

# Community Health Needs Assessment

Tioga Medical Center Service Area  
Tioga, North Dakota

# 2022

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# Executive Summary

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



To gather feedback from the community, residents of the area were given the opportunity to participate in a survey. Fifty-six TMC 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 Williams 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, Williams County's population from 2010 to 2020 increased by 45%. The average number of residents younger than age 18 (29.4%) for Williams County comes in 5.8 percentage points higher than the North Dakota average (23.5%). The percentage of residents, ages 65 and older, is 6.5% lower for Williams County (9.2%) than the North Dakota average (15.3%), and the rate of education is slightly lower for Williams County (90.5%) than the North Dakota average (92.5%). The median household income in Williams County (\$87,161) is much higher than the state average for North Dakota (\$63,473).

Data, compiled by County Health Rankings, show Williams County is doing better than North Dakota in health outcomes/factors for 14 categories.

Williams 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 56 TMC service area residents who completed the survey indicated the following 10 needs as the most important:

- Extra hours for appointments (evenings/weekends)
- Alcohol use and abuse – adult
- Not getting enough exercise/physical activity - adults
- Ability to get appointments for health services within 48 hours
- Availability of resources to help the elderly stay in their homes
- Depression/anxiety – youth and adult
- Drug use and abuse – youth
- Having enough quality school resources
- Not enough affordable housing
- Bullying/cyberbullying

The survey also revealed the biggest barriers to receiving healthcare (as perceived by community members). They included not enough evening/weekend hours, not able to get appointments/limited hours, and concerns about confidentiality.

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

- Safe place to live, family-friendly
- Local events and festivals
- People are friendly, helpful, and supportive
- People who live here are involved in their community
- Healthcare
- Active faith community

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

- Not enough healthcare staff in general
- Alcohol use and abuse – all ages
- Attracting and retaining young families
- Depression/anxiety
- Having enough child daycare services

## Overview and Community Resources

With assistance from the Center for Rural Health (CRH) at the University of North Dakota (UND) School of Medicine & Health Sciences (SMHS), Tioga Medical Center (TMC) completed a Community Health Needs Assessment (CHNA) of the TMC service area. The hospital identifies its service area as Williams, Burke, Mountrail, and Divide Counties. In addition to Tioga, located in the service area, are the communities of Ray, Powers Lake, White Earth, and Wildrose. Many community members and stakeholders worked together on the assessment.



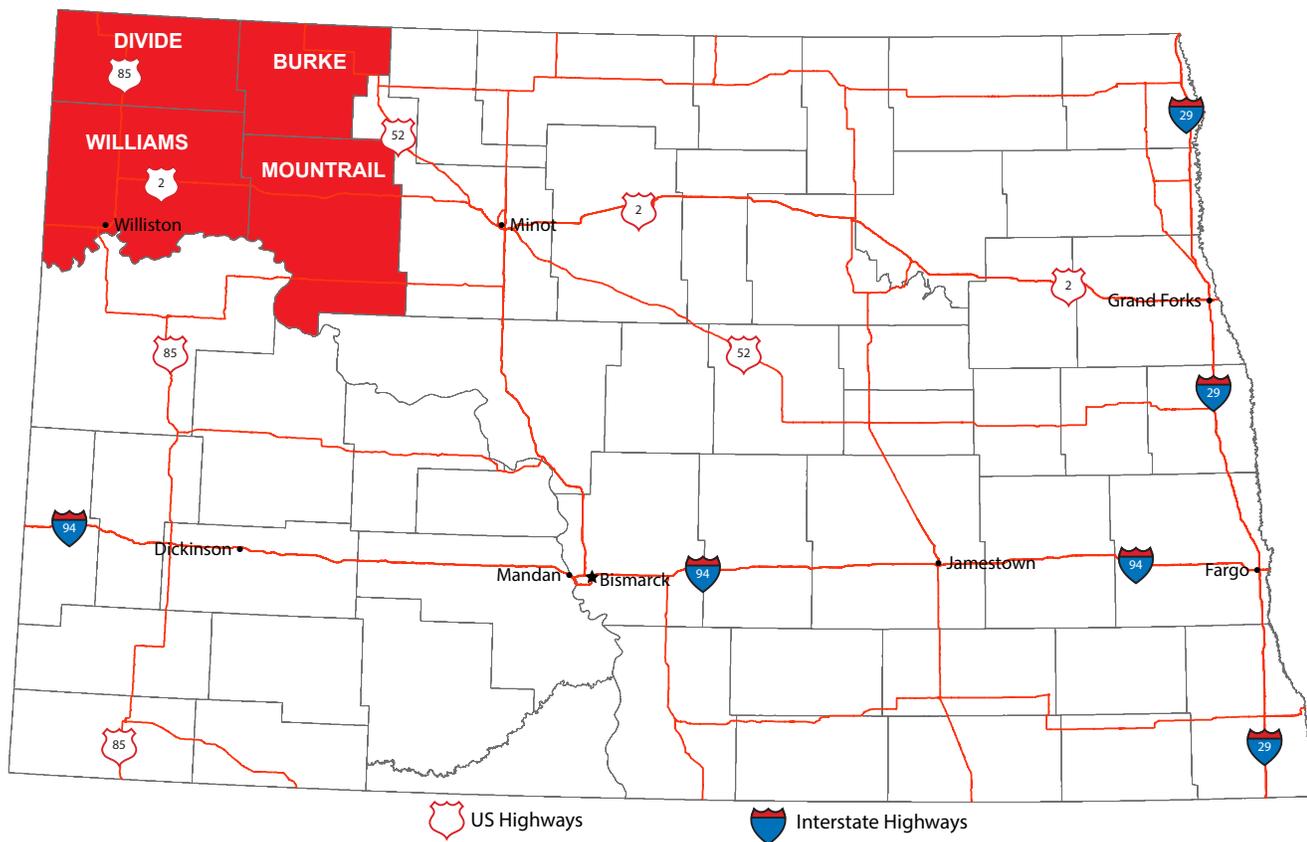
TMC is located in northwestern North Dakota, approximately 50 miles east of Williston. Along with the hospital, agricultural, oil, and gas operations provide the economic base for the town of Tioga and Williams County. According to the 2020 U.S. Census, Williams County had a population of 40,950, while Tioga had a population of 2,202.



Tioga and Williams County have a number of community assets and resources that can be mobilized to address population health improvement. In terms of physical assets and features, the community includes a bike/walking path, swimming pool, city parks, tennis courts, golf course, skating rink, baseball/softball fields, archery range, fitness center, movie theatre, and a community center that includes a gym, table games, indoor playground, library, and golf simulator. Lake Sakakawea, just south of Tioga, offers boating, hiking, ATV riding, and fishing. Tioga offers several cultural attractions, such as the Norseman Museum, which pays tribute to the town and region's history.

Each major town in Williams County has public transportation, good grocery stores, restaurants, convenience, and other valued community assets. The Tioga school system offers a comprehensive program for students K-12; several privately funded preschools are also available in the community. Some licensed as well as unlicensed daycares are available in the area.

**Figure 1: Burke, Divide, Mountrail, and Williams Counties**



## Tioga Medical Center

As early as 1952, the old Commercial Club, now the Chamber of Commerce, discussed the need for a hospital in Tioga. After meeting with hospital promoters in other towns and visiting with interested citizens, it was decided that it would be more practical to build a clinic first and then follow with a hospital, but before there could be either, there must be a doctor. The first meeting for the Tioga Hospital project was held on January 19, 1953. The Critical Access Hospital (CAH) Profile for Tioga Medical Center (TMC) includes a summary of hospital-specific information and is available in Appendix A.



Citizens of the Tioga community enthusiastically organized to provide medical facilities in town. Because of this spirit and recognizing the possibilities of the future, Dr. R.P. Froeschle and Dr. R.W. Cranston temporarily established offices in the Blikre Building. Within a month, the demand placed upon these doctors made it apparent that to provide adequate medical service for the area, Tioga needed a clinic building immediately. Construction of the clinic began August 24, 1953. The open house was held February 14, 1954.

The first meeting to plan for a hospital was held July 29, 1955. Bid letting for the 25-bed hospital was April 29, 1960, and groundbreaking ceremonies for the \$590,000 hospital were held on June 5, 1960. The doors were opened for patients on October 25, 1961.

Groundwork for the new 30-bed nursing home was started in 1976 with an estimated completion date of September 1977. The doors were opened in January of 1978. Over 500 people attended the open house on January 15, and the first nine residents were admitted on January 16.

Tioga Community Hospital was renamed to TMC and purchased the clinic from Dr. R.A. Patel in August of 1990. TMC built an independent living facility in 1998. The independent living facility comprises 22

apartments with a large commons area. The facility is adjacent to the TMC, which allows residents added safety and security.

Construction of an addition to the hospital began in 2014. The expansion included a new clinic, therapy, cardiac rehab, radiology, and diabetic education. The addition also contained an unfinished lower level to be completed at another time. On November 2, 2015, patients were seen in the new building.

In 2020, it was decided the lower level of the clinic needed to be finished to accommodate the growing facility that had since started a Williston State College (WSC) nursing program, expanded visiting specialists, and started more community health and wellness outreach programs. Construction began in January of 2021. In August 2021, a new class of licensed practical nurse (LPN) students began their fall semester in their newly finished space, comprised of a classroom, skills lab, and simulation rooms. On September 2, 2021, the first blood drive was held in the pristine wellness center, followed by patients being seen in the specialty clinic for the first time on November 12, 2021.

Today, TMC is one of the most essential assets in the community and the largest charitable organization in the Tioga area. As a Level V trauma center and stroke-ready facility, the community and surrounding communities have access to life-saving care that would otherwise not be possible. The 30-bed skilled nursing facility is key to keeping loved ones in the community to ensure they are taken care of and often visited by loved ones. The clinic provides daily services, such as primary care, therapy, cardiac rehab, radiology, and diabetic education to provide ease of access to the community to sustain their health. Monthly specialty services, such as cardiology, mental health, sports medicine, public health, orthopedic, podiatry, and general surgery have been crucial in supporting the community by bringing services to those who would otherwise not receive specialized care.

TMC has a significant economic impact on the region. They directly employ 99.7 FTE employees with an annual payroll of over \$7.4 million (including benefits). These employees create an additional 44 jobs and nearly \$1.6 million in income, as they interact with other sectors of the local economy. This employment results in a total impact of 144 jobs and more than \$9 million in income. Additional information is provided in Appendix B.

### **Mission**

The mission of TMC is: “to address the healthcare needs of the community through providing quality healthcare and promoting education and wellness.”

Services offered locally by TMC include:

- Emergency room
- Hospital (acute care)
- Swing bed
- Long-term care
- Independent living apartments
- Chronic disease management
- Geriatric care
- Preoperative exams
- Child/newborn wellness exams
- Physicals: annuals, employment, D.O.T., sports, and insurance
- Men’s and women’s health
- Adolescent health
- Minor procedures
- Mole/wart/skin lesion removal
- Diabetic foot care
- Vaccinations (in house and visiting physician)
- Nurse visits
- Nutrition counseling
- Counseling and mental health services (visiting physician)
- General surgery (visiting physician)
- Cardiology (visiting physician)
- Orthopedics (visiting physician)
- Podiatry (visiting physician)
- Sports medicine (visiting physician)
- Prenatal care up to 32 weeks

## **Surgical Services**

- Colonoscopies and EDGs
- General surgery
- Orthopedics

- Podiatry
- Pediatric dental

## **Screening/Therapy Service**

- General orthopedics
- Pre- and post-surgical rehab
- Pain management
- Wound/burn care
- Neurological rehab
- Athletic injuries/sports medicine
- Vestibular rehab
- Back education/rehab
- Geriatric issues (balance, falls)
- Myofascial release
- Hand therapy
- Splinting/bracing

- ADL equipment needs and training
- Home safety assessments
- Wheelchair assessments
- Speech therapy
- Cardiac rehab
- Cardiac monitoring
- Diabetic education
- Licensed nutrition counseling (visiting provider)
- Sleep studies
- Social services

## **Laboratory Services**

- Hematology
- Blood types
- Clot times
- Chemistry
- Urine testing
- Drug screening
- Breath alcohol testing

- Outpatient lab services
- X-ray
- CT-scan
- DEXA scan
- Ultrasound (mobile unit)
- MRI (mobile unit)

## **Upper Missouri District Health Unit**

Upper Missouri District Health Unit (UMDHU) provides public health services that encompass all residents, aged birth to end of life, in Divide, McKenzie, Mountrail, and Williams Counties. Services include environmental health, emergency preparedness, nursing services, WIC (women, infants, and children) program, alcohol, tobacco and other drugs (ATOD) prevention, and education services. Each of these programs provides a wide variety of services in order to accomplish the mission of public health, which is to assure that community is a healthy place to live, and each person has an equal opportunity for optimal health.

UMDHU was founded and began offering sanitation and nursing services in Divide, McKenzie, and Williams Counties in 1947. It was the third public health unit formed in the state. Mountrail County joined the health unit in 1949. The central office is located in Williston; satellite offices are maintained in Crosby, Stanley, and Watford City (all are county seats).

Funding for public health services comes from a variety of funding sources. Programs and services are covered by county mill dollars, state funding, federal funding, donations, and fees for services. UMDHU applies for other funding that supports the mission. Services are available to all eligible UMDHU residents, including all

age groups and economic status. UMDHU uses a sliding fee scale for some services, based on financial income.

### **Mission**

The UMDHU, serving northwestern North Dakota, promotes healthy lifestyles through health education, prevention and control of disease, and the protection and enhancement of the environment.

UMDHU works to prevent illness and injury, promote healthy communities, and offer protection of the environment keeping it clean, healthy, and safe. Quality of life is improved, and money is saved when illness and injury are prevented. Health promotion goals are to develop public policy and programs to support healthy lifestyles and to encourage the public to practice healthy lifestyles. A clean and safe environment doesn't just happen. Assisting people to identify and prevent public health risks in their community is an important public health responsibility.

Specific services that UMDHU provides are:

- Blood pressure checks
- Breastfeeding consultation and resources
- Car seat program
- Emergency preparedness services-work with community partners as part of local emergency response team
- Environmental health services (water, sewer, health hazard abatement)
- Family planning
- Flu shots
- Home health – in-home nursing care
- Immunizations
- Medication setup — home visits
- Member of Child Protection Team and County Interagency Team
- Newborn home visits
- Nutrition education
- School health – vaccinations, health education, and resource to the schools
- Preschool education programs
- Tobacco prevention and control
- Tuberculosis testing and management
- West Nile program — surveillance and education
- WIC (women, infants and children) program
- Worksite Wellness – coordinator for county employees and Sheriff's department

## **Assessment Process**

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

A CHNA benefits the community by:

- 1) Collecting timely input from the local community members, providers, and staff.
- 2) Providing an analysis of secondary data, related to health-related behaviors, conditions, risks, and outcomes.
- 3) Compiling and organizing information to guide decision making, education, and marketing efforts, and facilitate the development of a strategic plan.
- 4) Engaging community members about the future of healthcare.
- 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 Williams, Burke, Mountrail, and Divide Counties that are part of the service area for Tioga Medical Center (TMC). In addition to Tioga, located in the service area are the communities of Ray, Powers Lake, White Earth, and Wildrose.

The Center for Rural Health (CRH), in partnership with TMC and Upper Missouri District Health Unit (UMDHU), 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 TMC. A steering committee (see Figure 2) was formed that was responsible for planning and implementing the process locally. Representatives from CRH met and corresponded regularly by videoconference and/or via the eToolkit with the CHNA liaison. The community group (described in more detail below) provided in-depth information and informed the assessment process in terms of community perceptions, community resources, community needs, and ideas for improving the health of the population and healthcare services. Seven people, representing a cross section demographically, attended the focus group meeting. The meeting was highly interactive with good participation. TMC staff and board members were in attendance as well but largely played a role of listening and learning.

**Figure 2: Steering Committee**

Ryan Mickelsen	President/CEO, TMC
Krista Lambrecht	Financial services director, TMC
Javayne Oyloe	Executive officer, UMDHU
Keri Enget	Squad leader, Powers Lake Ambulance
Myron Eide	Squad leader, Ray Ambulance
Shelby Davis	Clinic manager, TMC
Hannah Odegaard	IT, TMC
Trisha Were	Diabetes education, TMC
Juliet Artment	Public health nurse, UMDHU

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 (NDSU).

