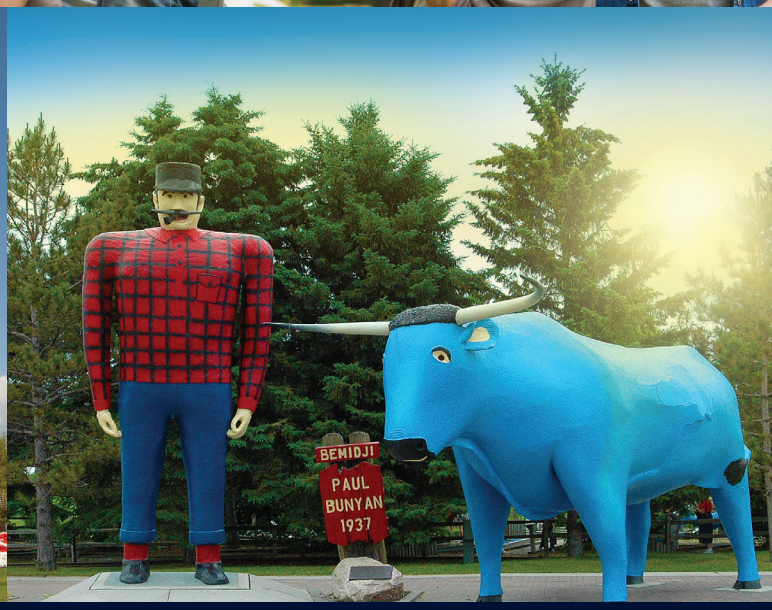

Sanford Medical Center Sioux Falls USD

2016 Community Health Needs Assessment

SANFORD HEALTH

dba Sanford USD Medical Center EIN #45-0227855

SANFORD HEALTH

Sanford Medical Center Sioux Falls USD

Community Health Needs Assessment

2016

Dear Community Members,

Sanford Medical Center Sioux Falls USD 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 has set strategy to address the following community health needs:

- Crime/Safety – specifically addressing narcotics in the community
- Physical Health – focusing on chronic disease

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

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

Sincerely,

Paul Hanson
President
Sanford Medical Center Sioux Falls USD

Sanford Medical Center Sioux Falls USD

Community Health Needs Assessment 2016

EXECUTIVE SUMMARY

SANFORD HEALTH

Sanford Medical Center Sioux Falls USD

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. Generalizable Survey

   A generalizable survey was conducted of residents in Minnehaha, Lincoln, McCook and Turner counties in South Dakota. The purpose of the generalizable survey of residents in the greater Sioux Falls area was to learn about the perceptions of area residents regarding community health, their personal health, preventive health, and the prevalence of disease.

   Staff at the North Dakota State University Center for Social Research, along with Sanford leadership and public health leaders from North Dakota, South Dakota and Minnesota, created the survey tool. Elements of informed consent were included in the cover letter ensuring that the NDSU Institutional Review Board requirements were met and the protection of human subjects maintained.

   Obtained through a qualified vendor, the sample was a stratified random sample to ensure that appropriate proportions from each of the two counties were included. A total of 1,500 records with names, addresses, and a few demographic indicators were included in the sample.

A total of 370 paper surveys were returned for scanning and an additional 3 surveys were completed on-line for a total of 373. Respondents who did not enter a gender and age response were eliminated from the analysis. A total of 354 surveys were analyzed, providing a generalizable sample with a confidence level of 95 percent and an error rate of plus or minus 5.2 percentage points.

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2. Community Stakeholder and Focus Group Meetings

   Thirty-three people participated in the focus group data collection process on May 19 and 20, 2015. Thirteen people completed the individual interview portion of the study. These meetings were conducted by collaborative partners in Sioux Falls and the findings are included in the 2016 Community Health Status found in the Appendix.

3. Community Asset Mapping

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

4. Secondary Research

   The secondary data includes the 2015 County Health Rankings for Minnehaha, Lincoln, McCook and Turner counties and the *Focus on South Dakota - A Picture of Health*.

Key Findings – Primary Research

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

Aging : The cost of long term care (3.95) is a high ranking concern among survey respondents.

Children and Youth: Bullying (3.51) is a high concern among survey respondents.

Safety: The presence of street drugs and alcohol in the community (3.84) is the top concern among survey respondents. The presence of drug dealers in the community (3.62), crime (3.58), child abuse and neglect (3.53), and domestic violence (3.51) are also high safety concerns of the respondents.

Health Care: Access to affordable health insurance (3.80), access to affordable health care (3.70), and access to affordable prescription drugs (3.65) are high concerns among survey respondents.

Physical Health: Cancer (3.72), inactivity (3.65), poor nutrition (3.68), obesity (3.33), and chronic disease (3.58) are the highest physical health concerns.

Behavioral Health/Substance Use and Abuse: Underage drug use and abuse (3.51) is a high concern among survey respondents.

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

Health Outcomes

Premature death: The premature death indicator is defined as years of potential life lost before age 75 per 100,000 population. The mortality health outcome for the state of South Dakota is 6,738 per 100,000. McCook County has a higher rate at 6,839 per 100,000, Minnehaha County is at 6,266, Turner County is at 5,713, and Lincoln County is at 3,451.

Poor or fair health: 10% of adults in Minnehaha County, 8% in Lincoln County, 9% in McCook County, and 9% in Turner County report poor or fair health compared to 10% nationally and 11% in South Dakota.

The average number of days reported in the last 30 as unhealthy mental health days is 2.7 in Minnehaha County, 1.8 in Lincoln County, and 2.1 in Turner County. South Dakota as a state reports 2.6 days.

The percent of live births with low birth weight (less than 2,500 grams) is 7.0% in Minnehaha County, 6.0% in Lincoln County, 6.1% in McCook County, and 6.5% in Turner County. The state of South Dakota is at 6.5%.

Health Factors

The percent of adults who are currently smoking is 18% in Minnehaha County, 11% in Lincoln County, 28% in McCook County, and 17% in Turner County. 18% of adults are current smokers in South Dakota.

27% of the adult population in Minnehaha County, 28% in Lincoln and McCook counties, and 31% in Turner County are considered to be obese with a BMI over 30. 29% of the population in South Dakota is obese.

The percent of adults reporting excessive or binge drinking is 21% in Minnehaha County, 23% in Lincoln County, 19% in McCook County, and 19% in Turner County. South Dakota reports 19% are binge drinkers statewide. Driving deaths that have alcohol involvement is at 26% in Minnehaha County, 46% in Lincoln County, 14% in McCook County, and 50% in Turner County. Alcohol involvement in driving deaths is at 37% in South Dakota.

Sexually transmitted infections rank substantially higher than the national benchmark (138) for South Dakota (471) and Minnehaha County (542). STDs are at 174 in Lincoln County, 160 in McCook County,

and 181 in Turner County. The teen birth rate is higher in South Dakota (37) than the national benchmark (20). The teen birth rate is 35 in Minnehaha County, 16 in Lincoln County, 13 in McCook County, and 18 in Turner County.

The clinical care outcomes indicate that the percentage of uninsured adults is 17% in South Dakota, 13% in Minnehaha County, 7% in Lincoln County, 12% in McCook County, and 12% in Turner County.

The ratio of population to primary care physicians is 1,045:1 in South Dakota. Minnehaha County's ratio is 1,080:1, Lincoln County is 743:1, McCook County is 5,610:1 and Turner County is 4,154:1. The ratio of population to mental health providers is 664:1 in South Dakota. Minnehaha County's ratio is 644:1, Lincoln County's ratio is 393:1, McCook County's ration is not available, and Turner County's ratio is 8,361:1.

The number of professionally active dentists in South Dakota is 1,813:1 and in Minnehaha County the ratio is 1,932:1. The ratio is 1,108:1 in Lincoln County, 5,654:1 in McCook County, and 8,361:1 in Turner County.

Preventable hospital stays are 51 in Minnehaha County, 44 in Lincoln County, 34 in McCook County, 65 in Turner County, 57 in South Dakota, and 41 nationally.

Diabetic monitoring is at 88% in Minnehaha County, 89% in Lincoln County, 86% in McCook County, 83% in Turner County, and 84% in South Dakota as a whole. Mammography screening is at 69.8% in Minnehaha County, 71% in Lincoln County, 61.2% in McCook County, 67.7% in Turner County, and 66.5% in South Dakota.

The social and economic factor outcomes indicate that South Dakota is at 84% for high school graduation. High school graduation is at 83% in Minnehaha County and 87% in Lincoln County. There is no county data available for this indicator in McCook and Turner counties. Post-secondary education (some post-secondary education) is at 68.1% in Minnehaha County, 82% in Lincoln County, 68.7% in McCook County, 65.3% in Turner County and 66.7% in South Dakota.

The unemployment rate is 3.4% in Minnehaha County, 2.9% in Lincoln County, 3.5% in McCook County, 3.4% in Turner County, and 3.8% in South Dakota.

The percentage of child poverty is 14% in Minnehaha County, 5% in Lincoln County, 12% in McCook County, and 13% in Turner County. The child poverty rate is 19% in South Dakota.

Social associations are defined as the number of membership associations per 10,000 population and links to social and economic support. The national benchmark for social associations is 22. The ranking is lower in Minnehaha County at 15, 12.6 in Lincoln County, and 21.4 in McCook County, but is higher in Turner County at 25.3. The state of South Dakota ranks at 17.4.

The percentage of children in single parent households is 32% in Minnehaha County, 20% in Lincoln County, 16% in McCook County, 24% in Turner County, and 31% in South Dakota.

Violent crime is at 282 per 100,000 populations in South Dakota. The rate is 285 in Minnehaha County, 216 in Lincoln County, 30 in McCook County, and 71 in Turner County.

The following needs were brought forward for prioritization:

- Aging – the cost of long term care
- Children and Youth – bullying
- Safety – presence of street drugs and alcohol in the community, presence of drug dealers in the community, crime, child abuse and neglect, and domestic violence
- Health Care Access – access to affordable health insurance, health care and prescription drugs
- Physical Health – cancer, chronic disease, inactivity, poor nutrition and obesity
- Mental Health/Behavioral Health – underage drug use and abuse, alcohol use and abuse

Community stakeholders rated behavioral health, access to care and the Hayward Thrive project as top priorities. Sanford leadership is serving on these key community initiatives.

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

- Priority 1: Safety
- Priority 2: Physical Health

Implementation Strategies

Priority 1: Crime/Safety – Pharmaceutical Narcotics in our Community

Goal: Standardize narcotic prescribing protocols across the enterprise to reduce usage

Sanford has set strategy to reduce narcotic use across the system by providing alternative pain management methods. Policies and procedures to address the prescription of narcotics will be standardized across the health care system as part of this strategy. Pain medication prescriptions will be tracked and studied to identify areas for improvement.

Priority 2: Physical Health – Chronic Disease

Goal 1: Improve Care of Patients with Overweight or Obesity Diagnosis

Sanford has set strategy to improve the care of patients with overweight or obesity diagnosis. Patients who are overweight will be referred to internal and external services including registered dietitians, exercise physiologists, and health coaches. BMI changes will be studied and monitored.

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 children, 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.

Goal 2: Improve Care of Patients with Diabetes

Sanford has set strategy to provide optimal diabetes care and to measure the outcomes for systolic and diastolic blood pressure, LDL cholesterol, Hemoglobin A1C, tobacco use and aspirin use. These outcomes are part of the optimal care recommendations for people living with diabetes.

Goal 3: Improve Care of Patients with Hypertension

Sanford has set strategy to address hypertension through standardized protocol, frequent blood pressure monitoring, and referral. Outcome measures include a blood pressure of less than 140/90 for all ages 18 – 59, and for age 60+ with diabetes, vascular or renal disease. For patients 60 or older without diabetes, vascular or renal disease the goal is a blood pressure of 150/90.

Goal 4: Improve Care of Patients with Ischemic Vascular Disease

Sanford has set strategy to address ischemic vascular disease by standardizing protocols for optimal vascular care. Outcome measures include systolic blood pressure <140, diastolic blood pressure < 90, LDL statin indications, tobacco free recommendations, and a daily use of aspirin.

SANFORD HEALTH

Sanford Medical Center Sioux Falls USD

Community Health Needs Assessment 2016

Table of Contents

Purpose

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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, Chief Financial Officer
- Michelle Bruhn, Vice-President Finance, Health Services Division
- Tiffany Lawrence, Vice President Finance, Sanford Fargo, Fargo Region Co-Lead
- Bruce Viessman, Vice President Finance, Sanford Health Network, Co-Lead
- Martha Leclerc, Vice President Corporate Contracting
- Randy Bury, Senior Vice-President Operations, Health Services Division
- Jane Heilmann, Senior Corporate Communications Strategist
- Joy Johnson, Vice President Operations, Bemidji Region
- Kirk Christy, Vice President Finance, Bismarck Region
- Carrie McLeod, Corporate Lead, Corporate Community Health

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

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

We extend special thanks to the community and county leaders, public health administration, physicians, nurses, representatives from the community and diverse populations for their participation in this work. Together we are reaching our vision “to improve the human condition through exceptional care, innovation and discovery”.

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

- Leni Healy, AARP
- Jill Ireland, American Cancer Society

- Chrissy Meyer, American Heart Association
- Megan Myers, American Heart Association
- Bill Albrecht, Argus Leader
- Deb Fischer-Clemens, Avera Health
- Dr. Tad Jacobs, Avera Health
- Teresa Miller, Avera Health
- Marilyn Paddock, Avera Heart Hospital of South Dakota
- Randell Beck, Avera McKennan Hospital & University Health Center
- Julie Benz, Avera McKennan Hospital & University Health Center
- Joylynn Buus, Avera McKennan Hospital & University Health Center
- Tonya Ellingson, Avera McKennan Hospital & University Health Center
- Dr. Mike Elliott, Avera McKennan Hospital & University Health Center
- Dr. Jared Friedman, Avera McKennan Hospital & University Health Center
- Lynne Hagen, Avera McKennan Hospital & University Health Center
- Caitlin Hurley, Avera McKennan Hospital & University Health Center
- Steve Lindquist, Avera McKennan Hospital & University Health Center
- Lori Popkes, Avera McKennan Hospital & University Health Center
- Stacy Reitmeier, Avera McKennan Hospital & University Health Center
- Rhonda Roesler, Avera McKennan Hospital & University Health Center
- Lacey Seefeldt, Avera McKennan Hospital & University Health Center
- Sr. Mary Thomas, Avera McKennan Hospital & University Health Center
- Amanda Viau, Avera McKennan Hospital & University Health Center
- Julie Ward, Avera McKennan Hospital & University Health Center
- Mary Wolf, Avera McKennan Hospital & University Health Center
- Bonnie Bleeker, P.A., Avera Medical Group
- Sandy Crisp, Avera Medical Group
- Dyan Nelson, Avera Medical Group
- Kristin Olson, Avera Medical Group
- Dr. Patty Peters, Avera Medical Group
- Tamera Jerke-Liesinger, The Banquet
- Chad Campbell, Bishop Dudley Hospitality House
- Sister Janet Horstman, Caminando Juntos
- Sister Sheila Schnell, Caminando Juntos
- Martin McDonald, Center for Family Medicine
- Nancy VanHeerde, Center of Hope
- Pastor Fred Wilgenburg, Center of Hope
- Kevin Kolb, City of Sioux Falls Central Services
- Adam Roach, City of Sioux Falls Community Development
- Janelle Zerr, City of Sioux Falls Finance
- Jeff Helm, City of Sioux Falls Fire Rescue
- Colleen Moran, City of Sioux Falls Human Relations
- Rana DeBoer, City of Sioux Falls Human Resources
- Alicia Luther, City of Sioux Falls Parks & Recreation
- Sam Trebilcock, City of Sioux Falls Planning & Building Services
- James Larson, City of Sioux Falls Police Department
- Alicia Collura, City of Sioux Falls Public Health

- Jill Franken, City of Sioux Falls Public Healh
- Lonna Jones, City of Sioux Falls Public Health, Falls Community Dental
- Stan Kogan, City of Sioux Falls Public Health
- Mary Michaels, City of Sioux Falls Public Health
- Dr. Jennifer Tinguely, City of Sioux Sioux Falls Public Health, Falls Community Health
- Heath Hoftiezer, City of Sioux Falls Public Works
- Jessica Lantgen, City of Sioux Falls Public Works
- Eric Meyerson, City of Sioux Falls, Sioux Area Metro
- Rachael Lebo, City of Sioux Falls, Siouxland Libraries
- Heather Stephenson, City of Sioux Falls, Siouxland Libraries
- Paul Bruflat, CNA Surety
- Dr. Paul Amundson, DAKOTACARE
- Trisha Dohn, DAKOTACARE
- Dr. Brian Kidman, Destiny Family Medical Clinic
- Brienne Maner, Downtown Sioux Falls
- Laurie Knutson, EmBe
- Julie Schoolmeester, Face It TOGETHER® Sioux Falls
- Tony Nour, First PREMIER Bank
- Carolyn Deal, Good Samaritan Society
- Bill Kubat, Good Samaritan Society
- Cindy Heidelberger-Larson, Groundworks Midwest
- Tim Olsen, Groundworks Midwest
- Lee Ferguson, Habitat for Humanity
- Sara Harris, Harrisburg United Methodist Church
- Janet Kittams-Lalley, Helpline Center
- Karla Lundell, Howalt+McDowell Insurance
- Bob Trader, HyVee
- Mark Schmitt, John Morrell & Company
- Mark Millage, Kilian Community College
- Mallery Schoen, Lawrence & Schiller
- April Weber, Lewis Drug
- Angie Brown, LifeScape
- Rebecca Kiesow-Knudsen, Lutheran Social Services
- Betty Oldenkamp, Lutheran Social Services
- Melissa Townsend, Meals on Wheels
- Tom Simmons, Midcontinent Communications
- Kari Benz, Minnehaha County
- Carol Muller, Minnehaha County
- Christy Nicolaisen, Multi-Cultural Center
- Darcy Jensen, Prairie View Prevention
- Nicole Soles, Ramkota Companies
- Jan Matthiesen, Raven Industries
- Major Tom Riggs, Salvation Army
- Angie Anema, Sanford Health
- Diana Berkland, Sanford Health
- Karla Cazer, Sanford Health

- Terri Carlson, Sanford Health
- John Gilbertson, Sanford Health
- Dan Heinemann, MD, CMO, Sanford Health
- Monica Huber, Sanford Health
- Jenny McDonald, Sanford Health
- Carrie McLeod, Sanford Health
- Amy Mertz, Sanford Health
- Doreen Miller, Sanford Health
- Melanie Bliss, Sioux Empire Homeless Coalition
- Christina Heckenlaible, Sioux Empire United Way
- Jay Powell, Sioux Empire United Way
- Mark Lee, Sioux Falls Area Chamber of Commerce
- Slater Barr, Sioux Falls Development Foundation
- Molly Satter, Sioux Falls School District
- Sandra Melstad, SLM Public Health Consulting, South Dakota Department of Health
- Elaine Roberts, South Dakota Parent Connection
- Nancy Fahrenwald, South Dakota State University
- Kip Littau, South Dakota State University
- Katie Olson, South Dakota State University
- Donna Keeler, South Dakota Urban Indian Health
- Kris Graham, Southeastern Behavioral Healthcare
- Julie Becker, St. Francis House
- Margaret Sumption, Sumption & Wyland
- Justin Falon, Tallgrass
- Kimberly K. Elbers, The First National Bankin Sioux Falls
- Steve VanBuskirk, VanBuskirk Companies
- Dennis Hoffman, Volunteers of America
- Jourdyn Kaarre, Volunteers of America

Description of Sanford Medical Center Sioux Falls USD

Sanford Medical Center Sioux Falls USD is 545-bed tertiary medical center in Sioux Falls, SD, which provides comprehensive, multi-specialty care for patients from across the Midwest. It is the largest hospital in South Dakota and a Level II Trauma Center serviced by AirMed air ambulance that extensively covers the vast geographic region.

As a provider of highly specialized services, Sanford USD offers Centers of Excellence in heart and vascular, children's services, cancer, neuroscience, trauma, orthopedics and sports medicine and women's services. It serves as the primary teaching hospital for the Sanford School of Medicine. Sanford employs more than 12,000 people in the Sioux Falls area, including 500 board-certified physicians and 350 advanced practice providers (APPs) in 80 medical specialties. Sanford Medical Center Sioux Falls USD is accredited by The Joint Commission and is a designated Magnet hospital by the American Nurses' Credentialing Center.

Description of the Community Served - Sioux Falls, SD

Bordering Iowa and Minnesota, Sioux Falls is the largest city in South Dakota and the county seat of Minnehaha County. It also extends into Lincoln County. Sioux Falls ranks in the top 50 growing cities in the U.S. and the fastest-growing metro area in South Dakota with a population in 2015 of 172,000 people.

Sioux Falls is named for the Sioux Tribe of American Indians and the waterfalls of the Big Sioux River located close to the downtown district. The falls are a popular local landmark and tourist attraction. Pioneers first staked claims on the banks of the Big Sioux River prior to the Civil War in 1856. The village of Sioux Falls was incorporated in 1876 and by 1900 had grown to over 10,000 people.

The largest employer in Sioux Falls is Sanford Health, followed closely by Avera. Sioux Falls is ranked number one on Forbes' list of Best Small Places for Business and Careers 9 of the last 10 years, and provides a home base for financial services, renewable energy industry, health care and expertise in manufacturing, research and back-office operations. Key industries include medical device manufacturing, bio-medical research, data centers and customer-care services.

Study Design and Methodology

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4. Secondary Research

   The secondary data includes the 2015 County Health Rankings for Minnehaha, Lincoln, McCook and Turner counties and the *Focus on South Dakota - A Picture of Health*.

Limitations of the Study

The findings in this study provide an overall snapshot of behaviors, attitudes, and perceptions of residents living in Sioux Falls, South Dakota, and in Minnehaha, Lincoln, McCook and Turner counties. A good faith effort was made to secure input from a broad base of the community. The generalizable survey was sent to a representative sample of the community. Additionally, invitations to participate in focus groups were extended to county and community leaders, organizations and agencies representing diverse populations and disparities. Additional data was reviewed through secondary research. The data for the secondary research was secured from the County Health Rankings and the *Focus on South Dakota - A Picture of Health*.

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

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

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

Key Findings

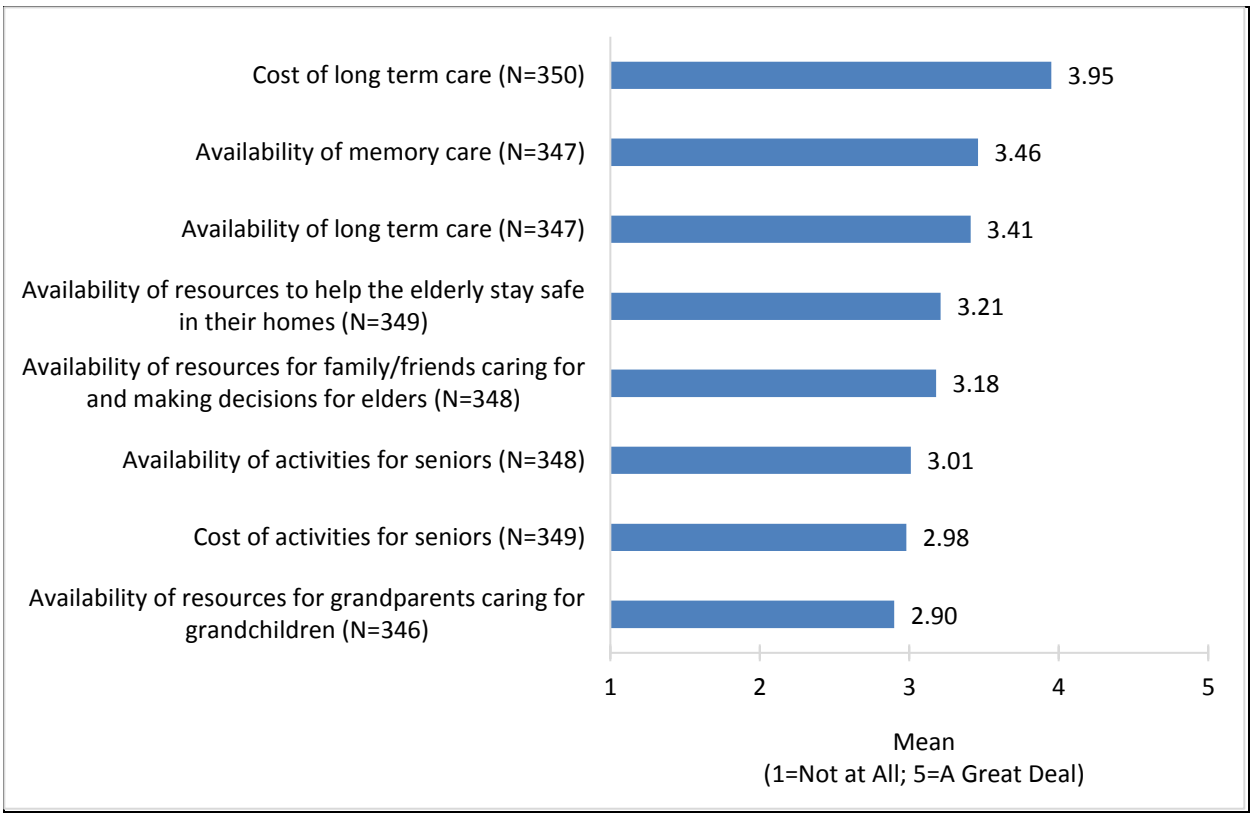
Primary Research

Community Health Concerns

The following concerns ranked highest of the indicators on the survey.

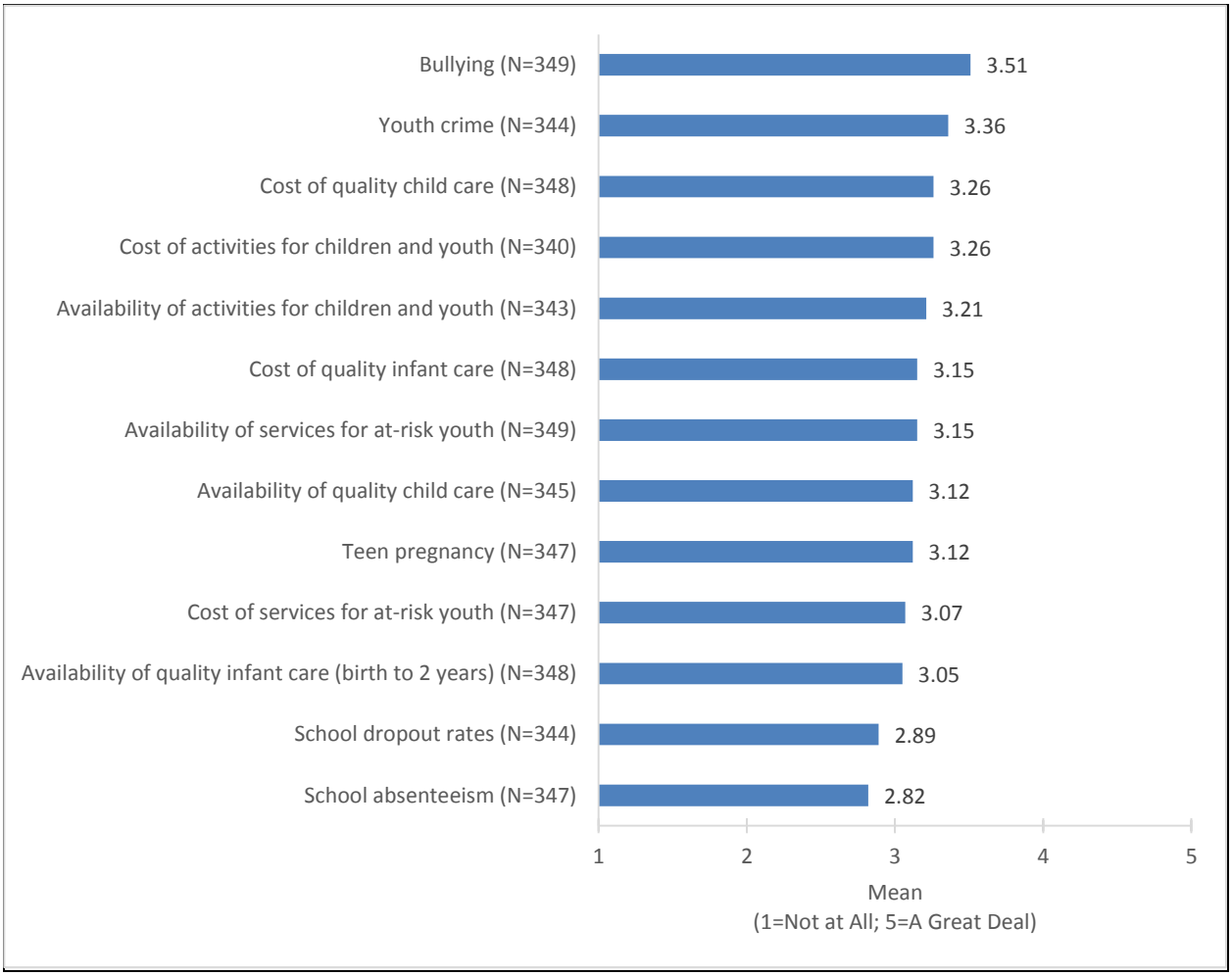
Aging: The top concern about the aging population is the cost of long term care.

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



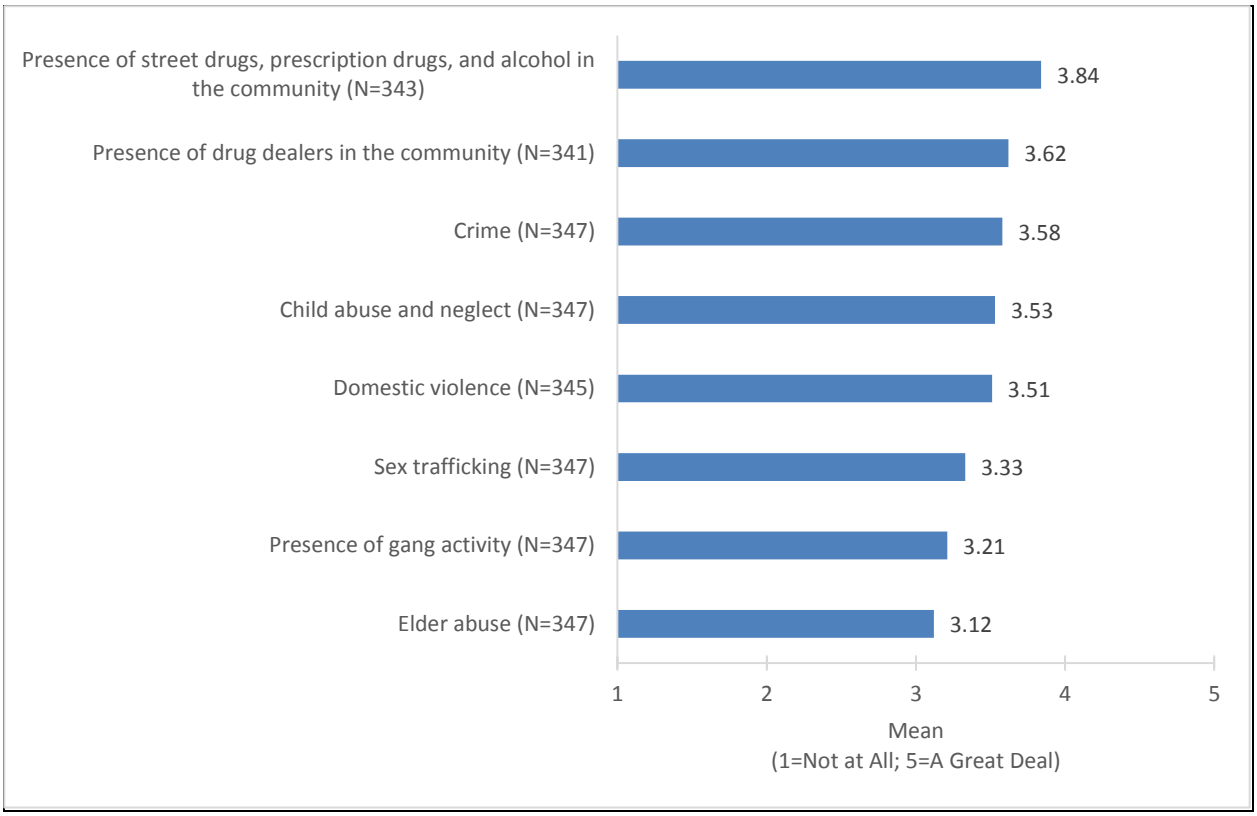
Children and Youth: The top concern for children and youth is bullying.

