Board Approved 04/16/19

Community Health Needs Assessment

2019

Valley City, North Dakota Service Area

Center for Rural Health
University of North Dakota
School of Medicine & Health Sciences

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Executive Summary

To help inform future decisions and strategic planning, CHI Mercy Health, Valley City and City-County Health District conducted a community health needs assessment (CHNA) in 2019. The previous CHNA was conducted in 2016. The Center for Rural Health (CRH) at the University of North Dakota School of Medicine & Health Sciences (UNDSMHS) facilitated the assessment process, which solicited input from area community members and healthcare professionals as well as analysis of community health-related data.

To gather feedback from the community, residents of the area were given the opportunity to participate in a survey. There were 199 service area residents who completed the survey. Additional information was collected through seven key informant interviews with community members. The input from the residents, who primarily reside in Barnes County, represented the broad interests of the communities in the service area. Together with secondary data gathered from a wide range of sources, the survey presents a snapshot of the health needs and concerns in the community. Barnes County's population from 2010 to 2017 decreased 3.0%. The average of residents under age 18 (20.2%) for Barnes County is 3.1% lower than the state average. The percentage of residents ages 65 and older is about 7% higher for Barnes County (22.0%) than the North Dakota average (15.0%), and the rates of education are slightly lower for Barnes County (90.9%) than the North Dakota average (92.0%). The median household income in Barnes County ($55,778) is slightly higher than the state average for North Dakota ($55,322).

Data compiled by County Health Rankings show Barnes County is doing better than North Dakota in health outcomes for 20 factors, and according to County Health Rankings data, Barnes County is performing poorly relative to the rest of the state in 8 factors.

Of the 82 potential community and health needs set forth in the survey, the 199 Valley City/Barnes County service area residents who completed the survey indicated the following ten needs as the most important:

- Availability of substance abuse/treatment services
- Drug use and abuse
- Attracting and retaining young families
- Depression/anxiety (adult & youth population)
- Physical violence, domestic violence, sexual abuse
- Not enough jobs with livable wages
- Alcohol use and abuse (adult & youth population)
- Extra hours for appointments (evenings & weekends)
- Ability to retain primary care providers (MD, DO, NP, PA, nurses in the community)
- Not having affordable housing

The survey also revealed the biggest barriers to receiving healthcare (as perceived by community members). They included not affordable (N=62), not enough evening or weekend hours (N=61), and no insurance or limited insurance (N=55).

When asked what the best aspects of the community were, respondents indicated the top community assets were:

- People are friendly, helpful and supportive
- Family friendly
- Quality school system
- Closeness to work and activities
- Safe place to live (little or no crime)
- Active faith community

Input from community leaders, provided via key informant interviews, and the community focus group echoed many of the concerns raised by survey respondents. Concerns emerging from these sessions were:

- Availability of mental health services
- Availability of substance use disorder/treatment services
- Drug use and abuse (including prescription drug abuse)
- Attracting and retaining young families
- Not enough affordable housing

Overview and Community Resources

With assistance from the CRH at the UNDSMHS, the CHI Mercy Health, completed a CHNA of the Valley City/Barnes County service area. The hospital identifies its service area as Barnes County in its entirety, plus portions of Stutsman, Wells, and Griggs Counties – the last three have a medical center in their county. Many community members and stakeholders worked together on the assessment.

As illustrated in Figure 1, Barnes County is located in southeastern North Dakota. The county seat is Valley City, which lies in the center of the county. The state capital, Bismarck, is located two hours to the west of Valley City. The 2017 estimated population of Barnes County was 10,734 which is a 3% decrease from 2010. Valley City's estimated population in 2017 was 6,447 (a 2.6% decrease from 2010). The remainder of Barnes County consists of an approximate population of 4,287 residents. Rural Barnes County has several incorporated cities, including Wimbledon (199), Sanborn (185), Litchville (163), Oriska (120), and Dazey (100). Outside of City-County Health District and CHI Mercy Health, other agencies that provide health services for Barnes County, include, Essentia Health – Valley City Clinic, and Sanford Health Valley City Clinic. Outside of Barnes County, residents most frequently access healthcare services in Cass County and Stutsman County.

Valley City is nestled on the banks of the beautiful Sheyenne River. The 11 bridges in Valley City help tell its history. Interpretive panels have been placed at seven bridges in town and one north of Valley City giving the details about how the valley was developed.

Valley City is also known for specialty shops– whether antiquing, looking for local art or quilting– Valley City has it covered. If you are a history buff you will enjoy the Rosebud Visitor Center, home to an 1881 Northern Pacific superintendent's railcar with the original furnishings and the outdoor railroad display. Don't miss the Barnes County Museum right in the middle of downtown. They have a special guest- Gundy the Triceratops.

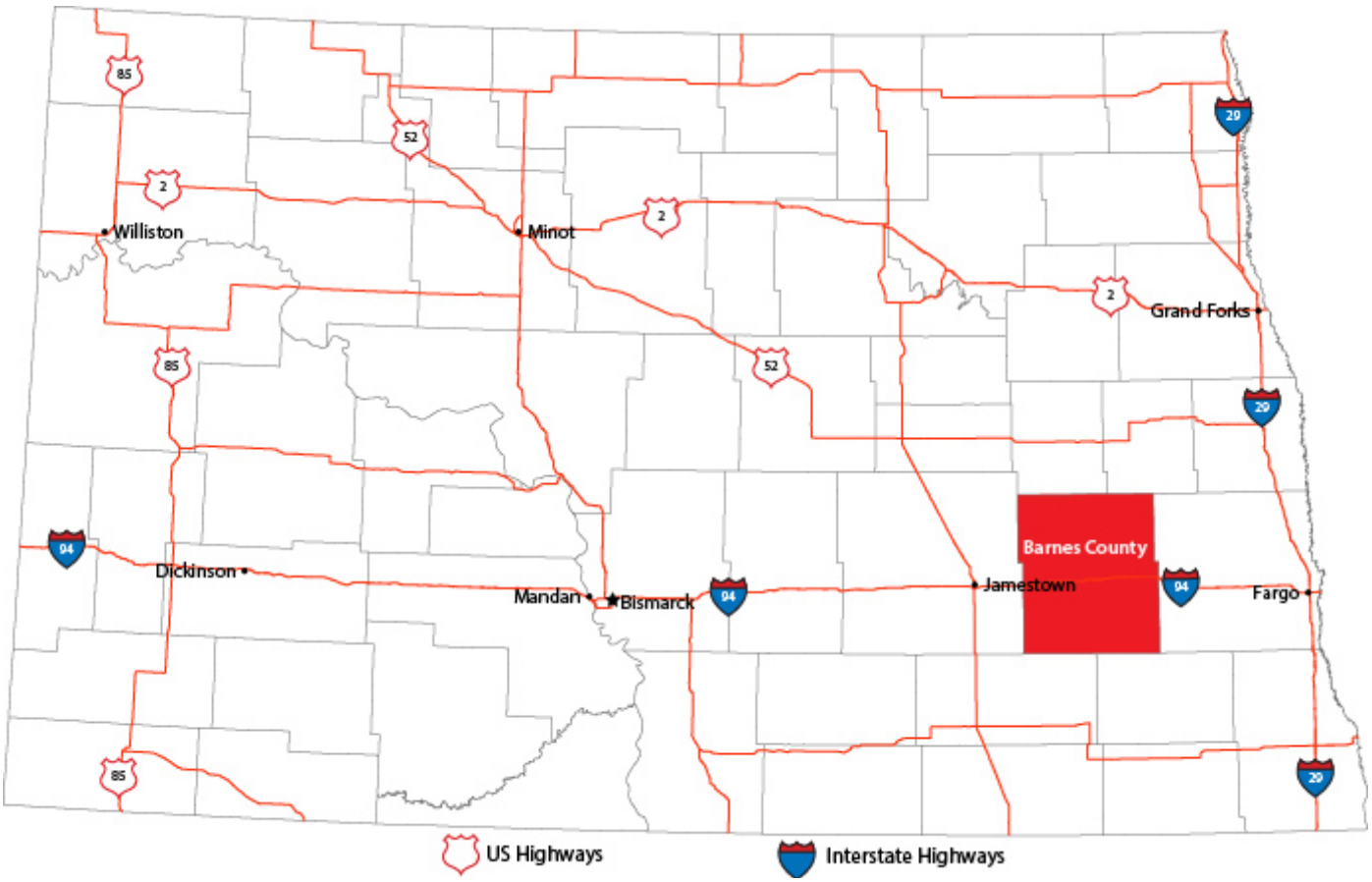
Remaining on the historic register, Old Main and the clock tower are Valley City State University's campus icons. Also, on campus you will find the planetarium. Up the hill, south of the campus on Winter

Show Road, is Medicine Wheel Park. A replica of a Native American solar calendar, a meridian calendar, burial mounds and a walk among the planets with interpretation are all part of the park.

For those who love the outdoors there are two beautiful golf courses along the river. Hikers will enjoy the North Country Scenic Trail as well as several walkways around Valley City. Enjoy a beautiful drive on the Sheyenne River Valley National Scenic Byway located north and south of Valley City.

A 2016 community addition, the Gaukler Wellness Center, is a state of the art, 65,000 sq ft. center which offers fitness classes, a three lane track, Matrix and Octane cardio equipment, Nautilus weight machines, free weights, a swimming pool with four lanes and a zero-depth area as well as a hot tub, two basketball courts, and an indoor playground.

Figure 1 Illustrates the location of the county.



CHI Mercy Health

CHI Mercy Health has been a part of the Valley City community since 1928 when it was founded by the Sisters of Mercy. Their vision was to build healthier communities through a healing ministry. Over the years CHI Mercy Health has progressed to meet the needs of the community - by offering services - close to home. CHI Mercy Health of Valley City is part of Catholic Health Initiatives (CHI): the third largest Catholic, not-for-profit healthcare system in the country. CHI operates hospitals, long-term care facilities, assisted living facilities and residential units in 18 states.

Mission

The Mission of Catholic Health Initiatives is to nurture the healing ministry of the Church, supported by education and research. Fidelity to the Gospel emphasizes human dignity and social justice to create healthier communities.

Vision

As a ministry of the Catholic church, we will lead the transformation of healthcare to achieve optimal health and wellbeing for the individuals and communities we serve, especially those who are poor and vulnerable. *Building on our Legacy...*

Core Values

At CHI Health, our core purpose is to heal the body, mind and spirit. Our most important focus is to care for our patients and their families. To do this, all CHI Health employees are expected to serve others by incorporating specific behaviors into their day-to-day work. Our Core Values describe specific day-to-day work expectations based on our mission and values.

- **Reverence** - Profound respect and awe for all of creation, the foundation that shapes spirituality, our relationships with others and our journey to God.
- **Integrity** - Moral wholeness, soundness, fidelity, trust, truthfulness in all we do.
- **Compassion** - Solidarity with one another, capacity to enter into another's joy and sorrow.
- **Excellence** - Preeminent performance

General and Acute Services

- Ambulatory care/Infusions
- Cardiac rehab
- Emergency room
- Hospital (acute care)
- Nutrition counseling
- Observation services
- Pharmacy
- Respite care
- Swing bed services

Screening/Therapy Services

- Occupational therapy
- Physical therapy
- Respiratory therapy
- Sleep studies
- Social services
- Tele-psychology screenings

Surgery Services

- General and same day surgery
- Cataract surgery
- Pain management injections

Radiology Services

- CT scan
- DEXA (bone density) scans
- EKG
- Fluoroscopy (c-arm)
- General X-ray
- Mammography (mobile unit)
- Nuclear medicine (mobile unit)
- MRI (mobile unit)
- Ultrasound

City County Health District

City-County Health District (CCHD)is a single-county health unit providing services to the people of Barnes County. It provides public health services that include environmental health, nursing services, and the WIC (women, infants, and children) program. Each of these programs provides a wide variety of services in order to accomplish the mission of public health, assuring that North Dakota is a healthy place to live and that each person has an equal opportunity to enjoy good health. To accomplish this mission, CCHD is committed to the promotion of healthy lifestyles, protection and enhancement of the environment, and provision of quality healthcare services for the people of North Dakota.

Mission

The mission of CCHD is building healthy communities through healthy lives and healthy lifestyles.

Vision

The vision of CCHD is healthy people thriving in a safe and healthy environment.'

Core Values

- **Quality** - We use evidence-based practices to provide quality education and services to our community.
- **Dignity** - We treat all people with understanding, compassion, and equity.
- **Accountability** - We do what will best protect and promote the public's health in our professional work and partnerships.
- **Integrity** - We consistently model and uphold the core values of public health.

10 Essential Public Health Services

1. Monitor health status to identify and solve community health problems
2. Diagnose and investigate health problems and health hazards in the community
3. Inform, educate and empower people about health issues
4. Mobilize community partnerships and action to identify and solve health problems
5. Develop polices and plans that support individual and community health efforts
6. Enforce laws and regulations that protect health and ensure safety
7. Link people to needed personal health services and assure the provision of healthcare
8. Assure competent public and personal healthcare workforce
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services
10. Research for new insights and innovative solutions to health problems

Specific services that City County Health District provides are:

- AED tracking
- Alcohol prevention program
- Blood pressure checks
- Breastfeeding resources
- Car seat program
- Child health (well baby checks)
- Correction facility health
- Diabetes screening and management programs

- Emergency preparedness services-work with community partners as part of local emergency response team
- Environmental health services (water, sewer, health hazard abatement)
- Family planning
- Flu shots
- Foot care
- Health Tracks (child health screening)
- Home health
- Immunizations
- Medication setup
- Newborn home visits
- Nutrition education
- Rapid screens
- School health
- ON THE MOVE community health program
- Opioid prevention program
- Tobacco prevention and control program
- Tuberculosis testing and management
- West Nile program—surveillance and education
- WIC (Women, Infants & Children) program
- Worksite wellness
- Young people's healthy heart program

Assessment Process

The purpose of conducting a CHNA is to describe the health of local people, identify areas for health improvement, identify use of local healthcare services, determine factors that contribute to health issues, identify and prioritize community needs, and help healthcare leaders identify potential actions to address the community's health needs.

A CHNA benefits the community by:

1) Collecting timely input from the local community members, providers, and staff;

2) Providing an analysis of secondary data related to health-related behaviors, conditions, risks, and outcomes;

3) Compiling and organizing information to guide decision making, education, and marketing efforts, and to facilitate the development of a strategic plan;

4) Engaging community members about the future of healthcare; and

5) Allowing the community hospital to meet the federal regulatory requirements of the Affordable Care Act, which requires not-for-profit hospitals to complete a CHNA at least every three years, as well as helping the local public health unit meet accreditation requirements.

This assessment examines health needs and concerns in Barnes County. In addition to Valley City, located in the county are the communities of Dazey, Fingal, Kathryn, Leal, Litchville, Nome, Oriska, Pillsbury, Rogers, Sanborn, Sibley, Tower City, and Wimbledon.

The assessment process was highly collaborative. Administrators and other professionals from CHI Mercy Health (CHI) and CCHD were considerably involved in planning and implementing the process. Along with representatives from the CRH, they met regularly by telephone conference and via email. The Community Group (described in more detail below) provided in-depth information and informed the assessment in terms of community perceptions, community resources, community needs, and ideas for improving the health of the population and healthcare services. Representatives from both CHI and CCHD were heavily involved in planning the Community Group meetings. The Community Group was comprised of many residents from outside the hospital and health department, including representatives from local government, businesses, and social services.

The survey instrument was developed out of a collaborative effort that took into account input from health organizations around the state. The North Dakota Department of Health's public health liaison organized a series of meetings that garnered input from the state's health officer, local public health unit professionals from around North Dakota, representatives of the CRH, and representatives from North Dakota State University.

As part of the assessment's overall collaborative process, the CRH spearheaded efforts to collect data for the assessment in a variety of ways:

- A survey solicited feedback from area residents;
- Community leaders representing the broad interests of the community took part in one-on-one key informant interviews;
- The community focus group, comprised of community leaders and area residents, was convened to discuss area health needs and inform the assessment process; and
- A wide range of secondary sources of data were examined, providing information on a multitude of measures, including demographics, health conditions, indicators, outcomes, rates of preventive measures; rates of disease; and at-risk behavior.

The CRH provided substantial support to CHI and CCHD in conducting this needs assessment. The CRH's involvement was funded partially through its Medicare Rural Hospital Flexibility (Flex) Program. The Flex Program is federally funded by the Office of Rural Health Policy, part of the Health Resources and Services Administration.

Community representatives met regularly in-person, by telephone conference, and email. A CHNA liaison was selected locally, who served as the main point of contact between the CRH and Valley City. A small steering committee (see Figure 2) was formed that was responsible for planning and implementing the process locally. Representatives from the CRH met and corresponded regularly by teleconference and/or via the eToolkit with the CHNA liaison. The community group provided in-depth information and informed the assessment process in terms of community perceptions, community resources, community needs, and ideas for improving the health of the population and healthcare services. Thirteen people, representing a cross section demographically, attended the focus group meeting. The meeting was highly interactive with good participation. CHI and CCHD staff and board members were in attendance as well, but largely played a role of listening and learning.

Figure 2: Steering Committee

Stephanie Mayfield	Mission/Foundation Director, CHI Mercy Health
Naomi Koch	Social Services Director, CHI Mercy Health
Teresa Will	Administrator, City-County Health District
Katie Beyer	Prevention Coordinator, City-County Health District
Heather Kroeker	Prevention Coordinator, City-County Health District
Jennifer Eberle	Mental Health Counselor, Creative Therapy
Chelsea Modlin	LICSW, South Central Human Service Center
Alicia Hoffarth	Resource Development Specialist, VC BC Development Corporation
Erin Klingenberg	LPCC/Professor, Valley City State University

The original survey tool was developed and used by the CRH. In order to revise the original survey tool to ensure the data gathered met the needs of hospitals and public health, the CRH worked with the North Dakota Department of Health's public health liaison. CRH representatives also participated in a series of meetings

that garnered input from the state's health officer, local North Dakota public health unit professionals, and representatives from North Dakota State University.

The CRH is one of the nation's most experienced organizations. It was created in 1980 by the UND School of Medicine & Health Sciences and is committed to providing leadership in rural health. Its mission is to connect resources and knowledge to strengthen the health of people in rural communities. The CRH is the designated State Office of Rural Health and administers the Medicare Rural Hospital Flexibility (Flex) program, funded by the Federal Office of Rural Health Policy, Health Resources Services Administration, and Department of Health and Human Services. The CRH connects the UNDSMHS and other necessary resources, to rural communities and their healthcare organizations in order to maintain access to quality care for rural residents. In this capacity, the CRH works at a national, state, and community level.

Detailed below are the methods used to gather data for this assessment, including the convening of the Community Group, conducting key informant interviews, soliciting feedback about health needs through a survey, and researching secondary data.

Community Group

A Community Group consisting of 15 community members first met on August 29, 2018. During this intial Community Group meeting, members were introduced to the needs assessment process, reviewed basic demographic information about Barnes County, and served as a focus group. Focus group topics included community assets and challenges, the general health needs of the community, community concerns, and suggestions for improving the community's health.

The Community Group met again on October 15, 2018 with 13 members in attendance. At this second meeting, the Community Group was presented with survey results, findings from key informant interviews and the focus group, and a wide range of secondary data relating to the general health of the population in Barnes County. The group was then tasked with identifying and prioritizing the community's health needs.

Members of the Community Group represented the broad interests of the community served by CHI and CCHD. They included representatives of the health community, business community, political bodies, law enforcement, education, faith community, and social service agencies. Not all members of the group were present at both meetings.

Interviews

One-on-one interviews with five key informants were conducted in person in Valley City on August 29, 2018. Two additional key informant interviews were conducted over the phone in September of 2018. A representative from the CRH conducted the interviews. Interviews were held with selected members of the community who could provide insights into the community's health needs. The informants included public health professionals with several years of direct experience in the community, including working with medically underserved, low income, and minority populations, as well as with populations with chronic diseases.

Topics covered during the interviews included the general health needs of the community, the general health of the community, community concerns, delivery of healthcare by local providers, awareness of health services offered locally, barriers to receiving health services, and suggestions for improving collaboration within the community.

Survey

A survey was distributed to solicit feedback from the community and was not intended to be a scientific or statistically valid sampling of the population. It was designed to be an additional tool for collecting qualitative data from the community at large – specifically, information related to community-perceived health needs. A copy of the survey instrument is included in Appendix A.

The community member survey was distributed to various residents of Barnes County. The survey tool was designed to:

- Identify the positive factors in the community and the community's concerns;
- Understand perceptions and attitudes about the health of the community and hear suggestions for improvement; and
- Learn more about how local health services are used by residents.

The survey covered the following topics:

- Residents' perceptions about community assets;
- Broad areas of community and health concerns;
- Awareness of local health services;
- Barriers to using local healthcare;
- Basic demographic information;
- Suggestions to improve the delivery of local healthcare; and
- Suggestions for capital improvements.

To promote awareness of the assessment process, press releases were disseminated and articles were published in The Valley City Times Record. Additionally, information was published on CHI's and CCHD's websites and Facebook pages, radio advertisements, advertisements on both the city and county websites, and all the email messages sent by CCHD had signature links that directed recipients to the survey.

Approximately 500 community member surveys were available for distribution in Barnes County. The surveys were distributed by Community Group members, CHI, CCHD, and other public locations.

To help ensure anonymity, included with each survey was a postage-paid return envelope to the CRH. In addition, to help make the survey as widely available as possible, residents also could request a survey by calling CHI Mercy Health or CCHD. The survey period ran from August 20, 2018 to September 28, 2018. Sixteen completed paper surveys were returned.

Area residents also were given the option of completing an online version of the survey. There were 183 online surveys completed. Six of those online respondents used the QR code to complete the survey. In total, counting both paper and online surveys, **199 community member surveys were completed**. The number of completed surveys is relatively low for this type of unsolicited survey methodology and raises some concerns regarding the level of community engagement. However, 199 is adequate.

Secondary Data

Secondary data was collected and analyzed to provide descriptions of: (1) population demographics, (2) general health issues (including any population groups with particular health issues), and (3) contributing causes of community health issues. Data was collected from a variety of sources, including the U. S. Census Bureau; Robert Wood Johnson Foundation's County Health Rankings, which pulls data from 20 primary data sources (www.countyhealthrankings.org); the National Survey of Children's Health, which touches on multiple intersecting aspects of children's lives (www.childhealthdata.org/learn/NSCH); and North Dakota KIDS COUNT, which is a national and state-by-state effort to track the status of children, sponsored by the Annie E. Casey Foundation (www.ndkidscount.org).

Social Determinants of Health and Population Health

***Social determinants of health are**, according to the World Health Organization, "the circumstances in which people are born, grow up, live, work, and age and the systems put in place to deal with illness. These circumstances are in turn*

shaped by wider set of forces: economics, social policies and politics. "

Income-level, educational attainment, race/ethnicity, and health literacy all impact the ability of people to access health services. Basic needs such as clean air and water and safe and affordable housing are all essential to staying healthy and they are also impacted by the social factors listed previously. The barriers already present in rural areas, such as limited public transportation options and fewer choices to acquire healthy food can compound the impact of these challenges.