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

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

CRH is one of the nation’s most experienced organizations committed to providing leadership in rural health. Its mission is to connect resources and knowledge to strengthen the health of people in rural communities. CRH is the designated State Office of Rural Health and administers the Medicare Rural Hospital Flexibility (Flex) program, funded by the Federal Office of Rural Health Policy, Health Resources Services Administration,

and Department of Health and Human Services. CRH connects the University of North Dakota (UND) School of Medicine & Health Sciences (SMHS) and other necessary resources to rural communities and other healthcare organizations in order to maintain access to quality care for rural residents. In this capacity, CRH works at a national, state, and community level.

Detailed below are the methods undertaken to gather data for this assessment by convening a community group, conducting key informant interviews, soliciting feedback about health needs via a survey, and researching secondary data.

## Community Group

A community group, consisting of seven community members, was convened and first met on November 10, 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 January 26, 2022, with seven 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 Williams County. The group was then tasked with identifying and prioritizing the community's health needs.

Members of the community group represented the broad interests of the community, served by TMC and UMDHU. They included representatives of the health community, business community, and education. Not all members of the group were present at both meetings.

## Interviews

One-on-one interviews with five key informants were conducted virtually via Zoom in November 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 healthcare by local providers, awareness of health services offered locally, barriers to receiving health services, and suggestions for improving collaboration within the community.

## Survey

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

The community member survey was distributed to various residents of Tioga, Ray, Powers Lake, Wildrose, and White Earth, which are all included in the TMC service area. The survey tool was designed to:

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

Specifically, the survey covered the following topics:

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

To promote awareness of the assessment process, advertisements were placed in the Tioga Tribune, reaching the communities of Tioga, Ray, Powers Lake, Wildrose, and White Earth. Flyers were placed at promenade business in the community. Additionally, information was published on TMC's website and Facebook page.

Approximately 50 community member paper surveys were available for distribution in Williams County as well as Burke County. The surveys were distributed by community group members and at TMC in Tioga, Ray, Powers Lake, and a local blood drive.

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 also could request a survey by calling TMC or UMDHU. The survey period ran from November 10, 2021 to November 30, 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 the community newspaper, on the TMC website, on posters distributed in the communities, as well as on the TMC Facebook page. Fifty-two online surveys were completed. One of those online respondents used the QR code to complete the survey. In total, counting both paper and online surveys, 56 community member surveys were completed, equating to a 3% response rate. This response rate is below the typical rate of 13% for this type of unsolicited survey methodology and does not indicate an engaged community; however, this rate is in line with survey responses during the pandemic.

## Secondary Data

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

## Social Determinants of Health

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

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

There are numerous models that depict social determinants of health. While the models may vary slightly in

the exact percentages that they attribute to various areas, the discrepancies are often because some models have combined factors when other models have kept them as separate factors.

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

**Figure 3: Social Determinants of Health**

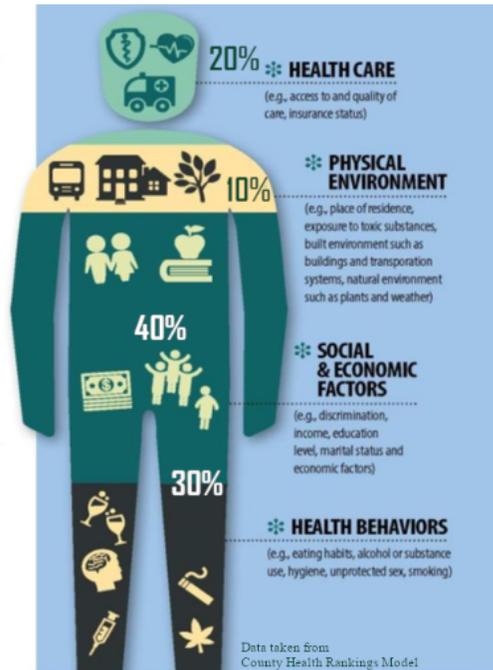


Figure 4 (Henry J. Kaiser Family Foundation, <https://www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/>), provides examples of factors that are included in each of the social determinants of health categories that lead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

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

**Figure 4: Social Determinants of Health**

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

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



# Demographic Information

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

	Williams County	North Dakota
Population (2021)	38,484	779,948
Population change (2020-2021)	-6.0%	-0.5%
People per square mile (2010)	10.8	9.7
Persons 65 years or older (2020)	9.2%	15.7%
Persons younger than 18 years (2020)	29.4%	23.6%
Median age (2020)	31.3	35.2
White persons (2020)	85.8%	86.9%
High school graduates (2020)	90.6%	93.1%
Bachelor’s degree or higher (2020)	25.6%	30.7%
Live below poverty line (2020)	9.6%	10.2%
Persons without health insurance, younger than age 65 years (2019)	8.5%	8.1%
Households with a broadband internet subscription (2020)	79.5%	83.1%

Source: <https://www.census.gov/quickfacts/fact/table/ND,US/INC910216#viewtop> and [https://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml#](https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml#)

As the population of North Dakota has decreased in recent years, so has the population in Williams County. The U.S. Census Bureau estimates show that Williams County’s population has decreased from 40,950 (2020) to 38,484 (2021).

## County Health Rankings

The Robert Wood Johnson Foundation, in collaboration with the University of Wisconsin Population Health Institute, has developed County Health Rankings to illustrate community health needs and provide guidance for actions toward improved health. In this report, McIntosh 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 [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

<p><b>Health Outcomes</b></p> <ul style="list-style-type: none"> <li>• Length of life</li> <li>• Quality of life</li> </ul> <p><b>Health Factors</b></p> <ul style="list-style-type: none"> <li>• Health behavior               <ul style="list-style-type: none"> <li>- Smoking</li> <li>- Diet and exercise</li> <li>- Alcohol and drug use</li> <li>- Sexual activity</li> </ul> </li> </ul>	<p><b>Health Factors (continued)</b></p> <ul style="list-style-type: none"> <li>• Clinical care               <ul style="list-style-type: none"> <li>- Access to care</li> <li>- Quality of care</li> </ul> </li> <li>• Social and Economic Factors               <ul style="list-style-type: none"> <li>- Education</li> <li>- Employment</li> <li>- Income</li> <li>- Family and social support</li> <li>- Community safety</li> </ul> </li> <li>• Physical Environment               <ul style="list-style-type: none"> <li>- Air and water quality</li> <li>- Housing and transit</li> </ul> </li> </ul>
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Table 2 summarizes the pertinent information, gathered by County Health Rankings, as it relates to Williams 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 UMDHU and TMC 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).

Williams County rankings within the state are included in the summary following. For example, Williams County ranks 12th out of 48 ranked counties in North Dakota on health outcomes and 28th on health factors. The measures, marked with a bullet point (•), are those where a county is not measuring up to the state rate/percentage; a square (■) indicates that the county is not meeting the U.S. Top 10% rate on that measure. Measures that are not marked with a colored shape but are marked with a plus sign (+) indicate that the county is doing better than the U.S. Top 10%.

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

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

Data, compiled by County Health Rankings, show Williams 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 rates
- Food environment index
- Unemployment rate
- Severe housing problems

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

- Premature deaths
- Poor or fair health
- Adult obesity
- Physical inactivity
- Excessive drinking
- Alcohol-impaired driving deaths
- Sexually transmitted infections
- Teen birth rate
- Ratio of primary care physicians
- Ratio of dentists
- Ratio of mental health providers
- Mammography screening
- Flu vaccinations
- Social associations
- Violent crime
- Injury deaths
- Drinking water violations

**TABLE 2: SELECTED MEASURES FROM COUNTY HEALTH RANKINGS 2021 – WILLIAMS 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 – WILLIAMS COUNTY			
	Williams County	U.S. Top 10%	North Dakota
<b>Ranking: Outcomes</b>	<b>12<sup>th</sup></b>		<b>(of 46)</b>
Premature death	7,800 ● ■	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	5%+	6%	6%
<b>Ranking: Factors</b>	<b>28<sup>th</sup></b>		<b>(of 45)</b>
<i>Health Behaviors</i>			
Adult smoking	20% ■	16%	20%
Adult obesity	38% ● ■	26%	34%
Food environment index (10=best)	9.5 +	8.7	8.9
Physical inactivity	24% ● ■	19%	23%
Access to exercise opportunities	79% ■	91%	74%
Excessive drinking	25% ● ■	15%	24%
Alcohol-impaired driving deaths	46% ● ■	11%	42%
Sexually transmitted infections	626.7 ● ■	161.2	466.6
Teen birth rate	36 ● ■	12	20
<i>Clinical Care</i>			
Uninsured	8% ■	6%	8%
Primary care physicians	1,770:1 ● ■	1,030:1	1,300:1
Dentists	1,630:1 ● ■	1,210:1	1,510:1
Mental health providers	770:1 ● ■	270:1	510:1
Preventable hospital stays	3,134 ■	2,565	4,037
Mammography screening (% of Medicare enrollees ages 65-74 receiving screening)	42% ● ■	51%	53%
Flu vaccinations (% of fee-for-service Medicare enrollees receiving vaccination)	36% ● ■	55%	50%
<i>Social and Economic Factors</i>			
Unemployment	1.8%+	2.6%	2.4%
Children in poverty	8%+	10%	11%
Income inequality	3.8 ■	3.7	4.4
Children in single-parent households	18% ■	14%	20%
Social associations	13.9 ● ■	18.2	16.0
Violent crime	373 ● ■	63	258
Injury deaths	80 ● ■	59	71
<i>Physical Environment</i>			
Air pollution – particulate matter	7.2 ● ■	5.2	4.7
Drinking water violations	Yes		
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](http://www.childhealthdata.org/learn/NSCH).

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

**TABLE 3: SELECTED MEASURES REGARDING CHILDREN’S HEALTH (For children ages 0-17 unless noted otherwise), 2019**

Health Status	North Dakota	National
Children born premature (3 or more weeks early)	9.9%	11.2%
Children 10-17 overweight or obese	26.9%	32.1%
Children 0-5 who were ever breastfed	86.1%	80.8%
Children 6-17 who missed 11 or more days of school	2.9%	3.9%
<b>Healthcare</b>		
Children currently insured	93.6%	93.1%
Children who had preventive medical visit in past year	16.0%	18.1%
Children who had preventive dental visit in past year	73.7%	77.5%
Young children (10 mos.-5 yrs.) receiving standardized screening for developmental or behavioral problems	10.5%	11.0%
Children aged 2-17 with problems requiring counseling who received needed mental healthcare	2.3%	2.5%
<b>Family Life</b>		
Children whose families eat meals together 4 or more times per week	31.1%	36.9 %
Children who live in households where someone smokes	79.2%	75.2%
<b>Neighborhood</b>		
Children who live in neighborhood with a park, sidewalks, a library, and a community center	81.7%	74.9%
Children living in neighborhoods with poorly kept or rundown housing	9.1%	13.3%
Children living in neighborhood that’s usually or always safe	97.3%	94.6%

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

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

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

Table 4 includes selected county-level measures, regarding children’s health in North Dakota. The data come from North Dakota KIDS COUNT, a national and state-by-state effort to track the status of children, sponsored by the Annie E. Casey Foundation. KIDS COUNT data focus on the main components of children’s well-being; more information about KIDS COUNT is available at [www.ndkidscount.org](http://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 Williams County is performing more poorly than the North Dakota average on three of the examined measures: child food insecurity, children enrolled in Healthy Steps (CHIP), and victims of child abuse and neglect requiring services.

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

	<b>Williams County</b>	<b>North Dakota</b>
Child food insecurity, 2019	7.1%	9.6%
Medicaid recipient (% of population age 0-20), 2021	21.3%	26.6%
Children enrolled in Healthy Steps (CHIP) (% of population age 0-18), 2021	1.1%	1.6%
Supplemental Nutrition Assistance Program (SNAP) recipients (% of population age 0-18), 2021	11.0%	16.9%
Licensed childcare capacity (# of children), 2020	966	36,701
4-year high school cohort graduation rate, 2020/2021	79.0%	89.0%
Victims of child abuse and neglect requiring services (rate per 1,000 children ages 0-17), 2020	16.70	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, compare state health risk behaviors to national health risk behaviors, and intended for use to plan, evaluate, and improve school and community programs. North Dakota began participating in the YRBS survey in 1995. Students in grades 7-8 and 9-12 are surveyed in the spring of odd years. The survey is voluntary and completely anonymous.

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

Table 5 depicts some of the YRBS data that have been collected in 2015, 2017, and 2019. They are further broken down by rural and urban percentages. The trend column shows a “=” for statistically insignificant change (no change), “↑” for an increased trend in the data changes from 2017 to 2019, and “↓” for a decreased trend in the data changes from 2017 to 2019. The final column shows the 2019 national average percentage. For a more complete listing of the YRBS data, see Appendix E.

**TABLE 5: Youth 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
<b>Injury and Violence</b>							
% of students who rarely or never wore a seat belt (when riding in a car driven by someone else)	8.5	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
<b>Tobacco, Alcohol, and Other Drug Use</b>							
% of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey)	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
<b>Weight Management, Dietary Behaviors, and Physical Activity</b>							
% of students who were overweight (>= 85th percentile but <95 <sup>th</sup> 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
<b>Other</b>							
% 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/healthyouth/data/yrbs/results.htm>; <https://www.nd.gov/dpi/districtschools/safety-health/youth-risk-behavior-survey>

## Low Income Needs

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

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

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

# 2020 North Dakota

## LOW INCOME COMMUNITY NEEDS



Assessed by CAPND and NDSU, November 2020

### KEY FINDINGS

1<sup>st</sup> Priority Need

**Rental Assistance**



**3,458**

Total Survey Responses

**1,086**

Low-Incomes

**2,084**

Non- Low-Incomes

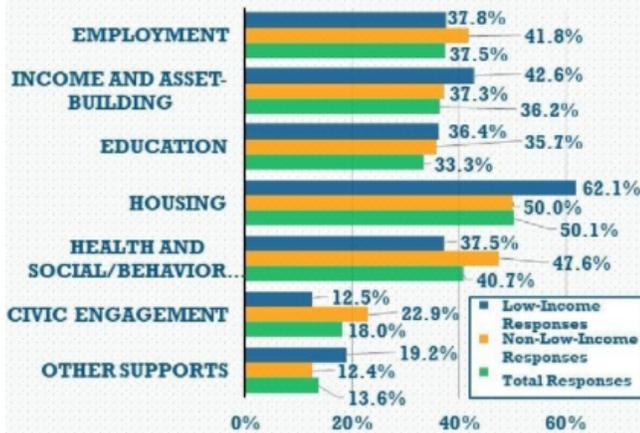
**288**

Others (roles cannot be identified)

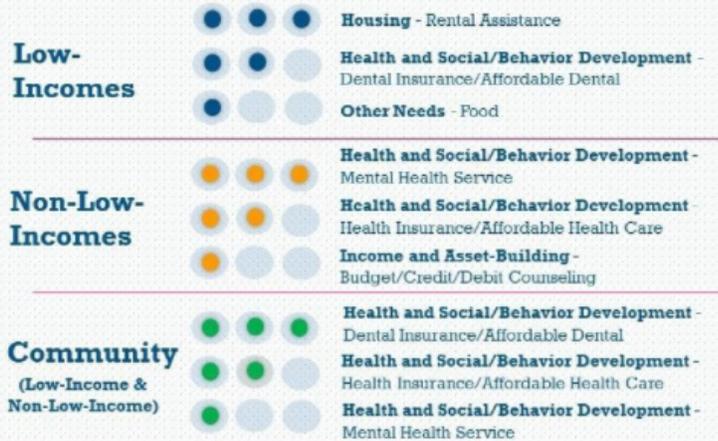
“**Rental Assistance**” becomes the 1<sup>st</sup> priority need of people experiencing poverty across the state under the category of “**Housing**”. This need, however, would represent their immediate (short-term) need, which could be partially or significantly affected by the pandemic of COVID-19.

