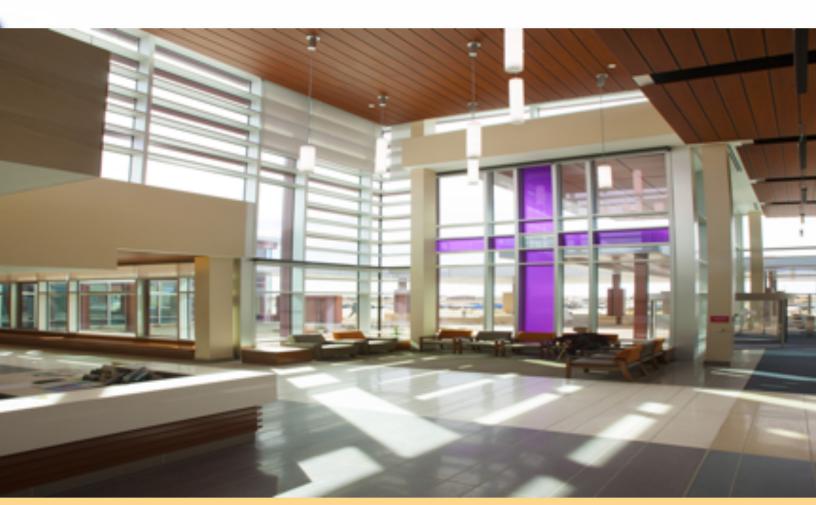
Community Health Needs Assessment

2019



Dickinson Service Area, North Dakota



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Executive Summary

To help inform future decisions and strategic planning, CHI St. Alexius Health Dickinson conducted a community health needs assessment (CHNA) in 2018/2019, the previous CHNA having been 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 236 CHI St. Alexius Health Dickinson service area residents who completed the survey (all electronic). Additional information was collected through nine key informant interviews with community members. The input from the residents, who primarily reside in Stark County, represented the broad interests of the communities in the service area. Together with secondary data gathered from a wide range of sources, the survey presents a snapshot of the health needs and concerns in the community.

With regard to demographics, Stark County's population from 2010 to 2017 increased 24.8% as compared to the North Dakota average of 12.3%. Much of this increase was related to oil field development in western North Dakota. The average of residents under the age of 18 (25.9%) for Stark County is less (13.5%) than the state average (15%) and the rates of education are slightly lower for Stark County (90.6% for high school graduation and 24.7% for bachelor degrees or higher) than the North Dakota average (92.0% and 28.2% respectively). However, less residents live below the poverty line in the county (8.0%) compared to the state average (10%) probably due to high paying jobs in the oil field.

According to DATA USA, the population of Stark County is 29,837 with the median age of 34.5 and a median household of \$76,817. Between 2015 and 2016 the population of the county grew 4.22% and its median household income grew from \$72,099 to \$76,817, a 6.54% increase. The population of the county is 89.1% white, 5.02% Hispanic, and 1.92% are a mixture. Of the people in the county, 6.8% speak a non-English language.

Data compiled by County Health Rankings show Stark County is doing better than North Dakota in health outcomes for 10 factors.

Stark County, according to County Health Rankings data, is performing poorly relative to the rest of the state in 7 factors and outcomes and worse than the U.S. Top 10% in 2 outcomes and 19 factors.

Of the 82 potential community and health needs set forth in the survey, the 236 CHI St. Alexius Dickinson service area residents who completed the survey indicated the following 11 needs as the most important:

- Having enough child daycare services
- Enough affordable housing.
- Availability of mental health services
- Availability of specialists
- Alcohol use and abuse youth
- Alcohol use and abuse-adult

- Cost of long-term/nursing home care
- Youth bullying/cyber-bullying
- Drug use and abuse -youth
- Drug use and abuse-adult
- Availability of resources to help the elderly stay in their homes

The survey also revealed the biggest barriers to receiving healthcare (as perceived by community members). Those barriers included the availability of mental health services 54%, availability of specialists 46%) and the ability to retain primary care providers (MD, DO, NP, PAs) and nurses in the community (29%).

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

- Safe place to live, low crime rate
- Quality school system
- Family-friendly, good place to raise kids a lot of young families
- People who live here are involved in their community-community ownership
- Very progressive-building amenities to attract young people
- Pride in the community, clean
- I like the size. Good mix of town and country living. Like a hometown.
- Everything is here. Don't have to travel elsewhere for services.

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:

- Physical violence to include domestic violence and sexual/child abuse and bullying including cyberbullying
- Drug and alcohol use and abuse
- Cost of long-term/nursing home care
- Depression/anxiety and suicide
- Having enough child daycare services
- Availability of mental health and substance use disorder treatment services

Overview and Community Resources

Dickinson is located in the southwest quadrant of North Dakota, approximately 65 miles from both the Montana and South Dakota borders. It is less than an hour drive from Lake Sakakawea, the largest of the mainstream reservoirs on the Missouri River, which provides fishing, camping, and other recreation. Dickinson's economy is based primarily on the oil and gas industry, professional and other services, and retail. Dickinson is home to Dickinson State University, a four-year public university with an enrollment of more than 2,000 students. The city's public education system includes the following: a high school, junior high, and five elementary schools; private schools serving the community are Hope Christian Academy (preschool through eighth grades); and Dickinson Catholic Schools consisting of two elementary schools and a high school.

Dickinson's five largest employers are: Dickinson Public Schools; TMI Systems; Dickinson State University; CHI St. Alexius Heath Dickinson Medical Center; and Walmart.

Dickinson offers 24 public parks, an 18-hole golf course, two disc-golf courses, Patterson Lake Recreation Area, and nearby hunting, fishing, and camping. West River Community Center is a 93,000-square-foot fitness facility that features an indoor pool, golf room, climbing wall, indoor tennis courts and track, basketball courts, racquetball courts, strength and cardiovascular equipment, and free weights. For children, it offers an indoor Community Health Needs Assessment

playground, childcare services, water slides, and other aquatic play areas.

As illustrated in Map 1, CHI St. Alexius Health Dickinson Medical Center and the Southwest District Health Unit is located in southwestern North Dakota. The medical center is located in Stark County and the health unit office is in Dickinson and the unit serves the eight counties in the southwest corner of North Dakota.

With assistance from the CRH at the UNDSMHS, the CHI St. Alexius Health Dickinson completed a CHNA of the CHI St. Alexius Dickinson service area in collaboration with the Southwestern District Health Unit. Many community members and stakeholders worked together on the assessment.

CHI St. Alexius Health Dickinson

CHI St. Alexius Health

The CHI St. Alexius Health regional healthcare system was formed in April 2016, when several Catholic Health Initiative healthcare facilities joined together to form the largest healthcare delivery system in central and western North Dakota. The system is comprised of a tertiary hospital in Bismarck, and critical access hospitals (CAHs) in Carrington, Dickinson, Devils Lake, Garrison, Turtle Lake, and Williston as well as numerous clinics and outpatient services. CHI St. Alexius Health also manages four CAHs in North Dakota that are located in the communities of Ashley, Elgin, Linton, and Wishek, as well as Mobridge Regional Hospital & Clinics in Mobridge, South Dakota.

Catholic Health Initiatives

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

Mission

The Mission of Catholic Health Initiatives is to nurture the healing ministry of the Church, supported by education and research. Fidelity to the Gospel 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:

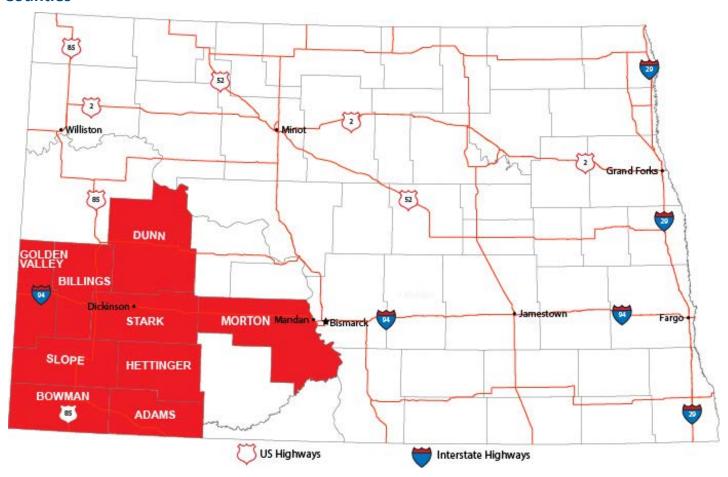
- Catholic: Living our mission and core values.
- Health: Improving the health of the people and communities we serve.
- Initiatives: Pioneering models and systems of care to enhance care delivery.

Dickinson is the only hospital in a 100-mile radius offering Level 4 trauma services including care for stroke, cardiac and burns as well as serving as the tertiary center for hospital services in southwestern North Dakota. Dickinson has increased its population by about 40% over the past three years with the median age steadily decreasing as the population becomes younger.

CHI St. Alexius Health Foundation operates Harvest Home, a temporary residential facility for out-of-town patients and their family members. Staffed by volunteers and those using it, the home has three rooms and accommodations including laundry and shower facilities.

CHI St. Alexius Health Foundation also offers bi-monthly wellness seminars that cover various medical and social issues.

Figure 1: Golden Valley, Dunn, Billings, Stark, Morton, Slope, Hettinger, Bowman and Adams Counties



Services offered locally by CHI St. Alexius Health Dickinson include:

General and Acute Services

- 1. Acute care services medical, orthopedic, and pediatrics
- 2. Acne treatment
- 3. Allergy, flu & pneumonia shots
- 4. Audiology
- 5. Blood pressure checks
- 6. Botox

- 7. Cardiac rehab
- 8. Clinics primary care and internal medicine
- 9. Diabetic education
- 10. Dietitian consult
- 11. Emergency room
- 12. Grief support group
- 13. Joint injection

14. Lamaze 23. Pharmacy – InstyMeds 15. Laser hair removal 24. Physicals, annuals, D.O.T, sports, and insurance 16. Mole/wart/skin lesion removal 25. Podiatry – evaluation and surgery 17. Level 2 nursery 26. Prenatal care 18. Nutrition counseling 27. Psychiatric services 19. Obstetrics 28. Physicals: annuals, D.O.T., sports & insurance 20. Outpatient infusion therapy 29. Sports medicine 21. Orthopedics (visiting physician) 22. Osteoarthritis treatment **Laboratory Services** 1. Alcohol screening 7. Microbiology 8. Occupational drug screenings 2. Blood types 3. Coagulation testing 9. Pathology 4. Chemistry 10. Special chemistry 5. Hematology 11. Transfusion services 6. Immunology 12. Urine testing Screening/Therapy Services 5. Occupational therapy 1. Cardiac rehab 2. Hydrotherapy 6. Physical therapy 7. Pulmonary rehab 3. Joint camp 4. Massage therapy 8. Social services Respiratory 1. Arterial blood gas (drawing & analysis) 6. Oxygen saturation monitoring & testing 2. EEG 7. Polysomnography 3. EKG 8. Pulmonary function testing 4. Holter-event monitoring & analysis 9. Stress testing 5. Medication administration & education 10. Ventilator, CPAP & BiPAP **Radiology Services** 1. CT scan 6. Mammograms 2. DEXA 7. MRI 3. Digital mammography (stereotactic biopsy) 8. Nuclear medicine (Spec CT) 9. Stress test 4. Echocardiograms 10. Ultrasound 5. General x-ray

Surgical Services

- 1. Ambulance services air and ground
- 2. Cardiology
- 3. Dental procedures
- 4. Dialysis
- 5. Nephrology



- 6. Ophthalmology surgical procedures
- 7. Orthopedics
- 8. Pain management
- 9. Pulmonology

Southwestern District Health Unit (Public Health)

Southwestern District Health Unit (SWDHU) is located in Dickinson and provides a variety of services and programs that maintain or improve the health status of the general population and their environment.

Specific services that SWDHU provides are:

- Bicycle helmet safety
- Blood pressure check
- Breastfeeding resources
- Car seat program
- Child health (well-baby)
- Correction facility health
- Diabetes screening
- Emergency response & preparedness program
- Flu shots
- Environmental health services (water, sewer, health hazard abatement)
- Health Tracks (child health screening)
- Home health



- Immunizations
- Medications setup—home visits
- Office visits and consults
- School health (vision screening, puberty talks, school immunizations)
- Preschool education programs
- Assist with preschool screening
- Tobacco prevention and control
- Tuberculosis testing and management
- WIC (Women, Infants & Children) program
- Youth education programs (first aid, bike safety)

Assessment Process

The purpose of conducting a CHNA is to describe the health of local people, identify areas for health improvement, identify use of local healthcare services, determine factors that contribute to health issues, identify and prioritize community needs, and help healthcare leaders identify potential actions 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 Stark County in the CHI St. Alexius Health, Dickinson service area.

The CRH, in partnership with CHI St. Alexius Health Dickinson and SWDHU, 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 Dickinson. 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 terms of community perceptions, community resources, community needs, and ideas for improving the health of the population and healthcare services. There were 29 individuals, representing a cross section demographically, who attended the focus group meeting. The meeting was highly interactive with good participation. CHI St. Alexius Health Dickinson staff and board members attended as well, but largely played a role of listening and learning.