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



Safety: Safety is a high concern for the respondents of the survey regarding the presence of street drugs, alcohol and the presence of drug dealers in the community. Crime, child abuse, and domestic violence are additional high concerns.

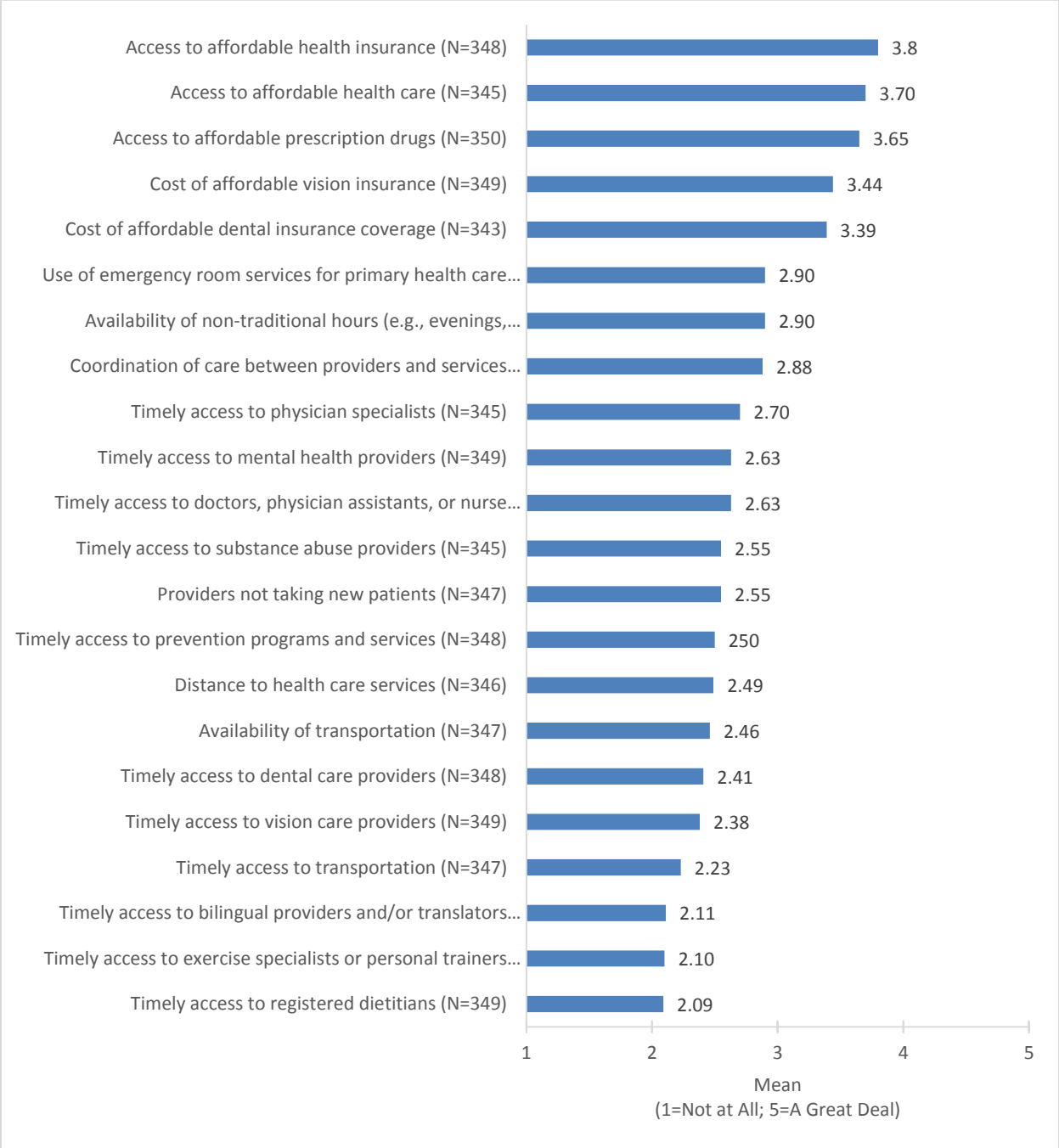
Level of concern with statements about the community regarding SAFETY



Sanford screens patients for substance abuse on admission to the emergency department. Additionally, Sanford has set strategy to reduce narcotic use across the system by providing alternative pain management methods. Policies and procedures to address the prescription of narcotics will be standardized across the health care system as part of this strategy. Pain medication prescriptions will be tracked and studied to identify areas for improvement.

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

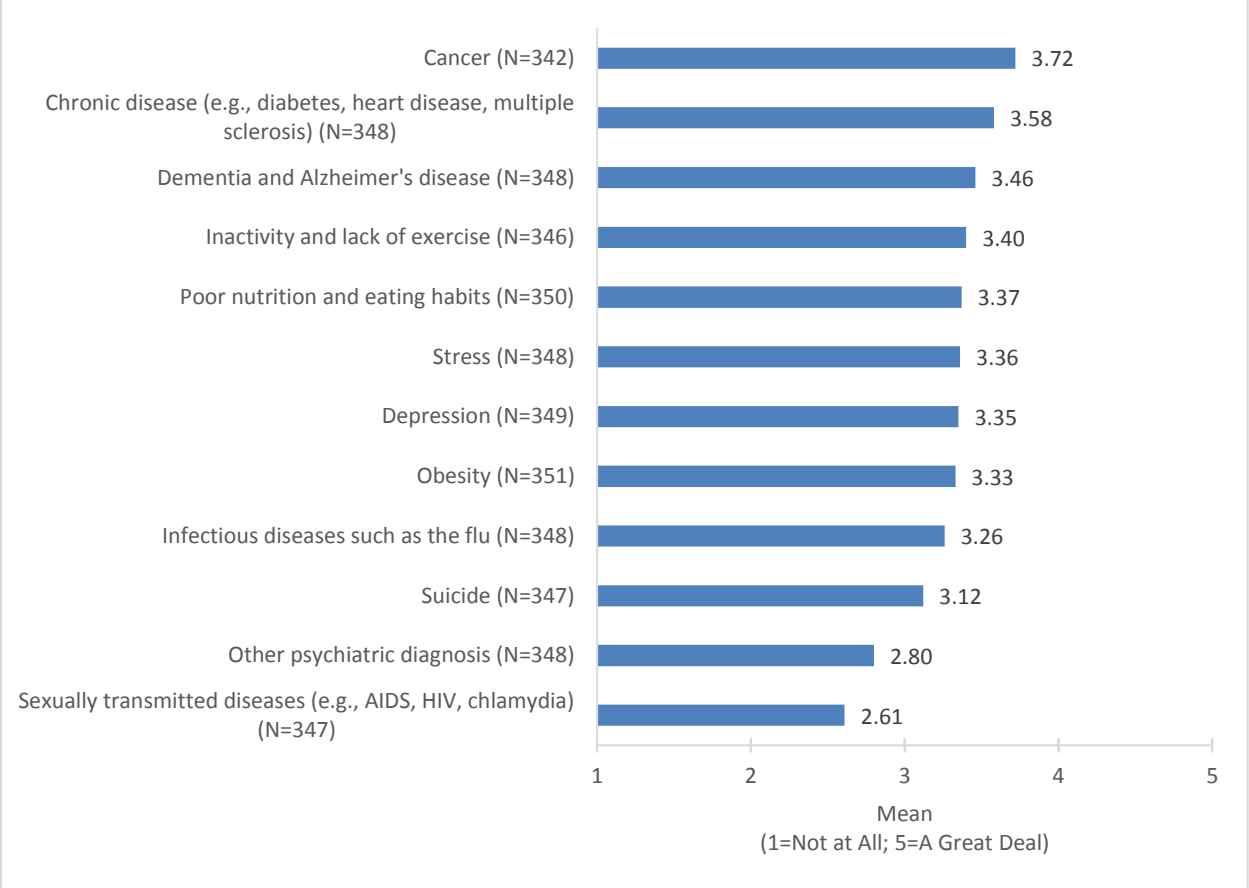
Level of concern with statements about the community regarding HEALTH CARE



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

Physical Health: The top physical health concern among the community stakeholders is cancer, chronic disease, inactivity, poor nutrition, and obesity. The highest ranking mental health concerns are dementia and Alzheimer's, stress and depression.

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



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

The chronic disease self-management program Better Choices, Better Health is offered free of charge to community members. Better Choices, Better Health is modeled after Stanford

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

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

- The *fit* website for Juniors, Kids and Teens creates an entertaining and interactive on-line environment where they can play games, watch videos and take daily challenges. Parents benefit from their own set of resources where they can find tips and tools on becoming healthy role models and raising *fit* kids. To date, the children's and parent's sites have received more than 7.5 million visitors. Over 700 pieces of content have been added to the sites, including videos, slideshows, games, articles, and even *fit* songs.

- In addition to the web, *fit* is developing meaningful school resources to bring value and fun into the primary education setting. We are doing this by integrating *fit* points into science and math components to provide health promotion, an avenue into the classroom without taking valuable time away from those critical subjects.

- *fit* 4 schools fit4schools@sanfordhealth.org is an on-line school resource with unique lessons integrated into daily classroom activities. *fit*4schools incorporates topics into math and science curriculum. The on-line resource for the classroom has 14 STEM (integrating science, technology, engineering, and math) unit plans that can be downloaded for classroom use.

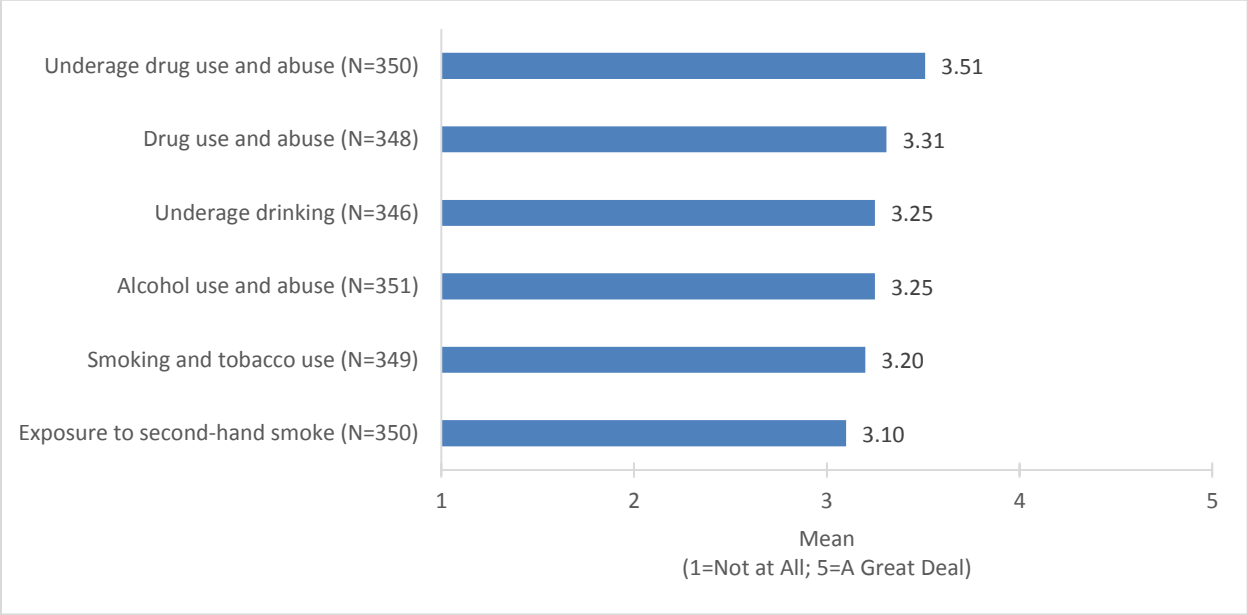
- Community
    - The *fit* friends, Denny, Abby, Sam, Alex and Marty, along with the *fit* team have been making a variety of appearances at events across the Sanford footprint. *fit* has been at over 2 dozen events interacting with more than 15,000 children and parents to spread the word about the *fit* platform and resources.
    - Smartphone Apps – Through a series of fun and engaging apps, *fit* will continue to activate kids at the touch of a fingertip to live a fit and healthy lifestyle related to Mood, Recharge, Food and Move.
    - MOVE2Draw is a simple and fun way for kids to move and create their own unique drawings. Once a drawing is completed, it can be stored on the MOVE2Draw website.
    - eMOODicam is a photo application that allows the user to enhance a photo and bring the mood to life and share with others.

- Looking Forward
    - *fit* is continuing to look to the future for ways to continue to make a meaningful impact on children and families both on-line and off-line. Other exciting expansions that are in the works include:
        - Clinical Setting – Resources for the clinical setting to spur actionable and understandable discussions between health care providers and families.
        - Health Coaches – Exploring meaningful ways for health coaches to promote healthy choices with children and adults.
        - Engage Key Role Models – Firefighters and youth sport coaches are role models and have a big influence on children so that's why *fit* is developing resources for them to teach the principles of *fit* along with sports fundamentals and other outreach efforts.
        - *fit*Club 4 Boys – 10-week after school program for boys, ages 8-12, to develop knowledge of *fit* principles and healthy behavior choices.
        - *fit* Parent/child – Class for parents and children to understand healthy choices and the benefits of living a healthy lifestyle.

Sanford screens patients for depression on admission to the emergency department. Behavioral health services are embedded into the clinic. Primary care providers assess for depression and refer to mental health providers.

Behavioral Health/Substance Abuse: The top behavioral health concerns are underage drinking and alcohol use and abuse.

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

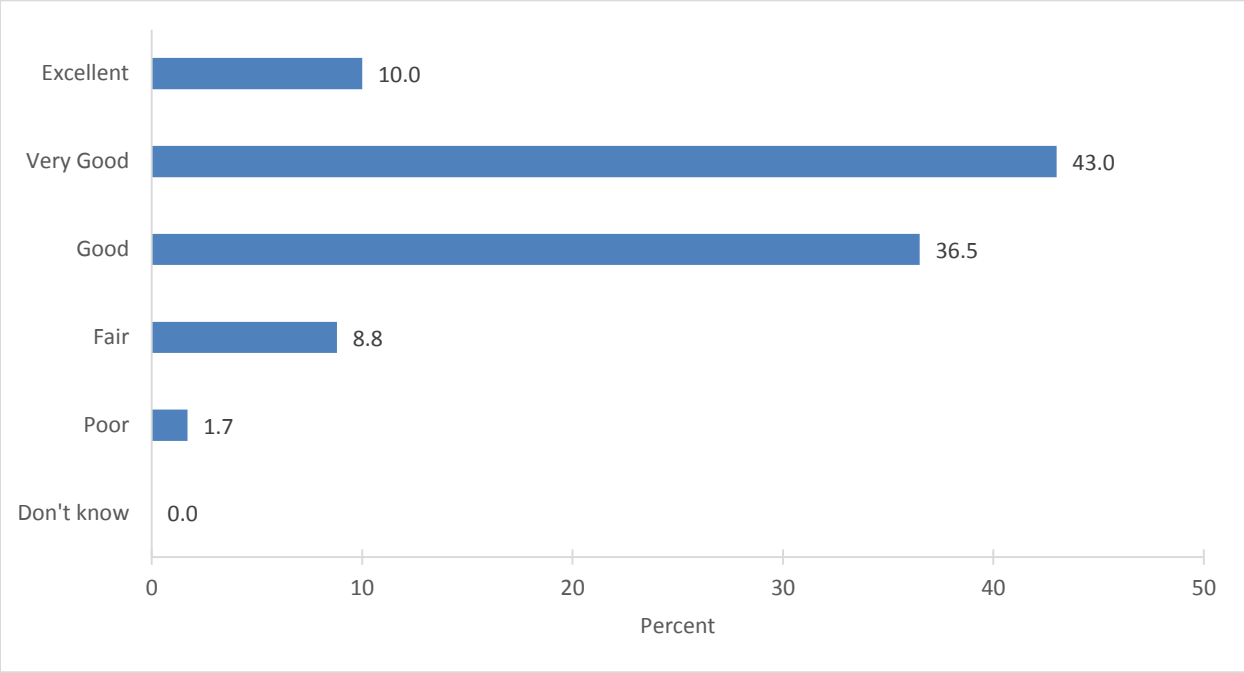


Personal Health Concerns

Respondents' Personal Health Status

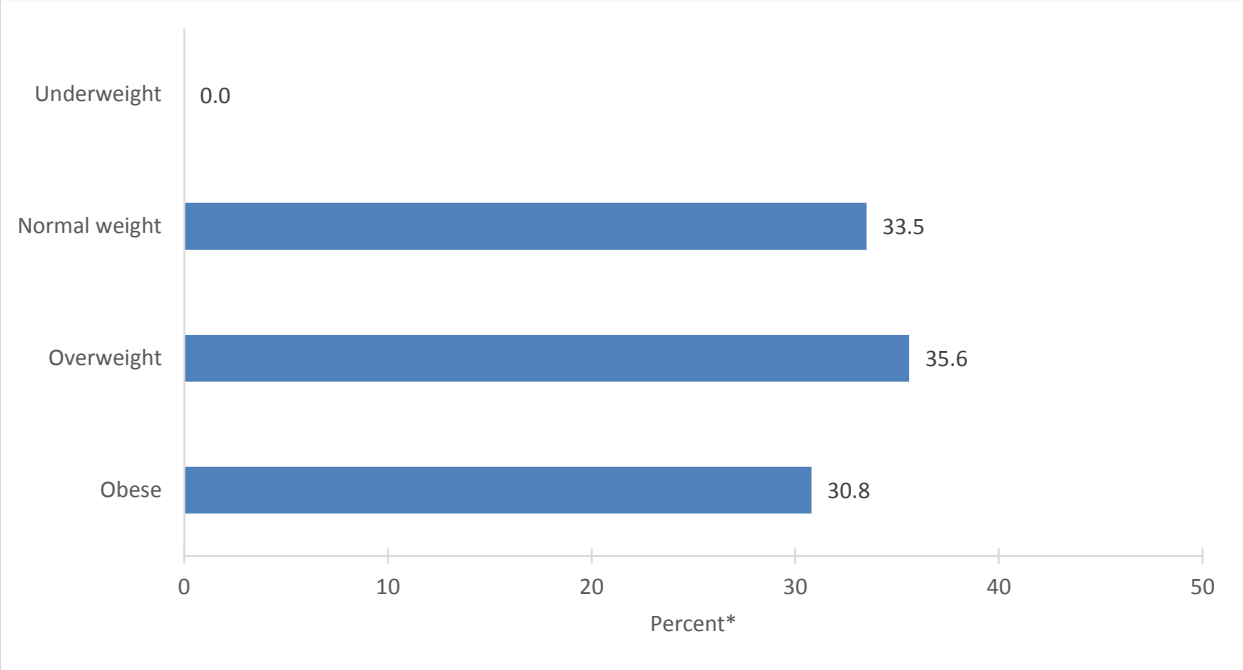
The study results suggest possible discrepancies between respondents' perceived personal health and their actual health status as determined by objective measures. For example, using the Body Mass Index (BMI) which calculates weight status using an individual's weight and height, the majority of respondents in the area (66.4%) are overweight or obese. However, the vast majority (89.5%) of community respondents rate their own health as excellent, very good, or good. With good overall health habits in mind, it is important to note that within the past year, over 80.9% of respondents visited a doctor or health care provider for a routine physical and 89% visited a dentist or dental clinic.

Respondents' rating of their health in general



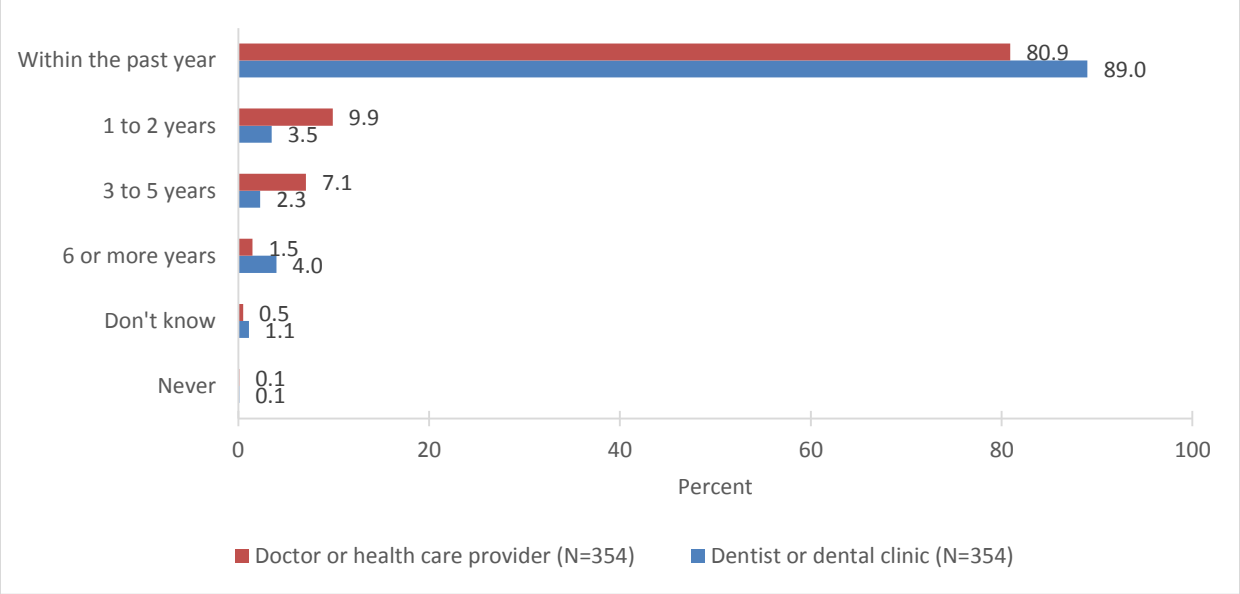
89.5% rate their health as good or better.

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



66.4% of the key stakeholders report a BMI that is overweight or obese.

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



Preventive Health

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

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

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

Type of screening	Percent of respondents		
	Yes	No	Total
GENERAL SCREENINGS			
Blood pressure screening (N=348)	87.1	12.9	100.0
Blood sugar screening (N=350)	70.3	29.7	100.0
Bone density test (N=348)	10.8	89.2	100.0
Cardiovascular screening (N=344)	25.5	74.5	100.0
Cholesterol screening (N=350)	74.6	25.4	100.0
Dental screening and X-rays (N=350)	89.2	10.8	100.0
Flu shot (N=351)	72.6	27.4	100.0
Glaucoma test (N=345)	51.5	48.5	100.0
Hearing screening (N=348)	17.6	82.4	100.0
Immunizations (N=348)	23.0	77.0	100.0
Pelvic exam (N=178 Females)	63.3	36.7	100.0
STD (N=345)	1.7	98.3	100.0
Vascular screening (N=344)	10.8	89.2	100.0
CANCER SCREENINGS			
Breast cancer screening (N=180 Females)	78.8	21.2	100.0
Cervical cancer screening (N=178 Females)	67.4	32.6	100.0
Colorectal cancer screening (N=346)	31.5	68.5	100.0
Prostate cancer screening (N=169 Males)	54.4	45.6	100.0
Skin cancer screening (N=350)	28.1	71.9	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	Total
GENERAL SCREENINGS								
Blood pressure screening (N=41)	76.2	20.3	0.0	0.0	0.0	0.0	3.5	100.0
Blood sugar screening (N=91)	52.1	35.4	0.5	0.0	0.0	0.0	11.9	99.9
Bone density test (N=271)	51.0	40.9	1.8	0.0	0.0	0.0	6.2	99.9
Cardiovascular screening (N=225)	41.3	47.3	2.0	0.0	0.0	0.0	9.5	100.1
Cholesterol screening (N=81)	49.9	33.0	0.6	0.0	0.0	0.0	16.5	100.0
Dental screening and X-rays (N=36)	35.3	4.7	36.3	0.6	0.0	0.0	23.0	99.9
Flu shot (N=93)	56.1	1.6	0.0	0.0	1.8	0.0	40.6	100.1
Glaucoma test (N=151)	62.7	29.5	1.3	0.0	0.0	0.0	6.5	100.0
Hearing screening (N=246)	63.4	27.7	2.0	0.0	0.3	0.0	6.6	100.0
Immunizations (N=238)	77.1	14.1	0.4	0.0	0.0	0.0	8.4	100.0
Pelvic exam (N=54 Females)	61.8	16.4	0.9	0.0	0.0	0.0	20.9	100.0
STD (N=298)	88.5	9.3	0.5	0.0	0.0	0.0	1.6	99.9
Vascular screening (N=261)	50.6	40.7	1.9	0.0	0.0	0.0	6.8	100.0
CANCER SCREENINGS								
Breast cancer screening (N=34 Females)	78.1	11.8	1.5	0.0	0.0	0.0	8.6	100.0
Cervical cancer screening (N=52 Females)	64.1	17.0	1.9	0.0	0.0	0.0	17.0	100.0
Colorectal cancer screening (N=204)	63.3	22.7	3.1	2.9	0.0	0.0	8.0	100.0
Prostate cancer screening (N=Males)	55.2	33.8	1.9	0.0	0.0	0.7	8.5	100.1
Skin cancer screening (N=207)	49.5	39.0	2.9	0.0	0.0	0.5	8.2	100.1

*Percentages do not total 100.0 due to multiple responses.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Flu Vaccines

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

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

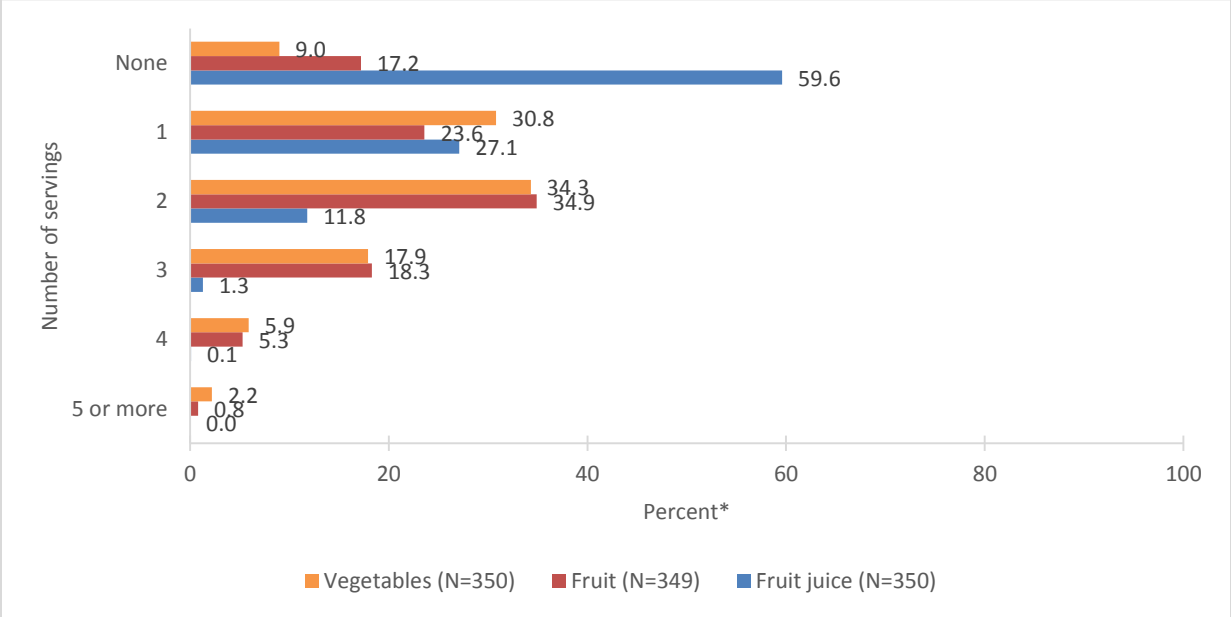
Sanford Health employees are required to have an annual flu vaccine as a protective measure for our patients as well as our staff.

Fruit and Vegetable Intake

The study results suggest that the majority of respondents do not meet vegetable and fruit recommended dietary guidelines. Only 26% of respondents reported having 3 or more servings of vegetables the prior day. Only 24.4% reported having 3 or more servings of fruits the prior day.

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

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

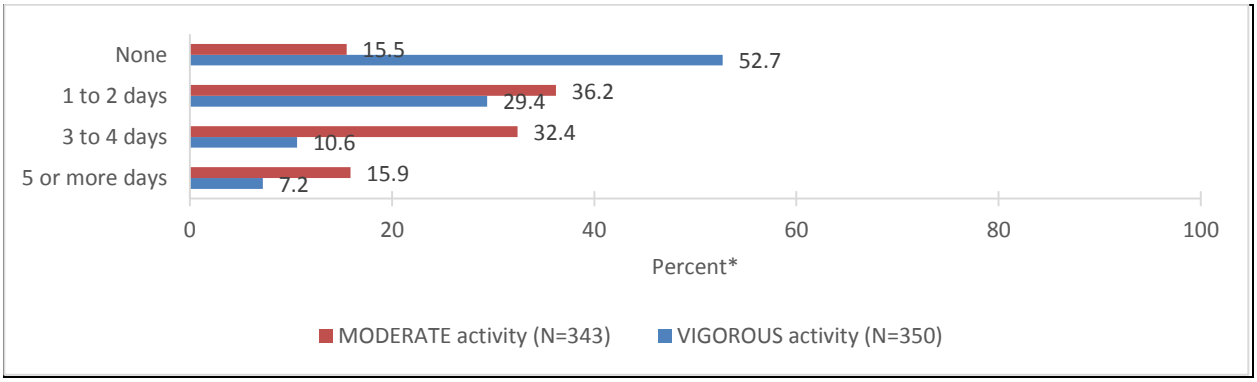


Physical Activity Levels

Study results suggest that 48.3% of respondents do meet physical activity guidelines. 48.3% of respondents have 3 or more days per week with moderate activity.

