

# Community Health Needs Assessment

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2019



Oakes, North Dakota Service Area



Center for Rural Health

University of North Dakota  
School of Medicine & Health Sciences

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# Executive Summary

To help inform future decisions and strategic planning, CHI Oakes Hospital conducted a community health needs assessment (CHNA) in 2018. The previous CHNA was conducted in 2016. The Center for Rural Health (CRH) at the University of North Dakota School of Medicine & Health Sciences (UNDSMHS) facilitated the assessment process, which solicited input from area community members and healthcare professionals as well as analysis of community health-related data.



To gather feedback from the community, residents of the area were given the opportunity to participate in a survey. There were 442 CHI Oakes Hospital service area residents who completed the survey. Additional information was collected through eight key informant interviews with community members. The input from the residents, who primarily reside in Dickey 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.

Dickey County's population from 2010 to 2017 decreased 8.1%. The average of residents under age 18 (24.3%) for Dickey County is 1% higher than the North Dakota state average (23.3%). The percentage of residents ages 65 and older is 6.1% higher for Dickey County (21.1%) than the North Dakota average (15.0%), and the rates of education are slightly lower for Dickey County (87.7%) than the North Dakota average (92.0%). The median household income in Dickey County (\$55,882) is right in line with the state average for North Dakota (\$55,322).

Data compiled by County Health Rankings show Dickey County is doing better than North Dakota in health outcomes/factors for 18 categories.

The 442 CHI Oakes Hospital service area residents who completed the survey indicated the following ten needs out of the 82 potential community and health needs set forth in the survey, as the most important (listed in alphabetical order):

- Alcohol use and abuse – youth and adult
- Attracting and retaining young families
- Availability of resources to help the elderly stay in their homes
- Bullying/cyber-bullying
- Cancer – adult
- Cost of long-term/nursing home care
- Cost of health insurance
- Depression/anxiety – youth
- Emotional abuse (isolation, verbal threats, economic abuse)
- Not enough jobs with livable wages

The survey also revealed the biggest barriers to receiving healthcare (as perceived by community members). They included no insurance or limited insurance (N=122), not affordable (N=112), and not enough evening or weekend hours (N=93).



When asked what the best aspects of the community were, respondents indicated the top community assets were (listed in alphabetical order):

- Active faith community
- Family-friendly
- People are friendly, helpful, and supportive
- People who live here are involved in their community
- Quality school system
- Recreational and sports activities



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 (listed in alphabetical order):

- Attracting and retaining young families
- Availability of mental health services
- Depression/anxiety
- Having enough child daycare services
- Not enough affordable housing

## Overview and Community Resources

With assistance from the CRH at the UNDSMHS, the CHI Oakes Hospital completed a CHNA of the CHI Oakes Hospital service area. The hospital identifies its service area as Dickey County. Many community members and stakeholders worked together on the assessment.

Oakes Community Hospital, dba CHI Oakes Hospital, is a 20-bed critical access hospital that provides various inpatient and outpatient services to approximately 14,000 people in southeastern North Dakota. It is also a 24-Hour Emergency Level V Trauma Center. The hospital building was newly-constructed in 2007, replacing a 50-year old building, and in 2010, Oakes Community Clinic was opened within the hospital building. The hospital is part of a larger values-based organization, Catholic Health Initiatives (CHI).



Dickey County is located in southeastern North Dakota, along the border with South Dakota. Along with the hospital, agriculture and industry provide the economic base for the county. According to the 2010 U.S. Census, Dickey County had a population of 5,289. Its two largest communities contain 3,250 of those residents: Ellendale, the county seat, had a population of 1,394, and Oakes had a population of 1,856.

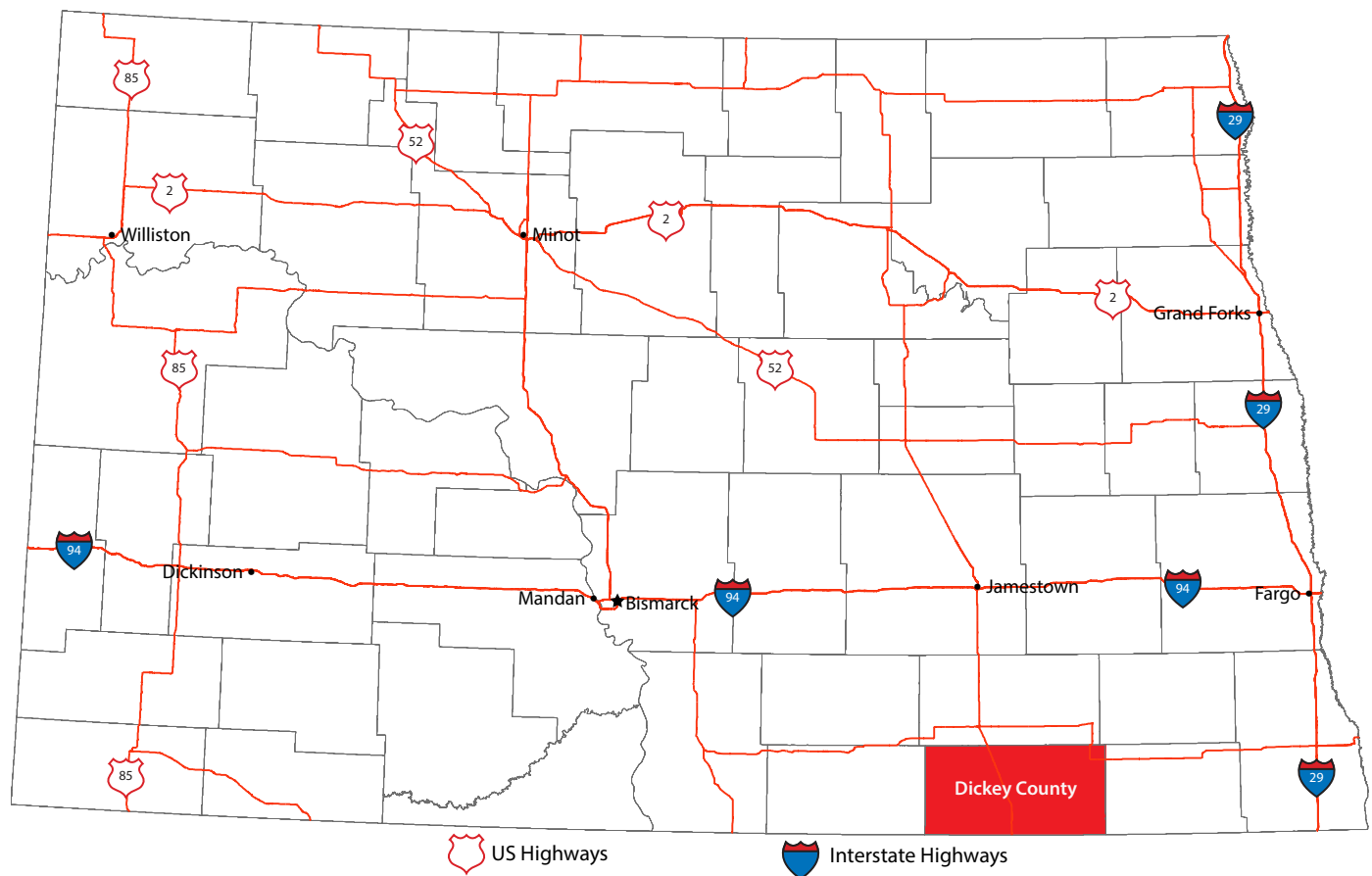
Primarily an agricultural area, Dickey County is a farm and ranch community with many acres of corn and soybeans produced each year. Oakes is proud to have two 110-car grain elevator facilities. Both Oakes and Ellendale boast a large industrial sector, as well as progressive main streets with a variety of items available.

The medical facilities in the county are like none other in rural North Dakota, with well-established clinics, dental offices, optometrist, chiropractors, ambulance service, pharmacies, all levels of retirement living, access to home health and hospice services, a dialysis center, and of course, hospital. Education is highly-valued, as evidenced by the modernized K-12 public school systems in both Oakes and Ellendale, Trinity Bible College, and the Southeast Region Career and Technology Center.

Dickey County has a number of community assets and resources, including modern swimming pools, park facilities, fitness center, grocery stores, walking paths, hotels, tennis courts, golf courses, and movie theatre. Hunting and fishing opportunities abound.



**Figure 1: Illustrates the Location of the Counties**



## CHI Oakes Hospital

CHI Oakes Hospital began delivering its healthcare mission in 1923 as the St. Anthony Hospital. In 1950, the Sisters of St. Francis of the Immaculate Heart of Mary purchased the hospital and eventually opened a new facility. The Sisters of St. Francis transferred the sponsorship of the Oakes Community Hospital to the Catholic Health Initiatives in 1998.

Catholic Health Initiatives (CHI), a nonprofit, faith-based health system formed in 1996 through the consolidation of four Catholic health systems, expresses its mission each day by creating and nurturing healthy communities in the hundreds of sites across the nation where we provide care. CHI is based in Englewood, Colorado and is one of the nation's largest nonprofit health systems. The organization operates in 18 states and is comprised of 101 hospitals, including two academic health centers and major teaching hospitals, as

well as 29 critical-access facilities; community health-services organizations; accredited nursing colleges; home-health agencies; living communities; and other facilities and services that span the inpatient and outpatient continuum of care. In fiscal year 2017, CHI provided more than \$1.2 billion in financial assistance and community benefit for programs and services for the poor, free clinics, education and research. Financial assistance and community benefit totaled approximately \$2.1 billion with the inclusion of the unpaid costs of Medicare. The health system, which generated operating revenues of \$15.5 billion in fiscal year 2017, has total assets of approximately \$22 billion.



## Mission

The Mission of CHI is to nurture the healing ministry of the Church, supported by education and research. Fidelity to the Gospel emphasizes human dignity and social justice to create healthier communities.

To fulfill this mission, Catholic Health Initiatives, as a values-driven organization, will:

- Assure the integrity of the healing ministry in both current and developing organizations and activities;
- Develop creative responses to emerging healthcare challenges;
- Promote mission integration and leadership formation throughout the entire organization;
- Create a national Catholic voice that advocates for systemic change and influences health policy with specific concern for persons who are poor, alienated and underserved; and
- Steward resources by general oversight of the entire organization.

## Vision

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

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

Services offered locally by CHI Oakes Hospital include:

### General and Acute Services

- |                                    |                         |
|------------------------------------|-------------------------|
| • Chemotherapy                     | • Hospital (acute care) |
| • Critical care                    | • Nutrition counseling  |
| • General/family/internal medicine | • Outpatient services   |

- Pain management
- Pediatric care
- Pharmacy
- Social services
- Surgical services-ear, nose, throat (ENT)
- Surgical services-endoscopy

- Surgical services-general/laparoscopic
- Surgical services-gynecologic
- Surgical services-ophthalmology (visiting specialist)
- Swing bed (sub-acute care)
- Telepharmacy (contracted service)

### **Clinical Care**

- Allergy, flu, and pneumonia shots
- Audiology (visiting specialist)
- Blood pressure checks
- Family medicine
- General surgery (visiting specialist)
- Immunizations

- Internal medicine
- Joint injections
- Mole / wart / skin lesion removal
- Orthopedics (visiting specialist)
- Physicals – annuals, DOT, sports, insurance
- Podiatry (visiting specialist)

### **Emergency Services**

- Emergency department (level V trauma)
- eEmergency (contracted service)

- Sexual Assault Nurse Examiner
- Stroke ready protocols

### **Screening/Therapy Services**

- Laboratory services
- Physical therapy – inpatient, outpatient, swing bed
- Respiratory therapy
- Smoking cessation

- Speech therapy
- Sleep studies (contracted service)
- Stress testing
- Tele-psychiatry (contracted service)

### **Radiology Services**

- Computed axial tomography (CT) Scan
- Dexascan
- Digital mammography
- Electrocardiogram
- General imaging/fluoroscopy/picture archiving and communication system (PACS)

- Magnetic resonance imaging (MRI) (contracted service)
- Nuclear medicine (contracted service)
- Tele-radiology (contracted service)
- Ultrasound (contracted service)

### **Laboratory Services**

- Biofluids
- Blood bank
- Chemistry

- Department of Transportation testing
- Hematology



## Services offered by OTHER providers/organizations

- Ambulance
- Chiropractic services
- Dental services
- Dialysis
- Hospice (contracted service)
- Massage therapy
- Optometric/ vision services

## Dickey County Health District

Dickey County Health District (DCHD) was formed September 1, 1999. The health district is governed by a health board and operates under the direction of a health officer. The public health district strives to promote wellness and protect the health of the people and communities in which they live, work, and play.

DCHD is located in Ellendale, North Dakota, the county seat of Dickey County. Situated in rural Southeast North Dakota, Dickey County is the home to 5289 people. DCHD currently employs 4 full-time staff.



## Mission

We believe that prevention and early detection of illness is a most cost-effective approach to keep people healthy through education, workshops, visits, screening, etc. By working together with the community to create healthy lifestyles, we can all live better, healthier lives.

## Vision

The vision of DCHD is working together to live healthier lives.

Specific services that DCHD provides are:

- Adult education programs
- Bicycle helmet safety education
- Blood pressure checks
- Breastfeeding resources
- Car seat program
- Child health (well baby checks)
- Diabetes screening
- Emergency preparedness services
- Environmental health services (water, sewer, health hazard abatement)
- Flu shots
- Health Tracks (child health screening)
- Immunizations
- Medications setup—home visits
- Member of Child Protection Team
- Newborn home visits
- Nutrition education
- Preschool education programs and screening
- School health – screenings, health education and resources
- Tobacco prevention and control
- Tuberculosis testing and management
- West Nile program – surveillance and education
- WIC (Women, Infants & Children) Program
- Worksite Wellness – County employees
- Youth education programs



# Assessment Process

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

A CHNA benefits the community by:

- 1) Collecting timely input from the local community members, providers, and staff;
- 2) Providing an analysis of secondary data related to health-related behaviors, conditions, risks, and outcomes;
- 3) Compiling and organizing information to guide decision making, education, and marketing efforts, and to facilitate the development of a strategic plan;
- 4) Engaging community members about the future of healthcare; and
- 5) Allowing the community hospital to meet the federal regulatory requirements of the Affordable Care Act, which requires not-for-profit hospitals to complete a CHNA at least every three years, as well as helping the local public health unit meet accreditation requirements.

This assessment examines health needs and concerns in Dickey County.

The CRH, in partnership with CHI Oakes Hospital and DCHD, facilitated the CHNA process. Community representatives met regularly in-person, by telephone conference, and email. A CHNA liaison was selected locally, who served as the main point of contact between the CRH and Oakes. A small steering committee (see Figure 2) was formed that was responsible for planning and implementing the process locally. Representatives from the CRH met and corresponded regularly by teleconference 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 community perceptions, community resources, community needs, and ideas for improving the health of the population and healthcare services. Eighteen people, representing a cross section demographically, attended the focus group meeting. The meeting was highly interactive with good participation. CHI Oakes Hospital staff and board members were in attendance as well, but largely played a role of listening and learning.

**Figure 2: Steering Committee**

Becki Thompson	President, CHI Oakes Hospital
Julie Entzminger	Human Resources Director and Mission Coordinator, CHI Oakes Hospital
Roxanne Holm	Administrator, Dickey County Health District
Addie Thompson	Program Project Manager, Dickey County Health District
Alison Peterson	Clinic Manager, CHI Oakes Hospital
Jean Schmaltz	Outreach Coordinator, Oakes Senior Citizen Center

The original survey tool was developed and used by the CRH. In order to revise the original survey tool to ensure the data gathered met the needs of hospitals and public health, the CRH worked with the North Dakota Department of Health's public health liaison. CRH representatives also participated in a series of meetings that garnered input from the state's health officer, local North Dakota public health unit professionals, and representatives from North Dakota State University.

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

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

The CRH is one of the nation's most experienced organizations committed to providing leadership in rural health. Its mission is to connect resources and knowledge to strengthen the health of people in rural communities. The CRH is the designated State Office of Rural Health and administers the Medicare Rural Hospital Flexibility (Flex) program, funded by the Federal Office of Rural Health Policy, Health Resources Services Administration, and Department of Health and Human Services. The CRH connects the UNDSMHS and other necessary resources, to rural communities and their healthcare organizations in order to maintain access to quality care for rural residents. In this capacity, the CRH works at a national, state, and community level.

Detailed 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 18 community members convened and first met on September 10, 2018. During this 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 December 5, 2018 with 12 community members in attendance. At this second meeting, the Community Group was presented with survey results, findings from key informant interviews and the focus group, and a wide range of secondary data relating to the general health of the population in Dickey 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 CHI Oakes Hospital and DCHD. They included representatives of the health community, business community, political bodies, law enforcement, education, faith community, and social service agencies. Not all members of the group were present at both meetings.

## Interviews

One-on-one interviews with five key informants were conducted in person in Oakes on September 10, 2018. Three additional key informant interviews were conducted over the phone in September of 2018. A representative from the CRH conducted the interviews. Interviews were held with selected members of the community who could provide insights into the community's health needs. Included among the informants were experienced public health professionals with special knowledge in public health and 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. It was not intended to be a scientific or statistically valid sampling of the population. It was designed to be an additional tool for collecting qualitative data from the community at large – specifically, information related to community-perceived health needs. A copy of the survey instrument is included in Appendix A.

