

Community Health Needs Assessment

Northwood Deaconess Health Center
Service Area
Northwood, North Dakota

2022

Holly Long, MSML, Project Coordinator
Kylie Nissen, BBA, CHA, Program Director



Center *for* Rural Health

University of North Dakota
School of Medicine & Health Sciences

Table of Contents

Executive Summary 3

Overview and Community Resources 4

Assessment Process 8

Demographic Information 13

Survey Demographics 21

Findings of Key Informant Interviews and Community Group 40

Priority of Health Needs 42

Next Steps – Strategic Implementation Plan 44

Appendix A – Critical Access Hospital Profile 46

Appendix B – Economic Impact Analysis 48

Appendix C – Survey Instrument 49

Appendix D – County Health Rankings Explained 55

Appendix E – Youth Risk Behavior Survey Results 66

Appendix F – Prioritization of Community’s Health Needs 70

Appendix G – Survey “Other” Responses 71

This project was supported, in part, by the Federal Office of Rural Health, Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS), Medicare Rural Flexibility Hospital grant program and State Office of Rural Health grant program. This information content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS, or the U.S. Government.

Executive Summary

To help inform future decisions and strategic planning, Northwood Deaconess Health Center (NDHC) conducted a Community Health Needs Assessment (CHNA) in 2022, the previous CHNA having been conducted in 2019. The Center for Rural Health (CRH) at the University of North Dakota School of Medicine & Health Sciences (UNDSMHS) facilitated the assessment process, which solicited input from area community members and healthcare professionals as well as analysis of community health-related data.



To gather feedback from the community, residents of the area were given the opportunity to participate in a survey. One hundred twenty-five NDHC service area residents completed the survey. Additional information was collected through six key informant interviews with community members. The input from the residents, who primarily reside in Grand Forks 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, Grand Forks County's population from 2020 to 2021 decreased by 0.6%. The average number of residents younger than age 18 (21.2%) for Grand Forks County comes in 2.4 percentage points lower than the North Dakota average (23.6%). The percentage of residents ages 65 and older is 2.4% lower for Grand Forks County (13.3%) than the North Dakota average (15.7%), and the rate of education is slightly higher for Grand Forks County (95.4%) than the North Dakota average (93.1%). The median household income in Grand Forks County (\$53,721) is much lower than the state average for North Dakota (\$65,315).

Data compiled by County Health Rankings show Grand Forks County is doing better than North Dakota in health outcomes/factors for 21 categories.

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

Of 106 potential community and health needs set forth in the survey, the 125 NDHC service area residents who completed the survey indicated the following needs as the most important:

- Attracting and retaining young families
- Having enough child daycare services
- Availability of mental health services
- Availability of dental care
- Depression/anxiety
- Alcohol use and abuse – all ages
- Availability of resources to help elderly stay in their homes
- Cost of long-term/nursing home care
- Bullying/cyberbullying – violence

The survey also revealed the biggest barriers to receiving healthcare (as perceived by community members). They included not enough evening/weekend hours (N=17), no insurance/limited insurance (N=13), and concerns about confidentiality (N=13).

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

- Safe place to live, little/no crime
- Quality school system
- Family-friendly, good place to raise kids
- Recreational and sports activities
- People are friendly, helpful, and supportive
- Healthcare

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:

- Having enough child daycare services
- Attracting and retaining young families
- Availability of mental health services
- Cost of health insurance
- Depression/anxiety – all ages
- Alcohol use and abuse – all ages
- Youth smoking and tobacco use
- Cost of long-term/nursing home care
- Availability of resources to help the elderly stay in their homes

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), Northwood Deaconess Health Center (NDHC) in partnership with Grand Forks Public Health completed a Community Health Needs Assessment (CHNA) of the NDHC service area. The hospital identifies its service area as the towns of Northwood, Larimore, Aneta, Arvilla, and Hatton, as well as several other small extending communities. Many community members and stakeholders worked together on the assessment.

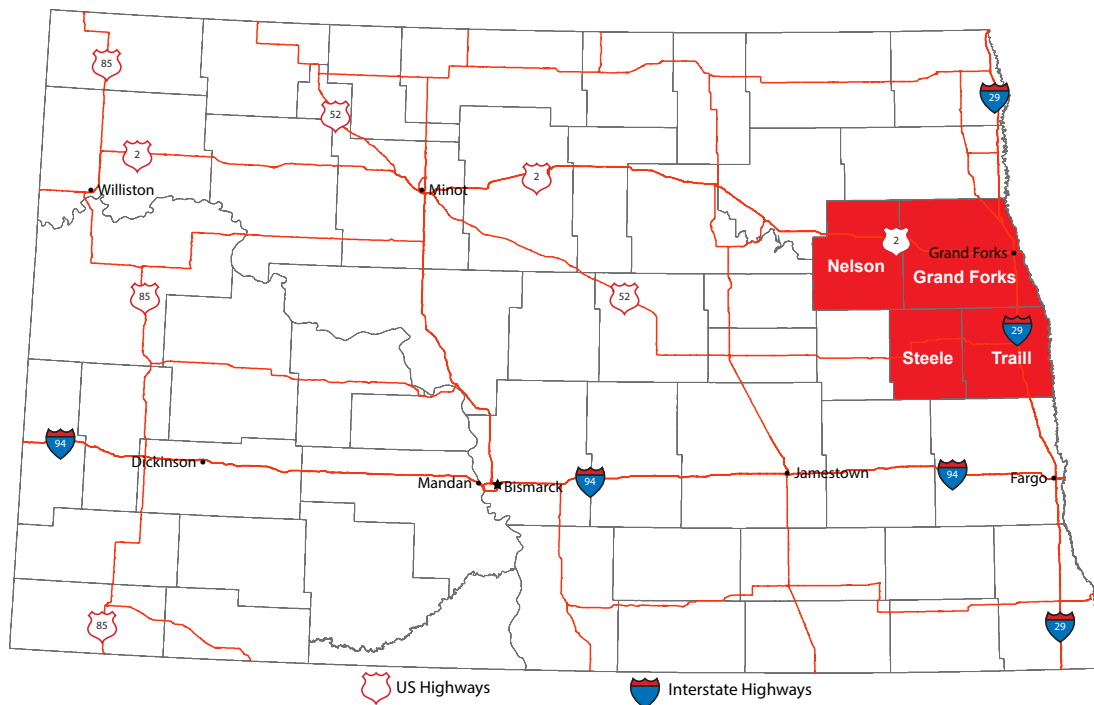
NDHC is located in southwestern Grand Forks County, 35 miles from Grand Forks and 85 miles from Fargo. Residents of the service area seek additional tertiary care services in both of those communities. Residents are able to seek chiropractic care in Northwood with a local provider but seek services in neighboring communities for dental and vision care. Local communities providing these services include Larimore, Mayville, Park River, and Grand Forks. Local pharmacy services are available in both Northwood and Larimore where NDHC has clinics.

The community of Northwood has a new and modern public school, constructed in 2009 with an addition to the elementary school constructed in 2019 to meet the needs of a growing enrollment. A Performing Arts Center Auditorium was completed in 2020. The Performing Arts Center has provided an opportunity to expand the community's ability to secure and nurture the arts in its many forms. The community has the option to utilize the Performing Arts Center for a variety of events. Enrollment has grown significantly over the past several years to an enrollment total of more than 300 students in grades K-12 with class sizes averaging between 20-35 students.

The local park district has a swimming pool, ball diamonds, and a 9-hole golf course. There are also walking paths, connecting the school to NDHC as well as circulating the school area, the football field, and the hockey arena. NDHC supports a fitness center open to the community 24/7 with a nominal membership fee for access.



Figure 1: Grand Forks, Nelson, Steele, & Traill Counties, North Dakota



Northwood Deaconess Health Center

NDHC was started in 1902 by area Lutheran churches. It continues to be independently owned and operated by those Lutheran churches, nine in total, from the communities of Northwood, Sharon, and Larimore. The Critical Access Hospital (CAH) Profile for NDHC includes a summary of hospital-specific information and is available in Appendix A.

NDHC has a 12-bed CAH, supported by clinics in Northwood, Larimore, and Binford. The nursing home is a 32-bed skilled facility. Six assisted living apartments and 10 independent living apartments help round out a full continuum of care on campus. NDHC also offers in-patient and out-patient therapy services to people of all ages,, which includes lifespan from infancy to the elderly within the hospital, long-term care, area schools, and home atmospheres. NDHC also provides emergency services with ambulance and emergency room services available.



The mission of NDHC is:

- Serve as local access to a full range of healthcare services.
- Continue as a leader in primary care for the whole family, in care of the elderly, and in emergency services.
- Function as a focal point for community health education and wellness.
- NDHC provides these services in a Christian environment, respecting the dignity of all.

NDHC has a significant economic impact on the region. In 2020, when the economic impact analysis was calculated, they directly employed 116 FTE employees with an annual payroll of over \$8.72 million (including benefits). These employees create an additional 89 jobs and nearly \$4.2 million in income, as they interact with other sectors of the local economy. This economy results in a total impact of 205 jobs and more than \$12.9 million in income. Additional information is provided in Appendix B.

Services offered locally by NDHC include:

General and Acute Services

1. Ambulance service
2. Assisted living
3. Blood pressure checks
4. Cardiology (visiting physician)
5. Clinic
6. Dermatology (visiting FNP)
7. Emergency room
8. Gynecology /OB (visiting physician)
9. Hospital (acute care)
10. Medi-Alerts
11. Nutrition counseling
12. Outpatient and inpatient infusions/injections
13. Pharmacy
14. Physicals: annuals, D.O.T., sports, and insurance
15. Skilled nursing
16. Sports medicine
17. Surgical services—outpatient (colonoscopy and vascular)
18. Swing bed services, respite care, adult daycare
19. Vaccine services

Screening/Therapy Services

1. Chronic disease management
2. Holter monitoring
3. Laboratory services
4. Lower extremity circulatory assessment
5. Occupational physicals
6. Occupational therapy
7. Pediatric services
8. Physical therapy
9. Sleep studies
10. Social services
11. Speech therapy

Radiology Services

1. Bone density studies (mobile unit)
2. CT scan (mobile unit)
3. Digital 3D mammography (mobile unit)
4. Echocardiograms
5. EKG
6. General X-ray
7. MRI (mobile unit)
8. Ultrasound

Laboratory Services

1. Chemistry
2. Coagulation
3. DNA/RNA molecular testing
4. EKG
5. Heart monitors (Holter monitor and Zio Patch)
6. Hematology
7. Immunology
8. Outpatient and inpatient phlebotomy of all ages
9. Two O Neg Trauma blood units
10. Urine and body fluids

Grand Forks Public Health

Grand Forks Public Health Department (GFPHD) provides services to the city and county of Grand Forks, North Dakota. They believe in creating a culture in which all people have the means and the opportunity to make choices that lead to the healthiest lives possible. They facilitate policy, system, and environmental changes that are supported by businesses, government, individuals, and organizations, all working together to foster health communities and lifestyles, well as functioning with the vision of healthy people, healthy environment, and healthy community.

Mission

The mission of GFPHD is to:

- Promote health environments and lifestyles.
- Prevent disease.
- Build community resilience through preparedness.
- Assure access to health services.

Values

The GFPHD aspires to be a consumer-focused agency, delivering the highest quality public health services, which are science-informed and evidence-based. The department's work is focused on demonstrating these values:

- Client focused
- Respect
- Collaboration
- Integrity
- Evidence-based
- Advocacy

Specific services that GFPHD provides are:

1. Animal bite/rabies investigation and quarantine or testing of animals
2. Breastfeeding resources
3. Car seat program
4. Colorectal cancer screening
5. Community health assessment
6. Correctional health
7. Counseling, Testing and Referral (CTR) program – HIV testing and Hepatitis C testing
8. COVID-19 pandemic response and recovery – testing, vaccination, education, and mitigation efforts
9. Disease surveillance
10. Emergency Preparedness services-work with community partners as part of local emergency response team
11. Fit-testing and personal protective equipment (PPE) training
12. Food service inspections at county schools and childcare facilities
13. Health Tracks (child health screening)
14. Increase access to local foods through local farmer's markets and community gardens
15. Investigate and abate public health nuisances
16. Inspect and advise the public on housing and sanitation issues (pest, mold, radon, and lead)
17. Immunizations for adult and pediatric populations
18. Medication setup with adult home visit services
19. Mosquito control
20. Nutrition education

21. Opioid response efforts, including increasing access to Naloxone and recovery resources
22. Preschool education health screening
23. Ryan White Program
24. School health— health education and resource to the schools
25. Syringe Service Exchange Program
26. Test and inspect public pools
27. Tobacco prevention and control
28. Tuberculosis surveillance and management
29. Wellness Programs for city and county employees
30. West Nile program—surveillance and education
31. Withdrawal Management Center
32. Women’s Way Breast and Cervical Cancer Early Detection Program

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 Grand Forks County, which is included in the Northwood Deaconess Health Center (NDHC) service area.

The Center for Rural Health (CRH), in partnership with NDHC and Grand Forks Public Health Department (GFPHD), facilitated the CHNA process. Community representatives met regularly in-person, by telephone, and email. A CHNA liaison was selected locally, who served as the main point of contact between CRH and Northwood. 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 phone, text, 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. Twenty-one people, representing a cross section demographically, attended the focus group meeting. The meeting was highly interactive with good participation. NDHC staff and board members were in attendance as well but largely played a role of listening, learning, and clarifying questions.

Figure 2: Steering Committee

Pete Antonson	CEO, NDHC
Brittany Ness	Community Health Manager, NDHC
Brock Sherva	Revenue Cycle Manager, NDHC
Doris Cooper	Human Resource/Marketing Manager, NDHC
Theresa Farmer	Health Services Team Leader, GFPHD
Kate Goldade	Family Health Team Leader, GFPHD

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's public health liaison. CRH representatives also participated in a series of meetings that garnered input from the state's health officer, local North Dakota public health unit professionals, and representatives from North Dakota State University.

As part of the assessment's overall collaborative process, 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
- 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 and administers the Medicare Rural Hospital Flexibility (Flex) program, funded by the Federal Office of Rural Health Policy, Health Resources Services Administration, and Department of Health and Human Services. CRH connects the University of North Dakota (UND) School of Medicine & Health Sciences (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 21 community members, was convened and first met on June 21, 2022. 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 along with key informants on September 28, 2022 with 16 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 Grand Forks 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 NDHC and GFPHD. They included representatives of the health community, business community, political bodies, law enforcement, education, agriculture community, and faith community. Not all members of the group were present at both meetings.

Interviews

One-on-one interviews with five key informants were conducted in person in Northwood on June 21, 2022. One additional key informant interview was conducted over the phone in June of 2022. 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.

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

Survey

A survey was distributed to solicit feedback from the community and was not intended to be a scientific or statistically valid sampling of the population. It was designed to be an additional tool for collecting qualitative data from the community at large – specifically, information related to community-perceived health needs. A copy of the survey instrument is included in Appendix 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 Grand Forks County, which are all included in the NDHC 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.
- 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, a press release was submitted to the Northwood Gleaner, our local newspaper. Additionally, information was published on NDHC's website and Facebook pages. A postcard was developed and mailed out to all mailbox holders in the NDHC service area. Information, regarding the survey, was also shared in church bulletins and in flyers throughout the community of Northwood, Larimore, and Hatton. The survey was also shared to all staff internally through the staff newsletter.

Information was shared with area residents on how to complete the survey online, with the option to request a paper copy from NDHC. A QR code along with a link to the survey was shared on all advertisements.

Approximately 50 paper copies of the survey were available upon request from NDHC.

To help ensure anonymity, included with each survey, was a postage-paid return envelope to CRH. The survey period ran from June 20, 2022 to July 15, 2022. No paper surveys were returned.

Area residents were also given the option of completing an online version of the survey, which was publicized in a press release to the local newspaper and on the websites and Facebook pages of both NDHC and GFPHD. One hundred twenty-five online surveys were completed. Sixty-eight of those online respondents used the QR code to complete the survey. In total, counting both paper and online surveys, 125 community member surveys were completed, equating to a 13% 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 United States Census Bureau; Robert Wood Johnson Foundation's County Health Rankings, which pulls data from 20 primary data sources (www.countyhealthrankings.org); the National Survey of Children's Health, which touches on multiple intersecting aspects of children's lives (www.childhealthdata.org/learn/NSCH); North Dakota KIDS COUNT, which is a national and state-by-state effort to track the status of children, sponsored by the Annie E. Casey Foundation (www.ndkidscount.org); and Youth Risk Behavior Surveillance System (YRBSS) data, which is published by the Centers for Disease Control and Prevention (<https://www.cdc.gov/healthyyouth/data/yrbs/index.htm>).

Social Determinants of Health

According to the World Health Organization, social determinants of health are, *"The circumstances in which people are born, grow up, live, work, and age and the systems put in place to deal with illness. These circumstances are in turn shaped by wider set of forces: economics, social policies and politics."*

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

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 has 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 Community Health Needs Assessment process, it was imperative to keep in mind how they impact the health of the community and what solutions can be implemented.

Figure 3: Social Determinants of Health

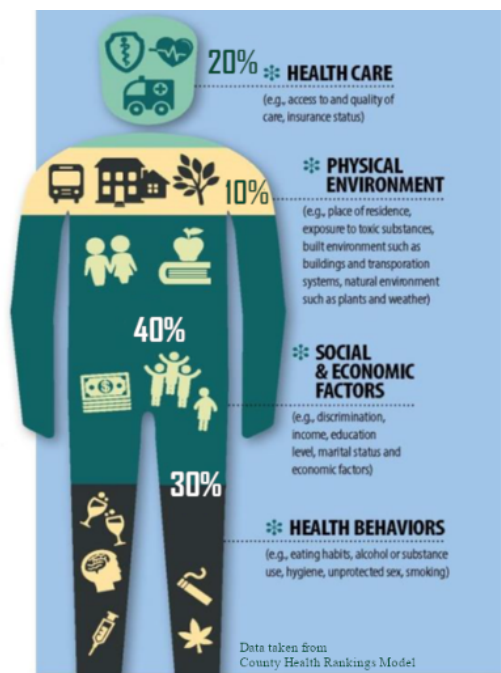


Figure 4 (Henry J. Kaiser Family Foundation, <https://www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/>), provides examples of factors that are included in each of the social determinants of health categories that lead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

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

Figure 4: Social Determinants of Health

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 summarizes general demographic and geographic data about Grand Forks County..

	Grand Forks County	North Dakota
Population (2021)	72,705	774,948
Population change (2020-2021)	-0.6%	-0.5%
People per square mile (2010)	46.5	9.7
Persons 65 years or older (2020)	13.3%	15.7%
Persons younger than 18 years (2020)	21.2%	23.6%
Median age (2020)	29.9	35.2
White persons (2020)	86.8%	86.9%
High school graduates (2020)	95.4%	93.1%
Bachelor's degree or higher (2020)	36.2%	30.7%
Live below poverty line (2020)	12.7%	10.2%
Persons without health insurance, younger than 65 years (2019)	6.4%	8.1%
Households with a broadband internet subscription (2020)	81.8%	83.1%

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

While the population of North Dakota has grown in recent years, Grand Forks County have seen a decrease in population since 2020. The U.S. Census Bureau estimates show that Grand Forks County's population decreased from 73,170 (2020) to 72,705 (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, Grand Forks 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 counties 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 County Health Rankings website at www.countyhealthrankings.org.