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

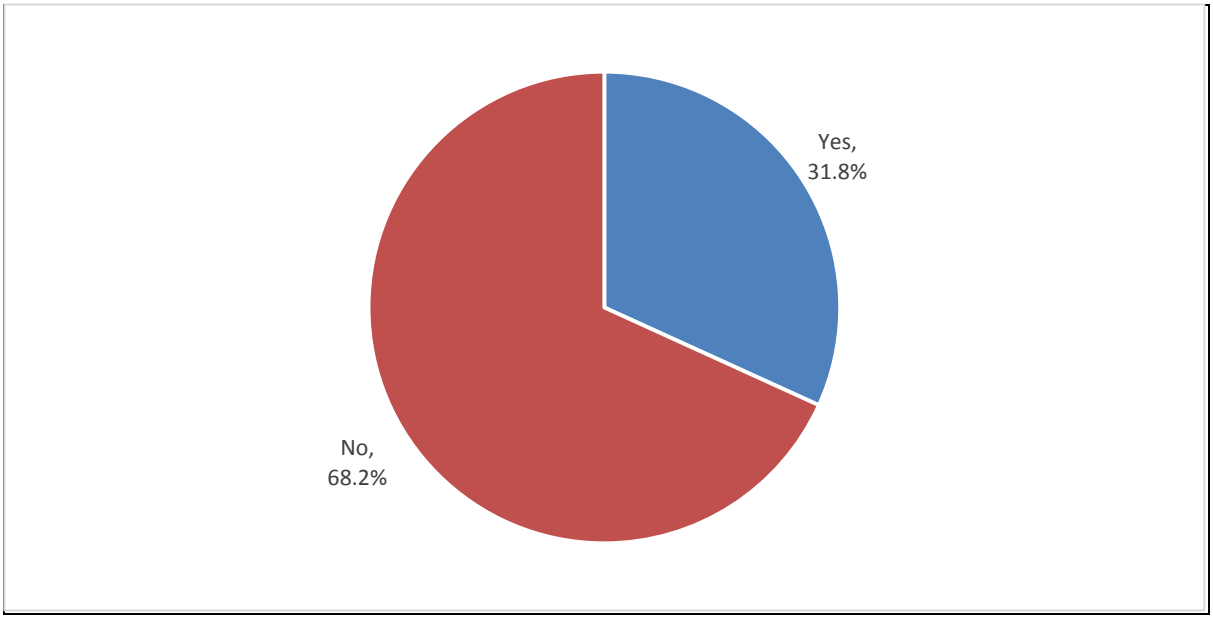
Number of days in an average week respondents engage in MODERATE and VIGOROUS activity



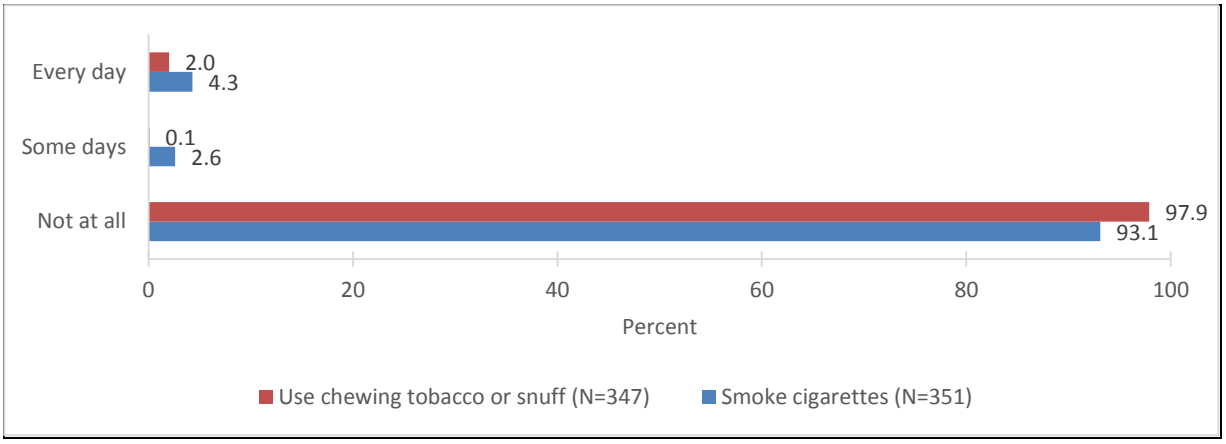
Tobacco Use

Study results indicate that the vast majority of community respondents are not currently tobacco users. However, 31.8% of respondents have smoked at least 100 cigarettes in their lifetime, which indicates a former smoker status according to the Centers for Disease Control and Prevention.

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



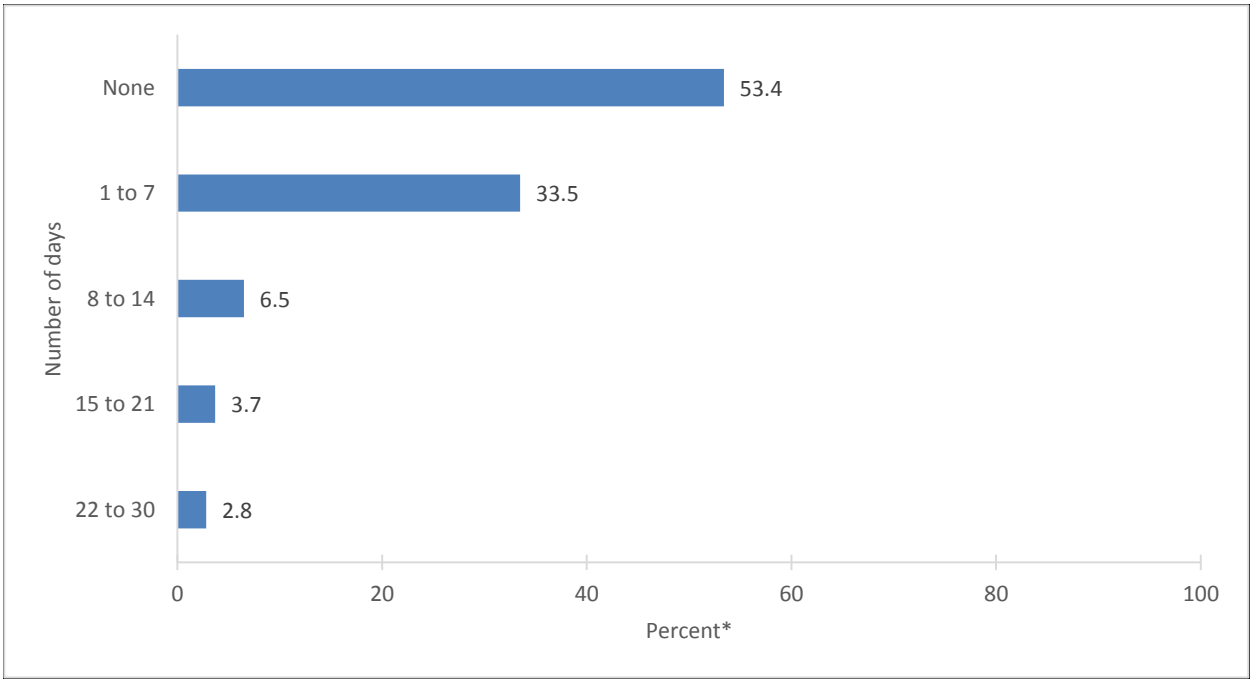
How often respondents currently smoke cigarettes and use chewing tobacco or snuff



Mental Health

Mental health is an important component of well-being at every stage of life and impacts how we think, act and feel. Mental health influences our physical health, how we handle stress, how we make choices, and how we relate to others. Among Sioux Falls MSA respondents, mental health is a moderately high area of concern, particularly depression, and stress. 12.5% of respondents have been told or diagnosed by a doctor or health professional that they have anxiety or stress and 13.5% have been told they have depression. In addition, 46.5% of respondents self-report that in the last month, there were days when their mental health was not good.

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

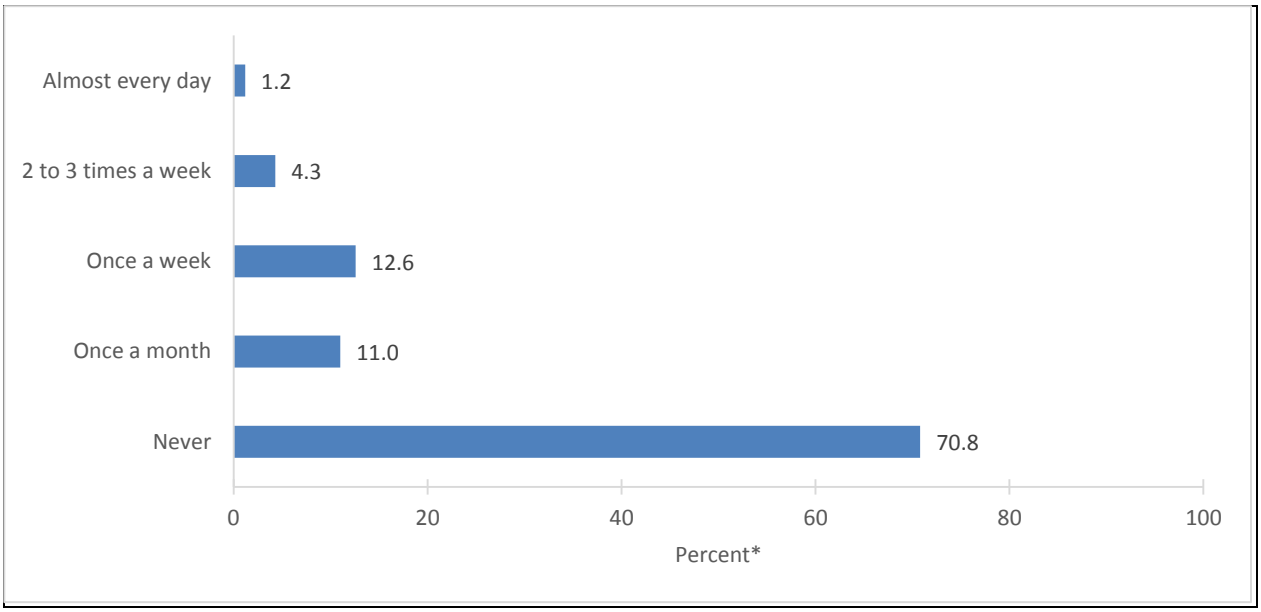


Substance Abuse Responses

Substance abuse is also a mental health disorder, as defined by the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV), and can stem from mental health concerns. In Sioux Falls MSA, 73.1% of the community stakeholder's respondents drank alcoholic beverages on at least one of the days in the last month. On days they drank, 22.4% of respondents drank an average of 3 or more drinks per day. In regards to binge drinking, 29.1% of community stakeholder's respondents report binge drinking at least once per month,

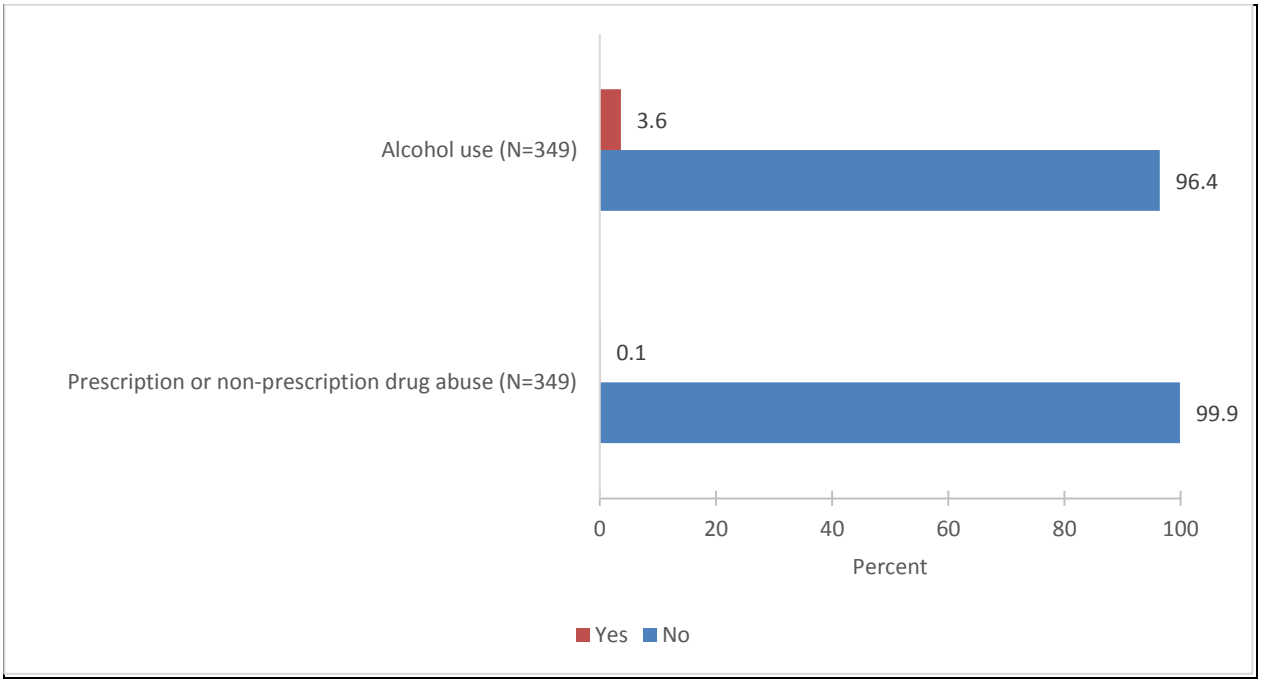
Secondary research through the 2015 County Health Rankings found that 21% of residents in Minnehaha County, 23% in Lincoln County, 19% in McCook County, and 19% in Turner County report excessive drinking. 26% of the driving deaths indicated alcohol involvement in Minnehaha County. The rate is 46% in Lincoln County, 14% in McCook County, and 50% in Turner County. (See Appendix)

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



N=50

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



3.6% percent of respondents reported having a problem with alcohol although earlier reporting indicated a higher level of binge drinking (29%).

Other forms of substance abuse include the use of prescription or non-prescription drugs. 0.1% of the community stakeholder's respondents reported having had a problem with prescription or non-prescription drug abuse.

Demographics

Total Population – 2014 U.S. Census Bureau (estimates)

Minnehaha: 176,014
Lincoln: 48,326
McCook: 5,615
Turner: 8,339

Population by Age

	Number	Percent
<5 years	Minnehaha: 13,530 Lincoln: 4,134 McCook: 407 Turner: 514	7.7 8.6 7.2 6.2
5-9	Minnehaha: 12,192 Lincoln: 4,211 McCook: 415 Turner:498	6.9 8.7 7.4 6.0
10-14	Minnehaha: 11,491 Lincoln: 3,749 McCook: 407 Turner:617	6.5 7.8 7.2 7.4
15-19	Minnehaha: 11,603 Lincoln: 2,963 McCook: 333 Turner:534	6.6 6.1 5.9 6.4
20-24	Minnehaha: 12,460 Lincoln: 2,281 McCook: 235 Turner: 339	7.1 4.7 4.2 4.1
25-34	Minnehaha: 27,498 Lincoln: 8,048 McCook: 572 Turner: 857	15.6 16.7 10.2 10.3
35-44	Minnehaha: 22,218 Lincoln: 7,126 McCook: 592 Turner: 928	12.6 14.7 10.5 11.1
45-54	Minnehaha: 24,243 Lincoln: 6,119 McCook: 826 Turner: 1,220	13.8 12.7 14.7 14.6
55-59	Minnehaha: 11,225 Lincoln: 2,920 McCook: 366 Turner: 630	6.4 6.0 6.5 7.6
60-64	Minnehaha: 9,126 Lincoln: 2,236 McCook: 382 Turner: 569	5.2 4.6 6.8 6.8

	Number	Percent
65-74	Minnehaha: 10,854 Lincoln: 2,525 McCook: 521 Turner: 783	6.2 5.2 9.3 9.4
75-84	Minnehaha: 6,348 Lincoln: 1,383 McCook: 365 Turner: 592	3.6 2.9 6.5 7.1
85 and over	Minnehaha: 3,226 Lincoln: 631 McCook: 194 Turner: 258	1.8 1.3 3.5 3.1
Median age	Minnehaha: 34.7 Lincoln: 33.5 McCook: 42.9 Turner: 43.9	

Population by Race

	Minnehaha	Percent	Lincoln	Percent	McCook	Percent	Turner	Percent
White	153,592	87.3	46,180	95.6	5,466	97.3	8,119	97.4
Black or African American	7,315	4.2	474	1.0	21	0.4	44	0.5
American Indian or Alaska Native	4,708	2.7	163	0.3	64	1.1	47	0.6
Asian	3,159	1.8	585	1.2	0	0	2	0
Native Hawaiian or other Pacific Islander	44	0.0	0	0	0	0	0	0
Hispanic or Latino	7,938	4.5	759	1.8	141	2.5	155	1.9

The per capita personal income in Minnehaha County, South Dakota is $28,555. 13.6% of individuals 18 years and older in Minnehaha County are living below the poverty level. The unemployment rate in Minnehaha County is 3.4% (2015 data).

The per capita personal income in Lincoln County, South Dakota is $16,848. 16.5% of individuals 18 years and older in Lincoln County are living below the poverty level. The unemployment rate in Lincoln County is 2.9% (2015 data).

The per capita personal income in McCook County, South Dakota is $27,830. 7.9% of individuals 18 years and older in McCook County are living below the poverty level. The unemployment rate in McCook County is 3.5% (2015 data).

The per capita personal income in Turner County, South Dakota is $26,263. 8.8% of individuals 18 years and older in Turner County are living below the poverty level. The unemployment rate in Turner County is 3.4% (2015 data).

Health Needs and Community Resources Identified

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

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

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

The asset map process includes identified needs from the following:

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

See the Asset Map in the Appendix.

Prioritization

The following needs were brought forward for prioritization:

- Aging – the cost of long term care
- Children and Youth – bullying
- Safety – presence of street drugs and alcohol in the community, presence of drug dealers in the community, crime, child abuse and neglect, and domestic violence
- Health Care Access – access to affordable health insurance, health care and prescription drugs
- Physical Health – cancer, chronic disease, inactivity, poor nutrition and obesity
- Mental Health/Behavioral Health – underage drug use and abuse, alcohol use and abuse

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

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

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

- Safety
- Physical Health

How Sanford Medical Center Sioux Falls USD is Addressing the Needs

Identified Concerns	How Sanford Medical Center Sioux Falls USD is Addressing the Needs
Aging • Cost of long term care	Cancer • Continuing options for hospice care with home health care, hospice cottages (routine hospice care), and acute hospice inpatient and in progress creation of Hospice facility for routine and acute patients with dedicated pediatric and adult services. HRSA Grant • HRSA grant is in its second year of deploying a dedicated interprofessional (IP) into 4 sites in community settings to promote health, identify health risk, provide IP interventions thru Co-Ops/clinics and home visits to reduce use of high end services, including delaying the need for LTC. • Community partners/sites include Active Generations in SF, Wellness Center SF, America Legion Valley Springs, and Our Lady of Guadalupe Free Clinic affiliation w/downtown location in Worthington MN.
Children and Youth • Bullying	Sanford Children's CHILD Services – Bullying • Conducts social emotional trainings and technical assistance to child care providers in 29 counties in southeast and northeast South Dakota to address the needs of young children learning social skills early and to prevent bullying.
Crime/Safety • Presence of street drugs and alcohol in the community • Presence of drug dealers in the community • Crime • Child abuse and neglect • Domestic violence	Sanford has set an implementation strategy to address narcotics usage. Sanford CHILD Services – Child abuse and neglect early intervention/prevention • Parent side program works with Child Protection Services to provide parent education and support to at risk families in Minnehaha and Lincoln counties. • Conducts community parent education classes for parents regarding appropriate developmental expectations for young children and appropriate discipline techniques.

Identified Concerns	How Sanford Medical Center Sioux Falls USD is Addressing the Needs
	• Security officers on site 24/7. One officer is always stationed at the Children's Hospital. • Secured units; Children's, Emergency Department, Birth Place • Security works with HR for specifically identified domestic violence issues with employees • Hugs & Kisses system • Child's Voice program • Social Work services • Mental Health services • Counseling for employees through EAP • Police Dept. 605-367-7212 • Minnehaha Sheriff 605-367-4300 • Child Protection 605-367-5444 • SD Child Advocacy Center 605-333-2226 • Children's Inn (services for family violence, child abuse) 605-338-0116 • Substance Abuse resources: o Glory Home 605-332-3273 o Keystone Outreach 605-413-1493 o Sioux Falls VAMC 605-336-3230 o Tallgrass Recovery 605-368-5559 o Bartels Counseling 605-310-0032 o Choices Recovery 605-334-1822 o Counseling Resources 605-331-2419 o Dakota Drug & Alcohol Prevention 605-331-5724 o First Step 605-361-1505 o Carroll Institute 605-336-2556 o Sioux Falls Urban Indian Health 605-339-0420 o Transitional Living Corporation 6005-368-5559 o Sioux Falls Treatment Center 605-332-3236 o Arch Halfway House 605-332-6730 o Changes & Choices Recovery Center 605-332-9257 o Face it Together 605-2274-2262 o Minnehaha Co. Detox Center 605-367-5297
Access to Health Care/Cost of Health Care • Access to affordable health insurance • Access to affordable health care • Access to affordable prescription drugs	HRSA Grant • The HRSA grant increases access to inter-professional health care services by deploying these services further into the community and homes where daily self-care occurs. Co-Ops are held 4 times each week in four community settings. • HRSA Co-Ops target those receiving Medicare, Medicaid or those who are uninsured. • Early outcomes indicate potential reduced cost of health care.

Identified Concerns	How Sanford Medical Center Sioux Falls USD is Addressing the Needs
	Cancer • Affordable Rx drugs – drug replacement and subsidy program for cancer patients available for infusion and oral chemotherapy.

Physical Health
• Cancer
• Chronic disease
  o High cholesterol
  o Hypertension
  o Arthritis
• Obesity
• Poor nutrition and eating habits
• Inactivity and lack of exercise
  o 66.4% of respondents report that they are overweight or obese
  o Only 11.2% report having 3 or more vegetables/day
  o Only 24.4% report having 3 or more fruits/day
  o 48.3% report moderate exercise at least 3x/week
	Sanford has developed an implementation strategy to address chronic disease and obesity.
	
	Sanford Women's Mutch Center for Health Enrichment – Chronic Disease
	• Conducts Healthy Lifestyle Coaching for the general public
	• Conducts nutrition consultations for the general public
	• Conducts small group fitness for women with classes specifically designed for bone health and individuals struggling with physical movement due to chronic disease for the general public
	Sanford CHILD Services – Pediatric Obesity
	• Conducts fitCare classes for child care providers in 29 counties in northeast and southeast South Dakota focusing on health and wellbeing relevant to pediatric obesity prevention
	• Conducts Physical Activity Technical Assistance to child care providers in 16 counties in southeast South Dakota to assist caregivers in putting more physical activity into a child's day in order to prevent pediatric obesity.
	• Conducts fitClub4 Girls in 8 schools with the Sioux Falls School district focusing on health and wellbeing relevant to pediatric obesity prevention
	HRSA Grant
	• Community screenings through the HRSA grant for hyperlipidemia may be funded in 2016 for testing of HDL and total cholesterol
	• BP thresholds are monitored for all HRSA grant participants with diagnoses of HTN
	• The IP team includes a dedicated PT and OT who work with those with arthritis to promote better function
	• All grant participants have a calculated BMI and are coached by RNs and the dietician for weight loss.
	• Community classes are offered for diabetes management, weight loss and exercise.
	
	Cancer
	• Screening – Increasing screening rate for breast and colon cancer through use of primary care and Medical

Identified Concerns	How Sanford Medical Center Sioux Falls USD is Addressing the Needs
	Home. Health maintenance reminders for breast, colon and cervical cancer screening. Addition of lung cancer screening program for early detection with dedicated lung nodule clinic. • Risk Assessment – Implementation of Edith Sanford Athena Breast Cancer Risk assessment program to identify and intervene with women at high risk of breast cancer. Expansion of high risk breast clinic to develop personalized screening plans. Identification of patients and families at high risk for colon and endometrial cancer through consistent genetic tumor testing. Genetic counseling imbedded in clinics for easy access to familial cancer risk assessment. • Treatment – Advanced treatment including targeted therapy based upon tumor genomic analysis and immunotherapy. Clinical trials including NCI-sponsored, investigator-initiated and commercial available for patients locally. • Survivorship – Survivor treatment summaries, care plans and visits serve to encourage healthy behaviors, reoccurrence prevention and quality of life. Plans include exercise, nutrition, health screenings and mental health aids. Other • Camp Fuel – Week-long camp held at the Sanford Wellness Center for kids ages 9-12 to teach them about healthy eating and physical activity • General nutrition education for K-12 students in Sioux Falls schools and surrounding communities • General nutrition education presentations to employees of Sioux Falls businesses • Serve as part of the HRSA grant interdisciplinary health care team • Serve as part of the Healthy SD Community work group • Cooking classes and nutrition education to Boy and Girl Scouts • Nutrition presentations to groups with cancer and other chronic conditions (breast cancer, COPD, diabetes, etc.) • Health fairs • Fuel Up to Play 60 Coach for the Brandon Valley School District (FUTP 60 is an in-school program that promotes healthy eating and physical activity) • Nutrition education for pregnant women and new moms (B4 Baby, New Baby & Me, Centering Pregnancy)

Identified Concerns	How Sanford Medical Center Sioux Falls USD is Addressing the Needs
	• One-on-one nutrition counseling for Wellness Center and Mutch Women's members • Participate in TV, radio, and newspaper interviews regarding nutrition topics in the news • Diabetes Prevention Program

Mental Health
• Underage drug use and abuse
• Alcohol abuse
  ○ 29.1% of respondents report binge drinking
	Mindfulness Based Stress Reduction (MBSR) courses provided to the community 2014, 2015, 2016
	• Mindfulness is moment-to moment, non-judgmental awareness. MBSR is a research-based intensive training course designed to assist people. Developed by Dr. Jon Kabat-Zinn at the University of Massachusetts Medical Center
	  ○ Manages anxiety, depression, stress, chronic pain, and a range of conditions.
	  ○ Uses a combination of mindfulness meditation, body awareness, and yoga to help people become more mindful.
	  ○ Beneficial effects, including stress reduction, relaxation, and improvements to quality of life.
	
	Mindfulness courses for 2016 includes community groups with chronic diseases including:
	• Breast cancer
	• Neurological conditions
	• Older adults
	
	Transition Nursing:
	• At Sanford Medical Center Sioux Falls USD in Sioux Falls, an experienced nurse case manager provides nursing care to support complex patients for a defined period of time after discharge from the hospital, usually 4 weeks.
	• The patient is referred and assessed prior to discharge
	  ○ Provides early identification and response to health risks
	• Multidisciplinary approach working with health care team
	• Service provided:
	  ○ The transition nurse makes a home visit soon after discharge
	  ▪ Medication review
	  ▪ Health status monitoring
	  ▪ Provide/reinforce discharge education
	  ▪ Assure follow-up appointments are made and accessible to the patient

Identified Concerns	How Sanford Medical Center Sioux Falls USD is Addressing the Needs
	○ Telephone encounters are provided to continue monitoring and provide support ○ Additional home visits are made based on patient need ○ The nurse coordinates care with patient's provider and the team • The transition nurse provides hand-off to the clinic and provider at the end of the transition period • Research has demonstrated a reduction in readmission, decreased cost, decreased length of stay **Emergency Department Case Management:** Sanford Medical Center Sioux Falls USD provides nurse case managers in the emergency department to support complex patients who access care in this setting, working with the multidisciplinary team to support the needs of the individual. The nurse case manager is available to consult with patients who need additional support to manage complex social, health or chronic conditions and provides referrals to resources in the community as appropriate for the assessed needs. The nurse case manager is a broker of services, linking the individual to community- based services including: • Establishing a primary care provider • Referrals to mental health and substance abuse resources • Medication assistance • Food and housing assistance Referrals to community, state and federal programs **Behavioral Health Triage Therapist (BHTT):** The BHTT serves as an integral core team member within the patient-centered Medical Home. The BHTT works with the physician, advanced practice provider, RN Health Coach, nurses, care coordinator assistant, peer support advocate and community partners, all of whom work collaboratively to provide the best care to patients. The BHTT is an important resource for patients and team members for issues related to mental and behavioral health, chemical health, psychosocial aspects of health and disease, and lifestyle management to support optimal patient functioning. The BHTT is integral in the adult and teen screening performed in the primary care clinics. They provide diagnostic assessments and determine disposition triaged according to level of clinical acuity and medical and psychosocial complexity, on-site crisis assessment

Identified Concerns	How Sanford Medical Center Sioux Falls USD is Addressing the Needs

	and crisis intervention, brief counseling, referrals, and education services across the continuum of care. They also provide follow up to ensure continuity of care and those patients are receiving appropriate behavioral health management.
	
	BHTT Key Points:
	• BHTT role is patient-centered and focuses on assisting the primary care medical team in identifying, triaging and effectively helping patients manage behavioral health problems or psychosocial comorbidities of their chronic medical disease.
	• BHTT works to ensure seamless interface between primary care and specialty and/or community-based resources.
	• They are able to assist in mental health crisis management and intervention within the clinic setting helping ensure patient safety.
	
	<u>Addiction Services:</u>
	• Sanford Health Psychiatry and Psychology Clinic is hiring a Llicensed Addiction Counselor to provide outpatient addiction/chemical dependency care.
	• Incorporation of Peer Support Advocate (PSA) position to enhance addiction services provided by Sanford Health
	  ○ The PSA brings an understanding and insight from the perspective of "lived experience" that can be extremely helpful to the patient struggling with addiction.
	  ○ The primary role of the PSA is to assist and direct people in recovery from addiction to the proper resources for ongoing care, promoting accountability and mitigating relapse.
	  ○ Examples of the above would be: assist patient with successfully attending after-care appointments, assist with successful completion of tasks outlined by the treatment team's plan of action and ultimately improve duration of sustained adherence to treatment plan.
	
	Sanford is participating in the community initiative to address behavioral health.

SANFORD HEALTH

2016 Implementation Strategy

Implementation Strategies

2017-2019

Priority 1: Crime/Safety – Pharmaceutical Narcotics in our Community

Goal: Standardize narcotic prescribing protocols across the enterprise to reduce usage

The Substance Abuse and Mental Health Services Administration (SAMHSA) reports that 4.3 million Americans engaged in non-medical use of prescription painkillers in the last month. Approximately 1.9 million Americans met criteria for prescription painkillers use disorder based on their use of prescription painkillers in the past year.

A number of opioids are prescribed by physicians to relieve pain. These include hydrocodone, oxycodone, morphine, and codeine. While many people benefit from using these medications to manage pain, prescription drugs are frequently diverted for improper use. In the 2013 and 2014 National Survey on Drug Use and Health (NSDUH), 50.5% of people who misused prescription painkillers got them from a friend or relative for free, and 22.1% got them from a physician. As people use opioids repeatedly, their tolerance increases.

Sanford has set strategy to reduce narcotic use across the system by providing alternative pain management methods. Policies and procedures to address the prescription of narcotics will be standardized across the health care system as part of this strategy. Pain medication prescriptions will be tracked and studied to identify areas for improvement.

Priority 2: Physical Health – Chronic Disease

Goal 1: Improve Care of Patients with Overweight or Obesity Diagnosis

Many of the chronic conditions experienced by our patients can be addressed through primary prevention. Weight gain itself has been shown to increase the risk of type 2 diabetes (Nurses Health Study), hypertension (NHANES III), gallstones (NHANESIII), osteoarthritis in the knee (Framingham Study and NHANES I), and endometrial cancer (Schottenfield et. Al, 1996). Weight gain is also associated with higher lipid levels, coronary heart disease, cardiovascular disease, and premature death from stroke and heart attack. (NHLBI, 1998).

Sanford has set strategy to improve the care of patients with overweight or obesity diagnosis. Patients who are overweight will be referred to internal and external services including registered dietitians, exercise physiologists, and health coaches. BMI changes will be studied and monitored.

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 children, 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*4theclassroom.com – *fit* 4 the Classroom is an on-line school resource developed in cooperation with Discovery Education that incorporates topics into math and science curriculum. The on-line resource for the classroom went live in September of 2012. To date the program has 14 STEM (integrating science, technology, engineering, and math) unit plans that can be downloaded for classroom use.
    - Reached 50,000 schools
    - 180,000 page views from educators across the country
    - 12,000 lesson plan downloads, representing 600,000+ students

  We are also reaching thousands of students through several pilot school programs.
    - *fit*4Schools – *fit*4Schools, which includes unique *fit*-based lessons integrated into daily classroom activities, is in its final phase of development. It is being piloted in seven elementary schools in the Sanford region.

- 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

Goal 2: Improve Care of Patients with Diabetes

According to the American Diabetes Association, approximately 30 million children and adults have diabetes in the United States. Out of that number, nearly 95% have type 2 diabetes, a condition characterized by high blood glucose levels caused by either a lack of insulin or the body's inability to use insulin efficiently. Type 2 diabetes develops most often in middle-aged and older adults but can appear in young people. Sadly, the problem is even greater for minority and ethnic populations.

Sanford has set strategy to provide optimal diabetes care and to measure the outcomes for systolic and diastolic blood pressure, LDL cholesterol, Hemoglobin A1C, tobacco use and aspirin use. These outcomes are part of the optimal care recommendations for people living with diabetes.

