

# Community Health Needs Assessment

Jacobson Memorial Hospital Care Center  
– Service Area  
Elgin, North Dakota

# 2023

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# Executive Summary

To help inform future decisions and strategic planning, Jacobson Memorial Hospital Care Center (JMHCC) conducted a Community Health Needs Assessment (CHNA) in 2023, the previous CHNA having been conducted in 2020. The Center for Rural Health (CRH) at the University of North Dakota (UND) School of Medicine & Health Sciences (SMHS) 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. Fifty-nine JMHCC service area residents completed the survey. Additional information was collected through eight 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 2020 to 2021 increased by 1%. The average number of residents younger than age 18 (20.4%) for Grant County comes in 3.2 percentage points lower than the North Dakota average (23.6%). The percentage of residents ages 65 and older is 15% higher for Grant County (30.6%) than the North Dakota average (15.7%), and the rate of education is slightly lower for Grant County (92.2%) than the North Dakota average (93.1%). The median household income in Grant County (\$57,200) is much lower than the state average for North Dakota (\$65,315).

Data compiled by County Health Rankings show Grant County is doing better than North Dakota in health outcomes/factors for seven categories.

Grant County, according to County Health Rankings data, is performing poorly, relative to the rest of the state, in 18 outcome/factor categories.

Of 106 potential community and health needs set forth in the survey, the 59 JMHCC service area residents who completed the survey indicated the following 10 needs as the most important:

- Ability to retain primary care providers and nurses in the community
- Alcohol use and abuse – youth and adult
- Attracting and retaining young families
- Availability of resources to help the elderly stay in their homes
- Availability of home health – senior
- Cost of long-term/nursing home care
- Depression/anxiety – adult
- Drug use and abuse – youth and adult
- Not getting enough exercise/physical activity – adult
- Not enough jobs with livable wages

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=17), not enough specialists (N=15), and no insurance/limited insurance (N=14).

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

- Family-friendly, good place to raise kids
- People are friendly, helpful, and supportive
- Feeling connected to people who live here
- Informal, simple, laidback lifestyle

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:

- Ability to retain primary care providers (MD, DO, NP, PA) and nurses in the community
- Depression/anxiety – adult and youth
- Attracting and retaining young families
- Availability of resources to help the elderly stay in their homes
- Alcohol use and abuse – adult and youth

## Overview and Community Resources

With assistance from the Center for Rural Health (CRH) at the University of North Dakota (UND) School of Medicine & Health Sciences (SMHS), Jacobson Memorial Hospital Care Center (JMHCC) completed a Community Health Needs Assessment (CHNA) of the JMHCC service area. The hospital identifies its service area as 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, North Dakota, and one is located 57 miles to the northwest in Richardton, North Dakota. 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 Western Plains Public Health and Grant County Social Services.

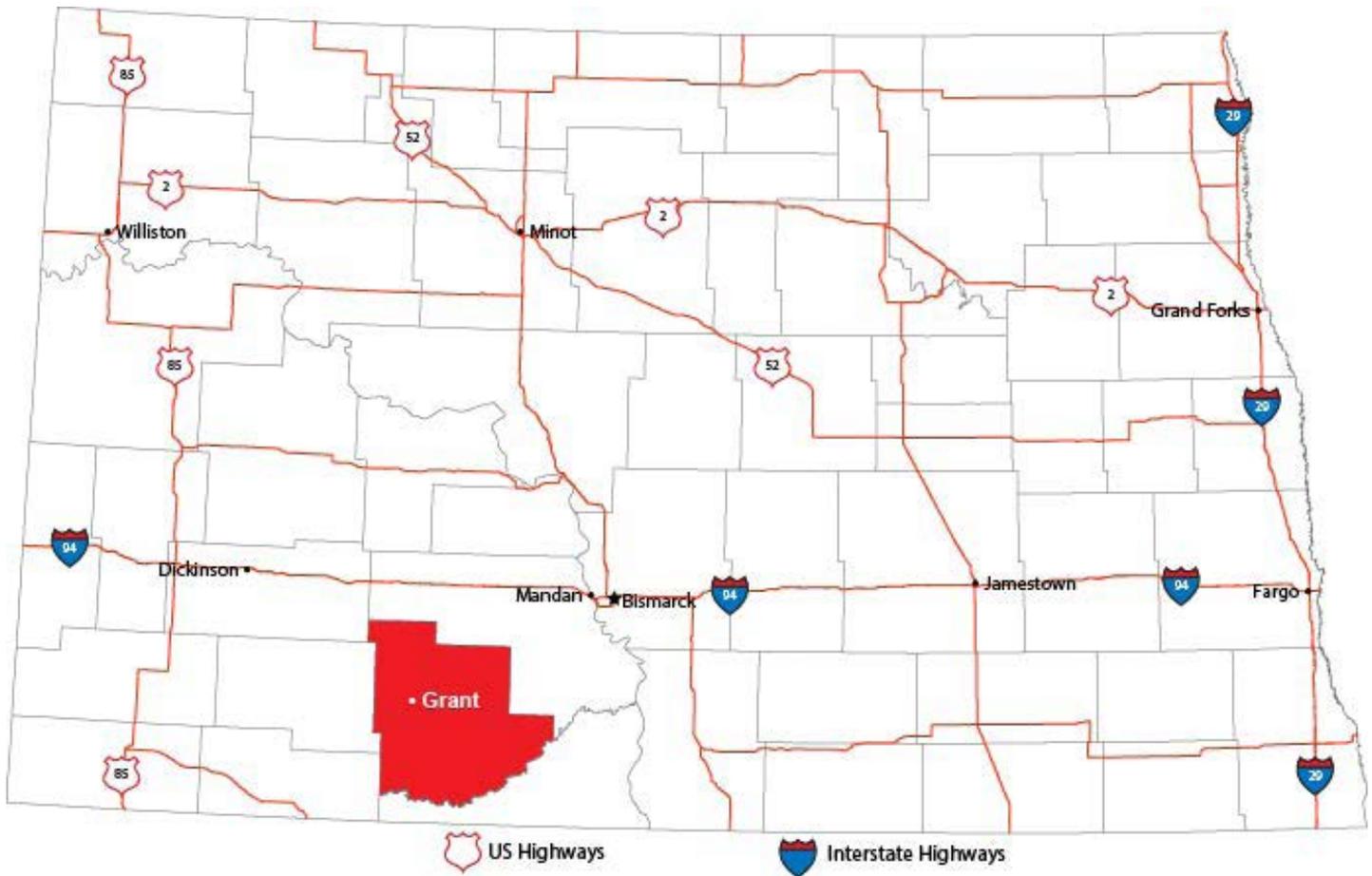
Elgin has a number of community assets and resources that can be mobilized to address population health improvement. In terms of physical assets and features, the community includes an indoor swimming pool, a nine-hole golf course, softball diamonds, a city park, and a high school weight area and football 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, Jacobson Memorial Hospital Care Center (JMHCC) is a 25-bed Critical Access Hospital (CAH). 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. The CAH Profile for Jacobson Memorial Hospital Care Center includes a summary of hospital-specific information and is available in Appendix A.

With 89 employees, JMHCC is the largest employer in Grant County and is one of the most important assets in the 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 mid-level medical providers and consulting/visiting medical providers.

Additionally, JMHCC was awarded as a 2020 Top 100 CAH by The Chartis Center for Rural Health.

JMHCC has a significant economic impact on the region. In 2020, when the economic impact analysis was calculated, it directly employed 63.52 FTE employees with an annual payroll of over \$4.5 million (including benefits). These employees create an additional 24 jobs and nearly \$750,000 in income, as they interact with other sectors of the local economy. This economy results in a total impact of 129 jobs and more than \$5.2 million in income. Additional information is provided in Appendix B.



## **Mission**

The mission of JMHCC is: “Advance the health of the communities with respect and accountability, providing peace of mind close to home.”

## **Vision**

The vision of JMHCC is: “Strive to be the community choice by providing excellent healthcare through continuous improvement.”

Services offered locally by JMHCC include:

### **General and Acute Services**

- Acne treatment
- Acute care
- Allergy, flu, and pneumonia shots
- Ambulance Service (BLS and ALS care)
- 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

### **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)
- 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

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

## Western Plains Public Health

Western Plains Public Health (formally known as 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, Western Plains Public Health is committed to the promotion of healthy lifestyles, protection and enhancement

### Specific services that Custer Health provides are:

- Blood pressure checks
- Breastfeeding resources
- Car seat program
- Child health (well-baby checks)
- CPR and first aid
- 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)
- Hepatitis C/HIV/STI testing
- Home visiting (maintenance in home 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 (Women, Infants, and Children) Program
- Youth education programs (first aid, bike safety, bicycle helmet safety education)

# Assessment Process

The purpose of conducting a Community Health Needs Assessment (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, Heil, Leith, New Leipzig, and Raleigh.

The Center for Rural Health (CRH), in partnership with Jacobson Memorial Hospital Care Center (JMHCC) and Western Plains Public 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 CRH and JMHCC. A small steering committee (see Figure 2) was formed that was responsible for planning and implementing the process locally. Representatives from CRH met and corresponded regularly by videoconference and / or via the eToolkit with the CHNA liaison. The community group (described in more detail below) 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. Seven people, representing a cross section demographically, attended the focus group meeting. The meeting was highly interactive with good participation.

**Figure 2: Steering Committee**

Scott Brooks	CEO, JMHCC
Julie Armijo	Member Services Manager at Mor-Gran-Sou Electric Cooperative
Bridget Winkler	Public Health Nurse, Custer Health
Carrie Gerving	FNP, COO, JMHCC
Luann Dart	CHNA Liaison, JMHCC

The original survey tool was developed and used by CRH. In order to revise the original survey tool to ensure the data gathered met the needs of hospitals and public health, CRH worked with the North Dakota Department of Health and Human Services’ 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.

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. CRH is the designated State Office of Rural Health, funded by the Federal Office of Rural Health Policy, Health Resources Services Administration, and Department of Health and Human Services. CRH connects the UND SMHS and other necessary resources to rural communities and other healthcare organizations in order to maintain access to quality care for rural residents. In this capacity, CRH works at a national, state, and community level.

Detailed below 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 seven community members, was convened and first met on March 16, 2023. 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 met again on May 8, 2023 with 11 community members in attendance. At this second meeting, the community group was presented with survey results, findings from key informant interviews and the focus group, and a wide range of secondary data, relating to the general health of the population in Grant County. The group was then tasked with identifying and prioritizing the community’s health needs.

Members of the community group represented the broad interests of the community served by JMHCC and Custer Health. They included representatives of the health community, business community, political bodies, education, and agricultural community. Not all members of the group were present at both meetings.

## Interviews

One-on-one interviews with six key informants were conducted in person in Elgin on March 16, 2023. Two additional key informant interviews were conducted over the phone in February and March of 2023. A representative from 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 healthcare by local providers, awareness of health services offered locally, barriers to receiving health services, and suggestions for improving collaboration within the community.

## Survey

A survey was distributed to solicit feedback from the community and was not intended to be a scientific or statistically valid sampling of the population. It was designed to be an additional tool for collecting qualitative data from the community at large – specifically, information related to community-perceived health needs. A copy of the survey instrument is included in Appendix C, and a full listing of direct responses provided for the questions that included “Other” as an option are included in Appendix G.

The community member survey was distributed to various residents of Grant County, which 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

To promote awareness of the assessment process, press releases led to a published article in the Grant County News. Additionally, information was published on JMHCC and Custer Health websites and Facebook pages.

Approximately 50 printed community member 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 paper survey was a postage-paid return envelope to CRH. In addition, to help make the survey as widely available as possible, residents also could request a survey by calling JMHCC or Western Plains Public Health. The survey period ran from February 22 to March 22, 2023. Thirteen completed paper surveys were returned.

Area residents were also given the option of completing an online version of the survey, which was publicized in the Grant County News, emailed to board members, Foundation board members, a church group, JMHCC staff, and posted throughout the county. The survey was also available through a link on the websites and Facebook pages of both JMHCC and Custer Health. Forty-six online surveys were completed. Seven of those online respondents used the QR code to complete the survey. In total, counting both paper and online surveys, 59 community member surveys were completed, equating to a 11% response rate. This response rate is on par for this type of unsolicited survey methodology and indicates an engaged community.

## 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](http://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](http://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](http://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

Social determinants of health are, according to the World Health Organization,

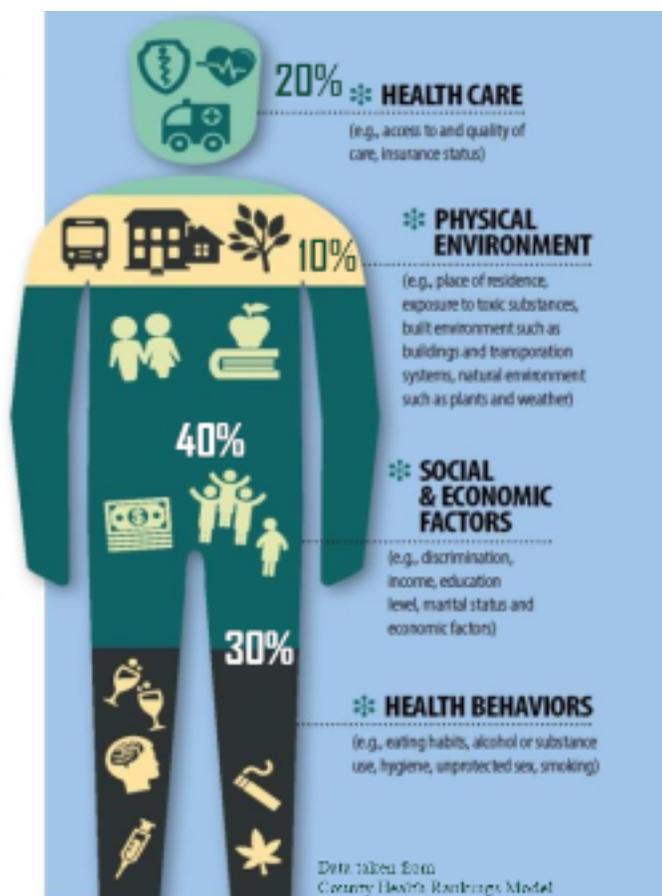
“the circumstances in which people are born, grow up, live, work, and age and the systems put in place to deal with illness. These circumstances are in turn shaped by wider set of forces: economics, social policies, and politics.”

Income-level, educational attainment, race/ethnicity, and health literacy all impact the ability of people to access health services. Basic needs such as clean air and water and safe and affordable housing are all essential to staying healthy and 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.

There are numerous models that depict the social determinants of health. While the models may vary slightly in the exact percentages that they attribute to various areas, the discrepancies are often because some models have combined factors when other models have kept them as separate factors.

For Figure 3, data have been derived from the County Health Rankings model, (<https://www.countyhealthrankings.org/resources/county-health-rankings-model>), and it illustrates that healthcare, while vitally important, plays only one small role (approximately 20%) in the overall health of individuals and, ultimately, of a community. Physical environment, social and economic factors, and health behaviors play a much larger part (80%) in impacting health outcomes. Therefore, as needs or concerns were raised through this CHNA process, it was imperative to keep in mind how they impact the health of the community and what solutions can be implemented.

**Figure 3: Social Determinants of Health**



In Figure 4, the 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, at <https://www.ruralhealthinfo.org/topics/social-determinants-of-health>.

**Figure 4: Social Determinants of Health**

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education		Stress	
Support	Walkability				
	Zip code / geography				

**Health Outcomes**  
Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations



## Demographic Information

**TABLE 1: GRANT COUNTY: INFORMATION AND DEMOGRAPHICS**

Source: <https://www.census.gov/quickfacts/fact/table/ND,US/INC910216#viewtop> and <https://data.census.gov/cedsci/profile?g=0400000US38&q=North%20Dakota>

	Grant County	North Dakota
Population (2021)	2,323	779,948
Population change (2020-2021)	0.4%	-0.5%
People per square mile (2010)	1.4	9.7
Persons 65 years or older (2020)	30.6%	15.7%
Persons younger than 18 years (2020)	20.4%	23.6%
Median age (2020)	48.2	35.2
White persons (2020)	95.6%	86.9%
High school graduates (2020)	92.2%	93.1%
Bachelor’s degree or higher (2020)	19.0%	30.7%
Live below poverty line (2020)	13.5%	10.2%
Persons without health insurance, younger than 65 years (2019)	13.5%	8.1%
Households with a broadband internet subscription (2020)	76.6%	83.1%

As the population of North Dakota has grown in recent years, Grant County has also seen an increase in population since 2020. The U.S. Census Bureau estimates show that Grant County’s population increased from 2,302 (2020) to 2,323 (2021).

## 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 2022 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 2022 County Health Rankings – a flow chart of how a county’s rank is determined – may be found in Appendix D. For further information, visit the [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

<p><b>Health Outcomes</b></p> <ul style="list-style-type: none"> <li>• Length of life</li> <li>• Quality of life</li> </ul> <p><b>Health Factors</b></p> <ul style="list-style-type: none"> <li>• Health behavior             <ul style="list-style-type: none"> <li>- Smoking</li> <li>- Diet and exercise</li> <li>- Alcohol and drug use</li> <li>- Sexual activity</li> </ul> </li> </ul>	<p><b>Health Factors (continued)</b></p> <ul style="list-style-type: none"> <li>• Clinical care             <ul style="list-style-type: none"> <li>- Access to care</li> <li>- Quality of care</li> </ul> </li> <li>• Social and Economic Factors             <ul style="list-style-type: none"> <li>- Education</li> <li>- Employment</li> <li>- Income</li> <li>- Family and social support</li> <li>- Community safety</li> </ul> </li> <li>• Physical Environment             <ul style="list-style-type: none"> <li>- Air and water quality</li> <li>- Housing and transit</li> </ul> </li> </ul>
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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 Heath and Jacobson Memorial Hospital Care Center (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 2022. 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 35th out of 47 ranked counties in North Dakota on health outcomes and 40th out of 48 on health factors. The measures, marked with a bullet point (•), are those where a county is not measuring up to the state rate/percentage; a 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 shape 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 show that Grant County is doing better than North Dakota in one of the outcomes but falls short in three other outcomes. Like many North Dakota counties, Grant County is doing poorly in many areas when it comes to the U.S. Top 10% ratings. One particular outcome where Grant County does not meet the U.S. Top 10% ratings is the poor or fair health percentage rate.