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

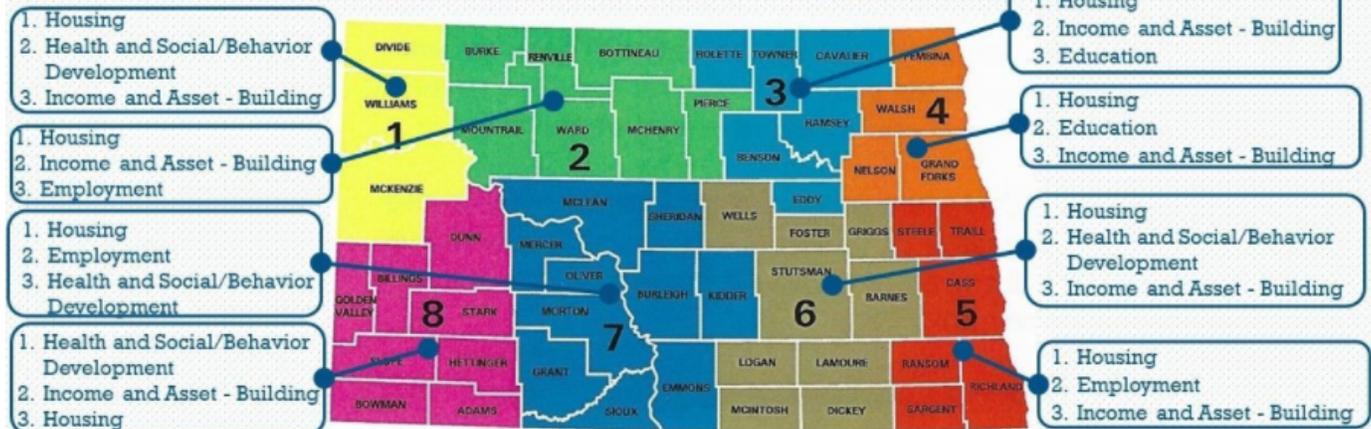
### STATEWIDE OVERALL NEEDS



### TOP STATEWIDE SPECIFIC NEEDS



### TOP REGIONAL OVERALL NEEDS FOR LOW-INCOMES



### ACKNOWLEDGMENTS

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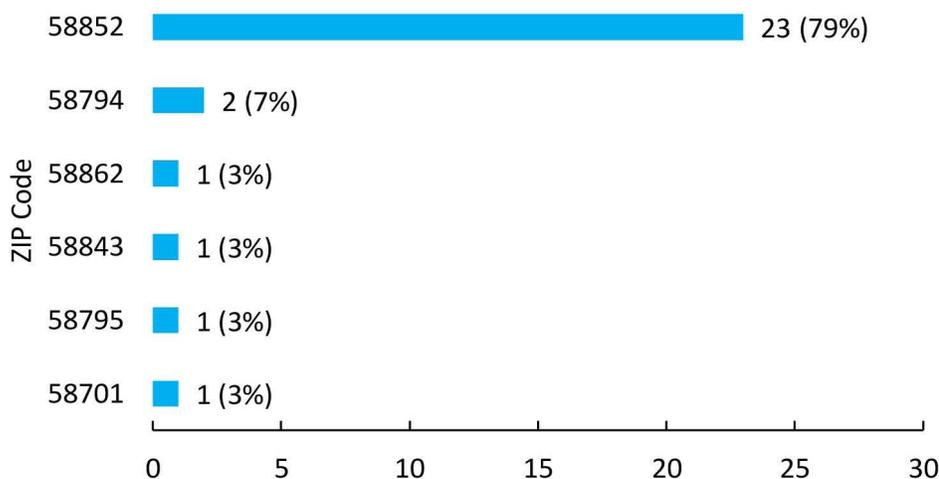
# Survey Results

As noted previously, 56 community members completed the survey in communities throughout the counties in the Tioga Medical Center (TMC) service area. For all questions that contained an “Other” response, all the 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 (some questions allow for selection of more than one response).

The survey requested that respondents list their home zip code. While not all respondents provided a zip code, 29 respondents did, revealing that a large majority of respondents (79%, N=23) lived in Tioga. These results are shown in Figure 5.

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

**Total respondents: 29**



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

## Survey Demographics

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

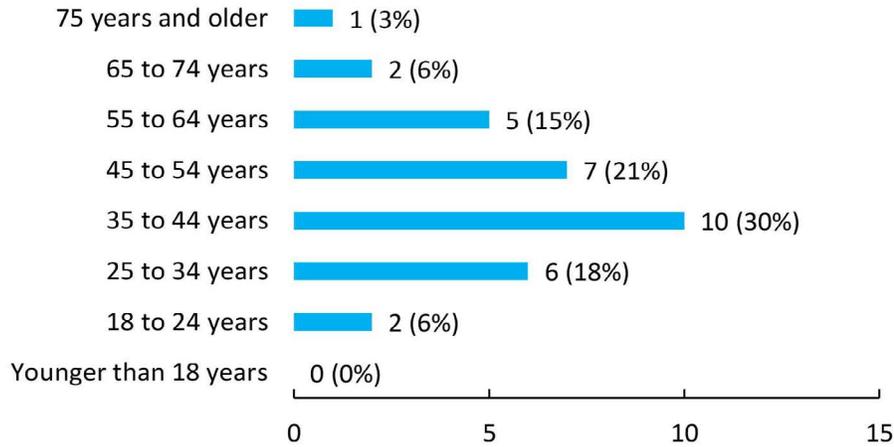
With respect to demographics of those who chose to complete the survey:

- 24% (N=8) were age 55 or older
- The majority (85%, N=29) were female
- Almost half of the respondents (N=14) had bachelor’s degrees or higher
- The number of those working full time (64%, N=21) was just over five times higher than those who were retired (12%, N=4)
- 100% (N=30) of those who reported their ethnicity/race were White/Caucasian
- 93% of the population (N=25) had household incomes of \$50,000 or more annually

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

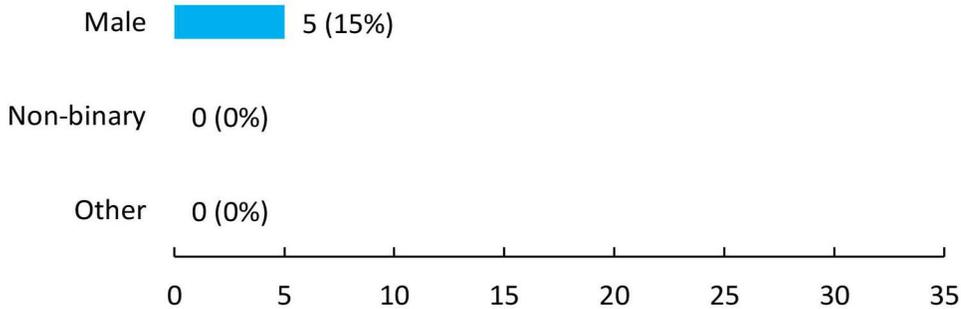
Total respondents = 33



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

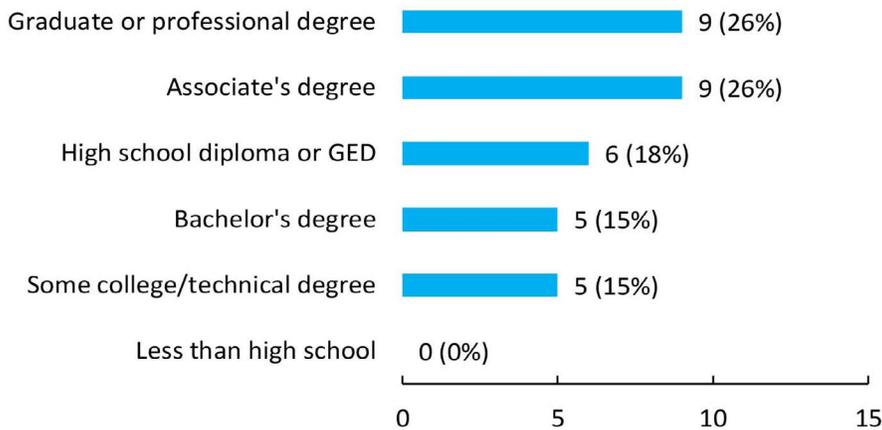
### Figure 7: Gender Demographics of Survey Respondents

Total respondents = 34



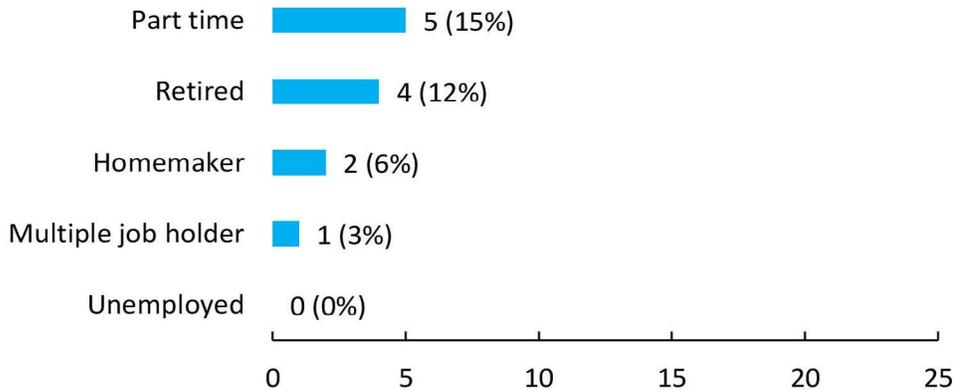
### Figure 8: Educational Level Demographics of Survey Respondents

Total respondents = 34



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

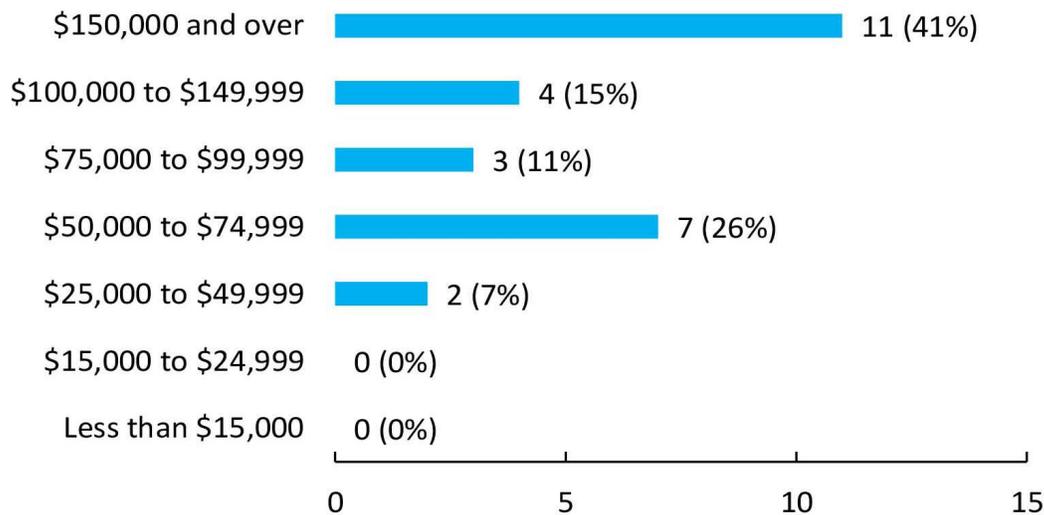
Total respondents = 33



Of those who provided a household income, 7% of (N=2) community members reported a household income of less than \$50,000. Fifty-six percent (N=15) indicated a household income of \$100,000 or more. This information is shown in Figure 10.

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

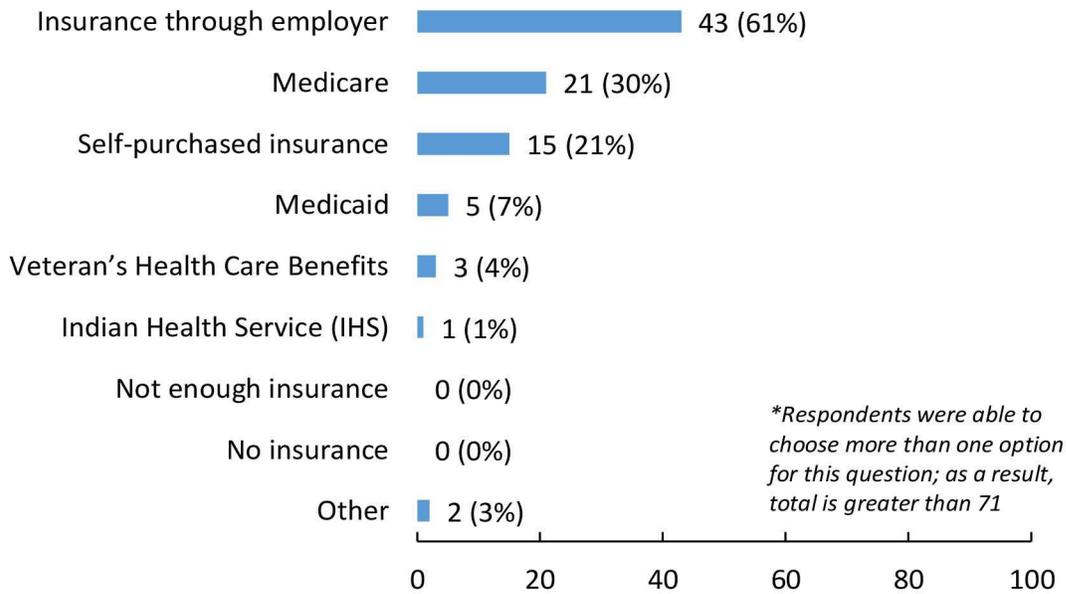
Total respondents = 27



Community members were asked about their health insurance status, which is often associated with whether people have access to healthcare. Nine percent (N=3) of the respondents reported having no health insurance or being under-insured. The most common insurance types were insurance through one’s employer (N=24), followed by self-purchased (N=7).

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

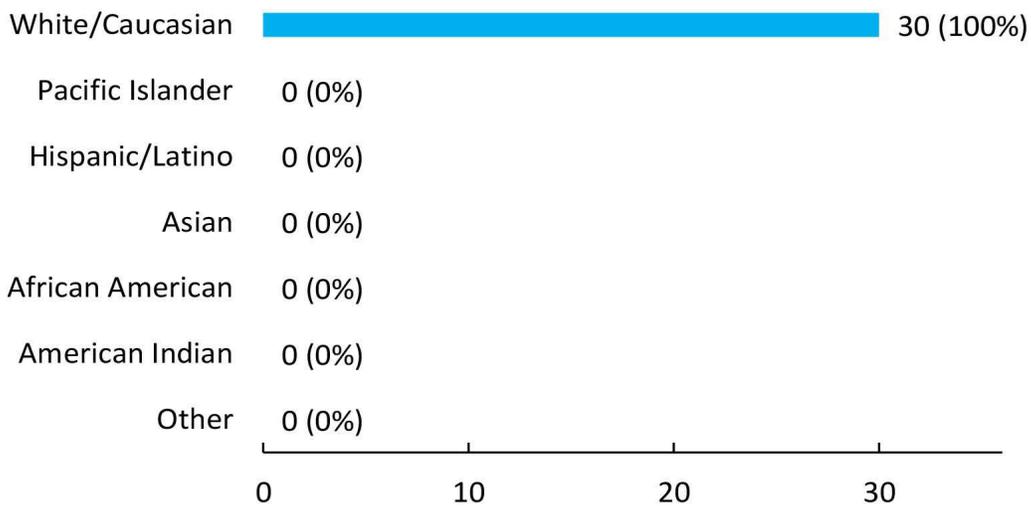
Total respondents = 71\*



As shown in Figure 12, nearly all of the respondents were White/Caucasian (97%). This number was in-line with the race/ethnicity of the overall population of Nelson county; the U.S. Census indicates that 95% of the population is White in Nelson County.

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

Total respondents = 30



## Community Assets and Challenges

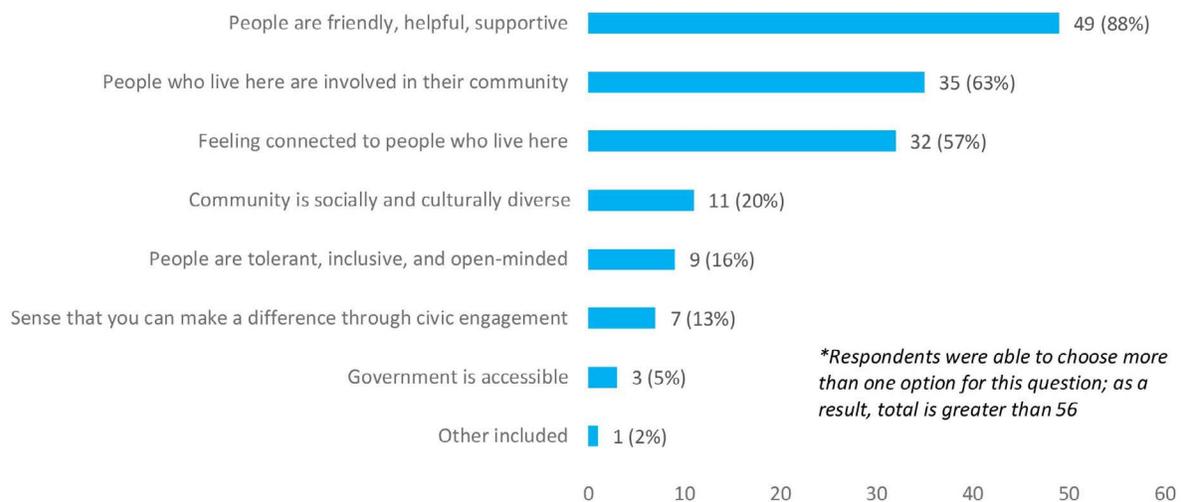
Survey-respondents were asked what they perceived as the best things about their community in four categories: people, services and resources, quality of life, and activities. In each category, respondents were given a list of choices and asked to pick the three best things. Respondents occasionally chose less than three or more than three choices within each category. If more than three choices were selected, their responses were not included. The results indicate there is consensus (with at least 35 respondents agreeing) that community assets include:

- People are friendly, helpful, supportive (N=49)
- Family-friendly (N=47)
- Local events and festivals (N=46)
- Safe place to live (N=39)
- Active faith community (N=36)
- People who live here are involved in their community (N=35)

Figures 13 to 16 illustrate the results of these questions.