Healthy People 2020, (https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health) illustrates that health and healthcare, while vitally important, play only one small role in the overall health of individuals and ultimately of a community. Social and community context, education, economic stability, neighborhood and built environment play a much larger part in impacting health outcomes. In the hospital and medical realm, health is associated with disease or the absence of disease and it is the role of the medical team to restore or fix the health of the patient. Factors like education, health literacy, income level including poverty, transportation, housing, and the physical environment have not been of primary concern in traditional medicine. However, the Affordable Care Act (ACA) significantly changes both the health delivery system and the payment or reimbursement process to health providers and health facilities. Social determinants of health are recognized as influencing health status

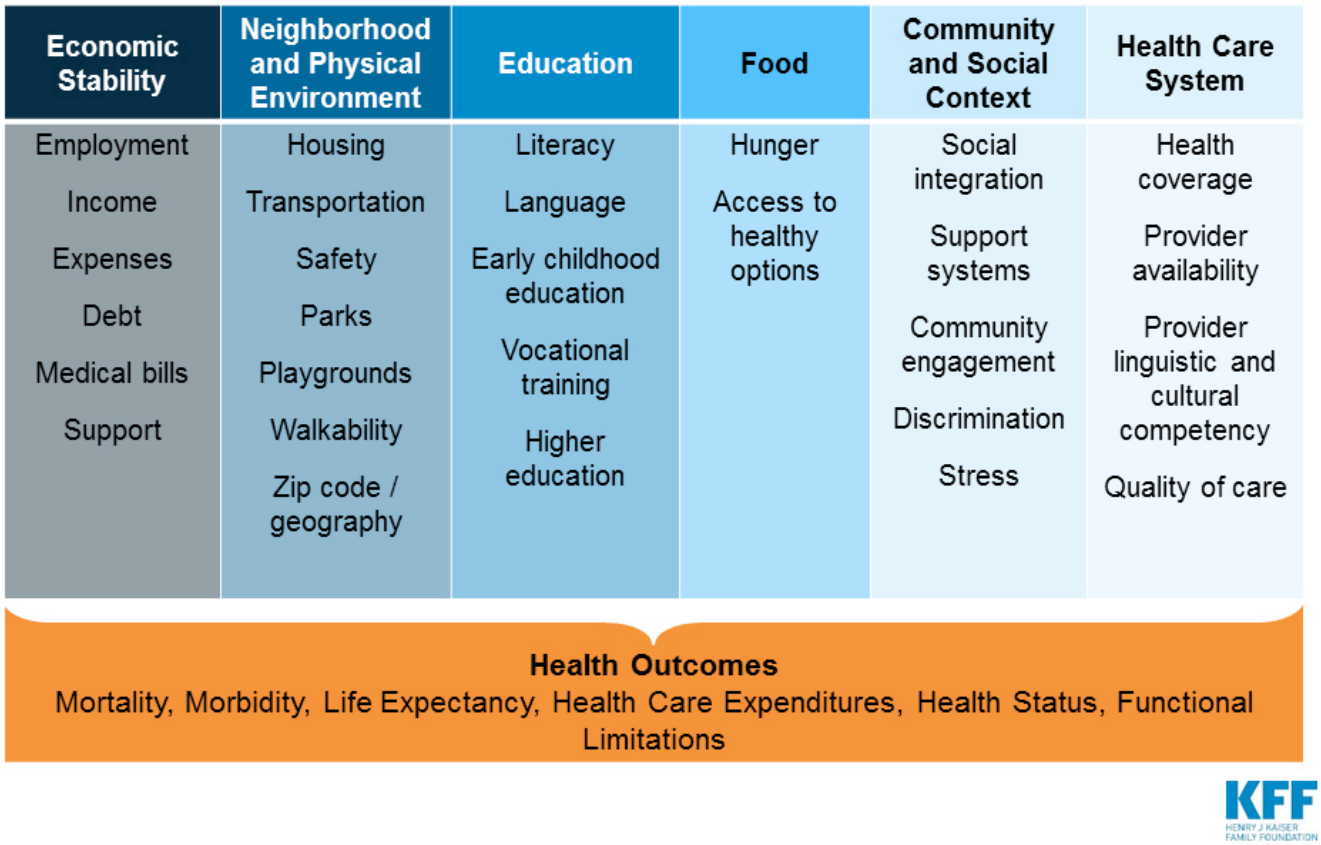
Therefore, as needs or concerns were raised through this community health needs assessment process, it was imperative to keep in mind how they impact the health of the community and what solutions can be implemented. See Figure 3.

Figure 3: Social Determinants of Health

Figure 4 (Henry J. Kaiser Family Foundation, https://www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/), provides examples of factors that are included in each of the social determinants of health categories that lead to health outcomes.

For more information and resources on social determinants of health, visit the Rural Health Information Hub website, https://www.ruralhealthinfo.org/topics/social-determinants-of-health.

Figure 4: Social Determinants of Health



Demographic Information

Table 1 summarizes general demographic and geographic data about Barnes County.

Table 1: Barnes County: Information and Demographics

(From 2010 Census/2017 American Community Survey; more recent estimates used where available)

	Barnes County	North Dakota
Population (2017)	10,734	755,393
Population change (2010-2017)	-3.0%	12.3%
People per square mile (2010)	7.4	9.7
Persons 65 years or older (2016)	22.0%	15.0%
Persons under 18 years (2016)	20.2%	23.3%
Median age (2016 est.)	43.5	35.2
White persons (2016)	94.1%	87.5%
Non-English speaking (2016)	2.4%	5.6%
High school graduates (2016)	90.9%	92.0%
Bachelor's degree or higher (2016)	23.7%	28.2%
Live below poverty line (2016)	10.9%	10.7%
Persons without health insurance, under age 65 years (2016)	8.3%	8.1%

Source: https://www.census.gov/quickfacts/fact/table/ND,US/INC910216#viewtop and https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml#

While the population of North Dakota has grown in recent years, Barnes County has seen a decrease in population since 2010. The U.S. Census Bureau estimates show a population decrease from 11,066 (2010) to 10,734 (2017). While the population density of Barnes County is slightly below the state average (7.4 people per square mile vs. 9.7 people), it is more densely populated than most of rural North Dakota. In North Dakota, 35 of 53 counties are classified as frontier, having 7 or less people per square mile. Neighboring counties are frontier (Lamoure, 3.6 people per square mile; Griggs, 3.3; and Steele 2.8). Stutsman County has 9.2 people per square mile. The least densely populated counties in the state are Billings with 0.7 people per square mile and Slope with 0.6 people. Barnes County is slightly older than the state (people 65 years of age or older, 22.0% vs. 15.0% and a median age of 43.5 vs. 35.2 years); it has a smaller percentage that is 18 and younger, 20.2% vs. 23.3%. Barnes County is slightly more white than the state, 94.1% vs. 87.5%. With regard to education, it has a slightly lower percentage of people who have completed high school, 90.9% vs. 92.0% and a lower percentage who have attained a bachelor's degree, 23.7% vs. 28.2%. It is in line with the state in terms of poverty, 10.9% vs. 10.7% and for people without health insurance, 8.3% vs. 8.1%.

County Health Rankings

The Robert Wood Johnson Foundation, in collaboration with the University of Wisconsin Population Health Institute, has developed County Health Rankings to illustrate community health needs and provide guidance for actions toward improved health. In this report, Barnes County is compared to North Dakota rates and national benchmarks on various topics ranging from individual health behaviors to the quality of healthcare.

The data used in the 2017 County Health Rankings are from more than 20 data sources and compiled to create county rankings. Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks, such as 1 or 2, are considered to be the "healthiest." Counties are ranked on both health outcomes and health factors. The following is a breakdown of the variables that influence a county's rank.

A model of the 2017 County Health Rankings – a flow chart of how a county's rank is determined – is found in Appendix B. For further information, visit the County Health Rankings website at www.countyhealthrankings.org.

Health Outcomes

- Length of life
- Quality of life

Health Factors

- Health behavior
  - Smoking
  - Diet and exercise
  - Alcohol and drug use
  - Sexual activity

Health Factors (continued)

- Clinical care
  - Access to care
  - Quality of care
- Social and Economic Factors
  - Education
  - Employment
  - Income
  - Family and social support
  - Community safety
- Physical Environment
  - Air and water quality
  - Housing and transit

Table 2 summarizes the pertinent information gathered by County Health Rankings as it relates to Barnes County. All of the following statistics are based on the health behaviors and conditions of the county's residents, not necessarily the patients and clients of CCHD and CHI Mercy Health or of any other medical facility.

It is important to note that these statistics describe the population of a county, regardless of where county residents choose to receive their medical care.

For most of the measures included in the rankings, the County Health Rankings' authors have calculated the "Top U.S. Performers" for 2017. The Top Performer number marks the point at which only 10% of counties in the nation do better, i.e., the 90th percentile or 10th percentile, depending on whether the measure is framed positively (such as high school graduation) or negatively (such as adult smoking).

Barnes County rankings within the state are included in the summary following. For example, Barnes County ranks 9th out of 49 ranked counties in North Dakota on health outcomes and 13th on health factors. The measures marked with a bullet point (•) are those where a county is not measuring up to the state rate/ percentage; a asterisk (*) indicates that the county is faring better than the North Dakota average but is not meeting the U.S. Top 10% rate on that measure. Measures that are not marked with a a bullet or asterisk but are marked with a Plus sign (+) indicate that the county is doing better than the U.S. Top 10%.

The data from County Health Rankings shows that Barnes is doing better than many counties compared to the rest of the state on all of the outcomes, landing at or above rates for other North Dakota counties. It has better rates than the nation on four of the five with the one exception being premature death.

On health behavior factors, Barnes County performs below the North Dakota average for counties in two areas: food environment index and access to exercise opportunities. The comparison to national data is more troubling. Of the nine health behaviors, Barnes is worse on eight: adult smoking, adult obesity, physical inactivity, access to exercise opportunities, excessive drinking, alcohol impaired driving deaths, sexually transmitted infections, and teen birth rate. It is better on the food environment index. On two of the metrics, the statistics in comparison to the nation are concerning. The percentage for alcohol impaired driving deaths is three times the U.S. rate (but still below the state rate) and sexually transmitted infections is roughly twice the U.S. rate (but still below the state rate).

For *clinical care factors*, Barnes County performs worse compared to North Dakota on the mental health provider ratio and preventable hospital stays. It presents worse compared to the U.S. on uninsured, primary care physician ratio, mental health provider ratio, and preventable hospital stays. It achieves more on three metrics when compared to both the state and nation: dentist ratio, diabetic monitoring, and mammography screening.

Social and economic factors, overall, appear to be the most difficult for Barnes County. On all six measures, it performs worse than the state, nation, or both. It is negative when compared to North Dakota and the country on unemployment, children in poverty, and injury deaths. It performs worse than the nation on income inequality, children in single-parent households, and violent crime.

The last set of factors are *physical environment* factors where Barnes County outperforms both the state and the nation on drinking water violations and severe housing shortage. However, it is worse in comparison to both on air-pollution (particulate matter).

Overall, for *Health Outcomes* Barnes ranks 9th out of 53 counties, which is very good, and 13th for health behavior factors is also quite good.

Table 2: Selected Measures from *County Health Rackings 2017* - Barnes County

+ Meeting or exceeding U.S. top 10% performers
***** Not meeting U.S. top 10% performers
• Not meeting North Dakota average

	Barnes County	U.S. Top 10%	North Dakota
Ranking: Outcomes	**9th**		**(of 49)**
Premature death	6,000 ✓	5,200	6,600
Poor or fair health	12% ☺	12%	13%
Poor physical health days (in past 30 days)	2.8 ☺	3.0	3.0
Poor mental health days (in past 30 days)	2.7 ☺	3.0	3.3
Low birth weight	6% ☺	6%	6%
Ranking: Factors	**13th**		**(of 49)**
Health Behaviors			
Adult smoking	16% ✓	14%	19%
Adult obesity	36% ✓	26%	31%
Food environment index (10=best)	8.9 ✓	8.4	8.4
Physical inactivity	23% ✓	19%	23%
Access to exercise opportunities	68% ✓✓	91%	66%
Excessive drinking	21% ✓	12%	25%
Alcohol-impaired driving deaths	41% ✓	13%	47%
Sexually transmitted infections	287.2 ✓	145.5	477.1
Teen birth rate	16 ✓	17	27
Clinical Care			
Uninsured	8% ✓	8%	9%
Primary care physicians	1,230:1 ✓	1,040:1	1,280:1
Dentists	1,210:1 ☺	1,320:1	1,630:1
Mental health providers	1,820:1 ✓✓	360:1	640:1
Preventable hospital stays	50 ✓✓	36	46
Diabetic monitoring (% of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring)	93% ☺	91%	87%
Mammography screening (% of Medicare enrollees ages 67-69 receiving screening)	73% ☺	71%	69%
Social and Economic Factors			
Unemployment	3.3% ✓✓	3.3%	2.7%
Children in poverty	13% ✓✓	12%	12%
Income inequality	4.0 ✓	3.7	4.4
Children in single-parent households	26% ✓	21%	27%
Violent crime	160 ✓	62	260
Injury deaths	85 ✓✓	53	66
Physical Environment			
Air pollution – particulate matter	8.2 ✓✓	6.7	7.5
Drinking water violations	No ☺	NA	
Severe housing problems	7% ☺	9%	11%

Source: http://www.countyhealthrankings.org/app/north-dakota/2018/rankings/outcomes/overall

Children's Health

The National Survey of Children's Health touches on multiple intersecting aspects of children's lives. Data are not available at the county level; listed below is information about children's health in North Dakota. The full survey includes physical and mental health status, access to quality healthcare, and information on the child's family, neighborhood, and social context. Data is from 2011-12. More information about the survey is found at www.childhealthdata.org/learn/NSCH.

Key measures of the statewide data are summarized below. The rates highlighted in red signify that the state is faring worse on that measure than the national average.

Table 3: Selected Measures Regarding Children's Health (For children aged 0-17 unless noted otherwise)

Health Status	North Dakota	National
Children born premature (3 or more weeks early)	10.8%	11.6%
Children 10-17 overweight or obese	35.8%	31.3%
Children 0-5 who were ever breastfed	79.4%	79.2%
Children 6-17 who missed 11 or more days of school	4.6%	6.2%
Healthcare		
Children currently insured	93.5%	94.5%
Children who had preventive medical visit in past year	78.6%	84.4%
Children who had preventive dental visit in past year	74.6%	77.2%
Young children (10 mos.-5 yrs.) receiving standardized screening for developmental or behavioral problems	20.7%	30.8%
Children aged 2-17 with problems requiring counseling who received needed mental healthcare	86.3%	61.0%
Family Life		
Children whose families eat meals together 4 or more times per week	83.0%	78.4%
Children who live in households where someone smokes	29.8%	24.1%
Neighborhood		
Children who live in neighborhood with a park, sidewalks, a library, and a community center	58.9%	54.1%
Children living in neighborhoods with poorly kept or rundown housing	12.7%	16.2%
Children living in neighborhood that's usually or always safe	94.0%	86.6%

Source: http://childhealthdata.org/browse/data-snapshots/nsch-profiles?geo=1&geo2=36&rpt=16

The data on children's health and conditions reveal that while North Dakota is doing better than the national averages on a few measures, it is not measuring up to the national averages with respect to:

- Obese or overweight children ages 10-17;
- Children with health insurance;
- Preventive primary care and dentist visits;
- Developmental/behavioral screening for children 10 months to 5 years of age;
- Children who have received needed mental healthcare; and
- Children living in smoking households.

Table 4 includes selected county-level measures regarding children's health in North Dakota. The data come from North Dakota KIDS COUNT, a national and state-by-state effort to track the status of children, sponsored by the Annie E. Casey Foundation. KIDS COUNT data focuses on the main components of children's well-being. More information about KIDS COUNT is available at www.ndkidscount.org. The measures highlighted in blue in the table are those in which the counties are doing worse than the state average. The year of the most recent data is noted.

The data show that Barnes County is performing better than the North Dakota average on five of the seven children health measures. Only on uninsured children and licensed child care capacity does it trail the state.

Table 4: Selected County-Level Measures Regarding children's Health

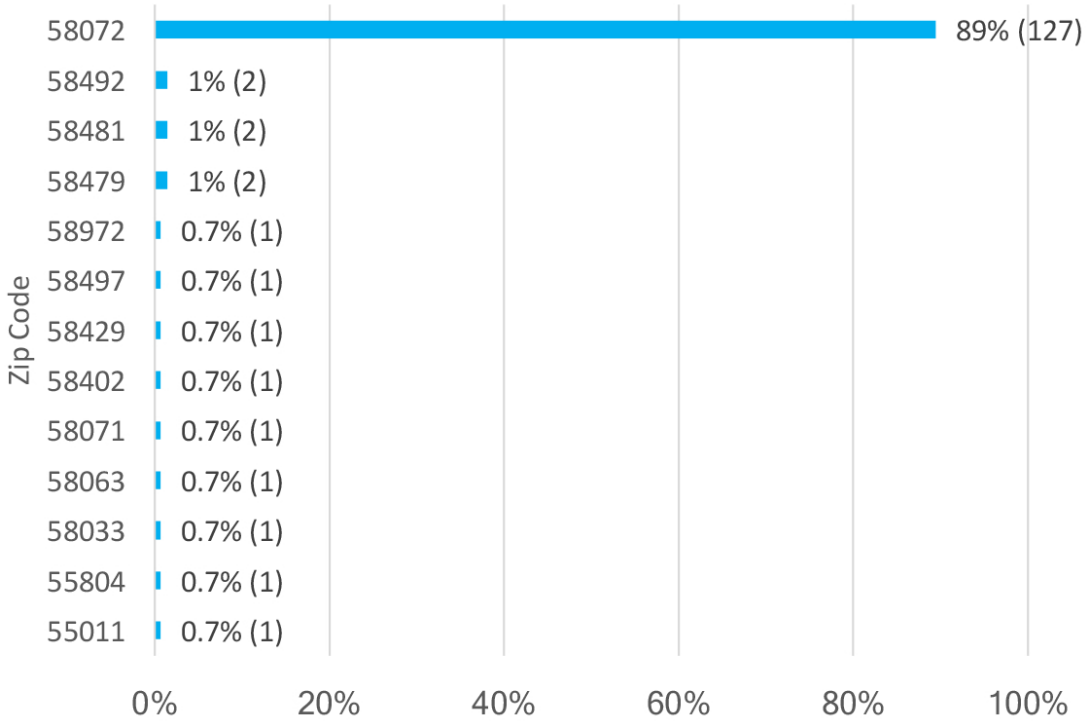
	Barnes County	North Dakota
Uninsured children (% of population age 0-18), 2016	8.1%	9.0%
Uninsured children below 200% of poverty (% of population), 2016	47.6%	41.9%
Medicaid recipient (% of population age 0-20), 2017	28.1%	28.3%
Children enrolled in Healthy Steps (% of population age 0-18), 2013	2.2%	2.5%
Supplemental Nutrition Assistance Program (SNAP) recipients (% of population age 0-18), 2017	18.5%	20.1%
Licensed childcare capacity (% of population age 0-13), 2018	39.5%	41.9%
4-Year High School Cohort Graduation Rate, 2017	87.1%	87.0%

Source: https://datacenter.kidscount.org/data#ND/5/0/char/0

Survey Results

As noted previously, 199 community members completed the survey in communities throughout the counties in the CHI Mercy Health service area. The survey requested that respondents list their home zip code. While not all respondents provided a zip code, 142 did, revealing that the large majority of respondents (89%, N=127) lived in Valley City. These results are shown in Figure 5.

Figure 5: Survey Respondents' Home Zip Code
Total respondents: 142



Survey results are reported in seven categories: demographics; healthcare access; community assets, challenges; community concerns; delivery of healthcare; and other concerns or suggestions to improve health.

Survey Demographics

To better understand the perspectives being offered by survey respondents, survey-takers were asked a few demographic questions. Throughout this report, numbers (N) instead of just percentages (%) are reported because percentages can be misleading with smaller numbers. Survey respondents were not required to answer all questions.

With respect to demographics of those who chose to complete the survey:

- 30% (N=50) were age 55 or older.
- The majority (79%, N=129) were female.
- Well over half of the respondents (70%, N=112) had bachelor's degrees or higher.
- The number of those working full time (76%, N=125) was 20 times higher than those who were retired (4%, N=6).
- 99% (N=160) of those who reported their ethnicity/race were white/Caucasian.
- 25% of the population (N=40) had household incomes of less than $50,000.

Figures 6 through 12 show these demographic characteristics. It illustrates the range of community members' household incomes and indicates how this assessment took into account input from parties who represent the varied interests of the community served, including a balance of age ranges, those in diverse work situations, and community members with lower incomes.

Figure 6: Age Demographics of Survey Respondents
Total respondents = 164

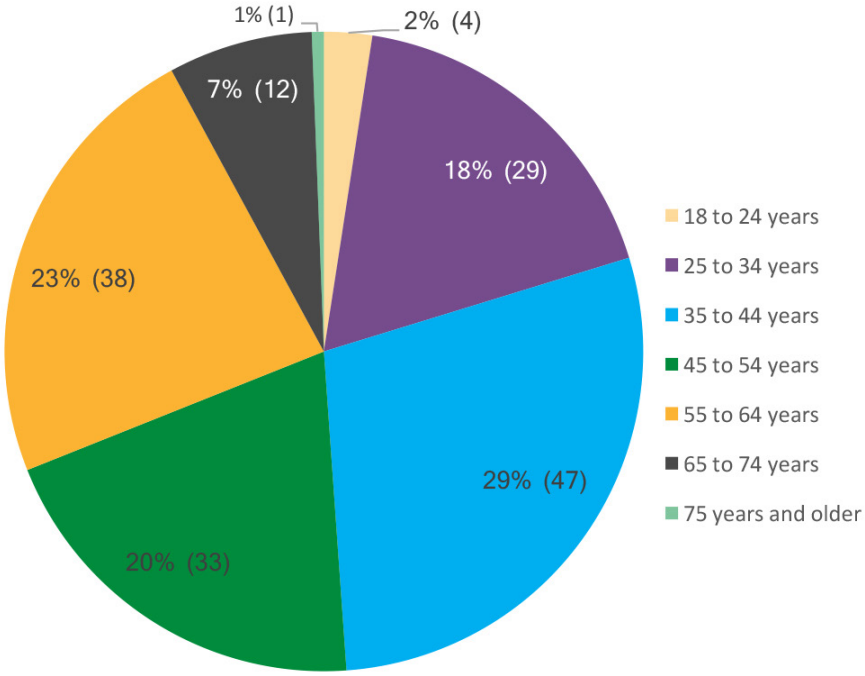
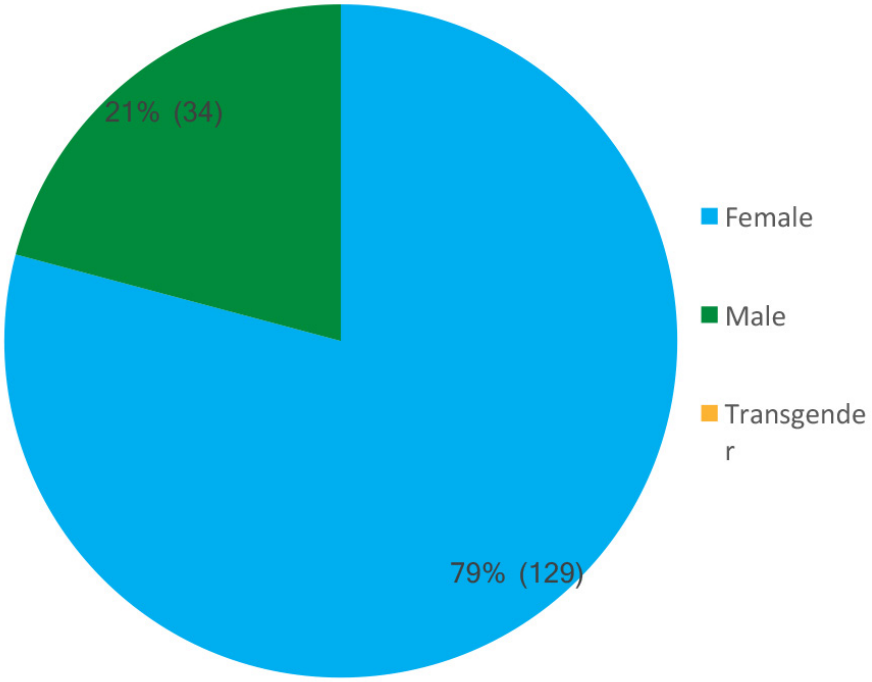
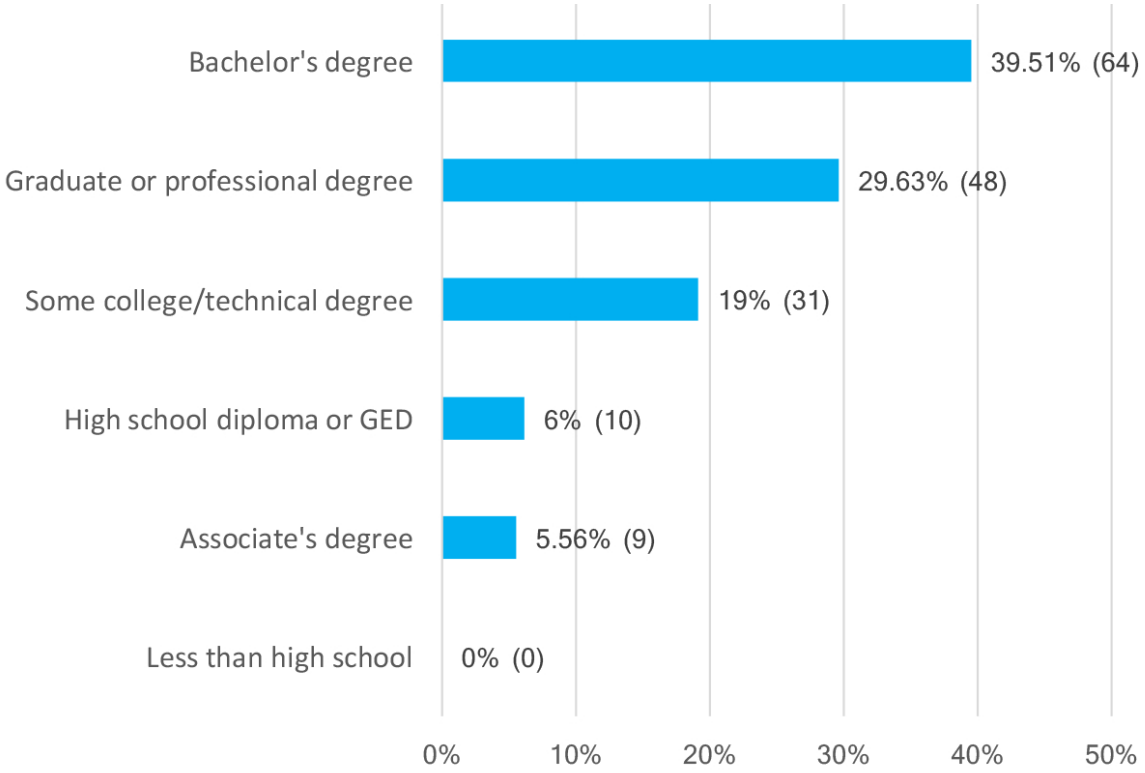


Figure 7: Gender Demographics of Survey Respondents
Total respondents = 163



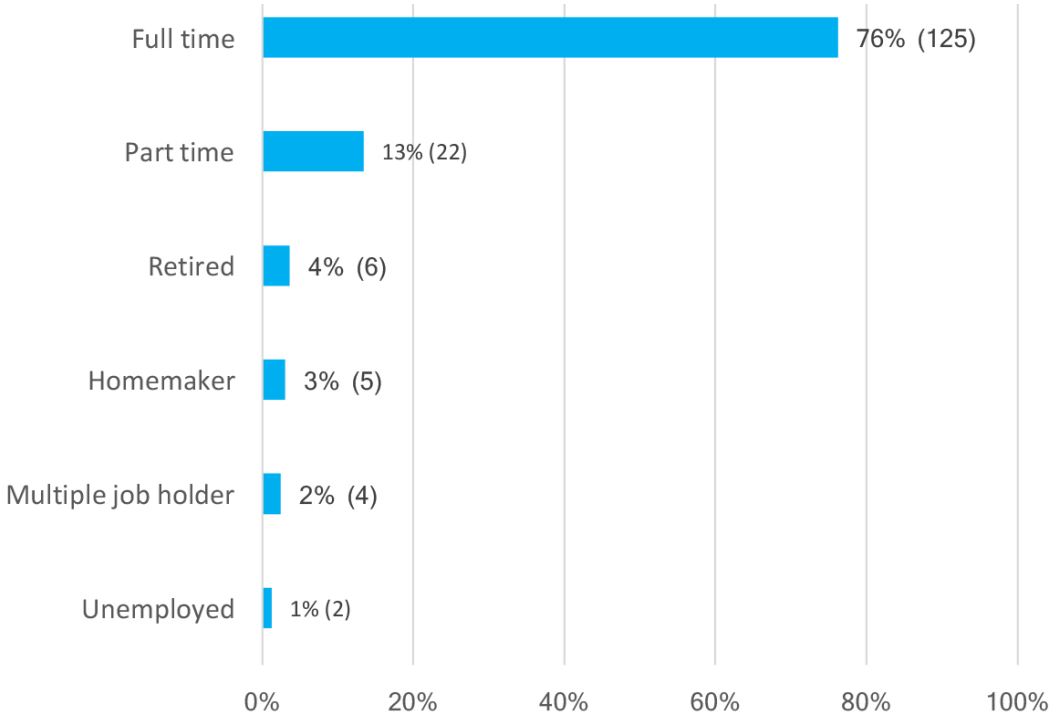
Survey respondents were highly educated, nearly 70% have a bachelor's, graduate, or professional degree. This is higher than the state average. Only 6% (N=9) had a high school degree or less than high school.