Figure 2: Steering Committee

John Odermann, Manager of Mission	CHI St. Alexius Health, Southwest Coalition for the Homeless, SW Behavioral Health Coalition, Community Relations Committee
Dave Wilkie, Detective	Dickinson Police Department, Southwest Coalition for the Homeless, SW Behavioral Health Coalition
Robyn Estes	United Way
Darcie Handt	ND Cares
Allison Traynor	NDDOH
Lori Maier	Family Connections
Tana Johnson	Badlands Human Services
Jennifer Gonser	Parent
Lauren Roemmich	Dickinson Public Schools

Figure 2: Steering Committee (continued)

Tammy Hovet	Trinity Catholic Schools
Carrie Hjellming	Juvenile Court
Sherry Adams	Southwest District Health
Reed Reyman, President	CHI St. Alexius Health
DeeAnna Opstedahl, CNO	CHI St. Alexius Health
Scott Decker, President - City Commission	City of Dickinson
Mike Lefor, State Representative - District 37	ND Legislature
Rich Wardner, State Senator - District 37	ND Legislature
Ryan Jilek, Executive Director	Stark Development Corporation
Chantel Zeller	DCIL
Shirley Meyer	Sen. Heitkamp



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 gathered input from the state's health officer, local North Dakota public health unit professionals, and representatives from North Dakota State University.

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

- A survey solicited feedback from area residents;
- Community leaders representing the broad interests of the community took part in one-on-one key informant interviews:
- The Community Group, comprised of community leaders and area residents, 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

Community Health Needs Assessment

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 20 community members convened and first met on August 24, 2018. During this first Community Group meeting, group members were introduced to the needs assessment process, reviewed basic demographic information about the community, and served as a focus group. Focus group topics included community assets and challenges, the general health needs of the community, community concerns, and suggestions for improving the community's health.

The Community Group met again on December 7, 2018 with eight 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 Stark 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 St. Alexius Health Dickinson and SWDHU. 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 nine key informants were conducted in person in Dickinson on August 24, 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. The informant interviews included public health professionals with several years of direct experience in the community, including working with medically underserved, low income, and minority populations, as well as with chronic diseases.

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

Survey

A survey was distributed to solicit feedback from the community and was not intended to be a scientific or statistically valid sampling of the population. It was designed to be an additional tool for collecting qualitative data from the community at large – specifically, information related to community-perceived health needs. A copy of the survey instrument is included in Appendix A.

The community member survey was distributed to various residents of Stark County which is the primary service area of CHI St. Alexius Health Dickinson.

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.



The survey period ran from August 15, 2018 to September 15, 2018. There were 236 surveys completed, all of them done online. This response rate is on par for this type of unsolicited survey methodology and indicates an engaged community.

Secondary Data

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

Social Determinants of Health

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

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

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 CHNA 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 Income Expenses Debt Medical bills Support	Housing Transportation Safety Parks Playgrounds Walkability Zip code / geography	Literacy Language Early childhood education Vocational training Higher education	Hunger Access to healthy options	Social integration Support systems Community engagement Discrimination Stress	Health coverage Provider availability Provider linguistic and cultural competency Quality of care				
Health Outcomes Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations									

Demographic Information

Table 1 summarizes general demographic and geographic data about the eight counties served by the medical center and SWDHU.

	Adams County	Billings County	Bowman County	Dunn County	Hettinger County	Golden Valley	Slope County	Stark County	North Dakota
Population (2017)	2318	940	3116	4289	2483	1680	771	30,209	755,393
Population change (2010-2017)	-1.1%	20.1%	0.5%	21.3%	0.2%	6.5%	6.1%	24.8%	12.3%
People per square mile (2010)	2.4	0.7	2.7	1.8	2.2	1.7	0.6%	18.7	9.7
Persons 65 years or older (2016)	26.7%	21.2%	20.4%	15.5%	23%	23.2%	23.1%	13.5%	15.0%
Persons under 18 years (2016)	18.9%	19.4%	24.3%	23.1%	23.1%	22.4%	20.2%	25.9%	23.3%
Median age (2016 est.)	45.3	44.4	42.2	41.2	47.3	42.4	52	34.5	35.2
White persons (2016)	94.3%	92.4%	96.1%	84.8%	94%	96.6%	94.9%	92.2%	87.5%
Non-English speaking (2016)	3.4%	5%	4.6%	8.4%	5.2%	0.6%	2.3%	6.8%	5.6%
High school graduates (2016)	95.6%	89.8%	91.7%	90.1%	89%	90.6%	88.3%	90.6%	92.0%
Bachelor's degree or higher (2016)	27.4%	23.1%	24.5%	23%	14.5%	22%	26.8%	24.7%	28.2%
Live below poverty line (2016)	9.5%	9.2%	8.4%	10.5%	11.8%	10.6%	12.1%	8.0%	10.7%
Persons without health insur- ance, under age 65 years (2016)	8.7%	11.2%	8.6%	12.4%	8.9%	7.9%	7.8%	7.1%	8.1%

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

The population of North Dakota has grown in recent years, and Stark County played a significant role in the growth with an increase in the county population of 24.8% compared to the average North Dakota state average of half that rate (12.3%).

County Health Rankings

The Robert Wood Johnson Foundation, in collaboration with the University of Wisconsin Population Health Institute, has developed County Health Rankings to illustrate community health needs and provide guidance for actions toward improved health. In this report, McLean County is compared to North Dakota rates and national benchmarks on various topics ranging from individual health behaviors to the quality of healthcare.

The data used in the 2017 County Health Rankings are from more than 20 data sources and then are compiled to create county rankings. Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks, such as 1 or 2, are considered to be the "healthiest." Counties are ranked on both health outcomes and health factors. Following is a breakdown of the variables that influence a county's rank.

A model of the 2017 County Health Rankings – a flow chart of how a county's rank is determined – may be found in Appendix B. For further information, visit the County Health Rankings website at www. countyhealthrankings.org.

Health Outcomes

- Length of life
- Quality of life

Health Factors

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

Health Factors (continued)

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

Table 2 summarizes the pertinent information gathered by County Health Rankings as it relates to Stark County and other surrounding counties in southwestern North Dakota. 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 SWDHU and CHI St. Alexius Health Dickinson or of any particular 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).

Stark County rankings within the state are included in the summary following. For example, Stark County ranks 10th out of 49 ranked counties in North Dakota on health outcomes and 8th on health factors. The measures marked with a bullet point (•) are those where a county is not measuring up to the state rate/percentage; a 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 bullet 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 Stark County is doing better than many counties compared

to the rest of the state on all but one of the outcomes, landing at or above rates for other North Dakota counties.

Data compiled by County Health Rankings show Stark County are doing better than North Dakota in health outcomes for the following factors:

- poor or fair health
- poor physical health days
- poor mental health days
- % of Diabetics
- Food environment index

- Diabetic monitoring
- # of children in poverty
- # of children in single-parent households
- Air pollution-particulate matter
- Drinking water violations

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

- Premature deaths
- Poor or fair health days
- Poor physical health days
- Poor mental health days

Factors in which Stark County were performing poorly relative to the rest of the state include:

- teen birth rate
- number of primary care physicians
- number of dentists

- number of mental health providers
- higher unemployment rate
- higher injury deaths

Factors in which Stark County was performing poorly relative to the Top 10% Performers on the national level include:

- Premature death
- Low birth rate
- Adult smoking
- Adult obesity
- Physical inactivity
- Access to exercise opportunities
- Excessive drinking
- Alcohol-impaired driving deaths
- Sexually transmitted infection
- Teen birth rate
- Uninsured

- number of primary care physicians
- number of dentists
- number of mental health providers
- Preventable hospital stays
- Mammography screening
- Unemployment
- Income inequality
- Violent crime
- Injury deaths
- Severe housing problems

TABLE 2: SELECTED MEASURES FROM COUNTY HEALTH RANKINGS 2018 - Stark County +

Meeting or exceeding U.S. top 10% performers

- * Not meeting U.S. top 10% performers
- Not meeting North Dakota average

	Stark County	U.S. Top 10%	North Dakota
Ranking: Outcomes	10 th		(of 49)
Premature death	6,500 *	5,300	6,600
Poor or fair health	11% +	12%	14%
Poor physical health days (in past 30 days)	2.5 +	3.0	3.0
Poor mental health days (in past 30 days)	2.5 +	3.1	3.1
Low birth weight	7% •*	6%	6%
% Diabetic	8% +	8%	8%
Ranking: Factors	8 th		(of 49)
Health Behaviors			
Adult smoking	18% *	14%	20%
Adult obesity	30% *	26%	32%
Food environment index (10=best)	9.5 +	8.6	9.1
Physical inactivity	24% *	20%	24%
Access to exercise opportunities	78% *	91%	75%
Excessive drinking	26% *	13%	26%
Alcohol-impaired driving deaths	25% *	13%	48%
Sexually transmitted infections	368.8 *	145.1	427.2
Teen birth rate	30 •*	15	25
Clinical Care			
Uninsured	8% *	6%	9%
Primary care physicians	1,610:1•*	1,030:1	1,330:1
Dentists	2,400:1•*	1,280:1	1,550:1
Mental health providers	730:1 •*	330:1	610:1
Preventable hospital stays	40 *	35	49
Diabetic monitoring (% of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring)	92% +	91%	87%
Mammography screening (% of Medicare enrollees ages 67-69 receiving screening)	70% *	71%	69%
Social and Economic Factors			
Unemployment	4.0% •*	3.2%	3.2%
Children in poverty	7% +	12%	12%
Income inequality	4.3 *	3.7	4.3
Children in single-parent households	18% +	20%	28%
Violent crime	218 *	62	26
Injury deaths	70 •*	55	68
Physical Environment			
Air pollution – particulate matter	6.7 +	6.7	7.5
Drinking water violations	No+	No	
Severe housing problems	10% *	9%	11%

Source: http://www.countyhealthrankings.org/app/north-dakota/2018/rankings/outcomes/overall

						Golden		
	Adams	Billings	Bowman	Dunn	Hettinger	Valley	Slope	Stark
Ranking: Outcomes	29 th	NR	1 st	7th	35th	34th	NR	10 th
Premature death			6,200	6,000				6,500 ✓
Poor or fair health	12%	12%	11%	13%	12%	13%	12%	11% +
Poor physical health days (in past 30 days)	2.8	2.6	2.5	2.8	2.8	3	2.8	2.5 +
Poor mental health days (in past 30 days)	2.7	2.5	2.4	2.7	2.8	2.9	2.6	2.5 +
Low birth weight			4%	5%	7%			7% •*
% Diabetic								8% +
Ranking: Factors	10th	NR	5 th	37th	21st	25th	NR	8 th
Health Behaviors								
Adult smoking	15%	17%	14%	17%	16%	17%	16%	18% *
Adult obesity	32%	28%	30%	34%	30%	34%	28%	30% *
Food environment index (10=best)	8.9	7.3	9.6	8.6	7.4	6.1	7.4	9.5 +
Physical inactivity	30%	25%	28%	28%	29%	28%	27%	24% *
Access to exercise opportunities	42%	67%	74%	13%	69%	39%	64%	78% *
Excessive drinking	20%	23%	23%	2.5%	23%	21%	21%	26% *
Alcohol-impaired driving	2076	2370	23/0	2.370	23/0	21/0	21/0	
deaths	0%	25%	0%	75%	0%	33%	50%	25% *
Sexually transmitted infections	167.8			341	714.3			368.8 *
Teen birth rate	29		34	26		38		30 •*
Clinical Care	23		- 34	20		30		30 •
	110/	110/	3 704	120/	100/	00/	00/	001 #
Uninsured	11%	11%	10%	13%	10%	9%	9%	8% *
Primary care physicians	240:1	940:0	3,290:1			1,850:0	770:0	1,610:1•*
Dentists	2,310:1	930:0	650:1		1,310:1	1,820:0	760:0	2,400:1•*
Mental health providers	2,310:1	930:0				180:1	760:0	730:1 •*
Preventable hospital stays	101		73	37	62			40 *
Diabetic monitoring (% of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring)	77%		82%	91%	89%	92%		92% +
Mammography screening (% of Medicare enrollees ages 67-69 receiving screening)	59%		49%	53%	59%	56%		70%*
Social and Economic Factors								
Unemployment	2.7%	3.2%	2.2%	3.1%	3.1%	2.8%	2.5%	4.0% •*
Children in poverty	10%	9%	9%	12%	11%	12%	16%	7% +
Income inequality	4.4	4.5	4.3	4.7	4.0	4.5	6.1	4.3 *
Children in single-parent households	15%	8%	16	24%	25%	26%	14%	18% +
Violent crime	42	37	61	194	76	72	0	218 *
Injury deaths	85		86	116		121		70 •*
	05		00	110		121		70 •
Physical Environment								
Air pollution – particulate matter	6.3	6.0	6.1	6.5	6.5	6.1	6.0	6.7 +

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 2016-17. More information about the survey is found at www.childhealthdata.org/learn/NSCH.