Sanford offers a comprehensive diabetes education program. Sanford diabetes clinics and centers are dedicated to empowering people with diabetes to feel better and prevent long-term complications. Sanford offers assessment and personalized education care to give patients and their families the tools they need to manage diabetes while living well. Endocrinologists, certified diabetes nurses, and certified diabetes dieticians provide diagnosis, assessment, one-on-one education, and instruction.

The chronic disease self-management program Better Choices, Better Health at Sanford is offered free of charge to community members. Better Choices, Better Health is modeled after Stanford University's chronic disease self-management program. The workshops are 2½ hours long and meet weekly for 6 weeks. The program is facilitated by two trained lay leaders and one or both have a chronic condition. Research has found that after participating in the program individuals are better able to manage their symptoms, communicate more easily with their doctors, are less limited by the disease, and generally feel better.

Goal 3: Improve Care of Patients with Hypertension

Hypertension is also known as high blood pressure. Often there are no symptoms with this condition which is why it is called the "silent killer". The American Heart Association reports that 1 in three adults, or approximately 80 million people in the United States will have high blood pressure. Other than pregnancy, hypertension is the most common reason for adult office visits. Despite the number of resources used to treat hypertension, only about 50% of hypertensive patients have their BP under control using the definition of less than 140/90.

Studies show 35 to 60% of health care professionals measure BP incorrectly. Surprisingly, even a small difference in measurement can have a considerable impact on the prevalence of cardiovascular events and life expectancy. Researchers approximate overestimating BP could lead to nearly 30 million

Americans receiving inappropriate treatment each year, unnecessarily exposing them to potential adverse side effects and increased health care costs. On the other hand, measuring BP even 5 mmHg too low will miss as many as 21 million people with hypertension in the U.S. each year.

Sanford has set strategy to address hypertension through standardized protocol, frequent blood pressure monitoring, and referral. Outcome measures include a blood pressure of less than 140/90 for all ages 18 – 59, and for age 60+ with diabetes, vascular or renal disease. For patients 60 or older without diabetes, vascular or renal disease, the goal is a blood pressure of 150/90.

Goal 4: Improve Care of Patients with Ischemic Vascular Disease

According to the American Heart Association, Ischemia is a condition in which the blood flow (and thus oxygen) is restricted or reduced in a part of the body. Cardiac ischemia is the name for decreased blood flow and oxygen to the heart muscle.

Ischemic vascular disease is the term given to heart problems caused by narrowed heart arteries. When arteries are narrowed, less blood and oxygen reach the heart muscle. This is also called coronary artery disease and coronary heart disease. This can ultimately lead to a heart attack.

Sanford has set strategy to address ischemic vascular disease by standardizing protocols for optimal vascular care. Outcome measures include systolic blood pressure <140, diastolic blood pressure < 90, LDL statin indications, tobacco free recommendations, and a daily use of aspirin.

Community Health Needs Assessment

Implementation Strategy for Sanford Medical Center Sioux Falls USD

FY 2017-2020 Action Plan

Priority 1: Crime/Safety - Pharmaceutical Narcotics in Our Community

Projected Impact: Alternative pain management methods are adopted across the enterprise and narcotic usage is reduced

Goal 1: Standardize narcotic prescribing protocols across the enterprise to reduce usage

Actions/Tactics	Measureable Outcomes	Dedicated Resources	Leadership	Community partnerships and collaborations
Policies and procedures to address the prescription of narcotics are standardized across the enterprise	Track narcotic prescriptions Identify areas for improvement	Behavioral Health Triage Therapists, Physicians	Dr. Mike Wilde, Dr. Dan Heinemann, Dr. Allison Suttle	Sioux Falls Police Department

Priority 2: Physical Health - Chronic Disease

Projected Impact: Improve chronic disease outcomes

Goal 1: Improve Care of Patients with Overweight or Obesity Diagnosis

Actions/Tactics	Measureable Outcomes	Resources	Leadership	Community partnerships and collaborations
Patients who are overweight or obese will be referred to internal/external services	Internal referrals are tracked; change in BMI is monitored through quality metrics	Kelly Hasvold/ Quality Team, Health Coaches, Exercise specialists, Sanford Dietitians, Sanford *fit*	Dr. Mike Wilde, Dr. Dan Heinemann, Dr. Allison Suttle	
Provide Sanford *fit* Program to the local schools and child care centers	Sanford *fit* is available to all students and families in the area through classroom and *fit* website	Sanford *fit* leadership, classroom teachers	Sanford leaders	Local schools, child care leaders

Goal 2: Diabetes – Improve Care of Patients with Diabetes

Actions/Tactics	Measureable Outcomes	Resources	Leadership	Community partnerships and collaborations
Adopt optimal diabetes care for patients ages 18-75 with diabetes	• Systolic B/P <140 • Diastolic B/P < 90 • LDL – per statin indications • HbA1C < 8 • Tobacco free • Daily aspirin if Ischemic Vascular Disease	Kelly Hasvold/ Quality Team, Health Coaches, Exercise specialists, Sanford Dietitians	Dr. Mike Wilde, Dr. Dan Heinemann, Dr. Allison Suttle	

Goal 3: – Improve Care of Patients with Hypertension

Actions/Tactics	Measureable Outcomes	Resources	Leadership	Community partnerships and collaborations - if applicable
Standardized hypertension protocols are in place in all primary care settings	• B/P < 140/90 for ages 18-59 • B/P < 140/90 for age 60+ with DM, vascular or renal disease • B/P < 150/90 for age 60 without DM, vascular or renal disease	Kelly Hasvold/ Quality Team, Health Coaches, Exercise specialists, Sanford Dietitians	Dr. Mike Wilde, Dr. Dan Heinemann, Dr. Allison Suttle	

Goal 4: Improve Care of Patients with Ischemic Vascular Disease

Actions/Tactics	Measureable Outcomes	Resources	Leadership	Community partnerships and collaborations
Adopt standardized protocols for optimal vascular care	• Systolic B/P <140 • Diastolic B/P < 90 • LDL – per statin indications • Tobacco free • Daily aspirin if Ischemic Vascular Disease	Kelly Hasvold/ Quality Team, Health Coaches, Exercise specialists, Sanford Dietitians	Dr. Mike Wilde, Dr. Dan Heinemann, Dr. Allison Suttle	

SANFORD HEALTH

2013 Implementation Strategy

Demonstrating Impact

The following unmet needs were identified through a formal community health needs assessment, resource mapping and prioritization process for 2013:

- Elderly
- Dental Needs

Implementation Strategy: Elderly

- Consider the recruitment of Geriatricians.
- Nurse-led clinics - explore external funding opportunities to:
    - Consider expansion of CareSpan (walk-in nurse-run elder care clinic) hours and locations
    - Consider expansion of foot care clinics hours and locations
- Continue and expand community-based nurse-led dialogues regarding advance directives and end-of-life care.
- Consider establishing an older adult population advisory council within the community.

Implementation Strategy: Dental

- Explore opportunities to help promote either free or sliding scale fee dental services and programs already offered in the community (i.e. Falls Community Health Center and Ronald McDonald Mobile Care Unit).

Impact of the 2013 CHNA Implementation Strategies

When the 2013 community health needs assessment was conducted we learned of the concerns for the aging population in our community and the need for additional services. Implementation strategies were put into place to address the needs of the increasing aging population. Sanford has expanded the nurse-led clinics, including the expansion of CareSpan (walk-in nurse-run elder care clinic) and foot care clinics to more days per week and at additional locations. Sanford supported professional staff to become trained facilitators of the Better Choices Better Health classes in Sioux Falls in partnership with South Dakota Department of Health and the SDSU Extension Program. Better Choices Better Health is designed to help those living with a chronic illness improve self-management. Sanford is hosting several workshops at clinic and community sites, as well as coordinating with other partners to offer Better Choices Better Health sessions across the city in churches and community centers.

Community members expressed concern about the need to understand end-of-life choices and what decisions must be made to determine that choices are honored. Nurse-led dialogues regarding advance directives and end-of-life care brought forth a new initiative to provide education about advanced directives and assistance for community members with the completion of these documents.

As a result a new initiative around advanced care planning has begun at Sanford using the Gunderson model.

Sanford supports education and resources for agencies serving older adults such as Active Generations, Arthritis Foundation, Alzheimer's Association, National Parkinson's Foundation SD, etc. and the following initiatives: Moving Day, PD Support Group, Arthritis Support Group, High Noon education.

Sanford also serves on the advisory board of Senior Companions, and the Sanford faith community nurses serve as a station to help supervise senior companions.

We have learned that the needs for services for our aging population continue to increase and remain a high concern among community members. The cost and availability of long term care and the availability of memory care are among the highest of concerns.

Implementation strategies were also put into place to address dental care in the Sioux Falls community. Poor dental health can be a disability for community members and can prevent students from learning well in school. The need for dental services for community members who did not have dental insurance served as a catalyst for the implementation strategy to address dental services. Sanford supports free or sliding scale fee dental services and programs already offered in the community such as the Falls Community Health Center and Ronald McDonald Mobile Care Unit. We have learned that the need for dental health services continues today - the gap in workforce is making this need more difficult to address.

Community Feedback from the 2013 Community Health Needs Assessment

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

Appendix

Primary Research

Sioux Falls/MSA Assessed Concerns and Resource/Asset Mapping

Identified concern	Community resources that are available to address the need
Aging Population	**Home Care/Respite Care resources:** • Sanford Home Care 605-328-5900 • Home Care Assistance of SF 605-275-9183 • Synergy Home Care 605-274-2191 • Comfort Keepers 605-679-6408 **Long Term Care resources:** • Good Samaritan 605-361-3311 & 605-336-6232 • Dow Rummel Village 605-336-1490 • Bethany Lutheran Home 605-338-2351 • Luther Manor 605-336-1997 • Southridge Health Care Center 605-338-9891 • Avera Prince of Peace 605-322-5600 • Golden Living Center 605-361-8822 **Sioux Falls Helping Hands Emergency Center** **SD Department of Social Services 605-367-5444** **Assisted Living for the elderly:** • Stoney Brook Suites 605-373-0013 • Inn on Westport 605-362-1210 • Primrose Retirement Community 605-334-9100 • Good Samaritan Society 605-331-5507 • Washington Crossing 605-271-9273 • Meadows on Sycamore 605-332-0938 • Trail Ridge 605-339-4847 • Avera Prince of Peace 605-322-5600 • Waterford 605-335-1117 • Edgewood Vista 605-367-9570 • Prairie Crossings 605-361-0012 • Dow Rummel Village 605-336-1490 • Green Leaf 605-275-0074 • Cayman court 605-271-8540 **Home Care resources:** • Sanford Home Care 605-328-5900 • Home Care Assistance of SF 605-275-9183 • Synergy Home Care 605-274-2191 • Comfort Keepers 605-679-6408 **Respite Care facilities:** • SD Dept. of Human Services Respite Care Program 800-265-9684 • Inn on Westport 866-662-2111 • Edgewood Vista 866-662-2624 • Home Care Assistance of SF 605-275-9183

Identified concern	Community resources that are available to address the need
Children and Youth	Counselors for children who are troubled by bullying: • DAKota Oak Counseling 605-759-8359 • Sioux Falls Psychological Services 605-334-2696 • Great Plains Psychological Services 605-323-2345 • Behavioral Health Triage Therapists within Sanford Family Medicine and Pediatric clinics • Psychiatry and Psychology Clinic 605-312-8700 Preschool programs: • Sioux Falls School District early childhood programs 605-367-7900 • Embe 605-336-3660 • Christian Center School 605-361-8002 • St. Mary School 605-334-9881
Crime/ Safety	Police Dept. 605-367-7212 Minnehaha Sheriff 605-367-4300 Child Protection 605-367-5444 SD Child Advocacy Ctr. 605-333-2226 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 Corporation 6005-368-5559 • Sioux Falls Treatment Center 605-332-3236 • Arch Halfway House 605-332-6730 • Changes & Choices Recovery Center 605-332-9257 • Face it Together 605-2274-2262 • Minnehaha Co. Detox Center 605-367-5297 • Sanford Psychiatry and Psychology Clinic 605-312-8700
Cost of Health Care/ Access to Health Care	Sanford Health Community Care Programs Medical Home Program Sanford Health Case Managers Sanford Health Parish Nurses Sanford Health Social Workers

Identified concern	Community resources that are available to address the need
	Health Care clinics: • Sanford Family Medicine Clinics (26th & Sycamore 605-328-9000; 49th & Oxbow 605-328-1850; 69th & Minnesota 605-328-5800; 69th & Louise 605-312-8000; 41st & Sertoma 605-328-9600; 34th & Kiwanis 605-328-9100; USD Family Medicine 605-312-8300; 4th & Sycamore 328-2999; Brandon 605-582-5820; Hartford 605-312-5600; Lennox 605-647-2841;) • Sanford Internal Medicine Clinics (Internal Medicine 605-328-7500; Womens Internal Medicine 605-328-9700; • Sanford Childrens Clinics (26th & Sycamore 605-328-9080; 69th & Louise 605-312-8000; MB2 605-328-7800) • Sanford Acute Care and Walk-In Clinics (26th & Sycamore, 41st & Sertoma, 69th & Minnesota, Walk-In Stevens Center 605-332-2883) • Falls Community Health 605-367-8793 • Avera McKennan 605-322-8372 • SF VA Center 605-336-3230 **Low income eye care:** • Sioux Falls Family Vision 605-275-6100 • Falls Community Health 605-367-8793 • SD Sept. of Social Services/Medicaid 605-773-3165 **Low income dental care:** • Sioux River Valley Health Center 605-367-8760 • SD Sept. of Social Services/Medicaid 605-773-3165 **Prescription Assistance programs:** • CancerCare co-payment Assistance Foundation 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 Assistance 888-477-2669 • Patient Access Network (PAN) Foundation 866-316-7263 • Pfizer RX Pathways 866-776-3700 • RXhope.com
Physical Health	**Health Care clinics:** • Sanford Family Medicine Clinics (26th & Sycamore 605-328-9000; 49th & Oxbow 605-328-1850; 69th & Minnesota 605-328-5800; 69th & Louise 605-312-8000; 41st & Sertoma 605-328-9600; 34th & Kiwanis 605-328-9100; USD Family Medicine 605-312-8300; 4th & Sycamore 328-2999; Brandon 605-582-5820; Hartford 605-312-5600; Lennox 605-647-2841;)

Identified concern	Community resources that are available to address the need
	• Sanford Internal Medicine Clinics (Internal Medicine 605-328-7500; Womens Internal Medicine 605-328-9700; • Sanford Childrens Clinics (26th & Sycamore 605-328-9080; 69th & Louise 605-312-8000; MB2 605-328-7800) • Sanford Acute Care and Walk-In Clinics (26th & Sycamore, 41st & Sertoma, 69th & Minnesota, Walk-In Stevens Center 605-332-2883) • Falls Community Health 605-367-8793 • Avera McKennan 605-322-8372 • SF VA Center 605-336-3230 Sanford Dietitians Sanford Power Center Sanford *fit* Farmers Markets: • Falls Park Farmers Market 605-360-1623 • Sioux Empire Farmers Market 605-651-3624 • MTM Euro Farmers Market 605-271-9099 Exercise Facilities: • Great Life Woodlake Athletic Club 605-361-0445 • Anytime Fitness 605-275-5556 • Sanford Wellness Center 605-328-1600 • Planet Fitness 605-330-9990 • Avera McKennan Fitness Center 605-322-5300 • Fitness 19 605-271-6019 • 9 Round Fitness 605-275-8855
Mental Health/ Behavioral Health	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 Corporation 6005-368-5559 • Sioux Falls Treatment Center 605-332-3236 • Arch Halfway House 605-332-6730 • Changes & Choices Recovery Center 605-332-9257 • Face it Together 605-2274-2262 • Minnehaha Co. Detox Center 605-367-5297

Identified concern	Community resources that are available to address the need
	Mental Health resources: • **Catholic Family Services 605-988-3775** • **Heuermann Counseling Clinic 605-336-1974** • **LifeMarks Behavioral Health 605-334-1414** • **Southeastern Behavioral HealthCare 605-336-0503 / 605-336-0510** **PTSD resources:** • **VA / Vet Center 605-330-4552** • **Avera Health 605-322-8000**

Sioux Falls 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	Round 2	Round 3 V
Aging • Cost of long term care 3.95			
Children and Youth • Bullying 3.51			
Crime/Safety • Presence of street drugs and alcohol in the community 3.84 • Presence of drug dealers in the community 3.62 • Crime 3.58 • Child abuse and neglect 3.53 • Domestic violence 3.51	priority		
Access to Health Care/Cost of Health Care • Access to affordable health insurance 3.80 • Access to affordable health care 3.70 • Access to affordable prescription drugs 3.65			
Physical Health • Cancer 3.72 • Chronic Disease 3.58 ▪ High Cholesterol ▪ Hypertension ▪ Arthritis • Obesity • Poor nutrition and eating habits 3.68 • Inactivity and lack of exercise 3.65 ▪ 66.4% of respondents report that they are overweight or obese ▪ Only 11.2% report having 3 or more vegetables/day ▪ Only 24.4% report having 3 or more fruits/day ▪ 48.3% report moderate exercise at least 3x/week	priority		
Mental Health • Underage drug use and abuse 3.51 • Alcohol abuse ▪ 29.1% of respondents report binge drinking			

SANFORD HEALTH

2015 Sioux Empire Community Health Needs Assessment of Residents

May 2015

Results from a March 2015 generalizable survey of community residents in the Sioux Falls Metropolitan Area including: Minnehaha, Lincoln, Turner, and McCook counties in South Dakota

Conducted through a partnership between

- **Sioux Empire Community Health Needs Assessment Collaborative**
- **Center for Social Research at North Dakota State University**

PREFACE

This report, entitled *2015 Sioux Empire Community Health Needs Assessment of Residents*, presents the results of a March 2015 generalizable survey of residents in Minnehaha, Lincoln, Turner, and McCook counties in Minnesota.

The study was conducted by the Center for Social Research at North Dakota State University on behalf of the Community Health Needs Assessment Collaborative. Funding for the study was provided by Collaborative member organizations.

TABLE OF CONTENTS

INTRODUCTION

The purpose of this generalizable survey of residents in the greater Sioux Falls area (i.e., Minnehaha, Lincoln, McCook and Turner counties) was to learn about the perceptions of area residents regarding community health, their personal health, preventive health, and the prevalence of disease.

Study Design and Methodology

A generalizable survey was conducted of residents in the Sioux Empire, which includes Minnehaha, Lincoln, Turner, and McCook counties in South Dakota. The survey instrument was developed in partnership with members of the Community Health Needs Collaborative and the Center for Social Research (CSR) at North Dakota State University (NDSU).

Members of the Sioux Empire consortium designed the cover letter. Elements of informed consent were included in the letter ensuring that the NDSU Institutional Review Board requirements were met and the protection of human subjects maintained.

The survey was designed as a scannable 8-page mail survey containing 54 questions. The questions focused on general community concerns, community health and wellness concerns, personal health, preventive health, and demographic characteristics.

The sample was a stratified random sample, drawn through a qualified vendor, to ensure that appropriate proportions from each of the four counties were included. A total of 1,500 records including names, addresses, and a few demographic indicators were drawn.

Residents listed in the sample were first mailed an introductory postcard briefly explaining the project and notifying them that a survey packet would be arriving in their mail. Survey packets, which contained the survey and a return envelope, were mailed three days after the introductory postcards; two percent of the packets were returned as undeliverable. A reminder postcard, containing a link to the on-line survey, was mailed to non-responders approximately 10 days after the initial survey was mailed. A total of 370 surveys were returned for scanning and an additional 3 surveys were completed on-line for a total of 373. It was apparent that elderly and male respondents were overrepresented in the scanned results. Therefore, post-stratification weights were applied to ensure proper representation of the population with respect to age and gender. Respondents who did not enter a gender and age response were eliminated from the analyses. A total of 354 surveys were analyzed providing a generalizable sample with a confidence level of 95 percent and an error rate of plus or minus 5.2 percentage points.

Limitations of the Study

The findings in this study provide an overall snapshot of behaviors, attitudes, and perceptions of residents in the Sioux Empire, which includes Minnehaha, Lincoln, Turner, and McCook counties in South Dakota. However, when comparing certain demographic characteristics (i.e., age, income, minority

status) with the current population estimates from the U.S. Census Bureau[1], it was evident that older, white, more highly educated, and higher income earners were overrepresented. Overrepresentation of this nature is typical in health needs assessments.

Literature reviews indicate that there are non-response rate issues among younger respondents[2]. In particular, response rates to health care and community health needs assessment surveys have often been found to be higher for older respondents[3]. Studies have also shown lower response rates for socially disadvantaged groups[4] (i.e., socially, culturally, or financially).

In order to supplement the findings of this study, particularly for the subpopulations that are under-represented, one might consider utilizing other data resources, such as local public health data and the Behavior Risk Factor Surveillance System[5].

Given the nature of this study, it may be necessary to reach out to community partnerships and implement a variety of recruitment techniques in order to gather information from under-represented groups in future studies. However, one should be mindful of increased time commitments and financial resources that may be necessary when gathering data from hard-to-reach populations.

[1] U.S. Census Bureau, Population Division, Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States, States, and Counties: April 1, 2010 to July 1, 2013. Released June 2014. Available from http://www.census.gov/popest/.

[2] Michael J. Stern, Ipek Bilgen, and Don Al Dillman. Field Methods 2014, Vol. 26(3) 284-301. The State of Survey Methodology: Challenges, Dilemmas, and New Frontiers in the Era of the Tailored Design.

[3] See the following examples: http://www.mathematica-mpr.com/~/media/publications/PDFs/internetmailsurvey.pdf; http://www.allied-services.org/wp-content/uploads/2013/06/CHNA-lackawanna-2013.pdf; http://www.hcno.org/pdf/counties/Cuyahoga%20County%20Health%20Assessment%20FINAL.pdf.

[4] See the following literature review: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3974746/#__ffn_sectitle.

[5] See Behavior Risk Factor Surveillance site: http://www.cdc.gov/brfss/index.html.

SURVEY RESULTS

General Health and Wellness Concerns about their Community

Using a 1 to 5 scale, with 1 being “not at all” and 5 being “a great deal” of concern, 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

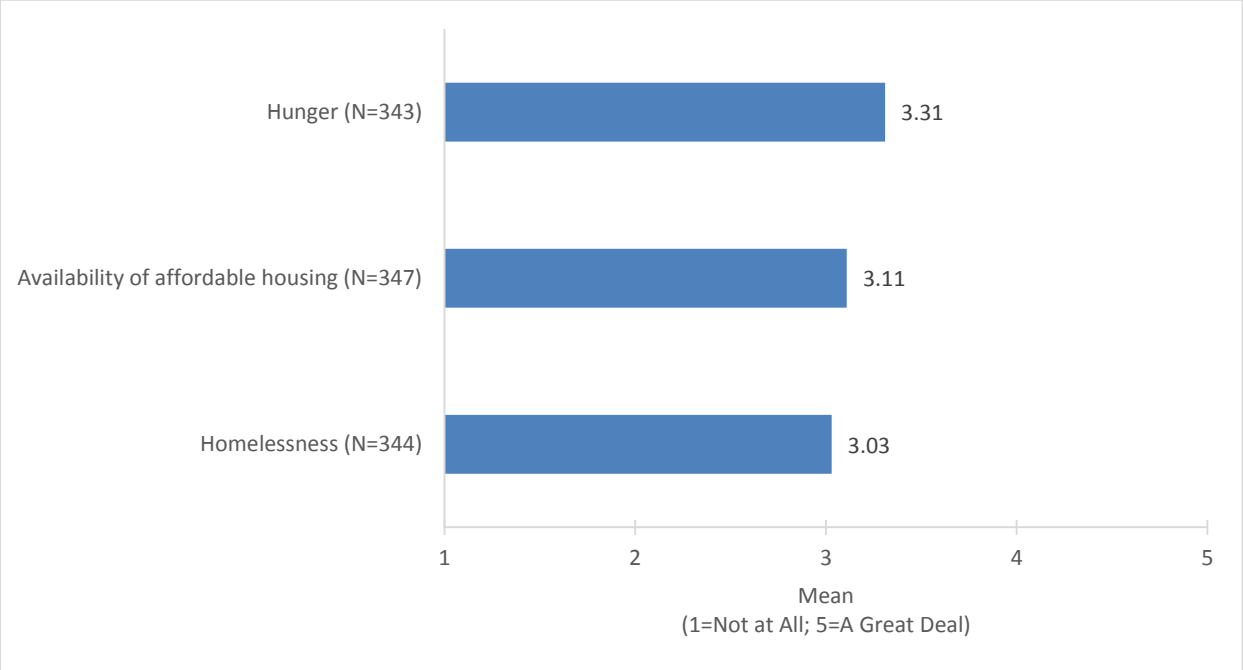


Figure 2. Level of concern with statements about the community regarding TRANSPORTATION

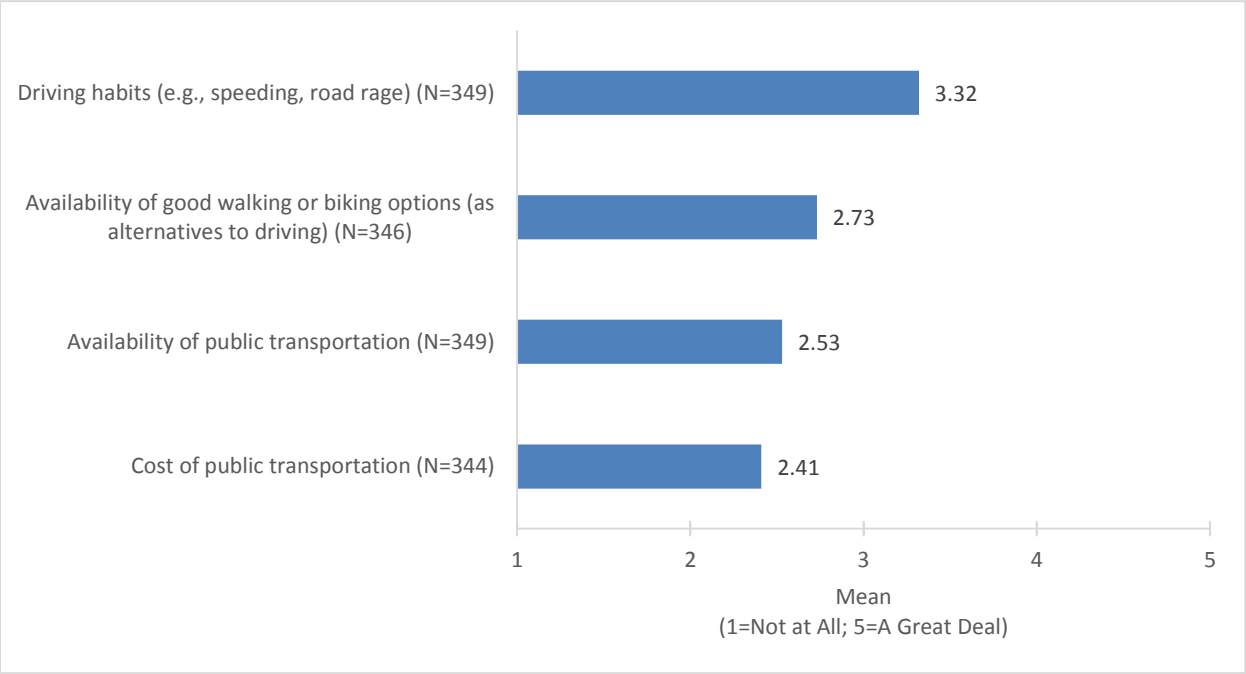


Figure 3. Level of concern with statements about the community regarding the ENVIRONMENT

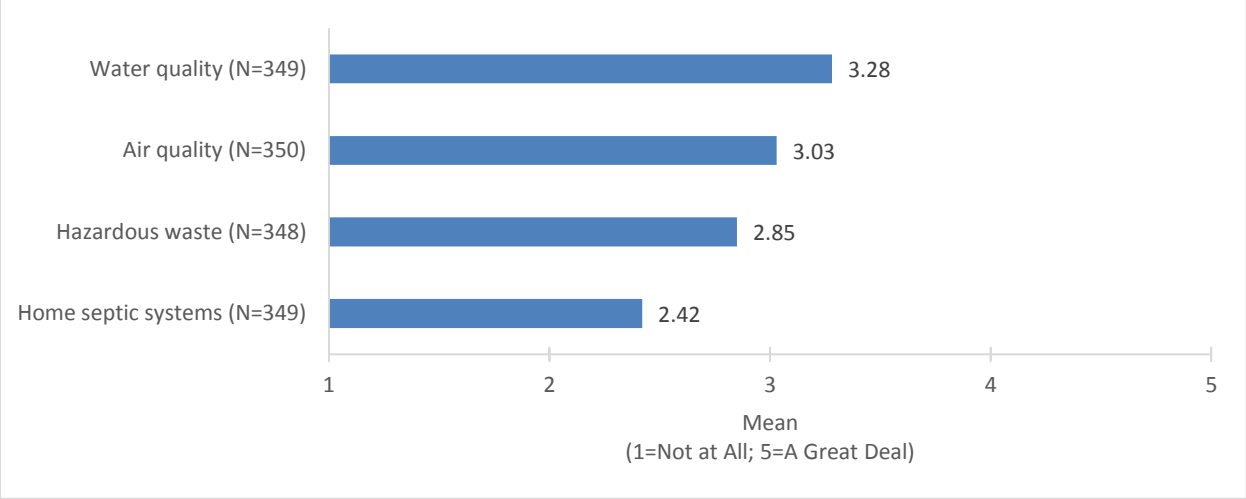


Figure 4. Level of concern with statements about the community regarding CHILDREN AND YOUTH

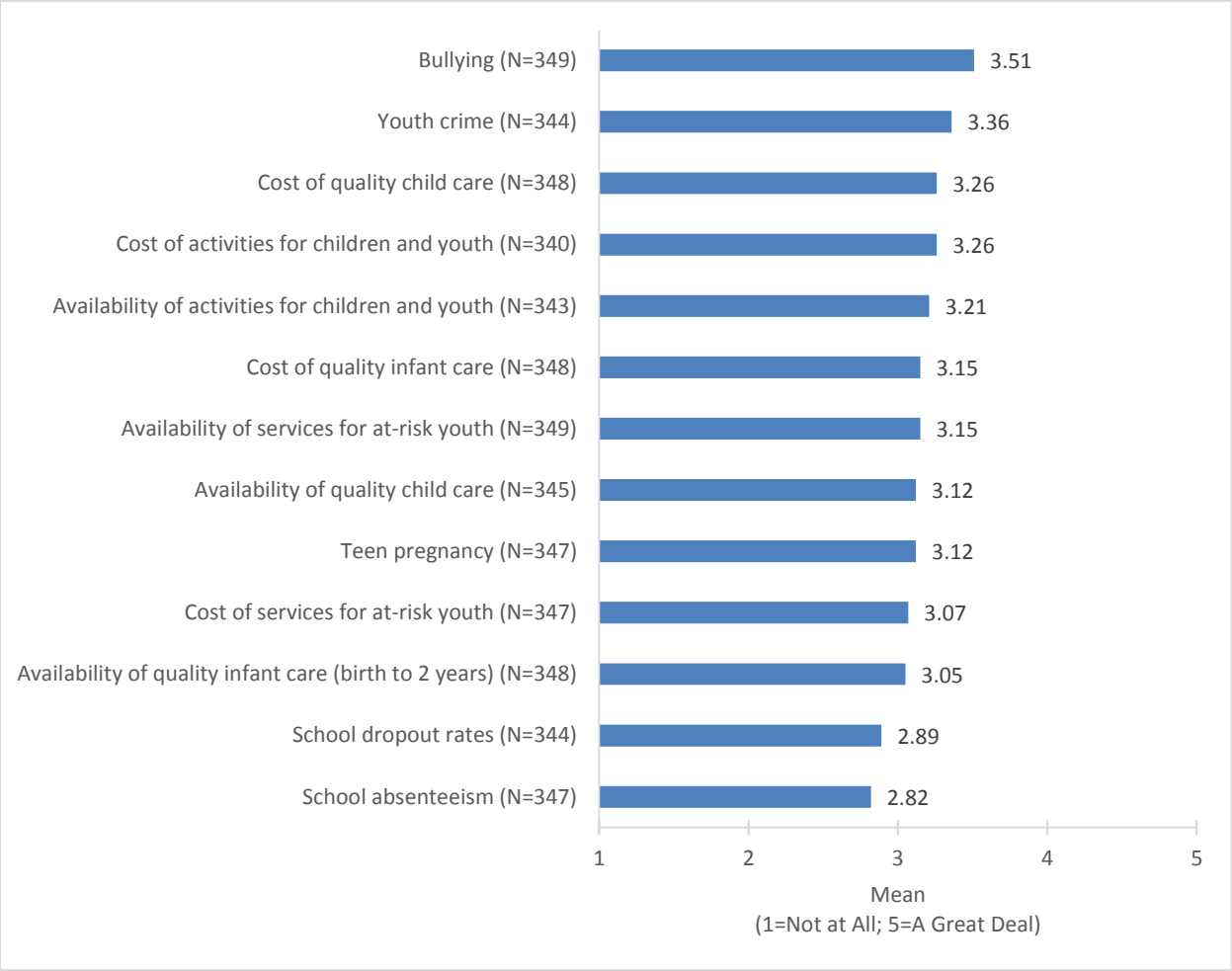


Figure 5. Level of concern with statements about the community regarding THE AGING POPULATION

