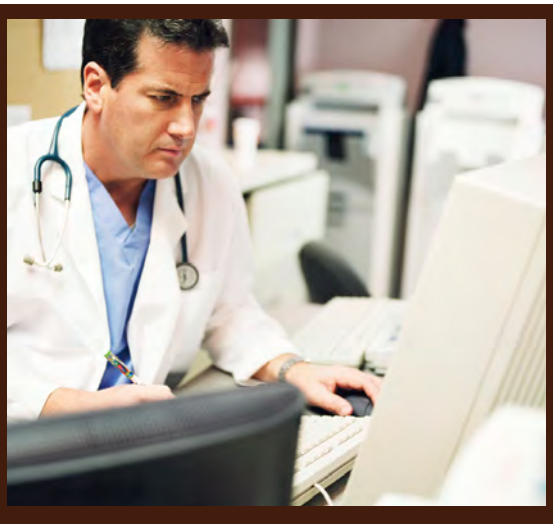
Community Health Needs Assessment


West River Health Services

Mission

The mission of West River Health Services is to provide comprehensive health & wellness services to the residents and visitors of the region it serves.

Completed by

The North Dakota Medicare Rural Hospital Flexibility (Flex) Program
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Introduction

The mission of West River Health Services (WRHS) is to provide comprehensive health and wellness services to the residents and visitors of the region it serves. WRHS and its partners in health care are dedicated to excellence in practice, innovation in service, compassion for the people they serve, and respect for one another.

To help inform future decisions and strategic planning, WRHS conducted a community health needs assessment. Through a joint effort, WRHS and the Center for Rural Health at the University of North Dakota School of Medicine & Health Sciences studied community health data and solicited input from community members and WRHS staff. 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.

To gather feedback from the community, residents of the facility's service area and staff of WRHS were given the chance to participate in a widely distributed survey. Additional information was collected through key informant interviews of locally identified community leaders as well as from a focus group that included members of boards affiliated with West River Health Services.

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 community needs, and identify action needed to address the future delivery of health care in the defined area. 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 and risks; 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 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.

Overview of Services and Facilities

West River Health Services

West River Health Services includes a 25-bed critical access hospital located in Hettinger, North Dakota. It is a state-designated Level IV Trauma Center and employs approximately 290 people. The corporate structure of the organization is comprised of three not-for-profit corporations: (1) West River Health Services Foundation is the foundation/fundraising and parent corporation; (2) West River Health Services (WRHS) is the health care services corporation and includes its hospital, clinics, and other health care services; and (3) Western Horizons Living Centers operates the skilled, basic care, and assisted living facilities. Each corporation has a separate board of directors, with each board having members from across the geographic area served by the organization.

WRHS is the largest medical complex in Adams County and serves 25,000 people throughout 25,000 square miles. Locally available services provided by WRHS include the following:

- Acute care hospital
- Aesthetic treatments
- Ambulance
- Birthing center

- Cardiac services/rehab
- Chemotherapy
- Clinic
- Counseling services
- Diabetes education
- Emergency room
- End of life care
- Eye exams/optometric services
- Foot care/podiatric services
- Health screenings
- Hearing tests/audiologist
- Home medical services/store
- Home oxygen service
- Laboratory services
- Medical nutrition therapy
- Medication assistance
- Medication for oxygen customers
- Pediatric/child care
- Physical therapy
- Occupational therapy
- Radiology - bone density
- Radiology - CT scan
- Radiology - fluoroscopy
- Radiology - general x-ray
- Radiology - mammography
- Radiology - MRI
- Radiology - nuclear medicine
- Radiology - ultrasound
- Respiratory care services
- Sleep studies
- Speech therapy
- Surgical services
- Swing-bed services
- Visiting nurses – home care
- Visiting specialists
- WIC program

Visiting specialists offer services related to cardiology/critical care, clinic audiology, nephrology, neurology, neurosurgery, ophthalmology, orthopedic surgery, and psychiatry.

West River Health Services traces its origins back to the initial settlers who settled in the territory more than 100 years ago and laid the foundation for a community and medical facilities. Prior to World War II, people who were seriously ill had to travel more than 150 miles for inpatient hospital care. Issues such as gas rationing, movement of troops, and complicated transportation hindered access to medical care. The small community of Hettinger then devised a plan to develop its own medical system. Since its inception, the goal and vision of WRHS has been to provide quality medicine on the prairie.

Today, the three corporations of the West River Health Services organization have a significant economic impact on Hettinger and the surrounding area. The health system's primary impact to the county is $7.5 million and its secondary impact is $3.75 million for a total impact of $11.25 million annually.[1]

Health Care Facilities and Other Resources

West River Health Services completed a renovation to its medical complex in 2009-10, which included the Centennial Addition. The renovation enhanced the facility in many ways, and included: construction of a new clinic, the addition of a new surgical services area with new operating rooms, consolidation of hospital and clinic entrances with a level and handicapped-accessible parking area, and centralization of admissions, patient accounts, and medical records.

WRHS' critical access hospital offers the following patient rooms:

- 20 acute beds and swing-bed unit
- Three intensive care unit (ICU) beds
- Two birthing unit (OB) beds
- Four outpatient rooms
- Two visual monitoring patient rooms

The West River Health Services Clinic System operates eight clinics in the following communities:

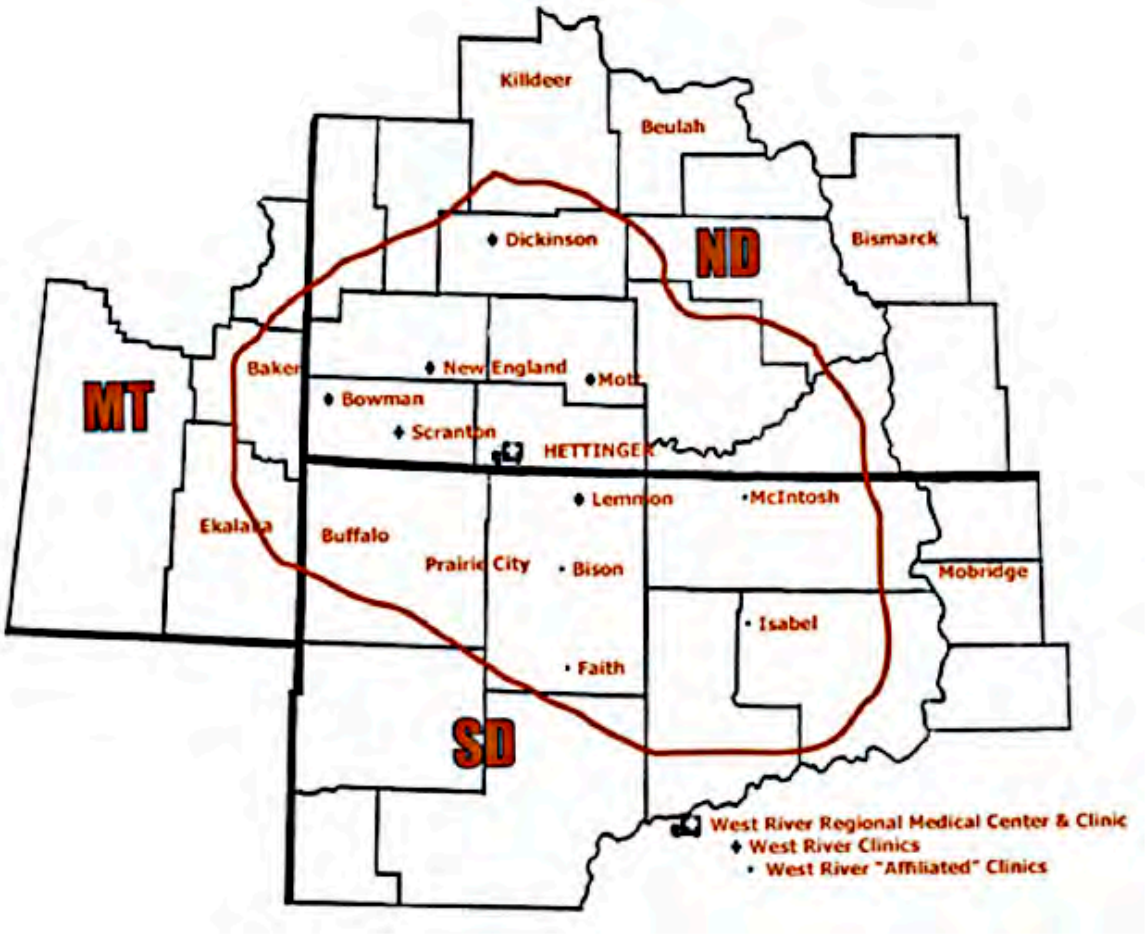
- Bowman

[1]*Figures based on payroll information and an economic multiplier of 1.5.*

- Dickinson
- Hettinger (2)
- Lemmon, SD
- Mott
- New England
- Scranton

The clinics include the West River Eye Center in Hettinger as well as the West River Foot & Ankle Center in Dickinson. Additionally, the United Clinic Physician, P.C. Group, the physician group that oversees the hospital, clinics, and affiliated clinics, manages four clinics in the South Dakota communities of Bison, McIntosh, Isabel, and Faith. Clinic locations are illustrated below:

West River Health Services
Service Area: 25,00 people, 25,000 square miles



WRHS also operates a fitness center that features the following equipment: weight machines, treadmills, elliptical machine, recumbent bike, fit balls, free weights, flex bands, and cardiovascular equipment. WRHS' home medical equipment store offers a variety of equipment and products available for purchase or rent, including oxygen concentrators, pumps, respiratory medications, fitness equipment, walkers, furniture, home fixtures, and prostheses.

Western Horizons Care Center has 50 skilled nursing care beds and 10 basic care beds (which provide an alternative for individuals who are unable to function in an independent living environment, but are not in need of skilled long-term care services). Amenities include beauty/barber shop, cable television, daily activities, end of life care,

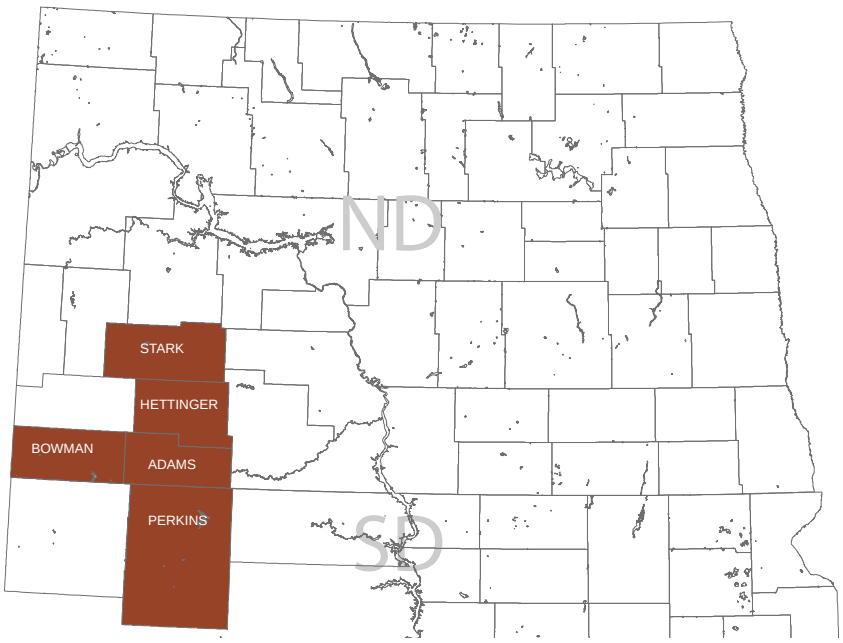
fenced courtyards, geriatric behavioral therapy, newspaper delivery, pastoral care, pet therapy, postal services, private and semi-private rooms, private family meeting rooms, serenity room, shopping and transportation, sub-acute care, and whirlpool spa rooms. Western Horizons also offers assisted living apartments with assistive services such as hair, skin and nail care, bathing, dressing, medication management, housekeeping/laundry, meal planning and preparation, exercise programs, monitoring blood sugars, vital signs, and oxygen, and assistance with mobility, communication, and reminders.

Hettinger offers four seasons, a low cost of living, more than 130 businesses, ten churches, and a variety of recreational opportunities. Recreation includes a nine-hole golf course, indoor/outdoor swimming pool, lighted tennis courts, bird watching, quilting, walking paths, a senior center, theater, restaurants, concerts, and a fitness center.

Assessment Methodology

As noted on the service area map in the previous section, WRHS' service area touches 19 counties in three states. This assessment focuses on the health system's core service area, serving communities in the North Dakota counties of Adams, Bowman, Hettinger, and Stark, as well as Perkins County in South Dakota. This core service area is defined based on the location of WRHS clinics, geographic distance to the hospital in Hettinger, and history of heaviest usage by consumers. Located in this core service are the North Dakota communities of Bowman, Hettinger, Mott, New England, Reeder, Regent, Rhame, and Scranton, and the South Dakota communities of Bison, Faith, and Lemmon.

West River Health Services Area: Hettinger, Adams, Bowman, Stark, Perkins, SD



Data for this community health needs assessment was collected in a variety of ways: (1) a broadly distributed survey solicited feedback from area consumers and residents, (2) health care professionals who work at West River Health Services provided input through a similar survey, (3) community leaders representing the broad interests of the community took part in one-on-one key informant interviews, (4) members of the health system's boards of directors participated in a focus group, and (5) a wide range of secondary sources of data were examined, providing information on a multitude of measures including demographics; health conditions, indicators, and outcomes; rates of preventative measures; rates of disease; and at-risk activities.

The Center for Rural Health at the University of North Dakota School of Medicine & Health Sciences supported WRHS in conducting this assessment by administering the survey, locating and analyzing secondary data sources, conducting interviews and the focus group, and writing this assessment report. The Center has extensive experience in conducting community health needs assessments and has worked on community assessments since its inception in 1980.

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 resource 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 & 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.

In addition to its work in the state, the Center also runs five national programs: (1) Rural Assistance Center (www.raconline.org), an information portal that received more than 900,000 web visits in the most recent year; (2) the Health Workforce Information Center (HWIC), which provides free access to the most recent resources on the nation's health workforce in one easy-to-use online location (www.hwic.org); (3) the Rural Health Research Gateway program, which extends the reach and impact of important findings at the national, state, and community level; (4) the National Resource Center on Native American Aging, the foremost authority on the subject of aging issues for Native Americans in the country; and (5) the newest program, the National Indigenous Elder Justice Initiative (NIEJI), which will focus on elder abuse in Indian Country.

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, the survey 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 core service area of West River Health Services. 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 need for services and concerns about the delivery of health care in the community;
- Solicit suggestions and help identify any gaps in services (now and in the future); and

- Determine preferences for using local health care versus traveling to other facilities.

Specifically, the survey covered the following topics: awareness and utilization of local health services, barriers to using local services, suggestions for improving collaboration with the community, local health care delivery concerns, reasons consumers use West River Health Services and reasons they seek care elsewhere, travel time to the nearest clinic and hospital, demographics (gender, age, years in community, marital status, employment status, income status and insurance status), and any health conditions or diseases respondents currently have.

Approximately 6,020 community member surveys were distributed via a bulk mailing to area residents in both North Dakota and South Dakota. A list of communities included in the mailing is included in Appendix B. To help ensure confidentiality and 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, West River Health Services also had on hand 200 copies of the survey to distribute to consumers who used its facilities during the survey period. The survey period ran from the first week in October of 2011 until November 11, 2011. Approximately 757 (12%) completed surveys were returned.

Area residents also were given the option of completing an online version of the survey, which was publicized in the local newspaper, on the West River Health Services' website, and on posters. Seven online surveys were completed.

Health Care Professional Survey

The health care professional version of the survey was distributed to the employees of WRHS. Approximately 300 surveys were distributed to these health care professionals, and approximately 134 (45%) of these were completed and returned. The survey for health care professionals covered the same topics as the consumer survey, although it sought less demographic information and didn't ask whether WRHS employees were aware of the services offered by WRHS. As with the consumer survey, responses were sent back to the Center for Rural Health to help ensure confidentiality and anonymity.

Interviews

One-on-one interviews with key informants were conducted in person in Hettinger on September 29 and 30, 2011, as well as by telephone on November 4, 2011. A representative of the Center for Rural Health conducted the interviews. West River Health Services' administrators identified certain individuals as "community leaders" who could provide insights into the community's health needs. These key informants represented the broad interests of the community served by West River Health Services. They included representatives of the health community, business community, faith community, social services, nonprofit agencies, and public health. 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 minority populations, as well as with populations with chronic diseases. Eleven individuals, listed in Appendix C, took part in the interviews.

Topics covered during the interviews included the general health needs of the community, delivery of health care by local providers, awareness of health services offered locally, utilization of local services, barriers to using local services, suggestions for improving collaboration with the community, local health care delivery concerns,

reasons community members use WRHS, and reasons community members go elsewhere for health care.

Focus Group

A focus group was held on September 28, 2011 in Hettinger. The group of nine people was comprised of officers of the boards of directors of: West River Health Services Foundation, West River Health Services, and Western Horizons Living Centers. A representative of the Center for Rural Health moderated the focus group. As with the one-on-one interviews, topics covered during the focus group included the general health needs of the community, delivery of health care by local providers, awareness of health services offered locally, utilization of local services, barriers to using local services, suggestions for improving collaboration with the community, local health care delivery concerns, reasons community members use WRHS, and reasons community members go elsewhere for health care.

Secondary Research

Secondary data 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 13 primary data sources); North Dakota Health Care Review, Inc.; 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

General demographic and geographic data about the counties in WRHS' core service area is summarized in the following table:

Table 1: County Information and Demographics

From 2010 Census where available; some figures from earlier Census data.