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:

- Low birth weight
- Excessive drinking
- Patient to mental health provider ratio
- Unemployment rate
- Children in single-parent household's rate
- Violent crime
- Drinking water violations
- Severe housing problems

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

- Poor or fair health rate
- Poor physical health days (in the past 30 days)
- Poor mental health days (in the past 30 days)
- Adult smoking
- Adult obesity
- Food environment index
- Physical inactivity
- Alcohol impaired driving deaths
- Social associations
- Injury deaths
- Access to exercise opportunities
- Uninsured
- Patient to dentist ratio
- Preventable hospital stays
- Mammography screening (% of Medicare enrollees ages 65-74 receiving screening)
- Flu vaccinations (% of fee-for-service Medicare enrollees receiving vaccination)
- Children in poverty
- Income inequality

**TABLE 2: SELECTED MEASURES FROM COUNTY HEALTH RANKINGS 2022 – GRANT COUNTY**

	Grant County	U.S. Top 10%	North Dakota
<b>Ranking: Outcomes</b>	<b>35<sup>th</sup></b>		<b>(of 47)</b>
Premature death		5,600	7,100
Poor or fair health	17% ●■	15%	13%
Poor physical health days (in past 30 days)	3.7 ●■	3.4	3.1
Poor mental health days (in past 30 days)	3.8 ●+	4.0	3.7
Low birth weight	5% +	6%	7%
<b>Ranking: Factors</b>	<b>40<sup>th</sup></b>		<b>(of 48)</b>
<i>Health Behaviors</i>			
Adult smoking	21% ●■	15%	17%
Adult obesity	38% ●■	30%	36%
Food environment index (10=best)	8.0 ●■	8.8	8.9
Physical inactivity	32% ●■	23%	28%
Access to exercise opportunities	30% ●■	86%	64%
Excessive drinking	23% ■	15%	24%
Alcohol-impaired driving deaths	50% ●■	10%	41%
Sexually transmitted infections		161.8	509.1
Teen birth rate		11	18
<i>Clinical Care</i>			
Uninsured	13% ●■	6%	7%
Primary care physicians		1,010:1	1,290:1
Dentists	2,220:1 ●■	1,210:1	1,480:1
Mental health providers	440:1 ■	250:1	470:1
Preventable hospital stays	6,438 ●■	2,233	3,553
Mammography screening (% of Medicare enrollees ages 65-74 receiving screening)	45% ●■	52%	53%
Flu vaccinations (% of fee-for-service Medicare enrollees receiving vaccination)	27% ●■	55%	50%
<i>Social and Economic Factors</i>			
Unemployment	2.8% +	4.0%	5.1%
Children in poverty	27% ●■	9%	11%
Income inequality	4.8 ●■	3.7	4.4
Children in single-parent households	10% +	14%	19%
Social associations	0.0 ●■	18.1	15.9
Violent crime	85 ■	63	258
Injury deaths	95 ●■	61	72
<i>Physical Environment</i>			
Air pollution – particulate matter	5.6 ■	5.9	6.4
Drinking water violations	No		
Severe housing problems	10% ■	9%	12%

● = 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

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 are from 2019-20. More information about the survey may be found at [www.childhealthdata.org/learn/NSCH](http://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 ages 0-17 unless noted otherwise), 2020**

Health Status	North Dakota	National
Children born premature (3 or more weeks early)	9.9%	11.2%
Children ages 10-17 overweight or obese	26.9%	32.1%
Children ages 0-5 who were ever breastfed	86.1%	80.8%
Children ages 6-17 who missed 11 or more days of school	2.9%	3.9%
<b>Healthcare</b>		
Children currently insured	93.6%	93.1%
Children who spent less than 10 minutes with the provider at a preventive medical visit	16.0%	18.1%
Children (1-17 years) who had preventive a dental visit in the past year	73.7%	77.5%
Children (3-17 years) received mental healthcare	10.5%	11.0%
Children (3-17 years) with problems requiring treatment did not receive mental health care	2.3%	2.5%
Young children (9-35 mos.) receiving standardized screening for developmental problems	31.1%	36.9%
<b>Family Life</b>		
Children whose families eat meals together four or more times per week	79.2%	75.2%
Children who live in households where someone smokes	16.1%	14.0%
<b>Neighborhood</b>		
Children who live in neighborhoods with parks or playgrounds	81.7%	74.9%
Children living in neighborhoods with poorly kept or rundown housing	9.1%	13.3%
Children living in neighborhood that’s usually or always safe	97.3%	94.6%

Source: <https://www.childhealthdata.org/browse/survey>

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:

- Children (1-17 years) who had a preventative dental visit in the past year
- Young children (9-35 mos.) receiving standardized screening for developmental problems
- 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 focus on the main components of children’s well-being. 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 Grant County is performing more poorly than the North Dakota average on three of the examined measures. The most marked difference was on the measure of Medicaid recipient with 100% of Grant County’s age 0-20 population were receiving services while the North Dakota average was 26.1%.

**Table 4: Selected County-Level Measures Regarding Children’s Health**

	<b>Grant County</b>	<b>North Dakota</b>
Child food insecurity, 2019	11.2%	9.6%
Medicaid recipient (% of population age 0-20), 2021	100%	26.1%
Children enrolled in Healthy Steps (CHIP) (% of population age 0-18), 2021	1.7%	2.1%
Supplemental Nutrition Assistance Program (SNAP) recipients (% of population age 0-18), 2021	13.5%	16.5%
Licensed childcare capacity (# of children), 2022	78	35,055
4-year high school cohort graduation rate, 2020/2021	≥80%	87.0%
Victims of child abuse and neglect requiring services (rate per 1,000 children ages 0-17), 2020	15.98	8.89

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, compare state health risk behaviors to national health risk behaviors and 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 completely anonymous.

North Dakota has two survey groups, selected and voluntary. The selected school survey population is chosen using a scientific sampling procedure, which ensures that 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 have been collected in 2017, 2019, and 2021. 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 2019 to 2021, and “↓” for a decreased trend in the data changes from 2019 to 2021. The final column shows the 2021 national average percentage. For a more complete listing of the YRBS data, see Appendix E.

## Table 5. Youth Risk Behavior Survey Results

North Dakota High School Survey

Rate Increase ↑, rate decrease ↓, or no statistical change = in rate from 2019-2021.

	ND 2017	ND 2019	ND 2021	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2021
<b>Injury and Violence</b>							
% of students who rarely or never wore a seat belt (when riding in a car driven by someone else)	8.1	5.9	49.6	↑	9.2	5.5	39.9
% 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)	16.5	14.2	13.1	=	18.2	13.7	14.1
% of students who talked on a cell phone while driving (on at least one day during the 30 days before the survey)	56.2	59.6	5.0	↓	64.9	64.2	NA
% of students who texted or emailed while driving a car or other vehicle (on at least one day during the 30 days before the survey)	52.6	53.0	55.4	=	59.9	55.9	36.1
% of students who were in a physical fight on school property (one or more times during the 12 months before the survey)~2017/2019~ *in 2021 replaced by* % 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)	7.2	7.1	5.0	↓	6.2	4.4	3.0
% of students who experienced sexual violence (being forced by anyone to do sexual things [counting such things as kissing, touching, or being physically forced to have sexual intercourse] that they did not want to, one or more times during the 12 months before the survey)	8.7	9.2	9.4	=	9.7	11.6	11
% of students who were bullied on school property (during the 12 months before the survey)	24.3	19.9	15.8	↓	19.8	15.0	15.0
% of students who were electronically bullied (includes texting, Instagram, Facebook, or other social media ever during the 12 months before the survey)	18.8	14.7	13.6	↓	16.2	14.5	15.9
% of students who made a plan about how they would attempt suicide (during the 12 months before the survey)	14.5	15.3	14.8	=	15.1	17.2	17.6
<b>Tobacco, Alcohol, and Other Drug Use</b>							
% 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 one day during the 30 days before the survey)	20.6	33.1	21.2	↓	24.2	23.6	18.0
% of students who currently used cigarettes, cigars, or smokeless tobacco (on at least one day during the 30 days before the survey)	18.1	12.2	5.9	↓	8.0	6.1	3.8
% of students who currently were binge drinking (four or more drinks for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey)	16.4	15.6	14.0	=	17.8	14.6	10.5
% of students who currently used marijuana (one or more times during the 30 days before the survey)	15.5	12.5	10.7	=	10.2	12.9	15.8

% of students who ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it (counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, one or more times during their life)	14.4	14.5	10.2	↓	9.7	11.0	12.2
<b>Weight Management, Dietary Behaviors, and Physical Activity</b>							
% of students who were overweight (>= 85th percentile but <95th percentile for body mass index)	16.1	16.5	15.6	=	15.5	14.2	16.0
% of students who had obesity (>= 95th percentile for body mass index)	14.9	14.0	16.3	=	17.4	15.0	16.3
% of students who did not eat fruit or drink 100% fruit juices (during the seven days before the survey)	4.9	6.1	5.0	=	5.7	4.6	7.7
% of students who did not eat vegetables (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the seven days before the survey)	5.1	6.6	5.9	=	5.3	6.2	9.3
% 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 seven days before the survey)	16.3	15.9	16.6	=	17.5	13.8	14.7
% of students who did not drink milk (during the seven days before the survey)	14.9	20.5	26.2	↑	21.2	29.4	35.7
% of students who did not eat breakfast (during the seven days before the survey)	13.5	14.4	15.1	=	14.5	17.3	22.0
% 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)	2.7	2.8	2.1	=	2.2	2.1	NA
% of students who were physically active at least 60 minutes per day on five 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 seven days before the survey)	51.5	49.0	56.5	↑	58.0	55.3	NA
% of students who watched television three or more hours per day (on an average school day) *In 2021 replaced by*Percentage of students who spent 3 or more hours per day on screen time (in front of a TV, computer, smart phone, or other electronic device watching shows or videos, playing games, accessing the internet, or using social media, not counting time spent doing schoolwork, on an average school day)	18.8	18.8	75.7	↑	75.8	78.6	75.7
% of students who played video or computer games or used a computer three or more hours per day (for something that was not schoolwork on an average school day) *In 2021, % of students who played video or computer games was combined with % of students who watch television three or more hours per day.	43.9	45.3	NA	NA	NA	NA	NA
<b>Other</b>							
% of students who ever had sexual intercourse	36.6	38.3	36.6	=	36.5	37.0	30
% of students who had eight or more hours of sleep (on an average school night)	31.8	29.5	24.5	↓	28.3	23.2	22.7
% of students who brushed their teeth on seven days (during the seven days before the survey)	69.1	66.8	67.9	=	64.5	69.9	NA

Source: <https://www.cdc.gov/healthyouth/data/yrbs/results.htm>; <https://www.nd.gov/dpi/districtschools/safety-health/youth-risk-behavior-survey>

## Low Income Needs

The North Dakota Community Action Agencies (CAAs), as nonprofit organizations, were originally established under the Economic Opportunity Act of 1964 to fight America’s war on poverty. CAAs are required to conduct statewide needs assessments of people experiencing poverty. The more recent statewide needs assessment study of low-income people in North Dakota sponsored by the CAAs was performed in 2020. The needs assessment study was accomplished through the collaboration of the CAAs and North Dakota State University (NDSU) by means of several kinds of surveys (such as online or paper surveys, etc., depending on the suitability of these survey methods to different respondent groups) to low-income individuals and families across the state of North Dakota. In the study, the survey data were organized and analyzed in a statistical way to find out the priority needs of these people. The survey responses from low-income respondents were separated from the responses from non-low-income participants, which allows the research team to compare them and then identify the similarity, difference, and uniqueness of them in order to ensure the validity and accuracy of the survey study and avoid bias. Additionally, two comparison methods were used in the study, including cross-sectional and longitudinal comparisons. These methods allow the research team not only to identify the top specific needs under the seven need categories, including Employment, Income and Asset-Building, Education, Housing, Health and Social/Behavior Development, Civic Engagement, and Other Supports, through the cross-sectional comparison but also to be able to find out the top specific needs regardless of which categories these needs belong to through the longitudinal comparison.

---

### Top Needs Identified by People Experiencing Poverty Across North Dakota

Category	Need
Housing	Rental Assistance
Income	Financial Issues
Employment	Finding a job
Health	Dental Insurance/Affordable Dental Care
Education	Cost

---

# 2020 North Dakota

## LOW INCOME COMMUNITY NEEDS



Assessed by CAPND and NDSU, November 2020

### KEY FINDINGS

1<sup>st</sup> Priority Need

**Rental Assistance**



**3,458**

Total Survey Responses

**1,086**

Low-Incomes

**2,084**

Non- Low-Incomes

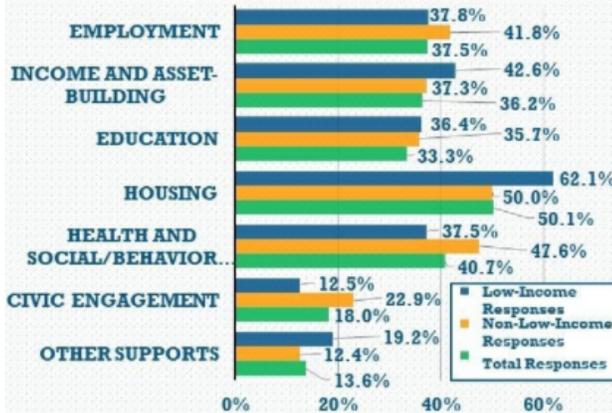
**288**

Others (roles cannot be identified)

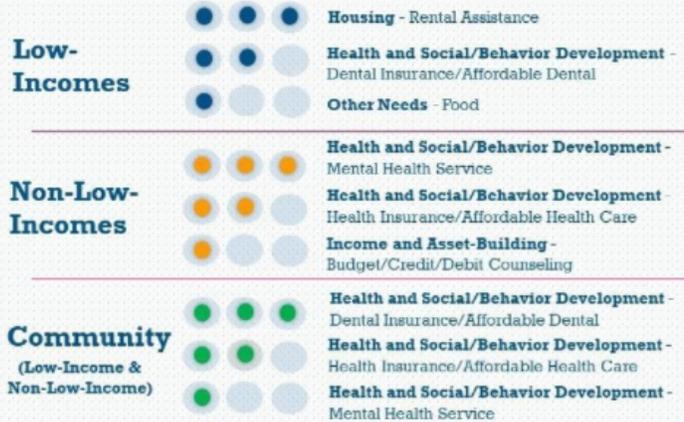
"**Rental Assistance**" becomes the 1<sup>st</sup> priority need of people experiencing poverty across the state under the category of "**Housing**". This need, however, would represent their immediate (short-term) need, which could be partially or significantly affected by the pandemic of COVID-19.

- ♥ The 1<sup>st</sup> priority need for the non-low-income respondents is "**Mental Health Service**".
- ♥ For the community (including both low-income and non-low-income people), the 1<sup>st</sup> priority need is "**Dental Issuance/Affordable Dental**".

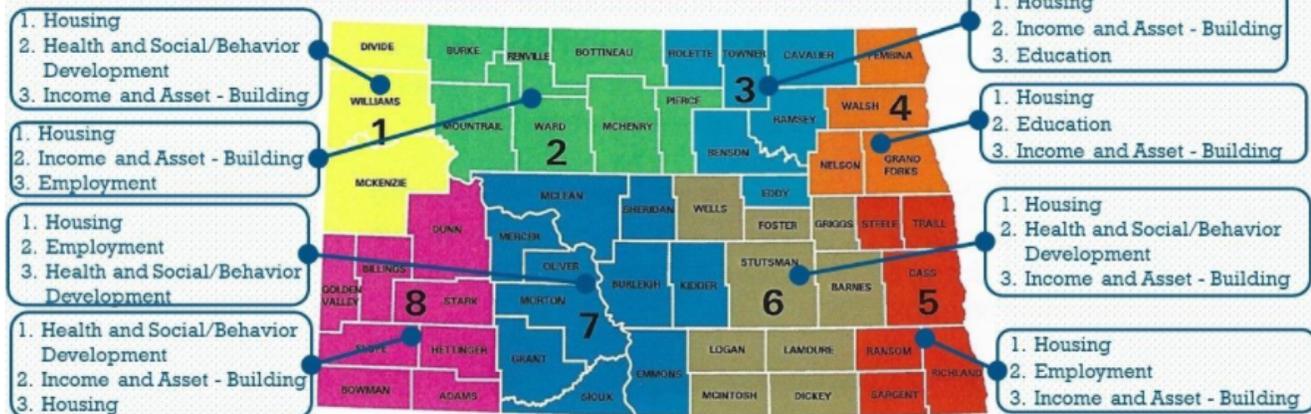
### STATEWIDE OVERALL NEEDS



### TOP STATEWIDE SPECIFIC NEEDS



### TOP REGIONAL OVERALL NEEDS FOR LOW-INCOMES



### ACKNOWLEDGMENTS

This project was supported by the Consensus Council, Inc. (in partnership with the Bush Foundation) through the Community Innovation Grants.

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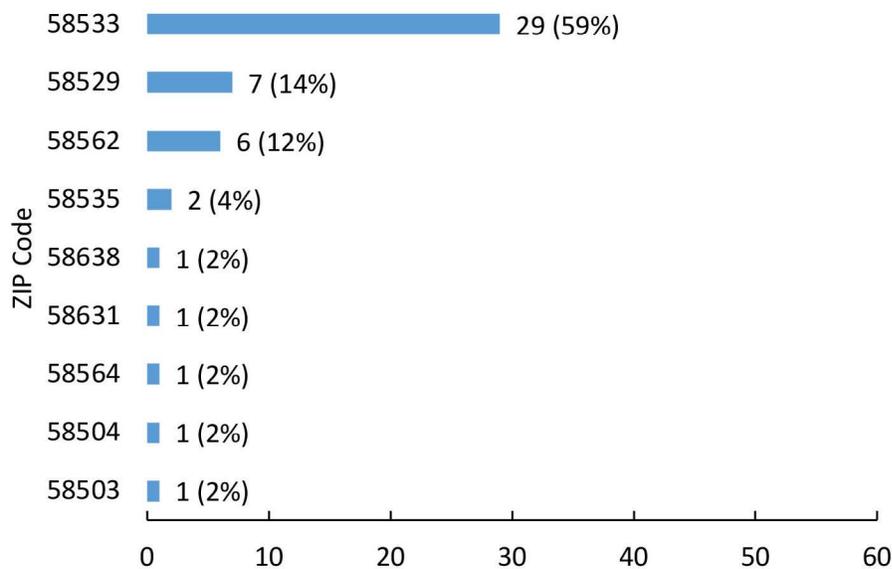
# Survey Results

As noted previously, 59 community members completed the survey in communities throughout the counties in the Jacobson Memorial Hospital Care Center (JMHC) service area. For all questions that contained an “Other” response, all of those direct responses may be found in Appendix G. In some cases, a summary of those comments is additionally included in the report narrative. The “Total respondents” number under each heading indicates the number of people who responded to that particular question, and the “Total responses” number under the heading depicts the number of responses selected for that question (some questions allow for selection of more than one response).

The survey requested that respondents list their home ZIP code. While not all respondents provided a ZIP code, 49 did, revealing that a large majority of respondents (59%, N=29) lived in Elgin, followed by Leith (14%, N=7), and New Leipzig (12%, N=6). These results are shown in Figure 5.

**Figure 5: Survey Respondents’ Home ZIP Code**

**Total respondents: 49**



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 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.

