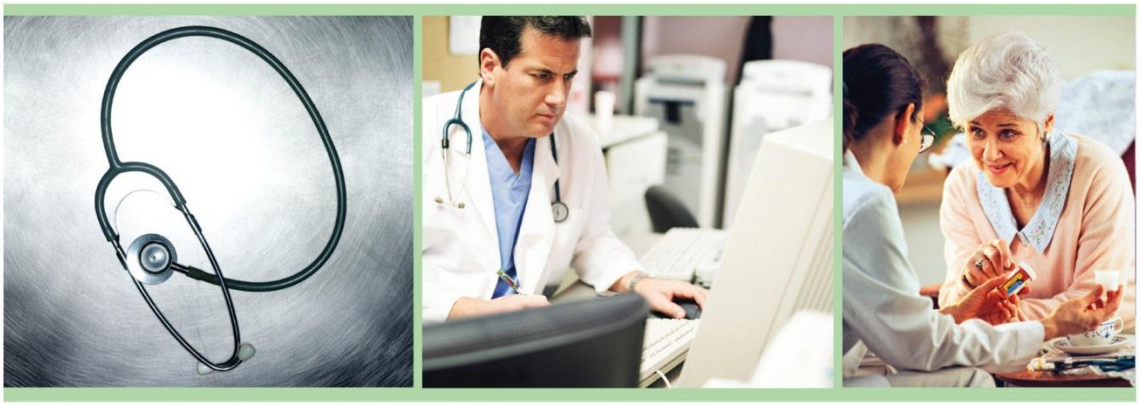
Community Health Needs Assessment



Tioga Medical Center
Tioga, North Dakota

2012 - 2013

Completed by

The North Dakota Medicare Rural Hospital Flexibility (Flex) Program
Karin Becker, PhD Candidate • Ken Hall, JD

Center for Rural Health
The University of North Dakota
School of Medicine & Health Sciences
501 N Columbia Road, Stop 9037
Grand Forks, ND 58202-9037

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Introduction

To help inform future decisions and strategic planning, Tioga Medical Center (TMC) in Tioga, North Dakota conducted a community health needs assessment. Through a joint effort, Tioga Medical Center and the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences analyzed community health-related data and solicited input from community members and local health care professionals. The Center for Rural Health's involvement was funded through its Medicare Rural Hospital Flexibility (Flex) Program. The Flex Program is federally funded by the Office of Rural Health Policy and as such associated costs of the assessment were covered by a federal grant.

The purpose of conducting a community health needs assessment is to describe the health of local people, identify use of local health care services, identify and prioritize community needs, and lay the groundwork for identifying action needed to address health needs. A health needs assessment benefits the community by: 1) collecting timely input from the local community, providers, and staff; 2) providing an analysis of secondary data related to health 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 health care delivery; and 5) allowing the charitable hospital to meet federal regulation requirements of the Patient Protection and Affordable Care Act, which requires not-for-profit hospitals to complete a community health needs assessment at least every three years.

To gather feedback from the community, residents of the health care service area and staff of Tioga Medical Center were given the chance to participate in a widely distributed survey. Additional information was collected through a Community Group comprised of community leaders as well as through one-on-one key informant interviews with community leaders.

Tioga Medical Center

Tioga Medical Center's stated mission is to address the health care needs of the community through providing quality care and promoting education and wellness. Founded for the primary purpose of administering health care in its most complete form, including care in the form of mercy and love, Tioga Medical Center offers professional health care to all persons regardless of race, color, creed, age or disability.

Efforts for a health care facility in Tioga started with discussions in the early 1950s and culminated with construction of a hospital in 1961. Development has continued with a 30-bed nursing home completed in 1977 and an independent living facility with 22 apartments that opened its doors in 1998. Together with the Tioga Clinic that is open weekdays and every other Saturday, the nursing home, independent living facility and the 25-bed critical access hospital make up Tioga Medical Center.

TMC also operates two satellite rural clinics in Williams County which are located in the communities of Ray and Powers Lake. Overall, TMC's 120 employees provide medical services to 5,000 residents living in and near Williams County. However, due to the recent oil boom from the Bakken formation, the population has increased substantially and the most recent census data does not adequately reflect the influx in population. Therefore, the approximate service area of TMC, both in size and in number, is hard to define. While the 2011 population data reports Tioga to have 1,200 residents, city employees say that 3,600 is a better estimate.

Four physicians, three certified physician assistant and two family nurse practitioners are on staff at TMC. Additionally, the Radiology Department employs one director and two technologists.

Tioga Medical Center has had substantial economic impact on its community. Its primary impact to the county is $4.06 million. Its secondary impact is $920,818, which includes the relationship of TMC and its employees with other sectors in the county; the total economic impact is $4.98 million annually. (Financial impacts were estimated using economic multipliers derived from MIG 2007 IMPLAN data).

Overview of Services

Services offered locally by Tioga Medical Center include:

General and acute services

- Cardiac rehab
- Clinics in Tioga, Ray and Powers Lake
- Emergency room
- Hospital (acute care)
- General surgeon—visiting specialist
- Pediatric/ child care
- Senior housing
- Social services
- Surgical services-GI procedures
- Surgical services—outpatient
- Swing bed services
- Telemedicine via eEmergency

Radiology services

- EKG
- CT scan
- DEXA scan (bone density)
- General x-ray
- MRI
- mammography
- ultrasound

Screening/therapy services

- Diabetic education
- Dietician consulting
- Health screenings
- Laboratory services
- Occupational therapy
- Physical therapy
- Speech therapy

Additionally, other services offered locally by other providers include:

- Ambulance
- Chiropractic services
- Dental services
- Optometric services

Health Care Facilities and Other Resources

Williams County is located in the northwest corner of North Dakota, lying above Lake Sakakawea. Tioga Medical Center's service region includes the counties of Williams, Mountrail, Burke and Divide.

The leading industries in Williams County are primarily agricultural and oil. Lake Sakakawea, one of North Dakota's largest recreational areas, offers excellent hunting and fishing. Other area recreational opportunities include a 9-hole golf course, parks, tennis courts, swimming pool, athletic fields, movie theatre and bowling alley. Tioga hosts three annual events: Tioga Freedom Fest, Tioga Farm Festival and the Fireman's Carnival; it is also home to the Norseman Museum. Numerous service and social organizations are active in Tioga including Kiwanis Club, Boy Scouts, Peaceful Valley Quilters Guild, Prairie Pounders Snowmobile Club and Sons of Norway. Dental, chiropractic and optometric services are available in the community.

It is important to note that there is another Critical Access Hospital (CAH) located in Williams County. Mercy Medical Center is located 45 miles to the east in Williston, ND and is a 25-bed regional medical facility with 450 employees. Mercy Medical Center offers many specialty services and providers such as an allergist, cardiologist, obstetrician and gynecologist and neurologist to name a few. Many patients from TMC are transferred to Mercy for specialized care.

Tioga is situated on the eastern edge of Williams County, bordering Mountrail County which has its own CAH in Stanley, ND. Approximately 30 miles to the east, Mountrail County Health Center is comprised of an 11-bed critical access hospital, rural health clinic and 12 independent living apartments.

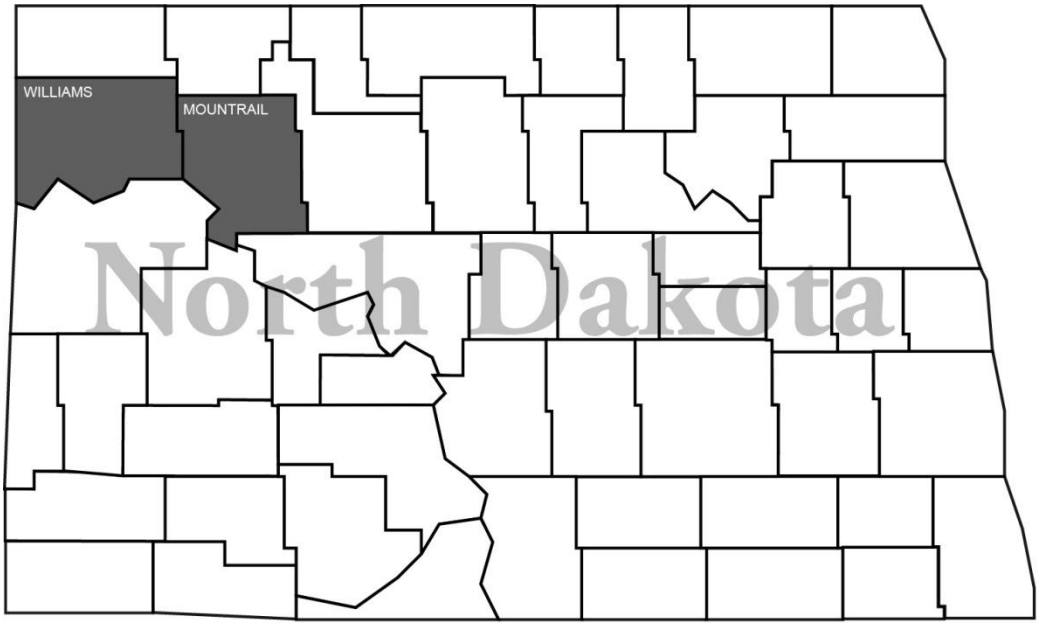
Tioga Ambulance EMS

The Tioga Fire and Ambulance Department is an all-volunteer station with nine active community volunteers.

Assessment Methodology

Tioga Medical Center primarily serves an area that includes four counties in North Dakota: Williams, Mountrail, Divide and Burke. The majority of residents served by Tioga Medical Center, however, reside in Williams and Mountrail so for the purpose of this assessment the focus is on those two counties. This service area is defined based on the location of the medical facilities, the geographic distance to other hospitals, and the history of usage by consumers. Located in the hospital's service are the communities of Battleview, Hamlet, McGregor, Powers Lake, Ray and Wheelock and White Earth.

FIGURE 1: SERVICE AREA OF TIOGA MEDICAL CENTER



The Center for Rural Health provided substantial support to TMC in conducting this needs assessment. Center for Rural Health representatives collected data for the assessment in a variety of ways: (1) a survey solicited feedback from area residents; (2) another version of the survey gathered input from health care professionals who work at TMC; (3) community leaders representing the broad interests of the community took part in one-on-one key informant interviews; (4) a Community Group comprised of community leaders and area residents was convened to discuss area health needs; and (5) a wide range of secondary sources of data was examined, providing information on a multitude of measures including demographics; health conditions, indicators, and outcomes; rates of preventive measures; rates of disease; and at-risk activities.

The Center for Rural Health 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 Center serves as a resource to health care providers, health organizations, citizens, researchers, educators, and policymakers across the state of North Dakota and the nation. Activities are targeted toward identifying and researching rural health issues, analyzing health policy, strengthening local capabilities, developing community-based alternatives, and advocating for rural concerns.

As the federally designated State Office of Rural Health (SORH) for the state and the home to the North Dakota Medicare Rural Hospital Flexibility (Flex) program, the Center connects the School of Medicine and Health Sciences and the university to rural communities and their health institutions to facilitate developing and maintaining rural health delivery systems. In this capacity the Center works both at a national level and at state and community levels. Detailed below are the methods undertaken to gather data for this assessment by convening a Community Group that served as a focus group, conducting key informant interviews, soliciting feedback about health needs via a survey, and researching secondary data.

Community Group

A community group consisting of 13 community members was convened and met on October 1, 2012 for approximately 90 minutes. A representative of the Center for Rural Health moderated the focus group. During this first Community Group meeting, group members were introduced to the needs assessment process, reviewed basic demographic information about the TMC service area, and served as a focus group. Focus group topics included the general health needs of the community, general community concerns, community health concerns, delivery of health care by local providers, awareness of health services offered locally, barriers to using local services, suggestions for improving collaboration within the community, reasons community members use TMC, reasons community members use other facilities for health care, and awareness of extended clinic hours.

The Community Group met again on January 13, 2013. 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 and behaviors of the population in the TMC service

area. The group was then tasked with identifying and prioritizing the community's health needs.

Members of the Community Group represented the broad interests of the community served by TMC. They included representatives of the health community, public schools, business community, city personnel, business leaders and elected officials. Members of the Community Group are listed in Appendix B. Not all members of the group were present at both meetings.

Interviews

One-on-one interviews with key informants were conducted in person in Tioga on October 1, 2012. Telephone interviews were held on October 17, 2012. A representative of the Center for Rural Health conducted the interviews. Interviews were held with selected members of the Community Group as well as other key informants who could provide insights into the community's health needs. These interviewees represented the broad interests of the community served by TMC. They included representatives of the medical community, business community and local government. Included among the informants was a public health nurse with special knowledge in public health acquired through several years of direct care experience in the community, including working with medically underserved, low income and Native populations, as well as with populations with chronic diseases. To add varying perspectives, various age brackets were represented including senior citizens as well as an expecting mother. Those taking part in interviews are listed in Appendix B.

Topics covered during the interviews included the general health needs of the community, local health care delivery concerns, general community concerns, awareness of health services offered locally, barriers to using local services, suggestions for improving collaboration within the community, reasons community members use local health care services, and reasons community members use non-local health facilities.

Survey

A survey was distributed to gather feedback from the community. The survey was not intended to be a scientific or statistically valid sampling of the population. Rather, 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.

Two versions of a survey tool were distributed to two different audiences: (1) community members and (2) health care professionals. Copies of both survey instruments are included in Appendix A.

Community Member Survey

The community member survey was distributed to residents of the service area of Tioga Medical Center. The survey tool was designed to:

- Understand community awareness about services provided by the local health system and whether consumers are using local services;
- Understand the community's views and attitudes about potential health concerns in the area;
- Learn about broad areas of community concerns;
- Determine preferences for using local health care versus traveling to other facilities; and
- Solicit suggestions and help identify any gaps in services.

Specifically, the survey covered the following topics: community assets, awareness and utilization of local health services, barriers to using local services, suggestions for improving collaboration within the community, local health care delivery concerns, reasons consumers use local health care providers and reasons they seek care elsewhere, travel time to the nearest local provider clinic and to the nearest clinic not operated by a local provider, demographics (gender, age, marital status, employment status, income, and insurance status), and any health conditions or diseases respondents currently have.

Approximately 500 community member surveys were available for distribution in the service area. The surveys were distributed by Community Group members, through banks, restaurants, the Senior Citizen Club, the fitness center, and were available for patients of the hospital and clinic. To help ensure anonymity, included with each survey was a postage-paid return envelope to the Center for Rural Health. In addition, to help make the survey as widely available as possible, residents also could request a survey by calling TMC. The survey period ran from October 1, 2012 until November 3, 2012. Approximately 45 completed surveys were returned.

Area residents were given the option of completing an online version of the survey, which was publicized in area newspapers. Seven online surveys were completed. Between the hard-copy surveys and the online version of the survey, a total of 52 community member surveys were completed.

Health Care Professional Survey

Employees of TMC were encouraged to complete an online version of the survey geared to health care professionals. Approximately 46 of these surveys were completed online. The version of the survey for health care professionals covered the same topics as the consumer survey, although it sought less demographic information and did not ask whether health care professionals were aware of the services offered by TMC.

Combining the print and online community member surveys with the health care professional surveys makes for a total survey sample of 98 responses.

Secondary Research

Secondary data were collected and analyzed to provide a snapshot of the area's overall health conditions, behaviors, and outcomes. Information was collected from a variety of sources including the U.S. Census Bureau; the North Dakota Department of Health; the Robert Wood Johnson Foundation's County Health Rankings (which pulls data from 14 primary data sources); North Dakota Health Care Review, Inc. (NDHCRI); the National Survey of Children's Health Data Resource Center; the Centers for Disease Control and Prevention; the North Dakota Behavioral Risk Factor Surveillance System; and the National Center for Health Statistics.

Demographic Information

Table 1 summarizes general demographic and geographic data about Williams and Mountrail counties, which comprise the majority of the service area of Tioga Medical Center.

TABLE 1: COUNTY INFORMATION AND DEMOGRAPHICS (From 2010 Census where available; some figures from earlier Census data)			
	Williams County	**Mountrail County**	**North Dakota**
Population (2011)	24,374	13,937	683,932
Population change, 2000-2010	13.3%	15.7%	4.7%
Square miles	2,077	1,825	69,001
People per square mile	10.8	4.2	9.8
Caucasian	92.3%	67.5%	90.0%
American Indian	3.9%	29.1%	5.4%
High school graduates	87.9%	88.5%	89.4%
Bachelor's degree or higher	19.3%	19.9%	26.3%
Live below poverty level	8.7%	16.5%	12.3%
Children in poverty	12%	21%	14%
65 years or older	13.7%	12.8%	14.5%
Median age	39.8	39.6	37.0

The data indicate that both Williams and Mountrail counties have a slightly smaller percentage of individuals over the age of 65 than the North Dakota average. The counties also have a slightly higher median age, by more than two years, than the state median age. A younger population may signify unique medical needs. The Population Bulletin from The North Dakota State Data Center show that the median age for Williams County is 39.8 years (2000). This

number is a 6.3 year increase over the previous census and a 10.7 year increase since 1950. Similarly, the median age for Mountrail County is 39.6, which is above the state median average. In 2000 the median age was 40.

The data show us that the growing population in Williams County and Mountrail County living within the service area of Tioga Medical Center may create an increasing number of residents most likely to use TMC's services. If this trend continues, adults requiring care, especially those aged 65 years and older, will increase. State level data also greatly supports this argument as the U.S. Census Bureau, Interim State Population Projections (2005) predict the state population of residents 65 and older to increase 61.3% between 2000 and 2030.

Both Williams and Mountrail counties have lower percentages of individuals with a high school diploma or bachelor's degree than the state averages. Approximately one out of five residents living in either county holds a bachelor's degree or higher, compared to one out of four for the state average. The reduced number of individuals with formal education could have implications for recruiting educated health care professionals to work with Tioga Medical Center.

On a positive note, Williams County beats the state average in terms of residents living below poverty levels, holding a low rate of 8.7% compared to the state average of 12.3%. The rate of children living in poverty also bests the state average.

Mountrail County has more concerning poverty rates, as both the rates for adults and children living below poverty level are higher than state averages. Of particular note is the rate of children aged eighteen years and younger who are living below the poverty line is one and a half times the state average signifying that children's access to and affordability of health care is an issue in this county. Mountrail County is considered rural, with an average of 4.2 people per square compared to the state average of 9.8 people per square mile. The generally rural area has implications for the delivery of services and residents' access to care. Transportation can be an issue for rural residents as can isolation, which can have many effects on health status.

Health Conditions, Behaviors, and Outcomes

As noted above, several sources were reviewed to inform this assessment. This data is presented below in four categories: (1) County Health Rankings, (2) public health community profiles, (3) preventive care data, and (4) children's health. One other source of information, the Gallup-Healthways Well-Being Index, shows that North Dakota ranked second nationally in well-being during 2011. The index is an average of six sub-indexes, which individually examines life evaluation, emotional health, work environment, physical health, healthy behaviors, and access to basic necessities.

Table 2: Variables Influencing a County's Health Rankings

Health Outcomes
- Mortality (length of life)
- Morbidity (quality of life)

Health Factors
- Health Behavior
  - Tobacco use
  - Diet and exercise
  - Alcohol use
  - Unsafe sex
- Clinical Care
  - Access to care
  - Quality of care

Health Factors (continued)
- Social and Economic Factors
  - Education
  - Employment
  - Income
  - Family and social support
  - Community safety
- Physical Environment
  - Air quality
  - Built environment

Table 2 summarizes pertinent information taken from County Health Rankings as it relates to Tioga Medical Center's service area in Williams and Mountrail counties. It is important to note that these statistics describe the population of each county, regardless of where county residents choose to receive their medical care. In other words, all of the following statistics are based on the health behaviors and conditions of the county's residents, not necessarily patients of TMC. Moreover, other health facilities are located in other counties that are adjacent to Williams and Mountrail counties. For example, another critical access hospital is located in Williston in Williams County and there is an acute care, level 2 trauma center in Minot in Ward County. Additionally, in Mountrail County there is an Indian Health Services hospital located in New Town.

For some of the measures included in the rankings, the County Health Rankings' authors have calculated a national benchmark for 2012. As the authors explain, "The national benchmark is 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 (e.g., high school graduation) or negatively (e.g., adult smoking)."

Williams and Mountrail counties' rankings are listed in Table 3. Williams County ranks 9th out of 46 ranked counties in North Dakota on health outcomes and comes in 34th place on health factors. Mountrail County comes in 43rd place for both health outcomes and factors. The variables marked by a diamond (❖) are areas where either county is not measuring up to the national benchmark. The variables marked by a red checkmark (✓) are areas where the counties are not measuring up to state averages. Appendix D sets forth definitions for each of the variables.

TABLE 3: SELECTED MEASURES FROM COUNTY HEALTH RANKINGS

	Williams County	Mountrail County	National Benchmark ❖	North Dakota ✓
Ranking: Outcomes	**9th**	**43rd**		**(of 46)**
Poor or fair health	❖11%	❖✓ 17%	10%	12%
Poor physical health days (in past 30 days)	❖✓ 2.9	❖✓ 2.9	2.6	2.7
Poor mental health days (in past 30 days)	2.0	❖✓ 2.8	2.3	2.5
% Diabetic	8%	✓ 10%	-	8%
Ranking: Factors	**34th**	**43rd**		**(of 46)**
Health Behaviors				
Adult smoking	❖✓ 31%	❖✓ 28%	14%	19%
Adult obesity	❖ 30%	❖✓ 35%	25%	30%
Physical inactivity	❖✓ 32%	❖✓ 34%	21%	26%
Excessive drinking	❖✓ 26%	❖✓ 24%	8%	22%
Motor vehicle crash death rate	❖ ✓ 22	❖✓ 53	12	19
Sexually transmitted infections	❖ 202	❖✓ 1,075	84	305
Teen birth rate	❖ ✓ 38	❖✓ 63	22	28
Clinical Care				
Uninsured	❖ 12%	❖✓ 15%	11%	12%
Primary care provider ratio	❖✓ 761:1	❖✓ 821:1	631:1	665:1
Mental health provider ratio	✓4,949 :1	✓ 6,569:0	-	2,555:1

Preventable hospital stays	❖ 64	❖✓ 85	49	64
Diabetic screening	❖✓ 80%	❖✓ 68%	89%	85%
Mammography screening	❖✓ 66%	❖✓ 52%	74%	72%
Physical Environment				
Limited access to healthy foods	❖ 8%	❖ 8%	0%	11%
Access to recreational facilities	24	❖✓ 0	16	13

Williams County

In terms of health outcomes, Williams County is ranked ninth, out of forty-six ranked counties in North Dakota, meaning it is among the top ten highest performing counties in the state. There is room for improvement as the number of self-reported poor physical health days in the past month (2.9) is slightly higher than the state average (2.7) and national benchmark (2.6).

With respect to health factors, including health behaviors, clinical care measures, and physical environment, Williams County is under performing state averages with an overall rank of 34 out of 46 counties. Williams County has higher rates than the national benchmarks in all behavioral categories. In regards to state averages, it does have lower sexually transmitted infection rates and its adult obesity rates are tied with state averages at 30%.

Specific health behaviors for Williams County that are of particular concern as they show markedly worse rates than the national benchmark and state average are:

- Adult smoking rate (more than 2x national benchmark)
- Physical inactivity rate (1 ½ x national benchmark)
- Excessive drinking rate (3x national benchmark)
- Motor vehicle crash death rate (almost 2x national benchmark)
- Sexually transmitted infections (almost 2 ½ x national benchmark)
- Teen birth rate (almost 2x national benchmark)

Williams County residents have higher ratios of patients to doctors than the national benchmark and state average and higher mental health provider ratios than the state averages. With the influx of population due to the oil boom and the tax of local resources and services, meeting mental health needs is critical for community health. Additionally, screening levels for diabetes and mammograms is low. Clearly, there is need for more doctors, as well as mental health providers, as availability and accessibility to care is limited.

A strength of Williams County is the abundance of recreational facilities. With a score of 24 on the measure of access to recreational activities, Williams County has almost double the state average of outdoor recreational opportunities. Promoting these resources more may help reduce the increased rate of physical inactivity.

Mountrail County

Mountrail County is ranked in the bottom tenth for overall health outcomes, coming in at 43 out of 46 counties. It has higher days of poor health, physical health and mental health reports as compared to national benchmarks and state averages. The percentage of diabetics in Mountrail County is also slightly elevated, 10% compared to the state average of 8%.

In terms of health factors, including health behaviors, clinical care measures, and physical environment, Mountrail County maintains its low performing rank of 43 out of 46 counties. Mountrail County has higher rates in *all behavioral categories than both national benchmarks and state averages.*

Of particular concern as they show markedly worse rates than the national benchmark and state average are:

- Adult smoking rate (2x national benchmark)
- Physical inactivity rate (1 ½ x national benchmark)
- Excessive drinking rate (3x national benchmark)
- Motor vehicle crash death rate (4x national benchmark)
- Sexually transmitted infections (12x national benchmark)
- Teen birth rate (more than 2x national benchmark)

In terms of clinical care, Mountrail County has some concerning results. The number of residents without insurance is higher than both the national benchmark and state average. The ratios for primary care doctors and mental health providers are higher as is the rate of preventable hospital stays. Diabetic and mammography screening rates are lower. While Mountrail County has better rates of access to healthy foods than state averages, it lacks access to recreational facilities.

Public Health Community Profiles

Included as Appendix E is the North Dakota Department of Health's community health profile for the Upper Missouri District which includes the counties of Williams, Mountrail, Divide and McKenzie. While the appendix includes information on all counties served by Tioga Medical Center, this report focuses primarily on Williams and Mountrail counties. Some of the demographic

information presented in these community health profiles is based on earlier census data. Data concerning causes of death is from 2004 to 2008.

For Williams County, the leading cause of death for infants is anomalies, followed by cancer. Unintentional injury is the overall leading cause of death for children to adults aged 5-34. Injuries represent half of all deaths (54%) for those aged 15-24. The second leading cause of death for those aged 15-34 is suicide (21%). For the 35-44 age bracket, heart disease and cancer are the first and second leading causes of death. The reverse is true for those aged 45-84 as cancer is the leading cause of death, followed by heart disease. For senior citizens aged 85 and older, heart disease is the leading cause of death, followed by cancer.

For Mountrail County, anomalies are attributed to the leading cause of death for infants. No information is reported for those aged 5-14. Unintentional injury is the leading cause of death for those aged 15-24, followed by suicide. Heart disease and suicide share the top causes of death for the 25-34 age bracket and information is unavailable for secondary causes. For those aged 35-44, unintentional injury is the leading cause of death, followed by heart disease. For those aged 45-65 heart disease is the leading cause, and unintentional injury and cancer come in second. Cancer is the number one cause of death for those aged 65-74, followed by heart disease. This pattern is flipped for those aged 75 and older where heart disease is the leading cause of death, followed by cancer.

This data on causes of death suggest that in Williams and Mountrail counties, reductions in mortality may be achieved by focusing on prevention of accidents and suicides as well as early detection and prevention of cancer and heart disease.

According to the county's community health profile, measures of self-reported adult behavioral risk factors in which there is a statistically significance difference between the Williams County rate and the state average (with Williams County performing below the state average) include residents who report not always using a seatbelt, residents who smoke every day, drink heavily and binge drink and residents who reported they had lost six or more permanent teeth due to gum disease or decay. Williams County was performing better than the state averages on the following measures: residents reporting lower cholesterol, diabetes and high blood pressure rates; lower obesity rates, fewer instances of drunk driving, and more reports of residents having a personal health care provider.

In Mountrail County, there is a significantly higher rate of residents who are over overweight or obese, eat less than five fruits and vegetables per day and have a

higher diabetes diagnosis rate as compared to the state average. Similar to Williams County, oral health is poor as the number of residents needing dental attention and having tooth loss is large. The drunk driving rate is over three times the state average. Additionally, there were a high percentage of respondents who lacked any health insurance as well as those who reported that they did not have one person whom they consider to be their health care provider. However, asthma rates and incidences of high blood pressure are lower than state averages.

In assessing the region's health needs, attention also should be paid to other information provided in the public health profiles about quality of life issues and conditions such as arthritis, asthma, cardiovascular disease, cholesterol, crime, drinking habits, fruit and vegetable consumption, health insurance, health screening, high blood pressure, mental health, obesity, physical activity, smoking, stroke, tooth loss, vaccination and crime.

Preventive Care Data

North Dakota Health Care Review, Inc., the state's quality improvement organization, reports rates related to preventive care.[1] They are summarized in Table 4 for the counties in Tioga Medical Center's service area. For a comparison with other counties in the state, see the respective maps for each variable found in Appendix F.

Those rates highlighted below marked with a red checkmark (✓) signify that the county is underperforming – meaning the majority of other counties in North Dakota are performing better on that measure. Those rates marked with a happy face (☺) are those that are performing better as compared to other counties in the state.

TABLE 4: SELECTED PREVENTIVE MEASURES			
	Williams County	**Mountrail County**	**North Dakota**

[1] The rates were measured using Medicare claims data from 2009 to 2010 for colorectal screenings, and using all claims through 2010 for pneumococcal pneumonia vaccinations, A1C screenings, lipid test screenings, and eye exams. The influenza vaccination rates are based on Medicare claims data between March 2009 and March 2010 while the potentially inappropriate medication rates and the percent of drug-drug interactions are determined through analysis of Medicare part D data between January and June of 2010.

Colorectal cancer screening rates	✓ 52.7%	✓ 49.0%	55.5%
Pneumococcal pneumonia vaccination rates	☺ 51.6 %	✓40.0%	51.3%
Influenza vaccination rates	✓ 45.5%	✓33.2%	50.4%
Annual hemoglobin A1C screening rates for patients with diabetes	✓ 91.6%	✓80.9%	92.2%
Annual lipid testing screening rates for patients with diabetes	☺ 81.6%	✓ 65.8%	81%
Annual eye examination screening rates for patients with diabetes	☺ 74.3%	✓ 64.3%	72.5%
PIM (potentially inappropriate medication) rates	✓ 11.3%	✓11.7%	11.1%
DDI (drug-drug interaction) rates	☺ 9.6%	✓ 9.9%	9.8%

The data indicate that Williams County is doing well in a number of preventive care measures, with several instances of scoring just slightly better than other North Dakota counties. There is, however, room for improvement in several measures related to the delivery of preventive care. For example, Williams County is below state averages on influenza vaccination rates and annual hemoglobin A1C screening rates for patients with diabetes and colorectal cancer screening rates.

Mountrail County has more work cut out for itself as it fares in the bottom on all accounts with the exception that potential drug to drug interaction rates, where it is fairing slightly worse than the state average.

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 in Table 5 is information about children's health in North Dakota. The full survey includes physical and mental health status, access to quality health care, and information on the child's family, neighborhood, and social context. Data is from 2007. More information about the survey may be found at: http://www.childhealthdata.org/learn/NSCH.

Key measures of the statewide data are summarized below. The rates highlighted with a red ✓ signify that North Dakota is faring worse on that measure than the national average.

TABLE 5: SELECTED MEASURES REGARDING CHILDREN'S HEALTH (For children aged 0-17 unless noted otherwise)		
Measure	**North Dakota**	**National**
Children who had preventive medical visit in past year	✓ 78.9%	88.5%
Children who had preventive dental visit in past year	✓ 77.2%	78.4%
Children aged 10-17 whose weight status is at or above the 85th percentile for Body Mass Index	25.7%	31.6%
Children aged 6-17 who engage in daily physical activity	✓ 27.1%	29.9%
Children who live in households where someone smokes	✓ 26.9%	26.2%
Children aged 6-17 who exhibit two or more positive social skills	95.6%	93.6%
Children aged 6-17 who missed 11 or more days of school in the past year	3.9%	5.8%
Young children (10 mos.-5 yrs.) receiving standardized screening for developmental or behavioral problems	✓ 17.6%	19.5%
Children aged 2-17 years having one or more emotional, behavioral, or developmental condition	✓ 11.4%	11.3%
Children aged 2-17 with problems requiring counseling who received mental health care	72.4%	60.0%

The data on children's health and conditions reveal that while North Dakota is doing better than the national average on several measures, it is not measuring up to the national average in annual preventive medical and dental visits and in terms of daily physical activity, households with smokers, developmental screening, and rates of emotional, behavioral or developmental conditions. Approximately 20% or more of the state's children are not receiving an annual preventive medical visit or a preventive dental visit. Lack of preventive care now affects these children's future health status. Access to behavioral health is an issue throughout the state, especially in frontier and rural areas. Anecdotal evidence from the Center for Rural Health indicates that children living in rural areas may be going without care due to the lack of mental health providers in those areas.