	Adams	Bowman	Hettinger	Stark	North Dakota	Perkins	South Dakota
Population	2,343	3,151	2,477	24,199	**672,591**	2,982	**814,180**
Square Miles	987	1,162	1,132	1,338	**70,704**	2,870	**75,811**
People per Square Mile	2.6	3	2	17	**9.8**	1	**10.7**
Caucasian	98.3%	97.9%	96.2%	95.2%	**90.%**	96.9%	**85.9%**
High School Graduate	83.1%	86.6%	82.9%	86.7%	**88.7%**	81.2%	**88.8%**
Bachelor's Degree or Higher	16.6%	18.1%	19.8%	23.3%	**25.6%**	16.2%	**24.6%**
Live Below Poverty Level	11.1%	7.7%	15.4%	9.6%	**11.7%**	17.4%	**14.2%**
Individuals 65 + with a disability	35.8%	33.7%	39.1%	40.2%	**38.5%**	39.2%	**39.5%**
65 years or older	24.2%	22.0%	25.8%	16.0%	**14.5%**	23.1%	**14.3%**
Median Age	49.5	46.9	49.4	38.3	**37.0**	48.5	**36.9**

The statistics above show that all five counties have a greater percentage of individuals over the age of 65 and all have a higher median age than their respective state averages. All but Stark County (which includes the city of Dickinson) have significantly older populations than the state averages. Also, the number of individuals 65 years or older with a disability is near or above the state average in three of the five counties. This likely signifies an increased need for medical care in these counties due to the aging population and a significant number of older individuals living with a disability.

All five counties have a lower percentage of individuals with a high school diploma or bachelor's degree than the respective state averages. The reduced number of educated individuals could have implications for recruiting educated health care professionals in the area.

The service area of West River Health Services is also very rural, with four of the five counties meeting the definition of a frontier service area (less than six people per square mile). This has implications for the delivery of service and residents' access to care. Transportation can be an issue for rural residents and others as can isolation, which can have many effects on health status.

Health Conditions, Indicators, and Outcomes

Several sources were reviewed to inform this assessment. The North Dakota Behavioral Risk Factor Surveillance System provides statistics regarding modifiable risk behaviors, preventative health practices, and health-related conditions. Large amounts of information about various health conditions, indicators, and outcomes also were collected from the North Dakota Department of Health's Southwest District Community Health Profile, the Robert Wood Johnson Foundation's County Health Rankings, and North Dakota Health Care Review, Inc. (NDHCRI), which is the state's quality improvement organization. Also included in this section is information from the National Survey of Children's Health Data Resource Center and the Gallup-Healthways Well-Being Index.

North Dakota statewide data related to children's health from the National Survey of Children's Health Data Resource Center indicated the following:

- 91.6% of children currently are insured (compared to 90.9% nationally)
- 78.9% of children have had a preventive medical visit in the past year (compared to 88.5% nationally)
- 77.2% of children have had a preventive dental visit in the past year (compared to 78.4% nationally)
- 17.6% of children age 10 months to five years received a standardized screening for developmental or behavioral problems (compared to 19.5% nationally)
- 72.4% of children aged 2-17 who have problems requiring counseling received mental health care (compared to 60% nationally)

South Dakota statewide data related to children's health from the National Survey of Children's Health Data Resource Center indicated the following:

- 92.2% of children currently are insured (compared to 90.9% nationally)
- 80% of children have had a preventive medical visit in the past year (compared to 88.5% nationally)
- 80.7% of children have had a preventive dental visit in the past year (compared to 78.4% nationally)
- 18.8% of children age 10 months to five years received a standardized screening for developmental or behavioral problems (compared to 19.5% nationally)
- 69.3% of children aged 2-17 who have problems requiring counseling received mental health care (compared to 60% nationally)

The data on children's health care reveals the states' opportunity to improve child health care by strengthening access and prevention. For example, approximately 20% or more of the states' 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 states, 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.

North Dakota ranked second nationally in well-being during the first half of 2011 as measured by the Gallup-Healthways Well-Being Index. South Dakota ranked 14th. The index is an average of six sub-indexes, which individually examine life evaluation, emotional health, work environment, physical health, healthy behaviors, and access to basic necessities.

Southwest District Community Health Profile

Included in Appendix D is the North Dakota Department of Health's community health profile for the state's southwest district, which includes the counties of Adams, Billings, Bowman, Dunn, Golden Valley, Hettinger, Slope, and Stark. Note: Some of the information in this summary is based on earlier census data.

The profile shows that the leading causes of death in the region are unintentional injury for those aged 5 to 44, cancer for those aged 45 to 84, and heart ailments for those 85 and older. Suicide is the second most common cause of death among those aged 15 to 44. With the exception of congenital anomaly for those aged 0 to 4, the first and second most common causes of death for all age groups is either unintentional injury, cancer, heart ailments, or suicide. Other common causes of death are chronic obstructive pulmonary disease (third most common cause of death for those aged 65 to 84) and stroke (third most common cause of death for those 85 and older). This data indicates that reductions in mortality may be achieved by focusing on the prevention of accidents, cancer, suicide, and heart disease.

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

County Health Rankings

The Robert Wood Johnson Foundation, in collaboration with the University of Wisconsin Population Health Institute, has developed the County Health Rankings to illustrate community health needs and provide guidance for actions toward improved health. In the County Health Rankings' report, counties are compared to national benchmark data and state rates in various topics ranging from individual health behaviors to the quality of health care.

The data used in the county rankings is pulled from 13 primary data sources and then is compiled to create a state rank and county rankings. Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks, e.g. 1 or 2, are considered to be the "healthiest." Counties are ranked on both health outcomes and health factors. Below is a breakdown of the variables that influence a county's rank. Included in Appendix E is a model of the 2011 County Health Rankings – a flow chart of how a county's rank is determined.

Health Outcomes

- **Mortality (length of life)**
- **Morbidity (quality of life)**
  - Poor or fair health
  - Poor physical health days

Health Factors

- **Health Behavior**
  - Tobacco use
  - Diet and exercise
  - Alcohol use
  - Unsafe sex
- **Clinical Care**
  - Access to care
  - Quality of care
- **Social and Economic Factors**
  - Education
  - Employment
  - Income
  - Family and social support
  - Community safety
- **Physical Environment**
  - Air quality
  - Built environment

NDHCRI, thorough its contract with the Centers for Medicare and Medicaid Services, also provides county-specific data as it relates to various preventive measures and health screens.

Below is a summary of the pertinent information taken from the County Health Rankings as it relates to the West River Health Services core service area, including Adams, Bowman, Hettinger, and Stark counties in North Dakota and Perkins County in South Dakota. 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, the following statistics are based on the health behavior and conditions of the stated counties' residents, not necessarily patients of West River Health Services. For definitions of health variables from the County Health Rankings 2011 Report, see Appendix F. Additional information is available at the County Health Rankings website, www.countyhealthrankings.org.

For some of the measures included in the rankings, the County Health Rankings' authors have calculated a national benchmark for 2011. 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)."

Each of the county's rankings also is listed in the table below. For example, Adams County ranks 29th out of 42 ranked counties in North Dakota on health outcomes and eighth on health factors. Note that there was not enough, or too much missing, data to assign a rank to Hettinger County in the County Health Rankings report for 2011. The variables listed in red are areas where that county is not measuring up to the national benchmark and/or the state rate.

North Dakota Counties	Adams	Bowman	Hettinger	Stark	National Benchmark	North Dakota
Ranking: Outcomes	**29th**	**32nd**	-	**13th**		**(of 42)**
Poor or Fair Health	10%	15%	10%	13%	10%	12%
Poor Physical Health Days *(in past 30 days)*	2.8	2.9	2.3	2.9	2.6	2.7
Poor Mental Health Days *(in past 30 days)*	2.6	2.3	2.4	2.5	2.3	2.5
Diabetics	10%	9%	10%	8%	-	8%
Ranking: Factors	**8th**	**6th**	-	**7th**		**(of 42)**
Adult Smoking	12%	11%	20%	18%	15%	20%
Adult Obesity	28%	28%	28%	28%	25%	28%
Physical Inactivity	30%	28%	28%	27%	-	25%
Excessive Drinking *(binge plus heaving drinking)*	16%	21%	14%	21%	8%	22%
Binge Drinking	15%	21%	14%	20%	-	21%
Sexually Transmitted Infections	45	166	463	213	83	300
Uninsured Adults	16%	19%	19%	14%	13%	15%
Primary Care Provider Ratio	126:1	1,013:1	-	979:1	631:1	665:1
Mental Health Provider Ratio	2,270:1	3,038:0	2,342:0	3,753:1	-	2,555:1
Preventable Hospital Stays[2]	141	85	75	64	52	71
Diabetic Screening	-	76%	85%	87%	89%	85%
Mammography Screening	-	-	-	60%	74%	72%
Access to Healthy Foods	50%	100%	100%	14%	92%	35%
Access to Recreational Facilities	0	0	0	9	17	12

Perkins County, SD	Perkins County	National Benchmark	South Dakota
Ranking: Outcomes	**34th**		**(of 55)**
Poor or Fair Health	14%	10%	12%
Poor Physical Health Days *(in past 30 days)*	2.9	2.6	2.8
Poor Mental Health Days *(in past 30 days)*	2.2	2.3	2.6
Diabetics	10%		7%
Ranking: Factors	39th		(of 55)
Adult Smoking	14%	15%	20%
Adult Obesity	29%	25%	29%
Physical Inactivity	31%	-	26%
Excessive Drinking *(binge plus heaving drinking)*	15%	8%	19%
Binge Drinking	15%	-	18%
Sexually Transmitted Infections	69	83	371
Uninsured Adults	20%	13%	16%
Mental Health Provider Ratio	2,900:1	-	3,544:1
Preventable Hospital Stays	104	52	69
Diabetic Screening	74%	89%	83%
Mammography Screening	79%	74%	68%
Access to Healthy Foods	20%	92%	42%
Access to Recreational Facilities	0	17	13

[2]The variable Preventable Hospital Stays measures the hospital discharge rate for ambulatory care-sensitive conditions per 1,000 Medicare enrollees in the previous year. In reference to this variable, the authors of the County Health Rankings note that "hospitalization for diagnoses amenable to outpatient services suggests that the quality of care provided in the outpatient setting was less than ideal. The measure may also represent the population's tendency to overuse the hospital as a main source of care."

The rankings reveal that there is room for improvement on many measures in the WRHS core service area. For example, on the measure of adult obesity, all five counties show obesity rates at or above both the state averages and the national benchmark. Likewise, excessive drinking (a measure of both binge and heavy drinking) appears to be an issue in all of the counties examined. While the national benchmark rate is 8%, all counties in the service area have significantly higher rates, with a rate of 21% in Bowman and Stark counties.

Residents in the service area also appear to have higher rates of physical inactivity. All five counties have higher rates of physical inactivity than the state averages, with both Adams and Perkins counties having a rate five percentage points above the state average (Adams County rate of 30% vs. ND average of 25%; Perkins County rate of 31% vs. SD average of 26%).

Another area where the region is lagging is the number of uninsured adults. All but Stark County have higher rates of uninsured adults as compared to the respective state averages. Perkins County had the highest rate, at 20% (compared to the state average of 16%), with Bowman and Hettinger counties both at 19% (compared to a state average of 15%).

Finally, the rates for preventable hospital stays are elevated in the region. Measured as the hospital discharge rate for ambulatory care-sensitive conditions per 1,000 Medicare enrollees, all counties with reported data are above the state averages and national benchmark with Adams County having a notably high rate (county rate of 141 versus state average of 72 and national benchmark of 52) and only Stark County having a rate lower than the state average.

Preventive Care Data

NDHCRI, the state's quality improvement organization, reports the following rates related to preventive care.[3] For a comparison between the counties covered by West River Health Services' service area and other counties in North Dakota on the following measures, see the respective maps for each variable, found in Appendix G.

Those rates noted in red in the table below refer to preventive health service measures that fall into the lower two quintiles overall – meaning that more than half of the counties in North Dakota are performing better on that measure. Those noted in blue indicate that county fell into the highest quintile on that measure.

	Adams	Bowman	Hettinger	Stark	ND State Average
Colorectal Cancer Screening Rates	47.1%	38.7%	44.4%	55.4%	55.5%
Pneumococcal Pneumonia Vaccination Rates	47.6%	32.4%	43.7%	50.9%	51.3%
Influenza Vaccination Rates	54.5%	15.4%	23.5%	52.6%	50.4%
Annual Hemoglobin A1C Screening Rates for Patients with Diabetes	95.1%	89.6%	89.6%	95.0%	92.2%
Annual Lipid Testing Screening Rates for Patients with Diabetes	73.1%	73.5%	73.9%	85.9%	81%
Annual Eye Examination Screening Rates for Patients with Diabetes	67.0%	63.2%	71.4%	72.7%	72.5%
PIM (Potentially Inappropriate Medication) Rates	11.4%	10.6%	11.1%	10.8%	11.1%
DDI (Drug-Drug Interaction) Rates	10.7%	14.8%	11.2%	12.4%	9.8%

[3]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 2010.

The data suggests that other than potentially inappropriate medication (PIM) rates, there is need for improvement in the WRHS service area, as in all of the other preventive measures, either two or three of the counties were in the lower two quintiles as compared to the rest of North Dakota.

Findings of Survey, Key Informant Interviews, and Focus Group

Survey Demographics

Two versions of the survey were administered: one for health care professionals and one for community members. With respect to demographics, both versions asked participants' gender, age, education level, and how long they have lived in the community. In addition, health care professionals were asked to state their professions, and community members were asked about marital status, employment status, household income, and travel time to the nearest WRHS clinic and the WRHS hospital in Hettinger. Figures 1 through 16 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.

Community Members and Health Care Professionals

The demographic results from both the community member survey and the health care professional survey revealed similar findings about several measures. In both response groups, the number of females responding was significantly more than the number of males responding.

Figure 1: Gender - Community Members

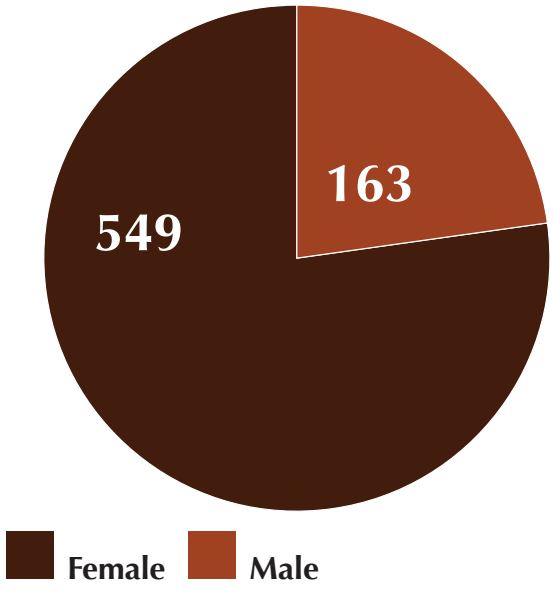
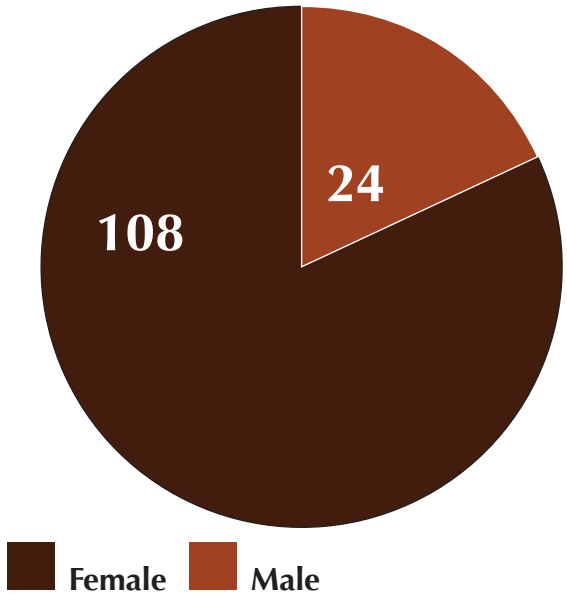


Figure 2: Gender – Health Care Professionals



In terms of age, the substantial majority of community members responding was 55 or older (N=434), with more than a third (N=263) being 65 years or older. The two smallest groups of community members responding were the two youngest sets: those aged 24 and younger (N=9) and those aged 25 to 34 (N=57). Health care professionals also tended to be older, with the largest group (N=41) being in the 55-64 age group, and the next largest group (N=32) being in the 45-54 age group.