Figure 8: Educational Level Demographics of Survey Respondents
Total respondents = 162



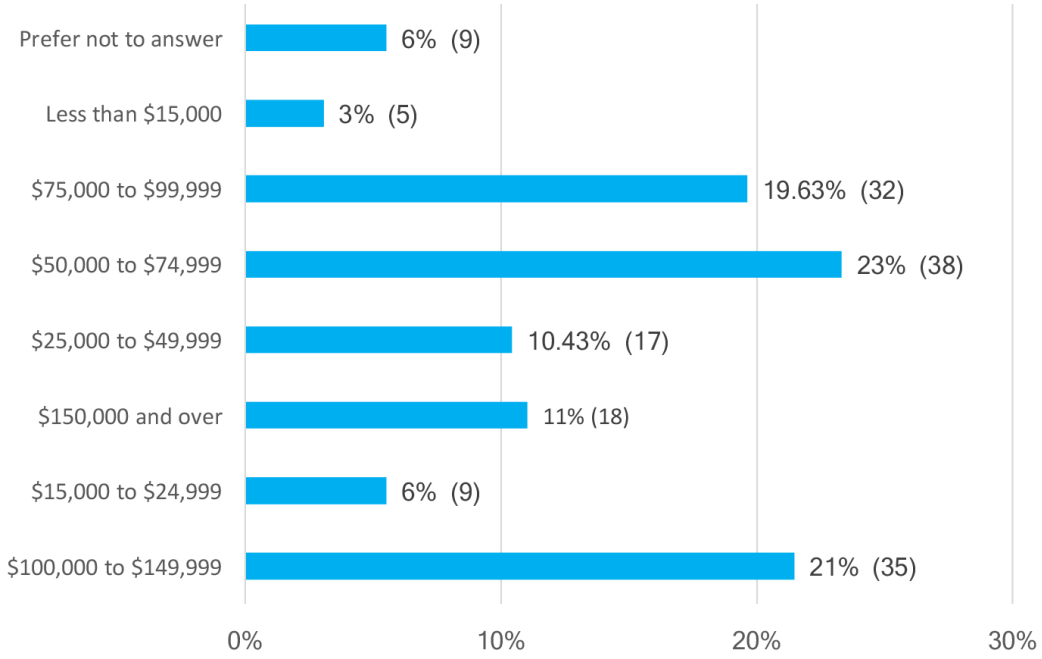
A significant majority were working full time, 76% or N = 125. Only 4% (N = 6) were retired and 1% (N = 2) were unemployed. With these types of surveys, the retired category is typically much larger. The states unemployment rate is very low sitting at 2.6% in June 2018.

Figure 9: Employment Status Demographics of Survey Respondents
Total respondents = 164



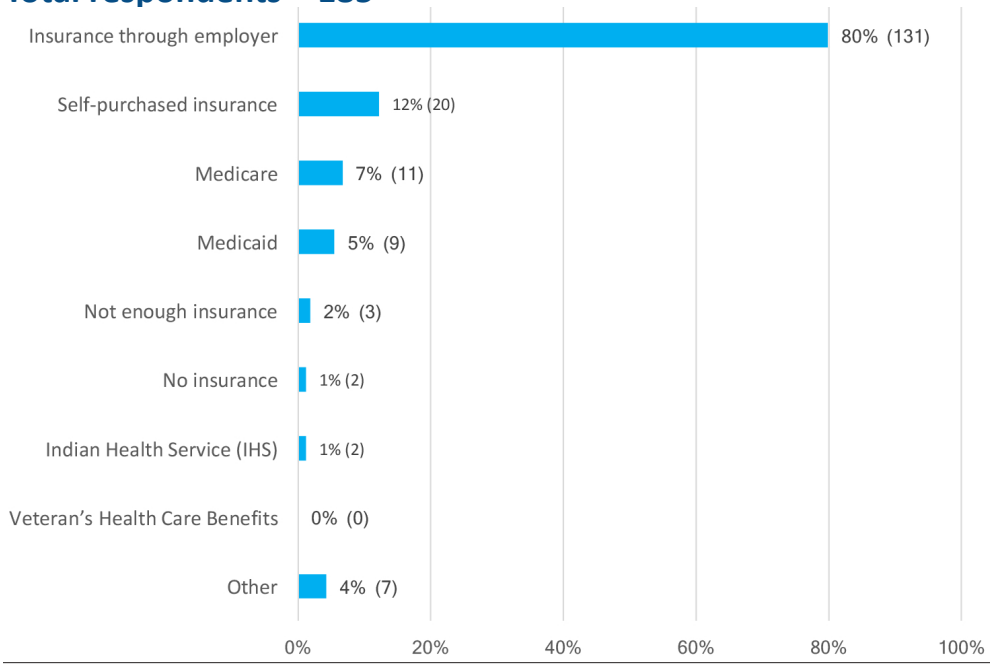
Of those who provided a household income, nearly 52% had an income greater than $75,000. The median household income in North Dakota in 2016 was $60,656; thus, the survey respondents tended to fall into a higher income range. The most common category was $50,000-$74,999 with 23% (N=38). About 9% made $24,999 or less (N= 14). This information is show in Figure 10.

Figure 10: Household Income Demographics of Survey Respondents
Total respondents = 163



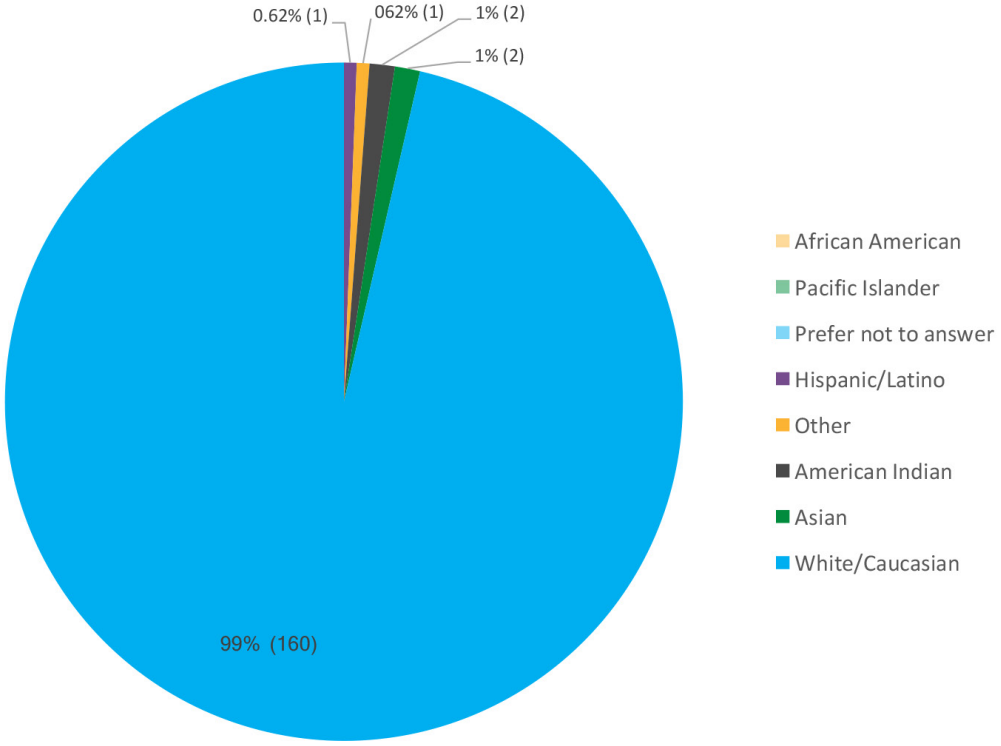
Community members were asked about their health insurance status, which is often associated with whether people have access to healthcare. One percent (N=2) of the respondents reported having no health insurance or being under-insured. The most common insurance types were insurance through one's employer (N=131), followed by self-purchased (N=20) and Medicare (N=11). The statewide uninsured rate is much lower than before the ACA. It dropped from 10.5% in 2013 to 7% in 2016; however, with some of the changes to the ACA, (eliminating the insurance mandate and some changes to the marketplace) it has started to inch up again. The statewide rate is about 8-9%.

Figure 11: Health Insurance Coverage Status of Survey Respondents
Total respondents = 185



As shown in Figure 12, nearly all of the respondents were white/Caucasian (99%). This was slightly higher than the race/ethnicity of the overall population of Barnes County; the U.S. Census indicates that 94.1% of the population is white in Barnes County.

Figure 12: Race/Ethnicity Demographics of Survey Respondents
Total respondents = 166



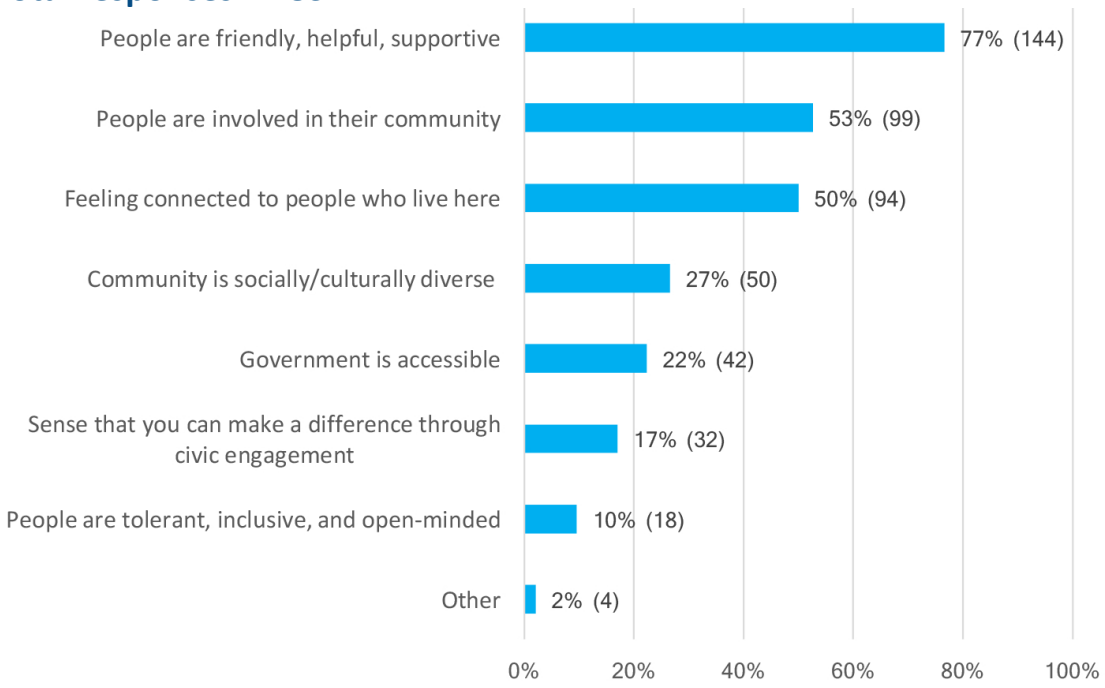
Community Assets and Challenges

Survey respondents were asked what they perceived as the best things about their community in four categories: people, services and resources, quality of life, and activities. In each category, respondents were given a list of choices and asked to pick the three best things. Respondents occasionally chose less than three or more than three choices within each category. If more than three choices were selected, their responses were not included. The results indicate there is consensus (with at least 125 respondents agreeing) that community assets include:

- People are friendly, helpful and supportive (N=144);
- Family friendly (N=150);
- Closeness to work and activities (N=130) and;
- Year round access to fitness opportunities (N=138).

Figures 13 to 16 illustrate the results of these questions.

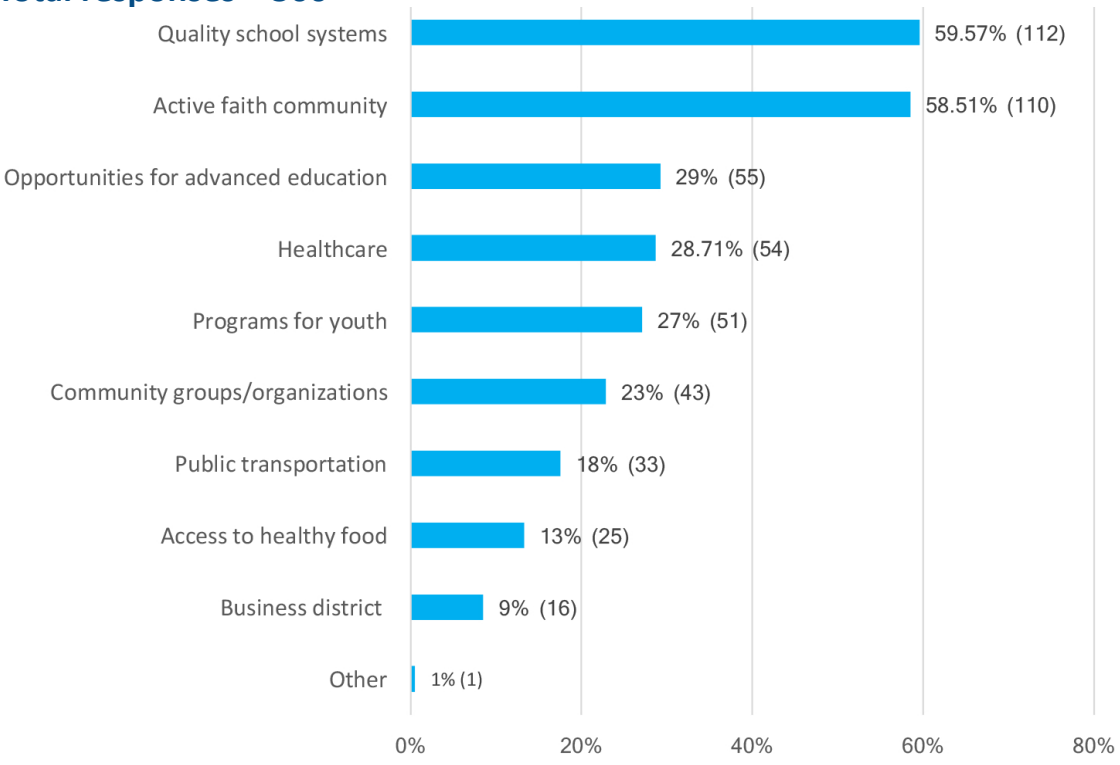
Figure 13: Best Things about the PEOPLE in Your Community
Total responses = 483



The "Other" category of the best things about the people included: that they feel secure, walking paths, and it is visually pretty.

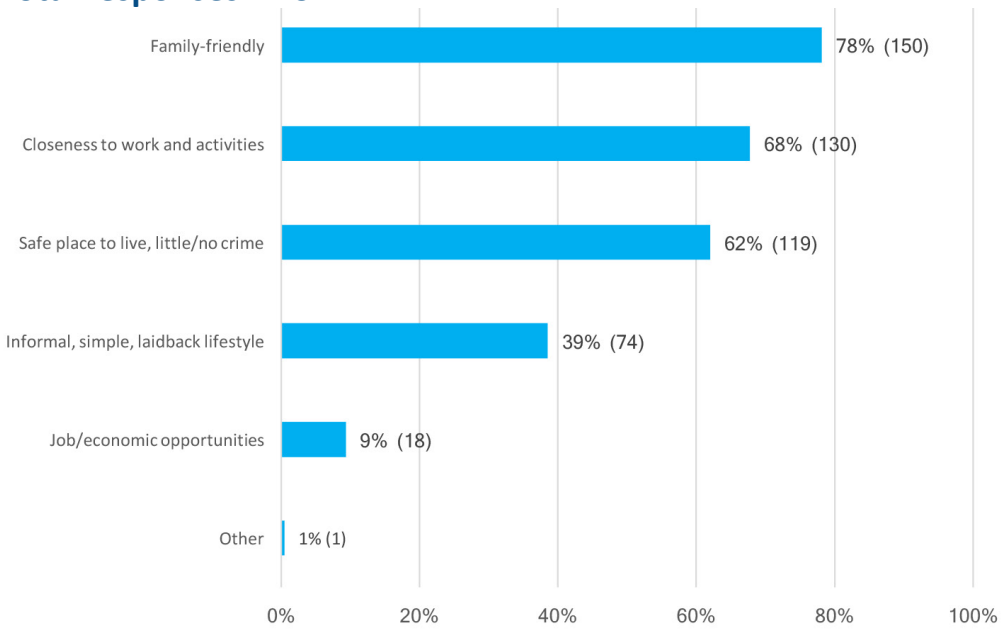
It is not unusual to see quality school systems (60% and N = 112) and active faith community (59% and N = 110) so highly rated. Valley City is a "college" town so opportunities for advanced education being rated third is natural (29% and N = 55). Community groups/organizations scored lower than anticipated (23% and N = 43) as did the busines community (9% and N = 16).

Figure 14: Best Things about the SERVICES AND RESOURCES in Your Community
Total responses = 500



A large majority identified as the best things about the quality of life in Valley City and Barnes County as family friendly (78%, N = 150); closeness to work and activities (68%, N = 130); and safe place to live, little/no crime (62%, N = 119). Job and economic opportunities were given a low grade (9%, N = 18).

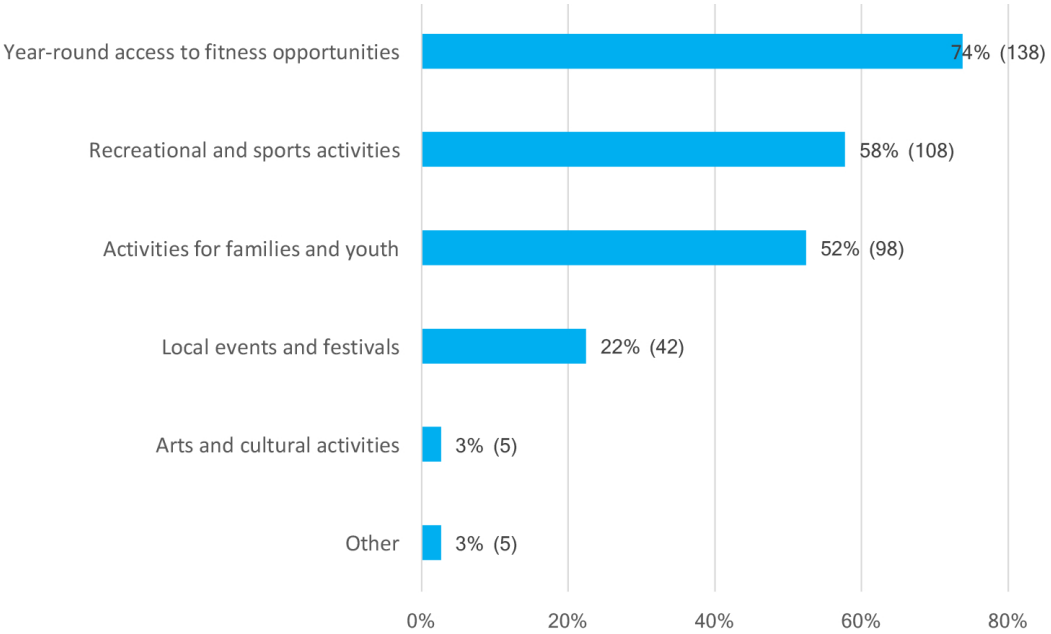
Figure 15: Best Things about the QUALITY OF LIFE in Your Community
Total responses = 492



The one "Other" response regarding the best things about the quality of life in the community was that Valley City is close to Fargo.

A large majority found year-round access to fitness opportunities to be one of the best things about the actvities found in Valley City and Barnes County (74%, N = 138) and a majority identified recreational and sports activities (58%, N = 108) and activities for families and youth (52%, N = 98). Rating much lower (3%, N = 5) were arts and cultural activities.

Figure 16: Best Thing about the ACTIVITIES in Your Community
Total responses = 396



The "Other" category of the best things about the people included: Fargo-Moorhead Symphony is easy to attend, intergenerational affordable activities, parks, and it is close to Jamestown for activities.

Community Concerns

At the heart of this community health assessment was a section on the survey asking survey respondents to review a wide array of potential community and health concerns in six categories and pick their top three concerns. The six categories of potential concerns were:

- Community/environmental health;
- Availability/delivery of health services;
- Youth population;
- Adult population;
- Senior population; and
- Violence.

