Community Health Needs Assessment

CHI St. Alexius Health Turtle Lake Service Area
Turtle Lake, North Dakota

2022

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

Adopted February 2022

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 15

Survey Results 24

Findings of Key Informant Interviews and Community Group 44

Priority of Health Needs 45

Next Steps – Strategic Implementation Plan 47

Appendix A – Critical Access Hospital Profile 49

Appendix B – Economic Impact Analysis 51

Appendix C – Survey Instrument 52

Appendix D – County Health Rankings Explained 59

Appendix E – Youth Behavioral Risk Survey Results 70

Appendix F – Prioritization of Community's Health Needs 73

Appendix G – Survey "Other" Responses 74

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, CHI St. Alexius Health Turtle Lake conducted a Community Health Needs Assessment (CHNA) in 2021, 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. Thirty-nine CHI St. Alexius Health Turtle Lake service area residents completed the survey. Additional information was collected through five key informant interviews with community members. The input from the residents, who primarily reside in McLean 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, McLean County's population from 2010 to 2019 increased by 5.4%. The average number of residents under age 18 (22%) for McLean County comes in 1.6 percentage points lower than the North Dakota average (23.6%). The percentage of residents ages 65 and older, is 8.5% higher for McLean County (24.2%) than the North Dakota average (15.7%), and the rate of education for McLean County (92.4%) is reflective to the North Dakota average (92.6%). The median household income in McLean County ($68,529) is higher than the state average for North Dakota ($64,894).

Data compiled by County Health Rankings show McLean County is doing better than North Dakota in health outcomes/factors for 15 categories.

McLean County, according to County Health Rankings data, is performing poorly relative to the rest of the state in 16 outcome/factor categories.

Of 106 potential community and health needs set forth in the survey, the 36 CHI St. Alexius Health Turtle Lake service area residents who completed the survey indicated the following ten needs as the most important::

- Attracting and retaining young families
- Alcohol use and abuse – Youth and Adult
- Assisted living options -- Senior
- Youth bullying/cyber-bullying
- Smoking and tobacco use (second-hand smoke, vaping) for youth
- Not enough jobs with livable wages
- Drug use and abuse – Youth and Adult
- Having enough child daycare services
- Not enough affordable housing
- Not enough activities for youth

The survey also revealed the biggest barriers to receiving healthcare (as perceived by community members). They included concerns about confidentiality (N=7), not enough specialists (N=7), do not know about local services (N=3), and poor quality of care (N=3).

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

- Community is socially and culturally diverse
- Feeling connected to people who live here
- People are friendly, helpful, and supportive
- Sense that you can make a difference through civil engagement
- People who live here are involved in their community
- People are tolerant, inclusive, open-minded

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:

- Attracting and retaining young families
- Having enough child daycare services
- Availability of transportation for seniors
- Availability of primary care providers (MD, DO, NP, PA) and nurses
- Ability to retain primary care providers (MD, DO, NP, PA) and nurses
- Availability of specialists
- Alcohol use and abuse in all ages
- Depression/anxiety in all ages
- Availability of resources to help the elderly stay in their homes
- Not enough activities for children
- Smoking and tobacco use, exposure to second-hand smoke, or vaping/juuling -adult
- Drug use and abuse (including prescription drug abuse) - youth
- Cancer
- Cost of long-term/nursing home care
- Being able to meet needs of older population

Overview and Community Resources

With assistance from CRH at the UNDSMHS, CHI St. Alexius Health Turtle Lake completed a CHNA of the service area. The hospital identifies its service area as central McLean, Sheridan, and Oliver counties one town having a medical center.

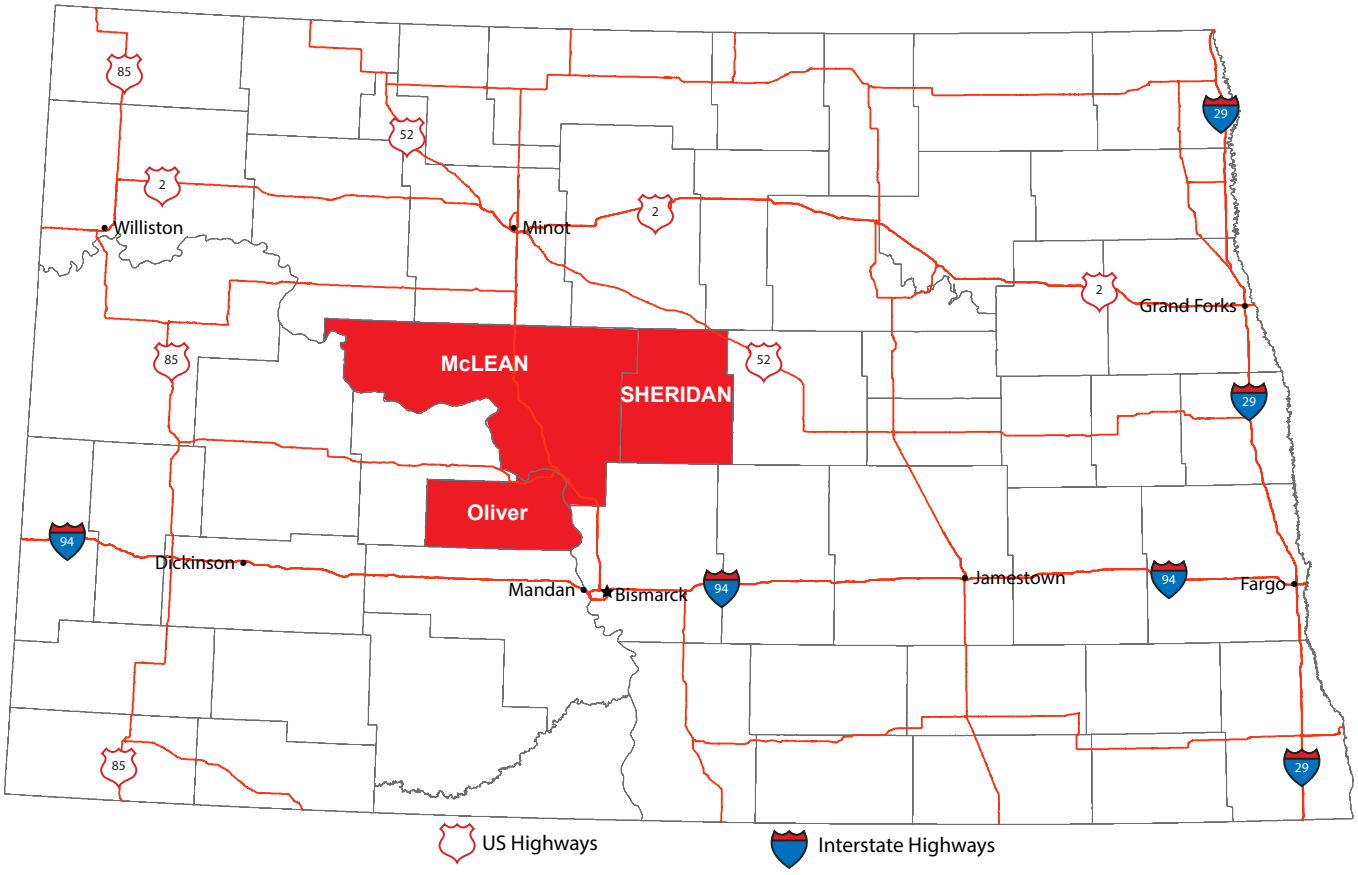
The hospital identifies its service area as the towns of Washburn, Underwood, Mercer, Butte, McClusky, and Goodrich. Zip codes in the service area include: 58531, 58559, 58575, 58576, 58577, 58579, 58723, 58778, 58530, 58530, 58430, 58444, and 58463. Many community members and stakeholders worked together on the assessment.

CHI St. Alexius Health Turtle Lake is located in central North Dakota, approximately 60 miles north of Bismarck and 60 miles south of Minot, North Dakota. We serve the people in central and south McLean County along with the people of eastern Sheridan County. Along, with the hospital, agricultural, energy production, and recreation provide the economic base of the town of Turtle Lake. It is surrounded by many area lakes and wide-open spaces to enjoy the wonders of nature. The population of Turtle Lake is 575 (2017).

Turtle Lake has a number of area assets and resources that are potentially available to address significant health needs. In terms of physical assets and features, the community includes a city park, softball complex, and many area lakes. The outdoor recreation opportunities include camping, fishing, hunting, biking, and ATV riding. Turtle Lake holds an annual Turtle Days celebration every July which includes games for kids, 5K walk/run, a rodeo, soap box derby, street dance, and the National and World Champion Turtle Races.

Turtle Lake has many businesses located within its community including several retail stores, restaurants, farmer-owned elevator, grocery store, and other valued community assets. The Turtle Lake-Mercer school system is dedicated to quality education and offers a comprehensive program for students K-12. Other healthcare facilities and services in the area include a Federally Qualified Healthcare Clinic which includes medical, dental, chiropractic, and mental health services.

Figure 1: McLean, Sheridan, and Oliver Counties



CHI St. Alexius Health Turtle Lake

The CHI St. Alexius Health regional healthcare system was formed in April 2016, when several Catholic Health Initiatives (CHI) healthcare facilities joined together to form the largest healthcare delivery system in central and western North Dakota. The system is comprised of a tertiary hospital in Bismarck, and Critical Access Hospitals (CAHs) in Carrington, Dickinson, Devils Lake, Garrison, Turtle Lake, and Williston and numerous clinics and outpatient services. CHI St. Alexius Health also manages five CAHs in North Dakota which are located in the communities of Ashley, Elgin, Linton, and Wishek, as well as Mobridge Regional Hospital & Clinics in Mobridge, South Dakota. The Critical Access Hospital profile for CHI St. Alexis Health Turtle Lake that includes a summary of hospital-specific information is available in Appendix A.

CHI St. Alexius Health is part of CHI, a national nonprofit health system based in Englewood, Colorado. The faith-based system operates in 18 states and includes 103 hospitals. Additional services offered within the system are: long-term care, assisted and residential living communities, community health services organizations, home health agencies, and numerous outpatient facilities.

CHI Turtle Lake has a significant economic impact on the region. They directly employ 52 FTE employees with an annual payroll of over $3.55 million (including benefits). These employees create an additional 18 jobs and nearly $719,000 in income as they interact with other sectors of the local economy. This results in a total impact of 70 jobs and more than $4.27 million in income. Additional information is provided in Appendix B.

Mission

The mission of Catholic Health Initiatives is to nurture the healing ministry of the Church, supported by education and research. Fidelity to the Gospel urges us to emphasize human dignity and social justice as we create healthier communities.

Vision

Our Vision is to live up to our name as One CHI:

- Catholic - Living our Mission and Core Values.
- Health - Improving the health of the people and communities we serve.
- Initiatives - Pioneering models and systems of care to enhance care delivery.

Core Values

- Reverence: Profound respect and awe for all of creation, the foundation that shapes spirituality, relationships with others and journey to God.
- Integrity: Moral wholeness, soundness, fidelity, trust, truthfulness in all they do.
- Compassion: Solidarity with one another, capacity to enter into another's joy and sorrow.
- Excellence: Preeminent performance, becoming the benchmark, putting forth personal and professional best.

CHI St. Alexius Health Turtle Lake, formerly Community Memorial Hospital, was established through the efforts of the Turtle Lake Hospital Association in 1947. The actual construction was completed in 1952, with additions built in 1963 and 1969.

The original mission of the association is the same today, that is, a commitment to excellence of services in a person-centered environment that reflects regard and respect for the total good of the patient and all human life. CHI St. Alexius Health Turtle Lake is a Critical Access Hospital (January 1, 2000). The reason for these substantial increases is a strong community support. The local people want a professional medical facility close to home. In order for a rural hospital to survive, it has to be wanted, and it has to be supported by the community. The people of the Turtle Lake saw this need, and this is why CHI St. Alexius Health Turtle Lake is alive today. In January of 1987, CHI St. Alexius Health Turtle Lake became affiliated with St. Alexius Medical Center in Bismarck. In 1990, St. Alexius Medical Center signed a lease agreement for the operation of the hospital. In October 2015 an affiliation agreement was sign with Catholic Health Initiatives becoming a part of St. Alexius Health's goal of becoming a leader in healthcare throughout North Dakota. The Turtle Lake Hospital Association remains responsible for the upkeep of the building. This is done through fund raising activities.

CHI St. Alexius Health Turtle Lake is a 25 bed Critical Access Hospital (CAH) with a Level V Emergency Department that is available 24 hours a day. The hospital has been committed to providing patients quality medical treatment in the Turtle Lake area and surrounding communities since 1952. Through the years, the hospital has sought to continually upgrade the quality and numbers of services it provides. The hospital's affiliation with major medical centers and healthcare agencies has allowed it to expand its healthcare services through a network that begins at the local level. CHI St. Alexius Health Turtle Lake is equipped with 2 emergency rooms, on-site lab, radiology, CT, and physical therapy services. Patients have access to 24/7 emergency care, swing-bed program, and acute care services. CHI St.

Alexius Health Turtle Lake's professional and caring staff is dedicated to ensuring patients have compassionate and excellent care.

Services offered locally by CHI St. Alexius Health Turtle Lake and Washburn Family Clinics include:

General and Acute Services

- Acne treatment
- Adult day care
- Allergy, flu, COVID-19, and pneumonia shots
- Blood pressure checks
- Clinics-Washburn Family Clinic & Turtle Lake Health Center
- Emergency room
- General surgeon – consulting (visiting physician)
- Hospital (acute care)
- Mental health services (visiting practitioner)
- Mole/wart/skin lesion removal and biopsies
- Nutrition counseling
- Orthopedics (visiting physician)
- Pharmacy (inpatient/outpatient)
- Physicals: annuals, sports, and insurance
- Prenatal care up to 32 weeks
- Respite care
- Sports medicine
- Swing bed services

Screening/Therapy Services

- Chronic disease management
- Holter monitoring
- IV therapies
- Laboratory services
- Occupational physicals
- Occupational therapy
- Pediatric services
- Physical therapy
- Respiratory care
- Restorative care
- Social services
- Sports injury screening

Radiology Services

- Bone densitometry (DexaScan-mobile unit)
- CT scan
- Echocardiograms
- EKG
- General x-ray
- Ultrasound (mobile unit)

Laboratory Services

- Chemistry
- Coagulation
- Hematology
- Rapid testing kits
- Urine testing

Services offered by OTHER providers/organizations

- Ambulance
- Chiropractic services
- Dental services
- Massage therapy
- Optometric/vision services-Washburn
- Retail pharmacy
- Digital mammography
- eEmergency
- eHospitalists
- TelePharmacy

First District Health Unit

First District Health Unit (FDHU) provides public health services to seven counties in north central North Dakota and offers services that include: child health and nutrition/WIC, child and adult immunizations, adult health maintenance including foot care, tobacco prevention, and more. The McLean County office also has radon kits, bottles for water testing, and food safety tests available. Services offered in or from the Minot office (701-852-1376) include STD (sexually transmitted diseases) and AIDS/HIV testing, family planning and child car seats, restaurant licensing and inspection, water testing, and sewer permits.

Mission

The mission of public health is to make a positive impact on the health and welfare of the community through service, education, prevention and collaborative activities.

Specific services that FDHU provides are:

- Blood pressure check
- School health (vision screening, puberty talks, school immunizations)
- Breastfeeding resources
- Car seat program
- Emergency response & preparedness program
- Environmental health services (water, sewer, health hazard abatement)
- Flu shots
- Foot care
- Health Tracks (child health screening)
- Immunizations
- Office visits and consults
- Preschool screening assistance
- Public health care
- School nursing services
- Tobacco education, prevention, and control
- Tuberculosis testing and management
- Women, Infants & Children (WIC) Program
- Youth education programs (first aid, bike safety)

Assessment Process

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

A CHNA benefits the community by:

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

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

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

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

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

This assessment examines health needs and concerns in McLean County, Sheridan County, and Oliver County which are all included in the CHI St. Alexius Health Turtle Lake service area. In addition to Turtle Lake, located in the service area are the communities of Mercer, McClusky, Goodrich, Underwood, Washburn, Wilton, and Center.

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

Figure 2: Steering Committee

Kathy Hanson	Assistant Administrator, CHI St. Alexius Health Turtle Lake
Tod Graeber	Administrator, CHI St. Alexius Health Turtle Lake
Jessica Hoffert	Senior Accountant, CHI St. Alexius Turtle Lake
Craig Pankow	Board President, Turtle Lake Hospital Auxiliary
Vickie Erdmann	Turtle Lake Hospital Association
Beth Anderson	Turtle Lake Hospital Association
Pam Fischer	First District Health Unit- McLean County

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, convened to discuss area health needs and inform the assessment process; and
- A wide range of secondary sources of data were examined, providing information on a multitude of measures, including demographics, health conditions, indicators, outcomes, rates of preventive measures; rates of disease; and at-risk behavior.

CRH is one of the nation's most experienced organizations committed to providing leadership in rural health. Its mission is to connect resources and knowledge to strengthen the health of people in rural communities. CRH is the designated State Office of Rural Health 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 UNDSMHS 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.

Members of the community group and key informants represented the broad interests of the community served by CHI St. Alexius Health Turtle Lake and FDHU. They included representatives of the health community, business community, political bodies, and law enforcement. Not all members of the group were present at both meetings.

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 13 community members was convened and first met on July 19, 2021. During this first community group meeting, group members were introduced to the needs assessment process, reviewed basic demographic information about the community, and served as a focus group. Focus group topics included community assets and challenges, the general health needs of the community, community concerns, and suggestions for improving the community's health.

The community group met again on September 1, 2021 with 12 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 McLean County. The group was then tasked with identifying and prioritizing the community's health needs.

Interviews

One-on-one interviews with four key informants were conducted in person in Turtle Lake on July 19, 2021. One additional key informant interview was conducted over the phone in July 2021. A representative from CRH conducted the interviews. Interviews were held with selected members of the community who could provide insights into the community's health needs. Included among the informants were public health professionals with special knowledge in public health acquired through several years of direct experience in the community, including working with medically underserved, low income, and minority populations, as well as with populations with chronic diseases.

Topics covered during the interviews included the general health needs of the community, the general health of the community, community concerns, delivery of 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 McLean County, as well as Sheridan and Oliver Counties, which are all included in the CHI St. Alexius Health Turtle Lake service area. The survey tool was designed to:

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

Specifically, the survey covered the following topics:

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

To promote awareness of the assessment process, press releases led to published articles in three newspapers in Mclean County including in the communities of Washburn, Turtle Lake/Underwood, as well as the Mclean County Extra that reaches all communities within the county. Additionally, information was published on CHI St. Alexius Health Turtle Lake's website and Facebook pages.