Figure 3: Age – Community Members

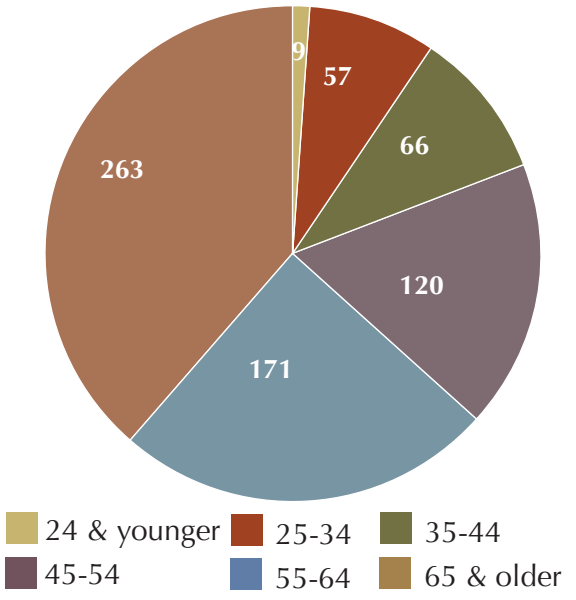
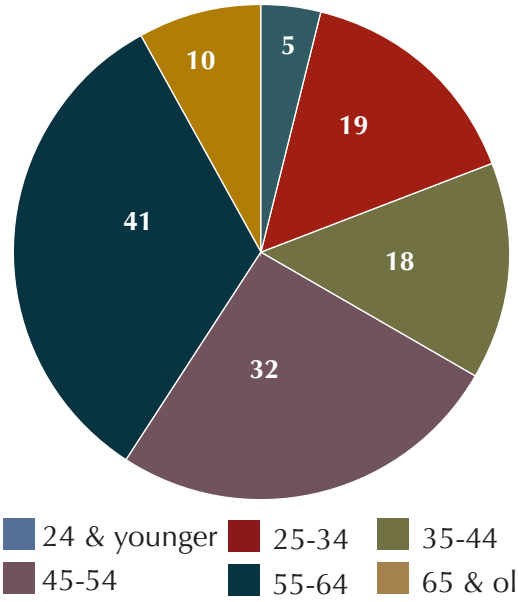


Figure 4: Age – Health Care Professionals



Respondents in both the community member survey and the health care professional survey reported living in their communities for long periods of time. A substantial majority of both sets of respondents reported living in their communities for more than 20 years.

Figure 5: Years Lived in Community – Community Members

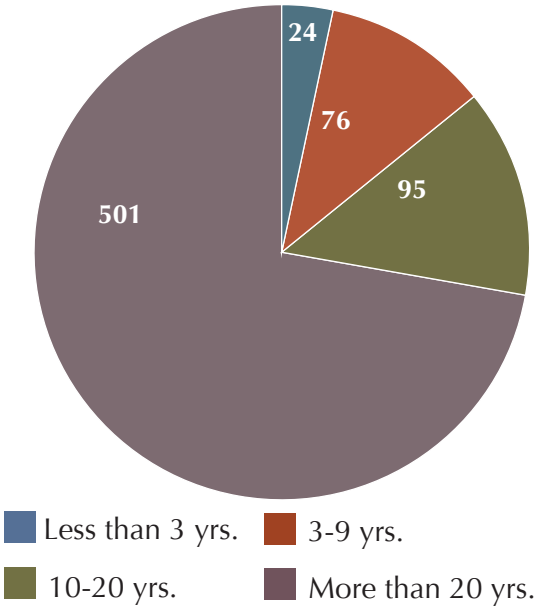
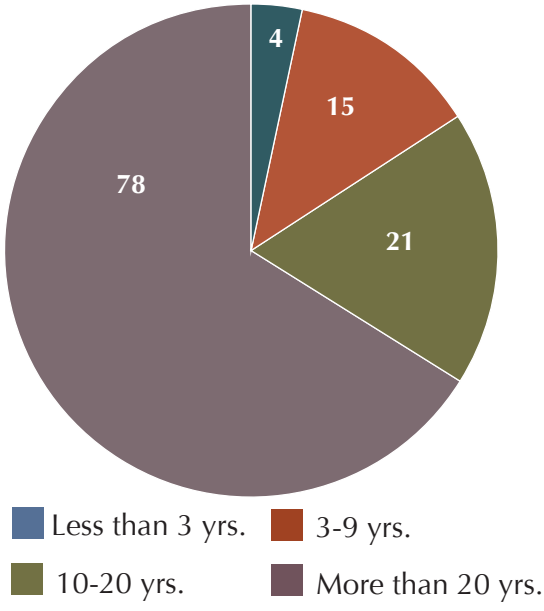


Figure 6: Years Lived in Community – Health Care Professionals



Respondents' level of education varied from middle school or less to a graduate degree. A high school degree was the most common level for community members (N=306), while four-year and two-year degrees were the most common responses from health care professionals (N=38 for both). Figures 7 and 8 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 7: Education Level – Community Members

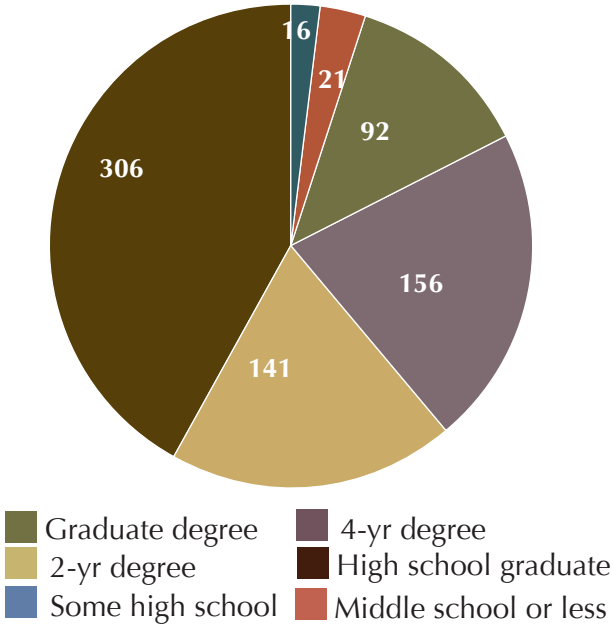
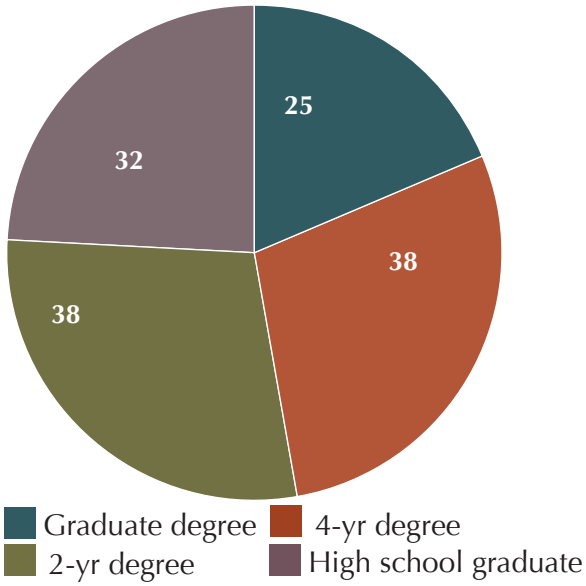


Figure 8: Education Level – Health Care Professionals



The majority of respondents identified themselves as married. This was true for both the community members (N=516) and health care professionals (N=109) as exhibited in Figures 9 and 10.

Figure 9: Marital Status – Community Members

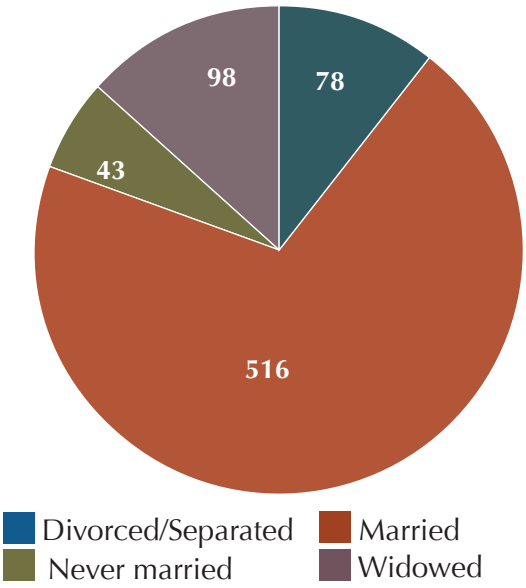
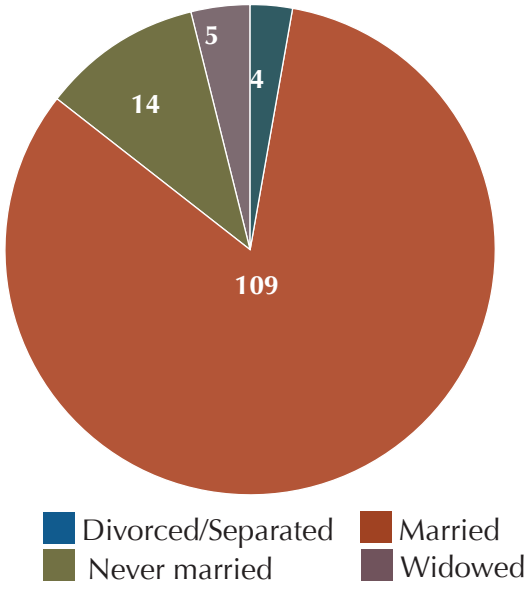


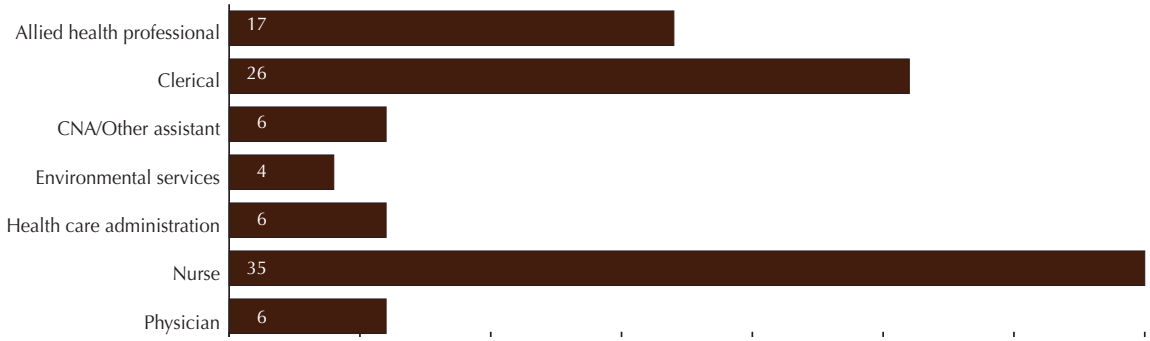
Figure 10: Marital Status – Health Care Professionals



Health Care Professionals

Health care professionals were asked to identify their specific professions within West River Health Services. A wide range of job roles within WRHS are represented, with the greatest response from nurses (N=35) and clerical personnel (N=26).

Figure 11: WRHS Employee Profession



Community Members

Community members were asked additional demographic information about their employment status, household income, and their proximity to the hospital and clinics operated by WRHS. As illustrated by Figure 12, a plurality of community members reported being employed full-time (N=341), with retired individuals making up the next most common group of respondents (N=256).

Figure 12: Employment Status – Community Members

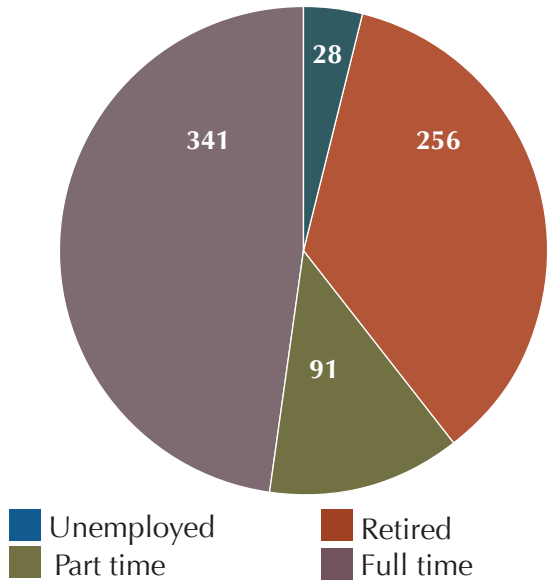
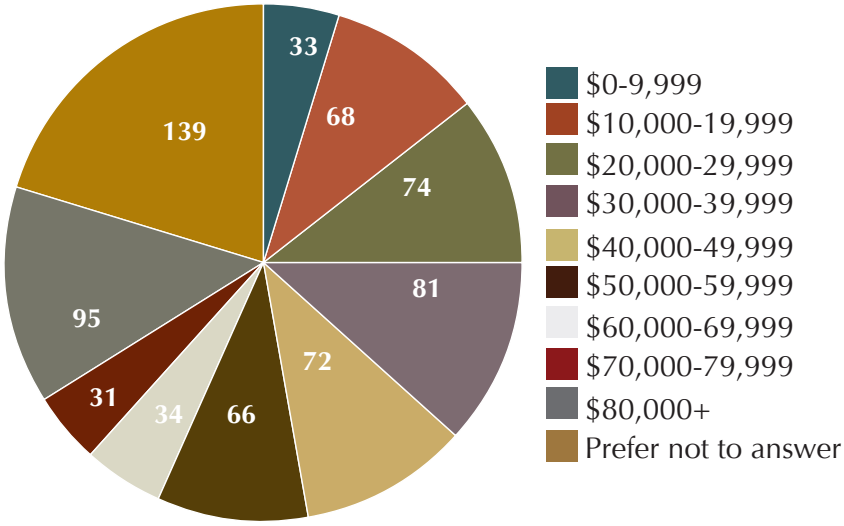


Figure 13 demonstrates the wide range of respondent household incomes and again indicates how this assessment took into account input from parties who represent broad interests of the community served. The assessment reflected input from a significant number of low income people, with more than 100 responses coming from community members who identified themselves being in households with an annual income of less than $20,000.

Figure 13: Annual Household Income – Community Members



Figures 14 and 15 illustrate the distance community members must travel to reach the nearest clinic operated by WRHS (Figure 15) and the WRHS hospital in Hettinger (Figure 14). As Figure 14 shows, respondents live in a wide geographic area, with nearly half of them (N=359) needing to drive 31 to 60 minutes to reach the WRHS hospital in Hettinger. Because West River Health Services operates satellite clinics in several communities outside of Hettinger (Bowman, Dickinson, Mott, New England, Scranton in North Dakota and Lemmon, South Dakota), the nearest clinic was geographically more accessible. As shown in Figure 15, the travel time to the nearest clinic for more than half of the respondents (N=400) is less than 10 minutes.

Figure 14: Community Member Travel Time to WRHS Hospital in Hettinger

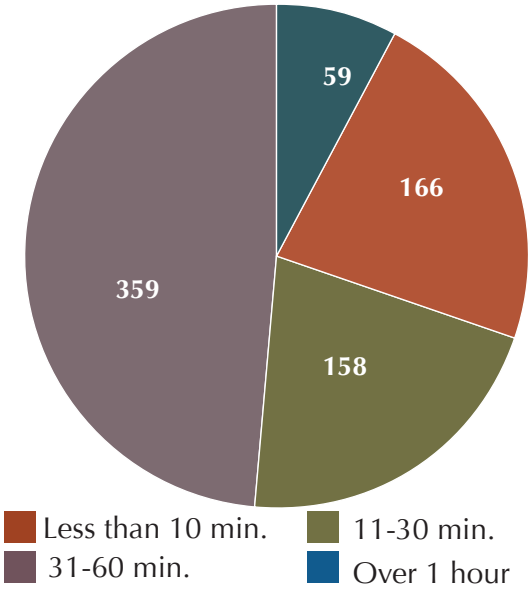
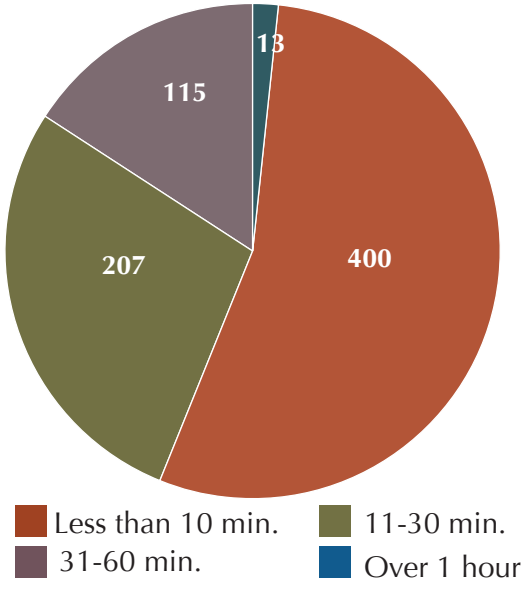


Figure 15: Community Member Travel Time to Nearest WRHS Clinic



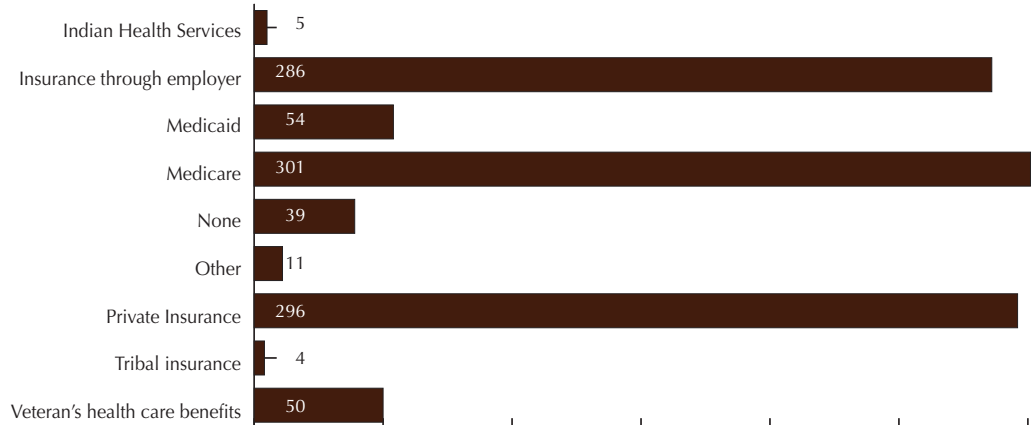
Health Status and Access

Community members were asked to identify general health conditions and/or diseases that they have. As illustrated in Figure 15, the results demonstrate that the assessment took into account input from those with chronic diseases and conditions. The conditions reported most often were arthritis (N=294), high cholesterol (N=248), muscles or bones (e.g., back problems, broken bones) (N=207), and hypertension (N=192).