With regard to responses about community challenges, the most highly voiced concerns (those having at least 80 respondents) were:

- Drug use and abuse – youth population (N=114)
- Alcohol use and abuse – adult population (N= 108)
- Bullying/cyber bullying (N=106);
- Drug use and abuse – adult population (N=98)
- Alcohol use and abuse – youth population (N=96)
- Not enough jobs with livable wages (N=96);
- Child abuse/neglect (N=87);

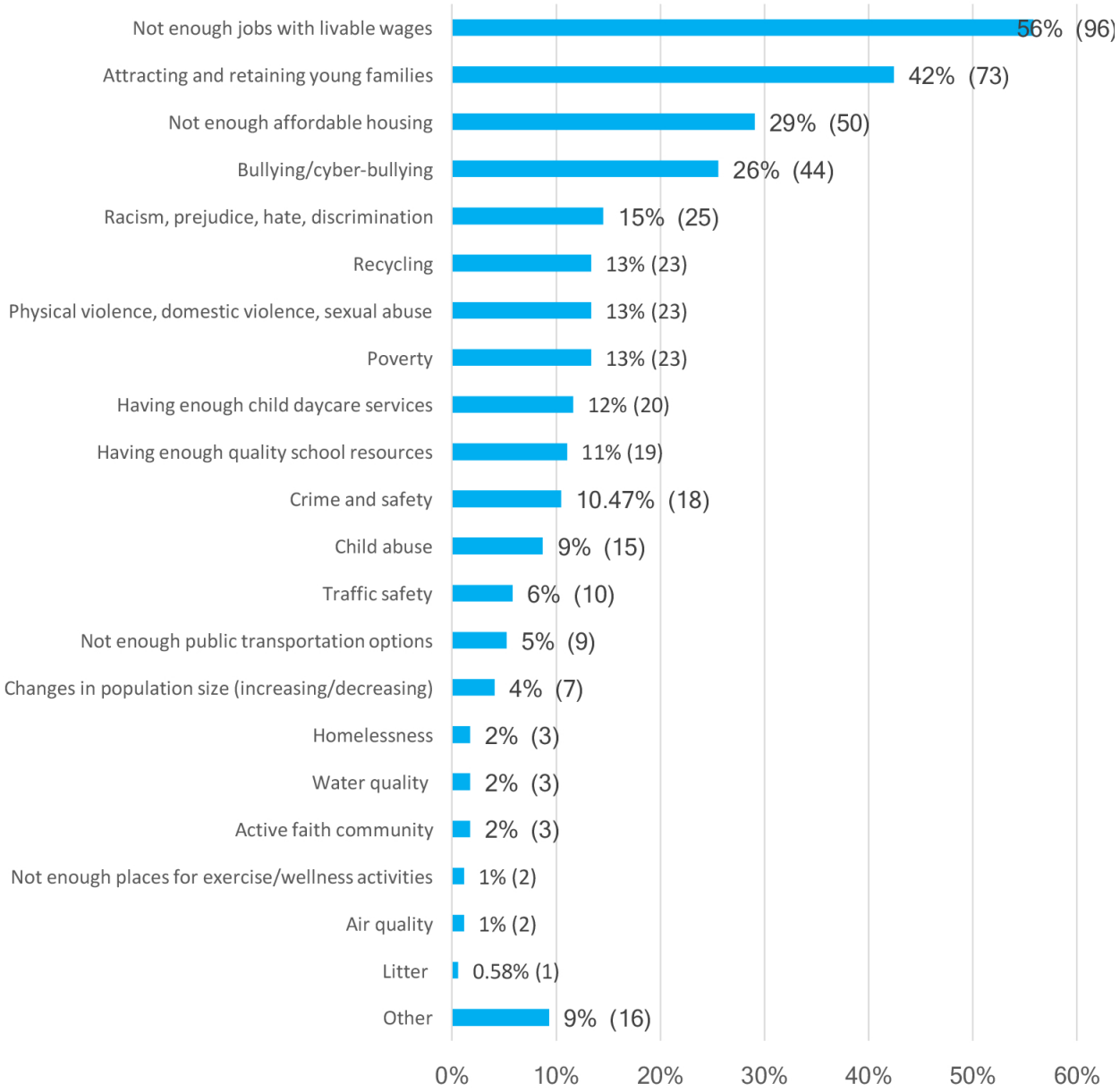
The other issues that had at least 50 votes included:

- Cost of long-term/nursing home care – senior population (N=74)
- Attracting and retaining young families (N=73);
- Depression/anxiety – adult population (N=72)
- Depression/anxiety – youth population (N=65)
- Availability of resources to help the elderly stay in their homes' (N=62)
- Emotional abuse (isolation, verbal threats, economic abuse) (N=61)
- Availability of mental health services (N=57)
- Domestic/intimate partner violence (N=54)
- Not enough affordable housing (N=50)
- Extra hours for appointments, such as evenings and weekends (N=50)

Figures 17 through 24 illustrate these results.

Earlier in the section on social determinants of health and population health it was discussed that there are community factors that can contribute to health status. Income and housing are concerns that shape the conditions of people's lives. The ability to afford care and even the environment can have an impact. Being able to attract and retain younger families relates to the viability of a community. In this section the three highest factors were not enough jobs with livable wages (56%, N = 96); attracting and retaining young families (42%, N =73); and not enough affordable housing (29%, N = 50).

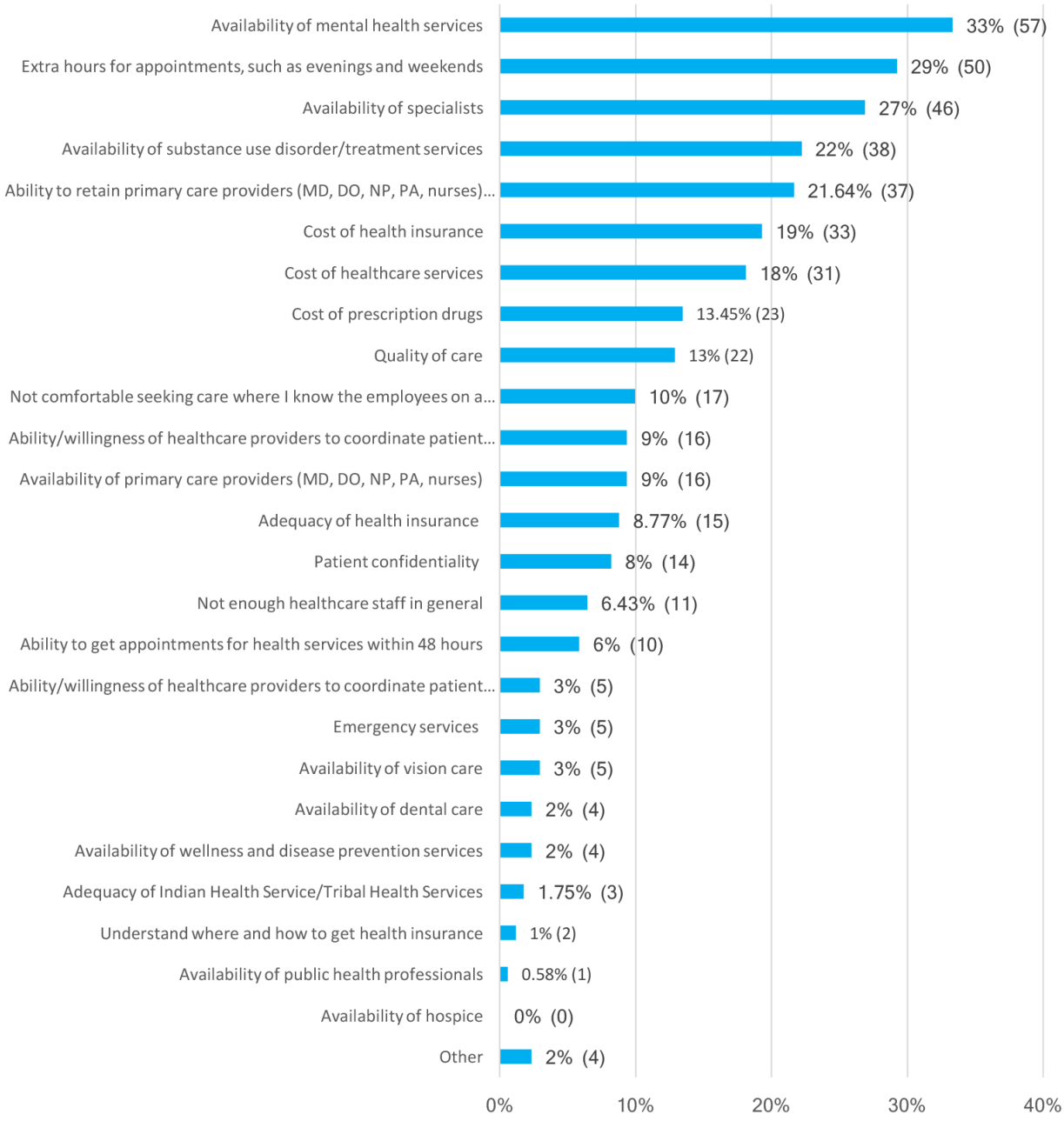
Figure 17: Community/Environmental Health Concerns
Total responses = 485



In the "Other" category for community and environmental health concerns, the following were listed: lack of full day preschools, lack of mental health resources, not enough variety of housing and newer apartments for the elderly, lack of professional level jobs and restaurants, not enough street lights, no safe bike/walking paths, and not enough Christians.

While none of the availability and delivery of health services concerns reached 50%, many identified the availability of mental health services as a concern (33%, N = 57). It is observed that throughout this study, issues associated with behavioral health (substance abuse) and mental health tend to rise to the top of the concerns. In this section on delivery, it is interesting to note that a few traditional community concerns are in the top five: extra hours for appointments (29%, N = 50); availabiltiy of specialists (27%, N = 46); and ability to retain primary care providers (22%, N = 37). These are common rural concerns in North Dakota.

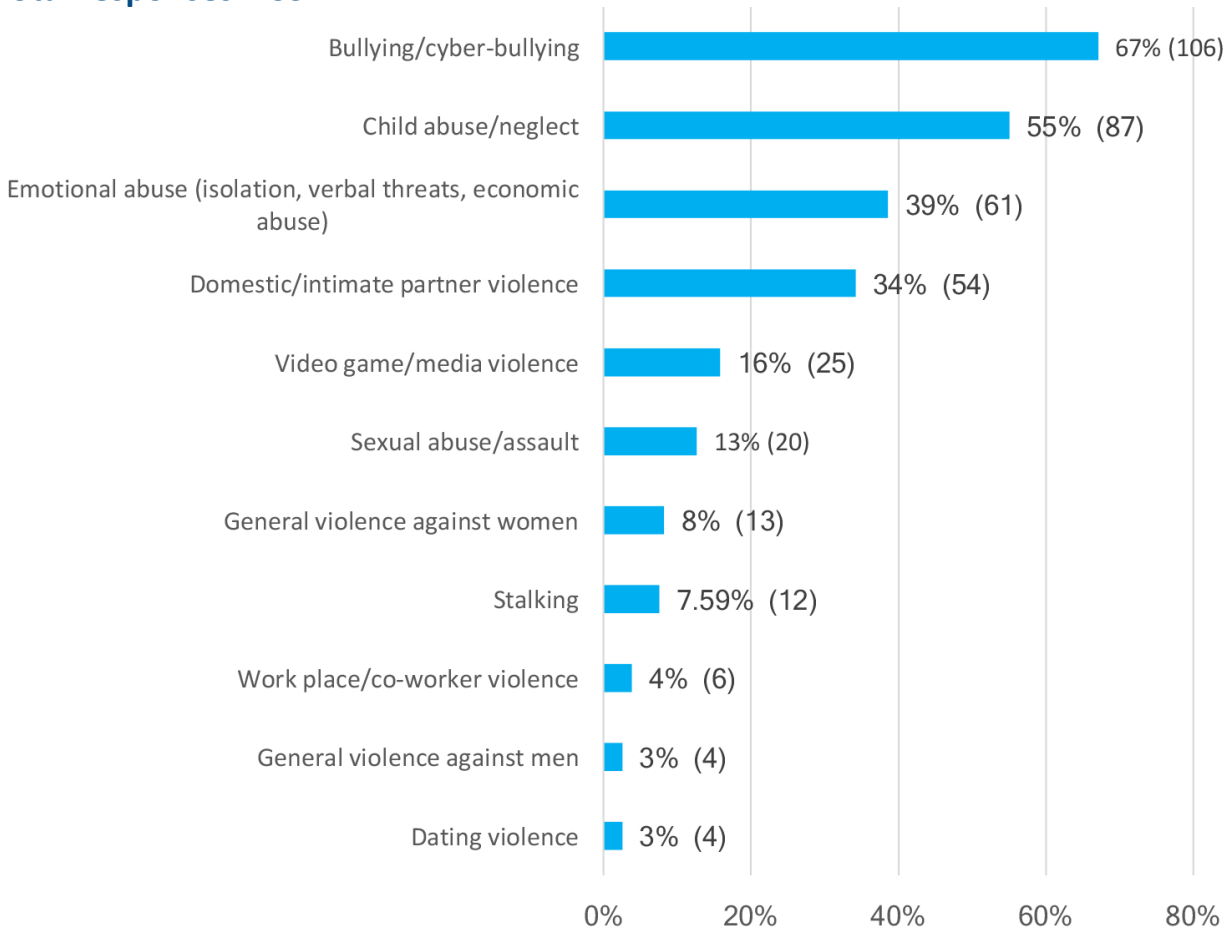
Figure 18: Availability/Delivery of Health Services Concerns
Total responses = 469



Respondents who selected "Other" identified concerns in the availability/delivery of health services as no specific pedatric care available, no services after 5 – 6 pm, lack of support for public health by community leaders/commissions.

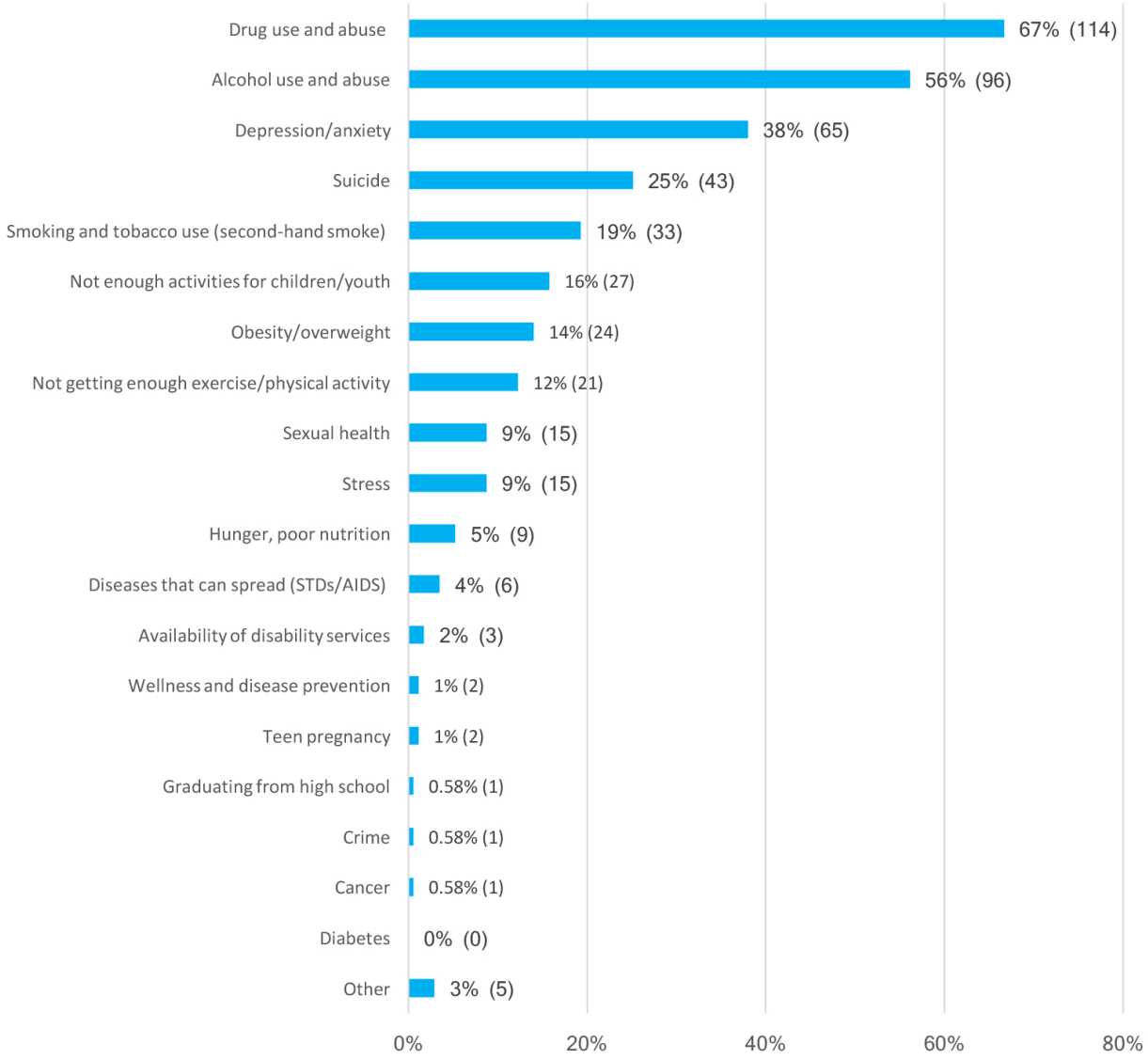
Bullying/cyber-bullying was the highest rated concern with regard to violence with 67% or N = 106), followed by child abuse/neglect (55%, N = 87); emotional abuse (39%, N = 61); and domestic/intimate partner violence (34%, N = 54). Bullying and cyber-bulling are relatively new concerns found in our society. The advent and growth of social media and electronic communicaiton can accelerate this form of abuse.

Figure 19: Forms of Violence
Total responses = 392



Youth population concerns skewed to behavioral health issues with drug use and abuse at 67% (N = 114) and alcohol use and abuse at 56% (N = 96). Mental health was toward the top with depression/anxiety having 38% (N = 65) and sucide with 25% (N = 43) identifying them as youth concerns.

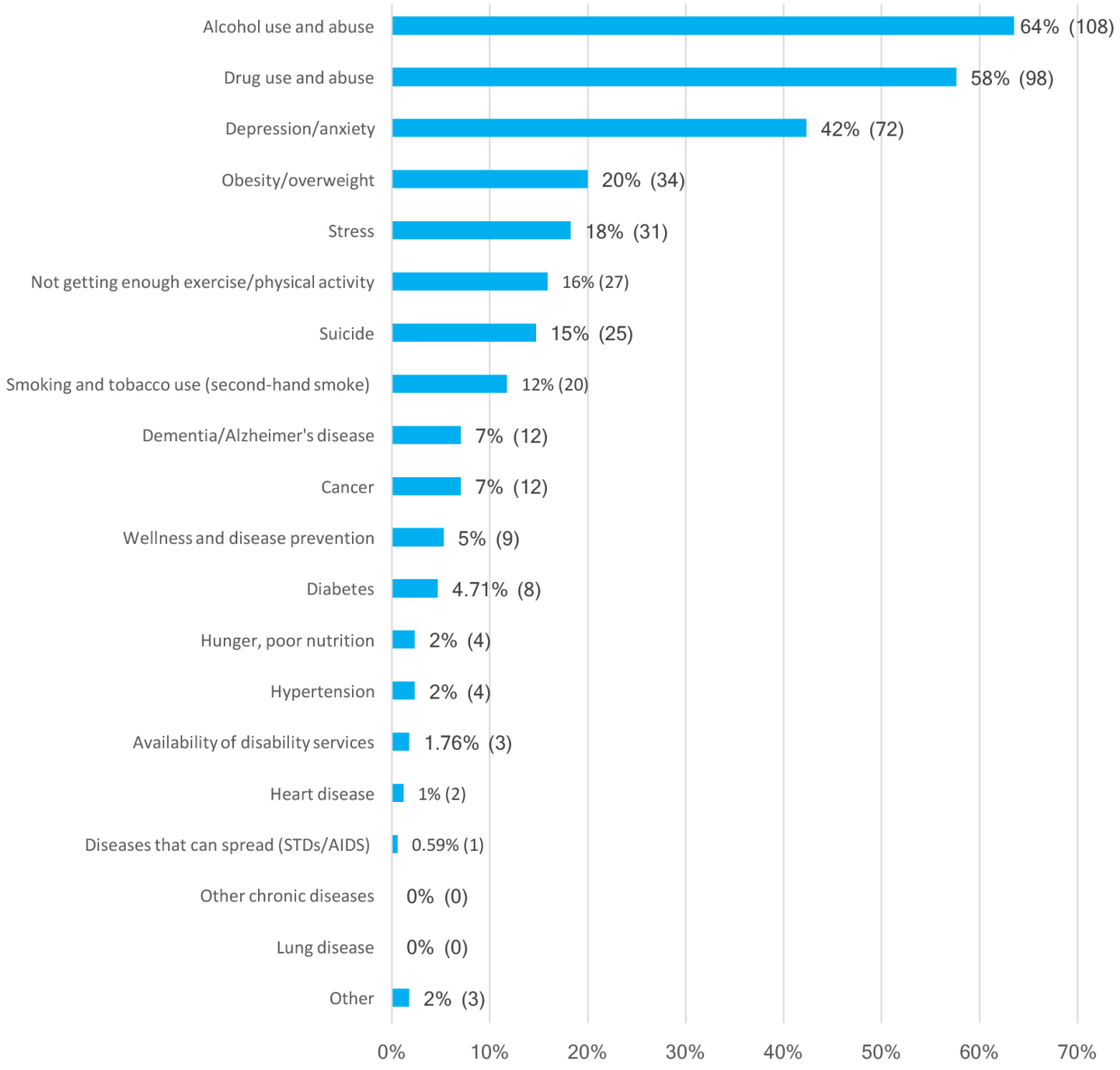
Figure 20: Youth Population Concerns
Total responses = 483



Living in households where drugs are prevalent, too much use of electronics, and vaping/e-cigs were indicated in the "Other" category for youth population concerns.

Concerns of behavioral health and mental health with alcohol use and abuse, drug use and abuse, and depression/anxiety as the top three issues seen for both the adult and youth populations. Statistics show that obesity and overweight is both a national and statewide problem. The County Health Rankings data found that adult obesity was higher in Barnes County (36%) than North Dakota (32%) and the country as a whole (26%). It is not surprising in the survey that it was the 4th highest rated adult population concern.

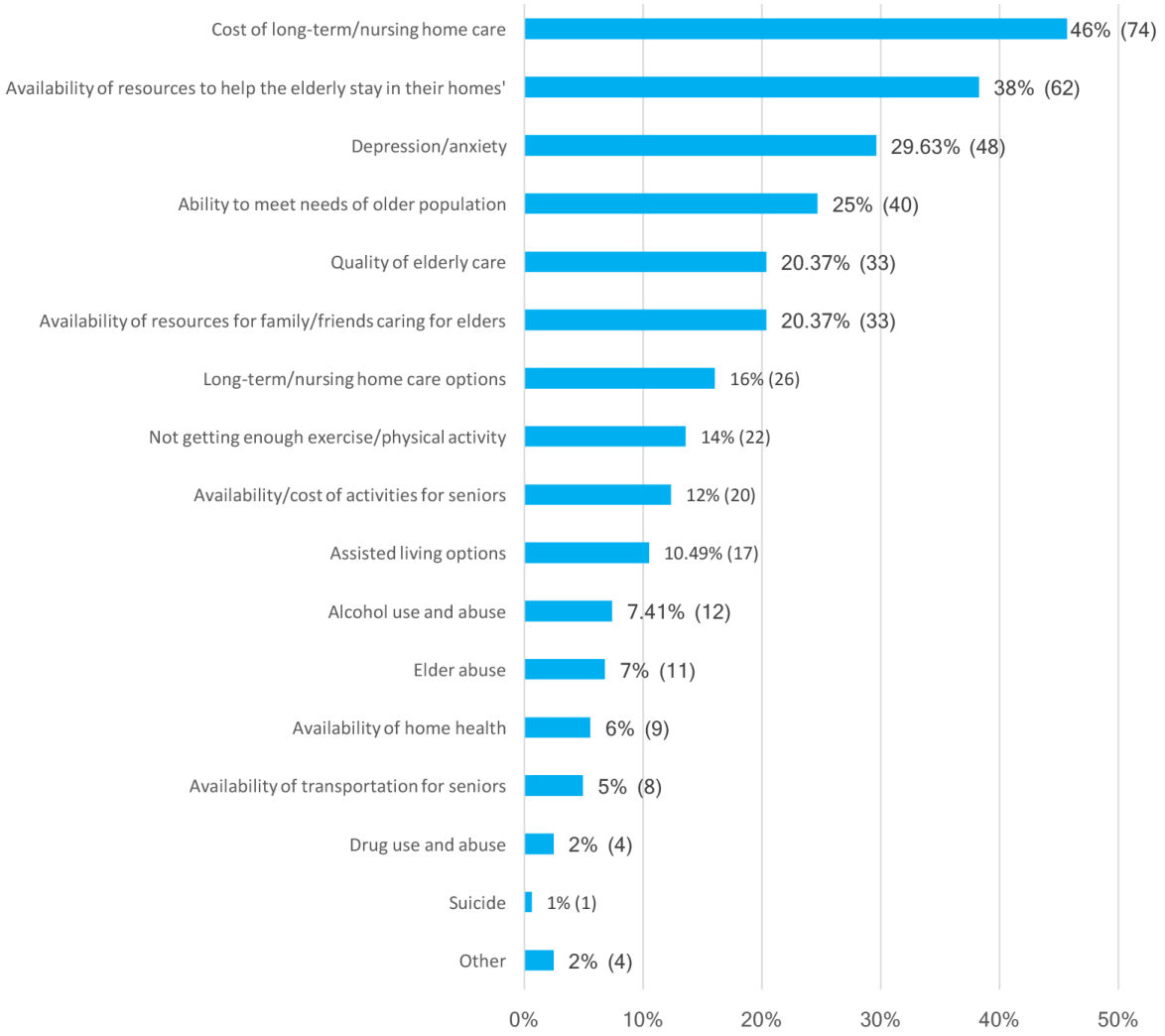
Figure 21: Adult Population Concerns
Total responses = 473



The "Other" category included living in poverty, being overall unwell, and mental health concerns.

For the senior population, five of the six top items were related to cost and the availability of resources and meeting the needs of the elderly. A mental health concern (depression and anxiety) was rated third. Much of this concern can be characterized as infrastructure and system. These are things that can make life easier for the elder and their family.