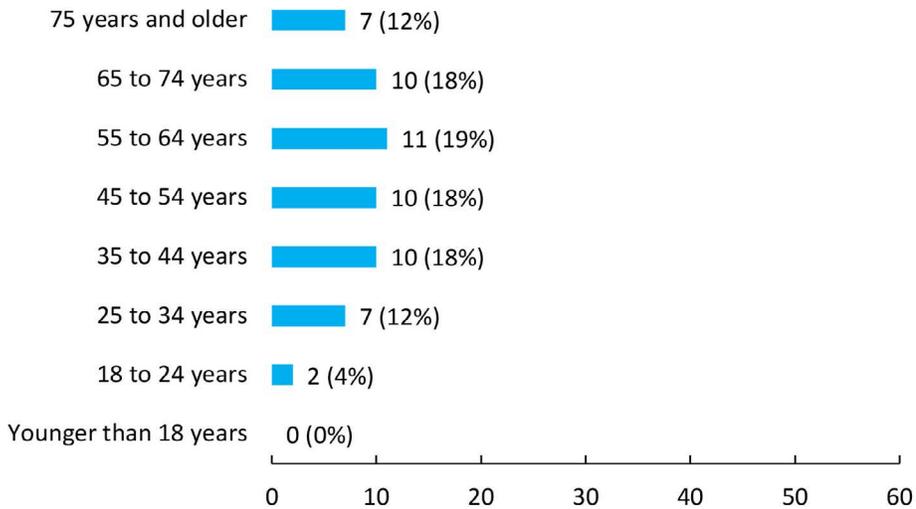
With respect to demographics of those who chose to complete the survey:

- 49% (N=28) were aged 55 or older
- The majority (84%, N=47) were female
- Slightly less than half of the respondents (46%, N=28) had bachelor’s degrees or higher
- The number of those working full time (65%, N=37) was more than three times higher than those who were retired (21%, N=12)
- 98% (N=54) of those who reported their ethnicity/race were White/Caucasian
- 28% of the population (N=16) 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

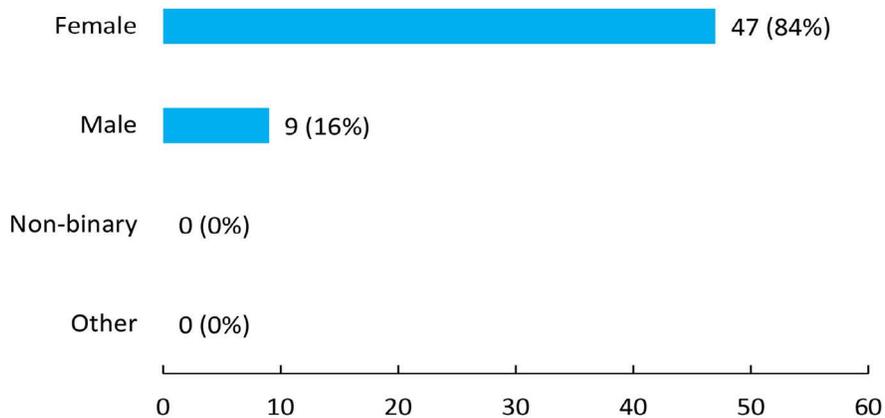
Total respondents = 57



People younger than age 18 are not questioned using this survey method.

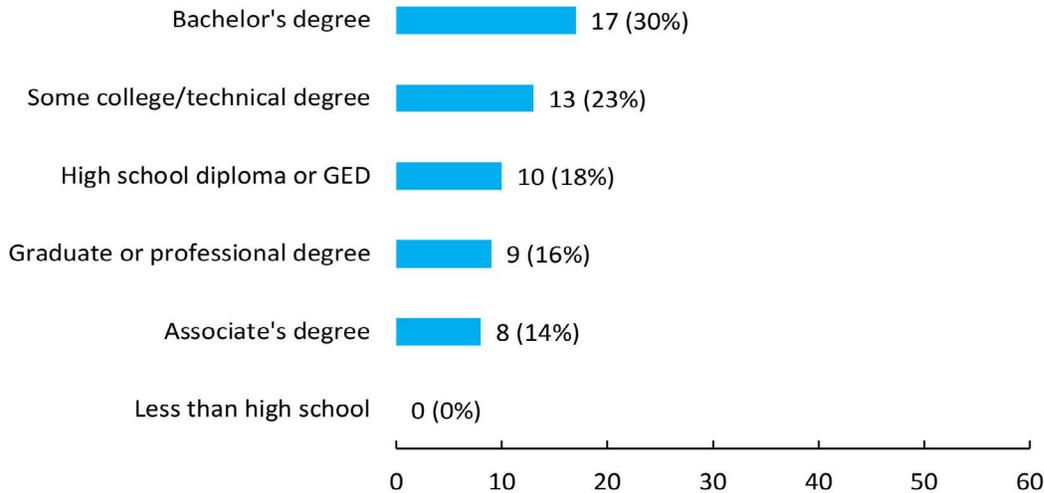
### Figure 7: Gender Demographics of Survey Respondents

Total respondents = 56



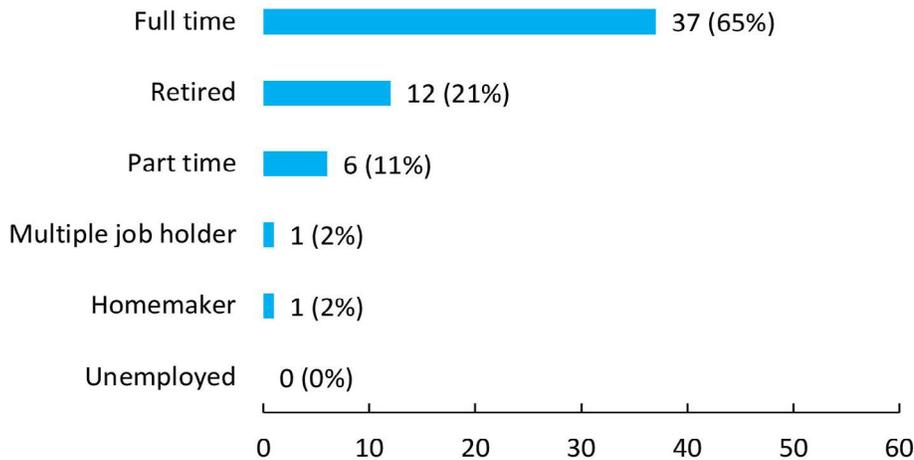
**Figure 8: Educational Level Demographics of Survey Respondents**

**Total respondents = 57**



**Figure 9: Employment Status Demographics of Survey Respondents**

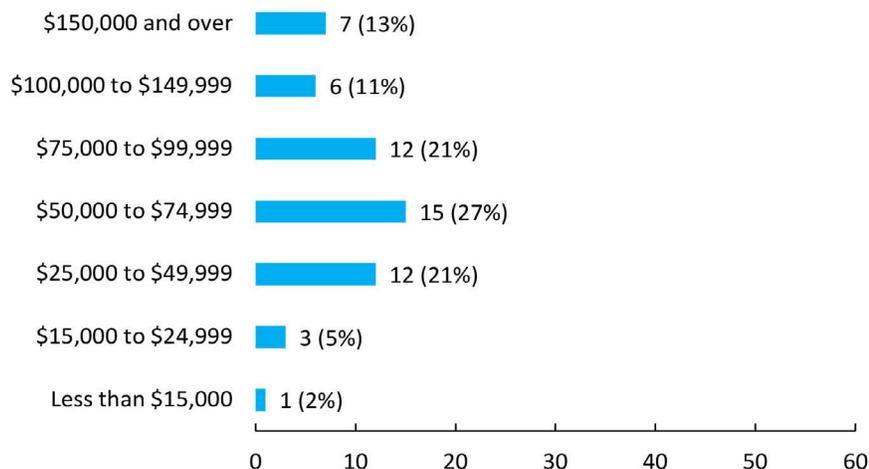
**Total respondents = 57**



Of those who provided a household income, 7% (N=4) community members reported a household income of less than \$25,000, while 24% (N=13) indicated a household income of \$100,000 or more. This information is shown in Figure 10.

**Figure 10: Household Income Demographics of Survey Respondents**

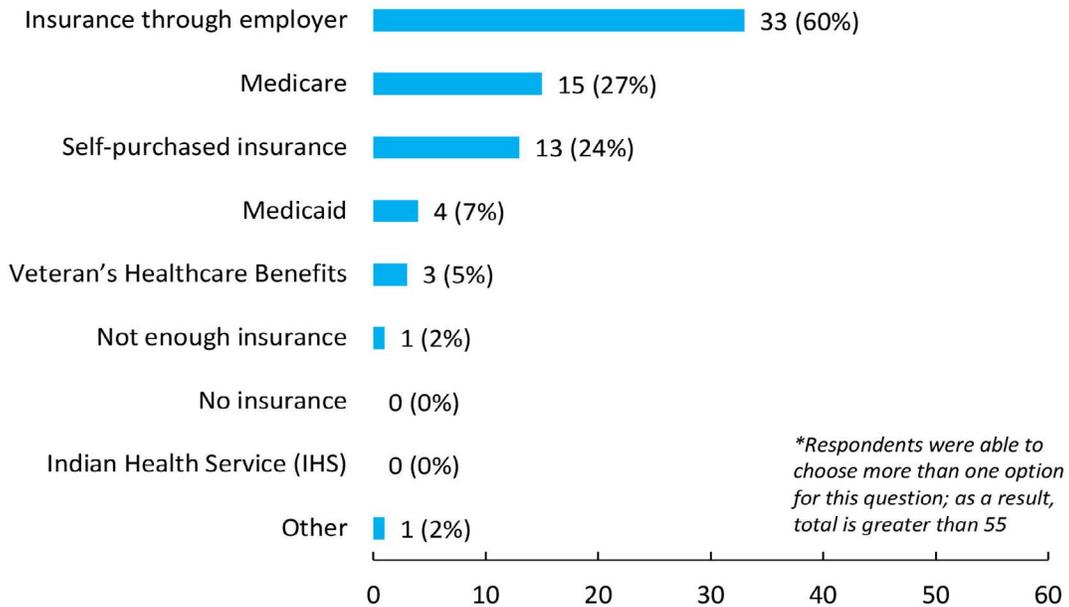
**Total respondents = 56**



Community members were asked about their health insurance status, which is often associated with whether people have access to healthcare. Two percent (N=1) of the respondents reported having no health insurance or being under-insured. The most common insurance types were insurance through one’s employer (N=33), followed by Medicare (N=15), and self-purchased insurance (N=13).

**Figure 11: Health Insurance Coverage Status of Survey Respondents**

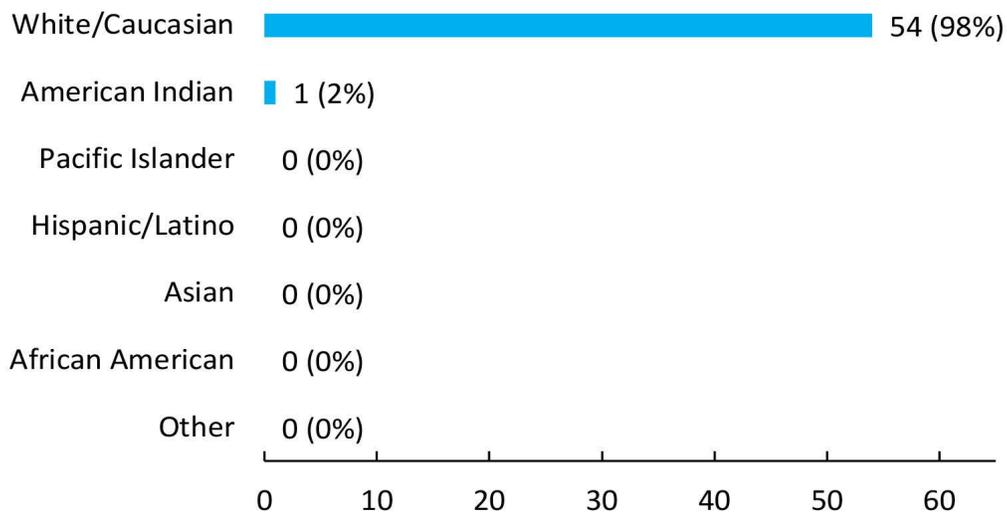
**Total respondents = 55\***



As shown in Figure 12, nearly all of the respondents were White/Caucasian (98%), with only one responded reporting they were also American Indian. This statistic was in-line with the race/ethnicity of the overall population of Grant County; the U.S. Census indicates that 95.6% of the population is White in Grant County.

**Figure 12: Race/Ethnicity Demographics of Survey Respondents**

**Total respondents = 55**



## Community Assets and Challenges

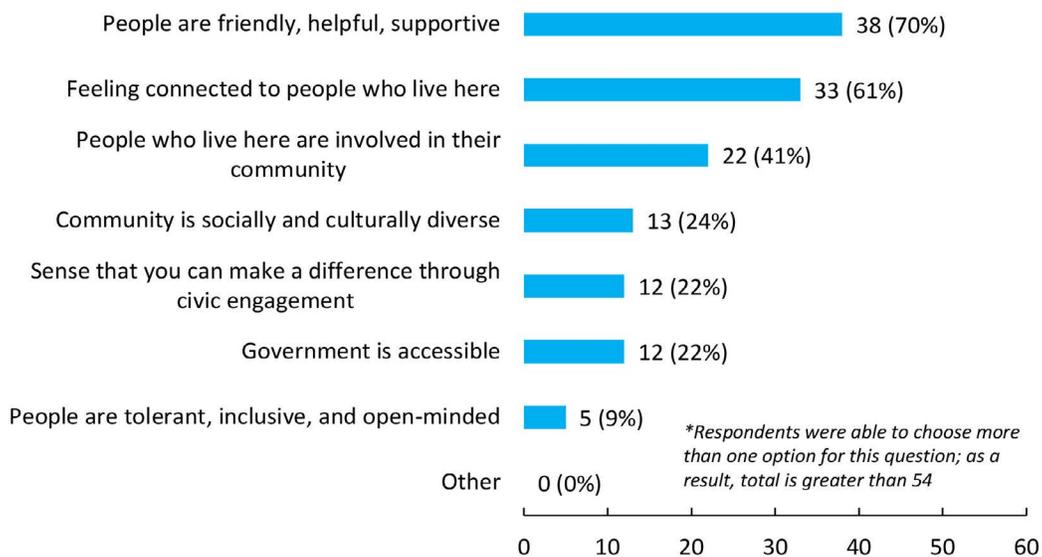
Survey-respondents were asked what they perceived as the best things about their community in four categories: people, services and resources, quality of life, and activities. In each category, respondents were given a list of choices and asked to pick the three best things. Respondents occasionally 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 35 respondents agreeing) that community assets include::

- Healthcare (N=41)
- Family-friendly (N=40)
- People are friendly, helpful, supportive (N=38)
- Safe place to live (N=38)

Figures 13 to 16 illustrate the results of these questions.

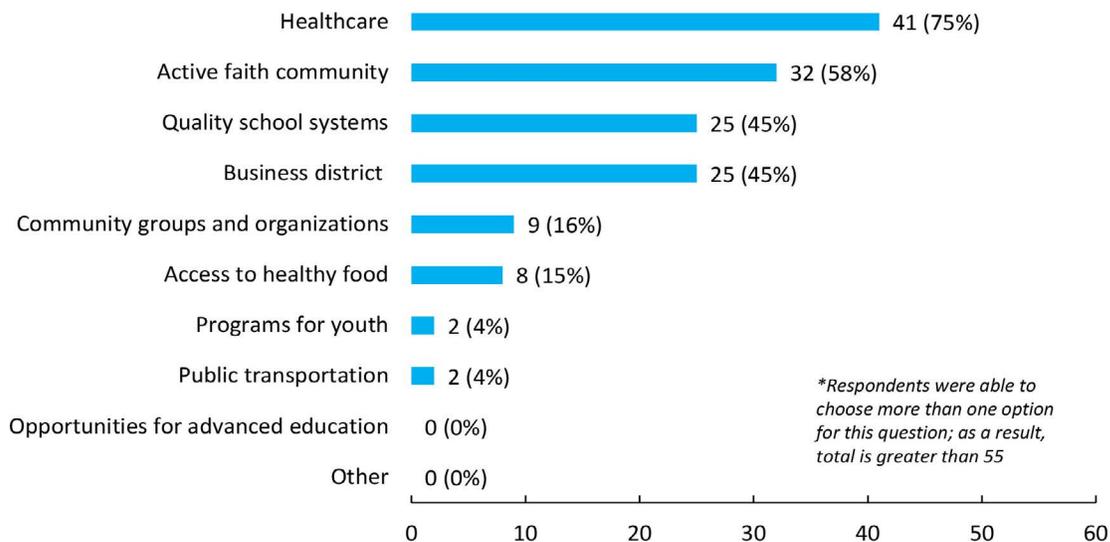
**Figure 13: Best Things About the PEOPLE in Your Community**

**Total responses = 54\***



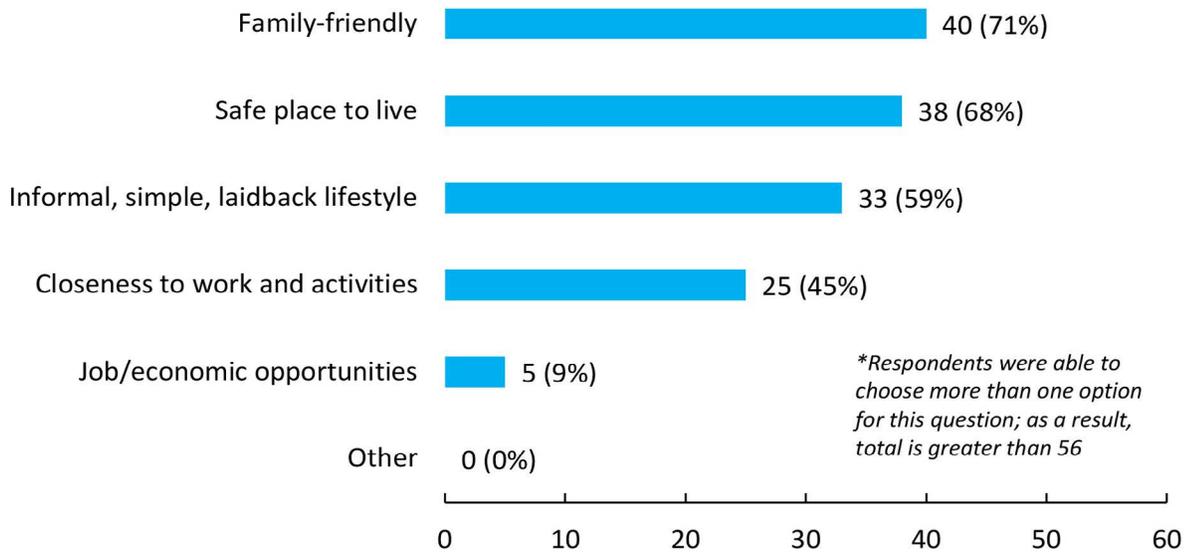
**Figure 14: Best Things About the SERVICES AND RESOURCES in Your Community**

**Total responses = 55\***



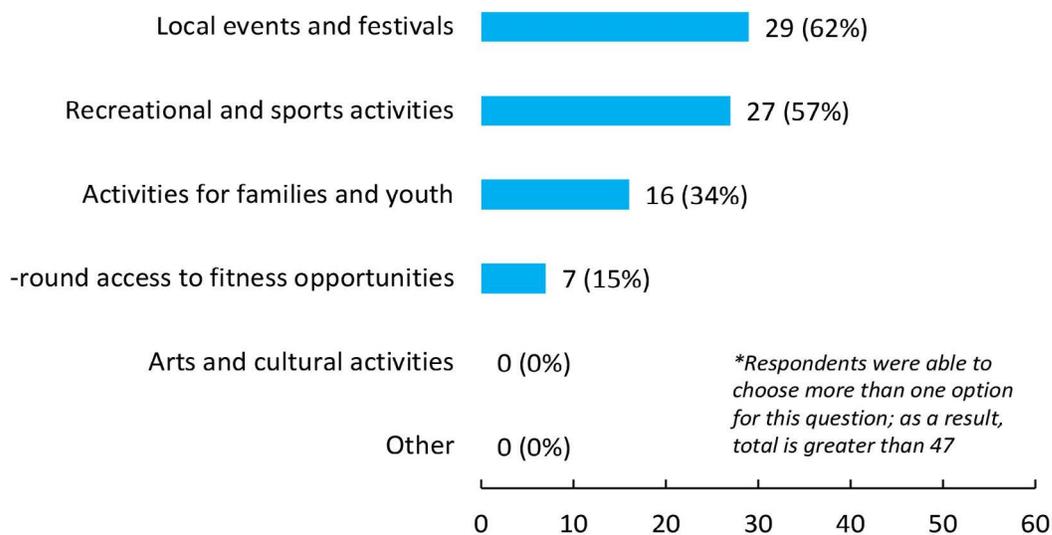
**Figure 15: Best Things About the QUALITY OF LIFE in Your Community**

