Community Health Needs Assessment 2020

Jacobson Memorial Hospital Care Center Service Area, North Dakota

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Executive Summary

To help inform future decisions and strategic planning, Jacobson Memorial Hospital Care Center (JMHCC) and Custer Health conducted a community health needs assessment (CHNA) in 2020, the previous CHNA having been conducted in 2017. 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. Seventy-nine JMHCC service area residents completed the survey. Additional information was collected through six key informant interviews with community members. The input from the residents, who primarily reside in Grant 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.

With regard to demographics, Grant County's population from 2010 to 2019 decreased by 5%. The average number of residents younger than 18 (20.6%) for Grant County comes in 2.9 percentage points lower than the North Dakota average (23.5%). The percentage of residents ages 65 and older is almost 15% higher for Grant County (29.9%) than the North Dakota average (15.3%), and the rate of education is slightly lower for Grant County (91.2%) than the North Dakota average (92.5%). The median household income in Grant County ($50,962) is much lower than the state average for North Dakota ($63,473).

Data compiled by County Health Rankings show that Grant County is doing better than North Dakota in health outcomes/factors for 13 categories; Grant County is doing better than the national top 10% of counties in health outcomes/factors for 7 categories.

Grant County, according to County Health Rankings data, is performing poorly relative to the rest of the state in 14 outcome/factor categories; it is performing worse than the national top 10% in 20 categories.

Of 82 potential community and health needs set forth in the survey, the 79 JMHCC service area residents who completed the survey indicated the following 10 needs as the most important:

- Attracting and retaining young families
- Not enough jobs with livable wages, not enough to live on
- Alcohol use and abuse – youth and adult
- Drug use and abuse – youth and adult
- Cost of long-term/nursing home care
- Availability of resources to help the elderly stay in their homes
- Ability to retain primary care providers (MD, DO, NP, PA) and nurses in the community
- Smoking and tobacco use, exposure to second-hand smoke, or vaping (juuling)
- Depression/anxiety – youth and adult
- Not enough places for exercise and wellness activities

The survey also revealed the biggest barriers to receiving healthcare (as perceived by community members). They included not able to see the same provider over time (N=19), no insurance or limited insurance (17), and concerns about confidentiality (N=12).

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

- Safe place to live, little/no crime
- People are friendly, helpful, and supportive
- Healthcare
- Informal, simple, laidback lifestyle
- Family-friendly, good place to raise kids
- Quality school system

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:

- Depression and anxiety for all ages
- Youth smoking and tobacco use, exposure to second-hand smoke, vaping/juuling
- Attracting and retaining young families
- Availability of mental health services
- Availability of resources to help the elderly stay in their homes

Overview and Community Resources

With assistance from the CRH at the UNDSMHS, the JMHCC completed a CHNA of the JMHCC service area, which includes Grant County in its entirety, plus portions of Morton, Stark, Hettinger, Adams, and Sioux counties. Many community members and stakeholders worked together on the assessment.

JMHCC is located in a frontier area and is licensed as a Critical Access Hospital with three provider-based rural health clinics. One clinic is attached to the Elgin hospital, one is located 32 miles to the north in Glen Ullin, and one is located 57 miles to the northwest in Richardton. Elgin is located in southwestern North Dakota, just over an hour from Bismarck and Dickinson.

Along with the hospital, the economy is based on agriculture, agri-businesses, service industries, and retail trade. Grant County consists of 1,672 square miles of land, with approximately 1,062,000 acres. The county has 47 townships, of which 10 are organized. The current estimated population of Grant County is 2,377. The three largest cities are Elgin, Carson, and New Leipzig. Carson is the county seat.

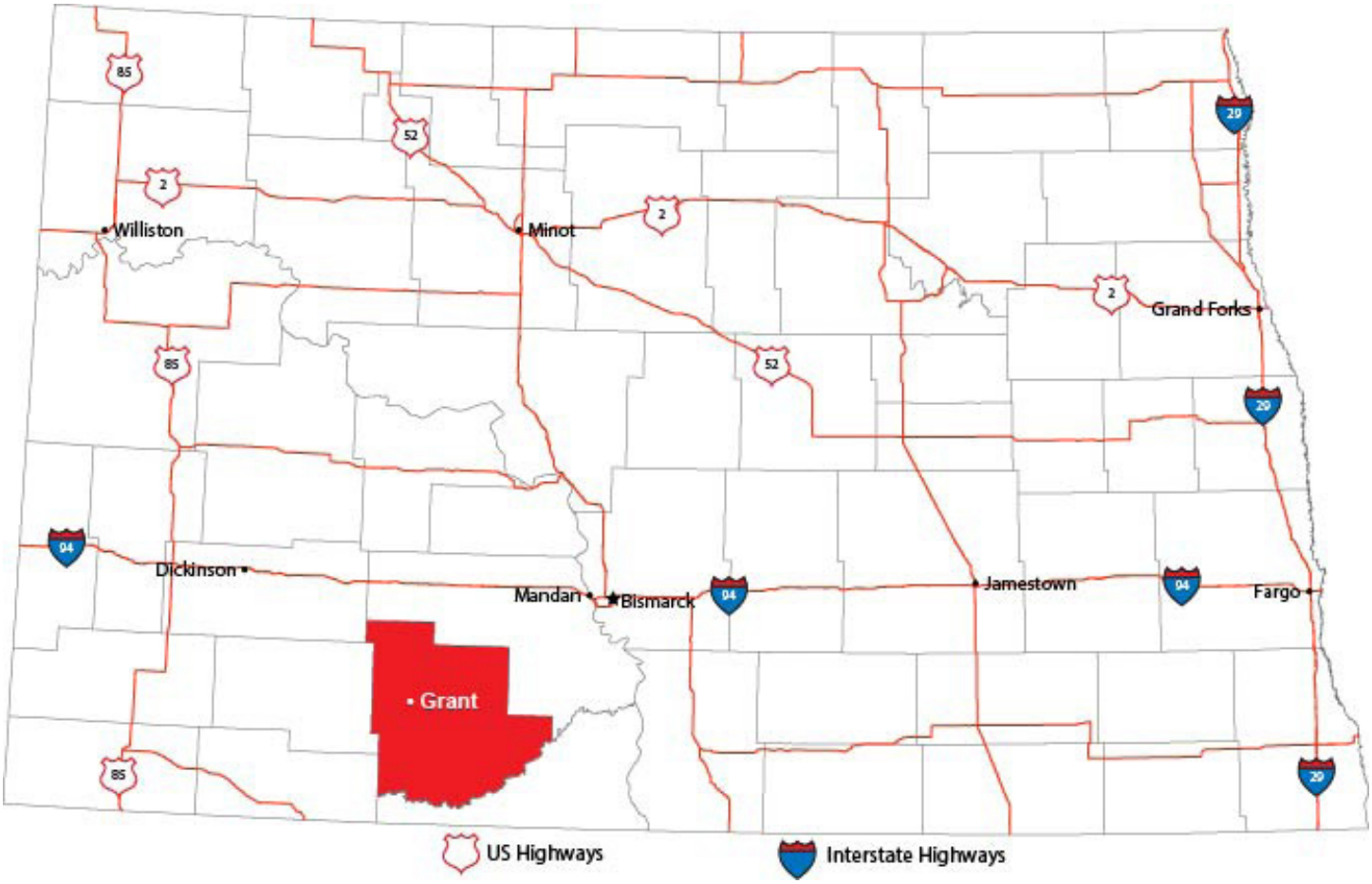
Other healthcare facilities and services in Grant County include: one dentist, a vision clinic, a basic care facility, a pharmacy, and a visiting chiropractor, along with services provided by Custer Health and Grant County Social Services.

Elgin has a number of community assets and resources that can be mobilized to address population health improvement. In terms of physical assets and features, the community includes an indoor swimming pool, a nine-hole golf course, softball diamonds, a city park, a high school weight area, and a football field. About 15 miles north of Elgin, Lake Tschida includes a public swimming beach, boating, camping, and fishing. Sheep Creek Dam south of Elgin offers camping and fishing opportunities.

The Elgin-New Leipzig Public School District offers a comprehensive program for students K-12.

Grant County has public transportation through West River Transit and JMHCC will soon offer transportation for clinic patient visits. Elgin also has a grocery store with delivery services and a pharmacy. Two licensed day cares serve the community. A senior meals program and Meals on Wheels are available.

Figure 1: Grant County



Jacobson Memorial Hospital Care Center

Opened in 1977, JMHCC is a 25-bed Critical Access Hospital. Located in Elgin, JMHCC includes a 24/7 emergency room and three affiliated clinics: the Elgin Community Clinic, the Glen Ullin Family Medical Clinic, and the Richardton Clinic.

With 89 employees, JMHCC is the largest employer and one of the most important assets in Grant County. As a hospital and designated level V trauma center, the hospital provides comprehensive care for a wide range of medical and emergency situations. JMHCC provides comprehensive medical care with physician and advanced practice medical providers and consulting/visiting medical providers.

A 2009 economic impact study estimated that JMHCC had a total economic impact on Grant County of slightly more than $3.5 million.

The mission of JMHCC is: ""Advance the health of our communities with respect and accountability by providing peace of mind close to home."

The vision of JMHCC is: "Strive to be the community choice by providing excellent health care through continuous improvement."

Additionally, JMHCC was named as a 2020 Top 100 Critical Access Hospital by The Chartis Center for Rural Health.

Services offered locally by JMHCC include:

General and Acute Services

- Acne treatment
- Acute care
- Allergy, flu, and pneumonia shots
- Blood pressure checks
- Childhood vaccines
- Clinics
- Diabetes care
- Emergency room
- Family medicine and primary care
- Hospital (acute care)
- Mole/wart/skin lesion removal
- Nutrition counseling
- Observation
- Outpatient services
- Pain medication addiction treatment
- Pharmacy
- Prenatal care up to 32 weeks
- Preventive visits
- Physicals: annuals, D.O.T., sports, and insurance
- Pulmonary function tests
- Restorative nursing
- Smoking cessation
- Skilled nursing services
- Social work services
- Sports medicine
- Swing bed services
- Visiting nurse
- Wellness exams

Screening/Therapy Services

- Cardiac rehab
- Chronic disease management
- Holter monitoring
- Laboratory services
- Lower extremity circulatory assessment
- Occupational physicals
- Occupational therapy
- Pediatric services
- Physical therapy
- Psychiatry and psychotherapy services (visiting therapist)
- Social services
- Speech therapy

Radiology Services

- Bone density (mobile unit)
- CT scans (in-house and mobile units)
- Digital mammography (mobile unit)
- Echocardiograms
- EKG
- General x-ray
- MRI (mobile unit)
- Teleradiology
- Ultrasound (mobile unit)

Laboratory Services

- Hematology
- Blood types
- Cardiac profile
- Clot times
- Chemistry
- Serology
- Urinalysis
- Urine drug testing

Services offered by other providers/organizations

- Ambulance
- Chiropractic services
- Dental services
- Drug takeback program at pharmacy
- Durable medical equipment
- Massage therapy
- Optometric/vision services
- Organ procurement
- Vision care

Custer Health

Custer Health is a five-county multi-district health unit providing services to people of Mercer, Oliver, Grant, Morton, and Sioux counties. It provides public health services that include environmental health; nursing services; the Women, Infants, and Children (WIC) Program, health screenings, and education services. Each of these programs provides a wide variety of services in order to accomplish the mission of public health, which is to assure that North Dakota is a healthy place to live and each person has an equal opportunity to enjoy good health. To accomplish this mission, Custer Health is committed to the promotion of healthy lifestyles, protection and enhancement of the environment, and provision of quality health care services for the people of North Dakota.

Specific services that Custer Health provides are:

- Blood pressure checks
- Breastfeeding resources
- Car seat program
- Child health (well-baby checks)
- CPR and First Aid
- Diabetes screening
- Emergency preparedness services (work with community partners as part of local emergency response team)
- Environmental health services (water, sewer, health hazard abatement)
- Health maintenance for seniors (foot care, blood pressure)
- Health Tracks (child health screening) done along with Social Services
- Hepatitis C/HIV/STI testing
- Home health (in-home nursing care)
- Immunizations (including flu shots) for all ages
- Mandan Good Neighbor Project
- Member of Child Protection Team and County Interagency Team
- Newborn home visits
- Nurse Family Partnership
- Nutrition education
- Preschool screening
- School health – vision, hearing, health education, and resource to schools
- Substance abuse
- Tobacco prevention and control
- Tuberculosis testing and management
- WIC Program
- Youth education programs (first aid, bike safety, bicycle helmet safety education)

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 action 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 Grant County. In addition to Elgin, located in the service area are the communities of Carson and New Leipzig.

The CRH, in partnership with JMHCC and Custer Health, facilitated the CHNA process. 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 Elgin. 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 videoconference and/or via the eToolkit with the CHNA liaison. The community group (described in more detail as follows) 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. Ten people, representing a cross section demographically, attended the focus group meeting. The meeting was highly interactive with good participation. JMHCC staff and board members were in attendance as well but largely played a role of listening and learning.

Figure 2: Steering Committee

Theo Stoller	CEO, JMHCC
Leslie Niederman	Board President, JMHCC
Bridget Winkler	Public health nurse, Custer Health
Marcy Haase	Board of Directors, JMHCC
Luann Dart	CHNA liaison, JMHCC

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.

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 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 is one of the nation's most experienced organizations 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, as follows, are the methods undertaken to gather data for this assessment by convening a community group, conducting key informant interviews, soliciting feedback about health needs via a survey, and researching secondary data.

Community Group

A community group consisting of 10 community members was convened in-person and first met on March 2, 2020. During this first community group meeting, group members were introduced to the needs assessment process, reviewed basic demographic information about the community, 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 and key informants (14 people total) were then emailed a pre-recorded presentation 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 Grant County. A survey was included for participants to complete after viewing the presentation. In that survey they selected their four highest health concerns for the community. The following week the group was sent a final survey with one question that asked them to identify their highest priority for the community's health needs.

Members of the community group represented the broad interests of the community served by JMHCC and Custer Health. They included representatives of the health community, business community, economic development, education, and the faith community. Not all members of the group were involved in both meetings.

Interviews

One-on-one interviews with six key informants were conducted in-person in Elgin on March 2, 2020. One additional key informant interview was conducted by phone in March 2020. 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. Included among the informants were public health professionals with special knowledge in public health acquired through 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 health care 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, and a full listing of direct responses provided for the questions that included "Other" as an option are included in Appendix D.

The community member survey was distributed to various residents of Grant County, whom are all included in the JMHCC service area. The survey tool was designed to:

- Learn of the good things 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.

Specifically, 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 led to published articles in the Grant County News in Grant County, including in the communities of Elgin, Carson, and New Leipzig. Additionally, information was published on JMHCC's website and Facebook page.

Approximately 150 community member paper surveys were available for distribution in Grant County. The surveys were distributed by JMHCC, Custer Health, and individuals.

To help ensure anonymity, included with each survey was a postage-paid return envelope to the Center for Rural Health. In addition, to help make the survey as widely available as possible, residents also could request a survey by calling JMHCC or Custer Health. The survey period ran from March 1, 2020, to March 31, 2020. Twenty-three completed paper surveys were returned.

Area residents also were given the option of completing an online version of the survey, which was publicized in the community newspaper and on the website and Facebook page of JMHCC. Fifty-six online surveys were completed. In total, counting both paper and online surveys, 79 community member surveys were completed, equating to a 12.5% response rate for the population of Elgin. This response rate is just below par (13%) for this type of unsolicited survey methodology and indicates an engaged community. The response rate for the county population was 3.5%, reflecting a less engaged service area.

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). and Youth Risk Behavior Surveillance System (YRBSS) data, which is published by the Centers for Disease Control and Prevention (https://www.cdc.gov/healthyyouth/data/yrbs/index.htm).