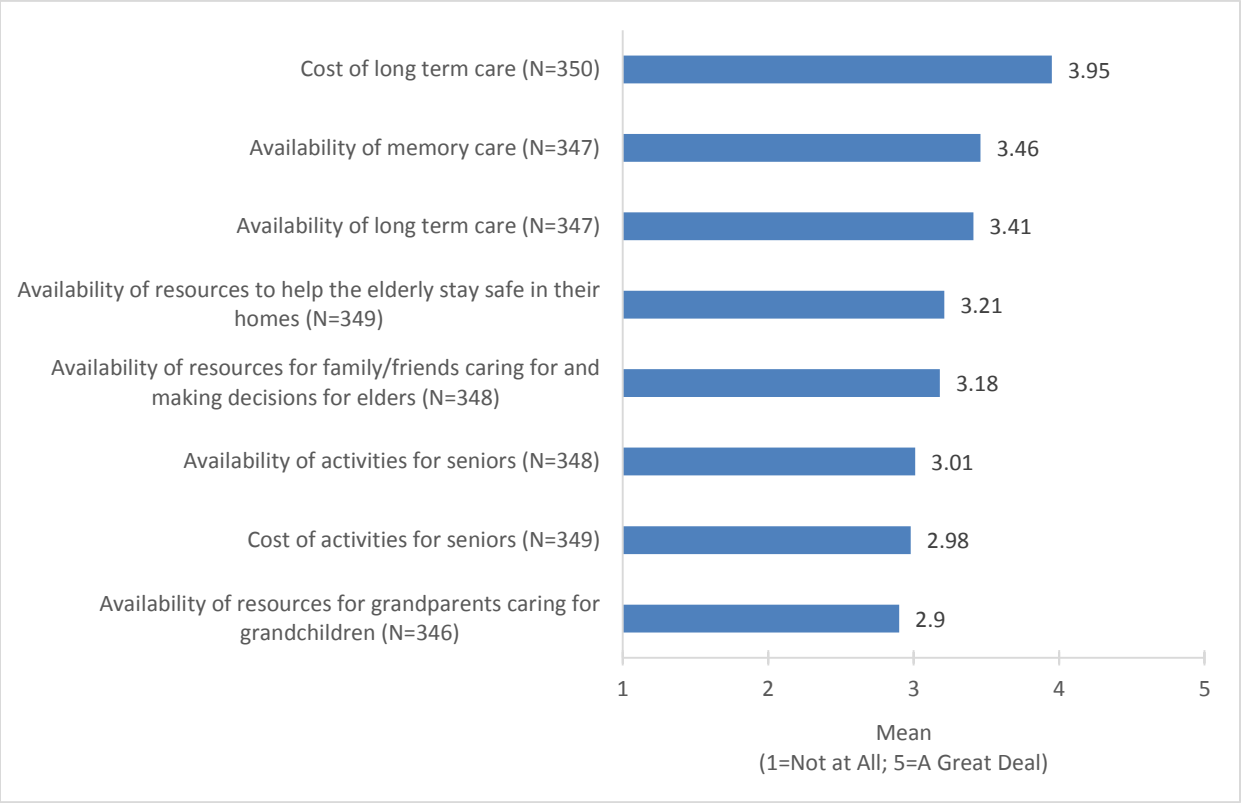


Figure 6. Level of concern with statements about the community regarding SAFETY

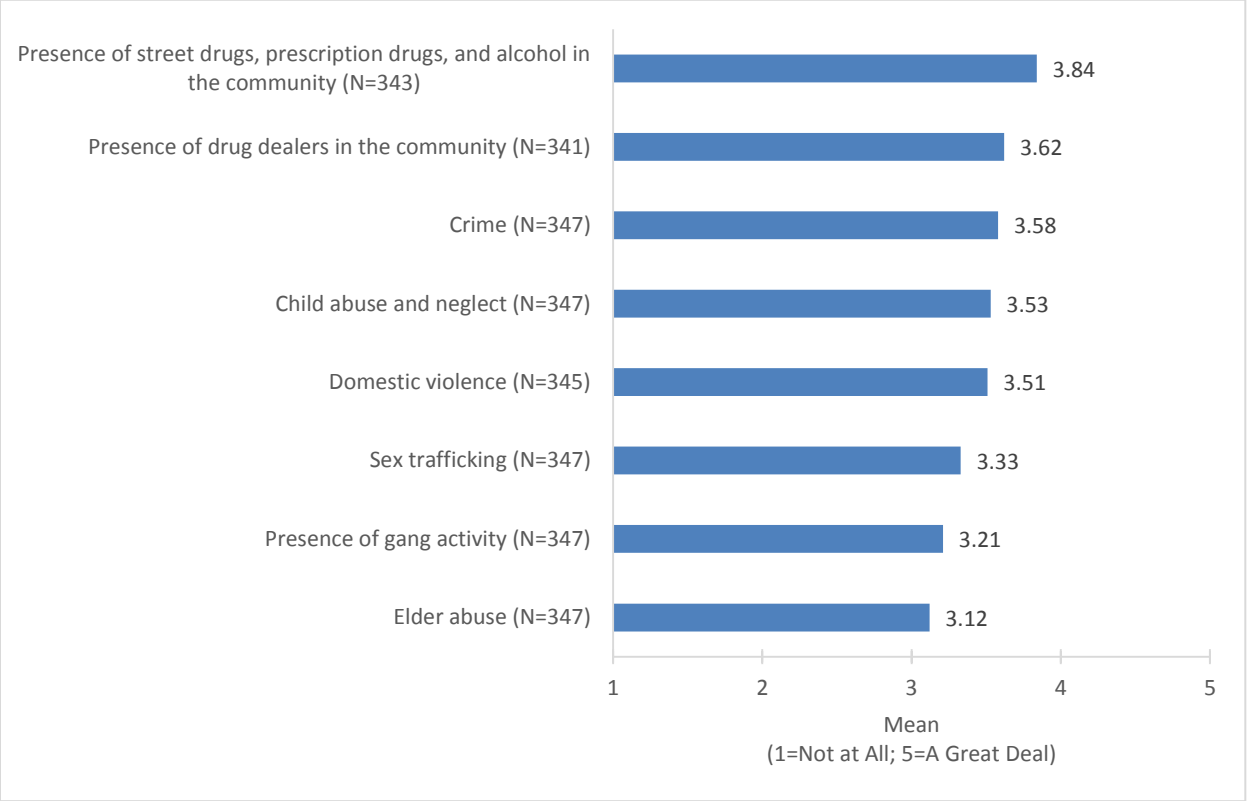


Figure 7. Level of concern with statements about community regarding HEALTH CARE

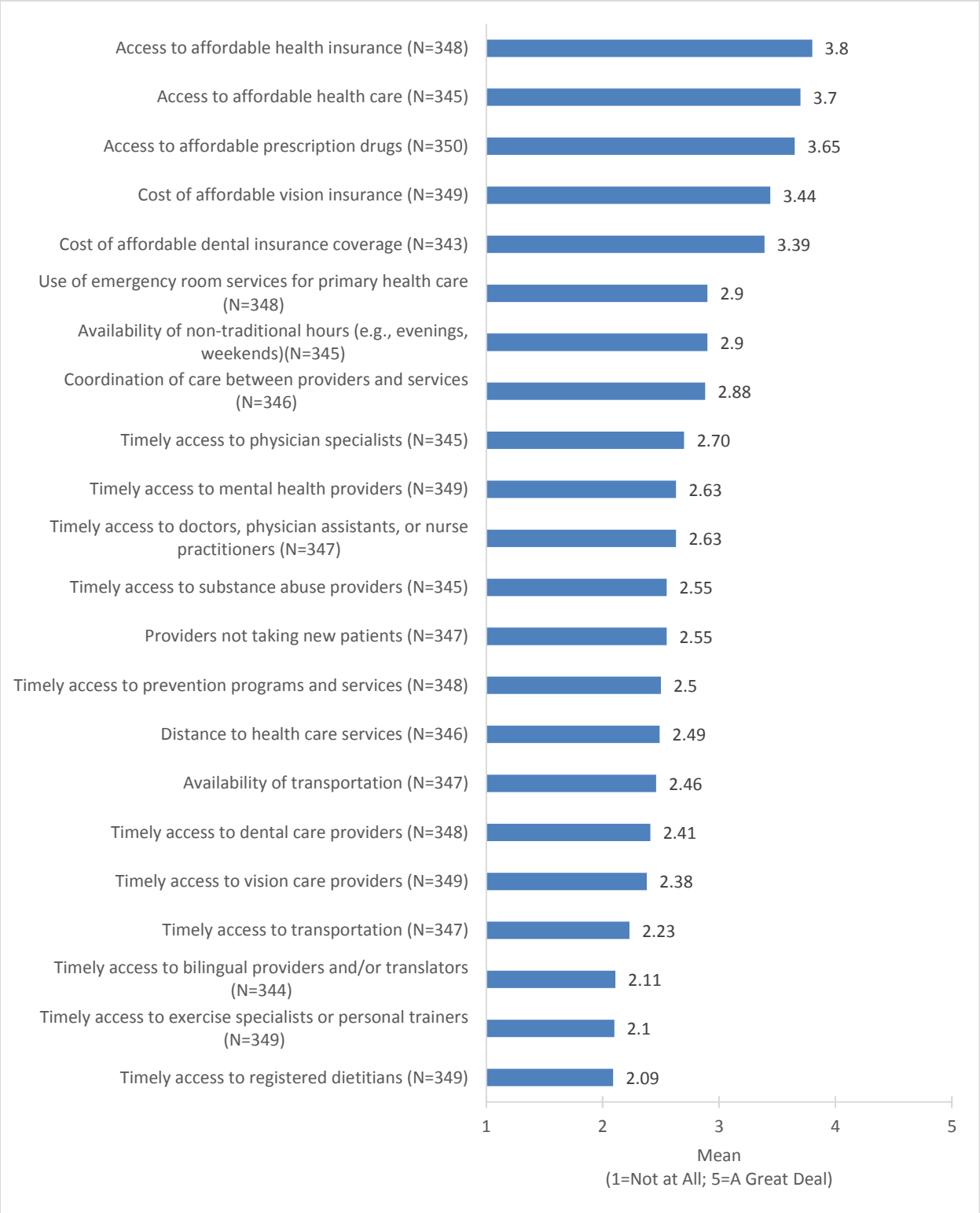


Figure 8. Level of concern with statements about community regarding PHYSICAL AND MENTAL HEALTH

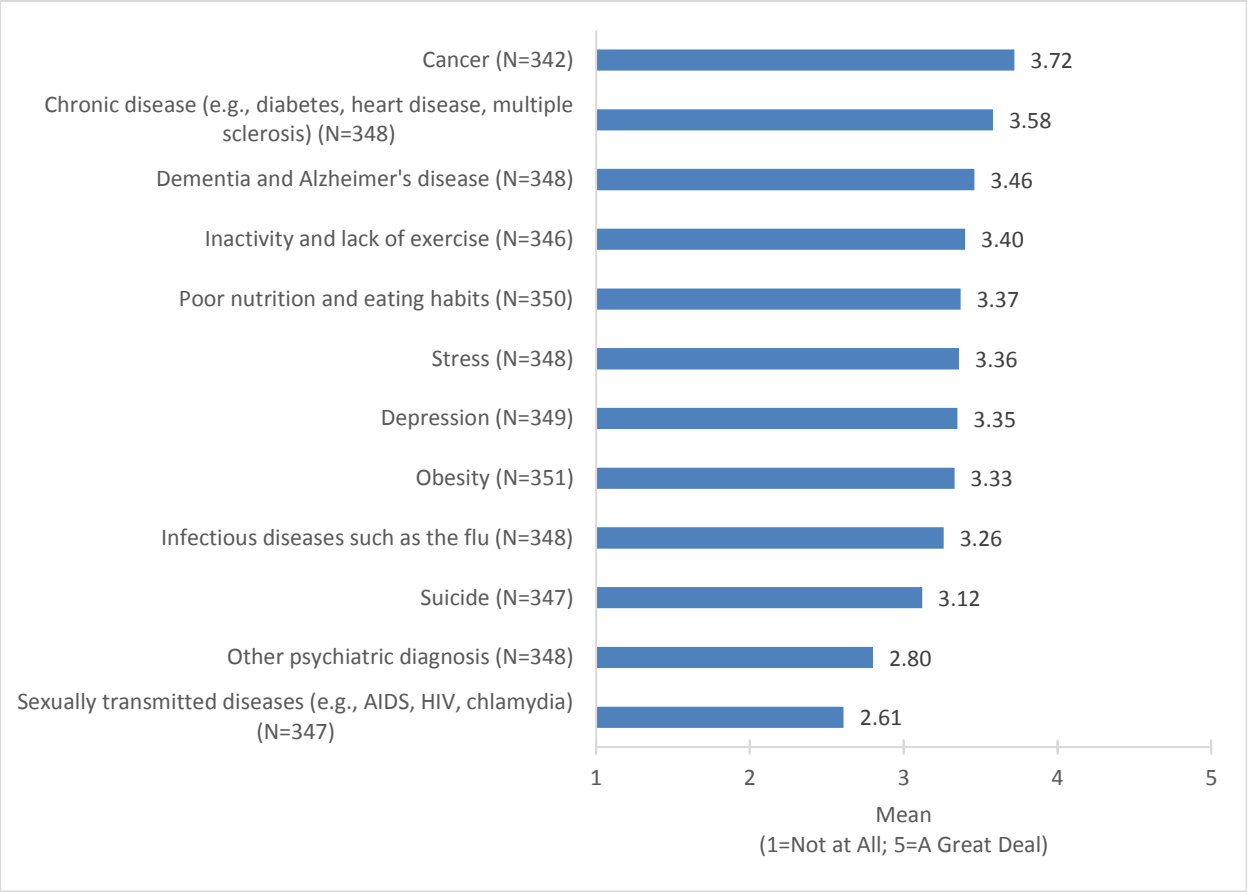
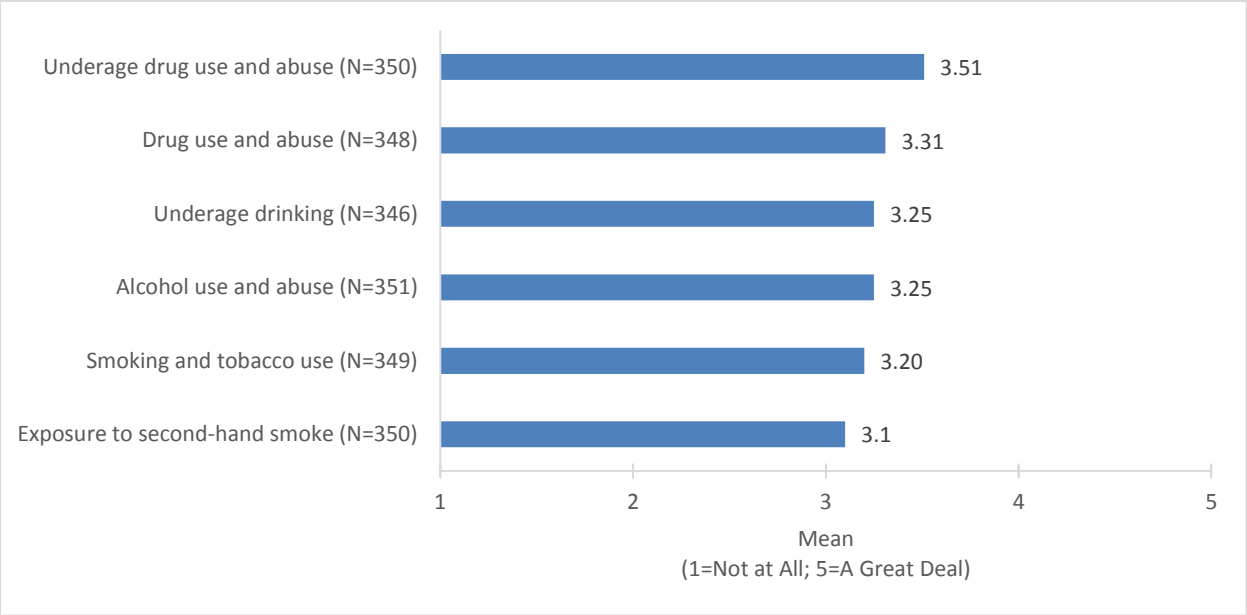
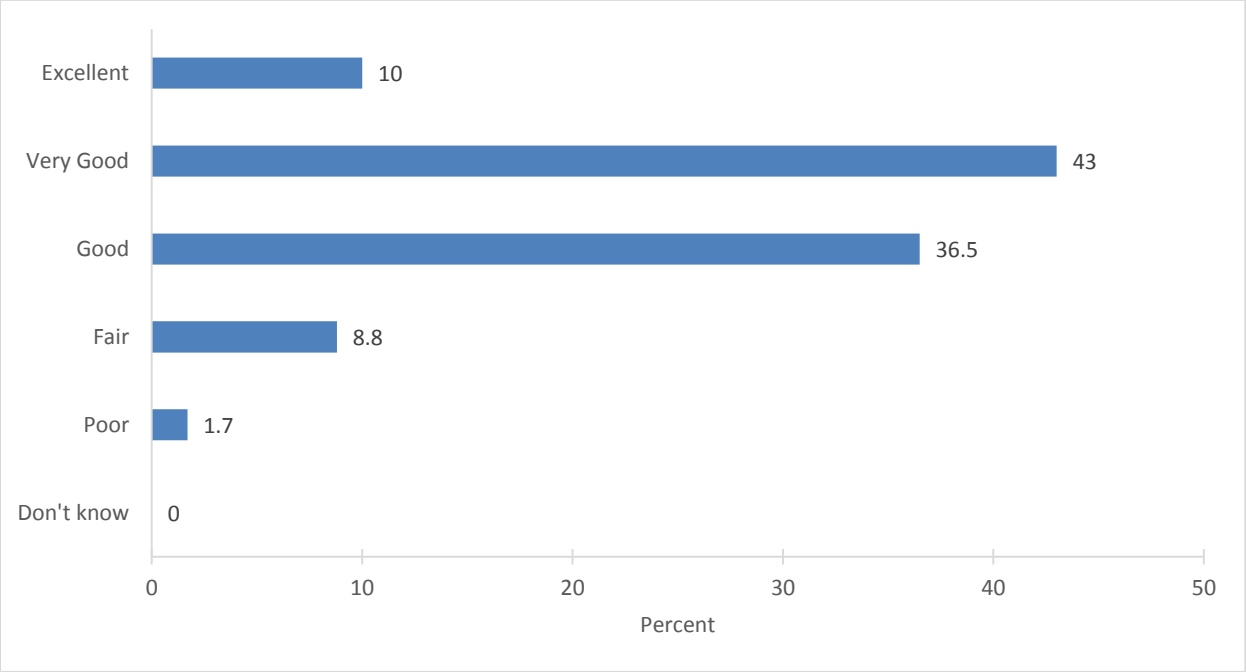


Figure 9. Level of concern with statements about community regarding SUBSTANCE USE AND ABUSE



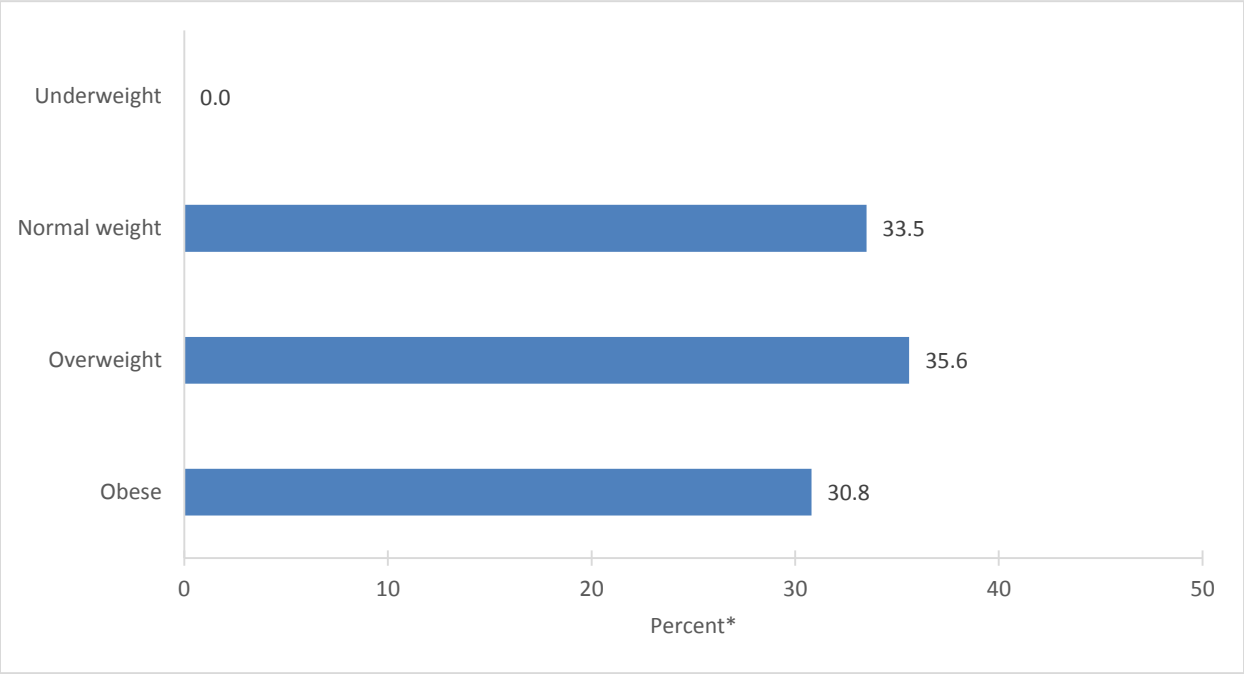
General Health

Figure 10. Respondents' rating of health in general



N=338

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

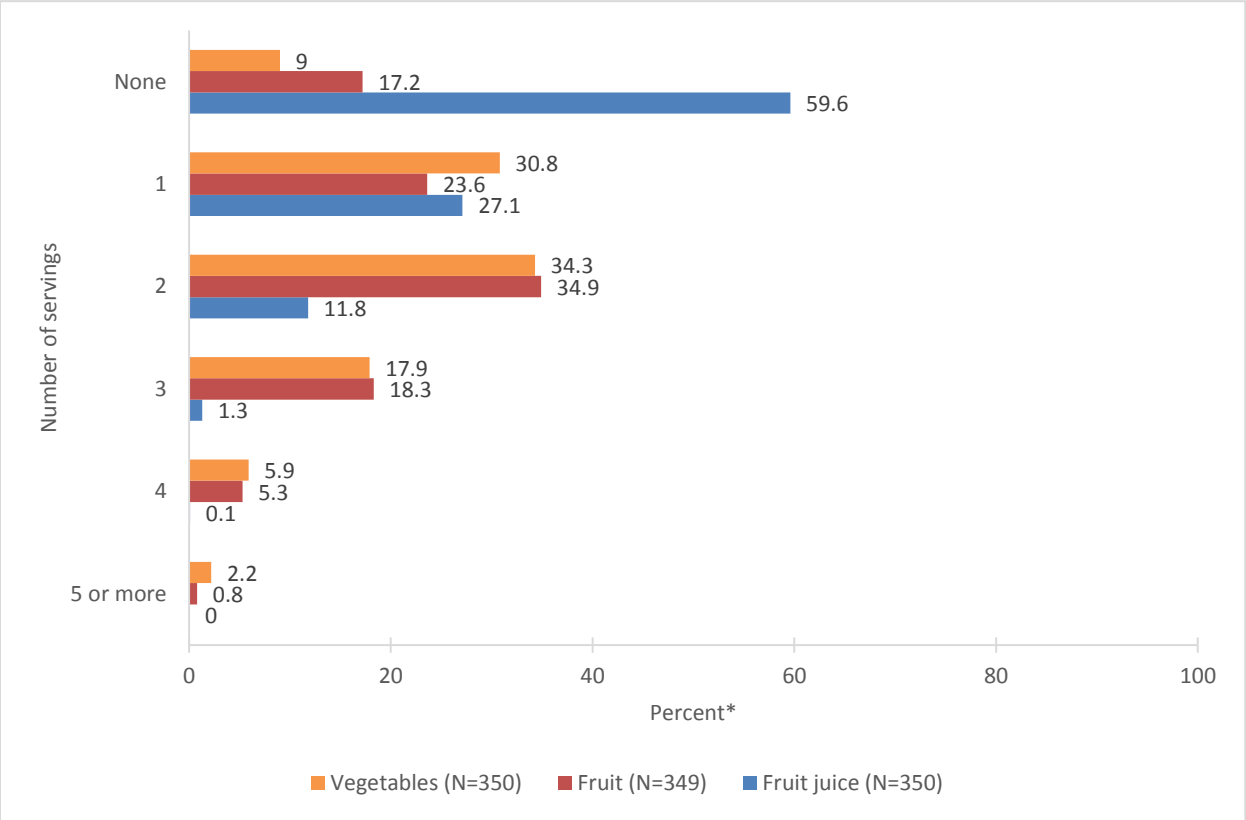


N=310

Percentages do not total 100.0 due to rounding.

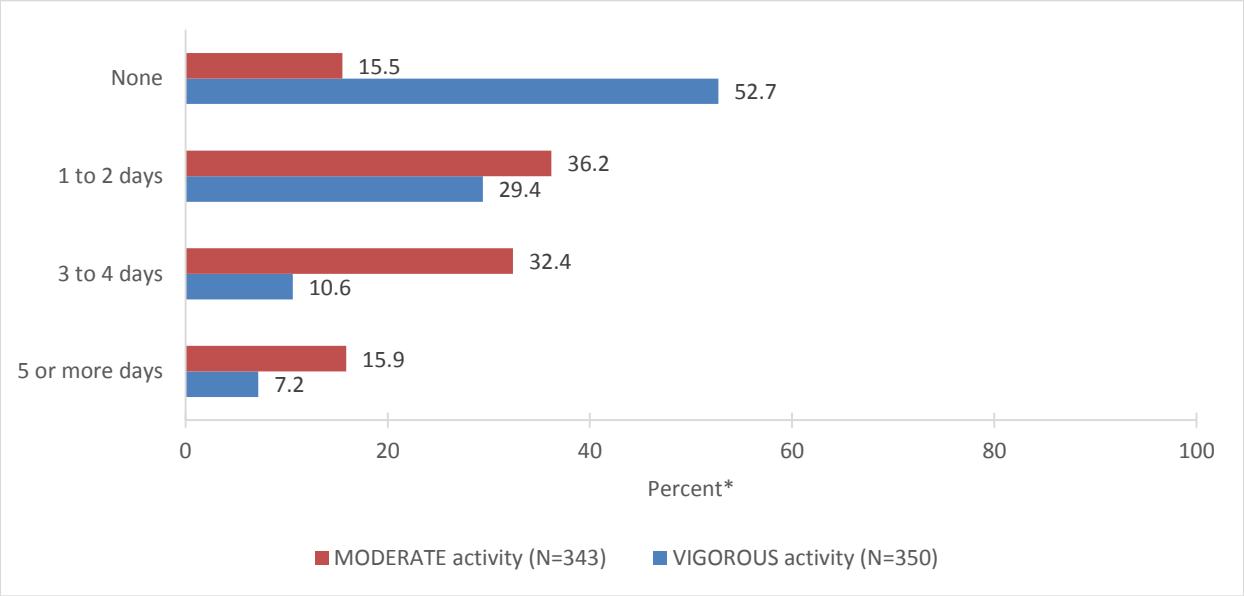
**http://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/

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



*Percentages may not total 100.0 due to rounding.

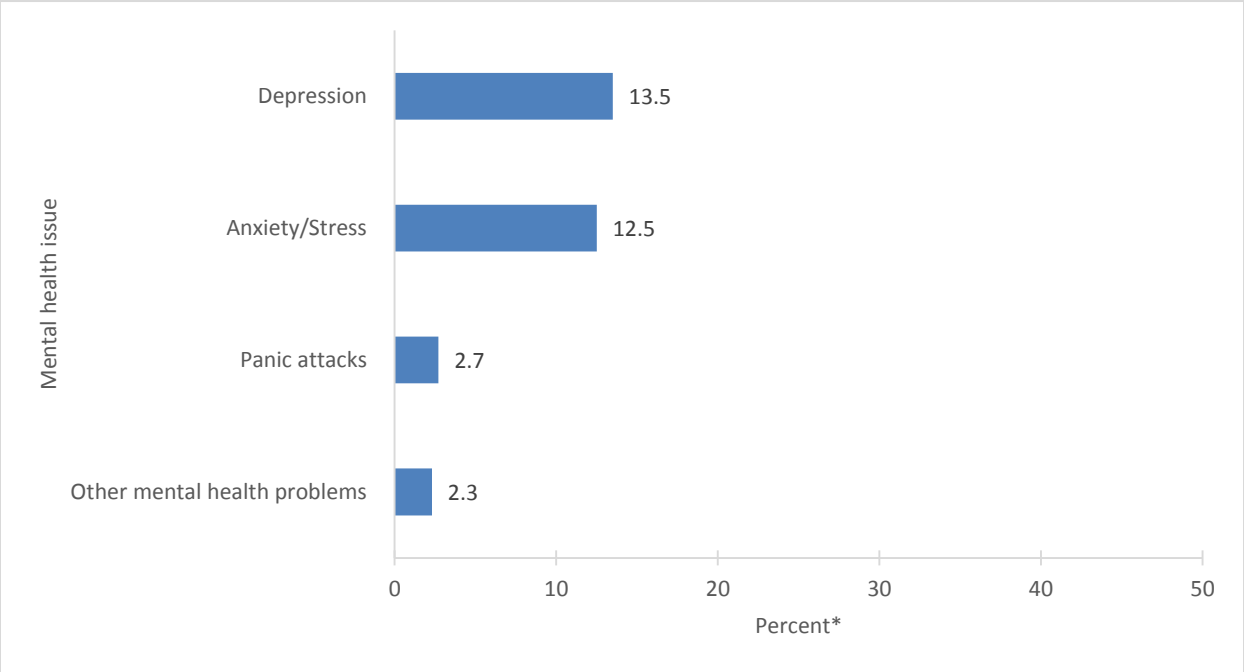
Figure 13. Number of days in an average week respondents engage in MODERATE and VIGOROUS activity



*Percentages may not total 100.0 due to rounding.