Approximately 50 community member paper surveys were available for distribution in Mclean and Sheridan Counties. The surveys were distributed by community group members and at CHI St. Alexius Health Turtle Lake, Washburn Family Clinic, local churches, and businesses.

To help ensure anonymity, included with each survey was a postage-paid return envelope to CRH. In addition, to help make the survey as widely available as possible, residents were able to also request a survey by calling CMC or FCPH. The survey period ran from July 1, 2021 to July 23, 2021. Four completed paper surveys were returned.

Area residents were also given the option of completing an online version of the survey, which was publicized in two community newspapers and the Mclean County Extra, emailed to at least 85 local community members, and on the websites and Facebook pages of CHI St. Alexius Health Turtle Lake. 32 online surveys were completed. Five of those online respondents used the QR code to complete the survey. In total, counting both paper and online surveys, 36 community member surveys were completed, equating to a 7% response rate. With a goal of 13% response rate for this community, this response rate is below this type of unsolicited survey methodology and indicates an engaged community.

Secondary Data

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

Social Determinants of Health

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 they are also impacted by the social factors listed previously. The barriers already present in rural areas, such as limited public transportation options and fewer choices to acquire healthy food can compound the impact of these challenges.

There are numerous models that depict 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

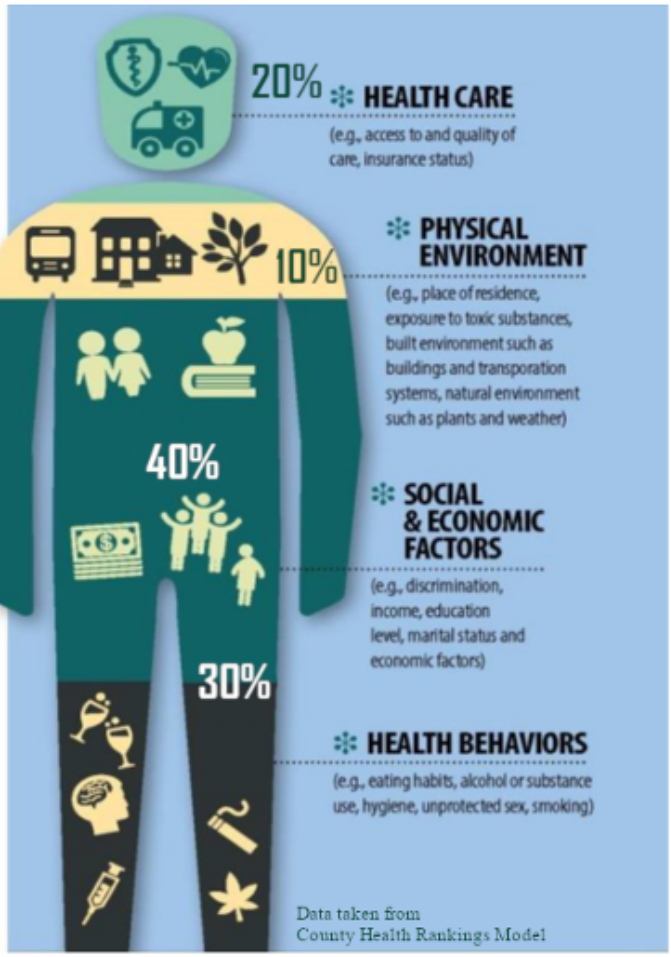
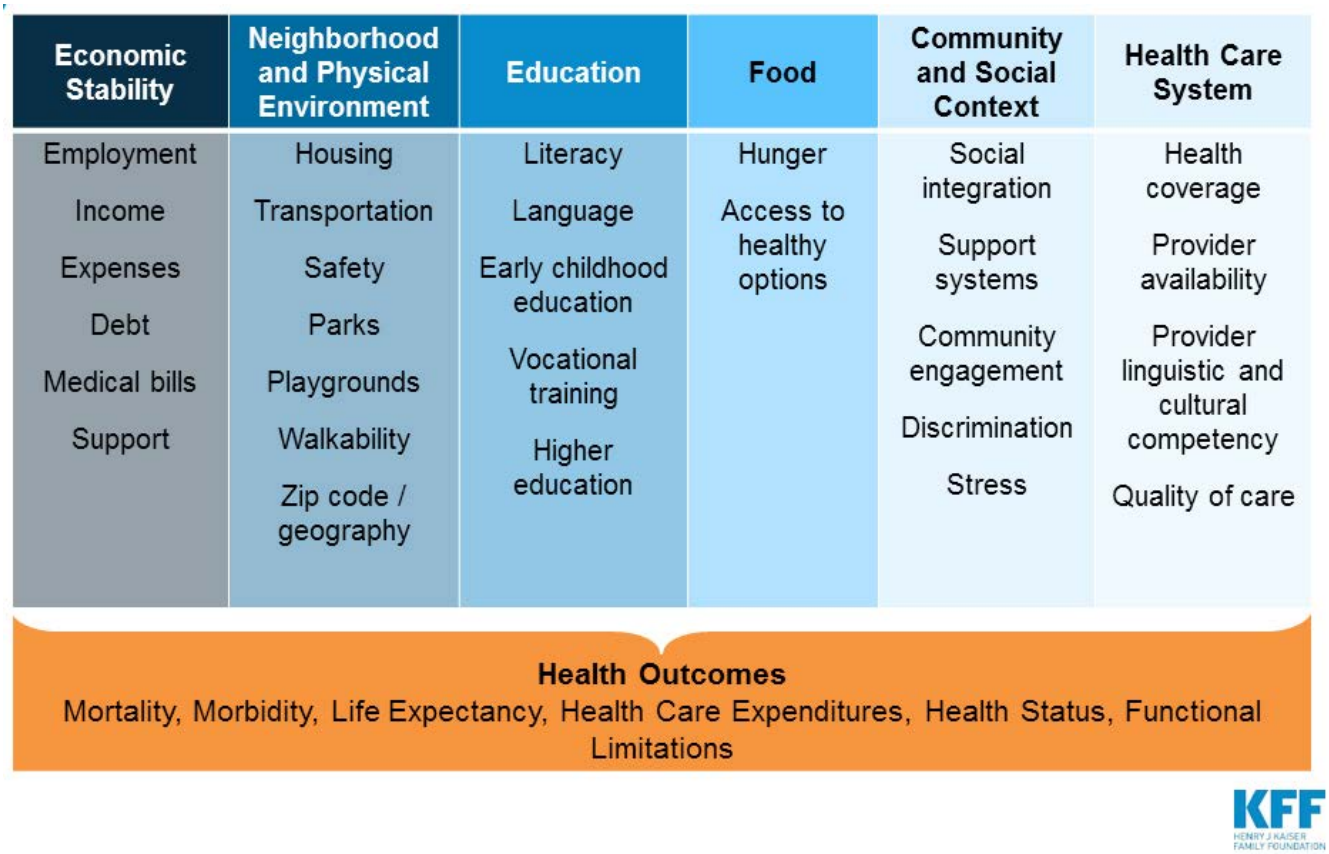


Figure 4 (Henry J. Kaiser Family Foundation, https://www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/), provides examples of factors that are included in each of the social determinants of health categories that lead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



Health Equity and COVID-19 Assessments for McLean County

The COVID-19 pandemic has brought social and racial injustice and inequity to the forefront of public health. It has highlighted that health equity is still not a reality as COVID-19 has unequally affected many minority groups, putting them more at risk of getting sick and dying from COVID-19. Many factors, such as poverty and healthcare access, are intertwined and have a significant influence on the people's health and quality-of-life. "Essential workers" are those who conduct a range of operations and services in industries that are essential to ensure the continuity of critical functions in the United States, from keeping us safe, to ensuring food is available at markets, to taking care of the sick. A majority of these workers belong to and live within communities disproportionately affected by COVID-19. Essential workers are inherently at higher risk of being exposed to COVID-19 due to the nature of their work, and they are disproportionately representative of racial and ethnic minority groups.

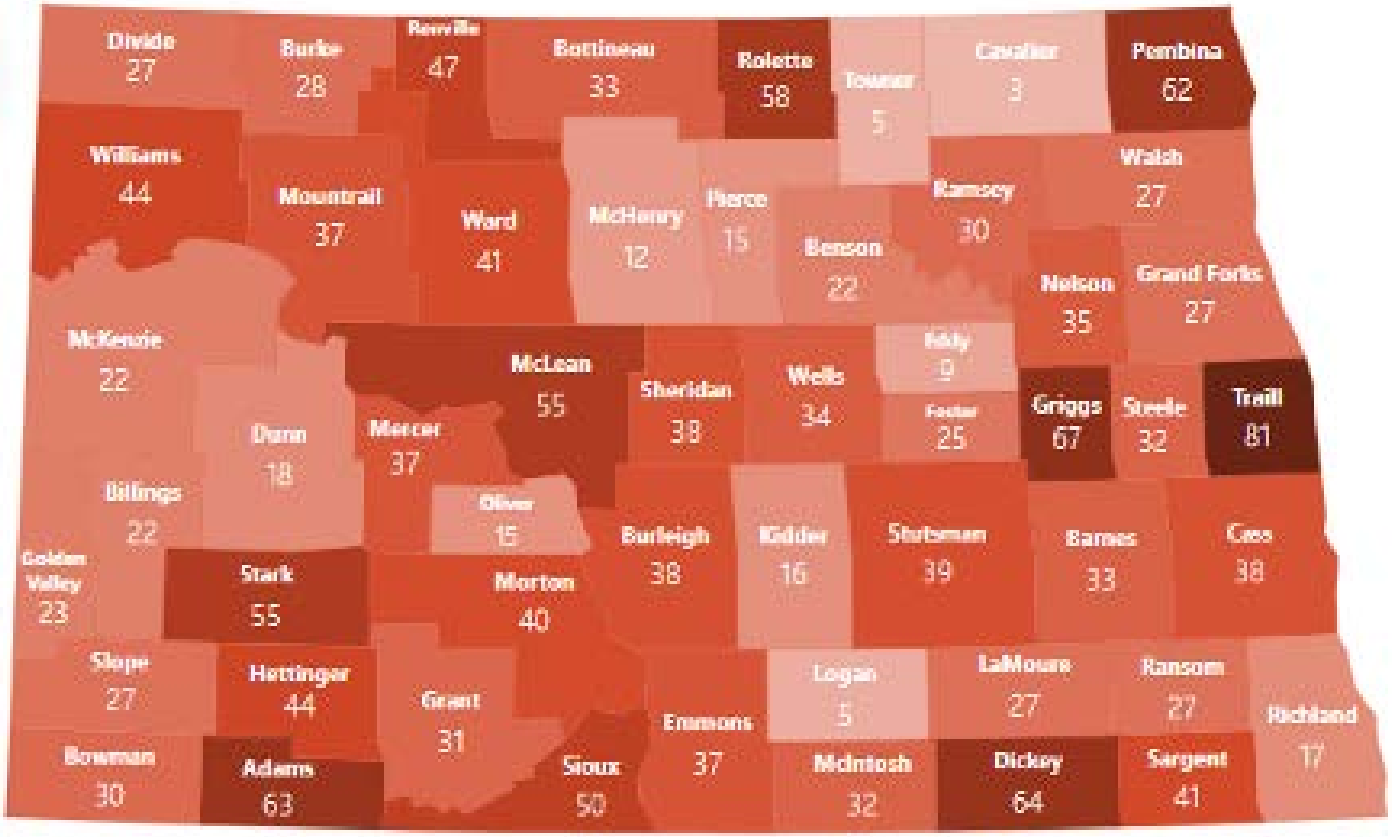
COVID-19 in McLean County

The COVID-19 vaccine data dashboard is administered by the North Dakota Department of Health and provides daily vaccine doses administered and weekly vaccine coverage rates for North Dakota. Dashboard data is based on COVID-19 vaccine doses reported to the North Dakota Immunization Information System (NDIIS). North Dakota immunization providers who are not receiving COVID-19 vaccine allocations through the North Dakota Department of Health Division of Immunizations, including Indian Health Services, Veteran's Affairs, and Department of Defense facilities, may not be entering COVID-19 vaccine information into the NDIIS and their doses administered will not be accounted for in this data.

County-level doses administered and coverage rate data is based on the vaccine recipient's county of residence, not the location of the administering provider site.

As of November 22, 2021, there were 55 active cases per 10,000 people in McLean County (actual number of positive cases was 52). There have been a total of 2,013 cases in total since the start of the pandemic with 43 deaths in McLean County. A total of 28,889 tests have been completed in the county.

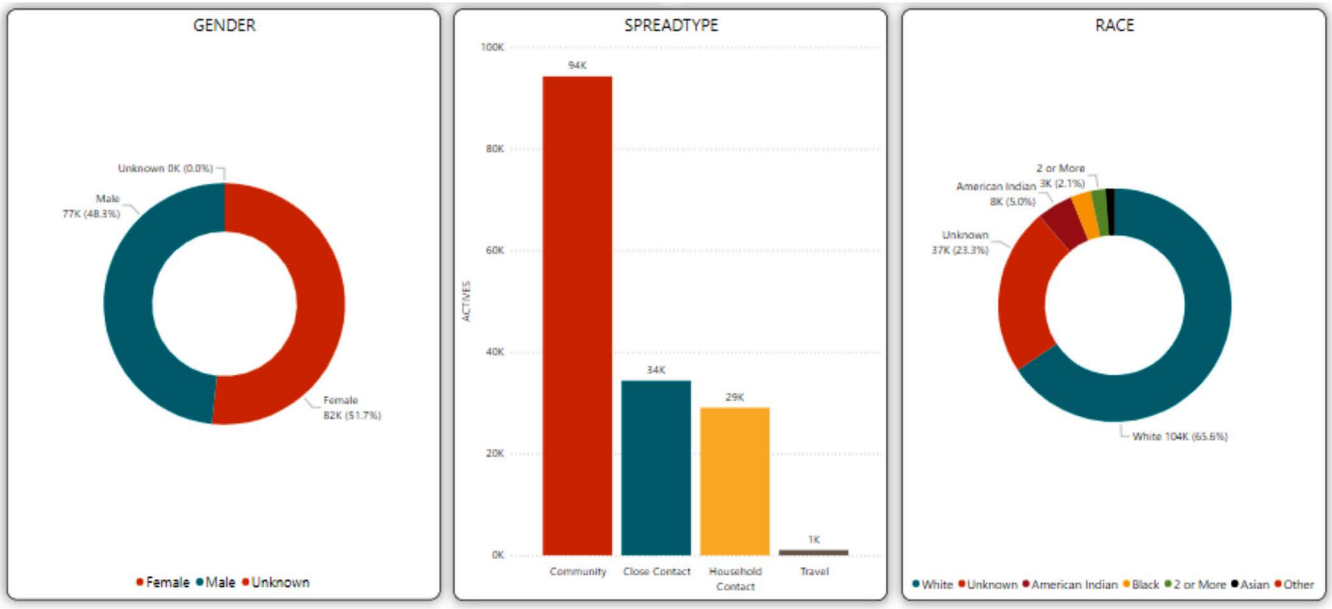
Graphic 1. Active Positive Cases per 10K



Source: https://www.health.nd.gov/diseases-conditions/coronavirus/north-dakota-coronavirus-cases

Here is an overview of the impact of COVID-19 on McLean County (Graphic 2) and the demographics of positive cases of COVID-19 in McLean County (Graphic 3) as of November 22, 2021. As you can see, there is a disproportionately high number of minorities (non-White) affected by COVID-19.

Graphic 2. Overview of COVID-19 for McLean County



Source: https://www.health.nd.gov/diseases-conditions/coronavirus/north-dakota-coronavirus-cases

Demographic Information

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

Table 1: Summarizes general demographic and geographic data about McLean County.
(From 2010 Census/2017 American Community Survey; more recent estimates used where available)

	McLean County	North Dakota
Population (2019)	9,450	762,062
Population change (2010-2019)	5.4%	13.3%
People per square mile (2010)	4.2	9.7
Persons 65 years or older (2019)	24.2%	15.7%
Persons under 18 years (2019)	22.0%	23.6%
Median age (2019 est.)	50.0	35.1
White persons (2019)	89.6%	86.9%
High school graduates (2019)	92.4%	92.6%
Bachelor's degree or higher (2019)	20.8%	30.0%
Live below poverty line (2019)	9.4%	10.6%
Persons without health insurance, under age 65 years (2019)	9.1%	8.1%
Households with a broadband Internet subscription (2019)	72.3%	80.7%

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

In line with the population growth of North Dakota in recent years, McLean County has seen an increase in population since 2010. The U.S. Census Bureau estimates show that McLean County's population increased from 8,962 (2010) to 9,450 (2019).

County Health Rankings

The Robert Wood Johnson Foundation, in collaboration with the University of Wisconsin Population Health Institute, has developed County Health Rankings to illustrate community health needs and provide guidance for actions toward improved health. In this report, McLean 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 2021 County Health Rankings are pulled from more than 20 data sources and then are compiled to create county rankings. Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks, such as 1 or 2, are considered to be the "healthiest." Counties are ranked on both health outcomes and health factors. Following is a breakdown of the variables that influence a county's rank.

A model of the 2021 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.

Health Outcomes

- Length of life
- Quality of life

Health Factors

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

Health Factors (continued)

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

Table 2 summarizes the pertinent information gathered by County Health Rankings as it relates to McLean 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 First District Health Unit and CHI St. Alexius Health Turtle Lake or of any particular medical facility.

For most of the measures included in the rankings, the County Health Rankings' authors have calculated the "Top U.S. Performers" for 2021. 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).

McLean County rankings within the state are included in the summary following. For example, McLean County ranks 11th out of 46 ranked counties in North Dakota on health outcomes and 24th out of 45 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 checkmark but are marked with a plus sign (+) indicate that the county is doing better than the U.S. Top 10%.

The data from County Health Rankings shows that McLean County is doing better than many counties compared to the rest of the state on all but eight of the outcomes, landing at or above rates for other North Dakota counties. However, like many other North Dakota counties, McLean County is also doing poorly in many areas when it comes to the U.S. Top 10% ratings. One particular outcome where McLean County does not meet the U.S. Top 10% ratings is the number of premature deaths.