Social Determinants of Health

According to the World Health Organization, social determinants of health are, *"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. "*

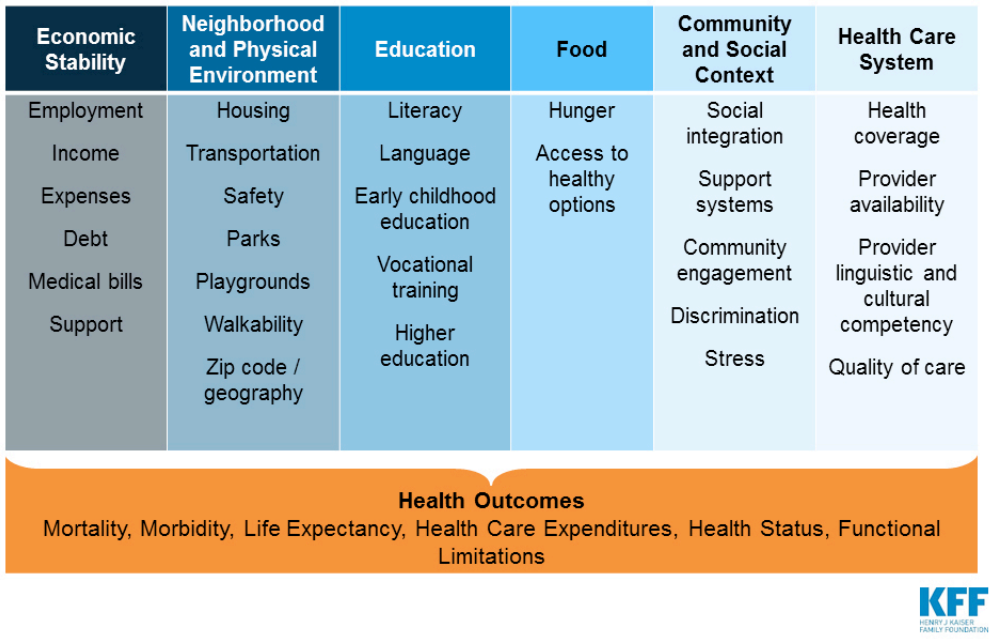
Income-level, educational attainment, race/ethnicity, and health literacy all impact the ability of people to access health services. Basic needs such as clean air and water and safe and affordable housing are all essential to staying healthy and are also impacted by the social factors listed previously. 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 (approximately 20%) 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 (80%) in impacting health outcomes. 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 Grant County.

	Grant County	North Dakota
Population (2019)	2,274	762,062
Population change (2010-2019)	-5.0%	13.3%
People per square mile (2010)	1.4	9.7
Persons 65 years or older (2019)	29.9%	15.3%
Persons under 18 years (2019)	20.6%	23.5%
Median age (2018 est.)	51.9	35.4
White persons (2019)	95.5%	87.0%
Limited English speaking (2018)	0.5%	1.3%
High school graduates (2018)	91.2%	92.5%
Bachelor's degree or higher (2018)	17.4%	29.5%
Live below poverty line (2019)	14.5%	10.7%
Persons without health insurance, under age 65 years (2019)	15.3%	8.4%

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, Grant County has seen a decrease in population since 2010. The U.S. Census Bureau estimates show that Grant County's population decreased from 2,385 (2010) to 2,274 (2019).

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, Grant 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 2019 County Health Rankings are pulled from more than 20 data sources and then are 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. Following is a breakdown of the variables that influence a county's rank.

A model of the 2019 County Health Rankings – a flow chart of how a county's rank is determined – may be 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 Grant County. 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. In other words, 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 Custer Health and JMHCC or of any particular medical facility.

For most of the measures included in the rankings, the County Health Rankings' authors have calculated the "Top U.S. Performers" for 2019. 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).

Grant County rankings within the state are included in the summary following. For example, Grant County ranks 27th out of 48 ranked counties in North Dakota on health outcomes and 35th on health factors. The measures marked with a with a bullet point (•) are those where a county is not measuring up to the state rate/percentage; a square (■) indicates that the county is not meeting the U.S. Top 10% rate on that measure. Measures that are not marked with a colored checkmark 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 Grant County 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. Grant County is doing well in many areas when it comes to the U.S. Top 10% ratings. The only outcome where Grant County does not meet the U.S. Top 10% ratings is the percentage with poor or fair health.

On health factors, Grant County performs below the North Dakota average for counties in several areas as well.

Data compiled by County Health Rankings show Grant County is doing better than or equal to North Dakota in health outcomes and factors for the following indicators:

- poor or fair health
- poor physical health days
- poor mental health days
- low birth weight
- adult smoking
- adult obesity
- excessive drinking
- alcohol-impaired driving deaths
- number of mental health providers
- unemployment
- children in single parent households
- violent crime
- air pollution
- drinking water violations

Outcomes and factors in which Grant County is performing poorly relative to the rest of the state include:

- food environment index
- physical inactivity
- access to exercise opportunities
- uninsured
- number of dentists
- preventable hospital stays
- mammography screening (% of Medicare enrollees ages 64-74 receiving screening)
- flu vaccinations (% of fee-for-service Medicare enrollees receiving vaccination)
- children in poverty
- income inequality
- social associations
- injury deaths
- severe housing problems

● = Not meeting North Dakota average

■ = Not meeting U.S. Top 10% Performers

+ = Meeting or exceeding U.S. Top 10% Performers

Blank values reflect unreliable or missing data

TABLE 2: SELECTED MEASURES FROM *COUNTY HEALTH RANKINGS* 2019 – GRANT COUNTY

	Grant County	U.S. Top 10%	North Dakota
Ranking: Outcomes	**27th**		**(of 48)**
Premature death		5,500	6,600
Poor or fair health	14% ■	12%	15%
Poor physical health days (in past 30 days)	2.9 +	3.1	3.3
Poor mental health days (in past 30 days)	3.2 +	3.4	3.5
Low birth weight	6% +	6%	6%
Ranking: Factors	**35th**		**(of 48)**
Health Behaviors			
Adult smoking	15% ■	14%	18%
Adult obesity	28% ■	26%	33%
Food environment index (10=best)	8.1 ■●	8.6	9.0
Physical inactivity	37% ■●	20%	24%
Access to exercise opportunities	32% ■●	91%	74%
Excessive drinking	19% ■	13%	24%
Alcohol-impaired driving deaths	33% ■	11%	43%
Sexually transmitted infections		161.4	433.9
Teen birth rate		13	21
Clinical Care			
Uninsured	18% ■●	6%	9%
Primary care physicians		1,030:1	1,300:1
Dentists	2,370:1 ■●	1,240:1	1,540:1
Mental health providers	1,190:1 ■●	290:1	530:1
Preventable hospital stays	5,520 ■●	2,761	4,551
Mammography screening (% of Medicare enrollees ages 65-74 receiving screening)	40% ■●	50%	52%
Flu vaccinations (% of fee-for-service Medicare enrollees receiving vaccination)	26% ■●	53%	49%
Social and Economic Factors			
Unemployment	2.6% +	2.6%	2.6%
Children in poverty	21% ■●	11%	11%
Income inequality	5.5 ■●	3.7	4.4
Children in single-parent households	6% +	20%	27%
Social associations	12.6 ■●	18.4	16.2
Violent crime	85 ■	63	258
Injury deaths	84 ■●	58	70
Physical Environment			
Air pollution – particulate matter	4.6 +	6.1	5.4
Drinking water violations	No		
Severe housing problems	13% ■●	9%	11%

Source: http://www.countyhealthrankings.org/app/north-dakota/2019/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 2017-18. More information about the survey may be 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), 2017/2018

Health Status	North Dakota	National
Children born premature (3 or more weeks early)	9.9%	11.6%
Children 10-17 overweight or obese	27.1%	30.8%
Children 0-5 who were ever breastfed	82.2%	80.3%
Children 6-17 who missed 11 or more days of school	2.8%	4.0%
Healthcare		
Children currently insured	93.9%	93.6%
Children who spent less than 10 minutes with the provider at a preventive medical visit	17.3%	19.0%
Children (1-17 years) who had preventive dental visit in past year	75.7%	79.9%
Children (3-17 years) received mental health care	12.4%	9.6%
Children (3-17 years) with problems requiring treatment did not receive mental health care	0.8%	2.4%
Young children (9-35 mos.) receiving standardized screening for developmental problems	36.7%	33.5%
Family Life		
Children whose families eat meals together 4 or more times per week	**73.3%**	73.3%
Children who live in households where someone smokes	15.3%	14.9%
Neighborhood		
Children who live in neighborhood with a parks, recreation centers, sidewalks, and a library	36.2%	39.0%
Children living in neighborhoods with litter/garbage on the streets, poorly kept or rundown housing, and vandalism	1.4%	3.9%
Children living in neighborhood that's usually or always safe	98.1%	95.3%

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:

- Preventive dental visits in past year;
- Children who live in a neighborhood with parks, recreation centers, sidewalks, and a library; 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 Grant County is performing more poorly than the North Dakota average on all of the examined measures except the percentage of the population who are Supplemental Nutrition Assistance Program (SNAP) recipients and the four-year high school graduation rate. The most marked difference was on the measure of uninsured children below 200% of poverty (over 20% higher rate in Grant County).

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

	Grant County	North Dakota
Uninsured children (% of population age 0-18), 2017	23.7%	7.5%
Uninsured children below 200% of poverty (% of population), 2017	64.7%	43.6%
Medicaid recipient (% of population age 0-20), 2019	34.5%	26.6%
Children enrolled in Healthy Steps (% of population age 0-18), 2019	1.8%	1.6%
Supplemental Nutrition Assistance Program (SNAP) recipients (% of population age 0-18), 2019	13.3%	16.9%
Licensed childcare capacity (% of population age 0-13), 2020	28.4%	39.9%
4-Year High School Cohort Graduation Rate, 2018	100%	88.0%

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

Another means for obtaining data on the youth population is through the Youth Risk Behavior Survey (YRBS). The YRBS was developed in 1990 by the Centers for Disease Control and Prevention (CDC) to monitor priority health risk behaviors that contribute markedly to the leading causes of death, disability, and social problems among youth and adults in the U.S. The YRBS was designed to monitor trends and compare state health risk behaviors to national health risk behaviors and was intended for use to plan, evaluate, and improve school and community programs. North Dakota began participating in the YRBS survey in 1995. Students in grades, 7-8 and 9-12 are surveyed in the spring of odd years. The survey is voluntary and anonymous.

North Dakota has two survey groups, selected and voluntary. The selected school survey population is chosen using a scientific sampling procedure that ensures the results can be generalized to the state's entire student population. The schools that are part of the voluntary sample, selected without scientific sampling procedures, will only be able to obtain information on the risk behavior percentages for their school and not in comparison to all the schools.

Table 5 depicts some of the YRBS data that has been collected in 2013, 2015, and 2017. At this time, the North Dakota-specific data for 2017 is not available, so data for 2013 and 2015 are shown for North Dakota. They are further broken down by rural and urban percentages. The trend column shows a "=" for statistically insignificant change (no change), "↑" for an increased trend in the data changes from 2013 to 2015, and "↓" for a decreased trend in the data changes from 2013 to 2015. The final column shows the 2017 national average percentage. For a more complete listing of the YRBS data, see Appendix C.

TABLE 5: Youth Behavioral Risk Survey Results

North Dakota High School Survey

Sources: https://www.nd.gov/dpi/uploads/1298/2015NDHStatewideYRBSReport20151110FINAL2NoCover.pdf; https://www.nd.gov/dpi/uploads/1298/2015NDHTrendReportUpdated42016.pdf; https://www.cdc.gov/healthyyouth/data/yrbs/results.htm

	ND 2013	ND 2015*	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2017
Injury and Violence						
% of students who rarely or never wore a seat belt.	11.6	8.5	↓	10.5	7.5	5.9
% of students who rode in a vehicle with a driver who had been drinking alcohol (one or more times during the 30 prior to the survey)	21.9	17.7	↓	21.1	15.2	16.5
% of students who talked on a cell phone while driving (on at least 1 day during the 30 days before the survey)	67.9	61.4	↓	60.7	58.8	NA
% of students who texted or e-mailed while driving a car or other vehicle (on at least 1 day during the 30 days before the survey)	59.3	57.6	=	56.7	54.4	39.2
% of students who were in a physical fight on school property (one or more times during the 12 months before the survey)	8.8	5.4	↓	6.9	6.1	8.5
% of students who were ever physically forced to have sexual intercourse (when they did not want to)	7.7	6.3	=	6.5	7.4	7.4
% of students who were bullied on school property (during the 12 months before the survey)	25.4	24.0	=	27.5	22.4	19.0
% of students who were electronically bullied (includes e-mail, chat rooms, instant messaging, websites, or texting during the 12 months before the survey)	17.1	15.9	=	17.7	15.8	14.9
% of students who made a plan about how they would attempt suicide (during the 12 months before the survey)	13.5	13.5	=	12.8	13.7	13.6
Tobacco, Alcohol, and Other Drug Use						
% of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least 1 day during the 30 days before the survey)	NA	22.3	↑	19.7	22.8	13.2
% of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey)	27.5	20.9	↓	22.9	19.8	14.0
% of students who drank five or more drinks of alcohol in a row (within a couple of hours on at least 1 day during the 30 days before the survey)	21.9	17.6	↓	19.8	17.0	13.5
% of students who currently used marijuana (one or more times during the 30 days before the survey)	15.9	15.2	=	13.2	17.1	19.8
% of students who ever took prescription drugs without a doctor's prescription (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax, one or more times during their life)	17.6	14.5	↓	13.2	16.0	14.0
Weight Management, Dietary Behaviors, and Physical Activity						
% of students who were overweight (>= 85th percentile but <95th percentile for body mass index)	15.1	14.7	=	15.4	14.6	15.6
% of students who were obese (>= 95th percentile for body mass index)	13.5	14.0	=	16.3	12.9	14.8

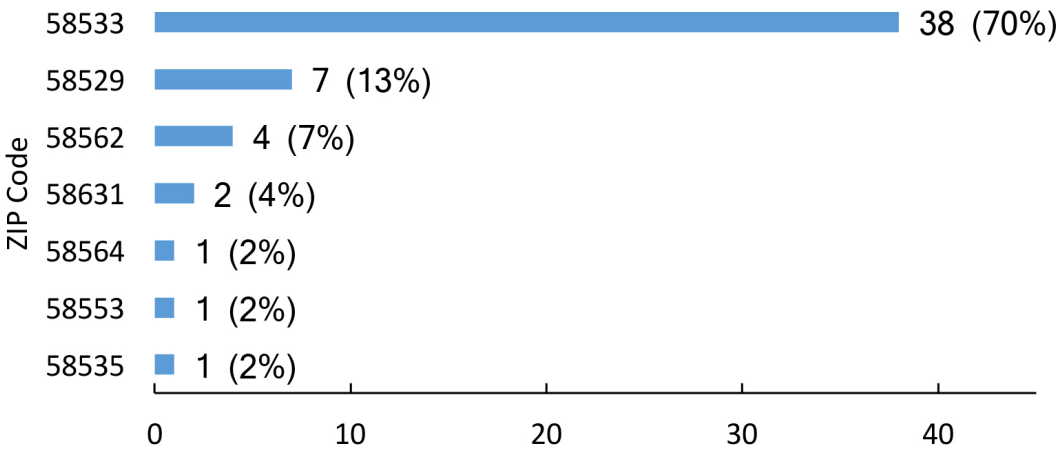
Weight Management, Dietary Behaviors, and Physical Activity						
% of students who were overweight (>= 85th percentile but <95th percentile for body mass index)	15.1	14.7	=	15.4	14.6	15.6
% of students who were obese (>= 95th percentile for body mass index)	13.5	14.0	=	16.3	12.9	14.8
% of students who did not eat fruit or drink 100% fruit juices (during the 7 days before the survey)	3.4	3.9	=	4.3	4.1	5.6
% of students who did not eat vegetables (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)	6.0	4.7	=	4.5	5.2	7.2
% of students who drank a can, bottle, or glass of soda or pop one or more times per day (not including diet soda or diet pop, during the 7 days before the survey)	23.4	18.7	=	21.4	18.0	18.7
% of students who did not drink milk (during the 7 days before the survey)	11.1	13.9	↑	11.6	13.7	26.7
% of students who did not eat breakfast (during the 7 days before the survey)	10.5	11.9	=	10.7	11.8	14.1
% of students who most of the time or always went hungry because there was not enough food in their home (during the 30 days before the survey)	3.1	2.2	=	2.4	2.8	NA
% of students who were physically active at least 60 minutes per day on 5 or more days (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)	50.6	51.3	=	51.7	50.1	46.5
% of students who watched television 3 or more hours per day (on an average school day)	21.0	18.9	=	20.7	18.2	20.7
% of students who played video or computer games or used a computer 3 or more hours per day (for something that was not school work on an average school day)	34.4	38.6	↑	39.4	38.0	43.0
Other						
% of students who ever had sexual intercourse	44.9	38.9	↓	39.3	39.1	39.5
% of students who had 8 or more hours of sleep (on an average school night)	30.0	29.5	=	34.5	28.7	25.4
% of students who brushed their teeth on seven days (during the 7 days before the survey)	71.5	71.0	=	67.8	70.1	NA

Survey Results

As noted previously, 79 community members completed the survey in communities throughout the counties in the JMHCC service area. For all questions that contained an "Other" response, all of those direct responses may be found in Appendix D. In some cases, a summary of those comments is additionally included in the report narrative. The "Total respondents" number under the heading indicates the number of people who responded to that particular question. The "Total responses" number under the heading indicates the total number of responses received for that particular question for questions that allowed multiple options to be selected.

The survey requested that respondents list their home zip code. While not all respondents provided a zip code, 54 did, revealing that the majority of respondents (70%, N=38) lived in Elgin. These results are shown in Figure 5.