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

Table 3: Selected Measures Regarding Children's Health (For children 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%
Healthcare		
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 mos5 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%
Family Life		
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%
Neighborhood		
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;
- Children who have received needed mental healthcare; 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. 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 Stark County is performing better than the North Dakota average on all of the examined measures except the percentage of licensed child care capacity (% of population age 0-13) 2016. Stark County is performing significantly better on the rates of uninsured children, percentage of children below 200% of poverty level and children on the SNAP or Supplemental Nutrition Assistance Program.

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

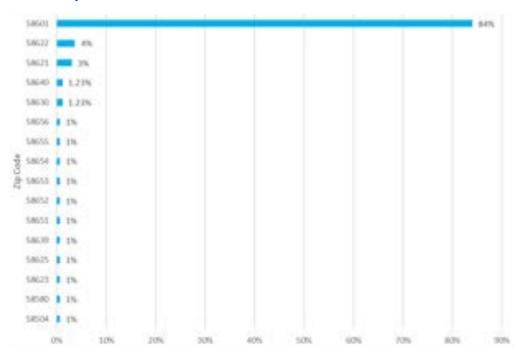
	Adams		Bowman		Hettinger	Golden Valley	Slope	Stark	ND
Uninsured children (% of population age 0-18), 2016	10.9%	13.4%	10.1%	14.9%	10.2%	8.5%	8.0%	6.5%	9.0%
Uninsured children below 200% of poverty (% of population), 2016	60%	50%	41.9%	46%	57.6%	60%	47.1%	31.9%	41.9%
Medicaid recipient (% of population age 0-20), 2017	23%	8.9%	19.6%	26.9%	20.5%	29.3%	8.5%	24.1%	28.3%
Children enrolled in Healthy Steps (% of population age 0-18), 2013	4.9%	5.6%	0.9%	3.3%	2.1%	5.9%	0.6%	2.2%	2.5%
Supplemental Nutrition Assistance Program (SNAP) recipients (% of population age 0-18), 2017	11.7%	1.6%	12.3%	13.8%	9.2%	21.1%	5.1%	13.8%	20.1%
Licensed childcare capacity (% of population age 0-13), 2018	63.4%	0.0%	24.4%	20.6%	53%	28.3%	0.0%	24.6%	41.9%
4-Year High School Cohort Graduation Rate, 2017	100%	NA	96.1%	82.9%	86.5%	90.6%	NA	88.8%	87.0%

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

Survey Results

As noted previously, 236 community members completed the survey in communities throughout the counties in the CHI St. Alexius Health Dickinson service area. The survey requested that respondents list their home zip code. While not all respondents provided a zip code, 84% did, revealing that the large majority of respondents live in Dickinson. These results are shown in, the remaining 16% live in surrounding communities.

Figure 5: Survey Respondents' Home Zip Code Total respondents: 163



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:

- 27% were age 55 or older.
- The majority 85% were female.
- Of the respondents, 44% had bachelor's degrees or higher. Only 9% had a high school diploma or GED.
- 85% have insurance through their employer, with 2% reporting no or not enough insurance.
- The number of those working full time (82%) and 5% held multiple jobs.
- 93% of those who reported their ethnicity/race were white/Caucasian. The next highest was Hispanic (4%).
- 13.3% of the respondents had household incomes of less than \$50,000. The majority (27%) responding reported incomes over \$100,000.

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 responses= 177

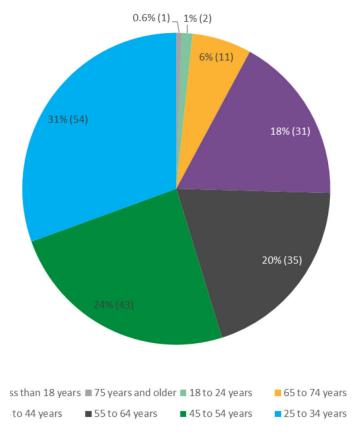


Figure 7: Gender Demographics of Survey Respondents Total Responses=177

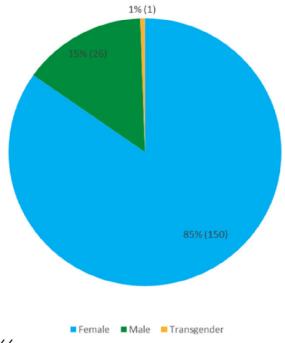


Figure 8: Educational Level Demographics of Survey Respondents Total respondents = 177

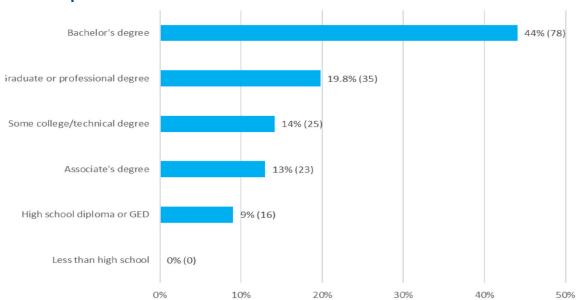


Figure 9: Employment Status Demographics of Survey Respondents Total respondents = 176

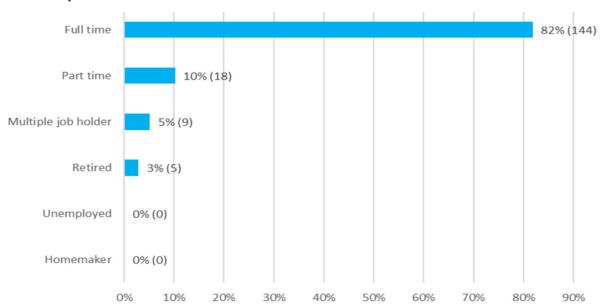


Figure 10: Household Income Demographics of Survey Respondents Total respondents = 176

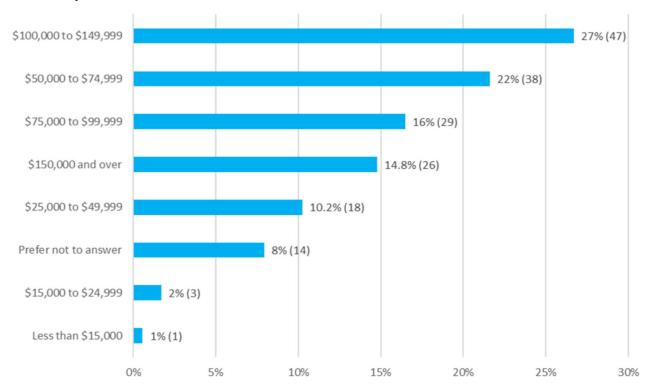


Figure 11: Health Insurance Coverage Status of Survey Respondents Total responses = 191

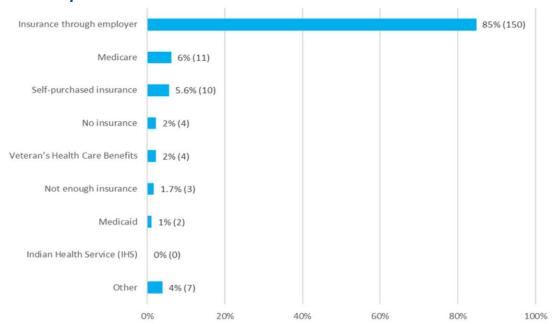
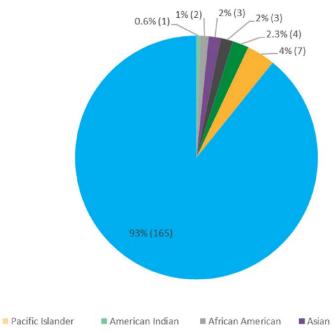


Figure 12: Race/Ethnicity Demographics of Survey Respondents Total respondents = 66



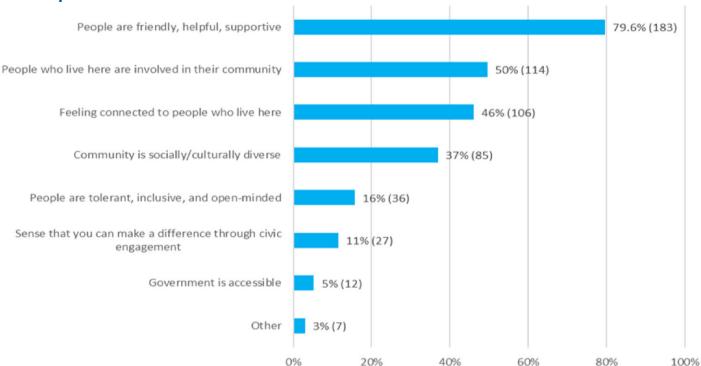
Community Assets and Challenges

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 183 respondents agreeing) that community assets include:

- People are friendly, helpful, supportive (N=183)
- Family-friendly (N=175)
- Year-round access to fitness opportunities (N=134)
- Closeness to work and activities (N=134)
- Active Faith community (N=120)

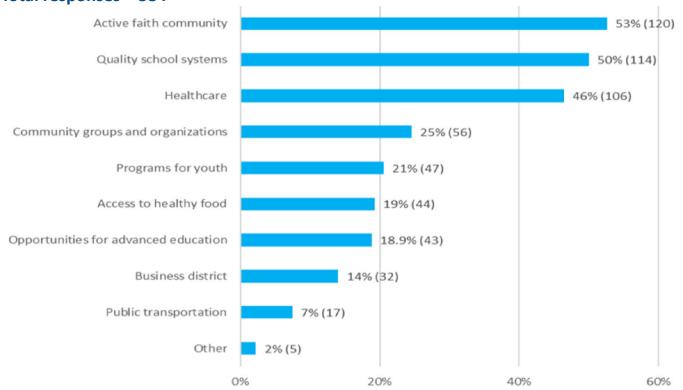
Figures 13 to 16 illustrate the results of these questions.

Figure 13: Best Things about the PEOPLE in Your Community Total responses = 570



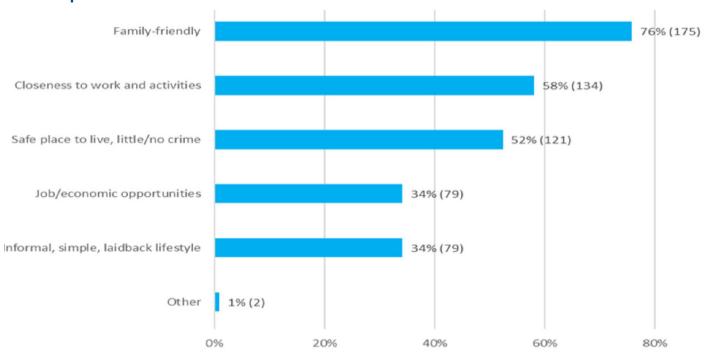
Included in the "Other" category of the best things about the people was there are some groups that are good to promote healthy communities.

Figure 14: Best Things about the SERVICES AND RESOURCES in Your Community Total responses = 584



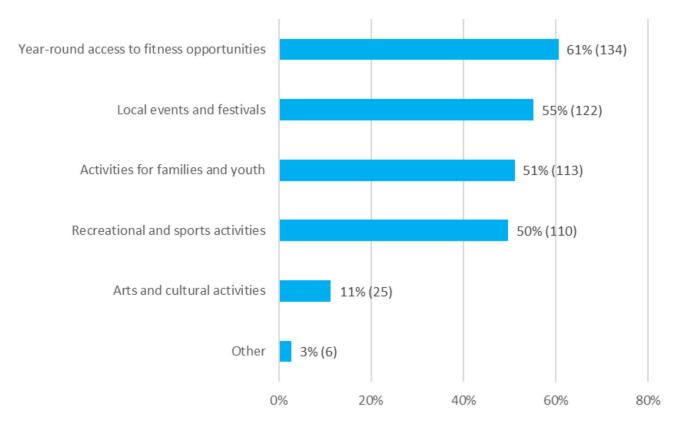
Respondents who selected "Other" specified that the best things about services and resources included day care.

Figure 15: Best Things about the QUALITY OF LIFE in Your Community Total responses = 590



The one "Other" response regarding the best things about the quality of life in the community was the quality of the water.

Figure 16: Best Thing about the ACTIVITIES in Your Community Total responses = 510



Respondents who selected "Other" specified that the best things about the activities in the community included mentioning the outdoor recreation/Badlands.