Table 2 summarizes the pertinent information gathered by County Health Rankings as it relates to Grand Forks 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 Grand Forks Public Health and Northwood Deaconess Health Center, or of any particular medical facility.

Health Outcomes <ul style="list-style-type: none"> • Length of life • Quality of life 	Health Factors (continued) <ul style="list-style-type: none"> • Clinical care <ul style="list-style-type: none"> - Access to care - Quality of care • Social and Economic Factors <ul style="list-style-type: none"> - Education - Employment - Income - Family and social support - Community safety • Physical Environment <ul style="list-style-type: none"> - Air and water quality - Housing and transit
Health Factors <ul style="list-style-type: none"> • Health behavior <ul style="list-style-type: none"> - Smoking - Diet and exercise - Alcohol and drug use - Sexual activity 	

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).

Grand Forks County rankings within the state are included in the summary following. For example, Grand Forks County ranks 22nd out of 47 ranked counties in North Dakota on health outcomes and 7th 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 Grand Forks County is doing better than many counties, compared to the rest of the state on all but two of the outcomes, landing at or above rates for other North Dakota counties. However, Grand Forks County, like many North Dakota counties, is doing poorly in many areas when it comes to the U.S. Top 10% ratings. One particular outcome where Grand Forks County does not meet the U.S. Top 10% ratings is the number of premature deaths.

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

Data compiled by County Health Rankings show Grand Forks County is doing better than North Dakota in health outcomes and factors for the following indicators:

- | | |
|---|--|
| <ul style="list-style-type: none"> • Premature death rates • Poor mental health days (in past 30 days) • Low birth weight rates • Adulting smoking • Adult obesity • Physical inactivity • Access to exercise opportunities • Excessive drinking • Alcohol-impaired driving deaths • Teen birth rate • Low rates of uninsured • Low primary care providers to patient ratio | <ul style="list-style-type: none"> • Low dentist to patient ratio • Low mental health providers to patient ratio • Preventable hospital stays • Mammography screening (% of Medicare enrollees ages 65-74 receiving screening) • Flu vaccinations (% of fee-for-service Medicare enrollees receiving vaccination) • Low rates of unemployment • Low rates of children in poverty • Low rates of violent crime • Low rates of injury deaths • No water violations |
|---|--|

Outcomes and factors in which Grand Forks County was performing poorly, relative to the rest of the state, include

- Poor or fair health
- Poor physical health days
- Food environment index
- Sexually transmitted infections
- Social associations
- Children in single-parent households
- Income inequality
- Air pollution – particulate matter
- Severe housing problems

TABLE 2: SELECTED MEASURES FROM COUNTY HEALTH RANKINGS 2021 – GRAND FORKS

COUNTY

● = 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

	Grand Forks County	U.S. Top 10%	North Dakota
Ranking: Outcomes	22nd		(of 46)
Premature death	6,700 ■	5,400	6,600
Poor or fair health	15% ●⊕	14%	14%
Poor physical health days (in past 30 days)	3.4 ●⊕	3.4	3.2
Poor mental health days (in past 30 days)	3.5 ⊕	3.8	3.8
Low birth weight	7% ■	6%	6%
Ranking: Factors	7th		(of 45)
<i>Health Behaviors</i>			
Adult smoking	16% ■	16%	20%
Adult obesity	36% ■	26%	34%
Food environment index (10=best)	8.4 ●■	8.7	8.9
Physical inactivity	27% ■	19%	23%
Access to exercise opportunities	77% ■	91%	74%
Excessive drinking	23% ■	15%	24%
Alcohol-impaired driving deaths	30% ■	11%	42%
Sexually transmitted infections	623.5 ●■	161.2	466.6
Teen birth rate	11 ⊕	12	20
<i>Clinical Care</i>			
Uninsured	6% ⊕	6%	8%
Primary care physicians	830:1 ⊕	1,030:1	1,300:1
Dentists	1,140:1 ⊕	1,210:1	1,510:1
Mental health providers	280:1 ■	270:1	510:1
Preventable hospital stays	2,812 ■	2,565	4,037
Mammography screening (% of Medicare enrollees ages 65-74 receiving screening)	52% ⊕	51%	53%
Flu vaccinations (% of fee-for-service Medicare enrollees receiving vaccination)	58% ⊕	55%	50%
<i>Social and Economic Factors</i>			
Unemployment	4.6% ■	2.6%	2.4%
Children in poverty	11% ■	10%	11%
Income inequality	4.9 ●■	3.7	4.4
Children in single-parent households	21% ●■	14%	20%
Social associations	11.5 ●■	18.2	16.0
Violent crime	243 ■	63	258
Injury deaths	61 ⊕	59	71
<i>Physical Environment</i>			
Air pollution – particulate matter	7.5 ●■	5.2	4.7
Drinking water violations	No		
Severe housing problems	18% ●■	9%	12%

Source: <http://www.countyhealthrankings.org/app/north-dakota/2022/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.

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

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

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%
Healthcare		
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 healthcare	2.3%	2.5%
Young children (9-35 mos.) receiving standardized screening for developmental problems	31.1%	36.9%
Family Life		
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%
Neighborhood		
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%

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 focuses on the main components of children’s well-being; more information about KIDS COUNT is available at www.ndkidscount.org. The measures highlighted in blue in the table are those in which the counties are doing worse than the state average. The year of the most recent data is noted.

The data show Grand Forks County is performing more poorly than the North Dakota average on three of the examined measures: child insecurity, Supplemental Nutrition Assistance Program (SNAP) recipients, and victims of child abuse and neglect requiring services.

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

	Grand Forks County	North Dakota
Child food insecurity, 2019	9.7%	9.6%
Medicaid recipient (% of population age 0-20), 2021	23.5	26.1%
Children enrolled in Healthy Steps (CHIP) (% of population age 0-18), 2021	1.8%	2.1%
Supplemental Nutrition Assistance Program (SNAP) recipients (% of population age 0-18), 2021	17.1%	17.0%
Licensed childcare capacity (# of children), 2022	3,561	35,055
Four-year high school cohort graduation rate, 2020/2021	87.6%	87.0%
Victims of child abuse and neglect requiring services (rate per 1,000 children ages 0-17), 2020	14.52	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 2015, 2017, and 2019. 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 2017 to 2019, and “↓” for a decreased trend in the data changes from 2017 to 2019. The final column shows the 2019 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 2017-2019.

	ND 2015	ND 2017	ND 2019	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2019
Injury and Violence							
% of students who rarely or never wore a seat belt (when riding in a car driven by someone else)	8.5	8.1	5.9	=	8.8	5.4	6.5
% 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)	17.7	16.5	14.2	=	17.7	12.7	16.7
% of students who talked on a cell phone while driving (on at least one day during the 30 days before the survey)	NA	56.2	59.6	=	60.7	60.7	NA
% 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)	57.6	52.6	53.0	=	56.5	51.8	39.0
% of students who were in a physical fight on school property (one or more times during the 12 months before the survey)	5.4	7.2	7.1	=	7.4	6.4	8.0
% 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)	NA	8.7	9.2	=	7.1	8.0	10.8
% of students who were bullied on school property (during the 12 months before the survey)	24.0	24.3	19.9	↓	24.6	19.1	19.5
% of students who were electronically bullied (includes texting, Instagram, Facebook, or other social media ever during the 12 months before the survey)	15.9	18.8	14.7	↓	16.0	15.3	15.7
% of students who made a plan about how they would attempt suicide (during the 12 months before the survey)	13.5	14.5	15.3	=	16.3	16.0	15.7
Tobacco, Alcohol, and Other Drug Use							
% of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey)	22.3	20.6	33.1	↑	32.2	31.9	32.7
% of students who currently used cigarettes, cigars, or smokeless tobacco (on at least one day during the 30 days before the survey)	NA	18.1	12.2	NA	15.1	10.9	10.5
% 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)	NA	16.4	15.6	=	17.2	14.0	13.7
% of students who currently used marijuana (one or more times during the 30 days before the survey)	15.2	15.5	12.5	=	11.4	14.1	21.7
% 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)	NA	14.4	14.5	=	12.8	13.3	14.3
Weight Management, Dietary Behaviors, and Physical Activity							
% of students who were overweight (≥ 85th percentile but <95 th percentile for body mass index)	14.7	16.1	16.5	=	16.6	15.6	16.1
% of students who had obesity (≥ 95th percentile for body mass index)	13.9	14.9	14.0	=	17.4	14.0	15.5
% of students who did not eat fruit or drink 100% fruit juices (during the seven days before the survey)	3.9	4.9	6.1	=	5.8	5.3	6.3

% 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)	4.7	5.1	6.6	=	5.3	6.6	7.9
% 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)	18.7	16.3	15.9	=	17.4	15.1	15.1
% of students who did not drink milk (during the seven days before the survey)	13.9	14.9	20.5	↑	14.8	20.3	30.6
% of students who did not eat breakfast (during the seven days before the survey)	11.9	13.5	14.4	=	13.3	14.1	16.7
% 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)	NA	2.7	2.8	=	2.1	2.9	NA
% of students who were physically active at least 60 minutes per day on 5 or more days (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the seven days before the survey)	NA	51.5	49.0	=	55.0	22.6	55.9
% of students who watched television 3 or more hours per day (on an average school day)	18.9	18.8	18.8	=	18.3	18.2	19.8
% of students who played video or computer games or used a computer 3 or more hours per day (for something that was not schoolwork on an average school day)	38.6	43.9	45.3	=	48.3	45.9	46.1
Other							
% of students who ever had sexual intercourse	38.9	36.6	38.3	=	35.4	36.1	38.4
% of students who had eight or more hours of sleep (on an average school night)	NA	31.8	29.5	=	31.8	33.1	NA
% of students who brushed their teeth on seven days (during the seven days before the survey)	NA	69.1	66.8	=	63.0	68.2	NA

Sources: <https://www.cdc.gov/healthyyouth/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 who are 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 to which categories these needs belong 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



NDSU NORTH DAKOTA
STATE UNIVERSITY

Assessed by CAPND and NDSU, November 2020

KEY FINDINGS

1st Priority Need

**Rental
Assistance**



3,458

Total Survey
Responses

1,086

Low-Incomes

2,084

Non- Low-Incomes

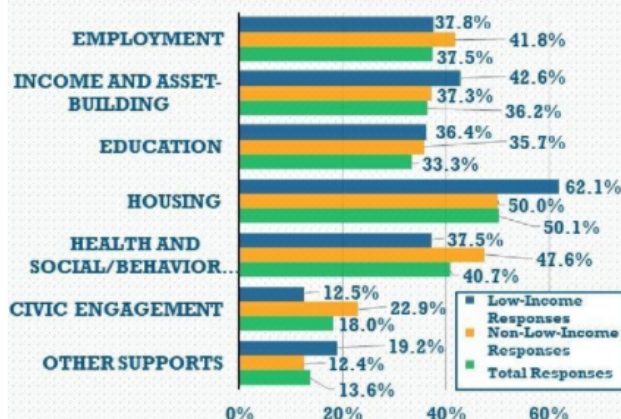
288

Others (roles cannot
be identified)

"**Rental Assistance**" becomes the 1st 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.

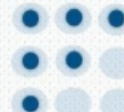
- ♥ The 1st priority need for the non-low-income respondents is "**Mental Health Service**".
- ♥ For the community (including both low-income and non-low-income people), the 1st priority need is "**Dental Issuance/Affordable Dental**".

STATEWIDE OVERALL NEEDS



TOP STATEWIDE SPECIFIC NEEDS

Low-Incomes

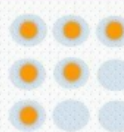


Housing - Rental Assistance

Health and Social/Behavior Development - Dental Insurance/Affordable Dental

Other Needs - Food

Non-Low-Incomes



Health and Social/Behavior Development - Mental Health Service

Health and Social/Behavior Development - Health Insurance/Affordable Health Care

Income and Asset-Building - Budget/Credit/Debit Counseling

Community
(Low-Income & Non-Low-Income)



Health and Social/Behavior Development - Dental Insurance/Affordable Dental

Health and Social/Behavior Development - Health Insurance/Affordable Health Care

Health and Social/Behavior Development - Mental Health Service

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.



info@capnd.org



701-232-2452



<https://www.capnd.org/>

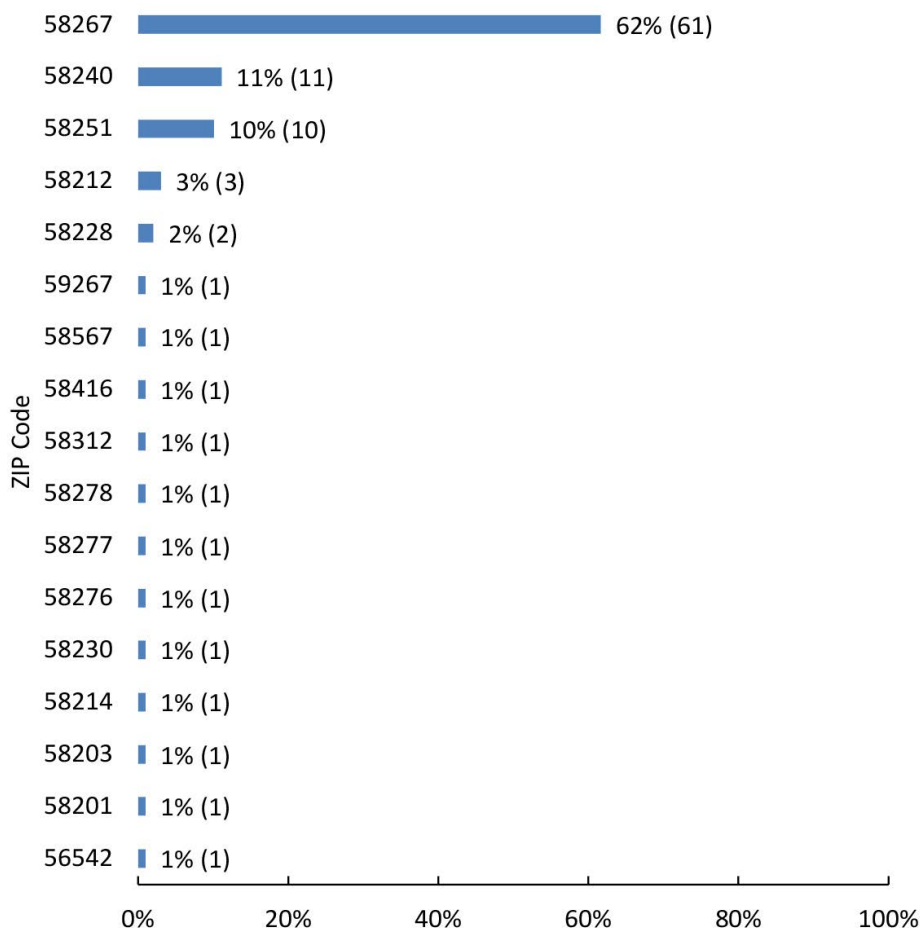
Survey results are reported in six categories: demographics; healthcare access; community assets, challenges; community concerns; delivery of healthcare; and other concerns or suggestions to improve health.

Survey Demographics

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

Figure 5: ZIP Code Demographics of Survey Respondents

Total respondents = 99



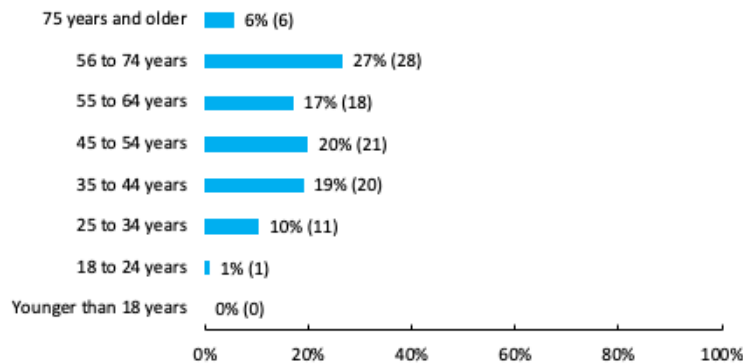
With respect to demographics of those who chose to complete the survey:

- 50% (N=52) were age 55 or older
- The majority (75%, N=79) were female
- More than half of the respondents (62%, N=65) had bachelor's degrees or higher
- The number of those working full time (57%, N=60) is about two times higher than those who were retired (33%, N=35)
- 99% (N=101) of those who reported their ethnicity / race were White / Caucasian
- 15% of the population (N=15) 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 = 105



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

Figure 7: Gender Demographics of Survey Respondents

Total respondents = 105

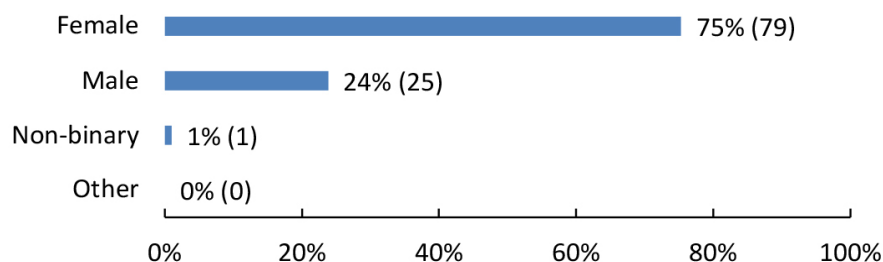


Figure 8: Educational Level Demographics of Survey Respondents

Total respondents = 105

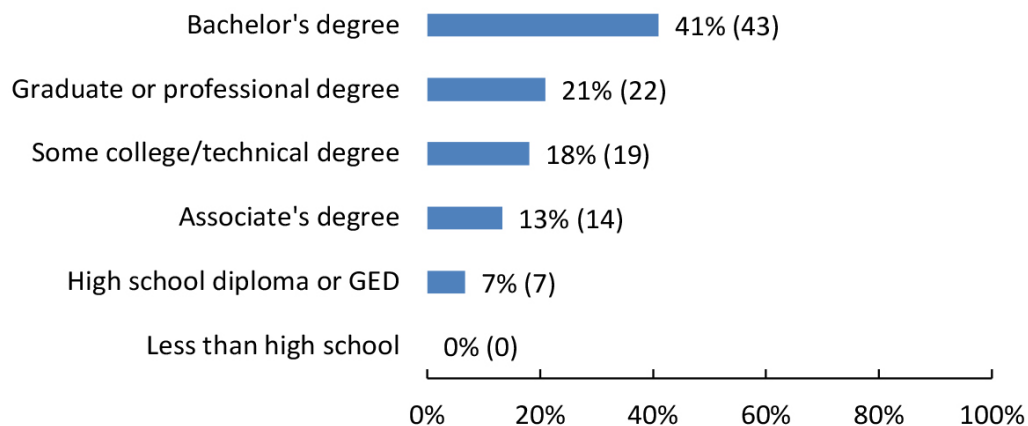
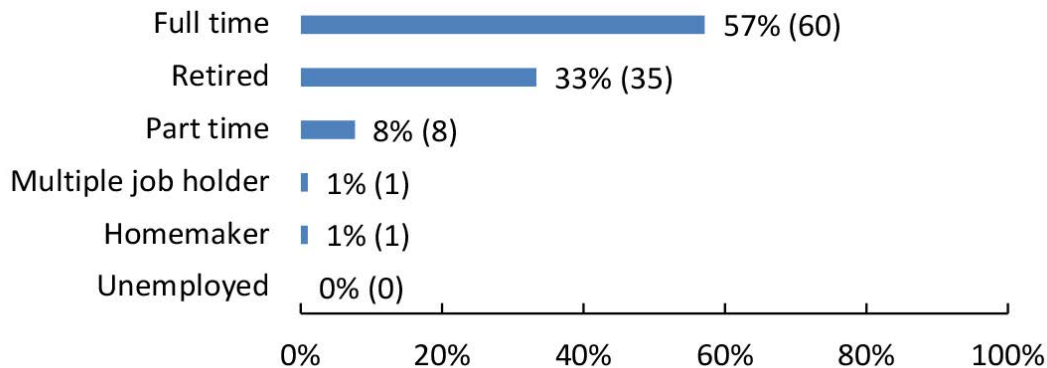