Figure 5: Survey Respondents' Home Zip Code
Total respondents: 54



Survey results are reported in six 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:

- 43% (N=28) were age 55 or older.
- The majority (69%, N=54) were female.
- A little less than half of the respondents (48%, N=37) had an associate's degrees or higher.
- The number of those working full time (46%, N=36) was more than twice as high than those who were retired (18%, N=14).
- 95% (N=64) of those who reported their ethnicity/race were white/Caucasian.
- 31% of the population (N=24) 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 = 65

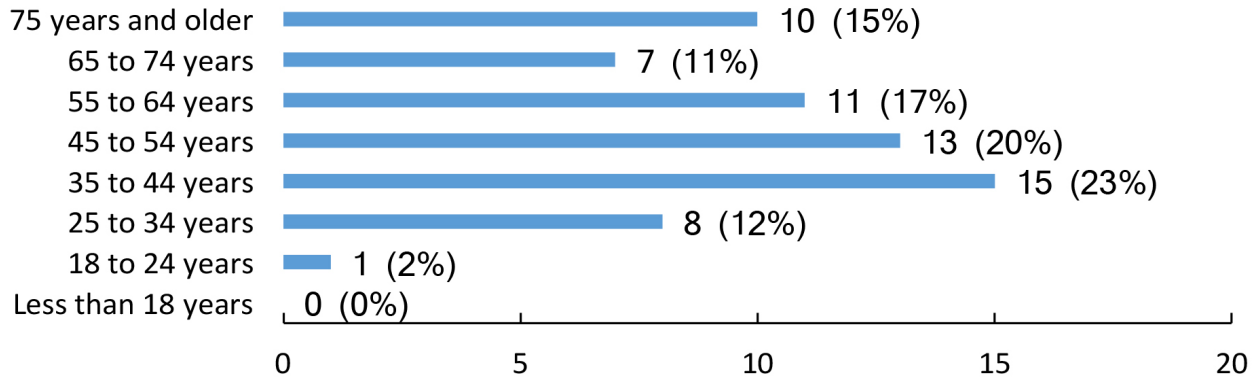


Figure 7: Gender Demographics of Survey Respondents
Total respondents = 66

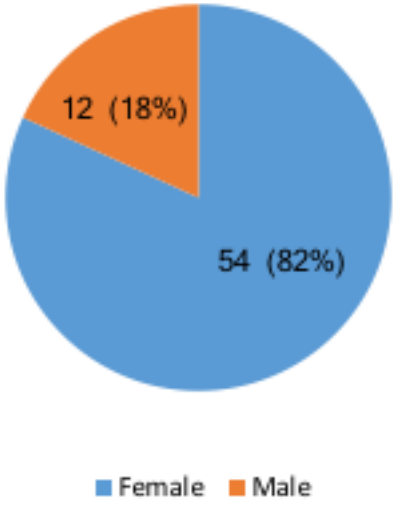


Figure 8: Educational Level Demographics of Survey Respondents
Total respondents = 65

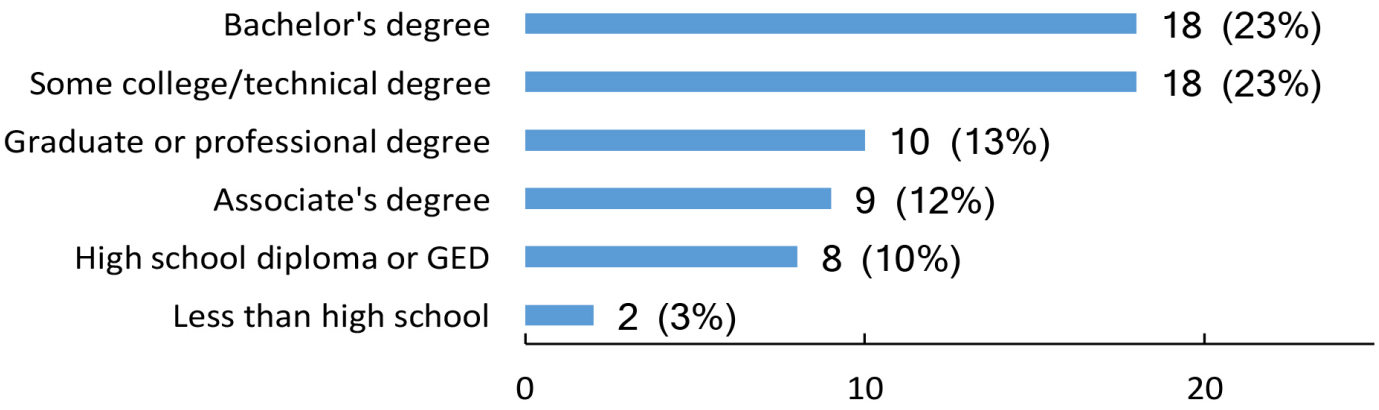
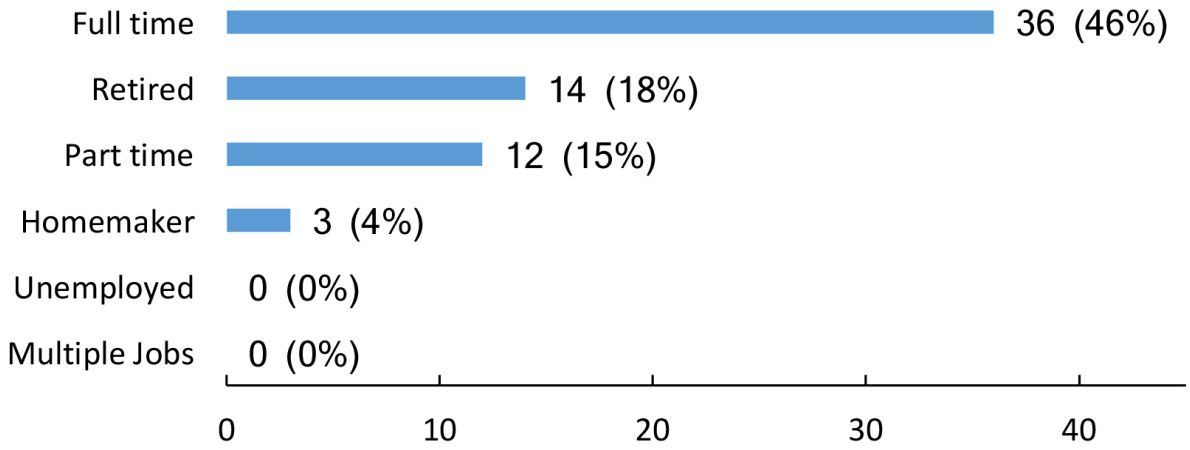
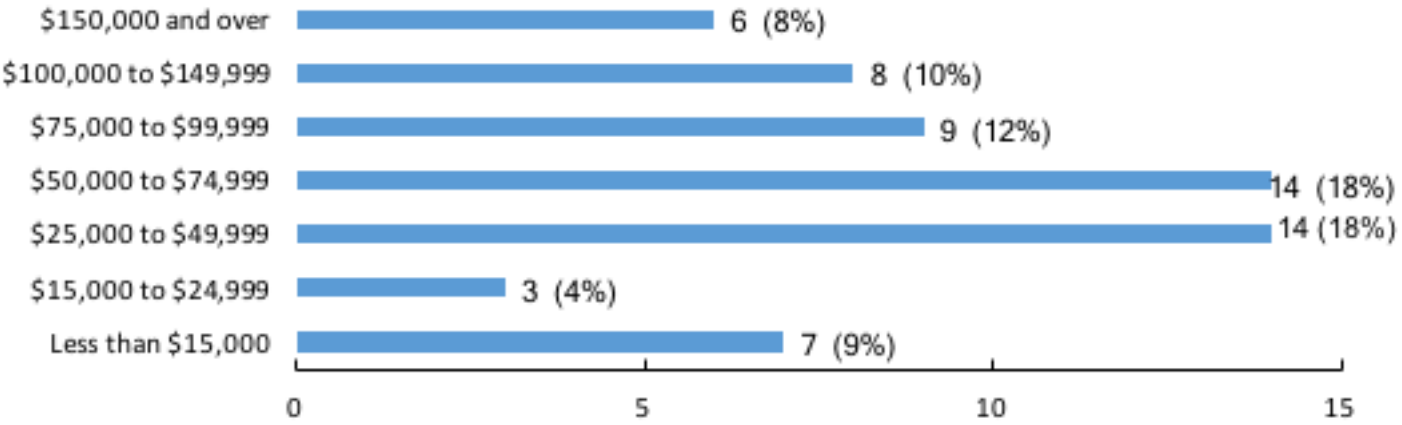


Figure 9: Employment Status Demographics of Survey Respondents
Total respondents = 65



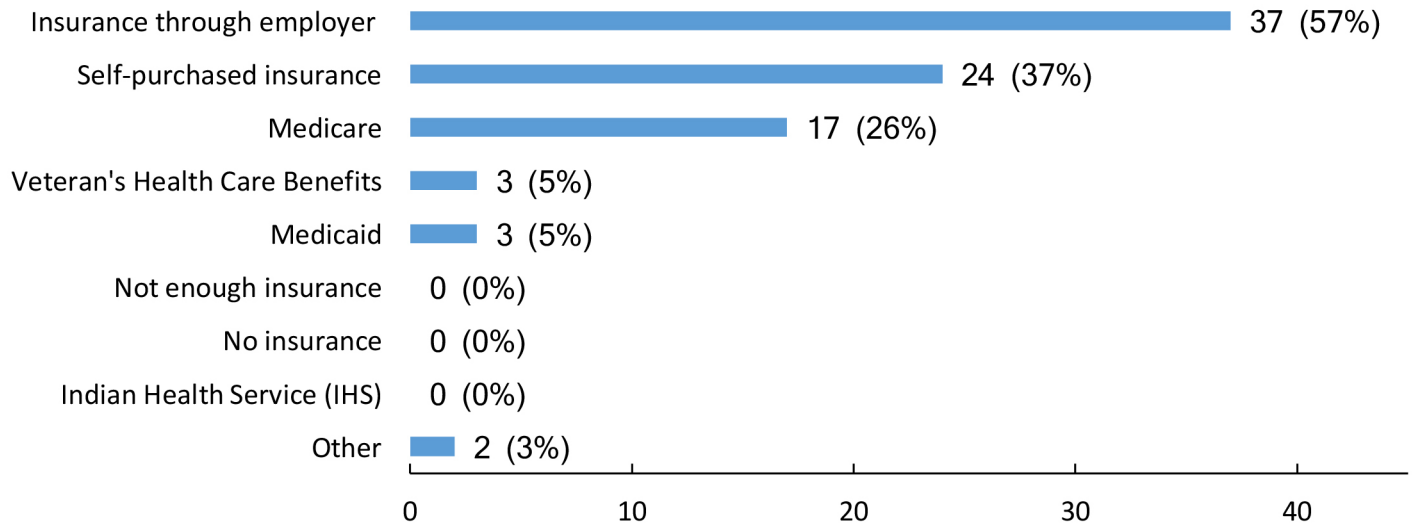
Of those who provided a household income, 13% (N=10) community members reported a household income of less than $25,000. Eighteen percent (N=14) indicated a household income of $100,000 or more. This information is show in Figure 10.

Figure 10: Household Income Demographics of Survey Respondents
Total respondents = 61



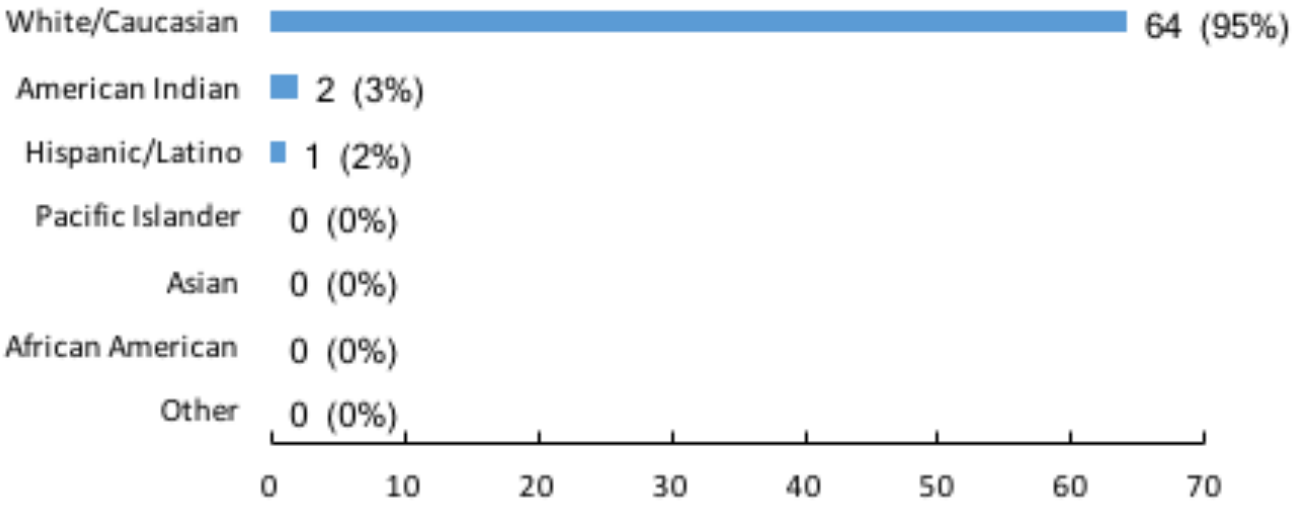
Community members were asked about their health insurance status, which is often associated with whether people have access to healthcare. None of the respondents reported having no health insurance or being under-insured. The most common insurance types were insurance through one's employer (N=37), followed by self-purchased (N=24) and Medicare (N=17).

Figure 11: Health Insurance Coverage Status of Survey Respondents
Total respondents = 65



As shown in Figure 12, nearly all of the respondents were white/Caucasian (95%). This was in-line with the race/ethnicity of the overall population of Grant County.

Figure 12: Race/Ethnicity Demographics of Survey Respondents
Total respondents = 67



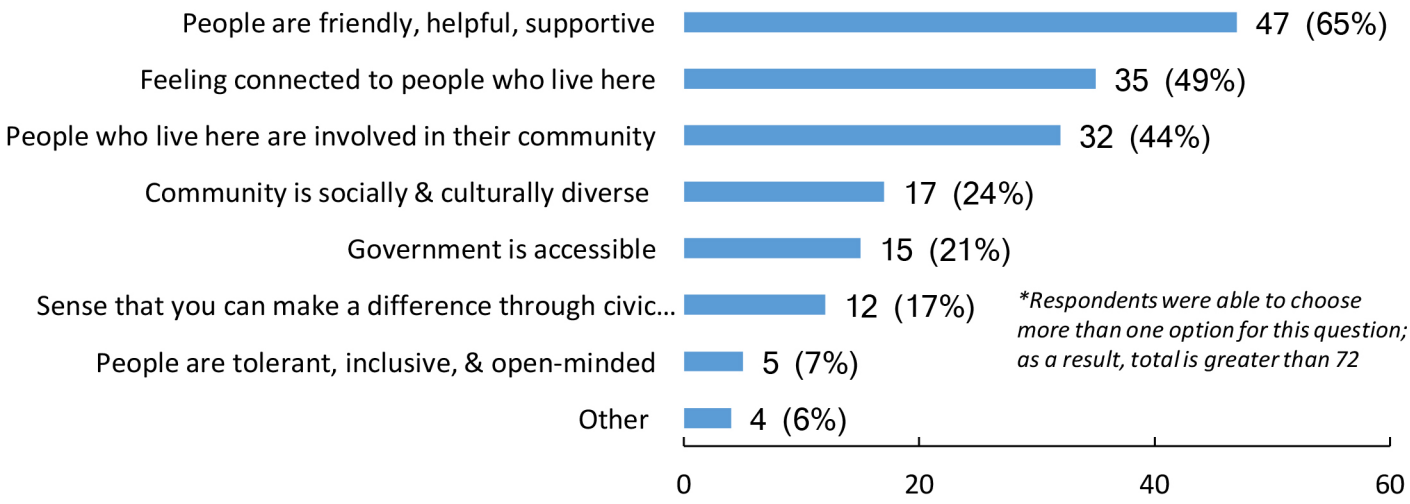
Community Assets and Challenges

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 45 respondents agreeing) that community assets include:

- Safe place to live, little/no crime (N=57);
- Healthcare (N=54);
- Family-friendly (N=53);
- People are friendly, helpful, supportive (N=47).