Table 6 includes selected county-level measures regarding children's health in North Dakota. The data come from North Dakota KIDS COUNT, a national and state-by-state effort to track the status of children, sponsored by the Annie E. Casey Foundation. KIDS COUNT data focus on main components of children's well-being; more information about KIDS COUNT is available at www.ndkidscount.org. The measures highlighted with a red checkmark (✓) indicate those measures in which the county is doing worse than the state average.

The data show that both counties are faring substantially worse than the state averages in terms of uninsured children as well as total teen birth rates. Both counties have more teenagers not enrolled in high school, are not high school graduates and not in the labor force compared to the state average. Williams County's high school dropout rate is more than double the state's.

The percentage of births to mothers that are receiving inadequate prenatal care is markedly high in Mountrail County -- nearly five times the state average. A significant number of children living in Mountrail County receive free or reduced lunches and Medicaid. While both counties report lower percentages for domestic violence than state averages, anecdotal evidence from the Center of Rural Health indicates that cramped quarters symptomatic of oilfield employees living in trailers may heighten violence.

TABLE 6: SELECTED MEASURES OF CHILDREN'S HEALTH
(For children aged 0-17 unless noted otherwise)

Measure	Williams County	Mountrail County	North Dakota
Children Receiving Free/Reduced Price Lunch	27.0%	✓ 43.3%	33.2%
High School Dropouts, Grades 9-12	✓ 4.9%	1.9%	2.2%
Children Ages 16-19 Not Enrolled in High School, Not High School Graduates, and Not in the Labor Force, (% of population 16-19)	✓ 3.2%	✓ 5.3%	2.1%
Uninsured Children Ages 0-18,	✓ 9.7%	✓ 15.6%	8.1%
Births to Mothers Receiving Inadequate Prenatal Care	2.6%	✓ 20.4%	4.3%
Total Births to All Teens Ages 12-19	✓ 11.1%	✓ 16.8%	7.4%
Low Weight Births	5.9%	✓ 8.8%	6.4%
Medicaid Recipients Ages 0-20	25.7%	✓ 38.6%	27.1%
Children Directly Impacted by Domestic Violence	2.5%	2.4%	2.9%

Survey Results

Survey Demographics

Two versions of the survey were administered: one for community members and one for health care professionals. With respect to demographics, both

versions asked participants about their gender, age, and education level. Community members were asked about marital status, employment status, household income, and travel time to the nearest non-TMC and to the Tioga Medical Center in Tioga. Figures 2 through 14 illustrate the demographics of health care professionals and community members.

Throughout this report, numbers (N) instead of percentages (%) are reported because percentages can be misleading with smaller numbers. Survey respondents were not required to answer all survey questions; they were free to skip any questions they wished.

Community Members and Health Care Professionals

The demographic results from both the community member version and the health care professional version of the survey revealed similar findings about several measures. In both response groups, as illustrated in Figures 2 and 3, the number of females responding was significantly higher than the number of males responding. Twice as many women completed the community member survey as did men and in the case of health care professionals, the number of female respondents outnumbered male respondents fifteen to one.

Figure 2: Gender - Community Members

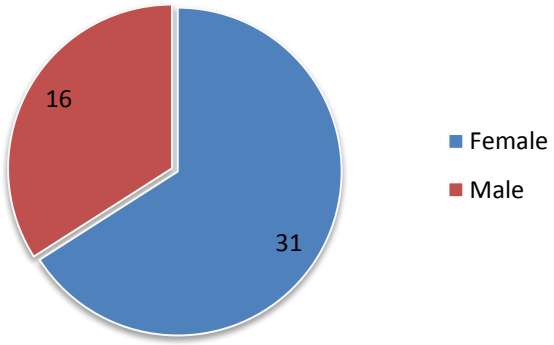
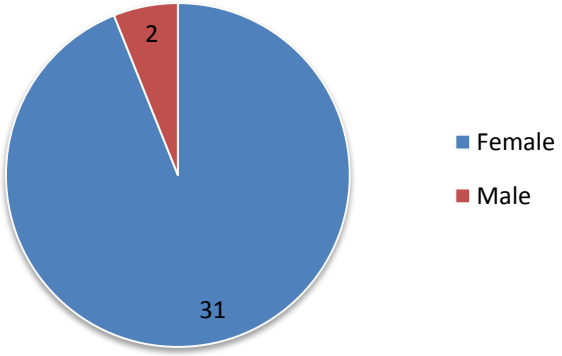


Figure 3: Gender – Health Care Professionals



In both versions of the survey, respondents represented all age brackets, making for a diverse and representative age sample. A plurality of community members completing the survey were between the ages of 45 and 54 (N=13). The next most represented groups were those aged 35 to 44 (N=10) and 55 to 64 (N=10). Only four people under the age of 35 completed the survey compared to 10 people over the age of 65, possibly indicating an older and active senior population. With respect to health care professionals, the largest age group represented was those aged 55-64 years. Figures 4 and 5 illustrate respondents' ages.

Figure 4: Age – Community Members

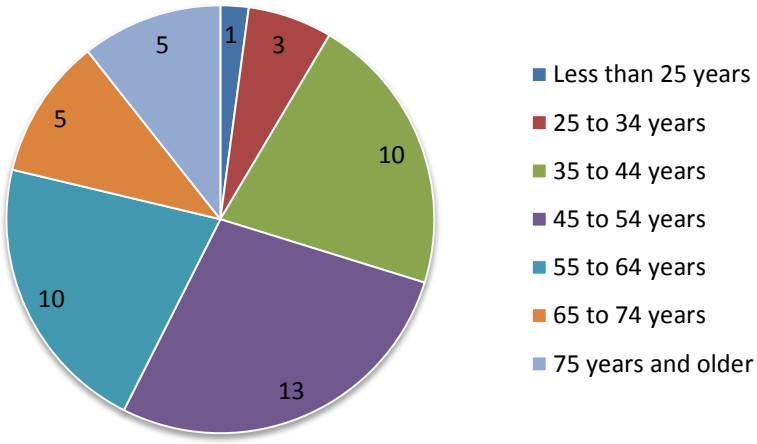
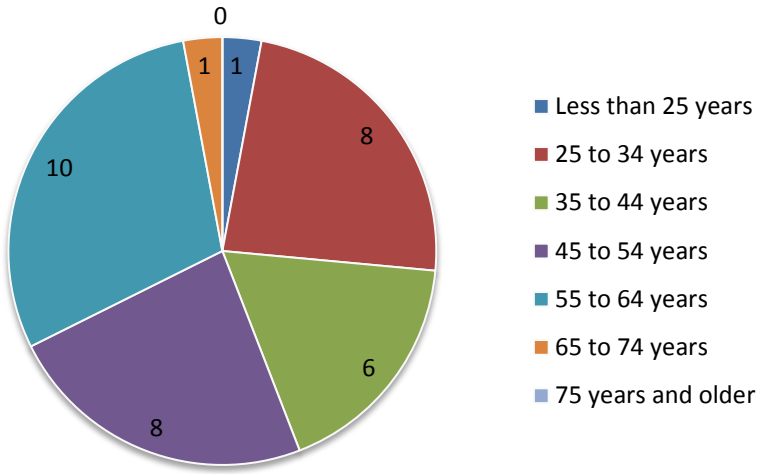


Figure 5: Age – Health Care Professionals



Community members and health care professionals represented a wide range of educational backgrounds. A plurality of community members reported that their highest level of education was some college or a technical degree (N=15). The next largest groups consisted of those having a high school diploma or GED (N=11). Most of the health care professionals held some college or technical degree (N=10) or a bachelor's degree (N=10). Figures 6 and 7 illustrate the diverse background of respondents and demonstrate that the assessment took into account input from parties with a wide range of educational experiences.

Figure 6: Education Level – Community Members

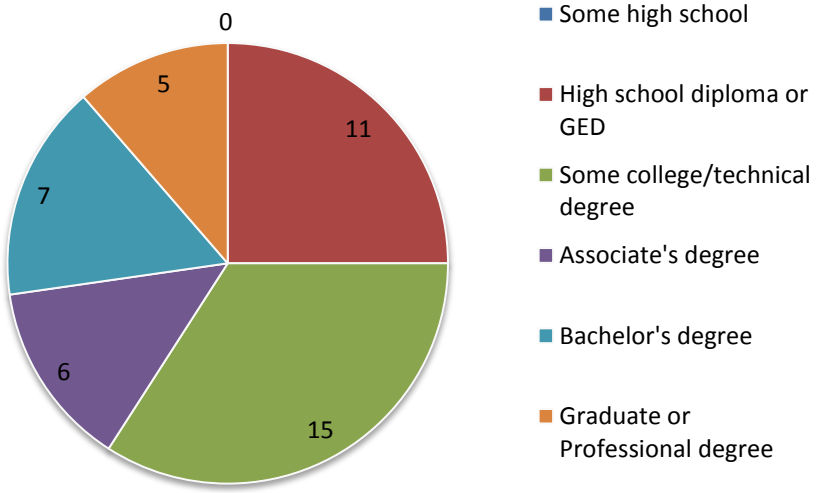
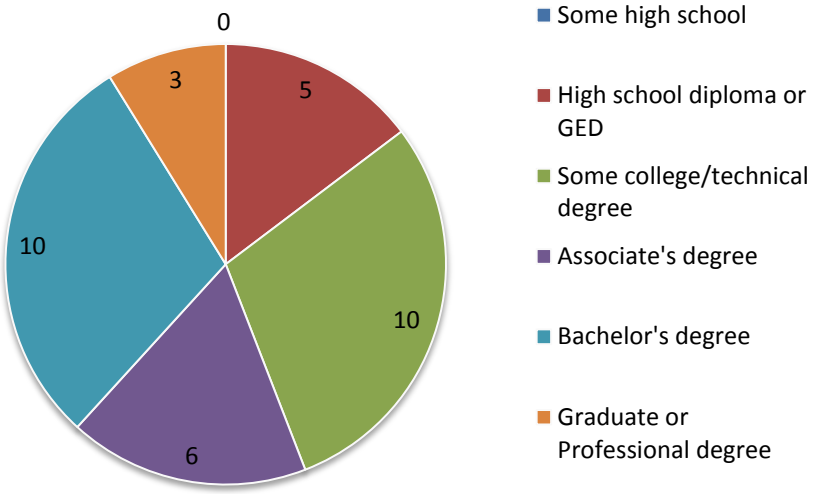


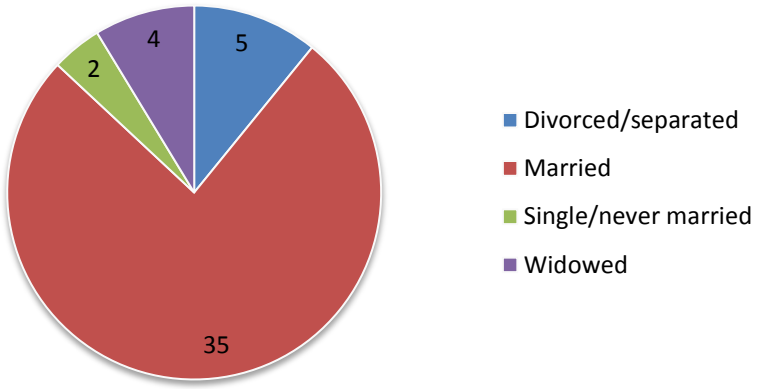
Figure 7: Education Level – Health Care Professionals



Community Members

Community members were asked additional demographic information not asked of health care professionals. This additional information included marital status, employment status, household income, and their proximity to the nearest clinic and to the Tioga Medical Center hospital in Tioga. The majority of community members (N=35) identified themselves as married, as exhibited in Figure 8.

Figure 8: Marital Status – Community Members



As illustrated by Figure 9, a plurality of community members reported being employed full time (N=28), followed by retired (N=10).

Figure 9: Employment Status – Community Members

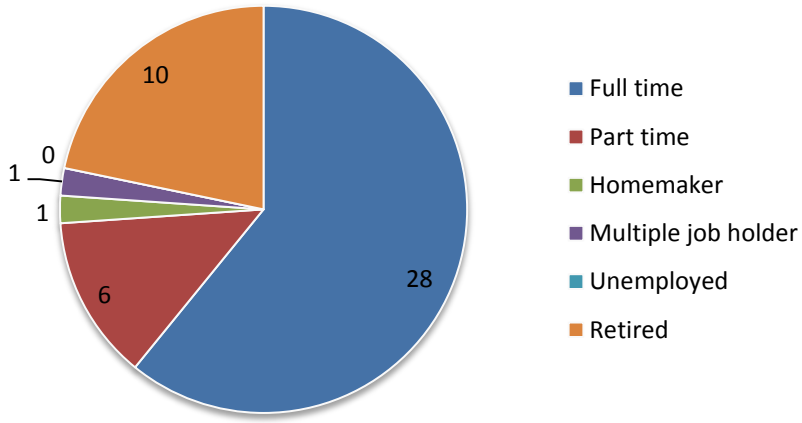
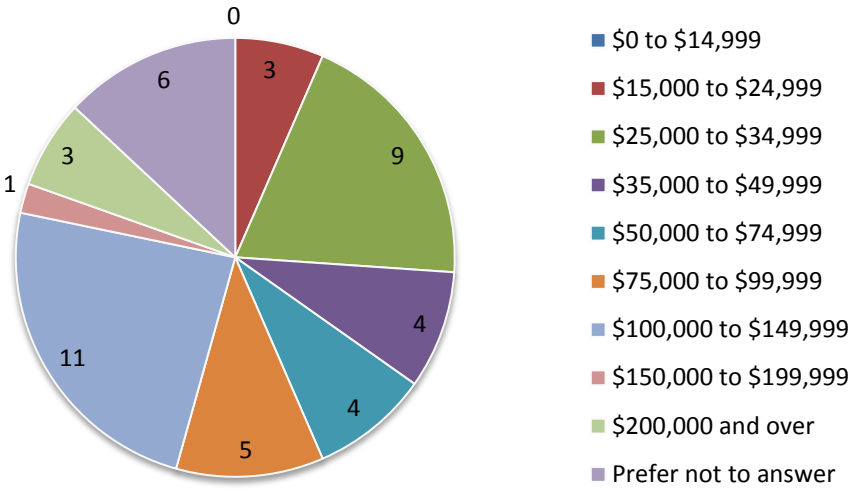


Figure 10 illustrates the wide range of community members' household income and again indicates how this assessment took into account input from parties who represent the broad interests of the community served, including lower-income community members. Of those that answered this question, the most commonly reported annual household income was $100,000-149,999 (N=11), followed by the $25,000--$34,999 (N=9). No one reported a household income of less than $15,000. Both spectrums of the financial ladder were represented as three community members reported earning $15,000 to 24,999 and three reported earning more than $200,000. Six community members preferred not to answer this question.

Figure 10: Annual Household Income – Community Members



Community members responding to the survey represented a fairly large geographic area. As shown in Figure 11, a plurality of the community members responding (N=21), travel 31 to 60 minutes to get to the nearest clinic outside of the Tioga Medical Center system. Seventeen community members must travel more than an hour.

On the other hand, Figure 12 shows that community members do not have much of a commute to reach TMC, with the majority of respondents traveling less than 10 minutes (N=32), followed by 10 to 30 minutes (N=9).

Figure 11: Respondent Travel Time to Nearest Non-TMC Clinic

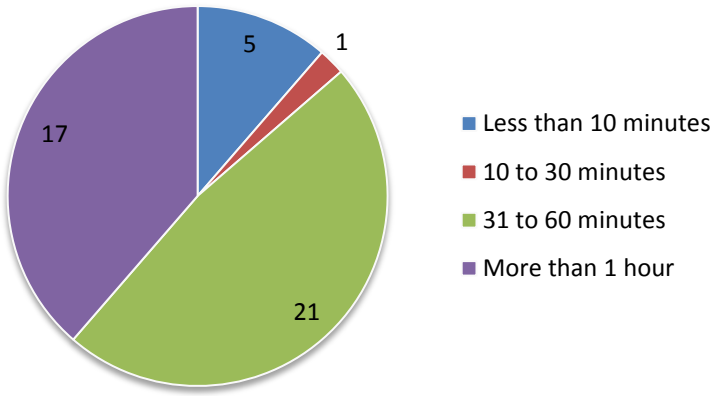
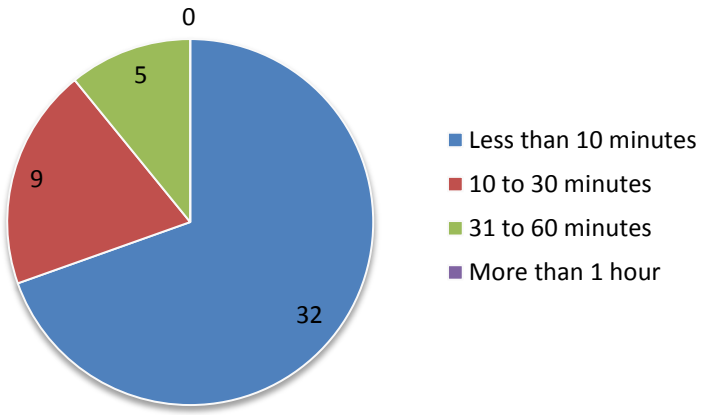


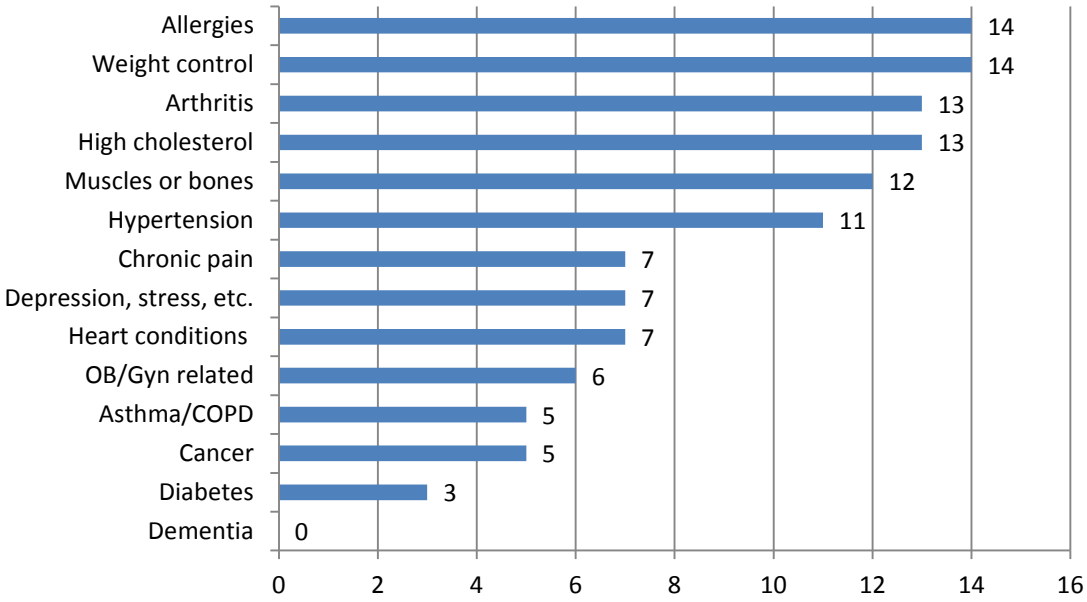
Figure 12: Respondent Travel Time to Tioga Medical Center



Health Status and Access

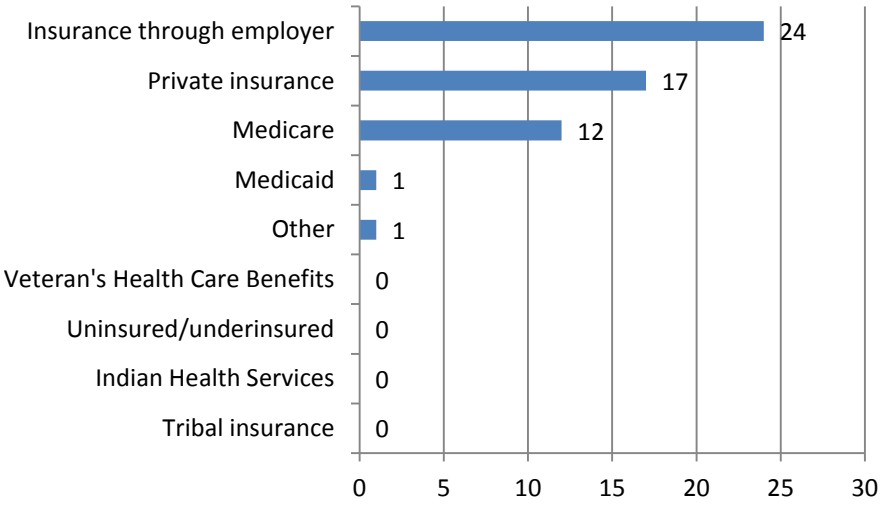
Community members were asked to identify general health conditions and/or diseases that they have. As illustrated in Figure 13, the results demonstrate that the assessment took into account input from those with chronic diseases and conditions. The conditions reported most often were allergies and weight control (N=14 each), arthritis and high cholesterol (N=13 each), muscles or bones (e.g., back problems, broken bones) (N=12), and hypertension (N=11).

Figure 13: Health Status - Community Members



Community members also were asked what, if any, health insurance they have. Health insurance status often is associated with whether people have access to health care. Not one community member reported having no insurance or being underinsured. As demonstrated in Figure 14, the most common insurance types were insurance through one's employer (N=24), private insurance (N=17) and Medicare (N=12).

Figure 14: Insurance Status – Community Members



Health Concerns

Respondents were asked to review a list of potential health concerns or conditions and rank them on a scale of 1 to 5 based on the importance of each potential concern to the community, with 5 being more of a concern and 1 being less of a concern.

Community members and health care professionals had similar responses for their top five most pressing concerns, with four concerns in common, but they differed in their level of importance. Also noteworthy is that health care professionals had higher mean rankings, indicating they perceive these issues to have more urgency than community members perceive them.

The top health concerns for both community members and health care professionals related to having adequate number of health care providers. Community members ranked adequate number of health care providers and specialists as their highest concern (4.00) and health care professionals similarly placed not enough health care staff in general (4.40) in their top position.

Both groups shared financial apprehensions as their second most oft-cited concern, but in different areas. Community members selected higher costs of health care for consumers (3.82), which health care professionals ranked as their fifth highest concern (3.86). The financial viability of the hospital was health care professionals' second most pressing community concern (4.20); however, community members did not regard this issue as pressing.

Addiction/substance abuse was similarly positioned as the fourth most cited concern (3.49 for community members and 4.12 for health care professionals.) Rounding out the top five concerns held by community members were not enough health care staff in general, selected as their third ranked concern (3.78); addiction/substance abuse positioned in fourth place (3.49); and cancer (3.47) was the fifth highest ranked concern. Health care professionals ranked adequate number of health care providers and specialists as their third concern (4.12); addiction/substance abuse as their fourth highest concern (3.88); and higher costs of health care for consumers (3.86) was positioned in fifth place.

On the opposite end of the spectrum, a focus on wellness and prevention of disease and diabetes were perceived to be the lowest concerns for community members with average rankings of 2.80 and 2.91 respectively. For health care professionals, access to needed technology/equipment (2.91) and distance/transportation to health care facility (3.31) were their least important concerns.
Figures 15 and 16 illustrate these results.

Figure 15: Health Concerns of Community Members

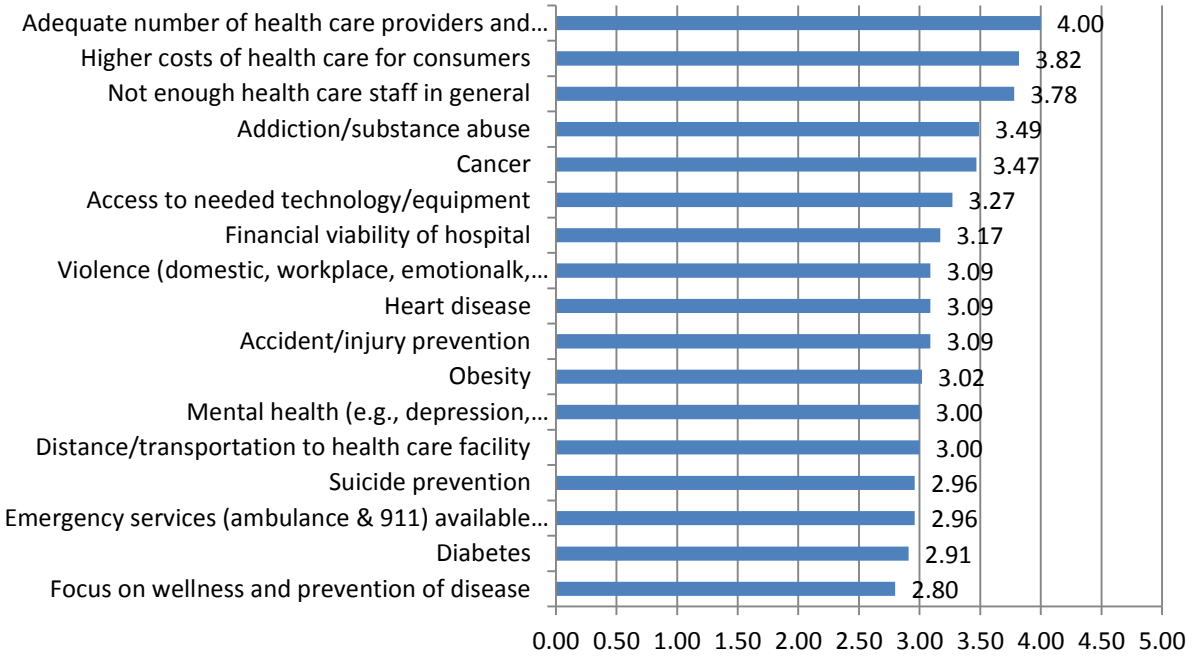
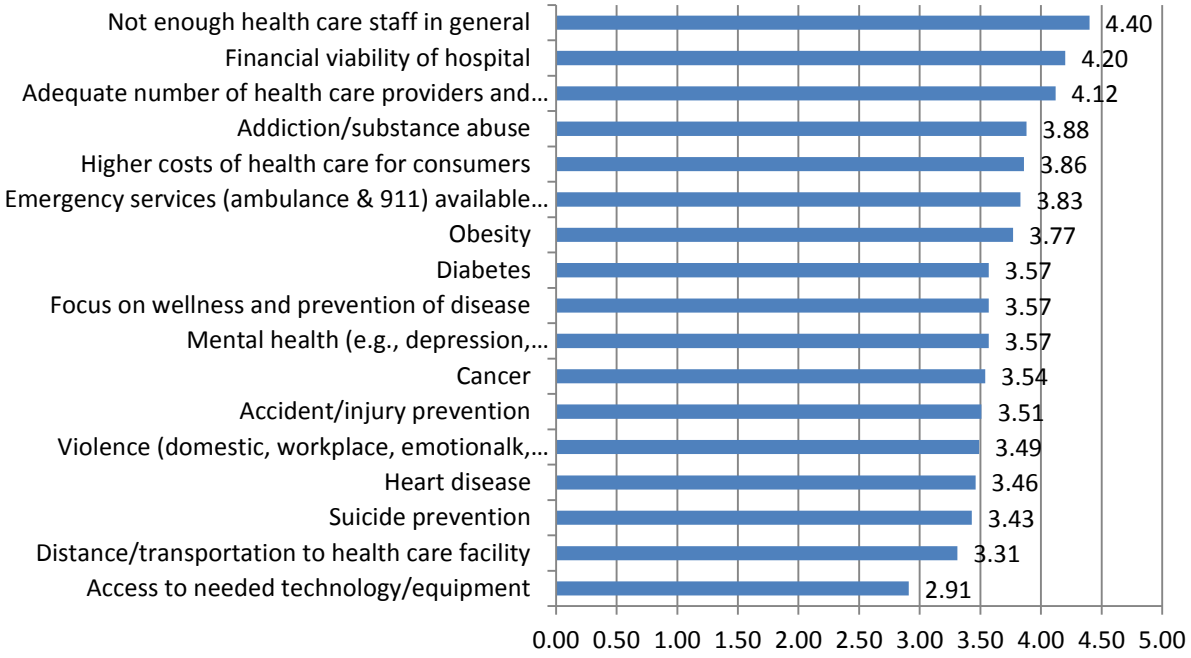


Figure 16: Health Concerns of Health Care Professionals



Community Impact

Respondents also were asked, in an open-ended question, to explain how these concerns impacted their community. Nine community members and nine health care professionals answered this question.

A plurality of community members (N=4) explained that as population increase and the community grows, more problems and stresses arise including an increase in drugs, crime, mental illness and trauma. Four respondents also stated the need for a permanent doctor to become part of the community and one specified a need for a full time ambulance worker. One shared the concern that if a patient can't get help, it is a long way to go out of town.

Health care professionals had lengthier responses to this question, showing the complexity of the current state of affairs in the community due to the oil patch activity and population influx. The majority of respondents (N=6) shared an overwhelming concern for the staff, especially the emergency service staff who are overtaxed because of increase call activity. Increasing safety, specifically improving hospital locks at night time, and increasing community outreach to attract more emergency service volunteers were other common responses. Comments from health care professionals about what they view as the most important concerns included:

Health care professionals' comments relating to emergency services

- Emergency services are over taxed because of volunteers having to take so many calls. Clinic is not adequately staffed so patients come to ER as a clinic. Payments are not made so hospital goes without money.
- Our volunteer services are being pushed way beyond what they should be pushed. They are extremely busy taking care of accidents, transfers and fires. We don't see the new people involved in this area but they expect to be taken care of. It would be nice to have them more involved in the community but it is hard to compete with oil field wages. We train them in, but then they find a better paying job in the oil field and leave.
- We are stressing our already overburdened ambulance, fire and general services. We cannot handle all this increased population so fast.
- Our community size is growing exponentially, however, our health care services are designed for a stable population of 1,200 people. With the rapid growth, our health care providers are not growing to sustain the demand.
- Our EMTs are excellent but because of the influx of people coming to work in the oilfields we need more of them. I see burnout in the future because it's only going to get worse. There are more major accidents/traumas. Our facility is small compared to larger trauma centers.

- We have a hard time keeping staff, CNAs, housekeeping and dietary due to higher paid jobs in the community that require less work. Many of the wives that come with their husbands work for less than a month in our health care facility before finding a higher paid job in the oil industry.

Health care professionals' comments relating to community outreach

- We need more community outreach (education; prevention courses) but then we don't have the staff to do this.
- We should have more education but have no one to do the educating without expecting a great salary to do such.

Community Concerns

In addition to the local health concerns, the survey asked respondents to rank larger health and wellness problems that may be affecting the community. Some of these concerns may not typically be addressed by hospitals, but given the changing dynamics of Tioga due to the oil patch activity and increasing population, it is important to assess greater community concerns. Moreover, monitoring community conditions can help to address mental health issues that accompany a stretched and stressed community.

Lack of affordable housing was the number one community condition stated by both community members (N=4.37) and health care professionals (N=4.83). The fact that health care professionals average response is so close to a ranking of 5.00 shows the severity of this concern.

Other areas of congruence among community members and health care professionals are that both groups ranked impact of increased oil/energy development (N=3.96 for community members and N=4.53 for health care professionals) and maintaining enough health workers (N=4.17 and 4.44) among their top five most pressing concerns.