Figure 9: Employment Status Demographics of Survey Respondents

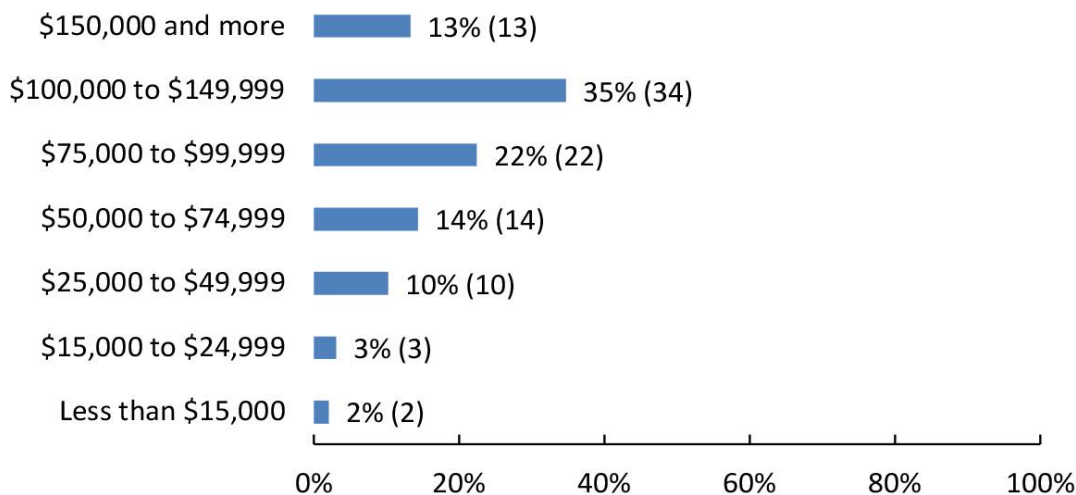
Total respondents = 105



Of those who provided a household income, 5% (N=5) community members reported a household income of less than \$25,000. Forty-eight percent (N=47) indicated a household income of \$100,000 or more. This information is shown in Figure 10.

Figure 10: Household Income Demographics of Survey Respondents

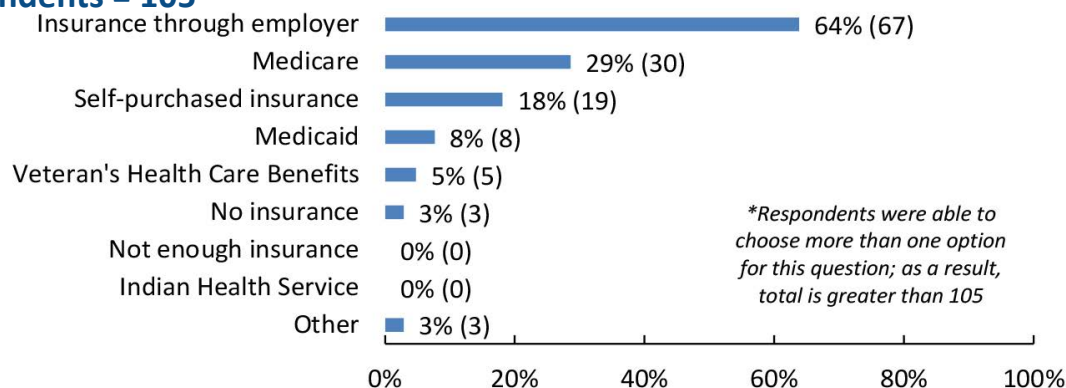
Total respondents = 98



Community members were asked about their health insurance status, which is often associated with whether people have access to healthcare. Three percent (N=3) of the respondents reported having no health insurance or being under-insured. The most common insurance types were insurance through one's employer (N=67), followed by Medicare (N=30), and self-purchased insurance (N=19).

Figure 11: Health Insurance Coverage Status of Survey Respondents

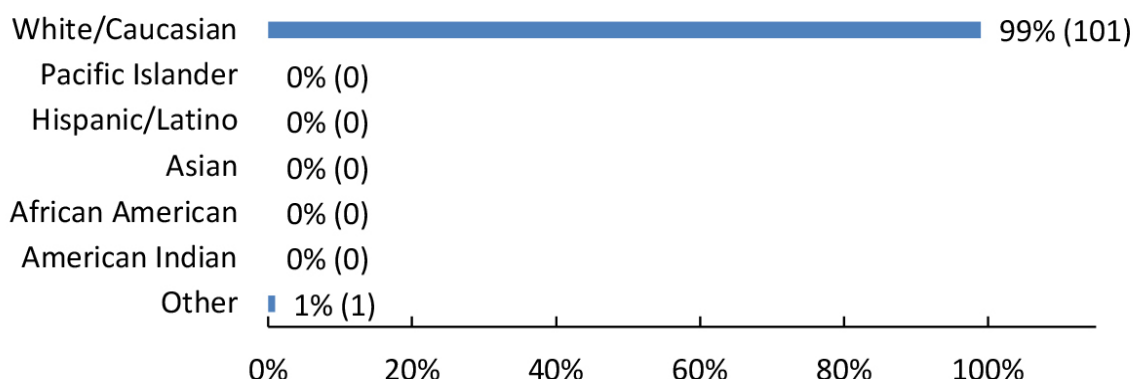
Total respondents = 105*



As shown in Figure 12, nearly all of the respondents were White/Caucasian (99%). This statistic was not in-line with the race/ethnicity of the overall population of Grand Forks County; the U.S. Census indicates that 86.8% of the population is White in Grand Forks County.

Figure 12: Race/Ethnicity Demographics of Survey Respondents

Total respondents = 102



Community Assets and Challenges

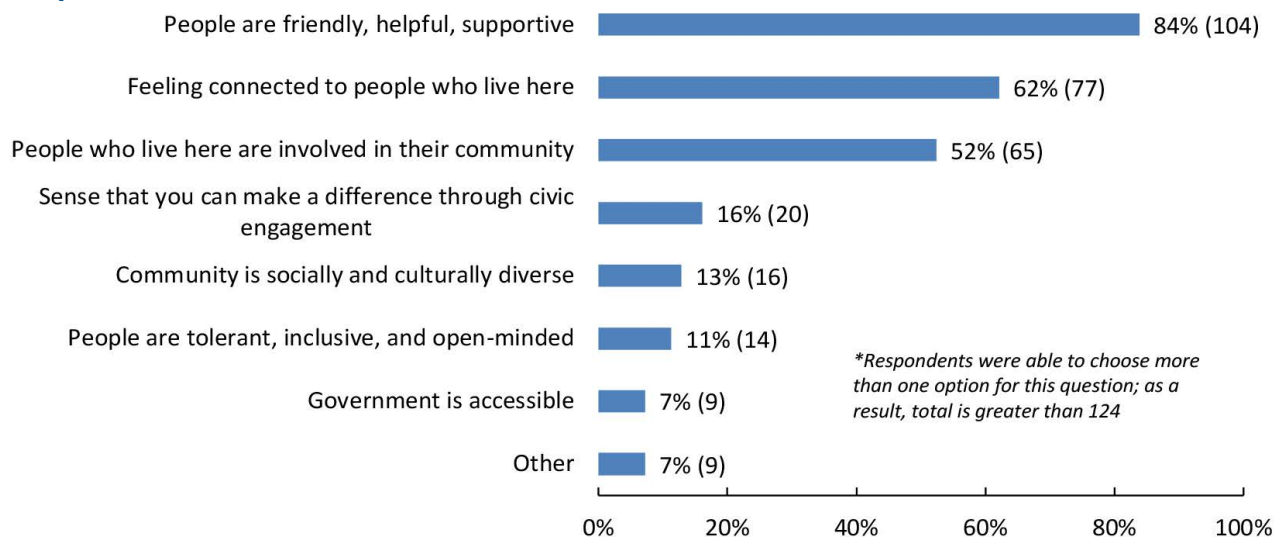
Survey-respondents were asked what they perceived as the best things about their community in four categories: people, services and resources, quality of life, and activities. In each category, respondents were given a list of choices and asked to pick the three best things. Respondents occasionally 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 95 respondents agreeing) that community assets include:

- Safe place to live, little/no crime (N=112)
- Family-friendly (N=107)
- People are friendly, helpful, supportive (N=104)
- Healthcare (N=104)
- Quality school system (N=95)

Figures 13 to 16 illustrate the results of these questions.

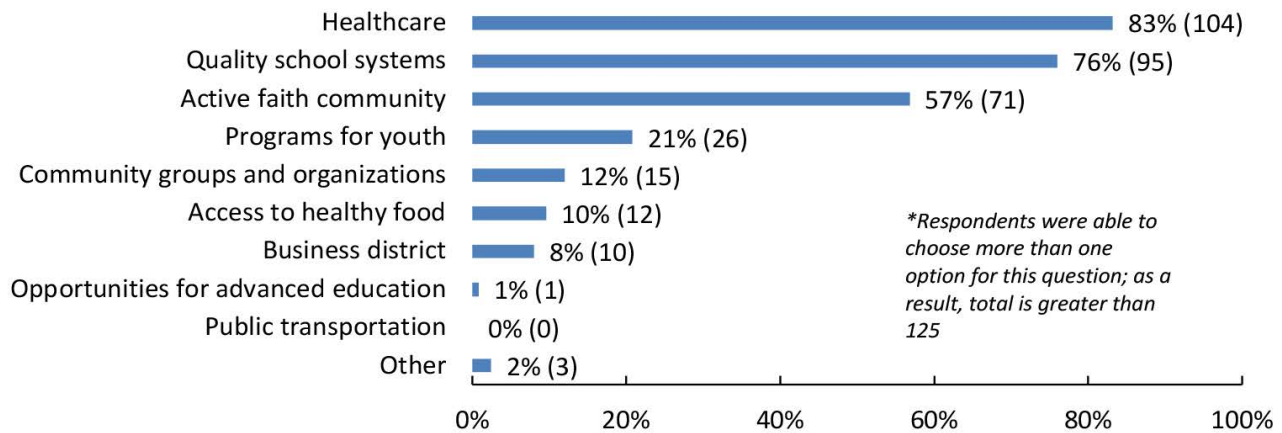
Figure 13: Best Things About the PEOPLE in Your Community

Total responses = 124



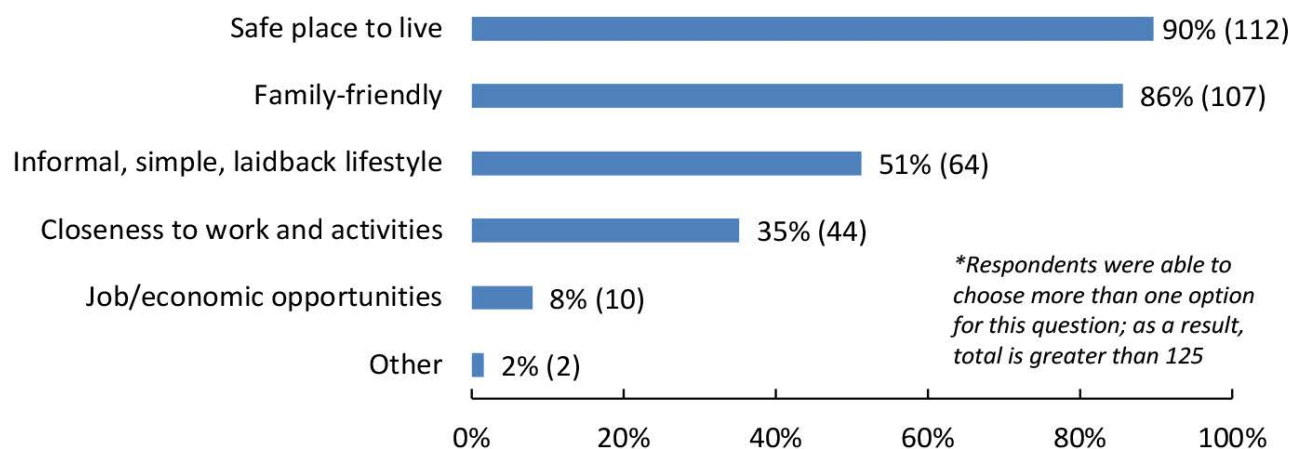
Included in the “Other” category of the best things about the people, the Christian community, and the people help when in a crisis.

Figure 14: Best Things About the SERVICES AND RESOURCES in Your Community
Total responses = 125*



Respondents who selected “Other” specified that the best things about services and resources included the clinic and being able to get squeezed in when needed.

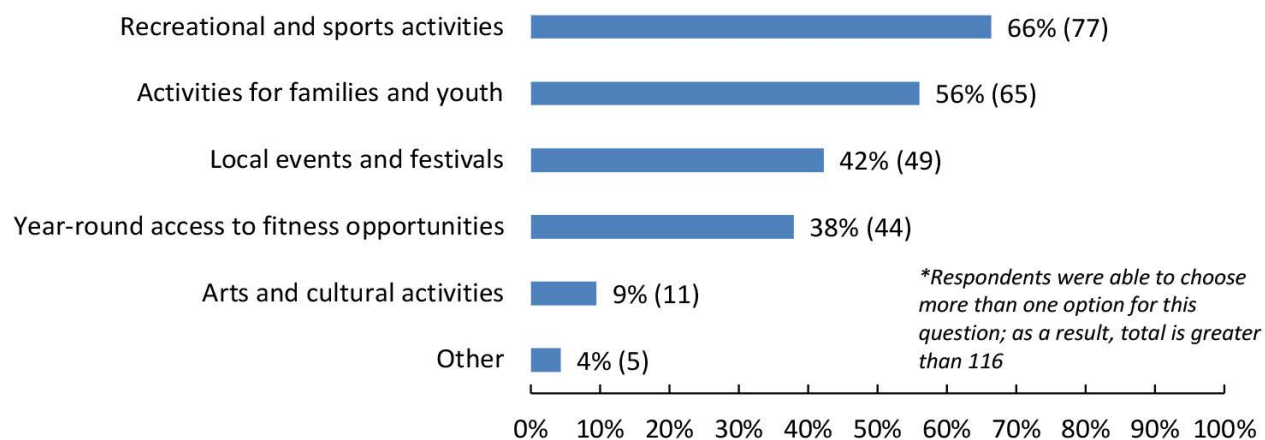
Figure 15: Best Things About the QUALITY OF LIFE in Your Community
Total responses = 125*



The “Other” response, regarding the best things about the quality of life in the community, was it’s a safe area.

Figure 16: Best Thing About the ACTIVITIES in Your Community

Total responses = 116*



Respondents who selected “Other” specified that the best things about the activities in the community included spiritual growth opportunities to serve.

Community Concerns

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

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

With regard to responses about community challenges, the most highly voiced concerns (those having at least 45 respondents) were:

- Bullying / cyberbullying – violence (N=60)
- Depression / anxiety – youth (N=60)
- Alcohol use and abuse – adults (N=56)
- Attracting and retaining young families (N=54)
- Having enough child daycare services (N=54)
- Depression / anxiety – adults (N=51)
- Availability of resources to help the elderly stay in their homes (N=48)
- Alcohol use and abuse – youth (N=45)

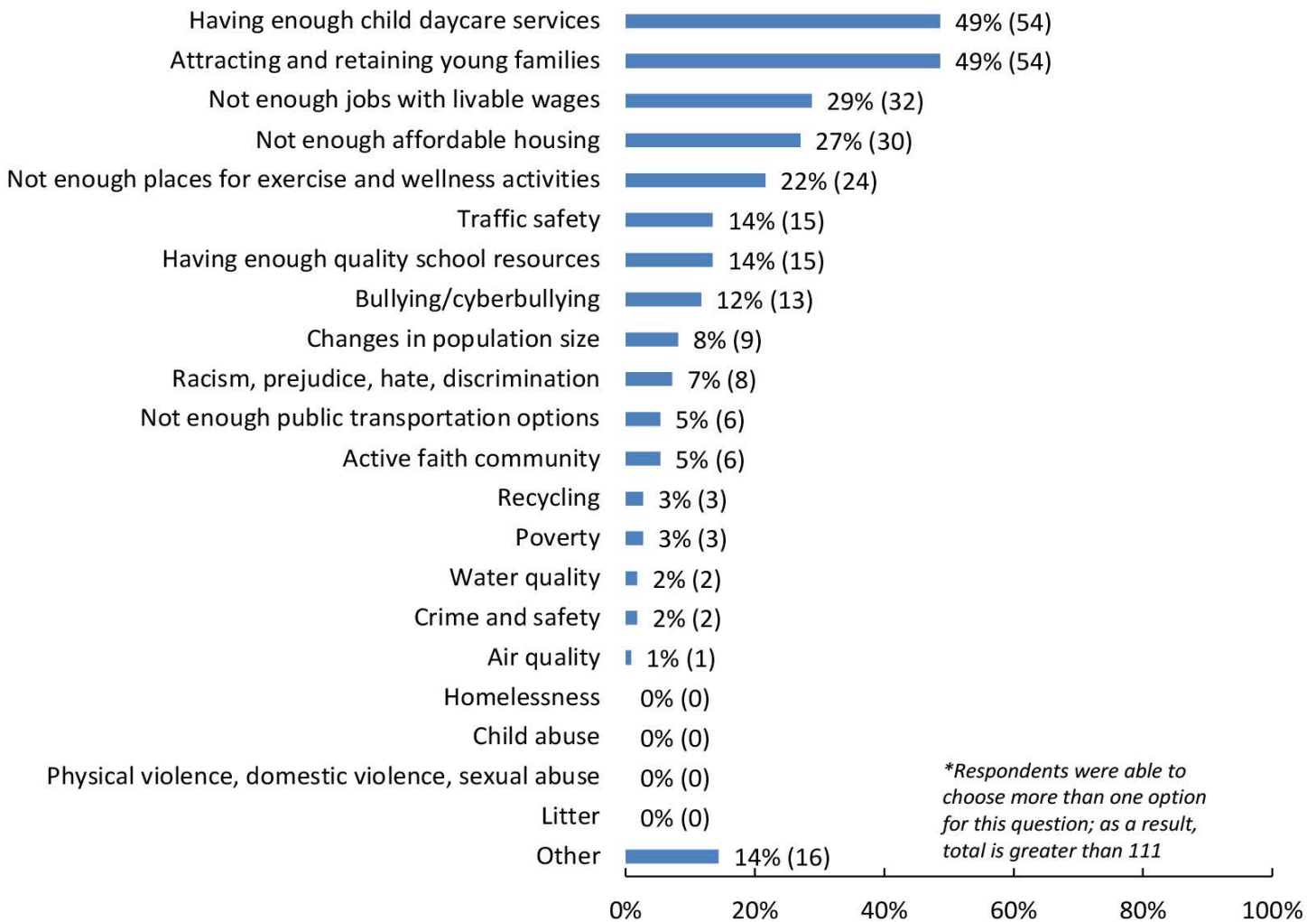
The other issues that had at least 30 votes included:

- Cost of long-term / nursing home care (N=42)
- Availability of mental health services (N=42)
- Smoking and tobacco use (second-hand smoke) – youth (N= 41)
- Not getting enough exercise / physical activity (N=37)
- Emotional abuse – violence (N=33)
- Drug use and abuse – youth (N=32)
- Not enough jobs with livable wages (N=32)
- Not enough affordable housing (N=30)

Figures 17 through 22 illustrate these results.

