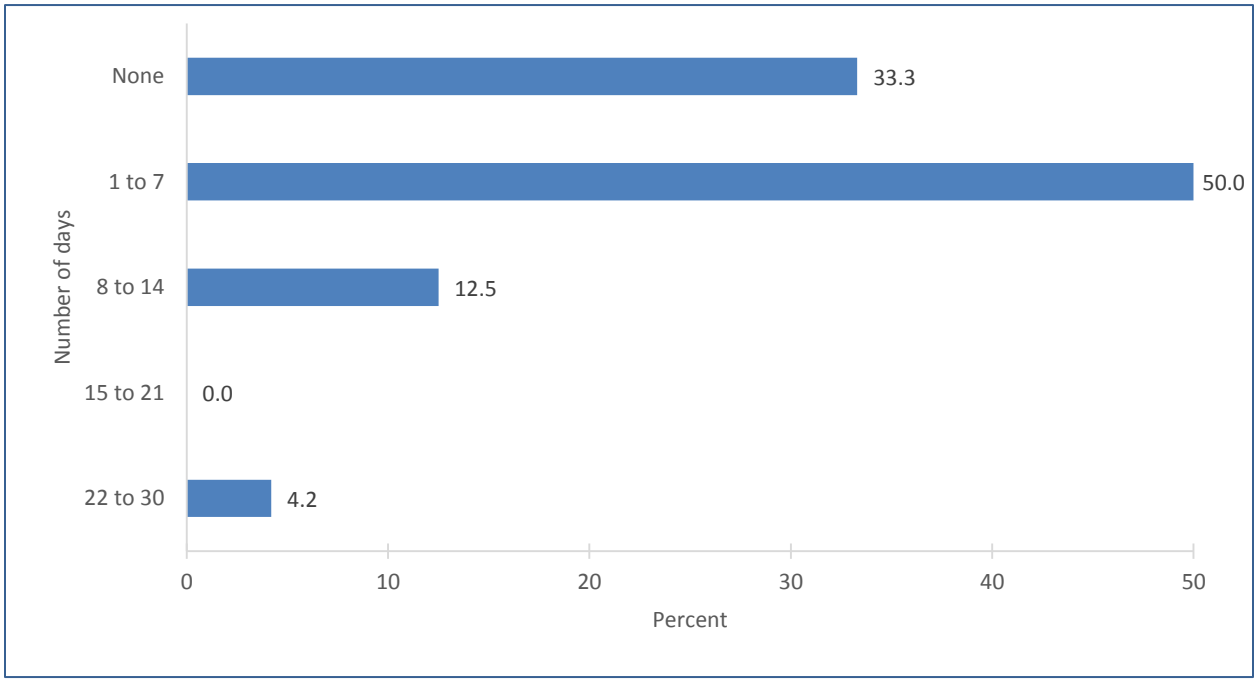
N=24

*Percentage do not total 100.0 due to rounding.

**Other responses include “Online” and “When you are ready to quit cold turkey, you quit”.

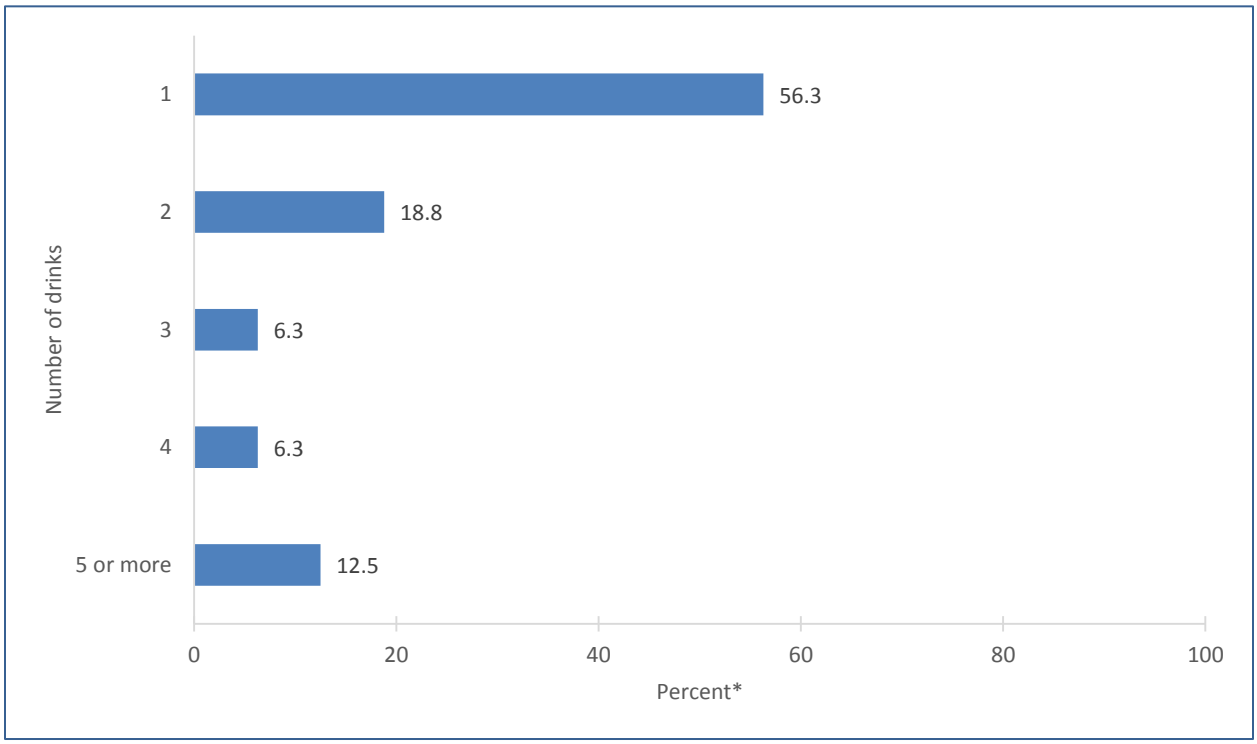
Alcohol Use and Prescription Drug/Non-prescription Drug Abuse

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



N=24

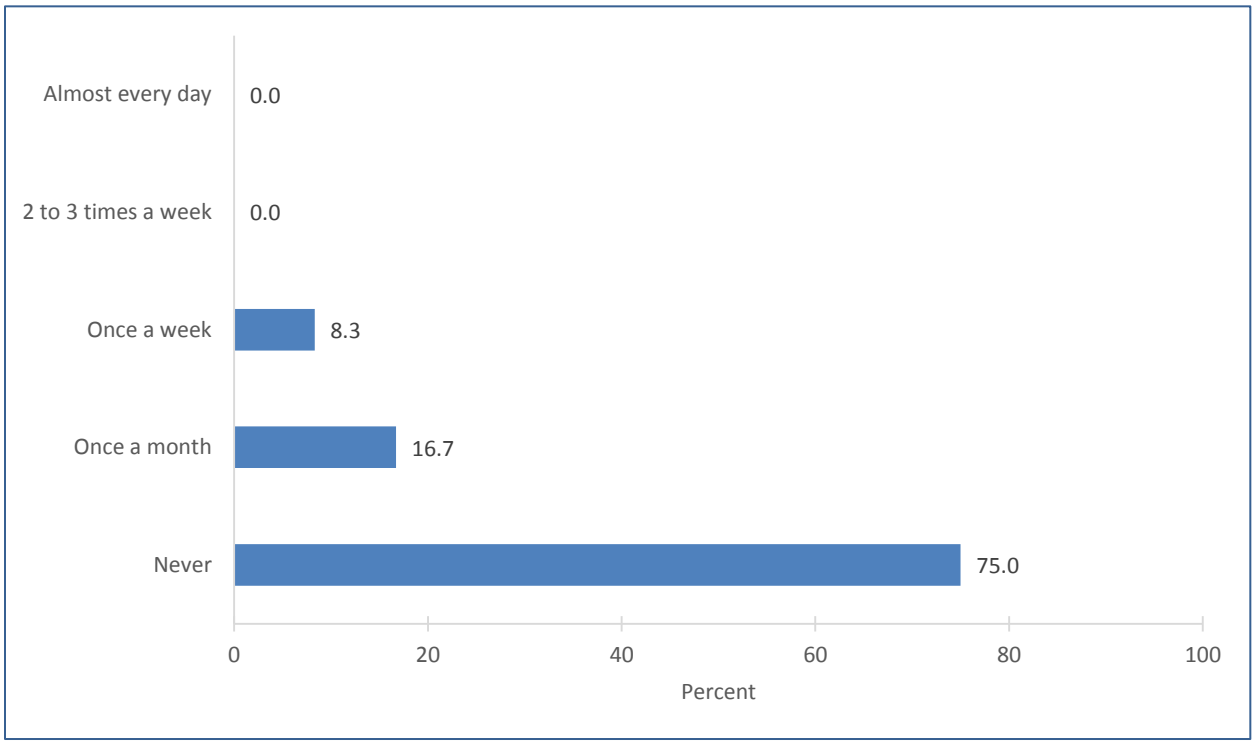
Figure 21. During the past month on days that respondents drank, average number of drinks per day respondents consumed



N=16

*Percentages do not total 100.0 due to rounding.

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=24

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

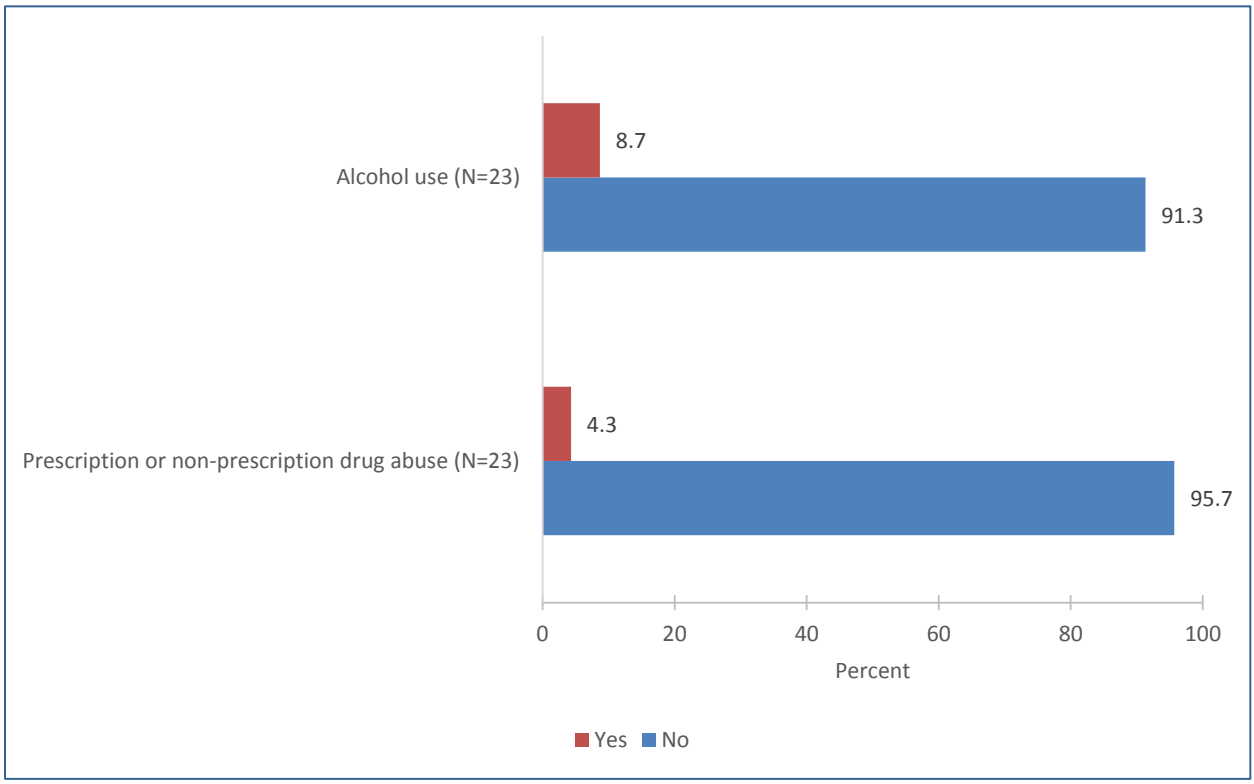


Figure 24. Of respondents who ever had a problem with alcohol use or prescription or non-prescription drug abuse, whether respondents got the help they needed