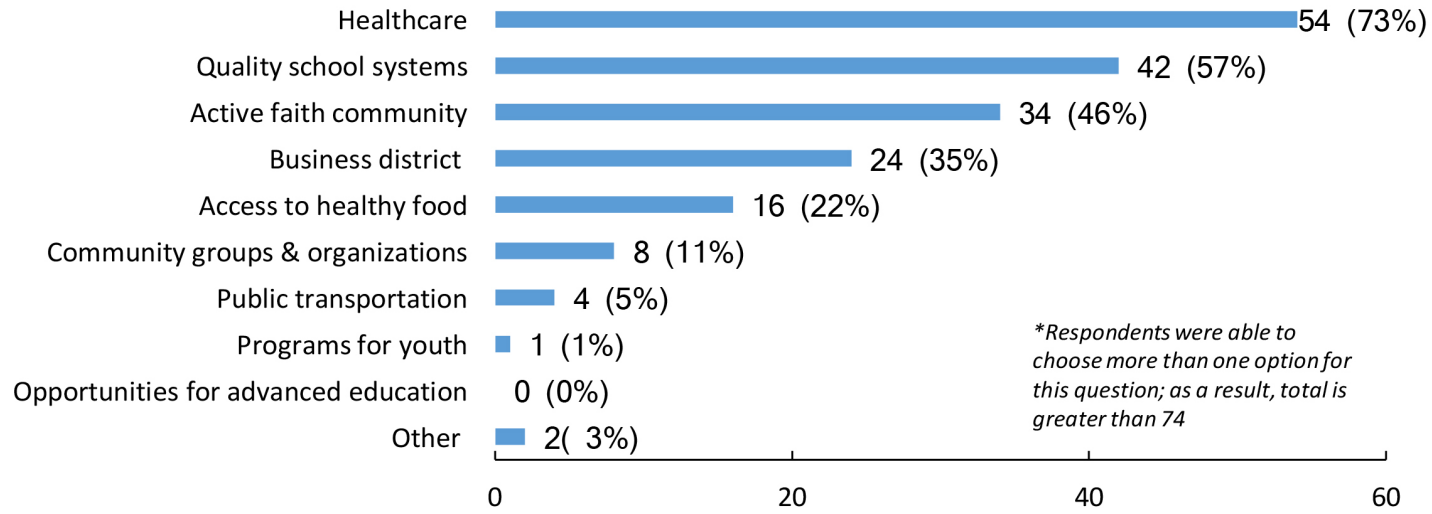
Figures 13 to 16 illustrate the results of these questions.

Figure 13: Best Things about the PEOPLE in Your Community
Total responses = 167



Included in the "Other" category of the best things about the people were that people are strong in Christian faith, respect for privacy, and community pride.

Figure 14: Best Things about the SERVICES AND RESOURCES in Your Community
Total responses = 185



Respondents who selected "Other" specified that it is the government headquarters.

Figure 15: Best Things about the QUALITY OF LIFE in Your Community
Total responses = 186

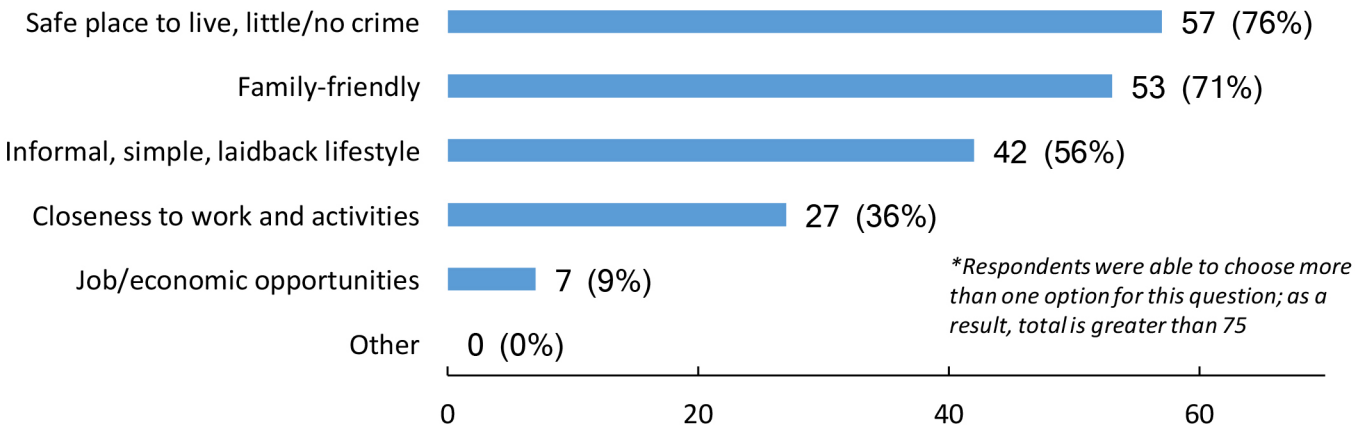
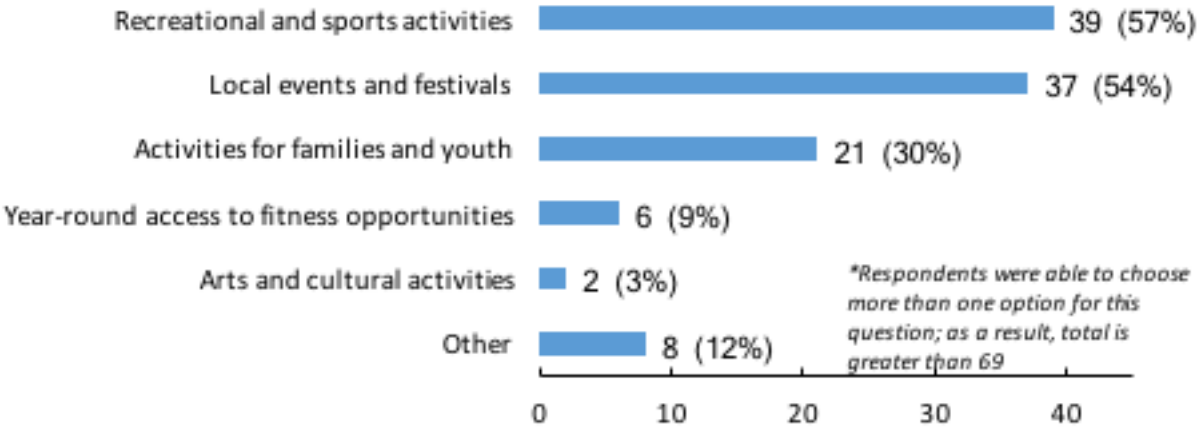


Figure 16: Best Thing about the ACTIVITIES in Your Community



Respondents who selected "Other" specified that the best things about the activities in the community included church, library, and the outdoors.

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 five categories and pick their top three concerns. The five categories of potential concerns were:

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

With regard to responses about community challenges, the most highly voiced concerns (those having at least 20 respondents) were:

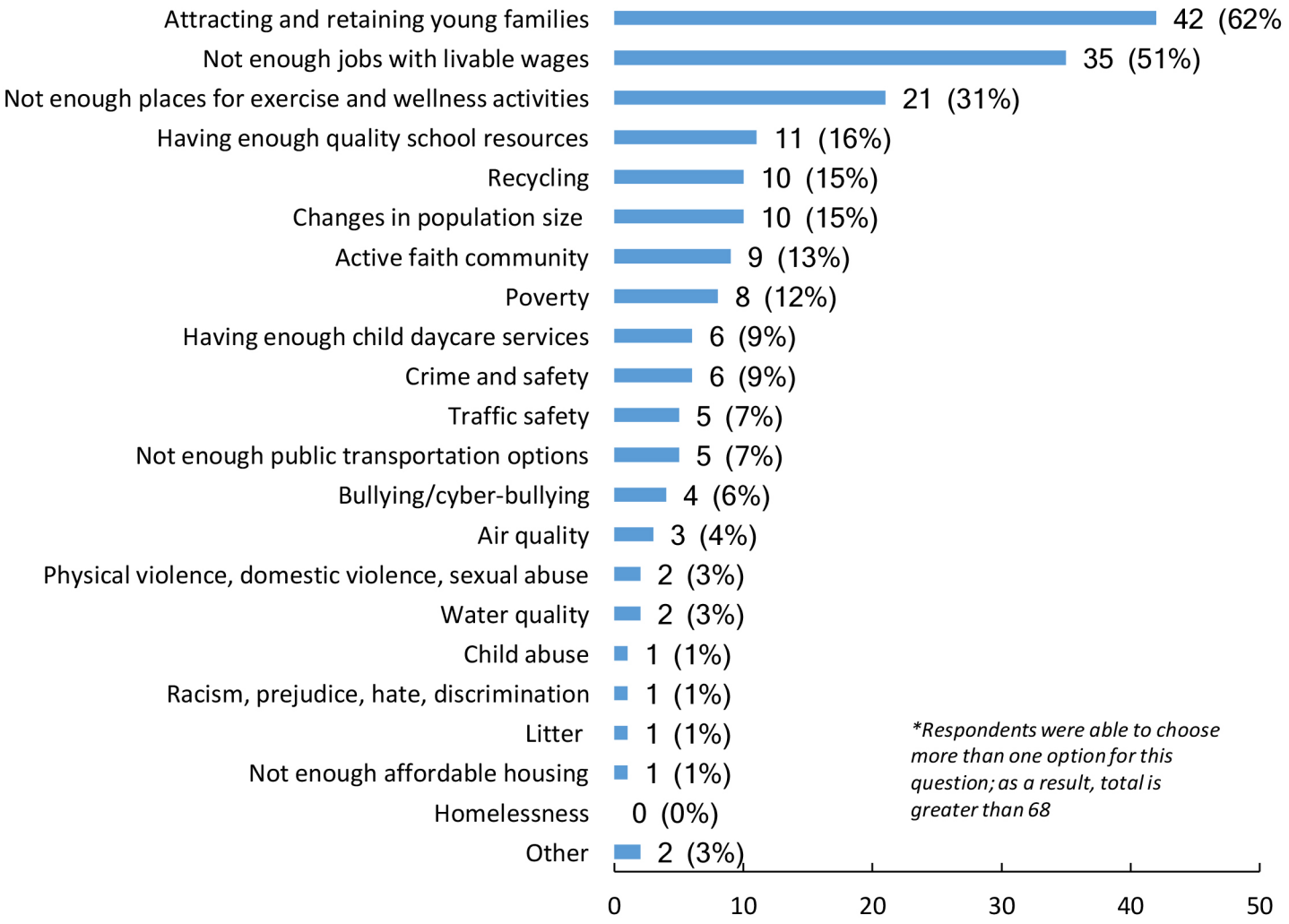
- Attracting and retaining young families (N=42);
- Not enough jobs with livable wages (N=35);
- Alcohol use and abuse – Youth (N=31);
- Alcohol use and abuse – Adults (N=29);
- Drug use and abuse – Adult (N=28);
- Cost of long-term/nursing home care (N=27);
- Availability of resources to help the elderly stay in their homes (N=24);
- Ability to retain primary care providers (MD, DO, NP, PA) and nurses in the community (N=23);
- Smoking and tobacco use, exposure to second-hand smoke, or vaping/juuling - Adults (N=23);
- Depression/anxiety – Adult (N=23);
- Drug use and abuse – Youth (N=22); and
- Not enough places for exercise and wellness activities (N=21).

The other issues that had at least 15 votes included:

- Depression/anxiety – Youth (N=18);
- Availability of transportation for seniors (N=18);
- Stress – Adult (N=17);
- Not enough activities for children and youth (N=16);
- Cancer (N=16); and
- Availability of activities for seniors (N=15).

Figures 17 through 21 illustrate these results.

Figure 17: Community/Environmental Health Concerns
Total responses = 185

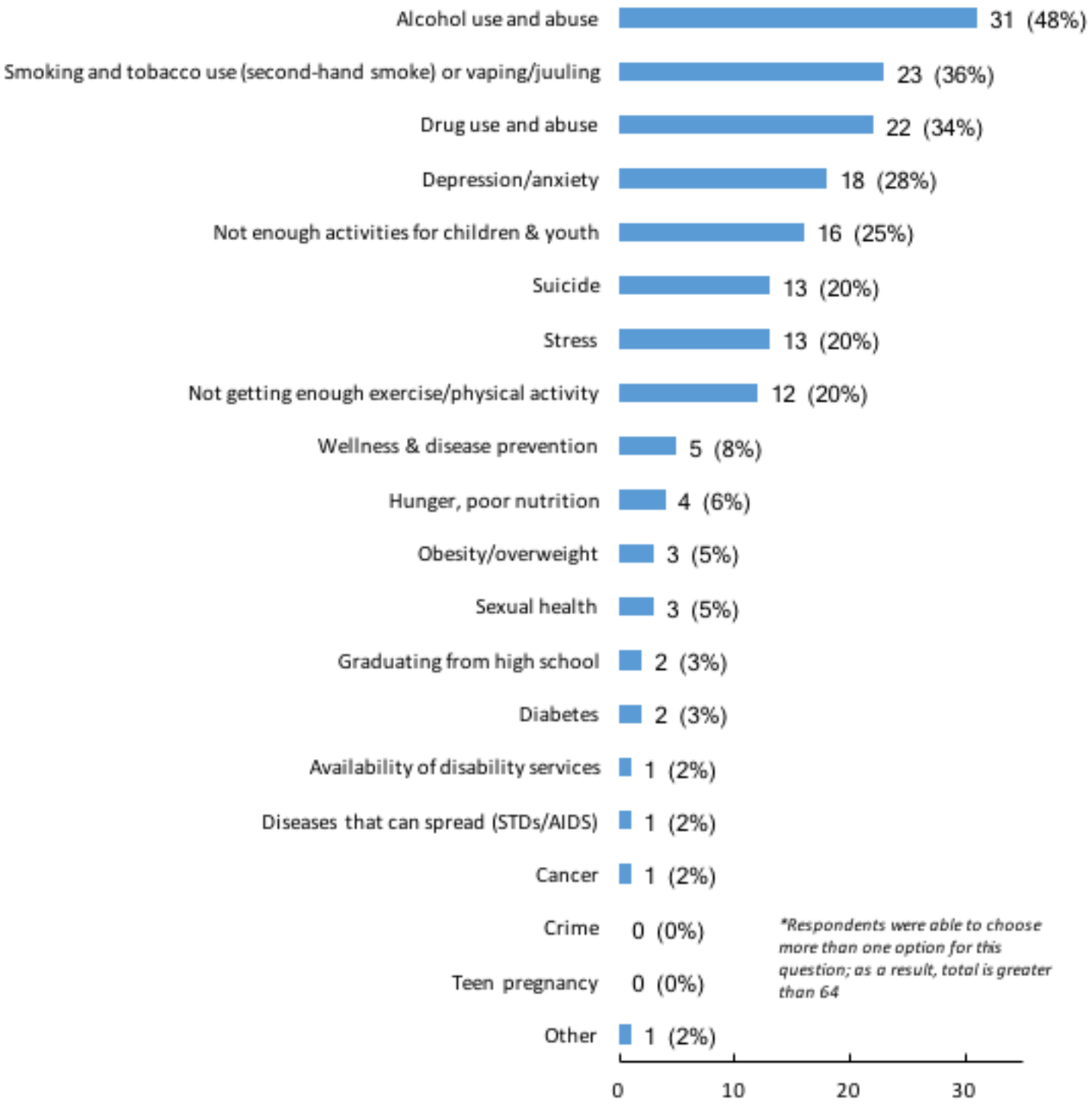


In the "Other" category for community and environmental health concerns, the following were listed: need more activities for the youth and not enough up-to-date housing.

Figure 18: Availability/Delivery of Health Services Concerns
Total responses = 172

Respondents who selected "Other" identified concerns in accuracy of billing, charges at the hospital being higher compared to Bismarck, high cost of prescription medication because of lack of competition, phones at the clinic are not being answered during the regular work hours, and the length of time it takes for a doctor to arrive at the emergency room for an emergency.

Figure 19: Youth Population Health Concerns
Total responses = 171



Listed in the "Other" category for youth population concerns was the need for positive adult role models outside of school and church.