Community Concerns

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

- Community and environmental concerns
- Healthcare delivery concerns
- Youth population concerns
- Adult population concerns
- Elderly or senior population concerns

With regard to responses about community challenges, the most highly voiced concerns (those having at least 107 votes) were:

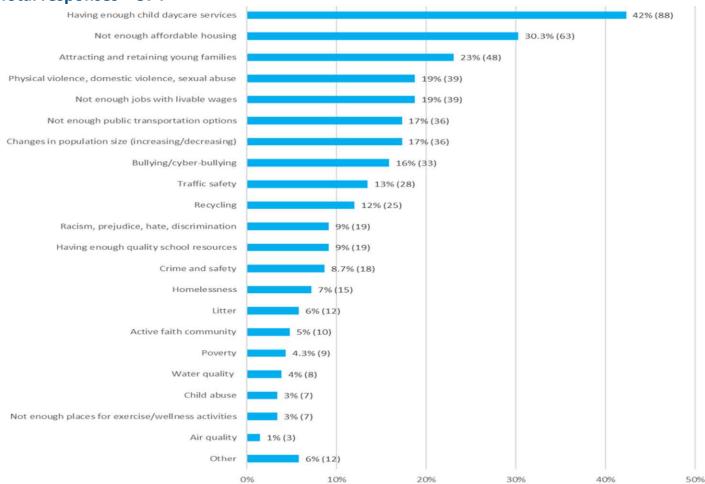
- Drug use and abuse Youth (N=128)
- Alcohol use and abuse Youth (N=118)
- Availability of mental health services (N=111)
- Alcohol use and abuse Adult (N=107)
- Drug use and abuse Adult (N=107)

The other issues that had at least 74 votes included:

- Availability of specialists (N=95)
- Having enough child daycare services (N=88)
- Cost of long-term/nursing home care (N=85)
- Depression/anxiety Adult (N=75)
- Availability of resources to help the elderly stay in their homes (N=74)

Figures 17 through 22 illustrate these results.

Figure 17: Community/Environmental Health Concerns Total responses = 574



In the "Other" category for community and environmental health concerns, the following were listed: the lack of healthy eating options, behavioral and mental health providers, daycare services, and business pride in ownership.

Figure 18: Availability/Delivery of Health Services Concerns Total responses = 572

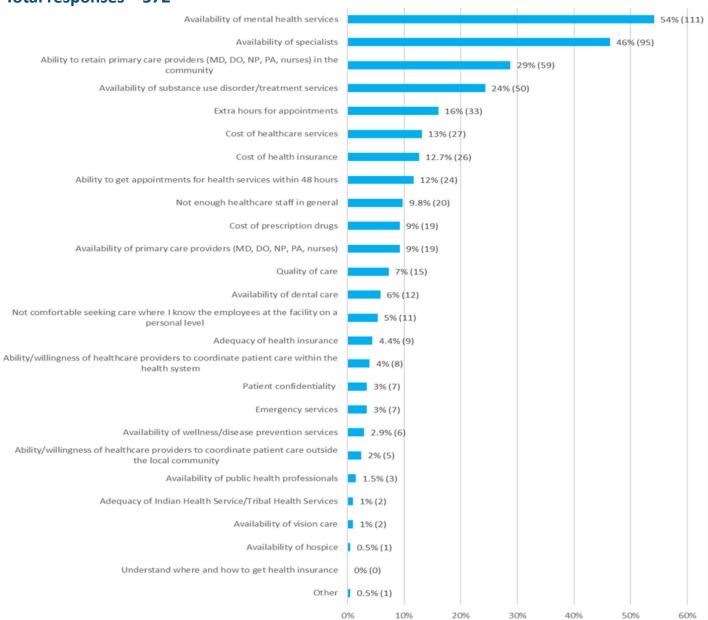
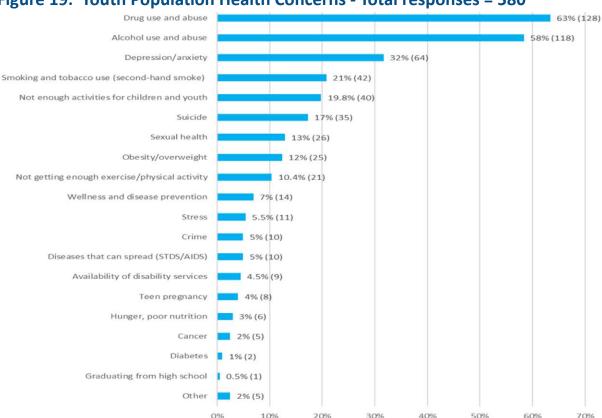
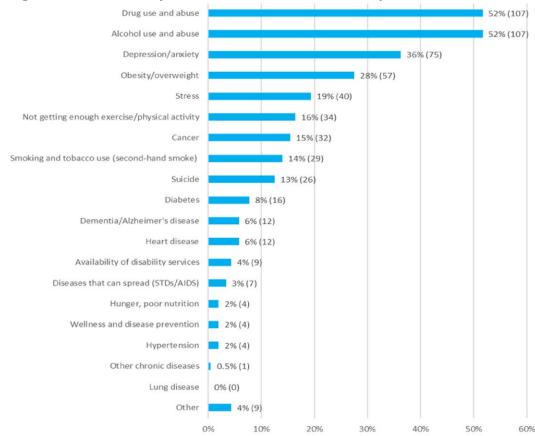


Figure 19: Youth Population Health Concerns - Total responses = 580



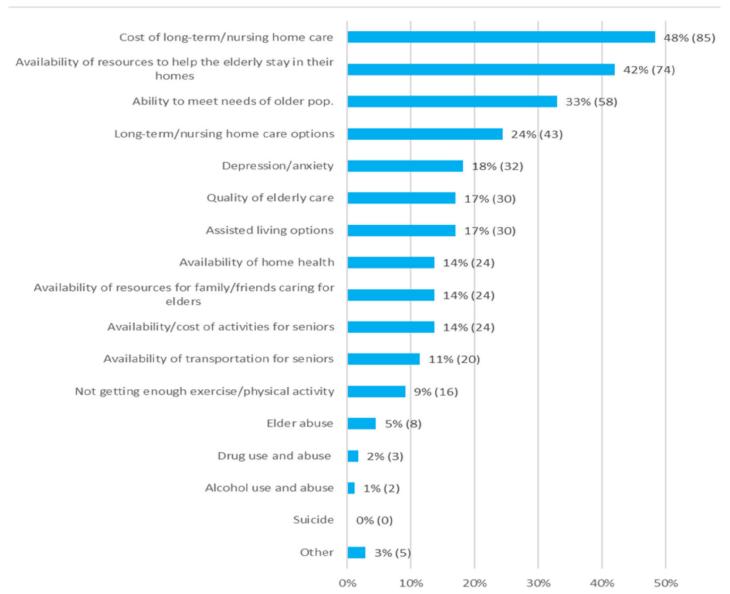
Listed in the "Other" category for youth population concerns were bullying, no group therapy opportunities for support of depressed/suicidal kids, lack of comprehensible sex education and knowledge, and kids lack social skills due to increasing use of technology to communicate.

Figure 20: Adult Population Concerns - Total responses = 174



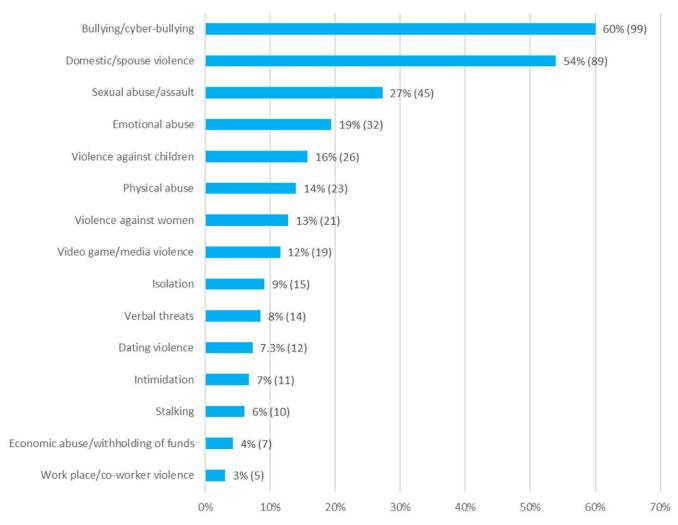
Homelessness, high rents and lack of available of food banks were indicated in the "Other" category for adult population concerns.

Figure 21: Senior Population Concerns - Total responses = 478



In the "Other" category, some of the concerns listed were hunger and housing affordability and the cost of food/commodities for the elderly.

Figure 22: Violence Concerns Total responses = 428



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

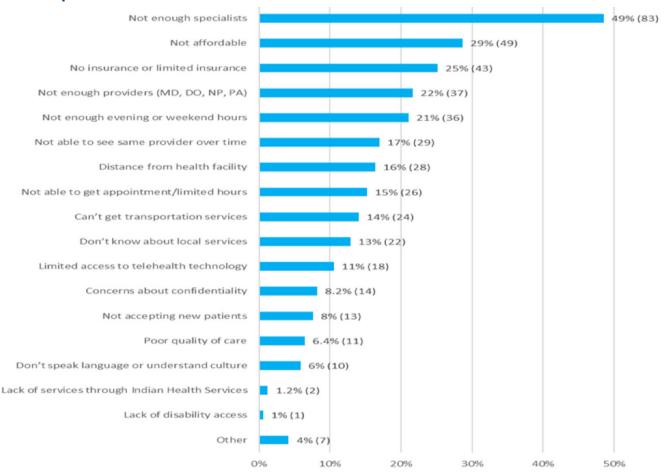
- 1. Lack of access to essential services such as food, housing, child care, healthcare.
- 2. Drug/alcohol/substance abuse

Other biggest challenges that were identified were: availability of services, costs, intolerance to different cultures and incomes.

Delivery of Healthcare

The survey asked residents what they see as barriers that prevent them or other community residents from receiving healthcare. The most prevalent barrier perceived by residents was not enough specialists (N=83), with the next highest being not affordable (N=49). After these, the next most commonly identified barriers were no insurance or limited insurance (N=43), and not enough providers (MD, DO, NP, PA) (N=37). The majority of concerns indicated in the "Other" category were "not offering all types of treatments", "not enough mental health services", and "poor patient referrals and no clinic healthcare on the weekends, only ambulance services".

Figure 23: Perceptions about Barriers to Care Total responses = 453



Considering a variety of healthcare services offered by Southwestern District Public Health Unit, respondents were asked to indicate if they were aware that the specific healthcare service is offered and if they or a family member used it in the past year. (See Figure 24).

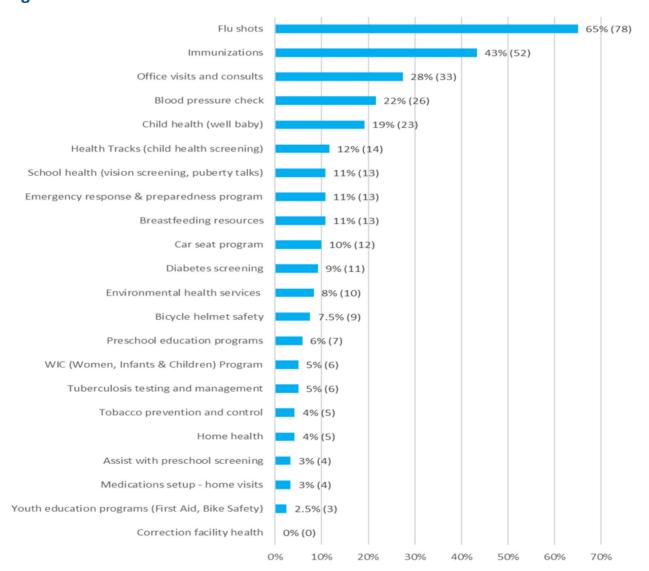


Figure 24: Awareness and Utilization of Public Health Services

When respondents were asked what specific healthcare services, if any, do you think should be added locally, the following items were listed;

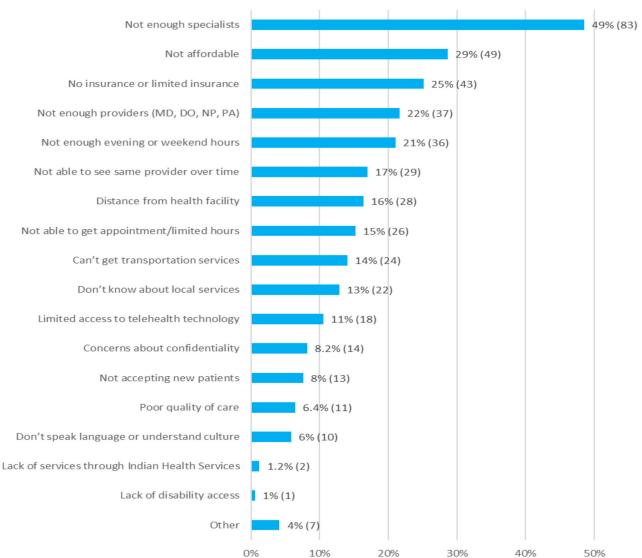
- Another orthopedic surgeon and cardiology
- An OB/GYN, prenatal, pediatricians
- Assistance for purchasing diabetic supplies; mental health services where they actually CARE about you and treat you as such!
- Behavioral health and addiction counseling
- Cancer care, kidney dialysis accessibility, mental health, more family practice and general surgeons
- Cancer center would be of huge benefit.
- Cardiac-heart health professionals; you have to go to Bismarck or they have a visiting cardiologist that comes once a month and you may have to wait 3-4 months to get in.