Rounding out the top five community conditions that concern community members are traffic safety, including road safety and drunk driving (N=4.24) and increasing population, including residents moving in (N=3.91).
Health care professionals perceived different community conditions. Lack of employees to fill positions was their second most oft-cited concern (N=4.56), followed by maintaining enough health workers (medical, dental, wellness) and alcohol and drug use and abuse (N=4.44 each).

"Other" was the fourth most selected category (N=4.50) so a detailed description of the responses is worth mentioning. Four respondents wrote in their own concerns which were: motor vehicle accidents; volunteers are overworked; truck traffic; and wages in health care.

Although the aforementioned results were the most frequently ranked concern it is also important to acknowledge the open-ended responses this survey question asked: a) Which concern is the most important and b) How do these concerns impact your community? Even though the open ended questions mirror the ranked list of concerns it is significant to hear from the community members in their own words and phrasings.

Two follow up questions appeared after the list of health questions. The first question was:

Question A: Which concern is the most important?

Thirty two community members completed the question with the majority of responses falling into the following thematic concerns:

- Lack of affordable housing (N=10)
- Maintaining health workers (N=8)
- Road and traffic safety (N=5)
- Drugs and alcohol (N=2)
- Law enforcement and public safety (N=2)

Fifteen health care professionals provided their own open-ended response to question A. Their responses were much longer and addressed many concerns at once, indicating a domino effect of the impacts. Health care professionals responses touched on the same as community members however, two new key themes emerged: lack of sense of community emerged (N=4) and need for recreational center (N=3). Specific comments relating to lack of sense of community include (direct quotes):

- The idea of community is starting to disappear with the out migration of long term residents and the in migration of temporary workers with litter concern for the community.
- Our community is no longer the nice, safe place to live and raise children as it once was. It is a terrible feeling when you no longer feel safe in your own home, or to let your children play outside.
- The bars are full but the churches are not seeing an increase in attendance.

Specific comments relating to need for a recreational center include (direct quotes):

- Need more recreational activities for young men.
- Need a rec center; our pool is in jeopardy of shutting down altogether. There needs to be a place for our youth. A nice park on the south end would be beneficial too for all this new housing going in.
- The community itself has a lot of need for money to return to the community to update/remodel existing facilities such as the Parks department, hospital and movie theatre.

Other shared common concerns were public safety (N=3) and lack of affordable housing (N=3).

Question B: How do these concerns impact your community?

Eleven community members answered the follow up question with majority of responses indicating that they were greatly impacted.

- Not having enough employees means you might lose a facility.
- Lack of affordable housing affects those with fixed and lower incomes.
- The school is growing; however we are not certain it will be big enough. Traffic safety is a GROWING concern—wait time, travel time.
- People are placed in inadequate housing for our climate; people needing to live in campers for the winter.
- A lot of accidents; young people getting killed in car accidents, increase in DUIs.
- Lots of litter makes our community look terrible and uninviting.
- Not enough people willing to work at grocery stores, restaurant, etc.
- If no appropriate place to live, no families or family activities.
- I see criminal activity going on in my neighborhood.
- Severe impact on fire and ambulance personnel and city and rural infrastructure (roads, water availability, etc).
- Fractured our community and difficult to respond quickly with the necessary help.

Figures 17 and 18 illustrate the complete results.

Figure 17: Community Concerns of Community Members

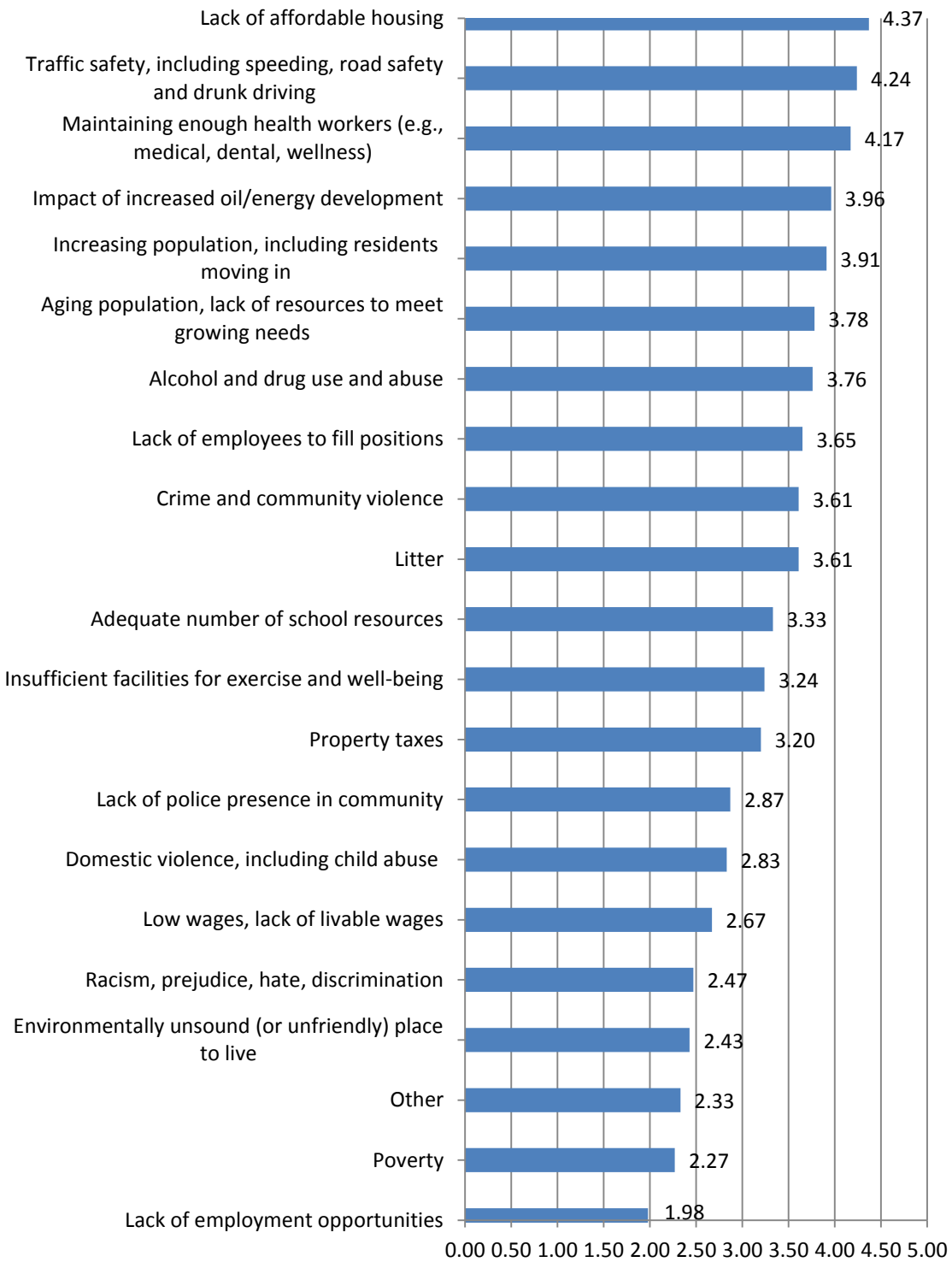
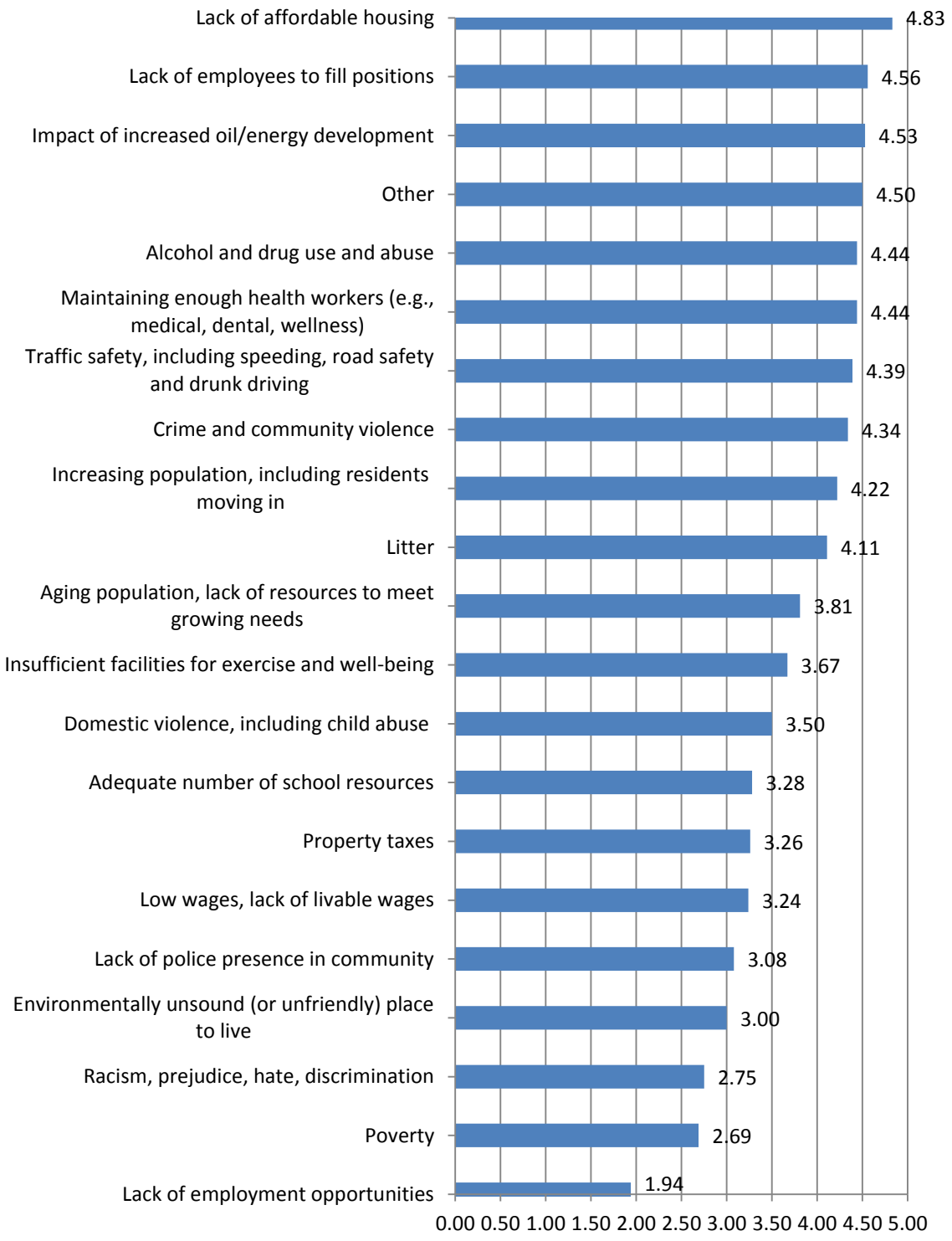


Figure 18: Community Concerns of Health Care Professionals



Concerns and Suggestions for Improvement

Each version of the survey concluded with an open-ended question that asked, "Overall, please share concerns and suggestions to improve the delivery of local health care." Responses were supplied by twelve community members and eleven health care professionals. Responses varied widely, but an appreciation for and contentment with the services offered by TMC was often expressed.

Below are some of the specific comments relating to overall concerns and suggestions from community members in their own words. Unless otherwise indicated, each response was given once.

- Clinic needs to be open on weekends, holidays and evenings, NOT every other Saturday. (N=3)
- I think Tioga is doing a good job. (N=2)
- We need local doctors; two PA are going to retire soon. (N=2).
- Need better wages and improved benefits. Also need more administration involvement with staff.
- Need more modern hospital and clinic with Progressive care unit beds and updated equipment.
- Administration lacks promotional experience for new hospital.
- No clear policies.

Below are some of the specific comments relating to overall concerns and suggestions from health care professionals:

- Tioga hospital needs upgraded equipment and additional space. Things are old and outdated. (N=2)
- We have a wonderful health care team in our community. We really stress about EMS transportation due to our area having only volunteer EMT's. We have trouble finding crews for transportation due to this reason. (N=2)
- Need paid ambulance (EMS) crew rather than volunteers. The same people respond all the time and sometimes it's hard to get anyone to respond. We need a call schedule. (N=2)
- Need more doctors that will be willing to stay for continuity of care. As people age, they need to not have to see a different physician at every appointment. (N=2)
- Need more clinic hours; triage at the ER level; affordable housing for hospital staff.
- Reception on nights and weekends would help improve things—then they could collect money after the ER visit and that would help them complete the paperwork instead of leaving it up to the nurses.

- Cleanliness of the hospital is sometimes horrible and items are seldom stocked where they should be. Cleaning crew has not been trained properly and that leaves the nursing staff again to clean. Cleanliness affects patient care, especially after we've had someone in isolation.
- TMC delivers great care. I wish companies would appreciate the facility and help out financially with the building project. TMC needs to continue to grow to keep up with the needs of our expanding population. I wish the companies would encourage their employees to become involved in the community. The local volunteers need help!

Awareness of Services

The survey asked community members whether they were aware of the services offered locally by Tioga Medical Center. The survey given to health care professionals did not include this inquiry as it was assumed they were aware of local services due to their direct work in the health care system.

In the paper version of the survey, respondents were given the option to check a "Yes" or "No" box for each listed service to indicate whether they were familiar with the service. Because a large number of respondents checked only the "Yes" boxes, reported below are the numbers of "Yes" choices for each service offered. The online version included only a choice for "Yes, aware this service is offered locally." The limitation with this reporting method is that it is implied that the gap between how many answered "Yes" and the total response count reflects those that are not aware. However, it is unknown if the difference reflects unawareness or respondents skipping that particular listed service.

Overall, community members were cognizant of TMC's service offerings, indicating successful advertising strategies by the hospital. Community members were most aware of (following each service is the number of respondents who indicated they were aware of that service):

- Ambulance (N=42)
- Laboratory services (N=40)
- Emergency room (N=39)
- Physical therapy (N=39)
- General x-ray (N=39)
- Dental services (N=38)
- Health screenings (N=37)
- Hospital (N=37)

Community members were least aware of the following services:

- Pediatric/ child medical care (N=13)
- Social services (N=18)
- Visiting specialists- general surgeon (N=18)
- Ray Clinic (N=20)
- Powers Lake Clinic (N=20)
- Speech therapy (N=20)
- Swing bed services (N=20)

The services with lower levels of awareness may present opportunities for further marketing, greater utilization, and increased revenue. Figures 19-23 illustrate community members' awareness of services.

Figure 19: Community Members' Awareness of Locally Available General Services

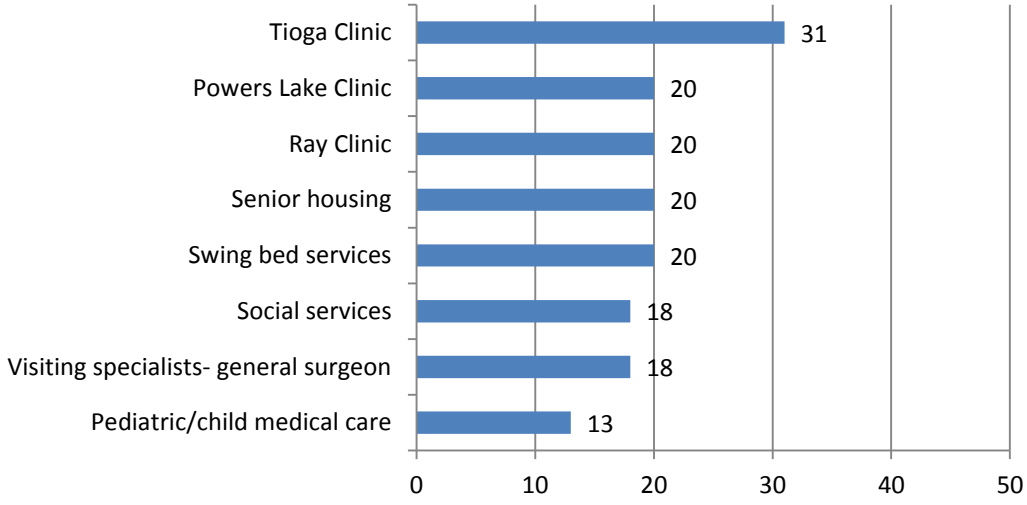


Figure 20: Community Members' Awareness of Locally Available Acute Services

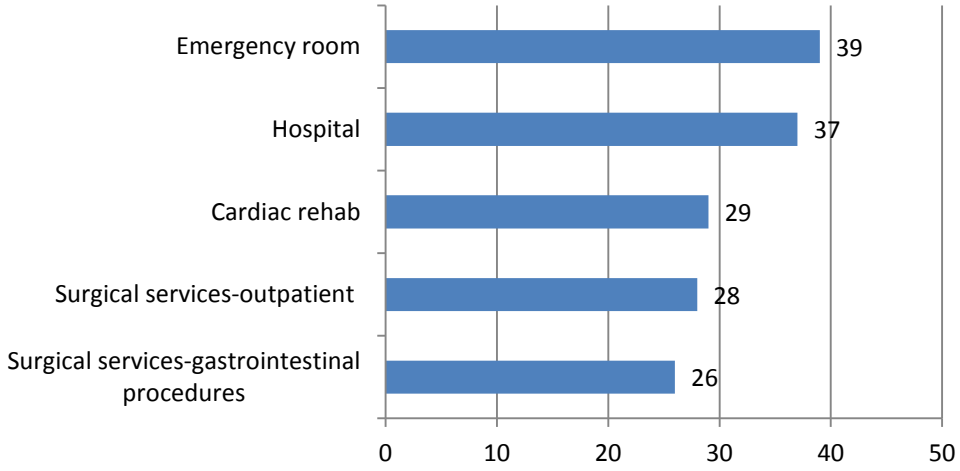


Figure 21: Community Members' Awareness of Locally Available Screening/Therapy Services

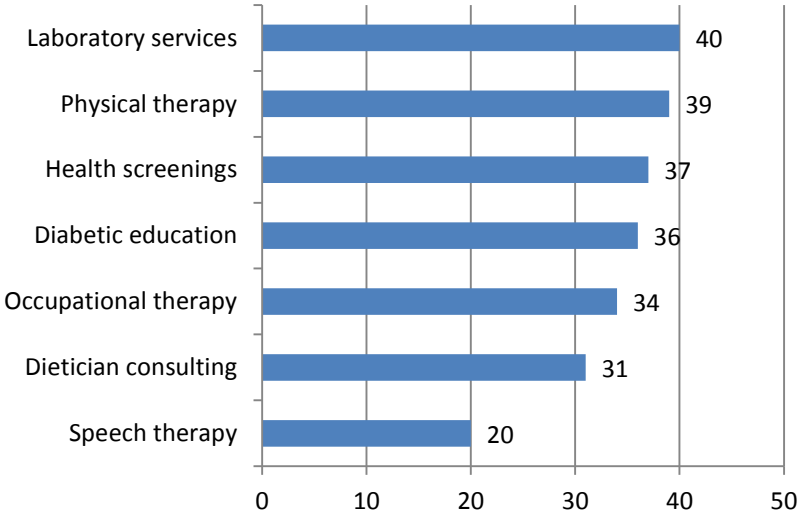


Figure 22: Community Members' Awareness of Locally Available Radiology Services

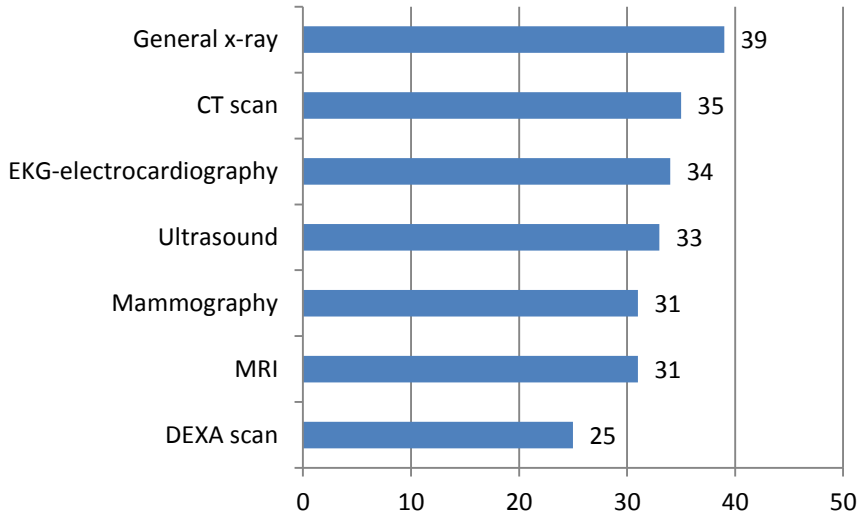
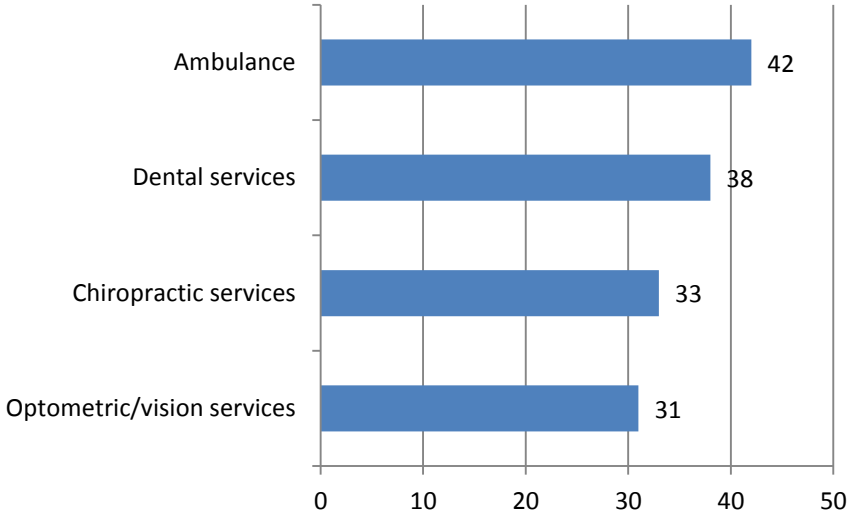


Figure 23: Community Members' Awareness of Other Community Services



Information about how community members learn of local services emerged during the focus group session. Participants said the advertisements listing available services in the local community newspaper were helpful. Others were kept abreast of services by referrals from Weight Watchers, by attending community-wide trainings at Farm Fest, by the TMC website, by their church congregation and by word of mouth. Community members were concerned newcomers may not know of all the service offerings and they are unlikely to

read the local newspaper or watch the local news station. To target the new labor force, community members suggested updating the TMC website with more specifics. For example, they wanted to know what kind of occupational and physical therapy was available. What kinds of health screenings are offered? They were concerned that if the newcomers don't know of services offered, the default assumption is that a small hospital lacks options and the newcomer may seek care elsewhere.

Health Service Use

Community members were asked to review a list of services provided locally by Tioga Medical Center and indicate whether they had used those services at TMC, at another facility, or both. Figures 24-28 illustrate these results.

Respondents identified the Tioga clinic (N=46), emergency room (N=35), laboratory services (N=35), and general x-ray (N=32) as the services most commonly used locally. There were a few services that respondents traveled outside of the area to receive, even though they are available locally. The following are services they most commonly sought out of the area:

- Optometric /vision services (N=16)
- Chiropractic services (N=10)
- General surgeon (N=10)
- Surgical services-outpatient (N=10)
- Surgical services-gastrointestinal procedures (N=8)
- MRI (N=8)
- Ultrasound (N=8)

As with low-awareness services, these services – for which community members are going elsewhere – may provide opportunities for additional education about their availability from the local health system and potential greater utilization of local services.

Figure 24: Community Member Use of Locally Available General Services

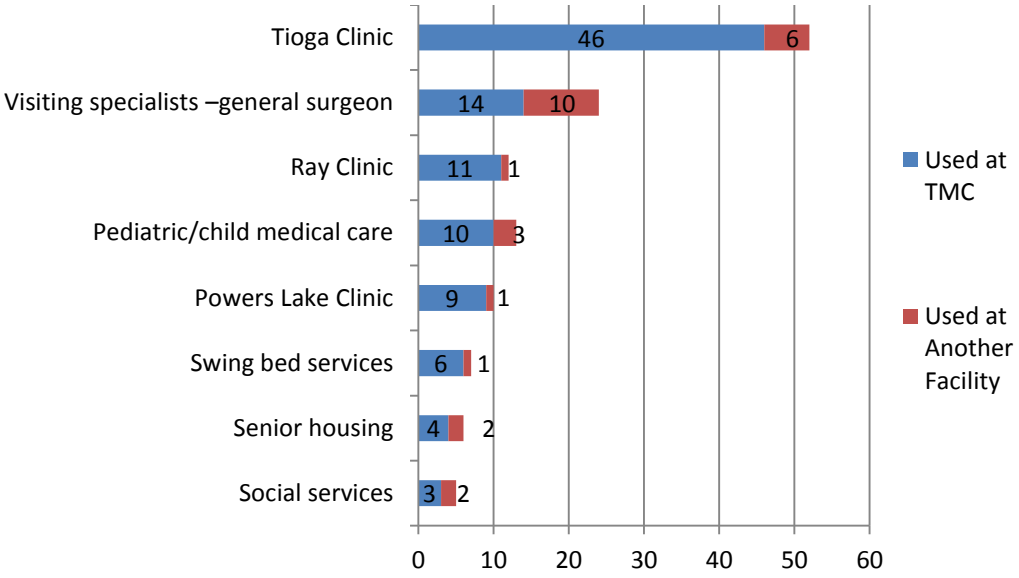


Figure 25: Community Member Use of Locally Available Acute Services

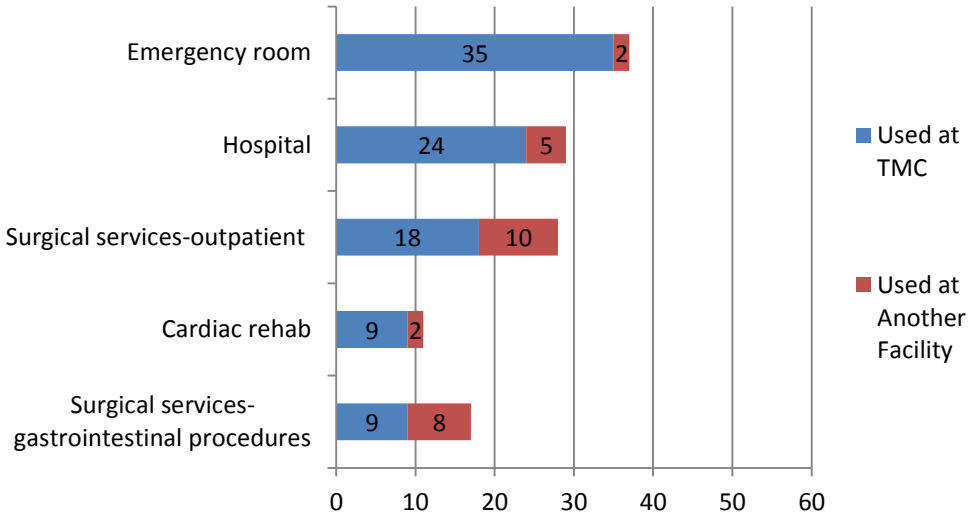


Figure 26: Community Member Use of Locally Available Screening/Therapy Services

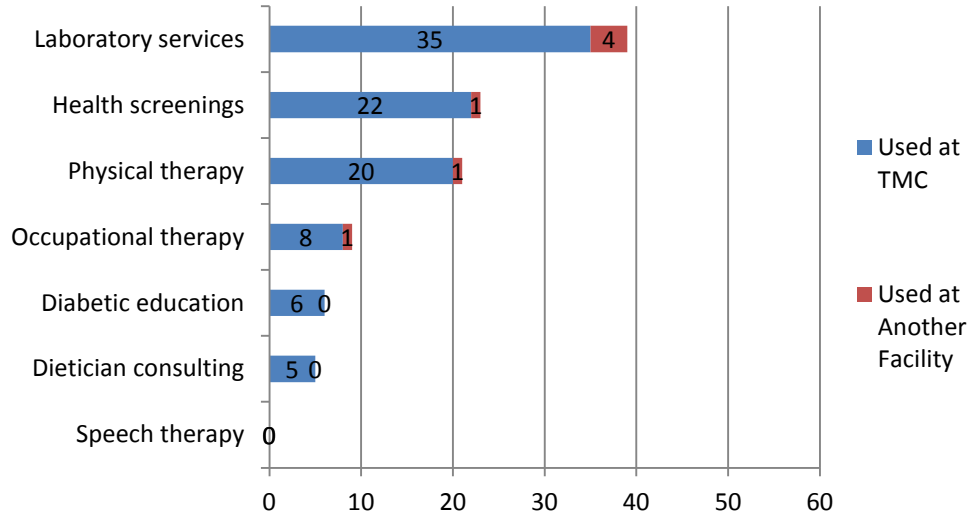


Figure 27: Community Member Use of Locally Available Radiology Services

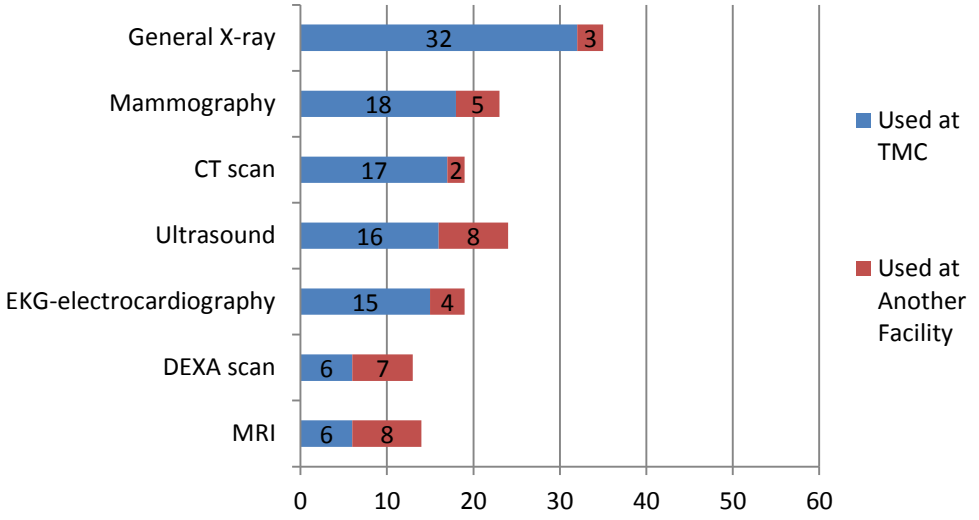
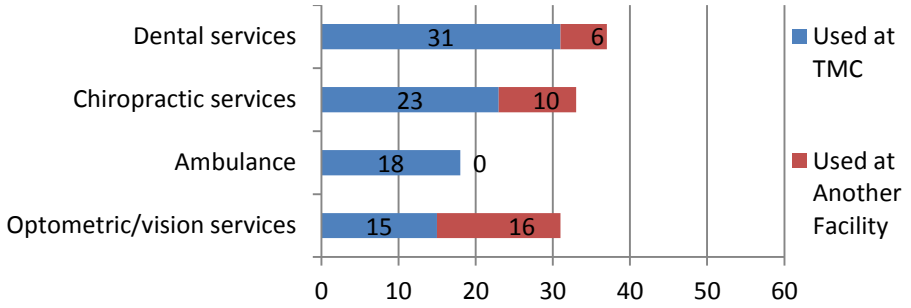


Figure 28: Community Member Use of Services Offered by Providers Other than Tioga Medical Center



Additional Services

In another open-ended question, both community members and health care professionals were asked to identify services they think Tioga Medical Center needs to add. This question had no parameters or wrong answers; it allowed respondents to dream and create a wish list regardless if these additional services are feasible. Thirteen community members provided responses to this question, with three of those suggesting adding more surgery services and obstetrics, including prenatal and delivery services due to the influx of younger and pregnant people that are coming into the community. Other responses included offering a walk-in clinic, urgent care, dermatologist, allergist and assisted living facility.