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

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

- Poor physical health days
- Poor mental health days
- Low birth weight
- Adult smoking
- Sexually transmitted infections
- Excessive drinking
- Social associations
- Violent crimes

- Air pollution-particulate matter
- Preventable hospital stays
- Mammography screening (% of Medicare enrollees ages 65-74 receiving screening)
- Income inequality
- Children in single-parent households
- Drinking water violations
- Severe housing problems

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

- Premature death
- Physical inactivity
- Access to exercise opportunities
- Alcohol-impaired driving deaths
- Number of uninsured
- Children in poverty
- Unemployment
- Injury deaths

TABLE 2: SELECTED MEASURES FROM COUNTY HEALTH RANKINGS 2021 – MCLEAN 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

TABLE 2: SELECTED MEASURES FROM *COUNTY HEALTH RANKINGS* 2021 – MCLEAN COUNTY			
	McLean County	**U.S. Top 10%**	**North Dakota**
Ranking: Outcomes	**11th**		**(of 46)**
Premature death	7,500 ■●	5,400	6,600
Poor or fair health	15% ■●	14%	14%
Poor physical health days (in past 30 days)	3.2 +	3.4	3.2
Poor mental health days (in past 30 days)	3.6 +	3.8	3.8
Low birth weight	6% +	6%	6%
Ranking: Factors	**24th**		**(of 45)**
Health Behaviors			
Adult smoking	20% ■	16%	20%
Adult obesity	35% ■●	26%	34%
Food environment index (10=best)	8.5 ■●	8.7	8.9
Physical inactivity	27% ■●	19%	23%
Access to exercise opportunities	29% ■●	91%	74%
Excessive drinking	24% ■	15%	24%
Alcohol-impaired driving deaths	45% ■●	11%	42%
Sexually transmitted infections	185.9 ■	161.2	466.6
Teen birth rate	21 ■●	12	20
Clinical Care			
Uninsured	9% ■●	6%	8%
Primary care physicians	4,770:1 ■●	1,030:1	1,300:1
Dentists	4,730:1 ■●	1,210:1	1,510:1
Mental health providers	9,450:1 ■●	270:1	510:1
Preventable hospital stays	3,412 ■	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)	43% ■●	55%	50%
Social and Economic Factors			
Unemployment	3.2% ■●	2.6%	2.4%
Children in poverty	12% ■●	10%	11%
Income inequality	3.7 +	3.7	4.4
Children in single-parent households	16% ■	14%	20%
Social associations	16.8 ■	18.2	16.0
Violent crime	103 ■	63	258
Injury deaths	85 ■●	59	71
Physical Environment			
Air pollution – particulate matter	4.1 +	5.2	4.7
Drinking water violations	No		
Severe housing problems	8% +	9%	12%

Source: http://www.countyhealthrankings.org/app/north-dakota/2021/rankings/outcomes/overall

Children's Health

The National Survey of Children's Health touches on multiple intersecting aspects of children's lives. Data are not available at the county level; listed below is information about children's health in North Dakota. The full survey includes physical and mental health status, access to quality healthcare, and information on the child's family, neighborhood, and social context. Data is from 2018-19. 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), 2019

Health Status	North Dakota	National
Children born premature (3 or more weeks early)	9.6%	11.2%
Children 10-17 overweight or obese	24.8%	31.4%
Children 0-5 who were ever breastfed	84.6%	80.6%
Children 6-17 who missed 11 or more days of school	3.9%	4.5%
Healthcare		
Children currently insured	93.4%	93.4%
Children who had preventive medical visit in past year	18.4%	19.0%
Children who had preventive dental visit in past year	75.4%	79.6%
Young children (10 mos.-5 yrs.) receiving standardized screening for developmental or behavioral problems	12.0%	10.4%
Children aged 2-17 with problems requiring counseling who received needed mental healthcare	1.2%	2.3%
Family Life		
Children whose families eat meals together 4 or more times per week	75.5%	73.6%
Children who live in households where someone smokes	15.3%	14.4%
Neighborhood		
Children who live in neighborhood with a park, sidewalks, a library, and a community center	81.1%	75.4%
Children living in neighborhoods with poorly kept or rundown housing	9.1%	13.3%
Children living in neighborhood that's usually or always safe	97.4%	95.0%

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

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

- Children (1-17 years) who had a preventative dental visit in the past year
- Young children (9-35 mos.) receiving standardized screening for developmental problems
- Children who live in households where someone smokes

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 McLean County is performing more poorly than the North Dakota average on all of the examined measures except the percentage of the population who are Supplemental Nutrition Assistance Program (SNAP) recipients and the 4-year high school graduation rate. The most marked difference was on the measure of percentage of Medicaid recipients (over 11% higher rate in McLean County).

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

	McLean County	North Dakota
Child food insecurity, 2019	**13.8%**	9.6%
Medicaid recipient (% of population age 0-20), 2019	**35.1%**	26.6%
Children enrolled in Healthy Steps (CHIP) (% of population age 0-18), 2020	**1.9%**	1.6%
Supplemental Nutrition Assistance Program (SNAP) recipients (% of population age 0-18), 2020	**12.7%**	16.9%
Licensed childcare capacity (# of children), 2020	**216**	36,701
4-year high school cohort graduation rate, 2019/2020	**>=95%**	89.0%
Victims of child abuse and neglect requiring services (rate per 1,000 children ages 0-17), 2019	**14.44**	9.98

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

Another means for obtaining data on the youth population is through the Youth Risk Behavior Survey (YRBS). The YRBS was developed in 1990 by the Centers for Disease Control and Prevention (CDC) to monitor priority health risk behaviors that contribute markedly to the leading causes of death, disability and social problems among youth and adults in the U.S. The YRBS was designed to monitor trends and compare state health risk behaviors to national health risk behaviors and 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 has been collected in 2015, 2017, and 2019. It is 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 Behavioral Risk 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 <95th 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.seven
% 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.seven	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 three 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/districtsschools/safety-health/youth-risk-behavior-survey

Low Income Needs

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

Top Needs Identified by People Experiencing Poverty Across North Dakota

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

2020 North Dakota LOW INCOME COMMUNITY NEEDS

Helping People. Changing Lives. community Action PARTNERSHIP
AMERICA'S POVERTY FIGHTING NETWORK

NDSU NORTH DAKOTA STATE UNIVERSITY

Assessed by CAPND and NDSU, November 2020

KEY FINDINGS

1st Priority Need

Rental Assistance

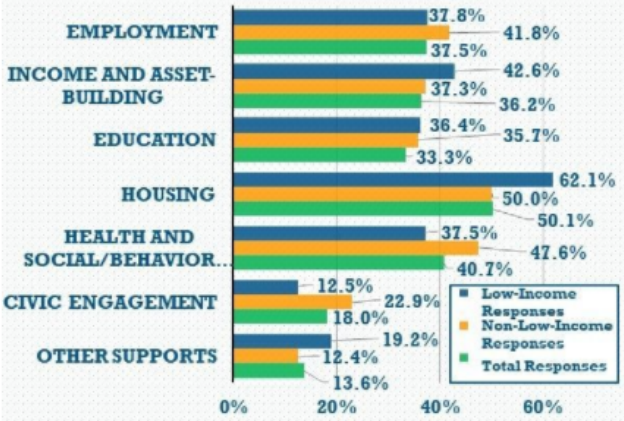
3,458 Total Survey Responses

- **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

1. Housing
2. Health and Social/Behavior Development
3. Income and Asset - Building

1. Housing
2. Income and Asset - Building
3. Employment

1. Housing
2. Employment
3. Health and Social/Behavior Development

1. Health and Social/Behavior Development
2. Income and Asset - Building
3. Housing

1. Housing
2. Income and Asset - Building
3. Education

1. Housing
2. Education
3. Income and Asset - Building

1. Housing
2. Health and Social/Behavior Development
3. Income and Asset - Building

1. Housing
2. Employment
3. Income and Asset - Building

ACKNOWLEDGMENTS

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

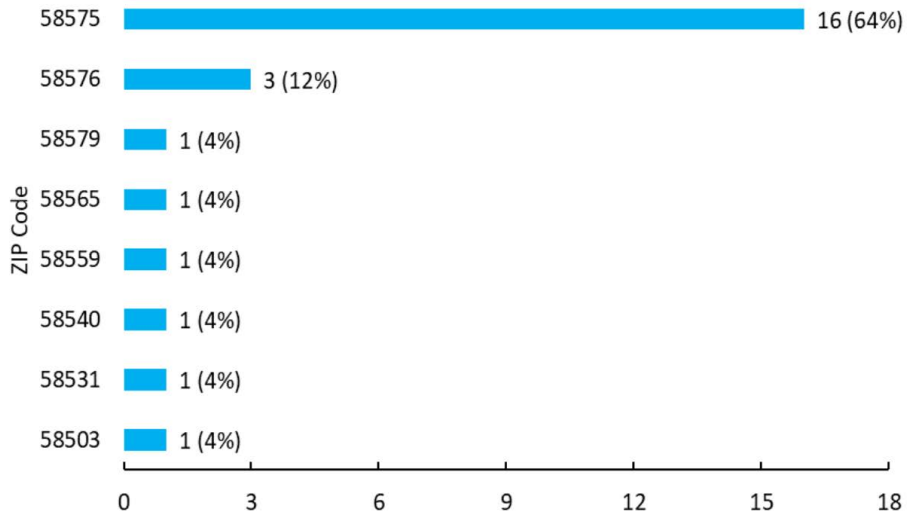
info@capnd.org 701-232-2452

https://www.capnd.org/

Survey Results

As noted previously, 36 community members completed the survey in communities throughout the counties in the CHI St. Alexius Health Turtle Lake service area. For all questions that contained an "Other" response, all of those direct responses may be found in Appendix G. In some cases, a summary of those comments is additionally included in the report narrative. The "Total respondents" number under each heading indicates the number of people who responded to that particular question and the "Total responses" number under the heading depicts the number of responses selected for that question (some questions allow for selection of more than one response).

Figure 5: Survey Respondents' Home ZIP Code
Total respondents: 25



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

Survey Demographics

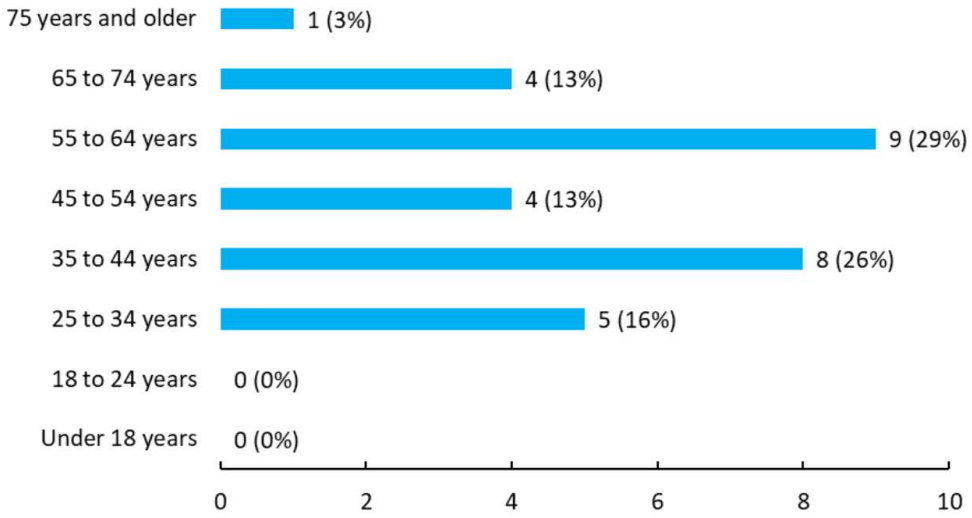
To better understand the perspectives being offered by survey respondents, survey-takers were asked a few demographic questions. Throughout this report, numbers (N) instead of just percentages (%) are reported because percentages can be misleading with smaller numbers. Survey respondents were not required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

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

- 45% (N=14) were age 55 or older.
- The majority (80%, N=30) were female.
- More than half of the respondents (68%, N=21) had an associate's degree or higher.
- The number of those working full time (74%, N=23) was just less than six times higher than those who were retired and part time (26%, N=8).
- 97% (N=30) of those who reported their ethnicity/race were White/Caucasian.
- 21% of the population (N=6) 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 = 31



For the CHNA, people younger than age 18 are not questioned using this survey method.

Figure 7: Gender Demographics of Survey Respondents
Total respondents = 30

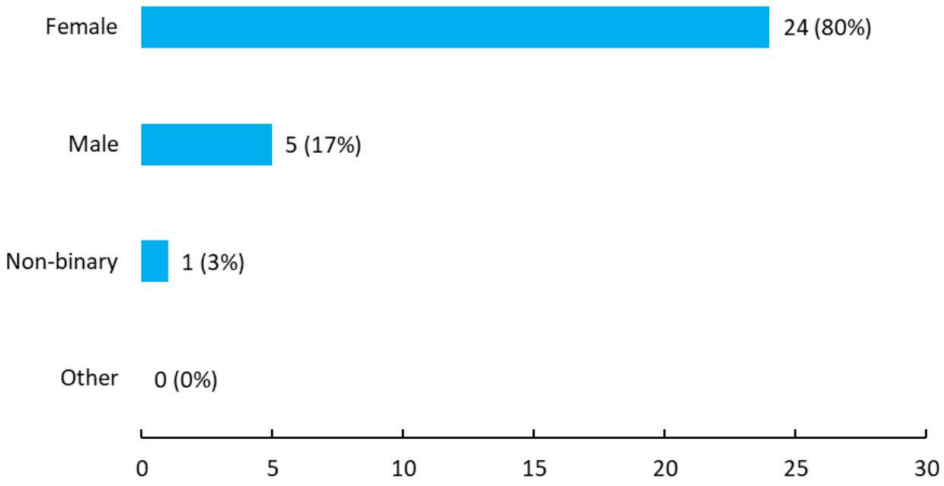


Figure 8: Educational Level Demographics of Survey Respondents
Total respondents = 31

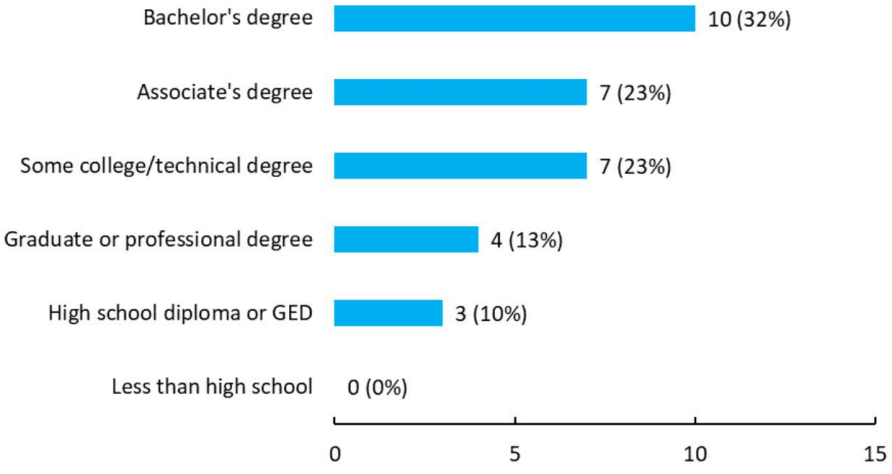
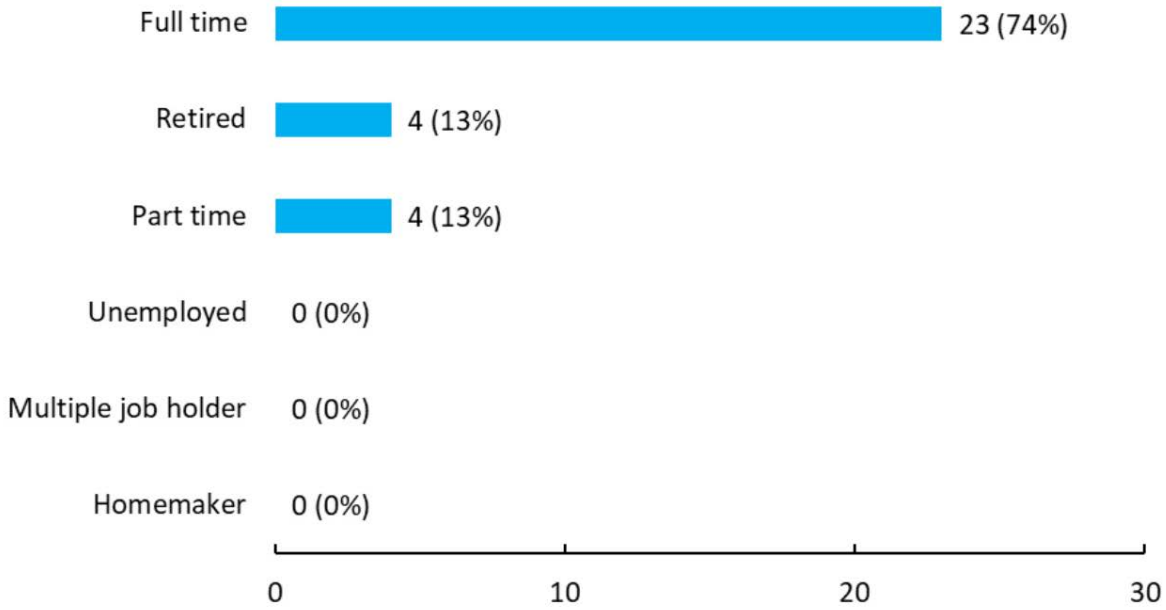
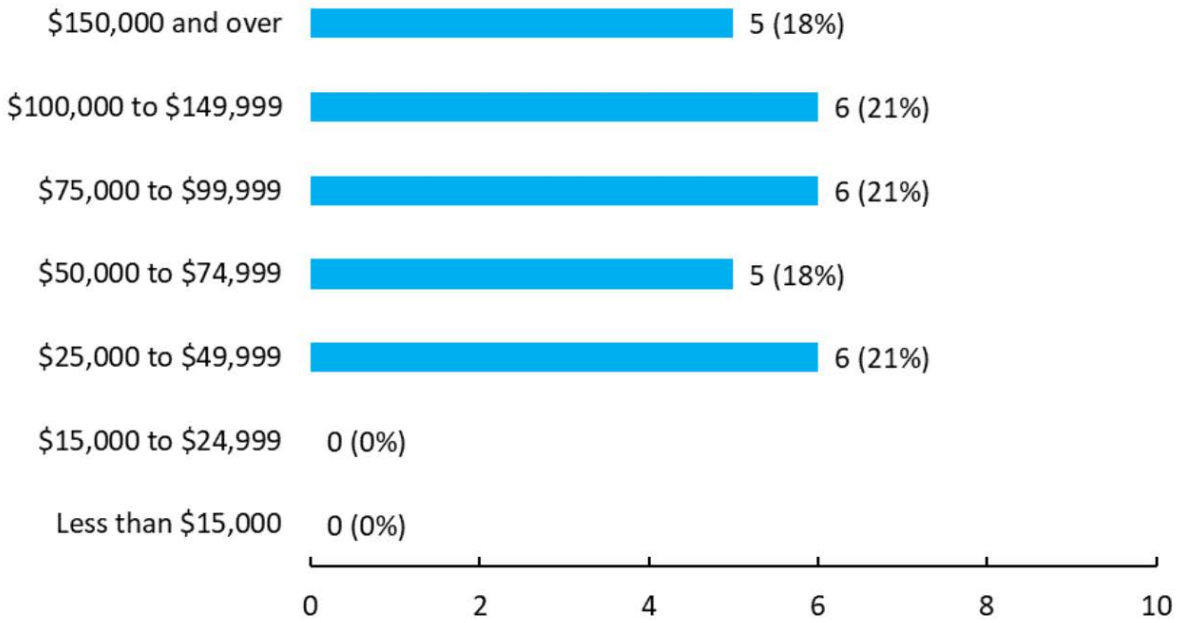