Mental Health

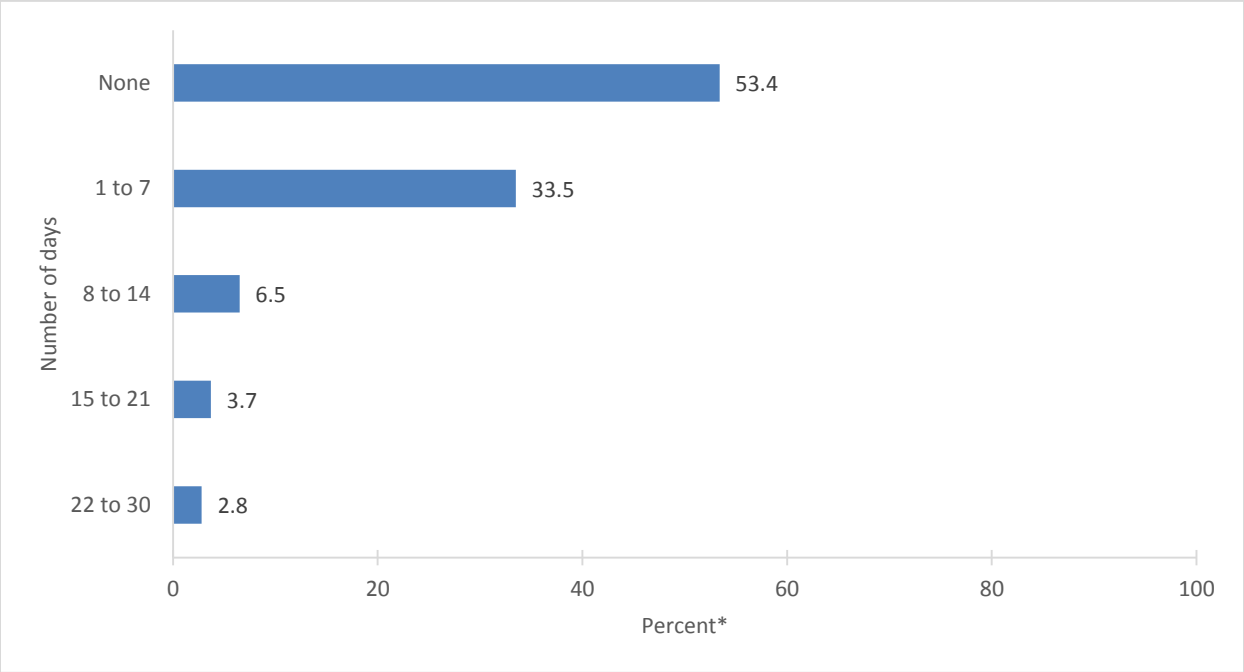
Figure 14. Percentage of respondents who have been told by a doctor or health professional that they have a mental health issue by type of mental health issue



N=354

*Percentages do not total 100.0 due to multiple responses.

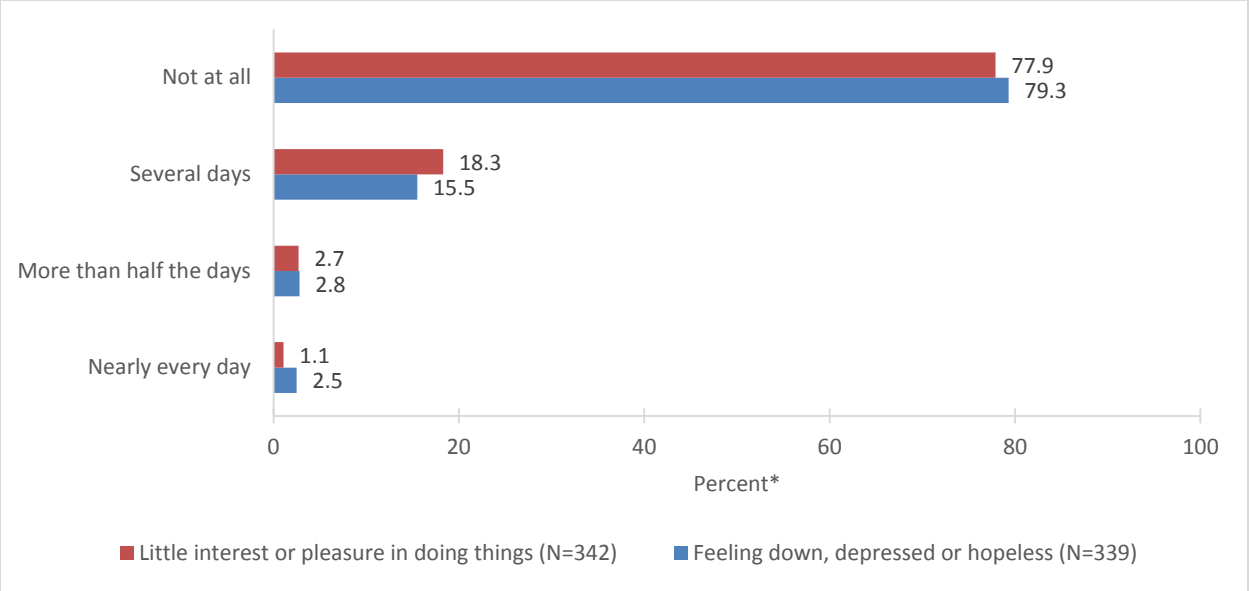
Figure 15. Number of days in the last month where respondents' mental health was not good



N=322

*Percentages do not total 100.0 due to rounding.

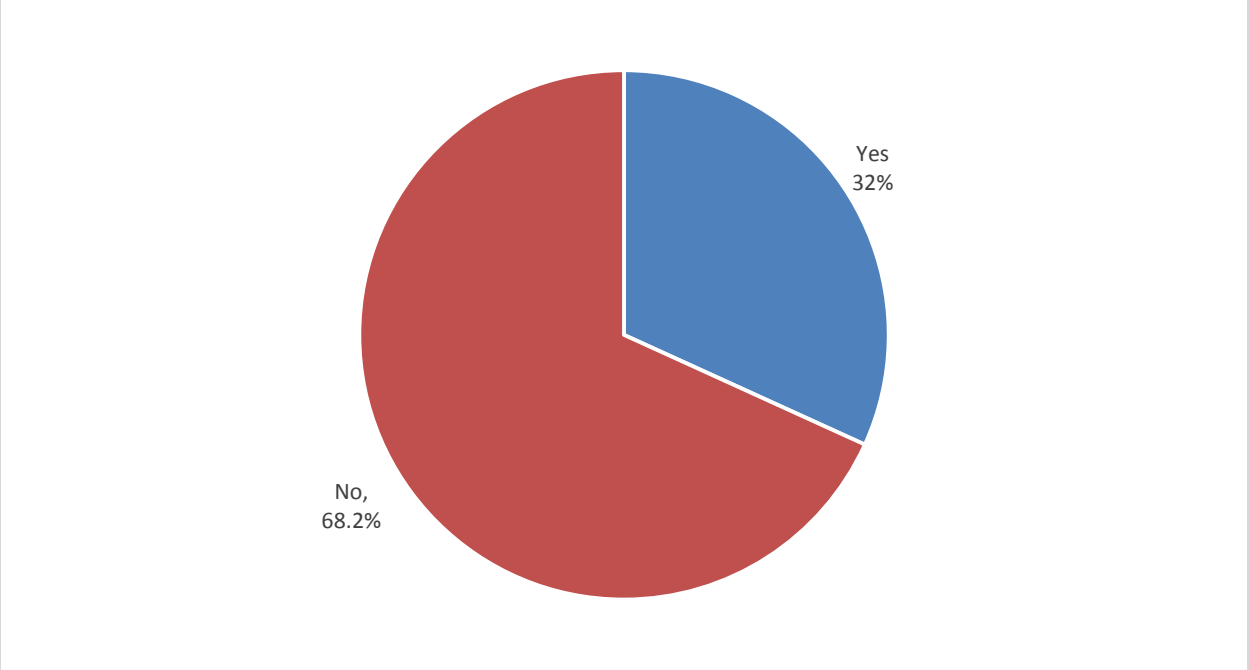
Figure 16. How often, over the past two weeks, respondents have been bothered by mental health issues



*Percentages may not total 100.0 due to rounding.

Tobacco Use

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



N=348

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

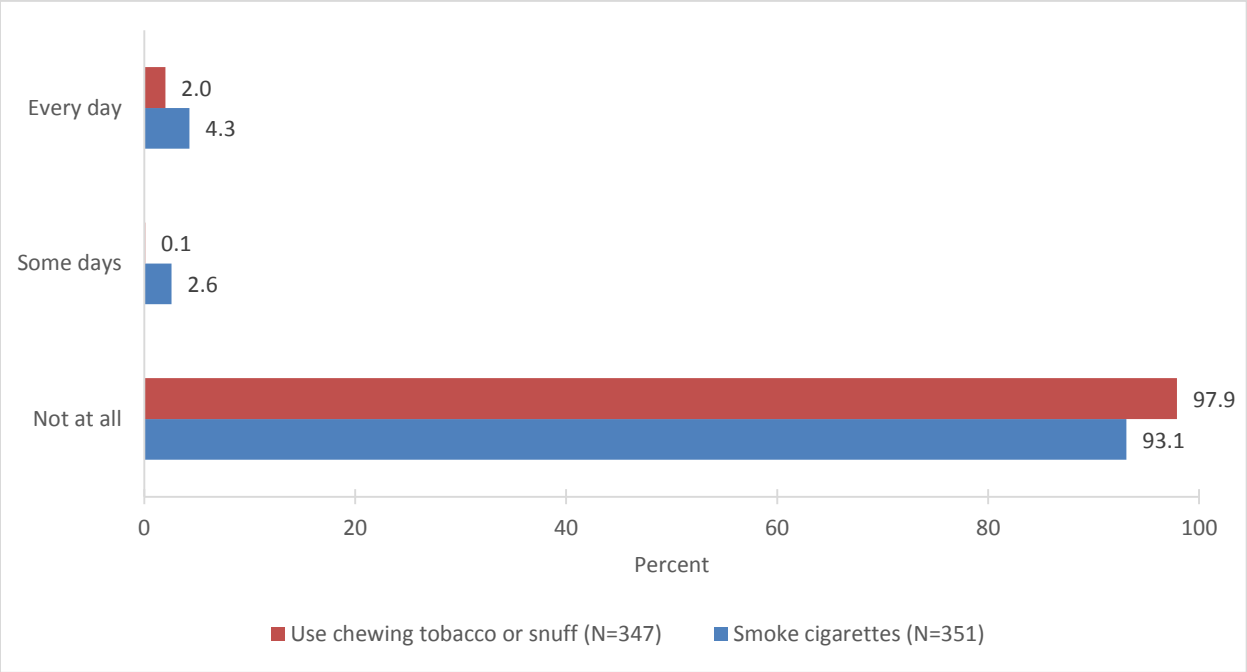
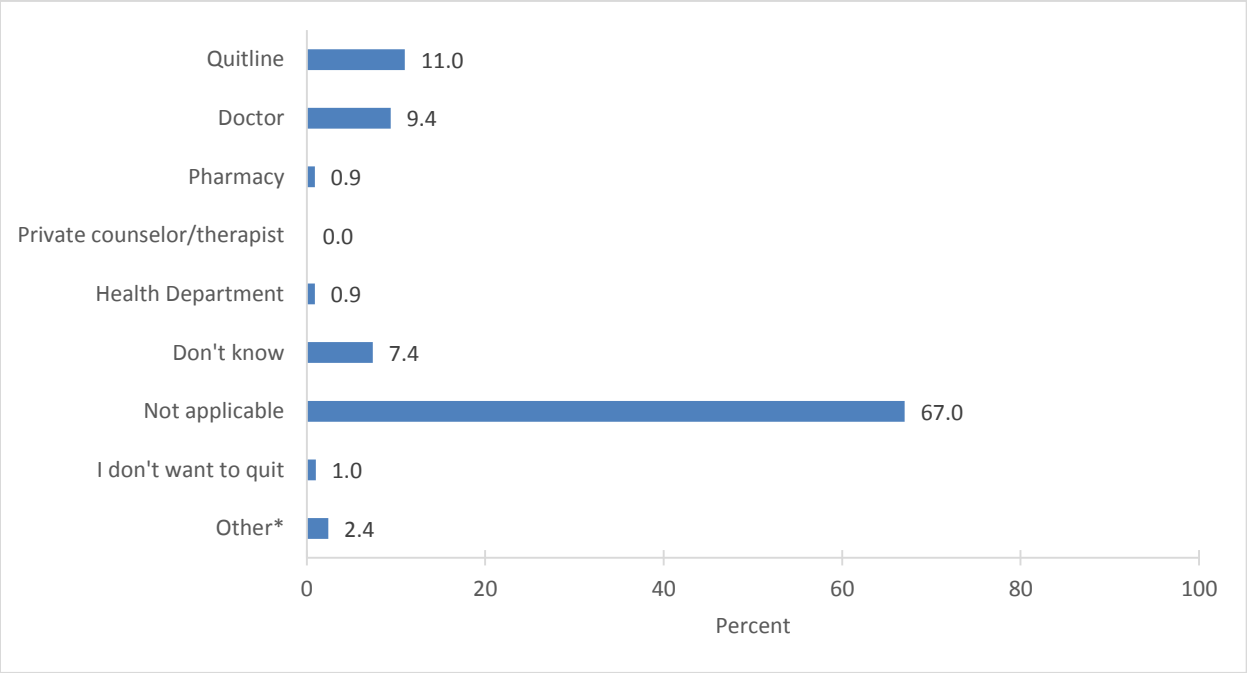


Figure 19. Location respondents would first go if they wanted help to quit using tobacco

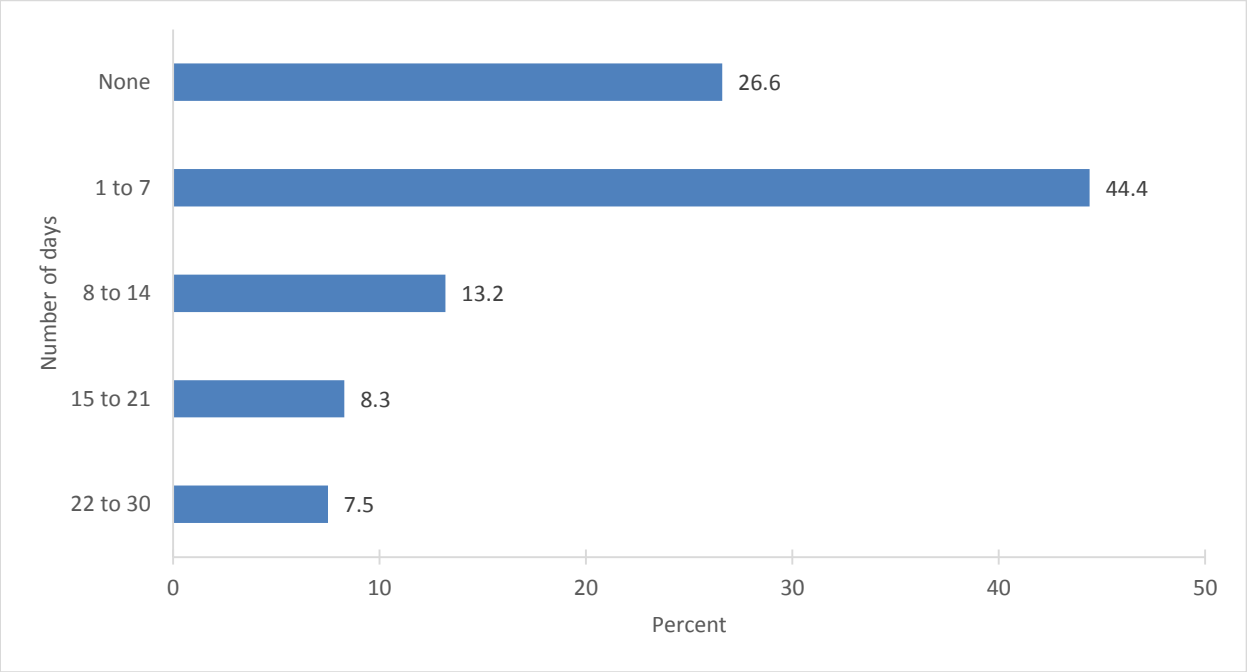


N=321

*Other responses include “Quit on their own (8)”, “Don’t know (2)”, and “Hypnosis (1)”.

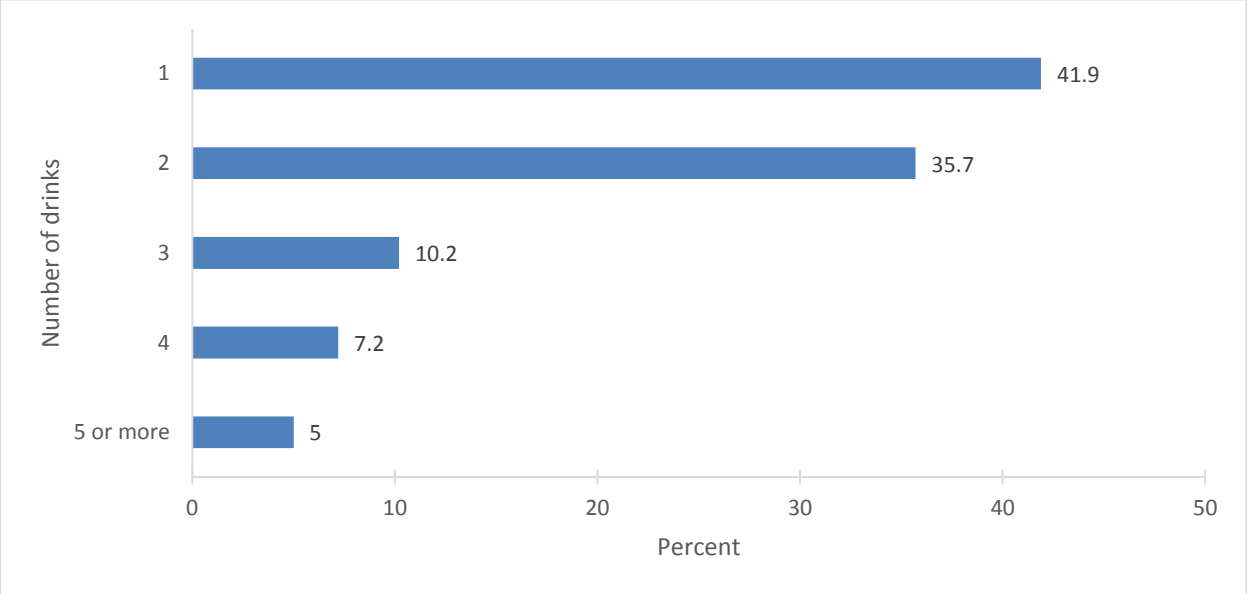
Alcohol Use and Prescription Drug/Non-prescription Drug Abuse

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



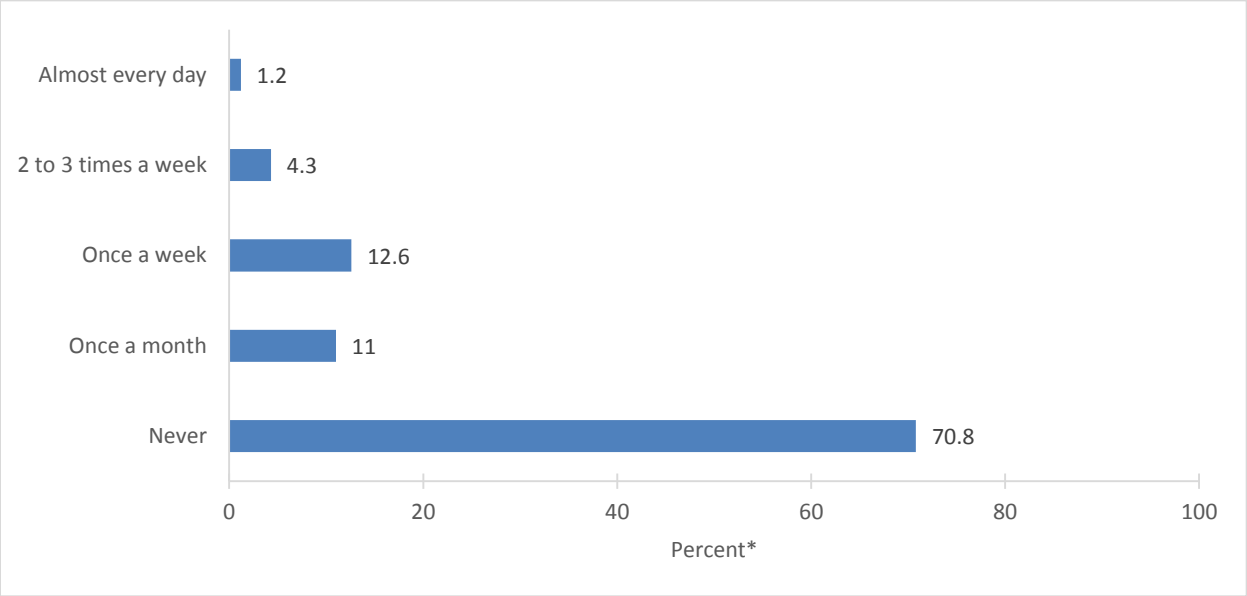
N=347

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



N=251

Figure 22. Number of times during the past month that respondents consumed at least 4 or 5 alcoholic drinks on the same occasion



N=348

*Percentages do not total 100.0 due to rounding.

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

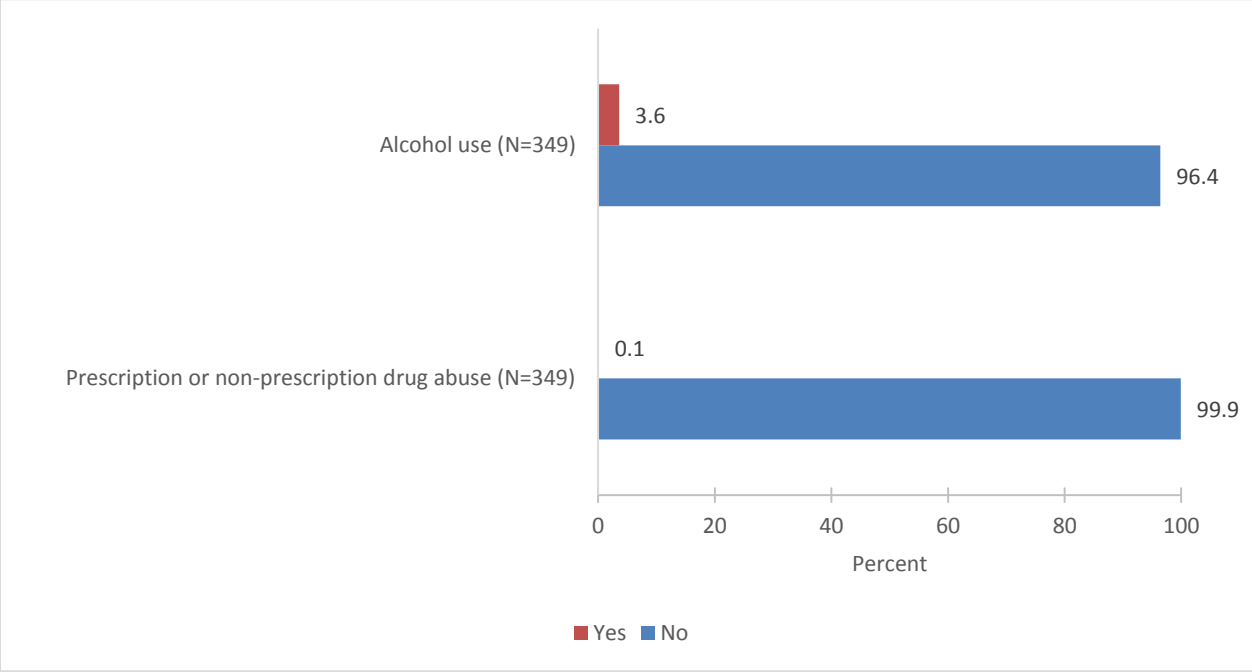


Figure 24. Of respondents who had ever had a problem with alcohol use or prescription or non-prescription drug abuse, whether respondents got the help they needed

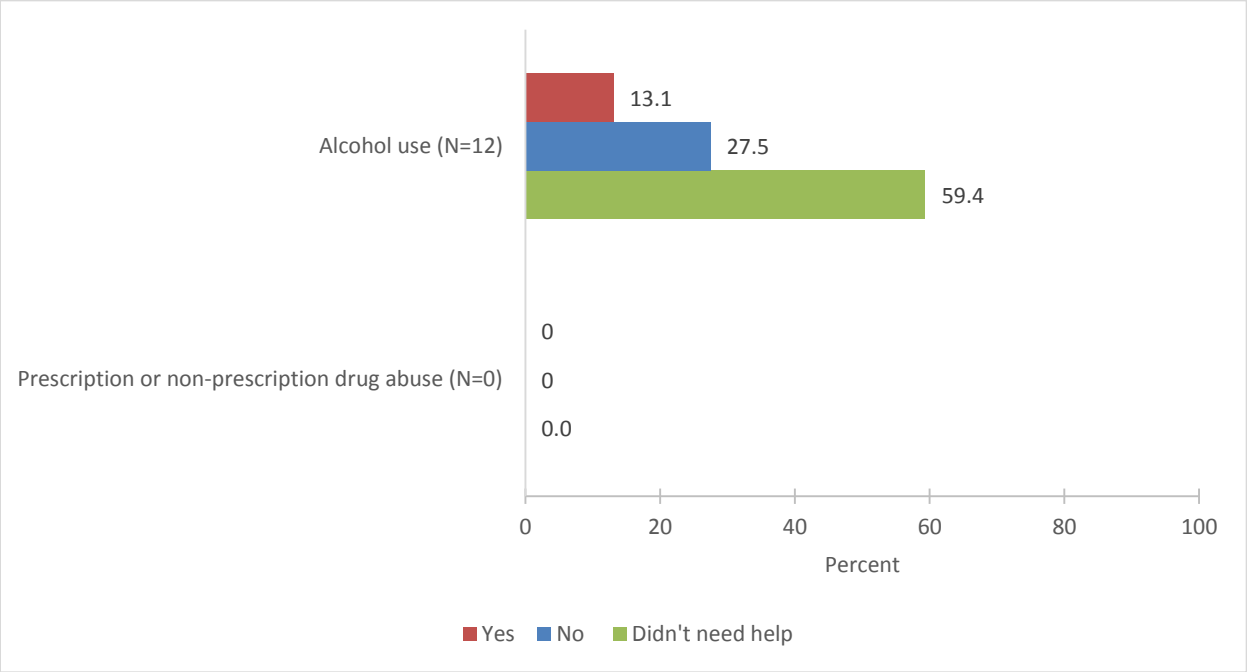
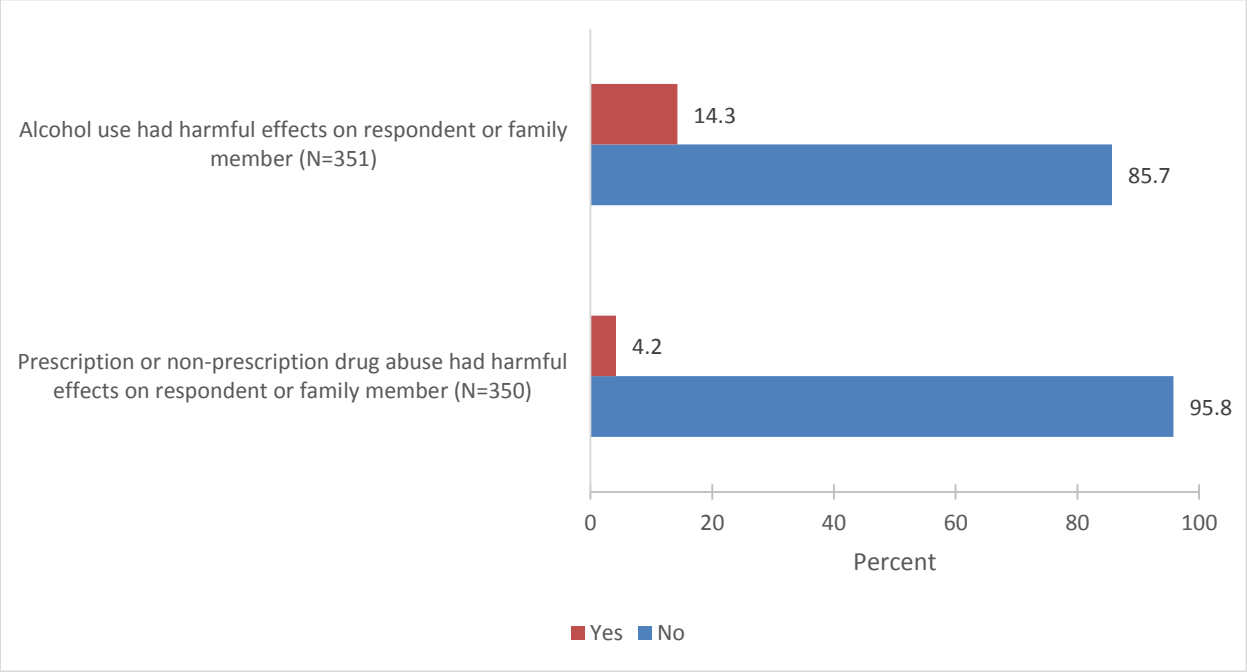


Figure 25. Whether alcohol use or prescription or non-prescription drug abuse has had harmful effects on respondents or a family member over the past two years



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=348)	87.1	12.9	100.0
Blood sugar screening (N=350)	70.3	29.7	100.0
Bone density test (N=348)	10.8	89.2	100.0
Cardiovascular screening (N=344)	25.5	74.5	100.0
Cholesterol screening (N=350)	74.6	25.4	100.0
Dental screening and X-rays (N=350)	89.2	10.8	100.0
Flu shot (N=351)	72.6	27.4	100.0
Glaucoma test (N=345)	51.5	48.5	100.0
Hearing screening (N=348)	17.6	82.4	100.0
Immunizations (N=348)	23.0	77.0	100.0
Pelvic exam (N=178 Females)	63.3	36.7	100.0
STD (N=345)	1.7	98.3	100.0
Vascular screening (N=344)	10.8	89.2	100.0
CANCER SCREENINGS			
Breast cancer screening (N=180 Females)	78.8	21.2	100.0
Cervical cancer screening (N=178 Females)	67.4	32.6	100.0
Colorectal cancer screening (N=346)	31.5	68.5	100.0
Prostate cancer screening (N=169 Males)	54.4	45.6	100.0
Skin cancer screening (N=350)	28.1	71.9	100.0

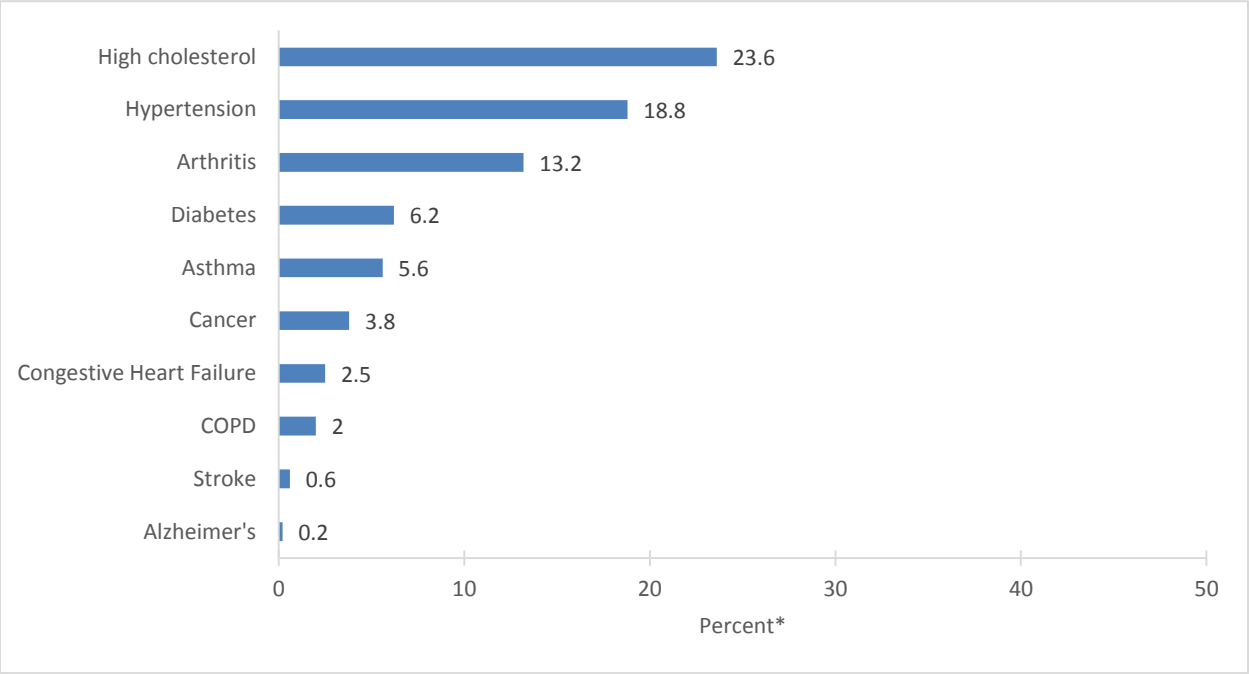
Table 2. Of respondents who have not had preventive screenings in the past year, reasons why they have not, by type of screening

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	Total
GENERAL SCREENINGS								
Blood pressure screening (N=41)	76.2	20.3	0.0	0.0	0.0	0.0	3.5	100.0
Blood sugar screening (N=91)	52.1	35.4	0.5	0.0	0.0	0.0	11.9	99.9
Bone density test (N=271)	51.0	40.9	1.8	0.0	0.0	0.0	6.2	99.9
Cardiovascular screening (N=225)	41.3	47.3	2.0	0.0	0.0	0.0	9.5	100.1
Cholesterol screening (N=81)	49.9	33.0	0.6	0.0	0.0	0.0	16.5	100.0
Dental screening and X-rays (N=36)	35.3	4.7	36.3	0.6	0.0	0.0	23.0	99.9
Flu shot (N=93)	56.1	1.6	0.0	0.0	1.8	0.0	40.6	100.1

Type of screening	Percent of respondents*							
	Not necessary	Doctor hasn't suggested	Cost	Fear of procedure	Fear of results	Unable to access care	Other reason	Total
Glaucoma test (N=151)	62.7	29.5	1.3	0.0	0.0	0.0	6.5	100.0
Hearing screening (N=246)	63.4	27.7	2.0	0.0	0.3	0.0	6.6	100.0
Immunizations (N=238)	77.1	14.1	0.4	0.0	0.0	0.0	8.4	100.0
Pelvic exam (N=54 Females)	61.8	16.4	0.9	0.0	0.0	0.0	20.9	100.0
STD (N=298)	88.5	9.3	0.5	0.0	0.0	0.0	1.6	99.9
Vascular screening (N=261)	50.6	40.7	1.9	0.0	0.0	0.0	6.8	100.0
CANCER SCREENINGS								
Breast cancer screening (N=34 Females)	78.1	11.8	1.5	0.0	0.0	0.0	8.6	100.0
Cervical cancer screening (N=52 Females)	64.1	17.0	1.9	0.0	0.0	0.0	17.0	100.0
Colorectal cancer screening (N=204)	63.3	22.7	3.1	2.9	0.0	0.0	8.0	100.0
Prostate cancer screening (N=Males)	55.2	33.8	1.9	0.0	0.0	0.7	8.5	100.1
Skin cancer screening (N=207)	49.5	39.0	2.9	0.0	0.0	0.5	8.2	100.1

*Percentages may not total 100.0 due to rounding.