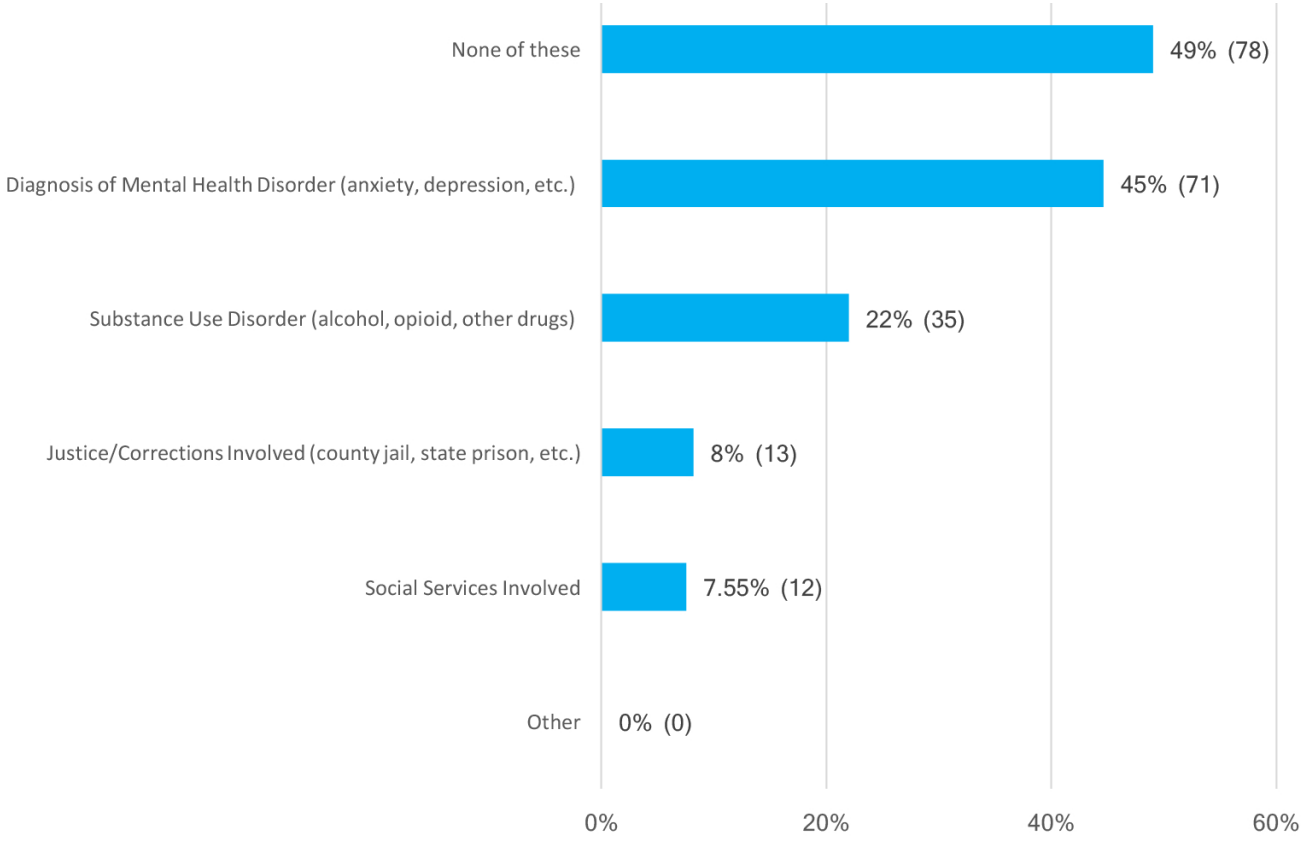
Figure 22: Senior Population concerns
Total responses = 424



No basic care facilities, cost of insurance, and dementia were indicated in the "Other" category for senior population concerns.

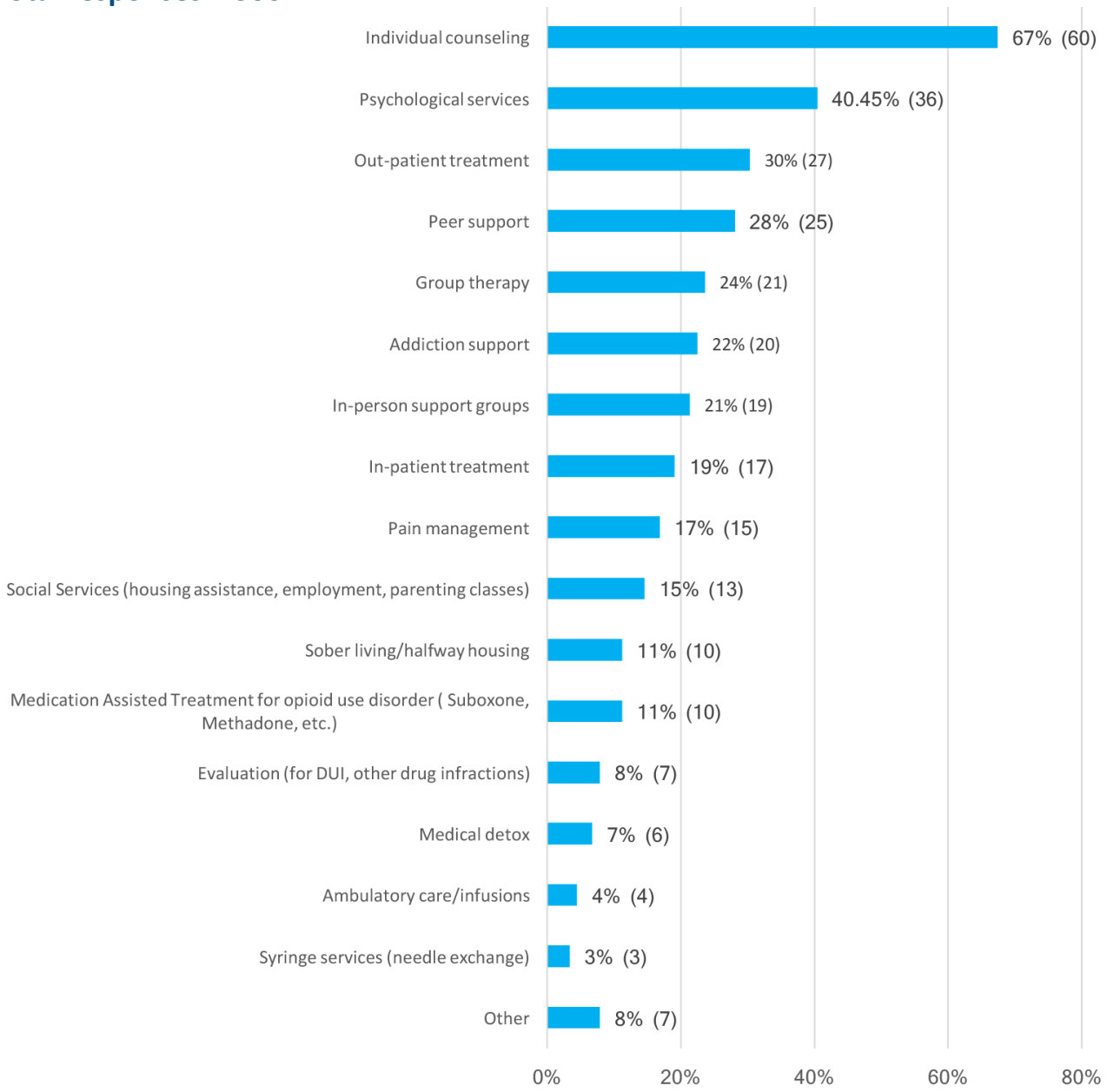
It is rare that the "None of these" category was chosen more than any of the "Concerns impacting family or household" at 49% (N = 78). However, following this, mental and behavioral health items were selected: diagnosis of mental health disorder and substance use disorder. A concern that is likely germane to Barnes County was third: justice/corrections including the county jail.

Figure 23: Concerns impacting family or household
Total responses = 209



The category of services utilized to address concerns impacting family and/or household favored access concerns to behavioral and mental health. Concerns such as individual counseling, psychological services, and outpatient treatment were the top three.

Figure 24: Services utilized to address concerns impacting family or household
Total responses = 300



The "other" category included: APOC, Alanon, Open Door Center, and family counseling.

In an open ended question, respondents were asked what single issue they feel is the biggest challenge facing their community. Two categories emerged above all others as the top concerns:

1. Lack of mental health services
2. Drug/alcohol/substance abuse

This is not a surprise as many of the categories of needs in the survey, combined with the key informant and focus group, found these issues to be preeminent. As was previously stated, in the last statewide CHNA process behavioral and mental health were the leading issues found in both rural and urban communities in North Dakota.

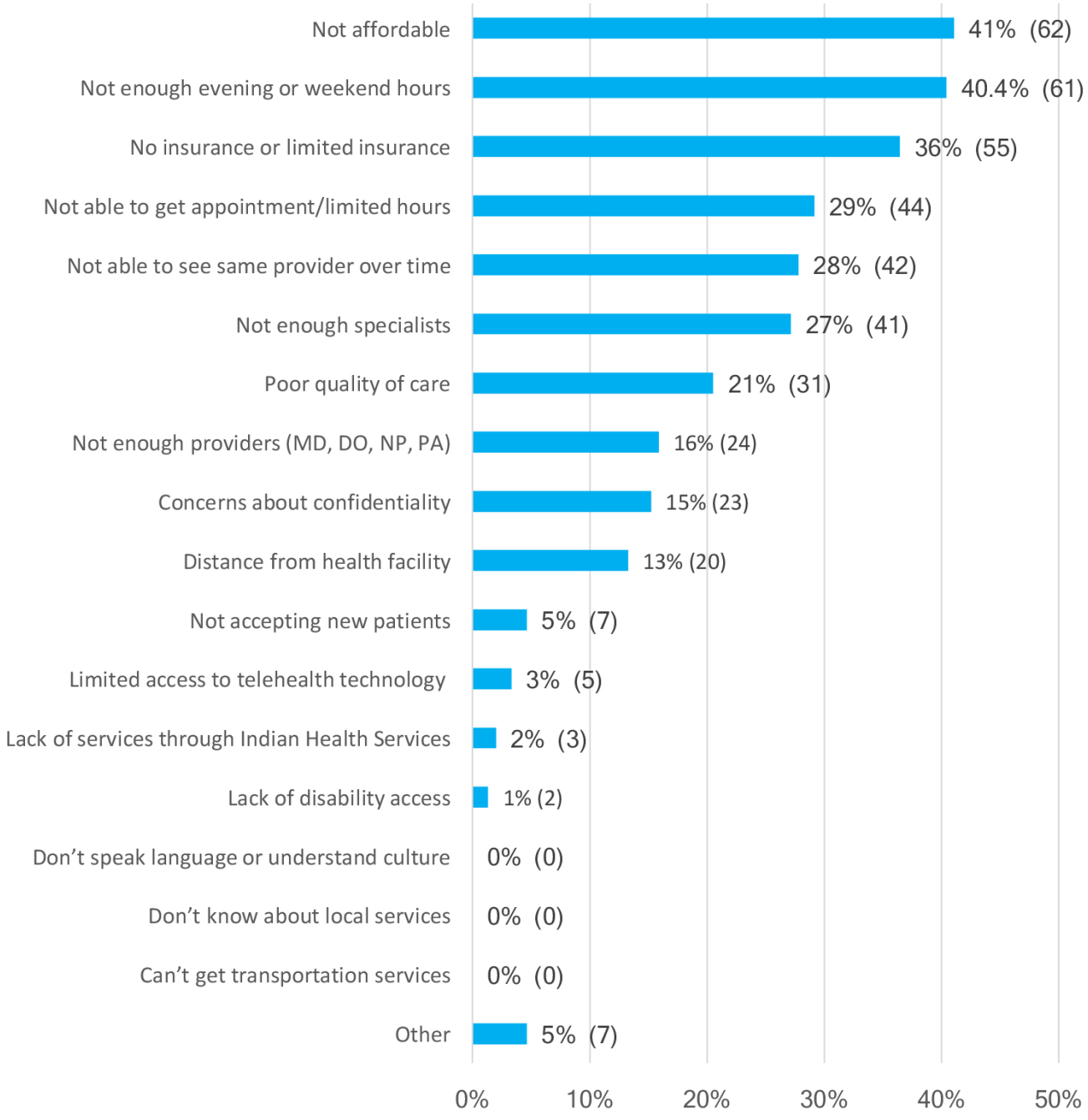
Other biggest challenges identified were the population decline/inability to attract families to live in the community, poor wages, and recruiting and retaining healthcare professionals,

Delivery of Healthcare

The survey asked residents what they see as barriers that prevent them, or other community residents, from receiving healthcare. The most prevalent barriers perceived by residents were related to cost or access. The top rated barrier was healthcare being not affordable (N=62), followed by not enough evening or weekend hours (N=61). After these, the next most commonly identified barriers were no insurance or limited insurance (N=55), not able to get appointment/limited hours (N=44), not able to see same provider over time (N=42), and not enough specialists (N=41). The majority of concerns indicated in the "Other" category was in regards to inflexible work hours, not taking certain insurances, and a poor billing system at CHI Mercy Health.

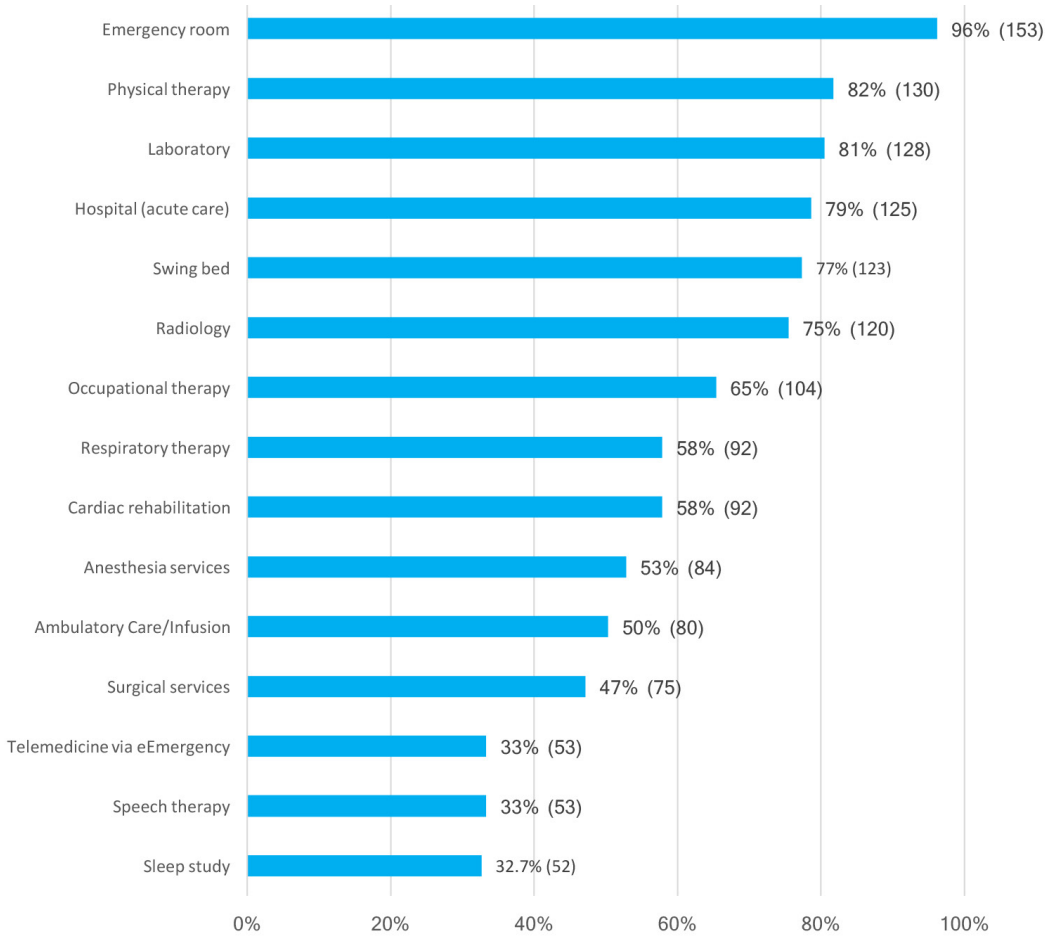
Figure 25 illustrates these results.

Figure 25: Perceptions about Barriers to Care
Total responses = 427



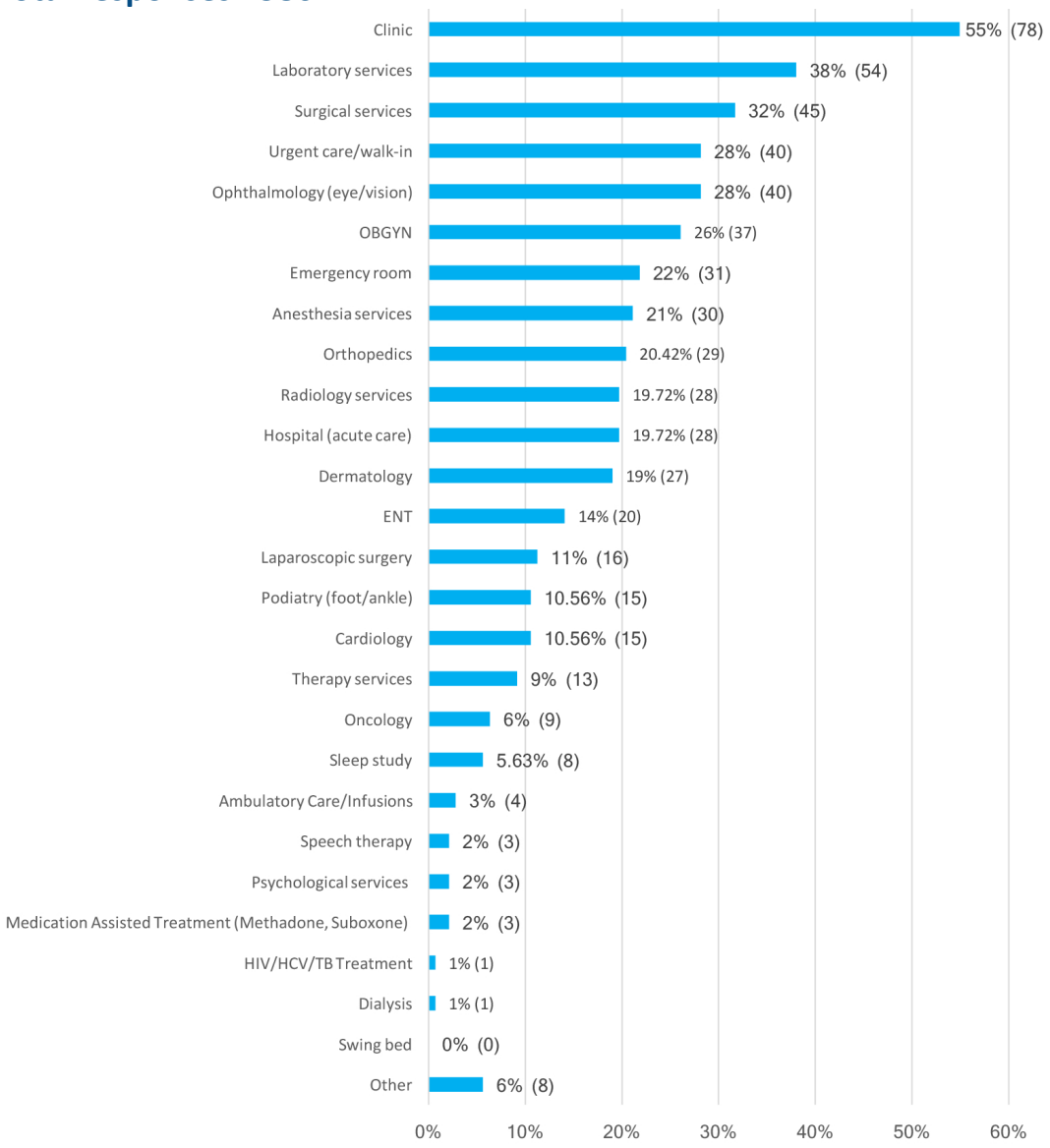
Considering a variety of healthcare services offered by CHI Mercy Health, respondents were asked to indicate if they were aware that the healthcare service is offered though Mercy Health. Eleven Of the 15 services, 11 had 50% or more indicating awareness. Less than a majority showed awareness for surgery, e-Emergency care, speech therapy, and sleep study. These services and some of the others may be considered for greater community promotion.

Figure 26: Awareness of Services Provided at CHI Mercy Health
Total responses =1464



Respondents were also asked to indicate what, if any, services they or a family member have used outside of Valley City in the past year (See Figure 27). Valley City and Barnes County experience benefits and disadvantages due to their proximity to Fargo. It is relatively easy to access health services in the state's largest city from Valley City or the county. This may be where some of the issue lies since, 55% or 78 peopled surveyed indicated they had sought clinic care outside of Valley City. This is an issue to discuss. Surgical services were identified by 38% of the survey and this may relate to the 47% who said they were unaware of surgical services from the hospital.

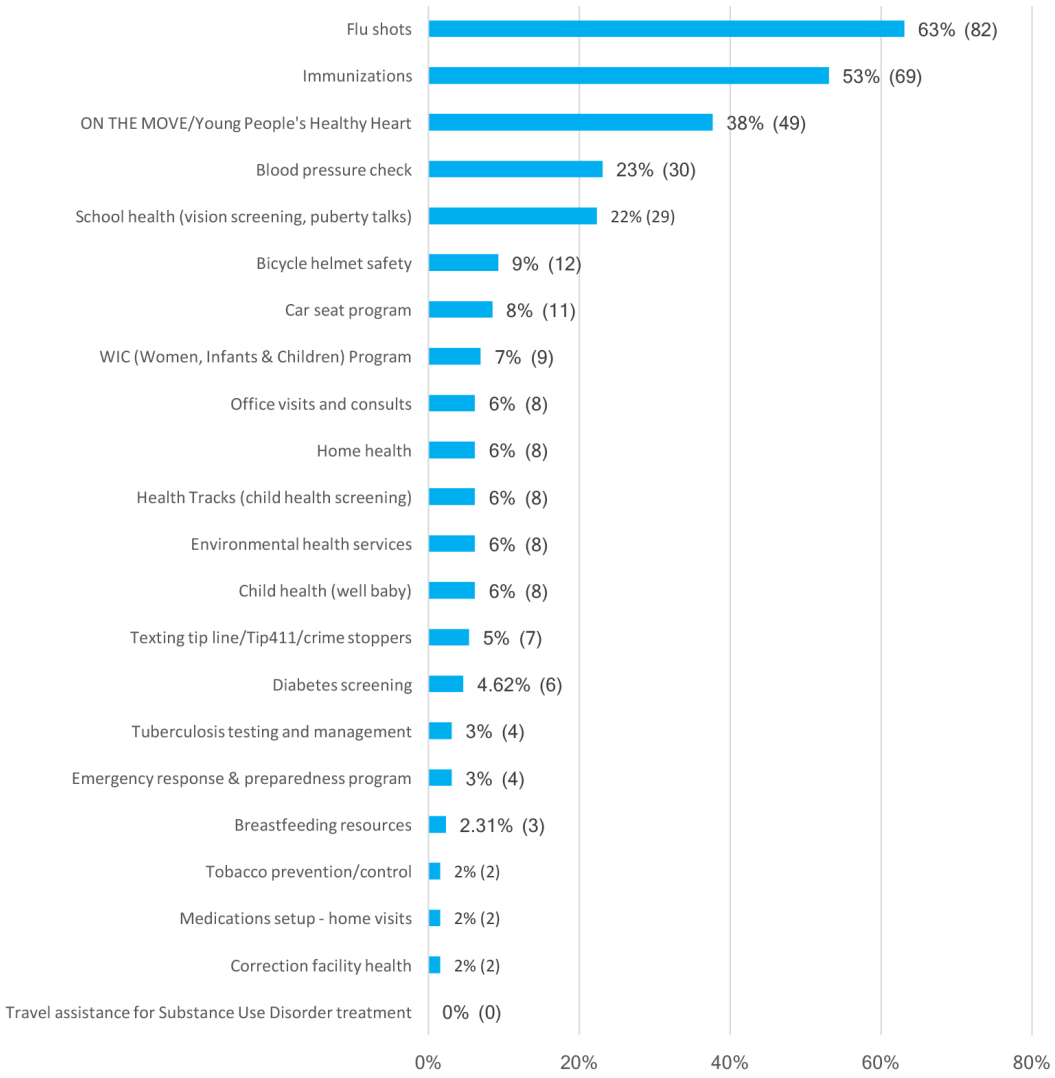
Figure 27: Services utilized outside of Valley City
Total responses =586



Responses in the other category included MRI, pediatrics, chiropractor, dentist, urology, GI specialist, rheumatology, endocrinology, and alternative medicine providers.