**Total responses = 56\***



**Figure 16: Best Thing About the ACTIVITIES in Your Community**

**Total responses = 47\***



## Community Concerns

At the heart of this CHNA 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 25 respondents) were:

- Alcohol use and abuse – adults (N=38)
- Availability of resources to help the elderly stay in their homes (N= 35)
- Alcohol use and abuse – youth (N=33)
- Depression / anxiety – adult (N=29)
- Drug use and abuse – youth (N=26)
- Attracting and retaining young families (N=25)

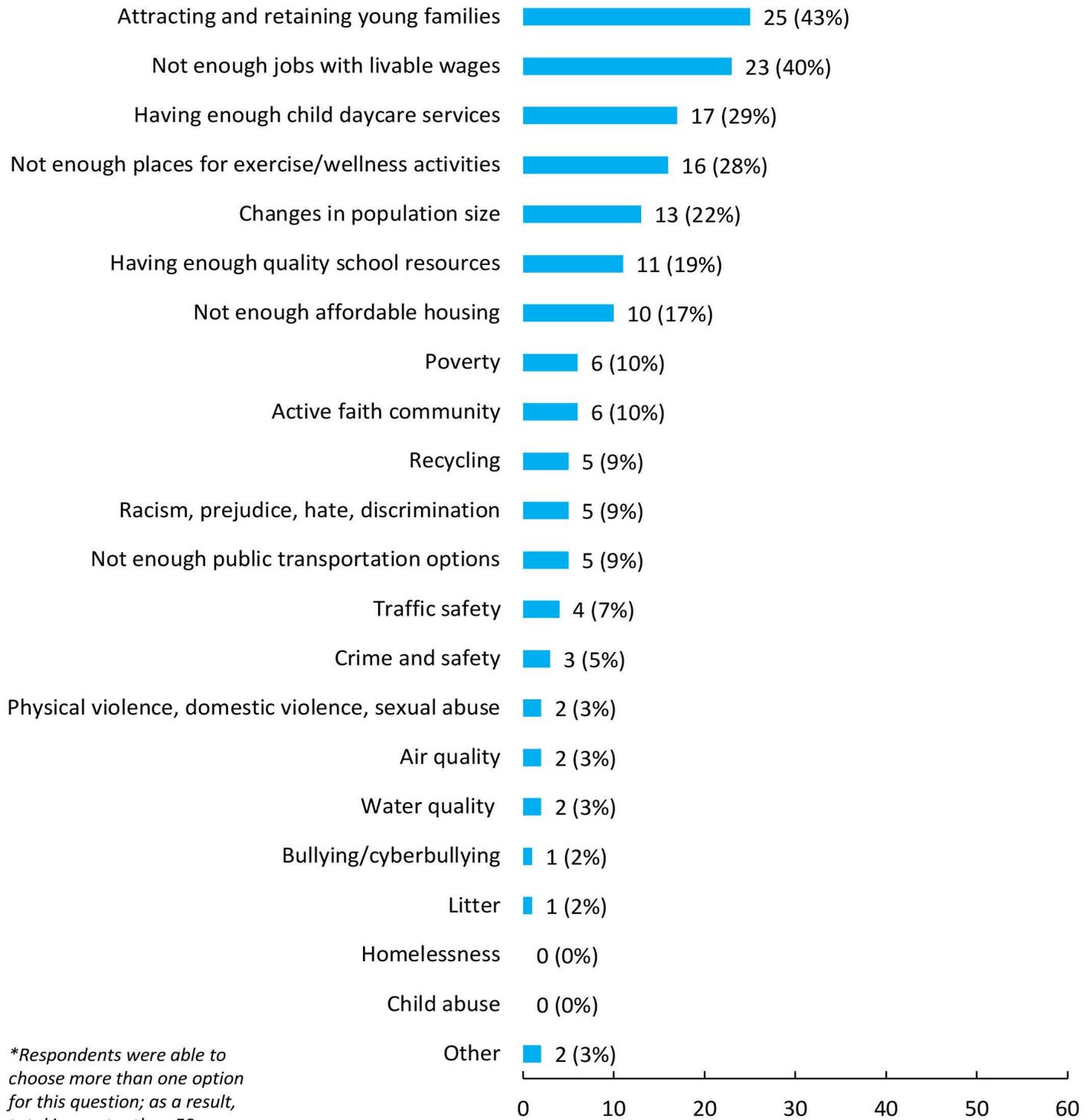
The other issues that had at least 20 votes included:

- Not enough jobs with livable wages (N=23)
- Ability to retain primary care providers (MD, DO, NP, PA, nurses) in the community (N=23)
- Not getting enough exercise / physical activity (N=23)
- Cost of long-term / nursing home care (N=20)
- Smoking and tobacco use (N=20)

Figures 17 through 21 illustrate these results.

## Figure 17: Community/Environmental Health Concerns

Total responses = 58\*

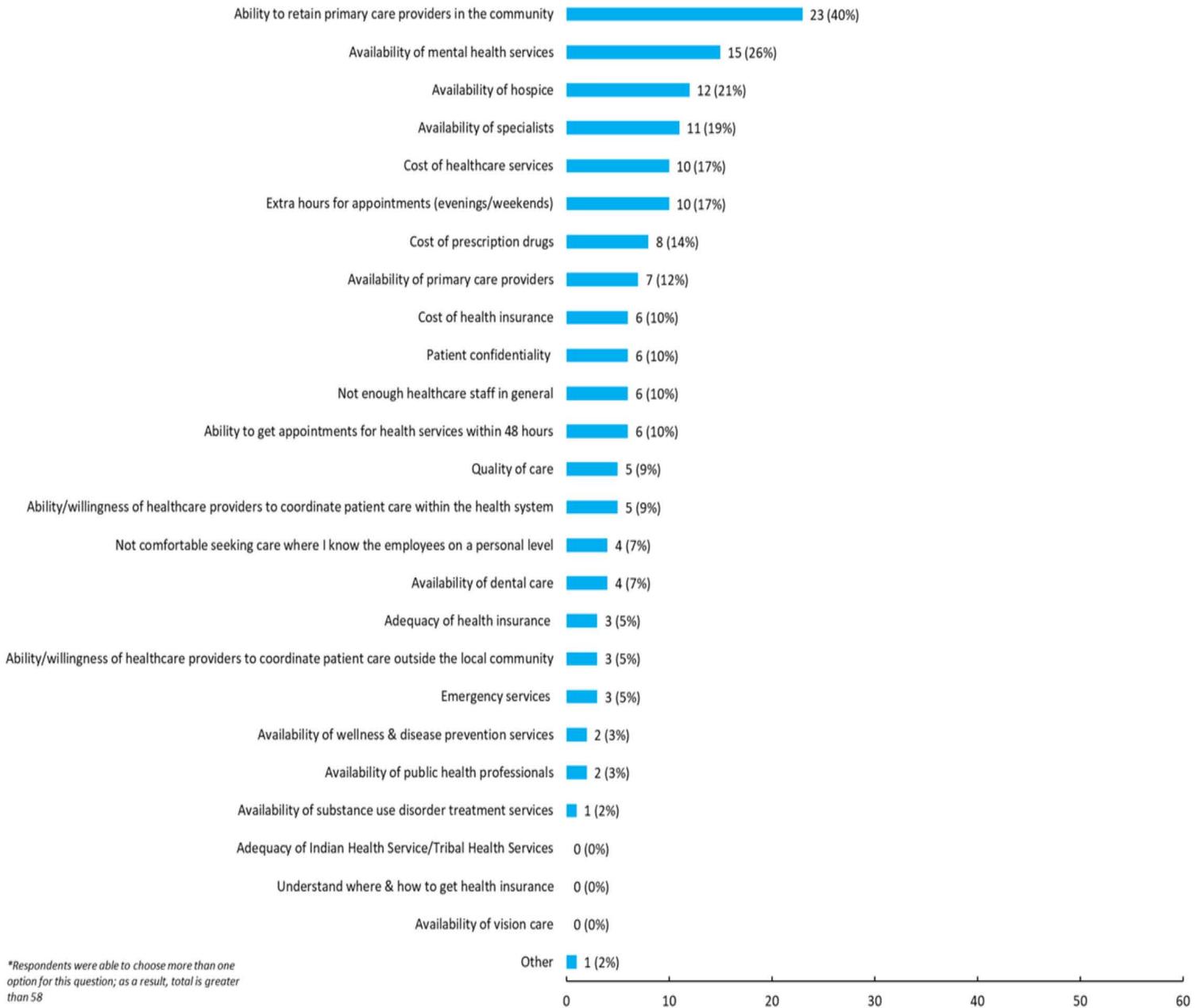


\*Respondents were able to choose more than one option for this question; as a result, total is greater than 58

In the “Other” category for community and environmental health concerns, the following were listed: drug and alcohol abuse, afterschool activities, summer programs, and food choices.

## Figure 18: Availability/Delivery of Health Services Concerns

Total responses = 58\*

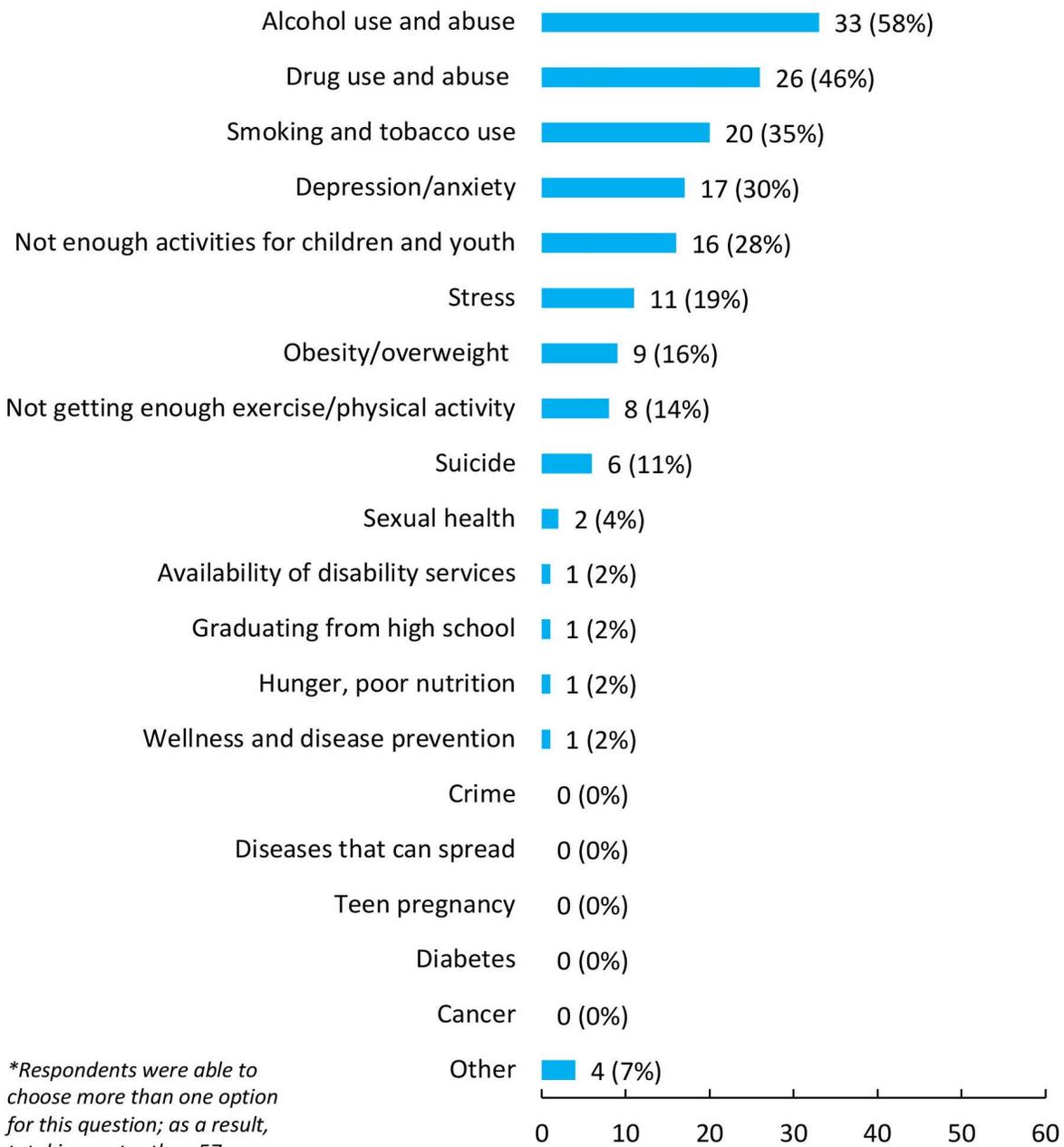


\*Respondents were able to choose more than one option for this question; as a result, total is greater than 58

One respondent who selected “Other” identified concerns in the availability / delivery of health services as available to get meds.

## Figure 19: Youth Population Health Concerns

Total responses = 57\*

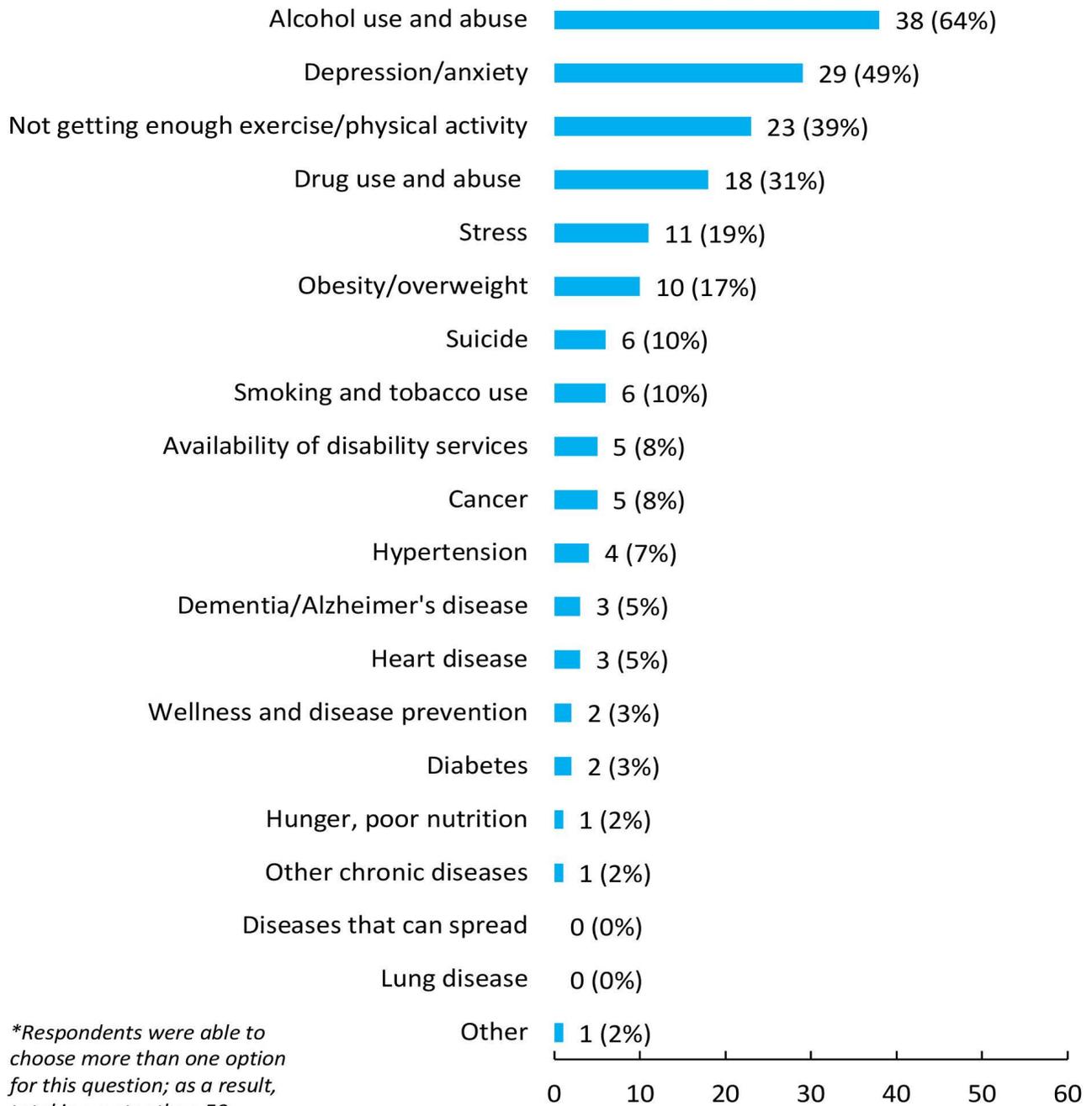


\*Respondents were able to choose more than one option for this question; as a result, total is greater than 57

Listed in the “Other” category for youth population concerns were art programs; music programs; getting them to be employed with starters jobs, such as a CNA, grocery store clerk, server, other activities for teenagers; and discipline / structure.

## Figure 20: Adult Population Concerns

Total responses = 59\*

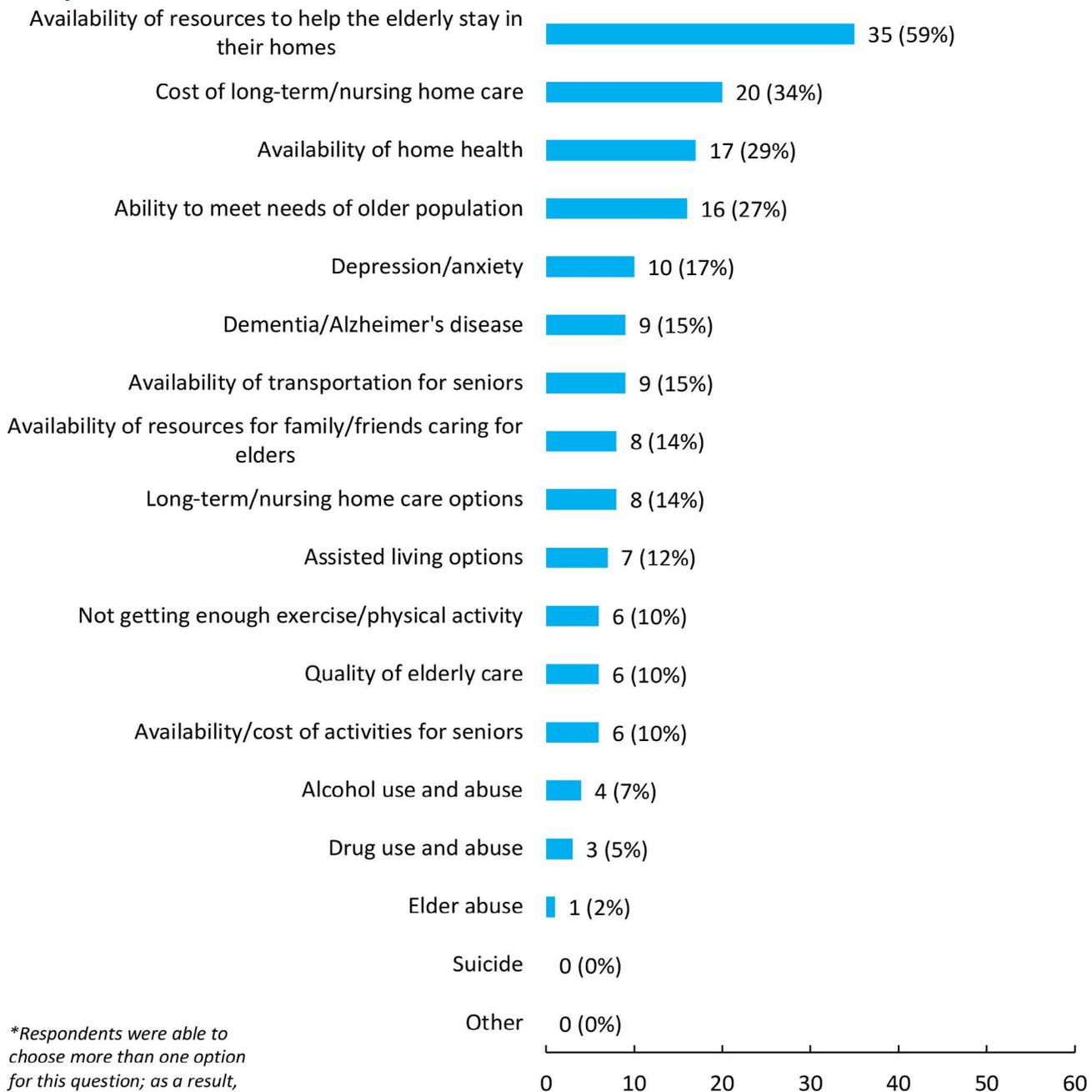


\*Respondents were able to choose more than one option for this question; as a result, total is greater than 59

Mental health services was indicated in the “Other” category for adult population concerns.