Four health care professionals answered this question offering four distinct responses. Increasing security was stressed, especially at night. One respondent voiced concern that there are only five women on staff at night and patients have appeared with loaded guns, high on drugs, drunk, and showing aggressive behavior. Other responses indicated a need for a bigger hospital with more a more stable and larger employee pool, updated equipment and larger bathrooms.

Reasons for Using Local Health Care Services and Non-Local Health Care Services

The survey asked community members why they seek health care services at Tioga Medical Center and why they seek services at another health care facility. Health care professionals were asked why they think patients use services at TMC and why they think patients use services at another facility. Respondents were allowed to choose multiple reasons.

Community members and health care professionals were in alignment across the board concerning why people choose care at TMC. The top four reasons were: convenience TMC (N=39 community members and N=33 health care professionals), familiarity with providers (N=34 and N=26), loyalty to local service providers (N=29 and N=25) and proximity (N=27 and N=22). The similarities among the results from the two groups indicate a shared set of health care values from community members and health care professionals. The parallel results could also indicate an accurate assessment of the hospital's strengths and weaknesses.

Figures 29 and 30 illustrate these responses.

Figure 29: Reasons Community Members Seek Services at Tioga Medical Center

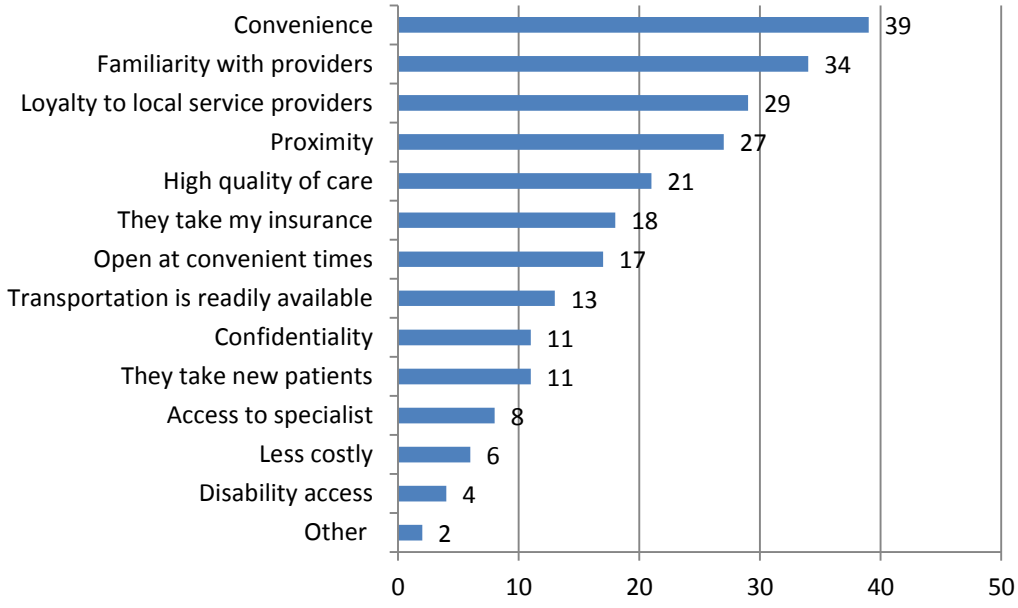
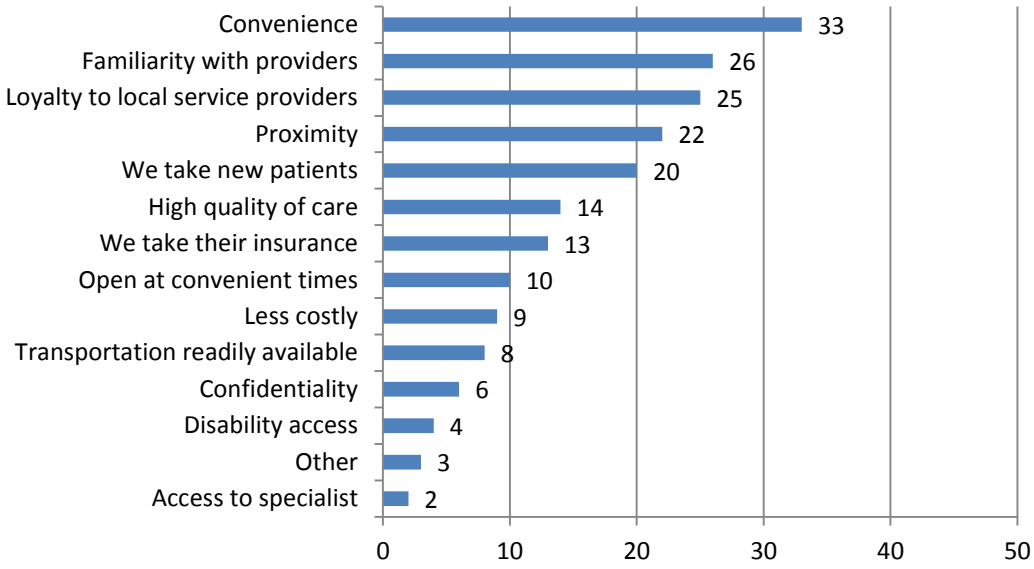


Figure 30: Reasons Health Care Professionals Think Patients Seek Services at Tioga Medical Center



The similarities continued in results from community members and health care professionals with respect to seeking health care services at other facilities. Both groups ranked the same top four reasons for seeking care elsewhere, but in a slightly different order. Providing necessary specialists was, by a large margin among both groups, the primary motivator to seek care elsewhere (N=40 for community members and N=31 health care professionals). Confidentiality and high quality of care were tied for the second most common reason for seeking care elsewhere by community members (N=10 each), whereas confidentiality and open at convenient times were tied for second place among health care professionals (N=11).

These results are illustrated in Figures 31 and 32.

Figure 31: Reasons Community Members Seek Services at Other Health Care Facilities

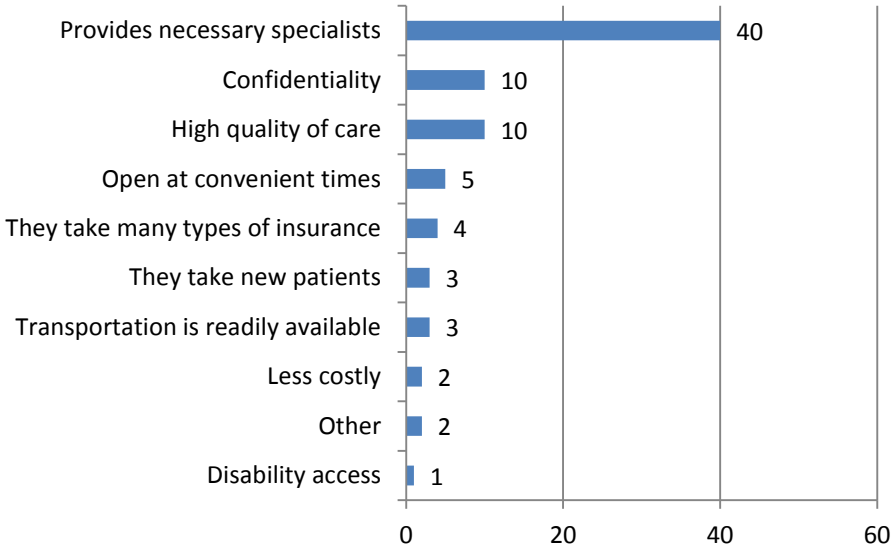
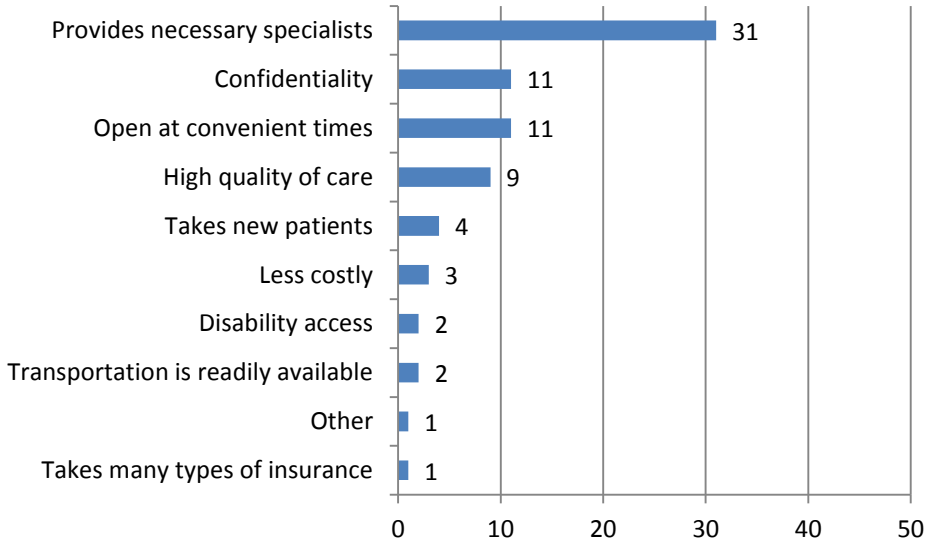


Figure 32: Reasons Health Care Professionals Believe Community Members Seek Services at Other Health Care Facilities



The survey provided both community members and health care professionals the opportunity to suggest "other" reasons that patients seek health care services in the local area as well as other reasons they seek services outside of the area. In terms of using local services, one community member specified using Ray Clinic over Tioga Clinic.

Three health care professionals selected the "other" answer and indicated that they believe patients choose to get care at TMC because of the friendly and trustworthy staff and the availability of services. One comment addressed the perception that the ER staff at Mercy hospital in Williston tells their patients that they can get through the Tioga emergency room without any waiting time so patients come to TMC due to the faster ER service.

In terms of using other health care facilities, one community member chose the open-ended "other" answer, explaining that services were not offered in Tioga.

One health care professional clarified in the "other" response that patients get transferred elsewhere after TMC has stabilized them.

Barriers to Accessing Health Care

Both community members and health care professionals were asked what barriers prevent them or other community members from receiving health care. Community members ranked lack of specialists as their number one barrier (N=17), followed by a tie (N=16) for inability to get an appointment and lack of doctors. Lack of evening or weekend hours was the fourth most common barrier cited (N=12).

Health care professionals arrived at the same conclusions regarding most common barriers, but ranked them in different order. Lack of evening or weekend hours was their most cited barrier (N=20), followed by inability to get an appointment (N=16), and then lack of specialists (N=14). There was a tie for the fourth most common barrier, as health care professionals ranked lack of doctors and lack of continuity of care the same, each receiving twelve votes (N=12).

These perceived barriers offer insight into where the hospital can start to brainstorm strategies to address these obstacles and the best way to remove them. See Figures 33 and 34 for additional barriers to local health care use.

Figure 33: Community Members' Perception of Barriers to Using Local Care

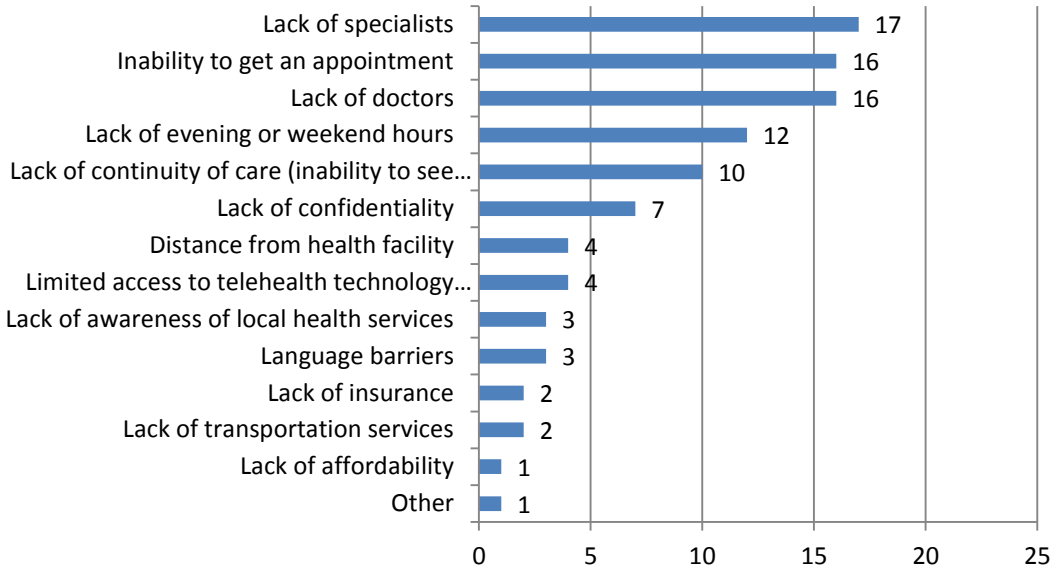
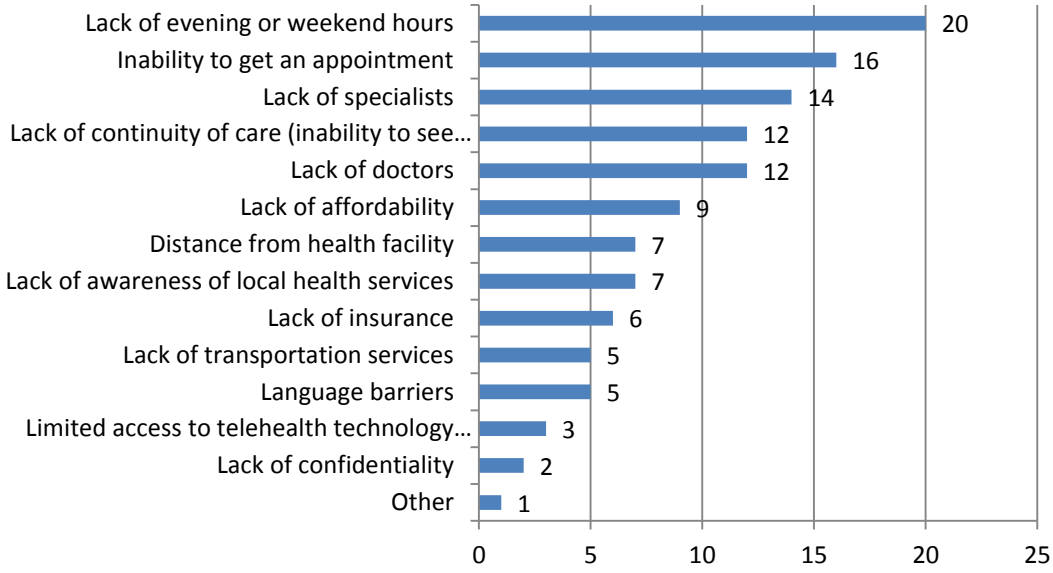


Figure 34: Health Care Professionals' Perception of Barriers to Using Local Care



Collaboration

Respondents were asked whether Tioga Medical Center could improve its levels of collaboration with other local entities, such as schools, economic development organizations, local businesses, schools and other providers. Of the three answer choices, ("yes," "no, it's fine as is," "don't know"), community members were most likely to choose "No, it's fine as is" while health care professionals saw room for more collaboration. Results show that both groups concur that they would like TMC to improve its collaboration with business and oil industry (N=15 and N=20). Otherwise, community members selected the response "No, it's fine as is" more often than any other response for all categories.

Health care professionals expressed just the opposite of this as they indicated more collaboration is needed among all categories except with other local health providers. Figures 35 and 36 illustrate these results.

Figure 35: Community Members – Could Tioga Medical Center Improve Collaboration?

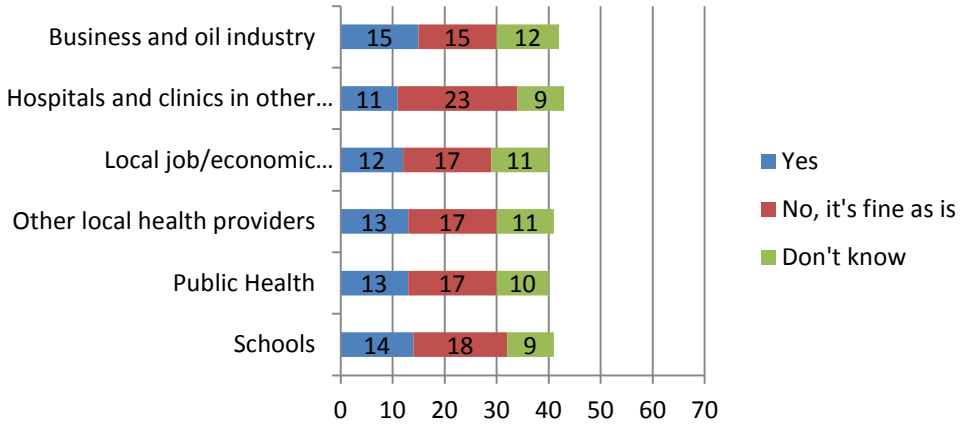
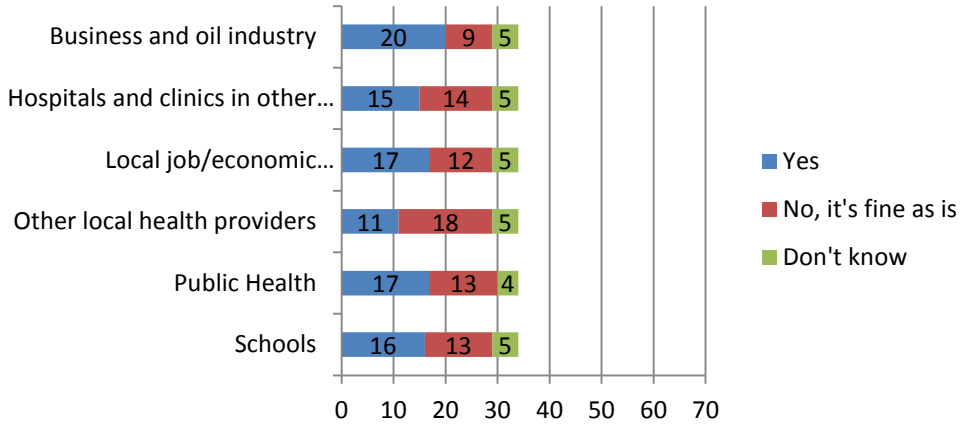


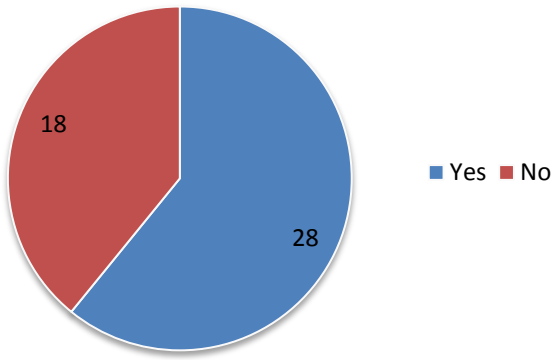
Figure 36: Health Care Professionals – Could Tioga Medical Center Improve Collaboration?



Awareness of Tioga's Clinic Extended Hours

Community members were polled regarding their awareness of Tioga's extended clinic hours; additional clinic hours are offered Monday through Friday from 9-5 pm and every other Saturday from 8 am to 12 pm. The majority of community members were aware of the extended hours (N=28), however increasing marketing efforts may be helpful to inform the large portion of the population apparently unaware of the extended hours, as represented by the 40% of survey respondents who were unaware (N=18). Figure 37 illustrates these results.

Figure 37: Community Members Awareness of Tioga's Clinic Extended Hours



Community Assets

Both community members and health care professionals were asked what they perceived as the best things about their community in five categories: people, services and resources, quality of life, geographic setting, and activities. In each category, respondents were given a list of choices and asked to pick the top three. Respondents occasionally chose less than three or more than three choices within each category. The results indicate that residents view the friendliness and helpfulness of people as the top community asset.

Other assets include things such as a sense of community; socially and culturally diverse community. Health care professionals added the sense of community engagement. Figures 38 to 42 illustrate the results of these questions.

Figure 38: Best Things about the PEOPLE in Your Community

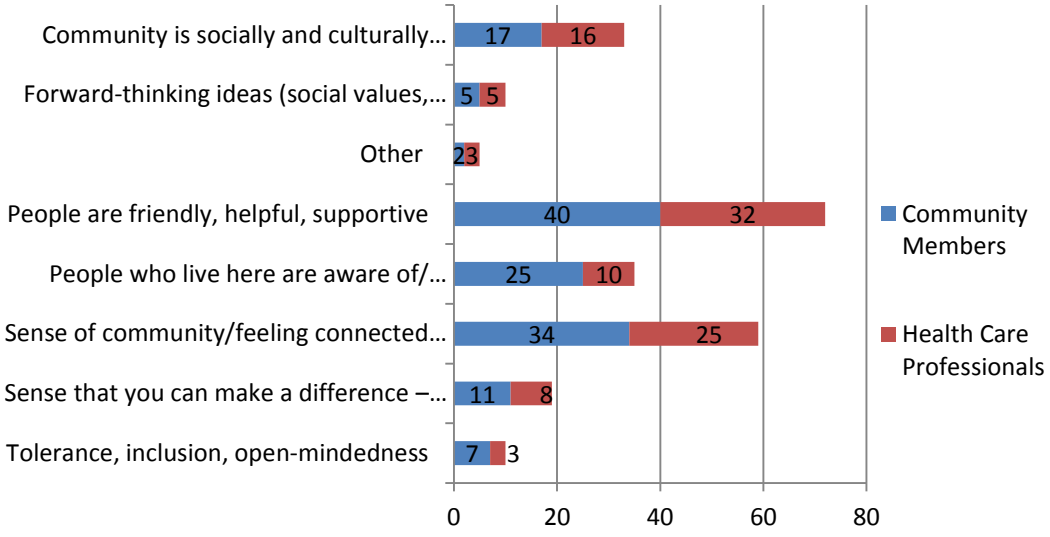


Figure 39: Best Things about the SERVICES AND RESOURCES in Your Community

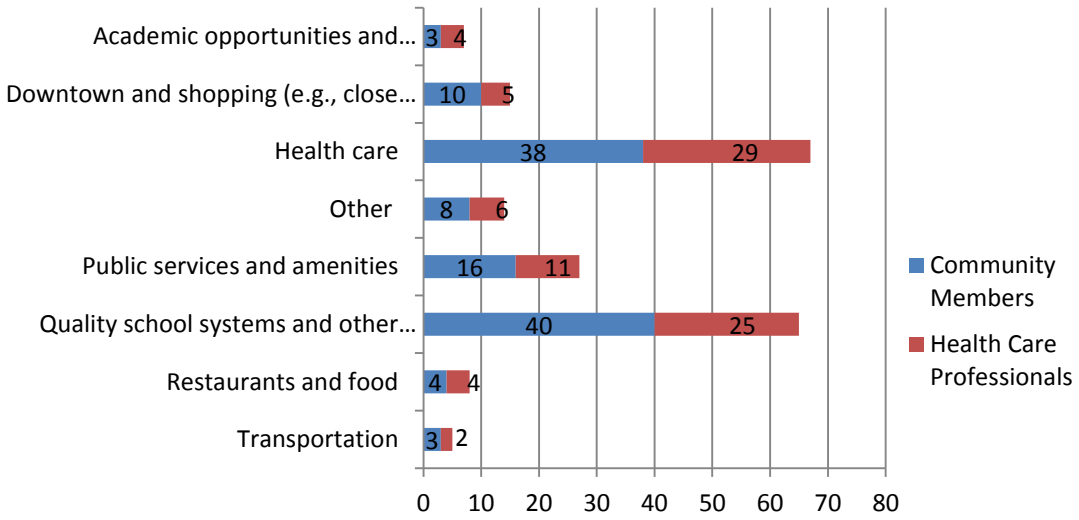


Figure 40: Best Things about the QUALITY OF LIFE in Your Community

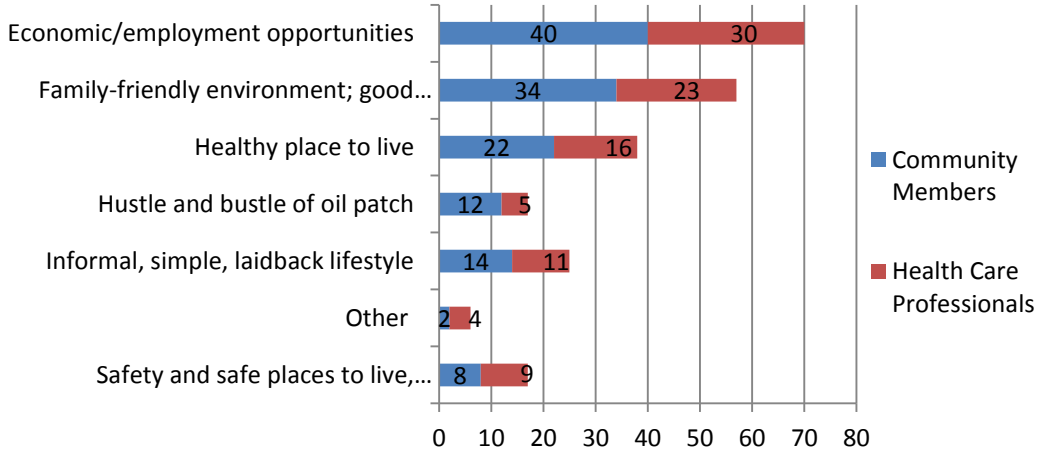


Figure 41: Best Things about the GEOGRAPHIC SETTING of Your Community

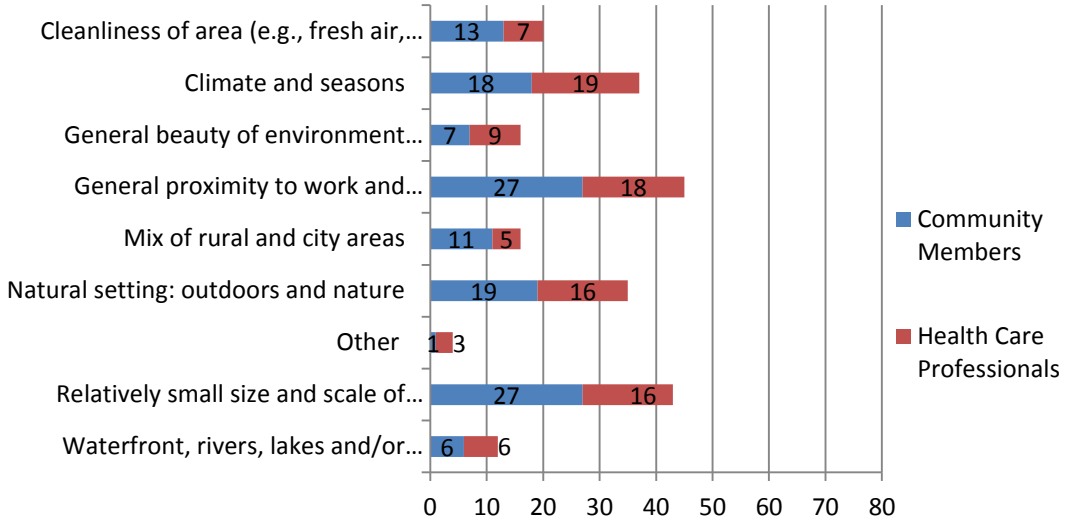
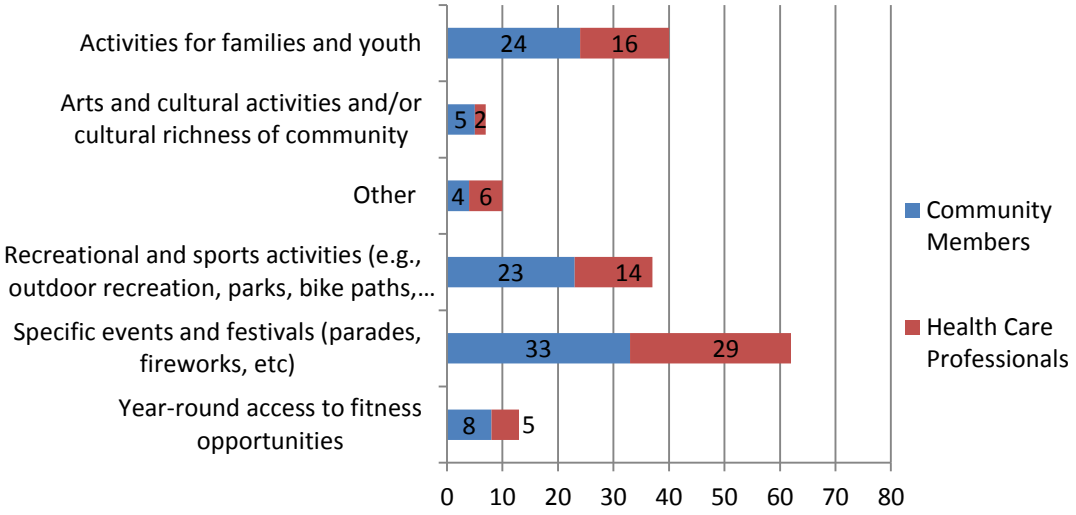


Figure 42: Best Thing about the ACTIVITIES in Your Community



Findings from Key Informant Interviews and Focus Group

The questions posed in the survey also were explored during a focus group session with the Community Group as well as during key informant interviews with community leaders and public health professionals. As an initial matter, interviewees and focus group participants generally were very complimentary toward hospital staff and their overall presence in the community. As one key informant summarized, "They are doing a bang up job." Another commented, "Keep up the good work." Participants also pointed out that TMC is one of the area employers that allow their staff to volunteer their time to niche services, noting the CFO is also the President of the Chamber of Commerce and he, along with the CEO, volunteer with the Fire and Rescue Department.

Several themes emerged from these sessions. Many of the same issues that were prevalent in the survey results emerged during the key informant interviews as well (and were further explored during the discussions), but additional issues also appeared. Generally, overarching issues that developed during the interviews can be grouped into five categories (listed in no particular order):

1. Accident/Injury prevention/EMS services
2. Need for more mental health providers
3. Adequate number of health care providers and specialists
4. Violence (domestic, workplace, emotional, physical, sexual)
5. Hospital viability

A more detailed discussion about these noteworthy issues follows:

1. Accident/Injury Prevention/EMS Services

Like many small town hospitals in boom areas, Tioga Medical Center has seen a dramatic leap in ambulance runs and emergency room patients. "In 2007 we would see 600 patients in ER per year," TMC CEO Randall Pederson explains in a recent news article by Stanford University. "In 2012, we anticipate seeing over 2,000. So in a five-year period, we have more than tripled our emergency room visits." The types of accidents are changing with the influx of oil activity. As a result, TMC is seeing a lot more industrial accidents, major trauma, many of those involving car accidents, because there's a lot more vehicles on the roads. For example, Pederson notes that many accidents involve a 40-ton tank truck

colliding with a 5,000-pound passenger car. Those can bring several patients with horrible injuries into the small ER at the same time. The one doctor on call has to scramble to get some help.

Other participants commented on new types of fire accidents. The fires they are getting called to fight are not the grass or structure fires which are typical in rural towns. Now its chemical fires and rig accidents where "things are blowing up." It is important to note that Hess Oil has flown the volunteer fire department to Texas for fire training school. Participants were pleased to have the oil company's involvement and training. "It's a busy ER, but staff is well trained." Another participant praised the staff saying, "Awesome fire and ambulance staff!"

Interviewees and focus group participants concurred with this concern, stating they have witnessed an increase in car and oil accidents. There is a pervasive concern about the strain on the volunteer fire and rescue squad due to the increase in call activity. Area businesses and TMC allow volunteers to be excused from work duty when they receive a call, but then this leaves businesses and the hospital understaffed when they already are suffering from a lack of employees to begin with. One suggestion to alleviate this strain is to have a paid fire and rescue staff as well as hire a nurse to accompany ambulance transfers.

Specific comments from members of the volunteer squad include:

- The only way I can get away from the calls is if I leave town.
- We see daily traffic accidents.
- I am so, so tired.
- I don't sleep well anymore.