Figure 15: Self-Reported Health Status - Community Members

Community members also were asked what type(s) of health insurance they carry. Health insurance status often is associated with whether people have access to health care. Thirty-nine community members reported having no insurance. Many respondents explained that even though they had insurance, they could not afford the copayments and/or high deductibles. As demonstrated in Figure 16, the most common insurance types were Medicare (N=301), private insurance (N=296), and insurance through one's employer (N=286).

Figure 16: Self-Reported Insurance Status – Community Members



Several respondents voiced concerns about costs of insurance and medical care. Many concluded that the increasing costs of insurance and medical care were simply making health care unaffordable. Others noted that even for those who had insurance, costs may be impeding access to care. For example, three respondents commented on WRHS' co-payment policy (requiring a payment prior to seeing a provider) and related concerns such as inability to pay and therefore perceived inability to receive care, as well as questions related to medical ethics in providing care to all. Others noted

that even consumers who have insurance are sometimes reluctant to schedule a clinic appointment due to having a large deductible. As one respondent said, "Sometimes I don't seek health care when I should due to a large deductible and the uncertainty that my insurance will cover something." A large number of respondents commented on the high costs of insurance premiums. Specific comments survey respondents made about insurance (in responses to various questions in the survey) included the following:

- Even with insurance it's very hard to reconcile going to the doctor, let alone the hospital. After years of conditioning not going because we had no insurance, now that we have it we're so used to not going that we still don't go.
- Who can afford insurance at $800+/month for a family plan?
- My family can't afford insurance and in some cases we are charged more than someone with insurance!
- Insurance costs are prohibitive, but this is not the fault of WRHS.
- We can't afford a private insurance policy and we are self-employed.
- Charge less for care if consumers have high deductible insurance.
- It is more convenient when all doctors are providers for my insurance. When some are and some aren't I tend not to use WRHS services because I've been "stuck" with higher costs by not using a provider approved by my family's insurance. It would be helpful to have a list of your doctors and the insurance companies they are providers for.
- We are not able to afford medical insurance at this time. We appreciate that WRHS works with us on a payment schedule. Thank you.
- Many second incomes in family are for paying the cost of health insurance.
- We want better options for patients who do not have insurance and cannot afford it.
- If health insurance continues to rise and people cannot afford it, more expense will come from unpaid hospitalization instead of preventing health issues.
- A lot of low income people won't be able to afford medical help and many can't afford insurance now. I work full time and if my employer did not pay most of my premium I would not have insurance.

Awareness of Services

Community members were asked whether they were aware of the services offered by West River Health Services. Health care professionals were not asked these questions as it was assumed they were aware of the services offered by WRHS due to their direct work in the health care system.

The majority of respondents were aware of most of the services offered by WRHS. 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.

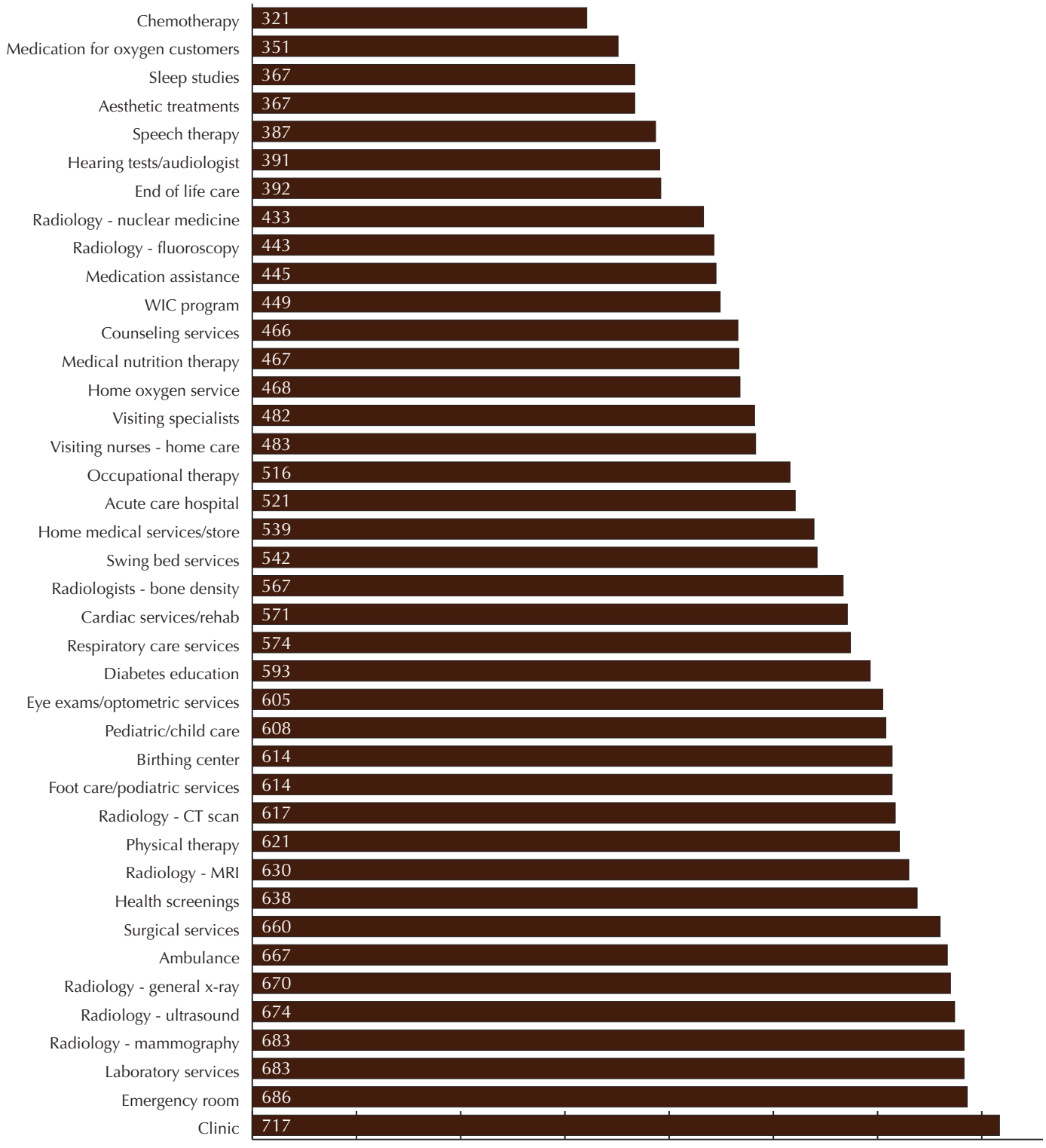
Services that community members were most aware of were clinic services (N=717), emergency room (N= 686), radiology-mammography (N=683), and laboratory services (N=683).
Respondents were least aware of the following services:

- Chemotherapy (N=321)
- Medication for oxygen customers (N=351)
- Sleep studies (N=367)
- Aesthetic treatments (N=367)
- Speech therapy (N=387)

- Hearing tests / audiologist (N=391)
- End of life care (N=392)
- Radiology – nuclear medicine (N=433)
- Radiology – fluoroscopy (N=443)

These services with lower awareness may present opportunities for further marketing, greater utilization, and increased revenue. Figures 17 illustrate community members' awareness of services.

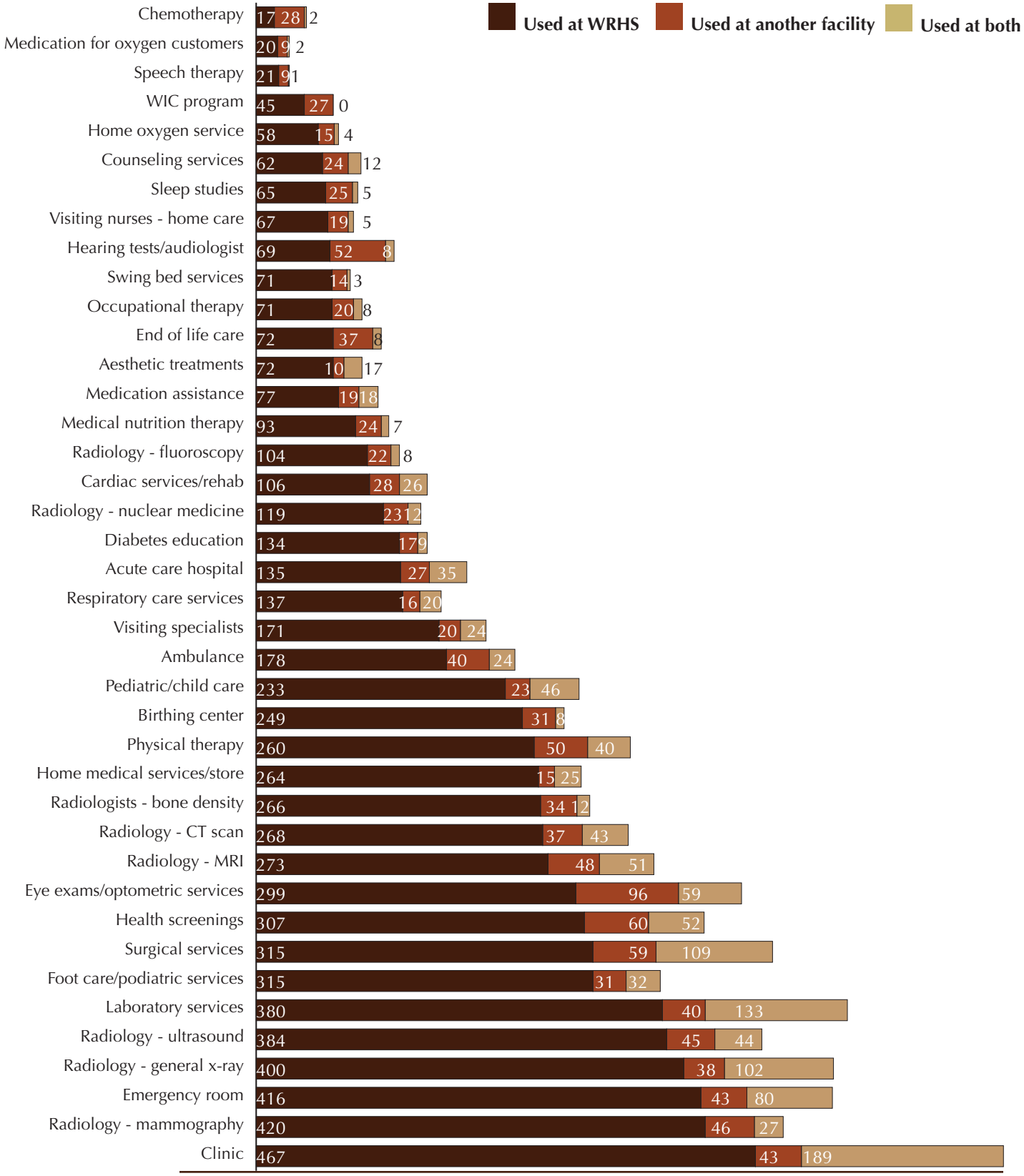
Figure 17: Community Awareness of Locally Available Services



Health Service Use and Needs

Community members were asked to review a list of services available at West River Health Services and indicate whether they have used those services at WRHS or at another facility (or both). Figures 18 illustrate these results.

Figure 18: Community Member Use of Locally Available Services



The results indicate that for the most part community members are making use of a great number of services that are available at WRHS. Respondents identified clinic services (N=656), laboratory services (N=513), radiology – general x-ray (N=502), and emergency room (N=496) as the services most commonly used at WRHS (either exclusively at WRHS or at both WRHS and another facility). The services that respondents most commonly received at another facility (either exclusively at another facility or both at another facility and at WRHS) were:

- Clinic (N=232)
- Laboratory services (N=173)
- Surgical services (N=168)
- Eye exams/optometric services (N=155)
- Radiology – general x-ray (N=140)
- Emergency room (N=123)
- Health screenings (N=112)

As with low-awareness services, these services – for which community members are going elsewhere – may provide opportunities for additional education about their availability at WRHS and potential greater utilization of services at WRHS. It should be noted, however, that some of the communities surveyed in this assessment also are served by other hospitals, and some respondents indicated that they preferred to use their "local" hospital rather than WRHS. Thus, some of the use of services at other facilities simply may indicate a preference to use services closer to home.

Reasons for Using WRHS or Another Health Care Facility for Health Care Needs

Community members were asked why they use the services of West River Health Services and services at another health care facility if applicable. Health care professionals were asked why they think patients use services of WRHS and why patients use another health care facility. Figures 19 and 20 illustrate reasons for using WRHS.

Figure 19: Reasons Community Members Use WRHS

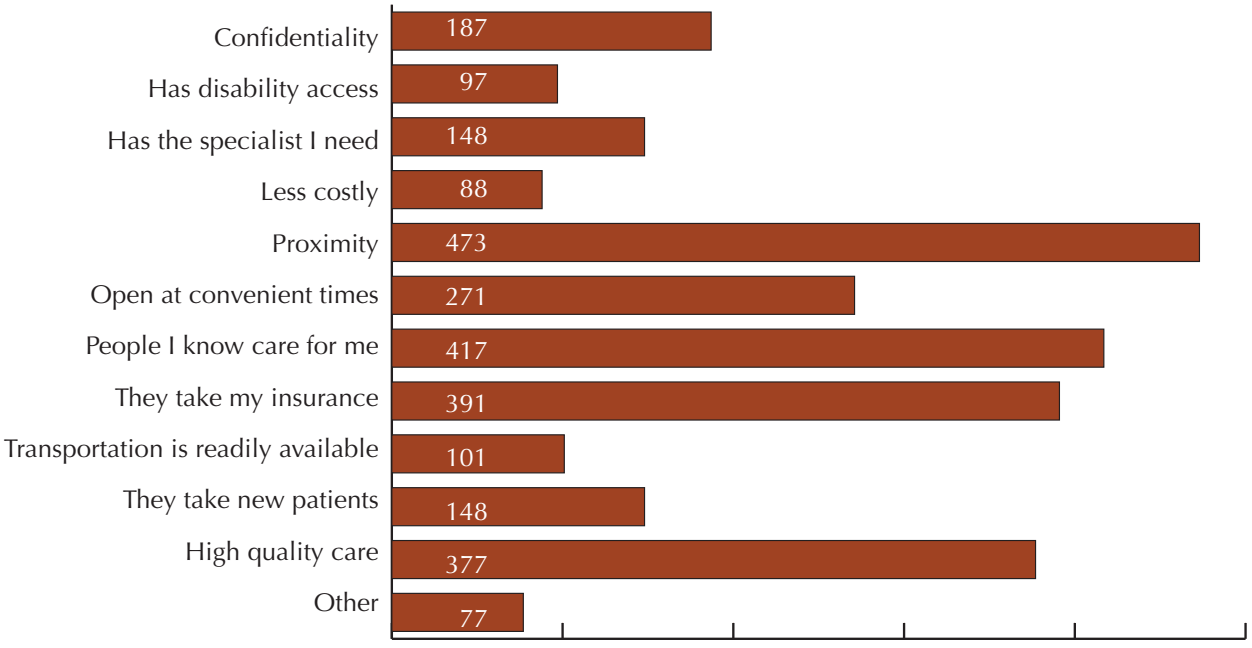
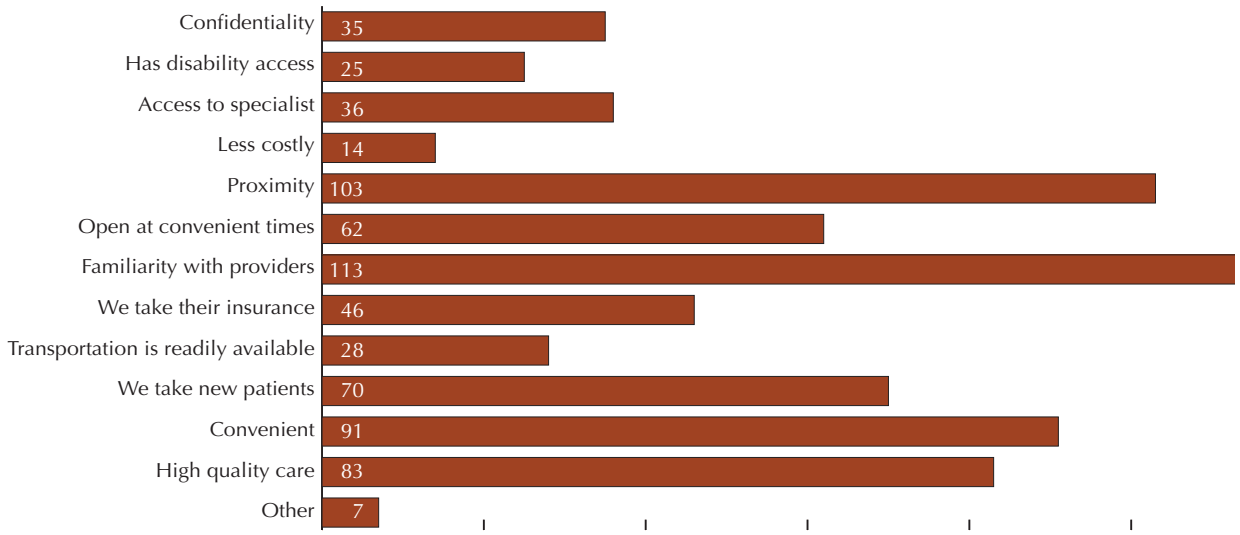


Figure 20: Reasons Health Care Professionals Believe Community Members Use WRHS



The most common reasons cited by community members for using WRHS were proximity (N=473), people I know care for me (N=417), and they take my insurance (N=391). Health care professionals' responses indicated they believe patients select WRHS because of familiarity with providers (N=113), proximity (N=103), and convenience (N=91). One area with a gap between community members' stated reasons for using WRHS and health care professionals' perceptions as to why consumers choose WRHS is the issue of accepting insurance. While acceptance of insurance was the third most common reason community members cited for using WRHS, it was only the seventh most cited reason by health care professionals.