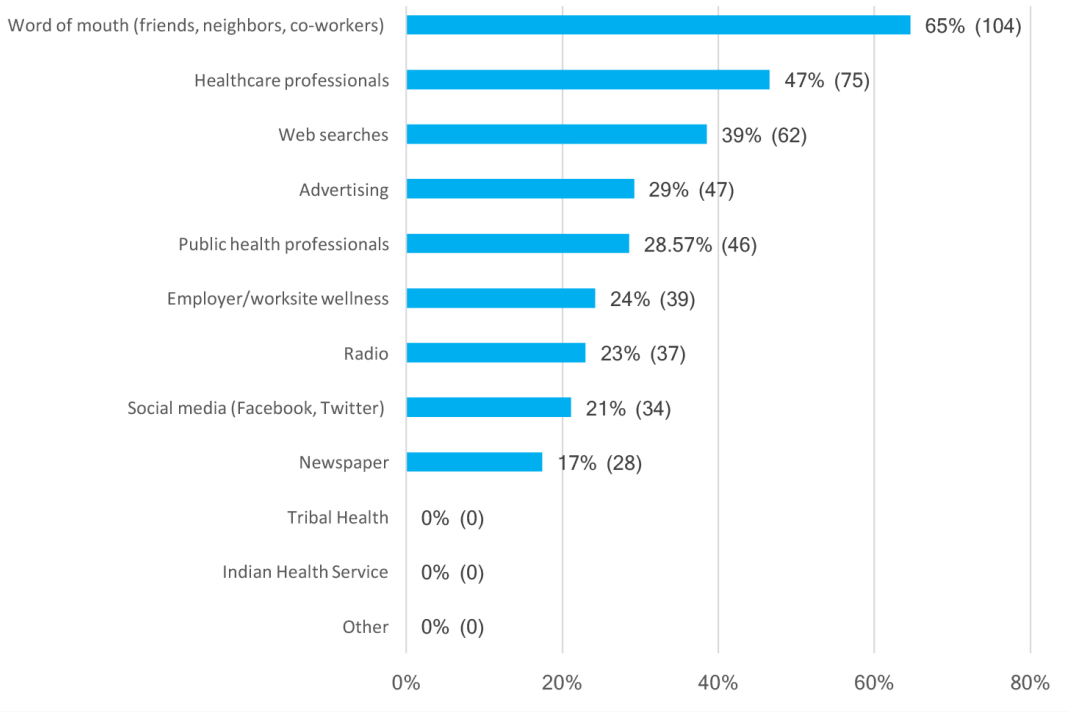
Considering a variety of healthcare services offered by CCHD, respondents were asked to indicate if they were aware of and utilized the services provided through CCHD (see Figure 28). Flu shots and immunizations were well recognized public health services; however, other important services were recognized at a much lower rate such as the car seat program, home health, Health Tracks, bicyle helmet safety, and breastfeeding resources which were all recognized by 10% or less.

Figure 28: Awareness of services and services utilized through CCHD
Total responses = 361



Respondents were asked to indicate which three services they felt CCHD should offer to the underinsured/uninsured in order to benefit the community the most (see Figure 29). The top three suggestions were primary care services (N=87), dental care (N=87), and annual check-ups (N=72). It should be noted that through a Federal Office of Rural Health Policy Rural Health Outreach grant, CCHD has develped a relationship with the Federally Qualified Health Center (FQHC). CCHD has also secured in 2018 a Federal Office of Rural Health Policy Opioid grant that will be used to increase access to Medical Assisted Treatment (MAT), provide community education over an eight county area, and provide Mental Health First Aid training in the counties.

Figure 29: Suggestions for expanded services offered by CCHD



Responses in the other category included counseling, B-12 injections, reproductive health, and pediatrics.

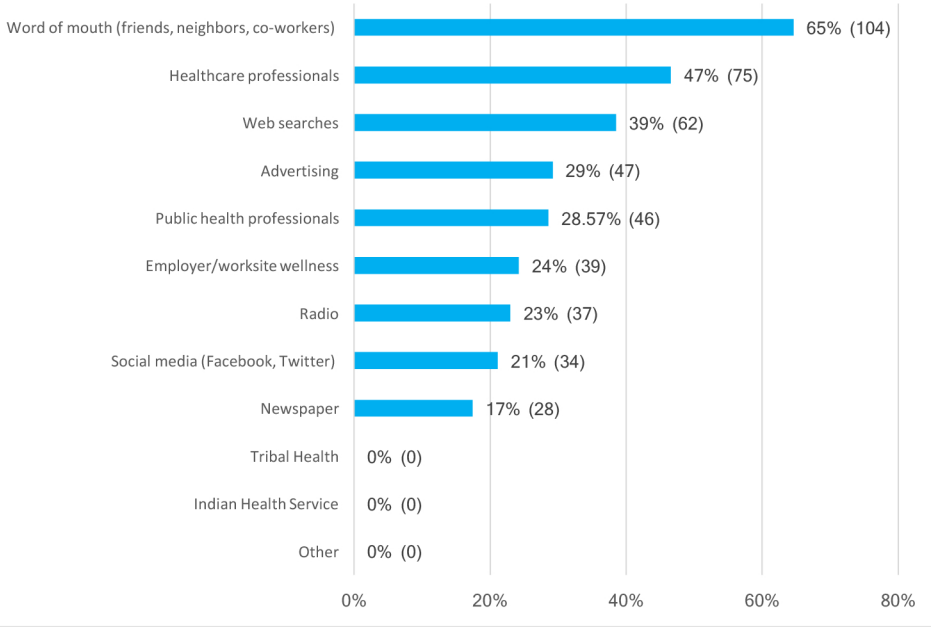
In an open-ended question, respondents were asked what specific healthcare services, if any, they think should be added locally. The number one desired service to add locally was mental health services. Additional requested services included:

- Dental care for people who are unable to afford the dentist (those on Medicaid)
- Glucose and cholesterol screens including ECG services.
- Indian health service
- Orthodontics
- Dermatology
- Occupational therapy
- Urgent care
- Pediatrics
- Quality, low cost eye care
- Veterans Affairs Healthcare Provider
- Walk-in or after hours clinic
- Addiction treatment and counseling services
- OBGYN

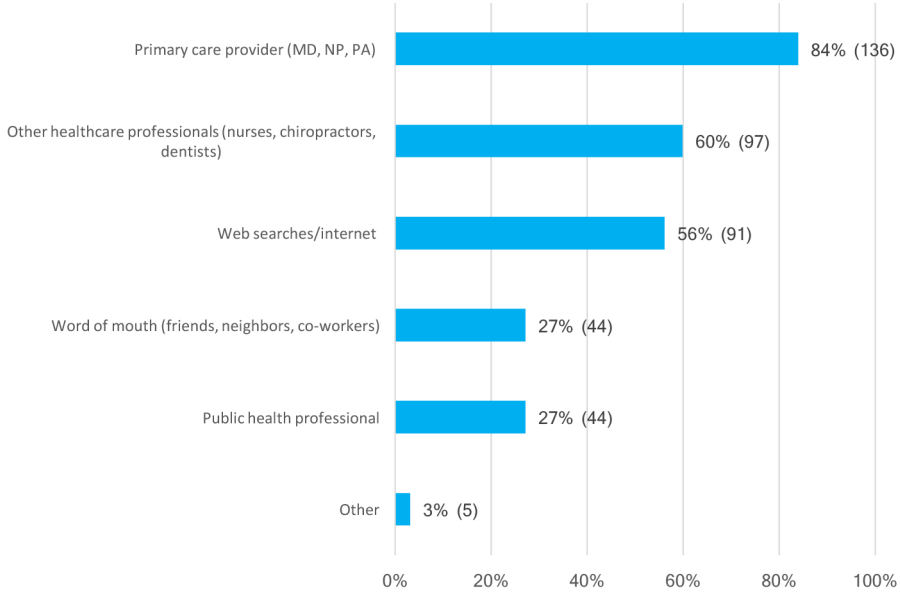
While not a service, many respondents indicated that they would like physicians added. One person indicated there should be a sliding fee scale for healthcare for those who are unable to afford it. The new FQHC access point in public health will address this.

Respondents were asked how they find out about local health services available in the area. (see Figure 29) This is a mix of traditional, such as word of mouth, healthcare professionals, and radio/newspaper along with newer sources such as social media and web searches.

Figure 29: How resident find out about services available in community



Respondents were asked where they go to for trusted health information. Primary care providers (N=136) received the highest response rate, followed by other healthcare professionals (N=97), and then web/internet searches (See Figure 30).



In the "Other" category, family member that is in medical field, pharmacist, and science based publications were listed as a source of trusted information.

The final question on the survey asked respondents to share concerns and suggestions to improve the delivery of local healthcare. The majority of responses focused on concern with the lack of mental health and addiction counseling services, recruiting and retaining physicians and other primary care providers, and not having extended hours or walk in clinics that allow people to see a provider without missing work or waiting for an appointment.

It was suggested that the hospital provide pregnancy services, and other simple services such as colonoscopies, and cataract surgery available locally instead of having to drive to Fargo for every procedure. It was also mentioned that someone other than a local doctor needs to diagnose and treat mental health issues instead of just prescribing medication right away.

The cost of healthcare remains a concern. Respondents stated that there needs to be services for people who are low income and/or don't have insurance. They also expressed a need to have a pricing system for healthcare so they can know what to expect to pay when receiving care.

Findings from Key Informant Interviews & the Community Meeting

Questions about the health and well-being of the community, similar to those posed in the survey, were explored during key informant interviews with community leaders, health professionals, and also with the community group at the first meeting. The themes that emerged were wide-ranging, with some directly associated with healthcare and others more rooted in broader social and community matters.

Generally, overarching issues that developed during the interviews and community meeting can be grouped into five categories (listed in alphabetical order):

- Alcohol use and abuse (adult population)
- Availability of mental health services
- Availability of resources to help the elderly stay in their homes
- Drug use and abuse (including prescription drug abuse – youth population)
- Not enough jobs with livable wages, not enough to live on

To provide context for the identified needs, following are some of the comments made by those interviewed about these issues:

Alcohol use and abuse

Alcohol use and abuse

- We need to change community perceptions

Availability of mental health and substance use disorder treatment services

- It's a big runaround trying to get users the help they need!
- Safe housing for people is the first step in recovery so people don't relapse into the same situations that they came from

Drug use and abuse (including prescription drug abuse – youth population)

- We need to focus on prevention

Not enough jobs with livable wages, not enough to live on

- Wages need to increase across the board to provide for housing, insurance, etc.
- Allow businesses to come
- Need to provide more job training
- Increase minimum wage and provide benefits

Key informants and focus group participants were asked to weigh in on community engagement and collaboration of various organizations and stakeholders in the community. Specifically, participants were asked, "On a scale of 1 to 5, with 1 being no collaboration/community engagement and 5 being excellent collaboration/community engagement, how would you rate the collaboration/engagement in the community among these various organizations?" This was not intended to rank services provided. They were presented with a list of 14 organizations or community segments to rank. According to these participants, emergency services, CHI Mercy Health, public health, economic development organizations, and other local health providers (dentists and chiropractors) are the most engaged. The averages of these rankings (with 5 being "excellent" engagement or collaboration) were:

- Faith based organizations (4.5)
- Law enforcement (4.5)
- Schools (4.0)
- Pharmacy (4.0)
- Business and industry (3.5)
- Clinics not affiliated with the main health system (3.5)
- Long-term care, including nursing homes and assisted living (3.0)
- Human services agencies (3.0)
- Social services (3.0)

Priority of Health Needs

A Community Group met on November 1, 2018. There were 13 community members who attended the meeting. Representatives from the CRH presented the group with a summary of this report's findings, including background and explanation about the secondary data, highlights from the survey results (including perceived community assets and concerns, and barriers to care), and findings from the key informant interviews.

Following the presentation of the assessment findings, and after considering and discussing the findings, all members of the group were asked to identify what they perceived as the top four community health needs. All of the potential needs were listed on large poster boards and each member was given four stickers to place next to each of the four needs they considered the most significant.

The results were totaled and the concerns most often cited were:

- Availability of substance abuse/treatment services (7 votes)
- Substance use and abuse (alcohol and drug) (7 votes)
- Attracting and retaining young families (4 votes)
- Depression and anxiety (4 votes)

From those top three priorities, each person put one sticker on the item they felt was the most important. The rankings were:

1. Substance use and abuse (alcohol and drug) (7 votes)
2. Attracting retaining young families (2 votes)
3. Availability of substance abuse/treatment services (2 votes)
4. Depression and anxiety (2 votes)

Following the prioritization process, during the second meeting of the Community Group and key informants, the number one identified need was the substance use and abuse (alcohol and drug). A summary of this prioritization is found in Appendix C.

Comparison of Needs Identified Previously

Top Needs Identified 2016 CHNA Process	Top Needs Identified 2019 CHNA Process
• Mental health service shortage	• Substance use and abuse (alcohol and drugs)
• Substance use and abuse (alcohol and drugs)	• Attracting and retaining young families
• Licensed child care capacity	• Availability of substance abuse/ treatment services
• Bullying/cyberbullying	• Depression and anxiety

The current process only identified one common concern from 2016. Substance use and abuse (alcohol and drugs) moved from the second concern in 2016 to the top concern in 2019. The availability of substance abuse/ treatment services and depression and anxiety both play a role in the concern of addressing substance use and abuse.

Hospital and Community Projects and Programs Implemented to Address Needs Identified in 2016

In response to the needs identified in the 2016 CHNA process, the following actions were taken:

Need 1: Mental Health Service Shortage – A matrix of behavioral health services was created along with an increased ratio of behavioral health providers to population size. There was also a collaboration with Family Health Care and South Central Human Service Center to support the establishment of each of their Valley City facilities.

Need 2: Substance abuse (alcohol and drugs) – Essential grant funds to address prevention, treatment, and recovery were secured, which have helped address persistent issues with substance use in Barnes County.

Need 3: Adequate Childcare Services – The group identified that they would not pursue the need for licensed child care as it isn't considered a healthcare proficiency and the hospital has a lack of knowledge, expertise, and resources to provide a solution for licensed child care.

Need 4: Adult Cyber-bullying – Need 4: Adult Cyber-bullying

Next Steps – Strategic Implementation Plan

Although a CHNA and strategic implementation plan are required by hospitals and local public health units considering accreditation, it is important to keep in mind the needs identified, at this point, will be broad community-wide needs along with healthcare system-specific needs. This process is simply a first step to identify needs and determine areas of priority. The second step will be to convene the steering committee, or other community group, to select an agreed upon prioritized need on which to begin working. The strategic planning process will begin with identifying current initiatives, programs, and resources already in place to address the identified community need(s). Additional steps include identifying what is needed and feasible to address (taking community resources into consideration) and what role and responsibility the hospital, clinic, and various community organizations play in developing strategies and implementing specific activities to address the community health need selected. Community engagement is essential for successfully developing a plan and executing the action steps for addressing one or more of the needs identified.

"If you want to go fast, go alone. If you want to go far, go together." Proverb

Community Benefit Report

While not required, the CRH strongly encourages a review of the most recent Community Benefit Report to determine how/if it aligns with the needs identified, through the CHNA, as well as the Implementation Plan.

The community benefit requirement is a long-standing requirement of nonprofit hospitals and is reported in Part I of the hospital's Form 990. The strategic implementation requirement was added as part of the ACA's CHNA requirement. It is reported on Part V of the 990. Not-for-profit healthcare organizations demonstrate their commitment to community service through organized and sustainable community benefit programs providing:

- Free and discounted care to those unable to afford healthcare.
- Care to low-income beneficiaries of Medicaid and other indigent care programs.
- Services designed to improve community health and increase access to healthcare.

Community benefit is also the basis of the tax-exemption of not-for-profit hospitals. The Internal Revenue Service (IRS), in its Revenue Ruling 69–545, describes the community benefit standard for charitable tax-exempt hospitals. Since 2008, tax-exempt hospitals have been required to report their community benefit and other information related to tax-exemption on the IRS Form 990 Schedule H.

What Are Community Benefits?

Community benefits are programs or activities that provide treatment and/or promote health and healing as a response to identified community needs. They increase access to healthcare and improve community health.

A community benefit must respond to an identified community need and meet at least one of the following criteria:

- Improve access to healthcare services.
- Enhance health of the community.
- Advance medical or health knowledge.
- Relieve or reduce the burden of government or other community efforts.

A program or activity should not be reported as community benefit if it is:

- Provided for marketing purposes.

- Restricted to hospital employees and physicians.
- Required of all healthcare providers by rules or standards.
- Questionable as to whether it should be reported.
- Unrelated to health or the mission of the organization.

Appendix A – CHNA Survey Instrument

Barnes County Area Survey

CHI Mercy Health and City-County Health District are interested in hearing from you about community health concerns.

The focus of this effort is to:

- Learn of the good things in your community as well as concerns in the community
- Understand perceptions and attitudes about the health of the community, and hear suggestions for improvement
- Learn more about how local health services are used by you and other residents

If you prefer, you may take the survey online at http://tinyurl.com/ValleyCity18 or by scanning on the QR Code at the right.

Scan here to take the survey online!

Surveys will be tabulated by the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences. Your responses are anonymous, and you may skip any question you do not want to answer. Your answers will be combined with other responses and reported only in total. If you have questions about the survey, you may contact Julie Reiten at 701-777-4173.

Surveys will be accepted through September 14, 2018. Your opinion matters – thank you in advance!

Community Assets: Please tell us about your community by **choosing up to three options** you most agree with in each category below.

1. Considering the **PEOPLE** in your community, the best things are (choose up to THREE):

- ☐ Community is socially and culturally diverse or becoming more diverse
- ☐ Feeling connected to people who live here
- ☐ Government is accessible
- ☐ People are friendly, helpful, supportive
- ☐ People who live here are involved in their community
- ☐ People are tolerant, inclusive and open-minded
- ☐ Sense that you can make a difference through civic engagement
- ☐ Other (please specify) _____

2. Considering the **SERVICES AND RESOURCES** in your community, the best things are (choose up to THREE):

- ☐ Access to healthy food
- ☐ Active faith community
- ☐ Business district (restaurants, availability of goods)
- ☐ Community groups and organizations
- ☐ Health care
- ☐ Opportunities for advanced education
- ☐ Public transportation
- ☐ Programs for youth
- ☐ Quality school systems
- ☐ Other (please specify) _____

3. Considering the **QUALITY OF LIFE** in your community, the best things are (choose up to THREE):

- ☐ Closeness to work and activities
- ☐ Family-friendly; good place to raise kids
- ☐ Informal, simple, laidback lifestyle
- ☐ Job opportunities or economic opportunities
- ☐ Safe place to live, little/no crime
- ☐ Other (please specify) _____

4. Considering the **ACTIVITIES** in your community, the best things are (choose up to THREE):

- ☐ Activities for families and youth
- ☐ Arts and cultural activities
- ☐ Local events and festivals
- ☐ Recreational and sports activities
- ☐ Year-round access to fitness opportunities
- ☐ Other (please specify) _____

Community Concerns: Please tell us about your community by choosing up to three options you most agree with in each category.

5. Considering the **COMMUNITY /ENVIRONMENTAL HEALTH** in your community, concerns are (choose up to THREE):

- ☐ Active faith community
- ☐ Attracting and retaining young families
- ☐ Not enough jobs with livable wages, not enough to live on
- ☐ Not enough affordable housing
- ☐ Poverty
- ☐ Changes in population size (increasing or decreasing)
- ☐ Crime and safety, adequate law enforcement personnel
- ☐ Water quality (well water, lakes, streams, rivers)
- ☐ Air quality
- ☐ Litter (amount of litter, adequate garbage collection)
- ☐ Having enough child daycare services
- ☐ Having enough quality school resources
- ☐ Not enough places for exercise and wellness activities
- ☐ Not enough public transportation options, cost of public transportation
- ☐ Racism, prejudice, hate, discrimination
- ☐ Traffic safety, including speeding, road safety, seatbelt use, and drunk/distracted driving
- ☐ Physical violence, domestic violence, sexual abuse
- ☐ Child abuse
- ☐ Bullying/cyber-bullying
- ☐ Recycling
- ☐ Homelessness
- ☐ Other (please specify) _____

6. Considering the **AVAILABILITY/DELIVERY OF HEALTH SERVICES** in your community, concerns are (choose up to THREE):

- ☐ Ability to get appointments for health services within 48 hours.
- ☐ Extra hours for appointments, such as evenings and weekends
- ☐ Availability of primary care providers (MD,DO,NP,PA) and nurses
- ☐ Ability to keep primary care providers (MD, DO, NP, PA) and nurses in the community
- ☐ Availability of public health professionals
- ☐ Availability of specialists
- ☐ Not enough health care staff in general
- ☐ Availability of wellness and disease prevention services
- ☐ Availability of mental health services
- ☐ Availability of substance use disorder/treatment services
- ☐ Availability of hospice
- ☐ Availability of dental care
- ☐ Availability of vision care
- ☐ Emergency services (ambulance & 911) available 24/7
- ☐ Ability/willingness of healthcare providers to work together to coordinate patient care within the health system.
- ☐ Ability/willingness of healthcare providers to work together to coordinate patient care outside the local community.
- ☐ Patient confidentiality (inappropriate sharing of personal health information)
- ☐ Not comfortable seeking care where I know the employees at the facility on a personal level
- ☐ Quality of care
- ☐ Cost of health care services
- ☐ Cost of prescription drugs
- ☐ Cost of health insurance
- ☐ Adequacy of health insurance (concerns about out-of-pocket costs)
- ☐ Understand where and how to get health insurance
- ☐ Adequacy of Indian Health Service or Tribal Health Services
- ☐ Other (please specify) _____

7. Regarding various forms of **VIOLENCE** in your community, concerns are (choose up to THREE):

- ☐ Bullying/cyber-bullying
- ☐ Child abuse/neglect
- ☐ Dating violence
- ☐ Domestic/intimate partner violence
- ☐ Emotional abuse (includes: intimidation, isolation, verbal threats, economic abuse/withholding of funds)
- ☐ General violence against men
- ☐ General violence against women
- ☐ Sexual abuse/assault
- ☐ Stalking
- ☐ Video game/media violence
- ☐ Work place/co-worker violence

8. Considering the **YOUTH POPULATION** in your community, concerns are (choose up to THREE):

- ☐ Alcohol use and abuse
- ☐ Drug use and abuse (including prescription drug abuse)
- ☐ Smoking and tobacco use, exposure to second-hand smoke
- ☐ Cancer
- ☐ Diabetes
- ☐ Depression/anxiety
- ☐ Stress
- ☐ Suicide
- ☐ Not enough activities for children and youth
- ☐ Teen pregnancy
- ☐ Sexual health
- ☐ Diseases that can spread, such as sexually transmitted diseases or AIDS
- ☐ Wellness and disease prevention, including vaccine-preventable diseases
- ☐ Not getting enough exercise/physical activity
- ☐ Obesity/overweight
- ☐ Hunger, poor nutrition
- ☐ Crime
- ☐ Graduating from high school
- ☐ Availability of disability services
- ☐ Other (please specify) _____

9. Considering the **ADULT POPULATION** in your community, concerns are (choose up to THREE):

- ☐ Alcohol use and abuse
- ☐ Drug use and abuse (including prescription drug abuse)
- ☐ Smoking and tobacco use, exposure to second-hand smoke
- ☐ Cancer
- ☐ Lung disease (i.e. emphysema, COPD, asthma)
- ☐ Diabetes
- ☐ Heart disease
- ☐ Hypertension
- ☐ Dementia/Alzheimer's disease
- ☐ Other chronic diseases: _____
- ☐ Depression/anxiety
- ☐ Stress
- ☐ Suicide
- ☐ Diseases that can spread, such as sexually transmitted diseases or AIDS
- ☐ Wellness and disease prevention, including vaccine-preventable diseases
- ☐ Not getting enough exercise/physical activity
- ☐ Obesity/overweight
- ☐ Hunger, poor nutrition
- ☐ Availability of disability services
- ☐ Other (please specify) _____

10. Considering the **SENIOR POPULATION** in your community, concerns are (choose up to THREE):

- ☐ Ability to meet needs of older population
- ☐ Long-term/nursing home care options
- ☐ Assisted living options
- ☐ Availability of resources to help the elderly stay in their homes
- ☐ Availability/cost of activities for seniors
- ☐ Availability of resources for family and friends caring for elders
- ☐ Quality of elderly care
- ☐ Cost of long-term/nursing home care
- ☐ Availability of transportation for seniors
- ☐ Availability of home health
- ☐ Not getting enough exercise/physical activity
- ☐ Depression/anxiety
- ☐ Suicide
- ☐ Alcohol use and abuse
- ☐ Drug use and abuse (including prescription drug abuse)
- ☐ Elder abuse
- ☐ Other (please specify) _____

11. Considering **YOUR FAMILY AND/OR HOUSEHOLD**, which of the following has impacted individuals living with or close to you? (Choose ALL that apply)

- ☐ Diagnosis of Mental Health Disorder (anxiety, depression, ADHD, etc.)
- ☐ Justice/Corrections Involved (county jail, state prison, etc.)
- ☐ Social Services Involved
- ☐ Substance Use Disorder (alcohol, opioid, another drug addiction)
- ☐ None of these
- ☐ Other_____

12. If you named **ANY OF THE ABOVE FACTORS** as having an effect on your family/household, which services would you use to help manage or treat these issues? (Choose ALL that apply)