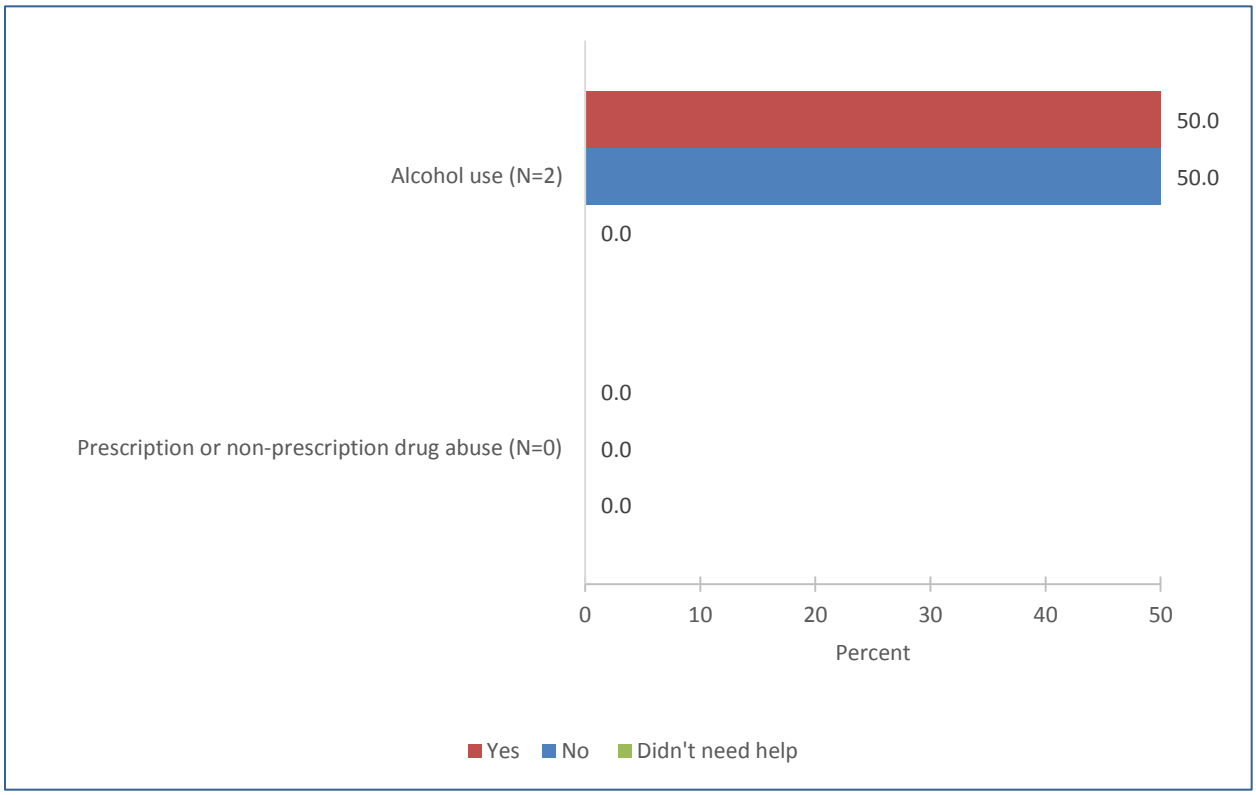
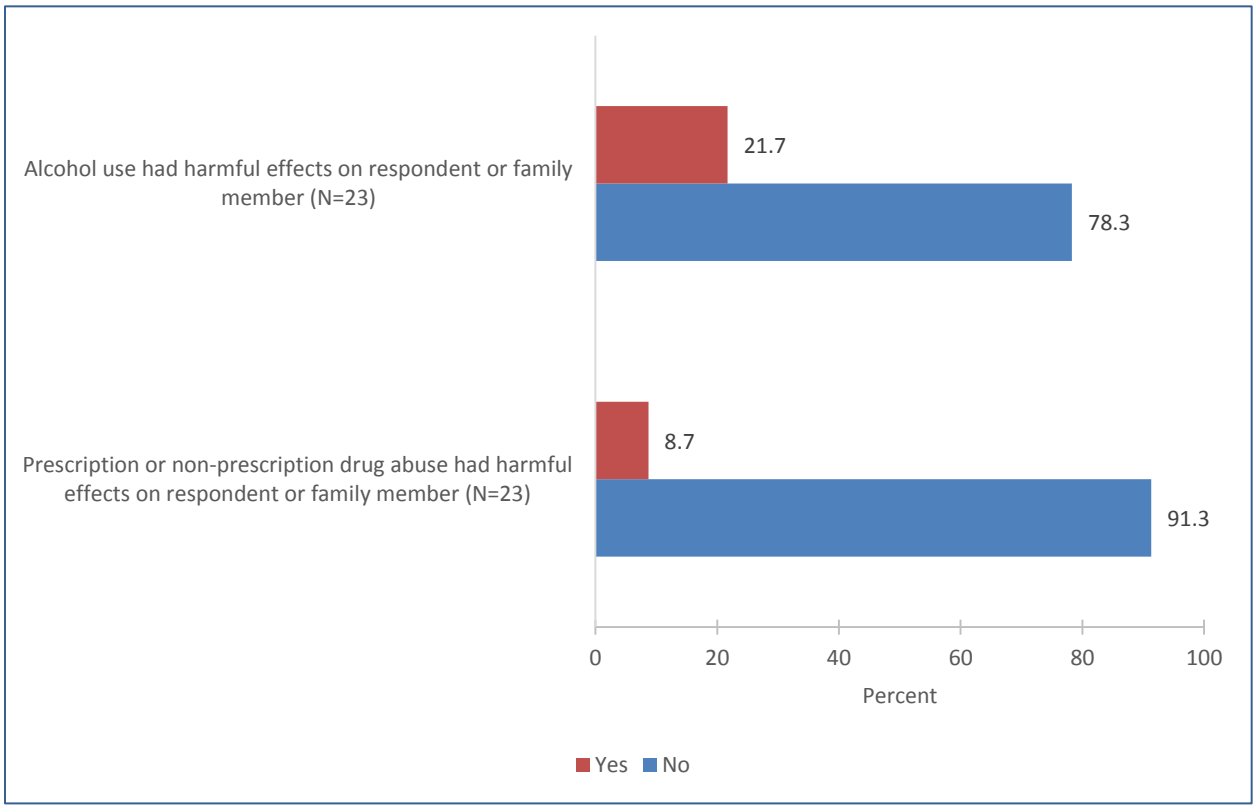


Figure 25. Whether alcohol use or prescription or non-prescription drug abuse has had harmful effects on respondents or a family member over the past two years



Preventive Health

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

Type of screening	Percent of respondents		
	Yes	No	Total
GENERAL SCREENINGS			
Blood pressure screening (N=23)	95.7	4.3	100.0
Blood sugar screening (N=23)	60.9	39.1	100.0
Bone density test (N=23)	13.0	87.0	100.0
Cardiovascular screening (N=23)	26.1	73.9	100.0
Cholesterol screening (N=23)	60.9	39.1	100.0
Dental screening and X-rays (N=23)	73.9	26.1	100.0
Flu shot (N=23)	87.0	13.0	100.0
Glaucoma test (N=23)	43.5	56.5	100.0
Hearing screening (N=23)	4.3	95.7	100.0
Immunizations (N=23)	30.4	69.6	100.0
Pelvic exam (N=16 Females)	68.8	31.3	100.0
STD (N=23)	8.7	91.3	100.0
Vascular screening (N=23)	4.3	95.7	100.0
CANCER SCREENINGS			
Breast cancer screening (N=16 Females)	75.0	25.0	100.0
Cervical cancer screening (N=16 Females)	68.8	31.3	100.0
Colorectal cancer screening (N=23)	21.7	78.3	100.0
Prostate cancer screening (N=7 Males)	14.3	85.7	100.0
Skin cancer screening (N=23)	26.1	73.9	100.0