With respect to the reasons community members use a facility other than WRHS, by far the most common response was that the facility has a needed specialist (N=348), followed next by high quality care (N=151). Provision of a necessary specialist was also the most common reason cited by health care professionals (N=112), followed by confidentiality (N=54). Figures 21 and 22 illustrate these results.

Figure 21: Reasons Community Members Use a Health Care Facility Other than WRHS

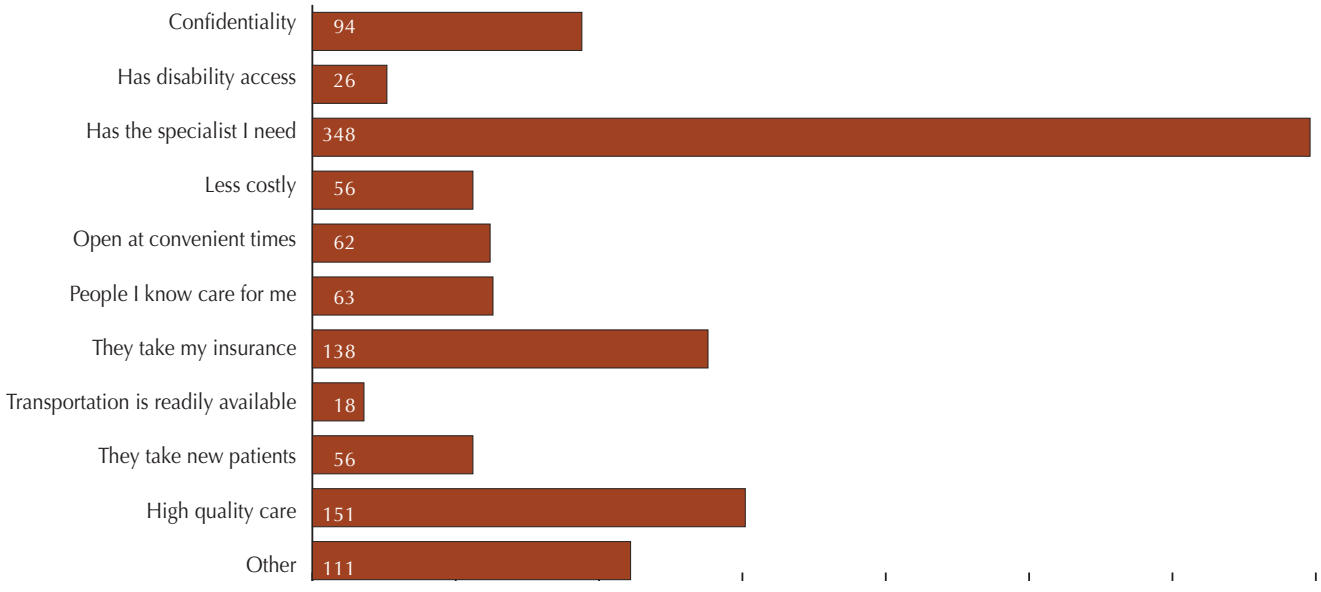
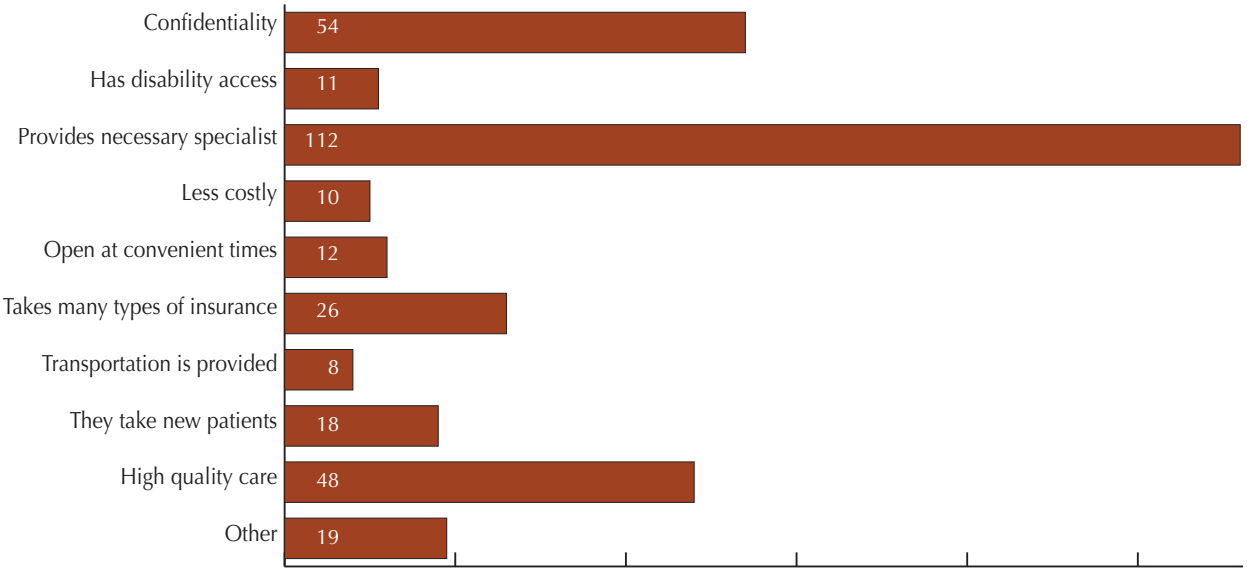


Figure 22: Reasons Health Care Professionals Believe Community Members Use a Health Care Facility Other Than WRHS



The survey also provided both community members and health care professionals an opportunity to suggest other reasons community members use West River Health Services and well as other reasons for using a health care facility other than WRHS. In terms of using WRHS, most commonly cited by community members was accessibility, proximity, and/or convenience (N=29). Other reasons included high quality physicians and staff (N=14), being comfortable with and trusting known providers (N=7), long-term use and continuity of medical record (N=4), and acceptance of insurance (N=2). With respect to other reasons given for using a facility other than WRHS, community members' most common responses were:

- Another facility is closer or more convenient (N=39)
- Referral to another provider or need for a specialist (N=31)
- Closer access to care during an emergency (N=8)
- Perceived higher quality or preference for a provider at another facility (N=7)
- Other facility is part of certain insurance network (N=5)
- Use a Veterans Administration facility (N=5)
- There is a shorter wait time to get an appointment and/or there are longer hours (N=5)
- Another facility offers alternative approaches to medicine (N=3)
- Other facilities offer advance equipment or technology (N=2)

Other specific comments offered by community members about why they seek care elsewhere included:

- Payments are made easier. Other providers are willing to work with you and are not demanding.
- The Mott clinic has poor insulation in its rooms, so you can hear what others say in neighboring rooms.
- Another facility provides an athletic trainer at sports activities for my children, so the trainer knows my child's situation.

According to health care professionals, "other" reasons community members use WRHS included a lack of other local options (N=4), ease of getting an appointment (N=1), and having a choice in providers (N=1).

The most common "other" reason cited by health care professionals as to why consumers seek health care elsewhere was that another facility provides access to a specialist, technology, or care not available locally (N=5). Other reasons offered were: personality conflicts or issues with local providers (N=4), quality of other providers (N=3), lack of awareness about services offered locally (N=2), and confidentiality concerns (N=2).

Barriers to Accessing Health Care

Community members were asked what would help to remove barriers that may be affecting their use of local health services. Likewise, health care professionals were asked what would help to remove barriers that generally may be affecting use of local health care. Both community members (N=301) and health care professionals (N=122) identified more doctors as the primary way to remove barriers associated with using local health care services. This was, by far, the most common response from both sets of respondents, and indicates the widespread concern in the community about recruiting and retaining enough physicians to meet the area's needs.

Large numbers of community members also recommended evening or weekend hours (N=190), confidentiality (N=156), and collaboration among competing providers (N=151). Among health care professionals, the second and third most common responses were collaboration between competing health providers (N=43) and confidentiality (N=38), respectively. See Figures 23 and 24 for additional items that may help remove barriers to local health care use.

Figure 23: Community Members' Recommendations to Help Remove Barriers to Using Local Health Care

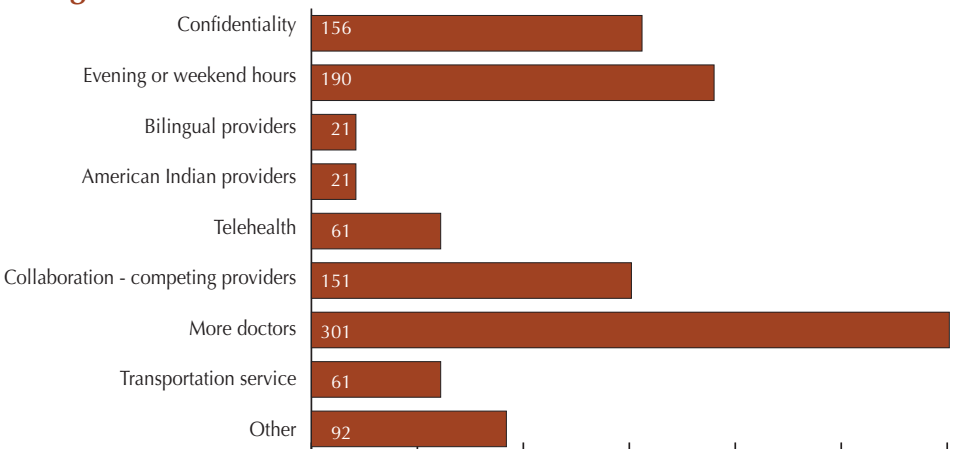
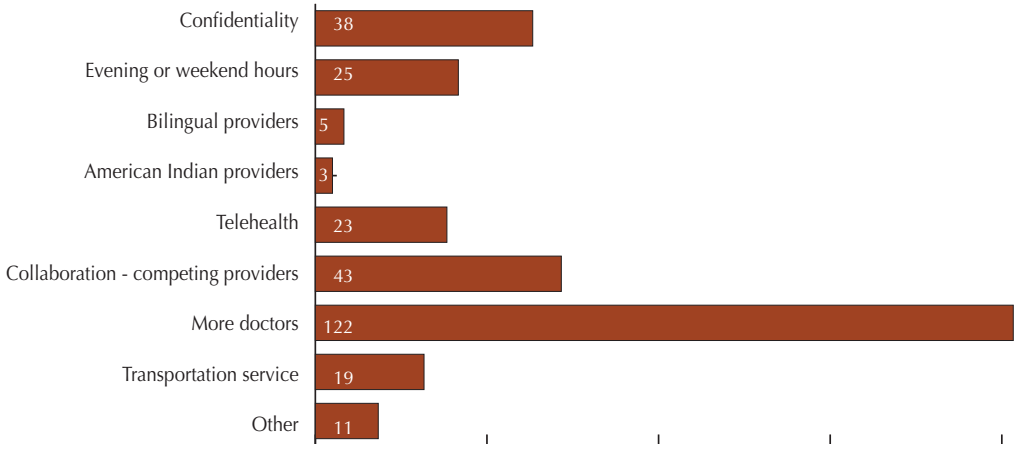


Figure 24: Health Care Professionals' Recommendations to Help Remove Barriers to Using Local Health Care



Respondents also were given the opportunity in an open-ended question to provide other suggestions for removing barriers to using local health care. Among suggestions and concerns from consumers were the following:

- More specialists and specialized services (N=13)
- Cost (N=12)
- Quality of providers and care (N=11)
- Customer service, friendliness of providers and staff, and on-time appointments (N=7)
- Proximity and convenience (N=6)
- Lack of physicians and burnout among providers (N=6)

Health care professionals' suggestions for "other" ways to remove barriers to local care were: advertise and promote availability of local services (N=3); add providers and staff (N=2); and add specialists (N=1).

Additional Services

Both community members and health care professionals were asked, in an open-ended question, to identify services they think West River Health Services needs to add. Below is a list of services recommended by more than one respondent, followed by the number of respondents who identified each service. For example, 50 community members requested more doctors and/or specialists. Both community members and health care professionals listed additional doctors as the most needed service.

Community Member Suggestions for Additional Services

- More doctors and specialists (N=50)
- Dialysis (N=24)
- Orthopedic services (N=12)
- Cancer services (N=11)
- Wellness, preventive services (N=11)
- Mental health, counseling (N=8)
- In-house MRI (N=7)
- OB/GYN (N=7)
- Dermatology (N=5)
- Hospice (N=5)
- Alternative/homeopathic medicine options (N=4)
- Expanded hours (N=4)
- Financial aid and alternative payment options (N=4)
- Acupuncture (N=3)
- Cardiac services (N=3)
- Emergency room in Lemmon (N=3)
- Expanded emergency services (N=3)
- More nurses (N=3)
- Dental services (N=2)

Health Care Professional Suggestions for Additional Services

- More doctors (N=12)
- In-house MRI (N=8)
- Dialysis (N=7)
- Increased mental health services/providers (N=7)
- Additional surgical services/providers (N=7)
- Focus on current services rather than adding new services (N=7)
- Orthopedic services (N=6)
- Cancer services (N=5)
- Increased access to specialists (N=4)
- Community health and prevention education (N=2)
- Urology (N=2)

Other services, suggested by only one respondent, included: Alzheimer's unit, asthma and allergy care, chiropractic services, digital mammography, fitness center in Mott, full-fledged pharmacy 24/7, lactation consultant, more transportation services, outpatient infusion center, PSA screening program like Women's Way, more services for disabilities, PET scans, Protime machine for home use and travel, and substance abuse services.

Community Health Concerns

Respondents were asked to review a list of potential community health concerns/ conditions and indicate whether they saw each as a concern now or in the next two to five years (or both). Figure 25 reflects community member concerns while Figure 26 reflects the concerns of health care professionals.

Figure 25: Concerns of Community Members

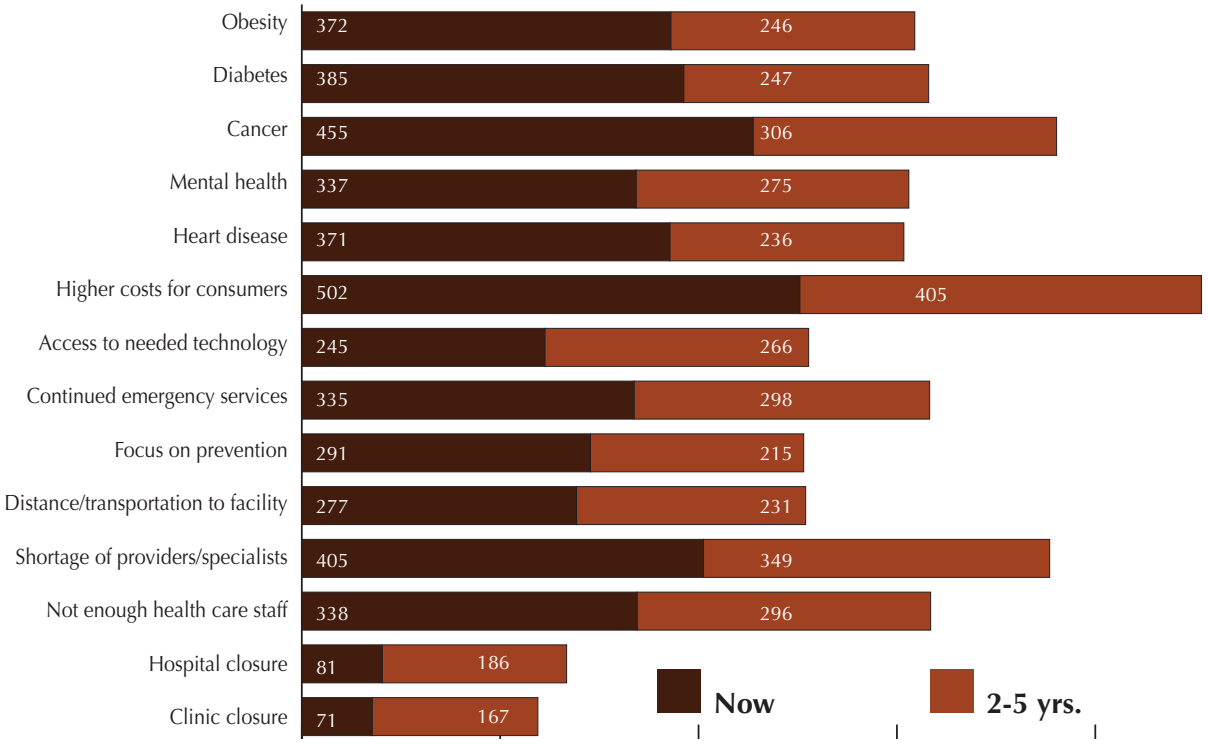
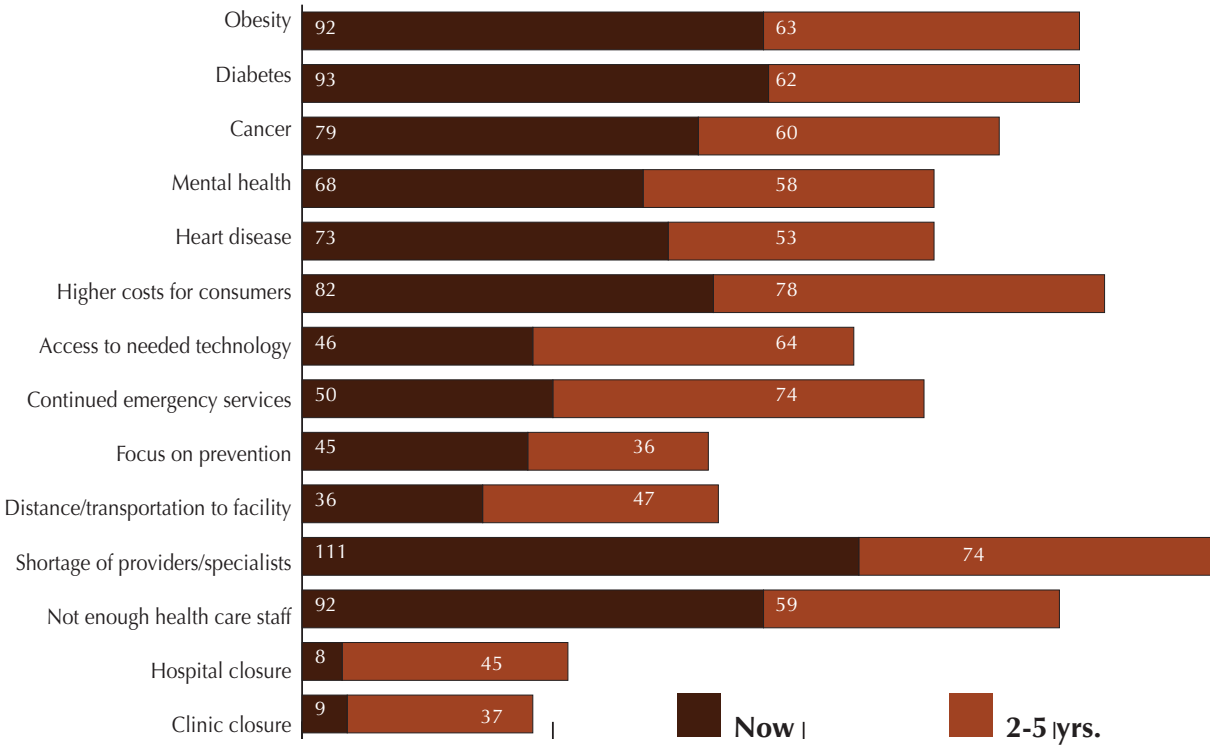


Figure 26: Concerns of Health Care Professionals



Overall, community members viewed higher costs for consumers as the greatest concern (N=502 Now, N=405 2-5 Years) while they saw cancer (N=455 Now, N=306 2-5 Years), shortage of providers and specialists (N=405 Now, N=349 2-5 Years), not enough health care staff (N=338 Now, N=296 2-5 Years), and continued emergency services (N=335 Now, N=298 2-5 Years) as the next most pressing concerns. Community members were least concerned about potential hospital and clinic closures.