- ☐ Addiction support (Alcoholics Anonymous, Narcotics Anonymous, ALATEEN)
- ☐ Ambulatory care/infusions
- ☐ Evaluation (for DUI, other drug infractions)
- ☐ Group therapy
- ☐ Individual counseling
- ☐ In-patient treatment
- ☐ In-person support groups
- ☐ Medical detox
- ☐ Medication Assisted Treatment for opioid use disorder (Suboxone, Methadone, etc.)
- ☐ Out-patient treatment
- ☐ Pain management
- ☐ Peer support
- ☐ Psychological services (diagnostic, medication management)
- ☐ Sober living/halfway housing
- ☐ Social Services (housing assistance, employment, parenting classes, childcare, etc.)
- ☐ Syringe services (needle exchange)
- ☐ Other_____

13. What single issue do you feel is the biggest challenge facing your community?

_____

_____

Delivery of Health Care

14. What **PREVENTS** you or other community residents from receiving health care? (Choose ALL that apply)

- ☐ Can't get transportation services
- ☐ Concerns about confidentiality
- ☐ Distance from health facility
- ☐ Don't know about local services
- ☐ Don't speak language or understand culture
- ☐ Lack of disability access
- ☐ Lack of services through Indian Health Services
- ☐ Limited access to telehealth technology (patients seen by providers at another facility through a monitor/TV screen)
- ☐ No insurance or limited insurance
- ☐ Not able to get appointment/limited hours
- ☐ Not able to see same provider over time
- ☐ Not accepting new patients
- ☐ Not affordable
- ☐ Not enough providers (MD, DO, NP, PA)
- ☐ Not enough evening or weekend hours
- ☐ Not enough specialists
- ☐ Poor quality of care
- ☐ Other (please specify) _____

15. Considering **GENERAL and ACUTE SERVICES** at CHI Mercy Health, which services are you aware of? (Choose ALL that apply)

- ☐ Ambulatory Care/Infusions
- ☐ Anesthesia services
- ☐ Cardiac rehabilitation
- ☐ Emergency room
- ☐ Hospital (acute care)
- ☐ Laboratory
- ☐ Occupational therapy
- ☐ Physical therapy
- ☐ Radiology
- ☐ Respiratory therapy
- ☐ Sleep study
- ☐ Speech Therapy
- ☐ Surgical services
- ☐ Swing bed
- ☐ Telemedicine via eEmergency

16. Which of the following services have you **UTILIZED AT ANOTHER HEALTHCARE PROVIDER** outside of Valley City in the past year? (Choose ALL that apply)

- ☐ Ambulatory Care/Infusions
- ☐ Anesthesia services
- ☐ Cardiology
- ☐ Clinic
- ☐ Dermatology
- ☐ Dialysis
- ☐ Emergency room
- ☐ ENT
- ☐ HIV/HCV/TB Treatment
- ☐ Hospital (acute care)
- ☐ Laboratory services
- ☐ Laparoscopic surgery
- ☐ Medication Assisted Treatment (ex. Methadone, Suboxone, etc.)
- ☐ OBGYN
- ☐ Oncology
- ☐ Ophthalmology (eye/vision)
- ☐ Orthopedics
- ☐ Podiatry (foot/ankle)
- ☐ Psychological services (please specify) _____
- ☐ Radiology services
- ☐ Sleep study
- ☐ Speech Therapy
- ☐ Surgical services
- ☐ Swing bed
- ☐ Therapy services
- ☐ Urgent care/walk-in
- ☐ Other:_____

17. Which of the following **SERVICES** provided by your local **PUBLIC HEALTH unit (City-County Health District)** have you or a family member used in the past year? (Choose ALL that apply)

- ☐ Bicycle helmet safety
- ☐ Blood pressure check
- ☐ Breastfeeding resources
- ☐ Car seat program/seat check
- ☐ Child health (well baby)
- ☐ Correction facility health
- ☐ Diabetes screening
- ☐ Emergency response & preparedness program
- ☐ Environmental health services (water, sewer, health hazard abatement)
- ☐ Flu shots
- ☐ Health Tracks (child health screening)
- ☐ Home health
- ☐ Immunizations
- ☐ Medications setup—home visits
- ☐ Office visits and consults
- ☐ ON THE MOVE/Young People's Healthy Heart
- ☐ School health (vision screening, puberty talks, school immunizations)
- ☐ Texting tip line/Tip411/crime stoppers
- ☐ Tobacco prevention and control
- ☐ Travel assistance for Substance Use Disorder treatment
- ☐ Tuberculosis testing and management
- ☐ WIC (Women, Infants & Children) Program

18. Your local Public Health unit will be partnering with Family Health Care out of Fargo, ND to offer expanded services locally to individuals in Barnes County most in need who are underinsured/uninsured. Considering expanded services to be offered at City-County Health, which do you feel would help our community the most? (Choose up to THREE)

- ☐ Annual check-ups
- ☐ Dental care
- ☐ Medication Assisted Treatment for substance use disorders
- ☐ Medication prescribing
- ☐ Primary care
- ☐ Other: _____

19. Where do you turn for trusted health information? (Choose ALL that apply)

- ☐ Other health care professionals (nurses, chiropractors, dentists, etc.)
- ☐ Primary care provider (doctor, nurse practitioner, physician assistant)
- ☐ Public health professional
- ☐ Web searches/Internet (WebMD, Mayo Clinic, Healthline, etc.)
- ☐ Word of mouth, from others (friends, neighbors, co-workers, etc.)
- ☐ Other (please specify) _____

20. Where do you find out about **LOCAL HEALTH SERVICES** available in your area? (Choose ALL that apply

- ☐ Advertising
- ☐ Employer/worksite wellness
- ☐ Health care professionals
- ☐ Indian Health Service
- ☐ Newspaper
- ☐ Public health professionals
- ☐ Radio
- ☐ Social media (Facebook, Twitter, etc.)
- ☐ Tribal Health
- ☐ Web searches
- ☐ Word of mouth, from others (friends, neighbors, co-workers, etc.)
- ☐ Other: (please specify) _____

21. What specific health care services, if any, do you think should be added locally?

_____

_____

Demographic Information: Please tell us about yourself.

22. Do you work for the hospital, clinic, or public health unit?

☐ Yes ☐ No

23. Health insurance or health coverage status (choose ALL that apply):

- ☐ Indian Health Service (IHS)
- ☐ Insurance through employer or self-purchased
- ☐ Medicaid
- ☐ Medicare
- ☐ No insurance
- ☐ Not enough insurance
- ☐ Veteran's Health Care Benefits
- ☐ Other (please specify) _____

24. Age:

- ☐ Less than 18 years
- ☐ 18 to 24 years
- ☐ 25 to 34 years
- ☐ 35 to 44 years
- ☐ 45 to 54 years
- ☐ 55 to 64 years
- ☐ 65 to 74 years
- ☐ 75 years and older

25. Highest level of education:

- ☐ Less than high school
- ☐ High school diploma or GED
- ☐ Some college/technical degree
- ☐ Associate's degree
- ☐ Bachelor's degree
- ☐ Graduate or professional degree

26. Gender:

- ☐ Female
- ☐ Male
- ☐ Transgender

27. Employment status:

☐ Full time
☐ Part time
☐ Homemaker
☐ Multiple job holder
☐ Unemployed
☐ Retired

28. Your zip code: _____

29. Race/Ethnicity (choose ALL that apply):

☐ American Indian
☐ African American
☐ Asian
☐ Hispanic/Latino
☐ Pacific Islander
☐ White/Caucasian
☐ Other: _____
☐ Prefer not to answer

30. Annual household income before taxes:

☐ Less than $15,000
☐ $15,000 to $24,999
☐ $25,000 to $49,999
☐ $50,000 to $74,999
☐ $75,000 to $99,999
☐ $100,000 to $149,999
☐ $150,000 and over
☐ Prefer not to answer

31. Overall, please share concerns and suggestions to improve the delivery of local health care.

_____

_____

Thank you for helping us with this important survey!

Appendix B – County Health Rankings Explained

Source: http://www.countyhealthrankings.org/

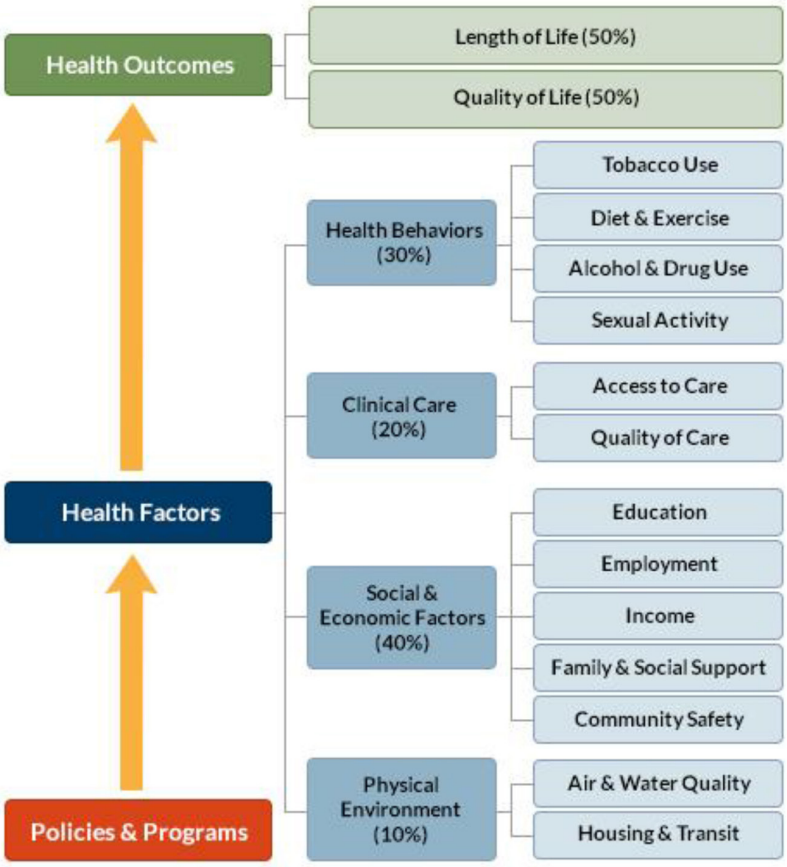
Methods

The County Health Rankings, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, measure the health of nearly all counties in the nation and rank them within states. The Rankings are compiled using county-level measures from a variety of national and state data sources. These measures are standardized and combined using scientifically-informed weights.

What is Ranked

The County Health Rankings are based on counties and county equivalents (ranked places). Any entity that has its own Federal Information Processing Standard (FIPS) county code is included in the Rankings. We only rank counties and county equivalents within a state. The major goal of the Rankings is to raise awareness about the many factors that influence health and that health varies from place to place, not to produce a list of the healthiest 10 or 20 counties in the nation and only focus on that.

Ranking System



The County Health Rankings model (shown above) provides the foundation for the entire ranking process.

Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks, e.g. 1 or 2, are considered to be the "healthiest." Counties are ranked relative to the health of other counties in the same state. We calculate and rank eight summary composite scores:

1. **Overall Health Outcomes**
2. Health Outcomes – **Length of life**
3. Health Outcomes – **Quality of life**
4. **Overall Health Factors**
5. Health Factors – **Health behaviors**
6. Health Factors – **Clinical care**
7. Health Factors – **Social and economic factors**
8. Health Factors – **Physical environment**

Data Sources and Measures

The County Health Rankings team synthesizes health information from a variety of national data sources to create the Rankings. Most of the data used are public data available at no charge. Measures based on vital statistics, sexually transmitted infections, and Behavioral Risk Factor Surveillance System (BRFSS) survey data were calculated by staff at the National Center for Health Statistics and other units of the Centers for Disease Control and Prevention (CDC). Measures of healthcare quality were calculated by staff at The Dartmouth Institute.

Data Quality

The County Health Rankings team draws upon the most reliable and valid measures available to compile the Rankings. Where possible, margins of error (95% confidence intervals) are provided for measure values. In many cases, the values of specific measures in different counties are not statistically different from one another; however, when combined using this model, those various measures produce the different rankings.

Calculating Scores and Ranks

The County Health Rankings are compiled from many different types of data. To calculate the ranks, they first standardize each of the measures. The ranks are then calculated based on weighted sums of the standardized measures within each state. The county with the lowest score (best health) gets a rank of #1 for that state and the county with the highest score (worst health) is assigned a rank corresponding to the number of places we rank in that state.

Health Outcomes and Factors

Source: http://www.countyhealthrankings.org/explore-health-rankings/what-and-why-we-rank

Health Outcomes

Premature Death (YPLL)

Premature death is the years of potential life lost before age 75 (YPLL-75). Every death occurring before the age of 75 contributes to the total number of years of potential life lost. For example, a person dying at age 25 contributes 50 years of life lost, whereas a person who dies at age 65 contributes 10 years of life lost to a county's YPLL. The YPLL measure is presented as a rate per 100,000 population and is age-adjusted to the 2000 U.S. population.

Reason for Ranking

Measuring premature mortality, rather than overall mortality, reflects the County Health Rankings' intent to focus attention on deaths that could have been prevented. Measuring YPLL allows communities to target resources to high-risk areas and further investigate the causes of premature death.

Poor or Fair Health

Self-reported health status is a general measure of health-related quality of life (HRQoL) in a population. This measure is based on survey responses to the question: "In general, would you say that your health is excellent, very good, good, fair, or poor?" The value reported in the County Health Rankings is the percentage of adult respondents who rate their health "fair" or "poor." The measure is modeled and age-adjusted to the 2000 U.S. population. Please note that the methods for calculating this measure changed in the 2016 Rankings.

Reason for Ranking

Measuring HRQoL helps characterize the burden of disabilities and chronic diseases in a population. Self-reported health status is a widely used measure of people's health-related quality of life. In addition to measuring how long people live, it is important to also include measures that consider how healthy people are while alive.

Poor Physical Health Days

Poor physical health days is based on survey responses to the question: "Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?" The value reported in the County Health Rankings is the average number of days a county's adult respondents report that their physical health was not good. The measure is age-adjusted to the 2000 U.S. population. Please note that the methods for calculating this measure changed in the 2016 Rankings.

Reason for Ranking

Measuring health-related quality of life (HRQoL) helps characterize the burden of disabilities and chronic diseases in a population. In addition to measuring how long people live, it is also important to include measures of how healthy people are while alive – and people's reports of days when their physical health was not good are a reliable estimate of their recent health.

Poor Mental Health Days

Poor mental health days is based on survey responses to the question: "Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" The value reported in the County Health Rankings is the average number of days a county's adult respondents report that their mental health was not good. The measure is age-adjusted to the 2000 U.S. population. Please note that the methods for calculating this measure changed in the 2016 Rankings.

Reason for Ranking
Overall health depends on both physical and mental well-being. Measuring the number of days when people report that their mental health was not good, i.e., poor mental health days, represents an important facet of health-related quality of life.

Low Birth Weight
Birth outcomes are a category of measures that describe health at birth. These outcomes, such as low birthweight (LBW), represent a child's current and future morbidity — or whether a child has a "healthy start" — and serve as a health outcome related to maternal health risk.

Reason for Ranking
LBW is unique as a health outcome because it represents multiple factors: infant current and future morbidity, as well as premature mortality risk, and maternal exposure to health risks. The health associations and impacts of LBW are numerous.

In terms of the infant's health outcomes, LBW serves as a predictor of premature mortality and/or morbidity over the life course.[1] LBW children have greater developmental and growth problems, are at higher risk of cardiovascular disease later in life, and have a greater rate of respiratory conditions.[2-4]

From the perspective of maternal health outcomes, LBW indicates maternal exposure to health risks in all categories of health factors, including her health behaviors, access to healthcare, the social and economic environment the mother inhabits, and environmental risks to which she is exposed. Authors have found that modifiable maternal health behaviors, including nutrition and weight gain, smoking, and alcohol and substance use or abuse can result in LBW.[5]

LBW has also been associated with cognitive development problems. Several studies show that LBW children have higher rates of sensorineural impairments, such as cerebral palsy, and visual, auditory, and intellectual impairments.[2,3,6] As a consequence, LBW can "impose a substantial burden on special education and social services, on families and caretakers of the infants, and on society generally."[7]

Health Factors

Adult Smoking
Adult smoking is the percentage of the adult population that currently smokes every day or most days and has smoked at least 100 cigarettes in their lifetime. Please note that the methods for calculating this measure changed in the 2016 Rankings.

Reason for Ranking
Each year approximately 443,000 premature deaths can be attributed to smoking. Cigarette smoking is identified as a cause of various cancers, cardiovascular disease, and respiratory conditions, as well as low birthweight and other adverse health outcomes. Measuring the prevalence of tobacco use in the population can alert communities to potential adverse health outcomes and can be valuable for assessing the need for cessation programs or the effectiveness of existing programs.

Adult Obesity
Adult obesity is the percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m2.

Reason for Ranking
Obesity is often the result of an overall energy imbalance due to poor diet and limited physical activity. Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, osteoarthritis, and poor health status.[1,2]

Food Environment Index

The food environment index ranges from 0 (worst) to 10 (best) and equally weights two indicators of the food environment:

1) Limited access to healthy foods estimates the percentage of the population that is low income and does not live close to a grocery store. Living close to a grocery store is defined differently in rural and nonrural areas; in rural areas, it means living less than 10 miles from a grocery store whereas in nonrural areas, it means less than 1 mile. "Low income" is defined as having an annual family income of less than or equal to 200 percent of the federal poverty threshold for the family size.

2) Food insecurity estimates the percentage of the population who did not have access to a reliable source of food during the past year. A two-stage fixed effects model was created using information from the Community Population Survey, Bureau of Labor Statistics, and American Community Survey.

More information on each of these can be found among the additional measures.

Reason for Ranking

There are many facets to a healthy food environment, such as the cost, distance, and availability of healthy food options. This measure includes access to healthy foods by considering the distance an individual lives from a grocery store or supermarket; there is strong evidence that food deserts are correlated with high prevalence of overweight, obesity, and premature death.[1-3] Supermarkets traditionally provide healthier options than convenience stores or smaller grocery stores.[4]

Additionally, access in regards to a constant source of healthy food due to low income can be another barrier to healthy food access. Food insecurity, the other food environment measure included in the index, attempts to capture the access issue by understanding the barrier of cost. Lacking constant access to food is related to negative health outcomes such as weight-gain and premature mortality.[5,6] In addition to asking about having a constant food supply in the past year, the module also addresses the ability of individuals and families to provide balanced meals further addressing barriers to healthy eating. It is important to have adequate access to a constant food supply, but it may be equally important to have nutritious food available.

Physical Inactivity

Physical inactivity is the percentage of adults age 20 and over reporting no leisure-time physical activity. Examples of physical activities provided include running, calisthenics, golf, gardening, or walking for exercise.

Reason for Ranking

Decreased physical activity has been related to several disease conditions such as type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality, independent of obesity. Inactivity causes 11% of premature mortality in the United States, and caused more than 5.3 million of the 57 million deaths that occurred worldwide in 2008.[1] In addition, physical inactivity at the county level is related to healthcare expenditures for circulatory system diseases.[2]

Access to Exercise Opportunities

Change in measure calculation in 2018: Access to exercise opportunities measures the percentage of individuals in a county who live reasonably close to a location for physical activity. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state, and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984, or 799998.

Individuals who:

- reside in a census block within a half mile of a park or
- in urban census blocks: reside within one mile of a recreational facility or

- in rural census blocks: reside within three miles of a recreational facility
- are considered to have adequate access for opportunities for physical activity.

Reason for Ranking

Increased physical activity is associated with lower risks of type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality, independent of obesity. The role of the built environment is important for encouraging physical activity. Individuals who live closer to sidewalks, parks, and gyms are more likely to exercise.[1-3]

Excessive Drinking

Excessive drinking is the percentage of adults that report either binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) or 2 (men) drinks per day on average. Please note that the methods for calculating this measure changed in the 2011 Rankings and again in the 2016 Rankings.

Reason for Ranking

Excessive drinking is a risk factor for a number of adverse health outcomes, such as alcohol poisoning, hypertension, acute myocardial infarction, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes. [1] Approximately 80,000 deaths are attributed annually to excessive drinking. Excessive drinking is the third leading lifestyle-related cause of death in the United States.[2]

Alcohol-Impaired Driving Deaths

Alcohol-impaired driving deaths is the percentage of motor vehicle crash deaths with alcohol involvement.

Reason for Ranking

Approximately 17,000 Americans are killed annually in alcohol-related motor vehicle crashes. Binge/heavy drinkers account for most episodes of alcohol-impaired driving.[1,2]

Sexually Transmitted Infection Rate

Sexually transmitted infections (STI) are measured as the chlamydia incidence (number of new cases reported) per 100,000 population.

Reason for Ranking

Chlamydia is the most common bacterial STI in North America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain.[1,2] STIs are associated with a significantly increased risk of morbidity and mortality, including increased risk of cervical cancer, infertility, and premature death.[3] STIs also have a high economic burden on society. The direct medical costs of managing sexually transmitted infections and their complications in the US, for example, was approximately 15.6 billion dollars in 2008.[4]

Teen Births

Teen births are the number of births per 1,000 female population, ages 15-19.

Reason for Ranking

Evidence suggests teen pregnancy significantly increases the risk of repeat pregnancy and of contracting a sexually transmitted infection (STI), both of which can result in adverse health outcomes for mothers, children, families, and communities. A systematic review of the sexual risk among pregnant and mothering teens concludes that pregnancy is a marker for current and future sexual risk behavior and adverse outcomes [1]. Pregnant teens are more likely than older women to receive late or no prenatal care, have eclampsia, puerperal endometritis, systemic infections, low birthweight, preterm delivery, and severe neonatal conditions [2, 3]. Pre-term delivery and low birthweight babies have increased risk of child developmental delay, illness, and mortality [4]. Additionally, there are strong ties between teen birth and poor socioeconomic, behavioral, and mental outcomes. Teenage women who bear a child are much less likely to achieve an education level at or

beyond high school, much more likely to be overweight/obese in adulthood, and more likely to experience depression and psychological distress [5-7].

Uninsured

Uninsured is the percentage of the population under age 65 that has no health insurance coverage. The Small Area Health Insurance Estimates uses the American Community Survey (ACS) definition of insured: Is this person CURRENTLY covered by any of the following types of health insurance or health coverage plans: Insurance through a current or former employer or union, insurance purchased directly from an insurance company, Medicare, Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability, TRICARE or other military healthcare, Indian Health Services, VA or any other type of health insurance or health coverage plan? Please note that the methods for calculating this measure changed in the 2012 Rankings.

Reason for Ranking

Lack of health insurance coverage is a significant barrier to accessing needed healthcare and to maintaining financial security.

The Kaiser Family Foundation released a report in December 2017 that outlines the effects insurance has on access to healthcare and financial independence. One key finding was that "Going without coverage can have serious health consequences for the uninsured because they receive less preventative care, and delayed care often results in serious illness or other health problems. Being uninsured can also have serious financial consequences, with many unable to pay their medical bills, resulting in medical debt."[1]

Primary Care Physicians

Primary care physicians is the ratio of the population to total primary care physicians. Primary care physicians include non-federal, practicing physicians (M.D.'s and D.O.'s) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics. Please note this measure was modified in the 2011 Rankings and again in the 2013 Rankings.

Reason for Ranking

Access to care requires not only financial coverage, but also access to providers. While high rates of specialist physicians have been shown to be associated with higher (and perhaps unnecessary) utilization, sufficient availability of primary care physicians is essential for preventive and primary care, and, when needed, referrals to appropriate specialty care.[1,2]

Dentists

Dentists are measured as the ratio of the county population to total dentists in the county.

Reason for Ranking

Untreated dental disease can lead to serious health effects including pain, infection, and tooth loss. Although lack of sufficient providers is only one barrier to accessing oral healthcare, much of the country suffers from shortages. According to the Health Resources and Services Administration, as of December 2012, there were 4,585 Dental Health Professional Shortage Areas (HPSAs), with 45 million people total living in them.[1]

Mental Health Providers

Mental health providers is the ratio of the county population to the number of mental health providers including psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, mental health providers that treat alcohol and other drug abuse, and advanced practice nurses specializing in mental healthcare. In 2015, marriage and family therapists and mental health providers that treat alcohol and other drug abuse were added to this measure.

Reason for Ranking

Thirty percent of the population lives in a county designated as a Mental Health Professional Shortage Area. As the mental health parity aspects of the Affordable Care Act create increased coverage for mental health services, many anticipate increased workforce shortages.

Preventable Hospital Stays

Preventable hospital stays is the hospital discharge rate for ambulatory care-sensitive conditions per 1,000 fee-for-service Medicare enrollees. Ambulatory care-sensitive conditions include: convulsions, chronic obstructive pulmonary disease, bacterial pneumonia, asthma, congestive heart failure, hypertension, angina, cellulitis, diabetes, gastroenteritis, kidney/urinary infection, and dehydration. This measure is age-adjusted.

Reason for Ranking

Hospitalization for diagnoses treatable in outpatient services suggests that the quality of care provided in the outpatient setting was less than ideal. The measure may also represent a tendency to overuse hospitals as a main source of care.

Diabetes Monitoring

Diabetes monitoring is the percentage of diabetic fee-for-service Medicare patients ages 65-75 whose blood sugar control was monitored in the past year using a test of their glycated hemoglobin (HbA1c) levels.