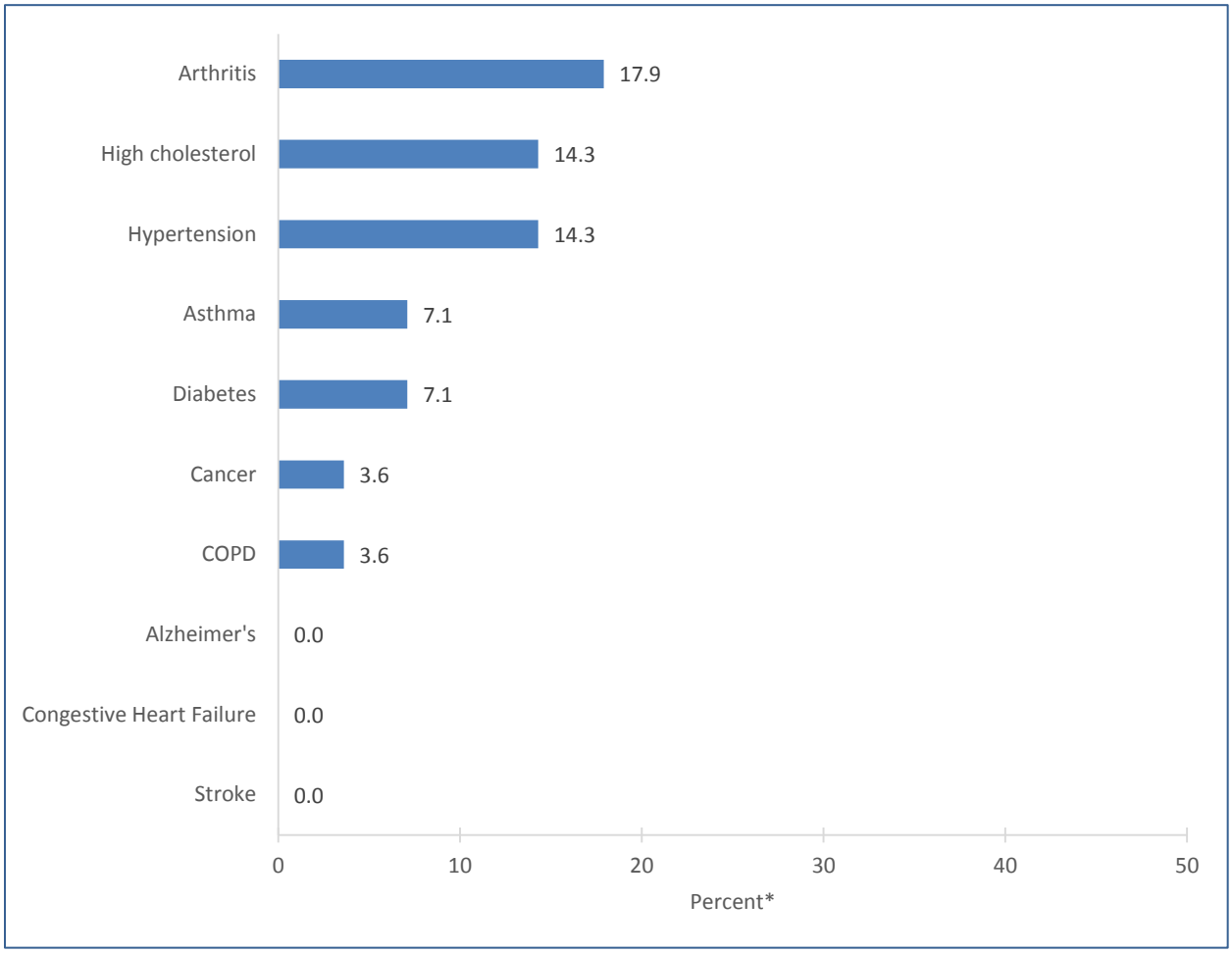
Table 2. Of respondents who have not had preventive screenings in the past year, reasons why they have not, by type of screening

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
GENERAL SCREENINGS							
Blood pressure screening (N=1)	0.0	0.0	0.0	0.0	100.0	0.0	0.0
Blood sugar screening (N=9)	44.4	33.3	0.0	0.0	11.1	0.0	0.0
Bone density test (N=20)	45.0	40.0	10.0	0.0	0.0	0.0	0.0
Cardiovascular screening (N=17)	35.3	41.2	5.9	0.0	0.0	5.9	0.0
Cholesterol screening (N=9)	22.2	55.6	0.0	0.0	0.0	11.1	0.0
Dental screening and	0.0	0.0	16.7	0.0	33.3	16.7	16.7

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
X-rays (N=6)							
Flu shot (N=3)	66.7	0.0	0.0	0.0	0.0	0.0	33.3
Glaucoma test (N=13)	38.5	15.4	0.0	0.0	0.0	0.0	23.1
Hearing screening (N=22)	63.6	18.2	0.0	0.0	0.0	0.0	4.5
Immunizations (N=16)	56.3	31.3	0.0	0.0	0.0	0.0	0.0
Pelvic exam (N=5 Females)	60.0	0.0	20.0	0.0	0.0	0.0	20.0
STD (N=21)	66.7	9.5	0.0	0.0	0.0	0.0	0.0
Vascular screening (N=22)	36.4	27.3	4.5	0.0	4.5	4.5	4.5
CANCER SCREENINGS							
Breast cancer screening (N=4 Females)	25.0	0.0	25.0	0.0	0.0	0.0	75.0
Cervical cancer screening (N=5 Females)	60.0	0.0	20.0	0.0	0.0	0.0	40.0
Colorectal cancer screening (N=18)	72.2	11.1	5.6	11.1	0.0	0.0	5.6
Prostate cancer screening (N=6 Males)	50.0	50.0	0.0	0.0	0.0	0.0	0.0
Skin cancer screening (N=17)	41.2	29.4	0.0	0.0	0.0	5.9	23.5

*Percentages may not total 100.0 due to multiple responses.

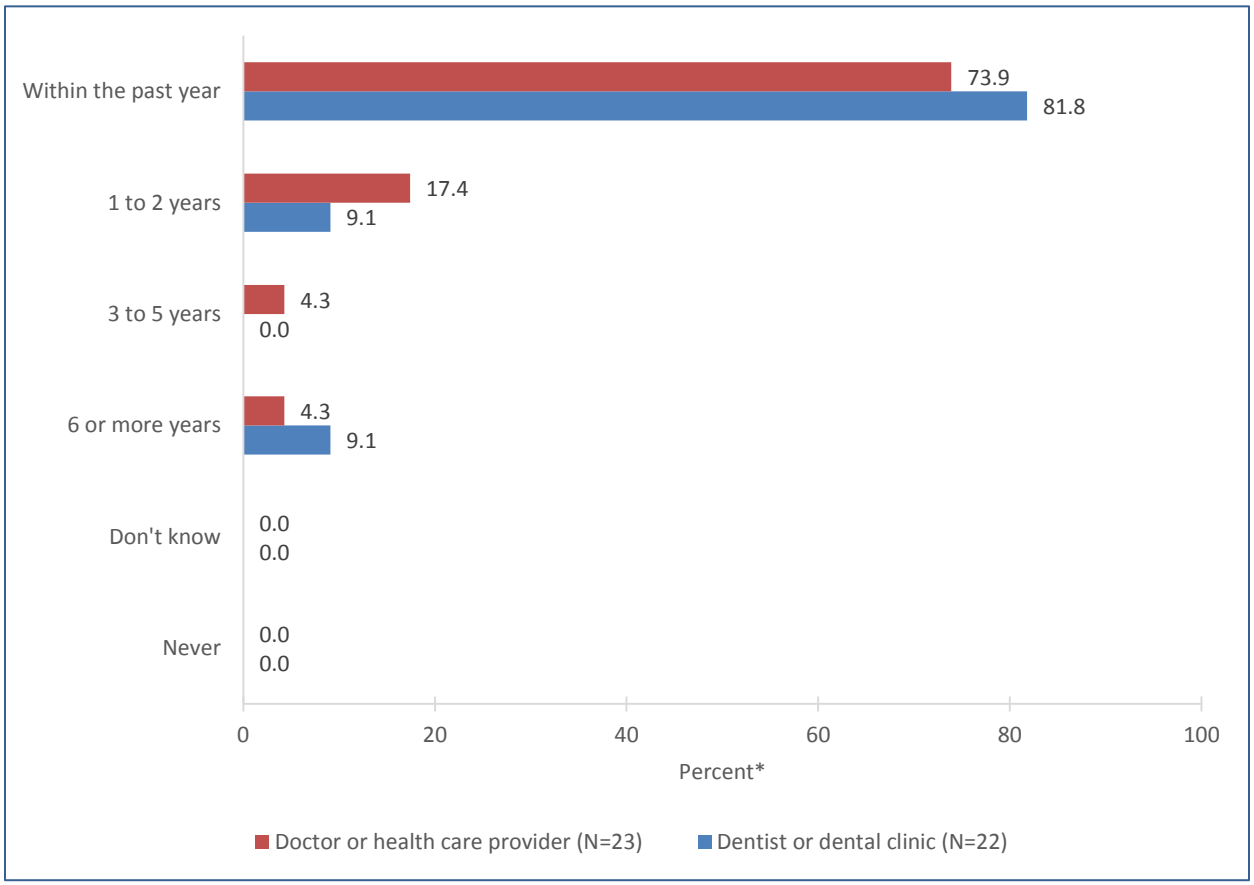
Figure 26. Whether respondents have any of the following chronic diseases



N=28

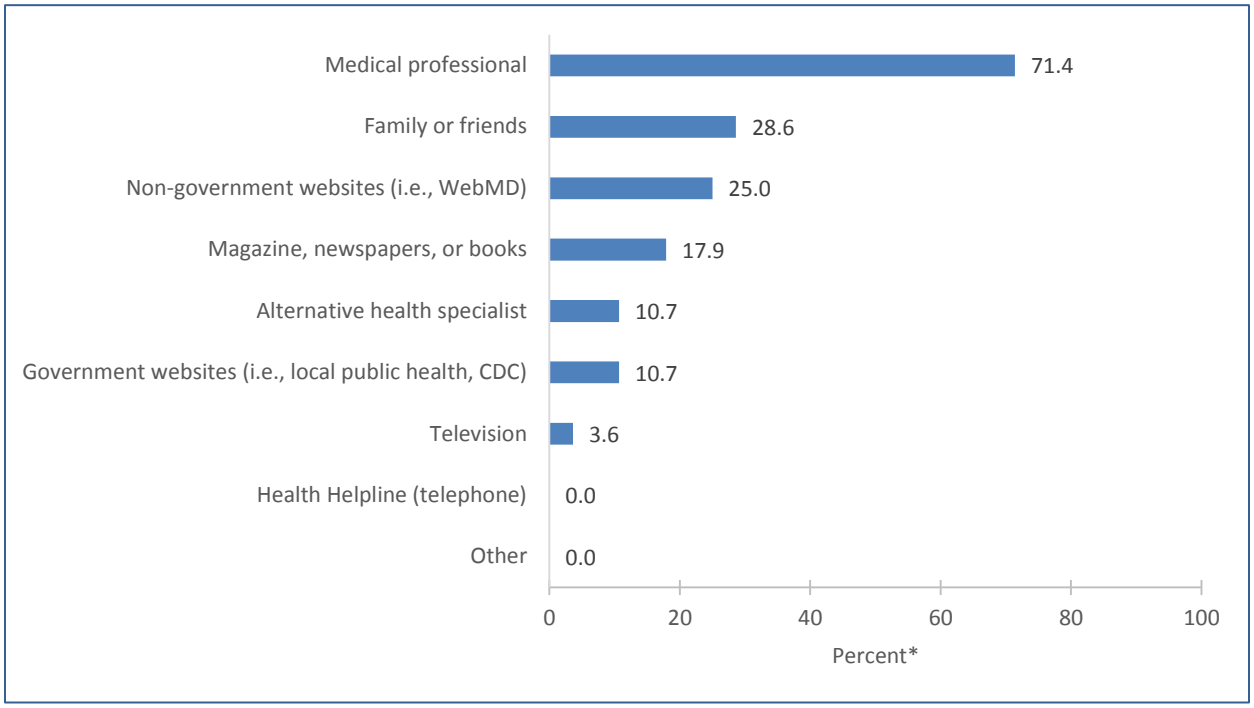
*Percentages do not total 100.0 due to multiple responses.