Figure 20: Adult Population Concerns
Total responses = 178

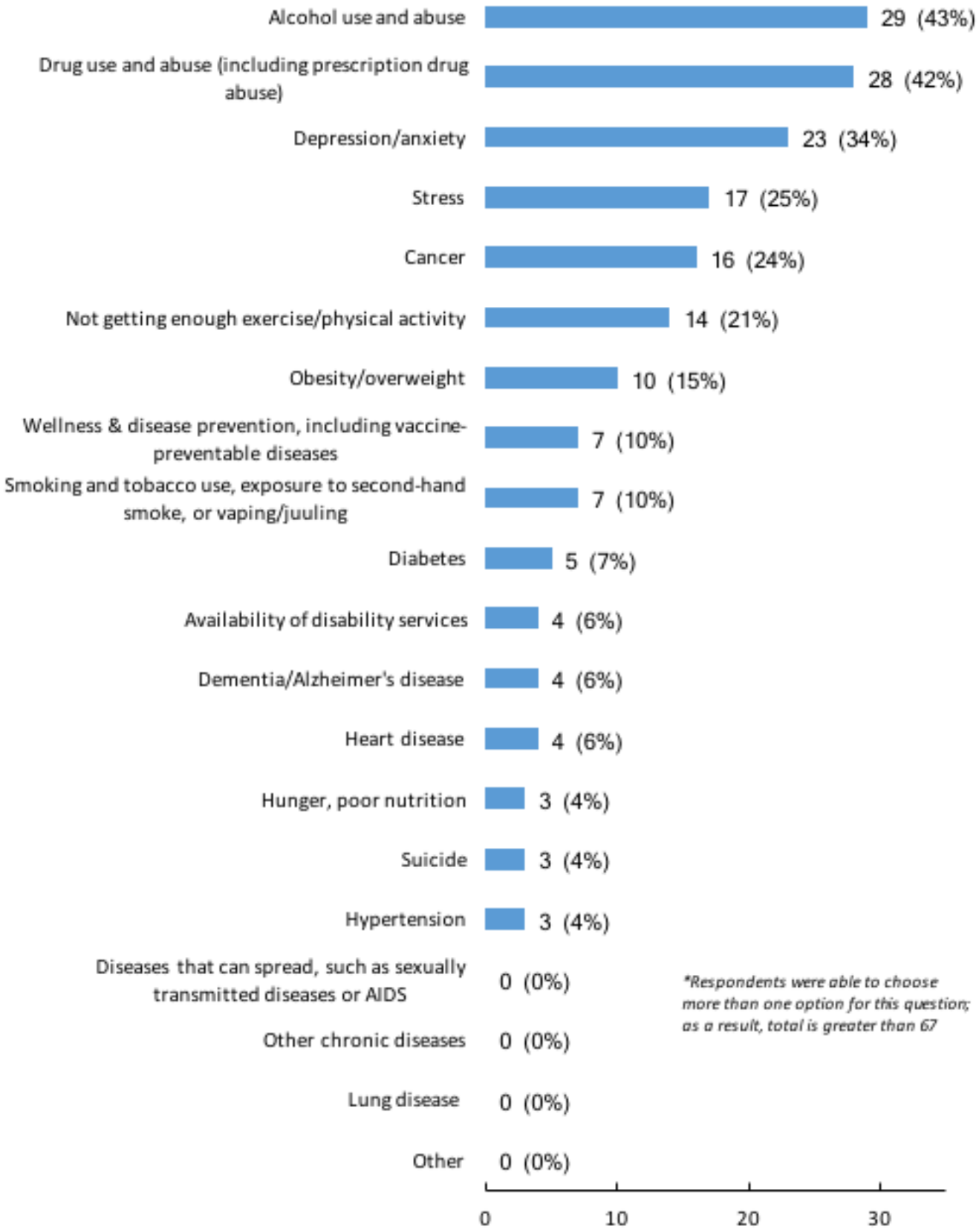


Figure 21: Senior Population Concerns
Total responses = 162

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. Population – need to increase and retain the population; and

2. Substance abuse (drug and alcohol).

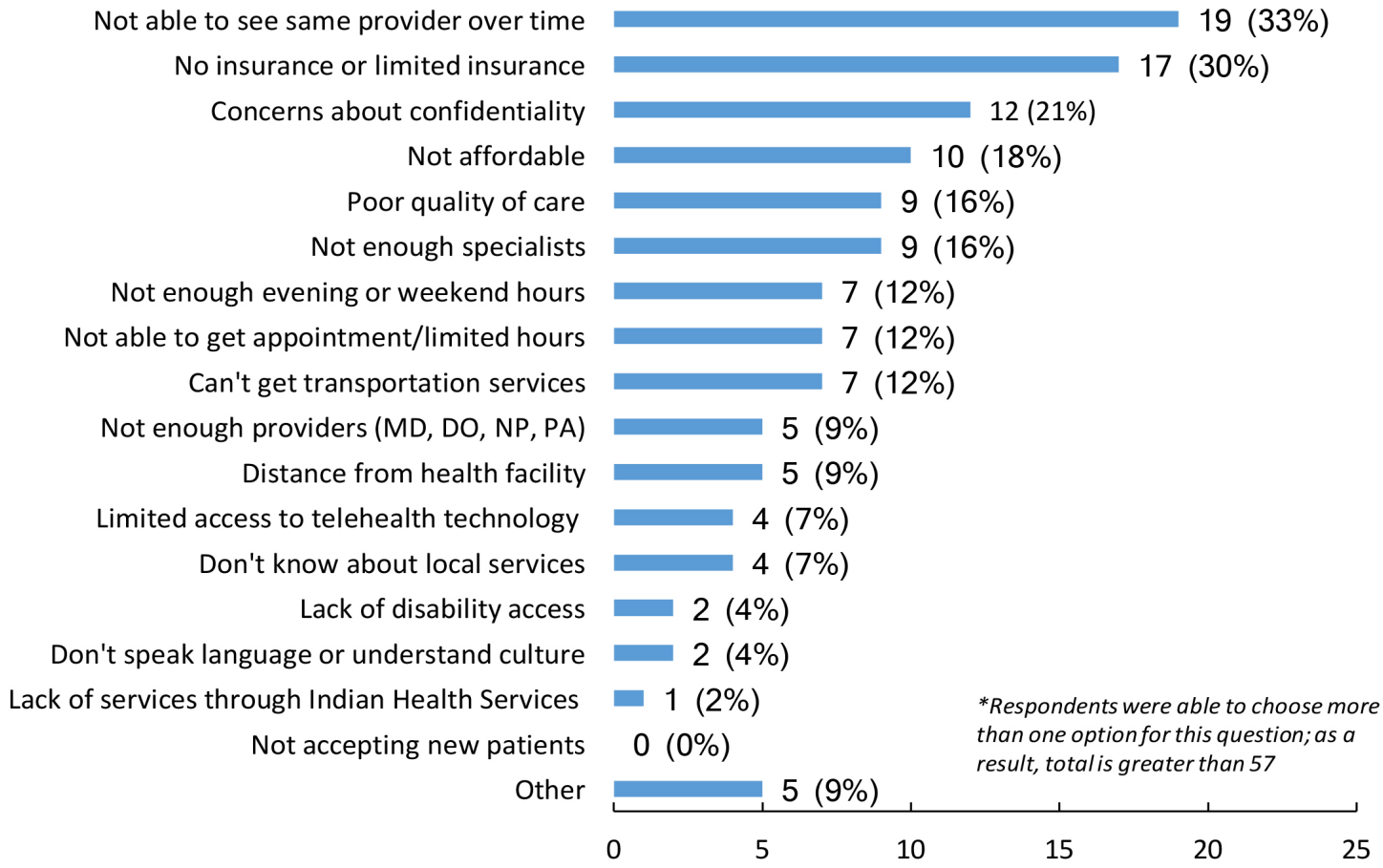
Other challenges that were identified were getting people engaged in the community, lack of funding for healthcare, lack of physical activity opportunities, lack of community involvement, ability to maintain and attract businesses, and lack of activities for youth.

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 barrier perceived by residents was not able to see the same provider over time (N=19) with the next highest being no or limited insurance (N=17). After these, the next most commonly identified barriers were concerns about confidentiality (N=21) and not affordable (N=10).

Figure 22 illustrates these results.

Figure 22: Perceptions About Barriers to Care
Total respondents = 57



Other issues that prevent residents from receiving healthcare include that the clinic closes early, the phone at the clinic is not answered for hours at a time, too busy, lack of fluency in English by staff, lack of home health services, and having to travel to see specialists.

Considering a variety of healthcare services offered by JMHCC, respondents were asked to indicate if they had utilized or were aware of the healthcare services offered in a variety of areas (See Figures 23-26). The top services known and utilized in JMHCC by the respondents were laboratory services, emergency room, family medicine and primary care, and general x-ray.

Figure 23: Awareness or Utilization of General and Acute Services Provided by JMHCC
Total respondents = 65

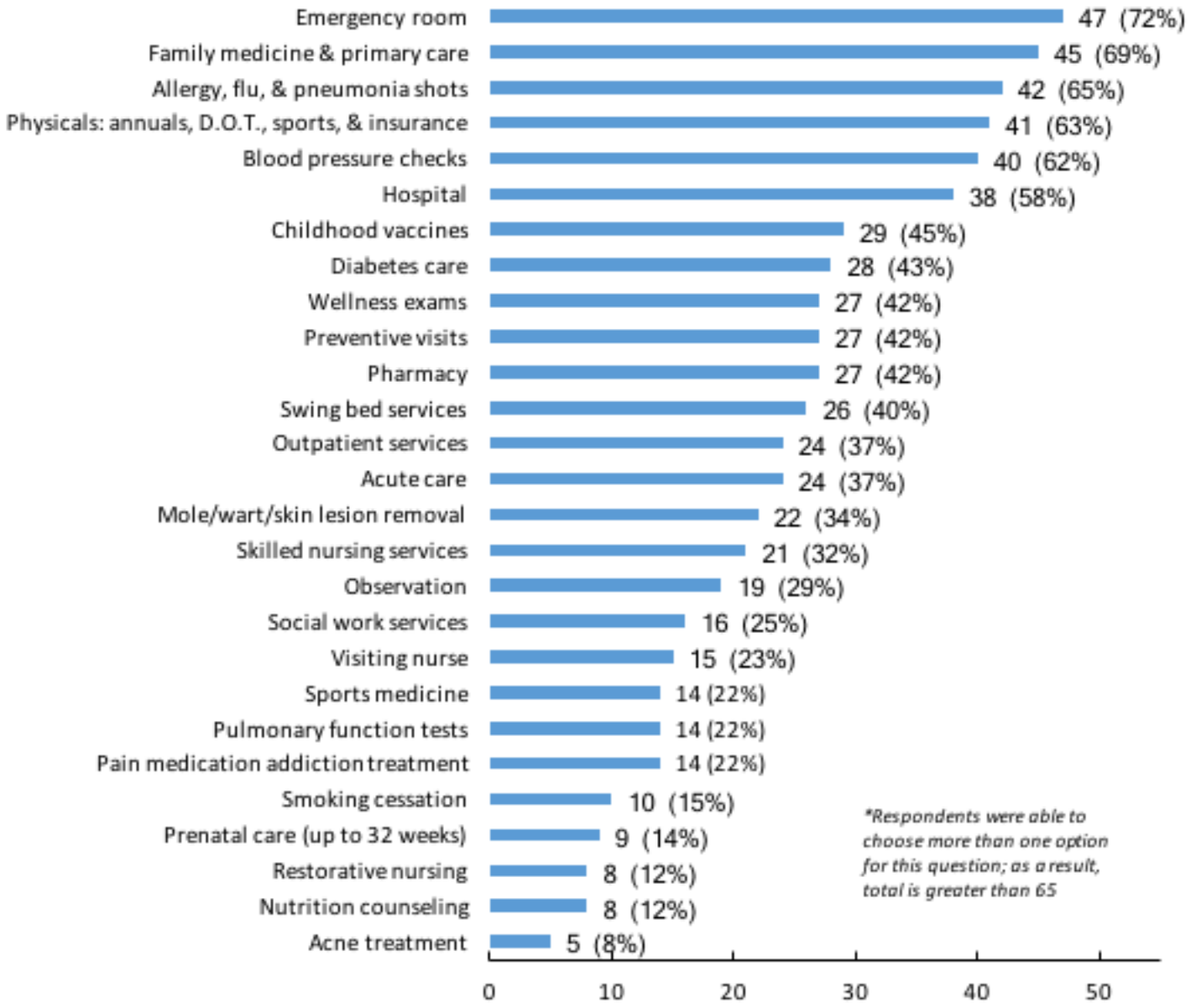


Figure 24: Awareness or Utilization of Screening/Therapy Services Provided by JMHCC
Total respondents = 65

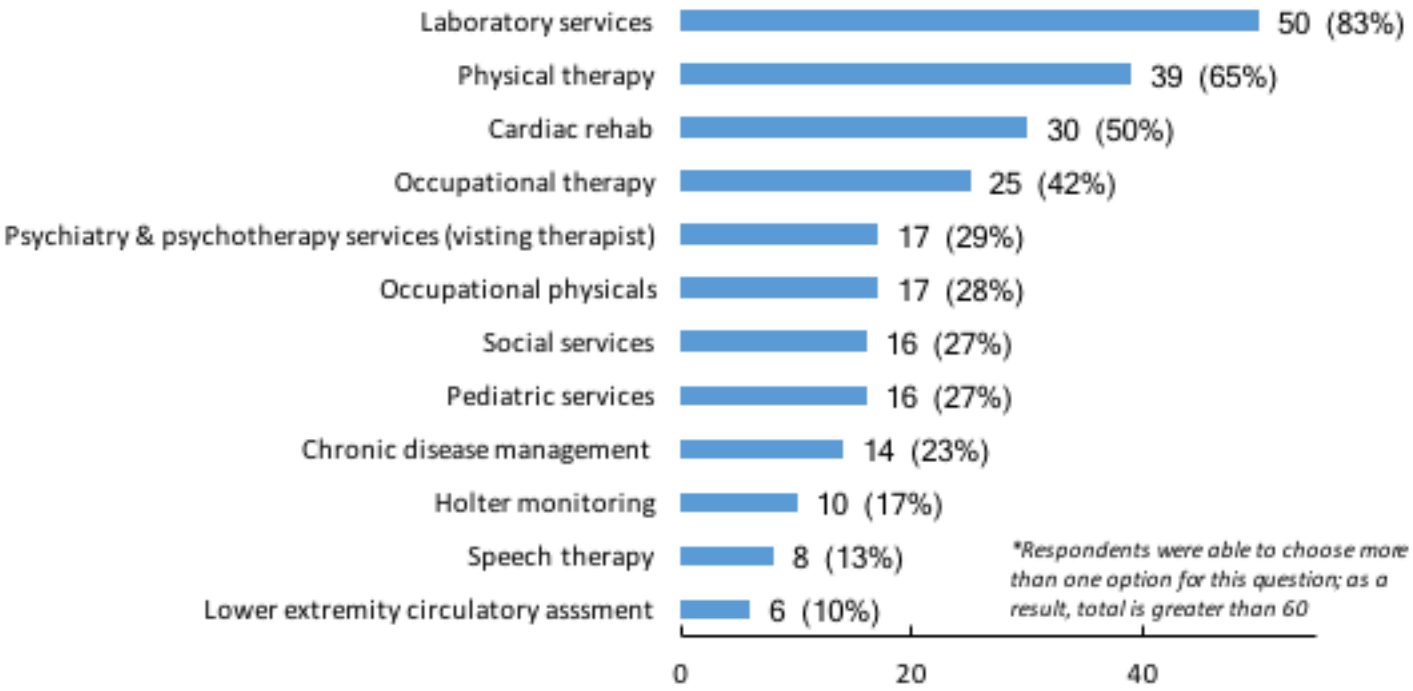


Figure 25: Awareness or Utilization of General and Acute Services Provided by JMHCC
Total respondents = 59