The community member survey was distributed to various residents of Dickey County, the CHI Oakes Hospital service area. The survey tool was designed to:

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

Specifically, the survey covered the following topics:

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

To promote awareness of the assessment process, press releases led to published articles in the newspaper in Oakes. Information was published on CHI Oakes Hospital's and DCHD's websites and Facebook pages, as well as broadcast on the local radio station.

Approximately 300 community member surveys were available for distribution in Dickey County. The surveys were distributed by Community Group members and at CHI Oakes Hospital, Sanford Clinics, local businesses, the fitness center, and other local health organizations including pharmacies, home health, and hospice care.

To help ensure anonymity, included with each survey was a postage-paid return envelope to the CRH. In addition, to help make the survey as widely available as possible, residents also could request a survey by calling CHI Oakes Hospital or DCHD. The survey period ran from September 3rd, 2018 to October 1st, 2018. There were 116 completed paper surveys returned.

Area residents also were given the option of completing an online version of the survey, which was publicized in the Oakes community newspaper, emailed to community groups, on the websites and Facebook pages of both CHI Oakes Hospital and DCHD, and publicized at various community events. There were 326 surveys completed. Eight of those online respondents used the QR code to complete the survey. In total, counting both paper and online surveys, 442 community member surveys were completed, equating to a 33% response rate. This response rate is very high for this type of unsolicited survey methodology and indicates an engaged community.



## Secondary Data

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

## Social Determinants of Health

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

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

Healthy People 2020, (<https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>) illustrates that health and healthcare, while vitally important, play only one small role (approximately 20%) in the overall health of individuals, and ultimately of a community. Social and community context, education, economic stability, neighborhood and built environment play a much larger part (80%) in impacting health outcomes. Therefore, as needs or concerns were raised through this community health needs assessment process, it was imperative to keep in mind how they impact the health of the community and what solutions can be implemented. See Figure 3.

**Figure 3: Social Determinants of Health**



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

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

**Figure 4: Social Determinants of Health**

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 Dickey County.

**Table 1: Dickey County: Information and Demographics**

(From 2010 Census/2017 American Community Survey; more recent estimates used where available)

	Dickey County	North Dakota
Population (2017)	4,861	755,393
Population change (2010-2017)	-8.1%	12.3%
People per square mile (2010)	4.7	9.7
Persons 65 years or older (2016)	21.1%	15.0%
Persons under 18 years (2016)	24.3%	23.3%
Median age (2016 est.)	43.2	35.2
White persons (2016)	96.4%	87.5%
Non-English speaking (2016)	6.0%	5.6%
High school graduates (2016)	87.7%	92.0%
Bachelor's degree or higher (2016)	28.0%	28.2%
Live below poverty line (2016)	10.9%	10.7%
Persons without health insurance, under age 65 years (2016)	9.1%	8.1%

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#)

While the population of North Dakota has grown in recent years, Dickey County has seen a decrease in population since 2010. The U.S. Census Bureau estimates show that Dickey County’s population decreased from 5,289 (2010) to 4,861 (2017).

## 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, Dickey 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 2017 County Health Rankings are from more than 20 data sources and 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. The following is a breakdown of the variables that influence a county’s rank.

A model of the 2017 County Health Rankings – a flow chart of how a county’s rank is determined – is found in Appendix B. For further information, visit the County Health Rankings website at [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

Health Outcomes	Health Factors (continued)
<ul style="list-style-type: none"><li>• Length of life</li><li>• Quality of life</li></ul>	<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>
Health Factors	
<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>	

Table 2 summarizes the pertinent information gathered by County Health Rankings as it relates to Dickey County. 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 DCHD and CHI Oakes Hospital or of any other medical facility.

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.

For most of the measures included in the rankings, the County Health Rankings’ authors have calculated the “Top U.S. Performers” for 2017. 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).

Dickey County rankings within the state are included in the summary following. For example, Dickey County ranks 2nd out of 49 ranked counties in North Dakota on health outcomes and 10th on health factors.



The measures marked with a dot point (•) are those where a county is not measuring up to the state rate / percentage; an asterisk (\*) indicates that the county is faring better than the North Dakota average but is not meeting the U.S. Top 10% rate on that measure. Measures that are not marked with a dot or asterisk but are marked with a plus sign (+) indicate that the county is doing better than the U.S. Top 10%.

The data from County Health Rankings shows that Dickey County is doing better than many counties compared to the rest of the state on all of the outcomes, landing at or above rates for other North Dakota counties. Dickey County is also doing well in many areas when it comes to the U.S. Top 10% ratings. Dickey County is exceeding the U.S. Top 10% ratings in all outcomes.

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

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

- Premature death
- Poor or fair health
- Poor physical health days
- Poor mental health days
- Low birth weight
- Adult smoking
- Excessive drinking
- Alcohol-impaired driving deaths
- Sexually transmitted infections
- Teen birth rate
- Diabetic monitoring (% of diabetic Medicare enrollees ages 65-75 receiving HbA1c screening)
- Mammography screening (% of Medicare enrollees ages 67-69 receiving screening)
- Unemployment
- Income inequality
- Children in single-parent households
- Violent crime
- Injury deaths
- Drinking water violations
- Severe housing problems

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

- Adult obesity
- Food environment index
- Physical inactivity
- Access to exercise opportunities
- Uninsured
- Primary care providers
- Dentists
- Mental health providers
- Preventable hospital stays
- Children in poverty
- Air pollution – particulate matter

**Table 2: Selected Measures from County Health Rankings 2017 - Dickey County**

+ Meeting or exceeding U.S. top 10% performers

\* Not meeting U.S. top 10% performers

• Not meeting North Dakota average

	<b>Dickey County</b>	<b>U.S. Top 10%</b>	<b>North Dakota</b>
<b>Ranking: Outcomes</b>	<b>2<sup>nd</sup></b>		<b>(of 49)</b>
Premature death	5,000 +	5,200	6,600
Poor or fair health	11% +	12%	13%
Poor physical health days (in past 30 days)	2.7 +	3.0	3.0
Poor mental health days (in past 30 days)	2.8 +	3.0	3.3
Low birth weight	5% +	6%	6%
<b>Ranking: Factors</b>	<b>10<sup>th</sup></b>		<b>(of 49)</b>
<i>Health Behaviors</i>			
Adult smoking	14% +	14%	19%
Adult obesity	33% ●*	26%	31%
Food environment index (10=best)	7.4 ●*	8.4	8.4
Physical inactivity	26% ●*	19%	23%
Access to exercise opportunities	41% ●*	91%	66%
Excessive drinking	21% *	12%	25%
Alcohol-impaired driving deaths	0% +	13%	47%
Sexually transmitted infections	152.4 *	145.5	477.1
Teen birth rate	16 +	17	27
<i>Clinical Care</i>			
Uninsured	10% ●*	8%	9%
Primary care physicians	1,720:1 ●*	1,040:1	1,280:1
Dentists	1,700:1 ●*	1,320:1	1,630:1
Mental health providers	2,550:1 ●*	360:1	640:1
Preventable hospital stays	63 ●*	36	46
Diabetic monitoring (% of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring)	89% *	91%	87%
Mammography screening (% of Medicare enrollees ages 67-69 receiving screening)	73% +	71%	69%
<i>Social and Economic Factors</i>			
Unemployment	1.8% +	3.3%	2.7%
Children in poverty	14% ●*	12%	12%
Income inequality	3.8 *	3.7	4.4
Children in single-parent households	9% +	21%	27%
Violent crime	64 *	62	26
Injury deaths	57 *	53	66
<i>Physical Environment</i>			
Air pollution – particulate matter	8.1 ●*	6.7	7.5
Drinking water violations	No +	NA	
Severe housing problems	7% +	9%	11%

Source: <http://www.countyhealthrankings.org/app/north-dakota/2018/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 2011-12. More information about the survey is 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 aged 0-17 unless noted otherwise)**

Health Status	North Dakota	National
Children born premature (3 or more weeks early)	10.8%	11.6%
Children 10-17 overweight or obese	35.8%	31.3%
Children 0-5 who were ever breastfed	79.4%	79.2%
Children 6-17 who missed 11 or more days of school	4.6%	6.2%
<b>Healthcare</b>		
Children currently insured	93.5%	94.5%
Children who had preventive medical visit in past year	78.6%	84.4%
Children who had preventive dental visit in past year	74.6%	77.2%
Young children (10 mos.-5 yrs.) receiving standardized screening for developmental or behavioral problems	20.7%	30.8%
Children aged 2-17 with problems requiring counseling who received needed mental healthcare	86.3%	61.0%
<b>Family Life</b>		
Children whose families eat meals together 4 or more times per week	83.0%	78.4%
Children who live in households where someone smokes	29.8%	24.1%
<b>Neighborhood</b>		
Children who live in neighborhood with a park, sidewalks, a library, and a community center	58.9%	54.1%
Children living in neighborhoods with poorly kept or rundown housing	12.7%	16.2%
Children living in neighborhood that's usually or always safe	94.0%	86.6%

Source: <http://childhealthdata.org/browse/data-snapshots/nsch-profiles?geo=1&geo2=36&rpt=16>



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

- Obese or overweight children ages 10-17;
- Children with health insurance;
- Preventive primary care and dentist visits;
- Developmental/behavioral screening for children 10 months to 5 years of age; and
- Children living in smoking households.



Table 4 includes selected county-level measures regarding children's health in North Dakota. The data come from North Dakota KIDS COUNT, a national and state-by-state effort to track the status of children, sponsored by the Annie E. Casey Foundation. KIDS COUNT data focuses on the main components of children's well-being. More information about KIDS COUNT is available at [www.ndkidscount.org](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 that Dickey County is performing more poorly than the North Dakota average on three of the examined measures: the percentage of uninsured children, the percentage of uninsured children below 200% of poverty, and the licensed childcare capacity.

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

	<b>Dickey County</b>	<b>North Dakota</b>
Uninsured children (% of population age 0-18), 2016	10.1%	9.0%
Uninsured children below 200% of poverty (% of population), 2016	42.9%	41.9%
Medicaid recipient (% of population age 0-20), 2017	27.8%	28.3%
Children enrolled in Healthy Steps (% of population age 0-18), 2013	2.5%	2.5%
Supplemental Nutrition Assistance Program (SNAP) recipients (% of population age 0-18), 2017	16.9%	20.1%
Licensed childcare capacity (% of population age 0-13), 2018	40.6%	41.9%
4-Year High School Cohort Graduation Rate, 2017	93.0%	87.0%

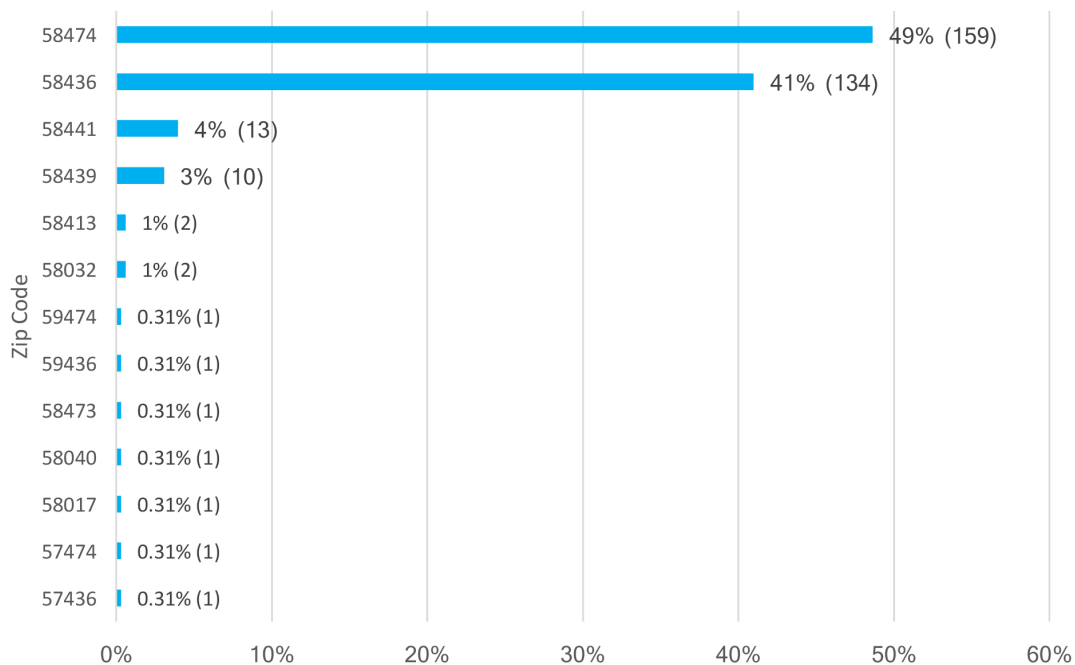
Source: <https://datacenter.kidscount.org/data#ND/5/0/char/0>

# Survey Results

As noted previously, 442 community members completed the survey in communities throughout the counties in the CHI Oakes Hospital service area. The survey requested that respondents list their home zip code. While not all respondents provided a zip code, 327 did, revealing that the large majority of respondents lived in Oakes (49%, N=159) or in Ellendale (41%, N=134). These results are shown in Figure 5.

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

**Total respondents: 327**



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

## Survey Demographics

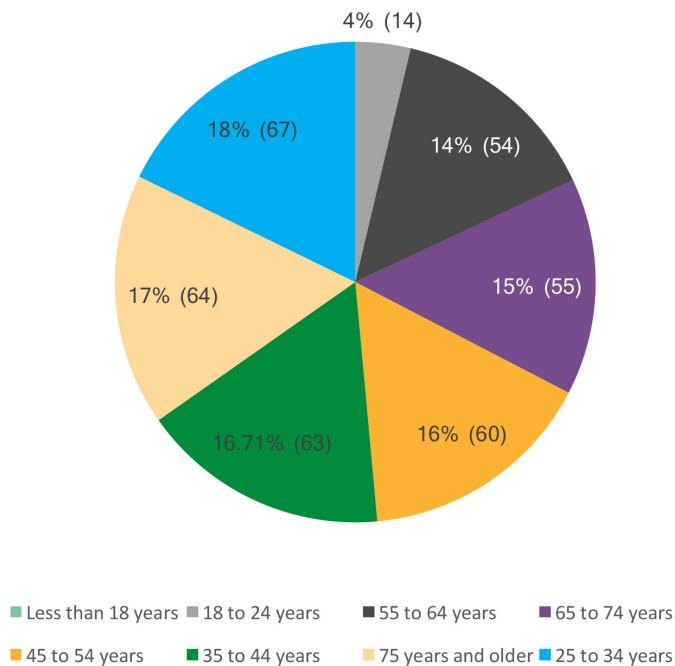
To better understand the perspectives being offered by survey respondents, survey-takers were asked a few demographic questions. Throughout this report, numbers (N) instead of just percentages (%) are reported because percentages can be misleading with smaller numbers. Survey respondents were not required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

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

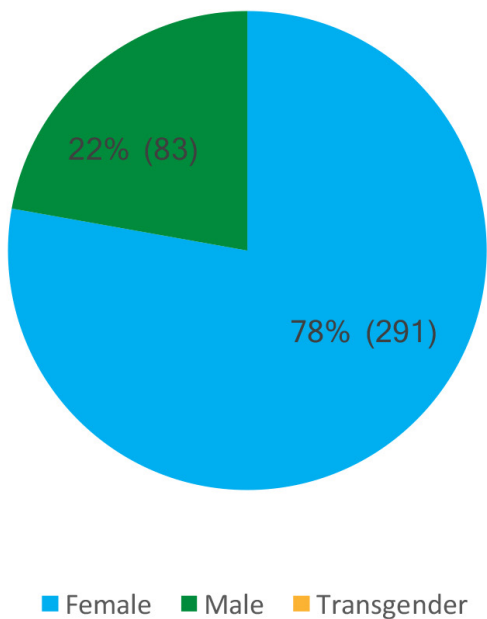
- 46% (N=173) were age 55 or older.
- The majority (78%, N=291) were female.
- Slightly less than half of the respondents (43%, N=162) had bachelor's degrees or higher.
- The number of those working full time (52%, N=195) was almost two times higher than those who were retired (26%, N=99).
- 97% (N=362) of those who reported their ethnicity / race were white / Caucasian.
- 32% of the population (N=117) had household incomes of less than \$50,000.

Figures 6 through 12 show these demographic characteristics. It illustrates the range of community members' household incomes and indicates how this assessment took into account input from parties who represent the varied interests of the community served, including a balance of age ranges, those in diverse work situations, and community members with lower incomes.