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

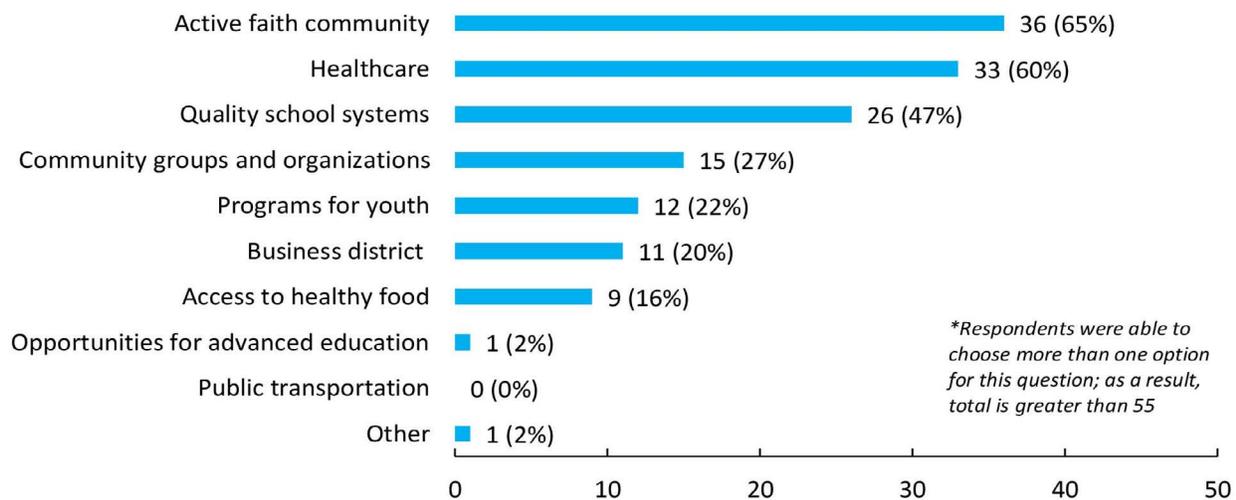
Total respondents = 56\*



In the “Other” category of the best things about the people was it’s a close-knit community.

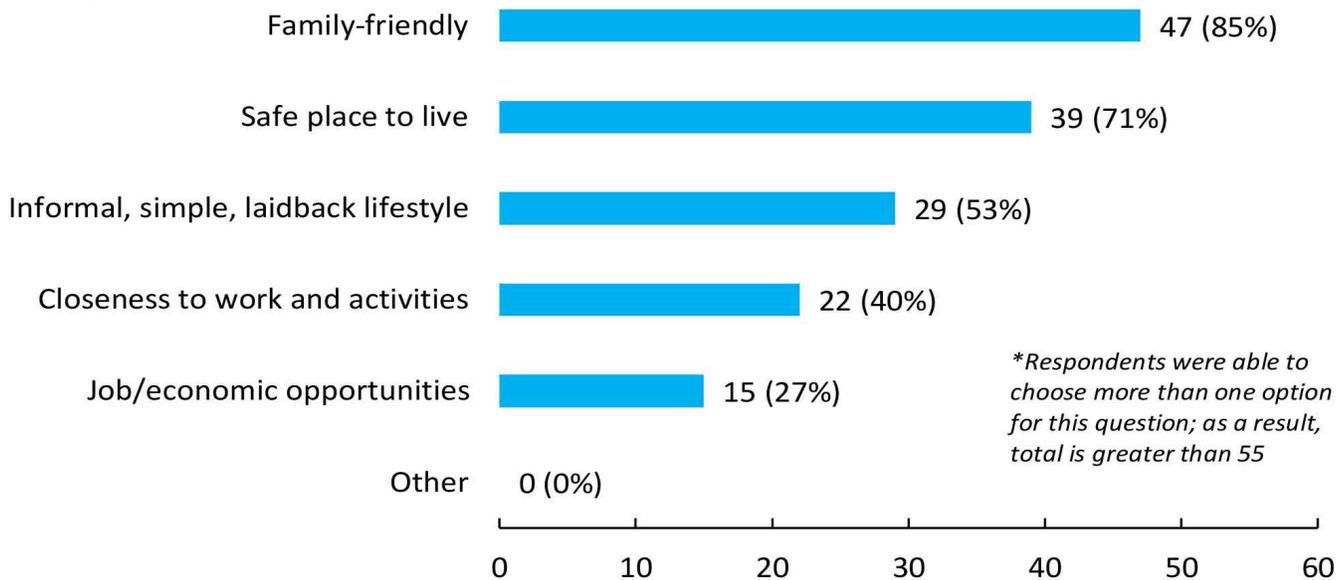
**Figure 14: Best Things About the SERVICES AND RESOURCES in Your Community**

**Total respondents = 55\***



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

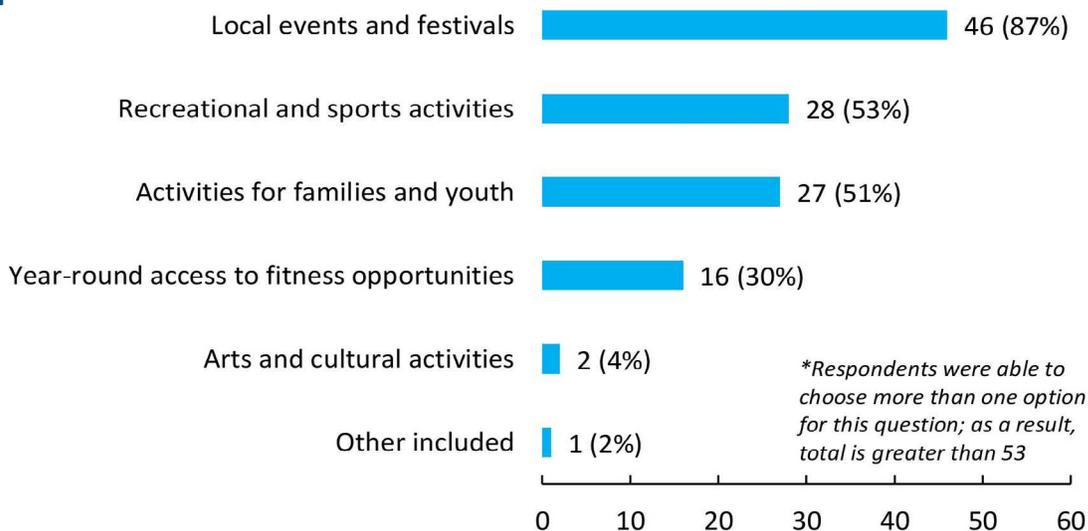
**Total respondents = 55\***



The majority of respondents agreed that the best thing about the quality of life in the community was family-friendly, which was followed by safe place to live.

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

Total respondents = 53\*



## 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
- Violence

With regard to responses about community challenges, the most highly voiced concerns (those having at least 16 respondents) were:

- Bullying / cyberbullying – violence (N=27)
- Depression / anxiety – youth (N=25)
- Drug use and abuse – youth (N=19)
- Alcohol use and abuse – adults (N=17)
- Depression / anxiety – adult (N=16)
- Having enough quality school resources (N=16)
- Not enough affordable housing (N=16)
- Not getting enough exercise / physical activity (N=16)

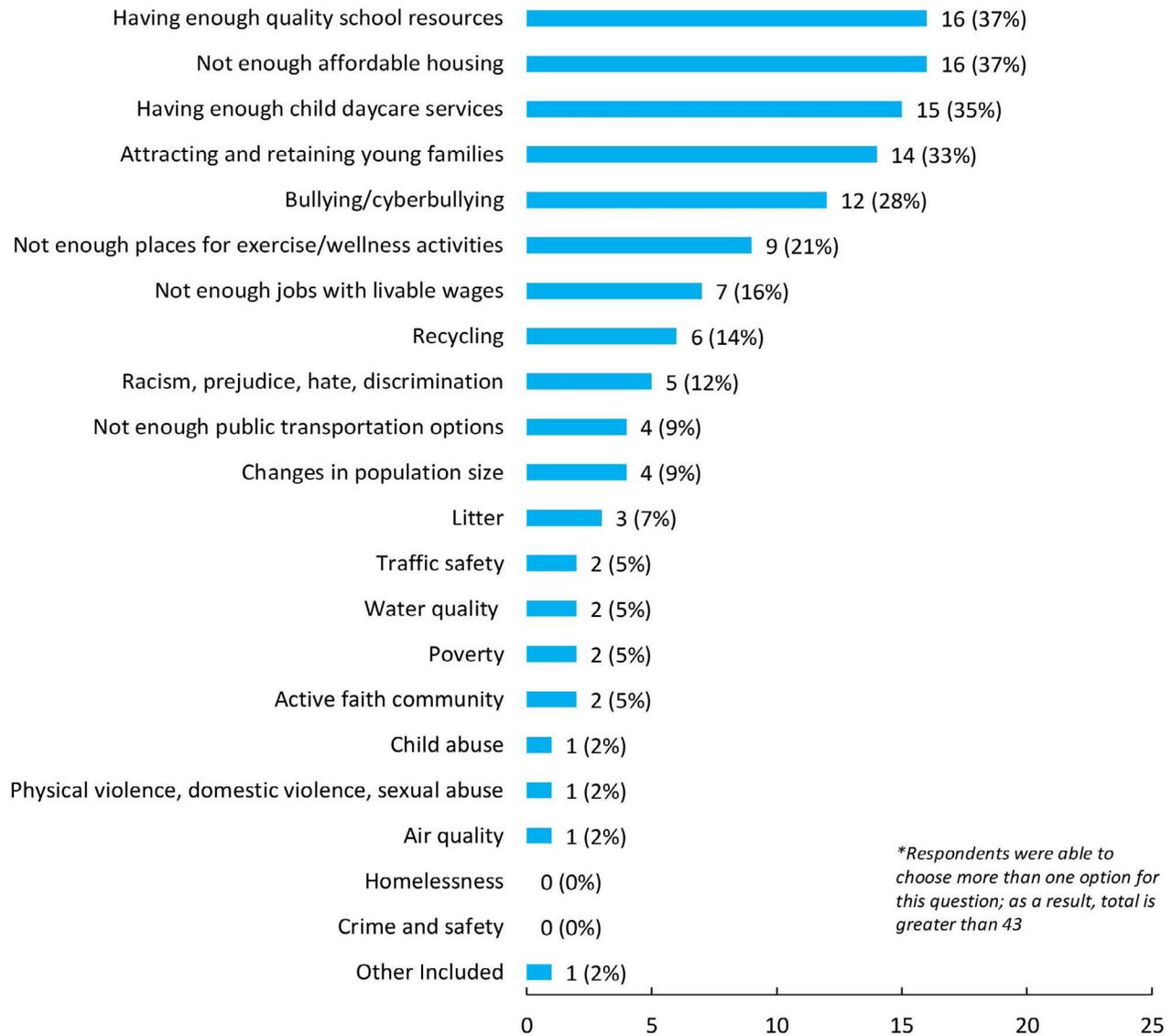
The other issues that had at least 14 votes included:

- Alcohol use and abuse – youth (N=15)
- Availability of resources to help the elderly stay in their homes (N=15)
- Having enough child daycare services (N=15)

- Ability to get appointments for health services within 48 hours (N=14)
- Attracting and retaining young families (N=14)
- Availability of home health (N=14)
- Emotional abuse (N=14)
- Extra hours for appointments (evening/ weekends) (N=14)
- Stress – adult (N=14)

Figures 17 through 22 illustrate these results.

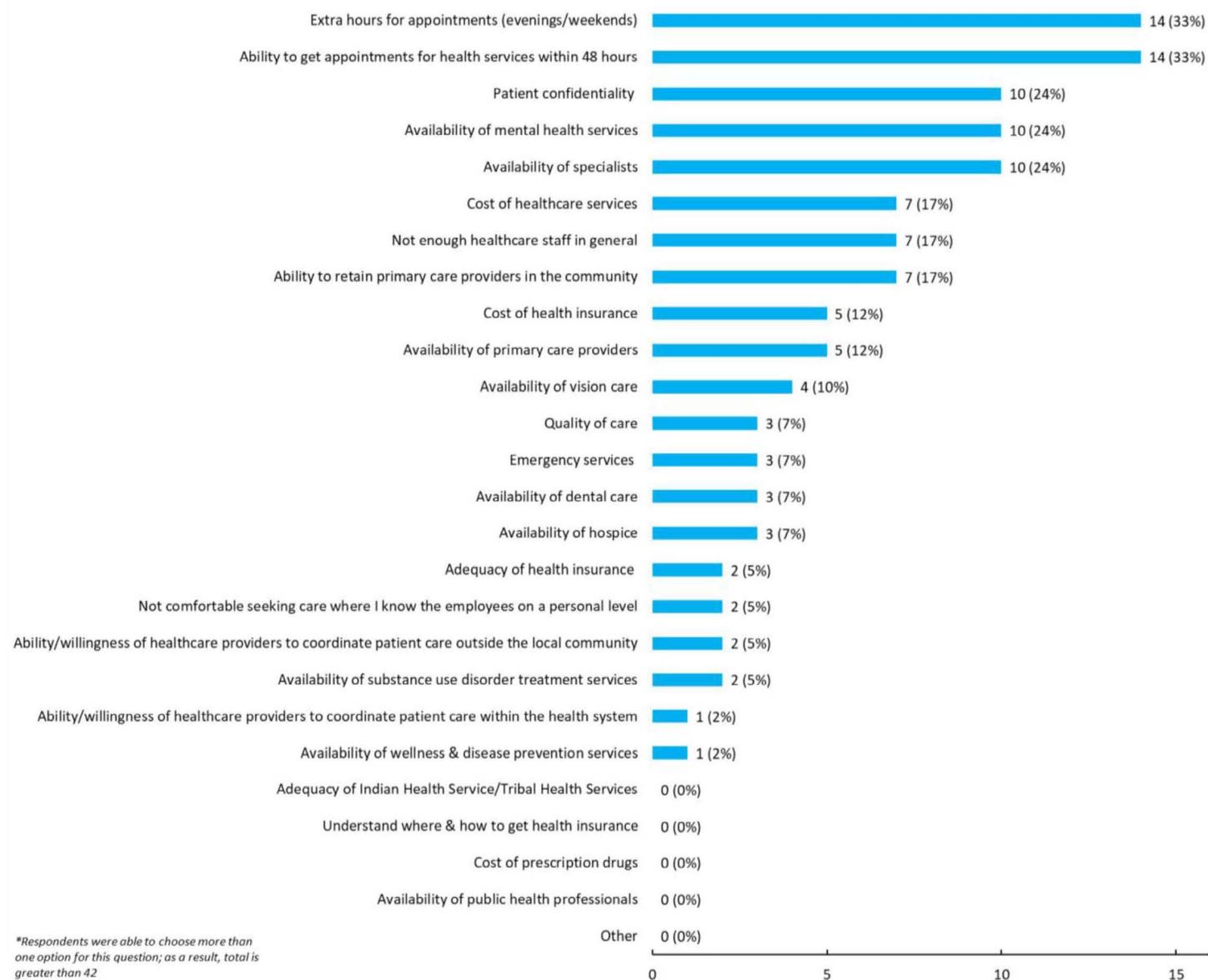
**Figure 17: Community/Environmental Health Concerns**  
**Total respondents = 43\***



In the “Other” category for community and environmental health concerns, one respondent stated having affordable daycare.