Figure 9: Employment Status Demographics of Survey Respondents
Total respondents = 31



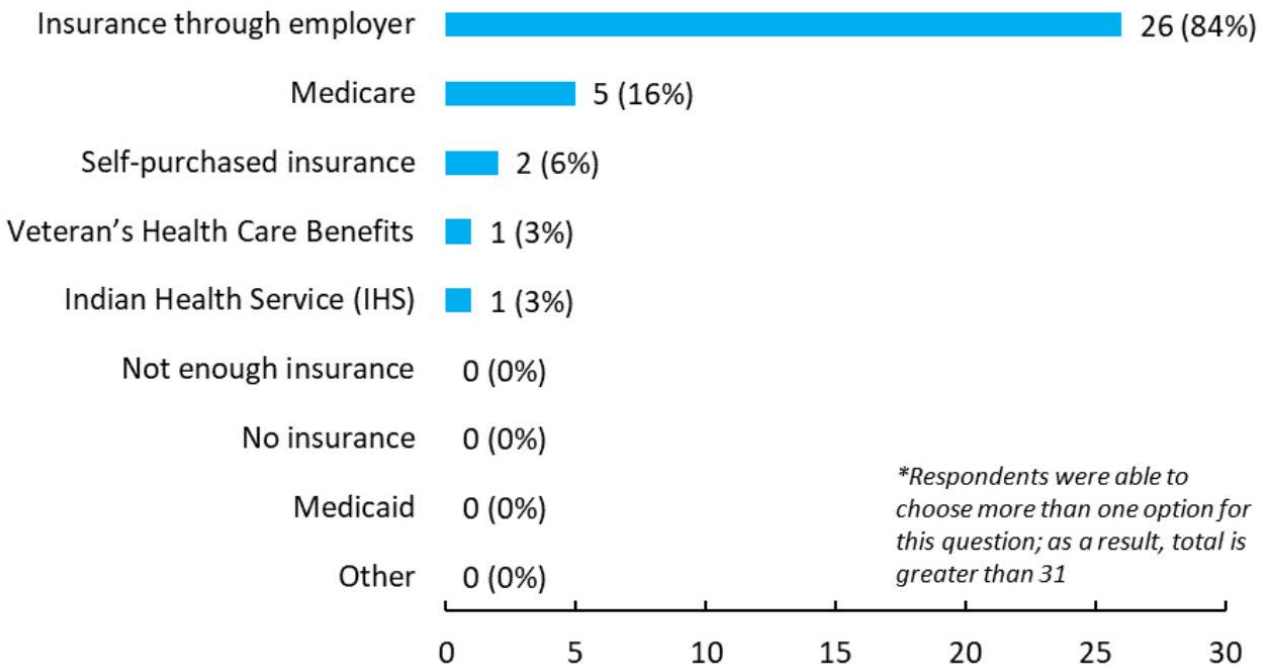
Of those who provided a household income, 21% (N=6) of community members reported a household income of $25,000-$49,999. Thirty-nine percent (N=11) indicated a household income of $100,000 or more. This information is shown in Figure 10.

Figure 10: Household Income Demographics of Survey Respondents
Total respondents = 28



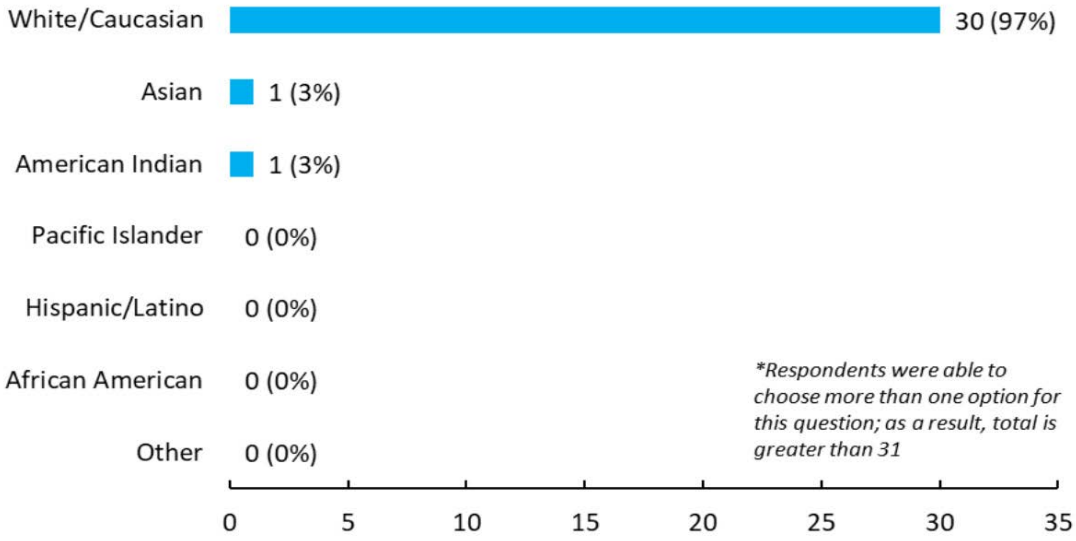
Community members were asked about their health insurance status, which is often associated with whether people have access to healthcare. All of the respondents reported having some kind of health insurance. The most common insurance types were insurance through one's employer (N=26), followed by Medicare (N=5) and self-purchased (N=2).

Figure 11: Health Insurance Coverage Status of Survey Respondents
Total respondents = 31*



As shown in Figure 12, nearly all of the respondents were White/Caucasian (97%). This was in line with the race/ethnicity of the overall population of the neighboring Sheridan County with a rate of 96% White/Caucasian.

Figure 12: Race/Ethnicity Demographics of Survey Respondents
Total respondents = 31*



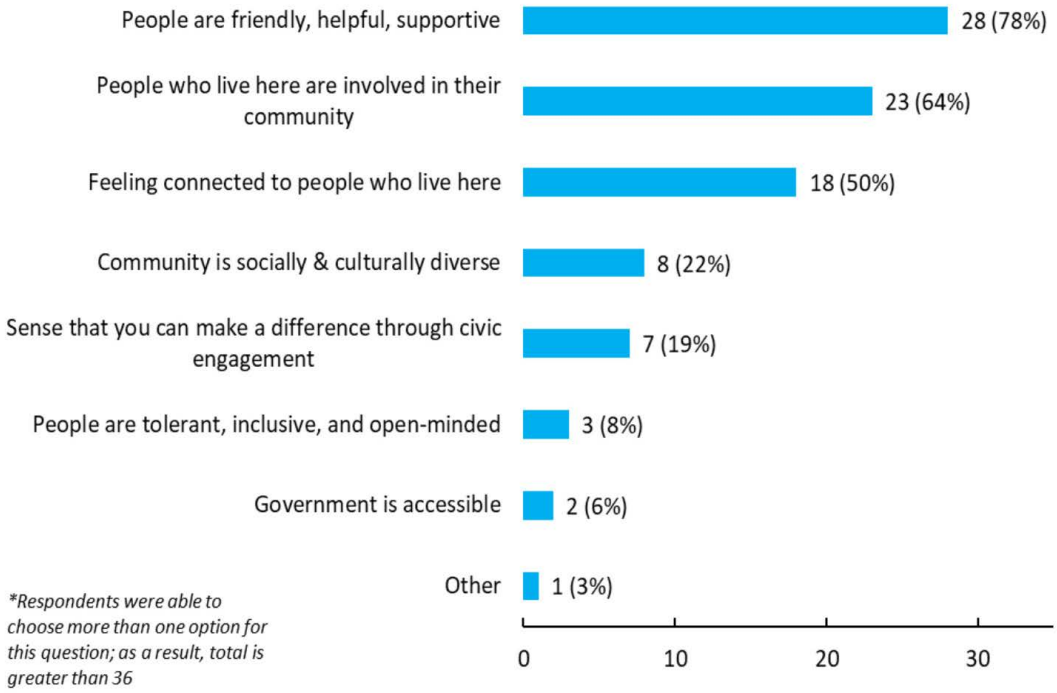
Community Assets and Challenges

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 23 respondents agreeing) that community assets include:

- Active faith community (N=31);
- Safe place to live, little/no crime (N=24);
- Family-friendly (N=29);
- People are friendly, helpful, supportive (N=28);
- Healthcare (N=28); and
- People who live here are involved in their community (N=23).

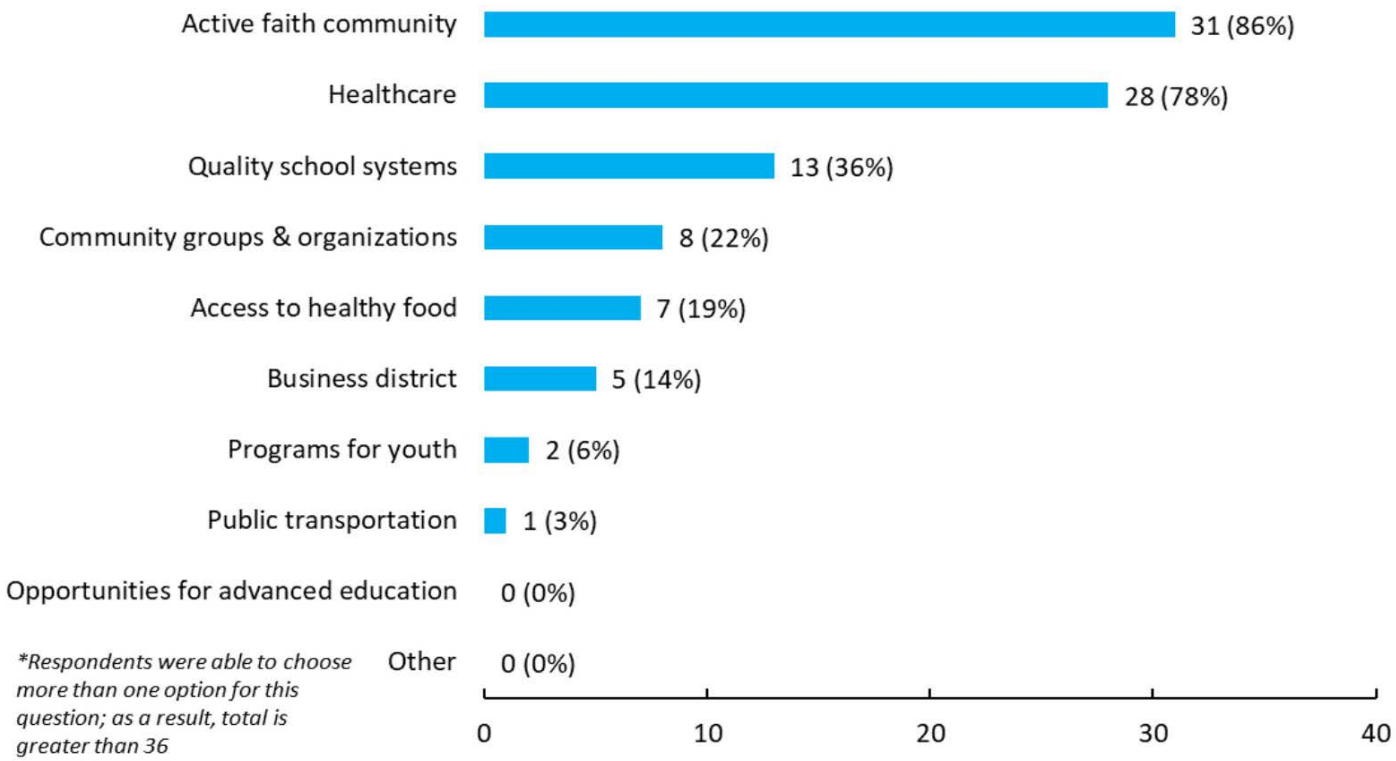
Figures 13 to 16 illustrate the results of these questions.

Figure 13: Best Things about the PEOPLE in Your Community
Total responses = 36*



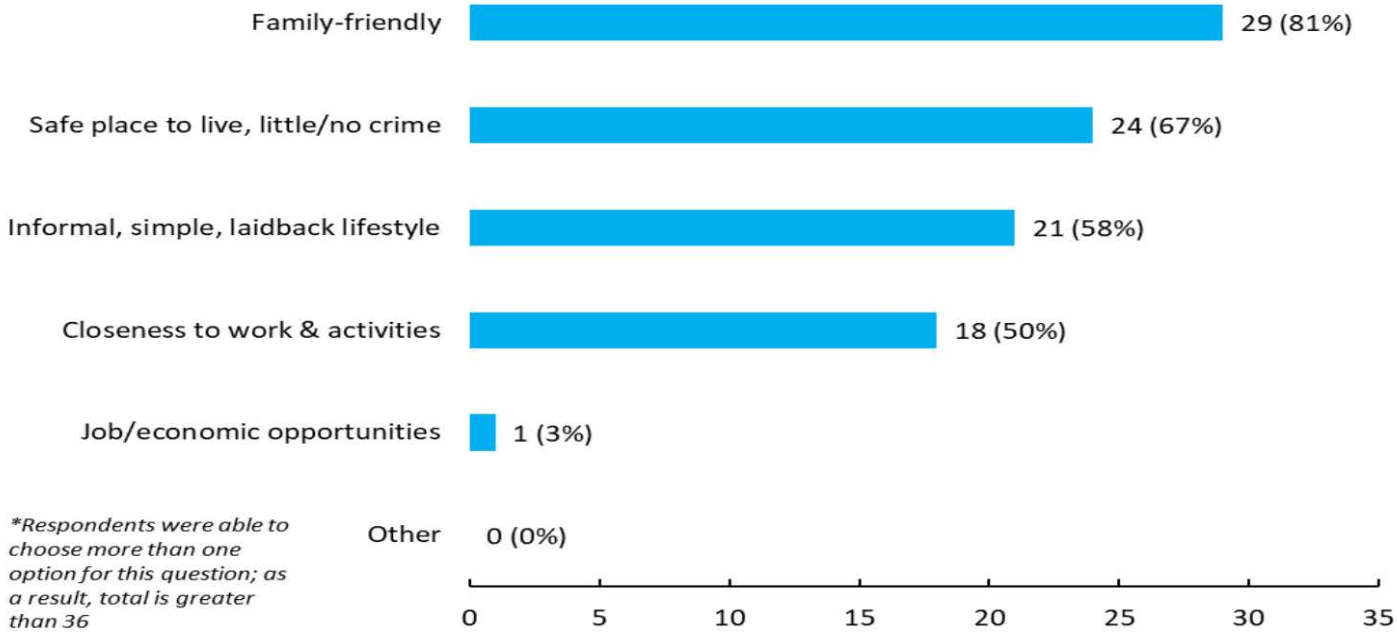
*Respondents were able to choose more than one option for this question; as a result, total is greater than 36

Figure 14: Best Things About the SERVICES AND RESOURCES in Your Community
Total responses = 36*



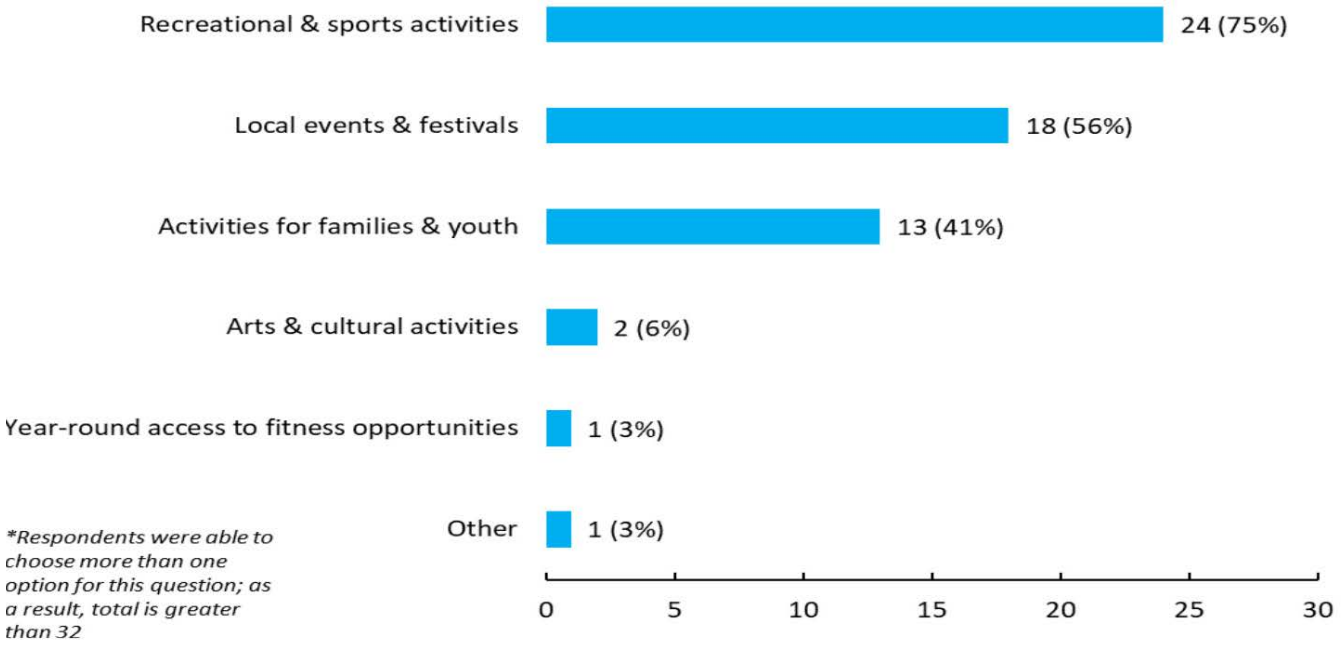
*Respondents were able to choose more than one option for this question; as a result, total is greater than 36

Figure 15: Best Things About the QUALITY OF LIFE in Your Community
Total responses = 36*



*Respondents were able to choose more than one option for this question; as a result, total is greater than 36

Figure 16: Best Thing About the ACTIVITIES in Your Community
Total responses = 32*



*Respondents were able to choose more than one option for this question; as a result, total is greater than 32

Community Concerns

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

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

With regard to responses about community challenges, the most highly voiced concerns (those having at least 15 respondents) were:

- Attracting and retaining young families (N=20);
- Alcohol use and abuse – Youth (N=20);
- Not enough jobs with livable wage (N=16);
- Bullying/cyber bullying – Youth (N=17);
- Assisted living options (N=17); and
- Drug use and abuse – Youth (N=15).