**Figure 6: Age Demographics of Survey Respondents**  
**Total respondents = 377**



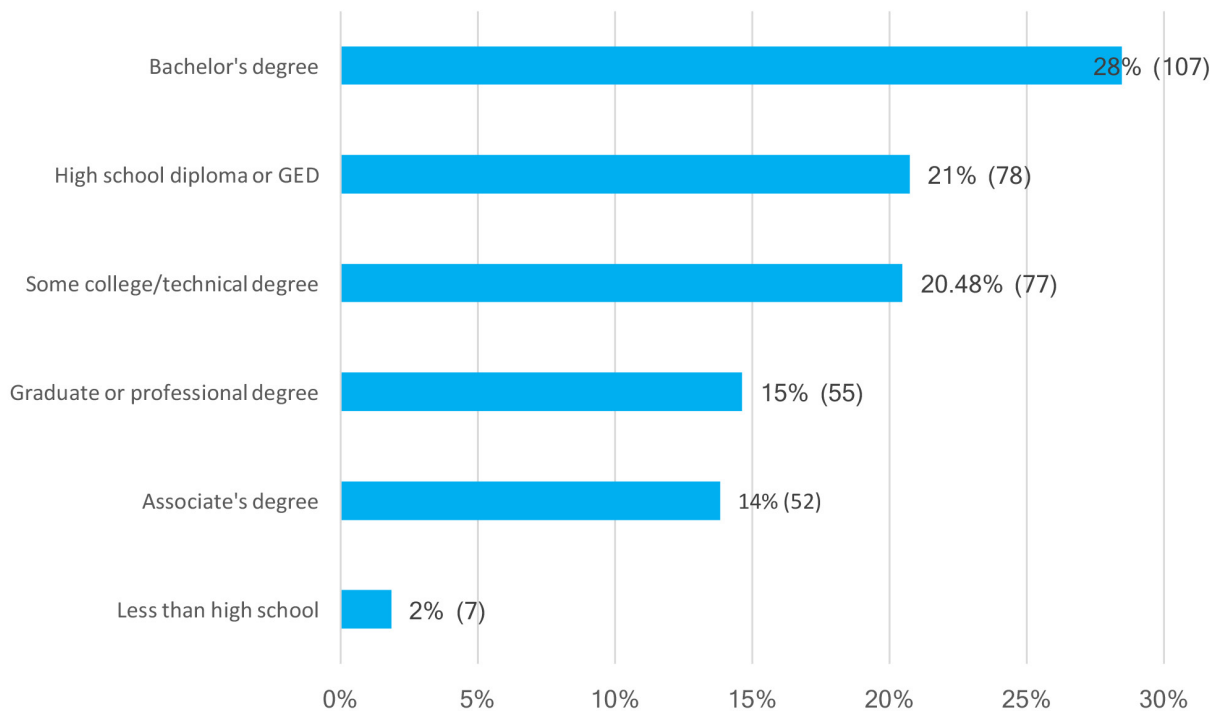
**Figure 7: Gender Demographics of Survey Respondents**  
**Total respondents = 374**





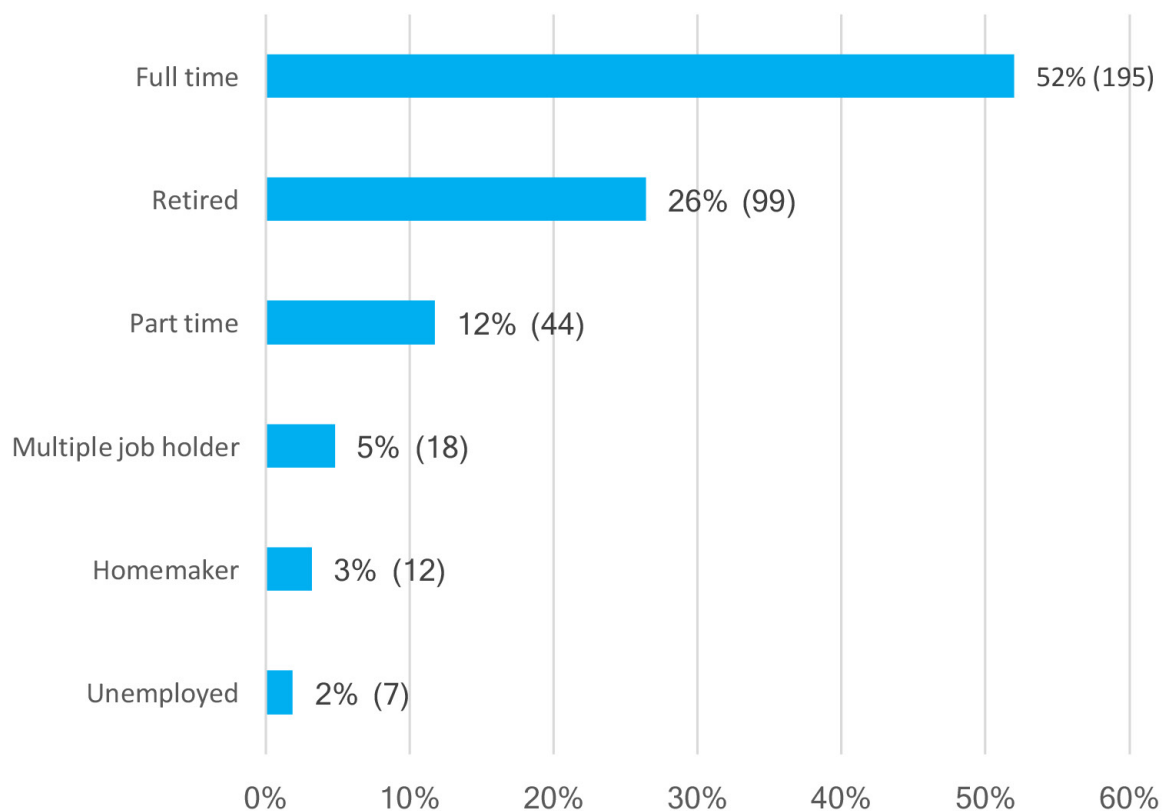
**Figure 8: Educational Level Demographics of Survey Respondents**

**Total respondents = 376**



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

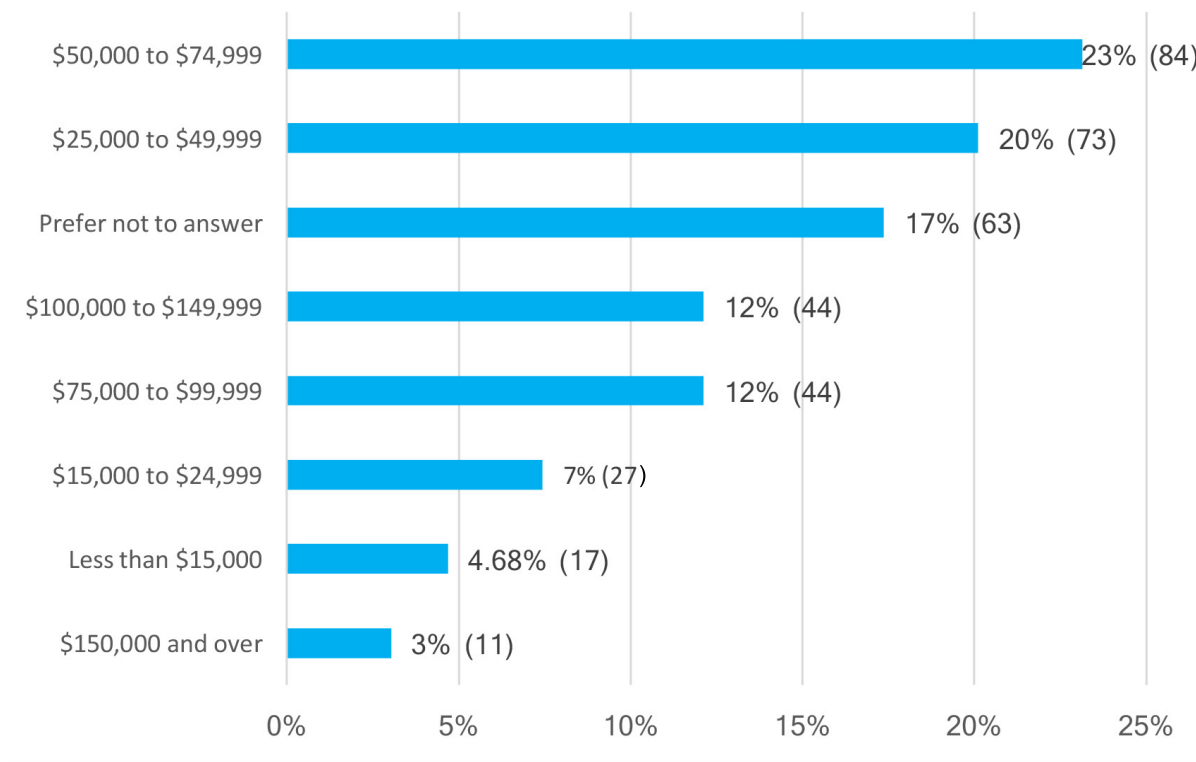
**Total respondents = 375**



Of those who provided a household income, 12% (N=44) community members reported a household income of less than \$25,000. Fifteen percent (N=55) indicated a household income of \$100,000 or more. This information is shown in Figure 10.

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

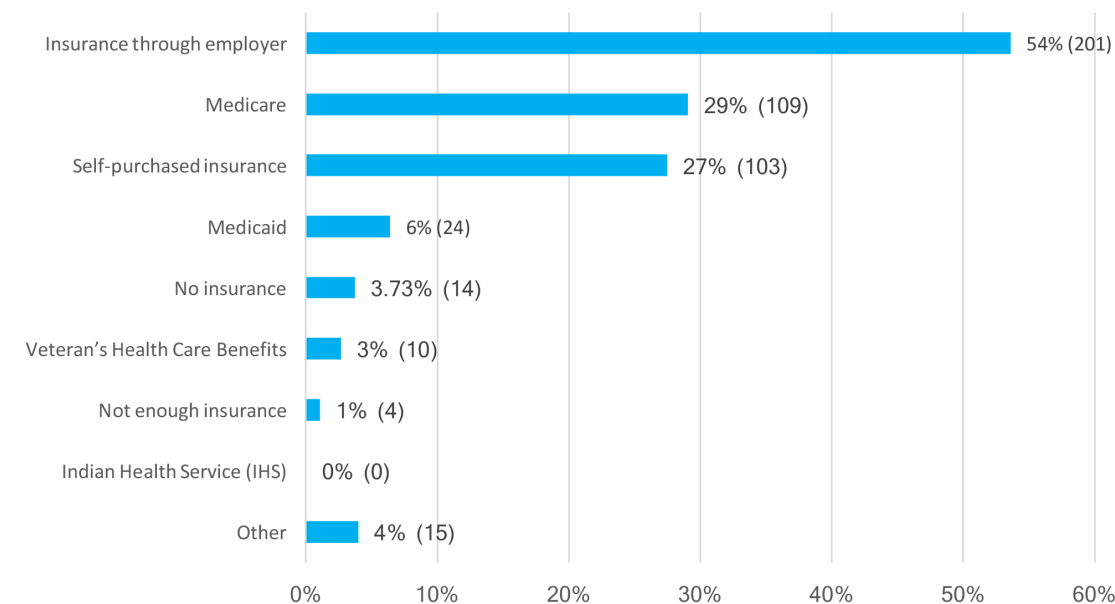
**Total respondents = 363**



Community members were asked about their health insurance status, which is often associated with whether people have access to healthcare. Just under five percent (N=18) of the respondents reported having no health insurance or being under-insured. The most common insurance types were insurance through one's employer (N=201), followed by Medicare (N=109) and self-purchased (N=103).

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

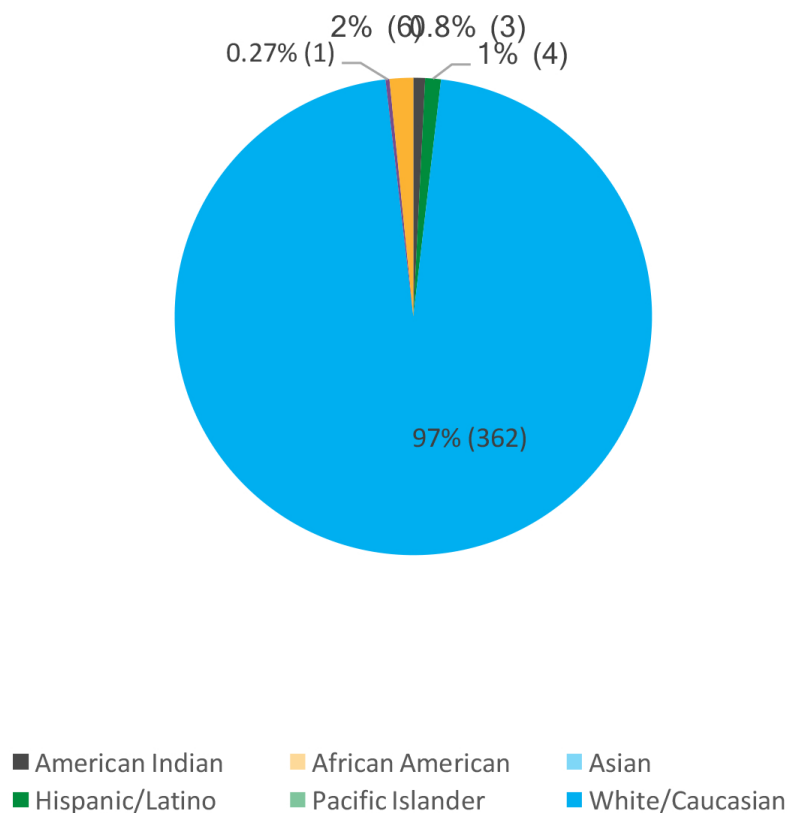
**Total respondents = 480**



As shown in Figure 12, nearly all of the respondents were white/Caucasian (97%). This was in-line with the race/ethnicity of the overall population of Dickey County; the U.S. Census indicates that 96.4% of the population is white in Dickey County,

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

**Total respondents = 373**



## Community Assets and Challenges

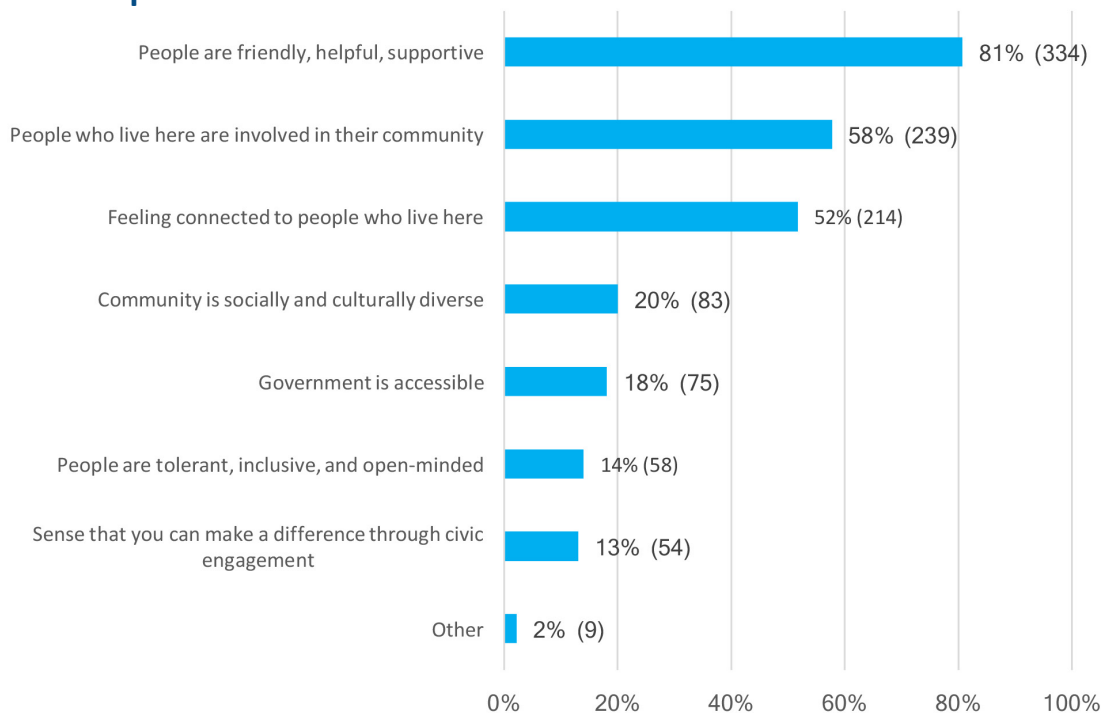
Survey-respondents were asked what they perceived as the best things about their community in four categories: people, services and resources, quality of life, and activities. In each category, respondents were given a list of choices and asked to pick the three best things. Respondents occasionally 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 250 respondents agreeing) that community assets include:

- Family-friendly (N=365);
- Safe place to live, little/no crime (N=359);
- People are friendly, helpful, supportive (N=334);
- Quality school systems (N=258); and
- Active faith community (N=254)

Figures 13 to 16 illustrate the results of these questions.

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

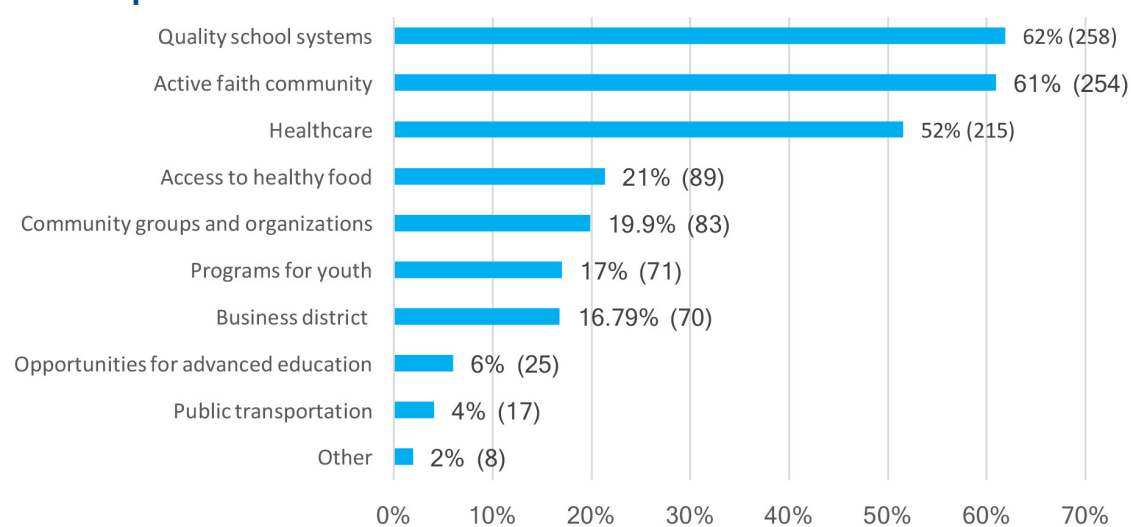
**Total responses = 415**



Included in the “Other” category of the best things about the people was that there are a high number of Christian residents, trustworthy, and many good people are involved in the community.