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

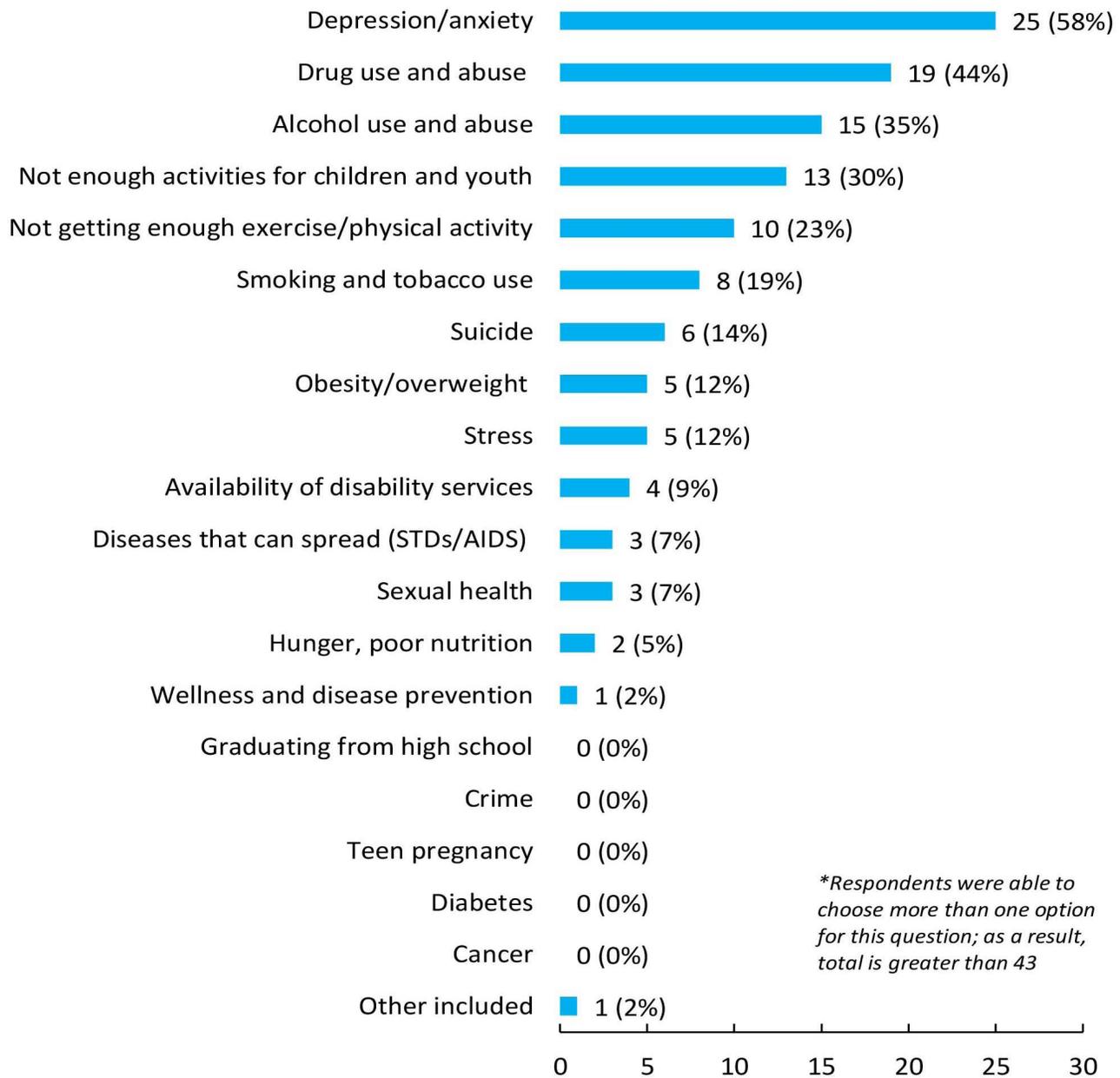
Total respondents = 42\*



Respondents' top concern for availability/delivery of health services was a tie between extra hours for appointments (evenings/weekends) and ability to get appointments for health services within 48 hours.

### Figure 19: Youth Population Health Concerns

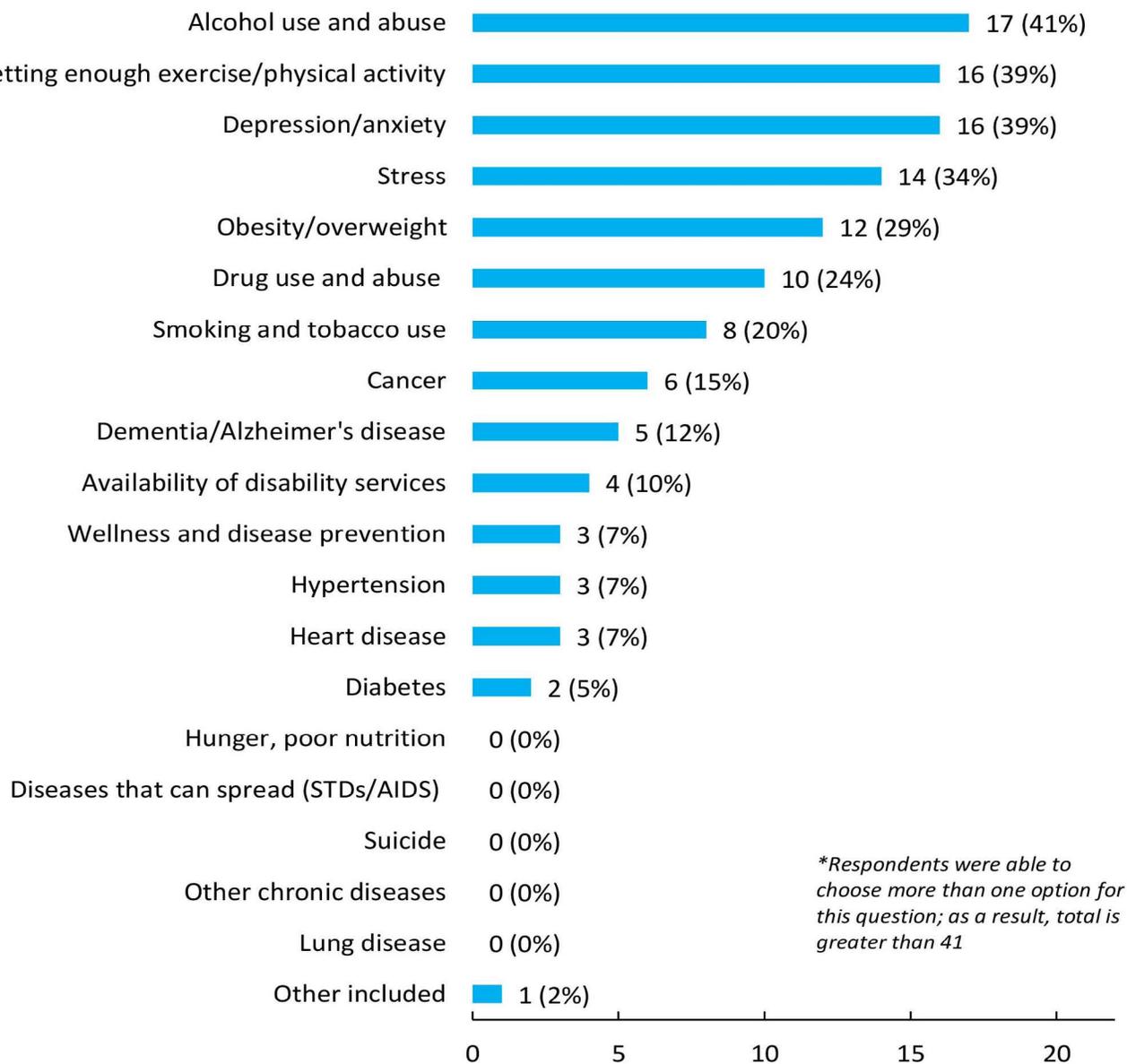
Total respondents = 43\*



*\*Respondents were able to choose more than one option for this question; as a result, total is greater than 43*

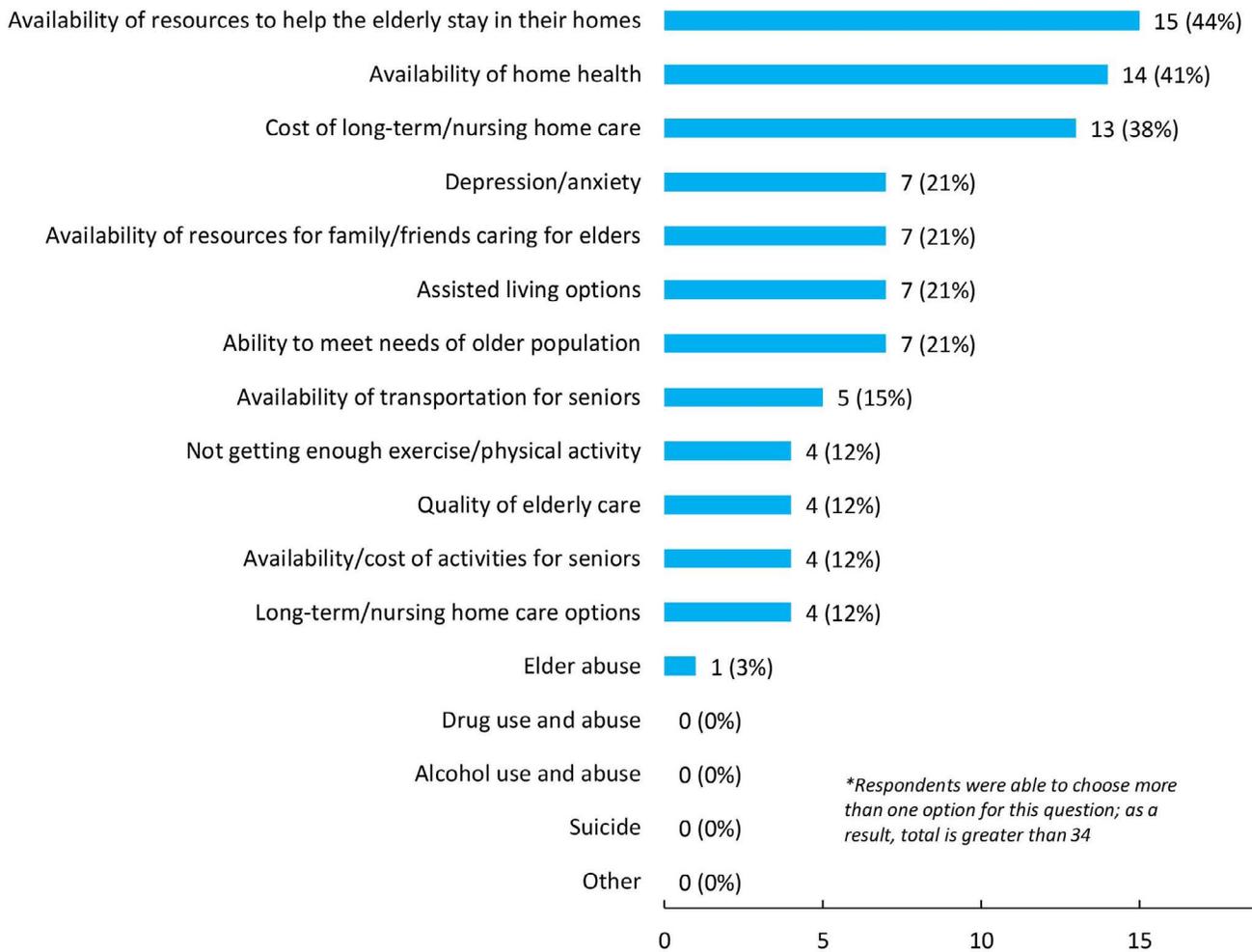
## Figure 20: Adult Population Concerns

Total respondents = 41\*



## Figure 21: Senior Population Concerns

Total respondents = 34\*

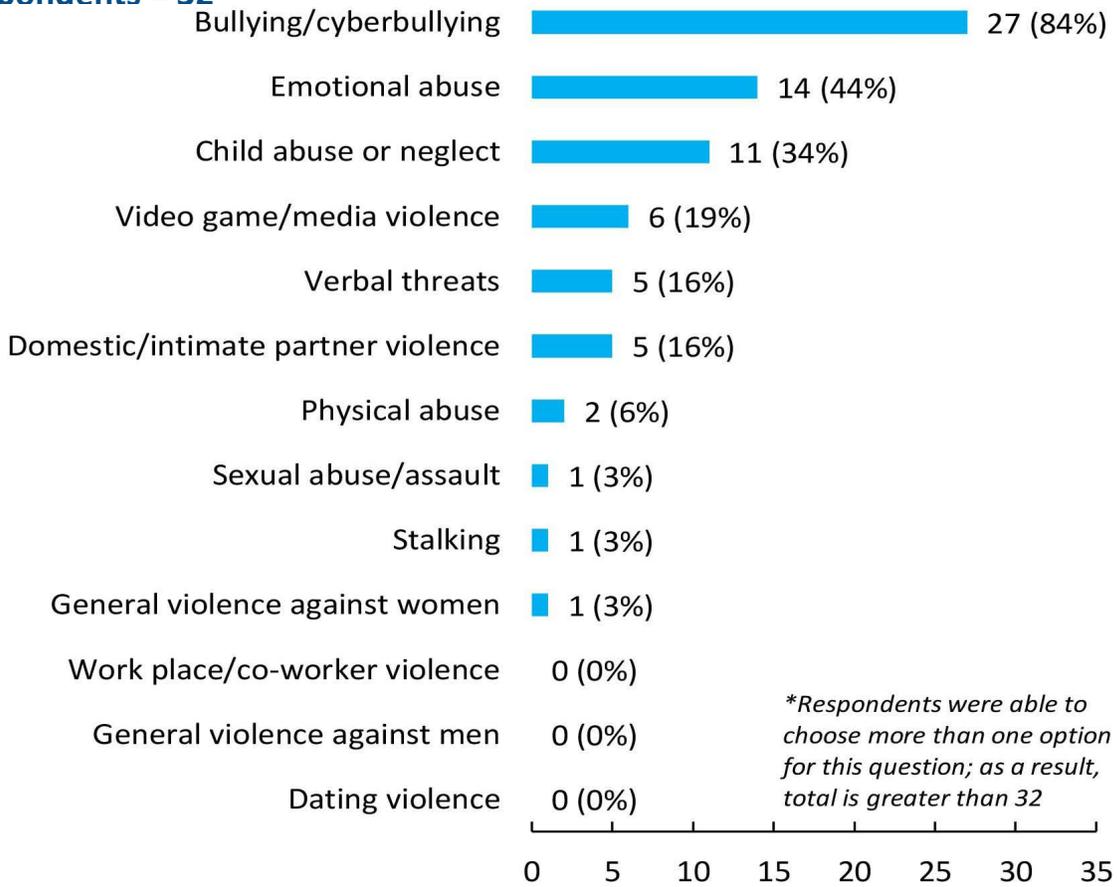


\*Respondents were able to choose more than one option for this question; as a result, total is greater than 34

Availability of resources to help the elderly stay in their homes was the top concern for the senior population.