## Figure 21: Senior Population Concerns

Total responses = 59\*



\*Respondents were able to choose more than one option for this question; as a result, total is greater than 59

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. Aging population and attracting young families
2. Drug/alcohol/substance abuse

Other biggest challenges that were identified were the population decline, cost of living, lack of activities for the family, supporting local businesses and supply workers, lack of resources, retaining primary care providers and keeping the hospital strong, new ideas are not supported, resources to care for the elderly, and better access to healthy food options.

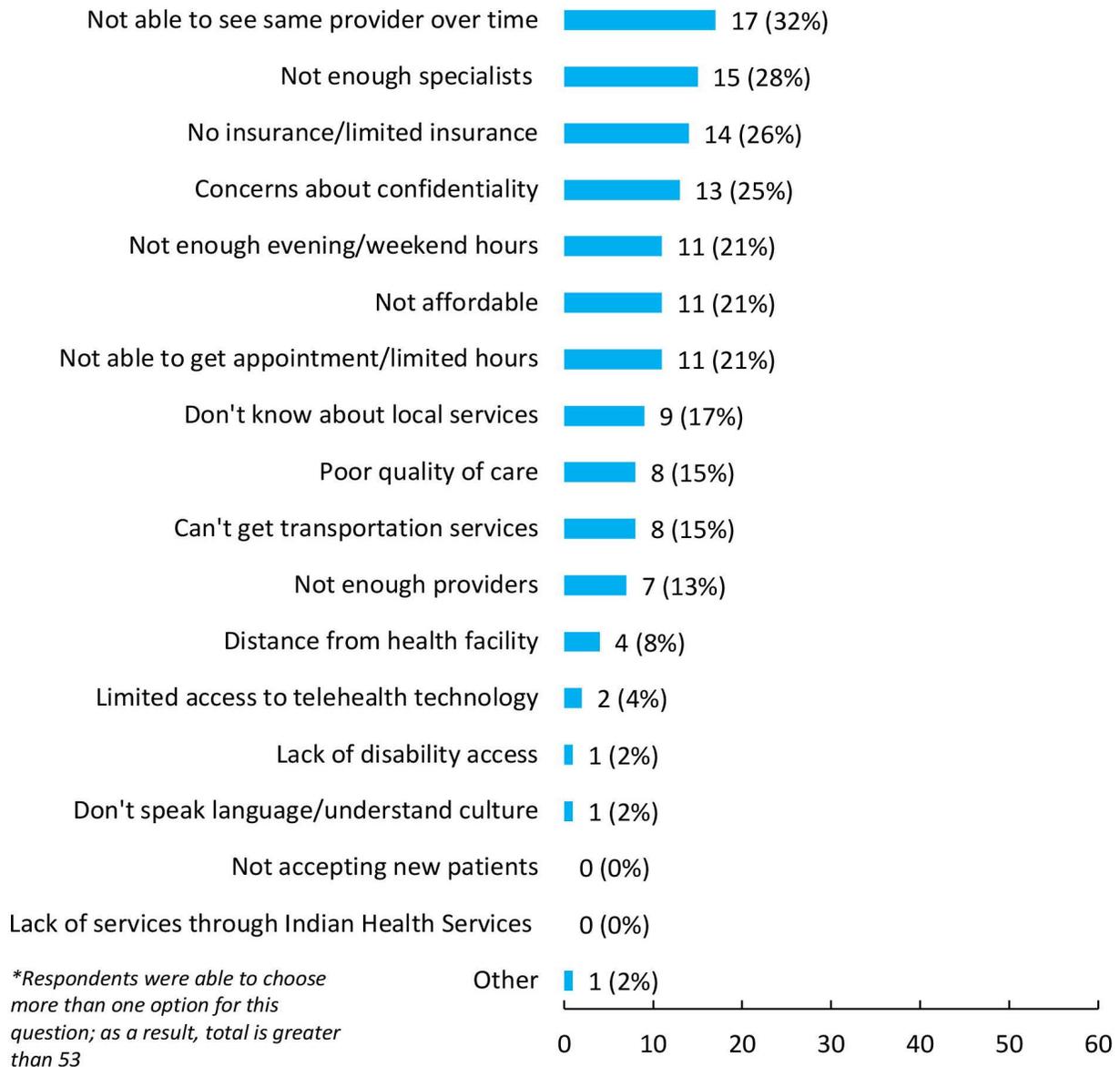
## Delivery of Healthcare

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=17), with the next highest being not enough specialists (N=15). After these items, the next most commonly identified barriers were no insurance or limited insurance (N=14) and concerns about confidentiality (N=13). In the “Other” category, the concern listed was workforce.

Figure 22 illustrates these results.

### Figure 22: Perceptions About Barriers to Care

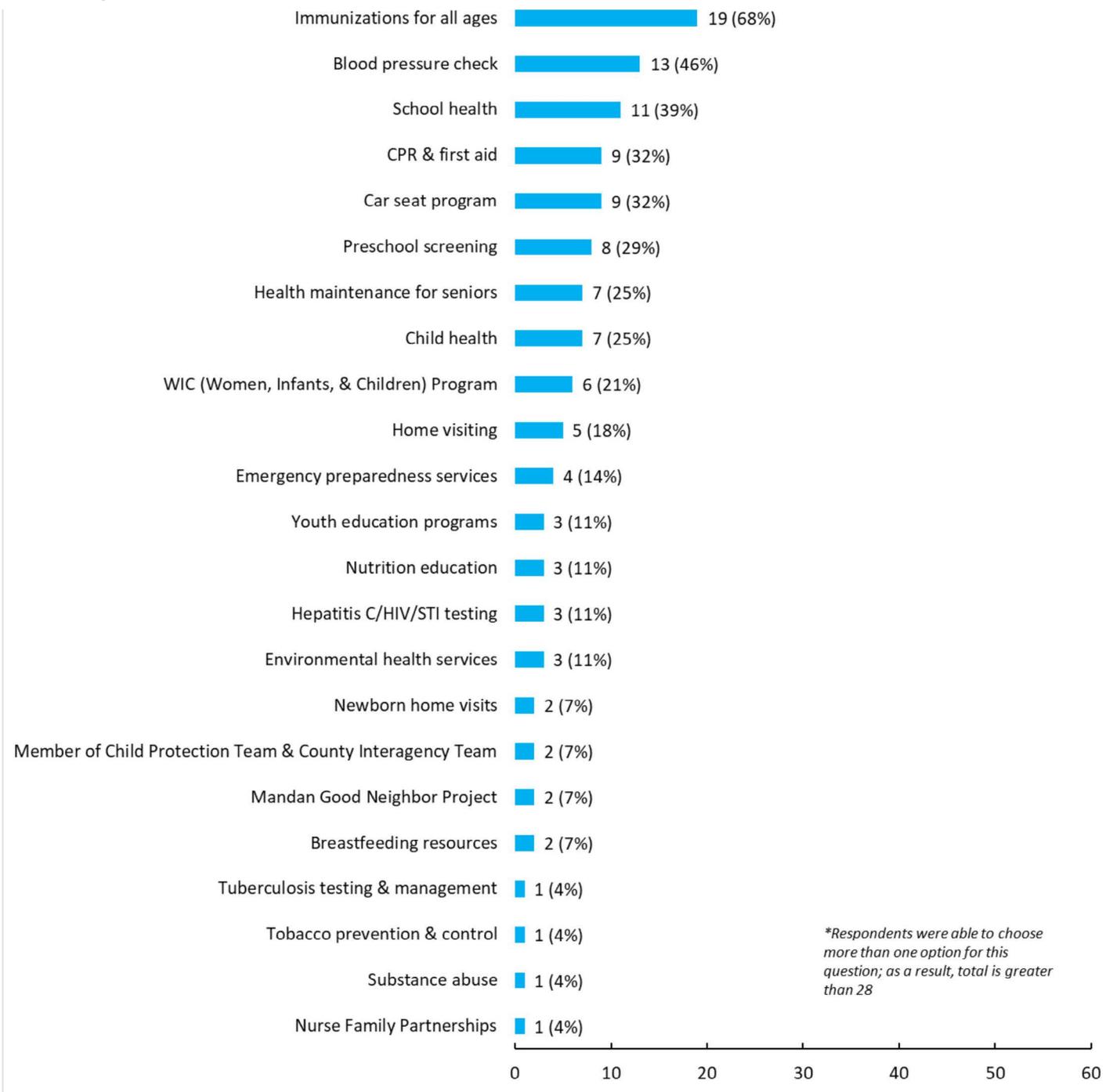
Total responses = 53\*



Considering a variety of healthcare services offered by Western Plains Public Health, respondents were asked to indicate if they were aware that the healthcare service is offered through Custer Health and to also indicate what, if any, services they or a family member have used at Western Plains Public Health, at another public health unit, or both (See Figure 23).

## Figure 23: Awareness and Utilization of Public Health Services

Total responses = 28\*



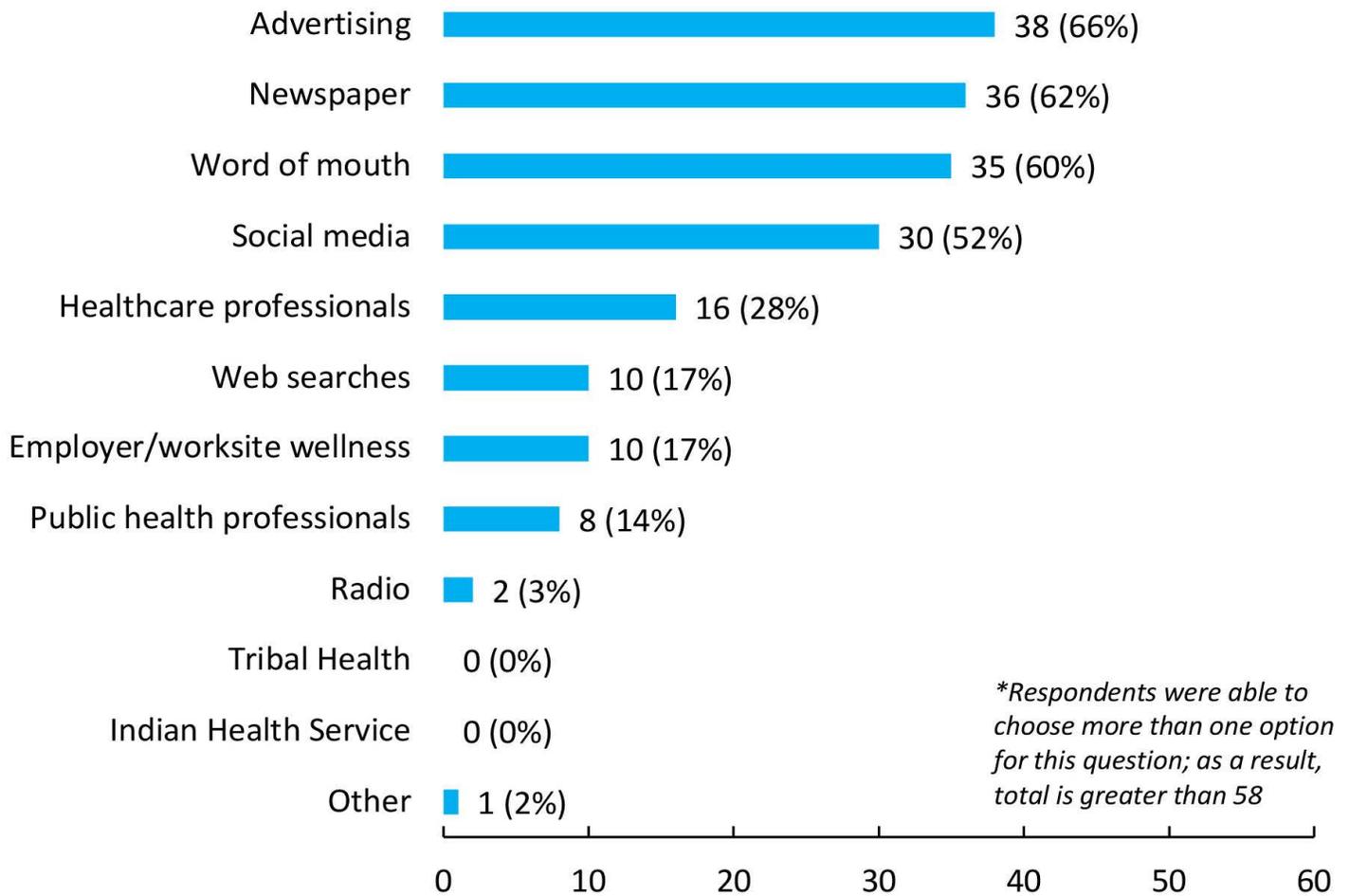
In an open-ended question, respondents were asked what specific healthcare services, if any, they think should be added locally. The number one desired service to add locally was hospice. Other requested services included:

- Better pharmacy hours
- Walk-ins
- Diabetic info and counseling
- Weight loss program
- Hearing
- Mammography
- Mental health service

The key informant and focus group members felt that the community members were aware of the majority of the health system and public health services. There were a number of services where they felt the hospital should increase marketing efforts; these included the visiting specialists and mobile units that are brought into the community. One key informant stated they would like to see hospice services in the area. Meeting this need and others related to the aging population had been mentioned a number of times throughout the CHNA process. Another key informant said they would like more access to mental health services and are aware of some movement in this concern.

**Figure 24: Sources of Information About Local Health Services**

**Total responses = 58\***



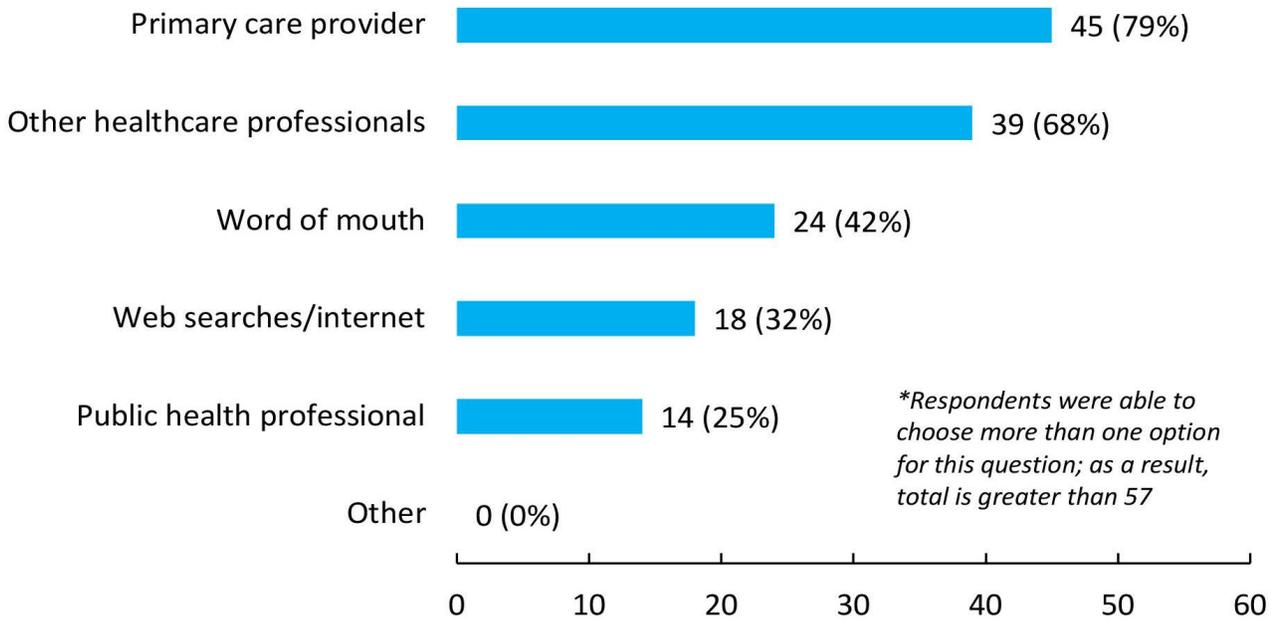
In the “Other” category, one respondent stated a newsletter was how they were informed about local health services available to them.

Respondents were asked where they go to for trusted health information. Primary care providers (N=45) received the highest response rate, followed by other healthcare professionals (N=39), and then word of mouth (N=24).

Results are shown in Figure 25.