The other issues that had at least 13 votes included:

- Not enough activities for children & youth (N=14);
- Having enough child daycare services (N=13);
- Drug use & abuse – Adult (N=13);
- Alcohol use & abuse – Adult (N=13);
- Smoking & tobacco use (second-hand smoke, vaping) (N=13);
- Not enough places for exercise/wellness activities (N=13).

Figures 17 through 22 illustrate these results.

Figure 17: Community/Environmental Health Concerns
Total responses = 36*

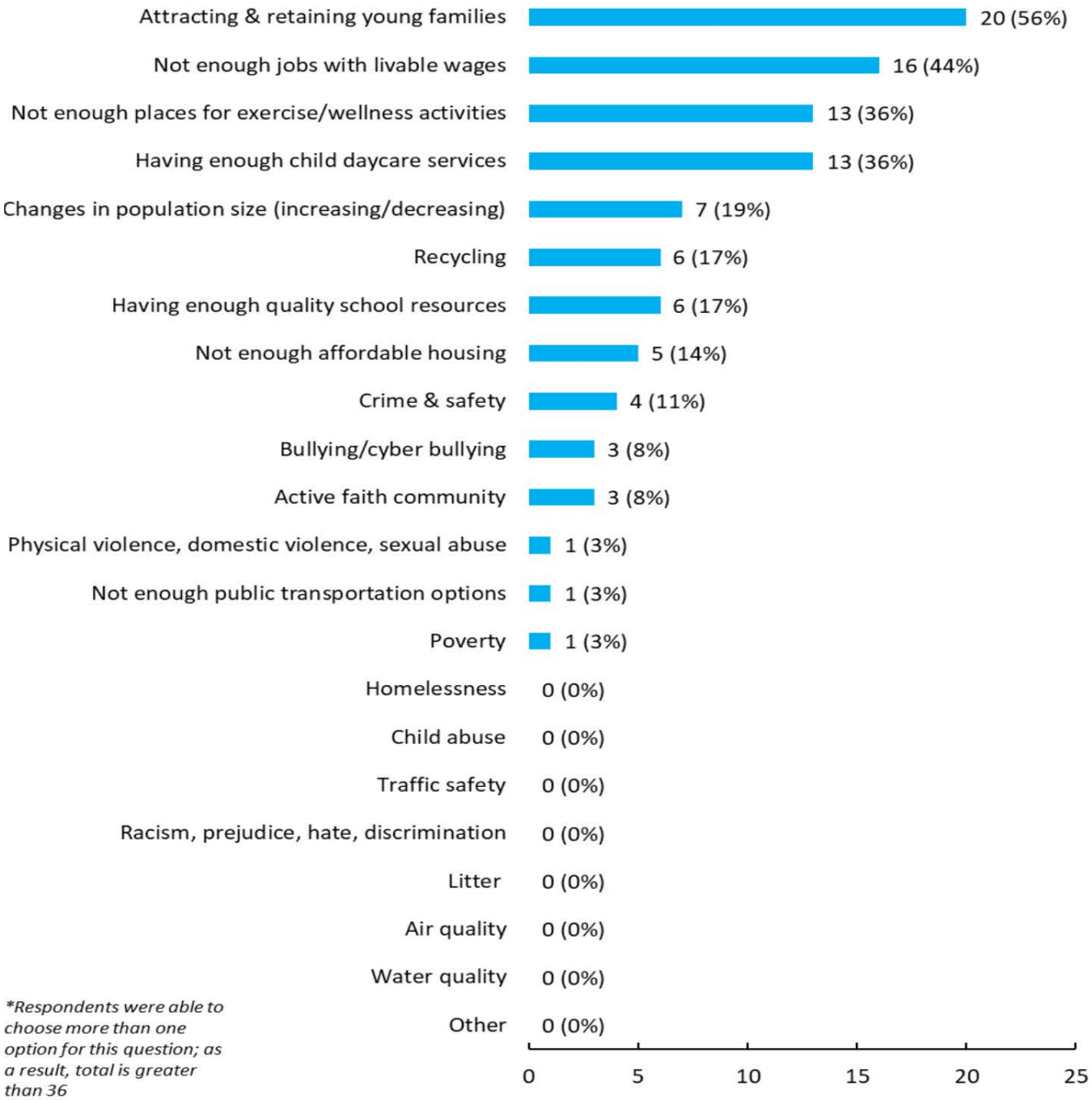
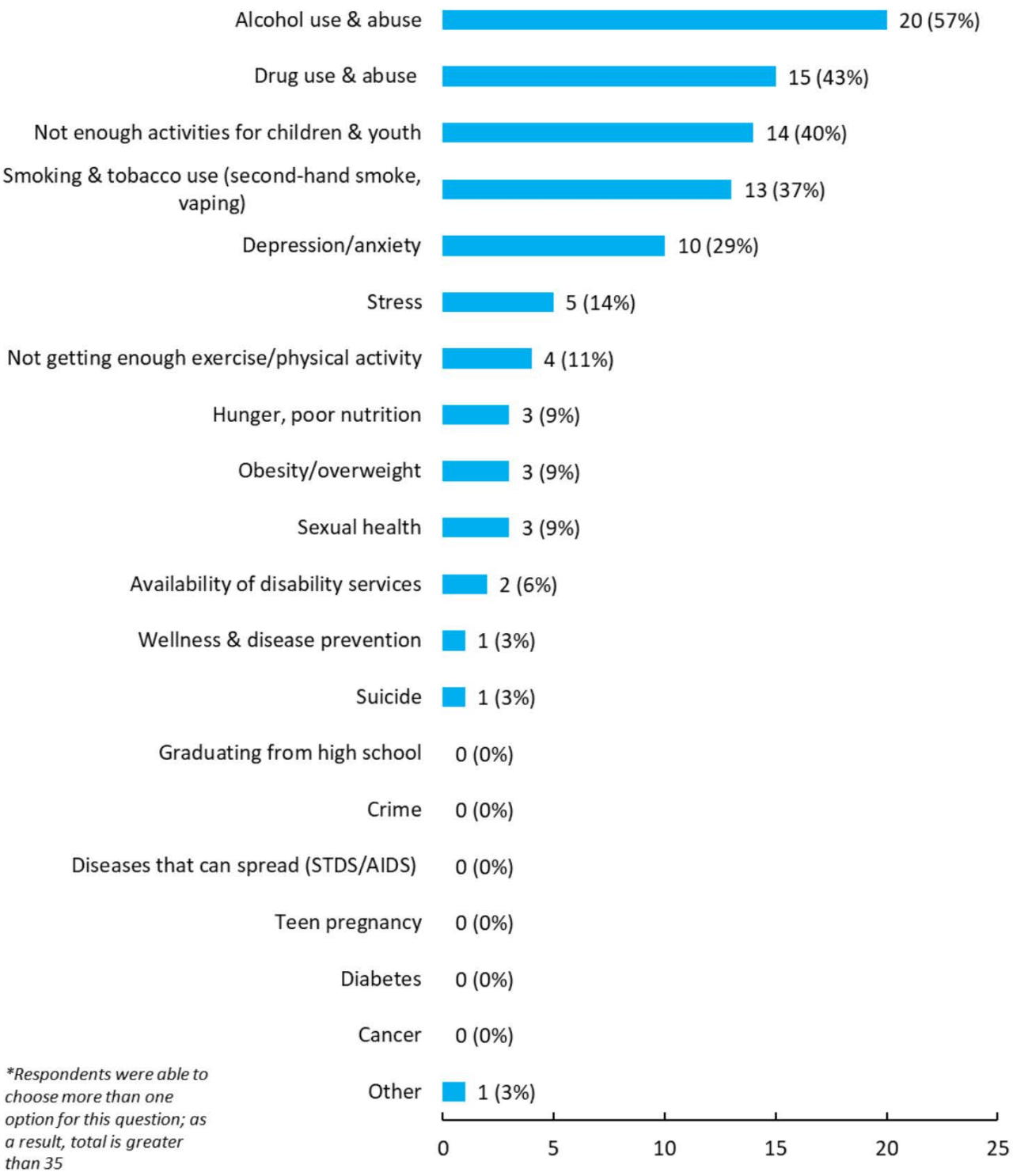


Figure 18: Availability/Delivery of Health Services Concerns
Total responses = 35*

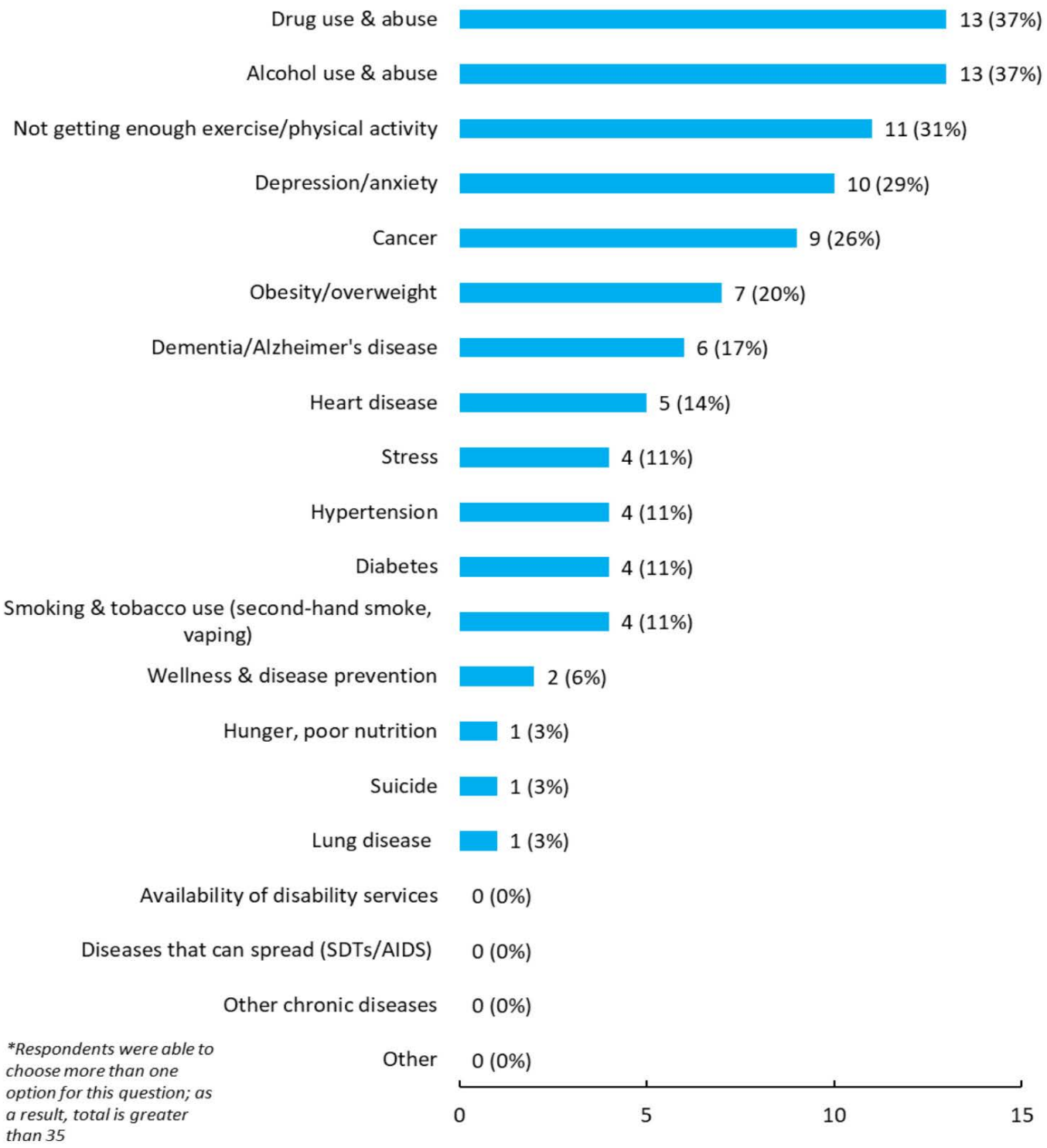
One respondent who selected "Other" stated they did not have any concerns because they believed they had all the services listed.

Figure 19: Youth Population Health Concerns
Total responses = 35*



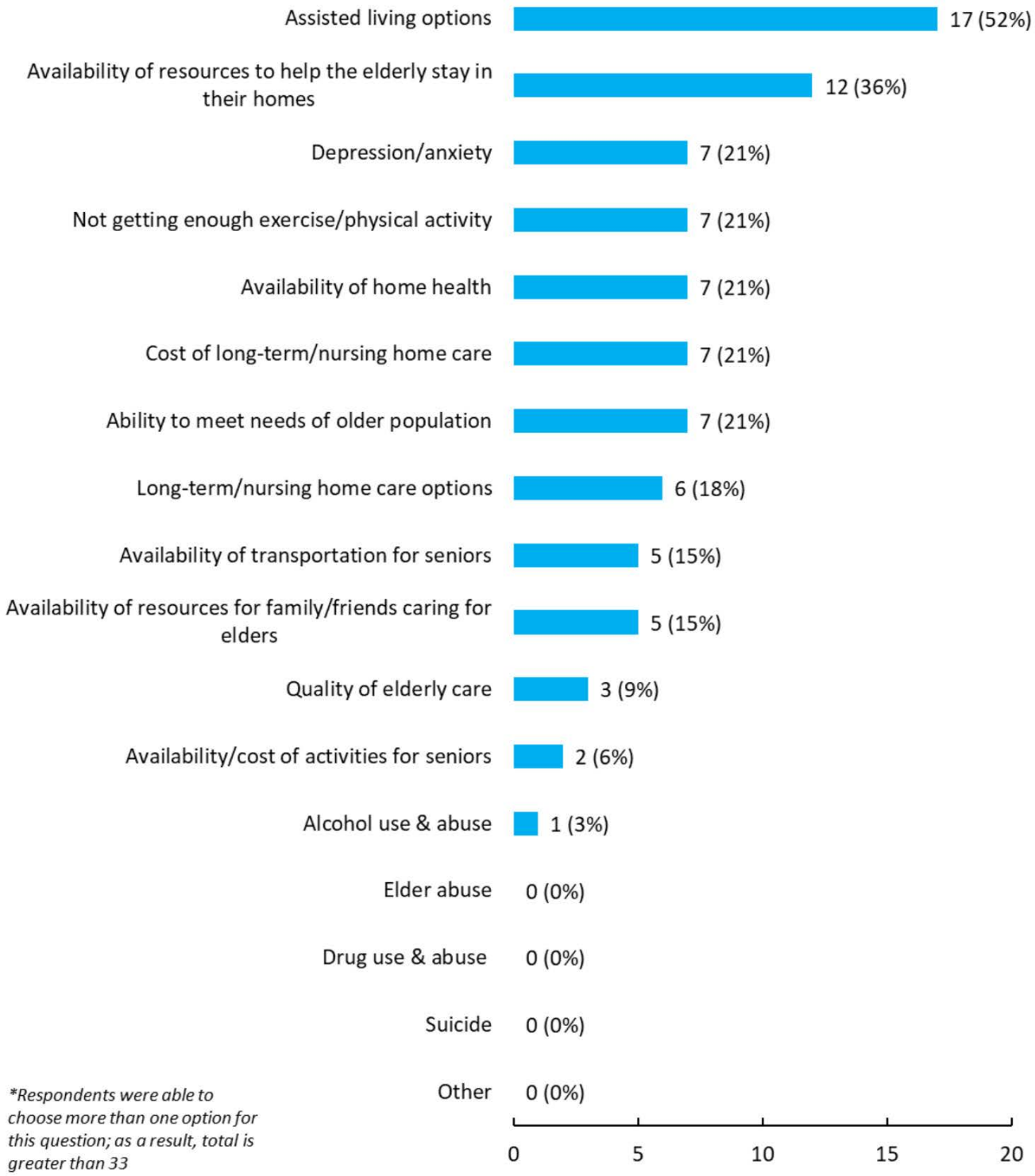
In the "Other" category for youth population concern, a respondent stated some children lacked parental guidance.