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



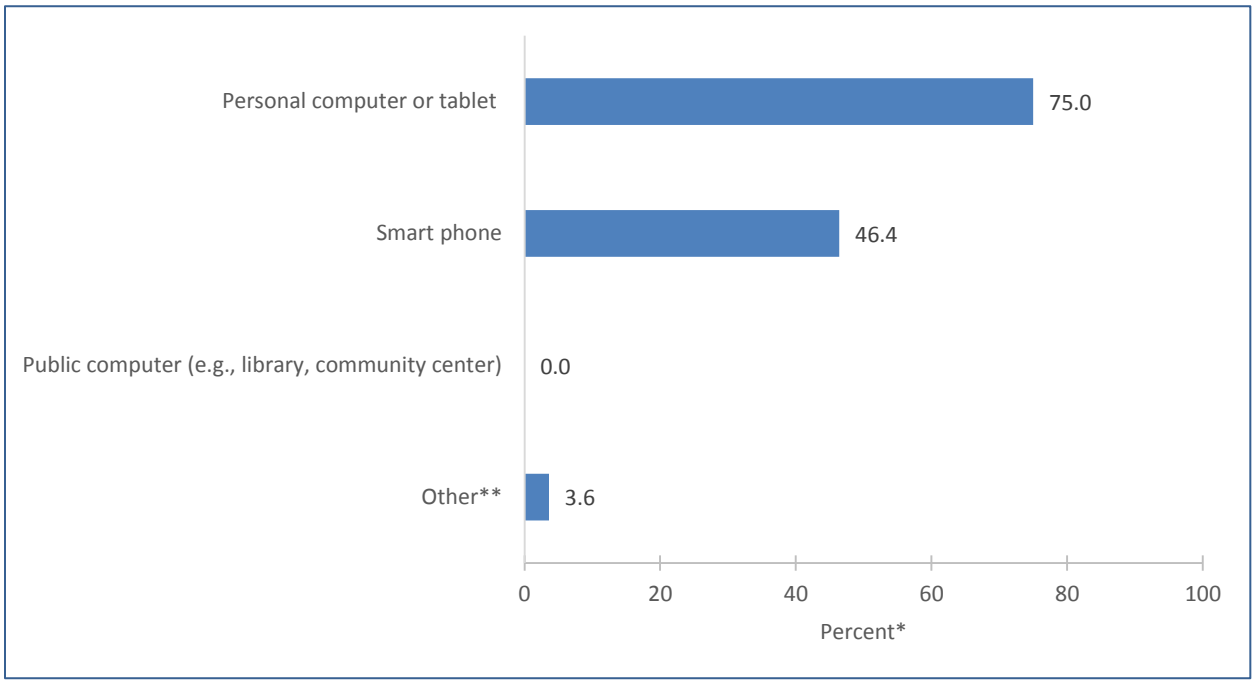
*Percentages may not total 100.0 due to rounding.

Figure 28. Where respondents get most of their health information



N=28 *Percentages do not total 100.0 due to multiple responses.

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

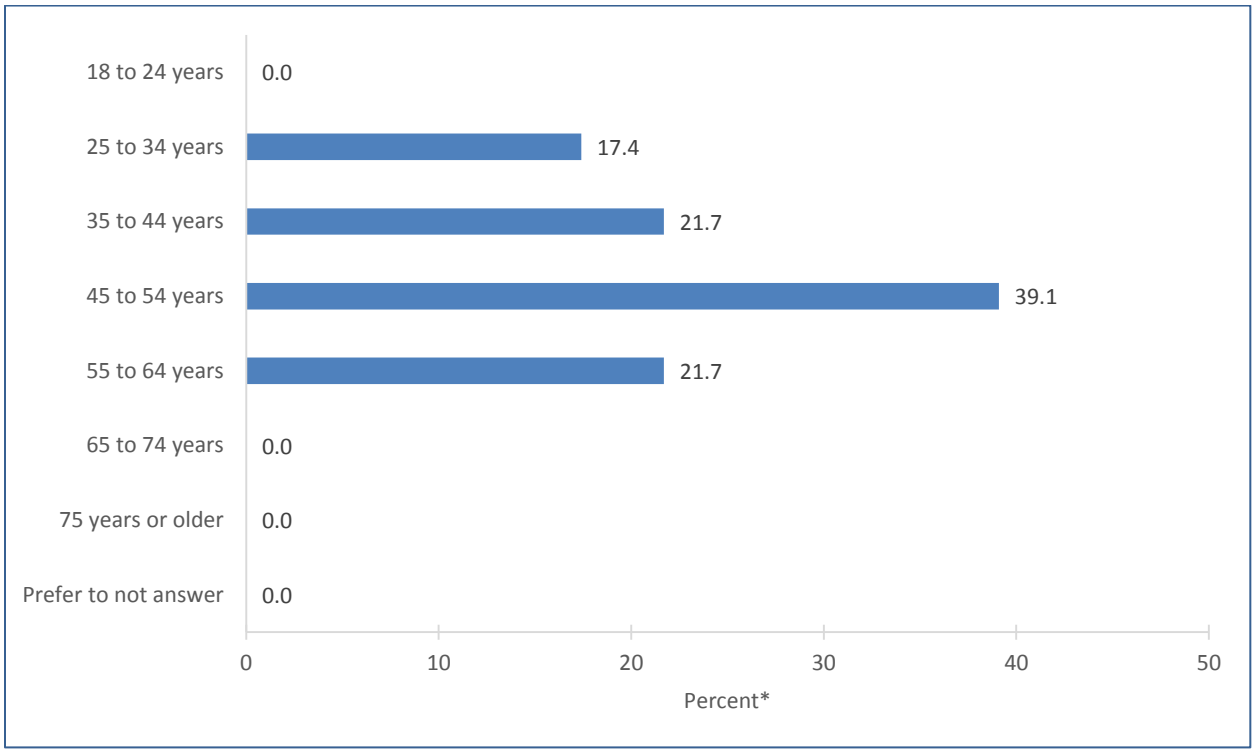


N=28 *Percentages do not total 100.0 due to multiple responses.

**Other response is “At work”.

Demographic Information

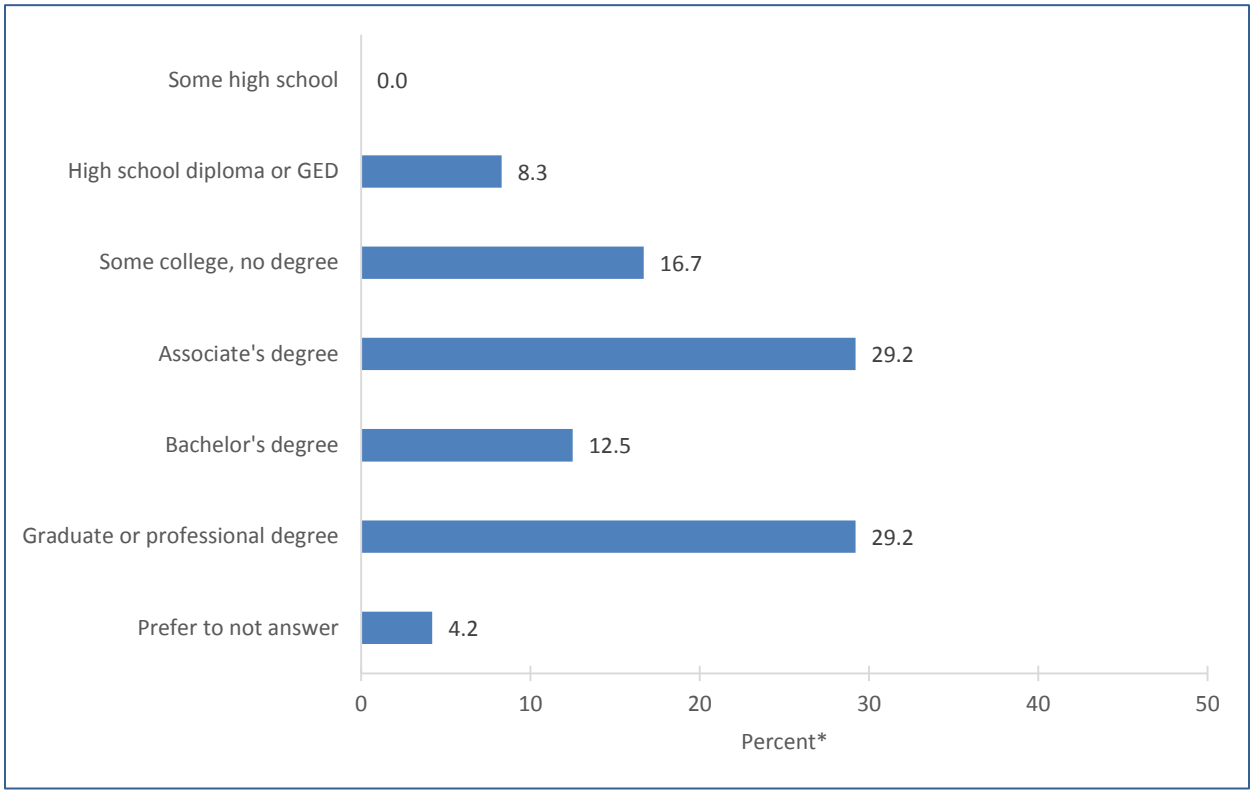
Figure 30. Age of respondents



N=23

*Percentages do not total 100.0 due to rounding.

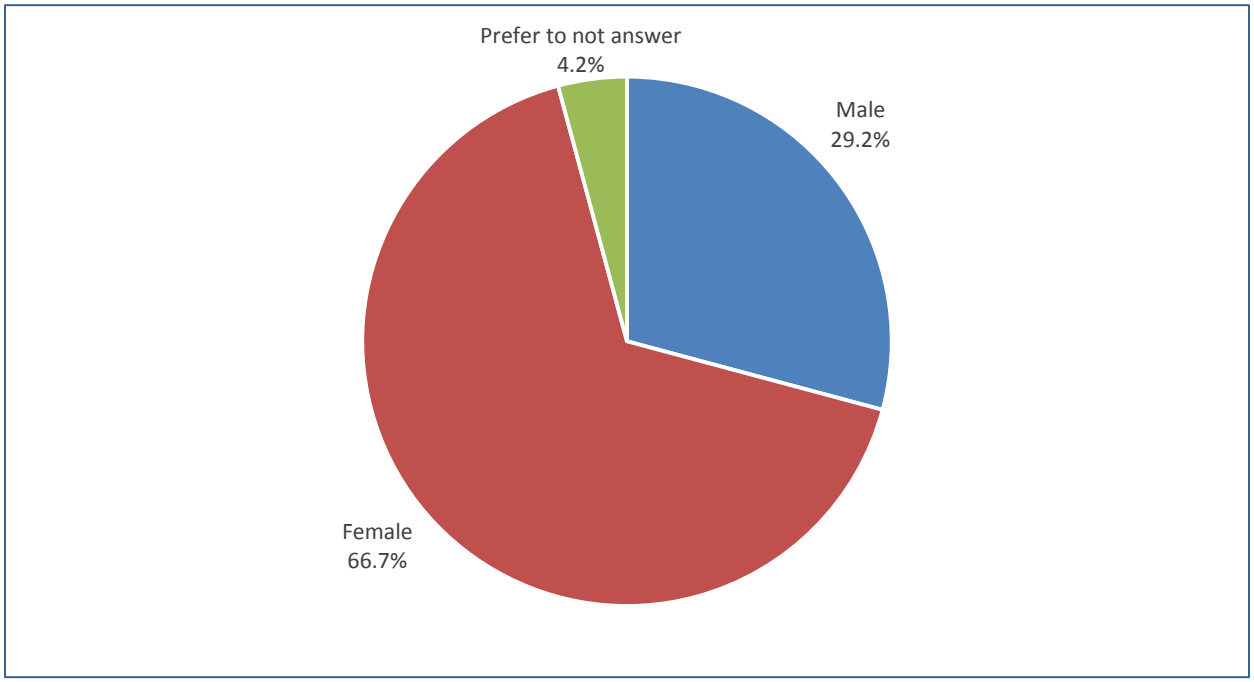
Figure 31. Highest level of education of respondents



N=24

*Percentages do not total 100.0 due to rounding.