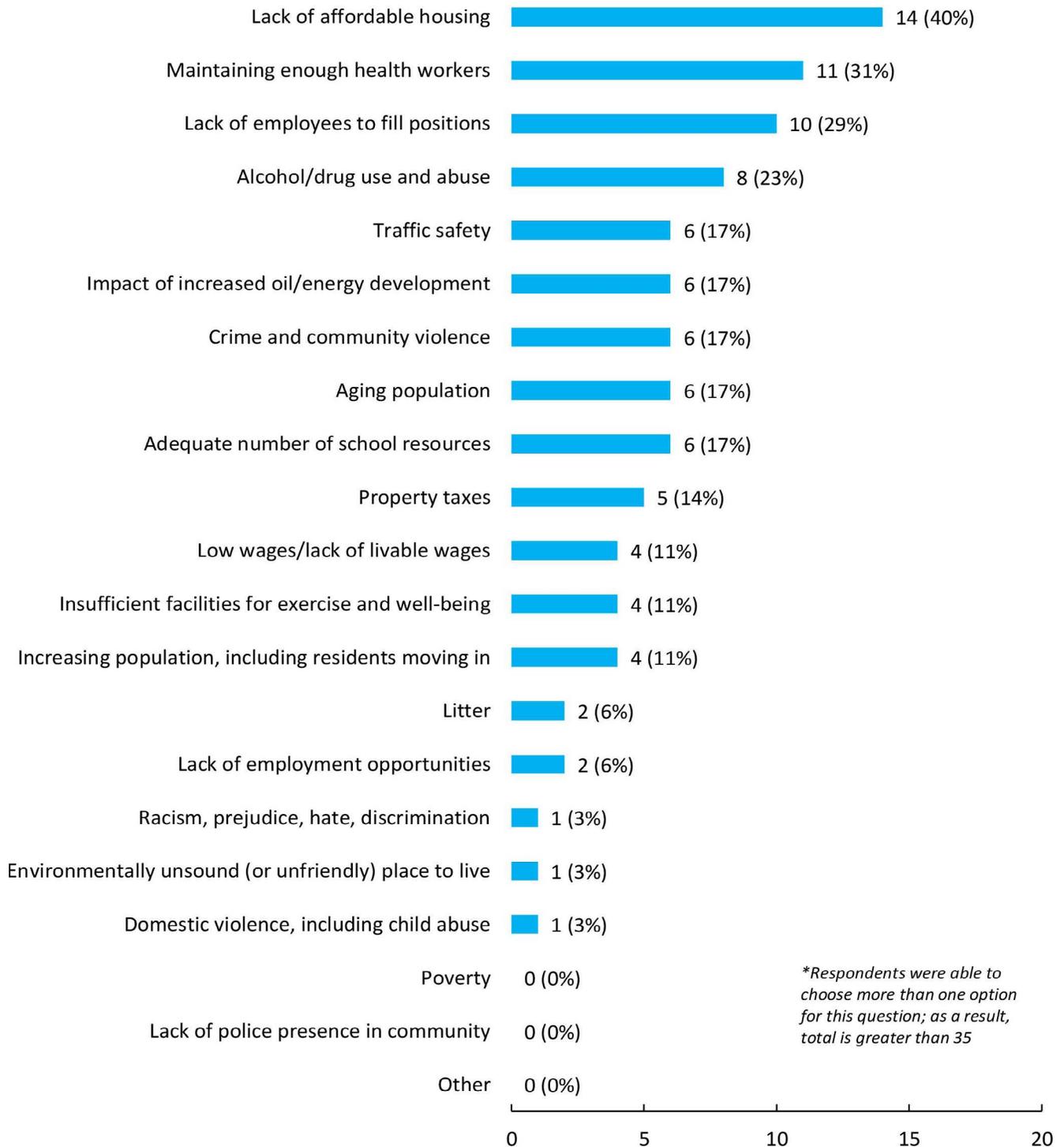
## Figure 22: Violence Concerns

Total respondents = 32\*



## Figure 23: Concerns About Impact of Oil Development of on the Community

Total respondents = 35\*



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. Affordable housing options
2. Bullying (schools, work, and community)

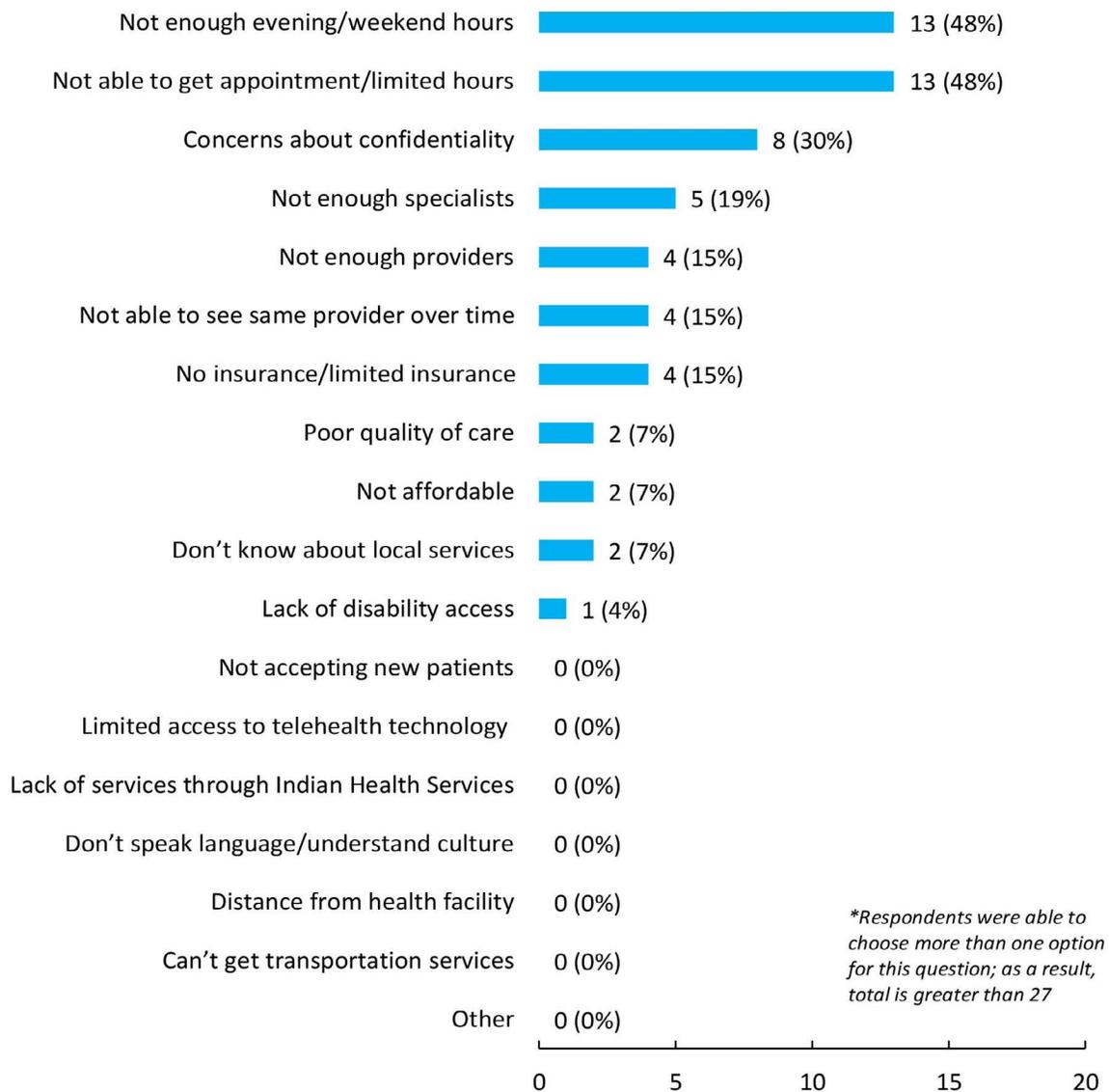
Other biggest challenges that were identified were youth stress, depression, anxiety, alcohol and drug abuse, lack of healthcare workers, lack of family-oriented attractions/services to get families to move here, labor shortages, elderly housing and resources for in-home care, as well as attracting and keeping young families. s.

## 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 not enough evening/ weekend hours (N=13) and not able to get appointment/limited hours (N=13). After these items, the next most commonly identified barriers were concerns about confidentiality (N=8) and not enough specialists (N=5).

Figure 24 illustrates these results.

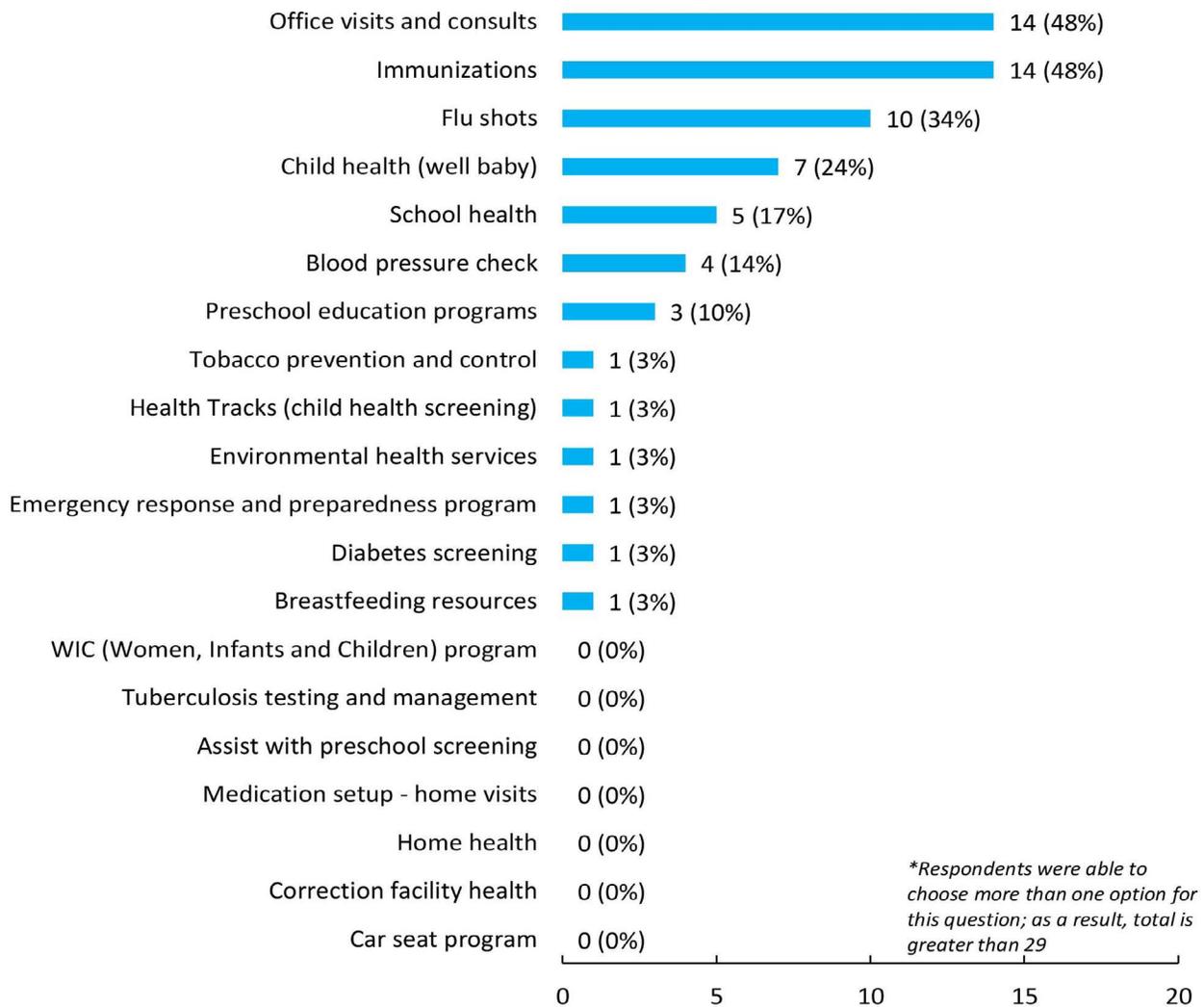
**Figure 24: Perceptions About Barriers to Care**  
**Total respondents = 27\***



Considering a variety of healthcare services, offered by Upper Missouri District Health Unit (UMDHU), respondents were asked to indicate what, if any, services they or a family member have used at UMDHU (See Figure 25).

### Figure 25: Utilization of Public Health Services

Total respondents = 29\*



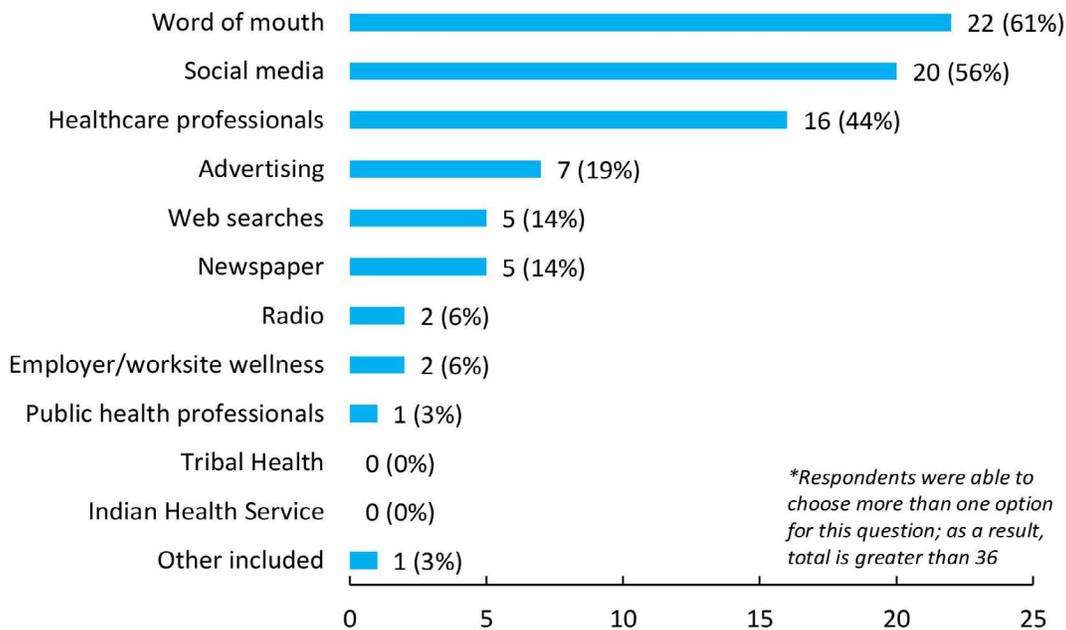
In an open-ended question, respondents were asked what specific healthcare services, if any, they think should be added locally. The number one desired service to add locally was mental health services. Other requested services included:

- Cardiologist
- Children counseling
- Dental
- Dialysis
- Functional medicine
- Gastro specialist
- Hepatology
- Most specialists in general
- Substance abuse counseling
- Vision
- Wellness

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 items included podiatry, nutrition counseling, and surgical services.

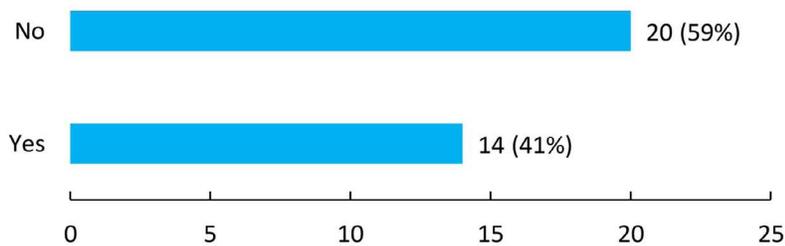
**Figure 26: Sources of Information About Local Health Services**

**Total respondents = 36\***



**Figure 27: Awareness of Tioga Medical Center’s Foundation**

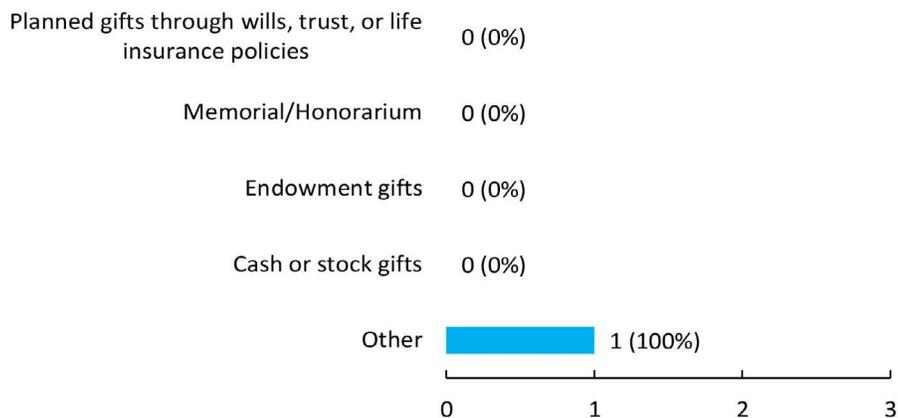
**Total respondents = 34**



In an effort to gauge ways that community members can financially support for the Tioga Medical Center Foundation, a question was included, asking them to select ways they are most likely to support Tioga Medical Center Foundation (see Figure 28).