Figure 20: Adult Population Concerns
Total responses = 35*



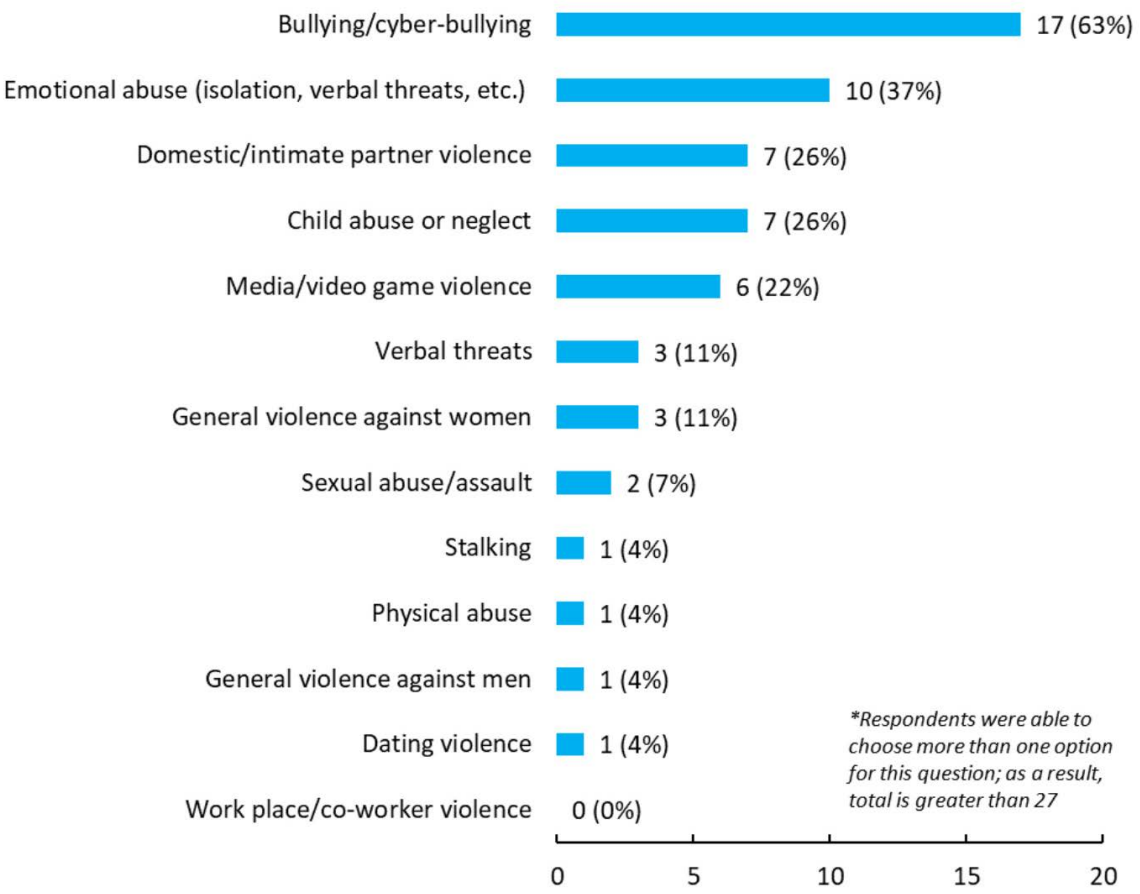
**Respondents were able to choose more than one option for this question; as a result, total is greater than 35*

Figure 21: Senior Population Concerns
Total responses = 33*



**Respondents were able to choose more than one option for this question; as a result, total is greater than 33*

Figure 22: Violence Concerns
Total responses = 27*



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. Attracting and retaining young families
2. Drug/alcohol/substance abuse

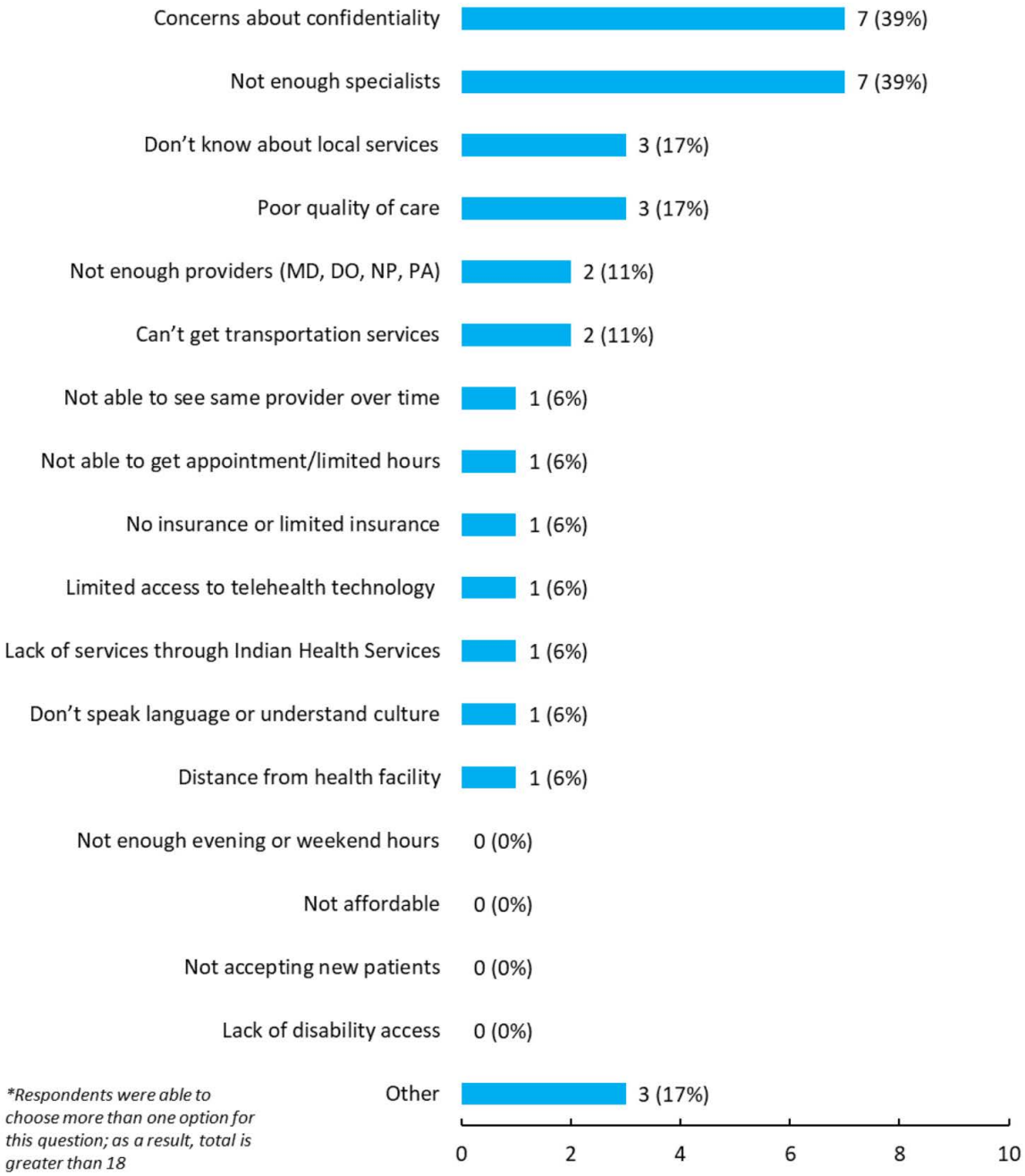
Other biggest challenges that were identified were businesses that were closing in the community, lack of activities for the family, and more opportunities for physical activities.

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 a tie between concerns about confidentiality (N=7) and not enough specialists (N=7). The next identified barriers were don't know about local services (N=3) and poor quality of care (N=3). The three concerns indicated in the "Other" category was CHI, N/A, and none.

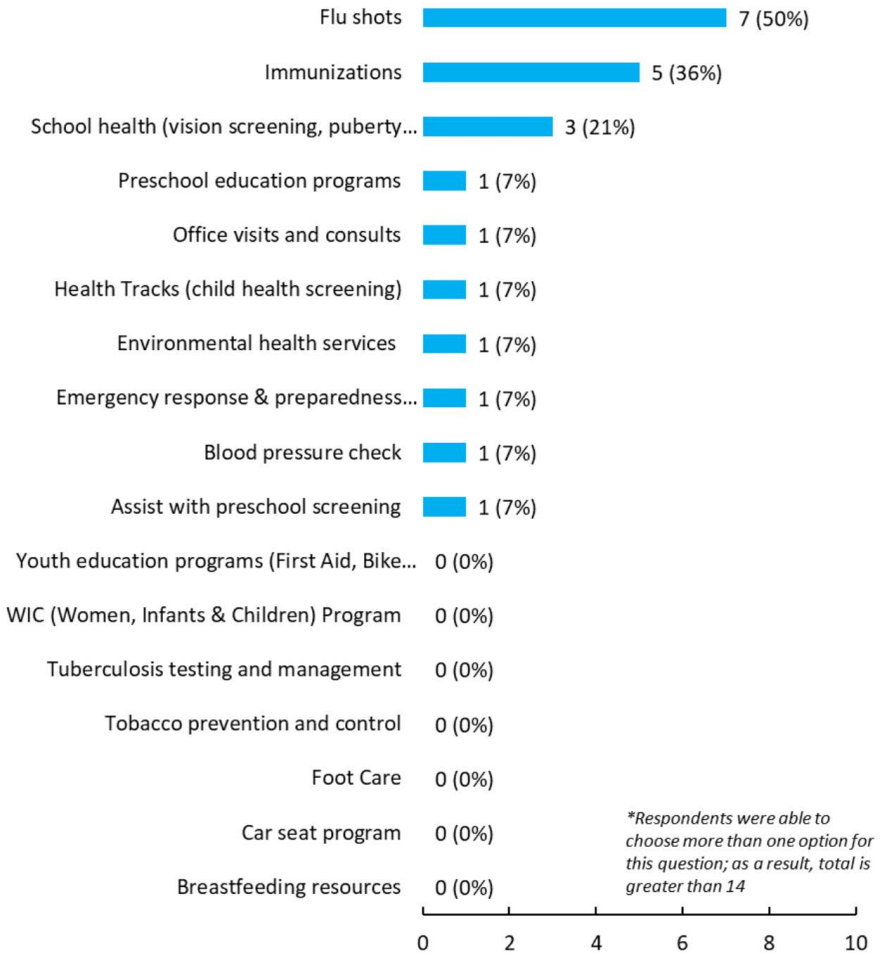
Figure 23 illustrates these results.

Figure 23: Perceptions About Barriers to Care
Total responses = 18*



Considering a variety of healthcare services offered by First District Health Unit (FDHU), respondents were asked to indicate if they were aware that the healthcare service is offered though FDHU and to also indicate what, if any, services they or a family member have used at FDHU, at another public health unit, or both (See Figure 24).

Figure 24: Awareness and Utilization of Public Health Services
Total responses = 14*



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:

- Annual check up
- Cardiac rehab
- Fitness programs
- Palliative care

While not a service, a respondent indicated that they would like physicians added. This was in line with what participants from the focus group stated.

The key informant and focus group members felt that the community members were aware of the majority of the health system and public health services. There were a number of services where they felt the hospital should increase marketing efforts, these included adult daycare, blood draws, prenatal visits up to 32 weeks, and physical therapy.

Figure 25: Awareness of Turtle Lake Clinic
Total responses = 33

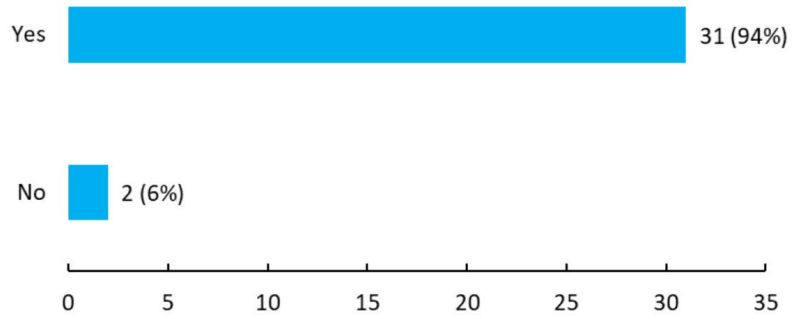
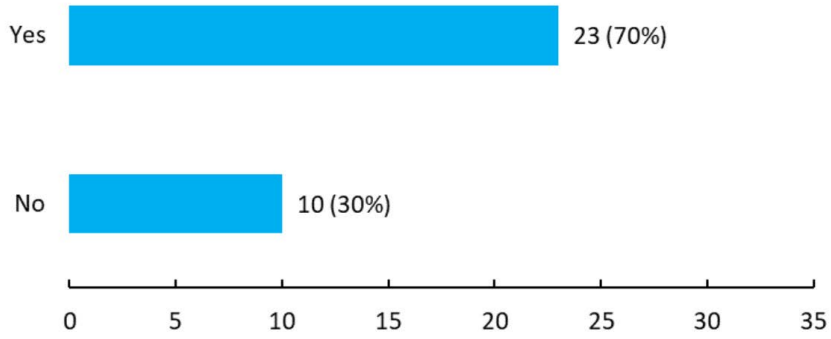


Figure 26: Use of Turtle Lake Clinic
Total responses = 33



According to the survey, most respondents are aware and use the Turtle Lake Clinic. and are satisfied with it.

Figure 27: Satisfaction with the Turtle Lake Clinic
Total responses = 23

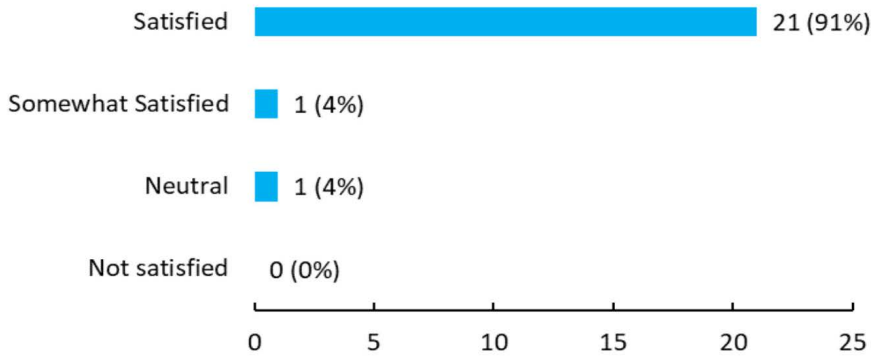
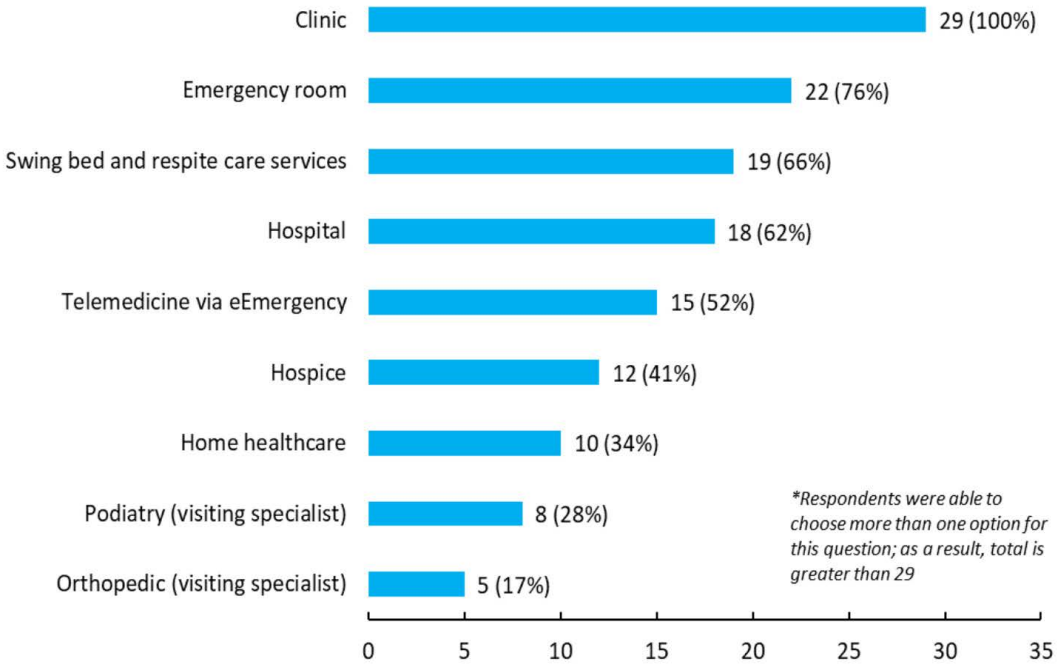


Figure 28: Use/Awareness of General and Acute Services
Total responses = 29*



All or majority of respondents are aware of the Turtle Lake Clinic, emergency room services, and the swing bed and respite care services. Lesser known services are home healthcare, podiatry (visiting specialist), and orthopedic (visiting specialist). Similarly, most respondents know about laboratory services and physical therapy, while some were not aware of speech and occupational therapy.

Figure 29: Use/Awareness of Screening and Therapy Services
Total responses = 28*

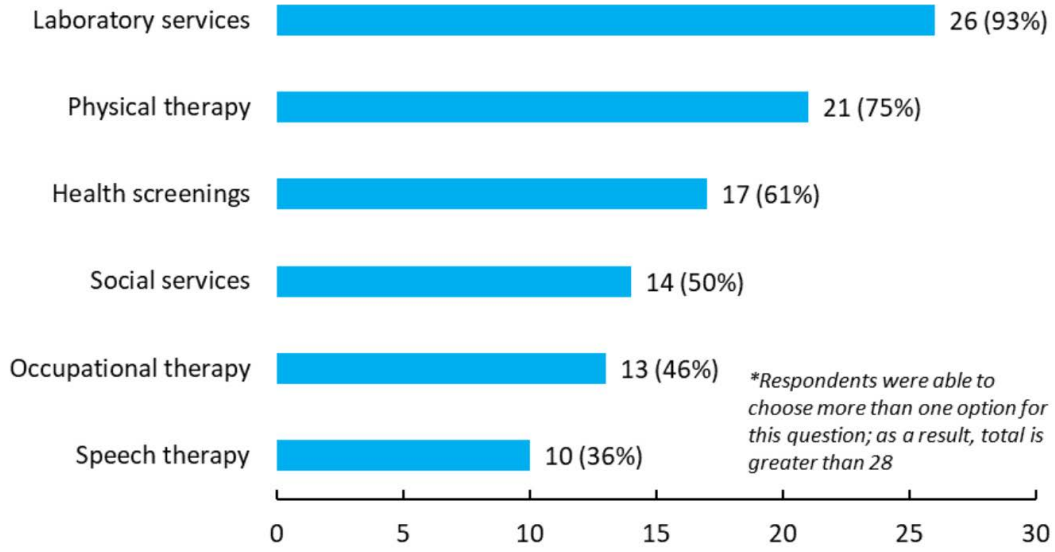
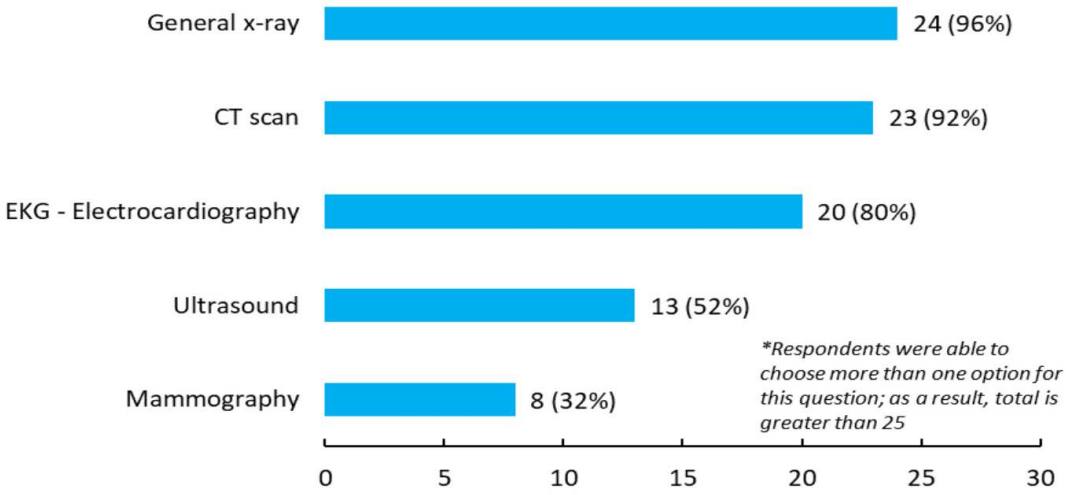
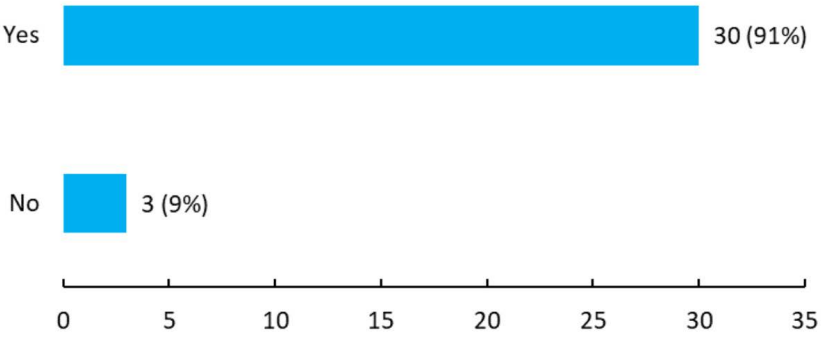


Figure 30: Use/Awareness of Radiology Services
Total responses = 25*



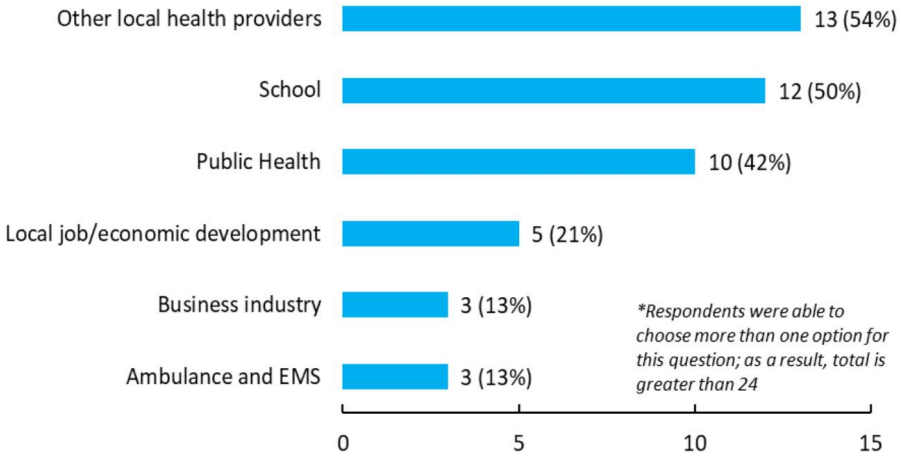
Respondents also are aware of Washburn Rural Health Clinic, with only 9% not aware.