2. Need for more mental health providers

Many participants commented on the unmet mental health needs. Some community members commented on the large amount of detox transfers sent to Minot and expressed a desire for an addiction/substance abuse counselor. Others stated the need for more psychiatrists and counselors due to the large incidence of depression and anxiety. Although participants noted it is easy to get medication locally, they expressed concern with the inability to get follow-up care. This lack of access is especially troublesome to teenagers who require routine counseling sessions and must travel to Minot weekly. Minot is 90 miles away but depending on the weather and the amount of oil trucks on the road, travel time can take much longer than an hour and a half. Participants did comment on local providers making appropriate mental health referrals and

noted options are available. Some conceded that when living in a small town, traveling is not out of the ordinary. "We go to Minot to eat and go to Bismarck to shop. Traveling for health care is acceptable."

One participant expressed that the definition of what constitutes mental health needs to be changed. More than a need for counseling or intervention therapy, mental health needs to address a decrease in morale. Participants indicated every single system is taxed. Specific examples include a six-week waiting period for day-to-day services like getting a haircut or needing a tire fixed. While the former may not have consequences, the latter could halt one's mobility. Grocery store shelves are frequently empty, putting a strain on accessing healthy foods. Moreover, there is a pervasive sense of oppression among newcomers and long-time residents. With the recent influx of population, all services are stretched thin. One participant had recently loss a family member and had to attend to all funeral matters herself including ordering the flowers, writing the obituary, assembling the photos, buying the tissue boxes. This is just one example of how the overburdened resources can strain and demoralize community members. Additionally, residents are working long hours which can limit their access to healthy meals and with waning daylight, opportunities to exercise.

Additionally, an increase in drugs and alcohol warrants more mental health care. There is a perception that the influx of population has brought an increase in drugs, specifically meth, into the area. Some shared that there are "lots of labs here." Another common sentiment is that transient workers transport drugs. Finally, alcohol use and abuse is perceived to be accepted. To this end a need for counseling and follow up care after detox was expressed.

3. Adequate number of health care providers and specialists

In addition to this being a health concern, the lack of health care providers and specialists was the number one most cited pressing potential health concern as well as the number one reason why community members use other health care facilities than TMC. Specific specialists participants would like to see added locally are a surgeon, orthopedic surgeon and a dentist. Some noted it is hard to get an appointment with area dentists. Others voiced a need for more chemotherapy and radiation services.

4. Violence (domestic, workplace, emotional, physical, sexual)

Community members have heard evidence of increasing domestic violence and more incidences of drunk driving and fighting. Respondents shared that their safety behaviors have changed, stating that whereas they used to leave garage doors open, they now lock their house and car and have installed security

systems. Some testified that with an increase in population, there is a clash in cultures and personalities and violence is bound to go up.
A particular need for a safe house for women and children was expressed. Currently there is no facility or system to provide a safe haven for those that may be fleeing violent situations. Respondents said that it is within North Dakota culture to "take people in." To this end, local pastors have stepped up and are opening up their homes to fulfill this need but it is strictly word of mouth. Motels are full and if they have vacancy, the going rate for a room is $230 per night.

5. Hospital viability

Many participants articulated concern about the sustainability of TMC. People worry that it is at grave financial risk because there is a perception that patients skip town and don't pay their bills. The hospital has to absorb the loss and has accumulated high bad debt. Participants wonder how long the hospital can stay open.

Randall Pederson said TMC had to write off $700,000 in bad debt last year. In that same Stanford University article, Pederson explained,

"That's a huge number for us, as a small community hospital. We're not deep pockets by any means. Whether we'll be able to absorb those kinds of debts is a concern to me. Most of that is because we are not able to find patients after they have used our services. Here one day, and gone the next; we can take a copy of everything in their wallet or purse, like their ID or driver's license and mail a statement out to them asking them to pay their bill. They've been returned by the post office, 'addressee not found.' And you can't hunt them down using telephone numbers, because they don't have landlines, only cell phones."

Moreover, participants are aware that services are more expensive in rural towns. Added to this dilemma is the higher paying jobs oil companies offer, making it harder for TMC to retain some of their staff.

Additional Issues

A perceived concern that warrants attention is the spread of infectious disease among the cramped spaces of man camps. With thousands of men living in close quarters, participants worried of an illness pandemic. Exacerbating this concern was the uncertainty and unavailability of immunizations. Currently, people have to travel outside of Tioga to receive vaccines and community members were unsure if the new oil field employees were current on the immunizations.

Participants were nervous about the spread of disease and feared the public health department was already overtaxed to attend to this issue.

Other issues that did not emerge as themes, but were mentioned, may warrant additional consideration.

- There is a need for Home Health as well as home visits from doctors.
- An obstetrician is in demand. Although some participants realize the huge risk and insurance liability, they are dissatisfied with a visiting OB available only a couple of days a month. Also, some noted that the oil drilling exploration is in its final stage which means less drilling and more maintenance jobs. These jobs require more skill and will attract families with young children, creating a growing birth rate.
- Build a Community Center. "We need a place to blow off steam."
- Assisted living apartment units: "The elderly are getting pushed and priced out. With their fixed income they cannot afford to live here. We need to grandfather them in and provide affordable housing for them."
- Transportation to pick up elderly and take them to the clinic.
- Daycare and housing shortages.
- Offer after-hour services at the clinic. "ER is used because it's the only thing open."

Finally, although by its nature this assessment process was more likely to uncover needs than measure satisfaction, several participants in the survey, focus group, and key informant interviews noted that the health services at TMC are highly regarded and are an important asset to the community. Participants had praise for health care staff, availability of services and the reputable name TMC has within the community. Respondents feel that TMC has a strong presence in the community and appreciate its active role it plays in the community.

Priority of Needs

The Community Group held its second meeting on the evening of January 13, 2013. Sixteen members of the group attended the meeting. A representative from the Center for Rural Health presented the group with a summary of this report's findings, including background and explanation about the secondary data, highlights from the results of the survey (including perceived community health concerns, awareness of local services, why patients seek care at TMC, community collaboration, and barriers to care), and findings from the focus group and key informant interviews.

Following the presentation of the assessment findings and after careful consideration of and discussion about the findings, each member of the group was asked to identify on a ballot what they perceived as the top five most pressing community needs. Each member articulated their five most pressing concerns and a representative from the Center of Rural Health kept a tally of the concerns in front of the room for all members to see. After all members had cast their votes, the tallies were counted to determine those health concerns that received the most votes. There was a tie for the fourth position, with each concern receiving 7 votes. The health concerns receiving the most votes were:

- Elevated rate of excessive drinking (12 votes)
- Elevated motor vehicle crash death rate (11 votes)
- Limited number of health care providers (8 votes)
- Elevated rate of adult smoking (7 votes)
- Elevated rate of uninsured adults (7 votes)

After reviewing the concerns, the Community Group was asked if they thought the list adequately reflected the health concerns of their community. After discussing the concerns the Community Group thought the ranked list did reflect the health needs of the community and would serve as a guiding light for the hospital's strategic planning.

Tioga Medical Center may use this prioritization for informational purposes – and as one form of community feedback – as it develops its implementation strategy, which is a plan for addressing community health needs. These identified needs satisfy the terms of the community health needs assessment, as mandated by the ACA, and they can help TMC's strategic planning and programming implementation. The complete ballot, as well as the votes received for each concern, may be found in Appendix G.

Summary

This study took into account input from approximately 98 community members and health care professionals from several counties as well as 34 community leaders, including a public health professional. This input represented the broad interests of the community served by Tioga Medical Center. Together with secondary data gathered from a wide range of sources, the information presents a snapshot of health needs and concerns in the community.

An analysis of secondary data reveals that a large portion of TMC's service area has a lower percentage of adults over the age of 65 than the state average and a slightly higher median age than the state median, indicating an increased need for medical services to attend to a young population. Additionally, the data compiled by County Health Rankings shows that Williams County is performing below North Dakota averages on the measures of adult smoking, physical inactivity, excessive drinking, motor vehicle crash death rate, sexually transmitted infections, teen birth rate, diabetic screening, mammography screening and it has a substantially higher ratio of primary care and mental health care providers.

When comparing Williams County to national benchmarks, it is under performing in the following measures: adult smoking, physical inactivity, and the rate of excessive drinking is three times the national benchmark. Additionally, the county's motor vehicle crash death rate, sexually transmitted infections and teen birth rate were more than twice the national benchmark.

Mountrail County is under performing in all measures on a statewide comparison as well as national benchmarks. Of particular concern is the rate of excessive drinking, three times that of national benchmarks; the rate of motor vehicle crash death is four times the national benchmark and the rate of sexually transmitted infections is twelve times national benchmarks. Additionally, Mountrail County suffers from a large percentage of uninsured residents, high percentages of preventable hospital stays and low rates of diabetic and mammography screenings.

Results from the survey revealed that among community members the top five community health concerns were: (1) adequate number of health care providers and specialists, (2) higher costs of health care for consumers, (3) not enough health care staff in general (4) addiction/substance abuse and (5) cancer.

Health care professionals also focused on medical and health conditions, collectively ranking as the top five concerns (1) not enough health care staff in general, (2) financial viability of hospital, (3) adequate number of health care providers and specialists, (4) addiction/substance abuse and (5) higher costs of health care for consumers.

The amount of overlap between these two survey results indicates strong alignment in the perception of community health care needs from community members and health care professionals.

Input from Community Group members and community leaders echoed many of the concerns raised by survey respondents, and also highlighted concerns about accident/injury prevention/EMS services, need for mental health providers and specialists in the community, the financial solvency of the hospital and its patients, and violence.

Following careful consideration of the results and findings of this assessment, Community Group members determined that the top health needs or issues in the community are elevated rates of excessive drinking, elevated motor vehicle crash death rate, limited number of health care providers and visiting specialists, elevated rate of adult smoking and elevated rate of uninsured adults.

Appendix A1 – Community Member Survey Instrument

Center for Rural Health Community Health Needs Assessment
(Community Member survey)

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

TIOGA Medical Center

Tioga Medical Center is interested in hearing from you about area health needs. The Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences is administering this survey on behalf of Tioga Medical Center. This initiative is funded by the N.D. Medicare Rural Hospital Flexibility Program. The focus of the assessment is to:

- Learn about the community's assets and concerns, and hear suggestions for improvement
- Learn of the community's awareness of local health care services being provided
- Determine preferences for using local health care services versus traveling to other facilities

Please take a few moments to complete the survey. If you prefer, this survey may be completed online by visiting: **http://tinyurl.com/tiogacommunitysurvey .** 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 in aggregate form. If you have questions about the survey, you may contact Karin Becker at the Center for Rural Health, 701.777.4499 or Karin.becker@email.und.edu

Surveys will be accepted through October 26. Your opinion matters – thank you in advance!

Community Assets/Best Things about Your Community

Please tell us about your community by choosing up to three options you most agree with in each category (i.e., people, services and resources, quality of life, geographic setting, and activities).

Q1a. Considering the PEOPLE in your community, the best things are (choose the top THREE):

☐	Community is socially and culturally diverse and/or becoming more diverse	☐	Sense of community/feeling connected to people who live here
☐	Forward-thinking ideas (e.g. social values, government)	☐	Sense that you can make a difference – government is accessible
☐	People who live here are aware of/ engaged in social, civic, or political issues	☐	Tolerance, inclusion, open-mindedness
☐	People are friendly, helpful, supportive	☐	Other (please specify)_____

Q1b. Considering the SERVICES AND RESOURCES in your community, the best things are (choose the top THREE):

☐	Academic opportunities and institutions (benefits that come from the proximity to colleges and universities)	☐	Public services and amenities
☐	Downtown and shopping (e.g., close by, good variety, availability of goods)	☐	Restaurants and food
☐	Health care	☐	Transportation
☐	Quality school systems and other educational institutions and programs for youth	☐	Other (please specify)_____

Q1c. Considering the QUALITY OF LIFE in your community, the best things are (choose the top THREE):

☐	Economic/employment opportunities	☐	Informal, simple, "laidback" lifestyle
☐	Family-friendly environment; good place to raise kids	☐	Safety and safe places to live, little/no crime
☐	Healthy place to live	☐	Other (please specify)_____
☐	Hustle and bustle of oil patch		

Q1d. Considering the GEOGRAPHIC SETTING in your community, the best things are (choose the top THREE):

☐	Cleanliness of area (e.g., fresh air, lack of pollution and litter)	☐	Natural setting: outdoors and nature
☐	Climate and seasons	☐	Relatively small size and scale of community
☐	General beauty of environment and/or scenery	☐	Waterfront, rivers, lakes, and/or beaches
☐	General proximity to work and activities (e.g., short commute, convenient access)	☐	Other (please specify)_____
☐	Mix of rural and city areas		

Q1e. Considering the ACTIVITIES in your community, the best things are (choose the top THREE):

☐	Activities for families and youth	☐	Specific events and festivals (e.g., parades, fireworks, etc.)
☐	Arts and cultural activities and/or cultural richness of community	☐	Year-round access to fitness opportunities (indoor activities, winter sports, etc.)
☐	Recreational and sports activities (e.g., outdoor recreation, parks, bike paths, and other activities)	☐	Other (please specify)_____

Q1f. What are other "best things" about your community that are not reflected in the questions above?
_____
_____

Community Concerns

Q2. Regarding the conditions in your community, please rank each of the potential concerns on a scale of 1 to 5, with 1 being less of a concern and 5 being more of a concern:

Community concerns	Less of a concern 1	2	3	4	More of a concern 5
Adequate number of school resources					
Aging population, lack of resources to meet growing needs					
Alcohol and drug use and abuse					
Crime and community violence					
Domestic violence, including child abuse					
Environmentally unsound (or unfriendly) place to live					
Impact of increased oil/energy development					
Increasing population, including residents moving in					
Insufficient facilities for exercise and well-being					
Lack of affordable housing					
Lack of employees to fill positions					
Lack of employment opportunities					
Lack of police presence in community					
Litter					
Low wages, lack of livable wages					
Maintaining enough health workers (e.g., medical, dental, wellness)					
Poverty					
Property taxes					
Racism, prejudice, hate, discrimination					
Traffic safety, including speeding, road safety and drunk driving					
Other. Please specify:					

b) Which concern above is the most important? _____
c) How do these concerns impact your community?_____
_____
_____

Health Care Services

Regarding each of the following health care services, please tell us:

a) Whether you are aware that the health care service is offered at Tioga Medical Center (TMC).
b) Whether you have used the health care service at Tioga Medical Center (TMC), at another facility, or both.

Q3a. General services

a) Aware of services at TMC?	Type of service offered	b) Used services, either at TMC or another facility? (Check both if applicable)	
Yes		Used Services at TMC	Used Services at another facility
	Tioga Clinic		
	Ray Clinic		
	Powers Lake Clinic		
	Pediatric/child care		
	Senior housing		
	Social services		
	Swing bed services		
	Visiting specialists – general surgeon		

Q3b. Acute services

a) Aware of services at TMC?		Type of service offered	b) Used services, either at TMC or another facility? (Check both if applicable)	
Yes	No		Used Services at TMC	Used Services at Another Facility
		Cardiac rehab		
		Emergency room		
		Hospital (acute care)		
		Surgical services – GI procedures		
		Surgical services – outpatient		

Q3c. Screening/therapy services

a) Aware of services at TMC?		Type of service offered	b) Used services, either at TMC or another facility? (Check both if applicable)	
Yes	No		Used Services at TMC	Used Services at Another Facility
		Diabetic education		
		Dietician consulting		
		Health screenings		
		Laboratory services		
		Occupational therapy		
		Physical therapy		
		Speech therapy		

Q3d. Radiology services

a) Aware of services at TMC?		Type of service offered	b) Used services, either at TMC or another facility? (Check both if applicable)	
Yes	No		Used Services at TMC	Used Services at Another Facility
		EKG--Electrocardiography		
		Radiology – CT scan		
		Radiology--DEXA scan		
		Radiology – general x-ray		
		Radiology – mammography		
		Radiology – MRI		
		Radiology – ultrasound		

Q3e. Services offered locally by other providers/organizations

a) Aware of services offered locally?		Type of service offered	b) Used services, either locally or non-locally? (Check both if applicable)	
Yes	No		Used Services Locally	Used Services Non-Locally
		Ambulance		
		Chiropractic services		
		Dental services		
		Optometric/vision services		

Q3f. What specific services, if any, do you think Tioga Medical Center needs to add, and why?

_____

_____

Delivery of Health Care

Q4. Regarding the delivery of health care in your community, please rank each of the potential health concerns listed below on a scale of 1 to 5, with 1 being less of a concern and 5 being more of a concern:

Health concerns	Less of a concern 1	2	3	4	More of a concern 5
Access to needed technology/equipment					
Accident/injury prevention					
Addiction/substance abuse					
Adequate number of health care providers and specialists					
Cancer					
Diabetes					
Distance/transportation to health care facility					
Emergency services (ambulance & 911) available 24/7					
Financial viability of hospital					
Focus on wellness and prevention of disease					
Heart disease (e.g., congestive heart failure, heart attack, stroke, coronary artery disease)					
Higher costs of health care for consumers					
Mental health (e.g., depression, dementia/Alzheimer's)					
Not enough health care staff in general					
Obesity					
Suicide prevention					
Violence (domestic, workplace, emotional, physical, sexual)					

b) How do these concerns impact your community? _____

_____

_____

Q5. Please tell us why you seek health care services at Tioga Medical Center. (Choose ALL that apply.)

- ☐ Access to specialist
- ☐ Confidentiality
- ☐ Convenience
- ☐ Disability access
- ☐ Familiarity with providers
- ☐ High quality of care
- ☐ Less costly
- ☐ Loyalty to local service providers
- ☐ Open at convenient times
- ☐ Proximity
- ☐ They take my insurance
- ☐ They take new patients
- ☐ Transportation is readily available
- ☐ Other (please specify)_____

_____

Q6. Please tell us why you seek health care services at another health care facility. (Choose ALL that apply.)

- ☐ Confidentiality
- ☐ Disability access
- ☐ High quality of care
- ☐ Less costly
- ☐ Open at convenient times
- ☐ Provides necessary specialists
- ☐ They take many types of insurance
- ☐ They take new patients
- ☐ Transportation is readily available
- ☐ Other (please specify)_____
  _____

Q7. What barriers prevent you or other community members from receiving health care? (Choose ALL that apply.)

- ☐ Distance from health facility
- ☐ Inability to get an appointment
- ☐ Lack of affordability
- ☐ Lack of awareness of local health services
- ☐ Lack of confidentiality
- ☐ Lack of doctors
- ☐ Lack of continuity of care (inability to see same provider over time)
- ☐ Lack of evening or weekend hours
- ☐ Lack of insurance
- ☐ Lack of specialists
- ☐ Lack of transportation services
- ☐ Language barriers
- ☐ Limited access to telethealth technology (patients seen by providers at another facility through a monitor/TV screen)
- ☐ Other (please specify)_____
  _____

Q8. How long does it take you to reach the nearest clinic outside Tioga Medical Center system?

- ☐ Less than 10 minutes
- ☐ 10 to 30 minutes
- ☐ 31 to 60 minutes
- ☐ More than 1 hour

Q9. How long does it take you to reach Tioga Medical Center?

- ☐ Less than 10 minutes
- ☐ 10 to 30 minutes
- ☐ 31 to 60 minutes
- ☐ More than 1 hour

Q10. Do you believe that Tioga Medical Center could improve its collaboration with:

	Yes	No. It's fine as it is.	Don't know
a) Business and oil industry	☐	☐	☐
b) Hospitals and clinics in other cities	☐	☐	☐
c) Local job/economic development	☐	☐	☐
d) Other local health providers	☐	☐	☐
e) Public Health	☐	☐	☐
f) Schools	☐	☐	☐

Q11. Are you aware of Tioga's Clinic extended hours: open Monday-Friday 9-5pm and on every other Saturday from 8am-12pm?

- ☐ Yes
- ☐ No

Demographic Information

Please tell us about yourself.

Q12. Listed below are some general health conditions/diseases. Please select all that apply to you.

- ☐ Allergies
- ☐ Arthritis
- ☐ Asthma/COPD
- ☐ Cancer
- ☐ Chronic pain
- ☐ Dementia
- ☐ Depression, stress, etc.
- ☐ Diabetes
- ☐ Heart conditions (e.g., congestive heart failure)
- ☐ High cholesterol
- ☐ Hypertension
- ☐ OB/Gyn related
- ☐ Weight control
- ☐ Muscles or bones (e.g. back problems, broken bones)

Q13. Health insurance status. (Choose all that apply.)

- ☐ Indian Health Services
- ☐ Insurance through employer
- ☐ Medicaid
- ☐ Medicare
- ☐ Private insurance
- ☐ Tribal insurance
- ☐ Uninsured/underinsured
- ☐ Veteran's Health Care Benefits
- ☐ Other

Q14. Age:

- ☐ Less than 25 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

Q15. Highest level of education:

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

Q16. Gender:

- ☐ Female
- ☐ Male

Q17. Your zip code: _____

Q18. Marital status:

- ☐ Divorced/separated
- ☐ Married
- ☐ Single/never married
- ☐ Widowed

Q19. Employment status:

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

Q20. Annual household income before taxes:

- ☐ $0 to $14,999
- ☐ $15,000 to $24,999
- ☐ $25,000 to $34,999
- ☐ $35,000 to $49,999
- ☐ $50,000 to $74,999
- ☐ $75,000 to $99,999
- ☐ $100,000 to $149,999
- ☐ $150,000 to $199,999
- ☐ $200,000 and over
- ☐ Prefer not to answer

Q21. Overall, please share concerns and suggestions to improve the delivery of local health care.

Thank you for assisting us with this important survey!

Appendix A1 – Health Care Professional Survey Instrument

Center for Rural Health Community Health Needs Assessment
(Health care professional survey)

Tioga Medical Center is interested in hearing from you about area health needs. The Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences is administering this survey on behalf of Tioga Medical Center. This initiative is funded by the N.D. Medicare Rural Hospital Flexibility Program. The focus of the assessment is to:

- Learn about the community assets and concerns, and hear suggestions for improvement
- Learn of the community's awareness of local health care services being provided
- Determine preferences for using local health care services versus traveling to other facilities

Please take a few moments to complete the survey. 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 in aggregate form. If you have questions about the survey, you may contact Karin Becker at the Center for Rural Health, 701.777.4499 or Karin.becker@email.und.edu

Surveys will be accepted through October 26. Your opinion matters -- thank you in advance!

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

Q1 Considering the PEOPLE in your community, the best things are (choose the top THREE):

- ❑ Community is socially and culturally diverse and/or becoming more diverse
- ❑ Forward-thinking ideas (e.g. social values, government)
- ❑ People who live here are aware of/ engaged in social, civic, or political issues
- ❑ People are friendly, helpful, supportive
- ❑ Sense of community/feeling connected to people who live here
- ❑ Sense that you can make a difference - government is accessible
- ❑ Tolerance, inclusion, open-mindedness
- ❑ Other (please specify) _____

Q2 Considering the SERVICES AND RESOURCES in your community, the best things are (choose the top THREE):

- ❑ Academic opportunities and institutions (benefits that come from the proximity to colleges and universities)
- ❑ Downtown and shopping (e.g., close by, good variety, availability of goods)
- ❑ Health care
- ❑ Quality school systems and other educational institutions and programs for youth
- ❑ Public services and amenities
- ❑ Restaurants and food
- ❑ Transportation
- ❑ Other (please specify) _____

Q3 Considering the QUALITY OF LIFE in your community, the best things are (choose the top THREE):

- ❑ Economic/employment opportunities
- ❑ Family-friendly environment; good place to raise kids
- ❑ Healthy place to live
- ❑ Hustle and bustle of oil patch
- ❑ Informal, simple, "laid back" lifestyle
- ❑ Safety and safe places to live, little/no crime
- ❑ Other (please specify) _____

Q4 Considering the GEOGRAPHIC SETTING in your community, the best things are (choose the top THREE):

- ❑ Cleanliness of area (e.g., fresh air, lack of pollution and litter)
- ❑ Climate and seasons
- ❑ General beauty of environment and/or scenery
- ❑ General proximity to work and activities (e.g., short commute, convenient access)
- ❑ Mix of rural and city areas
- ❑ Natural setting: outdoors and nature
- ❑ Relatively small size and scale of community
- ❑ Waterfront, rivers, lakes, and/or beaches
- ❑ Other (please specify) _____

Q5 Considering the ACTIVITIES in your community, the best things are (choose the top THREE):

- ❑ Activities for families and youth
- ❑ Arts and cultural activities and/or cultural richness of community
- ❑ Recreational and sports activities (e.g., outdoor recreation, parks, bike paths, and other activities)
- ❑ Specific events and festivals (e.g., parades, fireworks, etc.)
- ❑ Year-round access to fitness opportunities (indoor activities, winter sports, etc.)
- ❑ Other (please specify) _____

Q6 What are other "best things" about your community that are not reflected in the questions above?

Q7 Community Concerns: Regarding the conditions in your community, please rank each of the potential concerns on a scale of 1 to 5, with 1 being less of a concern and 5 being more of a concern:

	1 = less of a concern	2	3	4	5 = more of a concern
Adequate number of school resources	❍	❍	❍	❍	❍
Aging population, lack of resources to meet growing needs	❍	❍	❍	❍	❍
Alcohol and drug use and abuse	❍	❍	❍	❍	❍
Crime and community violence	❍	❍	❍	❍	❍
Domestic violence, including child abuse	❍	❍	❍	❍	❍
Environmentally unsound (or unfriendly) place to live	❍	❍	❍	❍	❍
Impact of increased oil/energy development	❍	❍	❍	❍	❍
Increasing population,	❍	❍	❍	❍	❍

including residents moving in					
Insufficient facilities for exercise and well-being	❍	❍	❍	❍	❍
Lack of affordable housing	❍	❍	❍	❍	❍
Lack of employees to fill positions	❍	❍	❍	❍	❍
Lack of employment opportunities	❍	❍	❍	❍	❍
Lack of police presence in community	❍	❍	❍	❍	❍
Litter	❍	❍	❍	❍	❍
Low wages, lack of livable wages	❍	❍	❍	❍	❍
Maintaining enough health workers (e.g., medical, dental, wellness)	❍	❍	❍	❍	❍
Poverty	❍	❍	❍	❍	❍
Property taxes	❍	❍	❍	❍	❍
Racism, prejudice, hate, discrimination	❍	❍	❍	❍	❍
Traffic safety, including speeding, road safety and drunk driving	❍	❍	❍	❍	❍
Other. Please specify:	❍	❍	❍	❍	❍

Q8 How do these concerns impact your community?

Q9 What specific services, if any, do you think Tioga Medical Center needs to add, and why?

Q10 Delivery of Health Care: Regarding the delivery of health care in your community, please rank each of the potential health concerns listed below on a scale of 1 to 5, with 1 being less of a concern and 5 being more of a concern:

	1 = less of a concern	2	3	4	5 = more of a concern
Access to needed technology/equipment	❍	❍	❍	❍	❍
Accident/injury prevention	❍	❍	❍	❍	❍
Addiction/substance abuse	❍	❍	❍	❍	❍
Adequate number of health care providers and specialists	❍	❍	❍	❍	❍
Cancer	❍	❍	❍	❍	❍
Diabetes	❍	❍	❍	❍	❍
Distance/transportation to health care facility	❍	❍	❍	❍	❍
Emergency services (ambulance & 911) available 24/7	❍	❍	❍	❍	❍
Financial viability of hospital	❍	❍	❍	❍	❍
Focus on wellness and prevention of disease	❍	❍	❍	❍	❍
Heart disease (e.g., congestive heart failure, heart attack, stroke, coronary artery disease)	❍	❍	❍	❍	❍
Higher costs of health care for consumers	❍	❍	❍	❍	❍
Mental health (e.g., depression, dementia/Alzheimer's)	❍	❍	❍	❍	❍
Not enough health care staff in general	❍	❍	❍	❍	❍
Obesity	❍	❍	❍	❍	❍
Suicide prevention	❍	❍	❍	❍	❍
Violence (domestic, workplace, emotional,	❍	❍	❍	❍	❍

physical, sexual)					

Q11 How do these concerns impact your community?

Q12 Please tell us why you think patients seek health care services at Tioga Medical Center. (Choose ALL that apply.)

- ❑ Access to specialist
- ❑ Confidentiality
- ❑ Convenience
- ❑ Disability access
- ❑ Familiarity with providers
- ❑ High quality of care
- ❑ Less costly
- ❑ Loyalty to local service providers
- ❑ Open at convenient times
- ❑ Proximity
- ❑ They take my insurance
- ❑ They take new patients
- ❑ Transportation is readily available
- ❑ Other (please specify) _____

Q13 Please tell us why you think patients seek health care services at another health care facility. (Choose ALL that apply.)

- ❑ Confidentiality
- ❑ Disability access
- ❑ High quality of care
- ❑ Less costly
- ❑ Open at convenient times
- ❑ Provides necessary specialists
- ❑ They take many types of insurance
- ❑ They take new patients
- ❑ Transportation is readily available
- ❑ Other (please specify) _____

Q14 What barriers prevent you or other community members from receiving health care? (Choose ALL that apply.)

- ❑ Distance from health facility
- ❑ Inability to get an appointment
- ❑ Lack of affordability
- ❑ Lack of awareness of local health services
- ❑ Lack of confidentiality
- ❑ Lack of doctors
- ❑ Lack of continuity of care (inability to see same provider over time)
- ❑ Lack of evening or weekend hours
- ❑ Lack of insurance
- ❑ Lack of specialists
- ❑ Lack of transportation services
- ❑ Language barriers
- ❑ Limited access to telethealth technology (patients seen by providers at another facility through a monitor/TV screen)
- ❑ Other (please specify) _____

Q15 Do you believe that Tioga Medical Center could improve its collaboration with:

	Yes	No. It's fine as it is.	Don't Know
Business and oil industry	❍	❍	❍
Hospitals and clinics in other cities	❍	❍	❍
Local job/economic development	❍	❍	❍
Other local health providers	❍	❍	❍
Public Health	❍	❍	❍
Schools	❍	❍	❍

Q16 Demographic Information: Please tell us about yourself.