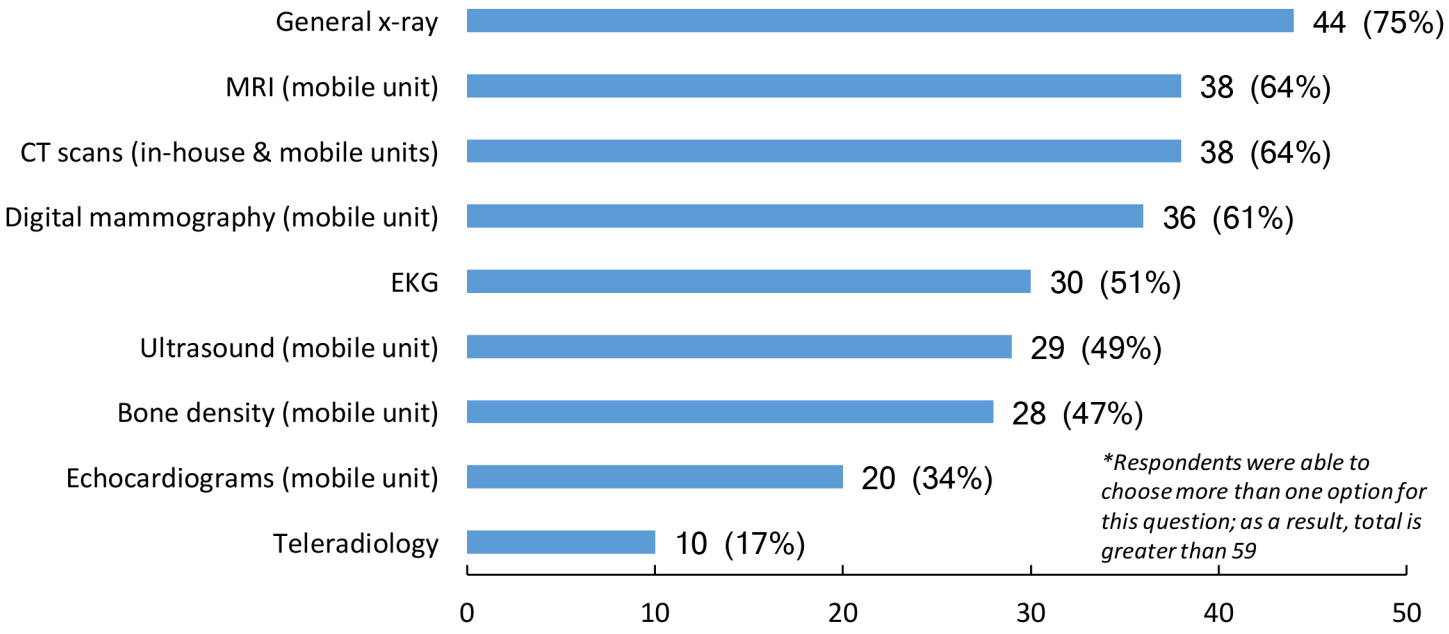
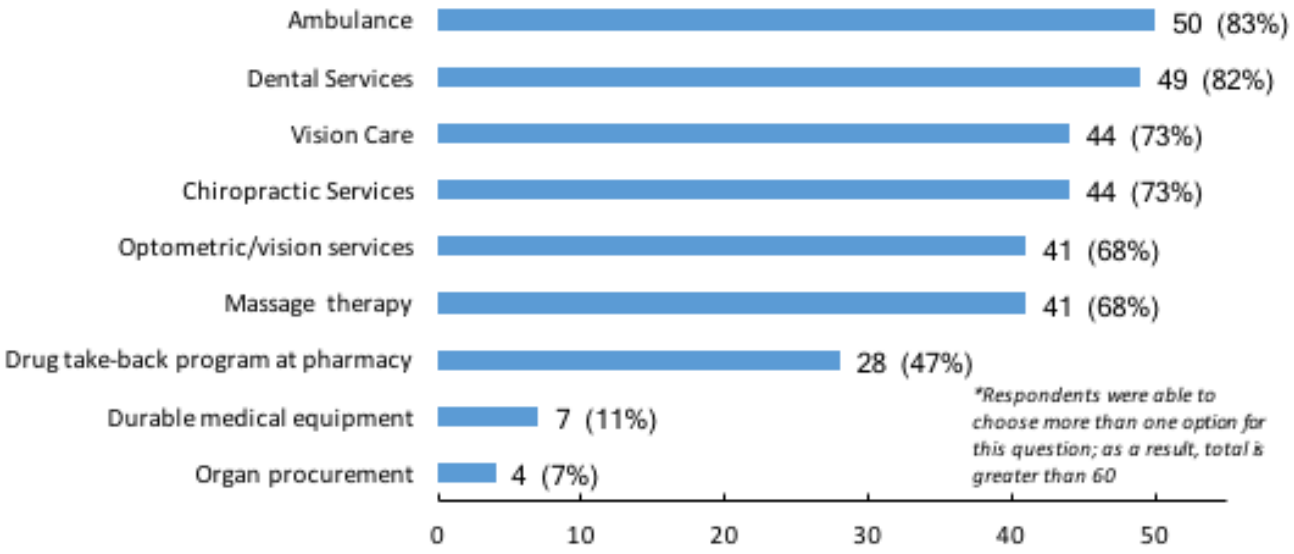
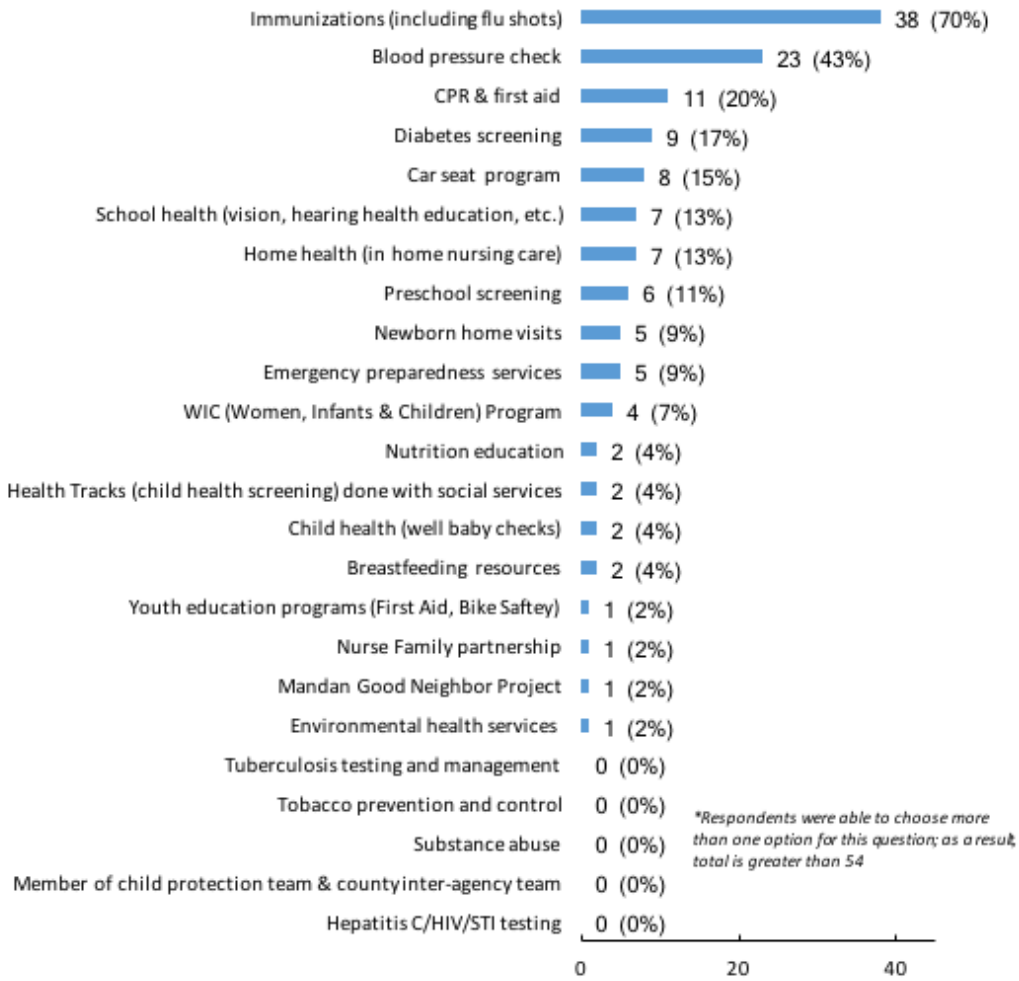


Figure 26: Awareness of Other Organizations/Service Providers
Total respondents = 59



Considering a variety of healthcare services offered by Custer Health, respondents were asked to indicate which services they had utilized or were aware of their availability (See Figure 27). The top services known and utilized in the public health setting by the respondents were immunizations (including flu shots) and blood pressure checks.

Figure 27: Awareness or Utilization of Public Health Services
Total respondents = 54



In an open-ended question, respondents were asked what specific healthcare services, if any, they thing should be added locally. The services recommended included:

- Mental health services
- Expand occupational therapy for rehab
- Cardiologist once per month
- More outpatient pediatric therapy for children with disabilities
- OB/GYN
- Orthopedics
- Self-defense classes
- Training on how to prevent falls

The key informant and focus group member's opinions on whether the community members were aware of the majority of the health system and public health services was split. Some felt they were well-known and others didn't feel that the community knew what was available locally. There were a number of services where they felt the hospital should increase marketing efforts, including nutrition counseling (especially for young parents), cardiac rehab, and addiction treatment. It was discussed that they would like to see Custer Health increase its marketing of the Mandan Good Neighbor Project and substance abuse treatment.

Word-of-mouth is the number one source that people utilize to find out about what services are available locally. Followed by the newspaper. See figure 28.

Figure 28: Sources Used to Find Out About Local Health Services
Total respondents = 66

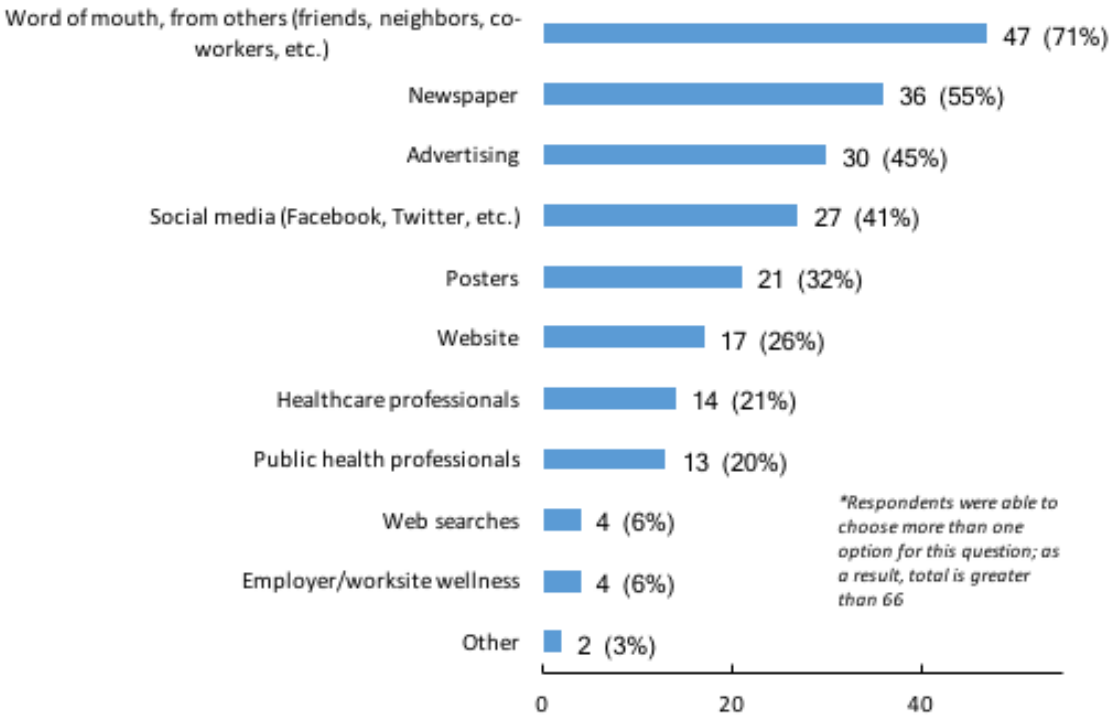
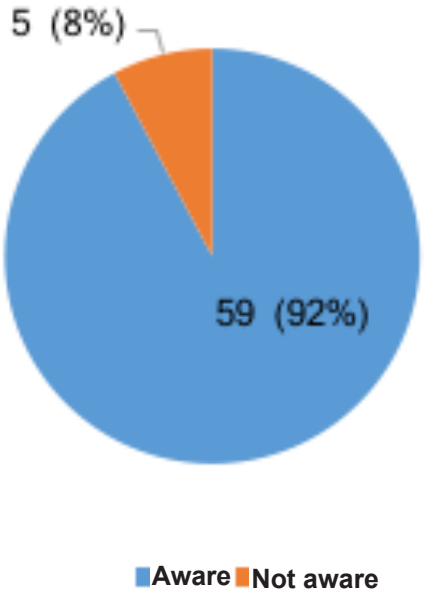


Figure 29 shows the number of respondents that were aware of the Jacobson Memorial Hospital Care Center's Foundation. Over 90 percent were aware that a foundation existed.

Figure 29: Awareness of Jacobson Memorial Hospital Care Center's Foundation
Total responses = 64



In an effort to gauge ways that community members would be most likely to financially support capital improvements, a question was included asking them to select ways they have supported the Foundation (see Figure 30) and which capital improvements at JMHCC they would most likely support (see Figure 31).

Figure 30: Ways Financial Support Has Been Provided to JMHCC Foundation
Total respondents = 39

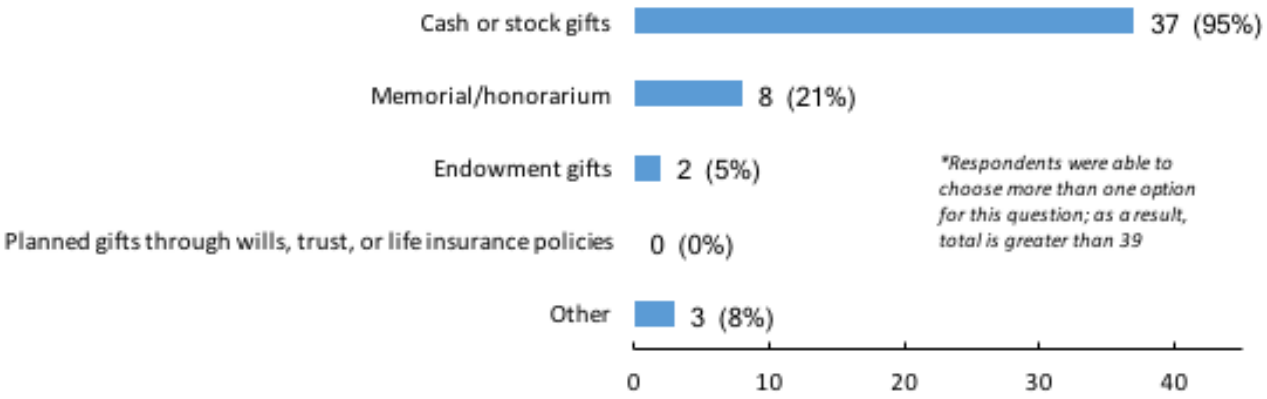
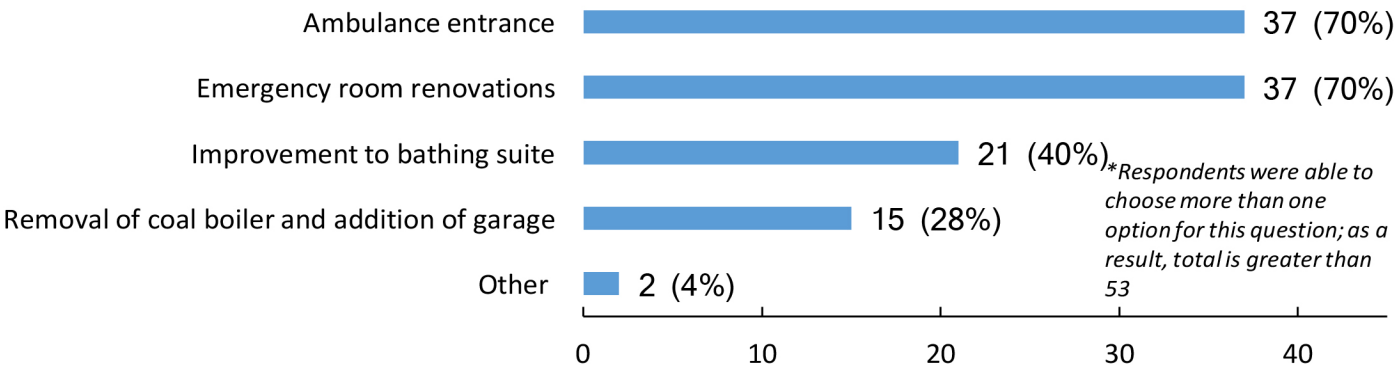


Figure 31: Capital Improvements that Respondents Would Support
Total respondents = 53



Respondents were asked if they would utilize a van service from JMHCC for transportation to appointments. Twenty percent indicated that they would. Of those people who indicated that they would, Wednesday was the day most desired for that service (See Figures 32-33).