Figure 17: Community/Environmental Health Concerns

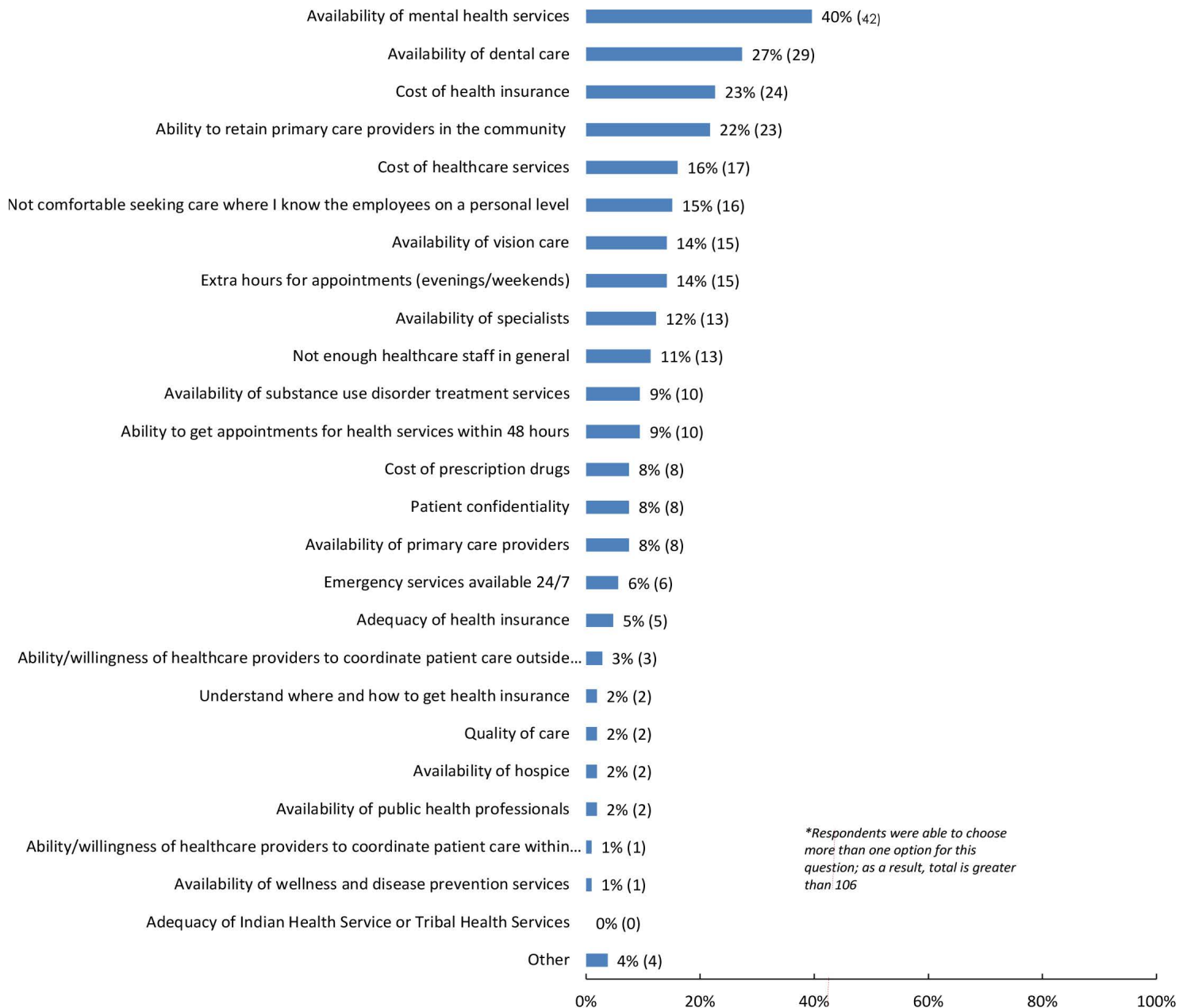
Total responses = 111



In the “Other” category for community and environmental health concerns, the following were listed: roads, illegal drugs use, high taxes and specials, and communication between organizations.

Figure 18: Availability/Delivery of Health Services Concerns

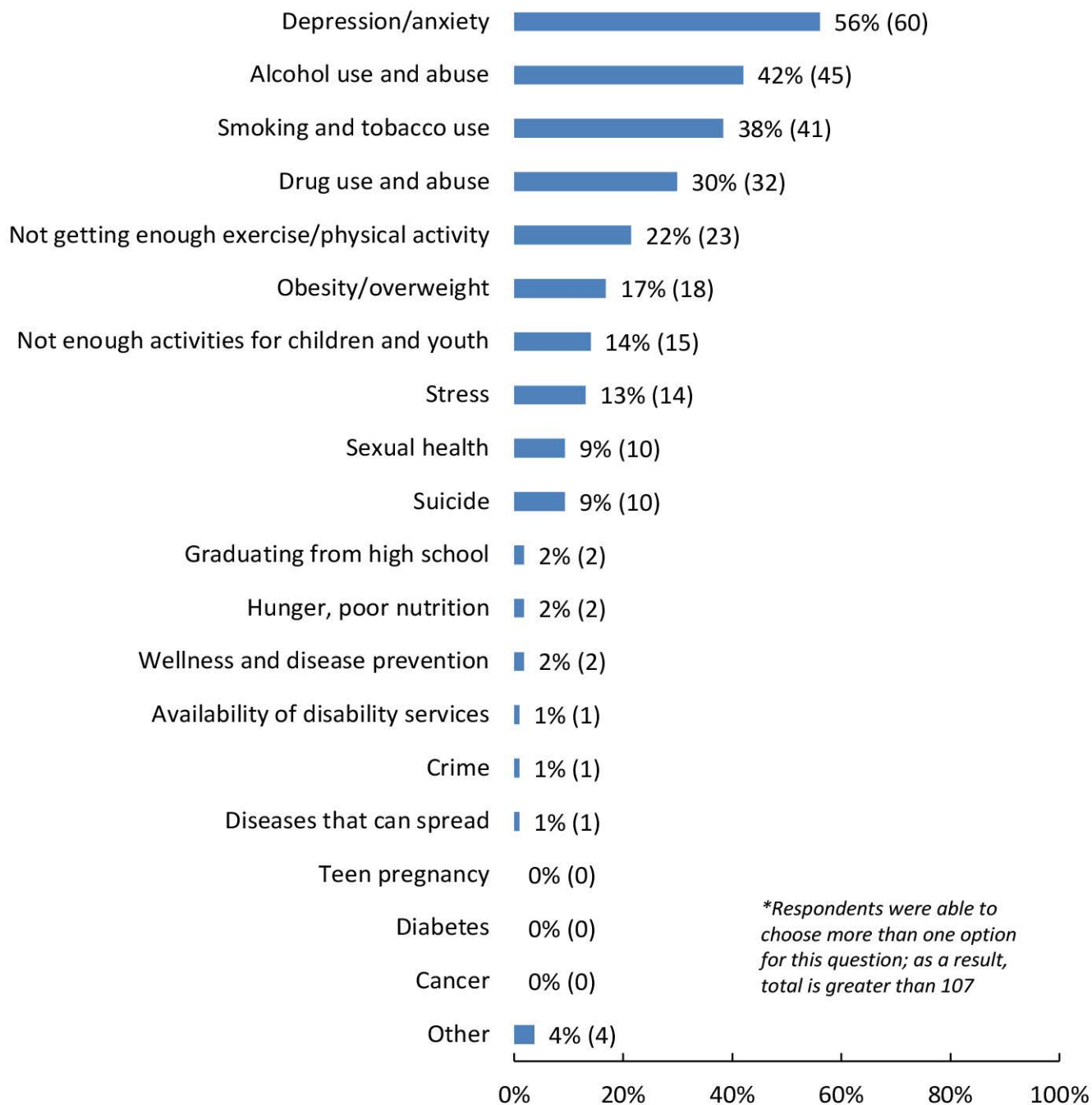
Total responses = 106*



Respondents who selected “Other” identified concerns in the availability / delivery of health services as cost of nursing home care for the elderly and vaccination and awareness for children.

Figure 19: Youth Population Health Concerns

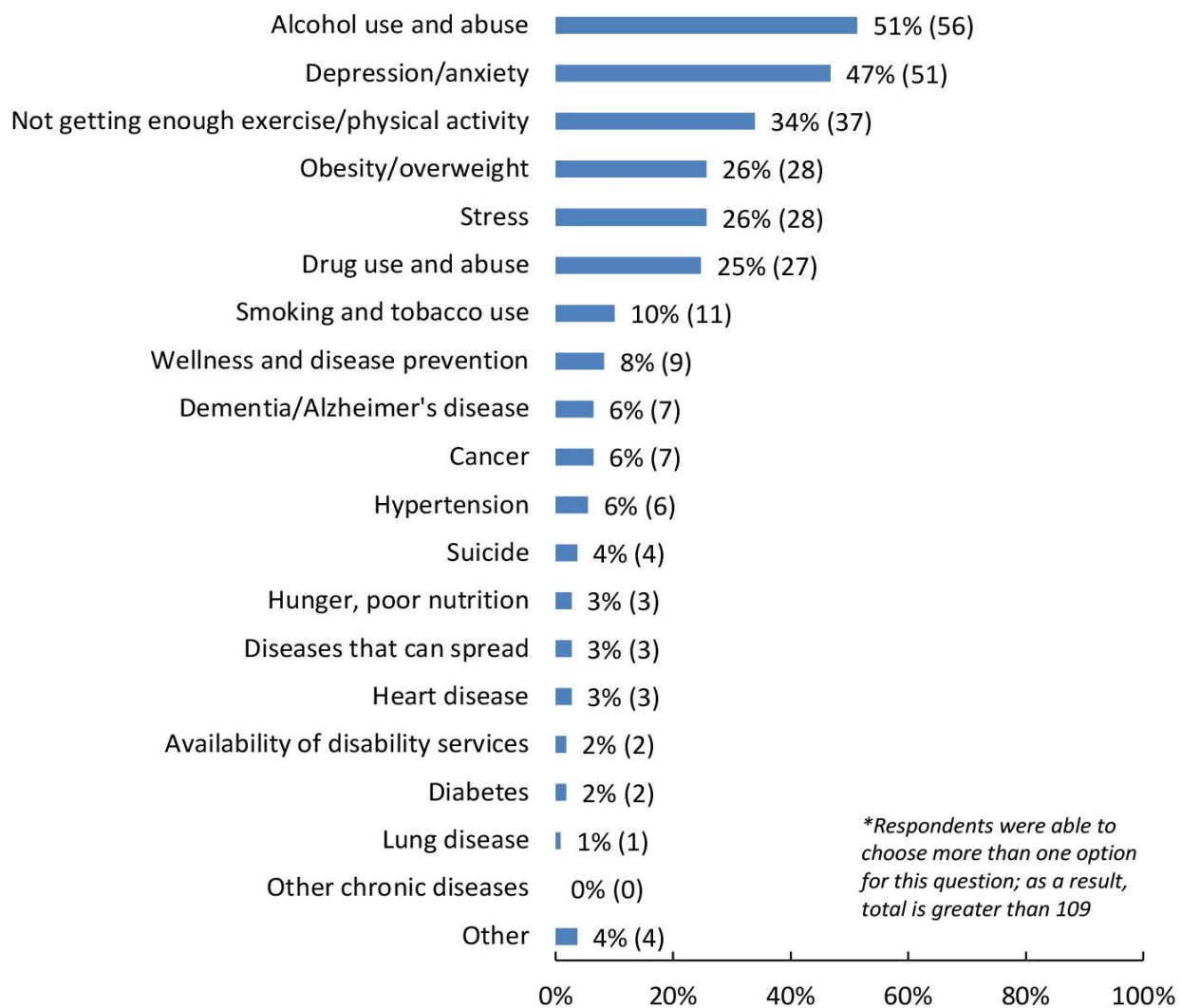
Total responses = 107*



Listed in the “Other” category for youth population concerns was mental health support.

Figure 20: Adult Population Concerns

Total responses = 109*



Mental health support and chronic bullying in adult leaders were indicated in the “Other” category for adult population concerns.

Figure 21: Senior Population Concerns

Total responses = 104*

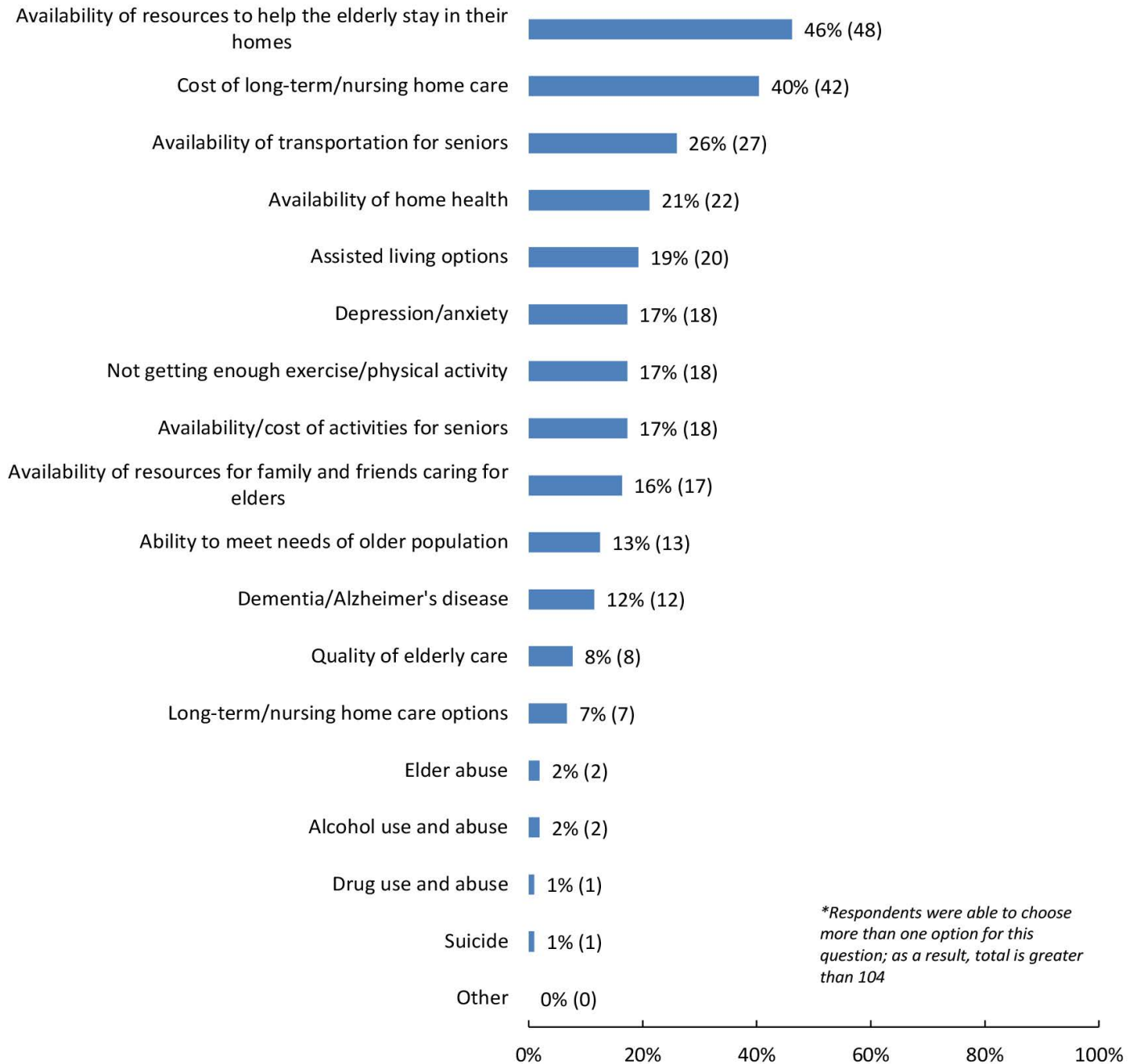
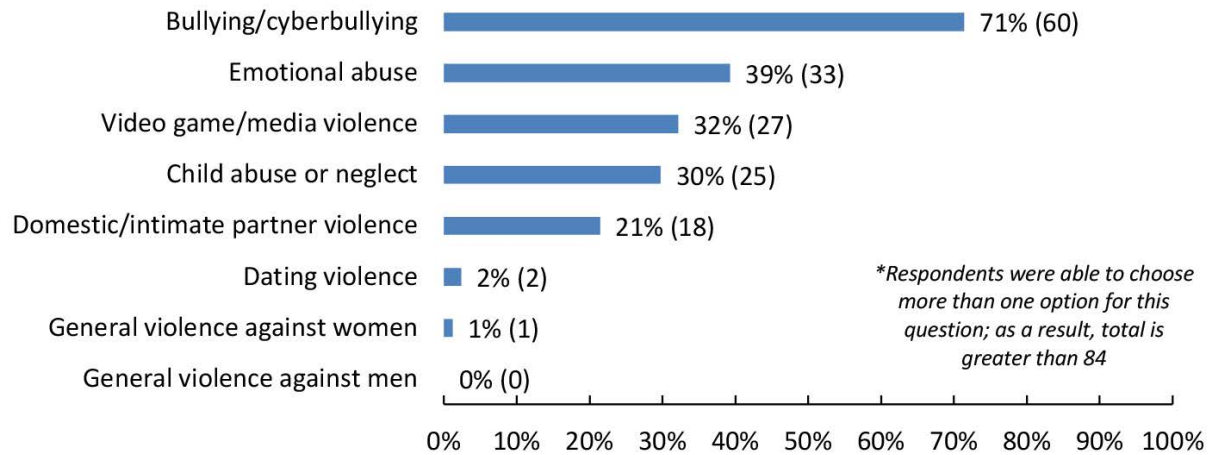


Figure 22: Violence Concerns

Total responses = 84*



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

1. Lack of mental health services for all ages
2. Infrastructure, including road conditions and sewer system

Other biggest challenges that were identified were the lack of activities for people of all ages, need for more inclusion, concerns with leadership roles in the city government, alcohol and drug use, abuse for all ages, cost of living, lack of jobs with livable wages, lack of businesses, and lack of child daycare services.