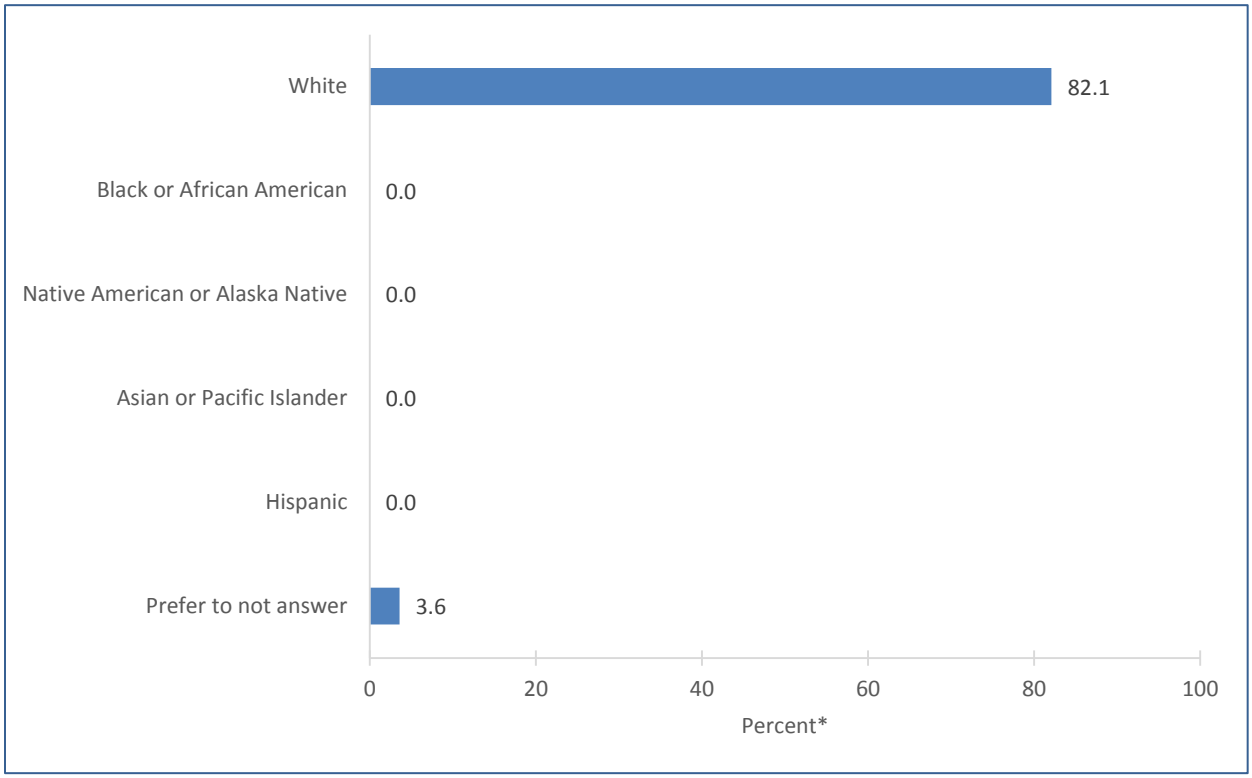
Figure 32. Gender of respondents*



N=24

*Percentages do not total 100.0 due to rounding.

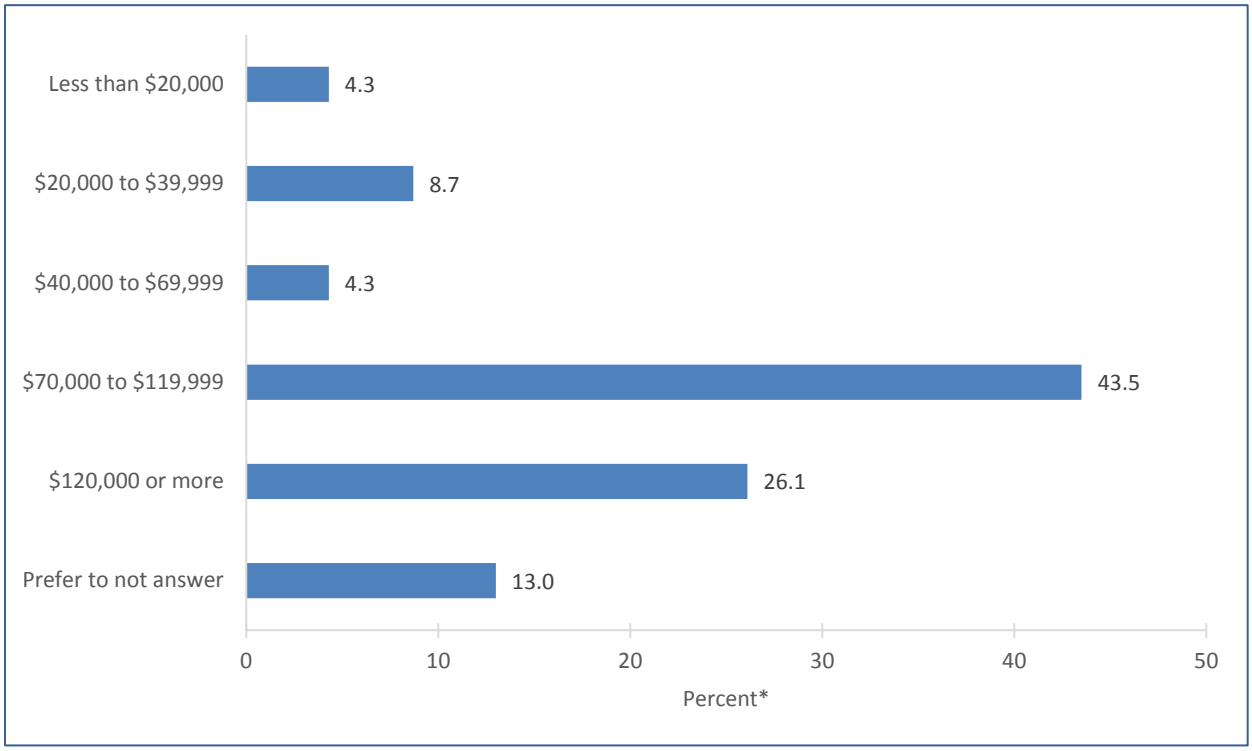
Figure 33. Race and ethnicity of respondents



N=28

*Percentages do not total 100.0 due to multiple responses.

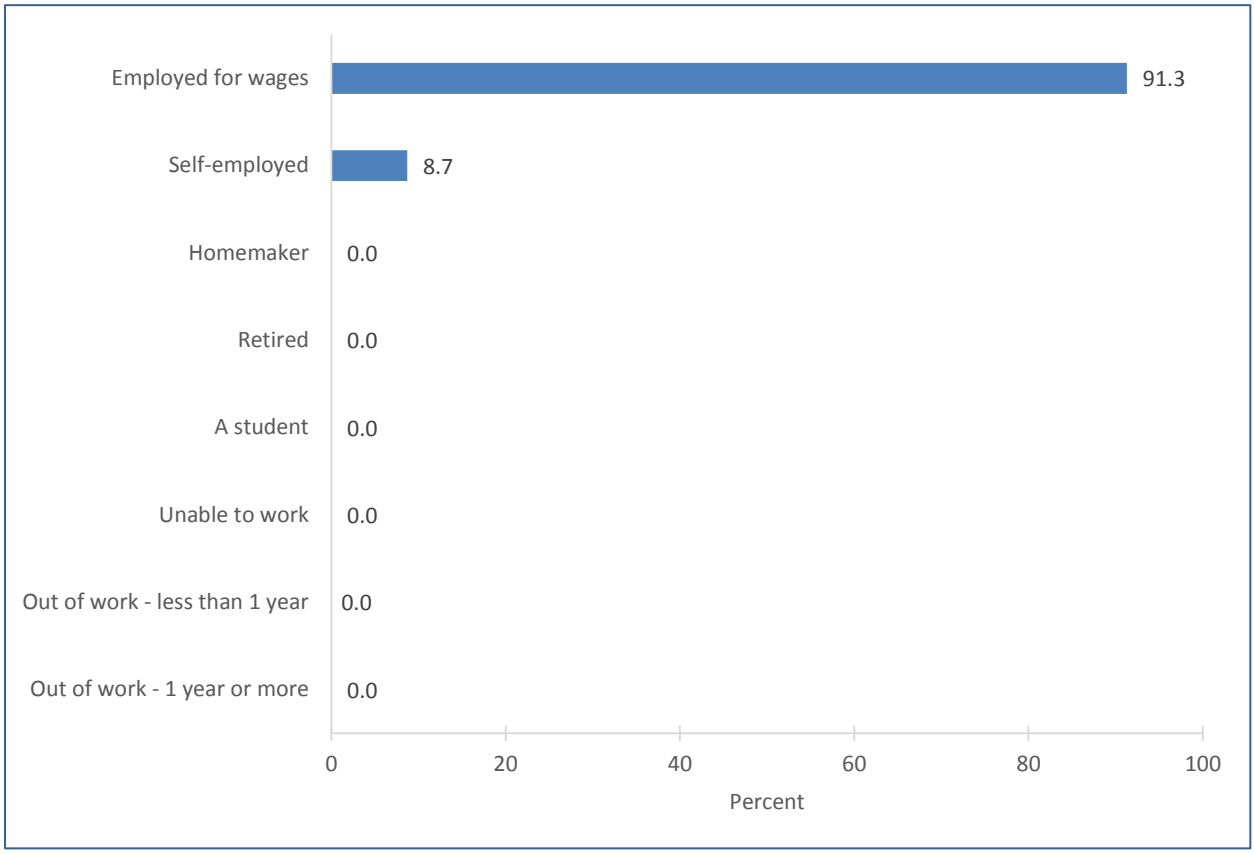
Figure 34. Annual household income of respondents