Figure 32: Utilization of a JMHCC Van Service to Appointments
Total responses = 66

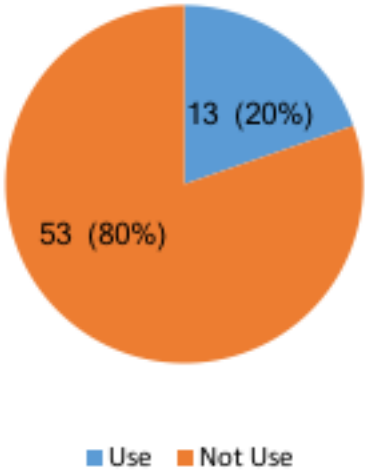
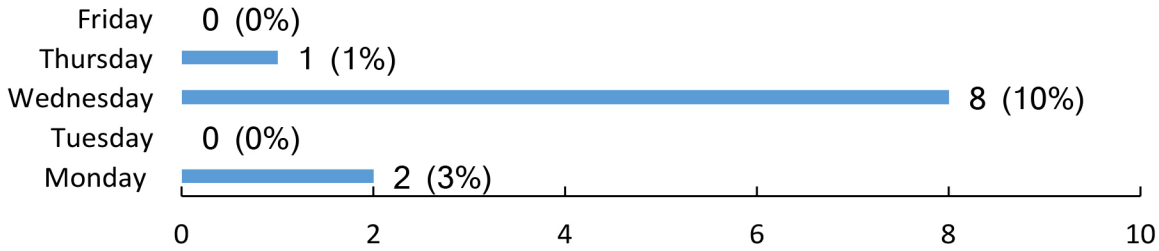


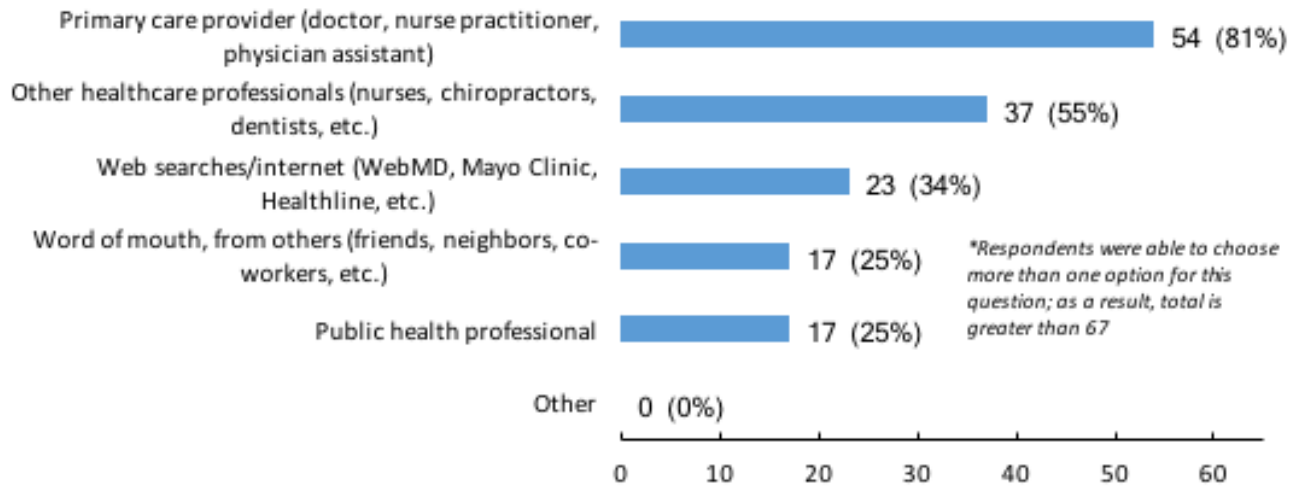
Figure 33: Preferred Day of Week for JMHCC Van Service
Total responses = 11



Respondents were asked where they go to for trusted health information. Primary care providers (N=54) received the highest response rate, followed by other healthcare professionals (N=37), and then web/Internet searches (N=23).

Results are shown in Figure 33.

Figure 34: Sources of Trusted Health Information
Total respondents = 67



The final question on the survey asked respondents to share concerns and suggestions to improve the delivery of local healthcare.

Several responses focused on concerns regarding the Care Center. These included residents needing to be taken out more (example, take a drive around town), residents not receiving regular baths and hair care, and long length of time for response to call lights.

Other concerns with the health system included the cost of services, receiving a recorded message when calling the clinic instead of a receptionist, need for more specialists to come to Elgin, timely prescription refills, providing accurate records, and retention of providers.

Insurance was also an issue. One responded that their deductible is so high they will never actually use their insurance other than for preventive care, despite huge monthly payments.

It was suggested that there be better training to improve efficiency in front desk, patient charts, and billing and coding. Also suggested was adding more options for local therapies such as pediatric occupational and behavior therapy (things outside of what school can offer) and psychiatric services for children. Offer mental health services for farmers in addition to children and add nutrition counseling as a service. It was also suggested that weekend clinic hours be added.

Having a fitness center in Elgin, possibly using an empty building on Main Street or a small facility on hospital property was proposed. The exercise program at senior meals in Carson is appreciated and could possibly be used as a model.

A comment was included noting that having the hospital and clinic local is great. Being so rurally located, the time it may take to drive somewhere else might be too long to save the person.

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 and health professionals and also with the community group at the first meeting. The themes that emerged from these sources 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:

- Depression and anxiety for all ages
- Youth smoking and tobacco use, exposure to second-hand smoke, vaping (juuling)
- Attracting and retaining young families
- Availability of mental health services
- Availability of resources to help the elderly stay in their homes

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

Depression and anxiety for all ages

- This is an ag region and that has caused a lot of financial stress.
- Because of the farm economy – there is a lot of stress and depression for farmers.
- People without assets built up are under great financial strain.
- Anxiety and alcohol use are big issues.
- Suicide – there has been a trend in the past couple of years.
- Availability of resources of family and friends caring for the elderly – this can lead to other issues: abuse, alcohol/drug use, stress.

Youth smoking and tobacco use, exposure to second-hand smoke, vaping (juuling)

- Vaping is a problem amongst the youth.
- Seeing more and more kids vaping.

Attracting and retaining young families

- Most important issue the community is seeing.
- Need to have jobs and social support services available to get and keep people.

Availability of mental health services

- Kids struggling in school – liaison between teacher and parent is important because if the parent has a complaint with the teacher the child ends up suffering. It's an endless conversation between parents and teachers – the children need an outside entity to talk to.
- Drug use and mental health are the top issues.

Community Engagement and Collaboration

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 13 organizations or community segments to rank. According to these participants, the hospital, public health, school, and emergency services (including ambulance and fire) are the most engaged in the community. The averages of these rankings (with 5 being "excellent" engagement or collaboration) were:

- Hospital (healthcare system) (4.5)
- Emergency services, including ambulance and fire (4.25)
- Public Health (4.25)
- Economic development organizations (4.0)
- Schools (4.0)
- Long-term care, including nursing homes and assisted living (3.75)
- Faith-based (3.5)
- Business and industry (3.5)
- Pharmacy (3.25)
- Social Services (3.25)
- Human services agencies (3.0)
- Other local health providers, such as dentists and chiropractors (3.0)
- Law enforcement (2.75)

Priority of Health Needs

A community group that consisted of the initial members who attended the first community meeting and the key informant interviewees were sent a pre-recorded presentation on April 15th. The pre-recorded presentation included the CRH representatives presenting 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 community group viewing the prerecorded presentation of the assessment findings, they completed an online survey in which they identified what they perceived as the top four community health needs. All of the potential needs were included in the online survey and each member checked the four needs they considered the most significant. They were also given the opportunity to leave comments.

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

- Availability of mental health services (7 votes)
- Attracting and retaining young families (6 votes)
- Depression/anxiety for all ages (6 votes)
- Ability to retain primary care providers (MD, DO, NP, PA) and nurses (4 votes)

From those top four priorities, each person was emailed a second survey and were instructed to select the one item they felt was the most important. The rankings were:

1. Attracting and retaining young families (4 votes)
2. Availability of mental health services (2 votes)
3. Depression/anxiety for all ages (2 votes)
4. Ability to retain primary care providers (MD, DO, NP, PA) and nurses (1 vote)

Following the prioritization process, the number one identified need was the attracting and retaining young families. A summary of this prioritization may be found in Appendix D.

Comparison of Needs Identified Previously

Top Needs Identified 2017 CHNA Process	Top Needs Identified 2020 CHNA Process
• Access to exercise and wellness activities	• Attracting and retaining young families
• Attracting and retaining young families	• Availability of mental health services
• Availability of specialists	• Depression/anxiety for all ages
• Youth alcohol use and abuse	• Ability to retain primary care providers (MD, DO, NP, PA) and nurses

The current process identified one common need from 2017, which was attracting and retaining young families.

Hospital and Community Projects and Programs Implemented to Address Needs Identified in 2017

In response to the needs identified in the 2017 community health needs assessment process, the following actions were taken:

Access to exercise and wellness activities: Since the last CHNA process, JMHCC formed a committee to advance the establishment of a community fitness center within the Elgin-New Leipzig Public School. Due to budget and physical constraints of the building, a new area was not able to be developed. The committee continues to advance the idea of renovating the current weight room in the school to allow for community access.

Availability of specialists: JMHCC has partnered with Sanford Health to add a visiting cardiologist to its Elgin clinic and is also now offering psychiatric and psychotherapy care through telemedicine with the Center for Psychiatric Care headquartered in Grand Forks.

Ability to recruit and remain primary care providers: JMHCC now has two medical doctors on staff and five providers, which is an increase in provider staffing since the last CHNA.

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

Elgin Area Health Survey

Jacobson Memorial Hospital Care Center and Custer Health 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/ElginND20 or by scanning on the QR Code at the right.

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 Kylie Nissen at 701.777.5380.

Surveys will be accepted through March 31, 2020. 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
- ☐ Healthcare
- ☐ 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): _____

7. 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 or vaping (juuling)
- ☐ 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): _____

8. 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): _____

9. 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
- ☐ Cost of activities for seniors
- ☐ Availability 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): _____

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

_____

_____

Delivery of Healthcare

11. What **PREVENTS** community residents from receiving healthcare? (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): _____

12. Considering **GENERAL and ACUTE SERVICES** at Jacobson Memorial Hospital Care Center, which services are you aware of (or have you used in the past year)? (Choose ALL that apply)

- ☐ Acne treatment
- ☐ Acute care
- ☐ Allergy, flu, & pneumonia shots
- ☐ Blood pressure chekcs
- ☐ Childhood vaccines
- ☐ Diabetes care
- ☐ Emergency room
- ☐ Family medicine & primary care
- ☐ Hospital
- ☐ Mole/wart/skin lesion removal
- ☐ Nutrition counseling
- ☐ Observation
- ☐ Outpatient services
- ☐ Pain medicatin addiction treatment
- ☐ Pharmacy
- ☐ Prenatal care (up to 32 weeks)
- ☐ Preventive visits
- ☐ Physicals: annuals, D.O.T., sports, & insurance)
- ☐ Pulmonary function tests
- ☐ Restorative nursing
- ☐ Smoking cessation
- ☐ Skilled nursing services
- ☐ Social work services
- ☐ Sports medicine
- ☐ Swing bed services
- ☐ Visiting nurse
- ☐ Wellness exams

13. Considering **SCREENING/THERAPY SERVICES** at Jacobson Memorial Hospital Care Center, which services are you aware of (or have you used in the past year)? (Choose ALL that apply)

- ☐ Cardiac rehab
- ☐ Chronis disease management
- ☐ Holter monitoring
- ☐ Laboratory services
- ☐ Lower extremity circulatory assessment
- ☐ Occupational physicals
- ☐ Occupational therapy
- ☐ Pediatric services
- ☐ Physical therapy
- ☐ Psychiatry & psychotherapy (visiting therapist)
- ☐ Social services
- ☐ Speech therapy

14. Considering **RADIOLOGY SERVICES** at Jacobson Memorial Hospital Care Center, which services are you aware of (or have you used in the past year)? (Choose ALL that apply)

- ☐ Bone density (mobile unit)
- ☐ CT scans (in-house & mobile unit)
- ☐ Digital mammography (mobile unit)
- ☐ Echocardiograms (mobile unit)
- ☐ EKG
- ☐ General x-ray
- ☐ MRI (mobile unit)
- ☐ Teleradiology
- ☐ Ultrasound (mobile unit)

15. Considering services offered locally by **OTHER PROVIDERS/ORGANIZATIONS** in your community, which services are you aware of (or have you used in the past year)? (Choose ALL that apply)

- ☐ Ambulance
- ☐ Chiropractic services
- ☐ Dental services
- ☐ Drug take-back program at local pharmacy
- ☐ Durable medical equipment
- ☐ Massage therapy
- ☐ Optometric/vision services
- ☐ Organ procurement
- ☐ Vision care

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

- ☐ Blood pressure check
- ☐ Breastfeeding resources
- ☐ Car seat program
- ☐ Child health (well baby checks)
- ☐ CPR & first aid
- ☐ Diabetes screening
- ☐ Emergency preparedness services – work with partners as part of local emergency response team
- ☐ Environmental health services (water, sewer, health hazard abatement)
- ☐ Health Tracks (child health screening) done with social services
- ☐ Hepatitis C/HIV/STI testing
- ☐ Home health (in-home nursing care)
- ☐ Immunizations (including flu shots)
- ☐ Mandan Good Neigbor Project
- ☐ Member of Child Protection Team & County Inter-agency Team
- ☐ Newborn home visits
- ☐ Nurse Family Partnerships
- ☐ Nutrition education
- ☐ Preschool screening
- ☐ School health (vision, hearing, health education)
- ☐ Substance abuse
- ☐ Tobacco prevention & control
- ☐ Tuberculosis testing & management
- ☐ WIC (Women, Infants & Children) Program
- ☐ Youth ecuation programs (first aid, bike safety, bicycle helmet safety education)

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

_____

_____

18. Would you utilize a van service from Jacobson Memorial Hospital Care Center for transportation to appointments?

- ☐ Yes
- ☐ No

19. If "Yes" to the previous question, what day would you prefer the service be available?

- ☐ Monday
- ☐ Tuesday
- ☐ Wednesday
- ☐ Thursday
- ☐ Friday

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

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

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

- ☐ Other healthcare 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): _____

22. Are you aware of Jacobson Memorial Hospital Care Center's Foundation, which exists to financially support Jacobson Memorial Hospital Care Center?

- ☐ Yes
- ☐ No

23. Have you supported the Jacobson Memorial Hospital Care Center Foundation in any of the following ways? (Choose ALL that apply)

- ☐ Cash or stock gift
- ☐ Endowment gifts
- ☐ Memorial/Honorarium
- ☐ Planned gifts through wills, trusts or life insurance policies
- ☐ Other: (please specify) _____

24. Do you believe individuals in the community would financially support any of the following capital improvements by Jacobon Memorial Hospital Care Center? (Choose ALL that apply)

- ☐ Emergency room renovations
- ☐ Ambulance entrance
- ☐ Removal of coal boiler & addition of garage
- ☐ Improvement to bathing suite
- ☐ Other (please specify):_____ _____

Demographic Information: Please tell us about yourself.

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

- ☐ Yes
- ☐ No

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

- ☐ Indian Health Service (IHS)
- ☐ Insurance through employer (self, spouse, or parent)
- ☐ Self-purchased insurance
- ☐ Medicaid
- ☐ Medicare
- ☐ No insurance
- ☐ Veteran's Healthcare Benefits
- ☐ Other (please specify): _____

27. 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

28. 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

29. Sex:

- ☐ Female
- ☐ Male
- ☐ Non-binary
- ☐ Other (please specify): _____

30. Employment status:

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

31. Your zip code: _____

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

- ☐ American Indian
- ☐ African American
- ☐ Asian
- ☐ Hispanic/Latino
- ☐ Pacific Islander
- ☐ White/Caucasian
- ☐ Other: _____

33. 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

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

_____

_____

Thank you for assisting us with this important survey!

Appendix B – County Health Rankings Explained

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

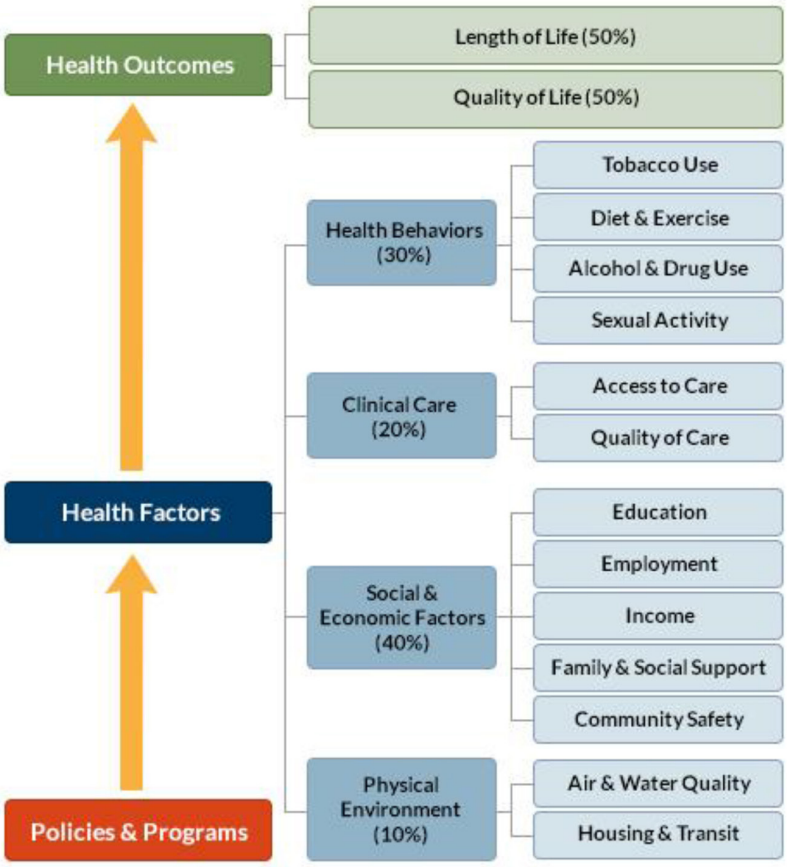
Methods

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 US 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 US 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 US 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 US 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 US 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 US 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 US 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 – Youth Behavioral Risk Survey Results

North Dakota High School Survey

*2017 YRBS North Dakota Data is not yet available, so the 2015 data was used.