Figure 31: Awareness of Washburn Rural Health Clinic
Total responses = 33



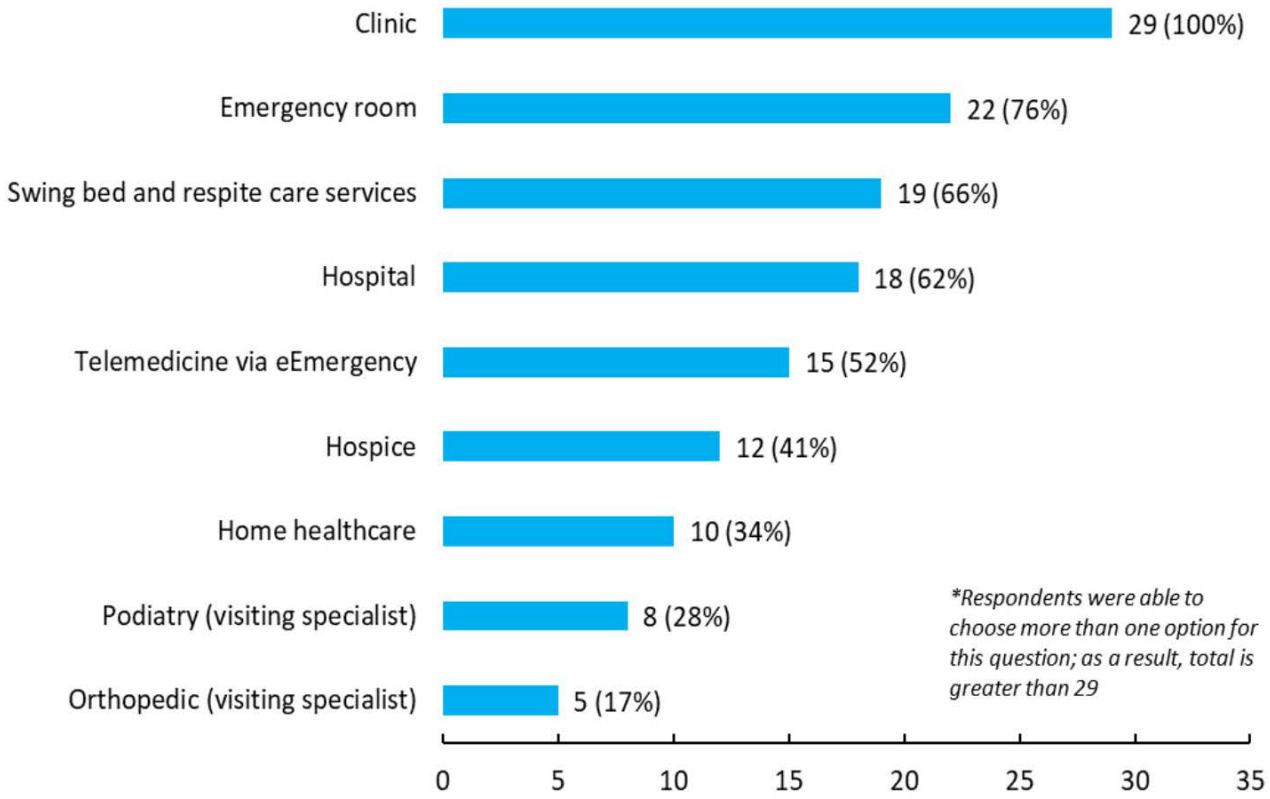
When asked who CHI St. Alexius Health Turtle Lake should work with to improve collaboration, over half of the respondents would like to see them work better with other local health providers. A close second and third were school and public health.

Figure 32: Local Entities for CHI St. Alexius Health Turtle Lake to Improve Collaboration With
Total responses = 24*



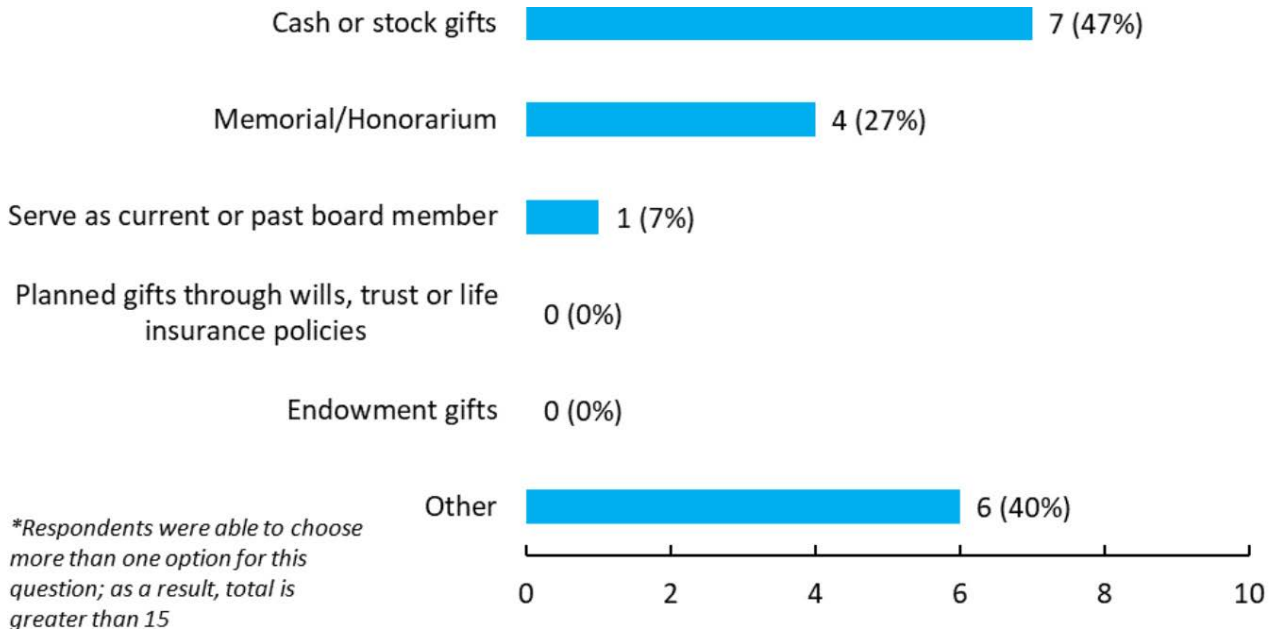
Respondents were asked if they were aware of the Turtle Lake Hospital Association, and 91% said they are aware.

Figure 28: Awareness of Turtle Lake Hospital Association
Total responses = 32



In an effort to gauge ways that community members would be most likely to support the Turtle Lake Hospital Association, a question was included asking them to select ways they are most likely to support CHI St. Alexius Health Turtle Lake Hospital Association (see Figure 34). Recommendations in the "Other" category included fundraisers, volunteer, and auxiliary membership.

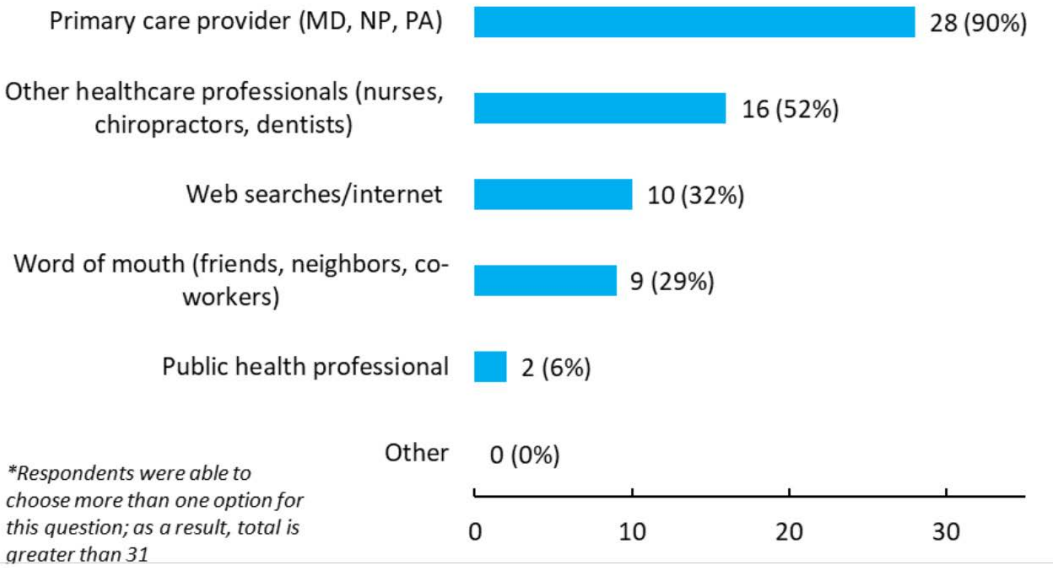
Figure 34: Forms of Support for the Turtle Lake Hospital Association
Total responses = 15*



Respondents were asked where they go for trusted health information. Primary care providers (N=28) received the highest response rate, followed by other healthcare professionals (N=16), and then web/internet searches (N=10).

Results are shown in Figure 35.

Figure 35: Sources of Trusted Health Information
Total responses = 31*



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 the concern of wellness. The community members stated they would like free wellness clinics, add wellness specials to attract residents to utilize local services, and an area to promote exercise or just socialization for the elderly. To ensure the health and wellness of a community, adding wellness-related services may draw new people into the community and help the whole community by providing an increase in health and wellness in Turtle Lake and the surrounding towns.

An additional suggestion for CHI St. Alexius Health Turtle Lake was to increase advertising to promote local services such as informing the community that tests ordered by other providers outside of the Turtle Lake Hospital can be done in Turtle Lake and sent to their out-of-town provider. There needs to be continued promotion of the clinic and hospital in order to keep it financially stable. The community takes local healthcare for granted and if the community does not support and utilize healthcare, they risk losing it.

Also mentioned as a concern was retaining hospital and clinic employees and having a better system when answering phone calls at the hospital. As previously stated, the respondents are worried about businesses closing and the community shrinking. Being able to retain employees is becoming harder as the community cannot compete with larger cities that offer more for young families.

Findings from Key Informant Interviews & the Community Meeting

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

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

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

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

- This concern was mentioned in the focus group, as well as, from the survey respondents

Alcohol use and abuse

- Top concern is addressing alcohol abuse in both adults and youth
- Major concern in the youth population
- Seems to be an increase in alcohol and drug use

Attracting and retaining young families

- This was the most important concern identified.
- Businesses are closing and families are leaving to larger cities where there are more employment options and places for childcare

Depression/anxiety

- Depression and anxiety lead to stress and suicide
- Top concern is addressing depression/anxiety
- Recurrent issue for people
- Combined with stress, some is about lifestyle
- Goes along with suicide, which has been very prevalent recently
- Not enough resources locally

Key informants and focus group participants were asked to weigh in on community engagement and collaboration of various organizations and stakeholders in the community. Specifically, participants were asked, "On a scale of 1 to 5, with 1 being no collaboration/community engagement and 5 being excellent collaboration/community engagement, how would you rate the collaboration/engagement in the community among these various organizations?" This was not intended to rank services provided. They were presented with a list of 14 organizations or community segments to score. According to these participants, the hospital, pharmacy, public health, and other long-term care (including nursing homes/assisted living) are the most engaged in the community. The averages of these scores (with 5 being "excellent" engagement or collaboration) were:

- Emergency services, including ambulance and fire (4.5)
- Faith-based (4.25)
- Hospital (healthcare system) (4.25)
- Schools (4.25)
- Pharmacy (4.0)
- Business and industry (3.75)
- Law enforcement (3.75)
- Long-term care, including nursing homes and assisted living (3.5)
- Economic development organizations (3.25)
- Other local health providers, such as dentists and chiropractors (3.0)
- Clinics not affiliated with the main health system (2.75)
- Social/human services agencies (2.75)
- Public health (2.5)
- Indian/tribal health service (1.75)

Priority of Health Needs

A community group met on September 1, 2021. Twelve community members attended the meeting. Representatives from CRH presented the group with a summary of this report's findings, including background and explanation about the secondary data, highlights from the survey results (including perceived community assets and concerns, and barriers to care), and findings from the key informant interviews.

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

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

- Attracting and retaining young families (9 votes)
- Availability of resources to help elderly stay in their homes (9 votes)
- Having enough child daycare services (7 votes)
- Not enough places for exercise/wellness activities (3 votes)

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

1. Attracting and retaining young families (8 votes)
2. Availability of resources to help elderly stay in their homes (4 votes)
3. Having enough child daycare services (0 votes)
4. Not enough places for exercise/wellness activities (0 votes)

Following the prioritization process during the second meeting of the community group and key informants, the number one identified need was attracting & retaining young families. A summary of this prioritization may be found in Appendix F.

Comparison of Needs Identified Previously

Top Needs Identified 2019 CHNA Process	Top Needs Identified 2021 CHNA Process
Ability to retain primary care providers (MD, DO, NP, PA) and nurses	Attracting and retaining young families
Availability of resources to help the elderly stay in their homes	Availability of resources to help the elderly stay in their homes
Not having jobs with livable wages	Having enough child daycare services
Not having enough places for exercise/ wellness activities	Not enough places for exercise/wellness activities

The current process did identify similar needs from 2019. The two needs that were the same are not enough places for exercise/wellness activities and availability of resources to help the elderly stay in their homes. A need identified in 2019 was not having jobs with livable wages. The current process now identifies daycare service shortage, which plays a role in jobs with livable wages and attracting and retaining young families.

CHI St. Alexius Health Turtle Lake 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 CHI St. Alexius Health Turtle Lake Board vote, a notation will be documented in the board minutes reflecting the approval and then the report will be widely available to the public on the hospital's website and a paper copy will be available for inspection upon request at the hospital. Written comments on this report can be submitted to CHI St. Alexius Health Turtle Lake CEO at 220 5th Avenue West, Turtle Lake, North Dakota 58575.

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:

Need 1: Ability to retain primary care providers and nurses – CHI St Alexius Health Turtle Lake met with the Turtle Lake Community Association (TLCHA) in regards to this matter. The TLCHA maintains the hospital building and grounds so it is important to them to have long lasting providers within the community. The TLCHA matched SLRP funds which is a student loan repayment program. In order to qualify for this, the advanced practitioners needed a community match. This assures commitment on the provider's part to remain in the community.

Need 2: Ability to keep elderly population in their homes – They do have the capability to do telehealth visits in their home due to the pandemic. Health at Home came to the medical staff meeting to inform medical providers of the services they provide to keep patients in their homes. With the opening of the RHC clinic in the Turtle Lake Hospital they are beginning to consider implementing chronic care management (CCM) through their RHC.

Need 3: Jobs with livable wages – CHI St. Alexius Health Turtle Lake recently did a marketing wage adjustment for nonprofessional positions. They are currently in the process of reviewing other positions, as well.

Need 4: Not enough places for exercise/wellness activities – CHI St. Alexius Health Turtle Lake has offered "fitness" challenges with incentives for community members. These challenges are usually offered once or twice a year. With COVID-19, they were unable to do so in 2020. CHI St. Alexius Health Turtle Lake did offer a fitness challenge for their employees that went over very well. There was a total of 20 participants. CHI St. Alexius Health Turtle Lake has also participated in a variety of health fairs. In 2019, a PA attended a health fair for 7-12 grade students in McLean County. During this health fair, she demonstrated how to give stitches which was a hands-on demonstration.

The above implementation plan for CHI St. Alexius Health Turtle Lake is posted on the CHI St. The above implementation plan for CHI St. Alexius Health Turtle Lake Hospital is posted on the CHI St. Alexius Health's website at https://www.chistalexiushealth.org/about-us/community-health-assessments.

Next Steps – Strategic Implementation Plan

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

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

Community Benefit Report

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

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

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

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

What Are Community Benefits?