Health care professionals were most concerned about shortage of providers and specialists (N=111 Now, N=74 2-5 Years), not enough health care staff (N=92 Now, N=59 2-5 Years), higher costs for consumers (N=82 Now, N=78 2-5 Years), obesity (N=92 Now, N=63 2-5 Years), and diabetes (N=93 Now, N=62 2-5 Years).

Thus, among both community members and health care professionals, commonly cited concerns were higher costs for consumers and shortage of providers and specialists, along with cancer among community members. Respondents also were asked to identify their most important concern and explain why it was the most important. A plurality of community members (N=125) chose shortage of providers and specialists as the most important concern. Also cited were the following:

- Costs of health care (N=103)
- Not enough health care staff in general (N=50)
- Clinic closure (N=33)
- Obesity (N=21)
- Focus on prevention (N=21)
- Cancer (N=16)
- Hospital closure (N=15)
- Continued emergency services (ambulance and 911) (N=14)
- Distance/transportation to health care facility (N=14)
- Mental health (N=12)
- Diabetes (N=11)
- Heart disease (N=6)

Among health care professionals, by a considerable margin respondents chose shortage of health care providers and specialists as the most important concern, with 66 respondents making note of it. Other responses were as follows:

- Not enough health care staff in general (N=25)
- Costs of health care (N=11)
- Hospital closure (N=4)
- Clinic closure (N=3)
- Obesity (N=3)
- Focus on prevention (N=3)
- Cancer (N=2)
- Mental health (N=2)
- Diabetes (N=2)
- Distance/transportation to health care facility (N=2)

Below is a sampling of comments from both community members and health care professionals about what they view as the most important concerns.

1) Shortage of providers and specialists

Community member comments about provider and specialist shortage

- All good doctors want to be in a bigger city, where they get paid more and like the social atmosphere compared to nothing available in small communities.

- Lack of health care providers. They do not take the time to listen to you now as they are over-booked.
- More doctors. The current staff is over worked and some are aging. Burn-out is a very real possibility.
- More doctors. Ours are good, but overworked and they have to rush patients.
- More physicians, not PAs.
- Local doctors getting to retirement age are hard to replace due to so many specializing. Not enough family practice doctors.
- Our young people leave the area and we have little to draw outside persons here.
- Shortage of providers, because many with technical/medical training prefer not to live in sparse, rural areas.

Health care professional comments about provider and specialist shortage

- Can't see your doctor because he or she is in other places and only one doctor at clinic in Hettinger to cover all people.
- Lack of MDs and other providers willing to live out here. We need money, technology, grants, etc.
- Not enough health care providers. It is hard to get an appointment, sometimes waiting 2-3 weeks to see a provider.
- Patients demand high quality and immediate access, and our doctors are overbooked already.
- Shortage of health care providers, specifically female physicians. We don't need any more midlevels.
- Cost of recruiting is high due to competition with urban areas. We can't match the bonuses and salaries they offer.
- Shortage of providers and staff. This decreases level of care, safety and patient satisfaction.
- Our staff (doctors and nurses) is getting older with many looking at retirement in the next several years, and our recruiting efforts have been unsuccessful recently. Also, if the oil boom does come this way we are totally unprepared with the amount or lack of staff we have.

2) Higher costs of health care for consumers

Community member comments about costs of health care for consumers

- The cost of doctor visits is what keeps us from having regular health exams.
- Cost: It is very hard to maintain or do preventive health checks if you can't afford to go to the doctor/clinic.
- If costs keep going up, none of us are going to be able to afford health care.
  My family pays a little over $1,200 per month, and we still have to meet all the deductible.
- Higher cost of health care because many in the surrounding area are elderly and live on fixed incomes. They choose between paying for a doctor visit, their meds, or putting food on the table.
- Higher cost of health care. This is a community with an aging population and Medicare is backing off on paying for certain services.
- Patients wait too long before they get care because of the cost.
  Higher health care costs. Others are going to have to help pay, through taxes, etc., for those who can't.

3) Not enough health care staff in general

Community member comments about lack of health care staff in general

- Staff shortages, especially support staff (housekeeper, cooks, and aides are not paid enough to recruit them to move here for a job).
- Not enough CNAs in long term care.
- We have witnessed the overwork of nurses and feel they can't do as good a job as they want to.
- Shortage of health care staff in general as it creates a Catch-22. Current staff gets stressed, burned out, leaves fewer staff, which leads to stress on existing staff, etc.
- Shortage of health care staff; without them WRHS will not exist! It places a bigger hardship on all! Administration/board needs to realize that they are not what keep the facility going.

Health care professional comments about lack of health care staff in general

- Lack of adequate staff, especially CNAs, kitchen, housekeepers, etc.
- Not enough health care staff. It's very hard to get people to come to rural ND that have never lived here before.
- Not enough staff because of a major decrease in benefits.
- Shortage of health care workers in all fields.

Collaboration

Respondents were asked whether West River Health Services should improve its level of collaboration with other local entities, such as schools, economic development organizations, and other providers. Community members answered "don't know" most often with respect to four of the five potential collaborators. Community members indicated that, of the choices, WRHS should improve its collaboration most with other rural clinics and hospitals (N=218) and schools/health wellness education (N=212).

Health care professionals saw the most need for improved collaboration with schools/health wellness education (N=54), local jobs/economic development (N=51), and other rural clinics and hospitals (N=50).

Figure 27: Community Members – Should WRHS Improve Collaboration?

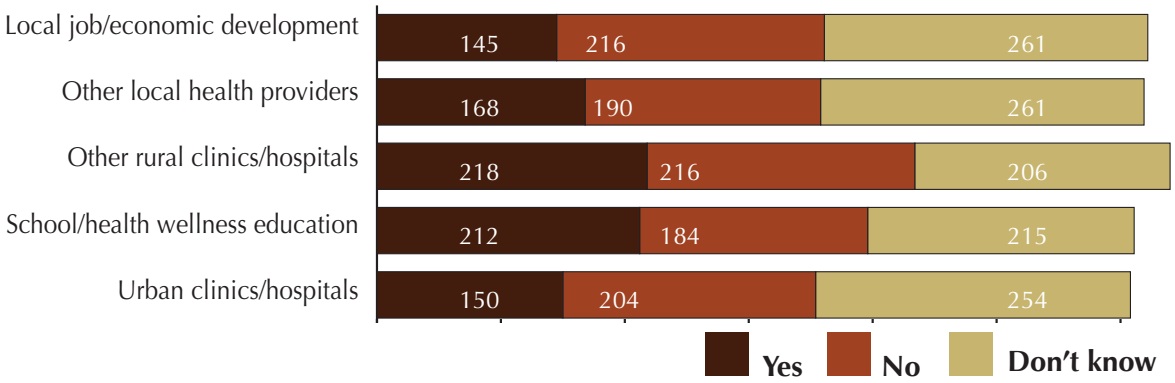
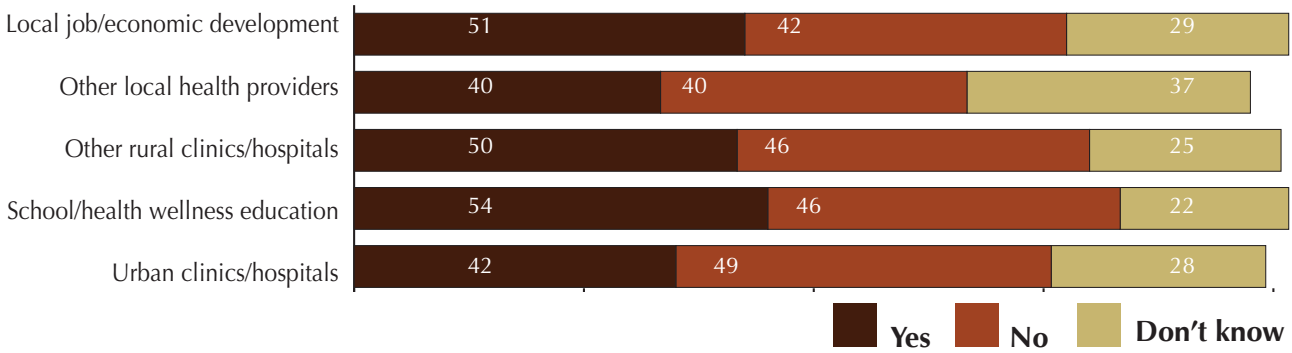


Figure 28: Health Care Professionals – Should WRHS Improve Collaboration?



Concerns and Suggestions for Improvement

The final question of each version of the survey asked, "Overall, please share concerns and suggestions to improve the delivery of local health care." Approximately 300 responses were collected from community members, while health care professionals supplied more than 60 suggestions and concerns. Consistent with other findings in the survey, the most commonly shared concerns and suggestions related to the community's perceptions about a shortage of health care providers and staff, with 92 respondents citing this issue as a concern. A great number of community members (N=57) offered praise for, or expressed overall general satisfaction with, West River Health Services and its providers. Thirty-two community members expressed concerns about customer service at WRHS. Other categories of concerns or suggestions included:

- Costs and affordability of health care (N=31)
- Concerns about quality of care at WRHS (N=25)
- Concerns about confidentiality at WRHS (N=14)
- Suggestions for and concerns about collaboration and cooperation among WRHS, other providers, and other community stakeholders (N=14)
- Concerns about management of WRHS (N=8)
- Suggestions for and concerns about prevention and health education efforts (N=7)

Like community members, health care professionals also focused on recruitment and retention of providers and health care staff as a major concern, with 33 health care professionals citing this issue. Other issues noted by health care professionals related to the morale, treatment of, and wage rates of WRHS employees (N=9), need for increased use of midlevel providers (N=3), better reimbursement schemes (N=3), and issues related to customer service and quality of care (N=3).

Below is a sampling of some of the specific comments relating to the most commonly cited concerns and suggestions:

Community members' concerns and suggestions relating to shortage of health care providers and staff

- Afraid docs won't come to our system because of where we are and the fact they won't make as much here as in urban area; afraid no one will replace what we have.
- We have good doctors, but they are overloaded.
- Hope with some of the doctors retiring and some leaving that new doctors can be hired. Now we have wonderful health care and so close to home.
- I feel all the doctors need to work on encouraging new doctors to come into this area, and not only young doctors. Middle age to older doctors have as much to offer as young ones.

- WRHS is very good but short on doctors. They go to different towns so if you want to see your doctor you may only be able to once or twice a week. You can't really plan on getting sick!
- Much discussion in the community revolves around why doctors may have left, and why we have been unable to secure any new doctors. With potential for developing energy industry impacts in the region and community, demand for health care services will only increase, placing more stress on current providers and staff.
- Losing providers is making it difficult to make appointments.
- Need to get wiser and more effective in recruiting staff. I know of very little effective planning among the school, business, WRHS to work together. They are each interdependent on the other for survival!
- The need for doctors who want to serve people in a rural area. Life is good even though the social events aren't at their fingertips.

Health care professionals' concerns and suggestions relating to the recruitment and retention of providers and staff

- Big concerns: Finding physicians for OB, surgery, internal medicine, family practice, and nurses. Maybe more mid-levels to help each physician.
- I think this hospital works hard to see that its patients get good care. Right now the shortage of doctors is my concern.
- The clinic is very short of doctors so people are getting very annoyed with waiting.
- Major concern is retention and recruitment of medical staff. We currently do not have enough providers to staff and provide services without rushing (fitting in) or delaying appointments.
- Major concerns over the lack of qualified doctors coming to rural areas. Would love to see West River and Southwest Health combine. It would be beneficial to both entities considering the rural issues/challenges they both face.
- Need to have consistent leadership and clear goals. Need to be open to new ideas and recruit new providers!

Community members' praise for and expressions of overall satisfaction with WRHS and its providers

- Doctors listen to concerns; this is a very positive aspect of West River. Nice to have female doctors available. Appreciate that there is a clinic in Mott during the week.
- I feel we have some of the best health care available to this community and even larger areas.
- I have had a great experience at WRHS. I would just continue to stress the importance of confidentiality.
- I have no concerns. Have always received TLC, respectful, genuine, caring doctors and staff. I am a "person," not a number or patient/client.
- Keep up the great job you all are doing. We have no complaints of the care we receive. We have great doctors who care.
- Our local health care at WRHS is truly exceptional. The physicians are so thorough and determined to help, with a care so sincere. The receptionists are exceptional, also! We have used their services for 15 years, and will only go elsewhere if an emergency does not allow us to drive 45 minutes to the ER! Grateful for their services!
- WRHS is a wonderful hospital with very good staff. I wouldn't go any other place for help.
- We have been very happy with WRRMC - would like to see more joint services with SW Healthcare in Bowman. This would lower costs for all.

- WRHS delivers excellent care. We all take it for granted.

Community members' concerns and suggestions relating to customer service issues

- As a patient I was crowded in a room with another patient while across the hall there were empty rooms. Patient rooms for two patients should be bigger. I fought two doors to get to the bathroom with an IV pole.
- Attitude of doctors and nursing staff: Patients are there for kind care, not to be made to feel they are a bother. Don't belittle their needs.
- Poor follow up with patients.
- Distance from front desk to the lab is too inconvenient for an elderly person with a breathing problem. It's just way too far!
- Doctors seem more concerned to get you out the door than to help figure out what's wrong and find a long-term cure instead of something that helps right now. Billing/coding department is a joke! Will not go back to see if something was coded wrong. Last time I went to the ER, it took one hour for a doctor to show up.
- It is difficult to get an appointment when you are sick. There is a serious lack of confidentiality. Why do we pay an internist fee when we see a PA? We shouldn't need to schedule an appointment to get test results … that just pushes up the cost of health care and makes the clinic busier.
- It needs friendlier reception staff and more confidential check-in. There needs to be a better check-in system. People currently stand behind you and can hear you while they wait their turn. If they sit down in waiting room they lose their turn.
- Need more physicians and to stress confidentiality. I will travel 100-250 miles just to make sure my health information is not talked about among the community.
- Never had a problem with health care, but continually have issues with billing and billing personnel. Do not plan to return unless emergency because of it.
- Return calls from physicians or their nurses not made when promised, especially to the elderly.
- The local clinic needs to be more professional and not talk about patients in front of waiting room. They are rude and treat all patients as if they are incompetent.
- When you have tests done sometimes I never hear the results unless I call them. I think they could improve on this.

Community members' concerns and suggestions relating to the costs and affordability of health care and insurance

- Concerned for cost of visit. Each visit is charged maximum office visit when only doing a medication renewal with no exam done.
- Concerned with Medicare payments and cost of supplemental insurance.
- Dental care is now an issue, most retired seniors living on Social Security cannot afford a dentist's cost.
- I am very concerned about losing our health care, also about health care costs in general. With cuts in Medicare and Medicaid I would be unable to pay the $100 they require just to get in to see the doctor. I would be unable to see a doctor if I could not pay. Money seems to be more important than people at this point.
- My concern is that due to the high cost of medical service, the facility will not see people who cannot pay the co-pay which is currently at $100 if you have no insurance and that people like my son who has no insurance and doesn't have a job because he is still in school won't be seen because of no ability to pay. And as parents we are living paycheck to paycheck and still can't meet the bills.