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 enough evening/weekend hours (N=17), with the next two highest responses being no insurance or limited insurance (N=13), and concerns about confidentiality (N=13). After these items, the next most commonly identified barriers were don't know about local services (N=12), can't get transportation services (N=12), and not enough specialists (N=8). The majority of concerns indicated in the "Other" category were the way physicians speak to patients, and lab cost is more expensive in Northwood than Grand Forks.

Figure 23 illustrates these results.

Figure 23: Perceptions About Barriers to Care

Total responses = 44*

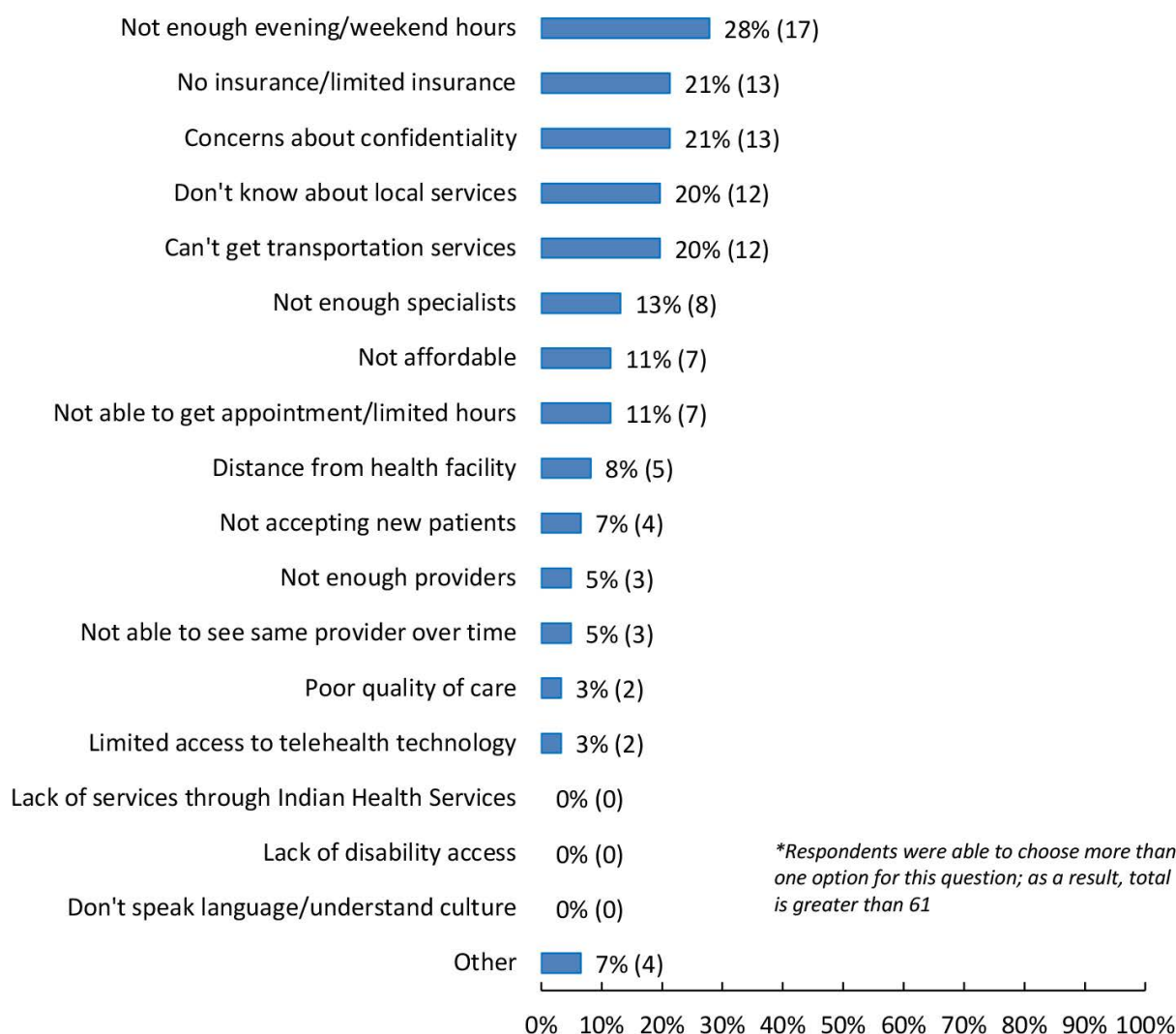
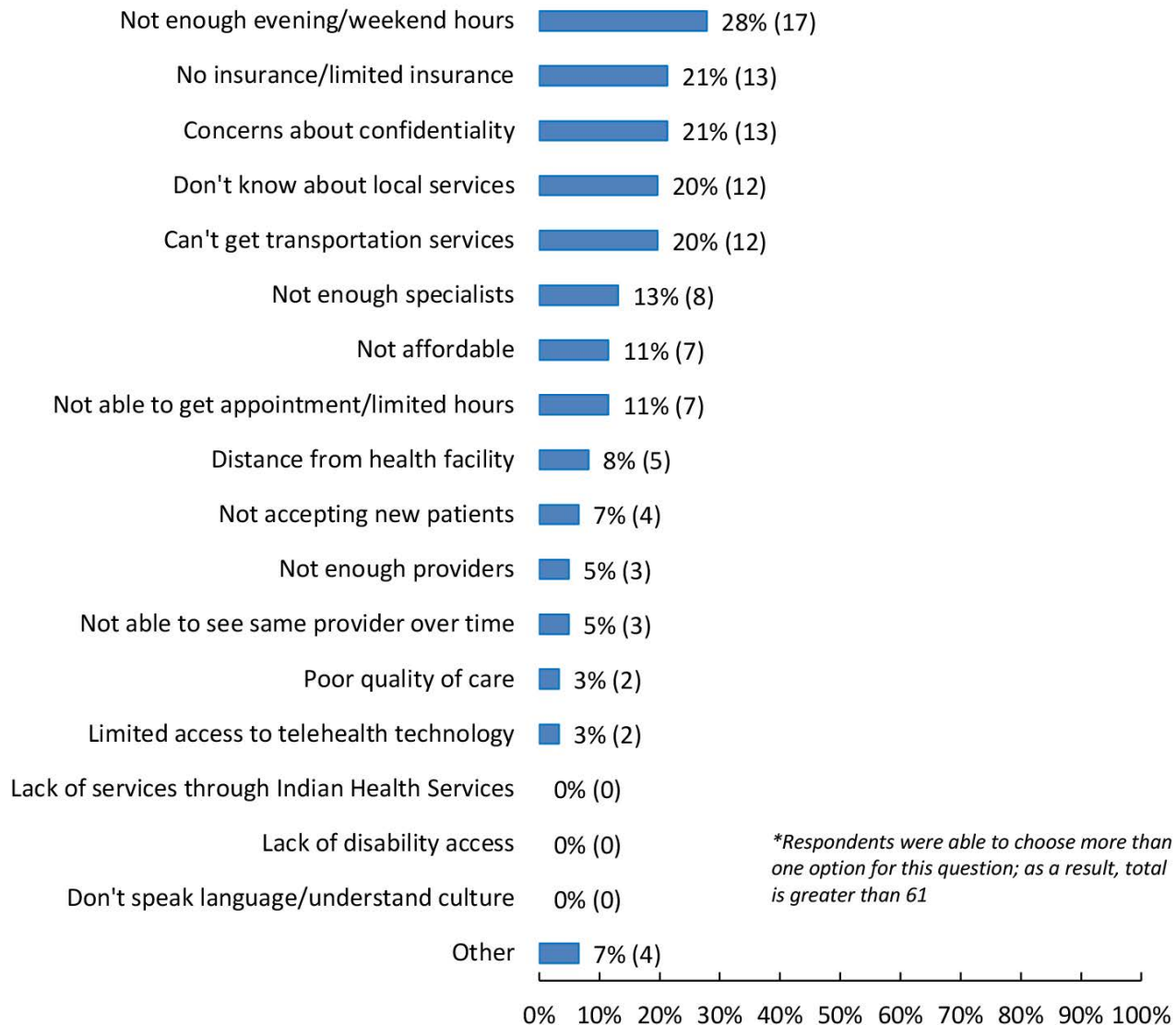


Figure 23: Perceptions About Barriers to Care

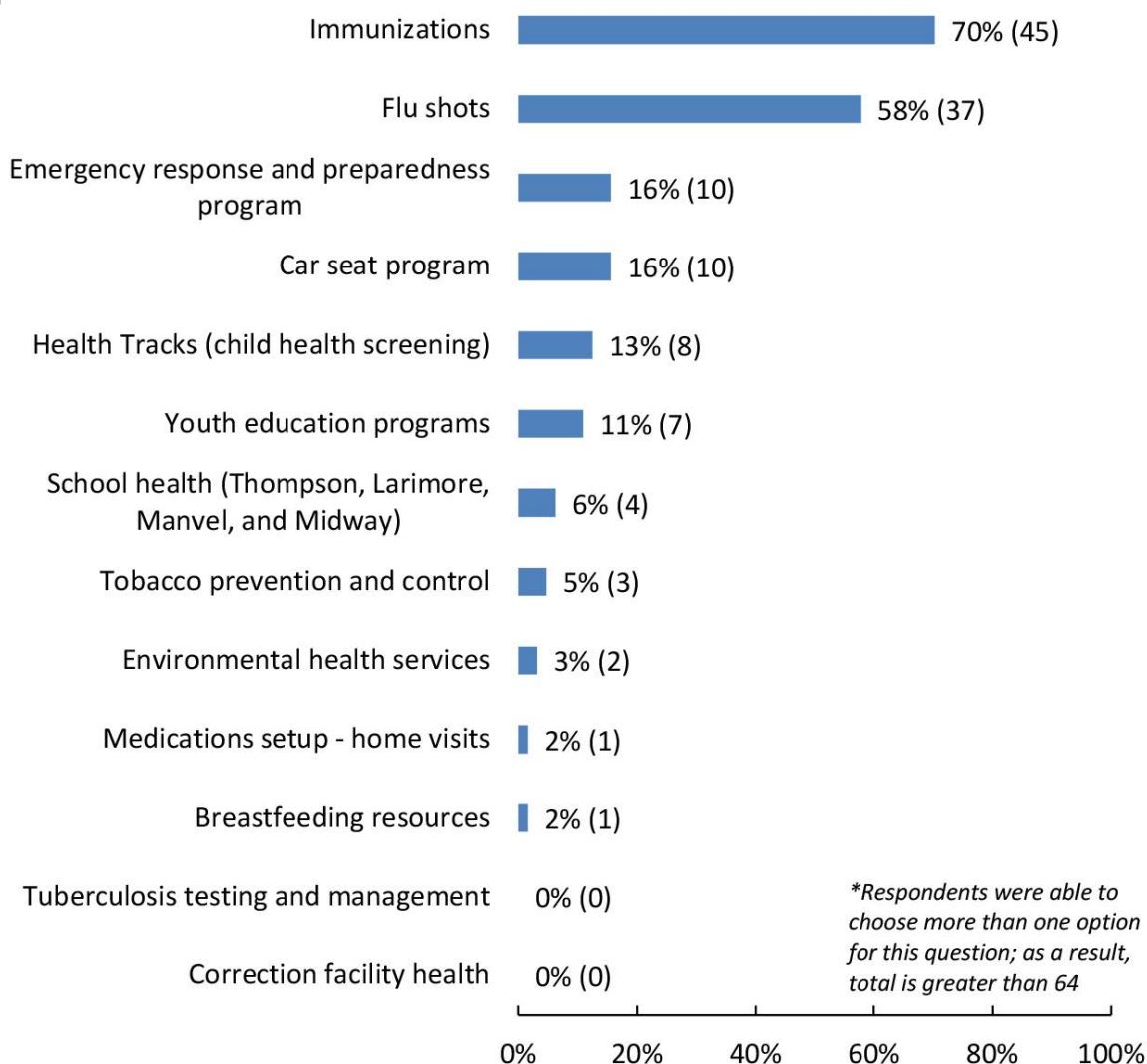
Total responses = 61*



Considering a variety of healthcare services offered by Grand Forks Public Health Department (GFPHD), respondents were asked to indicate if they were aware that the healthcare service is offered through GFPHD and to also indicate what, if any, services they or a family member have used at GFPHD, at another public health unit, or both (See Figure 24).

Figure 24: Awareness and Utilization of Public Health Services

Total responses= 64*



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

- Better indoor fitness room with fitness classes provided
- Better wellness and preventative health services
- Cardiac rehab
- Chiropractor
- Dental
- Exercise and strength training for later life/elderly
- Geriatric specialist
- Longer clinic hours or Saturday morning availability
- Mental health professionals
- Mental health services for all ages
- Sports enhancement program for youth
- OBGYN
- Vision

When asked about services that are offered at NDHC, many respondents stated there needed to be more advertising for services that are available through NDHC. One respondent suggested there be a dedicated person whose sole job is to promote services to all residents. Another respondent mentioned there were a number of new people to the area who may not know what services are offered locally.