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

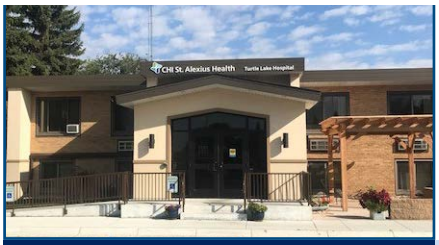
A community benefit must respond to an identified community need and meet at least one of the following criteria:

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

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

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

Appendix A – Critical Access Hospital Profile



Critical Access Hospital Profile
Spotlight on: Turtle Lake, North Dakota
CHI St. Alexius Health - Turtle Lake

Quick Facts

Administrator:
Tod Graeber, CEO

Chief of Medical Staff:
Dr. Jon Dornacher

Board Chair: John Giese

City Population:
554 (2019 Estimate) [1]

County Population:
9,450 (2019 Estimate) [1]

County Median Household Income: $68,529 (2019 Estimate) [1]

County Median Age:
46.0 years (2019 Estimate) [1]

Service Area Population:
50 mile radius

Owned by: Nonprofit Catholic Health Initiatives (CHI)

Hospital Beds: 25

Trauma Level: V

Critical Access Hospital Designation: 2000

Economic Impact on the County [2]

Employment:
Primary – 52
Secondary – 18
Total – 70

Financial Impact:
Primary – $3.55 million
Secondary – $719,000
Total – $4.27 million

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

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

County: McLean
Address: 220 5th Avenue, Box 280
Turtle Lake, ND 58575-0280
Phone: 701.448.2331
Fax: 701.448.2441
Web: www.chistalexiushealth.org/turtle-lake

CHI St. Alexius Health Turtle Lake is a 25 bed hospital and swing bed facility located in Turtle Lake, North Dakota. The hospital is equipped with emergency room, physical therapy capabilities, lab, radiology, CT, home care and hospice, and adult day care.

Located in this beautiful, quiet, rural community of ours, we offer safe, worry-free living in a supportive, Christian atmosphere. CHI is proud to offer this important resource as an alternative to nursing homes. This is our hospital with alternative living in our hometown and we would like to see our community and the area communities use it. We give lots of love and excellent care!

Services:
CHI St. Alexius Health Turtle Lake provides the following services directly:

- Emergency Room (Trauma V Certified)
- Acute Care
- Physical Therapy
- Dietary Consultations
- Lab
- Digital Radiology
- Home Care and Hospice
- Adult Day Care
- Swing Bed – Long Term Care
- Respite Care
- Ultrasounds
- Bone Densities
- CT Scans
- Nuclear Medicine
- Avera eEmergency Site

CHI St. Alexius Health Turtle Lake provides the following services through contract or agreement:

Mammography services are offered through the Garrison Hospital or through Trinity Mobile Unit from Minot, ND.

Staffing

Physicians: 1
Nurse Practitioners: 3
RNs: 10
LPNs: 2
Ancillary Personnel: 7
Total Employees: 80

Local Sponsors and Grant Funding Sources

- Center for Rural Health
  - SHIP Grant (Small Hospital Improvement Program)
  - Flex Grant (Medicare Rural Hospital Flexibility Grant Program)

Sources

[1] US Census Bureau; American Factfinder; Community Facts

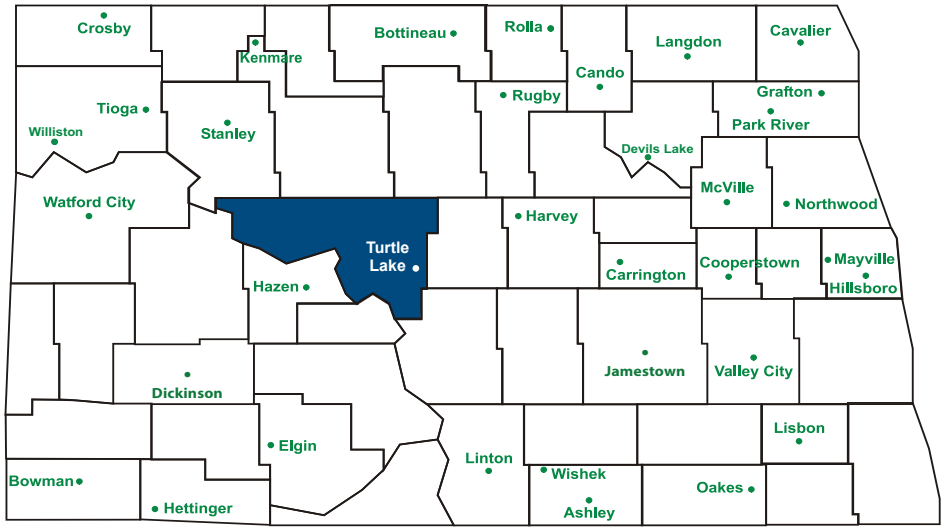
[2] Economic Impact 2020 Center for Rural Health Oklahoma State University and Center for Rural Health University of North Dakota

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 and the State Office of Rural Health 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

North Dakota Critical Access Hospitals



History:

Community Memorial Hospital was established through the efforts of the Turtle Lake Hospital Association in 1947. The actual construction was completed in 1952, with additions built in 1963 and 1969.

The original mission of the association is the same today, that is, a commitment to excellence of services in a person-centered environment that reflects regard and respect for the total good of the patient and all human life.

In January of 1987, Community Memorial became affiliated with St. Alexius Medical Center in Bismarck. St. Alexius provides medical equipment, physical therapists, as well as management and administrative services.

In 1990, St. Alexius Medical Center signed a lease agreement for the operation of the hospital. The hospital association remains responsible for the upkeep of the building. This is done through fundraising activities.

In 2000 Community Memorial Hospital became a Critical Access Hospital. The 25 bed medical facility has become a vital asset to the communities it serves, with patient admissions having increased significantly in recent years. In October 2014, St. Alexius and Community Memorial Hospital merged with Catholic Health Initiatives.

The reason for these substantial increases is a strong community support. The local people want a professional medical facility close to home. In order for a rural hospital to survive, it has to be wanted, and it has to be supported by the community. The people of the Lake Region saw this need and this is why Community Memorial is alive today.

Recreation:

The Turtle Lake area is the heart of North Dakota's best hunting and fishing. Geese, ducks, pheasants, grouse, deer, walleye, bass, trout, perch, rare bird watching and thousands of wild flowers within two miles. There is an abundance of public land in the area. Turtle Lake is a friendly and wholesome place to raise a family. Top notch school system that includes excellence in academics and sports. Come enjoy the truly good things in life, move to Turtle Lake, ND.

Appendix B – Economic Impact Analysis

December 2020

CHI St. Alexius Health Turtle Lake

CHI St. Alexius Health
Imagine better health.®

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

Turtle Lake Hospital

Economic Impact

CHI St. Alexius Health Turtle Lake is composed of a Critical Access Hospital (CAH), a Rural Health Clinic in Turtle Lake, and a clinic in Washburn, North Dakota.

CHI St. Alexius Health Turtle Lake **directly** employs **52 FTE employees** with an annual payroll of over **$3.55 million** (including benefits).

- After application of the employment multiplier of 1.34, these employees created an additional **18** jobs.
- The same methodology is applied to derive the income impact. The income multiplier of 1.20 is applied to create over **$719,000** in income as they interact with other sectors of the local economy.
- **Total impacts = 70 jobs and more than $4.27 million in income**.

Healthcare and Your Local Economy

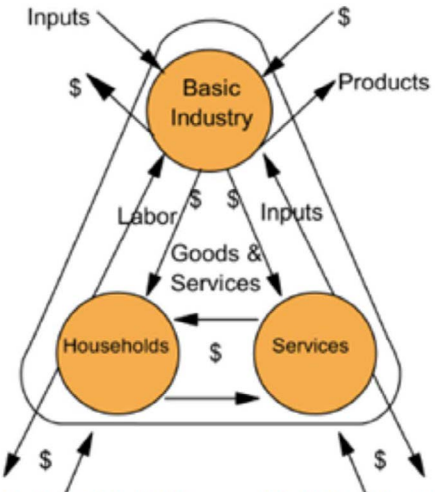
The health sector in a rural community, anchored by a CAH, is responsible for a number of full- and part-time jobs and the resulting wages, salaries, and benefits. Research findings from the National Center for Rural Health Works indicate that rural hospitals typically are one of the top employers in 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.

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

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

CENTER FOR RURAL HEALTH
OSU Center for Health Sciences

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

Appendix C – CHNA Survey Instrument

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

CHI St. Alexius Health
Imagine better health.®

Turtle Lake Hospital

Turtle Lake Area Health Survey

CHI St. Alexius Health – Turtle Lake is interested in hearing from you about community health concerns.

The focus of this effort is to:

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

If you prefer, you may take the survey online at http://tinyurl.com/TLCHNA21 or by scanning on the QR Code at the right.

Surveys will be tabulated by the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences. Your responses are anonymous, and you may skip any question you do not want to answer. Your answers will be combined with other responses and reported only in total. If you have questions about the survey, you may contact Kylie Nissen at 701.777.5380.

Surveys will be accepted through July 15, 2021. Your opinion matters – thank you in advance!

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- ☐ Bullying/cyber-bullying
- ☐ Child abuse or neglect
- ☐ Dating violence
- ☐ Domestic/intimate partner violence
- ☐ Emotional abuse (ex. intimidation, isolation, verbal threats, withholding of funds)
- ☐ General violence against women
- ☐ General violence against men
- ☐ Media/video game violence
- ☐ Physical abuse
- ☐ Stalking
- ☐ Sexual abuse/assault
- ☐ Verbal threats
- ☐ Workplace/co-worker violence

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

_____

_____

Delivery of Healthcare

12. Considering **GENERAL and ACUTE SERVICES** at CHI St. Alexius Health – Turtle Lake, which services are you aware of (or have you used in the past year)? (Choose ALL that apply)

- ☐ Clinic
- ☐ Emergency room
- ☐ Home healthcare
- ☐ Hospice
- ☐ Hospital (acute care)
- ☐ Orthopedic (visiting specialist)
- ☐ Podiatry (foot/ankle) (visiting specialist)
- ☐ Swing bed and respite care
- ☐ Telemedicine via eEmergency

13. Considering **SCREENING/THERAPY SERVICES** at CHI St. Alexius Health – Turtle Lake, which services are you aware of (or have you used in the past year? (Choose ALL that apply)

- ☐ Health screenings
- ☐ Laboratory services
- ☐ Occupational therapy
- ☐ Physical therapy
- ☐ Social services
- ☐ Speech therapy

14. Considering **RADIOLOGY SERVICES** at CHI St. Alexius Health – Turtle Lake, which services are you aware of (or have you used in the past year)? (Choose ALL that apply)

- ☐ CT scan
- ☐ EKG—Electrocardiography
- ☐ General x-ray
- ☐ Mammography
- ☐ Ultrasound

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

- ☐ Assist with preschool screening
- ☐ Blood pressure check
- ☐ Breastfeeding resources
- ☐ Car seat program
- ☐ Emergency response & preparedness program
- ☐ Environmental health services (water, sewer, health hazard abatement)
- ☐ Flu shots
- ☐ Foot care
- ☐ Health Tracks (child health screening)
- ☐ Immunizations
- ☐ Office visits and consults
- ☐ Preschool education programs
- ☐ School health (vision screening, puberty talks, school immunizations)
- ☐ Tobacco prevention and control
- ☐ Tuberculosis testing and management
- ☐ WIC (Women, Infants & Children) Program
- ☐ Youth education programs (First Aid, Bike Safety)

16. Are you aware of the Turtle Lake Clinic located within the hospital, open Monday – Friday from 8:30 am – 5:00 pm?

- ☐ Yes
- ☐ No

17. Have you utilized the Turtle Lake Clinic?

☐ Yes ☐ No

18. If yes, how satisfied are you with the opening of the Turtle Lake clinic?

☐ Satisfied
☐ Somewhat satisfied
☐ Neutral
☐ Not Satisfied

19. Are you aware of the rural health clinic in Washburn, open Monday – Friday from 8:30- 5 pm?

☐ Yes ☐ No

20. Select the entities that you believe CHI St. Alexius Health-Turtle Lake could improve its collaboration with:

☐ Ambulance and EMS
☐ Business industry
☐ Local job/economic development
☐ Other local health providers
☐ Public Health
☐ School

21. Are you aware of the Turtle Lake Hospital Association, which exists to maintain the hospital grounds and building?

☐ Yes ☐ No

22. Have you supported the Turtle Lake Hospital Association in any of the following ways? (Choose ALL that apply)

☐ Cash or stock gifts
☐ Endowment gifts
☐ Memorial/Honorarium
☐ Planned gifts through wills, trusts or life insurance policies
☐ Serve as current or past board member
☐ Other: (please specify) _____

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

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

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

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

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

_____

_____

Demographic Information: Please tell us about yourself.

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

- ☐ Yes
- ☐ No

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

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

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

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

29. Age:

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

30. Highest level of education:

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

31. Sex:

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

32. Employment status:

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

33. Your zip code: _____

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

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

35. Annual household income before taxes:

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

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

_____

_____

Thank you for assisting us with this important survey!

Appendix D – County Health Rankings Explained

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

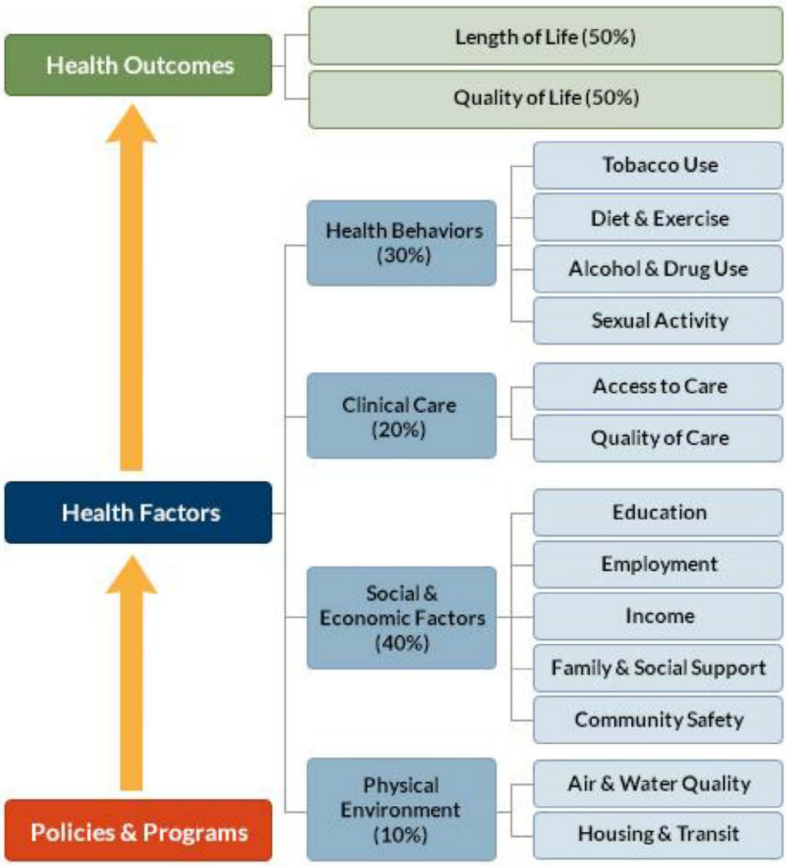
Methods

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

What is Ranked

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

Ranking System



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

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

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

Data Sources and Measures

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

Data Quality

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

Calculating Scores and Ranks

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

Health Outcomes and Factors

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

Health Outcomes

Premature Death (YPLL)

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

Reason for Ranking

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

Poor or Fair Health

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

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

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

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

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

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

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

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

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

Reason for Ranking

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

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

Income Inequality

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

Reason for Ranking

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

Children in Single-Parent Households

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

Reason for Ranking

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

Violent Crime Rate

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

Reason for Ranking

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

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

Injury Deaths

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

Reason for Ranking

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

Air Pollution-Particulate matter

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

Reason for Ranking

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

Drinking Water Violations

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

Reason for Ranking

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

Severe Housing Problems

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

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

- household is severely cost burdened.

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

Reason for Ranking

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

Appendix E – Youth Behavioral Risk Survey Results

Youth Behavioral Risk 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
	ND 2015	ND 2017	ND 2019	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2019
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
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)							
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 one day during the 30 days before the survey)							
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
	ND 2013	ND 2017	ND 2019	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2019
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
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)							
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							

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 seven days before the survey)							
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
	ND 2015	ND 2017	ND 2019	ND Trend ↑, ↓, =	Rural ND Town Average	Urban ND Town Average	National Average 2019
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 seven days before the survey)							
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

Appendix F – Prioritization of Community's Health Needs

Community Health Needs Assessment

Turtle Lake, North Dakota
Ranking of Concerns

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

	Priorities	Most Important
COMMUNITY/ENVIRONMENTAL HEALTH CONCERNS		
Attracting & retaining young families	9	8
Having enough child daycare services	7	
Not enough jobs with livable wages	1	
Not enough places for exercise/wellness activities	3	
AVAILABILITY/DELIVERY OF HEALTH SERVICES CONCERNS		
Not enough healthcare staff in general	1	
Availability of mental health services	2	
Availability of vision care	1	
Ability to retain primary care providers (MD, DO, NP, PA, nurses) in the community	2	
YOUTH POPULATION HEALTH CONCERNS		
Alcohol use and abuse		
Drug use and abuse (including prescription drugs)	1	
Smoking and tobacco use, exposure to second-hand smoke, juuling/vaping		
Not enough activities for children		
Depression/anxiety	2	
ADULT POPULATION HEALTH CONCERNS		
Alcohol use and abuse	1	
Drug use and abuse (including prescription drugs)	2	
Depression/anxiety	2	
Not getting enough exercise/physical activity		
SENIOR POPULATION HEALTH CONCERNS		
Assisted living options	2	
Availability of resources to help elderly stay in their homes	9	4
Cost of long-term/nursing home care		
Availability of transportation for seniors		
VIOLENCE CONCERNS		
Bullying/cyber-bullying	2	
Child abuse/neglect		

Appendix G – Survey "Other" Responses

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

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

- There are none

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

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

- N/A because I believe we have all of these

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

- Aging Community
- Alcohol abuse in teens
- Business closings
- Drug use in young adults
- Growth for the community to survive the elderly passing on, no younger generation moving into the community
- Lack of mental healthcare
- Losing population
- More things for the younger generation to do
- People lack physical activities due to health concerns or promotes mental or physical health is affected by COVID-19
- (2)Retaining young families
- (2)We are losing our only restaurant and I feel like that's going to be a huge down fall simply because they had a variety
- Wellness classes need them available to all, dietary, physical fitness, yoga

Delivery of Healthcare

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

- Annual check up
- Cardiac rehab
- Fitness programs
- Mental health
- Mental health, family practice MD
- Palliative care

16. What PREVENTS community residents from receiving healthcare? "Other" response:

- CHI
- N/A
- none

18. How have you support facility improvements/new equipment at CHI St. Alexius Health Carrington? "Other" responses:

- Volunteer for their fund raisers
- Hospital auxiliary supports the association projects
- None
- Fund raising events
- Fundraisers

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

- Annual check-ups for men and women
- Board games for elderly or place for them to promote self like exercise or just socialization just to be in routine
- Break away from CHI.
- Free wellness clinics
- My major concern over all healthcare entities within Turtle Lake and Washburn is the retention of employees; partly due to pay and other part employee concerns and grievances are not carried out.
- We need to promote our outpatient services more. Add wellness specials to attract the community to utilize our local services