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



N=354

*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 respondents last visited a dentist or dental clinic for any reason

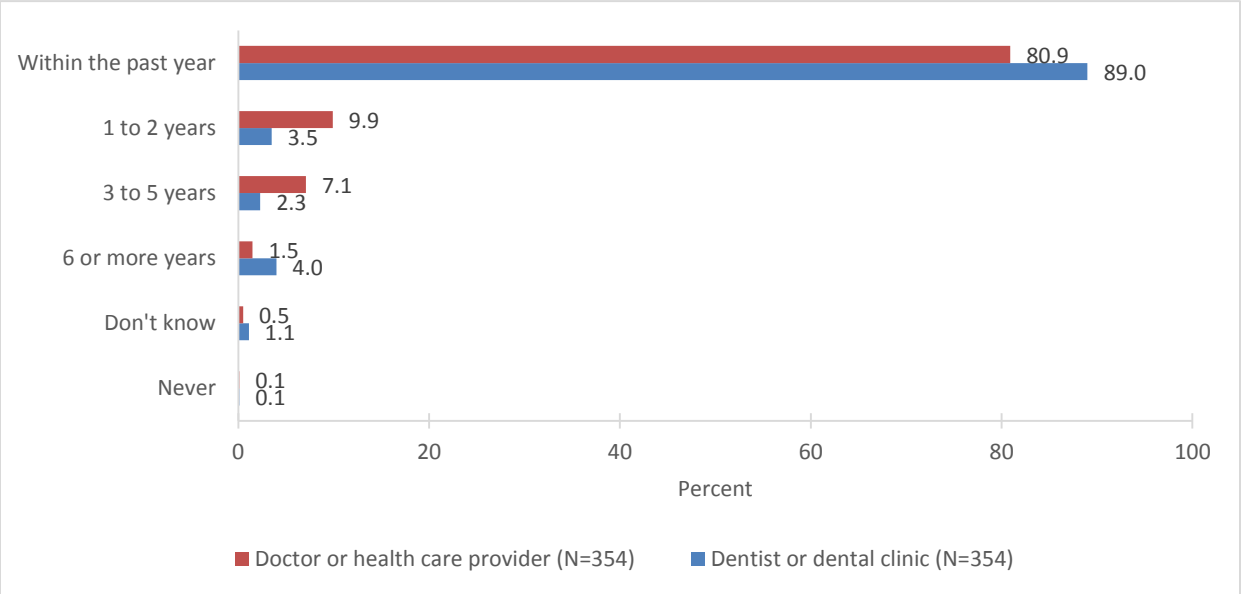
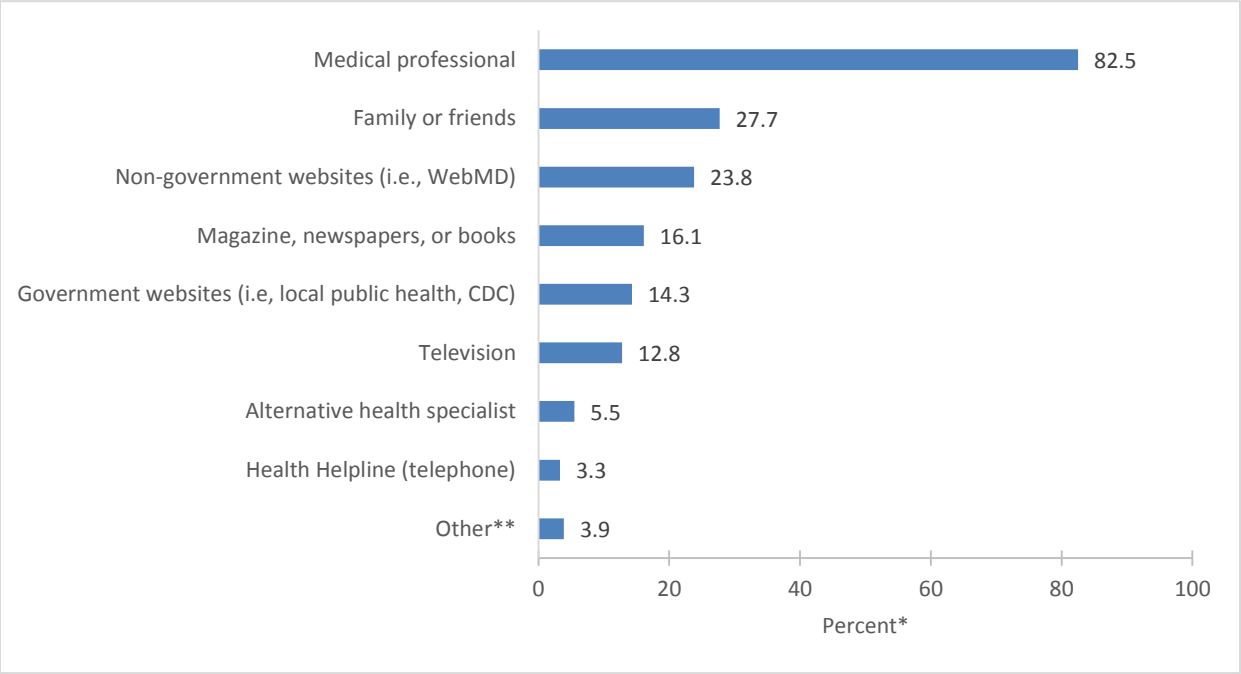


Figure 28. Where respondents get most of their health information

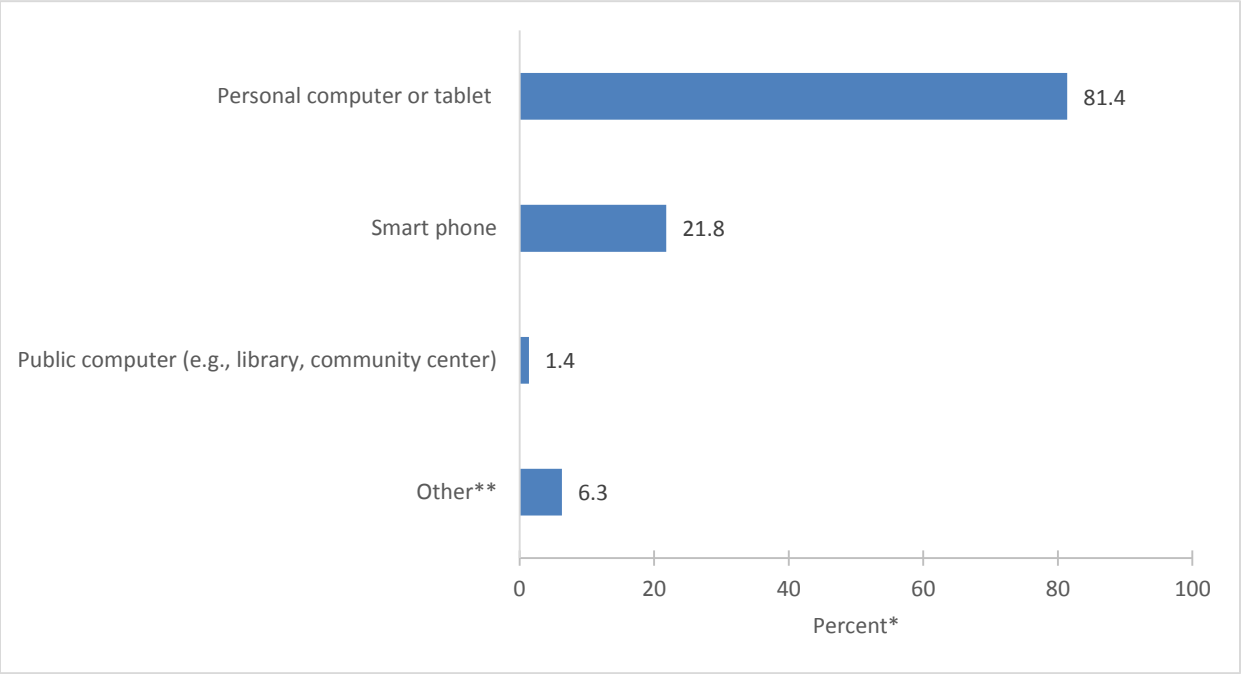


N=354

*Percentages do not total 100.0 due to multiple responses.

**Other responses include “Medical professionals (4)”, “Self (3)”, “Internet (3)”, “TV-Dr. Oz (1), and “Variety (1)”.

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



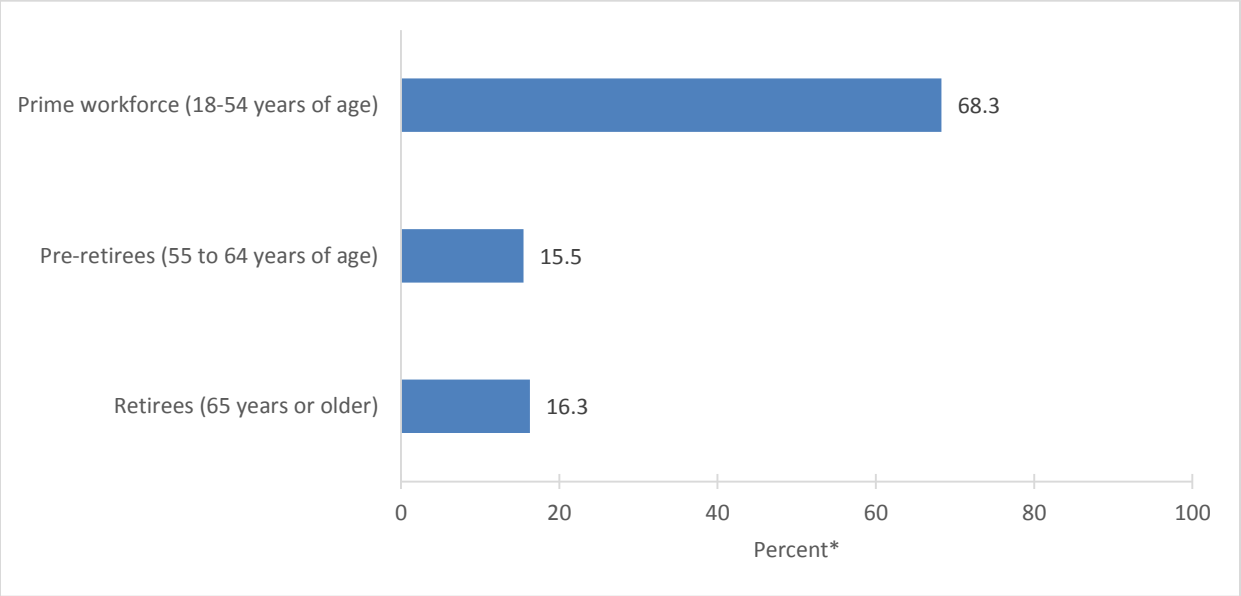
N=354

*Percentages do not total 100.0 due to multiple responses.

**Other responses include “Medical professional (13)”, “Don’t need or use technology (6)”, “TV and magazines (3)”, “Daughter’s computer (1)”, “Phone (1)”, and “Wherever (1).

Demographic Information

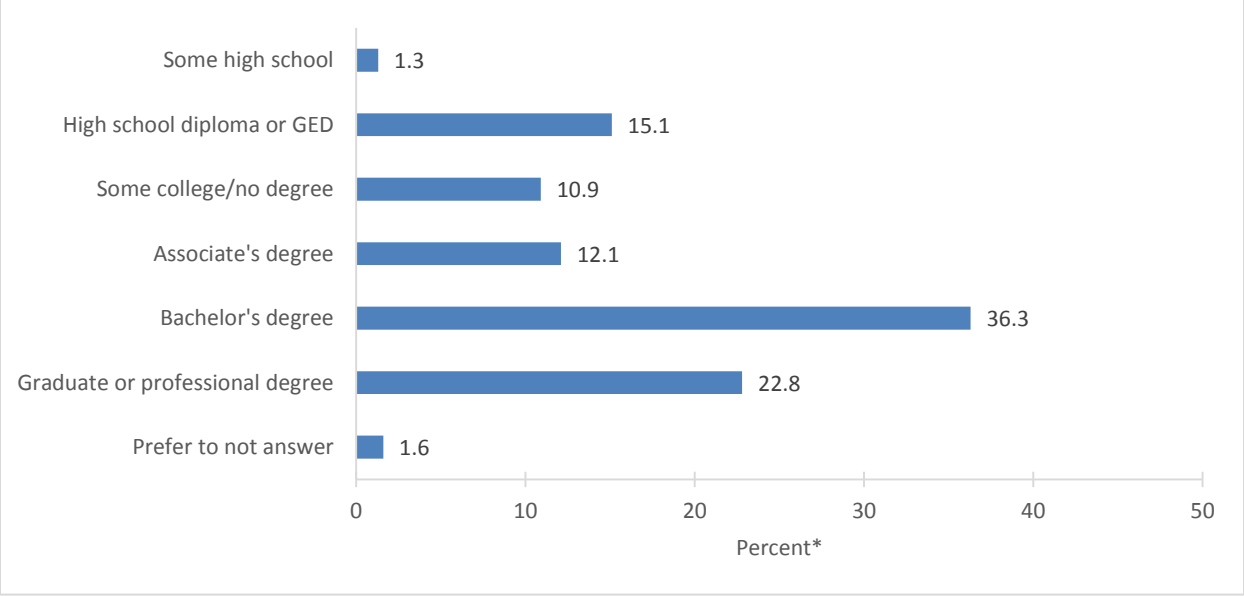
Figure 30. Age of respondents



N=354

*Percentages do not total 100.0 due to rounding.

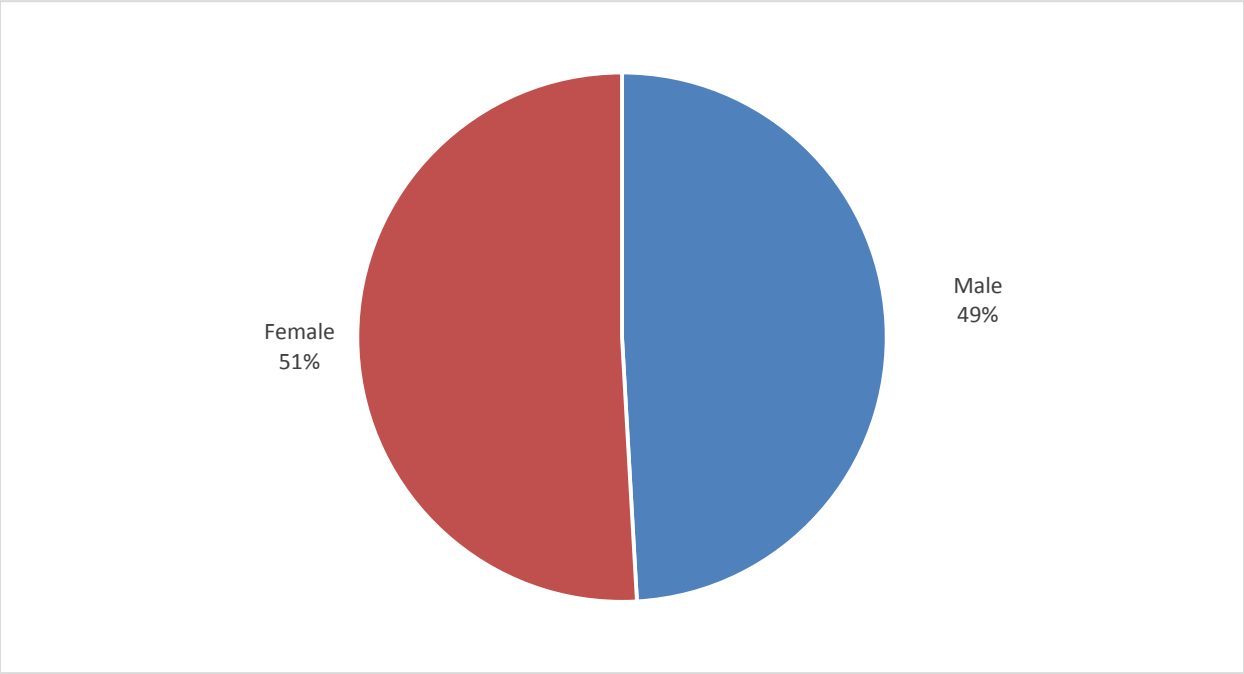
Figure 31. Highest level of education of respondents



N=351

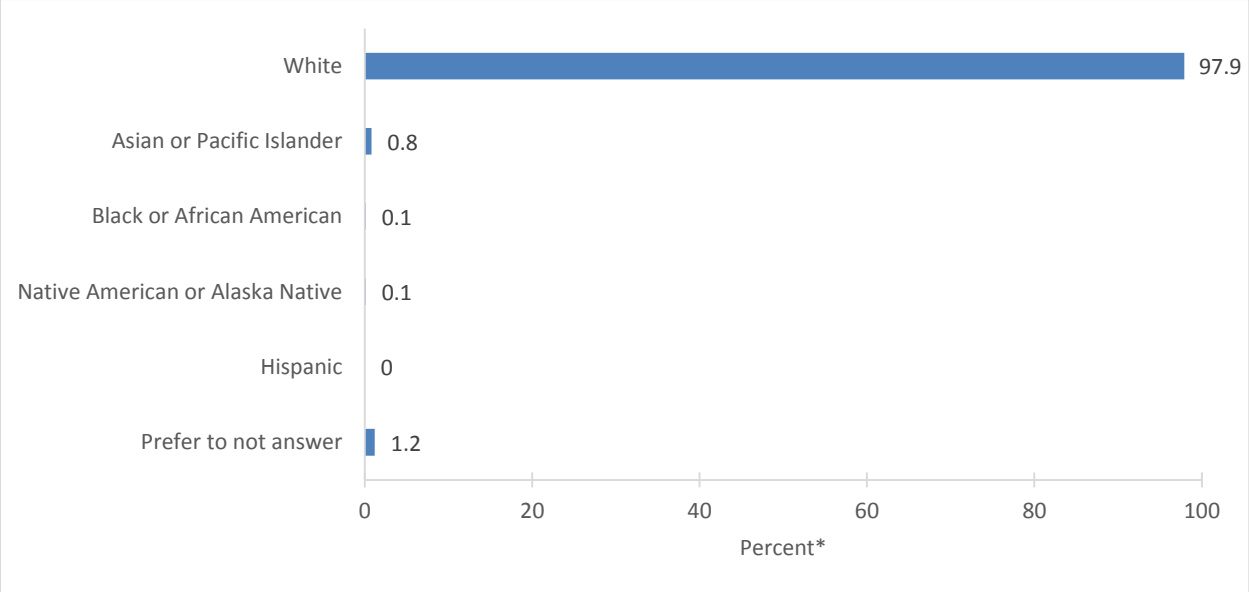
*Percentages do not total 100.0 due to rounding.

Figure 32. Gender of respondents



N=354

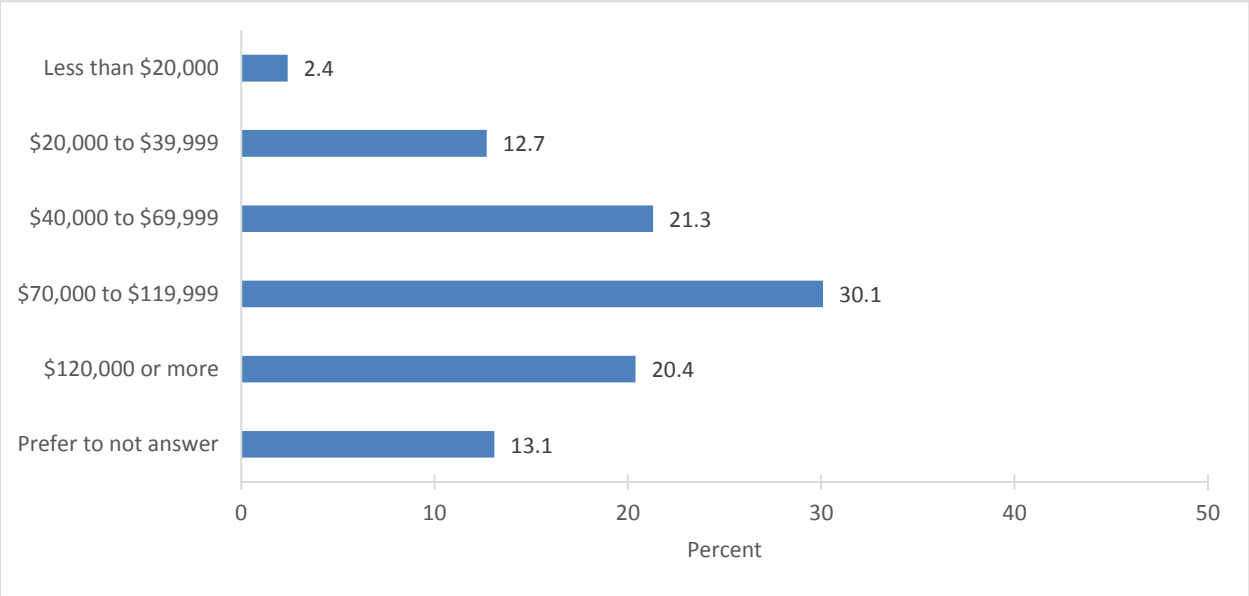
Figure 33. Race and ethnicity of respondents



N=354

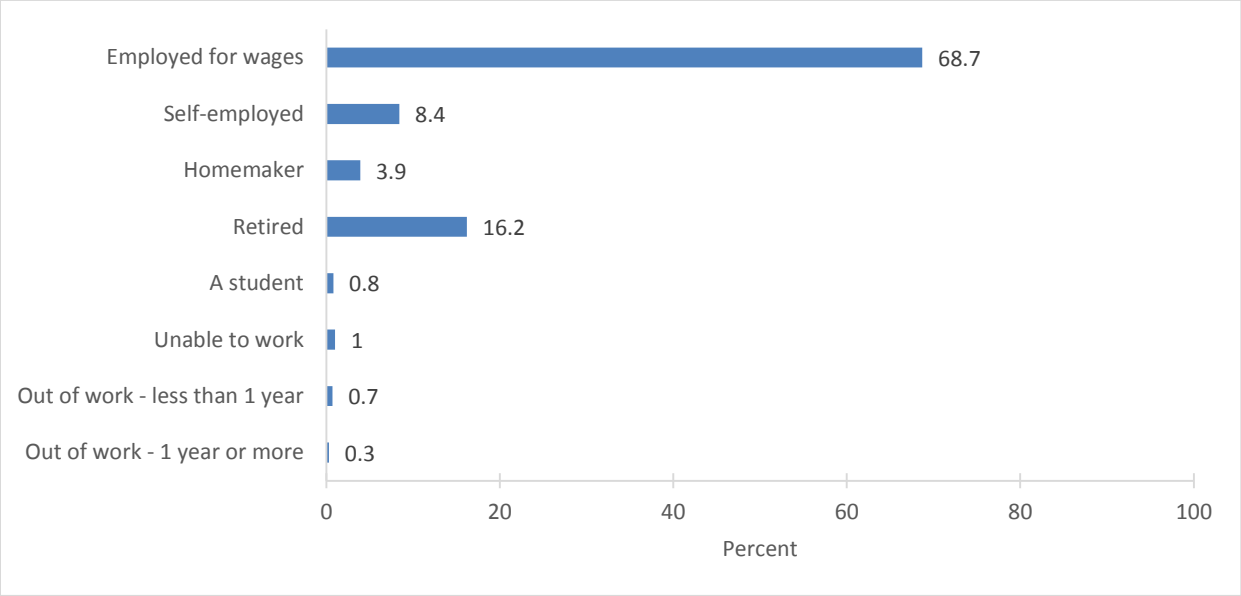
*Percentages do not total 100.0 due to multiple responses.

Figure 34. Annual household income of respondents



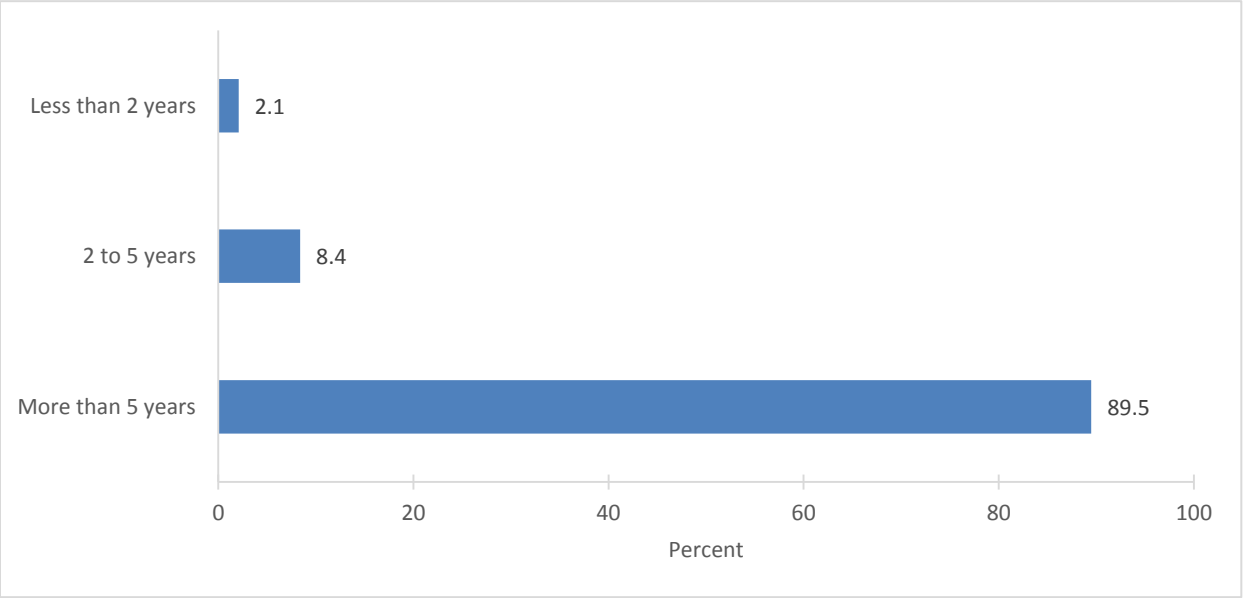
N=354

Figure 35. Employment status of respondents



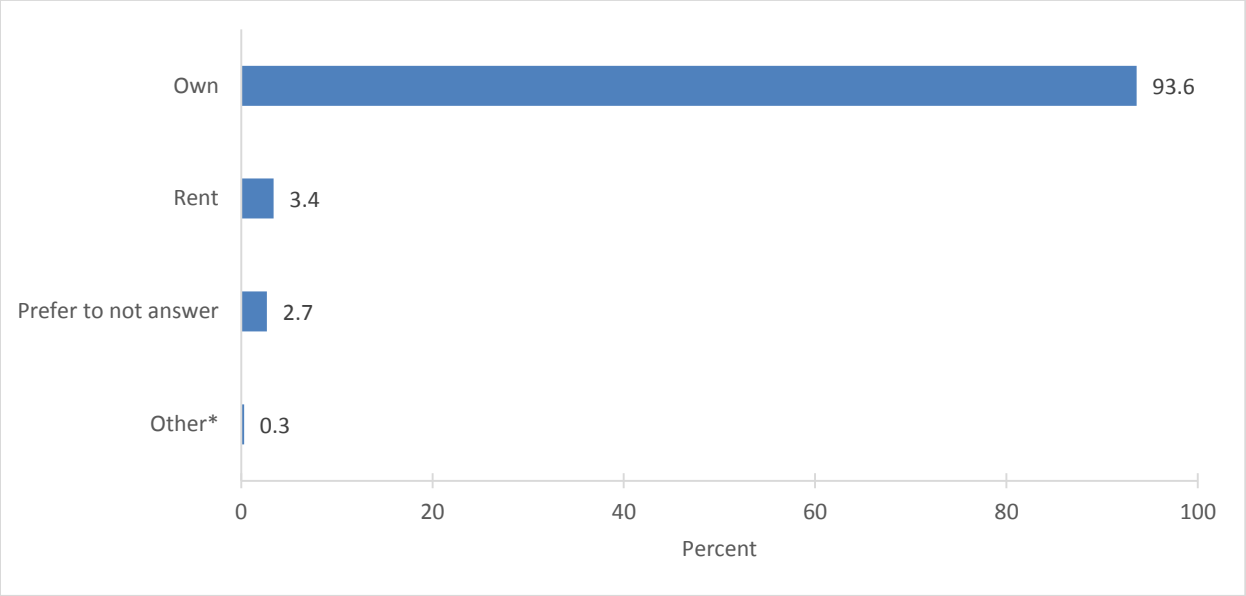
N=351

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



N=354

Figure 37. Whether respondents own or rent their home



N=353

*Other responses include “Apartment (2)” and “Buying (1)”.