Reason for Ranking

Regular HbA1c monitoring among diabetic patients is considered the standard of care. It helps assess the management of diabetes over the long term by providing an estimate of how well a patient has managed his or her diabetes over the past two to three months. When hyperglycemia is addressed and controlled, complications from diabetes can be delayed or prevented.

Mammography Screening

Mammography screening is the percentage of female fee-for-service Medicare enrollees age 67-69 that had at least one mammogram over a two-year period.

Reason for Ranking

Evidence suggests that mammography screening reduces breast cancer mortality, especially among older women.[1] A physician's recommendation or referral—and satisfaction with physicians—are major factors facilitating breast cancer screening. The percent of women ages 40-69 receiving a mammogram is a widely endorsed quality of care measure.

Unemployment

Unemployment is the percentage of the civilian labor force, age 16 and older, that is unemployed but seeking work.

Reason for Ranking

The unemployed population experiences worse health and higher mortality rates than the employed population.[1-4] Unemployment has been shown to lead to an increase in unhealthy behaviors related to alcohol and tobacco consumption, diet, exercise, and other health-related behaviors, which in turn can lead to increased risk for disease or mortality, especially suicide.[5] Because employer-sponsored health insurance is the most common source of health insurance coverage, unemployment can also limit access to healthcare.

Children in Poverty

Children in poverty is the percentage of children under age 18 living in poverty. Poverty status is defined by family; either everyone in the family is in poverty or no one in the family is in poverty. The characteristics of the family used to determine the poverty threshold are: number of people, number of related children under 18, and whether or not the primary householder is over age 65. Family income is then compared to the poverty threshold; if that family's income is below that threshold, the family is in poverty. For more information, please see Poverty Definition and/or Poverty.

In the data table for this measure, we report child poverty rates for black, Hispanic and white children. The rates for race and ethnic groups come from the American Community Survey, which is the major source of data used by the Small Area Income and Poverty Estimates to construct the overall county estimates. However, estimates for race and ethnic groups are created using combined five year estimates from 2012-2016.

Reason for Ranking

Poverty can result in an increased risk of mortality, morbidity, depression, and poor health behaviors. A 2011 study found that poverty and other social factors contribute a number of deaths comparable to leading causes of death in the U.S. like heart attacks, strokes, and lung cancer.[1] While repercussions resulting from poverty are present at all ages, children in poverty may experience lasting effects on academic achievement, health, and income into adulthood. Low-income children have an increased risk of injuries from accidents and physical abuse and are susceptible to more frequent and severe chronic conditions and their complications such as asthma, obesity, and diabetes than children living in high income households.[2]

Beginning in early childhood, poverty takes a toll on mental health and brain development, particularly in the areas associated with skills essential for educational success such as cognitive flexibility, sustained focus, and planning. Low income children are more susceptible to mental health conditions like ADHD, behavior disorders, and anxiety which can limit learning opportunities and social competence leading to academic deficits that may persist into adulthood.[2,3] The children in poverty measure is highly correlated with overall poverty rates.

Income Inequality

Income inequality is the ratio of household income at the 80th percentile to that at the 20th percentile, i.e., when the incomes of all households in a county are listed from highest to lowest, the 80th percentile is the level of income at which only 20% of households have higher incomes, and the 20th percentile is the level of income at which only 20% of households have lower incomes. A higher inequality ratio indicates greater division between the top and bottom ends of the income spectrum. Please note that the methods for calculating this measure changed in the 2015 Rankings.

Reason for Ranking

Income inequality within U.S. communities can have broad health impacts, including increased risk of mortality, poor health, and increased cardiovascular disease risks. Inequalities in a community can accentuate differences in social class and status and serve as a social stressor. Communities with greater income inequality can experience a loss of social connectedness, as well as decreases in trust, social support, and a sense of community for all residents.

Children in Single-Parent Households

Children in single-parent households is the percentage of children in family households where the household is headed by a single parent (male or female head of household with no spouse present). Please note that the methods for calculating this measure changed in the 2011 Rankings.

Reason for Ranking

Adults and children in single-parent households are at risk for adverse health outcomes, including mental illness (e.g. substance abuse, depression, suicide) and unhealthy behaviors (e.g. smoking, excessive alcohol use).[1-4] Self-reported health has been shown to be worse among lone parents (male and female) than for parents living as couples, even when controlling for socioeconomic characteristics. Mortality risk is also higher among lone parents.[4,5] Children in single-parent households are at greater risk of severe morbidity and all-cause mortality than their peers in two-parent households.[2,6]

Violent Crime Rate

Violent crime is the number of violent crimes reported per 100,000 population. Violent crimes are defined as offenses that involve face-to-face confrontation between the victim and the perpetrator, including homicide, rape, robbery, and aggravated assault. Please note that the methods for calculating this measure changed in the 2012 Rankings.

Reason for Ranking

High levels of violent crime compromise physical safety and psychological well-being. High crime rates can also deter residents from pursuing healthy behaviors, such as exercising outdoors. Additionally, exposure to crime and violence has been shown to increase stress, which may exacerbate hypertension and other stress-related disorders and may contribute to obesity prevalence.[1] Exposure to chronic stress also contributes to the

increased prevalence of certain illnesses, such as upper respiratory illness, and asthma in neighborhoods with high levels of violence.[2]

Injury Deaths
Injury deaths is the number of deaths from intentional and unintentional injuries per 100,000 population. Deaths included are those with an underlying cause of injury (ICD-10 codes *U01-*U03, V01-Y36, Y85-Y87, Y89).

Reason for Ranking
Injuries are one of the leading causes of death; unintentional injuries were the 4th leading cause, and intentional injuries the 10th leading cause, of U.S. mortality in 2014.[1] The leading causes of death in 2014 among unintentional injuries, respectively, are: poisoning, motor vehicle traffic, and falls. Among intentional injuries, the leading causes of death in 2014, respectively, are: suicide firearm, suicide suffocation, and homicide firearm. Unintentional injuries are a substantial contributor to premature death. Among the following age groups, unintentional injuries were the leading cause of death in 2014: 1-4, 5-9, 10-14, 15-24, 25-34, 35-44.[2] Injuries account for 17% of all emergency department visits, and falls account for over 1/3 of those visits.[3]

Air Pollution-Particulate matter
Air pollution-particulate matter is the average daily density of fine particulate matter in micrograms per cubic meter (PM2.5) in a county. Fine particulate matter is defined as particles of air pollutants with an aerodynamic diameter less than 2.5 micrometers. These particles can be directly emitted from sources such as forest fires, or they can form when gases emitted from power plants, industries and automobiles react in the air.

Reason for Ranking
The relationship between elevated air pollution (especially fine particulate matter and ozone) and compromised health has been well documented.[1,2,3] Negative consequences of ambient air pollution include decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary effects.[1] Long-term exposure to fine particulate matter increases premature death risk among people age 65 and older, even when exposure is at levels below the National Ambient Air Quality Standards.[3]

Drinking Water Violations
Change in measure calculation in 2018: Drinking Water Violations is an indicator of the presence or absence of health-based drinking water violations in counties served by community water systems. Health-based violations include Maximum Contaminant Level, Maximum Residual Disinfectant Level and Treatment Technique violations. A "Yes" indicates that at least one community water system in the county received a violation during the specified time frame, while a "No" indicates that there were no health-based drinking water violations in any community water system in the county. Please note that the methods for calculating this measure changed in the 2016 Rankings.

Reason for Ranking
Recent studies estimate that contaminants in drinking water sicken 1.1 million people each year. Ensuring the safety of drinking water is important to prevent illness, birth defects, and death for those with compromised immune systems. A number of other health problems have been associated with contaminated water, including nausea, lung and skin irritation, cancer, kidney, liver, and nervous system damage.

Severe Housing Problems
Severe housing problems is the percentage of households with at least one or more of the following housing problems:

- housing unit lacks complete kitchen facilities;
- housing unit lacks complete plumbing facilities;
- household is severely overcrowded; or

- household is severely cost burdened.
- Severe overcrowding is defined as more than 1.5 persons per room. Severe cost burden is defined as monthly housing costs (including utilities) that exceed 50% of monthly income.

Reason for Ranking

Good health depends on having homes that are safe and free from physical hazards. When adequate housing protects individuals and families from harmful exposures and provides them with a sense of privacy, security, stability and control, it can make important contributions to health. In contrast, poor quality and inadequate housing contributes to health problems such as infectious and chronic diseases, injuries and poor childhood development.

Appendix C – Prioritization of Community's Health Needs

Community Health Needs Assessment
Valley City, North Dakota
Ranking of Concerns

The top four concerns for each of the nine topic areas, based on the community survey results, were listed on flipcharts. The numbers below indicate the total number of votes (dots) by the people in attendance at the second community meeting. The "Priorities" column lists the number of yellow/green/blue dots placed on the concerns indicating which areas are felt to be priorities. Each person was given four dots to place on the items they felt were priorities. The "Most Important" column lists the number of red dots placed on the flipcharts. After the first round of voting, the top three priorities were selected based on the highest number of votes. Each person was given one dot to place on the item they felt was the most important priority of the top five highest ranked priorities.

	Priorities	Most Important
COMMUNITY HEALTH		
• Not enough jobs with livable wages	2	0
• Attracting and retaining young families	4	**2**
• Not having affordable housing	1	0
• Not having enough childcare services	0	0
AVAILABILITY OF HEALTH SERVICES		
• Availability of mental health services	0	
• Availability of specialists	0	
• Availability of substance abuse/treatment services	7	**2**
• Availability of primary care providers (MD, DO, NP, PA, nurses)	0	0
DELIVERY OF HEALTH SERVICES		
• Extra hours for appointments, such as evenings and weekends	1	
• Ability to retain primary care providers (MD, DO, NP, PA, nurses) in the community	1	
• Cost of health insurance	0	
• Cost of health care services	0	
SAFETY/ENVIRONMENTAL HEALTH		
• Bullying/cyber-bullying	0	
• Racism, prejudice, hate, discrimination	0	
• Recycling	0	
• Physical violence, domestic violence, sexual abuse	3	
FORMS OF VIOLENCE		
• Child abuse/neglect		
• Emotional abuse (isolation, verbal threats, economic abuse)		
• Domestic/intimate partner violence		
• Video game/media violence		
MENTAL HEALTH AND SUBSTANCE ABUSE		
• Drug use and abuse	7	**7**
• Alcohol use and abuse	2	0
• Depression/anxiety	4	**2**
• Suicide	0	0
AGING POPULATION		
• Cost of long-term/nursing home care	0	
• Availability of resources for family and friends caring for elders	0	
• Depression/anxiety	0	
• Ability to meet needs of older population	0	
ADULT POPULATION		
• Alcohol use and abuse	2	
• Drug use and abuse	1	
• Depression/Anxiety	1	
• Obesity/Overweight	0	
YOUTH POPULATION		
• Drug use and abuse	0	
• Alcohol use and abuse	2	
• Depression/anxiety		
• Suicide	1	
	0	

Appendix D – Survey "Other" Responses

Community Assets: Please tell us about your community by choosing up to three options you most agree with in each category below.

1. Considering the PEOPLE in your community, the best things are: "Other" responses:

- Feel secure
- I don't feel like any of these are particularly true. I moved here from out of state and people treat me differently.
- It's visually pretty
- Walking paths

2. Considering the SERVICES AND RESOURCES in your community, the best things are: "Other" responses:

- Gas pumps

3. Considering the QUALITY OF LIFE in your community, the best things are: "Other" responses:

- Close to Fargo

4. Considering the ACTIVITIES in your community, the best things are: "Other" responses:

- Close to Valley City or Jamestown for activities
- Fargo-Moorhead Symphony not hard to get to
- Intergenerational affordable activities
- Parks
- There is absolutely nothing in this town unless you like to go to the bar or church activities, or sports.

Community Concerns: Please tell us about your community by choosing up to three options you most agree with in each category.

5. Considering the COMMUNITY /ENVIRONMENTAL HEALTH in your community, concerns are: "Other" responses:

- Addiction issues
- Affordable housing options for seniors, disabled
- Drivers that are WAY too slow
- Drugs
- Drug problem
- Hungry children
- Inflation prices
- Lack of outdoor recreation opportunities
- Mental health services
- Need to institute a recycling program
- Not enough medical options for seniors
- Nothing for teens to do!
- Rampant drug use

- Substance abuse
- Tolerance of tobacco, alcohol, and drug abuse
- Too expensive to shop locally for groceries and basic needs•

6. Considering the AVAILABILITY/DELIVERY OF HEALTH SERVICES in your community, concerns are: "Other" responses:

- Greater support for public health by community leaders/commissions
- No confidence in our hospital ER – I will never go there again
- No specific pediatric care available
- Services after 5-6 pm

7. Considering the YOUTH POPULATION in your community, concerns are: "Other" responses:

- Electronics use and abuse
- Living in households where drugs are prevalent
- Too many activities for children and youth
- Vaping, e-cigs, etc
- Vaping/juuling

8. Considering the ADULT POPULATION in your community, concerns are: "Other" responses:

- Being overall unwell
- Living in poverty
- Mental health

9. Considering the SENIOR POPULATION in your community, concerns are: "Other" responses

- Cost of insurance
- Dementia
- No basic care facilities

10. Considering YOUR FAMILY AND/OR HOUSEHOLD, which of the following has impacted individuals living with or close to you? "Other: responses:

- Alcoholism and addiction are diseases and need to be recognized as such
- Disabilities services
- Increasing property taxes
- Low wages
- Physical and emotional abuse, child and adult
- Special needs resources for higher education

12. If you identified ANY OF THE ABOVE FACTORS as having an impact on your family/household, which services would you utilize to help manage or treat these issues? "Other" responses:

- APOC
- Alanon (for people affected by others drinking)
- NA
- Family counseling
- None
- Open Door Center

13. What single issue do you feel is the biggest challenge facing your community?

- Affordable healthcare
- Affordable resources
- Alcohol abuse (3)
- Alcohol/drug misuse
- An older generation running a community that is full of young individuals that are leaving because the older generation doesn't want to give up their authority and move on and let the younger generation take over.
- Attracting and keeping young families
- Being in a small town 20 min from a larger city
- Bullying- child and adult
- Cost of goods and services. It's cheaper to pay for gas back and forth to Jamestown or Fargo on top of buying things than it is to shop locally for pretty much ANYTHING. I rarely shop locally anymore except for things that are absolute necessities. Also, this town is known as a "retirement town" and it's obvious. This town caters too much to the seniors and doesn't bother trying to attract younger families.
- Cost of healthcare
- Cost of services/lack of insurance for low income
- Declining population.
- Doctors and retaining doctors
- Drug abuse
- Drug and alcohol problem
- Drug epidemic - meth, opioids
- Drug use
- Drug use and abuse of adolescents and adult all together.
- Drugs
- Drugs especially meth. It seems like nothing is done. There are so many people knowingly using and nothing is happening to stop it.
- Employers can not find qualified workers.
- Family and individual counseling for mental health concerns.
- Generation gaps involving community innovations
- Good places to work
- Healthcare affordability, treatment and prescriptions for young adults and seniors in my family is hard to get within the budget of income they have.
- High paying jobs to keep people here
- Honesty/integrity of people as a whole. People would lie, cheat or steal if it benefited them. Drugs and crime
- Housing
- I think mental health is one of the biggest issues. I think a lot of the other problems stem from mental health; ie., alcohol, drugs, suicide, depression, domestic violence, obesity, etc. I think that these all have a mental health component that needs to be addressed. People need to learn healthy life strategies so that they don't have to numb their feelings through these other means.
- Illegal drug use
- Inclusion, discrimination, lack of acceptance of people who are different than the "rest" of the people here.
- Inclusiveness
- Lack of commitment to healthy life style
- Lack of community acknowledgement of 'bad' things: drug addiction, violence, abuse, poverty, lack of action & accountability among public servant/service providers
- Lack of creative or new activities/social outlets. I feel this is partly why young adults, adults without children, or people from a wider range of cultural backgrounds move elsewhere - even if they still work

in town here

- Lack of good paying jobs
- Lack of opportunities for young professionals and high cost of living as compared to typical wages
- Lack of Peer Support and an understanding of what Peer Support is.
- Lack of quality higher paying jobs
- Lack of urgency for major issues
- Law enforcement picking on non-criminals, while criminals continue to endanger the general public.
- Living wages to keep people from moving away.
- Low wages - high rent or unable to buy a home due to lack of adequate income
- Maintaining balance in demographics. If we continue on the same trajectory of too many people working multiple minimum wage jobs, and not attracting higher paid jobs and workers, we will be out of balance demographically, and we would be more likely to see higher crime rates, higher poverty rates, more substance abuse, more need for social services. If we are far enough out of balance, we will lose the ability to attract higher paid jobs and workers, and property values, businesses, community safety, schools, etc. will all suffer.
- Mental health
- Mental health issues are often the underlying cause of many other problems that people face including children. Addiction, abuse, neglect, unemployment, physical health problems, relationship struggles, etc. I could go on and on. There is still such a stigma about receiving treatment for mental health problems. It is a step in the right direction that we now have counseling services right in Valley City but it is my opinion that there is not enough.
- Mental health providers, and addiction services
- Mental health services
- Mental health... juvenile
- Meth use
- Narcotic and substance abuse
- Not enough counseling/medical professionals who counsel/treat adults with depression/anxiety (and corresponding medications) - in particular for professionals within the community who would like to see someone whom they do not know (i.e., where can a professional who has depression/anxiety and works within the community - i.e. is well known within community - seek assistance where they're not in a position of having to such seek assistance from someone they know or are familiar with from work/community/professional events?)
- Obesity as the overarching cause of healthcare needs, anxiety, depression, loss of work time, anger, etc....
- Opioid overuse
- Our teens are not doing well. Drugs, alcohol, smoking, dropouts, and pregnancy! There is nothing for them to do...
- Overcoming hatred. Too much hate because someone is different or they have different ideologies.
- Personally not experienced, but word around town is drugs.
- Police do no policing
- Poor quality hospital, lack of doctors, clinics and hospital not working together, mental health
- Recovery and addiction
- Retaining quality health providers, specifically physicians
- Substance abuse
- Substance use/misuse
- Suicide and transportation issues
- The cost of living is high.
- The fact that there seems to be a "need" to serve alcohol at every event from family birthday celebrations, to graduations, to family-oriented community events. And now they want to legalize recreational marijuana. Can't we deal with anything anymore without an emotional crutch to get us through? What are we saying to our youngsters ... adults can't deal with life anymore? Maybe we need to look at slowing our lives down a bit and enjoying our lives more. With cell phones, we never really "disconnect" anymore. Our "ON" switch never gets shut off!

- The good ole boys club and a few dictate to the many
- Too much alcohol use in middle-aged adults and college students.
- Valley City is a clique. It seems like locals do not like anyone new coming to town. Just listen to local elected officials boast about how they've "lived here all their lives" or anyone moves here and takes an important position. "They aren't from here, they shouldn't have that job." It's not surprise this town is slowly losing population.
- Violence in the community.
- Youth & young adult activities & education

Delivery of Healthcare

14. What PREVENTS community residents from receiving healthcare? "Other" responses:

- Cost
- Inflexibility of work hours
- Need dermatologist
- Not enough alternative providers
- Not taking certain insurances
- We no longer use services at Mercy Hospital due to their poor billing system.

15. Which of the following services have you UTILIZED AT ANOTHER HEALTHCARE PROVIDER outside of Valley City in the past year? "Other" responses:

- Psychological services:
  - o ADHD, depression
  - o Counseling
  - o Counseling services
  - o Counseling, psychiatry
  - o Depression
  - o EOP in Moorhead because there are limited EOP providers in Valley City
  - o Mental health
  - o Mental health services and hospitalization for youth
  - o Psychiatry
  - o Sanford Child Psychiatry
- Other:
  - o Annual check-up
  - o Chiropractor, dentist, alternative medicine provider
  - o Kidney specialist, urology
  - o MRI
  - o Pediatrician
  - o Pediatrics
  - o Rheumatology, endocrinology, GI specialist

18. Your local Public Health unit will be partnering with Family Health Care out of Fargo, ND to offer expanded services locally to individuals in Barnes County most in need who are underinsured/uninsured. Considering expanded services to be offered at City-County Health, which do you feel would help our community the most? "Other" responses:

- B-12 injections
- Counseling
- None
- Pediatrics
- Reproductive health
- Specialist for counseling with medical diagnosis/disorder

19. Where do you turn for trusted health information? "Other" responses:

- Family member in the medical field
- Family members who are medical professionals
- Pharmacist Email doctor
- Pharmacists
- Science-based publications

21. What specific healthcare services, if any, do you think should be added locally?

- Addiction treatment and counseling services
- Affordable dental
- Child psychology
- Counseling services for adults that accept Medicaid.
- Dental care for people who are unable to afford the dentist...on medicaid
- Dental services for those on MA or who aren't insured; would like to see obstetric services offered again in Valley City
- Drug rehab/halfway house/narcotics anonymous
- Expanded mental health services
- Glucose and cholesterol screens including ECG services.
- I would just like access to quality doctors. I have had doctors give my children the wrong ear drops that could have caused serious problems. I have been unimpressed by their lack of professionalism and care. I haven't visited with all the providers, but the ones I have encountered have not impressed me.
- Indian health service
- Main deficit is still good mental health access
- Mental health service, orthodontics, or dermatology
- Mental health services
- More doctors.
- More mental health services
- More mental health Valley City needs something full time

33. Overall, please share concerns and suggestions to improve the delivery of local healthcare.

- Be more like Fargo, ND
- Clinics need extended hours into the evenings and weekends. After 6pm only option is ER or Jamestown/Fargo. Nothing local
- Confidentiality at hospital and clinic! Quality of care from doctors/nurses at clinic and hospital, hospital focused and supportive of community
- Currently, in town does not provide pregnancy services. Also, disorders like anxiety, local doctor just prescribes a medication. Non local doctor/specialist, digs deeper to find the correct answer to mental issue before prescribing medication. Finds best counseling and medication to help control break outs.
- Family Physicians do not stay over a period of time so it is very hard to list a primary physician when asked.

- Funds are needed to provide mental health and abuse counseling for children and teens; to support the ACCESS FOR ALL that has been created by the VCPS Education Foundation.
- Healthcare will improve in Valley City only if providers are brought in who believe in evidencebased practices instead of the "old ways". There also needs to be access to services that accept other forms of health insurance.
- Hospital should be focused on community needs, hire and retain more primary doctors, hospital should expand needed services in community such as PT, hospital should support more locally instead of hiring many of their services out of state and even to other countries, hospital should work closer and be more supportive of the physicians and clinics in our community
- I do not trust local providers in ER. Concern for confidentiality
- I wish there were prices for health care so I knew what to expect. I have health insurance with a $7000 deductible so I don't go in unless I am gravely ill and I wish I could get a skin cancer screening from a dermatologist (but I don't know how many hundreds of dollars that would cost).
- I would appreciate having competent providers that provide quality care.
- Keeping simple procedures such as colonoscopies and cataract surgery available locallyinstead of having to drive to Fargo for every procedure. I trust our local providers, or the roviders from outside VC that come here from other sites.
- Mental health services and addiction counseling services are needed
- More communication and attention to detail. We have had several bad experiences with our local ER and clinic, so when possible, we choose to go to Fargo. Inaccurate diagnoses, a broken bone on an infant that was missed on the X-ray but found in Fargo and there was no communication to us, so it resulted in a more serious break since it was not treated appropriately. These kinds of things led to a lot of misery and have caused me to only utilize local services for very basic things like well child checkups and immunizations. It's unfortunate, but when it comes to healthcare, trust in the provider is crucial.
- More doctors, hospital that focuses on community needs, walk-in clinic
- One day/week a psychiatrist at city county health. A competent and qualified one.
- Poor quality hospital.
- Retain quality medical personnel. Keep Mercy Hospital open. Keep the emergency room open.
- Some of the best activities in health care come from grants, which may run out and not be continued. We should have sufficient appreciation of the value of the services to be willing to pay for them through permanent funding sources, i.e. taxes
- The clinics need to work better between each other. not talking negative about the other clinic and about the Fargo doctors
- There's a need for more local availability of counseling services of all levels
- Valley City is pretty on the outside, but has an ugly underbelly. It is not open to change and seems too content with the "good enough" mentality. My job has allowed me to witness the toxic environment of the Care Center, the laziness of law enforcement, and the serious issues we have with drug and alcohol abuse. Valley City has many great qualities, but needs competition and accountability to get the most out of people in power.
- "Valley City/Barnes County needs more help for the ALREADY affected by addiction/alcoholism. Almost ALL of the public funding/Grants are prevention based, City-County Health Unit has little, maybe more accurately nothing to do with recovery. WHY? WHY?
- Walk-in and weekend care
- We haven't had a primary care physician since Dr. Braunagel left several years ago. It's hard to find a doctor that will work with ADHD visits/prescriptions, depression, OBGYN, etc. Clinic hours are also HORRIBLE. It's very difficult to get time away from work to get to the clinic when needed. It would be nice to have evening openings and a Saturday opening.
- We need to provide services for people who are low income and/or don't have insurance.