Q17 Age:

- ❍ Less than 25 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

Q18 Highest level of education:

- ❍ Some high school
- ❍ High school diploma or GED
- ❍ Some college/technical degree
- ❍ Associates degree
- ❍ Bachelor's degree
- ❍ Graduate or professional degree

Q19 Gender:

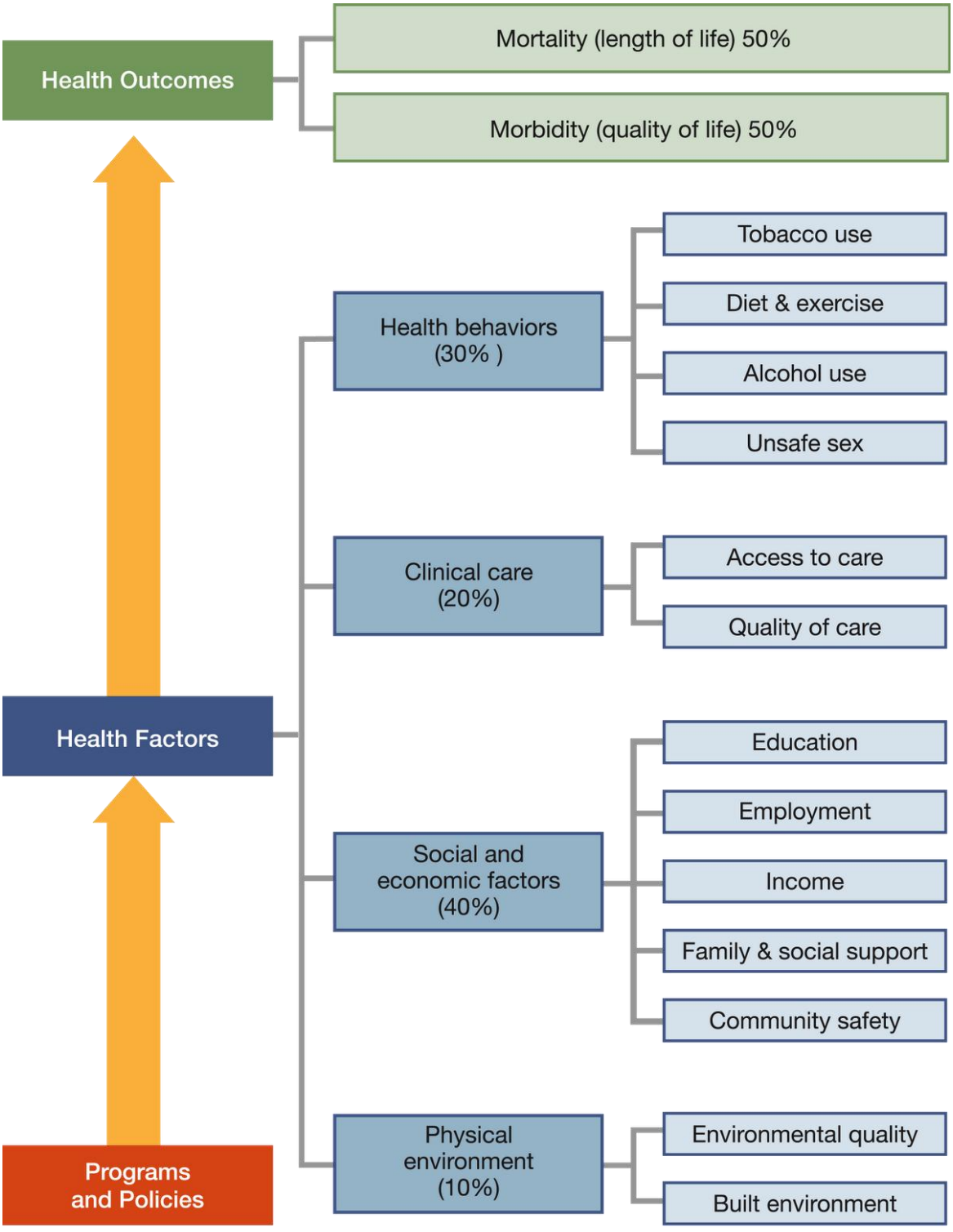
- ❍ Female
- ❍ Male

Q20 Overall please share concerns and suggestions to improve the delivery of local health care.

Appendix B – Community Group Members and Key Informants Participating in Interviews

Name	Organization	Title
Wanda Moberg	Retired	
Jeffrey Moberg	Tioga Fire & Ambulance	EMT
Ross Papineau	Dakota Realty	Agent
Del Martinson	TMC Board	Director
Kristi Knudson	TMC	Office Manager
Ethyl Papineau	Papineau Ins.	Agent
Larry Olson	Retired	
Lori Olson	TMC	RN
Joyce Pederson	Retired	
Jewell Pederson	Retired	
Kenneth Arelson	Retired	
Bernice Feiring	Retired	
Elvera Lokkin	Retired	
Ida Johnson	Retired	
Ruby Skarphal	Retired	
Randall Pederson	TMC	CEO
Haley Alberts	City of Tioga	Deputy Auditor
Judy Odegard	The Bank of Tioga	VP
Betty Freborg	Jafco, Inc	Owner, manager
Julie Jacobson	Tioga Public Schools	Admin Assistant
Irene Olson	Shear Image	Manager operator
Daniel McGinnity	Tioga Ambulance	Squad leader
Marcy Spooner	Retired RN	
D'Wayne Johnston	Tioga Schools	Superintendant
Judy Heilman	Bank of Tioga	Bookkeeping
Janine Oyloe	Upper Missouri Health Unit	Interim Executive Officer
Jim Booth	Lutheran Church	Pastor
Debbie Iverson	Retired	
Jamie Eraas	City of Tioga	Auditor
Nathan Germundson	City of Tioga	Mayor

Appendix C – County Health Rankings Model



County Health Rankings model ©2010 UWPHI

Appendix D – Definitions of Health Variables

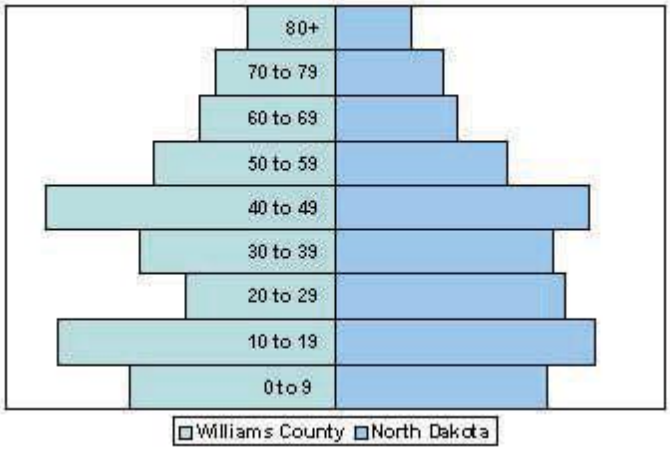
Definitions of Health Variables from the *County Health Rankings 2011 Report*

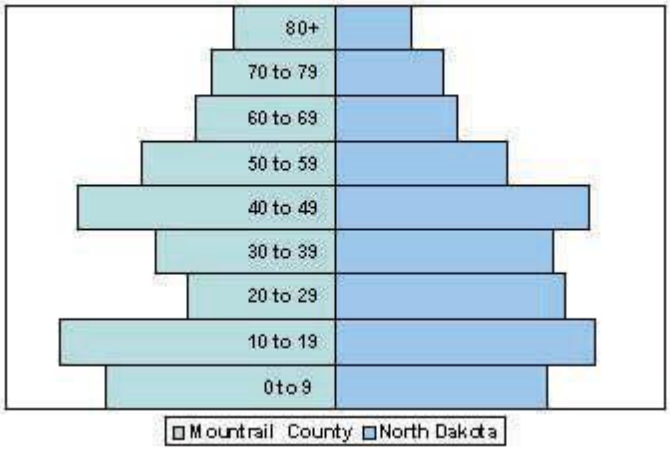
Variable	Definition
Poor or Fair Health	Self-reported health status based on survey responses to the question: "In general, would you say that your health is excellent, very good, good, fair, or poor?"
Poor Physical Health Days (in past 30 days)	Estimate based on responses to the question: "Thinking 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?"
Poor Mental Health Days (in past 30 days)	Estimate based on 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?"
Adult Smoking	Percent of adults that report smoking equal to, or greater than, 100 cigarettes and are currently a smoker
Adult Obesity	Percent of adults that report a BMI greater than, or equal to, 30
Excessive Drinking	Percent of as individuals that report binge drinking in the past 30 days (more than 4 drinks on one occasion for women, more than 5 for men) or heavy drinking (defined as more than 1 (women) or 2 (men) drinks per day on average
Sexually Transmitted Infections	Chlamydia rate per 100,000 population
Teen Birth Rate	Birth rate per 1,000 female population, ages 15-19
Uninsured Adults	Percent of population under age 65 without health insurance
Preventable Hospital Stays	Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees
Mammography Screening	Percent of female Medicare enrollees that receive mammography screening
Access to Healthy Foods	Healthy food outlets include grocery stores and produce stands/farmers' markets
Access to Recreational Facilities	Rate of recreational facilities per 100,000 population
Diabetics	Percent of adults aged 20 and above with diagnosed diabetes
Physical Inactivity	Percent of adults aged 20 and over that report no leisure time physical activity
Primary Care Provider Ratio	Ratio of population to primary care providers
Mental Health Care Provider Ratio	Ratio of population to mental health care providers
Diabetic Screening	Percent of diabetic Medicare enrollees that receive HbA1c screening.
Binge Drinking	Percent of adults that report binge drinking in the last 30 days. Binge drinking is consuming more than 4 (women) or 5 (men) alcoholic drinks on one occasion.

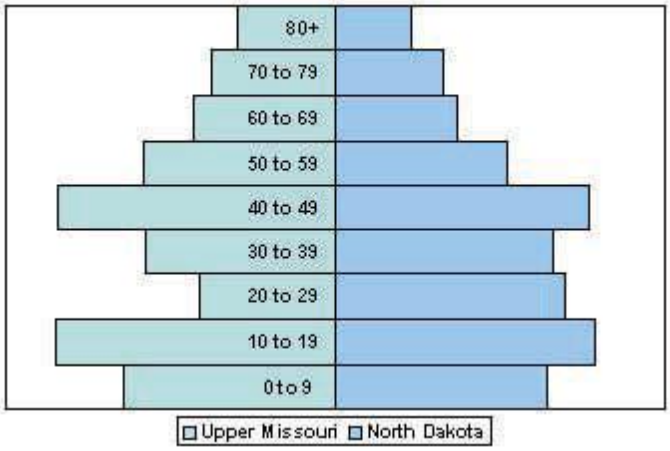
Appendix E – Upper Missouri Community Health Profile

Population by Age Group, 2000 Census						
Age Group	Williams County		UMDHU		North Dakota	
	Number	Percent	Number	Percent	Number	Percent
0-9	2469	12.5	4,391	12.8	82,382	12.8%
10-19	3329	16.8	5,839	17.0	101,082	15.7%
20-29	1805	9.1	2,860	8.3	89,295	13.9%
30-39	2355	11.9	3,969	11.5	85,086	13.2%
40-49	3480	17.6	5,799	16.9	98,449	15.3%
50-59	2192	11.1	3,996	11.6	66,921	10.4%
60-69	1639	8.3	2,947	8.6	47,649	7.4%
70-79	1448	7.3	2,592	7.5	41,844	6.5%
80+	1044	5.3	2,019	5.9	29,492	4.6%
Total	19761	100.0	34,412	100.0	642,200	100.0%
0-17	5,172	26.2%	9,250	26.9%	160,849	25.0%
65+	3,261	16.5%	6,009	17.5%	94,478	14.7%

Population by Age Group, 2000 Census						
Age Group	Divide County		McKenzie County		Mountrail County	
	Number	Percent	Number	Percent	Number	Percent
0-9	189	8.3	810	14.1	923	13.9
10-19	314	13.8	1,088	19.0	1,108	16.7
20-29	99	4.3	362	6.3	594	9.0
30-39	237	10.4	655	11.4	722	10.9
40-49	320	14.0	967	16.9	1,032	15.6
50-59	311	13.6	711	12.4	782	11.8
60-69	270	11.8	475	8.3	563	8.5
70-79	287	12.6	358	6.2	499	7.5
80+	256	11.2	311	5.4	408	6.2
Total	2,283	100.0	5,737	100.0	6,631	100.0
0-17	462	20.2%	1,756	30.6%	1,860	28.1%
65+	674	29.5%	900	15.7%	1,174	17.7%

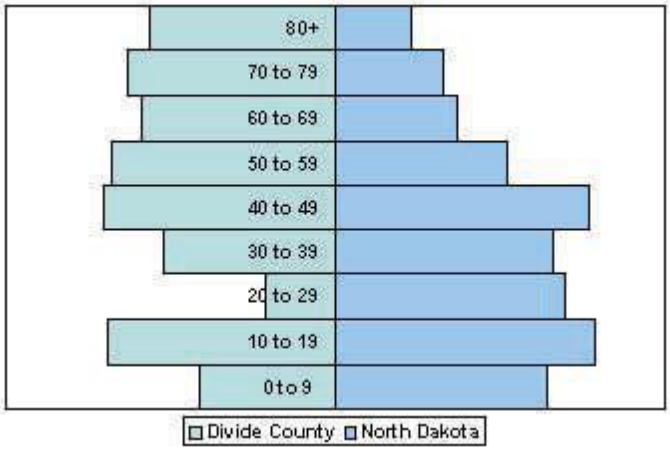

80+
70 to 79
60 to 69
50 to 59
40 to 49
30 to 39
20 to 29
10 to 19
0 to 9
Williams County
North Dakota

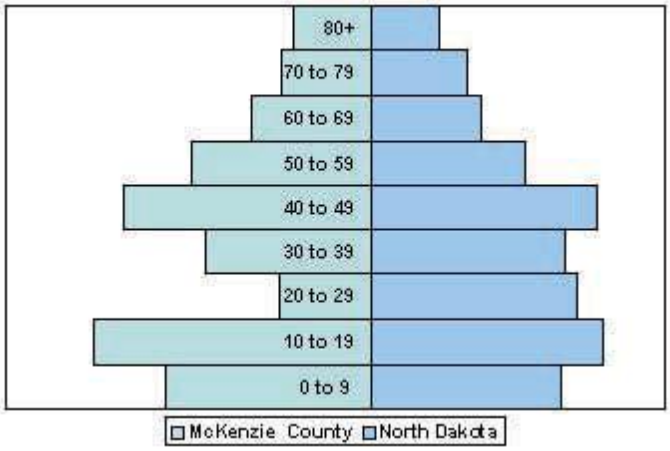

80+
70 to 79
60 to 69
50 to 59
40 to 49
30 to 39
20 to 29
10 to 19
0 to 9
Mountrail County
North Dakota


80+
70 to 79
60 to 69
50 to 59
40 to 49
30 to 39
20 to 29
10 to 19
0 to 9
Upper Missouri
North Dakota

Upper Missouri Community Health Profile

POPULATION





Upper Missouri Community Health Profile

Female Population and Percentage Female by Age, 2000 Census						
Age Group	Divide County		McKenzie County		Mountrail County	
	Number	Percent	Number	Percent	Number	Percent
0-9	79	41.8%	390	48.1%	440	47.7%
10-19	150	47.8%	528	48.5%	564	50.9%
20-29	43	43.4%	177	48.9%	298	50.2%
30-39	116	48.9%	344	52.5%	365	50.6%
40-49	145	45.3%	470	48.6%	511	49.5%
50-59	153	49.2%	350	49.2%	369	47.2%
60-69	138	51.1%	222	46.7%	302	53.6%
70-79	148	51.6%	207	57.8%	262	52.5%
80+	165	64.5%	171	55.0%	258	63.2%
Total	1,137	49.8%	2859	49.8%	3,369	50.8%

Female Population and Percentage Female by Age, 2000 Census						
Age Group	Williams County		UMDHU		North Dakota	
	Number	Percent	Number	Percent	Number	Percent
0-9	1222	49.5%	2,131	48.5%	40,200	48.8%
10-19	1637	49.2%	2,879	49.3%	48,823	48.3%
20-29	909	50.4%	1,427	49.9%	42,196	47.3%
30-39	1212	51.5%	2,037	51.3%	41,884	49.2%
40-49	1676	48.2%	2,802	48.3%	48,521	49.3%
50-59	1078	49.2%	1,950	48.8%	32,799	49.0%
60-69	846	51.6%	1,508	51.2%	24,937	52.3%
70-79	827	57.1%	1,444	55.7%	23,106	55.2%
80+	667	63.9%	1,261	62.5%	19,210	65.1%
Total	10074	51.0%	17,439	50.7%	321,676	50.1%

Population Change 1990 to 2000 Census						
Census	Divide County	McKenzie County	Mountrail County	Williams County	UMDHU	North Dakota
1990	2,899	6,383	7,021	21,129	37,432	638,800
2000	2,283	5,737	6,631	19,761	34,412	642,200
Change	-21.2%	-10.1%	-5.6%	-6.5%	-8.1%	0.5%

Race, 2000 Census	Divide County		McKenzie County		Mountrail County	
Race	Number	Percentage	Number	Percentage	Number	Percentage
Total	2,283	100.0%	5,737	100.0%	6,631	100.0%
White	2,260	99.0%	4,438	77.4%	4,376	66.0%
Black	0	0.0%	4	0.1%	6	0.1%
Am.Indian	3	0.1%	1,215	21.2%	1,988	30.0%
Asian	12	0.5%	3	0.1%	14	0.2%
Pac. Islander	0	0.0%	1	0.0%	3	0.0%
Other	4	0.2%	8	0.1%	17	0.3%
Multirace	4	0.2%	68	1.2%	227	3.4%

Race, 2000 Census	Williams County		UMDHU		North Dakota	
Race	Number	Percentage	Number	Percentage	Number	Percentage
Total	19,761	100.0%	34,412	100.0%	642,200	100.0%
White	18,367	92.9%	29,441	85.6%	593,181	92.4%
Black	24	0.1%	34	0.1%	3,916	0.6%
Am.Indian	869	4.4%	4,075	11.8%	31,329	4.9%
Asian	36	0.2%	65	0.2%	3,606	0.6%
Pac. Islander	2	0.0%	6	0.0%	230	0.0%
Other	27	0.1%	56	0.2%	2,540	0.4%
Multirace	436	2.2%	735	2.1%	7,398	1.2%

Household Populations, 2000 Census	Divide County		McKenzie County		Mountrail County	
	Number	Percent	Number	Percent	Number	Percent
Total	2,283	100.0%	5,737	100.0%	6,631	100.0%
In Family Households	1,815	79.5%	5,017	87.4%	5,571	84.0%
In Non-Family Households	378	16.6%	659	11.5%	89	1.3%
Total In Households	2,193	96.1%	5,676	98.9%	6,467	97.5%
Institutionalized	90	3.9%	151	2.6%	151	2.3%
Non-Institutionalized	0	0.0%	13	0.2%	13	0.2%
Total in Group Quarters	90	3.9%	164	2.9%	164	2.5%

Household Populations, 2000 Census	Williams County		UMDHU		North Dakota	
	Number	Percent	Number	Percent	Number	Percent
Total	19,761	100.0%	34,412	100.0%	642,000	100.0%
In Family Households	16,030	81.1%	28,433	82.6%	507,581	79.1%
In Non-Family Households	3,252	16.5%	4,378	12.7%	110,988	17.3%
Total In Households	19,282	97.6%	33,618	97.7%	618,569	96.4%
Institutionalized	164	0.8%	556	1.6%	9,688	1.5%
Non-Institutionalized	315	1.6%	341	1.0%	13,943	2.2%
Total in Group Quarters	479	2.4%	897	2.6%	23,631	3.7%

Marital Status of Persons Age 15 and Older, 2000 Census						
	Divide County		McKenzie County		Mountrail County	
Marital Status	Number	Percent	Number	Percent	Number	Percent
Total Age 15+	1,934	100.0%	4,338	100.0%	5,130	100.0%
Never Married	328	17.0%	1,007	23.2%	1,269	24.7%
Now Married	1,214	62.8%	2,600	59.9%	2,922	57.0%
Separated	12	0.6%	43	1.0%	46	0.9%
Widowed	228	11.8%	369	8.5%	486	9.5%
Female	200	10.3%	289	6.7%	420	8.2%
Divorced	152	7.9%	319	7.4%	407	7.9%
Female	65	3.4%	163	3.8%	178	3.5%

Marital Status of Persons Age 15 and Older, 2000 Census						
	Williams County		UMDHU		North Dakota	
Marital Status	Number	Percent	Number	Percent	Number	Percent
Total Age 15+	15,744	100.0%	27,146	100.0%	512,281	100.0%
Never Married	3,839	24.4%	6,443	23.7%	141,300	27.6%
Now Married	9010	57.2%	15,746	58.0%	290,833	56.8%
Separated	104	0.7%	205	0.8%	3,610	0.7%
Widowed	1290	8.2%	2,373	8.7%	36,702	7.2%
Female	1025	6.5%	1,934	7.1%	30,346	5.9%
Divorced	1501	9.5%	2,379	8.8%	39,836	7.8%
Female	740	4.7%	1,146	4.2%	21,235	4.1%

Educational Attainment Among Persons 25+, 2000 Census						
	Divide County		McKenzie County		Mountrail County	
Education	Number	Percent	Number	Percent	Number	Percent
No schooling completed	9	0.5%	12	0.3%	14	0.3%
No High School	159	9.1%	341	9.4%	417	9.7%
Some High School	173	9.9%	410	11.3%	523	12.1%
High school or GRE	608	34.9%	1185	32.5%	1274	29.6%
Some College	561	32.2%	1123	30.8%	1408	32.7%
Bachelor's degree	196	11.3%	458	12.6%	515	12.0%
Post Graduate Degree	35	2.0%	115	3.2%	158	3.7%

Educational Attainment Among Persons 25+, 2000 Census						
	Williams County		UMDHU		North Dakota	
Education	Number	Percent	Number	Percent	Number	Percent
No schooling completed	60	0.5%	95	0.4%	1,605	0.4%
No High School	1038	8.0%	1,955	8.6%	34,053	8.3%
Some High School	1181	9.1%	2,287	10.1%	30,326	7.4%
High school or GRE	4143	31.8%	7,210	31.7%	113,931	27.9%
Some College	4471	34.3%	7,563	33.3%	138,855	34.0%
Bachelor's degree	1622	12.4%	2,791	12.3%	67,551	16.5%
Post Graduate Degree	533	4.1%	841	3.7%	22,292	5.5%

Persons Age 5 and Older with Disabilty, 2000 Census	Divide County		McKenzie County		Mountrail County	
Group	Number	Percent	Number	Percent	Number	Percent
Total	2,123	100.0%	5,332	100.0%	6,038	100.0%
No Disability	1804	85.0%	4,489	84.2%	4,955	82.1%
Any Disability	319	15.0%	843	15.8%	1,083	17.9%
Self Care Disability	35	1.6%	95	1.8%	123	2.0%
5-15 with any disability	18	5.8%	23	2.0%	41	3.4%
16-64 with any disabilty	107	8.7%	455	13.7%	588	15.4%
65+ with any disability	194	33.0%	365	43.0%	454	44.6%

Persons Age 5 and Older with Disabilty, 2000 Census	Williams County		UMDHU		North Dakota	
Group	Number	Percent	Number	Percent	Number	Percent
Total	18,456	100.0%	31,949	100.0%	586,289	100.0%
No Disability	15,124	81.9%	26,372	82.5%	488,472	83.3%
Any Disability	3,332	18.1%	5,577	17.5%	97,817	16.7%
Self Care Disability	461	2.5%	714	2.2%	11,011	1.9%
5-15 with any disability	118	3.6%	200	3.4%	5,586	5.6%
16-64 with any disabilty	1990	16.5%	3,140	15.4%	58,630	14.7%
65+ with any disability	1224	39.2%	2,237	40.1%	33,601	38.5%

Income and Poverty Status by Age Group, 2000 Census						
	Divide County		McKenzie County		Mountrail County	
Median Household Income	$30,089		$29,342		$27,098	
Per Capita Income	$16,225		$14,732		$13,422	
	Number	Percent	Number	Percent	Number	Percent
Below Poverty Level	319	14.6%	968	17.2%	1,243	19.3%
Under 5 years	10	14.9%	78	23.3%	137	32.1%
5 to 11 years	39	22.0%	162	24.3%	178	25.3%
12 to 17 years	40	18.8%	150	20.8%	120	16.8%
18 to 64 years	144	12.6%	470	15.3%	622	17.3%
65 to 74 years	39	14.8%	51	11.9%	87	18.4%
75 years and over	47	14.6%	57	13.6%	99	18.2%

Income and Poverty Status by Age Group, 2000 Census						
	Williams County		UMDHU		North Dakota	
Median Household Income	$31,491		NA		$34,604	
Per Capita Income	$16,763		NA		$16,227	
	Number	Percent	Number	Percent	Number	Percent
Below Poverty Level	2,314	11.9%	4,844	14.4%	73,457	11.9%
Under 5 years	196	17.5%	421	21.6%	6,784	17.6%
5 to 11 years	341	17.9%	720	20.9%	8,666	14.3%
12 to 17 years	331	16.1%	641	17.3%	6,713	11.3%
18 to 64 years	1194	10.6%	2430	12.8%	41,568	11.1%
65 to 74 years	94	6.0%	271	9.9%	3,797	8.4%
75 years and over	158	10.2%	361	12.7%	5,929	14.1%

Family Poverty and Childhood and Elderly Poverty, 2000 Census	Divide County		McKenzie County	
	Number	Percent	Number	Percent
Total Families	651		1544	
Families in Poverty	62	9.5%	212	13.7%
Families with Own Children	230		793	
Families with Own Children in Poverty	37	5.7%	150	9.7%
Families with Own Children and Female Parent Only	23		146	
Families with Own Children and Female Parent Only in Poverty	12	1.8%	62	4.0%
Total Known Children in Poverty	89	19.5%	390	22.6%
Total Known Age 65+ in Poverty	86	14.7%	108	12.4%

Family Poverty and Childhood and Elderly Poverty, 2000 Census	Mountrail County		Williams County	
	Number	Percent	Number	Percent
Total Families	1768		5244	
Families in Poverty	247	14.0%	502	9.6%
Families with Own Children	887		2619	
Families with Own Children in Poverty	179	10.1%	418	8.0%
Families with Own Children and Female Parent Only	190		538	
Families with Own Children and Female Parent Only in Poverty	83	4.7%	277	5.3%
Total Known Children in Poverty	435	23.6%	868	17.1%
Total Known Age 65+ in Poverty	186	18.3%	252	8.1%

Family Poverty and Childhood and Elderly Poverty, 2000 Census	UMDHU		North Dakota	
	Number	Percent	Number	Percent
Total Families	9207		166963	
Families in Poverty	1023	11.1%	13890	8.3%
Families with Own Children	4529		83678	
Families with Own Children in Poverty	784	8.5%	10043	12.0%
Families with Own Children and Female Parent Only	897		13971	
Families with Own Children and Female Parent Only in Poverty	434	4.7%	5402	38.7%
Total Known Children in Poverty	1782	19.6%	22,163	13.8%
Total Known Age 65+ in Poverty	632	11.3%	9,726	10.2%

	Divide County		McKenzie County		Mountrail County	
	Number	Percent	Number	Percent	Number	Percent
Housing units: Total	1,469	100.0%	2,719	100.0%	3,438	100.0%
1980 and Later	180	12.3%	717	26.4%	724	21.1%
1970 to 1979	298	20.3%	635	23.4%	681	19.8%
Prior to 1970	991	67.5%	1,367	50.3%	2,033	59.1%

Age of Housing, 2000 Census	Williams County		UMDHU		North Dakota	
	Number	Percent	Number	Percent	Number	Percent
Housing units: Total	9,680	100.0%	17,306	100.0%	289,677	100.0%
1980 and Later	2,240	23.1%	3,861	22.3%	76,239	26.3%
1970 to 1979	2,283	23.6%	3,897	22.5%	68,376	23.6%
Prior to 1970	5,157	53.3%	9,548	55.2%	145,062	50.1%

Vital Statistics Data

BIRTHS AND DEATHS

Births, 2004 - 2008	Divide County		McKenzie County		Mountrail County	
	Number	Rate or Ratio	Number	Rate or Ratio	Number	Rate or Ratio
Live Births and Rate	78	7	333	12	555	17
Pregnancies and Rate	84	7	368	13	608	18
Fertility Rate		53		65		93
Teen Births and Rate	0	0	37	16	86	36
Teen Pregnancies and Rate	NA	NA	42	18	88	36
Out of Wedlock Births and Ratio	17	218	147	441	316	569
Out of Wedlock Pregnancies and Ratio	20	238	170	462	357	587
Low Birth Weight Birth and Ratio	0	0	12	36	41	74

Births, 2004 - 2008	Williams County		UMDHU		North Dakota	
	Number	Rate or Ratio	Number	Rate or Ratio	Number	Rate or Ratio
Live Births and Rate	1,296	13	2,262	13	42925	13
Pregnancies and Rate	1,380	14	2,440	14	47350	15
Fertility Rate		66		70		63
Teen Births and Rate	126	19	249	21	3306	17
Teen Pregnancies and Rate	144	21	274	23	4097	21
Out of Wedlock Births and Ratio	503	388	983	435	13743	320
Out of Wedlock Pregnancies and	557	404	1,104	452	16862	356
Low Birth Weight Birth and Ratio	78	60	131	58	2823	66

Child Deaths, 2004-2008	Divide County		McKenzie County		Mountrail County	
	Number	Rate or Ratio	Number	Rate or Ratio	Number	Rate or Ratio
Infant Deaths and Ratio	0	0	0	0	0	0
Child and Adolescent Deaths and Rate	0	0	0	0	0	0
Total Deaths and Crude Rate	163	1428	268	934	386	1164

Child Deaths, 2004-2008	Williams County		UMDHU		North Dakota	
	Number	Rate or Ratio	Number	Rate or Ratio	Number	Rate or Ratio
Infant Deaths and Ratio	0	0	0	0	261	6.1
Child and Adolescent Deaths	0	0	0	0	290	33
Total Deaths and Crude Rate	977	989	1794	1043	28,494	887

Deaths and Age Adjusted Death Rate by Cause, 2004-2008	Divide County	McKenzie County	Mountrail County
	Number (Adj. Rate)	Number (Adj. Rate)	Number (Adj. Rate)
All Causes	163 (563)	268 (764)	386 (838)
Heart Disease	28 (79)	71 (184)	116 (238)
Cancer	25 (95)	69 (194)	67 (147)
Stroke	17 (53)	13 (34)	22 (42)
Alzheimers Disease	26 (69)	*	7 (11)
COPD	8 (30)	12 (31)	19 (38)
Unintentional Injury	*	22 (84)	29 (82)
Diabetes Mellitus	*	10 (28)	37 (82)
Pneumonia and Influenza	7 (24)	10 (25)	5 (12)
Cirrhosis	0 (0)	*	9 (27)
Suicide	*	*	5 (17)

Deaths and Age Adjusted Death Rate by Cause, 2004-2008	Williams County	UMDHU	North Dakota
	Number (Adj. Rate)	Number (Adj. Rate)	Number (Adj. Rate)
All Causes	977 (747)	1794 (746)	28,494 (739)
Heart Disease	228 (168)	443 (174)	7,327 (183)
Cancer	243 (191)	404 (172)	6,573 (180)
Stroke	57 (41)	109 (42)	1,872 (45)
Alzheimers Disease	43 (29)	79 (27)	1,679 (38)
COPD	52 (39)	91 (37)	1,449 (37)
Unintentional Injury	59 (55)	114 (62)	1,477 (42)
Diabetes Mellitus	38 (29)	89 (38)	1,059 (28)
Pneumonia and Influenza	26 (19)	48 (18)	760 (18)
Cirrhosis	*	16 (9)	295 (9)
Suicide	12 (12)	21 (13)	433 (13)

Adj. Rate = Age Adjusted Rate; * Fewer than five deaths

Divide County: Leading Causes of Death by Age Group, 2004-2008			
Age	1	2	3
0-4	Unintentional Injury SIDS		
5-14	Unintentional Injury		
15-24	Unintentional Injury 5	Suicide	
25-34	Unintentional Injury 5	Suicide	Cancer Anomally
35-44	Unintentional Injury	Suicide Diabetes	
45-54	Heart	Unintentional Injury	Stroke Diabetes
55-64	Cancer 11	Heart 7	Unintentional Injury
65-74	Cancer 19	Heart	Unintentional Injury
75-84	Cancer 17	Heart 15	COPD 7
85+	Heart 41	Cancer 20	Pneumonia/Flu 8

McKenzie County: Leading Causes of Death by Age Group, 2004-2008			
Age	1	2	3
0-4	Unintentional Injury SIDS		
5-14	Unintentional Injury		
15-24	Unintentional Injury 5	Suicide	
25-34	Unintentional Injury	Cancer Anomally	
35-44	Unintentional Injury	Diabetes Suicide	
45-54	Heart	Unintentional Injury	
55-64	Cancer 11	Heart 7	Unintentional Injury
65-74	Cancer 19	Heart	Unintentional Injury
75-84	Cancer 17	Heart 15	COPD 7
85+	Heart 41	Cancer 20	Pneumonia/Flu 8

Mountrail County: Leading Causes of Death by Age Group, 2004-2008			
Age	1	2	3
0-4	Anomally		
5-14			
15-24	Unintentional Injury	Suicide	
25-34	Suicide Heart		
35-44	Unintentional Injury 6	Heart	Cirrhosis
45-54	Heart 13	Unintentional Injury 6	Diabetes Cirrhosis
55-64	Heart 12	Cancer 11	Diabetes 7
65-74	Cancer 15	Heart 10	Diabetes 7
75-84	Heart 24	Cancer 22	Stroke 7
85+	Heart 52	Cancer 15	Diabetes 13