- Cardiologist, oncologist, dermatology
- Cardiology, dermatologist
- Clinics open in the evenings and weekends! Almost everyone in the community WORKS and can't make Monday Friday appointments. Considering the amount of the community that works in the oilfield, the availability of clinics is impossible. Also, we are referred to Bismarck a lot for any specialist care. Not always feasible. It requires days of work, especially if there are follow-ups.
- Dermatologist, GI, ENT
- Dermatology
- Dermatology, neurology
- Dickinson has nothing. Most of the community feels that they need to go to Bismarck for anything of importance.
- Do they do tubes for infants/small children in Dickinson?
- Drug and alcohol treatment
- Ear, nose, throat provider and also mental health services
- ENT
- ENT surgeon, pediatric Doctors
- ENT with surgical options in Dickinson
- Extended evening hours. A vast majority of the community works during business hours and it can make it extremely difficult to get quality healthcare when you are having to take time off from work to do so. (If your employer will even allow time off)
- Full time ENT, full-time cancer care, more mental health resources
- General surgery, pediatrics, ENT, internal medicine, cardiology
- Homeopathic services
- In-patient psych institution
- Mental and addiction services
- Mental health
- Mental health
- Mental health
- Mental health (counseling)
- Mental health and addiction
- Mental health and dermatology
- Mental health and substance abuse
- Mental health and substance abuse services
- Mental health facility
- Mental health including: addiction, treatment, diagnosis

- Mental health professionals and home health services for the elderly
- Mental health providers
- Mental health services
- Mental health services
- Mental health services and addiction rehabilitation
- Mental health, substance abuse recovery
- Mental health/substance abuse treatment
- More education about fitness and nutrition; more specialties that come to Dickinson rather than having to travel to Fargo or Bismarck
- More mental health professionals for adults and children
- More pediatricians
- More primary care MDs
- More providers so less referrals to Bismarck/ Fargo
- More visiting specialist
- Need more mental healthcare services
- Need more specialists. We have plenty of nurses and general care physicians. We need neurologists, OB-GYN, Specialists.
- Nothing
- Outreach traveling nurse to the rural areas within Region VIII
- Pediatric providers
- Pediatrics and OB/GYN
- Preventative care, including community forums on wellness and nutrition...offer free sessions
- Psychiatrists' care, mental healthcare
- Psychology, headache specialist or neurologist
- Psychology/psychiatry, mental and behavioral health services, especially for addiction and substance abuse
- Psychiatrist
- Specialists
- Specialists
- Specialists
- Specialty services and mental health
- Substance abuse/treatment and mental health support
- Support groups; more specific: like for those who have suffered from a stroke & their caregivers
- The hospital could use a heart specialist and there is no home healthcare available.

- Visiting specialists
- We seem to have a ton of people in our community who suffer from depression especially during the changing of seasons. Maybe more mental health providers and educating the community about mental health.

Figure 25: Perceptions about barriers to care Total responses = 453



In the "Other" category, several respondents listed billboards, brochures, and social workers.

Figure 26: Which of the following ways have individuals in the community, especially young people, been impacted by Social media in the following ways?

Total responses=500

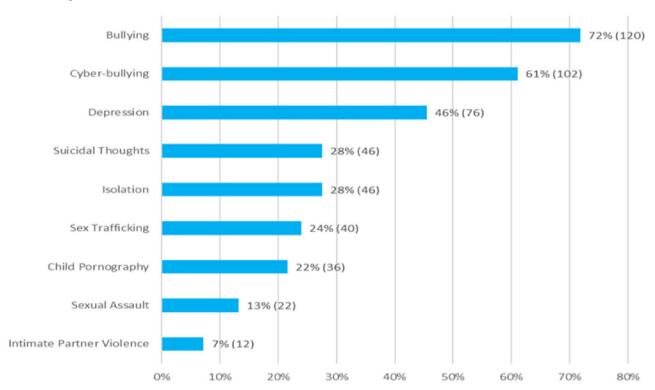


Figure 27: Regarding impacts from OIL DEVELOPMENT in your community, concerns are (choose up to THREE): Total responses = 472

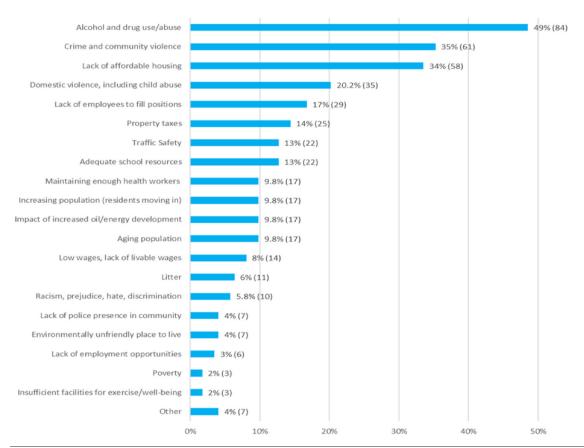
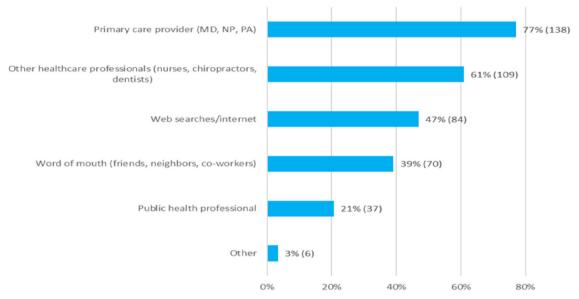


Figure 28: Sources of Trusted Health Information Total responses = 444



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, 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 three categories (listed in alphabetical order) with the vast majority of the responses (11 of 20 responses) being mental health concerns:

- Ages specific programs
- Drugs and alcohol abuse and addiction
- Mental health

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

Age-specific programs

- Services haven't caught up with the age of the population (affordable housing, day care providers).
- Activities, prevention, and wellness available in our area for both younger individuals and aging populations.
- One of the biggest concerns I see is the need for community building to prevent a sense of isolation among all demographic groups. We have a number of people who feel alone in a room full of people.

Behavior concerns specific to drugs and alcohol use and abuse

- Drugs and alcohol
- Alcohol and drug issues for families with very limited local resources. (It) creates issues financially for transportation and lost time at work. Youth and family issues are of greatest concern as they have a domino effect.
- That there is no family activity without alcohol being served.
- Lack of and/or wait time for appointments to address behavior health issues alcohol, drugs, tobacco. There is a need for prevention/education starting with youth (4th and 5th grade).

Mental Health

- Mental health-inpatient treatment, lack of psychiatrist (only have 1 in the city)
- Undertreated-lack of mental health treatment facilities in western ND and transportation to get them there. Takes 10-24 hours to get them admitted and then difficulty transporting.
- Mental and behavior health-coordinate. Wrap-around services on a consistent basis.
- Lack of mental health services including substance abuse. Resources and willingness to commit to resolve it. Attitude of throwing away people.

- Mental health-doesn't have correct services for emergency mental health. Need to transfer and be legally committed, change mind and no resolution.
- Mental health services- I've heard many scenarios where patients/staff/families have fallen through the cracks and do not receive the support that they need.
- Mental health services-very few intervention programs.
- Lack of mental health resources. We don't have any 24/7 emergency care for substance abuse.
- Mental health-need to know where families come from and why situations are happening.
- Mental health. Drugs/alcohol abuse. Care of elderly.
- Mental health services-there are none here.

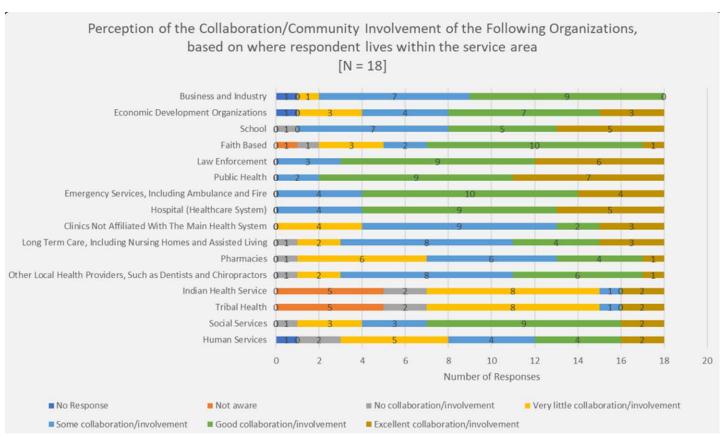
The Key Informants and first Community Group members also commented on other community health concerns that were not listed;

- County does not know the serious mess of vaping how much is going on in some schools. = to 1 pk of cigarettes per day. Buzz last is shorter so doing more often.
- Increase of sexual assaults. Increase use of forensic nurses.
- Cyber-bullying with adults and kids. Behavioral impact of social media.
- Mental health. Still go to Bismarck.
- Hunger availability of healthy food (nutrition)
- Every shift mental health. Drug abuse. Over prescribing more hydrocodone than needed post op, i.e.
- I've had staff, one of which needed inpatient alcohol rehab but was unable to find it locally, the other needed local, intense mental health treatment and was also unable to find the help locally or even in the state.
- Education for school age kids regarding social media. Local resources for treatment.
- So many stressed out, angry, and unhappy people who are not willing to try to attend some free programs or ask for help.
- More specialties so people don't have to drive 100 miles one way to get help.
- Discord between ER/Ambulance Service.
- Family counseling.
- Care of teenagers with mental health issues How can we help before they are in prison?
- Community Education
- Explaining to families / reaching out to families of new Dx disabilities to help explain services available to them.
- Responsible relationships for youth.
- This community has a lot of old tradition that need to be reversed alcohol at public functions and racism by failure to interact.
- The cost, lack of transportation are concerns. I had a bad experience.
- There is a perception of what public health does.

- Vaccinations to go overseas, guidance for families with children with special needs such as autism
- We have issues with international folks, getting service jobs (TB, AIDS) African American and Somalian. 99% of homeless are transients (Mental health issues, too)
- There is an issue with the state and local attitude toward mental health. They are walking away and leaving it to law enforcement, who deal with the same over and over.
- Lack of participation in both Social Services and Human Services.
- Have counselors but people aren't directed to the right professionals.
- Needing funding (keep in jail cell until stable and then frequent flyers, no care) kids' issues are HUGE and beyond what foster care parents can handle. 6 8 weeks wait
- Need more assortment of providers and #'s. Mental health is too centralized in Bismarck and they have their own issue.

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 13 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:



Below is a list of comments from the participants specific to the various organizations;

Organizations: Comments: Business and industry Economic development organizations School Faith based Law enforcement Agencies - animosity between city and county Law enforcement Public appearances Public health Very active in coalitions Public health Our public health is very active in community Emergency services, including ambulance and fire Volunteers Emergency services, including Need more staff ambulance and fire Emergency services, including ambulance and fire Fund limitations Hospital (healthcare system) Only hospital providing job shadowing in high school. Big towns. Hospital (healthcare system) Need more staff Clinics not affiliated with the main health system Long term care, including nursing homes and assisted living **Pharmacies** varies Other local health providers, such as dentists and chiropractors Indian Health Service Tribal health Social services Human services Those there are doing all they can do. Other comments: Dickinson's rapid growth these organizations (? run) lean on people and time. Willingness is there, need people.

Priority of Health Needs

A Community Group met on December 6, 2018. There were nine 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 services (6 votes)
- Availability of substance use disorder/treatment services (6 votes)
- Depression and anxiety among the youth population (5 votes)

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

- 1. Availability of mental health services (7 votes)
- 2. Depression and anxiety among the youth population (2 votes)

There were only 2 concerns listed as most important by the community group attendees.

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 services. A summary of this prioritization may be found in Appendix C.

Comparison of Needs Identified Previously

Top Needs Identified 2016 CHNA Process	Top Needs Identified 2019 CHNA Process
Mental health service shortage	Availability of mental health services
Substance abuse (alcohol and drugs)- elevated rate of excessive drinking	Depression and anxiety among the youth population
Licensed child care capacity	
Bullying/ cyberbullying	
Recruiting and retaining medical staff-availability of specialists	

Mental health service continues to be the primary concern within the service area of the medical center and the public health unit.

Dickinson Area 2016-2018 Key objectives & Implementation

CHI St. Alexius Health Dickinson Plan of Action for 2016

1. Objective: Increase access for mental health services

Implementation Strategies:

a. Develop a strategic organizational chart for mental health services in collaboration with the North Dakota Department of Human Services - Badlands Social Services Region VII.

Target Date: August 2017

Accountable parties: Reed Reyman, president, CHI St. Alexius Health Medical Center Dickinson, Joanna Smith, assistant regional director, Badlands Social Services Region VII.

b. Participate in the Mental Health Project Task Force – goal to create a Systemic Behavioral Health Program that encompasses inpatient and outpatient mental health services.

Target Date: May 2018

Accountable parties: Reed Reyman, president, CHI St. Alexius Health Medical Center Dickinson, North Dakota Department of Human Services Representatives, State of North Dakota Representatives, CHI St. Alexius Health Bismarck representatives, and North Dakota mental health providers representatives.

c. Continue to collaborate with North Dakota Department of Human Services and CRH - UNDSMHS for identification of behavioral health financial resources.

Target Date: March 2017

Accountable parties: Reed Reyman, president, CHI St. Alexius Health Medical Center Dickinson, Jody Ward senior project coordinator, CRH-UNDSMHS.