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

**Total responses = 417**

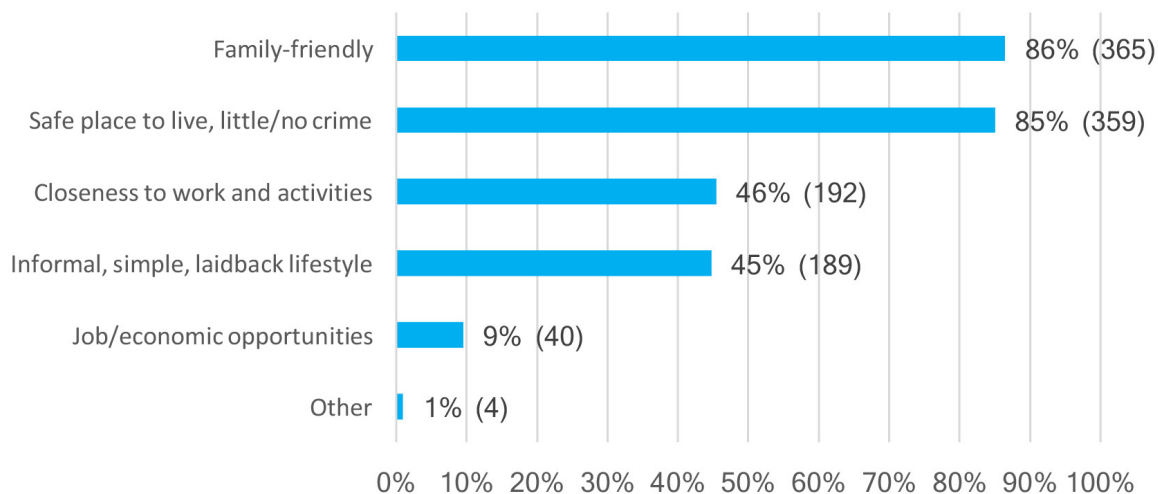




Respondents who selected “Other” specified that there are clothing boutiques and the Trinity Bible College is located in town.

### Figure 15: Best Things about the QUALITY OF LIFE in Your Community

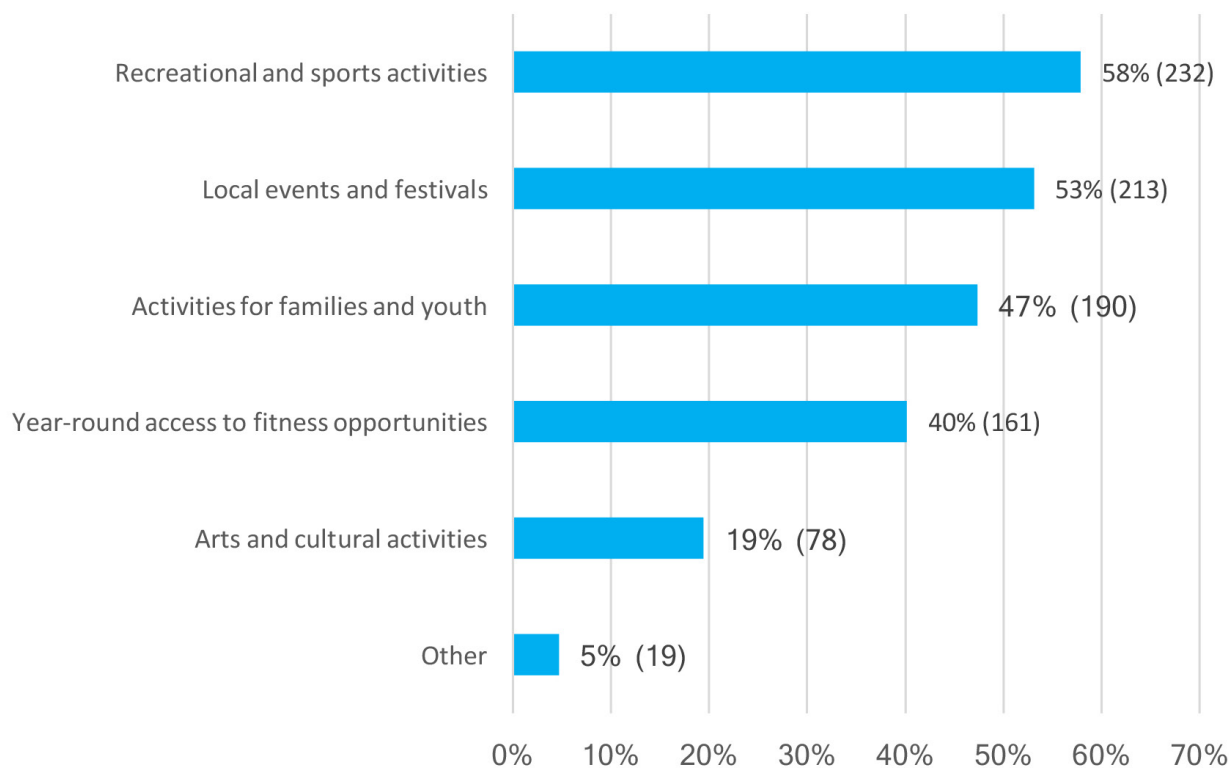
Total responses = 422



The “Other” response regarding the best things about the quality of life in the community was that most people are Christians.

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

Total responses = 401



Respondents who selected “Other” specified that the best things about the activities in the community included churches and school events (including school sports), Trinity Bible College athletics and lectures, bone building exercise, and the park and recreations programs.

## Community Concerns

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

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

With regard to responses about community challenges, the most highly voiced concerns (those having at least 130 respondents) were:

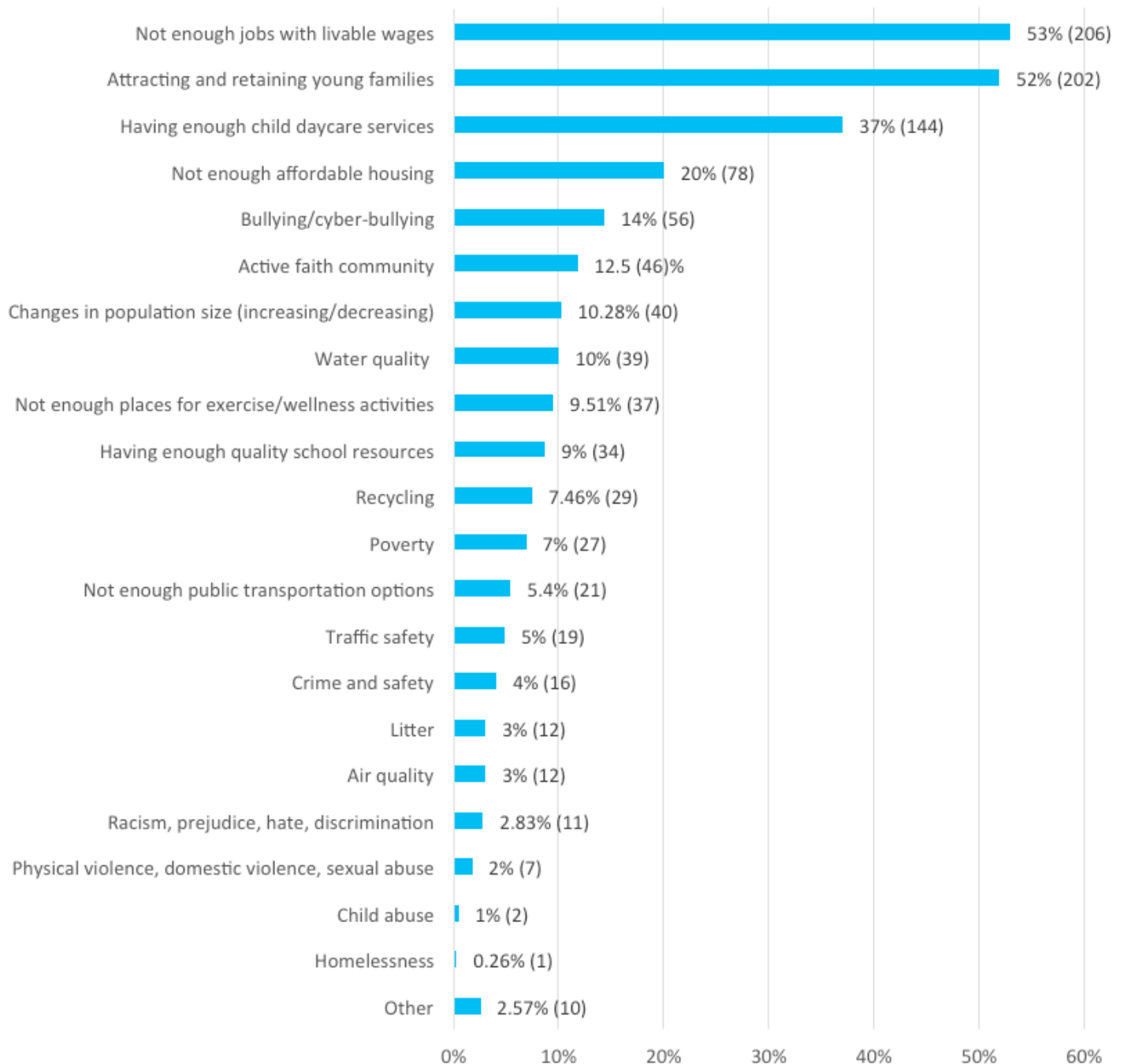
- Bullying / cyberbullying (N=241);
- Jobs with livable wages (N=206);
- Attracting and retaining young families (N=202);
- Cost of long-term / nursing home care (N=191);
- Alcohol use and abuse – youth (N=179);
- Emotional abuse (isolation, verbal threats, economic abuse) (N=155);
- Alcohol use and abuse – adults (N=146);
- Having enough child daycare services (N=144);
- Availability of resources to help the elderly stay in their homes (N=131)
- Depression / anxiety – youth (N=130).

The other issues that had at least 80 votes included:

- Depression and anxiety – adult (N=114);
- Long-term / nursing home care options (N=102);
- Not getting enough exercise / physical activity (N=98);
- Assisted living options (N=96)
- Extra hours for appointments, such as evenings and weekends (N=92);
- Availability of mental health services (N=85);
- Availability of specialists (N=83);
- Cost of healthcare services (N=82);
- Alcohol use and abuse – adult (N=81);
- Not enough activities for children and youth (N=81); and
- Video game / media violence (N=81).

Figures 17 through 22 illustrate these results.

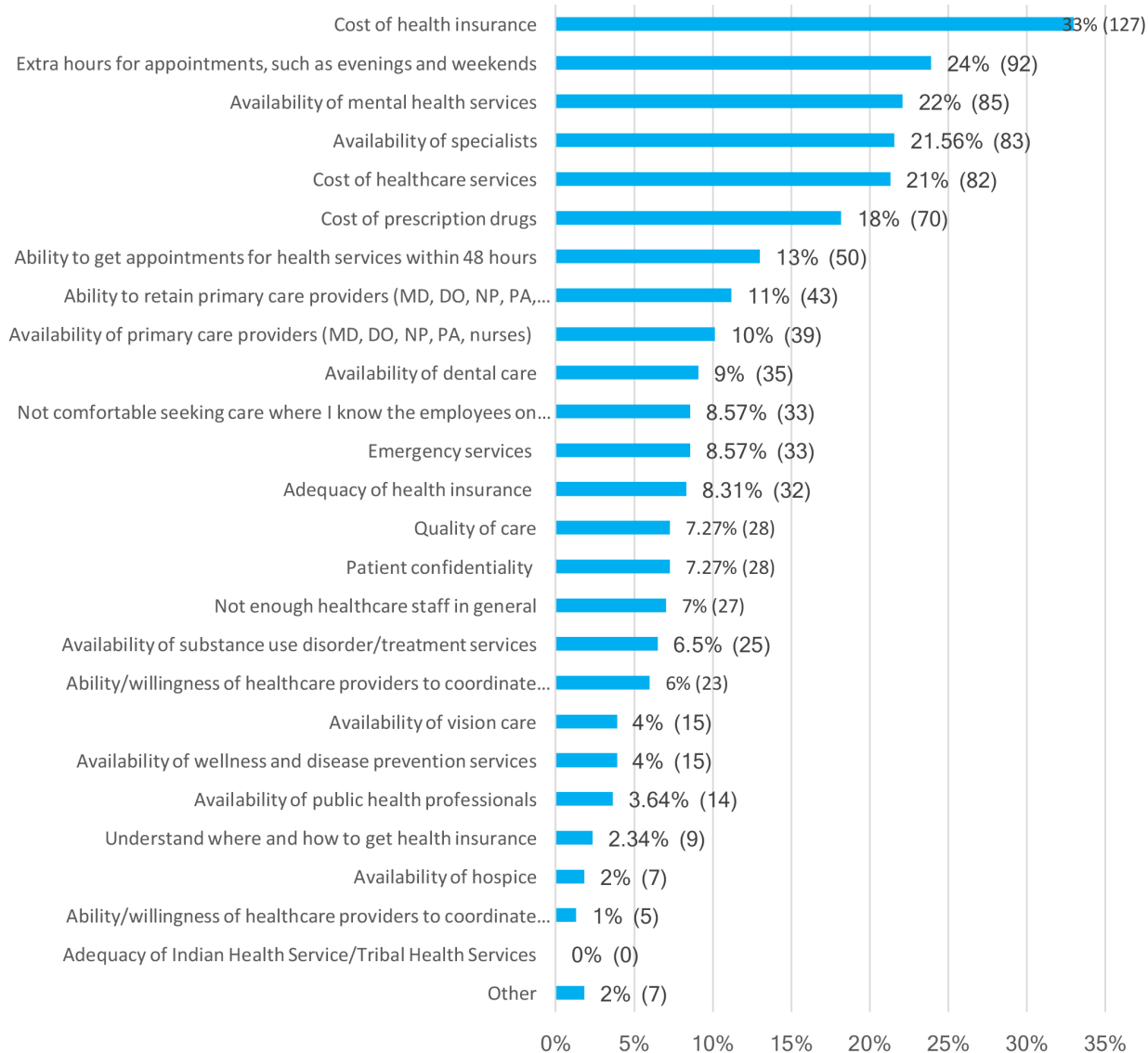
**Figure 17: Community/Environmental Health Concerns**  
**Total responses = 389**



In the “Other” category for community and environmental health concerns, the following were listed: lack of full day preschools, lack of mental health resources, not enough variety of housing and newer apartments for the elderly, lack of professional level jobs and restaurants, not enough street lights, no safe bike/walking paths, and not enough Christians.

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

**Total responses = 385**

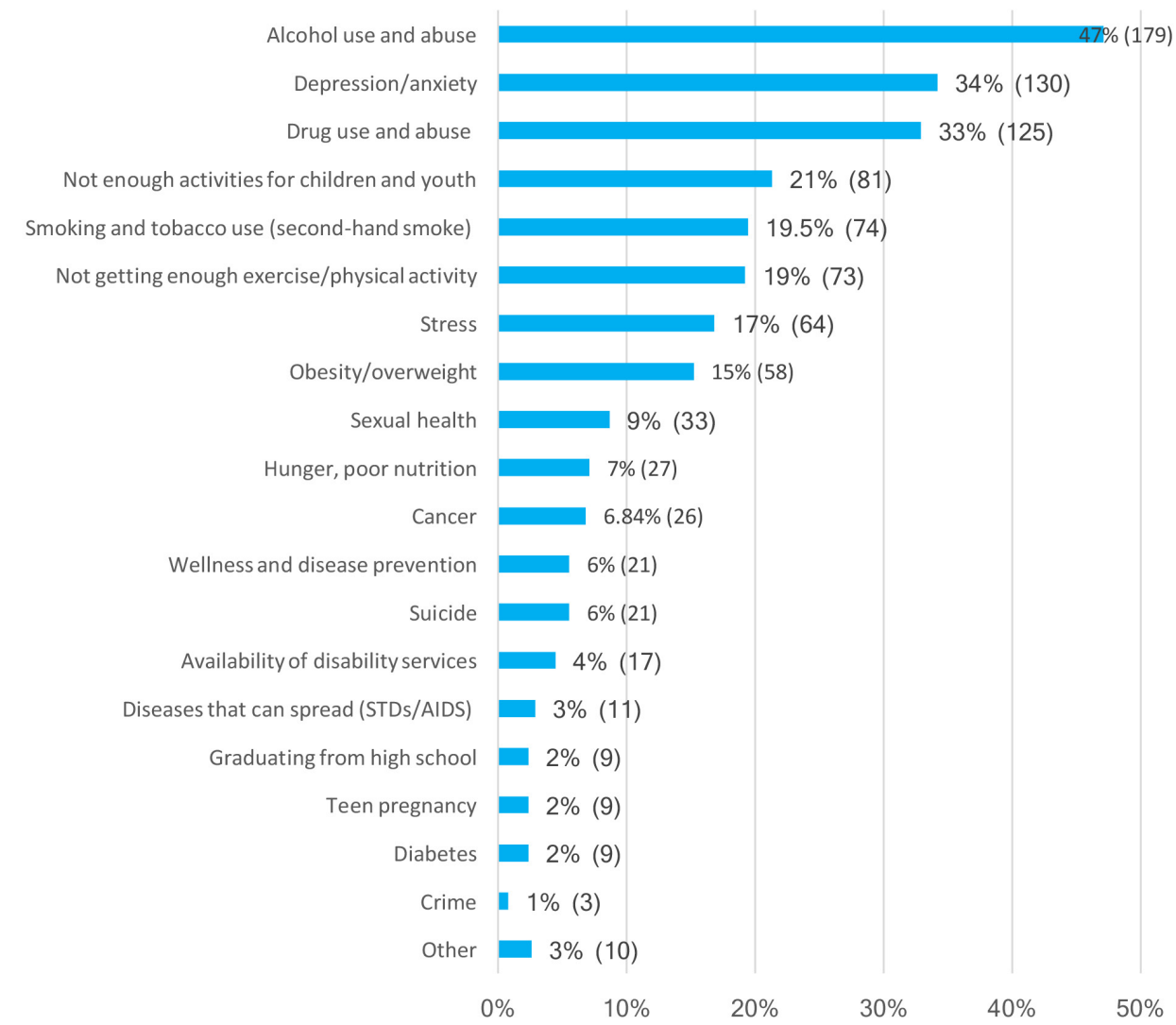


Respondents who selected “Other” identified concerns in the availability / delivery of health services, as a need for a mental health provider in the area, lack of support for Republican health plans, something needing to be done regarding 911 services and being able to pick up patients across the state line, and daycare for dementia patients.