## Figure 25: Sources of Trusted Health Information

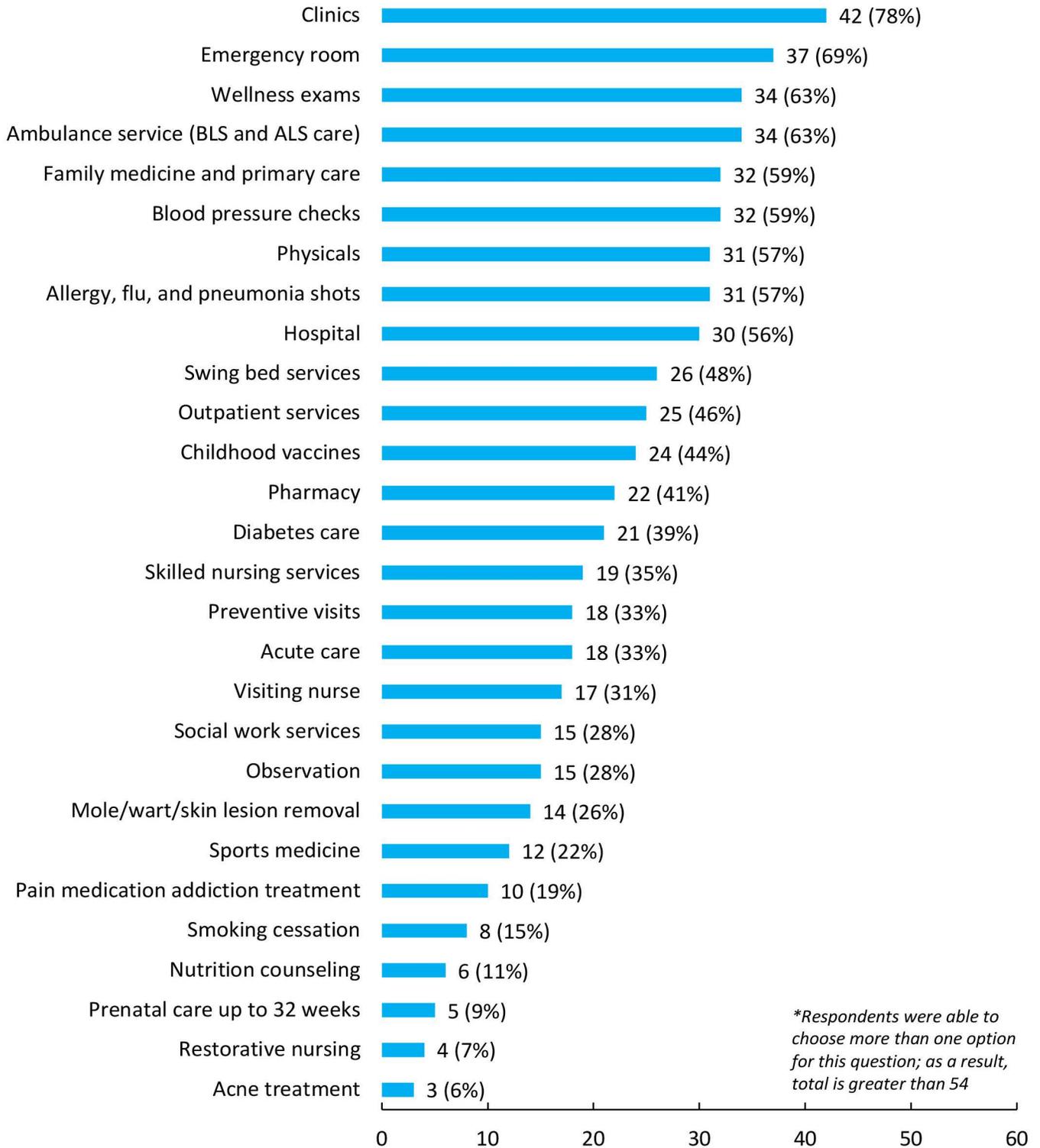
Total responses = 57\*



When asked about their awareness and use of general and acute services at JMHCC, most respondents were aware of and/or used the clinic, emergency room, wellness exams, ambulance services, and family medicine and primary care (See figure 26).

**Figure 26: Awareness/Use of General and Acute Services**

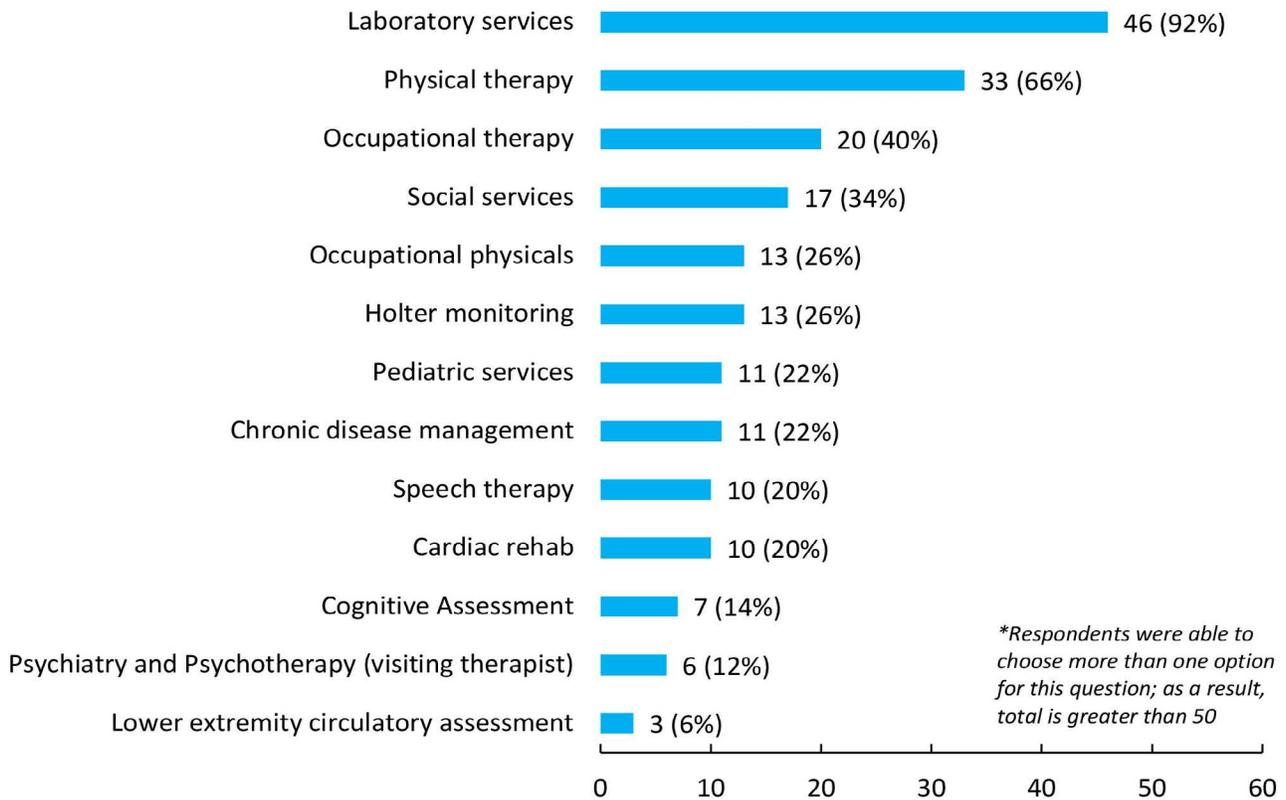
Total responses = 54\*



When asked about their awareness and use of screening and therapy services at JMHC, most respondents were aware of and/or used the services offered (See figure 27).

### Figure 27: Awareness/Use of General and Acute Services

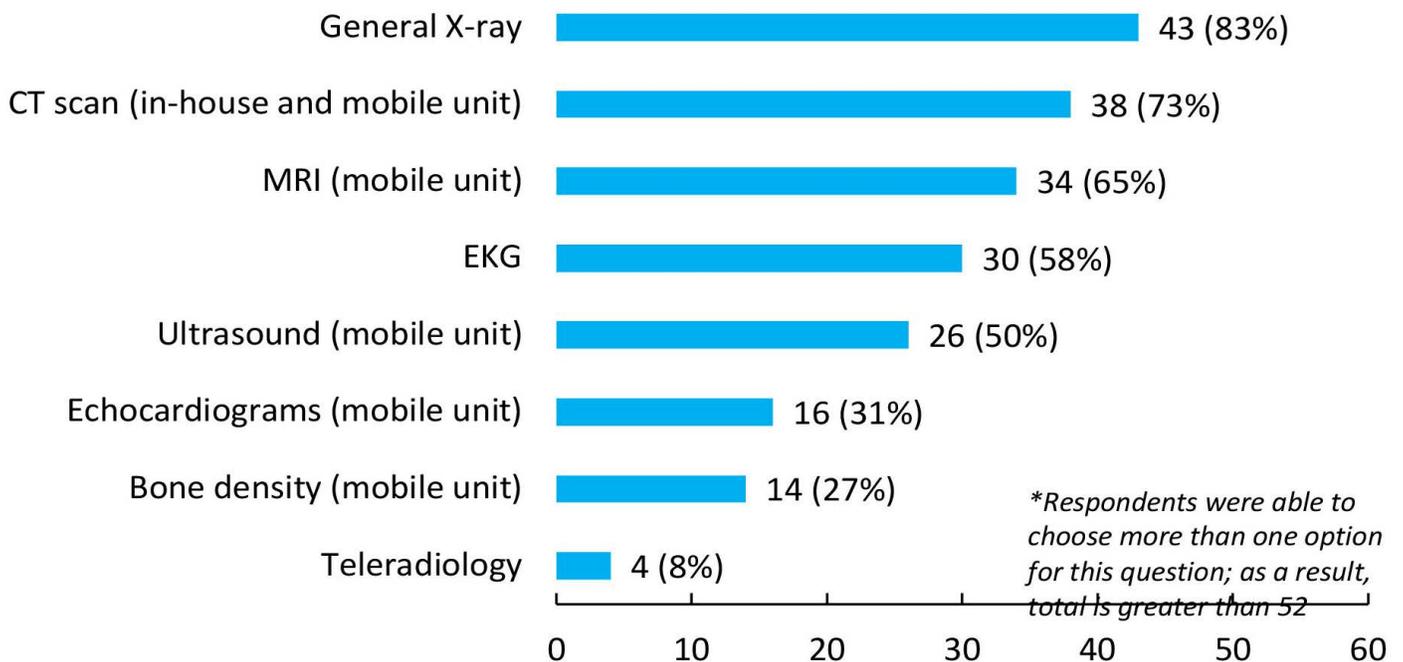
Total responses = 50\*



When asked about their awareness and use of radiology services at JMHCC, most respondents were aware of and/or used the general X-ray and CT scan mobile unit (See figure 28).

### Figure 28: Awareness/Use of Radiology Services

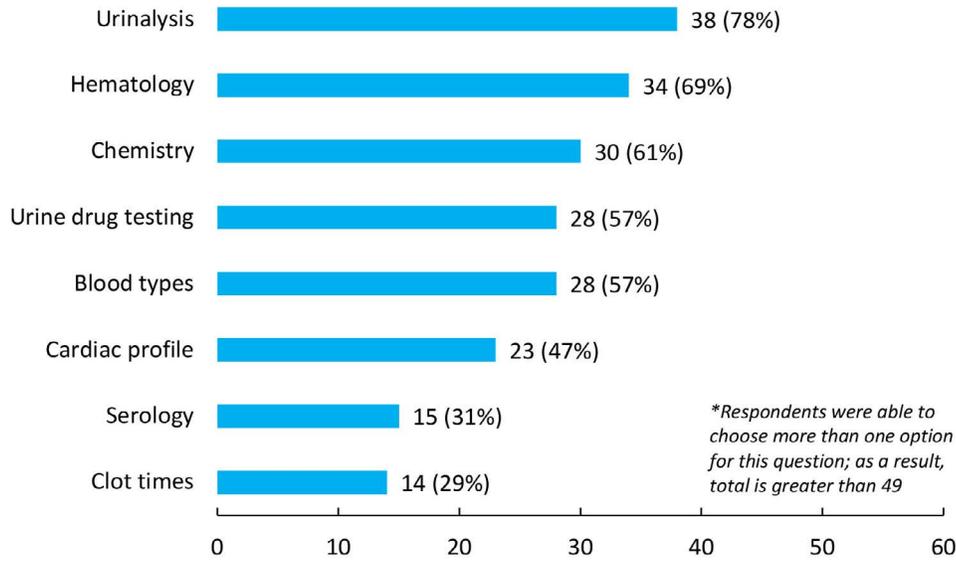
Total responses = 52\*



When asked about their awareness and use of Laboratory services at JMHCC, most respondents were aware of urinalysis and hematology services (See figure 29).

### Figure 29: Awareness/Use of Radiology Services

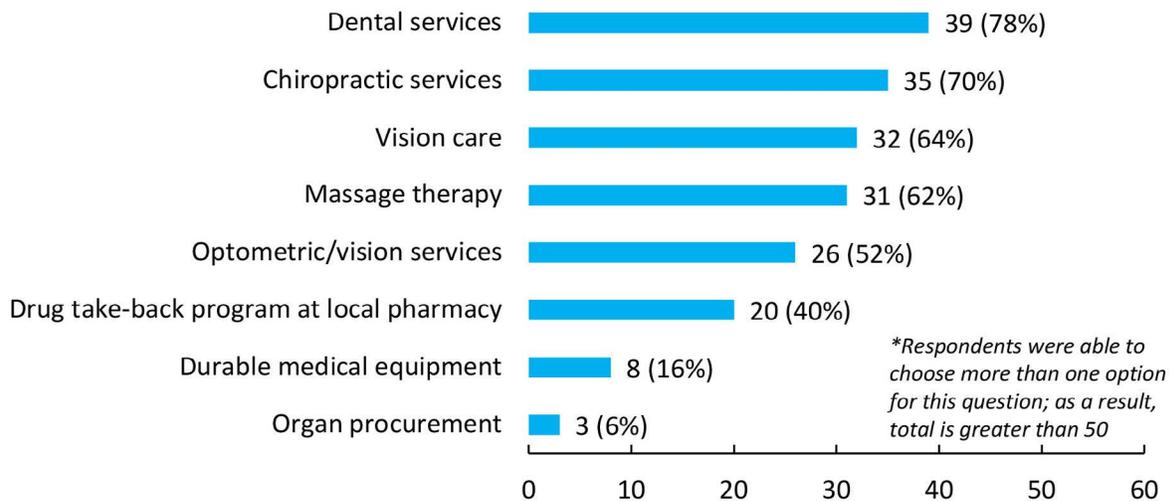
Total responses = 49\*



When asked about their awareness and use of other local health services, most respondents were aware of dental services, chiropractic services, and vision care (See figure 30).

### Figure 30: Awareness/Use of Other Local Health Services

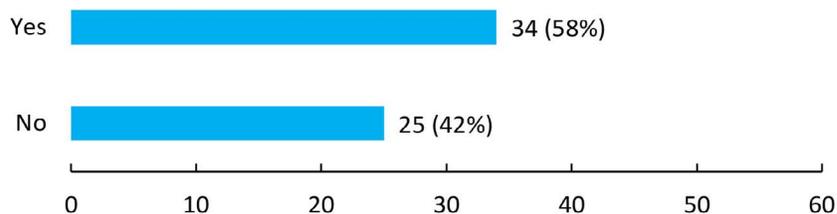
Total responses = 49\*



In an effort to gauge the community members’ awareness of JMHCC’s adult day care services, a question was included asking them if they knew about the service. A little more than half were aware of this service.

### Figure 31: Awareness of JMHCC’s Adult Day Care Services

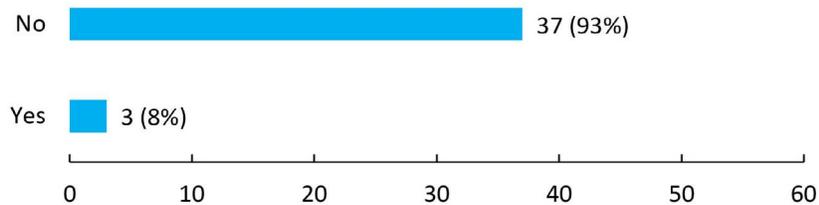
Total responses = 59



A follow-up question asked if they foresee themselves using the service in the future, most respondents (93%, N=37) selected no.

### Figure 32: Foresee Potential Use of Adult Day Care Services for Family

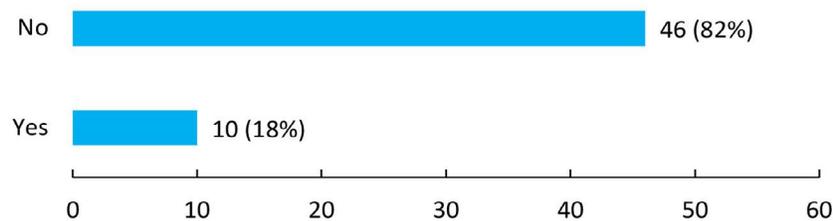
Total responses = 40



When respondents were asked if they would use child day care services if offered by JMHCC, most respondents (82%, N=46) selected no.

### Figure 33: Would Use Child Day Care Services if Offered by JMHCC

Total responses = 56



The final question on the survey asked respondents to share concerns and suggestions to improve the delivery of local healthcare. A number of responses focused on concern with the physicians leaving the community to practice elsewhere, and that nothing is being done to address this issue. According to the survey, residents find that not being able to see the same providers is a barrier. A respondent also noted that the current providers need to increase their compassion and listen to their patients, take time to sit with them to solve problems. Another respondent would like hire and retain fulltime medical staff and stop using traveling nurses and other medical staff.

It was suggested that the hospital staff need to answer the phones, especially at night. It was mentioned a few times that when someone has tried to call the hospital in the evening or at night, the phone just rang. Hiring new staff may help with this issue and ease the stress of the staff that is currently working those shifts. A concern, regarding billing and cost was also raised. People are frustrated that the billing is not accurate and takes a lot of time to process. A respondent mentioned that JMHCC cost to do lab work is more expensive than elsewhere and sometimes insurance does not cover most or all of the cost.

Respondents who answered this question also showed an interest in implementing different programs and activities for the area. One respondent would like to see weekly educational seminars on a variety of topics. They suggested it be held at the library. A fitness center is opening, and people are hopeful that will help with access to exercise and physical activity. Another concern raised was about transportation for the elderly. There is a need for a program that offers rides to the elderly free of charge. The ideas mentioned above are all needed; however, the issue they face is availability of resources. One respondent stated that money is always the issue, no matter the goal or the organization. Money equals resources, and if you have the money, problems get solved.

There was a common trend with respondents looking for collaboration between businesses and residents. They wish people would work together and make the area more welcoming to newcomers. One respondent stated there is a lot that local businesses offer, and they need to start marketing it to surrounding areas.

There needs to be continued promotion of the clinic and hospital in order to keep it financially stable. Most key informants and community members that attended the first meeting believe that JMHCC does a great job of identifying and delivering healthcare within its means and offers a wide variety of healthcare services. A respondent stated that the community was fortunate to have the hospital and all the services that are offered.

# 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 (listed in alphabetical order):

- Ability to retain primary care providers (MD, DO, NP, PA) and nurses in the community
- Alcohol use and abuse – all ages
- Attracting and retaining young families
- Depression/ anxiety – all ages
- Availability of resources to help the elderly stay in their homes

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

## Ability to retain primary care providers (MD, DO, NP, PA) and nurses in the community

- Lost a primary care provider last year.
- Not many people stay, the facility has PA's but it's hard to keep primary care physicians.
- The lack of steady physicians is the reason they go to a larger city for care.
- JMHCC will just refer patients out for specialty care, might as well just go to Bismarck right away.
- Prefer to see the same doctor during visits to build a relationship.
- Retaining a primary care physician would be a huge plus for the hospital and would make people feel safer, especially the elderly.

## Alcohol use and abuse – all ages

- Top concern is addressing alcohol abuse in both adults and youth.
- A lot of people are struggling with addiction.
- Alcohol and drug use seem to go hand in hand.
- Addiction problems started with alcohol but has morphed into alcohol and drugs.
- Low-income areas have problems that stem from addiction.

## Attracting and retaining young families

- There are only a few places that have good pay in the area. For young families to survive, they have to find work elsewhere and travel every day.
- There is a housing shortage in the area. Even if people want to move here, there is limited inventory. Currently, there are only three or four homes for sale in the area.
- There are not enough daycare services, people have to find other options.
- Not enough activities for families and for children.

## Availability of resources to help the elderly stay in their homes

- A top priority is meeting the needs of the elderly, such as transportation or running errands for them, which would enable them to stay in their homes longer.
- Need more assisted living options, there is only one in Grant County.
- Hire someone like a home health aide who works with the elderly at their homes.

## Depression/anxiety – all ages

- For a small community, there is too much suicide happening. The suicide rate is high compared to the population size.
- Top concern is addressing depression/anxiety.
- Mental health is an issue here and needs to be addressed.
- Leads to substance abuse and suicide.
- Not enough resources locally.