Rate Increase ↑, rate decrease↓, or no statistical change = in rate.

	ND 2013	ND 2015*	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2017
Injury and Violence						
Percentage of students who rarely or never wore a seat belt.	11.6	8.5	↓	10.5	7.5	5.9
Percentage of students who rode in a vehicle with a driver who had been drinking alcohol (one or more times during the 30 prior to the survey)	21.9	17.7	↓	21.1	15.2	16.5
Percentage of students who talked on a cell phone while driving (on at least 1 day during the 30 days before the survey, among students who drove a car or other vehicle)	67.9	61.4	↓	60.7	58.8	NA
Percentage of students who texted or e-mailed while driving a car or other vehicle (on at least 1 day during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey)	59.3	57.6	=	56.7	54.4	39.2
Percentage of students who never or rarely wore a helmet (during the 12 months before the survey, among students who rode a motorcycle)	29.8	28.7	=	32.8	24.7	NA
Percentage of students who carried a weapon on school property (such as a gun, knife, or club on at least 1 day during the 30 days before the survey)	6.4	5.2	=	6.6	4.5	3.8
Percentage of students who were in a physical fight on school property (one or more times during the 12 months before the survey)	8.8	5.4	↓	6.9	6.1	8.5
Percentage of students who were ever physically forced to have sexual intercourse (when they did not want to)	7.7	6.3	=	6.5	7.4	7.4
Percentage of students who experienced physical dating violence (one or more times during the 12 months before the survey, including being hit, slammed into something, or injured with an object or weapon on purpose by someone they were dating or going out with among students who dated or went out with someone during the 12 months before the survey)	9.7	7.6	=	6.9	8.0	8.0
Percentage of students who have been the victim of teasing or name calling because someone thought they were gay, lesbian, or bisexual (during the 12 months before the survey)	9.6	9.7	=	10.4	9.7	NA
Percentage of students who were bullied on school property (during the 12 months before the survey)	25.4	24.0	=	27.5	22.4	19.0
Percentage of students who were electronically bullied (including being bullied through e-mail, chat rooms, instant messaging, websites, or texting during the 12 months before the survey)	17.1	15.9	=	17.7	15.8	14.9
Percentage of students who felt sad or hopeless (almost every day for 2 or more weeks in a row so that they stopped doing some usual activities during the 12 months before the survey)	25.4	27.2	=	24.9	28.9	31.5
Percentage of students who seriously considered attempting suicide (during the 12 months before the survey)	16.1	16.2	=	15.8	16.7	17.2
Percentage of students who made a plan about how they would attempt suicide (during the 12 months before the survey)	13.5	13.5	=	12.8	13.7	13.6
Percentage of students who attempted suicide (one or more times during the 12 months before the survey)	11.5	9.4	↓	10.3	11.3	7.4

	ND 2013	ND 2015*	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2017
Tobacco Use						
Percentage of students who ever tried cigarette smoking (even one or two puffs)	41.4	35.1	↓	37.3	32.5	28.9
Percentage of students who smoked a whole cigarette before age 13 years (for the first time)	7.9	7.2	=	7.3	6.7	9.5
Percentage of students who currently smoked cigarettes (on at least 1 day during the 30 days before the survey)	19.0	11.7	↓	13.2	11.8	8.8
Percentage of students who currently frequently smoked cigarettes (on 20 or more days during the 30 days before the survey)	6.6	4.3	↓	4.3	4.7	2.6
Percentage of students who currently smoked cigarettes daily (on all 30 days during the 30 days before the survey)	3.9	3.2	=	3.2	3.2	2.0
Percentage of students who usually obtained their own cigarettes by buying them in a store or gas station (during the 30 days before the survey among students who currently smoked cigarettes and who were aged <18 years)	7.8	16.9	↑	0.2	1.0	NA
Percentage of students who tried to quit smoking cigarettes (among students who currently smoked cigarettes during the 12 months before the survey)	55.5	47.4	=	49.1	52.7	NA
Percentage of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least 1 day during the 30 days before the survey)	NA	22.3	↑	19.7	22.8	13.2
Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least 1 day during the 30 days before the survey)	13.8	10.6	↓	12.6	9.5	5.5
Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least 1 day during the 30 days before the survey)	11.7	9.2	↓	9.7	9.7	8.0
Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey)	27.5	20.9	↓	22.9	19.8	14.0
Alcohol and Other Drug Use						
Percentage of students who ever drank alcohol (at least one drink of alcohol on at least 1 day during their life)	65.8	62.1	=	64.5	59.9	60.4
Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips)	15.2	12.4	=	15.3	12.9	15.5
Percentage of students who currently drank alcohol (at least one drink of alcohol on at least 1 day during the 30 days before the survey)	35.3	30.8	↓	32.8	29.3	29.8
Percentage of students who drank five or more drinks of alcohol in a row (within a couple of hours on at least 1 day during the 30 days before the survey)	21.9	17.6	↓	19.8	17.0	13.5
Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol)	37.0	41.3	=	41.1	40.4	43.5
Percentage of students who tried marijuana before age 13 years (for the first time)	5.6	6.3	=	5.8	5.8	6.8
Percentage of students who currently used marijuana (one or more times during the 30 days before the survey)	15.9	15.2	=	13.2	17.1	19.8
Percentage of students who ever took prescription drugs without a doctor's prescription (such as OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax, one or more times during their life)	17.6	14.5	↓	13.2	16.0	14.0
Percentage of students who were offered, sold, or given an illegal drug on school property (during the 12 months before the survey)	14.1	18.2	↑	15.9	19.9	19.8

	ND 2013	ND 2015*	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2017
Percentage of students who attended school under the influence of alcohol or other drugs (on at least one day during the 30 days before the survey)	9.9	8.6	=	7.9	9.0	NA
Sexual Behaviors						
Percentage of students who ever had sexual intercourse	44.9	38.9	↓	39.3	39.1	39.5
Percentage of students who had sexual intercourse before age 13 years (for the first time)	3.8	2.6	=	3.3	3.3	3.4
Weight Management and Dietary Behaviors						
Percentage of students who were overweight (>= 85th percentile but <95th percentile for body mass index, based on sex and age-specific reference data from the 2000 CDC growth chart)	15.1	14.7	=	15.4	14.6	15.6
Percentage of students who were obese (>= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth chart)	13.5	14.0	=	16.3	12.9	14.8
Percentage of students who described themselves as slightly or very overweight	32.0	32.2	=	34.2	31.5	31.5
Percentage of students who were trying to lose weight	45.4	44.7	=	45.0	43.0	47.1
Percentage of students who did not eat fruit or drink 100% fruit juices (during the 7 days before the survey)	3.4	3.9	=	4.3	4.1	5.6
Percentage of students who ate fruit or drank 100% fruit juices one or more times per day (during the 7 days before the survey)	64.7	62.5	=	8.5	8.8	60.8
Percentage of students who did not eat vegetables (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)	6.0	4.7	=	4.5	5.2	7.2
Percentage of students who ate vegetables one or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the 7 days before the survey)	62.8	58.5	↓	61.2	60.0	59.4
Percentage of students who did not drink a can, bottle, or glass of soda or pop (not including diet soda or diet pop, during the 7 days before the survey)	25.3	25.6	=	23.5	21.7	27.8
Percentage of students who drank a can, bottle, or glass of soda or pop one or more times per day (not including diet soda or diet pop, during the 7 days before the survey)	23.4	18.7	=	21.4	18.0	18.7
Percentage of students who did not drink milk (during the 7 days before the survey)	11.1	13.9	↑	11.6	13.7	26.7
Percentage of students who drank two or more glasses per day of milk (during the 7 days before the survey)	42.4	35.8	↓	36.6	35.3	17.5
Percentage of students who did not eat breakfast (during the 7 days before the survey)	10.5	11.9	=	10.7	11.8	14.1
Percentage of students who most of the time or always went hungry because there was not enough food in their home (during the 30 days before the survey)	3.1	2.2	=	2.4	2.8	NA
Physical Activity						
Percentage of students who were physically active at least 60 minutes per day on 5 or more days (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey)	50.6	51.3	=	51.7	50.1	46.5
Percentage of students who watched television 3 or more hours per day (on an average school day)	21.0	18.9	=	20.7	18.2	20.7
Percentage of students who played video or computer games or used a computer 3 or more hours per day (for something that was not school work on an average school day)	34.4	38.6	↑	39.4	38.0	43.0

	ND 2013	ND 2015*	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2017
Other						
Percentage of students who had 8 or more hours of sleep (on an average school night)	30.0	29.5	=	34.5	28.7	25.4
Percentage of students who brushed their teeth on seven days (during the 7 days before the survey)	71.5	71.0	=	67.8	70.1	NA
Percentage of students who most of the time or always wear sunscreen (with an SPF of 15 or higher when they are outside for more than one hour on a sunny day)	11.2	12.5	=	10.3	12.8	NA
Percentage of students who used an indoor tanning device (such as a sunlamp, sunbed, or tanning booth [not including getting a spray-on tan] one or more times during the 12 months before the survey)	19.6	12.2	↓	13.3	12.8	NA

Appendix D – Prioritization of Community's Health Needs

Community Health Needs Assessment
Elgin, North Dakota
Ranking of Concerns

The top four concerns for each of the six topic areas, based on the community survey results, were disseminated to participants via a Qualtrics survey. The numbers below indicate the total number of votes by the people who responded to the survey sent out with the findings presentation. This information would typically have been presented and collected at the second community meeting, but because of COVID-19 was completed online. The "Priorities" column lists the number of votes for each of the concerns indicating which areas are felt to be priorities. Each person was given four votes for the items they felt were priorities. The "Most Important" column lists the number of votes during the second round of voting. After the first round of voting, the top four priorities were selected based on the highest number of votes. Each person was given one vote to select the item they felt was the most important priority of the top four highest ranked priorities.

	Priorities	Most Important
COMMUNITY/ENVIRONMENTAL HEALTH CONCERNS		
Attracting & retaining young families	6	4
Not enough jobs with livable wages, not enough to live on	1	
Not enough places for exercise and wellness activities	3	
Having enough quality school resources	1	
Having enough child daycare services	0	
AVAILABILITY/DELIVERY OF HEALTH SERVICES CONCERNS		
Ability to retain primary care providers (MD, DO, NP, PA)	4	1
Availability of mental health services	7	2
Cost of health insurance	1	
Not comfortable seeking care where I know the employees at the facility on a personal level	0	
Cost of prescription drugs	1	
YOUTH POPULATION HEALTH CONCERNS		
Alcohol use and abuse	3	
Smoking and tobacco use, exposure to second-hand smoke, or vaping (juuling)	3	
Drug use and abuse (including prescription drugs)	2	
Not enough activities for children	2	
Depression/anxiety (combined with adult) (for all ages)	~~(4)~~ 6	2
ADULT POPULATION HEALTH CONCERNS		
Alcohol use and abuse	2	
Drug use and abuse (including prescription drugs)	2	
Depression/anxiety	~~(2)~~ added to Youth	
Stress	3	
Cancer	0	
Not getting enough exercise/physical activity	1	
SENIOR POPULATION HEALTH CONCERNS		
Cost of long-term/nursing home care	1	
Availability of resources to help elderly stay in their homes	0	
Availability of transportation for seniors	1	
Availability of activities of activities for seniors	0	
Being able to meet the needs of older population	2	
Availability of resources for family and friends caring for elders	0	

Appendix E – Survey "Other" Responses

The number in parenthesis () indicates the number of people who indicated that EXACT same answer. All comments below are directly taken from the survey results and have not been summarized.

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:
    - Community proud
    - People are strong in Christian Faith
    - Respect for privacy
2. Considering the SERVICES AND RESOURCES in your community, the best things are: "Other" responses:
    - Government headquarter
    - None of the above
4. Considering the ACTIVITIES in your community, the best things are: "Other" responses:
    - Church
    - Hope
    - Library
    - None
    - Not much
    - Nothing
    - Outdoors
    - There's a huge lack of community activities

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:
    - Need more activities for youth
    - Not enough up to date housing
6. Considering the AVAILABILITY/DELIVERY OF HEALTH SERVICES in your community, concerns are: "Other" responses:
    - 1) Phones at clinic aren't being answered during regular day.
      2) 1 hour 40 minutes for ER doctor to arrive at hospital
    - Accurate billing
    - Charges at hospital way out of line compared to Bismarck charges. Prescription drug way too high because of no competition in our area.

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

- Positive adult role models outside of school and church

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

- Aging population
- Available home healthcare - high cost of nursing home care and basic care!
- Bringing opportunity to the community. New things are treated as bad and with distrust. Hard to bring new opportunities in that climate.
- Daycare
- Drug and alcohol abuse youth and adult. Little to no policing. Very little law and order.
- Families with parents doing substance abuse and neglecting children.
- Funding for health
- Getting young people interested in joining civic duties such as being on boards. Also, when there is a planned community activity, such as public dinners, they don't attend. Cohesiveness of communities.
- Having enough providers/staff in the clinic to care for current patient load.
- I think our community is great. Nice people, great churches, good educators. I would love to see some sort of semi-extensive paved trail for walking or biking safely on.
- Keeping enough families in the community
- Lack of activities for those who enjoy the arts (plays, movies, local artists)
- Lack of jobs that pay over minimum wage and most do not have many benefits, like health insurance and retirement plans.
- Lack of people willing to become involved and volunteering
- Maintaining our existing services and businesses - shop local
- Meeting the healthcare needs of our area in a changing time.
- No incoming people
- Non-operating vehicles on public property
- Not enough for the young people to do. No walking path, gym, no activities beside bar life for young adults
- Not enough physical activity for youth
- Overall limited access to resources (both general and healthcare related)
- Poor snow removal
- Provider retention
- Raising taxes, raising water-garbage costs; city
- Substance abuse across all age groups.
- The community working as a team.
- The decline of population and also the inability for business places to find and keep good employees. Because no one wants to work, businesses are not open as much as they could be.
- The inability for the business community and economic development organizations to move forward with projects due to the lack of funding and people to help.
- The loss of national and state funds to support our senior meals. Sloppy business and the cafe will mean an unnecessary burden on the local tax payers who will now have to assume the cost. --- Fix this! & do it now!

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

- Clinic closing early and no one answering the for hours at a time
- Have to travel far to see any specialists
- Lack of home health services
- Nurse don't speak good English
- Too busy

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

- Expand occupational therapy for rehab
- Heart doctor at clinic once a month
- Mental Health services.
- More outpatient pediatric therapy for children with disabilities without having to go to Bismarck
- OB/GYN
- Orthopedics
- Self-defense classes
- Training on how to prevent falls.
- Unsure

20. Where do you find out about LOCAL HEALTH SERVICES available in your area? "Other" responses:

- BOD
- Doctor in family

23. Have you supported the Jacobson Memorial Hospital Care Center's Foundation in any of the following ways? "Other" responses:

- Donations to JMHC Auxiliary
- It seems like Jacobson runs mostly on grants, donations, and foundation. Administrator (poor job). He cares more about keeping the building nice that the people in the hospital and in the nursing home.
- Projects

24. Do you believe individuals in the community would financially support any of the following capital improvements by Jacobson Memorial Hospital Care Center?

- Call system in activity room - where residents are left long hours without assistance
- Why do we have to pay for improvements? They have received way too much sales tax money?

Demographics

26. Health insurance or health coverage status (choose ALL that apply): "Other" responses:

- RX drug plan
- Supplement

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

- At Care Center old people don't get regular baths and no hair either. Poor Poor! Up to 40 minutes for call-light answered.
- Better training to improve efficiency in front desk, patient charts, billing and coding. Also more options for local therapies such as pediatric occupational therapy and behavior therapy (things outside of what school can offer) and psych services for children.
- Clinic phone is not answered much of the time (recording instead)
- Costs are too high! $800 for 2 stitches in O.P. Room! $900 for 1 office call, vein analysis and Rx for antibiotic! $2000 for a Prosia Injection! 4800-900 for ear infection. Most charges are higher than Sanford? or St. Alexius? Residents are very seldom taken out for a ride or any activities. Some would just like a short ride around town - etc!!!
- I have heard that the exercise program at senior meals in Carson is appreciated.
- I think having the hospital/clinic here is great! We are so rural to drive somewhere unfortunately that by the time you need help it might be too late!
- Insurance is the biggest issue. My deductible is so high I will never actually use my insurance other than for preventive care, despite huge monthly payments.
- It would be wonderful to have a fitness center in Elgin. Perhaps empty building on main street or small facility on hospital property.
- Mental Health Availability for youth and farmers
- Nutrition Counseling

- Need more specialists coming to Elgin
- Need to find ways to keep a local doctor, who wants to stay here for more than a couple years, and then move on
- Need to have providers respond to refills in a timely fashion, preferably same day.
- Retaining providers and accurate records
- Weekend clinic hours