**Figure 28: Support for the Tioga Medical Center Foundation**

**Total responses = 1**

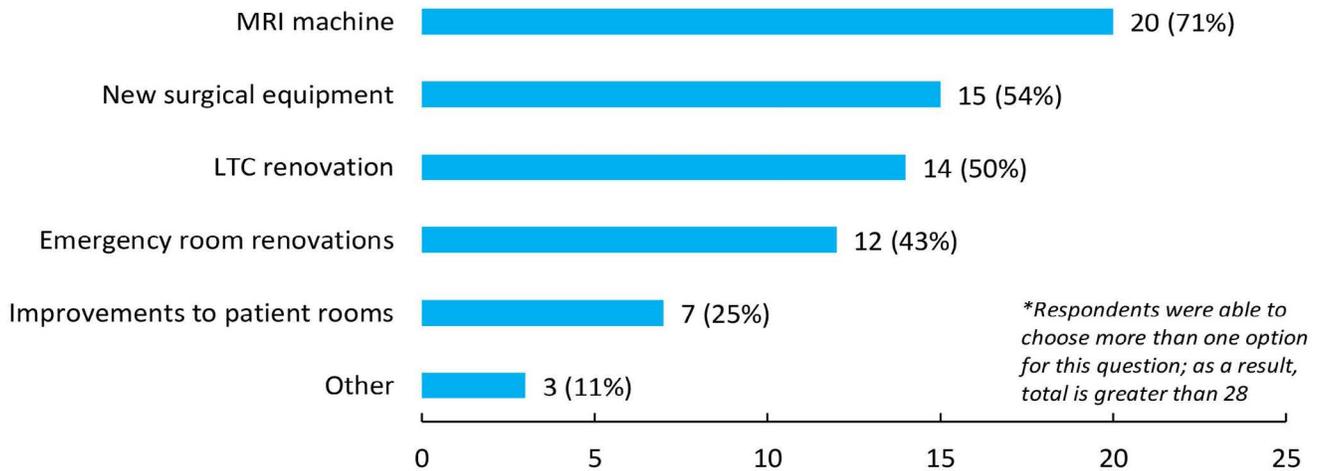


One respondent selected other, specifying they attend fundraisers.

Respondents were asked to select capital improvements that they are most likely to support at TMC (see Figure 29). Recommendations in the “Other” category included dialysis unit and private rooms at LTC.

### Figure 29: Capital Improvements Community Would Financially Support

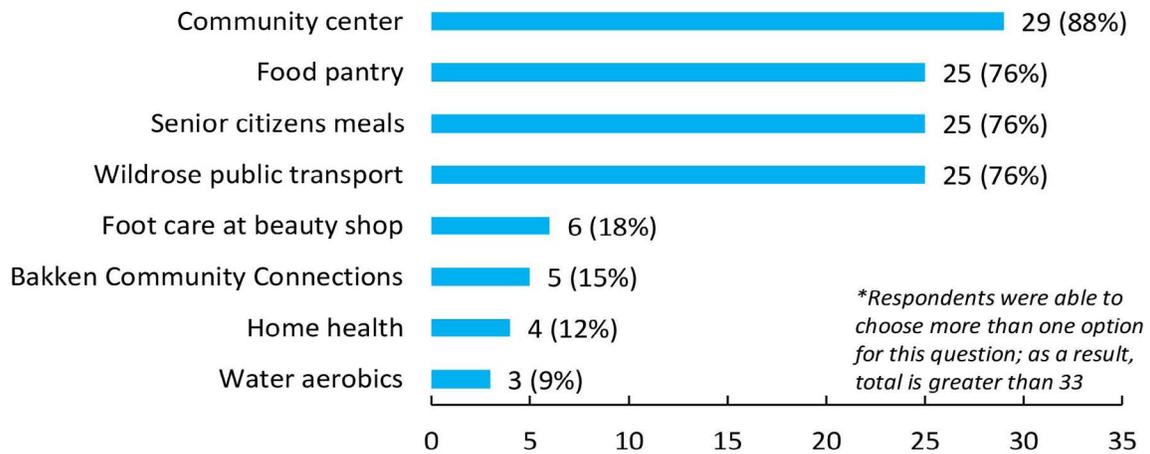
Total respondents = 28\*



When asked about the respondent’s awareness of services in the community, the majority are aware of the community center, food pantry, senior citizen meals, and Wildrose Public Transport.

### Figure 30: Awareness of Services in the Community

Total respondents = 33\*



Respondents were asked where they go to for trusted health information. Primary care providers (N=30) received the highest response rate, followed by other healthcare professionals (N=17), and then web / Internet searches (N=

### Figure 31: Sources of Trusted Health Information

Total responses = 34\*



In the “Other” category, podcasts were listed as a source of trusted information.

The final question on the survey asked respondents to share concerns and suggestions to improve the delivery of local healthcare. The responses included concerns regarding communication at the healthcare facility between the administration and staff. Another respondent stated they would like more access to other doctors. They wrote that it would also be nice to have some Saturday or Sunday openings. Currently, community residents go to the ER or drive to Minot for a walk-in clinic.

One respondent voiced concern regarding the cuts of certain programs, which cause the elderly population to suffer. There is a need for more programs that are affordable in the community to assist the elderly to remain at home.

The last suggestion noted was to see more specialties offered so residents do not have to drive to Minot or Bismarck for care. Having visiting specialists may help community members ease the burden of having to take time off of work and travel to receive care.

# Findings from Key Informant Interviews & the Community Meeting

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

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

- Alcohol use and abuse
- Attracting and retaining young families
- Depression/anxiety
- Having enough child daycare services
- Not enough healthcare staff in general

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

## Alcohol use and abuse

- Top concern is addressing alcohol abuse in both adults and youth
- Major concern in the youth population

## Attracting and retaining young families

- See a lot of people come and go in the school system
- Changes on population size, it reflects on everything. With the fluctuation it affects businesses, hospitals, and services available
- The community bounces all over with the oil industry

## Depression/anxiety

- Social media creates too much pressure on kids

## Having enough child daycare services

- People cannot find daycare services for their children

## Not enough healthcare staff in general

- Need to be able to get and retain medical staff, there is a shortage and the ones that are there are overworked and do the work of 2-3 people.
- Travel nurses/CNAs are only a short-term solution.
- Not able to retain doctors. People used to have the same doctor throughout their life, now it is not like that.

- Not enough healthcare staff in general, there is a high need and we can't meet the demand in the community.
- It's an ongoing battle, especially in small communities. Need volunteers, training them and then having the equipment for Emergency services.
- No vision doctor in the community.
- Need mental health services in the local area, no services or beds for mental health patients that are close. Ambulance spends a lot of time on the road sending people to open beds far away.

## Community Engagement and Collaboration

Key informants and focus group participants were asked to weigh in on community engagement and collaboration of various organizations and stakeholders in the community. Specifically, participants were asked, "On a scale of 1 to 5, with 1 being no collaboration/community engagement and 5 being excellent collaboration/community engagement, how would you rate the collaboration/engagement in the community among these various organizations?" This question was not intended to rank services provided. They were presented with a list of 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 (4.75)
- Hospital (healthcare system) (4.5)
- Pharmacy (4.5)
- Schools (4.5)
- Faith-based (4.25)
- Law enforcement (4.25)
- Business and industry (4.0)
- Economic development organizations (3.75)
- Long-term care, including nursing homes and assisted living (3.75)
- Other local health providers, such as dentists and chiropractors (3.5)
- Public health (3.0)
- Human/social services agencies (3.0)
- Clinics not affiliated with the main health system (2.5)
- Tribal/Indian Health Services (2.0)



## Priority of Health Needs

A community group met on January 26, 2022. Seven community members attended the meeting. Representatives from the Center for Rural Health (CRH) presented the group with a summary of this report's findings, including background and explanation about the secondary data, highlights from the survey results (including perceived community assets, 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 in the PowerPoint presentation, and each member was able to vote for their top four needs that they considered the most significant.

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

- Depression/anxiety (all ages) (5 votes)
- Having enough child daycare services (4 votes)
- Attracting and retaining young families (2 votes)

From those top three priorities, each person was able to vote once more on the item they felt was the most important. The rankings were:

1. Depression/anxiety (all ages) (5 votes)
2. Attracting and retaining young families (1 votes)
3. Having enough child daycare services (0 votes)

Following the prioritization process during the second meeting of the community group and key informants, the number one identified need was depression/anxiety for all ages. A summary of this prioritization may be found in Appendix F.

### Comparison of Needs Identified Previously

<b>Top Needs Identified 2019 CHNA Process</b>	<b>Top Needs Identified 2022 CHNA Process</b>
Attracting and retaining young families	Depression/anxiety – all ages
Depression/anxiety among the youth	Attracting and retaining young families
Having enough child daycare services	Having enough child daycare services
Not enough affordable housing	

The current process identified all identical common needs from 2019. However, the depression and anxiety need has expanded from youth to include all ages. Having enough child daycare services and attracting and retaining young families were also identified in the previous community health needs assessment, indicating that more needs to be done in these areas.

Tioga Medical Center (TMC) 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 TMC board vote, a notation will be documented in the board minutes, reflecting the approval; 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 TMC.

## 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:

Significant challenges were met in the implementation process of addressing the needs identified in the 2019 CHNA due to COVID-19 Global Pandemic beginning in 2020.

**Need 1: Attracting and retaining young families:** Since the last CHNA process, TMC has conducted two Safe Sitter classes to assist young families with access to qualified sitters. TMC has also been active in discussions/activities with the city of Tioga, Tioga School District, Tioga Rec, and many more organizations, regarding community events for young families. TMC has assisted in advertising events on an electronic sign, located on a high traffic road in Tioga. TMC is active in new Facebook group, created to promote awareness of events available in the community to the public.

**Need 2: Depression/anxiety among the youth:** The community was concerned during the last CHNA process about the increase in depression/anxiety among the youth. Since 2019, TMC has worked closely with Melissa Nystuen, LICSW, to strengthen her services available at TMC and aide in her being a part of the Tioga School District system. Throughout the COVID-19 pandemic that started in March of 2020, TMC was a pillar in promoting mental health awareness in the community through social media, radio interviews, and public education through staff members. A new partnership was developed with ConnectUS Therapy in August of 2021, which provides mental health medication management in Tioga and a strong referral process for mental health services for the community. TMC staff presented to youth/adolescence on puberty/hormone changes and effects on mood in the Tioga Public Schools. Requests for Ray and Powers Lake School were denied.

TMC indicated they encountered significant challenges in the implantation process of addressing the needs identified in the 2019 CHNA due to the COVID-19 pandemic. Because of this challenge, Need 3: Having enough child daycare services and Need 4: Not enough affordable housing, were not addressed.

The above implementation plan for Tioga Medical Center is posted on the [TMC website](#).

## Next Steps – Strategic Implementation Plan

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

*“If you want to go fast, go alone. If you want to go far, go together.” Proverb*

## Community Benefit Report

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

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

providing:

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

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

## What Are Community Benefits?

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

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

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

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

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

# Appendix A – Critical Access Hospital Profile



## Critical Access Hospital Profile

### Spotlight on: Tioga, North Dakota

# Tioga Medical Center

#### Quick Facts

**President/CEO:**

Ryan Mickelsen

**Chief of Medical Staff:**

Robert Rotering, MD

**Board Chair:**

Pastor James Booth

**City Population:**

1,062 (2019 estimate)<sup>1</sup>

**County Population:**

37,589 (2019 estimate)<sup>1</sup>

**County Median Household Income:**

\$87,161 (2019 estimate)<sup>1</sup>

**County Median Age:**

31.3 years (2019 estimate)<sup>1</sup>

**Service Area Population:**

5,000

**Owned by:** Non-Profit**Hospital Beds:** 25**Skilled Nursing Facility Beds:** 30**Trauma Level:** V**Critical Access Hospital Designation:** 1999**Economic Impact on the County<sup>2</sup>****Employment:**

Primary – 100

Secondary – 44

Total – 144

**Financial Impact:**

Primary – \$7.4 million

Secondary – \$1.6 million

Total – \$9 million

**Mission:**

The mission of Tioga Medical Center is to address the health care needs of the community through providing quality health care and promoting education and wellness.

**County:** Williams

**Address:** 810 Welo Street, PO Box 159  
Tioga, ND 58852

**Phone:** (701) 664-3305

**Fax:** (701) 664-2240

**Web:** <http://www.tiogahealth.org>

Tioga Medical Center, located in Tioga, North Dakota provides a full range of quality health care services. Located in eastern Williams County, Tioga Medical Center operates a 25-bed Critical Access Hospital, a 30-bed Skilled Nursing facility, three rural health clinics located in Tioga, Ray and Powers Lake, North Dakota and a 22 unit independent living unit.

Tioga Medical Center was founded for the primary purpose of administering health care in its most complete form. This means care in the form of mercy and love, as well as providing a professional service.

All persons regardless of race, color, creed, age, or disability are entitled to the best care medical science has to offer. Restorative, physical, mental, social, and spiritual facilities are available to each individual admitted, to aid in recovery and enrich their life.

These individuals are in a transitional and stressful part of their life. They now require professional care, guidance, and support to provide for their needs to obtain their highest level of functioning. Our philosophy is to protect and promote the rights of each individual and to illicit active participation in their plan of care.

We believe the provision of in-service educational programs for employees is essential to maintain a standard of quality for the services our facility provides.

**Services:**

Tioga Medical Center provides the following services directly:

- Cardiac rehab
- Clinic services
- CT-scan
- EKG
- Emergency room
- Gastrointestinal procedures
- Independent living unit
- Laboratory
- Occupational therapy
- Outpatient surgery
- Physical therapy
- Radiology
- Skilled nursing facility
- Social services
- Stress testing
- Swingbed

## Staffing

Physicians:	1
PAs:	2
NPs:	2
RNs:	23
LPNs:	9
<b>Total Employees:</b>	<b>130</b>

## Local Sponsors and Grant Funding Sources

- Center for Rural Health
  - SHIP Grant (Small Hospital Improvement Program)
  - Flex Grant (Medicare Rural Hospital Flexibility Grant Program)
- North Dakota Department of Emergency Services-Division of Homeland Security
- Williams County LEPC

## 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



This project is supported by the Medicare Rural Hospital Flexibility Grant Programs and the State Office or 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.

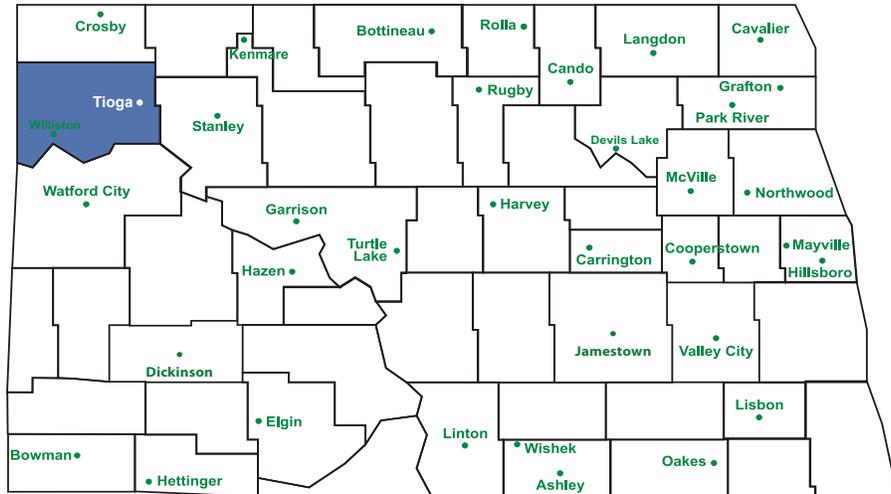
[ruralhealth.und.edu](http://ruralhealth.und.edu)

## List of Services:

Tioga Medical Center provides the following services through contract or agreement:

- Cardiology
- Diabetes education
- Nutrition services
- Orthopedic surgery
- Pediatric dental surgery
- Podiatry
- Sleep wellness studies
- Speech therapy
- Sports medicine
- Ultrasound

## North Dakota Critical Access Hospitals



## History:

As early as 1952, it was recognized that with the new oil industry, new businesses, and new construction, there was an urgent need for medical facilities in Tioga. It was decided that it would be more practical to build a clinic first followed with a hospital. Two young physicians were recruited to begin practicing in Tioga. They temporarily established offices in the Blikre Building.

It quickly became apparent that to provide adequate medical service for the area, a clinic building was imperative. The Tioga Community Clinic and Hospital Association organized to meet this challenge. The clinic open house was held February 14, 1954 and soon after, plans for a hospital began to unfold.

The hospital doors opened for patients on October 25, 1961. Fifteen years later, ground work for the new 30 bed nursing home was started and the first residents were welcomed in January of 1978.

Tioga Community Hospital was renamed Tioga Medical Center and purchased the clinic in August of 1990.

Tioga Medical Center built an adjacent independent living facility in 1998, comprised of 22 apartments with a large commons area.

In 2015, a new clinic was built attached to the hospital, the ER and ambulance bay were expanded, and a helicopter pad was added to serve the population influx.

Currently, Tioga Medical Center consists of a 25-bed Critical Access Hospital, 30-bed long term care facility, one clinic, and a 22-apartment independent living facility located in Tioga. Tioga Medical Center also operates two satellite clinics located in Ray, and Powers Lake.

## Recreation:

Located in northwest North Dakota, Tioga has an economy of primarily agriculture and oil. The area provides excellent hunting and fishing and includes Lake Sakakawea, one of North Dakota's largest recreational areas. Golf, parks, tennis courts, swimming pool, athletic fields, movie theatre, community center, and drone camp for kids provide for a variety of recreational activities.