## 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 question was not intended to rank services provided. They were presented with a list of 13 organizations or community segments to score. According to these participants, the hospital, pharmacy, public health, and other long-term care (including nursing homes/assisted living) are the most engaged in the community. The averages of these scores (with 5 being “excellent” engagement or collaboration) were:

- Emergency services, including ambulance and fire (4.75)
- Hospital (healthcare system) (4.5)
- Schools (4.5)
- Business and industry (4.25)
- Economic development organizations (3.75)
- Faith-based (3.75)
- Social services/human services agencies (3.5)



- Law enforcement (3.25)
- Long-term care, including nursing homes and assisted living (3.0)
- Pharmacy (3.0)
- Other local health providers, such as dentists and chiropractors (2.75)
- Public health (2.75)
- Indian Health Services (2.0)

## Priority of Health Needs

A community group met on May 8, 2023. Eleven community members attended the meeting. Representatives from the Center for Rural Health (CRH) presented the group with a summary of this report's findings, including background and explanation about the secondary data, highlights from the survey results (including perceived community assets and concerns, and barriers to care), and findings from the key informant interviews as well as the focus group meeting.

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

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

- Alcohol use and abuse for all ages (14 votes)
- Availability of home health (7 votes)
- Ability to retain primary care providers (MD, DO, NP, PA) and nurses (5 votes)
- Attracting and retaining young families (3 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. Availability of home health (6 votes)
2. Ability to retain primary care providers (MD, DO, NP, PA) and nurses (2 votes)
3. Attracting and retaining young families (2 votes)
4. Alcohol use and abuse for all ages (1 votes)

Following the prioritization process during the second meeting of the community group and key informants, the number one identified need was the availability of home health for the elderly. A summary of this prioritization may be found in Appendix E.

## Comparison of Needs Identified Previously

Top Needs Identified 2020 CHNA Process	Top Needs Identified 2023 CHNA Process
<ul style="list-style-type: none"><li>• Attracting and retaining young families</li><li>• Availability of mental health services</li><li>• Depression/anxiety for all ages</li><li>• Ability to retain primary care providers (MD, DO, NP, PA) and nurses</li></ul>	<ul style="list-style-type: none"><li>• Availability of home health</li><li>• Ability to recruit and retain primary care providers and nurses</li><li>• Attracting and retaining young families</li><li>• Alcohol use and abuse for all ages</li></ul>

The current process did identify two identical common needs from 2020, which are attracting retaining young families and ability to retain primary care providers and nurses.

Jacobson Memorial Hospital Care Center (JMHCC) invited written comments on the most recent CHNA report and implementation strategy both in the documents and on the website where they are widely available to the public. No written comments have been received.

Upon adoption of this CHNA Report by the JMHCC Board vote, a notation will be documented in the board minutes, reflecting the approval, and then the report will be widely available to the public on the hospital's website, and a paper copy will be available for inspection upon request at the hospital. Written comments on this report can be submitted to JMHCC.

## Hospital and Community Projects and Programs Implemented to Address Needs Identified in 2020

In response to the needs identified in the 2020 CHNA process, the following actions were taken:

**Need 1: *Attracting and retaining young families*** – To attract and retain young families as well as employees, JMHCC ensured that it continued to have competitive wages for its staff and salaried employees. As this period was through the pandemic, four bonuses were given to employees during the COVID-19 public health emergency in appreciation for their work and as an incentive to retain staff. JMHCC promotes a positive work environment for its employees. JMHCC has also utilized foreign workers to fill roles as well as promote an inclusive environment.

**Need 2: *Availability of mental health services and depression/anxiety for all ages*** - During the pandemic period, JMHCC used telehealth services, which included those services for mental health. JMHCC during this period entered the Frontier Community Health Integration Project, also known as FCHIP program, and received and was able to use cost reimbursement to continue mental health programs.

**Need 3: *Ability to retain primary care providers and nurses*** - JMHCC conducted wage surveys within the region to assure that it was competitive with its salaries for staff and provider contracts. JMHCC made certain to inform and assist those employees eligible to participate in state loan repayment programs. JMHCC utilized foreign nursing staff to assure the facility had the needed staff to provide care in an effort to enhance and build its core staff levels.

The above implementation plan for JMHCC is posted on JMHCC's website. at [http://www.jacobsonhospital.org/implementation\\_plan.pdf](http://www.jacobsonhospital.org/implementation_plan.pdf).

# Next Steps – Strategic Implementation Plan

Although a Community Health Needs Assessment (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, 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 Affordable Care Act’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 – Critical Access Hospital Profile



## Critical Access Hospital Profile

### Spotlight on: Elgin, North Dakota

# Jacobson Memorial Hospital Care Center

## Quick Facts

**Administrator:**

Scott Brooks, CEO

**Chief of Medical Staff:**

Dr. Justin Reisenauer

**Board Chair:**

Ron Bartz

**City Population:**

601 (2020 estimate)<sup>1</sup>

**County Population:**

2,323 (2021 estimate)<sup>1</sup>

**County Median Household**

**Income:** \$57,200 (2021 estimate)<sup>1</sup>

**County Median Age:**

48.2 years (2020)<sup>1</sup>

**Service Area:**

2000 square miles

**Owned by:** Nonprofit**Hospital Beds:** 35**Trauma Level:** V**Critical Access Hospital**

**Designation:** 2001

**Economic Impact on the County****Employment Impact:**

Direct – 64

Secondary – 24

Total – 88

**Financial Impact:**

Direct – \$4.5 million

Secondary – \$750,000

Total – \$5.2 million

## Mission

Advance the health of the communities with respect and accountability, providing peace of mind close to home.

**County:** Grant

**Address:** 601 East Street North, PO Box 367

Elgin, ND 58533

**Phone:** (701) 584-2792

**Fax:** (701) 584-3348

**Web:** [www.jacobsonhospital.org](http://www.jacobsonhospital.org)

Jacobson Memorial Hospital Care Center (JMHC) has served the health care needs of the region since 1977. JMHC continues to be dedicated to the healthcare needs of the residents of Elgin and the surrounding area. Funded by patient revenue and philanthropy, JMHC is one of the most important assets of this community. It continues, as it was established, with a tradition of excellence and a rich heritage of personal attention to its patients. JMHC operates clinics in Elgin, Glen Ullin and Richardton.

## Services

Jacobson Memorial Hospital Care Center provides the following services directly:

- Chronic disease management
- Clinical laboratory services
- Radiology
- Emergency department
- Rehabilitation
- Inpatient swing bed program
- Primary care
- Hospital services
- Ambulance services

Jacobson Memorial Hospital Care Center provides the following services through contract or agreement:

- Cardiology speciality care
- Dietary instruction/consultation
- Psychiatric counseling
- Physical therapy
- Occupational therapy

## Staffing

Physicians:	1
Nurse Practitioners:	8
RNs:	18
LPNs:	9
Ancillary Personnel:	84
Total Employees:	120

## Local Sponsors and Grant Funding Sources

- Jacobson Memorial Hospital Foundation
- State of North Dakota
- Elgin Lions
- Center for Rural Health
  - SHIP Grant (*Small Hospital Improvement Program*)
  - Flex Grant (*Medicare Rural Hospital Flexibility Grant Program*)
- First International Bank & Trust
- Dakota Community Bank
- Provider Relief Funds

## Sources

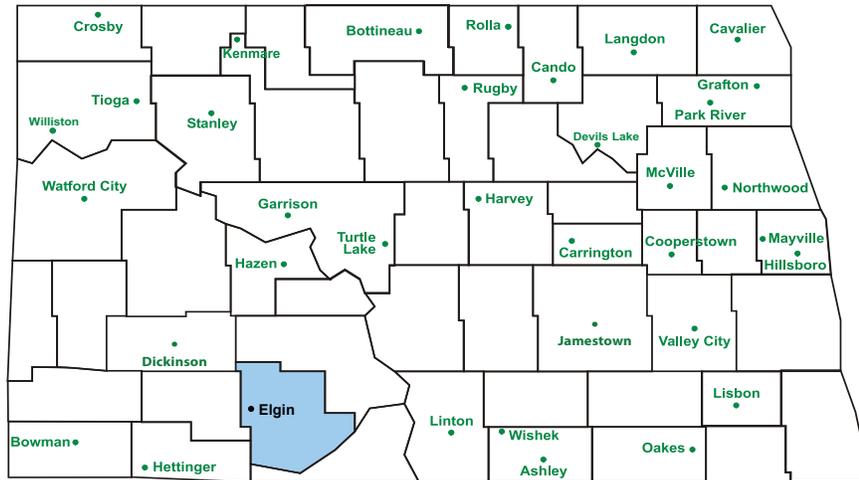
- <sup>1</sup> - US Census Bureau; American Factfinder, Community Facts



*This project is supported by the State Office of Rural Health grant at the Center for Rural Health, University of North Dakota School of Medicine & Health Sciences located in Grand Forks, North Dakota.*

[ruralhealth.und.edu](http://ruralhealth.und.edu)

## North Dakota Critical Access Hospitals



## History

Jacobson Memorial Hospital Care Center (JMHC) opened its doors, in March of 1977. The facility, offering both hospital and nursing home care, was built with a combination of FHA loan dollars, a Hill-Burton government grant, and gifts of cash, pledges, and memorials. The facility was named to honor Dr. M. S. Jacobson for his long term commitment, dedication, and support to health care services in the region. This hospital follows a history of community healthcare in Elgin beginning in 1915, as the Elgin Hospital from 1915 to 1948, then through Lorenzen Memorial Hospital from 1948 to 1977.

JMHC provides comprehensive medical care with physician and mid-level medical providers and consulting/visiting medical providers. The not-for-profit healthcare corporation is governed by a local board of directors. JMHC has a professional and support staff of approximately 120 full and part time employees. The hospital has 35 licensed beds for acute care or swing beds, and clinics in Elgin, Glen Ullin and Richardton. Patients are also served by the hospital's well-developed referral systems to nearby medical specialists.

## Recreation

The city of Elgin is in southwestern North Dakota, 88 miles southwest of Bismarck. The JMHC is the largest employer in the area, and one of the most important assets in the community. Along with the hospital, agricultural operations provide the economic base for Elgin.

Elgin has an indoor Olympic-sized pool, a nine-hole golf course, tennis courts, softball diamonds, a lighted football field, and rodeo facilities. The Grant County school system offers a comprehensive program for all students including foreign languages, advanced science, math electives, computer education programs, and special education services. Eighteen miles north on Highway 49, Heart Butte Dam and Lake Tschida offer swimming, boating, camping, and fishing. The Cannonball River runs just a few miles south of Elgin. Sheep Creek Dam, just seven miles south of Elgin, also provides excellent camping and fishing. The area has ideal terrain for cross country skiing, snowmobiling, hunting, and hiking. Pheasant, grouse, turkey, antelope, and deer abound in the area, as well as a variety of raptors, waterfowl, and songbirds.

Updated 06/23

# Appendix B – Economic Impact Analysis

## Jacobson Memorial Hospital Care Center



*Healthcare, especially a hospital, plays a vital role in local economies.*

### Economic Impact

Jacobson Memorial Hospital Care Center is composed of a Critical Access Hospital (CAH) and a clinic in Elgin, North Dakota.

Jacobson Memorial Hospital Care Center **directly** employs **63.52 FTE employees** with an annual payroll of almost **\$4.5 million** (including benefits).

- After application of the employment multiplier of 1.38, these employees created an additional **24 jobs**.
- The same methodology is applied to derive the income impact. The income multiplier of 1.17 is applied to create nearly **\$750,000** in income as they interact with other sectors of the local economy.
- **Total impacts = 129 jobs and more than \$5.2 million in income.**

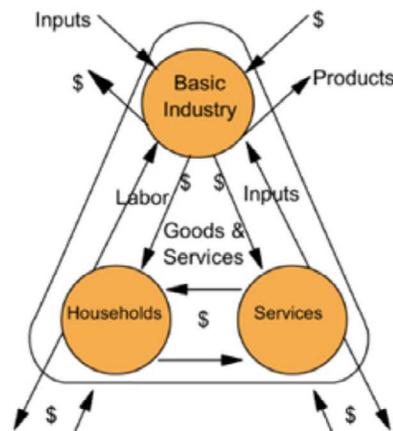
### Healthcare and Your Local Economy

The health sector in a rural community, anchored by a CAH, is responsible for a number of full- and part-time jobs and the resulting wages, salaries, and benefits. Research findings from the National Center for Rural Health Works indicate that rural hospitals typically are one of the top employers in the rural community. The employment and the resulting wages, salaries, and benefits from a CAH are critical to the rural community economy. Figure 1 depicts the interaction between an industry like a healthcare institution and the community, containing other industries and households.

### Key contributions of the health system include

- Attracts retirees and families
- Appeals to businesses looking to establish and/or relocate
- High quality healthcare services and infrastructure foster community development
- Positive impact on retail sales of local economy
- Provides higher-skilled and higher-wage employment
- Increases the local tax base used by local government

**Figure 1.** An overview of the community economic system.



Source: Doeksen, G.A., T. Johnson, and C. Willoughby. 1997. Measuring the Economic Importance of the Health Sector on a Local Economy: A Brief Literature Review and Procedures to Measure Local Impacts

Data analysis was completed by the Center for Rural Health at the Oklahoma State University Center for Health Sciences utilizing IMPLAN data.

Fact Sheet Author: Kylie Nissen, BBA

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CENTER FOR RURAL HEALTH  
OSU Center for Health Sciences



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

*This project is/was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) through the State Office of Rural Health Grant.*

# Appendix C – 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/Elgin23> 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 15, 2023. 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**):

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

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

- |   |   |
|---|---|
| <input type="checkbox"/> Access to healthy food                                 | <input type="checkbox"/> Opportunities for advanced education |
| <input type="checkbox"/> Active faith community                                 | <input type="checkbox"/> Public transportation                |
| <input type="checkbox"/> Business district (restaurants, availability of goods) | <input type="checkbox"/> Programs for youth                   |
| <input type="checkbox"/> Community groups and organizations                     | <input type="checkbox"/> Quality school systems               |
| <input type="checkbox"/> Healthcare   | <input type="checkbox"/> Other (please specify): _____        |

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

- |  |  |
|--|--|
| <input type="checkbox"/> Closeness to work and activities          | <input type="checkbox"/> Job opportunities or economic opportunities |
| <input type="checkbox"/> Family-friendly; good place to raise kids | <input type="checkbox"/> Safe place to live, little/no crime         |
| <input type="checkbox"/> Informal, simple, laidback lifestyle      | <input type="checkbox"/> Other (please specify): _____               |

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

- |  |   |
|--|---|
| <input type="checkbox"/> Activities for families and youth | <input type="checkbox"/> Recreational and sports activities         |
| <input type="checkbox"/> Arts and cultural activities      | <input type="checkbox"/> Year-round access to fitness opportunities |
| <input type="checkbox"/> Local events and festivals        | <input type="checkbox"/> Other (please specify): _____              |

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

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

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

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

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

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

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

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

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

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

- |   |   |
|---|---|
| <input type="checkbox"/> Ability to meet needs of older population                          | <input type="checkbox"/> Availability of home health                            |
| <input type="checkbox"/> Long-term/nursing home care options                                | <input type="checkbox"/> Not getting enough exercise/physical activity          |
| <input type="checkbox"/> Assisted living options  | <input type="checkbox"/> Dementia/Alzheimer's disease                           |
| <input type="checkbox"/> Availability of resources to help the elderly stay in their homes  | <input type="checkbox"/> Depression/anxiety                                     |
| <input type="checkbox"/> Cost of activities for seniors                                     | <input type="checkbox"/> Suicide  |
| <input type="checkbox"/> Availability of activities for seniors                             | <input type="checkbox"/> Alcohol use and abuse                                  |
| <input type="checkbox"/> Availability of resources for family and friends caring for elders | <input type="checkbox"/> Drug use and abuse (including prescription drug abuse) |
| <input type="checkbox"/> Quality of elderly care  | <input type="checkbox"/> Availability of activities for seniors                 |
| <input type="checkbox"/> Cost of long-term/nursing home care                                | <input type="checkbox"/> Elder abuse  |
| <input type="checkbox"/> Availability of transportation for seniors                         | <input type="checkbox"/> Other (please specify): _____                          |

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

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## Delivery of Healthcare

11. What **PREVENTS** community residents from receiving healthcare? (Choose ALL that apply)

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

- |   |   |
|---|---|
| <input type="checkbox"/> Acne treatment                     | <input type="checkbox"/> Outpatient services                              |
| <input type="checkbox"/> Acute care                         | <input type="checkbox"/> Pain medication addiction treatment              |
| <input type="checkbox"/> Allergy, flu, & pneumonia shots    | <input type="checkbox"/> Pharmacy   |
| <input type="checkbox"/> Ambulance service (BLS & ALS care) | <input type="checkbox"/> Prenatal care up to 32 weeks                     |
| <input type="checkbox"/> Blood pressure checks              | <input type="checkbox"/> Preventive visits                                |
| <input type="checkbox"/> Childhood vaccines                 | <input type="checkbox"/> Physicals: annuals, D.O.T., sports, & insurance) |
| <input type="checkbox"/> Clinics                            | <input type="checkbox"/> Restorative nursing                              |
| <input type="checkbox"/> Diabetes care                      | <input type="checkbox"/> Smoking cessation                                |
| <input type="checkbox"/> Emergency room                     | <input type="checkbox"/> Skilled nursing services                         |
| <input type="checkbox"/> Family medicine & primary care     | <input type="checkbox"/> Social work services                             |
| <input type="checkbox"/> Hospital (acute care)              | <input type="checkbox"/> Sports medicine                                  |
| <input type="checkbox"/> Mole/wart/skin lesion removal      | <input type="checkbox"/> Swing bed services                               |
| <input type="checkbox"/> Nutrition counseling               | <input type="checkbox"/> Visiting nurse                                   |
| <input type="checkbox"/> Observation                        | <input type="checkbox"/> 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)

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Cardiac rehab              | <input type="checkbox"/> Lower extremity circulatory assessment | <input type="checkbox"/> Physical therapy                                |
| <input type="checkbox"/> Chronic disease management | <input type="checkbox"/> Occupational physicals                 | <input type="checkbox"/> Psychiatry & psychotherapy (visiting therapist) |
| <input type="checkbox"/> Cognitive Assessment       | <input type="checkbox"/> Occupational therapy                   | <input type="checkbox"/> Social services                                 |
| <input type="checkbox"/> Holter monitoring          | <input type="checkbox"/> Pediatric services                     | <input type="checkbox"/> Speech therapy                                  |
| <input type="checkbox"/> Laboratory services        |   |  |

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)

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Bone density (mobile unit)        | <input type="checkbox"/> EKG               | <input type="checkbox"/> Teleradiology            |
| <input type="checkbox"/> CT scans (in-house & mobile unit) | <input type="checkbox"/> General x-ray     | <input type="checkbox"/> Ultrasound (mobile unit) |
| <input type="checkbox"/> Echocardiograms (mobile unit)     | <input type="checkbox"/> MRI (mobile unit) |   |

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

- |  |                                     |   |
|--|-------------------------------------|---|
| <input type="checkbox"/> Hematology      | <input type="checkbox"/> Clot times | <input type="checkbox"/> Urinalysis         |
| <input type="checkbox"/> Blood types     | <input type="checkbox"/> Chemistry  | <input type="checkbox"/> Urine drug testing |
| <input type="checkbox"/> Cardiac profile | <input type="checkbox"/> Serology   |   |

16. 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)

- |   |   |                                      |
|---|---|--------------------------------------|
| <input type="checkbox"/> Chiropractic services                    | <input type="checkbox"/> Durable medical equipment  | <input type="checkbox"/> Vision care |
| <input type="checkbox"/> Dental services                          | <input type="checkbox"/> Massage therapy            |                                      |
| <input type="checkbox"/> Drug take-back program at local pharmacy | <input type="checkbox"/> Optometric/vision services |                                      |
|   | <input type="checkbox"/> Organ procurement          |                                      |

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

- |  |   |
|--|---|
| <input type="checkbox"/> Blood pressure check  | <input type="checkbox"/> Mandan Good Neighbor Project   |
| <input type="checkbox"/> Breastfeeding resources   | <input type="checkbox"/> Member of Child Protection Team & County Inter-agency Team                         |
| <input type="checkbox"/> Car seat program  | <input type="checkbox"/> Newborn home visits  |
| <input type="checkbox"/> Child health (well baby checks)   | <input type="checkbox"/> Nurse Family Partnerships  |
| <input type="checkbox"/> CPR & first aid   | <input type="checkbox"/> Nutrition education  |
| <input type="checkbox"/> Emergency preparedness services – work with partners as part of local emergency response team | <input type="checkbox"/> Preschool screening  |
| <input type="checkbox"/> Environmental health services (water, sewer, health hazard abatement)                         | <input type="checkbox"/> School health (vision, hearing, health education)                                  |
| <input type="checkbox"/> Health maintenance for seniors (foot care, blood pressure)                                    | <input type="checkbox"/> Substance abuse  |
| <input type="checkbox"/> Hepatitis C/HIV/STI testing   | <input type="checkbox"/> Tobacco prevention & control   |
| <input type="checkbox"/> Home visiting (maintenance in home care)  | <input type="checkbox"/> Tuberculosis testing & management  |
| <input type="checkbox"/> Immunizations (including flu shots) for all ages  | <input type="checkbox"/> WIC (Women, Infants & Children) Program  |
|  | <input type="checkbox"/> Youth education programs (first aid, bike safety, bicycle helmet safety education) |

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

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19. Are you aware of JMHCC's adult day care services?