**Figure 19: Youth Population Concerns**

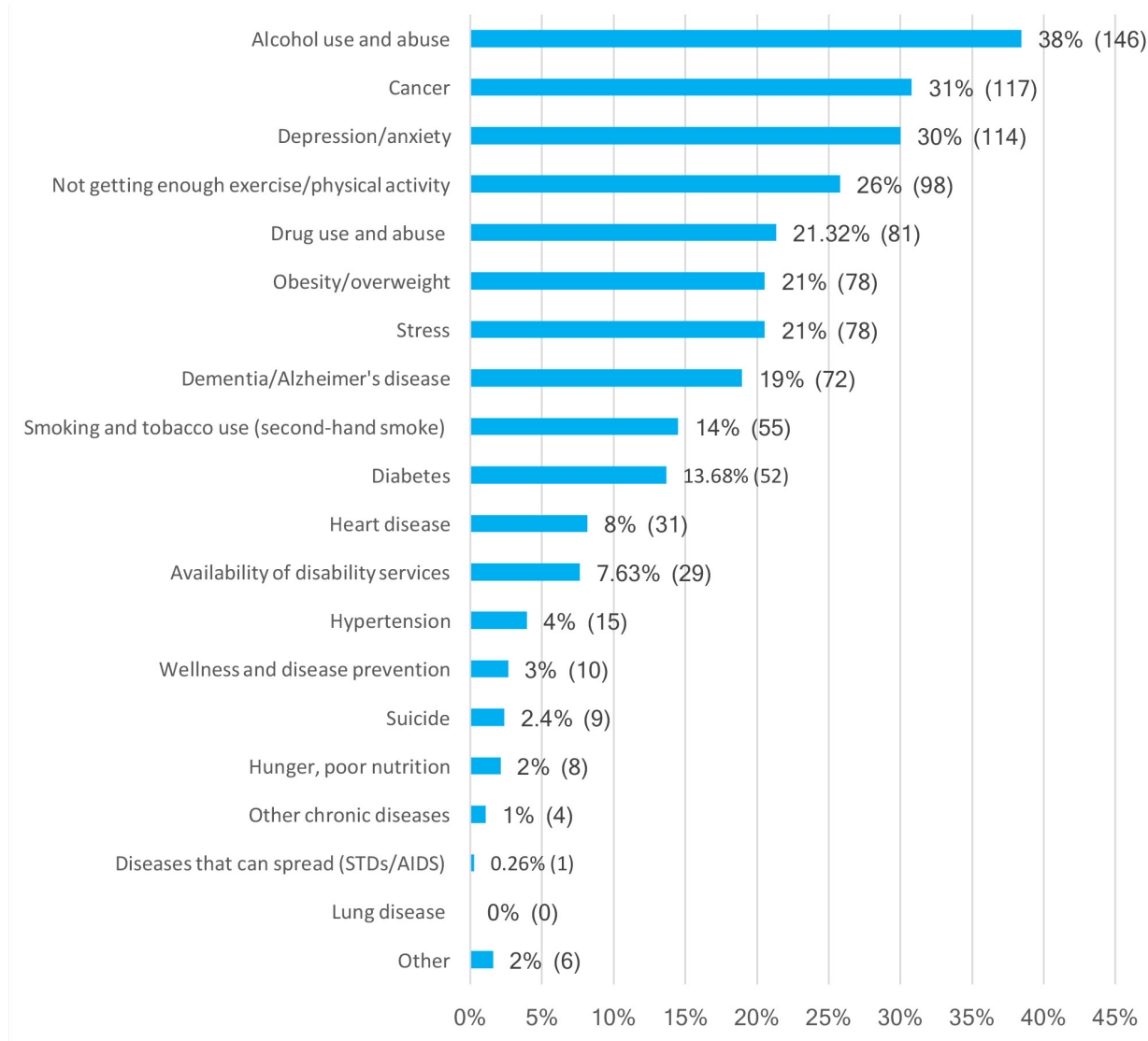
**Total responses = 380**



Listed in the “Other” category for youth population concerns were bullying/cyberbullying, lack of behavioral health services/psychologists, gaming addictions, poor quality of education provided by the schools, limited resources for lesbian/gay/bisexual/transgender/questioning youth, and the overloaded sports schedule that monopolizes kids time, to the exclusion of family time and other youth organizations and activities.

**Figure 20: Adult Population Concerns**

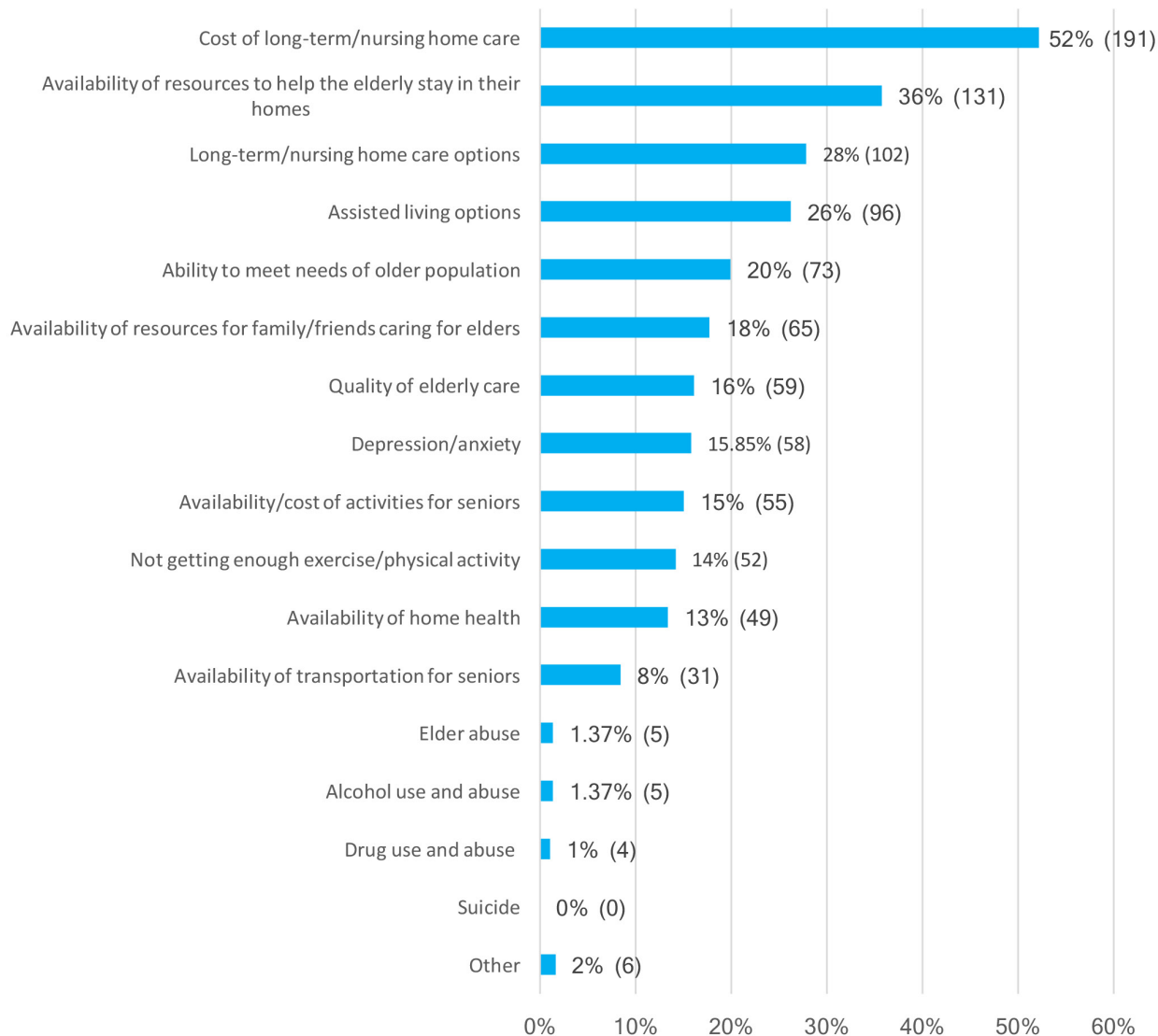
**Total responses = 380**



Not enough activities or things to do in the evenings or weekends, lack of access to mental health services, and transitional housing for the geriatric population (levels of assisted living) were indicated in the “Other” category for adult population concerns.

## Figure 21: Senior Population Concerns

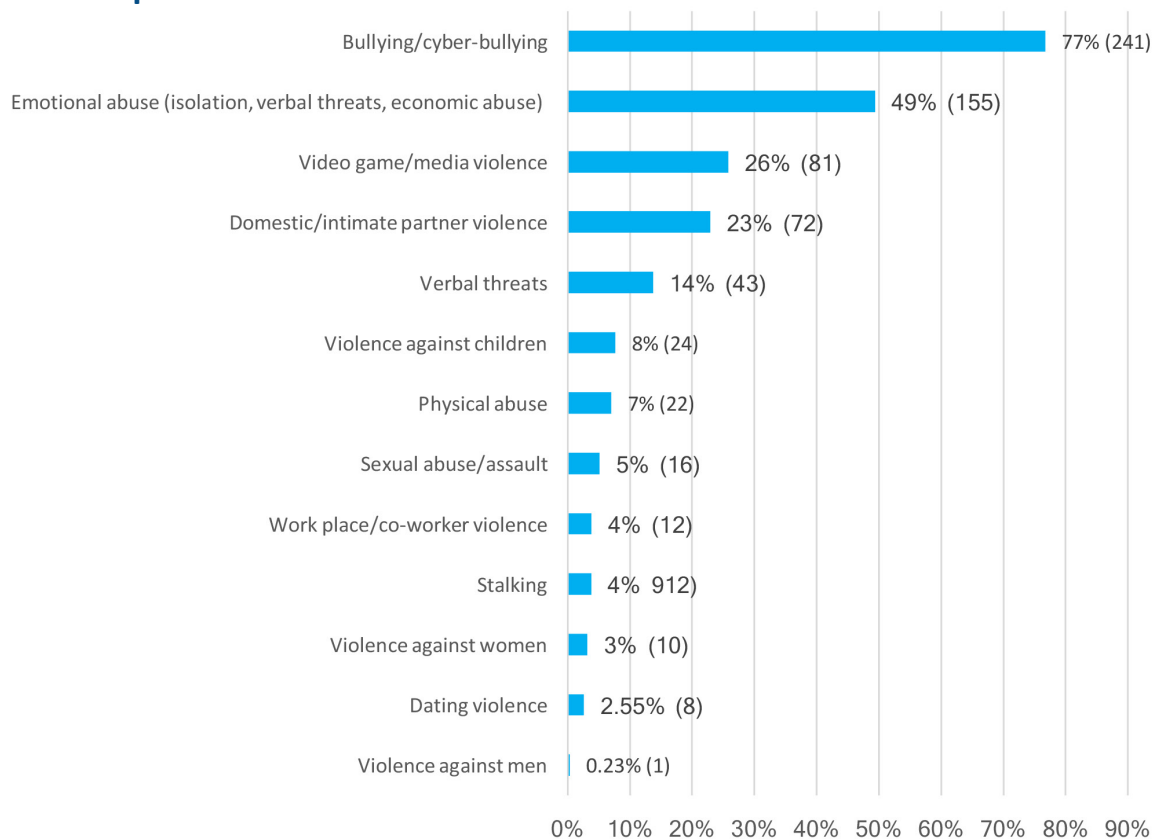
Total responses = 366



In the “Other” category were the cost of prescriptions, having enough money to live and pay bills, cost of living in a nursing home, and the elderly driving when they no longer should be.

## Figure 22: Violence Concerns

Total responses = 360



In an open ended question, respondents were asked what single issue they feel is the biggest challenge facing their community. One category emerged above all others as the top concern: Lack of career choices and job opportunities with good salaries.

Other challenges that ranked high were identified as the inability to attract/the closing of/lack of businesses, attracting and retaining young families, bullying, lack of mental health services, and declining population. Challenges listed with few responses included drugs, lack of activities, need to keep the town alive/lack of community growth, and the lack of daycare.

## Delivery of Healthcare

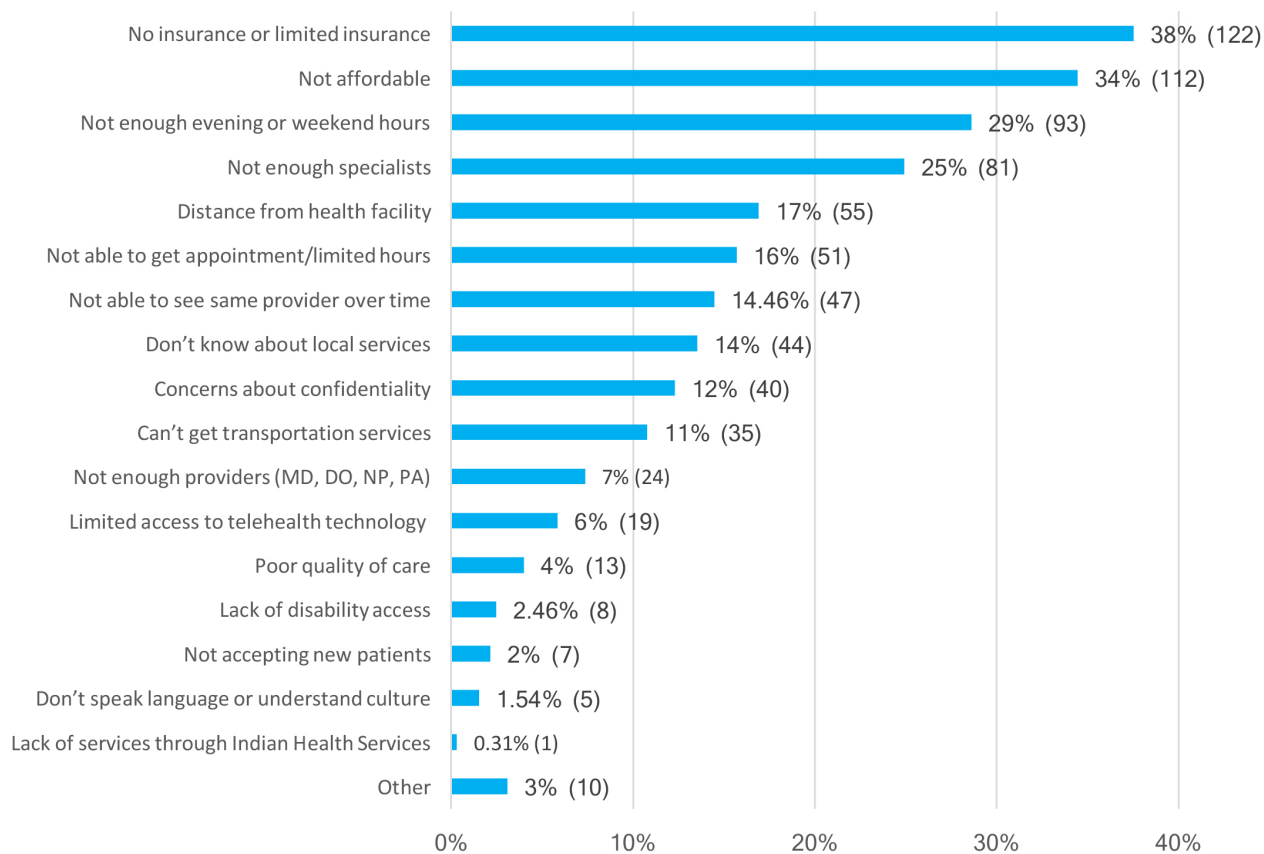
The survey asked residents what they see as barriers that prevent them, or other community residents, from receiving healthcare. The most prevalent barrier perceived by residents was no insurance or limited insurance (N=122), with the next highest being not affordable (N=112). After these, the next most commonly identified barriers were not enough evening or weekend hours (N=93), not enough specialists (N=81), and distance from health facility (N=55). Concerns indicated under “Other” were health insurance is too expensive, lack of confidence in local professionals, limited appointment slots available, and long wait time at some clinics.

Figure 23 illustrates these results.