Figure 25: Awareness and Use of General and Acute Services

Total response = 105*

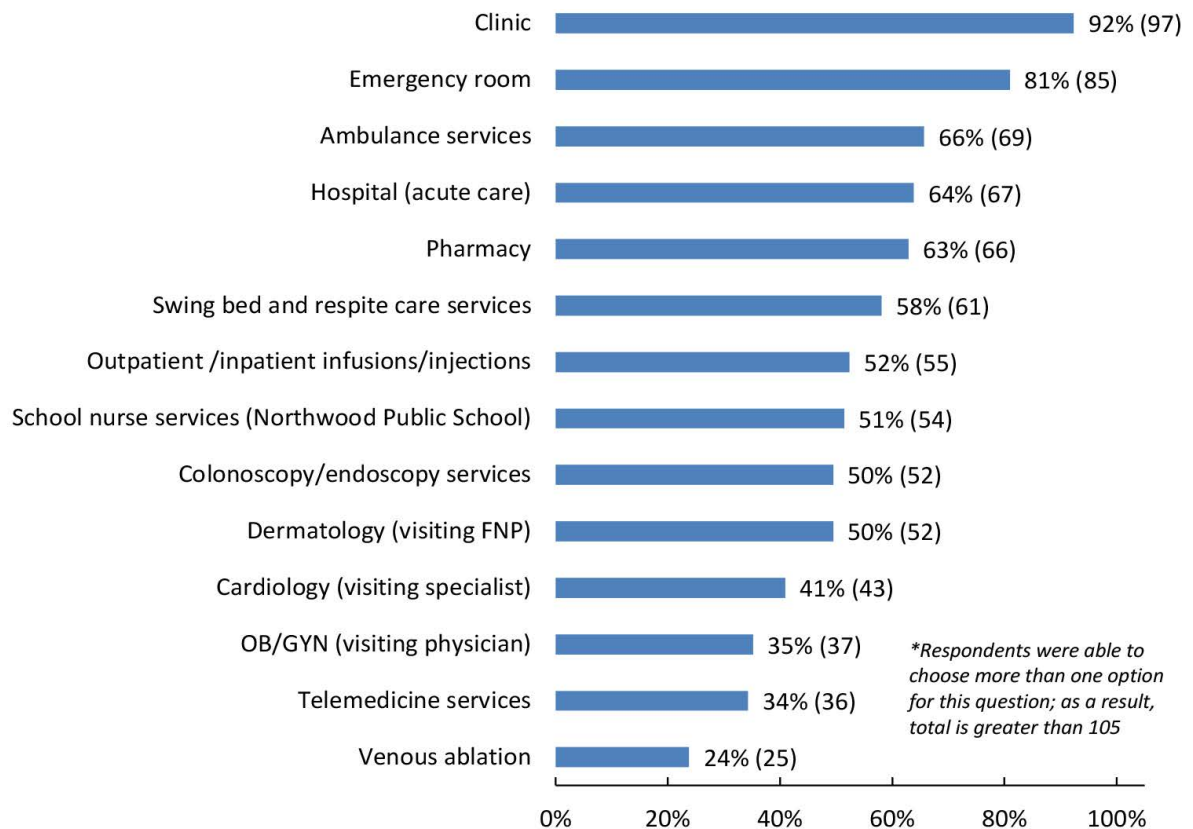


Figure 26: Awareness and Utilization of Screening and Therapy Services

Total responses = 99*

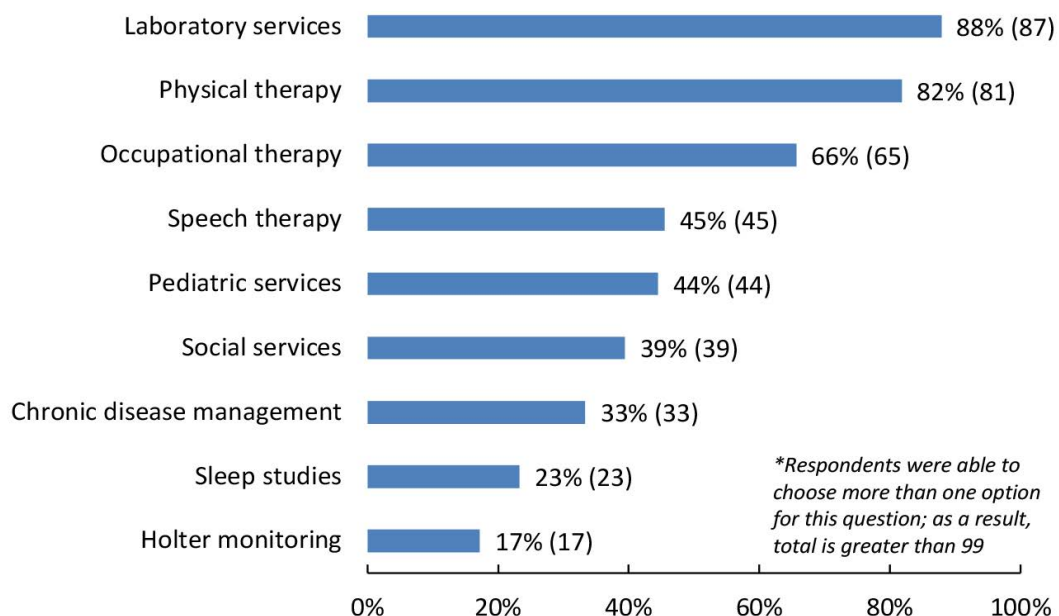


Figure 27: Awareness and Use of Radiology Services

Total responses = 90*

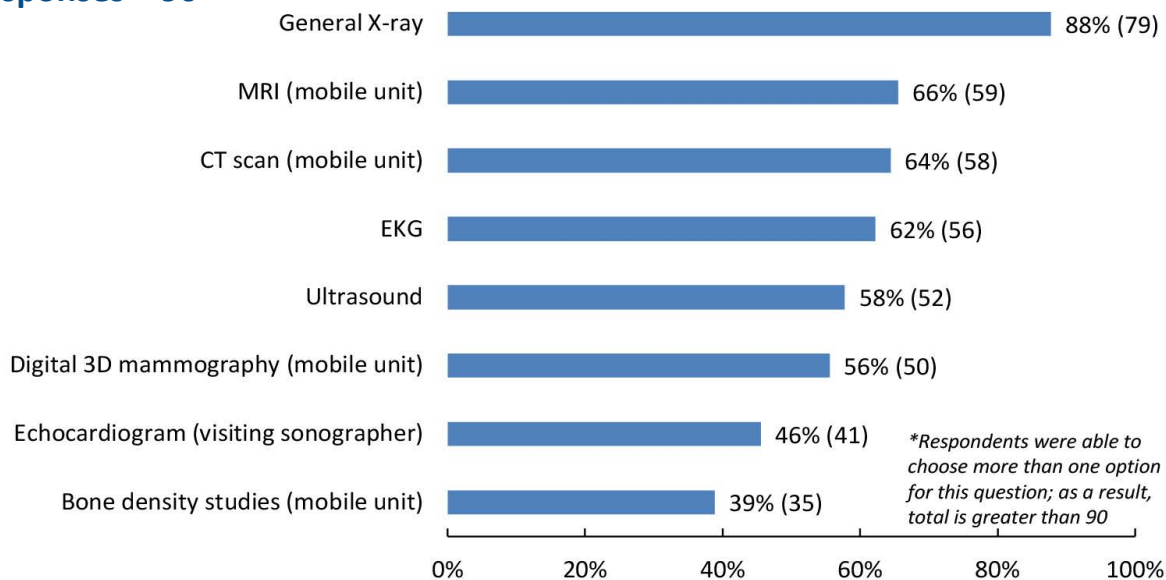
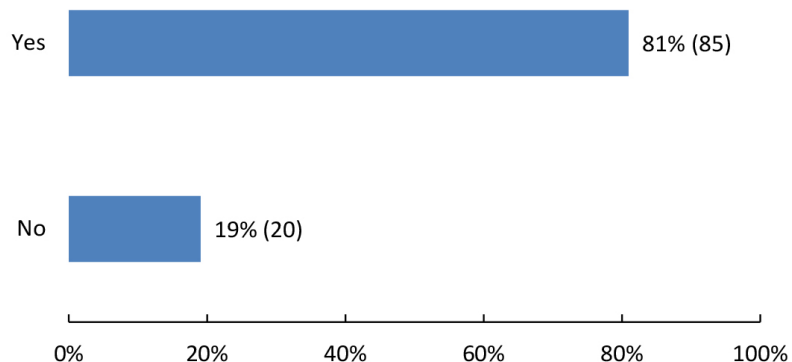


Figure 28: Aware of Northwood Deaconess Health Center's Building Project

Total responses = 105



In an effort to gauge ways that community members would be most likely to financially support facility improvements/new equipment, a question was included asking them to select ways they are most likely to support Northwood Deaconess Health Center. For those who answered, cash or stock gifts was the number one response, followed by memorial/honorarium. Other responses included volunteer time, donating to the activity's department, church donations, and ambulance fund.

Figure 29: Forms of Support for Northwood Deaconess Health Center

Total responses = 49*

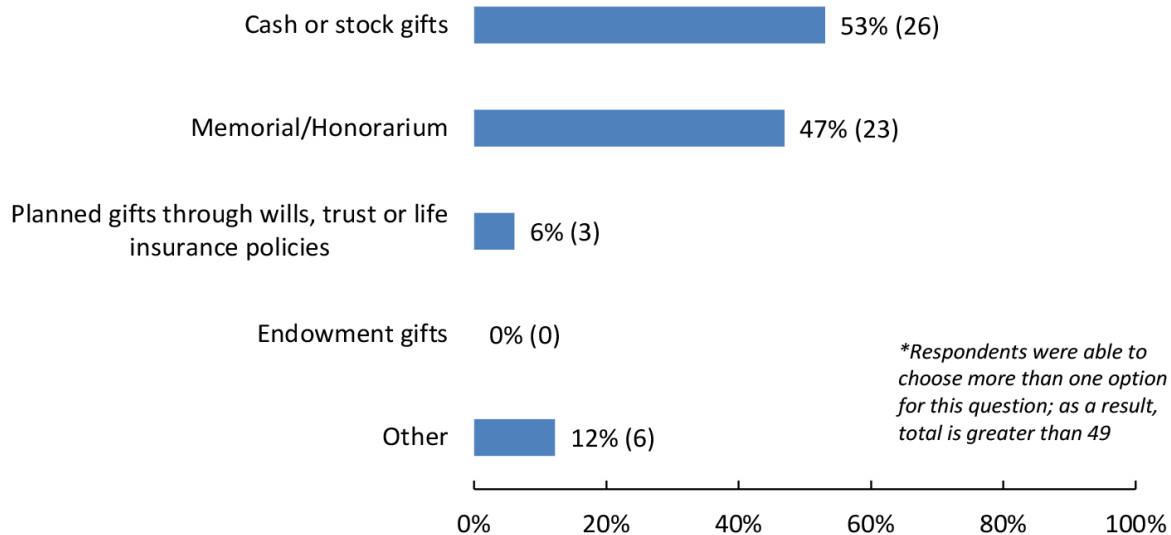
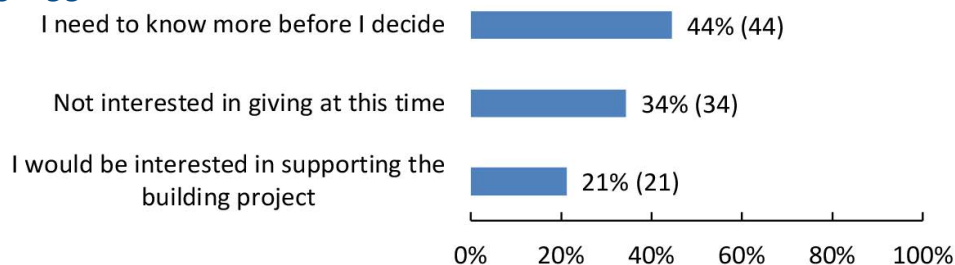


Figure 30: Interested in Supporting the Northwood Deaconess Health Center Building Project

Total responses = 99



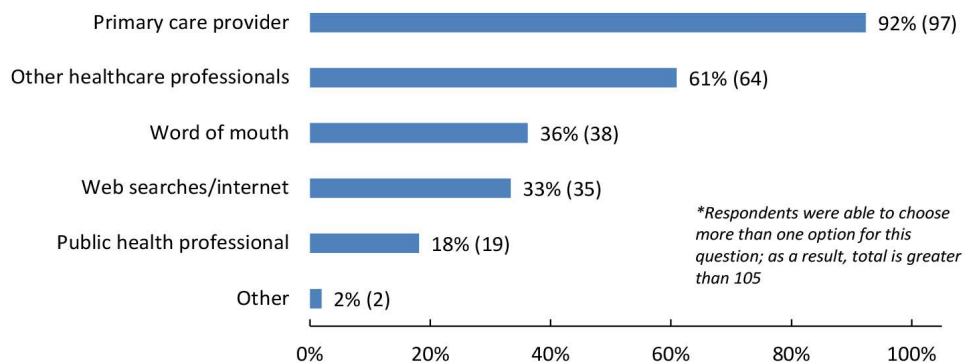
Respondents were asked if they would support the Northwood Deaconess Health Center Building Project. Majority of responses indicated they would like to know more about the project.

Respondents were asked where they go to for trusted health information. Primary care providers (N=97) received the highest response rate, followed by other healthcare professionals (N=64), and then word of mouth (N=38). In the "Other" category, responses were family members and naturopath.

Results are shown in Figure 31.

Figure 31: Sources of Trusted Health Information

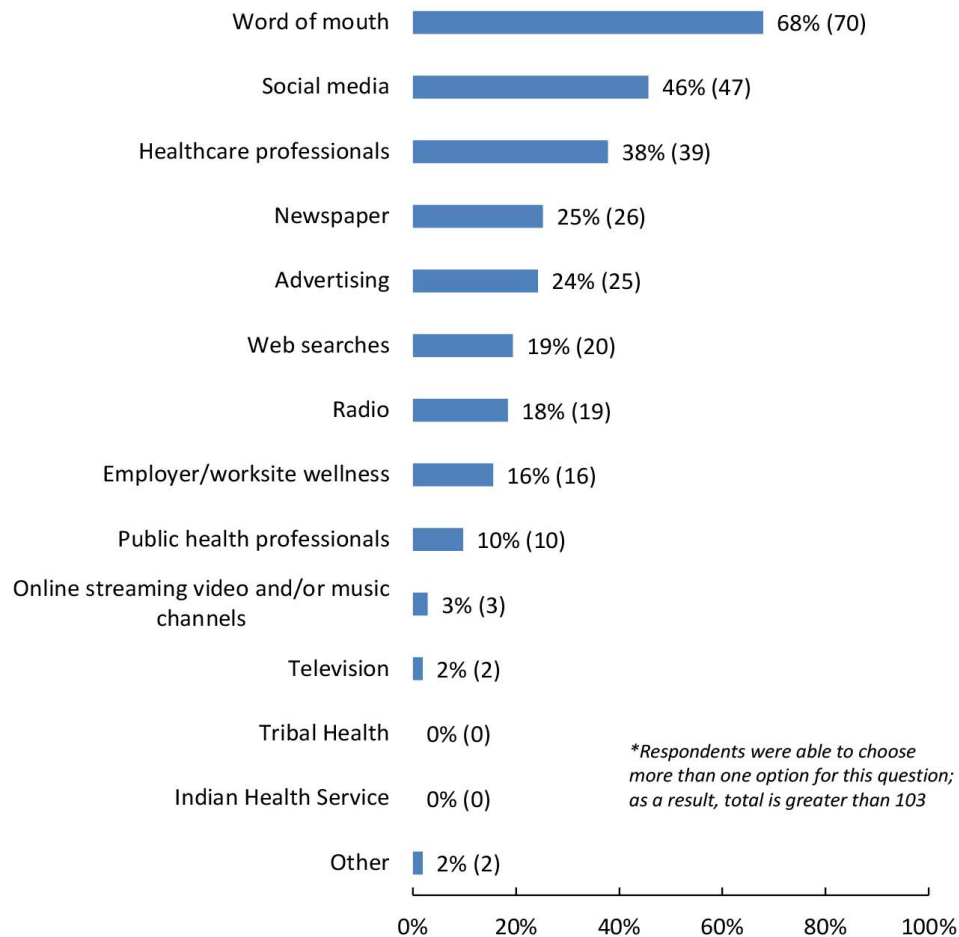
Total responses = 105*



When asked how people found out about local health services, respondents' number one response was word of mouth (N=70). That item was followed by social media (N=47) and healthcare professionals (N=39) in a distant third place.

Figure 32: Sources of Information about Local Health Services

Total responses = 103*



In the “Other” category, their provider and they had lived in the area for years were listed as a source of trusted information.

The final question on the survey asked respondents to share concerns and suggestions to improve the delivery of local healthcare. The majority of responses focused on concern with the lack of mental health services. One responder stated that it’s a huge misunderstanding of what the community needs for mental health services versus what is currently provided. Another participant stated the system constantly rejects people who need help. Mental health is a major problem across the state; most facilities do not have enough beds or staff to cover the beds. Mental health encroaches many other parts of a person’s life. Depression and anxiety may lead to poor coping skills, such as relying on alcohol and drug use and abuse. A respondent stated teens are suffering more than ever. They turn to drugs, alcohol, and smoking to handle their stress and depression. Another person mentioned concern over social media and youth being bullied online. There is no escaping the bullying for kids today as long as they have access to their phones and social media apps.

Another concern people mentioned is the lack of exercise or physical activity opportunities. Living in North Dakota, there are only a few months in the year where it is nice enough to be outside to exercise. The options in Northwood for indoor physical activity are limited by hours that the facilities are open and by what equipment is available for the public to use.

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; some were directly associated with healthcare, and others were more rooted in broader social and community matters.

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

- Attracting and retaining young families
- Availability of mental health services
- Cost of long-term/nursing home care options
- Depression/anxiety
- Having enough child daycare services

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

Attracting and retaining young families

- Not able to attract young families due to lack of job with livable wages.

Availability of mental health services

- Mental health services currently being provided are far from adequate.
- Specifically, youth are more depressed and suffer from anxiety.
- Hard for small towns to get into inpatient care facilities, and there are no beds available.
- Poor mental health leads to depression, suicide, and alcohol/drugs/smoking.

Cost of long-term/nursing home care options

- The cost of long-term care is too expensive. Most people cannot afford this cost.
- People try to stay in their homes as long as possible, because they know as soon as they go into a facility, that will eat away all their savings.

Depression/anxiety

- Depression and anxiety lead to stress and suicide.
- Bullying/cyberbullying is causing youth to have depression/anxiety.
- All ages are suffering from depression and anxiety.
- People turn to alcohol and drug use to cope.

Having enough child daycare services

- People are not able to find quality daycare for their children.

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:



- Hospital (healthcare system) (4.5)
- Faith-based (4.5)
- Emergency services, including ambulance and fire (4.25)
- Long-term care, including nursing homes and assisted living (4.25)
- Pharmacy (4.25)
- Schools (4.25)
- Other local health providers, such as dentists and chiropractors (4.0)
- Business and industry (3.75)
- Economic development organizations (3.5)
- Law enforcement (3.5)
- Clinics not affiliated with the main health system (3.25)
- Public health (3.25)
- Social Services/Human services agencies (3.0)
- Tribal Health/Indian Health Service (2.0)

Priority of Health Needs

A community group met on September 28, 2022. Sixteen 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, with barriers to care), and findings from the key informant interviews.

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

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

- Availability of mental health services (10 votes)

- Not getting enough exercise/physical activity for adults (9 votes)
- Depression/anxiety for all ages (8 votes)
- Smoking and tobacco use, exposure to second-hand smoke, juuling/vaping for youth (7 votes)

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

1. Not getting enough exercise/physical activity for adults (6 votes)
2. Availability of mental health services (5 votes)
3. Depression/anxiety for all ages (4 votes)
4. Smoking and tobacco use, exposure to second-hand smoke, juuling/vaping for youth (0 votes)

Following the prioritization process during the second meeting of the community group and key informants, the number one identified need was not getting enough exercise/physical activities for the adult population. A summary of this prioritization may be found in Appendix E.

Comparison of Needs Identified Previously

Top Needs Identified 2019 CHNA Process	Top Needs Identified 2022 CHNA Process
Cost of health insurance	Adults not getting enough exercise/ physical activity
Attracting and retaining young families	Availability of mental health services
Depression/anxiety	Depression/anxiety
	Youth smoking and tobacco use, exposure to second-hand smoke, juuling/vaping

The current process identified one identical common need from 2019. Depression and anxiety were identified during the last CHNA process.

Northwood Deaconess Health Center (NDHC) 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 NDHC 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; a paper copy will be available for inspection upon request at the hospital. Written comments on this report can be submitted to NDHC.

Hospital and Community Projects and Programs Implemented to Address Needs Identified in 2019

In response to the needs identified in the 2019 CHNA process, the following actions were taken:

Cost of health insurance: This topic is hard to address as a healthcare facility, but efforts to guide community members to resources and insurance coverage options continues. NDHC continues to provide a part-time employee, dedicated to helping community members find resources to help cover out of pocket costs as well as

providing guidance to those seeking assistance with insurance coverage questions.

Attracting and retaining young families: The Northwood Economic Development Foundation is offering a housing incentive for families, building new homes in Northwood. NDHC is working on several initiatives to help retain local community members and attract new families as well. One initiative has been in building a partnership with the school by creating a position that allows a nurse to be at the school, providing nursing services and ensuring families of those students with chronic health issues are safe at school, a service not many rural schools have available at this time. A human resource/marketing manager position was also created to assist with recruiting, engaging, and retaining high quality employees as well as new community members. This position will also enhance awareness of services available at NDHC to the community and entice young families to choose a provider within NDHC. A good school system, a healthcare facility that offers a multitude of services and experienced healthcare providers, and opportunities for employment all guide efforts toward attracting and retaining young families.

In efforts to attract and retain our youth, a few new programs have been implemented recently. In the 2021-22 school year, NDHC implemented a Scrubs Camp for 8th graders as a way to introduce them to a variety of healthcare careers. Northwood Public School, in partnership with NDHC, implemented a local HOSA Future Health Professionals chapter to raise awareness of healthcare careers and to help foster an interest in rural healthcare. NDHC also developed a scholarship to award students in health profession programs who have a specific interest in rural healthcare.

Depression/anxiety in youth and adults: Behavioral health services continue to be available to NDHC patients via telehealth. Research and discussion surrounding the option of providing a licensed counselor/therapist services on-site at NDHC have begun. NDHC is aware of the need to address this concern and is looking into options on how to address this issue with the shortage of behavioral health specialists in the state/nation as well as obstacles surrounding reimbursement for services provided. A mental health taskforce is in the beginning stages and will be implemented in the 2022-23 school year.

In addition to the work mentioned above, NDHC has also added several services since the last CHNA, as well as a medical doctor. Dr. Stein has been a phenomenal addition to NDHC, expanding coverage in the clinic, hospital, outpatient, and long-term care services. Services added since 2019 include offering specialty services in the areas of cardiology and OB/GYN with visiting physicians. NDHC is now also able to provide endoscopy/colonoscopies, on-site ultrasounds, echocardiograms, and vascular procedures. NDHC continues to evaluate needed services and continues to look for ways to expand coverage.

The above implementation plan for NDHC is posted on the NDHC website at <https://www.ndhc.net/community-health-needs-assessment>.

Next Steps – Strategic Implementation Plan

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

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

Community Benefit Report

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

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

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

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

What Are Community Benefits?