- Yes  No

20. If "Yes" to the previous question, do you foresee using these services for family?

- Yes  No

21. Would you utilize child day care services offered by JMHCC?

- Yes  No

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

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

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

- |  |  |
|--|--|
| <input type="checkbox"/> Other healthcare professionals (nurses, chiropractors, dentists, etc.)  | <input type="checkbox"/> Web searches/internet (WebMD, Mayo Clinic, Healthline, etc.)      |
| <input type="checkbox"/> Primary care provider (doctor, nurse practitioner, physician assistant) | <input type="checkbox"/> Word of mouth, from others (friends, neighbors, co-workers, etc.) |
| <input type="checkbox"/> Public health professional  | <input type="checkbox"/> Other (please specify): _____                                     |

**Demographic Information:** Please tell us about yourself.

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

- Yes  No

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

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

26. Age:

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

27. Highest level of education:

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

28. Sex:

- Female  Male  Non-binary  
 Other (please specify): \_\_\_\_\_

29. Employment status:

- Full time  Homemaker  Unemployed  
 Part time  Multiple job holder  Retired

30. Your zip code: \_\_\_\_\_

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

- American Indian  Hispanic/Latino  Other: \_\_\_\_\_  
 African American  Pacific Islander  
 Asian  White/Caucasian

32. Annual household income before taxes:

- Less than \$15,000  \$50,000 to \$74,999  \$150,000 and over  
 \$15,000 to \$24,999  \$75,000 to \$99,999  
 \$25,000 to \$49,999  \$100,000 to \$149,999

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

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***Thank you for assisting us with this important survey!***

# Appendix D – County Health Rankings Explained

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

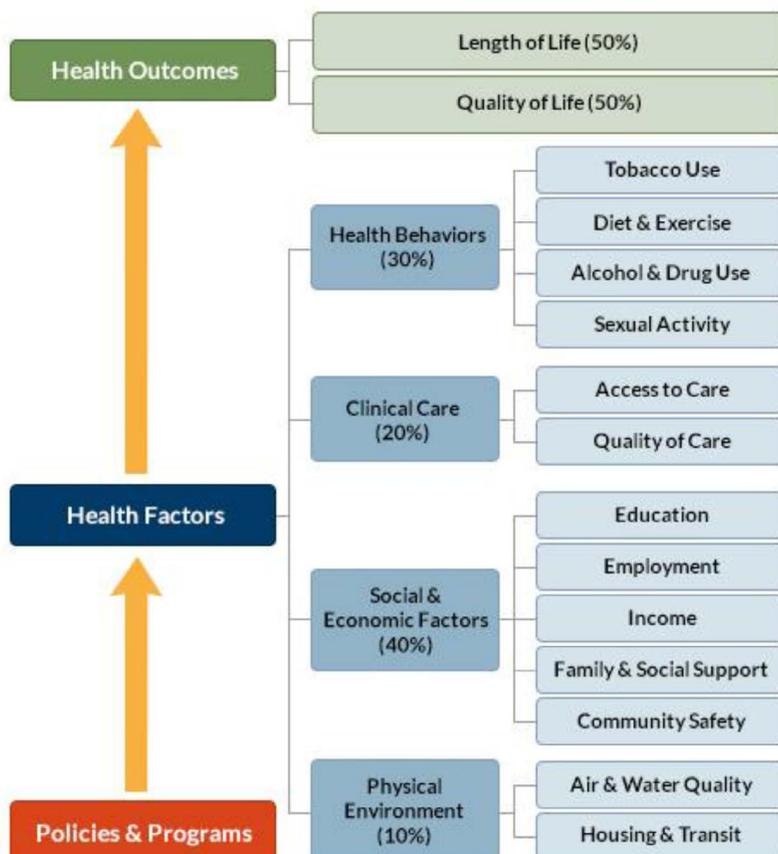
## Methods

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/m<sup>2</sup>.

### *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.

## **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.

## **Flu Vaccinations**

Flu vaccinations are Percentage of fee-for-service (FFS) Medicare enrollees that had an annual flu vaccination.

### *Reason for Ranking*

Influenza is a potentially serious disease that can lead to hospitalization and even death. Every year there are millions of influenza infections, hundreds of thousands of flu-related hospitalizations, and thousands of flu-related deaths. An annual flu vaccine is the best way to help protect against influenza and may reduce the risk of flu illness, flu-related hospitalizations, and even flu-related death. It is recommended that everyone 6 months and older get a seasonal flu vaccine each year, and those over 65 are especially encouraged because they are at higher risk of developing serious complications from the flu.

## **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 E – Youth Behavioral Risk Survey Results

North Dakota High School Survey

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

	ND 2017	ND 2019	ND 2021	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2021
<b>Injury and Violence</b>							
Percentage of students who rarely or never wore a seat belt (when riding in a car driven by someone else)	8.1	5.9	<b>49.6</b>	=	9.2	5.0	6.5
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)	16.5	14.2	<b>13.1</b>	=	18.2	13.7	16.7
Percentage of students who talked on a cell phone while driving (on at least one day during the 30 days before the survey, among students who drove a car or other vehicle)	56.2	59.6	<b>64.4</b>	=	64.9	64.2	NA
Percentage of students who texted or e-mailed while driving a car or other vehicle (on at least one 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)	52.6	53.0	<b>55.4</b>	=	59.9	55.9	39.0
Percentage of students who never or rarely wore a helmet (during the 12 months before the survey, among students who rode a motorcycle)	20.6	NA	<b>NA</b>	<b>NA</b>	NA	NA	NA
Percentage of students who carried a weapon on school property (such as a gun, knife, or club on at least one day during the 30 days before the survey)	5.9	4.9	<b>5.0</b>	=	6.2	4.4	3.1
Percentage of students who were in a physical fight on school property (one or more times during the 12 months before the survey)	7.2	7.1	<b>NA</b>	<b>NA</b>	NA	NA	5.8
Percentage of students who experienced sexual violence (being forced by anyone to do sexual things [counting such things as kissing, touching, or being physically forced to have sexual intercourse] that they did not want to, one or more times during the 12 months before the survey)	8.7	9.2	<b>9.4</b>	=	9.7	11.6	9.7
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)	NA	NA	<b>NA</b>	<b>NA</b>	NA	NA	8.5
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)	11.4	11.6	<b>11.0</b>	=	11.2	11.1	NA
Percentage of students who were bullied on school property (during the 12 months before the survey)	24.3	19.9	<b>15.8</b>	↓	19.8	15.0	19.5
Percentage of students who were electronically bullied (including being bullied through texting, Instagram, Facebook, or other social media during the 12 months before the survey)	18.8	14.7	<b>13.6</b>	↓	16.2	14.5	15.7
Percentage of students who felt sad or hopeless (almost every day for two or more weeks in a row so that they stopped doing some usual activities during the 12 months before the survey)	28.9	30.5	<b>36.0</b>	↑	34.8	39.7	42.3
Percentage of students who seriously considered attempting suicide (during the 12 months before the survey)	16.7	18.8	<b>18.6</b>	=	18.5	20.6	22.2

	ND 2017	ND 2019	ND 2021	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2021
Percentage of students who made a plan about how they would attempt suicide (during the 12 months before the survey)	14.5	15.3	14.8	=	15.1	17.2	15.7
Percentage of students who attempted suicide (one or more times during the 12 months before the survey)	13.5	13.0	6.1	↓	7.9	7.5	10.2
<b>Tobacco Use</b>							
Percentage of students who ever tried cigarette smoking (even one or two puffs)	30.5	29.3	22.3	↓	26.8	21.1	17.8
Percentage of students who smoked a whole cigarette before age 13 years (even one or two puffs)	11.2	NA	NA	NA	NA	NA	6.3
Percentage of students who currently smoked cigarettes (on at least one day during the 30 days before the survey)	12.6	8.3	5.9	↓	8.0	6.1	3.8
Percentage of students who currently frequently smoked cigarettes (on 20 or more days during the 30 days before the survey)	3.8	2.1	0.8	↓	1.7	1.3	0.7
Percentage of students who currently smoked cigarettes daily (on all 30 days during the 30 days before the survey)	3.0	1.4	0.7	↓	1.3	1.1	0.41
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) ~2021~ Usually got their electronic vapor products by buying them themselves in a convenience store, supermarket, discount store, or gas station	7.5	13.2	NA	NA	NA	NA	6.8
Percentage of students who tried to quit smoking cigarettes (among students who currently smoked cigarettes during the 12 months before the survey)	50.3	54.0	30.9	↓	30.4	29.9	NA
Percentage of students who currently use an electronic vapor product (e-cigarettes, vape e-cigs, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey)	20.6	33.1	21.2	↓	24.2	23.6	18.0
Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey)	8.0	4.5	4.3	↓	5.2	3.7	2.5
Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey)	8.2	5.2	2.8	↓	4.0	3.3	3.1
Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey)	18.1	12.2	8.9	↓	11.2	8.9	18.7
<b>Alcohol and Other Drug Use</b>							
Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life)	59.2	56.6	50.4	↓	55.7	50.6	NA
Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips)	14.5	12.9	12.1	=	13.7	10.9	15.0
Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey)	29.1	27.6	23.7	=	28.7	23.7	22.7
Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey)	16.4	15.6	14.0	=	17.8	14.6	10.5
Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol)	37.7	NA	NA	NA	NA	NA	40.0
Percentage of students who tried marijuana before age 13 years (for the first time)	5.6	5.0	4.1	=	3.7	3.3	4.9

Percentage of students who currently used marijuana (one or more times during the 30 days before the survey)	15.5	12.5	<b>10.7</b>	=	10.2	12.9	15.8
	ND 2017	ND 2019	ND 2021	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2021
Percentage of students who ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it (counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, one or more times during their life)	14.4	14.5	10.2	↓	9.7	11.0	12.2
Percentage of students who were offered, sold, or given an illegal drug on school property (during the 12 months before the survey)	12.1	NA	NA	NA	NA	NA	13.3
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)	NA	NA	NA	NA	NA	NA	NA
<b>Sexual Behaviors</b>							
Percentage of students who ever had sexual intercourse	36.6	38.3	36.6	=	36.5	37.1	30.0
Percentage of students who had sexual intercourse before age 13 years (for the first time)	2.8	NA	NA	NA	NA	NA	3.2
<b>Weight Management and Dietary Behaviors</b>							
Percentage of students who were overweight ( $\geq$ 85th percentile but $<$ 95th percentile for body mass index, based on sex and age-specific reference data from the 2000 CDC growth chart)	16.1	16.5	<b>15.6</b>	=	15.5	14.2	16.0
Percentage of students who had obesity ( $\geq$ 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth chart)	14.9	14.0	<b>16.3</b>	=	17.4	15.0	16.3
Percentage of students who described themselves as slightly or very overweight	31.4	32.6	<b>31.7</b>	=	35.3	32.5	32.3
Percentage of students who were trying to lose weight.	44.5	44.7	<b>21.6</b>	↓	20.8	23.2	54.3
Percentage of students who did not eat fruit or drink 100% fruit juices (during the seven days before the survey)	4.9	6.1	5.0	=	5.8	4.6	7.7
Percentage of students who ate fruit or drank 100% fruit juices one or more times per day (during the seven days before the survey)	61.2	54.1	25.4	↓	21.9	27.0	NA
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 seven days before the survey)	5.1	6.6	<b>5.9</b>	=	5.3	6.2	9.3
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 seven days before the survey)	60.9	57.1	61.3	=	60.0	59.3	NA
Percentage of students who did not drink a can, bottle, or glass of soda or pop (such as Coke, Pepsi, or Sprite, not including diet soda or diet pop, during the seven days before the survey)	28.8	28.1	<b>27.7</b>	=	27.1	31.6	NA
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 seven days before the survey)	16.3	15.9	<b>16.6</b>	=	17.5	13.8	14.7
Percentage of students who did not drink milk (during the seven days before the survey)	14.9	20.5	26.2	↑	21.2	29.4	35.7
Percentage of students who drank two or more glasses per day of milk (during the seven days before the survey)	33.9	NA	NA	NA	NA	NA	NA
Percentage of students who did not eat breakfast (during the 7 days before the survey)	13.5	14.4	<b>15.1</b>	=	14.5	17.3	22.0
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)	2.7	2.8	<b>2.1</b>	=	2.2	2.1	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)	51.5	49.0	56.5	↑	58.0	55.3	55.9
	ND 2017	ND 2019	ND 2021	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2021
Percentage of students who watched television three or more hours per day (on an average school day) *In 2021, % of students who played video or computer games was combined with % of students who watch television 3 or more hours per day.	18.8	18.8	75.7	NA	75.8	78.6	75.9
Percentage of students who played video or computer games or used a computer three or more hours per day (counting time spent on things such as Xbox, PlayStation, an iPad or other tablet, a smartphone, texting, YouTube, Instagram, Facebook, or other social media, for something that was not school work on an average school day). ~2021~ questioned combined with previous question regarding television.	43.9	45.3	NA	NA	NA	NA	NA
Other							
Percentage of students who had eight or more hours of sleep (on an average school night)	31.8	29.5	24.5	=	28.3	23.2	22.7
Percentage of students who brushed their teeth on seven days (during the 7 days before the survey)	69.1	66.8	67.9	=	64.5	69.9	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)	12.8	NA	NA	NA	NA	NA	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)	8.3	7.0	7.4	=	8.6	6.8	64.4

Sources: <https://www.cdc.gov/healthyyouth/data/yrbs/results.htm>; <https://www.nd.gov/dpi/districtschools/safety-health/youth-risk-behavior-survey>

# Appendix F – Prioritization of Community’s Health Needs

## Community Health Needs Assessment Elgin, North Dakota Ranking of Concerns

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

	Priorities	Most Important
<b>COMMUNITY/ENVIRONMENTAL HEALTH CONCERNS</b>		
Attracting & retaining young families	3	2
Having enough child daycare services	1	
Not enough jobs with livable wages	2	
Not enough places for exercise/wellness activities	3	
<b>AVAILABILITY/DELIVERY OF HEALTH SERVICES CONCERNS</b>		
Ability to retain primary care providers (MD, DO, NP, PA) and nurses	5	2
Availability of mental health services	1	
Availability primary care providers (MD, DO, NP, PA) and nurses		
Availability of specialists		
Availability of hospice	2	
<b>YOUTH POPULATION HEALTH CONCERNS</b>		
Alcohol use and abuse	10*	1*
Depression/anxiety		
Drug use and abuse (including prescription drugs)		
Not enough activities for children	3	
Obesity/overweight		
Smoking & tobacco use		
<b>ADULT POPULATION HEALTH CONCERNS</b>		
Alcohol use and abuse	4*	
Drug use and abuse (including prescription drugs)		
Depression/anxiety		
Stress		
<b>SENIOR POPULATION HEALTH CONCERNS</b>		
Ability to meet needs of older population		
Assisted living options		
Availability of activities for seniors	2	
Availability of home health	7	6
Availability of resources for family and friends caring for elders		
Availability of resources to help elderly stay in their homes		
Cost of long-term/nursing home care	1	

\*means it was combined together

# Appendix G – 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.

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

- After school activities, summer programs, food choices
- Alcohol and drug use

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

- Available to get meds

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

- Art programs, music programs
- getting them to be employed, take starters jobs as cna, grocery store clerk, wait tables at cafe
- other activities for teenagers
- Discipline/structure

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

- Mental Health services

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

- Alcohol and drug abuse (2)
- Addiction problems stemming from alcohol and drug abuse.
- Drug use
- New ideas are not supported
- Getting families to stay
- Loss of population, which transfers into loss of employees for our hospital and school.
- not enough people (young and old) wanting to work when jobs are so avoidable.
- Getting the community to work together
- Lack of resources
- People keeping their shipping and other business needs local, where the money stays in the community, not a larger corporation that isn’t even facilitated in ND
- Better access to healthy food options
- keeping a stable or growing population (all ages).
- not enough people to support businesses and supply workers
- We live in a very “old” community; not a lot of people want to move here and stay here because there’s not a lot to do. Most people that move here have some kind of tie to the community.
- Elderly needing help.
- Growing elderly community, keeping or bringing in young families
- no activities for adults to get out more and enjoy life more!

- Costs (2)
- Cost of living
- Retaining our health care facility which is driven by finding long term doctors and PA's. Turnover is hard on patients to develop a long-term relationship.
- Keeping the hospital going strong. Provide good jobs for young adults.
- Accessibility of good healthcare providers and retaining them. It is truly a good old boys club, you need to be in the right crowd to have any say in what goes on.
- Availability of home health.
- Clinic run by poor PA's and running our doctor's out!!!

## Delivery of Healthcare

11. What prevents you or other community residents from receiving healthcare? "Other" responses:

- workforce

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

- Hospice (3)
- Mammography
- Hearing
- I have not used any of them.
- Weight loss program
- Diabetic info and counseling.
- Walk in, better pharmacy hours, in house for elderly

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

- Newsletter

25. Health insurance or health coverage status: "Other" responses:

- Spouse insurance

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

- Need mammos done locally, better billing, more accurate and timely. Ability to talk to someone in that office - they don't answer the phone.
- It seems that the lab work is more expensive at JMH or the insurance does not cover as well. Also the length of time between care and a final bill seems extreme. If there is an issue, referral to a specialist in Bismarck is required, so I find it easier to begin there.
- They need to answer the phone at night.
- Healthcare needs to communicate better to local people. Find ways to help people who are dying at home.
- Provide transportation to and from clinic for seniors (Free)
- More personal care at J.M.H.C.C.
- Have skilled providers willing to increase learning with kind compassionate care and time to listen to concerns and solve problems
- Retain and get full time med staff, try not to use travelers.
- We need to find a way to retain hospital/ clinic staff.
- Keep the doctors we HAD HAVE and DON'T replace with PA'S or locume doctors
- More community involvement
- I am thankful the clinics and hospital are here
- We are most fortunate that our community has as many health care services as we do.