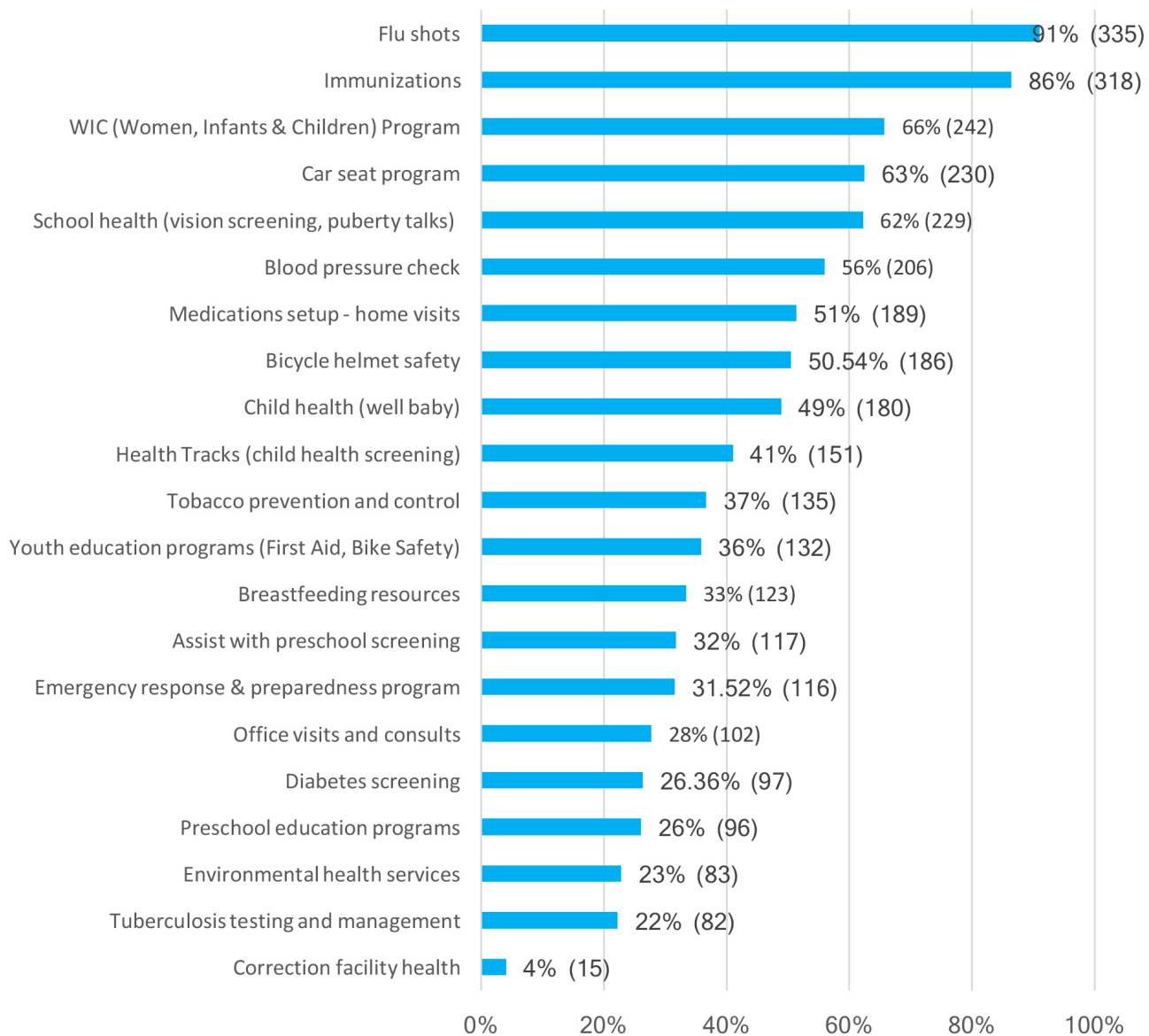
**Figure 23: Perceptions about Barriers to Care**

**Total responses = 325**



Considering a variety of healthcare services offered by DCHD, respondents were asked to indicate which services they were aware of offered through DCHD. (See Figure 24).

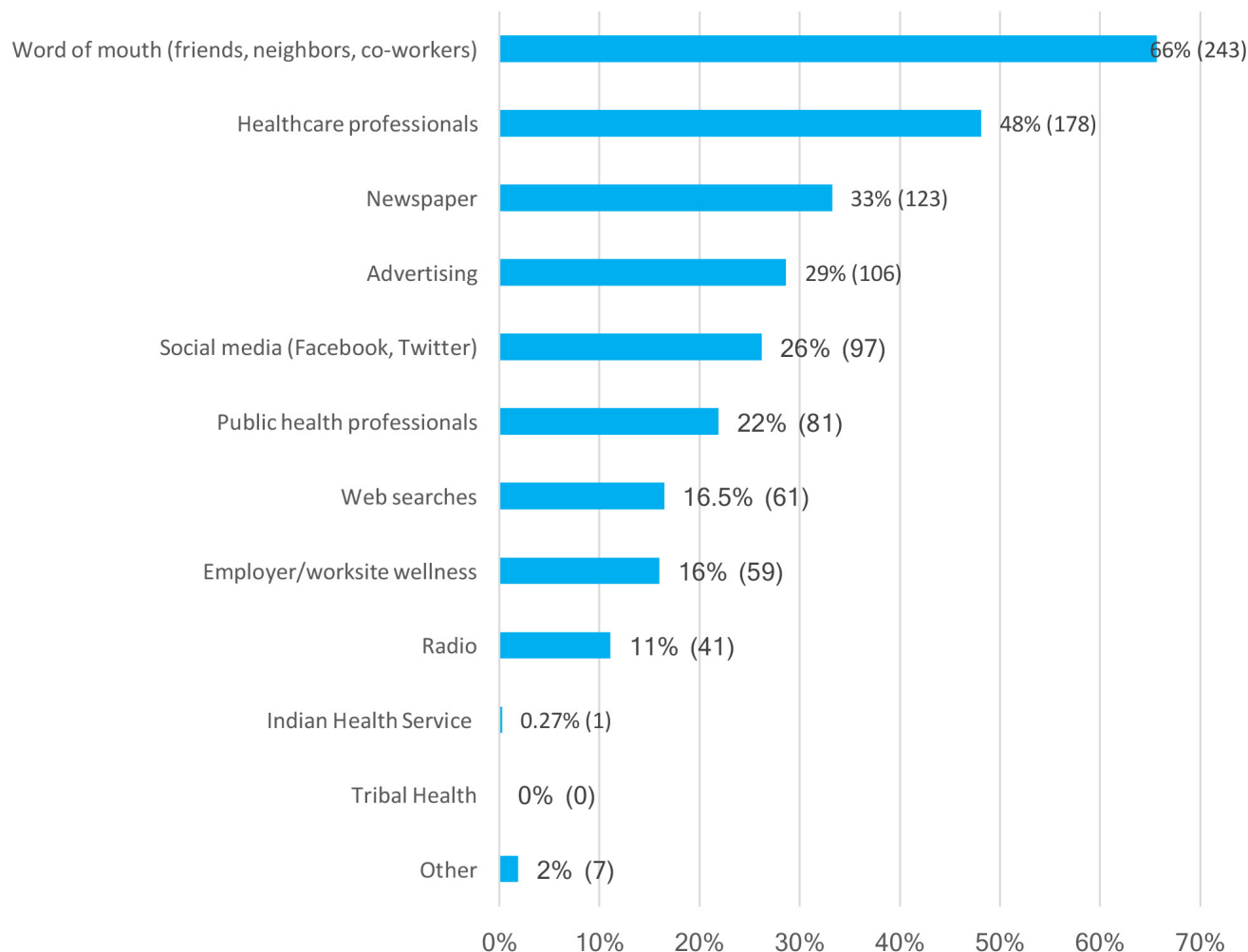
**Figure 24: Awareness and Utilization of Public Health Services**



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/behavioral health services. Other services requested included:

- Cancer doctor
- Community gym for all
- Dermatology
- Diet education
- Memory unit at nursing home
- More surgical specialties
- More telehealth – especially mental health
- Lactation specialist
- Endocrinologist
- Evening and weekend clinic hours
- Fitness/weight loss coaches
- Gastroenterologist
- Obstetrics
- Personal trainers
- Psychiatry
- Specialized mental health school counselor
- Substance abuse safe house
- Vision
- Wider range of specialists
- Year round indoor swimming pool

**Figure 25: Sources of information about local health services available in the area**  
**Total responses =370**



In the “Other” category, respondents listed online, the directory, Senior Center, Facebook, and the phone book.

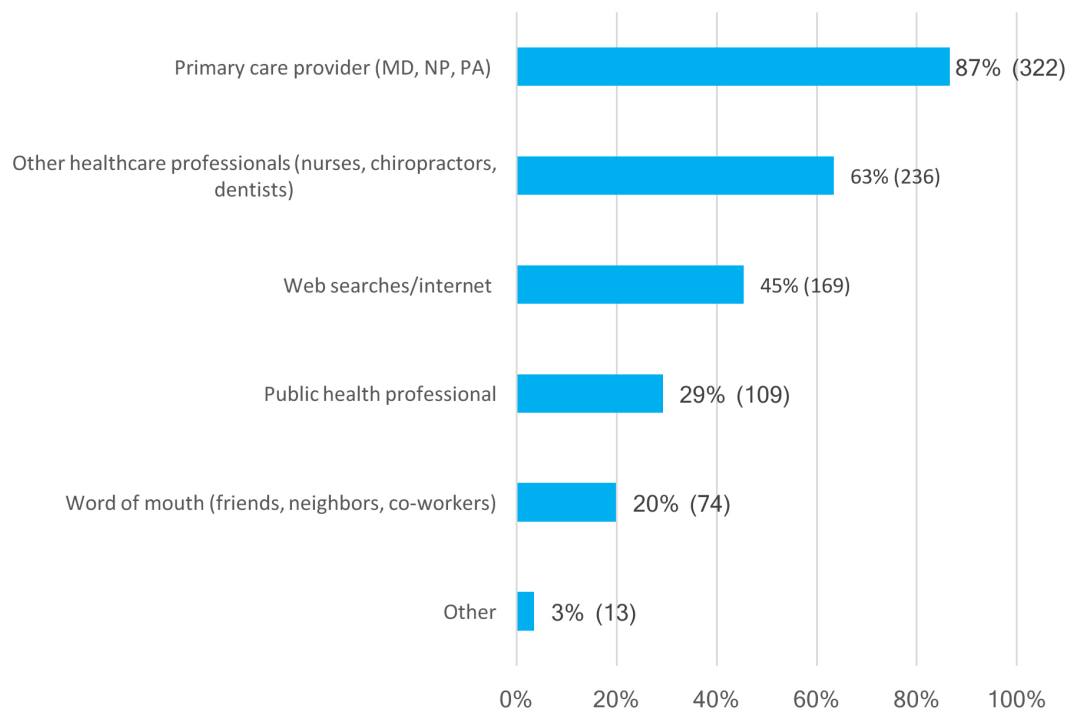
The key informant and focus group members felt that the community members were not aware of the health system and public health services. They would like a directory of services that could go to each one of the churches. Public health said that they are willing to make one of these. The current brochures being provided need to be updated. The hospital has brochures that list services primarily for adults and seniors, but would benefit from adding services that target the youth population.

Respondents were asked where they go for trusted health information. Primary care providers (N=322) received the highest response rate, followed by other healthcare professionals (N=236), and then web/Internet searches (N=169).

Results are shown in Figure 26.

**Figure 26: Sources of Trusted Health Information**

**Total responses = 372**



The “Other” category included: church pastor, friends, a non-local doctor, an individual who has experienced the issue, parent, nurse, television, friends and family that are medical professionals, and pharmacist were listed as sources of trusted information.

The final question on the survey asked respondents to share concerns and suggestions to improve the delivery of local healthcare. There were several responses that spanned many different topics. The two areas of concern revolved around having more specialists come to town and having mental health services available locally.

It is hard for some to get out of town for medical appointments due to their jobs, so having the specialized outreach providers come to the area monthly/bimonthly so people can get more specialized medicine in the area is strongly desired. There is a need for more speech, counseling, occupational therapy, head start (not home based), and therapy for kids. Dermatology would also be a nice addition. A specialist in mental health is very needed.

There is a need for more mental health resources; even tele-mental health services would be helpful. One person suggested the need for increased assistance and access to mental health starts in children even before grade school. Children are being pushed to not act like children, but adults instead, and it is leading to a very unstable and dangerous school system.

There were also many suggestions and concerns relating to being able to be seen for a medical appointment. Some indicated they have concerns with the time it takes to be seen locally (ex. couldn’t get in until the next day for a child’s ear infection). The suggestions include adding extended hours or a walk-in clinic available. The feeling is that the availability of full time health providers is limited, the majority are shared or part time. There is a need for more doctors in town. Being referred to a specialist out of town and having to wait weeks (2-3) for an appointment is far from desirable. The health systems should be combatting the staffing shortage by encouraging students to take up medical courses rather than other fields of study, assisting with payment of schooling for students in health professions that will come back and practice locally, and raise salaries.

Concern over how often people are transferred or directed to seek care in Fargo, Aberdeen, or Bismarck was addressed. It is felt that patients are being sent out-of-town more often than necessary.

Keeping costs down for the patients is very important. The cost of services and medical supplies is very high. Biggest issue is cost and availability. Because the cost of seeking medical attention may seem high for some, some patients feel they need to juggle that against their insurance and co pay to try to find a way to be able to pay for everything.

When it comes to the senior population, there were a number of recommendations, including increasing services for dementia patients, such as a facility so family members with dementia can continue to live in the community and adult day care to give caregivers a break. Other suggestions were to add more senior housing, increase or provide home healthcare for those that need it, and provide a bus to Aberdeen for medical appointments. Having a local provider that specializes in geriatrics is desired.

It was recommended there be more advertising done to promote the services available locally. The populations who most need services are the least likely to be connected to providers, social media, or friends/neighbors who are aware of services, so there needs to be a plan to reach this group of people. It was suggested that a “healthcare options available” list be compiled and available at community locations: bulletin boards, churches, medical offices, online. Include things such as what services public health and CHI Oakes offers, what counselors are available, what are the transportation services in the area, what medical services outside of CHI/public health are available (do I go to Aberdeen for ER visits or can Oakes help or not?). Communication and awareness of programs offered throughout the community are critically important for people using the services available locally and not immediately going elsewhere.

There were some concerns and suggestions related to religion. One respondent recommended connecting the healthcare delivery systems through the local Christian churches as part of a privatization initiative. On the other hand, another respondent indicated that they avoid hospitals with religious affiliation because they don’t trust that they’ll be provided with all of the information they might need because of their belief system/restrictions. They do not want religious bias involved in their healthcare.

It was felt there was a lack in quality emergency services in the rural areas. If they have an emergency they have to wait a long time to get an ambulance to their place. This is because when they call 911 it goes to Mobridge, South Dakota and whoever answers the phone there doesn’t know which ambulance company to dispatch because they don’t know the area.

Concern over the shrinking size of the community was raised, along with concern over the high cost of goods available locally. As a community, it was suggested to have additional summer-time activities for the whole town.

Several people indicated that they are glad to have so many services available locally and that there is great healthcare, both in the hospital and public health, in the area.

## Findings from Key Informant Interviews & the Community Meeting

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

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

- Attracting and retaining young families
- Availability of mental health services



- Depression/anxiety
- Having enough child daycare services
- Not enough affordable housing

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

#### Attracting and retaining young families

- Lack of winter activities, wellness/recreation facilities makes it hard to attract people.
- Every year it seems like school enrollment is dropping.
- As people age, they travel to live with their families who live elsewhere; their kids don't want to live here because there is nothing for them to do.
- Rural schools are declining – can't find people to live and work here. Because of this, businesses close, the people leave, and those spots aren't filled.

#### Availability of mental health services

- None available in the community.
- Need services for all ages.
- Lack of these services creates bigger problems.
- People have to go to larger towns to get quality services.

#### Depression/anxiety

- No mental health services available to help manage these conditions.
- Depression, anxiety, stress all worsen due to lack of mental health education in the community.
- The fact that people have to leave town to get help is a problem.

#### Having enough child daycare services

- The cost of daycare is a problem; a two income family uses one of those incomes to pay for daycare.
- Need enough child daycare services available.
- Working on this with the county – if we can't take care of your kids, we can't hire you.
- Rules to opening a daycare are limiting, and people can't find childcare so they can't work.

#### Not enough affordable housing

- Lots of jobs, but there is nowhere to live.
- Especially a problem for women.

#### Community Engagement and Collaboration

Key informants and focus group participants were asked to weigh in on community engagement and collaboration of various organizations and stakeholders in the community. Specifically, participants were asked, "On a scale of 1 to 5, with 1 being no collaboration/community engagement and 5 being excellent collaboration/community engagement, how would you rate the collaboration/engagement in the community

among these various organizations?” This was not intended to rank services provided. They were presented with a list of 14 organizations or community segments to rank. 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 rankings (with 5 being “excellent” engagement or collaboration) were:

- Public Health (4.75)
- Emergency services, including ambulance and fire (4.5)
- Hospital (healthcare system) (4.25)
- Schools (4.25)
- Law enforcement (4.0)
- Pharmacy (4.0)
- Business and industry (3.75)
- Economic development organizations (3.75)
- Social Services (3.75)
- Clinics not affiliated with the main health system (3.5)
- Faith-based (3.5)
- Human services agencies (3.5)
- Long-term care, including nursing homes and assisted living (3.5)
- Other local health providers, such as dentists and chiropractors (3.5)



## Priority of Health Needs

A Community Group met on December 5, 2018. There were 12 community members who attended the meeting. Representatives from the CRH presented the group with a summary of this report’s findings, including background and explanation about the secondary data, highlights from the survey results (including perceived community assets and concerns, and barriers to care), and findings from the key informant interviews.