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

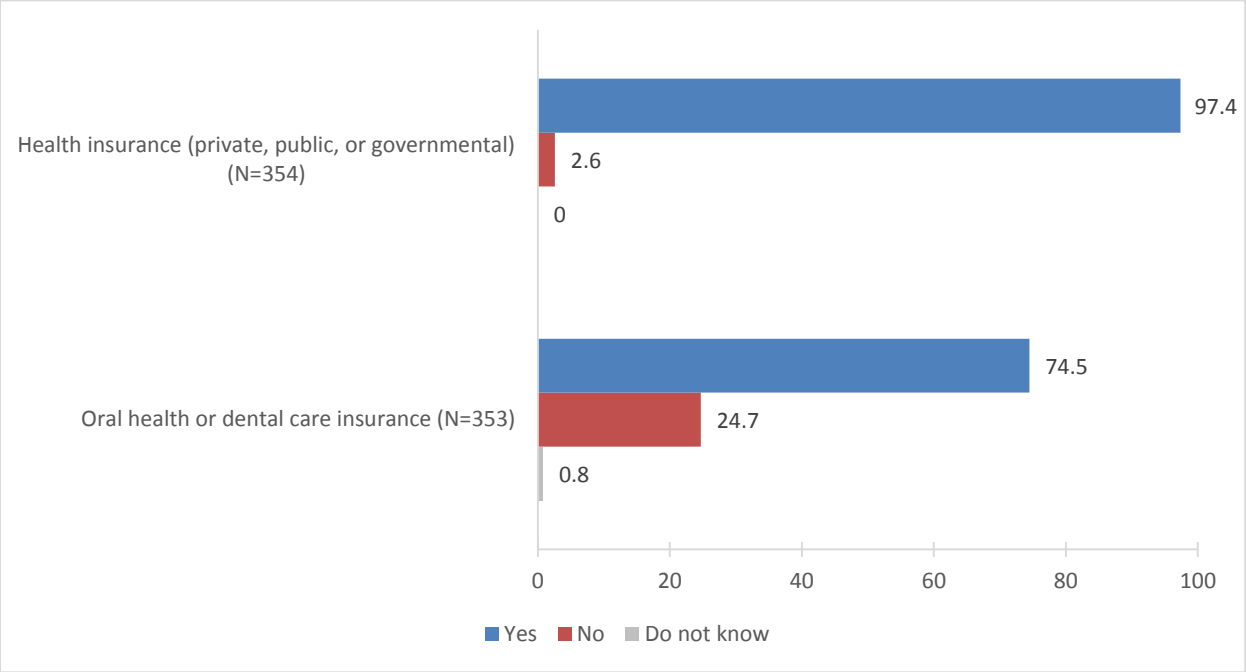
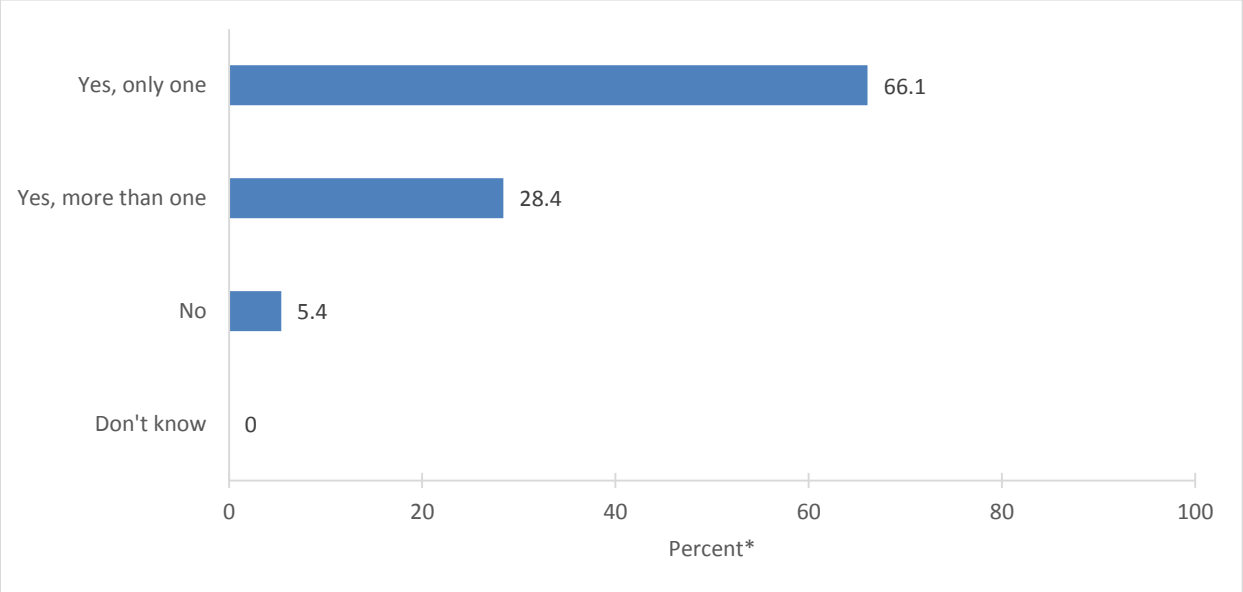


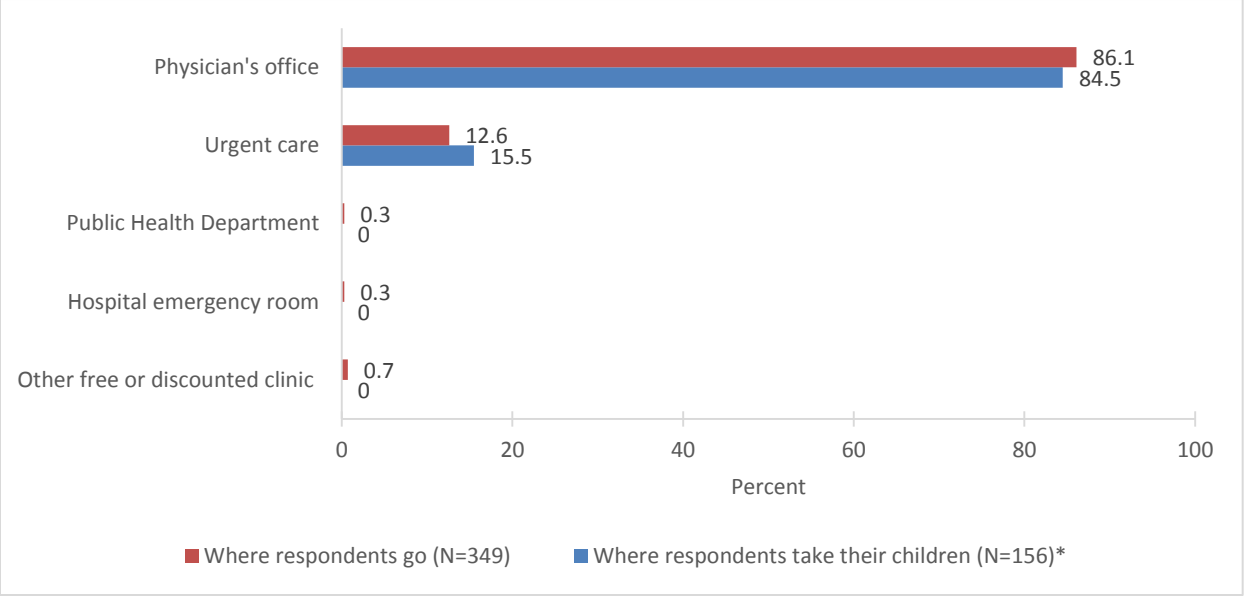
Figure 39. Whether respondents have one person who they think of as their personal doctor or health care provider



N=351

*Percentages do not total 100.0 due to rounding.

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

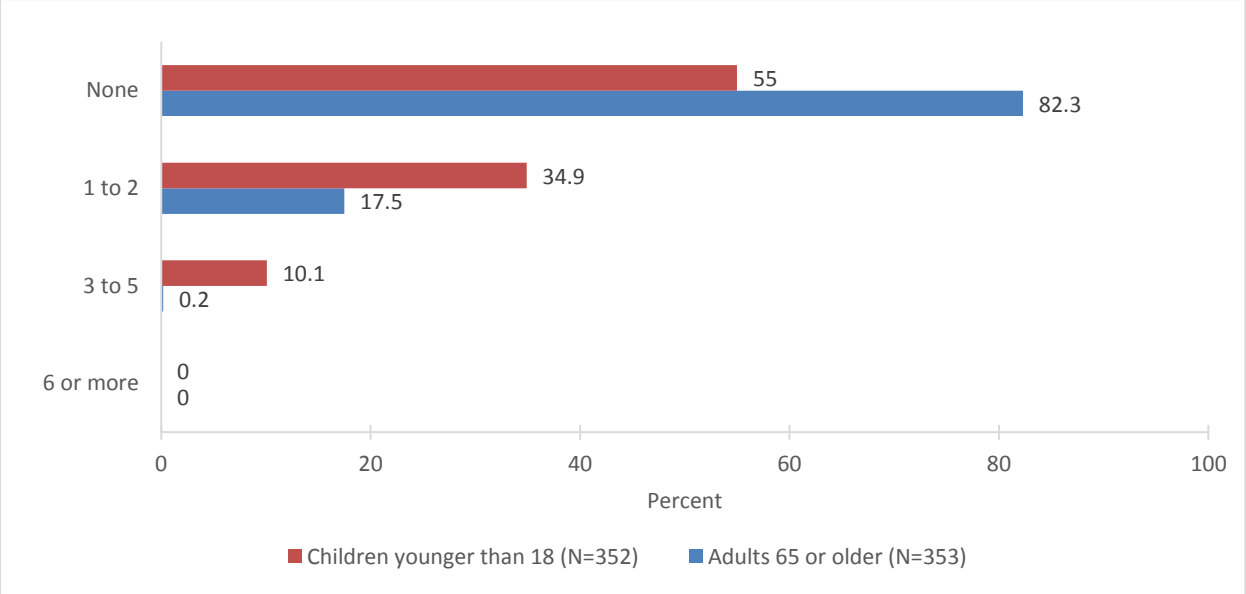
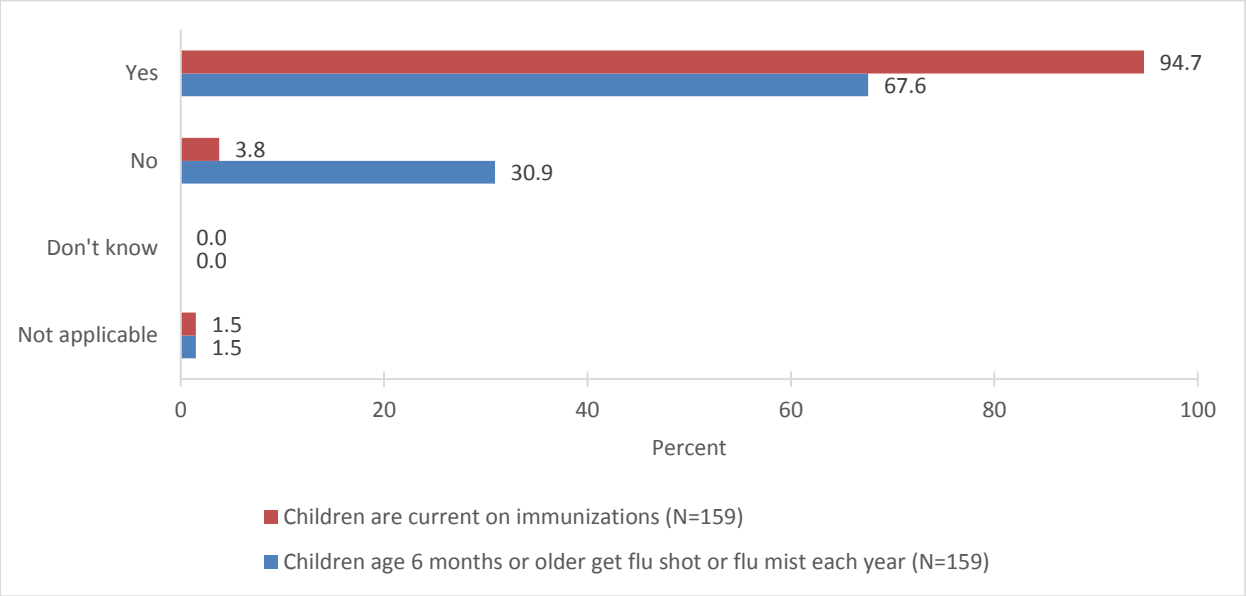


Figure 42. Of parents, whether all children in home are current on their immunizations and all children age 6 months or older get a flu shot or flu mist each year*



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

Table 3. Location of respondents based on zip code

	Percent of respondents*
Minnehaha County, SD	**86.5**
Sioux Falls	53.6
Rural	32.9
Lincoln County, SD	**6.4**
Turner County, SD	**1.8**
McCook County, SD	**2.7**
Other counties, SD	**0.4**
Unknown or missing	**1.8**

N=349

*Percentages do not total 100.0 due to rounding.

2016 Community Health Status Report

Live Well Sioux Falls is a community-based initiative designed to help improve the health and well-being of Sioux Falls residents by collaborating on projects to address health needs.

The Live Well Sioux Falls Coalition, a group of diverse businesses, organizations and individuals, is instrumental in guiding our efforts to improve community health and wellness.

Working together, this coalition completed a Community Health Needs Assessment and conducted a resident survey to gather information about health in our community.

This work is available in the **2016 Community Health Status Report**

http://livewellsiouxfalls.org/about-us/

Resources associated with this report can be found **below**.

This publication summarizes information about the health and wellbeing of the residents of Sioux Falls and presents strategies for providing a healthier community. It is intended to guide the efforts of the many programs and services currently provided in our community as well as inspire new programs that focus on the most critical needs of Sioux Falls residents.

Why is this work important?

- 1 in 2 adults suffers from chronic disease.
- 7 of 10 deaths in our nation are caused by chronic disease.
- Due to chronic disease, a baby born today may have a shorter life expectancy than that of its parents.
- Chronic disease is largely preventable.

Our Supporters

Live Well Sioux Falls is truly a community-wide effort to make the healthy choice the easy choice for residents and visitors. We are grateful to the **many organizations that have generously supported our efforts** by offering volunteer leadership, financial sponsorship and other resources.

Additional Resources for 2016 Community Health Needs Assessment:

- 2016 Community Health Needs Assessment Resident Survey Report
- 2016 Community Health Needs Assessment Infographic
- 2016 Community Health Needs Assessment Focus Group Report
- Sioux Falls Helping Hand Emergency Resource Guide
- Sioux Falls Basic Needs Resource Guide
- Guía de Fuentes de Necesidades Básicas de Sioux Falls 2016 (Sioux Falls Basic Needs Guide Spanish Version)
- Sioux Falls Mental Health Resource Guide
- Sioux Falls Metro Area Directory of Specialized Transportation Services

SANFORD HEALTH

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)

Minnehaha County

	Minnehaha County	Error Margin	Top U.S. Performers^	South Dakota	Rank (of 60)
Health Outcomes					**28**
Length of Life					23
Premature death	6,266	5,856-6,676	5,200	6,738	
Quality of Life					35
Poor or fair health	10%	9-11%	10%	11%	
Poor physical health days	2.6	2.3-2.8	2.5	2.7	
Poor mental health days	2.7	2.3-3.0	2.3	2.6	
Low birth weight	7.0%	6.6-7.4%	5.9%	6.5%	
Health Factors					**22**
Health Behaviors					20
Adult smoking	18%	16-20%	14%	18%	
Adult obesity	27%	25-29%	25%	29%	
Food environment index	8.1		8.4	7.4	
Physical inactivity	23%	21-24%	20%	25%	
Access to exercise opportunities	86%		92%	70%	
Excessive drinking	21%	19-23%	10%	19%	
Alcohol-impaired driving deaths	26%		14%	37%	
Sexually transmitted infections	542		138	471	
Teen births	35	34-37	20	37	

	Minnehaha County	Error Margin	Top U.S. Performers^	South Dakota	Rank (of 60)
Clinical Care					
Uninsured	13%	11-14%	11%	14%	
Primary care physicians	1,080:1		1,045:1	1,302:1	
Dentists	1,932:1		1,377:1	1,813:1	
Mental health providers	644:1		386:1	664:1	
Preventable hospital stays	51	48-54	41	57	
Diabetic monitoring	88%	83-92%	90%	84%	
Mammography screening	69.8%	65.6-74.1%	70.7%	66.5%	
Social & Economic Factors					22
High school graduation	83%		93%	78%	
Some college	68.1%	65.4-70.9%	71.0%	66.7%	
Unemployment	3.4%		4.0%	3.8%	
Children in poverty	14%	11-16%	13%	19%	
Income inequality	3.7	3.5-3.9	3.7	4.2	
Children in single-parent households	32%	30-35%	20%	31%	
Social associations	15.0		22.0	17.4	
Violent crime	285		59	282	
Injury deaths	58	53-63	50	69	
Physical Environment					54
Air pollution - particulate matter	12.3		9.5	10.8	
Drinking water violations	1%		0%	3%	
Severe housing problems	12%	11-13%	9%	12%	

	Minnehaha County	Error Margin	Top U.S. Performers^	South Dakota	Rank (of 60)
Driving alone to work	84%	83-85%	71%	78%	
Long commute - driving alone	10%	9-10%	15%	14%	

2015

^ 10th/90th percentile, i.e., only 10% are better.

Note: Blank values reflect unreliable or missing data

Lincoln County

	Lincoln County	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 birth weight	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	

	Lincoln County	Error Margin	Top U.S. Performers^	South Dakota	Rank (of 60)
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	
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%		93%	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%	

	Lincoln County	Error Margin	Top U.S. Performers^	South Dakota	Rank (of 60)
Long commute - driving alone	14%	12-16%	15%	14%	

McCook County

	McCook County	Error Margin	Top U.S. Performers^	South Dakota	Rank (of 60)
Health Outcomes					**17**
Length of Life					**30**
Premature death	6,839	5,406-8,535	5,200	6,738	
Quality of Life					**16**
Poor or fair health	9%	5-14%	10%	11%	
Poor physical health days	1.9	1.2-2.5	2.5	2.7	
Poor mental health days			2.3	2.6	
Low birth weight	6.1%	4.0-8.2%	5.9%	6.5%	
Health Factors					**18**
Health Behaviors					**25**
Adult smoking			14%	18%	
Adult obesity	28%	22-35%	25%	29%	
Food environment index	6.4		8.4	7.4	
Physical inactivity	29%	22-36%	20%	25%	
Access to exercise opportunities	42%		92%	70%	
Excessive drinking	19%	12-29%	10%	19%	
Alcohol-impaired driving deaths	14%		14%	37%	
Sexually transmitted infections	160		138	471	
Teen births	13		20	37	
Clinical Care					**23**

	McCook County	Error Margin	Top U.S. Performers^	South Dakota	Rank (of 60)
Uninsured	12%	10-13%	11%	14%	
Primary care physicians	5,610:1		1,045:1	1,302:1	
Dentists	5,654:1		1,377:1	1,813:1	
Mental health providers			386:1	664:1	
Preventable hospital stays	34	23-45	41	57	
Diabetic monitoring	86%	66-100%	90%	84%	
Mammography screening	61.2%	42.5-79.9%	70.7%	66.5%	
Social & Economic Factors					**4**
High school graduation			93%	78%	
Some college	68.7%	60.4-77.0%	71.0%	66.7%	
Unemployment	3.5%		4.0%	3.8%	
Children in poverty	12%	8-15%	13%	19%	
Income inequality	3.8	3.4-4.2	3.7	4.2	
Children in single-parent households	16%	10-21%	20%	31%	
Social associations	21.4		22.0	17.4	
Violent crime	30		59	282	
Injury deaths	50	27-84	50	69	
Physical Environment					**45**
Air pollution - particulate matter	12.0		9.5	10.8	
Drinking water violations	9%		0%	3%	
Severe housing problems	8%	6-10%	9%	12%	
Driving alone to work	69%	65-72%	71%	78%	
Long commute - driving alone	43%	37-49%	15%	14%	

Turner County

	Turner County	Error Margin	Top U.S. Performers^	South Dakota	Rank (of 60)
Health Outcomes					**15**
Length of Life					**19**
Premature death	5,713	4,516-7,130	5,200	6,738	
Quality of Life					**21**
Poor or fair health	9%	6-13%	10%	11%	
Poor physical health days	2.6	1.7-3.6	2.5	2.7	
Poor mental health days	2.1	1.2-3.0	2.3	2.6	
Low birth weight	6.5%	4.6-8.3%	5.9%	6.5%	
Health Factors					**30**
Health Behaviors					**38**
Adult smoking	17%	11-26%	14%	18%	
Adult obesity	31%	26-38%	25%	29%	
Food environment index	8.2		8.4	7.4	
Physical inactivity	30%	25-37%	20%	25%	
Access to exercise opportunities	39%		92%	70%	
Excessive drinking	19%	13-27%	10%	19%	
Alcohol-impaired driving deaths	50%		14%	37%	
Sexually transmitted infections	181		138	471	
Teen births	18	12-25	20	37	
Clinical Care					**40**

	Turner County	Error Margin	Top U.S. Performers^	South Dakota	Rank (of 60)
Uninsured	12%	11-14%	11%	14%	
Primary care physicians	4,154:1		1,045:1	1,302:1	
Dentists	8,361:1		1,377:1	1,813:1	
Mental health providers	8,361:1		386:1	664:1	
Preventable hospital stays	65	52-78	41	57	
Diabetic monitoring	83%	67-100%	90%	84%	
Mammography screening	67.7%	51.0-84.5%	70.7%	66.5%	
Social & Economic Factors					**10**
High school graduation			93%	78%	
Some college	65.3%	58.3-72.3%	71.0%	66.7%	
Unemployment	3.4%		4.0%	3.8%	
Children in poverty	13%	10-17%	13%	19%	
Income inequality	3.7	3.2-4.1	3.7	4.2	
Children in single-parent households	24%	18-29%	20%	31%	
Social associations	25.3		22.0	17.4	
Violent crime	71		59	282	
Injury deaths	60	39-89	50	69	
Physical Environment					**51**
Air pollution - particulate matter	11.9		9.5	10.8	
Drinking water violations	3%		0%	3%	
Severe housing problems	8%	6-10%	9%	12%	
Driving alone to work	74%	71-76%	71%	78%	
Long commute - driving alone	49%	43-54%	15%	14%	

Focus on South Dakota
A Picture of Health

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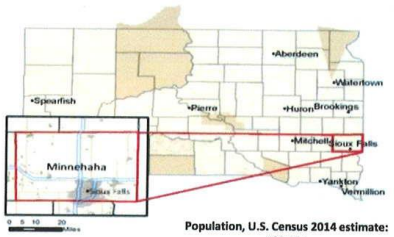
SOUTH DAKOTA HEALTH STUDY: MINNEHAHA COUNTY RESULTS



Population, U.S. Census 2014 estimate: 182,882

SURVEY RESPONSES

South Dakota Responses: 7,675	Response Rate: 48%
Minnehaha County Responses: 565	Response Rate: 44%

RESPONDENT PROFILE

SOUTH DAKOTA (n = 7,675)		MINNEHAHA COUNTY (n = 565)
57.4%	Female	57.0%
11.3%	Non-White	4.7%
19.1%	Age 65 and older	15.6%
20.3%	Income ≤ 100% FPL (Federal Poverty Level)	17.5%
19.9%	Three or more ACEs (Adverse Childhood Experiences)	17.1%
8.5%	Five or more ACEs (Adverse Childhood Experiences)	7.2%

NEED FOR CARE

75.0%	Need Medical Care	76.5%
79.5%	Need Prescription Medications	79.6%
9.5%	Need Mental Health Care	10.4%
1.1%	Need Alcohol or Drug Treatment	0.2%

ACCESS TO CARE

94.2%	Have a usual place to go for care	94.1%
77.4%	Have a personal doctor/provider	84.4%
13.0%	Unmet medical needs	10.2%
6.4%	Unmet prescription needs	5.5%
35.8%	Unmet mental health needs	31.0%
45.6%	Unmet alcohol or drug abuse needs	64.7%

HEALTH PROFILE

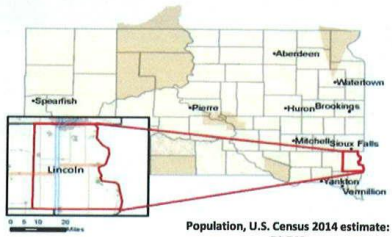
SOUTH DAKOTA (n = 7,675)	Percent who have been told by a doctor that they have...	MINNEHAHA COUNTY (n = 565)
11.4%	Diabetes	8.1%
10.9%	Asthma	8.6%
33.3%	High Blood Pressure	26.7%
8.9%	Heart Disease	6.4%
28.5%	High Cholesterol	26.2%
3.4%	COPD (Chronic Obstructive Pulmonary Disease)	2.8%
8.9%	Cancer	6.9%
54.7%	At least one of the above	49.0%
17.0%	Depression	16.1%
17.6%	Anxiety	18.5%
3.4%	PTSD (Post-Traumatic Stress Disorder)	2.2%
1.7%	Bipolar Disorder	2.4%
2.6%	Addiction Issues	1.9%
25.5%	At least one of the above	24.3%

HEALTH RESULTS (SCREENINGS)

	Percent who screened positive for...	
83.4%	Overall health status (good, very good, excellent)	81.4%
5.5%	Depression	5.3%
7.5%	Anxiety	8.9%
6.0%	PTSD (Post-Traumatic Stress Disorder)	5.7%
17.0%	Current Smoker	16.7%
42.4%	Alcohol Abuse	43.5%
6.7%	Marijuana Use (past year)	8.4%

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%

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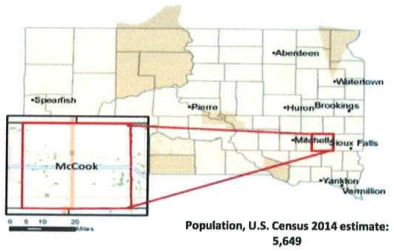
SOUTH DAKOTA HEALTH STUDY: McCOOK COUNTY RESULTS



Population, U.S. Census 2014 estimate: 5,649

SURVEY RESPONSES

South Dakota Responses: 7,675	Response Rate: 48%
McCook County Responses: 101	Response Rate: 51%

RESPONDENT PROFILE

SOUTH DAKOTA (n = 7,675)		MCCOOK COUNTY (n = 101)
57.4%	Female	51.4%
11.3%	Non-White	1.2%
19.1%	Age 65 and older	25.7%
20.3%	Income ≤ 100% FPL (Federal Poverty Level)	16.6%
19.9%	Three or more ACEs (Adverse Childhood Experiences)	22.3%
8.5%	Five or more ACEs (Adverse Childhood Experiences)	15.0%

NEED FOR CARE

75.0%	Need Medical Care	82.1%
79.5%	Need Prescription Medications	82.8%
9.5%	Need Mental Health Care	16.1%
1.1%	Need Alcohol or Drug Treatment	1.6%

ACCESS TO CARE

94.2%	Have a usual place to go for care	92.2%
77.4%	Have a personal doctor/provider	83.6%
13.0%	Unmet medical needs	22.5%
6.4%	Unmet prescription needs	2.8%
35.8%	Unmet mental health needs	14.4%
45.6%	Unmet alcohol or drug abuse needs	50.0%

HEALTH PROFILE

SOUTH DAKOTA (n = 7,675)	Percent who have been told by a doctor that they have...	MCCOOK COUNTY (n = 101)
11.4%	Diabetes	5.7%
10.9%	Asthma	4.7%
33.3%	High Blood Pressure	26.7%
8.9%	Heart Disease	7.6%
28.5%	High Cholesterol	29.7%
3.4%	COPD (Chronic Obstructive Pulmonary Disease)	2.0%
8.9%	Cancer	9.9%
54.7%	At least one of the above	50.3%
17.0%	Depression	26.5%
17.6%	Anxiety	19.9%
3.4%	PTSD (Post-Traumatic Stress Disorder)	8.0%
1.7%	Bipolar Disorder	7.0%
2.6%	Addiction Issues	1.9%
25.5%	At least one of the above	33.0%

HEALTH RESULTS (SCREENINGS)

	Percent who screened positive for...	
83.4%	Overall health status (good, very good, excellent)	87.0%
5.5%	Depression	8.3%
7.5%	Anxiety	17.2%
6.0%	PTSD (Post-Traumatic Stress Disorder)	15.7%
17.0%	Current Smoker	19.5%
42.4%	Alcohol Abuse	39.2%
6.7%	Marijuana Use (past year)	8.7%

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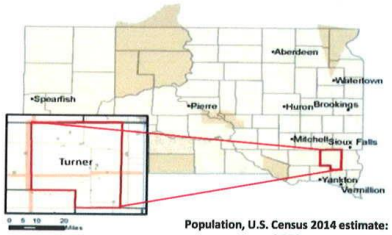
SOUTH DAKOTA HEALTH STUDY: TURNER COUNTY RESULTS



Population, U.S. Census 2014 estimate: 8,272

SURVEY RESPONSES

South Dakota Responses: 7,675	Response Rate: 48%
Turner County Responses: 81	Response Rate: 40%

RESPONDENT PROFILE

SOUTH DAKOTA (n = 7,675)		TURNER COUNTY (n = 81)
57.4%	Female	49.0%
11.3%	Non-White	0.0%
19.1%	Age 65 and older	26.0%
20.3%	Income ≤ 100% FPL (Federal Poverty Level)	22.3%
19.9%	Three or more ACEs (Adverse Childhood Experiences)	14.2%
8.5%	Five or more ACEs (Adverse Childhood Experiences)	3.6%

NEED FOR CARE

75.0%	Need Medical Care	73.0%
79.5%	Need Prescription Medications	73.1%
9.5%	Need Mental Health Care	11.1%
1.1%	Need Alcohol or Drug Treatment	0.0%

ACCESS TO CARE

94.2%	Have a usual place to go for care	92.6%
77.4%	Have a personal doctor/provider	73.7%
13.0%	Unmet medical needs	13.2%
6.4%	Unmet prescription needs	7.6%
35.8%	Unmet mental health needs	49.3%
45.6%	Unmet alcohol or drug abuse needs	N/A

HEALTH PROFILE

SOUTH DAKOTA (n = 7,675)	Percent who have been told by a doctor that they have...	TURNER COUNTY (n = 81)
11.4%	Diabetes	15.2%
10.9%	Asthma	3.3%
33.3%	High Blood Pressure	38.2%
8.9%	Heart Disease	14.8%
28.5%	High Cholesterol	34.4%
3.4%	COPD (Chronic Obstructive Pulmonary Disease)	4.5%
8.9%	Cancer	13.2%
54.7%	At least one of the above	51.7%
17.0%	Depression	12.4%
17.6%	Anxiety	9.9%
3.4%	PTSD (Post-Traumatic Stress Disorder)	6.2%
1.7%	Bipolar Disorder	1.4%
2.6%	Addiction Issues	0.0%
25.5%	At least one of the above	20.2%

HEALTH RESULTS (SCREENINGS)

	Percent who screened positive for...	
83.4%	Overall health status (good, very good, excellent)	83.2%
5.5%	Depression	8.7%
7.5%	Anxiety	5.5%
6.0%	PTSD (Post-Traumatic Stress Disorder)	3.2%
17.0%	Current Smoker	11.6%
42.4%	Alcohol Abuse	35.6%
6.7%	Marijuana Use (past year)	1.3%

SANFORD HEALTH

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