Williams County: Leading Causes of Death by Age Group, 2004-2008			
Age	1	2	3
0-4	Anomally	Cancer	Unintentional Injury Prematurity
5-14	Unintentional Injury		
15-24	Unintentional Injury 14	Suicide 5	
25-34	Unintentional Injury 7	Cancer Suicide	
35-44	Heart	Cancer	
45-54	Cancer 15	Heart 8	Unintentional Injury 7
55-64	Cancer 27	Heart 18	Diabetes 5 Suicide 5
65-74	Cancer 53	Heart 23	COPD 10
75-84	Cancer 83	Heart 69	Stroke 23
85+	Heart 105	Cancer 59	Alzheimer's 32

UMDHU: Leading Causes of Death by Age Group, 2004-2008			
Age	1	2	3
0-4	Anomally	Unintentional Injury SIDS	
5-14	Unintentional Injury		
15-24	Unintentional Injury 25	Suicide 10	
25-34	Unintentional Injury 11	Suicide	Cancer Heart
35-44	Unintentional Injury 9	Heart 8	Cancer
45-54	Heart 25	Cancer 20	Unintentional Injury 16
55-64	Cancer 52	Heart 37	Diabetes 12
65-74	Cancer 90	Heart 39	Diabetes 16
75-84	Cancer 133	Heart 116	Stroke 42
85+	Heart 216	Cancer 101	Alzheimer's 59

ADULT BEHAVIORAL RISK FACTORS, 2000-2008

	ALCOHOL	Divide County	McKenzie County	Mountrail County
Binge Drinking	Respondents who reported binge drinking (5 drinks for men, 4 drinks for women) one or more times in the past 30 days.	24.3 (14.2-34.5)	23.9 (17.0-30.8)	26.1 (19.5-32.6)
Heavy Drinking	Respondents who reported heavy drinking (more than 2 drinks per day for men, more than 1 drink per day for women) during the past 30 days	1.5 (0.0- 3.2)	7.5 (2.5-12.6)	5.5 (2.2- 8.8)
Drunk Driving	Respondents who reported driving when they had too much to drink one or more times during the past 30 days	NA	12.8 (4.6-21.0)	14.4 (5.7-23.1)

	ALCOHOL	Williams County	UMDHU	North Dakota
Binge Drinking	Respondents who reported binge drinking (5 drinks for men, 4 drinks for women) one or more times in the past 30 days.	24.0 (20.0-28.0)	24.4 (21.4-27.3)	21.6 (19.9-23.3)
Heavy Drinking	Respondents who reported heavy drinking (more than 2 drinks per day for men, more than 1 drink per day for women) during the past 30 days	7.6 (4.5-10.7)	6.7 (4.7- 8.8)	5.1 (4.1- 6.1)
Drunk Driving	Respondents who reported driving when they had too much to drink one or more times during the past 30 days	2.4 (0.7- 4.1)	6.4 (3.9- 8.9)	4.6 (3.6- 5.5)

	ARTHRITIS	Divide County	McKenzie County	Mountrail County
Chronic Joint Symptoms	Respondents who reported pain, aching of stiff in a joint during the past 30 days which started more than 3 months ago	NA	37.5 (27.6-47.5)	31.7 (23.0-40.5)
Activity Limitation Due to Arthritis	Respondents who reported being limited in any usual activities because of arthritis or joint symptoms.	13.2 (4.7-21.8)	11.5 (5.9-17.0)	9.6 (4.6-14.5)
Doctor Diagnosed Arthritis	Respondents who reported ever have been told by a doctor or other health professional that they had some form or arthritis.	NA	30.7 (22.3-39.1)	22.7 (15.4-30.0)

	ARTHRITIS	Williams County	UMDHU	North Dakota
Chronic Joint Symptoms	Respondents who reported pain, aching of stiff in a joint during the past 30 days which started more than 3 months ago	38.1 (32.6-43.5)	36.7 (32.6-40.7)	31.7 (30.1-33.4)
Activity Limitation Due to Arthritis	Respondents who reported being limited in any usual activities because of arthritis or joint symptoms.	10.6 (7.8-13.3)	10.7 (8.6-12.9)	10.7 (9.8-11.7)
Doctor Diagnosed Arthritis	Respondents who reported ever have been told by a doctor or other health professional that they had some form or arthritis.	30.4 (25.7-35.1)	28.7 (25.3-32.2)	26.9 (25.4-28.4)

ADULT BEHAVIORAL RISK FACTORS, 2000-2008

	ASTHMA	Divide County	McKenzie County	Mountrail County
Ever Asthma	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had asthma.	7.7 (2.7-12.6)	10.1 (4.8-15.4)	7.0 (3.0-10.9)
Current Asthma	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had asthma and who still have asthma.	6.5 (1.8-11.2)	5.4 (2.1- 8.6)	5.5 (2.2- 8.9)

	ASTHMA	Williams County	UMDHU	North Dakota
Ever Asthma	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had asthma.	11.1 (8.2-13.9)	9.8 (7.8-11.9)	11.6 (10.4-12.8)
Current Asthma	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had asthma and who still have asthma.	8.5 (5.9-11.1)	7.2 (5.5- 8.9)	7.9 (6.9- 9.0)

	BODY WEIGHT	Divide County	McKenzie County	Mountrail County
Overweight But Not Obese	Respondents with a body mass index greater than or equal to 25 but less than 30 (overweight)	43.7 (33.7-53.7)	35.0 (28.3-41.8)	42.0 (35.1-48.9)
Obese	Respondents with a body mass index greater than or equal to 30 (obese)	24.1 (15.6-32.5)	34.9 (27.4-42.4)	32.9 (26.8-39.1)
Overweight or Obese	Respondents with a body mass index greater than or equal to 25 (overweight or obese)	67.8 (58.1-77.5)	69.9 (63.1-76.8)	74.9 (69.0-80.9)

	BODY WEIGHT	Williams County	UMDHU	North Dakota
Overweight But Not Obese	Respondents with a body mass index greater than or equal to 25 but less than 30 (overweight)	38.8 (35.0-42.7)	39.0 (36.1-42.0)	39.6 (37.7-41.5)
Obese	Respondents with a body mass index greater than or equal to 30 (obese)	25.1 (21.5-28.6)	28.4 (25.6-31.2)	27.8 (26.1-29.5)
Overweight or Obese	Respondents with a body mass index greater than or equal to 25 (overweight or obese)	63.9 (60.0-67.9)	67.5 (64.6-70.3)	67.4 (65.5-69.3)

	CARDIOVASCULAR	Divide County	McKenzie County	Mountrail County
Heart Attack	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had a heart attack.	6.8 (2.2-11.4)	4.4 (1.6- 7.2)	4.8 (2.1- 7.6)
Angina	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had angina.	7.1 (2.1-12.1)	5.1 (2.0- 8.2)	4.1 (1.1- 7.0)
Stroke	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had a stroke.	NA	3.9 (0.0- 7.7)	2.1 (0.3- 3.8)
Any Cardiovascular Disease	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had any of the following: heart attack, angina or stroke.	11.1 (5.1-17.1)	9.3 (4.6-14.0)	7.7 (4.0-11.4)

	CARDIOVASCULAR	Williams County	UMDHU	North Dakota
Heart Attack	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had a heart attack.	4.5 (2.8- 6.1)	4.7 (3.5- 5.9)	3.9 (3.4- 4.5)
Angina	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had angina.	5.3 (3.6- 7.0)	5.2 (3.9- 6.5)	4.1 (3.5- 4.6)
Stroke	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had a stroke.	1.9 (0.9- 3.0)	2.2 (1.2- 3.1)	2.3 (1.9- 2.7)
Any Cardiovascular Disease	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had any of the following: heart attack, angina or stroke.	8.1 (6.0-10.2)	8.5 (6.8-10.1)	7.5 (6.8- 8.3)

	CHOLESTEROL	Divide County	McKenzie County	Mountrail County
Never Cholesterol Test	Respondents who reported never having a cholesterol test	NA	20.9 (13.8-28.1)	26.9 (18.2-35.5)
No Cholesterol Test in Past 5 Years	Respondents who reported never having a cholesterol test in the past five years	NA	27.1 (19.3-34.9)	31.9 (23.1-40.7)
High Cholesterol	Respondents who reported that they had ever been told by a doctor, nurse or other health professional that they had high cholesterol.	NA	28.8 (19.9-37.7)	34.3 (25.3-43.3)

	CHOLESTEROL	Williams County	UMDHU	North Dakota
Never Cholesterol Test	Respondents who reported never having a cholesterol test	21.8 (16.9-26.8)	23.3 (19.7-27.0)	22.5 (20.6-24.5)
No Cholesterol Test in Past 5 Years	Respondents who reported never having a cholesterol test in the past five years	26.3 (21.2-31.3)	28.0 (24.3-31.8)	27.3 (25.3-29.3)
High Cholesterol	Respondents who reported that they had ever been told by a doctor, nurse or other health professional that they had high cholesterol.	31.1 (26.3-35.8)	31.2 (27.6-34.9)	37.1 (35.3-38.9)

	COLORECTAL CANCER	Divide County	McKenzie County	Mountrail County
Fecal Occult Blood	Respondents age 50 and older who reported not having a fecal occult blood test in the past two years.	NA	NA	85.0 (76.2-93.8)
Never Sigmoidoscopy	Respondents age 50 and older who reported never having had a sigmoidoscopy or colonoscopy	NA	NA	NA
No Sigmoidoscopy in Past 5 Years	Respondents age 50 and older who reported not having a sigmoidoscopy or colonoscopy in the past five years.	NA	NA	NA

	COLORECTAL CANCER	Williams County	UMDHU	North Dakota
Fecal Occult Blood	Respondents age 50 and older who reported not having a fecal occult blood test in the past two years.	77.8 (69.9-85.7)	76.1 (70.5-81.8)	77.8 (76.1-79.4)
Never Sigmoidoscopy	Respondents age 50 and older who reported never having had a sigmoidoscopy or colonoscopy	54.2 (46.6-61.8)	54.4 (48.7-60.0)	42.1 (40.2-44.0)
No Sigmoidoscopy in Past 5 Years	Respondents age 50 and older who reported not having a sigmoidoscopy or colonoscopy in the past five years.	66.2 (59.7-72.7)	66.2 (61.4-71.0)	62.1 (60.2-64.0)

	DIABETES	Divide County	McKenzie County	Mountrail County
Diabetes Diagnosis	Respondents who reported ever having been told by a doctor that they had diabetes.	6.5 (1.1-11.9)	5.3 (2.2- 8.4)	9.4 (5.0-13.9)

	DIABETES	Williams County	UMDHU	North Dakota
Diabetes Diagnosis	Respondents who reported ever having been told by a doctor that they had diabetes.	5.9 (4.2- 7.6)	6.5 (5.1- 8.0)	7.6 (6.8- 8.4)

	FRUITS AND VEGETABLES	Divide County	McKenzie County	Mountrail County
Five Fruits and Vegetables	Respondents who reported that they do not usually eat 5 fruits and vegetables per day	79.9 (69.6-90.2)	75.1 (67.3-83.0)	74.0 (66.2-81.8)

	FRUITS AND VEGETABLES	Williams County	UMDHU	North Dakota
Five Fruits and Vegetables	Respondents who reported that they do not usually eat 5 fruits and vegetables per day	79.7 (75.8-83.6)	77.9 (74.8-81.0)	78.1 (76.5-79.6)

	GENERAL HEALTH	Divide County	McKenzie County	Mountrail County
Fair or Poor Health	Respondents who reported that their general health was fair or poor	10.2 (4.8-15.5)	17.6 (12.2-23.0)	14.6 (10.6-18.7)
Poor physical Health	Respondents who reported they had 8 or more days in the last 30 when their physical health was not good	14.0 (6.6-21.4)	11.0 (6.0-15.9)	12.0 (7.6-16.4)
Poor Mental Health	Respondents who reported they had 8 or more days in the last 30 when their mental health was not good	10.4 (3.4-17.4)	10.1 (4.9-15.3)	11.8 (7.5-16.2)
Activity Limitation Due to Poor Health	Respondents who reported they had 8 or more days in the last 30 when poor physical or mental health kept them from doing their usual activities.	5.1 (0.8- 9.3)	5.1 (1.9- 8.2)	6.1 (2.9- 9.4)
Any Activity Limitation	Respondents who reported being limited in any way due to physical, mental or emotional problem.	16.1 (9.0-23.2)	14.0 (9.1-19.0)	17.7 (13.0-22.3)

	GENERAL HEALTH	Williams County	UMDHU	North Dakota
Fair or Poor Health	Respondents who reported that their general health was fair or poor	13.1 (10.7-15.5)	14.1 (12.2-16.0)	13.4 (12.2-14.6)
Poor physical Health	Respondents who reported they had 8 or more days in the last 30 when their physical health was not good	11.5 (9.0-14.0)	11.7 (9.7-13.6)	10.6 (9.6-11.6)
Poor Mental Health	Respondents who reported they had 8 or more days in the last 30 when their mental health was not good	7.5 (5.6- 9.4)	9.1 (7.3-10.8)	8.9 (7.8-10.0)
Activity Limitation Due to Poor Health	Respondents who reported they had 8 or more days in the last 30 when poor physical or mental health kept them from doing their usual activities.	5.0 (3.6- 6.5)	5.3 (4.0- 6.5)	5.4 (4.7- 6.2)
Any Activity Limitation	Respondents who reported being limited in any way due to physical, mental or emotional problem.	16.7 (14.1-19.4)	16.3 (14.3-18.4)	17.0 (15.8-18.3)

	HEALTH CARE ACCESS	Divide County	McKenzie County	Mountrail County
Health Insurance	Respondents who reported not having any form or health care coverage	5.2 (1.7- 8.7)	15.1 (9.9-20.3)	17.8 (11.6-24.0)
Access Limited by Cost	Respondents who reported needing to see a doctor during the past 12 months but could not due to cost.	11.3 (3.7-18.9)	6.9 (2.2-11.5)	6.0 (2.9- 9.2)
No Personal Provider	Respondents who reported that they did not have one person they consider to be their personal doctor or health care provider.	19.2 (11.0-27.4)	24.5 (17.4-31.5)	39.0 (31.7-46.3)

	HEALTH CARE ACCESS	Williams County	UMDHU	North Dakota
Health Insurance	Respondents who reported not having any form or health care coverage	12.7 (9.8-15.7)	13.6 (11.4-15.9)	11.6 (10.1-13.2)
Access Limited by Cost	Respondents who reported needing to see a doctor during the past 12 months but could not due to cost.	7.4 (5.3- 9.5)	7.3 (5.6- 9.0)	6.2 (5.3- 7.1)
No Personal Provider	Respondents who reported that they did not have one person they consider to be their personal doctor or health care provider.	19.0 (15.7-22.4)	23.9 (21.1-26.7)	23.8 (22.0-25.6)

	HYPERTENSION	Divide County	McKenzie County	Mountrail County
High Blood Pressure	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had high blood pressure.	45.6 (30.9-60.2)	26.8 (18.5-35.1)	24.6 (17.1-32.1)

	HYPERTENSION	Williams County	UMDHU	North Dakota
High Blood Pressure	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had high blood pressure.	25.0 (20.6-29.4)	26.7 (23.3-30.1)	26.0 (24.5-27.4)

	IMMUNIZATION	Divide County	McKenzie County	Mountrail County
Influenza Vaccine	Respondents age 65 and older who reported that they did not have a flu shot in the past year	NA	NA	NA
Pneumococcal Vaccine	Respondents age 65 or older who reported never having had a pneumonia shot.	NA	NA	NA

	IMMUNIZATION	Williams County	UMDHU	North Dakota
Influenza Vaccine	Respondents age 65 and older who reported that they did not have a flu shot in the past year	29.5 (22.9-36.2)	30.7 (25.6-35.7)	26.5 (24.1-28.8)
Pneumococcal Vaccine	Respondents age 65 or older who reported never having had a pneumonia shot.	32.4 (25.6-39.3)	36.7 (31.5-42.0)	31.6 (29.0-34.2)

	INJURY	Divide County	McKenzie County	Mountrail County
Fall	Respondents 45 years and older who reported that they had fallen in the past 3 months	NA	14.7 (5.2-24.2)	11.9 (3.8-20.0)
Seat Belt	Respondents who reported not always wearing their seatbelt	NA	NA	NA

	INJURY	Williams County	UMDHU	North Dakota
Fall	Respondents 45 years and older who reported that they had fallen in the past 3 months	15.7 (10.5-20.8)	15.7 (11.8-19.6)	13.9 (12.7-15.2)
Seat Belt	Respondents who reported not always wearing their seatbelt	50.5 (44.7-56.4)	52.8 (48.2-57.5)	40.8 (38.8-42.7)

	ORAL HEALTH	Divide County	McKenzie County	Mountrail County
Dental Visit	Respondents who reported that they have not had a dental visit in the past year	NA	41.1 (31.3-50.9)	39.6 (31.0-48.1)
Tooth Loss	Respondents who reported they had lost 6 or more permanent teeth due to gum disease or decay.	NA	13.3 (8.0-18.6)	25.4 (18.4-32.4)

	ORAL HEALTH	Williams County	UMDHU	North Dakota
Dental Visit	Respondents who reported that they have not had a dental visit in the past year	31.5 (26.9-36.0)	35.1 (31.4-38.8)	25.9 (24.3-27.6)
Tooth Loss	Respondents who reported they had lost 6 or more permanent teeth due to gum disease or decay.	23.0 (18.9-27.1)	21.7 (18.7-24.6)	14.9 (13.8-15.9)

	PHYSICAL ACTIVITY	Divide County	McKenzie County	Mountrail County
Recommend Physical Activity	Respondents who reported that they did not get the recommended amount of physical activity	NA	28.9 (20.2-37.6)	39.8 (30.6-48.9)
No Leisure Physical Activity	Respondents who reported that they participated in no leisure time physical activity	2.5 (0.0- 5.4)	6.9 (1.9-11.9)	8.9 (2.4-15.3)

	PHYSICAL ACTIVITY	Williams County	UMDHU	North Dakota
Recommend Physical Activity	Respondents who reported that they did not get the recommended amount of physical activity	38.4 (33.3-43.5)	36.5 (32.7-40.3)	37.4 (35.5-39.3)
No Leisure Physical Activity	Respondents who reported that they participated in no leisure time physical activity	6.0 (3.5- 8.4)	6.4 (4.4- 8.5)	6.0 (5.2- 6.9)

	TOBACCO	Divide County	McKenzie County	Mountrail County
Current Smoking	Respondents who reported that they smoked every day or some days	14.9 (8.2-21.7)	29.2 (22.0-36.4)	29.4 (23.0-35.9)

	TOBACCO	Williams County	UMDHU	North Dakota
Current Smoking	Respondents who reported that they smoked every day or some days	26.0 (22.4-29.6)	26.5 (23.8-29.3)	18.1 (16.5-19.7)

	PROSTATE CANCER	Divide County	McKenzie County	Mountrail County
PSA Testing	Men age 40 and older who reported that they have not had a PSA test in the past two years	NA	NA	NA

	PROSTATE CANCER	Williams County	UMDHU	North Dakota
PSA Testing	Men age 40 and older who reported that they have not had a PSA test in the past two years	54.5 (44.9-64.1)	52.9 (46.1-59.7)	45.4 (42.7-48.2)

	WOMEN'S HEALTH	Divide County	McKenzie County	Mountrail County
Pap Smear	Women 18 and older who reported that they have not had a pap smear in the past three years	NA	NA	13.6 (6.7-20.5)
Mammogram Age 40+	Women 40 and older who reported that they have not had a mammogram in the past two years	NA	NA	NA

	WOMEN'S HEALTH	Williams County	UMDHU	North Dakota
Pap Smear	Women 18 and older who reported that they have not had a pap smear in the past three years	10.3 (5.8-14.7)	12.3 (8.8-15.7)	17.2 (14.7-19.8)
Mammogram Age 40+	Women 40 and older who reported that they have not had a mammogram in the past two years	22.1 (15.8-28.3)	25.1 (20.3-30.0)	23.1 (21.2-25.1)

CRIME

Divide County

	2004	2005	2006	2007	2008	5 year	5-Year Rate
Murder	NA	NA	NA	NA	NA		
Rape	NA	NA	NA	NA	NA		
Robbery	NA	NA	NA	NA	NA		
Assualt	NA	NA	NA	NA	NA		
Violent crime							
	NA	NA	NA	NA	NA		
Burglary	NA	NA	NA	NA	NA		
Larceny	NA	NA	NA	NA	NA		
Motor vehicle theft	NA	NA	NA	NA	NA		
Property crime							
Total	NA	NA	NA	NA	NA		

McKenzie County

	2004	2005	2006	2007	2008	5 year	5-Year Rate
Murder	0	0	0	0	0	0	0.0
Rape	0	1	0	0	0	1	3.6
Robbery	0	0	0	0	0	0	0.0
Assualt	3	4	3	1	1	12	43.0
Violent crime	3	5	3	1	1	13	46.5
Burglary	4	16	8	7	4	39	139.6
Larceny	40	34	37	33	29	173	619.3
Motor vehicle theft	0	3	9	4	3	19	68.0
Property crime	44	53	54	44	36	231	826.9
Total	47	58	57	45	37	244	873.5

Mountrail County

	2004	2005	2006	2007	2008	5 year	5-Year Rate
Murder	0	0	0	0	0	0	0.0
Rape	1	0	0	0	0	1	3.1
Robbery	0	0	0	0	0	0	0.0
Assualt	0	1	0	0	3	4	12.3
Violent crime	1	1	0	0	3	5	15.4
Burglary	3	18	8	8	10	47	144.5
Larceny	28	26	26	17	50	147	452.0
Motor vehicle theft	3	9	8	1	5	26	79.9
Property crime	34	53	42	26	65	220	676.4
Total	35	54	42	26	68	225	691.8

Williams County

	2004	2005	2006	2007	2008	5 year	5-Year Rate
Murder	0	0	1	0	0	1	1.0
Rape	3	5	7	4	16	35	36.4
Robbery	0	1	1	2	2	6	6.2
Assualt	16	11	9	16	23	75	77.9
Violent crime	19	17	18	22	41	117	121.5
Burglary	38	49	38	33	58	216	224.3
Larceny	228	163	179	202	209	981	1018.9
Motor vehicle theft	34	50	41	38	39	202	209.8
Property crime	300	262	258	273	306	1,399	1453.0
Total	319	279	276	295	347	1,516	1574.5

North Dakota

	2004	2005	2006	2007	2008	5 year	5-Year Rate
Murder	10	13	8	16	4	51	1.6
Rape	157	146	184	202	222	911	28.4
Robbery	42	45	69	68	71	295	9.2
Assualt	319	396	525	599	738	2,577	80.3
Violent crime	528	600	786	885	1,035	3,834	119.5
Burglary	1,855	1,884	2,364	2,096	2,035	10,234	319.1
Larceny	8,832	9,081	8,884	8,672	8,926	44,395	1384.1
Motor vehicle theft	858	998	966	878	854	4,554	142.0
Property crime	11,545	11,963	12,214	11,646	11,815	59,183	1845.1
Total	12,073	12,563	13,000	12,531	12,850	63,017	1964.7

CHILD HEALTH INDICATORS

Child Indicators: Education 2008	Divide County	McKenzie County	Mountrail County
Children Ages 3 and 4 Enrolled in Head Start (Percent of all children Head Start eligible)	0	36 (74)	110 (66)
Enrolled in Special Education Ages 3-21 (Number and percent of total school enrollment)	24 (11)	68 (8.3)	222 (16)
Speech or Language Impaired Children in Special Education (Percent of all special education children)	9 (38)	20 (29)	92 (41)
Mentally Handicapped Children in Special Education (Percentage of total special education children)	2 (8.3)	2 (2.9)	16 (7.2)
Children with Specific Learning Disability in Special Education (Percentage of total special education children)	3 (13)	26 (38)	60 (27)
High School Dropouts (Dropouts per 1000 persons Grades 9-12)	1 (0.9)	9 (3.4)	11 (2.5)
Average ACT Composite Score	21.3	21.7	19.4
Average Expenditure per Student in Public School	$10,312	$14,062	$8,440

Child Indicators: Education 2008	Williams County	North Dakota
Children Ages 3 and 4 Enrolled in Head Start (Percent of all children Head Start eligible)	115 (91)	2,607(65)
Enrolled in Special Education Ages 3-21 (Number and percent of total school enrollment)	536 (17)	13,278(14)
Speech or Language Impaired Children in Special Education (Percent of all special education children)	150 (28)	3,644 (27)
Mentally Handicapped Children in Special Education (Percentage of total special education children)	27 (5.0)	860 (6.5)
Children with Specific Learning Disability in Special Education (Percentage of total special education children)	197 (37)	4,224 (32)
High School Dropouts (Dropouts per 1000 persons Grades 9-12)	62 (5.9)	791 (2.4)
Average ACT Composite Score	21.6	21.5
Average Expenditure per Student in Public School	$8,583	$8,096

Child Indicators: Economic Health 2008	Divide County	McKenzie County	Mountrail County
TANF Recipients Ages 0-19 (Percent of persons ages 0-19)	0	99 (6.7)	169 (9.3)
Food Stamp Recipients Ages 0-19 (Percent of all children ages 0-19)	55 (15)	439 (30)	516 (30)
Children Receiving Free and Reduced Price Lunches (Percent of total school enrollment	65 (29)	259 (32)	708 (51)
Medicaid Recipients Ages 0-20 (Percent of all persons ages 0-20)	73 (18)	577 (34)	770 (39)
Median Income for Families with Children Ages 0-17 (Percent of all women with children ages 0-17)*	$37,292	$35,856	$31,901
Children Ages 0-17 Living in Extreme Poverty (Percent of children 0-17 for whom poverty is determined)*	31 (6.8)	97 (5.6)	207 (11)
* Year 2000 data			

Child Indicators: Economic Health 2008	Williams County	North Dakota
TANF Recipients Ages 0-19 (Percent of persons ages 0-19)	95 (2.0)	7,532 (4.5)
Food Stamp Recipients Ages 0-19 (Percent of all children ages 0-19)	810 (18)	31,380 (20)
Children Receiving Free and Reduced Price Lunches (Percent of total school enrollment	940 (29)	32,445 (32)
Medicaid Recipients Ages 0-20 (Percent of all persons ages 0-20)	1,237 (24)	41,376 (23)
Median Income for Families with Children Ages 0-17 (Percent of all women with children ages 0-17)*	$37,479	$44,640
Children Ages 0-17 Living in Extreme Poverty (Percent of children 0-17 for whom poverty is determined)*	414 (8.2)	11,000 (8)
* Year 2000 data		

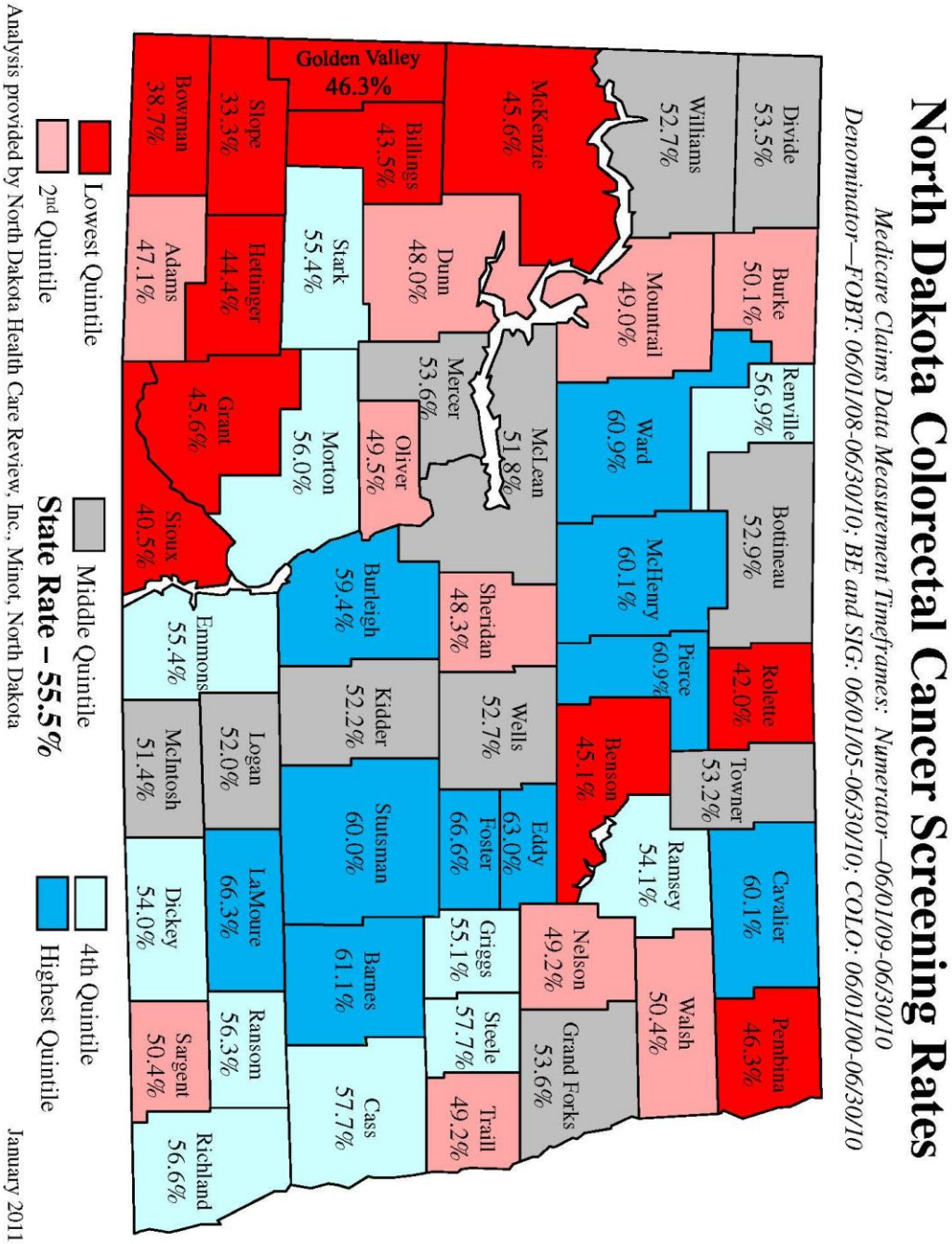
Child Indicators: Families and Child Care 2008	Divide County	McKenzie County	Mountrail County
Child Care Providers - All Approved Categories†	11	18	66
Child Care Capacity†	94	159	332
Mothers in Labor Force with a Child Ages 0-17 (Percent of all mothers with a child ages 0-17)*	188 (86)	498 (75.6)	597 (75)
Children Ages 0-17 Living in a Single Parent Family (Percent of all children ages 0-17)*	59 (13)	394 (22)	498 (27)
Children in Foster Care (Percent of children ages 0-18)	4 (1.2)	18 (1.3)	35 (2)
Children Ages 0-17 with Suspected Child Abuse or Neglect (Cases per 100 children 0-17)	10 (3.2)	27 (2.0)	43 (2.6)
Children Ages 0-17 Impact by Domestic Violence (Percent of all children ages 0-17)	4 (0.9)	94 (5.4)	218 (12)
Births to Mothers with Inadequate Prenatal Care**	NA	10 (17)	26 (24)
†2009 ** 2007 data ***2002 data			

Child Indicators: Families and Child Care 2008	Williams County	North Dakota
Child Care Providers - All Approved Categories	91	3,353
Child Care Capacity	723	43,213
Mothers in Labor Force with a Child Ages 0-17 (Percent of all mothers with a child ages 0-17)*	2,067 (84)	63,085 (81)
Children Ages 0-17 Living in a Single Parent Family (Percent of all children ages 0-17)*	1,094 (21)	30,695 (18)
Children in Foster Care (Percent of children ages 0-18)	144 (3.2)	2,134 (1.4)
Children Ages 0-17 with Suspected Child Abuse or Neglect (Cases per 100 children 0-17)	281 (6.7)	6,982 (4.9)
Children Ages 0-17 Impact by Domestic Violence (Percent of all children ages 0-17)	248 (4.8)	4,862 (3.0)
Births to Mothers with Inadequate Prenatal Care**	16 (5.2)	478 (5.4)
** 2007 data ***2002 data		