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

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

- Availability of mental health/substance abuse treatment services (11 votes)
- Not enough jobs with livable wages (8 votes)
- Attracting and retaining young families (11 votes)

- Having enough child daycare services (7 votes)

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

1. Availability of mental health/substance abuse treatment services (7 votes)
2. Attracting and retaining young families (2 votes)
3. Not enough jobs with livable wages (2 votes)
4. Having enough child daycare services (1 votes)

Following the prioritization process during the second meeting of the community group and key informants, the number one identified need was the availability of mental health/substance abuse treatment services. A summary of this prioritization is found in Appendix C.

### Comparison of Needs Identified Previously

The current process identified mental health/substance abuse treatment services as the top priority. While not exactly the same as what was identified in the 2016 process, mental health in adults and children, it shares

Top Needs Identified 2016 CHNA Process	Top Needs Identified 2019 CHNA Process
<ul style="list-style-type: none"> <li>• High cost of healthcare</li> <li>• Mental health in adults and children</li> <li>• Maintaining enough healthcare and EMS workers</li> <li>• Obesity</li> <li>• Focus on wellness/prevention of disease – availability of exercise facilities</li> </ul>	<ul style="list-style-type: none"> <li>• Availability of mental health/substance abuse treatment services</li> <li>• Attracting and retaining young families</li> <li>• Not enough jobs with livable wages</li> <li>• Having enough child daycare services</li> </ul>

the same theme of mental health. The other three top needs are very community engaging, not directly tied to healthcare.

## Hospital and Community Projects and Programs Implemented to Address Needs Identified in 2016

In response to the needs identified in the 2016 CHNA process, the following actions were taken:

*Need 1: High Cost of Healthcare* – CHI Oakes Hospital is offering assistance with acquiring coverage and/or financial assistance for patients who are either uninsured or underinsured. An additional strategy to keep costs down is the ongoing pursuit of grants and use of foundation funds where possible for critical needs.

*Need 2: Mental Health in Adults and Children* – Mental health is being addressed by continuing to work with Dr. David Lopez and the Telepsych group to provide inpatient placements, working toward outpatient clinical services, and providing education and awareness of resources that are available. Staff have also attended several educational sessions on addressing behavioral health needs within the constraints of budget, staff availability and limited resource availability. CHI Oakes Hospital has also presented at the local school about making healthy choices and violence prevention.

*Need 3: Maintaining enough healthcare and EMS workers* – CHI Oakes Hospital is continuing to strive for optimal staff satisfaction and retention, attending and promoting healthcare at job and career fairs, providing scholarship dollars for those pursuing healthcare fields, and providing education assistance to current staff.

*Need 4: Obesity* – Obesity is being addressed primarily through provider education to patients regarding healthy lifestyle choices. The CHI Oakes Hospital staff also participates in various wellness challenges and education, which applies to this priority, as well as the focus on wellness/prevention of disease.

*Need 5: Focus on wellness/prevention of disease* – Wellness is being focused on through community education and working in collaboration with the public school to provide weekend food backpacks, holiday food baskets, and basic supplies for families in need. A 5K walk/run is also held each year to promote healthy exercise habits.

The above implementation plan for CHI Oakes Hospital is posted on the CHI Oakes Hospital's website at <http://www.oakeshospital.com/communitybenefits.htm>.

## Next Steps – Strategic Implementation Plan

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

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

### Community Benefit Report

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

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

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

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

### What Are Community Benefits?

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

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

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

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

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

# Appendix A – CHNA Survey Instrument



## Dickey County Health Survey

CHI Oakes Hospital and Dickey County Health District are interested in hearing from you about community health concerns.

The focus of this effort is to:

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



If you prefer, you may take the survey online at <http://tinyurl.com/DickeyCounty18> or by scanning 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 October 1, 2018. 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 |



**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 | <input type="checkbox"/> Not getting enough exercise/physical activity                           |
| <input type="checkbox"/> Cancer   | <input type="checkbox"/> Obesity/overweight  |
| <input type="checkbox"/> Diabetes   | <input type="checkbox"/> Hunger, poor nutrition  |
| <input type="checkbox"/> Depression/anxiety                                     | <input type="checkbox"/> Crime   |
| <input type="checkbox"/> Stress   | <input type="checkbox"/> Graduating from high school   |
| <input type="checkbox"/> Suicide  | <input type="checkbox"/> Availability of disability services                                     |
| <input type="checkbox"/> Not enough activities for children and youth           | <input type="checkbox"/> Other (please specify) _____  |
| <input type="checkbox"/> Teen pregnancy   |  |
| <input type="checkbox"/> Sexual health  |  |

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

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

9. Considering the **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"/> Depression/anxiety                                     |
| <input type="checkbox"/> Availability/cost of activities for seniors                        | <input type="checkbox"/> Suicide  |
| <input type="checkbox"/> Availability of resources for family and friends caring for elders | <input type="checkbox"/> Alcohol use and abuse                                  |
| <input type="checkbox"/> Quality of elderly care  | <input type="checkbox"/> Drug use and abuse (including prescription drug abuse) |
| <input type="checkbox"/> Cost of long-term/nursing home care                                | <input type="checkbox"/> Availability of activities for seniors                 |
|   | <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      | <input type="checkbox"/> Verbal threats                |
| <input type="checkbox"/> Dating violence                     | <input type="checkbox"/> Intimidation         | <input type="checkbox"/> Video game/media violence     |
| <input type="checkbox"/> Domestic/intimate partner violence  | <input type="checkbox"/> Isolation            | <input type="checkbox"/> Violence against children     |
| <input type="checkbox"/> Economic abuse/withholding of funds | <input type="checkbox"/> Physical abuse       | <input type="checkbox"/> Violence against women        |
|  | <input type="checkbox"/> Stalking             | <input type="checkbox"/> Violence against men          |
|  | <input type="checkbox"/> Sexual abuse/assault | <input type="checkbox"/> Work place/co-worker violence |

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

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## Delivery of Healthcare

12. 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) _____              |

13. Which of the following **SERVICES** provided by Dickey County Public Health are you aware of? (Choose ALL that apply)

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

14. 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) _____                                      |

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/worksites wellness | <input type="checkbox"/> Radio                                  | <input type="checkbox"/> Other: (please specify)  |
| <input type="checkbox"/> Healthcare 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. What specific healthcare services, if any, do you think should be added locally?

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

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

☐ Yes

☐ No

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

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

19. 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 |   |

20. 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 |

21. Gender:

☐ Female

☐ Male

☐ Transgender

22. 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    |

23. Your zip code: \_\_\_\_\_

24. 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"/> Prefer not to answer |
| <input type="checkbox"/> Asian            | <input type="checkbox"/> White/Caucasian  |   |

25. 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"/> Prefer not to answer |
| <input type="checkbox"/> \$25,000 to \$49,999 | <input type="checkbox"/> \$100,000 to \$149,999 |   |

26. 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 B – County Health Rankings Explained

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

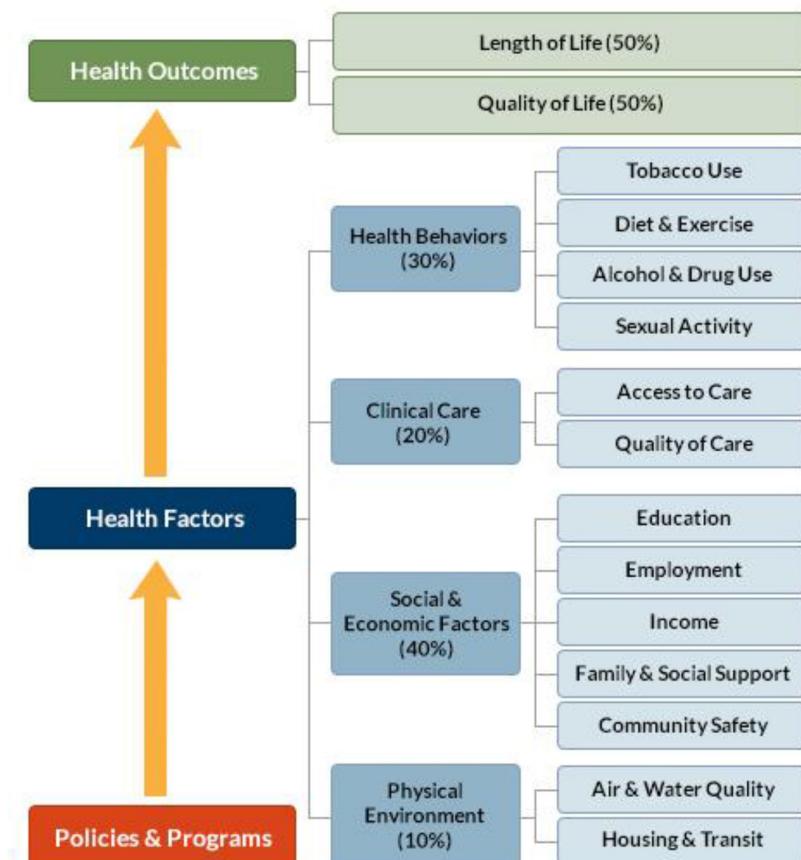
## Methods

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

## What is Ranked

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

## Ranking System





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

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

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

## Data Sources and Measures

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

## Data Quality

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

## Calculating Scores and Ranks

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

# Health Outcomes and Factors

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

## Health Outcomes

### Premature Death (YPLL)

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

#### *Reason for Ranking*

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

### Poor or Fair Health

Self-reported health status is a general measure of health-related quality of life (HRQoL) in a population. This measure is based on survey responses to the question: "In general, would you say that your health is excellent, very good, good, fair, or poor?" The value reported in the County Health Rankings is the percentage of adult respondents who rate their health "fair" or "poor." The measure is modeled and age-adjusted to the 2000 US population. Please note that the methods for calculating this measure changed in the 2016 Rankings.

#### *Reason for Ranking*

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

### Poor Physical Health Days

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

#### *Reason for Ranking*

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

### Poor Mental Health Days

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

### *Reason for Ranking*

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

### **Low Birth Weight**

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

### *Reason for Ranking*

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

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

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

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

## **Health Factors**

### **Adult Smoking**

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

### *Reason for Ranking*

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

### **Adult Obesity**

Adult obesity is the percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m<sup>2</sup>.

### *Reason for Ranking*

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

## Food Environment Index

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

- 1) Limited access to healthy foods estimates the percentage of the population that is low income and does not live close to a grocery store. Living close to a grocery store is defined differently in rural and nonrural areas; in rural areas, it means living less than 10 miles from a grocery store whereas in nonrural areas, it means less than 1 mile. “Low income” is defined as having an annual family income of less than or equal to 200 percent of the federal poverty threshold for the family size.
- 2) Food insecurity estimates the percentage of the population who did not have access to a reliable source of food during the past year. A two-stage fixed effects model was created using information from the Community Population Survey, Bureau of Labor Statistics, and American Community Survey.

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

### *Reason for Ranking*

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

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

## Physical Inactivity

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

### *Reason for Ranking*

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

## Access to Exercise Opportunities

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

Individuals who:

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

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

#### *Reason for Ranking*

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

#### **Excessive Drinking**

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

#### *Reason for Ranking*

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

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

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

#### *Reason for Ranking*

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

#### **Sexually Transmitted Infection Rate**

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

#### *Reason for Ranking*

Chlamydia is the most common bacterial STI in North America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain.[1,2] STIs are associated with a significantly increased risk of morbidity and mortality, including increased risk of cervical cancer, infertility, and premature death.[3] STIs also have a high economic burden on society. The direct medical costs of managing sexually transmitted infections and their complications in the US, for example, was approximately 15.6 billion dollars in 2008.[4]

#### **Teen Births**

Teen births are the number of births per 1,000 female population, ages 15-19.

#### *Reason for Ranking*

Evidence suggests teen pregnancy significantly increases the risk of repeat pregnancy and of contracting a sexually transmitted infection (STI), both of which can result in adverse health outcomes for mothers, children, families, and communities. A systematic review of the sexual risk among pregnant and mothering teens concludes that pregnancy is a marker for current and future sexual risk behavior and adverse outcomes [1]. Pregnant teens are more likely than older women to receive late or no prenatal care, have eclampsia, puerperal endometritis, systemic infections, low birthweight, preterm delivery, and severe neonatal conditions [2, 3]. Pre-term delivery and low birthweight babies have increased risk of child developmental delay, illness, and mortality [4]. Additionally, there are strong ties between teen birth and poor socioeconomic, behavioral, and mental outcomes. Teenage women who bear a child are much less likely to achieve an education level at or



beyond high school, much more likely to be overweight/obese in adulthood, and more likely to experience depression and psychological distress [5-7].

### **Uninsured**

Uninsured is the percentage of the population under age 65 that has no health insurance coverage. The Small Area Health Insurance Estimates uses the American Community Survey (ACS) definition of insured: Is this person CURRENTLY covered by any of the following types of health insurance or health coverage plans: Insurance through a current or former employer or union, insurance purchased directly from an insurance company, Medicare, Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability, TRICARE or other military healthcare, Indian Health Services, VA or any other type of health insurance or health coverage plan? Please note that the methods for calculating this measure changed in the 2012 Rankings.

#### *Reason for Ranking*

Lack of health insurance coverage is a significant barrier to accessing needed healthcare and to maintaining financial security.

The Kaiser Family Foundation released a report in December 2017 that outlines the effects insurance has on access to healthcare and financial independence. One key finding was that “Going without coverage can have serious health consequences for the uninsured because they receive less preventative care, and delayed care often results in serious illness or other health problems. Being uninsured can also have serious financial consequences, with many unable to pay their medical bills, resulting in medical debt.”[1]

### **Primary Care Physicians**

Primary care physicians is the ratio of the population to total primary care physicians. Primary care physicians include non-federal, practicing physicians (M.D.’s and D.O.’s) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics. Please note this measure was modified in the 2011 Rankings and again in the 2013 Rankings.

#### *Reason for Ranking*

Access to care requires not only financial coverage, but also access to providers. While high rates of specialist physicians have been shown to be associated with higher (and perhaps unnecessary) utilization, sufficient availability of primary care physicians is essential for preventive and primary care, and, when needed, referrals to appropriate specialty care.[1,2]

### **Dentists**

Dentists are measured as the ratio of the county population to total dentists in the county.

#### *Reason for Ranking*

Untreated dental disease can lead to serious health effects including pain, infection, and tooth loss. Although lack of sufficient providers is only one barrier to accessing oral healthcare, much of the country suffers from shortages. According to the Health Resources and Services Administration, as of December 2012, there were 4,585 Dental Health Professional Shortage Areas (HPSAs), with 45 million people total living in them.[1]

### **Mental Health Providers**

Mental health providers is the ratio of the county population to the number of mental health providers including psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, mental health providers that treat alcohol and other drug abuse, and advanced practice nurses specializing in mental healthcare. In 2015, marriage and family therapists and mental health providers that treat alcohol and other drug abuse were added to this measure.

#### *Reason for Ranking*

Thirty percent of the population lives in a county designated as a Mental Health Professional Shortage Area. As the mental health parity aspects of the Affordable Care Act create increased coverage for mental health services, many anticipate increased workforce shortages.



## **Preventable Hospital Stays**

Preventable hospital stays is the hospital discharge rate for ambulatory care-sensitive conditions per 1,000 fee-for-service Medicare enrollees. Ambulatory care-sensitive conditions include: convulsions, chronic obstructive pulmonary disease, bacterial pneumonia, asthma, congestive heart failure, hypertension, angina, cellulitis, diabetes, gastroenteritis, kidney / urinary infection, and dehydration. This measure is age-adjusted.

### *Reason for Ranking*

Hospitalization for diagnoses treatable in outpatient services suggests that the quality of care provided in the outpatient setting was less than ideal. The measure may also represent a tendency to overuse hospitals as a main source of care.