05/2022

# Appendix B – Economic Impact Analysis

December 2020

## Tioga Medical Center

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



### Economic Impact

Tioga Medical Center is composed of a Critical Access Hospital (CAH), three Rural Health Clinics, a long term care facility, and an independent living unit in Tioga, North Dakota.

Tioga Medical Center **directly** employs **99.7 FTE employees** with an annual payroll of over **\$7.4 million** (including benefits).

- After application of the employment multiplier of 1.44, these employees created an additional **44** jobs.
- The same methodology is applied to derive the income impact. The income multiplier of 1.22 is applied to create over **\$1.6 million** in income as they interact with other sectors of the local economy.
- **Total impacts = 144 jobs and more than \$9 million in income.**

### Healthcare and Your Local Economy

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

### Key contributions of the health system include

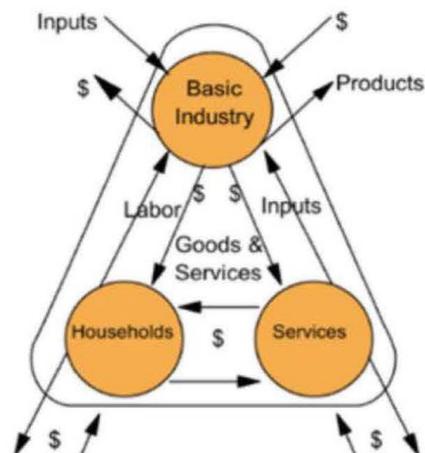
- Attracts retirees and families
- Appeals to businesses looking to establish and/or relocate
- High quality healthcare services and infrastructure foster community development
- Positive impact on retail sales of local economy
- Provides higher-skilled and higher-wage employment
- Increases the local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

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

Fact Sheet Author: Kylie Nissen, BBA

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

Figure 1. An overview of the community economic system.



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



CENTER FOR RURAL HEALTH  
OSU Center for Health Sciences



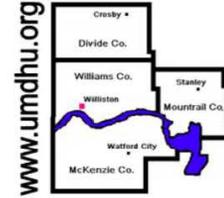
Center for Rural Health  
University of North Dakota  
School of Medicine & Health Sciences

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

# Appendix C – CHNA Survey Instrument



## Tioga Area Health Survey



Tioga Medical Center and Upper Missouri District Health Unit are interested in hearing from you about community health concerns.

The focus of this effort is to:

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



If you prefer, you may take the survey online at <https://tinyurl.com/Tioga21> 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 November 30, 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):

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

11. Regarding impacts from **OIL DEVELOPMENT** in your community, concerns are (choose up to THREE):

- |  |  |
|--|--|
| <input type="checkbox"/> Adequate number of school resources                       | <input type="checkbox"/> Lack of employment opportunities                                    |
| <input type="checkbox"/> Aging population, lack of resources to meet growing needs | <input type="checkbox"/> Lack of police presence in community                                |
| <input type="checkbox"/> Alcohol and drug use and abuse                            | <input type="checkbox"/> Litter  |
| <input type="checkbox"/> Crime and community violence                              | <input type="checkbox"/> Low wages, lack of livable wages                                    |
| <input type="checkbox"/> Domestic violence, including child abuse                  | <input type="checkbox"/> Maintaining enough health workers (e.g., medical, dental, wellness) |
| <input type="checkbox"/> Environmentally unsound (or unfriendly) place to live     | <input type="checkbox"/> Poverty   |
| <input type="checkbox"/> Impact of increased oil/energy development                | <input type="checkbox"/> Property taxes  |
| <input type="checkbox"/> Increasing population, including residents moving in      | <input type="checkbox"/> Racism, prejudice, hate, discrimination                             |
| <input type="checkbox"/> Insufficient facilities for exercise and well-being       | <input type="checkbox"/> Traffic safety, including speeding, road safety and drunk driving   |
| <input type="checkbox"/> Lack of affordable housing                                | <input type="checkbox"/> Other (please specify): _____                                       |
| <input type="checkbox"/> Lack of employees to fill positions                       |  |

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

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### Delivery of Healthcare

13. 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)

- |  |  |
|--|--|
| <input type="checkbox"/> Blood pressure check  | <input type="checkbox"/> Home health   |
| <input type="checkbox"/> Breastfeeding resources   | <input type="checkbox"/> Immunizations   |
| <input type="checkbox"/> Car seat program  | <input type="checkbox"/> Medications setup—home visits   |
| <input type="checkbox"/> Child health (well baby)  | <input type="checkbox"/> Office visits and consults  |
| <input type="checkbox"/> Correction facility health  | <input type="checkbox"/> School health (vision screening, puberty talks, school immunizations) |
| <input type="checkbox"/> Diabetes screening  | <input type="checkbox"/> Preschool education programs  |
| <input type="checkbox"/> Emergency response & preparedness program                             | <input type="checkbox"/> Assist with preschool screening                                       |
| <input type="checkbox"/> Flu shots   | <input type="checkbox"/> Tobacco prevention and control  |
| <input type="checkbox"/> Environmental health services (water, sewer, health hazard abatement) | <input type="checkbox"/> Tuberculosis testing and management                                   |
| <input type="checkbox"/> Health Tracks (child health screening)                                | <input type="checkbox"/> WIC (Women, Infants & Children) Program                               |

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

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

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

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

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

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

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

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18. Are you aware of Tioga Medical Center's Foundation, which exists to financially support Tioga Medical Center?

- Yes  No

19. Have you supported the Tioga Medical Center Foundation in any of the following ways? (Choose ALL that apply)

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

20. Do you believe individuals in the community would financially support any of the following capital improvements by Tioga Medical Center? (Choose ALL that apply)

- |   |  |
|---|--|
| <input type="checkbox"/> Emergency room renovations | <input type="checkbox"/> Improvements to patient rooms (e.g., larger bathrooms)  |
| <input type="checkbox"/> LTC renovation             | <input type="checkbox"/> Other (Please specify other capital improvements that you believe the community would financially support): _____ |
| <input type="checkbox"/> New surgical equipment     |  |
| <input type="checkbox"/> MRI machine                |  |

21. Which of the following services provided in the community are you aware of?

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Foot Care at Beauty Shop  | <input type="checkbox"/> Community Center | <input type="checkbox"/> Bakken Community Connections |
| <input type="checkbox"/> Wildrose Public Transport | <input type="checkbox"/> Home Health      | <input type="checkbox"/> Food Pantry                  |
| <input type="checkbox"/> Senior citizens meals     | <input type="checkbox"/> Water aerobics   |   |

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

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

- Yes  No

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

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

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

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

25. Age:

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

26. Highest level of education:

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

27. Gender:

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

28. Employment status:

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

29. Your zip code: \_\_\_\_\_

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

- |   |   |                                       |
|---|---|---------------------------------------|
| <input type="checkbox"/> American Indian  | <input type="checkbox"/> Hispanic/Latino  | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> African American | <input type="checkbox"/> Pacific Islander |                                       |
| <input type="checkbox"/> Asian            | <input type="checkbox"/> White/Caucasian  |                                       |

31. Annual household income before taxes:

- |   |   |   |
|---|---|---|
| <input type="checkbox"/> Less than \$15,000   | <input type="checkbox"/> \$50,000 to \$74,999   | <input type="checkbox"/> \$150,000 and over |
| <input type="checkbox"/> \$15,000 to \$24,999 | <input type="checkbox"/> \$75,000 to \$99,999   |   |
| <input type="checkbox"/> \$25,000 to \$49,999 | <input type="checkbox"/> \$100,000 to \$149,999 |   |

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

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

# Appendix D – County Health Rankings Explained

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

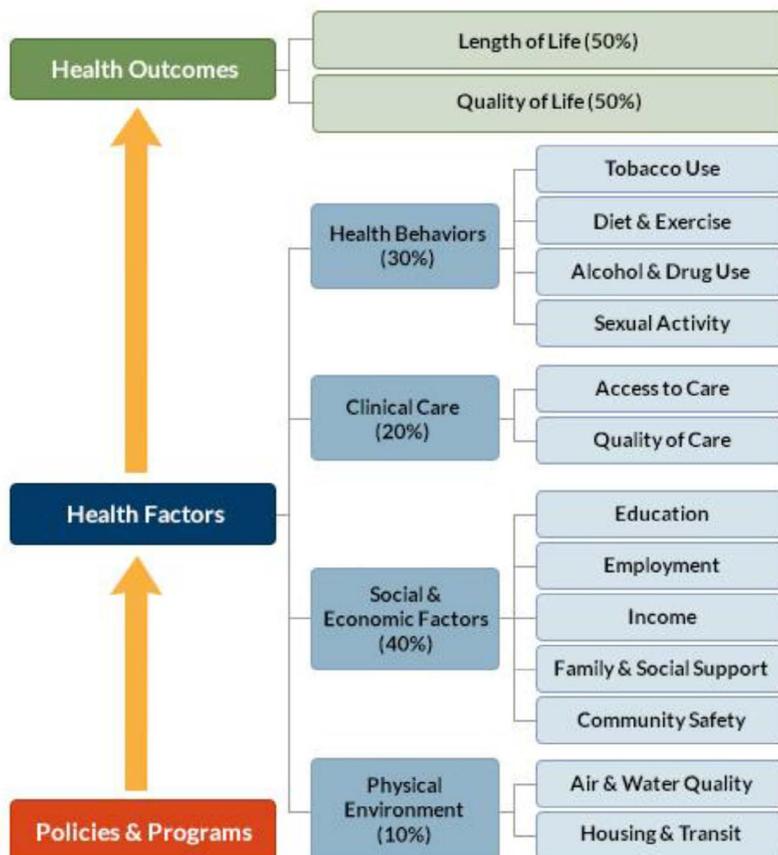
## Methods

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

## What is Ranked

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

## Ranking System



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

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

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

## Data Sources and Measures

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

## Data Quality

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

## Calculating Scores and Ranks

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

# Health Outcomes and Factors

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

## Health Outcomes

### Premature Death (YPLL)

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

#### *Reason for Ranking*

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

### Poor or Fair Health

Self-reported health status is a general measure of health-related quality of life (HRQoL) in a population. This measure is based on survey responses to the question: "In general, would you say that your health is excellent, very good, good, fair, or poor?" The value reported in the County Health Rankings is the percentage of adult respondents who rate their health "fair" or "poor." The measure is modeled and age-adjusted to the 2000 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/m<sup>2</sup>.

### *Reason for Ranking*

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

### **Food Environment Index**

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

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

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

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

### *Reason for Ranking*

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

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

### **Physical Inactivity**

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

### *Reason for Ranking*

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

### **Access to Exercise Opportunities**

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

Individuals who:

- reside in a census block within a half mile of a park or
- in urban census blocks: reside within one mile of a recreational facility or
- in rural census blocks: reside within three miles of a recreational facility
- are considered to have adequate access for opportunities for physical activity.

### *Reason for Ranking*

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

### **Excessive Drinking**

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

### *Reason for Ranking*

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

### **Alcohol-Impaired Driving Deaths**

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

### *Reason for Ranking*

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

### **Sexually Transmitted Infection Rate**

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

### *Reason for Ranking*

Chlamydia is the most common bacterial STI in North America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain.[1,2] STIs are associated with a significantly increased risk of morbidity and mortality, including increased risk of cervical cancer, infertility, and premature death.[3] STIs also have a high economic burden on society. The direct medical costs of managing sexually transmitted infections and their complications in the 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
<b>Injury and Violence</b>							
Percentage of students who rarely or never wore a seat belt (when riding in a car driven by someone else)	8.5	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)							
<b>Tobacco Use</b>							
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)							
<b>Alcohol and Other Drug Use</b>							
Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life)	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
<b>Sexual Behaviors</b>							
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
<b>Weight Management and Dietary Behaviors</b>							
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
<b>Physical Activity</b>							
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
<b>Other</b>							
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 Tioga, North Dakota Ranking of Concerns

The top concerns for each of the six-topic area, based on the community survey results, were listed a Qualtrics survey. The numbers below indicate the total number of votes by the people in attendance at the virtual second community meeting. The “Priorities” column lists the number of concerns indicating which areas are felt to be priorities. Each person was told to choose four items they felt were priorities on Tioga survey part 1. After tallying the first round of votes, a second survey was given with the top four concerns from the first survey. The “Most Important” column shows the results of the second survey, with depression/anxiety for all ages receiving the highest votes, followed by attracting & retaining young families.

	Priorities	Most Important
<b>COMMUNITY/ENVIRONMENTAL HEALTH CONCERNS</b>		
Attracting & retaining young families	2	1
Having enough child daycare services	4	
Not enough affordable housing	1	
Having enough quality school resources		
<b>AVAILABILITY/DELIVERY OF HEALTH SERVICES CONCERNS</b>		
Availability of mental health services		
Extra hours for appointments (evenings and weekends)		
Patient confidentiality		
Ability to get appointment for health services within 48 hours	1	
<b>YOUTH POPULATION HEALTH CONCERNS</b>		
Alcohol use and abuse (ALL AGES)	1	
Drug use and abuse (including prescription drugs) (ALL AGES)	1	
Depression/anxiety (ALL AGES)	5	5
Not enough activities for exercise/physical activity (ALL AGES)	1	
<b>ADULT POPULATION HEALTH CONCERNS</b>		
Stress	1	
<b>SENIOR POPULATION HEALTH CONCERNS</b>		
Cost of long-term/nursing home care	1	
Availability of resources to help elderly stay in their homes	1	
Availability of home health		
<b>VIOLENCE CONCERNS</b>		
Bullying/cyber-bullying (adults & youth)	1	
Child abuse or neglect		
Video game/media violence		
Emotional abuse (isolation, verbal threats, withholding of funds)		

# Appendix G – Survey “Other” Responses

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

## Community Concerns

1. Considering the PEOPLE in your community, the best things are: “Other” responses:
    - Close knit community
  2. Considering the SERVICES AND RESOURCES in your community, the best things are: “Other” responses:
    - Healthy food is expensive. Restaurants are okay, but the quality is lacking. The school system is below average and there isn’t as much for youth to do outside of school. The community is very cliquy and not as open to outsiders.
  4. Considering the ACTIVITIES in your community, the best things are: “Other” responses:
    - Things are not advertised as well, especially with the local paper which mostly biased anyway.
- Community Concerns: Please tell us about your community by choosing up to three options you most agree with in each category.
5. Considering the COMMUNITY / ENVIRONMENTAL HEALTH in your community, concerns are: “Other” responses:
    - Having affordable daycare
  7. Considering the YOUTH POPULATION in your community, concerns are: “Other” responses
    - Bullying is horrible and nothing is done about it
  8. Considering the ADULT POPULATION in your community, concerns are: “Other” responses:
    - Dialysis services
  12. What single issue do you feel is the biggest challenge facing your community?
    - Youth stress, depression, anxiety
    - These weird Patriot groups having meetings.
    - The Tioga Tribune
    - The same for years alcohol and drug abuse.
    - Lack of health care workers
    - Lack of family-oriented attractions/ services to get families to move here
    - Labor shortages
    - Housing for families that is affordable.
    - Elderly housing & resources for in home care
    - Bullying. Whether it is at school, work, or in a public meeting. It happens all the time and no one ever does anything about it because the people in charge are the ones that are the biggest bullies.
    - BULLYING IN THE HIGH-SCHOOL IS ATROCIOUS
    - Bullying in schools, our children need more resources and schools need to start cracking down
    - Attracting and keeping young families
    - Affordable housing options

## Delivery of Healthcare

15. Where do you find out about LOCAL HEALTH SERVICES available in your area? “Other” responses:

- Websites for each hospital/ clinic

16. Where do you turn for trusted health information? “Other” responses:

- Podcasts

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

- Vision, more Dentist
- Vision and dental
- Specialists
- more mental health, substance abuse counseling, crisis pregnancy support, dialysis
- Mental health for youth
- mental health
- Gastro, Hepatology, Cardiologist
- Functional medicine. Wellness.
- Dialysis
- Dialysis
- Children counseling

19. Have you supported the Tioga Medical Center Foundation in any of the following ways? “Other” responses:

- Attended fundraisers

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

- Communication at our healthcare facility between our administration and staff.
- More access to other doctors.
- I was an IHCS for Williams County for 19 years. I feel since programs like this have been cut our elderly population is suffering. More programs that are affordable are needed in our communities to assist elderly to remain at home.
- It would be nice to see more specialties offered so we don't have to drive to Minot or Bismarck for care. It would also be nice to have some Saturday or Sunday openings versus going to the ER or driving to Minot for a walk-in clinic.