Achievements

- The gap in behavioral health was addressed through a Behavioral Health Coalition, which was formed as a joint effort, combining the mental health, tobacco prevention, alcohol prevention, and drug prevention groups to have one larger group to address all the issues as one group. Met monthly. The medical center staff participated in the Behavioral Health Coalition.
- An emotional health toolkit has been developed and distributed to hundreds throughout southwestern North Dakota. This was put together in collaboration with the Behavioral Health Coalition.

2. Objective: Promote primary care providers recruitment and retention

Implementation Strategies.

a. Continue to collaborate with CHI provider recruitment program for the recruitment of three additional primary care providers

Target date: March 2018

Accountable parties: Reed Reyman President CHI St. Alexius Health Medical Center Dickinson, Francine Kyaw, CHI division director of provider recruitment.

b. Collaborate with long term care facilities and assisted living facilities to identify community health needs related to limited access to primary care services.

Target date: March 2017

Accountable Parties: Reed Reyman, president, CHI St. Alexius Health Medical Center Dickinson, long term care and assisted living facilities representatives.

c. Continue to work with CHI hospitalist service line for identification of patient care needs related to limited access to primary care services

Target date: March 2018

Accountable Parties: Reed Reyman, president, CHI St. Alexius Health Medical Center Dickinson, Amanda Trask, CHI vice president of hospitalist service line

d. Continue to promote staff and community education of disease prevention and primary care services available in our community through CHI St. Alexius Health Dickinson Medical Center Service

Excellence Program – Oasis team

Target date: October 2017

Accountable Parties: Reed Reyman, president, CHI St. Alexius Health Medical Center Dickinson, Service Excellence – Oasis team representatives

e. Continue to collaborate with local business to establish CHI St. Alexius Health Dickinson Medical Center as their designated medical provider

Target date: March 2018

Accountable Parties: Reed Reyman, president, CHI St. Alexius Health Medical Center Dickinson, Jodi Bosch, director, CHI St. Alexius Health Dickinson Foundation and Communications.

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

Achievements by CHI St. Alexius 2016-2018

CHI St. Alexius staff and current clinicians in the clinics and medical center were able to recruit the following physicians or expanded services with current physician staffing in the following ways since 2016:

Kelly Glick, PA-C- Botox, Laser
Kelsey Kuylen, NP- Botox, Laser
Dr. Baker- Family Practice with OB
Shad Brophy, PA-C- FP in Beach ND and Dickinson
Liz Fridrich, PA-C- FP
DesiRae Dinius- PA-C
Lea Floberg, FNP
Thomas Arnold, MD- OBGYN— CenteringPregnancy®
Dr. Lowe, OBGYN- CenteringPregnancy®
Dr. Craig Wolf, OBGYN – CenteringPregnancy®
Mary Jo Wicks- FNP- CenteringPregnancy®
Dr. Kris Siri- Surgical Care

In the 2016 study, nursing recruitment and retention was also a concern. The medical center and nursing directors initially covered their staffing needs with travel nurses. The use of travel nurses resulted in higher labor costs and nurses were still leaving the facility to take non-nursing positions with higher wages and better benefits. The nursing directors met and revised the wage scale and utilized an in-house program called service excellence to make new faces and new graduates feel at home. Welcome gifts were included and new graduates had a preceptor as a mentor. The initial agreements with these newer staff members were two years, but they found the nurses are staying longer.

Additionally, the medical center developed a leadership training initiative to prepare nursing staff to take advanced positions in the facility. In some cases, individuals left employment due to the changes, however, those staying in employment are much happier in the new atmosphere of change. The new thought is "once we got them here, we worked really hard to keep them here."

The medical center administration reviewed current policies for retention of staff. No changes were made during this time period. CHI St. Alexius Dickinson offers flexible hours for staff and encourage family time. Family time includes allowing staff to attend children's school events including sport meets and conferences. The medical system also offers incentive payments for work time and tuition reimbursement.

The medical center administration also reviewed the protocol for recruitment. While most of the recruitment process begins in the Fargo corporate office, locally, staff and potential co-workers invest time and money to engage them. The recruitment routine includes investing in their travel to Dickinson, a community and facility tour, and reimbursement of meals and other expenses. Currently, the medical center recruitment staff have been focusing on local individuals and those who are in the last few academic years of their chosen healthcare profession.

The current staffing need is in general surgery and pediatrics.

SWDHU plan of action for 2016

As stated above, the emotional health of the communities and region are the primary focus. If the emotional health is strong, the region is better able to deal with the other primary issues affecting the southwestern counties of North Dakota. Again, all priority issues (i.e. housing, workforce shortages, crime, availability, access, injury, crime/violence, substance abuse, and sexual behavior) are all related to emotional health.

The Disaster Behavioral Health Coalition decided to focus on four components of emotional health:

- 1.Job Burnout Focused on burnout that can occur in high-stress environments and how to effectively manage job burnout
- 2.Stress Focused on ways to manage and cope with stress, particularly stress related to high-pressure jobs
- 3. Depression Outlined the signs, symptoms, and warning signs of depression and how to effectively treat it in a high-stress work environment
- 4.Suicide Identified the warning signs and identified, planned, and implemented ways to deal with the risk of suicide.

According to a study released by Northwestern National Life and the CDC, 40% of American workers report feeling "extremely" stressed while at work and one out of four Americans say their job is the number one source of stress in their lives. The CDC reported that problems and stress at work are more strongly associated with health complaints than any other life stressor, even more than financial problems or family issues. In addition, stress can lead to productivity issues and distractions. With most employers struggling to fill all the positions needed to complete everyday tasks in the workplace, additional stress can lead to an even more demanding work environment.

The CDC listed three types of stress: day-to-day stress, cumulative stress, and critical incident stress. Day-to-day stress is the most common type and refers to stress from one's personal life, family, or social setting. Cumulative stress is stress caused by various stresses at one's job. Critical incident stress is most common among first responders when dealing with extreme, traumatic, or chaotic events.

Priority Area: Emotional and Behavioral Health Support

GOAL: Improve the behavioral health and well-being of southwestern North Dakota (Region 8) impacted by oil development by increasing the accessibility and availability of quality community resources.

Performance Measures							
Short Term Indicators	Responsibility	Year					
Reduce job related stress factors	SWDBHC	2014-2015					
Enhance community receptiveness of Emotional Health Toolkit and brochures	SWDBHC	2014-2016					
Build emotional health support capacity	SWDBHC	Ongoing					
Long Term Indicators							
Greater awareness of emotional and behavioral health	SWDBHC	2014-2016					
Decrease in emergency responders needing behavioral health treatment	SWDBHC	Ongoing					

Alignment with State / National Priorities											
Objective	ND Health Priorities	Health People 2020	National Prevention Strategy								
#1	Suicide	MHMD-11 Increase depression screening by primary care providers	Provide people with tools and information to make healthy choices								
#2	Suicide	MHMD-9 Increase the proportion of adults with mental health disorders who receive treatment	Enhance coordination and integration of clinical, behavioral, and complementary strategies.								

Obje	ctive	1:
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Enhance capacity to support the emotional and behavioral needs of the region.

STRATEGY:

Create emotional health support services

ACTION PLAN

Activity	Target Date	Year	Lead Person / Organization	Anticipated Result	Framework Level
Activity 1: Provide Disaster Behavioral Health training, including chaplaincy, and suicide prevention curriculum.					
Activity 2: Develop a Disaster Behavioral Team					
Activity 3: Develop a Disaster Debriefing Team					
Activity 4: Develop an emotional health support referral system					
Activity 5: Develop a Behavioral Health Coalition					

Achievements by SWDHU in 2016-2018

- The gap in behavioral health was addressed through a Behavioral Health Coalition, which was formed as a joint effort combining the mental health, tobacco prevention, alcohol prevention, and drug prevention groups to have one larger group to address all the issues as one group. Met monthly.
- SWDHU in collaboration with the Center for Psychiatric Health, now offers in-kind staff and a building for telehealth equipment for psychiatric services...to enhance current programs. There have been 781 clients seen in the past 18 months.
- The SWDHU has a SW region Disaster Behavioral Health team that consists of chaplains, clergy etc. that volunteer and help in instances where a debriefing for responders is needed---following a tragic event.
- An emotional health toolkit has been developed and distributed to hundreds throughout southwestern North Dakota. This was put together in collaboration with the Behavioral Health Coalition.

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







Dickinson Medical Center

Dickinson Health Survey

CHI- St. Alexius Health Dickinson Medical Center and Southwestern District Health Unit are interested in hearing from you about community health concerns.

The focus of this effort is to:

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



Scan to take survey online!

If you prefer, you may take the survey online at http://tinyurl.com/Dickinson18 or by scanning on the QR Code at the right.

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

Surveys will be accepted through September 15, 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 <u>THREE</u>):					
	becoming more diverse Feeling connected to people who live here Government is accessible	000	People who live here are involved in their community People are tolerant, inclusive, and open-minded Sense that you can make a difference through civic engagement			
	People are friendly, helpful, supportive	П	Other (please specify)			
2.	Considering the SERVICES AND RESOURCES in your comm	unit	ty, the best things are (choose up to <u>THREE</u>): Opportunities for advanced education			
	Active faith community		Public transportation			
	Business district (restaurants, availability of goods)		Programs for youth			
	Community groups and organizations		Quality school systems			
	Healthcare		Other (please specify)			

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

	Family-friendly; good place to raise kids		Safe place to live, little/no crime
Ш	Informal, simple, laidback lifestyle		Other (please specify)
4. (Considering the ACTIVITIES in your community, the best t	hing	gs are (choose up to <u>THREE</u>):
	Activities for families and youth		Recreational and sports activities
	Arts and cultural activities		Year-round access to fitness opportunities
	Local events and festivals		Other (please specify)
	mmunity Concerns: Please tell us about your comm	nunit	cy by choosing up to three options you most agree with
ın e	ach category.		
5. (Considering the COMMUNITY /ENVIRONMENTAL HEALT	H in	your community, concerns are (choose up to <u>THREE</u>):
	Active faith community		Having enough quality school resources
	Attracting and retaining young families		Not enough places for exercise and wellness activities
	Not enough jobs with livable wages, not enough to live on		Not enough public transportation options, cost of public transportation
	Not enough affordable housing		Racism, prejudice, hate, discrimination
	Poverty Changes in population size (increasing or decreasing)		Traffic safety, including speeding, road safety, seatbelt use, and drunk/distracted driving
	Changes in population size (increasing or decreasing) Crime and safety, adequate law enforcement		Physical violence, domestic violence, sexual abuse
ш	personnel		Child abuse
	Water quality (well water, lakes, streams, rivers)		Bullying/cyber-bullying
	Air quality		Recycling
	Litter (amount of litter, adequate garbage collection)		Homelessness
	Having enough child daycare services		Other (please specify)
6. (Considering the AVAILABILITY/DELIVERY OF HEALTH SER	VICE	S in your community, concerns are (choose up to
THE	REE):		
	Ability to get appointments for health services within		Availability of dental care
	48 hours.		Availability of vision care
	Extra hours for appointments, such as evenings and weekends		Emergency services (ambulance & 911) available 24/7 Ability/willingness of healthcare providers to work
	Availability of primary care providers (MD,DO,NP,PA) and nurses		together to coordinate patient care within the health system.
	Ability to retain primary care providers		Ability/willingness of healthcare providers to work
	(MD,DO,NP,PA) and nurses in the community		together to coordinate patient care outside the local
	Availability of public health professionals		community.
	Availability of specialists		Patient confidentiality (inappropriate sharing of personal health information)
	Not enough healthcare staff in general		Not comfortable seeking care where I know the
	Availability of wellness and disease prevention		employees at the facility on a personal level
	services		Quality of care
	Availability of mental health services		Cost of healthcare services Cost of prescription drugs
	Availability of substance use disorder/treatment		Cost of health insurance
_	services		Adequacy of health insurance (concerns about out-of-
	Availability of hospice		nocket costs)

	Understand where and how to get health insurance Adequacy of Indian Health Service or Tribal Health Services		Other (please specify)
7.	Considering the YOUTH POPULATION in your community,	. cor	cerns are (choose up to <u>THREE</u>):
	Alcohol use and abuse Drug use and abuse (including prescription drug abuse) Smoking and tobacco use, exposure to second-hand smoke Cancer Diabetes Depression/anxiety Stress Suicide Not enough activities for children and youth Teen pregnancy Sexual health		Diseases that can spread, such as sexually transmitted diseases or AIDS Wellness and disease prevention, including vaccine-preventable diseases Not getting enough exercise/physical activity Obesity/overweight Hunger, poor nutrition Crime Graduating from high school Availability of disability services Other (please specify)
8.	Considering the ADULT POPULATION in your community,	con	cerns are (choose up to <u>THREE</u>):
	Alcohol use and abuse Drug use and abuse (including prescription drug abuse) Smoking and tobacco use, exposure to second-hand smoke Cancer Lung disease (i.e. emphysema, COPD, asthma) Diabetes Heart disease Hypertension Dementia/Alzheimer's disease Other chronic diseases: Depression/anxiety		Stress Suicide Diseases that can spread, such as sexually transmitted diseases or AIDS Wellness and disease prevention, including vaccine-preventable diseases Not getting enough exercise/physical activity Obesity/overweight Hunger, poor nutrition Availability of disability services Other (please specify)
9.	Considering the SENIOR POPULATION in your community	, cor	ncerns are (choose up to <u>THREE</u>):
	Ability to meet needs of older population Long-term/nursing home care options Assisted living options Availability of resources to help the elderly stay in their homes Availability/cost of activities for seniors Availability of resources for family and friends caring for elders Quality of elderly care Cost of long-term/nursing home care		Availability of transportation for seniors Availability of home health Not getting enough exercise/physical activity Depression/anxiety Suicide Alcohol use and abuse Drug use and abuse (including prescription drug abuse) Availability of activities for seniors Elder abuse Other (please specify)