N=23

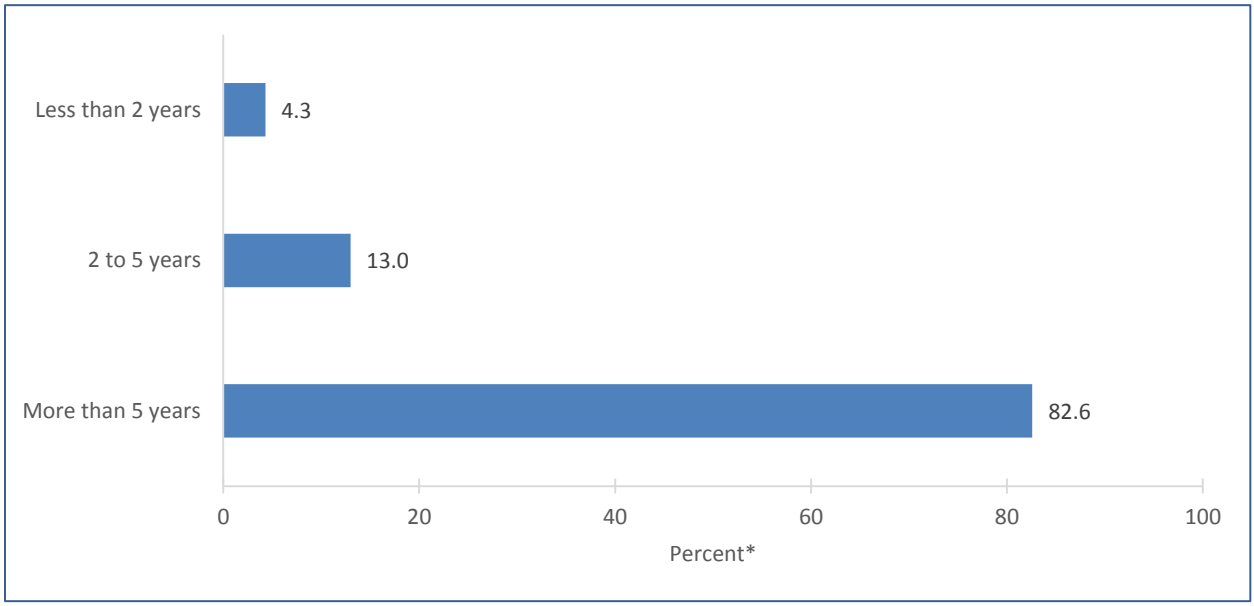
*Percentages do not total 100.0 due to rounding.

Figure 35. Employment status of respondents



N=23

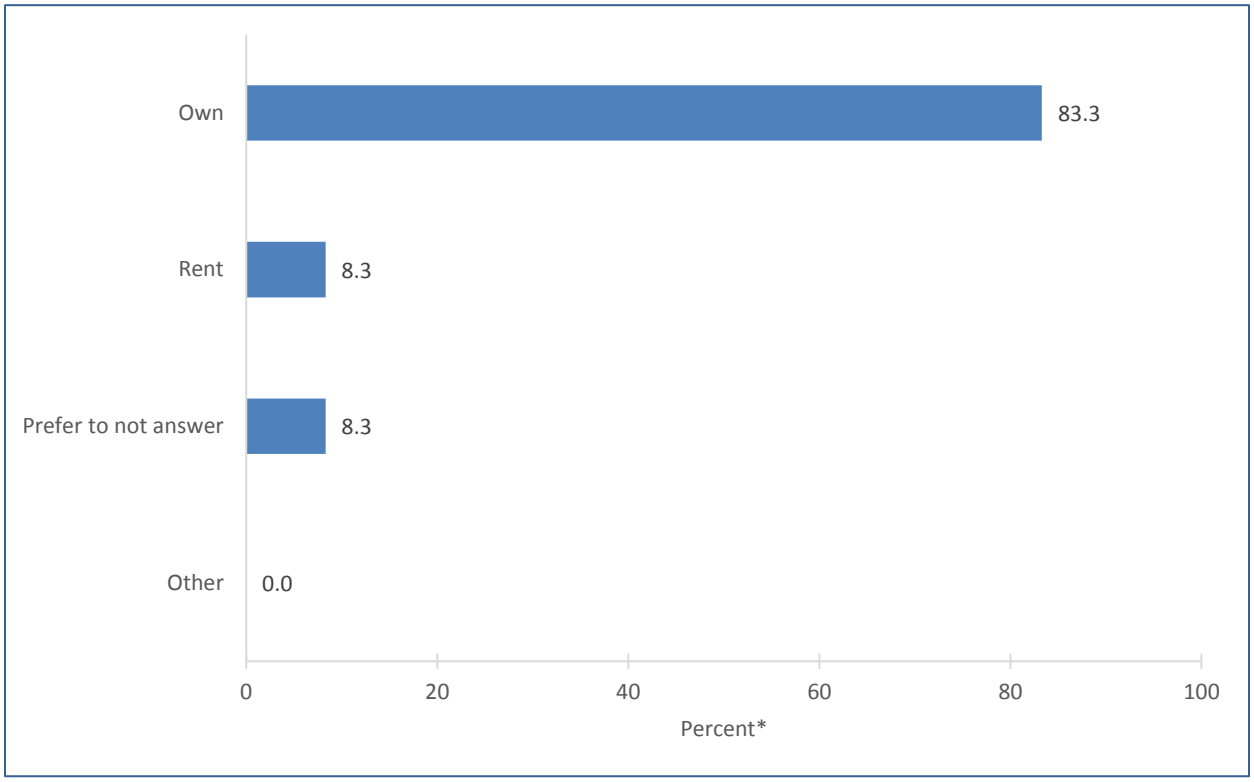
Figure 36. Length of time respondents have lived in their community



N=23

*Percentages do not total 100.0 due to rounding.

Figure 37. Whether respondents own or rent their home



N=24

*Percentages do not total 100.0 due to rounding.

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

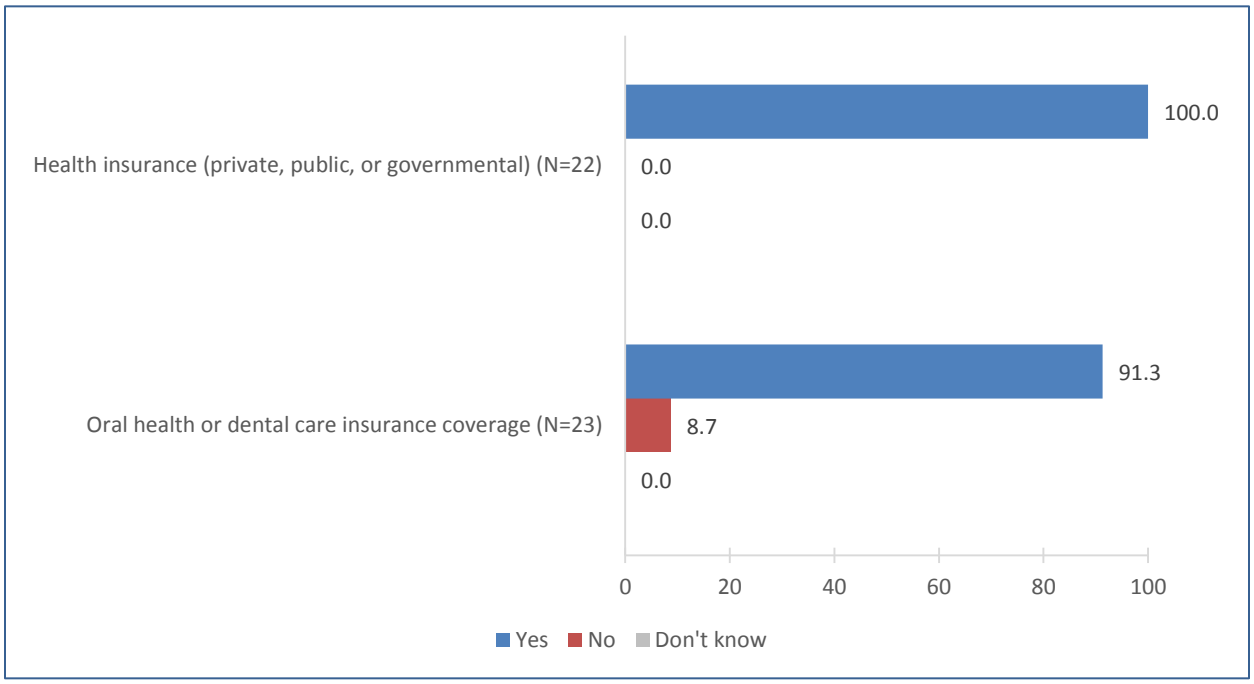
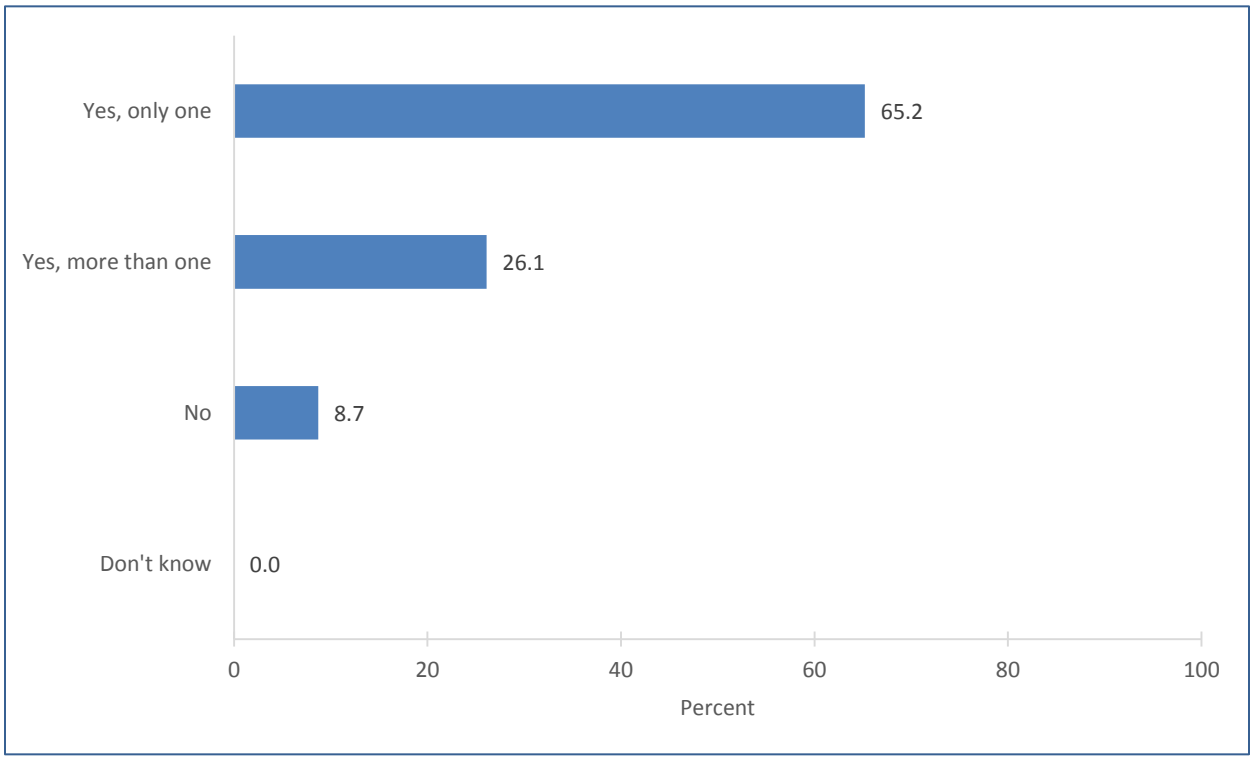
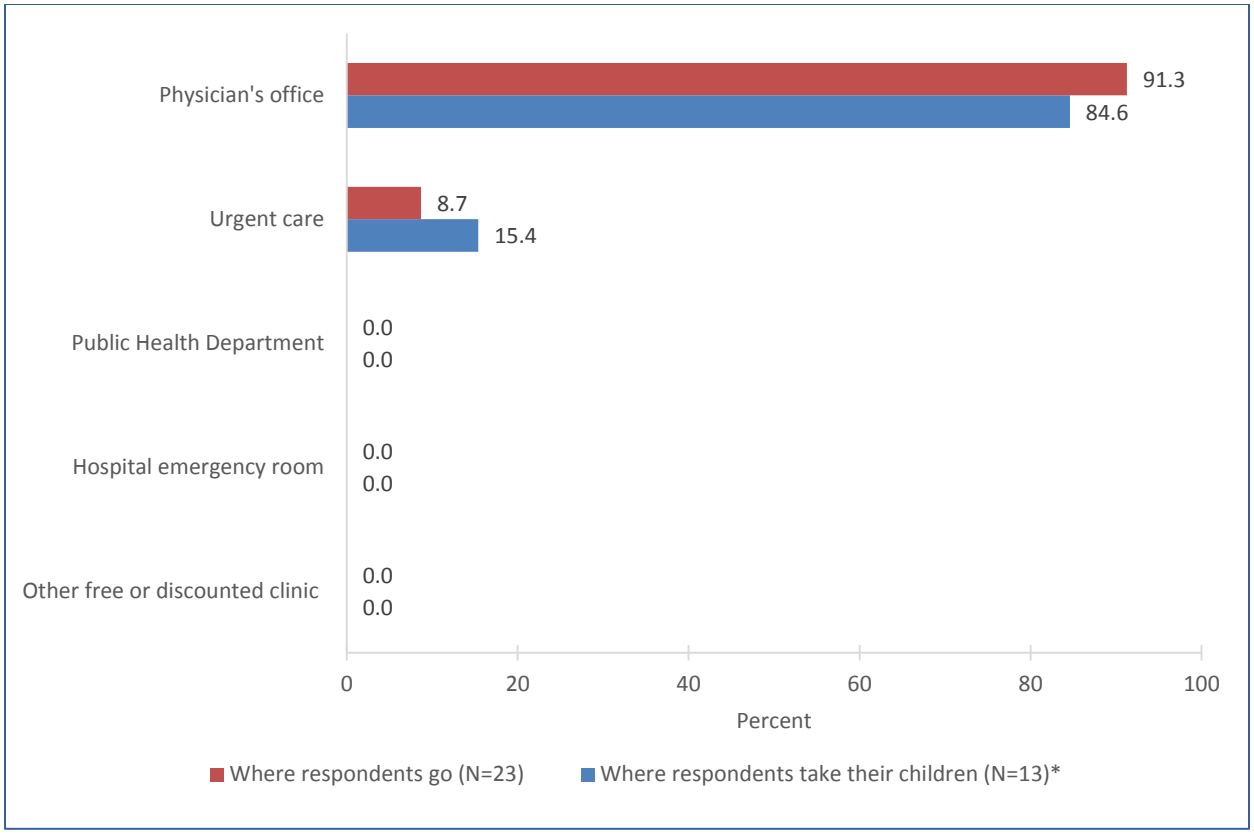