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

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

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

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

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

Appendix A – Critical Access Hospital Profile

Staffing

Physicians:	1
Nurse Practitioners:	4
PAs:	1
RNs:	28
LPNs:	12
Total Employees:	169

Local Sponsors and Grant Funding Sources

- Alerus Financial
- Blue Cross Blue Shield
- Center for Rural Health
 - SHIP Grant (*Small Hospital Improvement Program*)
 - Flex Grant (*Medicare Rural Hospital Flexibility Grant Program*)
- Community Foundation
- Dakota Medical Foundation
- Myra Foundation
- Nellie J. Svej Foundation
- Nodak Electric Trust
- Otto Bremer Foundation
- Pederson Brothers Foundation

Sources

- ¹ - U.S. Census Bureau; American Factfinder, Community Facts



This project is supported by the Medicare Rural Hospital Flexibility Grant Program at the Center for Rural Health, University of North Dakota School of Medicine & Health Sciences located in Grand Forks, North Dakota.

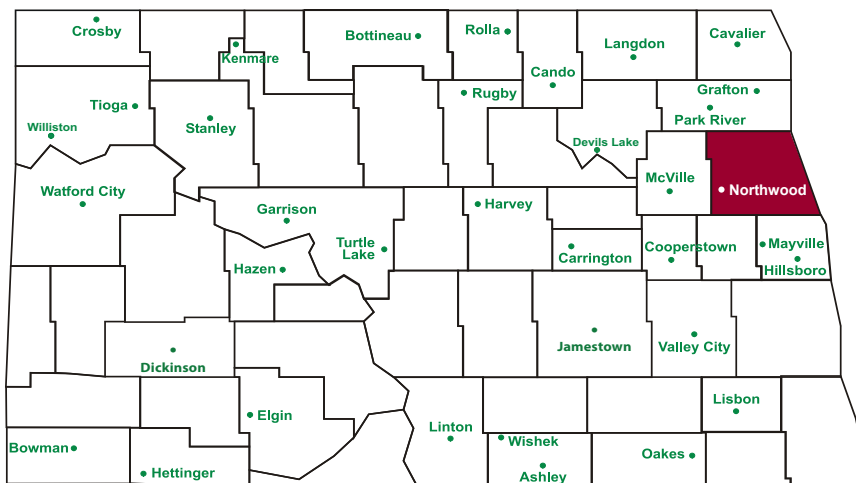
ruralhealth.und.edu

List of Services

NDHC provides the following services through contract or agreement:

- Speech
- Life Alert System
- Dexa
- Nuclear Medicine (MRI, CT)
- Mental health services
- Pharmacy

North Dakota Critical Access Hospitals



History

Established in 1902, NDHC is the oldest nursing home in the state and is owned by nine Lutheran churches. The Center employs 169 people and has an annual budget of over \$10 million. Services offered by NDHC include a 37-bed nursing home, six assisted living apartments, 12 bed hospital, ten independent living apartments, ambulance, rehab department, emergency room, diabetic education, fitness center, and emergency room.

Recreation

Northwood is located in eastern North Dakota. The economic base of this community is agriculture. The Northwood school system offers comprehensive programs for students K-12. The nearest university is 25 miles away. A medical university and a vocational training school are within approximately 45 miles, and three colleges or universities are within 90 miles. City parks offer a variety of facilities and activities such as swimming, softball diamonds, tennis courts, along with skating and hockey in the winter. There is a nine-hole golf course just three miles from town. Camping, fishing, and swimming are available at nearby Golden Lake. Northwood offers the opportunity to live in the quiet of a rural setting and yet have the amenities of a large town and university setting nearby.

Updated 11/2022

Staffing

Physicians:	1
Nurse Practitioners:	4
PAs:	1
RNs:	28
LPNs:	12
Total Employees:	169

Local Sponsors and Grant Funding Sources

- Alerus Financial
- Blue Cross Blue Shield
- Center for Rural Health
 - SHIP Grant (*Small Hospital Improvement Program*)
 - Flex Grant (*Medicare Rural Hospital Flexibility Grant Program*)
- Community Foundation
- Northwood American Legion

Sources

¹ - U.S. Census Bureau; American Factfinder, Community Facts



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

This project is supported by the Medicare Rural Hospital Flexibility Grant Program at the Center for Rural Health, University of North Dakota School of Medicine & Health Sciences located in Grand Forks, North Dakota.

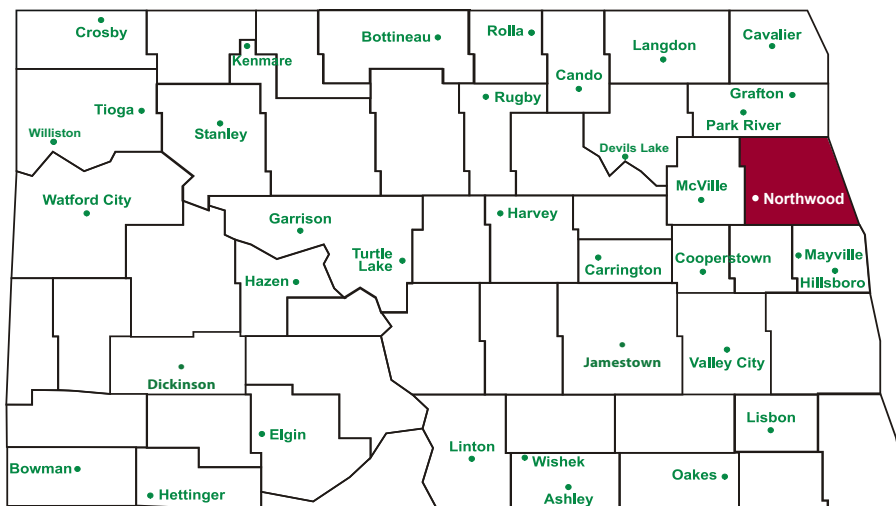
ruralhealth.und.edu

List of Services

NDHC provides the following services through contract or agreement:

- Speech
- Life Alert System
- Dexa
- Nuclear Medicine (MRI, CT)
- Mental health services
- Pharmacy

North Dakota Critical Access Hospitals



History

Established in 1902, NDHC is the oldest nursing home in the state and is owned by nine Lutheran churches. The Center employs 169 people and has an annual budget of over \$10 million. Services offered by NDHC include a 37-bed nursing home, six assisted living apartments, 12 bed hospital, ten independent living apartments, ambulance, rehab department, emergency room, diabetic education, fitness center, and emergency room.

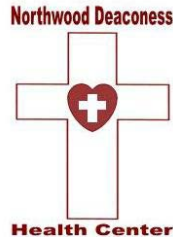
Recreation

Northwood is located in eastern North Dakota. The economic base of this community is agriculture. The Northwood school system offers comprehensive programs for students K-12. The nearest university is 25 miles away. A medical university and a vocational training school are within approximately 45 miles, and three colleges or universities are within 90 miles. City parks offer a variety of facilities and activities such as swimming, softball diamonds, tennis courts, along with skating and hockey in the winter. There is a nine-hole golf course just three miles from town. Camping, fishing, and swimming are available at nearby Golden Lake. Northwood offers the opportunity to live in the quiet of a rural setting and yet have the amenities of a large town and university setting nearby.

Updated 11/2022

Appendix B – Economic Impact Analysis

Northwood Deaconess Health Center



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

Economic Impact

Northwood Deaconess Health Center is composed of a Critical Access Hospital (CAH), Rural Health Clinic, skilled nursing facility, assisted living, independent living, and an ambulance service.

Northwood Deaconess Health Center **directly** employs **116 FTE employees** with an annual payroll of nearly **\$8.72 million** (including benefits).

- After application of the employment multiplier of 1.77, these employees created an additional **89 jobs**.
- The same methodology is applied to derive the income impact. The income multiplier of 1.48 is applied to create more than **\$4.2 million** in income as they interact with other sectors of the local economy.
- **Total impacts = 205 jobs and over \$12.9 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

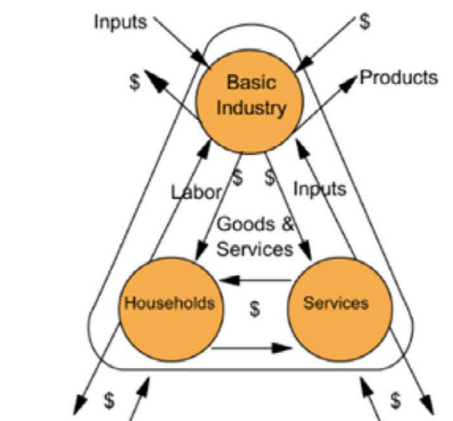
- Attracts retirees and families
- Appeals to businesses looking to establish and/or relocate
- High quality healthcare services and infrastructure foster community development
- Positive impact on retail sales of local economy
- Provides higher-skilled and higher-wage employment
- Increases the local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

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

For additional information, please contact:
Kylie Nissen, Program Director, Center for Rural Health
kylie.nissen@und.edu • (701) 777-5380

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



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 Medicare Rural Hospital Flexibility Grant Program and the State Office of Rural Health Grant.

Appendix C – CHNA Survey Instrument



Northwood Area Health Survey

Northwood Deaconess Health Center and Grand Forks Public Health want to know how you perceive the state of healthcare in your community.

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/northwoodchna2022> 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 Holly Long at 701.777.3848.

Surveys will be accepted through June 29th, 2022. 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"/> Emergency services (ambulance & 911) available 24/7 |
| <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 within the health system. |
| <input type="checkbox"/> Availability of primary care providers (MD,DO,NP,PA) and nurses | <input type="checkbox"/> Ability/willingness of healthcare providers to work together to coordinate patient care outside the local community. |
| <input type="checkbox"/> Ability to retain primary care providers (MD,DO,NP,PA) and nurses in the community | <input type="checkbox"/> Patient confidentiality (inappropriate sharing of personal health information) |
| <input type="checkbox"/> Availability of public health professionals | <input type="checkbox"/> Not comfortable seeking care where I know the employees at the facility on a personal level |
| <input type="checkbox"/> Availability of specialists | <input type="checkbox"/> Quality of care |
| <input type="checkbox"/> Not enough health care staff in general | <input type="checkbox"/> Cost of health care services |
| <input type="checkbox"/> Availability of wellness and disease prevention services | <input type="checkbox"/> Cost of prescription drugs |
| <input type="checkbox"/> Availability of mental health services | <input type="checkbox"/> Cost of health insurance |
| <input type="checkbox"/> Availability of substance use disorder treatment services | <input type="checkbox"/> Adequacy of health insurance (concerns about out-of-pocket costs) |
| <input type="checkbox"/> Availability of hospice | <input type="checkbox"/> Understand where and how to get health insurance |
| <input type="checkbox"/> Availability of dental care | <input type="checkbox"/> Adequacy of Indian Health Service or Tribal Health Services |
| <input type="checkbox"/> Availability of vision care | <input type="checkbox"/> Other (please specify): _____ |

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

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

- | | | |
|---|---|---|
| <input type="checkbox"/> Bullying/cyber-bullying | <input type="checkbox"/> Domestic/intimate partner violence | <input type="checkbox"/> Emotional abuse (ex. intimidation, isolation, verbal threats, withholding funds) |
| <input type="checkbox"/> Child abuse or neglect | <input type="checkbox"/> General violence against men | <input type="checkbox"/> Media/video game violence |
| <input type="checkbox"/> Dating violence | | |
| <input type="checkbox"/> General violence against women | | |

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

Delivery of Healthcare

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

- | | | |
|--|--|--|
| <input type="checkbox"/> Cardiology (visiting physician) | <input type="checkbox"/> OB/GYN (visiting physician) | <input type="checkbox"/> Telehealth services |
| <input type="checkbox"/> Clinic | <input type="checkbox"/> Colonoscopy/Endoscopy services | <input type="checkbox"/> Outpatient/Inpatient infusions/injections |
| <input type="checkbox"/> Emergency room | <input type="checkbox"/> Venous Ablation | <input type="checkbox"/> Pharmacy |
| <input type="checkbox"/> Hospital (Acute Care) | <input type="checkbox"/> Swing bed and respite care services | <input type="checkbox"/> School Nursing Services (Northwood Public School) |
| <input type="checkbox"/> Ambulance Services | | |
| <input type="checkbox"/> Dermatology (visiting FNP) | | |

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

- | | | |
|---|---|---|
| <input type="checkbox"/> Chronic Disease management | <input type="checkbox"/> Occupational Therapy | <input type="checkbox"/> Social Services |
| <input type="checkbox"/> Holter Monitoring | <input type="checkbox"/> Physical Therapy | <input type="checkbox"/> Pediatric Services |
| <input type="checkbox"/> Laboratory Services | <input type="checkbox"/> Speech Therapy | <input type="checkbox"/> Sleep Studies |

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

- | | | |
|---|---|--|
| <input type="checkbox"/> Bone Density Studies (mobile unit) | <input type="checkbox"/> Echocardiograms (visiting sonographer) | <input type="checkbox"/> General X-ray |
| <input type="checkbox"/> CT Scan (mobile unit) | <input type="checkbox"/> EKG | <input type="checkbox"/> MRI (mobile unit) |
| <input type="checkbox"/> Digital 3D mammography (mobile unit) | | <input type="checkbox"/> Ultrasound |

15. Are you aware of Northwood Deaconess Health Center's building project? NDHC has plans to begin a large building renovation and remodeling project to meet the community's growing needs and enhance services for the residents.

- ☐ Yes ☐ No

16. Have you supported Northwood Deaconess Health Center financially in any of the following ways in the past? (Choose ALL that apply)

- | | | |
|--|---|--|
| <input type="checkbox"/> Cash or stock gift | <input type="checkbox"/> Planned gifts through wills, trusts or life insurance policies | <input type="checkbox"/> Other (please specify): _____ |
| <input type="checkbox"/> Endowment gifts | | |
| <input type="checkbox"/> Memorial/honorarium | | |

17. Would you be interested in supporting Northwood Deaconess Health Center's building project?

- | | |
|---|--|
| <input type="checkbox"/> I would be interested in supporting the building project | <input type="checkbox"/> I need to know more before I decide |
| <input type="checkbox"/> Not interested in giving at this time | |

18. Which of the following **SERVICES** provided by **Grand Forks Public Health** are you aware of (or have you used in the past year)? (Choose ALL that apply)

- | | |
|--|---|
| <input type="checkbox"/> Breastfeeding resources | <input type="checkbox"/> Immunizations |
| <input type="checkbox"/> Car seat program | <input type="checkbox"/> Medications setup—home visits |
| <input type="checkbox"/> Correction facility health | <input type="checkbox"/> School health (Thompson, Larimore, Manvel, and Midway) |
| <input type="checkbox"/> Emergency response & preparedness program | <input type="checkbox"/> Tobacco prevention and control |
| <input type="checkbox"/> Flu shots | <input type="checkbox"/> Tuberculosis testing and management |
| <input type="checkbox"/> Environmental health services (water, sewer, health hazard abatement) | <input type="checkbox"/> Youth education programs |
| <input type="checkbox"/> Health Tracks (child health screening) | |

19. 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): _____ |

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

- | | | |
|--|---|--|
| <input type="checkbox"/> Advertising | <input type="checkbox"/> Radio | <input type="checkbox"/> Online Streaming video and/or music channels |
| <input type="checkbox"/> Employer/worksites wellness | <input type="checkbox"/> Social media (Facebook, Twitter, etc.) | <input type="checkbox"/> Word of mouth, from others (friends, neighbors, co-workers, etc.) |
| <input type="checkbox"/> Health care professionals | <input type="checkbox"/> Tribal Health | <input type="checkbox"/> Other: (please specify): _____ |
| <input type="checkbox"/> Indian Health Service | <input type="checkbox"/> Web searches | |
| <input type="checkbox"/> Newspaper | <input type="checkbox"/> Television | |
| <input type="checkbox"/> Public health professionals | | |

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

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

Demographic Information: Please tell us about yourself.

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

☐ Yes ☐ No

24. How did you acquire the survey (or survey link) that you are completing?

- | | |
|---|--|
| <input type="checkbox"/> Hospital or public health website | <input type="checkbox"/> Church bulletin |
| <input type="checkbox"/> Hospital or public health social media page | <input type="checkbox"/> Flyer sent home from school |
| <input type="checkbox"/> Hospital or public health employee | <input type="checkbox"/> Flyer at local business |
| <input type="checkbox"/> Hospital or public health facility | <input type="checkbox"/> Flyer in the mail |
| <input type="checkbox"/> Economic development website or social media | <input type="checkbox"/> Word of Mouth |
| <input type="checkbox"/> Other website or social media page (please specify): _____ | <input type="checkbox"/> Direct email (if so, from what organization): _____ |
| <input type="checkbox"/> Newspaper advertisement | <input type="checkbox"/> Other (please specify): _____ |
| <input type="checkbox"/> Newsletter (if so, what one): _____ | |

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

- | | | |
|---|--|--|
| <input type="checkbox"/> Indian Health Service (IHS) | <input type="checkbox"/> Medicaid | <input type="checkbox"/> Other (please specify): _____ |
| <input type="checkbox"/> Insurance through employer (self, spouse, or parent) | <input type="checkbox"/> Medicare | |
| <input type="checkbox"/> Self-purchased insurance | <input type="checkbox"/> No insurance | |
| | <input type="checkbox"/> Veteran's Healthcare Benefits | |

26. Age:

- | | | |
|---|---|---|
| <input type="checkbox"/> Less than 18 years | <input type="checkbox"/> 35 to 44 years | <input type="checkbox"/> 65 to 74 years |
| <input type="checkbox"/> 18 to 24 years | <input type="checkbox"/> 45 to 54 years | <input type="checkbox"/> 75 years and older |
| <input type="checkbox"/> 25 to 34 years | <input type="checkbox"/> 55 to 64 years | |

27. Highest level of education:

- | | | |
|---|--|--|
| <input type="checkbox"/> Less than high school | <input type="checkbox"/> Some college/technical degree | <input type="checkbox"/> Bachelor's degree |
| <input type="checkbox"/> High school diploma or GED | <input type="checkbox"/> Associate's degree | <input type="checkbox"/> Graduate or professional degree |

28. Gender:

- | | | |
|--|-------------------------------|-------------------------------------|
| <input type="checkbox"/> Female | <input type="checkbox"/> Male | <input type="checkbox"/> Non-binary |
| <input type="checkbox"/> Other (please specify): _____ | | |

29. Employment status:

- | | | |
|------------------------------------|--|-------------------------------------|
| <input type="checkbox"/> Full time | <input type="checkbox"/> Homemaker | <input type="checkbox"/> Unemployed |
| <input type="checkbox"/> Part time | <input type="checkbox"/> Multiple job holder | <input type="checkbox"/> Retired |

Appendix D – County Health Rankings Explained

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

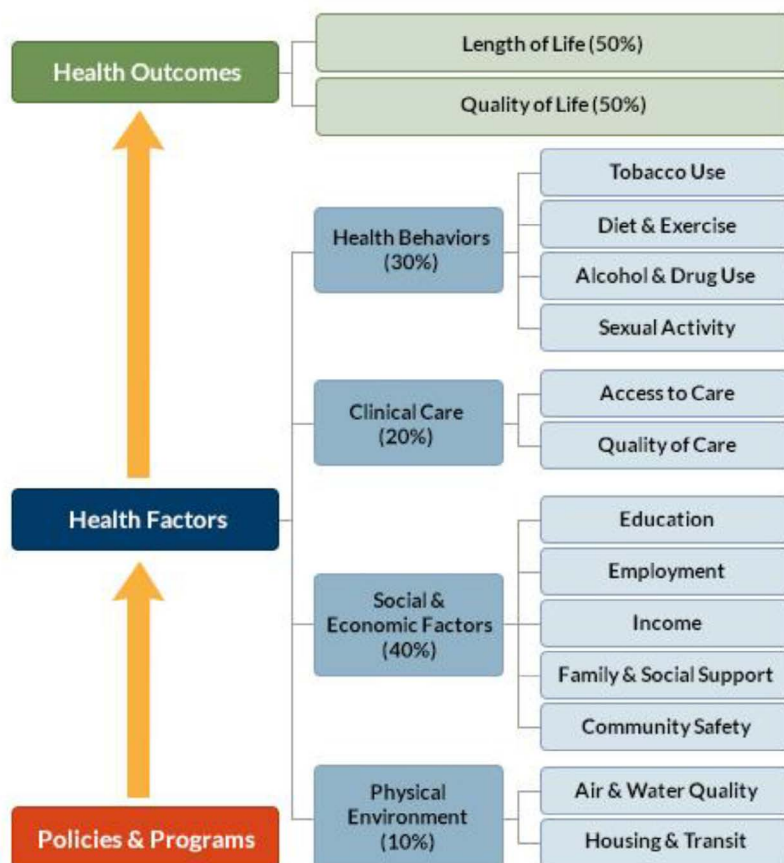
Methods

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 U.S. population. Please note that the methods for calculating this measure changed in the 2016 Rankings.