Community Health Needs Assessment

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

De	elivery of Healthcare						
11.	. What PREVENTS community residen	ts from receiving he	ealth	ncare? (Choose <u>A</u>	<u>.LL</u> tł	nat apply)	
	Can't get transportation services Concerns about confidentiality Distance from health facility Don't know about local services Don't speak language or understand Lack of disability access Lack of services through Indian Healt Limited access to telehealth technology providers at another facility through a monite No insurance or limited insurance	h Services ogy (patients seen by		Not able to see Not accepting r Not affordable Not enough pro Not enough even Not enough spo Poor quality of	e sam new ovide enin ecial care	ers (MD, DO, NP, PA) g or weekend hours ists	
12.	. Where do you turn for trusted health	n information? (Cho	ose	<u>ALL</u> that apply)			
	Other healthcare professionals (nurses, chiropractors, dentists, etc.) Primary care provider (doctor, nurse practitioner, physician assistant) Public health professional			 □ Web searches/internet (WebMD, Mayo Clinic, Healthline, etc.) □ Word of mouth, from others (friends, neighbors, co-workers, etc.) □ Other (please specify) 			
13.	. What specific healthcare services, if	any, do you think sh	noul	d be added local	ly? 		
14.	. Where do you find out about LOCAL	HEALTH SERVICES	avai	able in your area	a? (C	hoose <u>ALL</u> that apply)	
	Advertising Employer/worksite wellness Healthcare professionals Indian Health Service Newspaper	□ Public health p□ Radio□ Social media (F□ Tribal Health□ Web searches				Word of mouth, from others (friends, neighbors, co-workers, etc.) Other: (please specify)	
	. Which of the following SERVICES proded in the past year? (Choose <u>ALL</u> that a		PUB	LIC HEALTH unit	hav	e you or a family member	
	Bicycle helmet safety Blood pressure check Breastfeeding resources Car seat program Child health (well baby)			Correction facil Diabetes screen Emergency res Flu shots	ning		

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	Environmental health services (water	r, sew	ver, health hazard			•	sior	n screening, puberty talks, school
_	abatement)			_		izations)		
	Health Tracks (child health screening)							n programs
	Home health					•		ol screening
	Immunizations					•		and control
	Medications setup—home visits							g and management
	Office visits and consults				•			ts & Children) Program
16.	Regarding various forms of VIOLENC	CE <u>in</u>	your community	□ <u>/</u> , cc				ograms (First Aid, Bike Safety) up to <u>THREE</u>):
	Bullying/cyber-bullying Dating violence Domestic/spouse violence Economic abuse/withholding of funds Emotional abuse		Intimidation Isolation Physical abuse Stalking Sexual abuse/as Verbal threats	ssau	lt			Video game/media violence Violence against children Violence against women Work place/co-worker violence
17.	Regarding impacts from OIL DEVELO	рМ	ENT in your com	mur	nity, cor	ncerns are	(ch	noose up to <u>THREE</u>):
	Adequate number of school resources aging population, lack of resources needs		eet growing			· · · · · · · · · · · · · · · · · · ·		t opportunities nce in community
	Alcohol and drug use and abuse Crime and community violence Domestic violence, including child al Environmentally unsound (or unfrience Impact of increased oil/energy deve	lly) p	lace to live		Low w Mainta wellness Povert	aining eno s) y		livable wages n health workers (e.g., medical, denta
	Increasing population, including resingular facilities for exercise and Lack of affordable housing	den	ts moving in		Racism Traffic			nate, discrimination ding speeding, road safety and
	Lack of employees to fill positions				Other:	(please sp	oec	ify)
	Which of the following ways have in dia in the following ways?	ndivi	duals in the com	mur	iity, esp	ecially you	ung	people, been impacted by Social
	Bullying Child Pornography Cyber-Bullying		Depression Isolation Intimate Partne	r Vid	olence			Sex Trafficking Suicidal Thoughts Sexual Assault
De	mographic Information: Pleas	se te	ell us about yours	elf.				
19.	Do you work for the hospital, clinic,	orp	ublic health unit	?				
	□ Yes					No		
20.	Health insurance or health coverage	e sta	tus (choose ALL t	hat	apply):			

☐ Indian Health Service (IHS)☐ Insurance through employer☐ Self-purchased insurance	☐ Medicaid☐ Medicare☐ No insurance	□ Veteran's Healthcare Benefits□ Other (please specify)—————————————————————————————————
21. Age:		
□ Less than 18 years□ 18 to 24 years□ 25 to 34 years	☐ 35 to 44 years ☐ 45 to 54 years ☐ 55 to 64 years	☐ 65 to 74 years ☐ 75 years and older
22. Highest level of education:		
☐ Less than high school☐ High school diploma or GED	☐ Some college/technical degree☐ Associate's degree	☐ Bachelor's degree☐ Graduate or professional degree
23. Gender:		
☐ Female	☐ Male	☐ Transgender
24. Employment status:		
☐ Full time ☐ Part time	☐ Homemaker ☐ Multiple job holder	☐ Unemployed☐ Retired
25. Your zip code:		
26. Race/Ethnicity (choose <u>ALL</u> that app	oly):	
☐ American Indian☐ African American☐ Asian	☐ Hispanic/Latino☐ Pacific Islander☐ White/Caucasian	☐ Other: ☐ Prefer not to answer
27. Annual household income before ta	xes:	
☐ Less than \$15,000 ☐ \$15,000 to \$24,999 ☐ \$25,000 to \$49,999	□ \$50,000 to \$74,999 □ \$75,000 to \$99,999 □ \$100,000 to \$149,999	□ \$150,000 and over □ Prefer not to answer
28. Overall, please share concerns and s	suggestions to improve the delivery of loo	cal healthcare.

Thank you for assisting us with this important survey!

Appendix B – County Health Rankings Explained

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

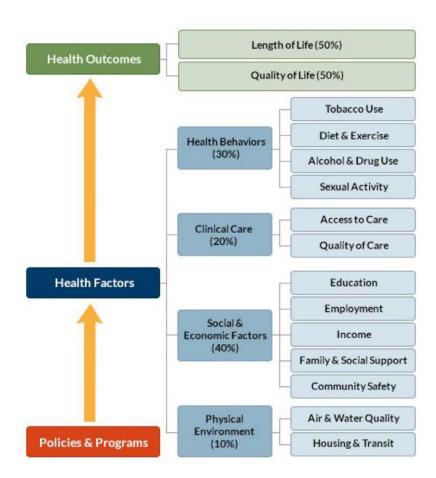
Methods

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 U.S. population.

Reason for Ranking

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

Poor or Fair Health

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

Reason for Ranking

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

Poor Physical Health Days

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

Reason for Ranking

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

Poor Mental Health Days

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

Reason for Ranking

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

Low Birth Weight

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

Reason for Ranking

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

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

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

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

Health Factors

Adult Smoking

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

Reason for Ranking

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

Adult Obesity

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

Reason for Ranking

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

Food Environment Index

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

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

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

Reason for Ranking

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

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

Physical Inactivity

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

Reason for Ranking

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

Access to Exercise Opportunities

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

Individuals who:

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

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

Reason for Ranking

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

Excessive Drinking

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

Reason for Ranking

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

Alcohol-Impaired Driving Deaths

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

Reason for Ranking

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

Sexually Transmitted Infection Rate

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

Reason for Ranking

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

Teen Births

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

Reason for Ranking

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

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

Uninsured

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

Reason for Ranking

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

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

Primary Care Physicians

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

Reason for Ranking

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

Dentists

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

Reason for Ranking

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

Mental Health Providers

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

Reason for Ranking

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

Preventable Hospital Stays

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

Reason for Ranking

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

Diabetes Monitoring

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

Reason for Ranking

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

Mammography Screening

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

Reason for Ranking

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

Unemployment

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

Reason for Ranking

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

Children in Poverty

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

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

Reason for Ranking

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

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

Income Inequality

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

Reason for Ranking

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

Children in Single-Parent Households

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

Reason for Ranking

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

Violent Crime Rate

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

Reason for Ranking

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

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

Injury Deaths

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

Reason for Ranking

Injuries are one of the leading causes of death; unintentional injuries were the 4th leading cause, and intentional injuries the 10th leading cause, of U.S. 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

Dickinson, 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. In the first round of ranking at the second community meeting, each person in attendance they were asked to place four small dots. The "Priorities column lists the number of small dots placed. In the second round of ranking, each person in attendance at the meeting was given one large dot to place on one of the four highest ranking concerns from the first round. The "Most important column lists the number of large dots placed on the flip chart which prioritized the final three concerns.

CONCERNS	Priorities	Most Important
Community/Environmental Health Concerns		***************************************
Having enough child daycare services	3	
Not enough affordable housing		
Attracting and retaining young families	1	
Not having jobs with livable wages		
Physical violence, domestic violence, sexual abuse	1	
Availability/Delivery of Health Services Concerns		
Availability of mental health services	6	7
Availability of specialists		
Ability to retain primary care providers (MN, Do, NP, PA) and nurses		
Availability of substance use disorder/treatment services	6	
Adult Population Health Concerns		
Alcohol use and abuse	3	
Drug use and abuse (including prescriptions)		
Depression/anxiety	1	
Obesity/ overweight		
Youth Population Health Concerns		
Alcohol use and abuse	1	
Drug use and abuse (including prescriptions		
Depression/anxiety	5	2
Smoking and tobacco use (second-hand smoke)		
Senior Population Health Concerns		
Cost of long-term care/nursing home care		
Availability of resources to help elderly stay in their homes	1	
Ability to meet the needs of the older population	1	
Long-term/nursing home options		
Violence Concerns		
Bullying/Cyber-bullying	4	
Emotional abuse (Isolation, verbal threats ,with-holding of funds)	2	
Sexual abuse/assault		
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.

- 1. Considering the PEOPLE in your community, the best things are: "Other" responses:
 - Altruism
 - Fairly easy access to community services
 - Have some groups that are good to promote healthy communities
 - I do not feel welcomed in this community
 - Stop flooding our town with refugees
 - The Badlands
- 2. Considering the SERVICES AND RESOURCES in your community, the best things are: "Other" responses:
 - Again, I am not able to positively respond to these selections. Dickinson is a very closed community.
 - Daycare
 - Definitely not healthcare
 - Sorry None of these
 - Need inpatient/outpatient substance, mental health services
- 3. Considering the QUALITY OF LIFE in your community, the best things are: "Other" responses:
 - Quality water
- 4. Considering the ACTIVITIES in your community, the best things are: "Other" responses:
 - If year-round access to fitness opportunities means the community center, then that is a good thing.
 - NONE
 - None of these
 - Nothing for me
 - Outdoor recreation/Badlands

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:
 - Healthy eating options
 - High real estate cost
 - Lack of behavioral health
 - Mental health availability
 - NOT ENOUGH DAYCARE SERVICES
 - Not much for families to do year-round (winter)
 - People do not treat their animals well
 - Businesses lack pride in their landscape. Most business that have landscape are not taking care of it.
 - RESTURANTS

- Lack of inpatient mental health and addiction services
- Businesses lack pride in their landscape. Most business that have landscape are not taking care of it.
- Stop flooding our town with refugees
- 6. Considering the AVAILABILITY/DELIVERY OF HEALTH SERVICES in your community, concerns are: "Other" responses:
 - Dentist are not on call. My daughter had a dental emergency over a holiday and we could not find a dentist to take care of her.
- 7. Considering the YOUTH POPULATION in your community, concerns are: "Other" responses:
 - Bullying
 - No group therapy opportunities for support of depressed/suicidal kids
 - Lack of comprehensible sex education
 - Lack of social skills due to increasing use of technology to communicate
 - Not enough knowledge
- 8. Considering the ADULT POPULATION in your community, concerns are: "Other" responses:

Other Chronic Diseases:

Migraine/headache

Other:

- Domestic violence
- Homeless
- Mental Healthcare
- Availability of food banks
- High rent
- Mental health services
- Need for mental health services for ALL AGES
- Non-alcoholic events/activities
- Stop flooding our town with refuges
- 9. Considering the SENIOR POPULATION in your community, concerns are: "Other" responses:
 - Cost rent in Dickinson
 - Hunger
 - Affordability to live here
 - Cost of food\commodities
 - Elderly community social activities low or no cost
- 10. Regarding impacts from OIL DEVELOPMENT in your community, concerns are (choose up to THREE):
 - Dickinson public school system needs to be redone. Horrible, horrible
 - It is impossible to select just three. All of these have severely impacted the community!
 - Language translators in schools and business'
 - NEW PEOPLE NOT BEING KIND OR HELPFUL
 - Cost of living is high
 - Mental health services, increasing number of Vape shops in Dickinson
 - We have enough police, I won't move back to my city because police murder our children, friends and family
- 11. The study asked participants about the single biggest challenge facing the community;
 - There are not enough homeless shelters in the area.