Figure 39. Whether respondents have one person who they think of as their personal doctor and health care provider



N=23

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 age 18 living in their household.

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

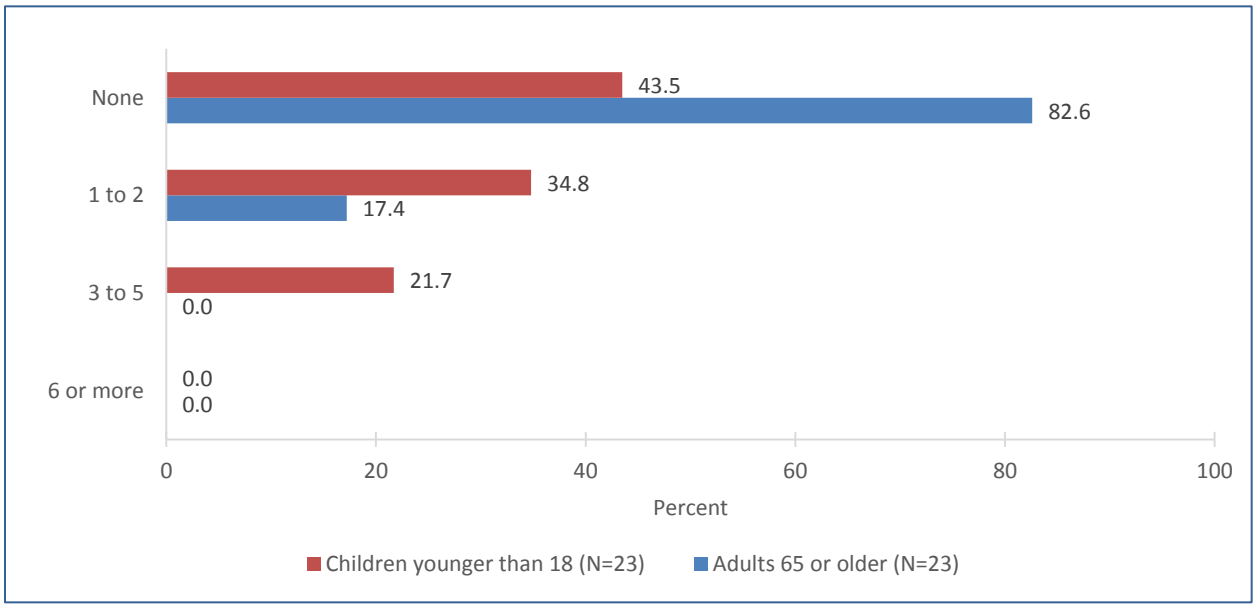
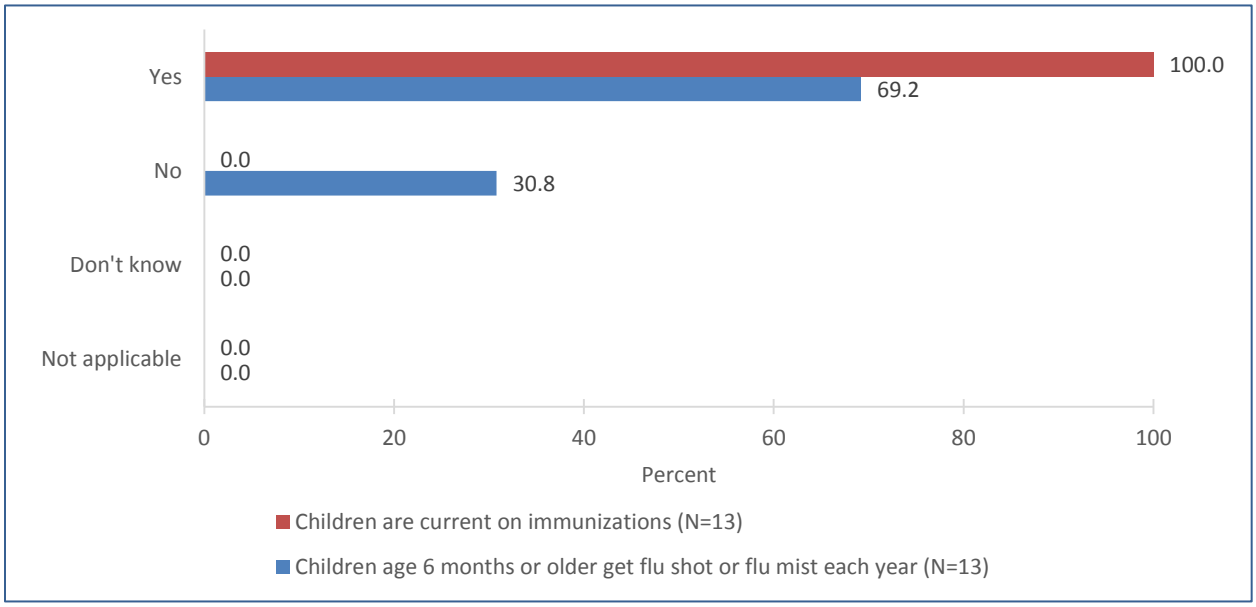


Figure 42. Whether all children in home are current on their immunizations and all children age 6 months or older get a flu shot or flu mist each year*



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

Table 3. Zip code of respondents

Zip code	Number of respondents
57013	19
57034	1
57039	1
57108	1

Secondary Research

Definitions of Key Indicators

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

Contents:

* 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	(Measure - Average of state counties)/(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	(Measure - Average of state counties)/(Standard Deviation)

Measure	Data Elements	Description
Poor physical health days	Sample Size	Number of respondents
	Physically Unhealthy Days	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)
Poor mental health days	Sample Size	Number of respondents
	Mentally Unhealthy Days	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)
Low birthweight	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
	% LBW	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)
Adult smoking	Sample Size	Number of respondents
	% Smokers	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)
Adult obesity	**% Obese**	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)
Food environment index	**Food Environment Index**	Indicator of access to healthy foods - 0 is worst, 10 is best
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
Physical inactivity	**% Physically Inactive**	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)
Access to exercise opportunities	# With Access	Number of people with access to exercise opportunities
	% With Access	Percentage of the population with access to places for physical activity
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
Excessive drinking	Sample Size	Number of respondents
	% Excessive Drinking	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)
Alcohol-impaired driving deaths	# Alcohol-Impaired Driving Deaths	Number of alcohol-impaired motor vehicle deaths
	# Driving Deaths	Number of motor vehicle deaths
	% Alcohol-Impaired	Percentage of driving deaths with alcohol involvement
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
Sexually transmitted infections	# Chlamydia Cases	Number of chlamydia cases
	Chlamydia Rate	Chlamydia cases / Population * 100,000
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
Teen births	Teen Births	Teen birth count, ages 15-19
	Teen Population	Female population, ages 15-19
	Teen Birth Rate	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)
Uninsured	# Uninsured	Number of people under age 65 without insurance
	% Uninsured	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)
Primary care physicians	# Primary Care Physicians	Number of primary care physicians (PCP) in patient care
	PCP Rate	(Number of PCP/population)*100,000
	PCP Ratio	Population to Primary Care Physicians ratio
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
Dentists	# Dentists	Number of dentists
	Dentist Rate	(Number of dentists/population)*100,000
	Dentist Ratio	Population to Dentists ratio
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
Mental health providers	# Mental Health Providers	Number of mental health providers (MHP)
	MHP Rate	(Number of MHP/population)*100,000
	MHP Ratio	Population to Mental Health Providers ratio
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
Preventable hospital stays	# Medicare Enrollees	Number of Medicare enrollees
	Preventable Hosp. Rate	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)
Diabetic monitoring	# Diabetics	Number of diabetic Medicare enrollees
	% Receiving HbA1c	Percentage of diabetic Medicare enrollees receiving HbA1c