Child Indicators: Juvenile Justice 2008	Divide County	McKenzie County	Mountrail County
Children Ages 10-17 Referred to Juvenile Court (Percent of all children ages 0-17)	5 (2.9)	27 (3.8)	16 (2.1)
Offense Against Person Juvenile Court Referral (Percent of total juvenile court referral)	1 (10)	5 (9.4)	1 (3)
Alcohol-Related Juvenile Court Referral (Percent of all juvenile court referrals)	0	11 (21)	13 (39)

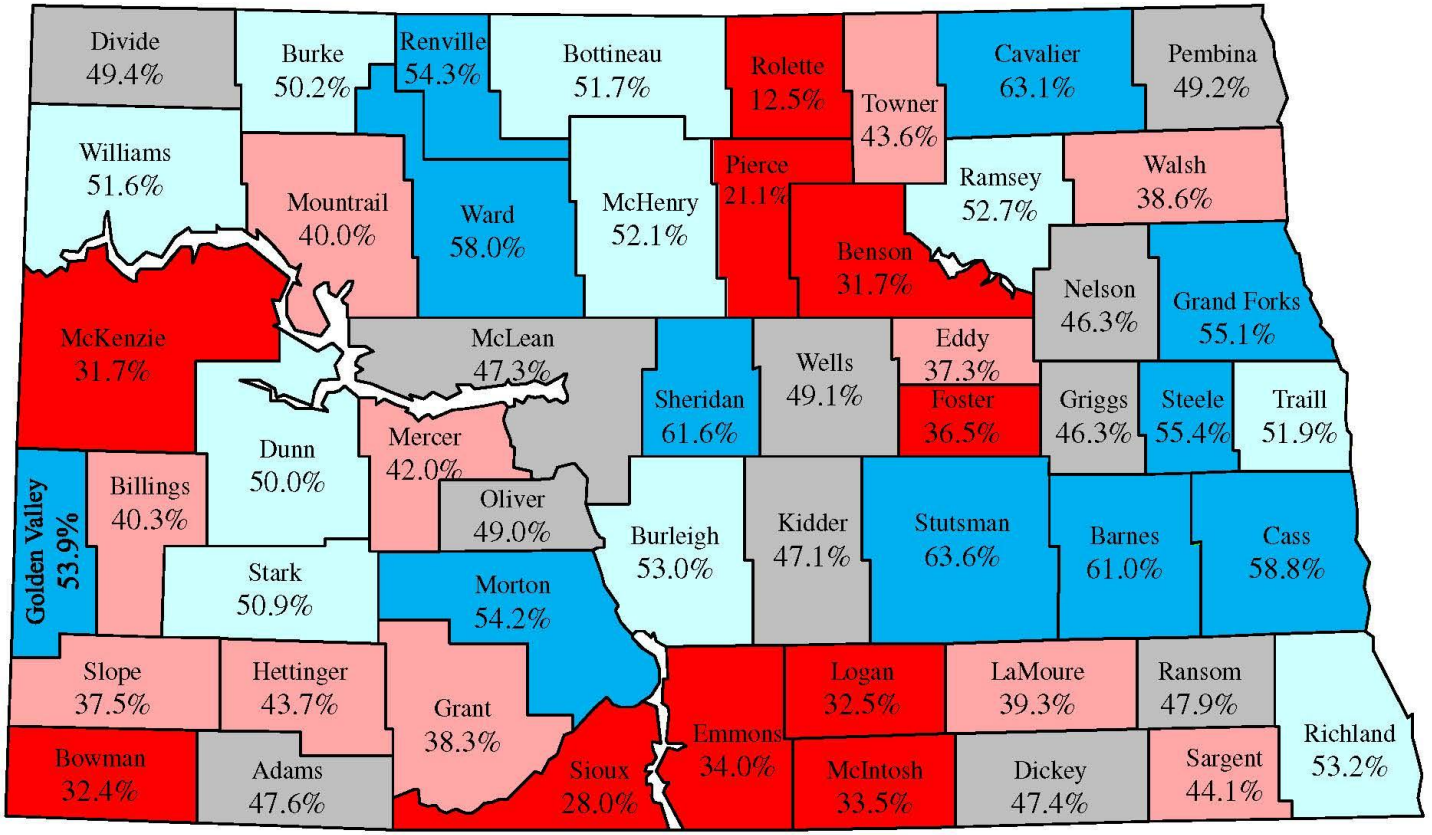
Child Indicators: Juvenile Justice 2008	Williams County	North Dakota
Children Ages 10-17 Referred to Juvenile Court (Percent of all children ages 0-17)	276 (14)	5,555 (8.4)
Offense Against Person Juvenile Court Referral (Percent of total juvenile court referral)	26 (5.0)	808 (7.8)
Alcohol-Related Juvenile Court Referral (Percent of all juvenile court referrals)	68 (13)	1,845 (18)

Appendix F – County Analysis by North Dakota Health Care Review, Inc.



North Dakota Pneumococcal Pneumonia Vaccination Rates

Medicare Claims Data – Claims through 06/30/10

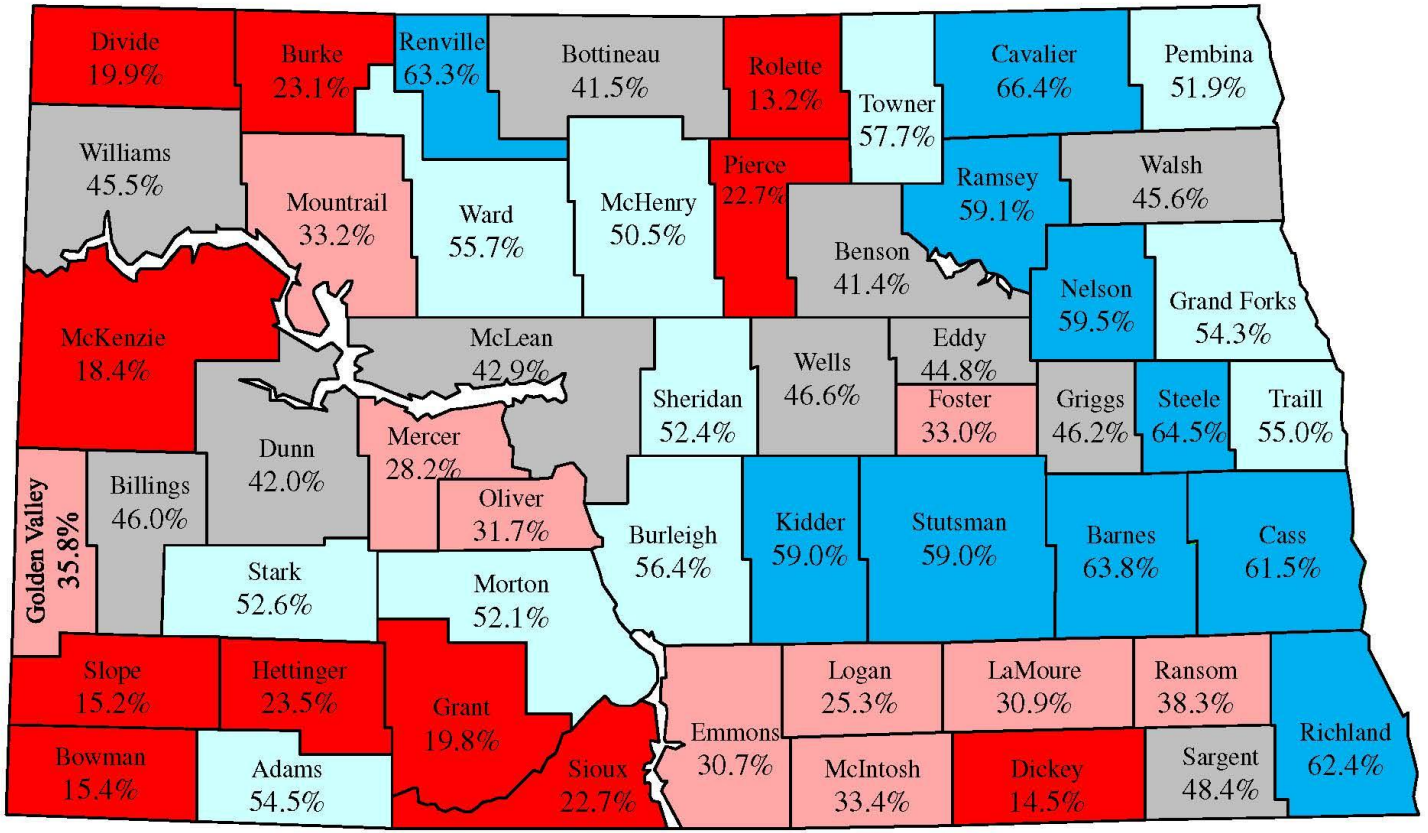


Analysis provided by North Dakota Health Care Review, Inc., Minot, North Dakota

January 2011

North Dakota Influenza Vaccination Rates

Medicare Claims Data – 03/01/09-03/31/10

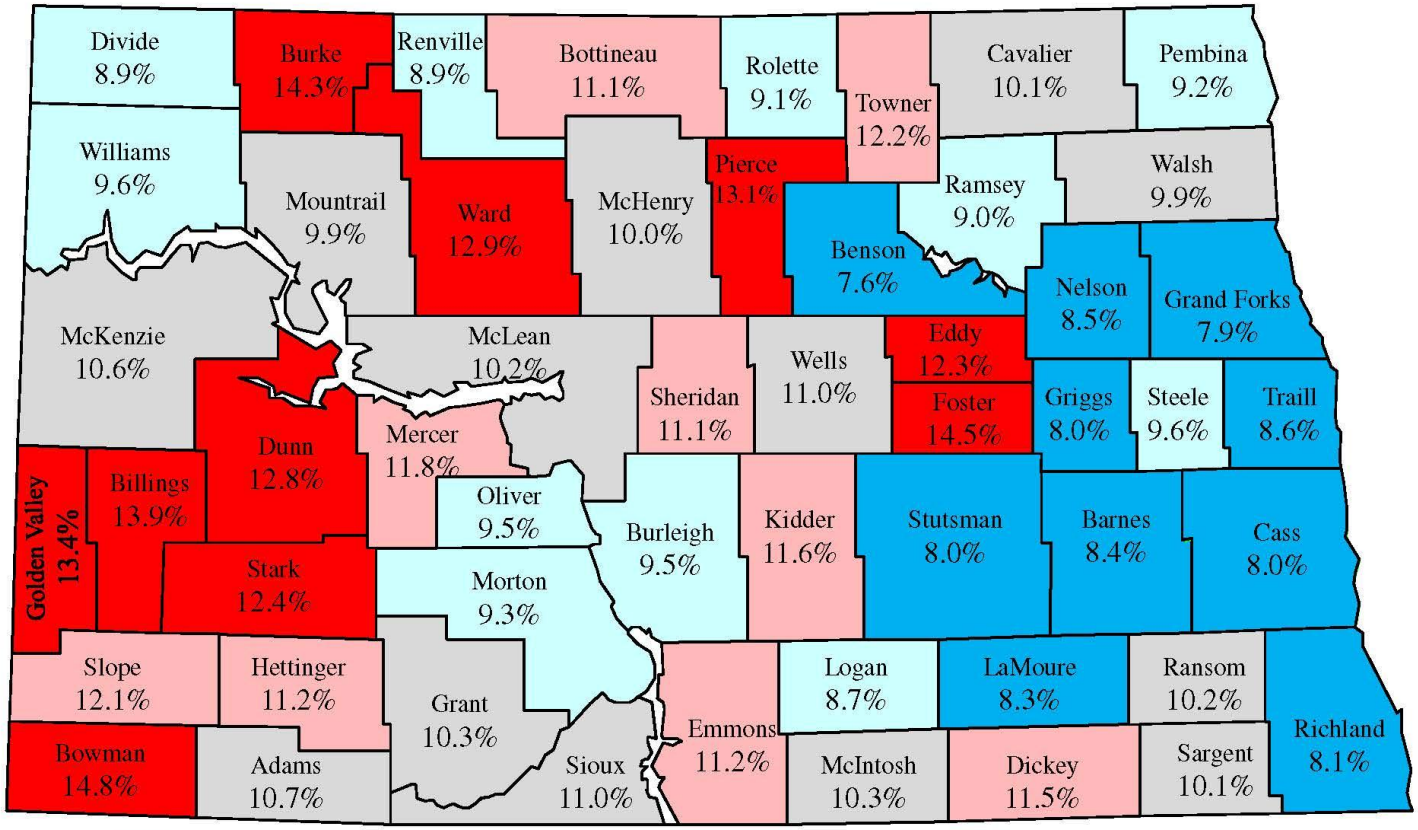


Analysis provided by North Dakota Health Care Review, Inc., Minot, North Dakota

October 2010

North Dakota DDI Rates

Timeframe: 01/01/10-06/30/10; Data Source: Medicare Part D

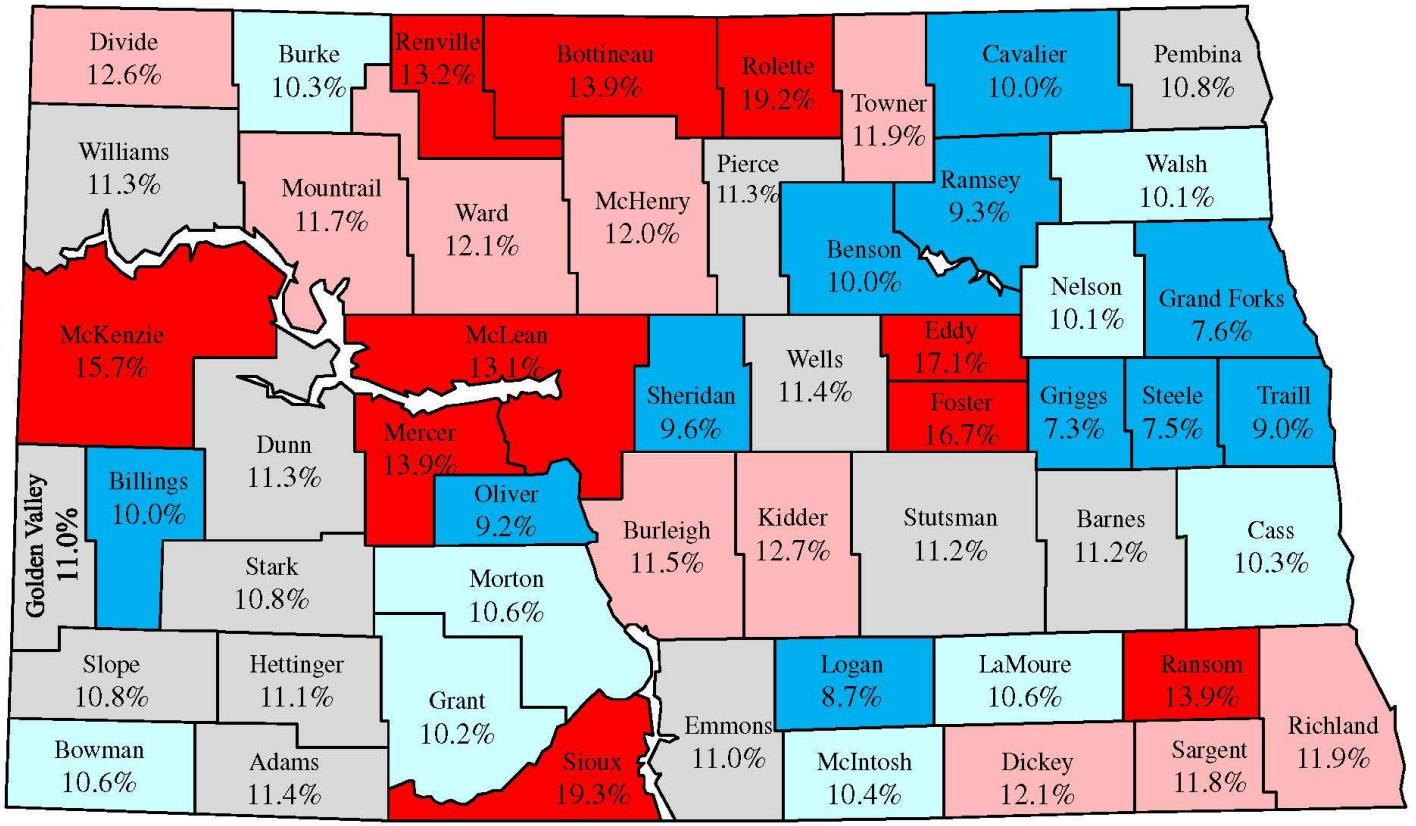


Analysis provided by North Dakota Health Care Review, Inc., Minot, North Dakota

January 2011

North Dakota PIM Rates

Timeframe: 01/01/10-06/30/10; Data Source: Medicare Part D

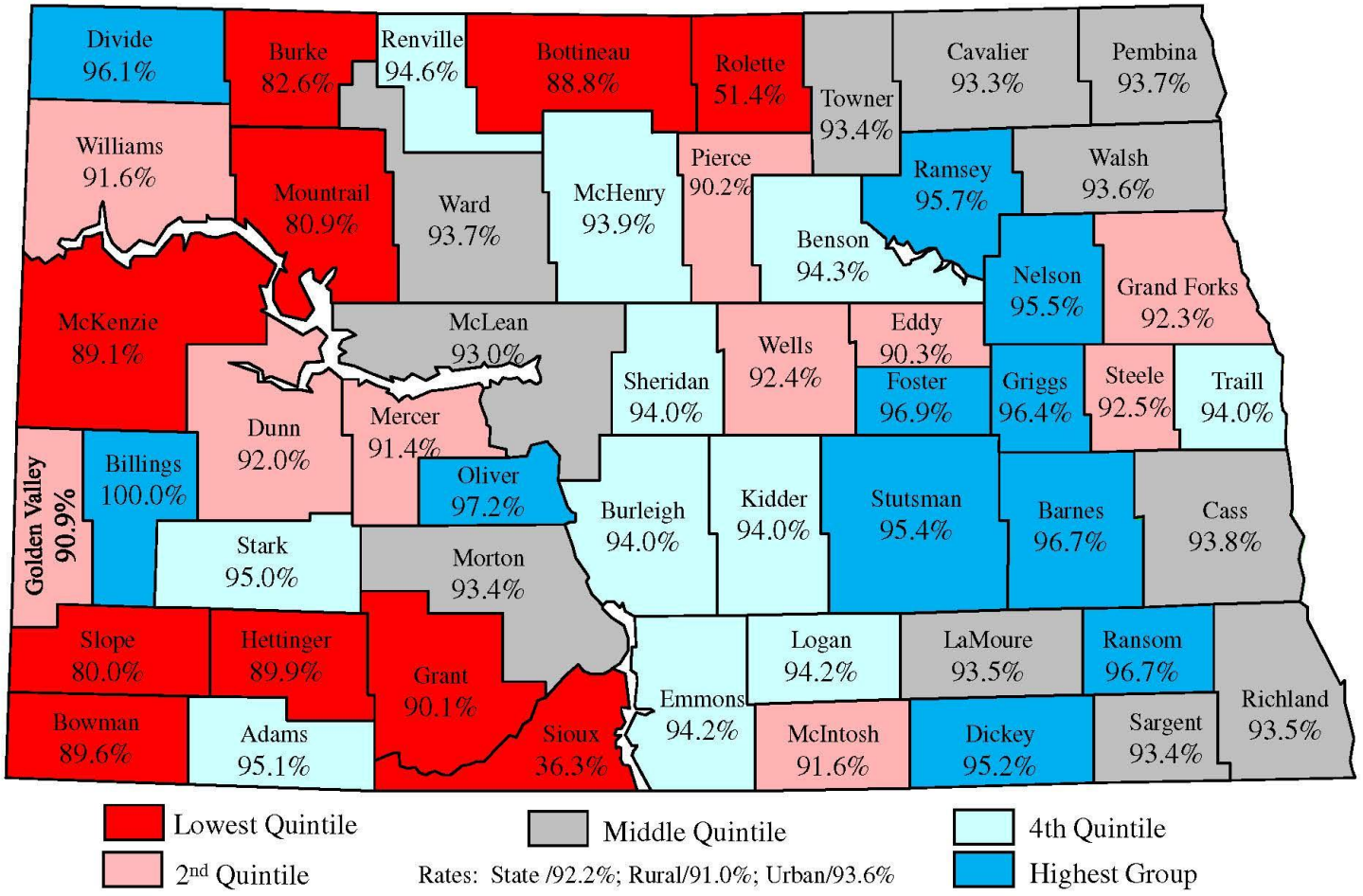


Analysis provided by North Dakota Health Care Review, Inc., Minot, North Dakota

January 2011

Annual Hemoglobin A1C Screening Rates for Patients with Diabetes

Medicare Claims Data Quarter 10 – End date 06/30/10

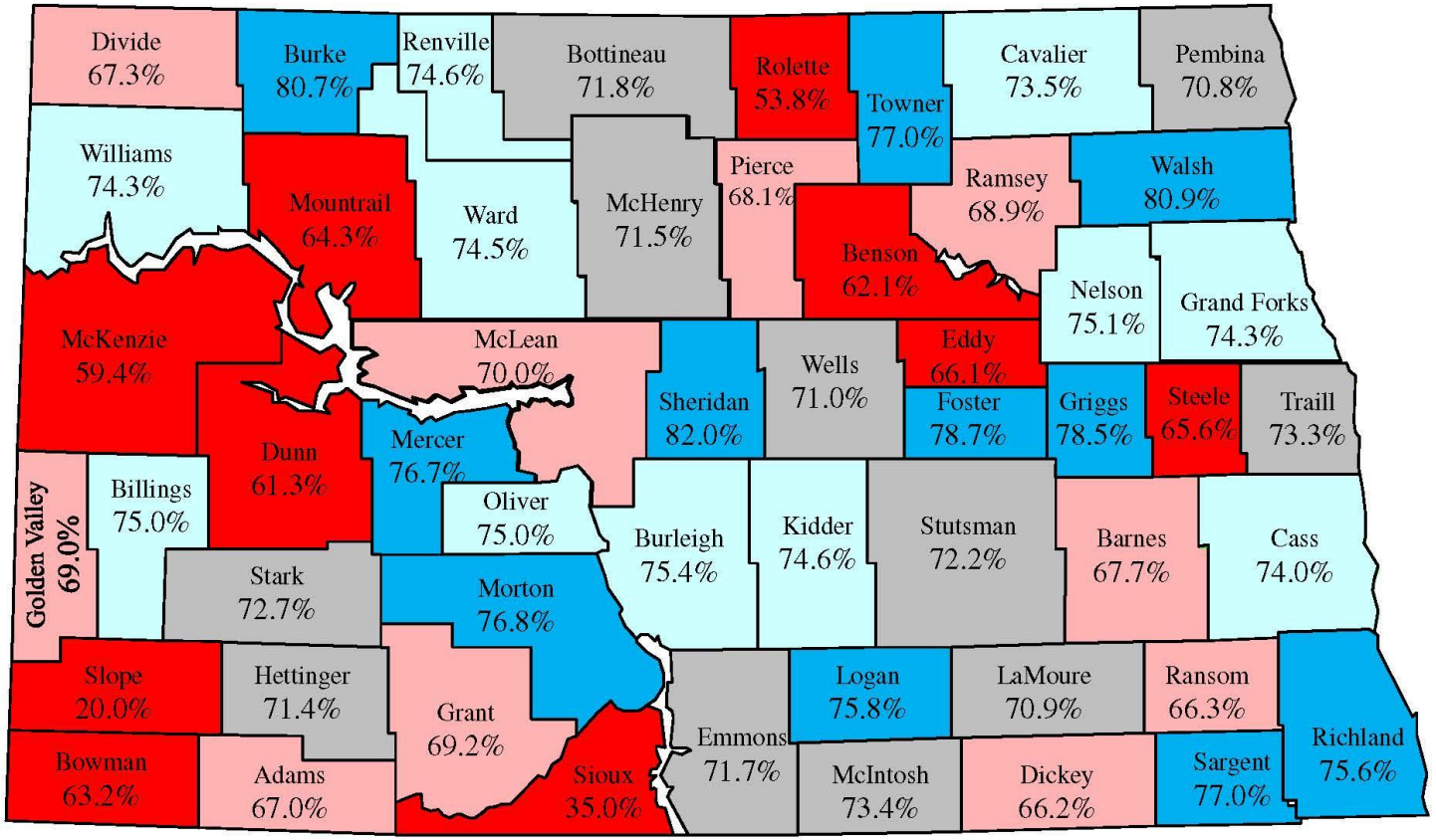


Analysis provided by North Dakota Health Care Review, Inc., Minot, North Dakota

January 2011

Annual Eye Examination Screening Rates for Patients with Diabetes

Medicare Claims Data Quarter 10 – End date 06/30/10

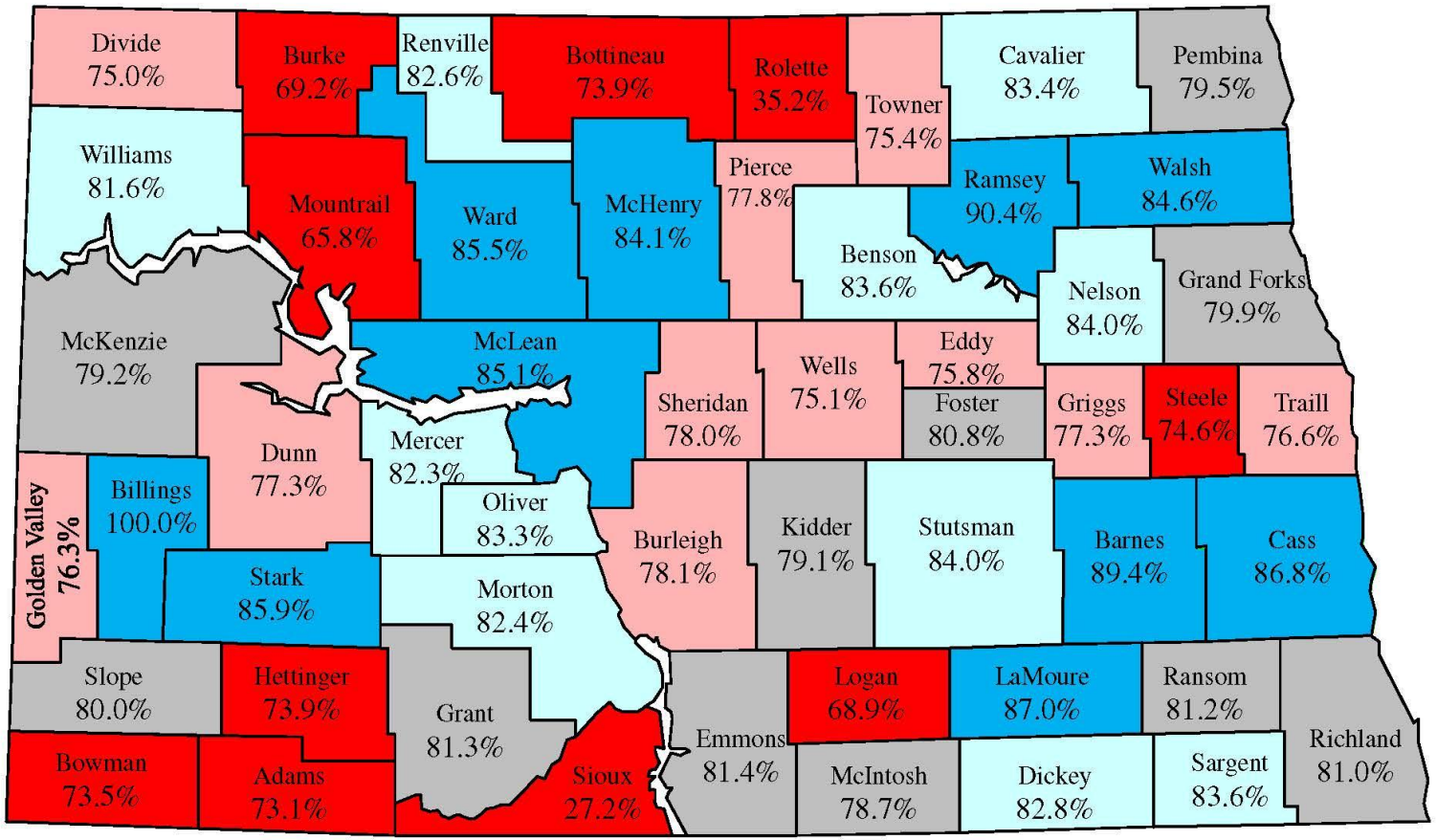


Analysis provided by North Dakota Health Care Review, Inc., Minot, North Dakota

January 2011

Annual Lipid Testing Screening Rates for Patients with Diabetes

Medicare Claims Data Quarter 10 – End date 06/30/10



Analysis provided by North Dakota Health Care Review, Inc., Minot, North Dakota

January 2011

Appendix G – Prioritization of Community's Health Needs

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

POTENTIAL COMMUNITY HEALTH NEEDS – TIOGA
(Listed in no particular order)

	IDENTIFIED NEED	VOTE
1.	Secondary data: Elevated rate of diabetics ◊	1
2.	Secondary data: Elevated rate of adult smoking ✓ ✓ ◊ ◊	7
3	Secondary data & Survey: Elevated rate of adult obesity ✓ ◊ ◊	3
4.	Secondary data: Elevated rate of physical inactivity ✓ ✓ ◊ ◊	3
5.	Secondary data: Elevated rate of excessive drinking ✓ ✓ ◊ ◊	12
6.	Secondary data: Elevated level of sexually transmitted infections ✓ ◊ ◊	4
7.	Secondary data: Elevated motor vehicle crash death rate ✓ ✓ ◊ ◊	11
8.	Secondary data: Elevated teen birth rate ✓ ✓ ◊ ◊	5
9.	Secondary data: Elevated rate of uninsured adults ✓ ◊ ◊	7
10.	Secondary data & Survey & Interview/Focus Group: Limited number of health care providers ✓ ✓ ◊ ◊	8
11.	Secondary data & Interviews/Focus Group: Limited number of mental health care providers ✓ ✓	1
12.	Secondary data: Elevated level of preventable hospital stays ✓ ◊ ◊	1
13.	Secondary data: Decreased rate of diabetic screening ✓ ✓ ◊ ◊	1
14.	Secondary data: Decreased rate of mammography screening ✓ ✓ ◊ ◊	0
15.	Secondary data: Limited access to healthy foods ◊ ◊	3
16.	Secondary data: Decreased rate of colorectal cancer screening ✓ ✓	0
17.	Secondary data: Decreased rate of annual hemoglobin A1C screening rates ✓ ✓	0
18.	Secondary data: Decreased rate of pneumococcal pneumonia vaccination rates ✓	0
19.	Secondary data: Decreased rate influenza vaccination rates ✓	0
20.	Secondary data: Decreased rate of annual lipid testing screening for patients with diabetes ✓	0
21.	Secondary data: Decreased rate of annual eye examination screening for patients with diabetes ✓	0

22.	Secondary data: Increased rate of potentially inappropriate medication rates ✓	0
23.	Survey: Cancer	2
24.	Survey: Higher cost of health care for consumers	2
25.	Survey: Addiction/substance abuse	2
26.	Interview/Focus Group: Accident/ Injury prevention/ EMS services	4
27.	Interview/Focus Group: Adequate number of visiting specialists	0
28.	Interview/Focus Group: Violence (domestic, workplace, emotional, physical, sexual)	2
29.	Survey & Interview/Focus Group: Financial viability of TMC	2
30.	Interviews/Focus Group: Spread of infectious disease	0

✓ = Williams County not meeting state average

◊ = Williams County not meeting national benchmark

✓ = Mountrail County not meeting state average

◊ = Mountrail County not meeting national benchmark