- Not enough organizations willing to participate in the community. Need more programs such as American Legion, VFW, Relay for Life, March of Dimes. These organizations need to take a bigger, more proactive role in the community. They need to be out there.
- Access to competitive education
- Access to healthcare specialists
- Alcohol and drug abuse treatment
- Availability of assistance in home and transportation for seniors
- Availability of healthcare specialties (cardiology, etc.)
- Availability of mental health resources.
- Closed minded, racism, dislike for transplants. Seen in speech and actions of the people.
- Community services for mental illness/homelessness
- Costs of healthcare & nursing home care
- Drug and alcohol abuse of adolescents
- Drugs, alcohol, and sex trafficking
- Drugs, crime, abuse
- Economic opportunity and bottom lines are placed before community health regarding mineral extraction and pollution of our air, land and water.
- Elder abuse--likely more prevalent than we know.
- Greed. Our town is dying out because of greed: losing people partly because excessive rent has improved only slightly when compared with living wages of its occupants; losing businesses in part because mall space rental price has always been an issue.
- Having non-sport related activities for our youth to do after school and on the weekends that are low cost or no cost to make events/activities accessible to the lowest income youth population.
- Having to go elsewhere to get adequate medical help.
- I really feel that food security is a great issue for our elderly population. Seniors living on a fixed income in this area have a difficult time purchasing food.
- In network providers for hospital eye and dental insurance.
- Increased crime, intolerance, and unease due to the influx of different cultural backgrounds.
- LACK OF CHILD CARE! Not nearly enough daycares in the area. There is a wait about a mile long in each facility.
- Lack of available resources for a number of different services general retail beyond Walmart, lack of mental and behavioral health services, inadequate child care facilities, affordable single-family housing (we have tons of apartments)
- Lack of mental health and substance abuse help in the community.
- Lack of mental health and substance abuse treatment services.
- Lack of mental health services for addiction
- Lack of mental/behavioral health, community communications about the drug epidemic and providing the appropriate help for those people.
- Local hospital able to care for elderly problems due to lack of staff
- MENTAL HEALTH
- Mental Health
- Mental Health Services
- Mental health
- NO MENTAL HEALTHCARE
- None stand out
- Nothing outside sports for teens
- Population decrease loss of businesses
- Racist people! Very, very stuck in their ways
- Retention of young families to the community

- Since the oil boom, regular job wages (non-oil jobs) have decreased, but cost of living has not. This makes it difficult for people to get ahead unless they are making oil wages.
- Stress
- Substance abuse and lack of effective treatment for substance abuse problems, especially continuing treatment.
- The amount of people that do not get involved in the businesses and help out in the community. Our community has many, many homes for sale, yards look awful...lack of or little upkeep on the yards, weeds, some businesses look awful and very unattractive
- The availability of specialized healthcare and lack of mental health options/treatment
- The biggest issue facing our community is the depression/anxiety brought on through social isolation. Our ability to make an actual connection with another human being has been diminished by our reliance on technology. I have heard from numerous people.
- The community is big enough that it needs more things to do in town. Better movie theater, different things to do inside and outside for all ages.
- The cost of long-term care
- The inability of the core community to accept people and new populations who are moving into the area. The community that is in place has not been exposed to different populations, cultures, sexual preferences, or religions so this makes the community diverse.
- The overall lack of any type of mental health services in rural North Dakota, especially drug and alcohol treatment centers.
- We are told to shop locally but NO SHOPPING is AVAILABLE especially for clothing, shoes, household items. This is even a worse concern since Herbergers has closed.
- Affordable housing for the elderly
- Care for older population
- Cost of living, retail items, food
- Cost of long term care needs
- Cost of long-term/nursing home care
- Drugs
- If I'm choosing one, I have to go with racism. Many people turn their backs on the fact that they have internalized racism, and choose not to learn on how their attitude, words, behavior, as well as participating in a system where white people have the upper hand.
- Income too low to allow elderly to live a decent life
- Influx of liberal minded people
- Lack of inpatient mental health and substance abuse services
- Need for mental health services for inpatient and out-patient services. Plus, addiction services.
- Not enough places to shop for household goods.
- Snow removal in winter. Difficulty getting to work.
- Staffing issues

Delivery of Healthcare

- 12. Where do you find out about LOCAL HEALTH SERVICES available in your area? "Other" responses:
 - Billboards
 - Knowledge of community and locations of medical care facilities
 - Services available brochure
 - Social worker
- 13. What is your Health insurance or health coverage status (choose ALL that apply): "Other" responses:
 - Insurance through parent

- Husbands insurance
- Insurance through spouse
- Insured through husbands employer
- Spouse's insurance

14. [FOR PUBLIC HEALTH PROFESSIONALS ONLY] Are you aware of particular populations or groups in the area that are medically underserved?

- 14 A. If so, what are the particular health concerns of those groups?
 - Vaping in class pen is up the sleeve-accessible and the inserts look like flash drives.
 - Very young families and elderly-lack of services, cost of living
 - Elderly-isolated-living at home and too proud to get home
- 14 B. Are there certain resources or assets currently available that could help meet these particular needs?
 - Vaping perception it's healthier
 - Very young families and elderly Get community to know what's here.
 - Need more public education
 - Elderly more in-home visiting nurses

14 C. Do you have any suggestions you would like to give the organizations or people within the community that could improve the overall health of the population? (PUBLIC HEALTH PROFESSIONALS ONLY)

- Public education of programs/services available. Deal with lack of confidentiality.
- Collaborate more

15. When asked about a list of services provided by the Medical Center, the respondents reviewed and comment on whether they think the community is aware of these locally available services. Those mentioned to be unaware of are;

- Cosmetic
- Psychiatry
- Mole, wart
- Cosmetic Botox
- Laser hair removal
- Sleep studies

15 A. Are there any services that are not on the list (Medical Center) that they would like to see added?

- Mental health Rx. drug addiction
- 15.B. Are there any specific services (Medical Center) that they felt should have increased marketing?
 - Psychiatry Telemedicine. Independent senior housing
 - Laser hair removal. Psychiatry.
 - All skin services. Dermatology services.
 - Tele-med psych.
 - Dermatology items

16. Participants were asked about specific healthcare services that could be added. The responses are as follows:

- Another orthopedic surgeon and cardiology
- Behavioral health and addiction counseling
- Cancer care, kidney dialysis accessibility, mental health, more family practice and general surgeons
- Cancer center would be of huge benefit
- Cardiac-heart health professionals; you have to go to Bismarck or they have a visiting cardiologist that

comes once a month and you may have to wait 3-4 months to get in.

- Cardiologist, oncologist, dermatology
- Clinics open in the evenings and weekends! Almost everyone in the community WORKS and can't make Monday Friday appointments. Considering the amount of the community that works in the oilfield, the availability of clinics is impossible. Also, we are referred to Bismarck.
- Dermatologist, GI, ENT,
- Dickinson has nothing. Most of the community feels that they need to go to Bismarck for anything of importance
- Do they do tubes for infants/small children in Dickinson?
- Drug and alcohol treatment
- ENT
- ENT surgeon, Ped. Doctors
- ENT with surgical options in Dickinson
- Ear, nose, throat provider and also mental health services
- Extended evening hours. A vast majority of the community works during business hours and it can make it extremely difficult to get quality healthcare when you are having to take time off from work to do so. (If your employer will even allow time off)
- Full time ENT, full -time cancer care, more mental health resources
- General surgery, pediatrics, ENT, internal medicine, cardiology
- Mental health
- Mental health services
- Mental health and substance abuse services
- Mental health and addiction
- Mental health including addiction, treatment, diagnosis
- Mental health professionals and home health services for the elderly
- Mental health providers
- Mental health services
- Mental health
- Mental health and dermatology
- Mental health facility
- Mental health/substance abuse treatment
- More mental health professionals for adults and children.
- More pediatricians
- More primary care MDs
- More providers so less referrals to Bismarck/ Fargo
- More visiting specialist
- Need more mental healthcare services
- Need more specialists. We have plenty of nurses and general care physicians. We need neurologists, OB-GYN, specialists
- Outreach traveling nurse to the rural areas within Region VIII
- pediatric providers
- Pediatrics and OB/Gyn
- Preventative care, including community forums on wellness and nutrition...offer free sessions
- Psychiatrists' care, mental healthcare
- Psychology, headache specialist or neurologist
- Specialists
- Specialty services and mental health

- The hospital could use a heart specialist and there is no home healthcare available.
- We seem to have a ton of people in our community who suffer from depression especially during the changing of seasons.
- Maybe more mental health providers and educating the community about mental health
- An OB/GYN, prenatal, pediatricians
- Assistance for purchasing diabetic supplies; mental health services where they actually CARE about you and treat you as such!
- Cardiology, dermatologist
- Dermatology
- Dermatology, neurology
- Homeopathic services
- In-patient psych institution
- Mental and addiction services
- Mental health (counseling)
- Mental health and substance abuse
- Mental health services and addiction rehabilitation
- Mental health, substance abuse recovery
- More education about fitness and nutrition; more specialties that come to Dickinson rather than having to travel to Fargo or Bismarck
- Psychology/psychiatry, mental and behavioral health services, especially for addiction and substance abuse
- Psychiatrist
- Specialists
- Substance abuse/treatment and mental health support
- Support groups; more specific: like for those who have suffered from strokes & their caregivers
- Visiting specialists

17. What are the reasons that community members use the Medical Center rather than other providers for health care needs?

- Faith based aspect.
- Primary care. FU and wellness checks. ER. Therapy and rehab.
- Great collegiality among staff (medical) --> increased satisfaction scores --> med staff support
- Less travel
- Here and available (Day Clinic)
- CHI clinic is best in town. Closest facility.

18. What are the reasons that community members use other healthcare providers rather than use the Medical Center?

- Chemotherapy Bismarck, Insurance-related. Personal medical billing issues
- Pediatrics Surgeons
- Pediatric Care and their OB-GYN sterilization post OB. Choice of care (issues)
- More options (known). Can get in sooner (visiting specialists). Shortage (wait time)
- Previous provider in Bismarck and records there. Dentists, GYN, optometry. Insurance (PPO), inconvenience with billing.
- Specialists. Different services at Sanford Clinic. Keep same provider if moved.

19. I've given you a list of services provided by the District Health Unit. Please review and comment on whether you think the community is aware of these locally available services.

- 19 A. Are there any services (Southwest District Public Health Unit) that are on the list that you were not aware of?
 - Vector control Environmental programs
 - No
 - Provide car seats (free or discount) as in other states
 - Education
 - Suicide screening
 - Vector control
 - Worksite wellness
 - Ryan White/AIDS
 - West Nile
 - Abatements Surveillance and education
- 19 B. Are there any services that are not on the list that you would like to see added?
 - Case management for behavioral health. Follow up with home visits.
- 19 C. Are there any specific services that you feel should have increased marketing?
 - No
 - Services are not just for low income Entire public
 - Psychiatric services in person. Anything involving elderly.
 - Increased telemedicine services. Medication set-up. Blood pressure checks. Emergency preparedness and response.
- 20. What PREVENTS community residents from receiving healthcare? "Other" responses:
 - I receive adequate and timely healthcare
 - None
 - Not offering all types of treatments
 - Not enough mental health services available in Dickinson
 - Poor patient referrals
 - The clinic in our town is exceptional and have good providers. No healthcare on the weekends but do have the ambulance services
- 21. Where do you turn for trusted health information? "Other" responses.
 - My own research
 - My schooling/degree
 - Sanford walk-in clinic
 - Two RNs in family
 - My niece, nurse practitioner
 - Peer reviewed journals/research
- 22. Do you have any suggestions you would like to give the organizations or people within the community that could improve the overall health of the population?
 - Mental health prevention in the elementary schools. Day treatment in high schools. Increased availability for mental health services in rural communities. Affordable mental healthcare for everyone. Behavior health for at risk youth.
 - More preventative education and less reactive responses when there is a mental health concern. Especially with youth and young adults. Working with pre-school/elementary ages to begin prevention education.
 - More involvement in kids needing to know about help and where to go before they are in too bad of trouble.

- More prevention/education in schools to address coping skills/problem solving, drugs, alcohol, vaping and bullying.
- More business health programs. Work sponsored.
- More educational opportunities for law enforcement so they better understand human trafficking, domestic violence, etc.; how to deal with mental health issues.
- (1.) Stricter DUI enforcement. (2.) Drinking/drugs is a toxic and widespread abuse issue in our community and I don't feel there is much enforcement of things like "over serving" or monitoring establishments other than to ensure they ID on the way out. Monitoring establishments for drugs, especially alcohol serving establishments. (3.) More involvement at a younger age building the relationship between law enforcement and children to show they are "safe" rather than "scary."
- Community volunteer if you are able.