Health care professionals' concerns and suggestions relating to the morale, treatment of, and wage rates of WRHS employees

- I feel strongly there is a real breakdown between providers and administration. Until there is better communication and camaraderie between the two groups, I think we could face some difficult times.
- The hospital board needs to listen to the employees without repercussions and without any administrators present.
- There is discontent within employee ranks.

Findings From Interviews and Focus Group

The questions posed in the survey also were explored during key informant interviews with community leaders as well as a focus group comprised of WRHS board members. During these one-on-one interviews and the group discussion, several themes emerged. While much of the information derived from interviews and the focus group echoed the results of the broad community survey, a few other issues emerged that were not as prevalent in the survey results. Generally, these suggestions and concerns can be grouped into seven broad categories (listed in no particular order):

1) Enhancing education about available services and quality of services offered by WRHS;
2) Meeting mental health needs;
3) Shortage of physicians and staff;
4) Financial burdens and the high cost of health care;
5) Transportation and physical access issues;
6) Improving follow-up with patients to better develop long-term relationships; and
7) Planning for changes associated with increased energy development.

A more detailed discussion about these issues follows:

1) Enhancing education about available services and quality of services offered.

With respect to enhancing education about available services, some interviewees and focus group participants thought awareness was high, while others noted what specific services they were not aware of as well as services they believed community members may not know about. Many participants also noted that community perceptions about quality were not always accurate and suggested more education was needed about the high quality of services to counterbalance the "bad stories" that sometimes get passed around the community.

Specific comments included:

- They do a pretty good job of advertising services.
- People generally are aware that it's a full-service hospital. Unless it's something like transplant or hip replacement, people know they can get care here.
- I know these services are offered, but it's hard to know what elderly people know; they probably don't understand what all these services are. Also, I don't know if the youth would be aware of all of these services … it might be a good idea to explain to them in the schools what all is available.
- Most people probably couldn't name the services available.
- I don't know much about the health screenings or audiology services. Other people probably don't either.
- I didn't know WRHS offered end of life care, other than swing bed.
- I didn't know about chemotherapy.

- Education as to what's available could be enhanced. We are fighting a perception in rural areas that specialized doctors and specialized services are only available in bigger towns.
- I wouldn't think of counseling services when I think about the hospital.
- I think people would be surprised about sleep studies. This is probably viewed by public as requiring a "specialist" that we wouldn't have here.
- I think you "don't have a clue" what's here until you need it.
- Patients need to be more proactive about where to go and not just take a referral for a service that can be done here. Many older people "take it as gospel" that they have to keep taking trips to Bismarck for a service, even a 10-minute visit that can be done here.
- In the immediate area, people know what's here because the hospital does a good job of advertising. But specific services that people might not be aware of are sleep studies, speech therapy, counseling services, and aesthetic treatments.
- I think people are aware of most of the services. Diabetic education and WIC gets advertised all the time, full health screens are advertised in the fall; I feel people know about the foot care services.
- We need more emphasis on education about what's available here. It might be an opportunity.
- You hear things about doctors. Some people say I would never let Dr. X treat me because of what I've heard, but others think he's right up there with God.
- In smaller communities, you hear the bad stuff, but not the good stuff about local care.
- You hear of misdiagnoses here sometimes. I'm sure it happens as much in other places, but you just don't hear about it.
- In a small town everyone hears if there's a fluke and someone has a bad experience or outcome. It's probably the same rate as other places, but you hear about it more here. You hear about the bad stories, but not the good stories.

2) Meeting mental health needs.

Several interviewees raised the issue of access to mental health care and stated that they believed mental health issues were not being addressed adequately. Multiple interviewees specifically raised concerns about meeting needs associated with addiction. Others noted the stigma attached to mental health care issues and suggested it might be useful to have providers from outside the community help deal with sensitive personal matters that patients might be reluctant to share with providers they know. Comments included:

- There's a real need for addiction services. The committal process happens more often than people realize, and there are no support services for addiction… we have quite a problem, and there are no services to help them.
- There is an increase in drug activity and more people migrating here that have those issues.
- For personal issues, like counseling, people might go somewhere else because "they don't want to run into their mental health provider in the grocery store." Maybe it's better to have counseling be offered by non-local provider.
- There is still a stigma associated with going to a counselor so people go to other clinics.
- We need counseling services in a family setting. It seems like counseling is set up more for individuals and is not child or family friendly. It's the older generation that gets referred more for counseling services. If there are immediate counseling needs, there's no one to address it, except a physician who might not be appropriate for counseling.

- I'd like to see more outreach in terms of mental health issues. I think these services are under-utilized and maybe people aren't aware of them. There is a huge issue and fear about confidentiality, and it's awkward for many to seek help. It's much harder to compartmentalize life in a small town like you can in a larger city. Maybe it would be easier for people to seek help if we brought in someone from other communities for those services.
- Issues with addiction are, in some ways, not addressed here. I'm not sure how West River could partner with others. Maybe offer space for AA meetings. Other ways West River might help is to put on seminars or other community education about addiction issues.
- Mental health is a big issue, with an aging population, Alzheimer's is big concern.
- There's not a lot of mental health care in this area. These are huge issues. The services aren't available here.
- I think drug abuse is bigger than we realize and will get bigger, and doctors struggle with how to deal with it

3) Shortage of physicians and staff.

Consistent with the survey results, interviewees spoke at length about the problems associated with retaining and recruiting physicians and staff. Their observations included:

- In Lemmon, it's hard to see a physician. Patients keep getting "pushed" to a physician assistant.
- Probably the biggest issue is the lack of physicians, especially in the last six months. Four have retired in the last two years.
- In two to five years, the shortage of workers is probably going to get worse. With the oil, people are being pulled north to higher-paying jobs.
- Of potential concerns, the "big one" is shortage of health care providers and specialists and not enough health care staff in general.
- The concern of the community is not adding services, but rather maintaining services because of issues of recruiting doctors.
- It's hard to get doctors here. UND should do more to provide incentives to doctors to come here. I think they're looking for five to six doctors now. Often it's easier to attract men here than women. The current group of doctors is all growing old together and will retire. It might have been better back when doctors had ownership of the clinic. It made them more invested, more than just buying a house in town. That's how this hospital started, and maybe we should go back to it.
- There are so many visiting nurses that you never know who you're going to see. In a small town some people aren't comfortable with that and want to know the people they're seeing.
- My number one concern is not enough nurses and doctors. More and more people are seeing physician assistants and nurse practitioners rather than physicians. I realize that's the new model, but some want to see a physician.
- The problem looming on the horizon is not enough health care providers and specialists and not enough health care staff in general. A lot of doctors are at the same age and nearing retirement, and younger doctors are moving away. We need to attract and keep health care workers. It's hard to think five or 10 years in the future because staffing needs to come before everything else.
- The satellite clinics face barriers because no physicians are living in those communities.
- We lose physicians due to burnout. Recruiting physicians is an ongoing issue.

- The current generation of doctors is retiring and the younger doctors are leaving. It's not purely a money issue. Other businesses are bringing in new, young people.
- People can't get appointments. I know of one person who had surgery elsewhere. This person is scheduled for later follow-up with a local doctor, but is in quite a bit of pain and should go in today. But they won't even try to get an appointment before the weekend because they know it's impossible.

4) Financial burdens and the high cost of health care.

Like survey respondents, participants in interviews and the focus group mentioned that health care costs were an important – and growing – concern. Participants talked about both rising costs of care and insurance:

- People have no insurance or are underinsured. Even those who have insurance have such high deductibles that they won't seek care unless it's life threatening or a very crucial need.
- People without insurance are reluctant to go to the clinic.
- Many people on Social Security are living on the very bare minimum. There is no room to pay more.
- During the bad years in agriculture, people got behind and are still catching up.

5) Transportation and physical access issues.

While transportation issues did not emerge among the top concerns identified in the broader survey, many interviewees touched on transportation and physical access issues, suggesting that these issues may need attention too. Comments included:

- Transportation could be issue as this is an older community and people often stop driving and need help getting around. There are not as many extended family members around now as there used to be since more of the younger people are leaving town.
- SW Senior Services offers bus service, but I'm not sure whether people know about it.
- There is a bus service, but it costs money and the driver can't help people get on or off the bus, so that's an issue. The handicapped parking at WRHS is too far from the appointment desk. It's not patient friendly.
- Distance and transportation will be a big problem unless older people move in from farms to town.
- It is just hard to find your way around the WRHS building. At first after new construction volunteers helped guide people. At other places I've been to, staff will ask right away if you need help finding something if you look lost. The staff here could be better about proactively helping people if they look like they might need help.
- People can avail themselves of transportation services, for example, senior bus, and most people have friends who would drive them, although people here do not always feel comfortable asking for help.
- SW Transit, which is privately owned and not part of the senior center, does a lot and is used a lot, but not everyone can use it. People must be ambulatory because drivers can't assist with getting on or off the bus. Also, people must be cognitively able to call, remember when the bus is coming, and so on. It's not a babysitter, it's a taxi.

6) Improving follow-up with patients to better develop long-term relationships.

Several participants mentioned that an area that needs improvement in the realm of customer service is follow-up communication with patients. Several people offered constructive suggestions for improving long-term relationships with patients by improving follow-up. Specific comments included:

- The follow-up here is not good. The Bismarck hospitals have better follow-up, and that helps create relationships.
- They're not good here about following up. If you have a lab result or test result, you want to know either way, not just if it's bad. It might be due to too large of a workload, but they should work on it.
- As the new doctors come into St. A's, they don't work as well with us. The new doctors at St. A's are not "on board" with this connection between West River and St. A's. Local doctors make referrals and then never hear back. We need to stay in touch with the patient.
- I've had such wonderful care that I'm the wrong person to ask about how to improve it. But I've heard others say that there needs to be better follow-up. Often people don't get that call back that they're waiting for.

7) Planning for changes associated with increased energy development.

Finally, participants saw the need to take steps now to deal with potential increased energy development activities, especially oil development, in the region:

- If energy development comes here, there could be significant challenges with asthma, allergies, toxic spills, work injuries. We'll need new protocols to deal with all of this. We may want to be involved in monitoring for chemicals, for example. We should be doing planning now in case it happens.
- We need flexibility to deal with what's coming in terms of energy development. We'll need to adapt and deal with that as we've done historically.
- Collaboration is good. I just sat down with people from the hospital this week. But if oil issues come here, we'll need to prepare and work together on that.
- We know there may be more people coming because of oil and West River is trying to figure out how to get more doctors here before the influx of people.
- My number three concern is ambulance services. The nature of volunteerism is struggling. If the Oil Patch comes down this way and we have to deal with those issues, the volunteers will leave and the hospital will have to take it up. Oil activities really strain services.
- If oil comes, it is a big burden on a community and it's not good for lots of businesses, except construction and those with mineral rights.
- I have heard that hospitals in oil patch dealing with huge bad debt issues with all the oil workers.
- If oil comes, crime comes too. Williston and Watford City are no longer safe.

Priority of Health Needs

In January 2012, the boards of the West River Health Services-affiliated corporations met to review the findings of this assessment. After careful consideration of, and discussion about, the findings, they prioritized the needs facing the community. Included in Appendix H is a summary of the prioritization of the community's health needs.

Summary

This study took into account input from approximately 900 community members and health care professionals from several counties in two states as well as 20 community leaders and health facility board members. This input represented the broad interests of the community served by West River Health Services. Together with secondary data gathered from a wide range of sources, the information gathered presents a snapshot of health needs and concerns in the community.

Analysis of secondary data reveals that WRHS' core service area has a higher percentage of adults over the age of 65 and a higher median age than the averages of North Dakota and South Dakota. Additionally, the data shows that the region's rates of obesity, physical inactivity, uninsured adults, and preventable hospital stays are higher than state averages. Another area of concern is excessive drinking, with most counties in the area having a rate twice that of the national benchmark. In preventable care, the North Dakota counties in the service area lag state averages on several measures, including colorectal cancer screening rates, drug-drug interaction rates, and annual lipid testing screening rates for diabetes patients.

The most important issues that emerged from the survey results were the need to recruit and retain adequate numbers of physicians (and other health care professionals) and the increasing costs of health care. More than 400 community members (54%) rated shortage of providers and specialists as an immediate concern, as did 111 health care professionals (83%). Consumers rated cost as the most important concern with 502 community members (66%) saying it is an immediate concern. The survey also revealed that large numbers of consumers are aware of most of the services offered by WRHS and that a large number of consumers choose to use the health system's services when available.

Input from community leaders and WRHS board members echoed the community's concerns about maintaining an adequate level of providers and staff, and also revealed concerns about access to mental health care, enhancing education about WRHS' services and quality, improving follow-up communication with patients, and planning for potential increased oil development activities in the region.

Appendix A - Survey Instruments

Community Health Needs Assessment

West River Health Services (WRHS) is interested in hearing from you about area health needs. This survey is being administered by the University of North Dakota (Center for Rural Health) on behalf of WRHS. Associated costs are funded by the ND Medicare Rural Hospital Flexibility Program. All responses are confidential and there is no way to track responses back to individuals. You may skip any question you wish. If you prefer, this survey may be completed electronically by visiting: http://ruralhealth.und.edu/surveys/survey.php?sid=82

This survey is available to all communities served by West River Health Services. Information will be used to strengthen area health care. The focus of the survey is to:

1. *Learn of the community's awareness of local health care services being provided;*
2. *Hear suggestions and help identify any gaps in services (now and in the future); and*
3. *Determine preferences for using local health care versus traveling to other facilities.*

Surveys will be accepted through the 1st week of November. Your opinion matters – thank you in advance!

1. For **each** service listed below, please indicate:

a) Whether or not you are **aware** WRHS offers the services listed.
b) Whether you **have used** WRHS services, or the same service but at another health care facility.

Aware of services offered by WRHS?		Services offered by WRHS	Have you used the services at WRHS or at another facility? **(Check both if applicable)**	
Yes	**No**		**Used service at WRHS**	**Used service at another facility**
☐	☐	End of life care	☐	☐
☐	☐	Clinic	☐	☐
☐	☐	Pediatric/child care	☐	☐
☐	☐	Health screenings	☐	☐
☐	☐	Medical nutrition therapy	☐	☐
☐	☐	WIC program	☐	☐
☐	☐	Diabetes education	☐	☐
☐	☐	Ambulance	☐	☐
☐	☐	Emergency room	☐	☐
☐	☐	Radiology (mammography)	☐	☐
☐	☐	Radiology (ultrasound)	☐	☐
☐	☐	Radiology (fluoroscopy)	☐	☐
☐	☐	Radiology (nuclear medicine)	☐	☐

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

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We're right where you need us.
www.wrhs.com

Aware of Services offered by WRHS?		Services offered by WRHS	Have you used the services at WRHS or at another facility? (**Check both if applicable**)	
Yes	**No**		**Used service at WRHS**	**Used service at another facility**
☐	☐	Cardiac services/rehab	☐	☐
☐	☐	Respiratory care services	☐	☐
☐	☐	Surgical services	☐	☐
☐	☐	Birthing center	☐	☐
☐	☐	Home medical services/store	☐	☐
☐	☐	Home oxygen service	☐	☐
☐	☐	Acute care hospital	☐	☐
☐	☐	Swing bed services	☐	☐
☐	☐	Chemotherapy	☐	☐
☐	☐	Sleep studies	☐	☐
☐	☐	Eye exams/optometric services	☐	☐
☐	☐	Foot care/podiatric services	☐	☐
☐	☐	Hearing tests/audiologist	☐	☐
☐	☐	Physical therapy	☐	☐
☐	☐	Occupational therapy	☐	☐
☐	☐	Speech therapy	☐	☐
☐	☐	Visiting nurses – home care	☐	☐
☐	☐	Visiting specialists	☐	☐
☐	☐	Radiologists (bone density)	☐	☐
☐	☐	Radiology (MRI)	☐	☐
☐	☐	Radiology (general x-ray)	☐	☐
☐	☐	Radiology (CT scan)	☐	☐
☐	☐	Counseling services	☐	☐
☐	☐	Aesthetic treatments	☐	☐
☐	☐	Laboratory services	☐	☐
☐	☐	Medication assistance	☐	☐
☐	☐	Medication for oxygen customers	☐	☐

2. What would help to **remove barriers** that may be affecting your use of local health services? (Mark ALL that apply)

☐ Confidentiality
☐ Collaboration between competing health providers
☐ Evening or weekend hours
☐ More doctors
☐ Bilingual providers
☐ Transportation services
☐ American Indian providers
☐ Other: _____
☐ Telehealth (patients seen by provider at another facility through a monitor/tv screen)

3. What specific services, if any, do you think West River Health Services needs to **add**?

_____

_____

4. Do you believe that West River Health Services should improve its collaboration with:

	Yes	No. It's fine as is.	Don't Know
Local job/economic development	☐	☐	☐
Local health providers not employed by the hospital	☐	☐	☐
Other rural clinics/hospitals	☐	☐	☐
Schools/health wellness education	☐	☐	☐
Urban clinics/hospitals	☐	☐	☐

5. What major health concerns do you see, now and for the next 2-5 years, related to the delivery of healthcare conditions in your community? (Mark ALL that apply)

Now	2-5 years	
☐	☐	Obesity
☐	☐	Diabetes
☐	☐	Cancer
☐	☐	Mental health (e.g., depression, dementia/Alzheimer, stress)
☐	☐	Heart disease
☐	☐	Higher costs of health care for consumers
☐	☐	Access to needed technology/equipment
☐	☐	Continued emergency services (ambulance & 911)
☐	☐	Focus on prevention
☐	☐	Distance/transportation to health care facility
☐	☐	Shortage of health care providers and specialists
☐	☐	Not enough health care staff in general
☐	☐	Hospital closure
☐	☐	Clinic closure. Name the locations(s) of clinic you are referring to: _____