Measure	Data Elements	Description
		test
	95% CI - Low	95% confidence interval reported by Dartmouth Institute
	95% CI - High	
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
Mammography screening	# Medicare Enrollees	Number of female Medicare enrollees age 67-69
	% Mammography	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)
High school graduation	Cohort Size	Number of students expected to graduate
	Graduation Rate	Graduation rate
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
Some college	# Some College	Adults age 25-44 with some post-secondary education
	Population	Adults age 25-44
	% Some College	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)
Unemployment	# Unemployed	Number of people ages 16+ unemployed and looking for work
	Labor Force	Size of the labor force
	% Unemployed	Percentage of population ages 16+ unemployed and looking for work
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
Children in poverty	# Children in Poverty	Number of children (under age 18) living in poverty
	% Children in Poverty	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)
Income inequality	80th Percentile Income	80th percentile of median household income
	20th Percentile Income	20th percentile of median household income
	Income Ratio	Ratio of household income at the 80th percentile to income at the 20th percentile
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
Children in single-parent households	# Single-Parent Households	Number of children that live in single-parent households
	# Households	Number of children in households
	% Single-Parent Households	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)
Social associations	# Associations	Number of associations
	Association Rate	Associations / Population * 10,000

Measure	Data Elements	Description
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
Violent crime	# Violent Crimes	Number of violent crimes
	Violent Crime Rate	Violent crimes/population * 100,000
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
Injury deaths	# Injury Deaths	Number of injury deaths
	Injury Death Rate	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)
Air pollution - particulate matter	**Average Daily PM2.5**	Average daily amount of fine particulate matter in micrograms per cubic meter
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
Drinking water violations	Pop. In Viol	Average annual population affected by a water violation
	% Pop in Viol	Population affected by a water violation/Total population with public water
	Z-Score	(Measure - Average of state counties)/(Standard Deviation)
Severe housing problems	# 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
	% Severe Housing Problems	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)
Driving alone to work	# Drive Alone	Number of people who drive alone to work
	# Workers	Number of workers in labor force
	% Drive Alone	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)
Long commute - driving alone	# Workers who Drive Alone	Number of workers who commute in their car, truck or van alone
	% Long Commute - Drives Alone	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)

Lyon County

	Lyon County	Trend(Click for info)	Error Margin	Top U.S. Performers*	Iowa	Rank (of 99)
Health Outcomes						6
Length of Life						14
Premature death	4,810		3,878-5,899	5,200	5,911	
Quality of Life						10
Poor or fair health				10%	11%	
Poor physical health days	1.8		0.9-2.7	2.5	2.8	
Poor mental health days	1.0		0.6-1.5	2.3	2.6	
Low birthweight	6.0%		4.7-7.4%	5.9%	6.8%	
Health Factors						8
Health Behaviors						36
Adult smoking	17%		11-26%	14%	18%	
Adult obesity	32%		25-39%	25%	30%	
Food environment index	8.6			8.4	7.8	
Physical inactivity	28%		21-36%	20%	24%	
Access to exercise opportunities	62%			92%	79%	
Excessive drinking	16%		10-26%	10%	20%	
Alcohol-impaired driving deaths	40%			14%	23%	
Sexually transmitted infections	102			138	370	
Teen births	15		11-21	20	30	
Clinical Care						45
Uninsured	11%		10-12%	11%	10%	
Primary care physicians	3,919:1			1,045:1	1,375:1	

	Lyon County	Trend(Click for info)	Error Margin	Top U.S. Performers*	Iowa	Rank (of 99)
Dentists	2,342:1			1,377:1	1,670:1	
Mental health providers	11,712:1			386:1	904:1	
Preventable hospital stays	50		40-60	41	56	
Diabetic monitoring	88%		71-100%	90%	89%	
Mammography screening	77.4%		59.5-95.3%	70.7%	66.4%	
Social & Economic Factors						1
High school graduation					89%	
Some college	69.1%		61.7-76.4%	71.0%	69.1%	
Unemployment	2.6%			4.0%	4.6%	
Children in poverty	10%		7-13%	13%	16%	
Income inequality	3.3		2.9-3.6	3.7	4.2	
Children in single-parent households	13%		9-17%	20%	29%	
Social associations	28.9			22.0	15.6	
Violent crime	239			59	263	
Injury deaths	64		45-88	50	59	
Physical Environment						56
Air pollution - particulate matter	12.3			9.5	10.9	
Drinking water violations	0%			0%	7%	
Severe housing problems	7%		4-9%	9%	12%	
Driving alone to work	80%		78-82%	71%	80%	
Long commute - driving alone	23%		20-26%	15%	19%	

* 90th percentile, i.e., only 10% are better.
Note: Blank values reflect unreliable or missing data

2015

Lincoln County

	Lincoln County	Trend(Click for info)	Error Margin	Top U.S. Performers*	South Dakota	Rank (of 60)
Health Outcomes						2
Length of Life						1
Premature death	3,451		2,864-4,037	5,200	6,738	
Quality of Life						7
Poor or fair health	8%		7-10%	10%	11%	
Poor physical health days	1.9		1.5-2.2	2.5	2.7	
Poor mental health days	1.8		1.4-2.2	2.3	2.6	
Low birthweight	6.0%		5.3-6.6%	5.9%	6.5%	
Health Factors						1
Health Behaviors						2
Adult smoking	11%		9-13%	14%	18%	
Adult obesity	28%		25-30%	25%	29%	
Food environment index	9.1			8.4	7.4	
Physical inactivity	22%		19-24%	20%	25%	
Access to exercise opportunities	78%			92%	70%	
Excessive drinking	23%		19-28%	10%	19%	
Alcohol-impaired driving deaths	46%			14%	37%	
Sexually transmitted infections	174			138	471	
Teen births	16		14-19	20	37	
Clinical Care						1
Uninsured	7%		6-9%	11%	14%	
Primary care physicians	743:1			1,045:1	1,302:1	
Dentists	1,108:1			1,377:1	1,813:1	

	Lincoln County	Trend(Click for info)	Error Margin	Top U.S. Performers*	South Dakota	Rank (of 60)
Mental health providers	393:1			386:1	664:1	
Preventable hospital stays	44		38-51	41	57	
Diabetic monitoring	89%		79-99%	90%	84%	
Mammography screening	71.0%		61.6-80.4%	70.7%	66.5%	
Social & Economic Factors						1
High school graduation	87%				78%	
Some college	82.0%		76.5-87.4%	71.0%	66.7%	
Unemployment	2.9%			4.0%	3.8%	
Children in poverty	5%		4-7%	13%	19%	
Income inequality	3.3		3.1-3.5	3.7	4.2	
Children in single-parent households	20%		16-25%	20%	31%	
Social associations	12.6			22.0	17.4	
Violent crime	216			59	282	
Injury deaths	38		31-47	50	69	
Physical Environment						52
Air pollution - particulate matter	12.0			9.5	10.8	
Drinking water violations	2%			0%	3%	
Severe housing problems	9%		7-10%	9%	12%	
Driving alone to work	87%		85-89%	71%	78%	
Long commute - driving alone	14%		12-16%	15%	14%	

* 90th percentile, i.e., only 10% are better.
Note: Blank values reflect unreliable or missing data

2015

FOCUS ON SOUTH DAKOTA
A Picture of Health

SOUTH DAKOTA HEALTH STUDY: LINCOLN COUNTY RESULTS

Population, U.S. Census 2014 estimate: 51,548

SURVEY RESPONSES

South Dakota Responses: 7,675	Response Rate: 48%
Lincoln County Responses: 111	Response Rate: 41%

RESPONDENT PROFILE

SOUTH DAKOTA (n = 7,675)		LINCOLN COUNTY (n = 111)
57.4%	Female	56.7%
11.3%	Non-White	5.2%
19.1%	Age 65 and older	13.9%
20.3%	Income ≤ 100% FPL (Federal Poverty Level)	10.7%
19.9%	Three or more ACEs (Adverse Childhood Experiences)	15.9%
8.5%	Five or more ACEs (Adverse Childhood Experiences)	6.0%

NEED FOR CARE

75.0%	Need Medical Care	78.6%
79.5%	Need Prescription Medications	87.7%
9.5%	Need Mental Health Care	8.0%
1.1%	Need Alcohol or Drug Treatment	0.9%

ACCESS TO CARE

94.2%	Have a usual place to go for care	97.6%
77.4%	Have a personal doctor/provider	88.5%
13.0%	Unmet medical needs	4.2%
6.4%	Unmet prescription needs	2.7%
35.8%	Unmet mental health needs	24.4%
45.6%	Unmet alcohol or drug abuse needs	100.0%

HEALTH PROFILE

SOUTH DAKOTA (n = 7,675)	Percent who have been told by a doctor that they have...	LINCOLN COUNTY (n = 111)
11.4%	Diabetes	6.6%
10.9%	Asthma	11.8%
33.3%	High Blood Pressure	31.8%
8.9%	Heart Disease	8.0%
28.5%	High Cholesterol	29.5%
3.4%	COPD (Chronic Obstructive Pulmonary Disease)	1.5%
8.9%	Cancer	6.6%
54.7%	At least one of the above	45.5%
17.0%	Depression	18.4%
17.6%	Anxiety	20.4%
3.4%	PTSD (Post-Traumatic Stress Disorder)	1.0%
1.7%	Bipolar Disorder	0.0%
2.6%	Addiction Issues	0.9%
25.5%	At least one of the above	27.3%

HEALTH RESULTS (SCREENINGS)

	Percent who screened positive for...	
83.4%	Overall health status (good, very good, excellent)	84.6%
5.5%	Depression	4.2%
7.5%	Anxiety	2.2%
6.0%	PTSD (Post-Traumatic Stress Disorder)	4.1%
17.0%	Current Smoker	8.0%
42.4%	Alcohol Abuse	43.2%
6.7%	Marijuana Use (past year)	5.8%

SANFORD HEALTH

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