Reason for Ranking

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

Poor Physical Health Days

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

Reason for Ranking

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

Poor Mental Health Days

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

Reason for Ranking

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

Low Birth Weight

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

Reason for Ranking

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

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

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

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

Health Factors

Adult Smoking

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

Reason for Ranking

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

Adult Obesity

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

Reason for Ranking

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

Food Environment Index

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

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

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

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

Reason for Ranking

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

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

Physical Inactivity

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

Reason for Ranking

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

Access to Exercise Opportunities

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

Individuals who:

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

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

Reason for Ranking

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

Excessive Drinking

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

Reason for Ranking

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

Alcohol-Impaired Driving Deaths

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

Reason for Ranking

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

Sexually Transmitted Infection Rate

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

Reason for Ranking

Chlamydia is the most common bacterial STI in North America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain.[1,2] STIs are associated with a significantly increased risk of morbidity and mortality, including increased risk of cervical cancer, infertility, and premature death.[3] STIs also have a high economic burden on society. The direct medical costs of managing sexually transmitted infections and their complications in the U.S., 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 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 U.S. like heart attacks, strokes, and lung cancer.[1] While repercussions resulting from poverty are present at all ages, children in poverty may experience lasting effects on academic achievement, health, and income into adulthood. Low-income children have an increased risk of injuries from accidents and physical abuse and are susceptible to more frequent and severe chronic conditions and their complications such as asthma, obesity, and diabetes than children living in high income households.[2]

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

Income Inequality

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

Reason for Ranking

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

Children in Single-Parent Households

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

Reason for Ranking

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

Violent Crime Rate

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

Reason for Ranking

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

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

Injury Deaths

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

Reason for Ranking

Injuries are one of the leading causes of death; unintentional injuries were the 4th leading cause, and intentional injuries the 10th leading cause, of 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 Risk Behavior Survey Results

Youth Risk Behavioral Survey Results

North Dakota High School Survey

Rate Increase “↑” rate decrease “↓”, or no statistical change = in rate from 2017-2019

	ND 2015	ND 2017	ND 2019	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2019
Injury and Violence							
Percentage of students who rarely or never wore a seat belt (when riding in a car driven by someone else)	8.5	8.1	5.9	=	8.8	5.4	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)	17.7	16.5	14.2	=	17.7	12.7	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)	NA	56.2	59.6	=	60.7	60.7	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)	57.6	52.6	53.0	=	56.5	51.8	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)	NA	20.6	NA	NA	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)	5.2	5.9	4.9	=	6.2	4.2	2.8
Percentage of students who were in a physical fight on school property (one or more times during the 12 months before the survey)	5.4	7.2	7.1	=	7.4	6.4	8.0
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)	NA	8.7	9.2	=	7.1	8.0	10.8
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)	7.6	NA	NA	NA	NA	NA	8.2
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)	NA	11.4	11.6	=	12.6	11.4	NA
Percentage of students who were bullied on school property (during the 12 months before the survey)	24.0	24.3	19.9	↓	24.6	19.1	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)	15.9	18.8	14.7	↓	16.0	15.3	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)	27.2	28.9	30.5	=	31.8	33.1	36.7
Percentage of students who seriously considered attempting suicide (during the 12 months before the survey)	16.2	16.7	18.8	=	18.6	19.7	18.8

	ND 2015	ND 2017	ND 2019	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2019
Percentage of students who made a plan about how they would attempt suicide (during the 12 months before the survey)	13.5	14.5	15.3	=	16.3	16.0	15.7
Percentage of students who attempted suicide (one or more times during the 12 months before the survey)	9.4	13.5	13.0	=	12.5	11.7	8.9
Tobacco Use							
Percentage of students who ever tried cigarette smoking (even one or two puffs)	35.1	30.5	29.3	=	32.4	23.8	24.1
Percentage of students who smoked a whole cigarette before age 13 years (even one or two puffs)	NA	11.2	NA	NA	NA	NA	NA
Percentage of students who currently smoked cigarettes (on at least one day during the 30 days before the survey)	11.7	12.6	8.3	↓	10.9	7.3	6.0
Percentage of students who currently frequently smoked cigarettes (on 20 or more days during the 30 days before the survey)	4.3	3.8	2.1	↓	2.3	1.7	1.3
Percentage of students who currently smoked cigarettes daily (on all 30 days during the 30 days before the survey)	3.2	3.0	1.4	↓	1.6	1.2	1.1
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)	NA	7.5	13.2	=	9.4	10.1	8.1
Percentage of students who tried to quit smoking cigarettes (among students who currently smoked cigarettes during the 12 months before the survey)	NA	50.3	54.0	=	52.8	51.4	NA
Percentage of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey)	22.3	20.6	33.1	↑	32.2	31.9	32.7
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)	NA	8.0	4.5	↓	5.7	3.8	3.8
Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey)	9.2	8.2	5.2	↓	6.3	4.3	5.7
Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey)	NA	18.1	12.2	NA	15.1	10.9	10.5
Alcohol and Other Drug Use							
Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life)	62.1	59.2	56.6	=	60.6	54.0	NA
Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips)	12.4	14.5	12.9	=	16.4	13.2	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)	30.8	29.1	27.6	=	29.4	25.4	29.2
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)	NA	16.4	15.6	=	17.2	14.0	13.7
Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol)	41.3	37.7	NA	NA	NA	NA	40.5
Percentage of students who tried marijuana before age 13 years (for the first time)	5.3	5.6	5.0	=	5.5	5.1	5.6
Percentage of students who currently used marijuana (one or more times during the 30 days before the survey)	15.2	15.5	12.5	=	11.4	14.1	21.7

	ND 2013	ND 2017	ND 2019	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2019
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)	NA	14.4	14.5	=	12.8	13.3	14.3
Percentage of students who were offered, sold, or given an illegal drug on school property (during the 12 months before the survey)	18.2	12.1	NA	NA	NA	NA	21.8
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
Sexual Behaviors							
Percentage of students who ever had sexual intercourse	38.9	36.6	38.3	=	35.4	36.1	38.4
Percentage of students who had sexual intercourse before age 13 years (for the first time)	2.6	2.8	NA	NA	NA	NA	3.0
Weight Management and Dietary Behaviors							
Percentage of students who were overweight (>= 85th percentile but <95th percentile for body mass index, based on sex and age-specific reference data from the 2000 CDC growth chart)	14.7	16.1	16.5	=	16.6	15.6	16.1
Percentage of students who had obesity (>= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth chart)	13.9	14.9	14.0	=	17.4	14.0	15.5
Percentage of students who described themselves as slightly or very overweight	32.2	31.4	32.6	=	35.7	33.0	32.4
Percentage of students who were trying to lose weight	NA	44.5	44.7	=	46.8	45.5	NA
Percentage of students who did not eat fruit or drink 100% fruit juices (during the seven days before the survey)	3.9	4.9	6.1	=	5.8	5.3	6.3
Percentage of students who ate fruit or drank 100% fruit juices one or more times per day (during the seven days before the survey)	NA	61.2	54.1	↓	54.1	57.2	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)	4.7	5.1	6.6	=	5.3	6.6	7.9
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)	NA	60.9	57.1	↓	58.2	59.1	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)	NA	28.8	28.1	=	26.4	30.5	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)	18.7	16.3	15.9	=	17.4	15.1	15.1
Percentage of students who did not drink milk (during the seven days before the survey)	13.9	14.9	20.5	↑	14.8	20.3	30.6
Percentage of students who drank two or more glasses per day of milk (during the seven days before the survey)	NA	33.9	NA	NA	NA	NA	NA
Percentage of students who did not eat breakfast (during the 7 days before the survey)	11.9	13.5	14.4	=	13.3	14.1	16.7
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)	NA	2.7	2.8	=	2.1	2.9	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)	NA	51.5	49.0	=	55.0	22.6	55.9

	ND 2015	ND 2017	ND 2019	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2019
Percentage of students who watched television three or more hours per day (on an average school day)	18.9	18.8	18.8	=	18.3	18.2	19.8
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)	38.6	43.9	45.3	=	48.3	45.9	46.1
Other							
Percentage of students who had eight or more hours of sleep (on an average school night)	NA	31.8	29.5	=	31.8	33.1	NA
Percentage of students who brushed their teeth on seven days (during the 7 days before the survey)	NA	69.1	66.8	=	63.0	68.2	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)	NA	12.8	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)	NA	8.3	7.0	=	6.0	5.9	4.5

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 Northwood, North Dakota Ranking of Concerns

The top concerns for each of the six 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 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 4 highest ranked priorities.

	Priorities	Most Important
COMMUNITY/ENVIRONMENTAL HEALTH CONCERNS		
Attracting & retaining young families	0	
Having enough child daycare services	2	
Not enough affordable housing	0	
Not enough jobs with livable wages	2	
AVAILABILITY/DELIVERY OF HEALTH SERVICES CONCERNS		
Availability of mental health services	10	5
Availability of dental care	1	
Ability to retain primary care providers in the community	1	
Cost of healthcare insurance	4	
Availability of substance use disorder treatment services	2	
YOUTH POPULATION HEALTH CONCERNS		
Smoking and tobacco use, exposure to second-hand smoke, juuling/vaping	7	0
ADULT POPULATION HEALTH CONCERNS		
Stress	2	
Not getting enough exercise/physical activity	9	6
Obesity/overweight	1	
SENIOR POPULATION HEALTH CONCERNS		
Cost of long-term/nursing home care	5	
Availability of resources to help elderly stay in their homes	2	
Availability of home health	0	
Availability of transportation for seniors	0	
VIOLENCE CONCERNS		
Bullying/cyber-bullying	0	
ALL AGES		
Alcohol use and abuse	4	
Depression/anxiety	8	4
Drug use and abuse (including prescription drugs)	2	

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.

1. Considering the PEOPLE in your community, the best things are: “Other” responses:
 - None of the above.
 - Christian community
 - No transportation and ehr fraud
 - People are not tolerant or open minded, but overly conservative & uninterested in reality, thus a bunch of ignorant GOP trump supporters.
 - they help in a crisis
 - Don’t no, Don’t use any of them
 - Below
 - i do not belong
 - Not strong in any of these areas
2. Considering the SERVICES AND RESOURCES in your community, the best things are: “Other” responses:
 - Limited businesses, the school system is run by unqualified demagogue’s
 - I love the small community with the clinic if you need to get in they will always squeeze you in
 - Don’t use any of them
3. Considering the QUALITY OF LIFE in your community, the best things are: “Other” responses:
 - A safe area but subjected to illegal drugs little investment into the community by the major employer in the area
 - Don’t use any of them
4. Considering the ACTIVITIES in your community, the best things are: “Other” responses:
 - We are lacking in this area
 - Spiritual growth opportunities to serve
 - Not many activities
 - Don’t use any of them
 - Not much

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

5. Considering the COMMUNITY /ENVIRONMENTAL HEALTH in your community, concerns are: “Other” responses:
 - Streets
 - (2) Roads
 - Illegal drug use
 - The streets
 - High taxes and specials
 - City road conditions
 - Alcohol & drug abuse
 - Hard to fit in

- Too many drugs in the community
- Don't use any of them
- Road conditions and water issues
- Road/sewer infrastructure
- No concerns
- Councils and park boards and other groups can't work together because of a few bullies and narcissistic people
- Our number one issue is the town roads destroying our vehicles

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

- Since I work in Grand Forks I continue to use the same family dr there
- All children need to be vaccinated and awareness raised
- Cost of nursing home care for our elderly
- Don't use any of them

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

- (2) Mental health support
- Don't use any of them
- No concerns

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

- Mental health support
- Don't know
- No concerns
- Chronic Bullying in adult leaders

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

- Lack of resources surrounding mental health
- Mental health
- Streets
- Lack of safe, engaging activities for young adults outside of athletics.
- Indoor recreation, places for people to exercise during the winter, causing winter blues and sadness
- Acceptance of others and their beliefs that may be different than our own
- Social media use by everyone
- For the youth: mental health services, depression/anxiety, the teenagers need more things to do
- City government. Need progressive and driven city leadership to get Northwood back to a booming community and a beautiful community with drivable streets.
- Facebook
- Teenagers drinking/vaping/ drug use its not well known, but its a huge problem.
- Drugs and alcohol
- Jobs
- Not enough things to retain young families. Lack of things for kids to do or for families to do. No wellness centers where families can focus on the family health as a whole.
- Isolation due to age and limitations of health, or because of poverty and struggles with work, or due to individual and family choices to live in a small community and never get involved in things of the community. People who do get involved in organizations, school activities, or church programs in our small towns seem to be healthier, happier and more connected to others, but and therefore more at peace. People need a purpose greater than simply surviving and paying the bills.

- Depression/ Anxiety in all age groups
- Mental health support
- Alcoholism
- Good jobs.
- HIGH COST OF LIVING
- Maintaining adult and senior activity especially during the winter
- Local government and park board transparency causing lack of trust and hostility amongst citizens
- Lack of qualified City Government!
- Our council members and police are a joke!
- Drugs and alcohol
- Not enough eating places for visitors and now with the sale of the hotel, no place to stay
- Maintaining quality and cost-effective public service such as streets and utilities
- Growth
- Ability to meet the needs of the older population.
- Lack of business to support community (wellness center, restaurant, quality grocery shopping, daycare etc.)
- Alcohol and drug use in our youth and adults that is leading to drunk driving as well as excessive depression and anxiety.
- Roads
- Availability of affordable housing and affordable nursing care for the elderly
- Mental health providers available locally
- Water and roads
- A single employer in the area who farms more than 30,000 acres does not do business in our community and even though he has grandchildren in the area, does not contribute to the community. This entity, for all legal purposes, is not a corporate farm but behind the scenes receives funding from a global farming conglomerate. It is slowly destroying our community. All that is left are churches and bars.
- Declining younger population
- Cost of long-term care
- Drugs in the community and children living and seeing parents use them social services does nothing about it.
- The condition of the roads.
- Extremism and intolerance
- Infrastructure of the sewer, water drainage, and road conditions.
- Streets and Sewer
- bullying/ cyber bullying for teens
- Childcare/ daycare for younger children as well as Summer care.
- Lack of daycare to support potential new families/ employees
- Inflation
- Roads
- Working together to make things better and lasting

Delivery of Healthcare

19. What PREVENTS community residents from receiving healthcare? “Other” responses:

- a) Cost that insurance doesn’t cover. High deductible on current insurance
- b) No pediatrician
- c)NA
- d) The overall cost. Even with insurance the co-pays and overall costs for some services are more than

many people can afford

Community Health Needs Assessment

16. Have you supported the Northwood Deaconess Health Center financially in any of the following ways in the past? "Other" responses:

- I doctor at NDHC
- Volunteer time
- Donations to the Activity Department
- None
- Church donations
- Ambulance fund

19. What prevents community residents from receiving healthcare? "Other" responses:

- I have a primary care provider at another facility
- Inappropriateness with how providers speak to patients
- Lab is much more expensive in Northwood than Grand Forks
- I receive it but not here except PT

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

- Lived in the area for years
- My provider

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

- Family members
- Naturopath

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

- Mental health services
- (4) Mental Health
- Psychologists, especially for youth.
- Dental and Vision
- Better indoor fitness that isn't in a dark, cold basement. And fitness classes.
- Mental health/psych
- Mental health resources
- Better wellness and preventative health services
- Cardiac rehab, sports enhancement program for youth
- Chiropractor
- I don't know what it's called, but having children
- Not sure
- Mental illness
- (3) Dental and vision availability
- Additional providers who specialize in geriatric health issues.
- Depression and Suicide
- Basic care
- Vision services
- Mental Health, Dental, and Vision
- Dentist, Optometrist, and longer clinic hours or Saturday morning availability.

- Good psychiatrist/psychologist's mental health for teens is a concern in this community
33. Overall, please share concerns and suggestions to improve the delivery of local healthcare.
- Roads would help
 - Telehealth appointments would be nice when needed urgently. Counseling services. Fitness options in the community.
 - I am excited for the building project. I feel it will answer a lot of the needs for Northwood. It will draw people from other communities I believe and retain patients from the area.
 - Issues with providers are not dealt with, they are swept under the rug and no change ever takes place. Seems like it's more important to retain the staff than to have staff who are respectful to those that they work with and those they take care of.
 - Be open to accept new patients who need healthcare
 - Combine Altru, NDHC & Sanford!!
 - Not sure
 - Appointments longer than 15 minutes
 - Lack of medical doctors
 - More frequent visits to LTC patients by the MD
 - More extensive training for ambulance personnel or an active paramedic on calls
 - Being able to see your primary provider sooner, dietary education for all ages, more facilities for exercise for all ages, diabetes education, support groups for primary caregivers of spouse, relative or child, local mental health services by social worker and psychologist with psychiatrist backup.
 - Not so expensive. More programs that deal with health issues. Have more information out there or come to the public and have meetings.
 - I love the accessibility of NDHC! KEEP up the good work!
 - Transportation should be offered through Medicaid services. individuals that receive S5130 services should be able to get rides to appointments.
 - More specialists, mental health providers, activities for youth or a center for youth to go to. Out of the norm classes for teens as Tai Kwan Doh/karate/weight lifting, yoga for teens. Going to Grand Forks becomes very tiring.
 - Town website that is updated. Town Facebook page that is updated. Park Board Audit and restructuring management and designation of funds.