## **Diabetes Monitoring**

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

### *Reason for Ranking*

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

## **Mammography Screening**

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

### *Reason for Ranking*

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

## **Unemployment**

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

### *Reason for Ranking*

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

## **Children in Poverty**

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

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

### *Reason for Ranking*

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

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

### **Income Inequality**

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

### *Reason for Ranking*

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

### **Children in Single-Parent Households**

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

### *Reason for Ranking*

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

### **Violent Crime Rate**

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

### *Reason for Ranking*

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

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

### **Injury Deaths**

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

#### *Reason for Ranking*

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

### **Air Pollution-Particulate matter**

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

#### *Reason for Ranking*

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

### **Drinking Water Violations**

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

#### *Reason for Ranking*

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

### **Severe Housing Problems**

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

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

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

#### *Reason for Ranking*

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

# Appendix C – Prioritization of Community's Health Needs

## Community Health Needs Assessment

### Oakes, North Dakota

#### Ranking of Concerns

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

	Priorities	Most Important
<b>CONCERNS ABOUT COMMUNITY/ENVIRONMENTAL HEALTH CONCERNS</b>		
Attracting & retaining young families	7	2
Having enough child daycare services	7	1
Not enough affordable housing	0	
Not enough jobs with livable wages	8	2
<b>AVAILABILITY/DELIVERY OF HEALTH SERVICES CONCERNS</b>		
Cost of health insurance	4	
Extra hours for appointments, such as evening and weekends	1	
Availability of mental health/substance abuse treatment services	11	7
Cost of healthcare services	0	
Availability of specialists	1	
<b>YOUTH POPULATION HEALTH CONCERNS</b>		
<del>Alcohol use and abuse</del> (changed to all ages in adult concerns)		
<del>Drug use and abuse (including prescription drugs)</del> (changed to all ages in adult concerns)		
<del>Depression/anxiety</del> (changed to all ages in adult concerns)		
Not getting enough activities for children and youth	0	
<b>ADULT POPULATION HEALTH CONCERNS</b>		
Alcohol use and abuse (changed to all ages)	0	
Drug use and abuse (changed to all ages)	0	
Cancer	0	
Depression/anxiety (changed to all ages)	1	
Not getting enough exercise/physical activity	1	
<b>SENIOR POPULATION HEALTH CONCERNS</b>		
Cost of long-term/nursing home care	0	
Availability of resources to help elderly stay in their homes	4	
Assisted living options	4	
Long-term/nursing home options	0	
Availability of transportation for seniors	1	
Availability/cost of activities for seniors	0	
<b>VIOLENCE CONCERNS</b>		
Bullying/cyber-bullying	1	
Emotional abuse (isolation, verbal threats, withholding of funds)	0	
Video game/media violence	0	
Domestic/intimate partner violence	1	

# Appendix D – Survey “Other” Responses

**Community Assets: Please tell us about your community by choosing up to three options you most agree with in each category below. Responses with “(xxx)” in front of them indicate the number of people that indicated that exact response.**

1. Considering the PEOPLE in your community, the best things are: “Other” responses:

- All the above
- Intolerant, close-minded
- Lots of Christians live here
- Many good people involved. Many people oblivious to happenings.
- None of the above
- People are closed minded and not supportive
- People are mostly Christians
- Trustworthy

2. Considering the SERVICES AND RESOURCES in your community, the best things are: “Other” responses:

- All the above
- Clothing boutiques
- I feel we lack greatly in diversity, open mindedness, and events to draw the community out together
- None
- Trinity Bible college is here

3. Considering the QUALITY OF LIFE in your community, the best things are: “Other” responses:

- Most people are Christians
- Not much for jobs for younger families to stay

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

- All the above
- Are in need of activities
- Bone building exercise
- Church and school events
- Most activities involve alcohol
- N/A
- None
- None of the above
- Not much
- Nothing for kids to do after school
- Parks & rec programs
- Poor in all areas locally
- School sports with children
- The nothingness



- There are all kinds of activities for kids to do but none for families to do together
- There is very little
- Trinity Bible College athletics
- Trinity Bible College lectures and athletics

## 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:

- All the above
- Lack of full day preschools
- Lack of professional level jobs especially for women
- Lack of resources for mental health
- Lack of restaurants
- Not enough Christians
- Not enough street lights (very dark during night), unannounced power interruption
- Not enough variety in housing
- Our housing is old and we need newer apartments for older people
- Safe bike / walking paths

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

- All good
- (2) All of the above
- Daycare for dementia patients
- I think it would be great if there was a specialized mental health provider in the area.
- Lack of support for Republican health plans
- Something needs to be done about 911 services, we live 1 mile south of the state line and the Dickey County ambulance can't cross the state line to pick up a patient, when it is an emergency it is not a good situation!

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

- All the above
- Behavior Health services / psychologists
- (2) Bullying
- Cyberbullying
- Gaming addictions
- Limited resources for LGBTQ youth
- Not wanting work - all age groups
- Overloaded sports schedule that monopolizes kids' time, to the exclusion of family time and other youth organizations and activities. School sports and school activities monopolize too much of kids' time.
- Poor quality of education provided by schools

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

- (2) All of the above
- Lack of access to mental health services
- Not enough activities or things to do in the evenings or weekends
- Transitional housing for the geriatric population - aka: levels of “assisted living”

9. Considering the SENIOR POPULATION in your community, concerns are: “Other” responses

- 2) All of the above
- Cost of nursing home
- Cost of prescriptions
- Elderly driving when they shouldn’t
- Having enough money to live on and pay bills

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

- A lot of drugs, and kids bullying, by teacher and kids
- A steadily declining farm economy
- Activities for all ages outside of school. Nothing to do. Nothing going on unless you are into bars. No teen hang out center.
- Adequate and affordable healthcare
- Affordable senior care
- Afterhours access to domestic abuse resources
- Aging population - decrease of young people
- Air quality - with grain elevators in town more and more people are having breathing, lung issues
- Attracting and retaining professional families, and youth families from lack of career choices, and community involvement.
- Attracting families and businesses due to population decline, lack of high paying jobs, housing shortage, and lack of child care options.
- Attracting young families
- Availability of mental healthcare providers/services and the stigma of seeking them if they were available locally
- Availability of services and goods.
- Be willing to work.
- Being able to handle mental health with adults and youth.
- (2) Bullying
- Bullying in the youth/young adult population.
- Bullying, both within the school and community.
- Businesses closing down.
- Cancer - why so much in this area?
- Caring for our elderly population.
- (2) Childcare
- Community is dying. Businesses are closing and no new ones to replace them. There are not enough activities in community and young people do not stay. The wages people make here are not enough to live on.
- Cost for healthcare and long term care
- Cost of living and healthcare
- Cost of living vs wage
- Day care

- Decline in population
- Declining working age population with good jobs/housing
- Decreasing population survival
- Depression and access to mental health services
- Depression/anxiety among our teens from stress and bullying, especially social media
- Discrimination
- Drug abuse is here and more coming in
- (2) Drugs
- Drugs abuse
- Economic development
- Emotional abuse
- Enough room for all who need the care
- Financial resources
- Gossip and spreading rumors falsely
- Growth
- Having enough high paying jobs with benefits to attract younger families to live here.
- Help for domestic violence
- High apartment costs compared to job options and wages for the area. Need more apartment housing and renovation of rundown apartment buildings for better living conditions.
- Housing
- How cliché the community is
- I think Ellendale struggles with staying open minded.
- In the last 40 years the town has a drop in school population of 50%
- Increasing geriatric population and meeting their needs outside of institutional settings.
- Job opportunities
- Job opportunity
- (2) Jobs
- Jobs and affordable, decent housing that draw and retain younger families to the community
- Jobs and business in Ellendale Main Street is gone. There needs to be something done to bring in businesses and jobs that pay good wages
- Jobs and high enough salaries for people not to have to commute!!!! City officials to not expect everyone to pay for services they don't use, like dump fees. Doubling mosquito spraying and issue of mosquito and West Nile aren't better!!!
- Jobs and retaining youth
- Keeping a community going - stores, schools, hospital, etc.
- Keeping business open (restaurants)
- Keeping our small businesses going
- Keeping population up
- Keeping qualified medical staff in Oakes without the cost of it being cost effective.
- Keeping the community from becoming non-existent!
- Keeping the town alive
- Keeping young people in town
- Lack of affordable groceries
- Lack of anything to keep people under 40 here – jobs, entertainment, shopping, housing
- Lack of community participation, unless there is free food.
- Lack of community togetherness due to closed social circles in all age categories
- Lack of high paying jobs.

- Lack of jobs with adequate wage or wage increase.
- Lack of mental health resources
- Lack of opportunity
- Lack of population
- Lack of population and jobs
- Lack of resources (restaurants, shopping, etc...) needed to attract new families.
- Lack of resources and support for those experiencing mental/emotional health issues and those seen by the broader community as somehow “different”.
- Lack of various activity options for youth and adults
- Living wage jobs.
- Losing businesses
- Low wages
- Maintaining the business district and attracting more to the area
- Mental health
- (2) Mental health needs
- Mental health services
- Mental health services in such a rural area
- Need a better business district, shopping, restaurants etc.
- Need more housing for the elderly
- No competition to hold costs down
- No growth in this community
- No jobs available, with benefits. Have to drive out of town, and therefore spend our money out of town. Contributes to decline in town support.
- None
- Not being able to doctoring in our clinics
- Not enough business - jobs! People move away because we don't have anything to offer our younger generation. High cost - less income to pay bills
- Not enough good paying jobs
- not enough high quality jobs
- Not enough jobs to keep young people in the community!
- Not enough medical doctors
- Not enough people are serious about serving Jesus Christ. We need a renewal of Christian faith at all ages and levels of the community.
- Not enough senior activities and transportation
- Not enough people to fill job openings
- Not enough workers to fill all job openings
- Nursing home care is horrible - not enough attention is given to the residents
- Nursing home cost
- Options for good paying jobs with benefits. In a rural farm community where the farm economy is down, another income is important and Ellendale does not have that many businesses who have the availability of good wages plus benefits.
- Our school is going downhill,
- Overall lack of resources available to address mental health needs/concerns.
- Population decreasing and taxes rising
- Population loss
- (2) Poverty
- Retaining business
- Retaining young people - families

- Retention of good families.
- Shrinking Main St. for sale/ going out of business
- Sidewalk safety, not enough areas with sidewalks/ walking paths. Children are forced to ride/ walk on street near park where many cars speed!
- Strangers bothering little kids
- Taxes
- Taxes, special assessments to own property is too high for seniors to stay in their homes
- Technology use - What happened to going to a ball game to watch the game, not be on a device?
- Teenagers making poor choices - sex, drugs, tobacco, alcohol and then putting everything online
- The ability of the community (small town) to survive
- The Christian churches are not active enough in recruiting more persons to be Christian.
- The fact that people can't come back to the community for good jobs
- The lack of jobs that pay good, family sustaining wages
- The poor education system in OAKES, increased bullying in schools, lack of parental concern, the increased pressure applied to today's youth
- The price of utility, what garbage sewer, DRN
- There is a very large lack of things that draw families to move into the area. There aren't a lot of jobs, activities, or services to make anyone want to come here. The community is very stagnant.
- There is not a variety of community events that encourage involvement from local families.
- Uncertain
- Violence
- Volunteering
- Water
- Water both drinking and sewer drainage
- Work force recruitment and retention, specifically of younger people and/ or families.

## Delivery of Healthcare

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

- All of the above
- All the above
- Healthcare insurance is too expensive
- Lack of confidence in local professionals
- Limited appointment slots available
- N/A
- There is no excuse in this community.
- Very accessible
- Wait time at some clinics

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

- All of the above
- Church Pastor and friends
- Doctor out of Dickey county
- Friends & family who are medical professionals (nurses & MDs)
- I use Sanford because I trust them.

- Individual who's dealing with the issue I'm inquiring about. True life experience.
- My mother. She is a nurse
- My own research
- Pharmacist
- Spouse (nurse)
- TV

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

- All the above
- Directory
- Facebook
- Online
- Phone book
- Senior center

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

- A community gym, for all not just the elderly
- A doctor
- A hospital (even a small one offering basic emergency services) would be fantastic!
- Advisory capacity or reference to one, provided by local chamber to new or even current residents
- All that is needed
- Baby delivery
- Baby delivery. The hospital used to provide it. And just any more healthcare services we can get! More of any such things is good.
- Badly need mental health service
- Behavioral health
- Better access to mental healthcare
- Cancer doctor
- Counseling
- Diet education for diseases such as diabetes and hypertension
- Evening and weekend clinic options
- Evening hours or afternoon hours if you want them you have to go Oakes or Aberdeen. It would be great to have a lab, X-ray etc. at the Sanford clinic in Ellendale
- Fitness/weight loss coaches. Personal trainers
- Lifestyle health, promoting active, social lifestyles with a focus on proper nutrition
- Memory unit at nursing home
- (3) Mental health
- Mental health counselors
- Mental health facility/ substance abuse safe house
- Mental Health Services and Dietary Education for specific disease management
- Mental health support needs to be better advertised, especially within the school
- Mental Health, Dermatology
- Mental health. Specialized school counselor. Gastroenterologist. Endocrinologist.
- More primary care
- More surgical specialties
- More telehealth specialties, especially mental health



- New dentist
- No idea
- (2) None
- Nothing specific
- Nutrition/fitness programs
- Physical activity programs
- Psychiatry
- Psychologist
- Saturday Urgent Care in Ellendale for sick visits since the clinic hours are limited
- Services to address mental health needs
- Specialist maybe once a month at the local clinic
- Substance abuse counseling
- Transportation more than 2 days a week that is affordable....
- Very well covered
- Vision
- We miss our hospital - never should have closed - would employ people, many local - good hospital and doctors years ago. Thank you for all the good PA's that keep Ellendale going! Thank you all!
- Weight loss counseling
- When I have an appointment it takes too long to get in and out, my time is precious too!
- Wider range of specialists
- Year round available indoor swimming pool

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

- A daily bus to Aberdeen for the elderly and doctor appointments
- Availability of full time healthcare is limited, the majority are shared or part time
- Being referred to specialist out of town and having to wait weeks (2-3) for an appointment
- Biggest issue is cost and availability. Most of the time don't have enough money but just over their limits because they use gross income instead of net.
- Communication and awareness of programs that are offered throughout the community.
- Concerned about our local hospital keeping its doors open. Parking lot is frequently empty and seems like most patients are sent out of town for hospitalization.
- Connect the healthcare delivery systems through the local Christian churches as part of a privatization initiative.
- Cost
- Cost of services and supplies are very high
- Easy access to medical appointments
- Emergency services in the rural area, if we have an emergency we have to wait a long time to get an ambulance to your place. When we call 911 it goes to Mobridge, SD and whoever answers the phone out there doesn't know who to dispatch, like the closest ambulance to our place, they don't know our area or the people, like who lives where, or the addresses of our community.
- For a community of our size I think we have good healthcare
- Glad to have all that we do have
- Have great healthcare in our area
- I am concerned about the limited options for care. For example, I was concerned my youngest child had an ear infection. I called the local clinic and the soonest I was able to get is was the next day. I didn't want to wait another day but I also didn't want to drive to Aberdeen or Jamestown. I wish there were extended hours or a walk-in clinic available.
- I am very happy and satisfied with it

- I avoid hospitals with religious affiliation. I don't trust that they'll give me all the info I might need because of their belief system/restrictions. I do not want religious bias involved in my healthcare.
- I don't know how much is available but I feel home healthcare for needy is an important issue
- I live in Sargent County. I doctor in Oakes and also see doctor at Fargo VA
- I think our public health ladies do a great job of serving our community.
- I think there needs to be more weekend/evening appointments for office visits with all healthcare professionals in Oakes. Dental, eye, primary care providers, etc. what good are these services close to home if the working person cannot use them.
- I think we need more mental health resources and I realize this is a national and state issue as well as local, but if we could even get telehealth mental health services it would be helpful.
- I truly appreciate the shot clinics provided by Dickey County Health Department
- I'm pleased
- It's hard for me to get out of town for medical appointments due to my job. Dermatology would also be a nice addition. I would love to see more specialized outreach providers come to the area monthly/bimonthly so we can get more specialized medicine in
- Just keep doing what they are doing...keep improving and learning about new care
- Keeping costs down
- Like to see more done for dementia patients - a facility so family members can stay in the community, adult day care to give caregivers a break
- Local healthcare is excellent in our community
- Maybe a healthcare options availability list compiled and available on community locations: bulletin boards, churches, medical offices, such as what public health does offer, what counselors are available, what transportations are available etc., what medical services are available, what does Oakes hospital do? (OB? 24 hour CT or MRI? – do I go to Aberdeen for ER visits or can Oakes help or not?) As a community member, I don't know what is offered for services and assume I have to go to Aberdeen or Fargo for about everything.
- More doctors (resident) in town
- More information by flyers or word of mouth
- More senior housing!
- More specialists. Counseling services? Speech services? Early childhood?
- More specialists, weekend hours
- Need more specialists to come to our town
- None
- Our town is small 1500-1600 people - very concerned
- Professional help for mental health individuals
- Provide local access to younger medical doctors who specialize in geriatrics
- Regular weekday hours past noon would be great and Saturday morning.
- Sometimes I feel I pay more because of our income to supplement lower income. I feel the cost seeking medical attention may seem high and I feel I need to juggle that against my insurance and my co pay and how I will be able to pay for everything.
- Staffing shortage, encourage students to take up medical courses rather than other field of study, raise salary, and decrease tuition/offer scholarship to attract more students.
- Starts with the White House in Washington and down to us here in ND. Our hands pretty much tied and have no choice to pay health insurance etc., forced! Feel sorry for young people that can't afford insurance, etc.
- Support ambulance services - a hospital which doesn't ship EVERYTHING to Fargo/Sioux Falls
- The folks in this area are stubborn. They don't want to hear from an outsider. That's your biggest hurdle to get over. Getting them to listen to you and believe what you are telling them keeps a lot of them from seeing a professional.
- The populations who most need services are the least likely to be connected to providers, social media, or friends/neighbors who are aware of services. How can this group of people be reached?
- Try to make more summer time activities for the whole town

- We need increased assistance and access to mental health starting in children even before grade school, we need the school boards to hear the concern from parents about the poor quality of education provided to children. We need to value children as children and not expect adult behavior from them as young as 1st grade. They need to be allowed to be children, they have to be adults far too long in life. Pushing children as we do without the proper mental health support is leading to a very unstable and dangerous school system.
- We need more specialists in the area as well as professionals that can help with mental health patients!!
- We need more speech, counseling, OT, head start, not home based therapy for kids
- We're in a small town so they can charge you twice the amount for goods
- What we have locally, clinic and hospital is all available
- Why do we always have to go either to Fargo, Aberdeen, Sioux Falls, or Bismarck? Why can't everything be done here at home?
- Why do we always have to leave town?