6. Which concern do you feel is the most important and why? _____

7. If applicable, please indicate your reasons for using **West River Health Services**.
(Mark ALL that apply)

- ☐ Confidentiality
- ☐ Disability access
- ☐ Has the specialist I need
- ☐ Less costly
- ☐ Proximity
- ☐ Open at convenient times
- ☐ People I know care for me
- ☐ They take my insurance
- ☐ Transportation is readily available
- ☐ They take new patients
- ☐ High quality care
- ☐ Other: _____

8. If applicable, please indicate your reasons for using **another health care facility**.
(Mark ALL that apply)

- ☐ Confidentiality
- ☐ Disability access
- ☐ Has the specialist I need
- ☐ Less costly
- ☐ Open at convenient times
- ☐ People I know care for me
- ☐ They take my insurance
- ☐ Transportation is readily available
- ☐ They take new patients
- ☐ High quality care
- ☐ Other: _____

9. How long does it take you to reach the nearest clinic that is operated by WRHS?

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

10. How long does it take you to reach WRHS hospital in Hettinger?

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

11. General health conditions and/or diseases you currently have.
(Mark ALL that apply)

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

12. Gender:

- ☐ Female
- ☐ Male

13. Age: _____

14. Years lived in community: _____ Zip code: _____

15. Your highest level of education:

☐ Middle school/or less
☐ Some High School
☐ High School Graduate
☐ 2 yr degree
☐ 4 yr degree
☐ Graduate degree

16. Your marital status:

☐ Divorced/separated
☐ Married
☐ Never married
☐ Widowed

17. Your household income:

☐ $0 - $9,999
☐ $10,000 - $19,000
☐ $20,000 - $29,999
☐ $30,000 - $39,999
☐ $40,000 - $49,999
☐ $50,000 - $59,999
☐ $60,000 - $69,999
☐ $70,000 - $79,999
☐ $80,000 and over
☐ Prefer not to answer

18. Your employment status:

☐ Full time
☐ Part time
☐ Unemployed
☐ Retired

19. Your insurance status (Mark ALL that apply):

☐ Indian Health Services
☐ Medicaid
☐ Medicare
☐ Insurance through employer (any member of the household)
☐ Private Insurance
☐ Tribal Insurance
☐ Veteran's Health Care Benefits
☐ None
☐ Other

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

_____

_____

_____

_____

If you have questions or concerns about this survey, please contact:

Center for Rural Health, UND
Attn: Ken Hall
(701) 777-6046
kenneth.hall@med.und.edu

or

UND Institutional Review Board
(701) 777-4279

Appendix A-2 - Health Care Professionals Survey

Community Health Needs Assessment

As you may know, West River Health Services is in the process of conducting a community health needs assessment. The focus of this initiative is to:

1. *Learn of the community's awareness of local health care services being provided;*
2. *Hear suggestions and help identify any gaps in services (now and in the future); and*
3. *Determine preferences for using local health care versus traveling to other facilities.*

The needs assessment is being completed by the University of North Dakota, Center for Rural Health. Associated costs are funded by the N.D. Medicare Rural Hospital Flexibility Program. Employees, community leaders, and consumers are being asked to complete a survey. You are assured that all responses are confidential and there is no way to track responses back to individuals. You may skip any question you wish. Surveys will be accepted through the first week of November.

Your opinion matters – thank you in advance!

1) Reasons why you think patients select **West River Health Services**.
(Mark ALL that apply)

☐ Confidentiality
☐ Disability access
☐ Access to specialist
☐ Less costly
☐ Proximity
☐ Open at convenient times
☐ Familiarity with providers
☐ We take their insurance
☐ Transportation is readily available
☐ We take new patients
☐ Convenient
☐ High quality of care
☐ Other: _____

2) Reasons why you think patients select **non-local** health care.
(Mark ALL that apply)

☐ Confidentiality
☐ Disability access
☐ Provides necessary specialists
☐ Less costly
☐ Open at convenient times
☐ Takes many types of insurance
☐ Transportation is provided
☐ They take new patients
☐ High quality of care
☐ Other: _____

3) What would help to remove barriers that may be affecting use of local health care?
(Mark ALL that apply)

☐ Confidentiality ☐ Collaboration between competing health providers
☐ Evening or weekend hours ☐ More doctors
☐ Bilingual providers ☐ Transportation services
☐ American Indian providers ☐ Other: _____
☐ Telehealth (patients seen by providers at another facility through a monitor/tv screen)

4) Do you believe that West River Health Services should improve its collaboration with:

	Yes	No. It's fine as is.	Don't Know
Local job/economic development	☐	☐	☐
Local health providers not employed by the hospital	☐	☐	☐
Other rural clinics/hospitals	☐	☐	☐
Schools/health wellness education	☐	☐	☐
Urban clinics/hospitals	☐	☐	☐

5) What major health concerns do you see, now and for the next 2-5 years, related to the delivery of healthcare conditions in your community? (Mark ALL that apply)

Now	2-5 years	
☐	☐	Obesity
☐	☐	Diabetes
☐	☐	Cancer
☐	☐	Mental health (e.g., depression, dementia/Alzheimer, stress)
☐	☐	Heart disease
☐	☐	Higher costs of health care for consumers
☐	☐	Access to needed technology/equipment
☐	☐	Continued emergency services (ambulance & 911)
☐	☐	Focus on prevention
☐	☐	Distance/transportation to health care facility
☐	☐	Shortage of health care providers and specialists
☐	☐	Not enough health care staff in general
☐	☐	Hospital closure
☐	☐	Clinic closure. Insert the location(s) of clinic you are referring to: _____

6) Which concern do you feel is the most important and why? _____

_____

7) What specific services, if any, do you think West River Health Services needs to add, and why?
_____

_____

8) Gender:
- ☐ Female
- ☐ Male

9) Age: _____

10) (If applicable) Years lived in community: _____

11) Highest level of education:
- ☐ Some High School
- ☐ High School Graduate
- ☐ 2 yr degree
- ☐ 4 yr degree
- ☐ Graduate degree

12) Marital status:
- ☐ Divorced/separated
- ☐ Married
- ☐ Never married
- ☐ Widowed

13) Profession:
- ☐ Clerical
- ☐ Health care administration
- ☐ Allied health professional
- ☐ Environmental services
- ☐ Nurse
- ☐ Physician
- ☐ CNA/Other Assistant
- ☐ Other: _____

14) Overall, please share concerns and suggestions to improve the delivery of local health care:

_____

_____

_____

_____

If you have questions or concerns about this survey, please contact:

Center for Rural Health, UND
Attn: Ken Hall
(701) 777-6046
kenneth.hall@med.und.edu

or

UND Institutional Review Board
(701) 777-4279

Appendix B
Survey Distribution by Community

Communities Included in Survey Distribution

North Dakota	South Dakota
Hettinger	Bison
Bowman	Lemmon
Mott	Lodgepole
New England	Meadow
Reeder	Morristown
Regent	Prairie City
Rhame	Ralph
Scranton	Reva

Appendix C
Key Informants Participating in Interviews

NAME	ORGANIZATION
Ethan Andress	West River Veterinary Clinic
Tara Bieber, RN	Southwestern District Health Unit (Adams County)
Kathleen Dettman	Hettinger Lutheran Church
Cheryl Dix	Adams County Social Services
Jim Goplin	Adams County Chamber of Commerce & Development Corp.
Bonnie Lueck	Dakota Plains Federal Credit Union
Debbie Molbert	Dakota Prairie Helping Hands
Mark Nelson, DDS	Mark Nelson, DDS
Chris Schauer	North Dakota State University Research & Extension Center
Betty Svihovec	

Appendix D
Southwest District Community Health Profile

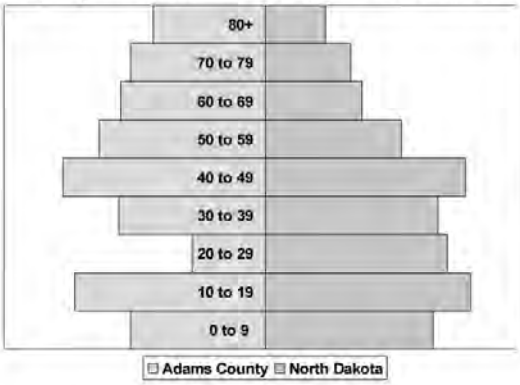
Southwest District Community Health Profile

Demographics

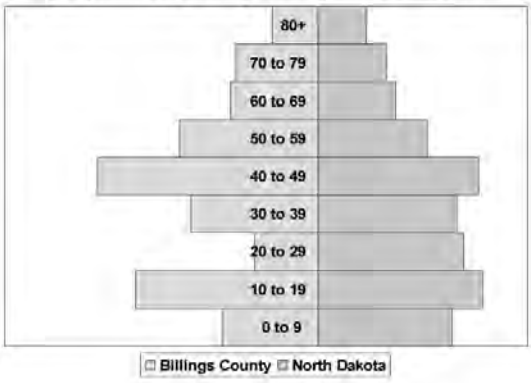
Age	Adams Number	Adams Percentage	Billings Number	Billings Percentage	Bowman Number	Bowman Percentage	Dunn Number	Dunn Percentage	Golden Valley Number	Golden Valley Percentage
0-9	267	10.3	82	9.2	347	10.7	465	12.9	242	12.6
10-19	379	14.6	155	17.5	506	15.6	604	16.8	345	17.9
20-29	145	5.6	54	6.1	229	7.1	254	7.1	130	6.8
30-39	290	11.2	108	12.2	378	11.7	424	11.8	205	10.7
40-49	403	15.5	187	21.1	561	17.3	604	16.8	296	15.4
50-59	330	12.7	118	13.3	373	11.5	439	12.2	203	10.6
60-69	289	11.1	75	8.4	308	9.5	342	9.5	170	8.8
70-79	267	10.3	70	7.9	303	9.3	274	7.6	179	9.3
80 +	223	8.6	39	4.4	237	7.3	194	5.4	154	8.0
Total	2,593	100.0	888	100.0	3,242	100.0	3,600	100.0	1,924	100.0

Age	Hettinger Number	Hettinger Percentage	Slope Number	Slope Percentage	Stark Number	Stark Percentage	Southwest District Number	Southwest District Percentage	North Dakota Number	North Dakota Percentage
0-9	269	9.9	79	10.3	2,880	12.7	4,631	12.1	82,382	12.8
10-19	414	15.2	125	16.3	3,845	17.0	6,373	16.6	101,082	15.7
20-29	145	5.3	44	5.7	2,831	12.5	3,832	10.0	89,295	13.9
30-39	271	10.0	91	11.9	2,803	12.4	4,570	11.9	85,086	13.2
40-49	415	15.3	159	20.7	3,544	15.7	6,169	16.1	98,449	15.3
50-59	350	12.9	83	10.8	2,335	10.3	4,231	11.0	66,921	10.4
60-69	342	12.6	105	13.7	1,747	7.7	3,378	8.8	47,649	7.4
70-79	303	11.2	50	6.5	1,542	6.8	2,988	7.8	41,844	6.5
80 +	206	7.6	31	4.0	1,109	4.9	2,193	5.7	29,492	4.6
Total	2,715	100.0	767	100.0	22,636	100.0	38,365	100.0	642,200	100.0

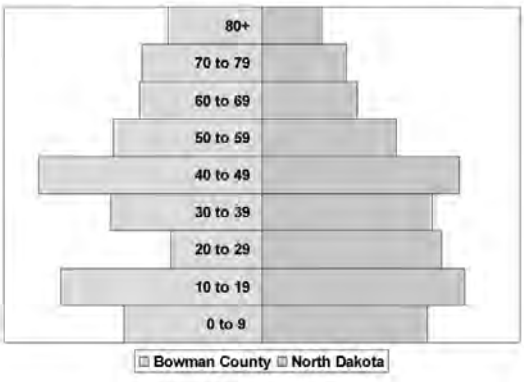
Age Pyramid for Adams County and North Dakota



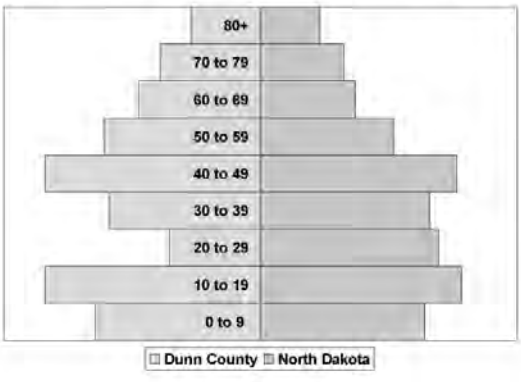
Age Pyramid for Billings County and North Dakota



Age Pyramid for Bowman County and North Dakota

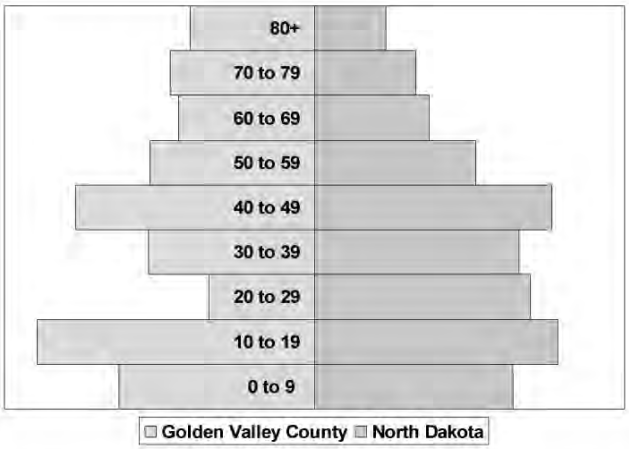


Age Pyramid for Dunn County and North Dakota

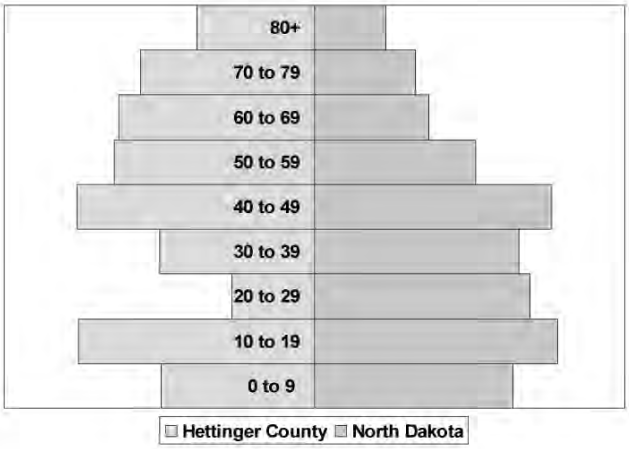


Demographics

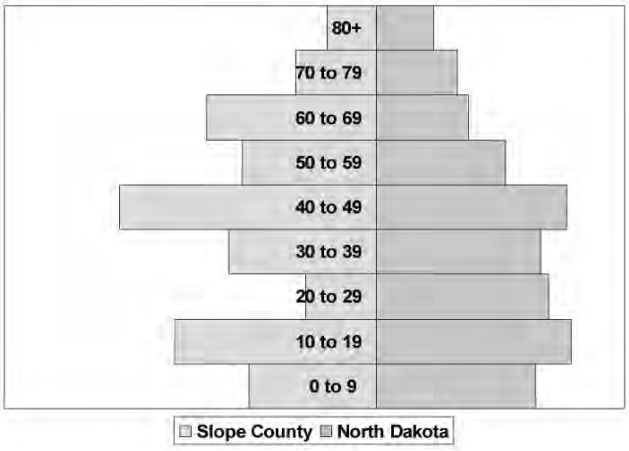
Age Pyramid for Golden Valley County and North Dakota



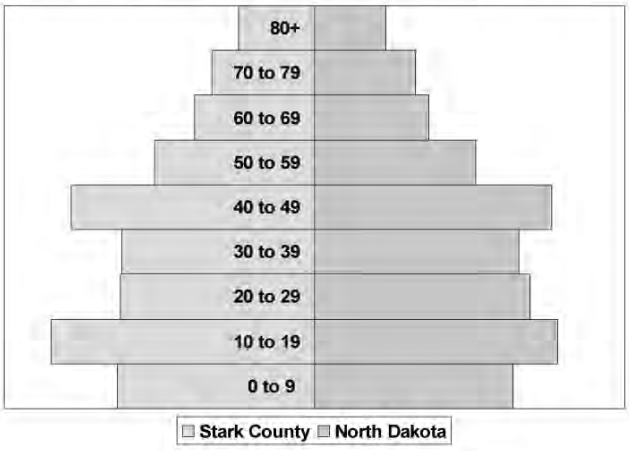
Age Pyramid for Hettinger County and North Dakota



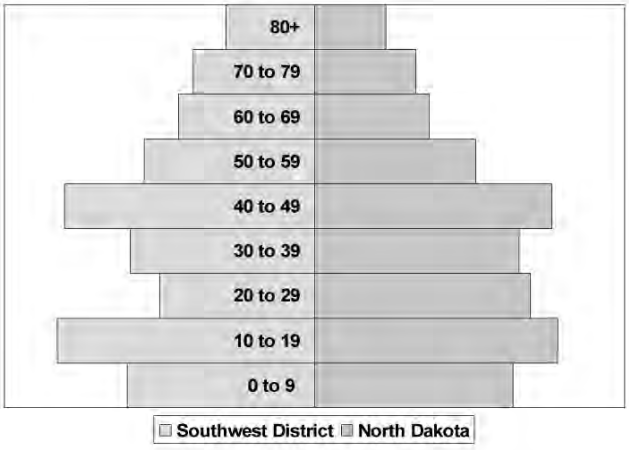
Age Pyramid for Slope County and North Dakota



Age Pyramid for Stark County and North Dakota



Age Pyramid for Southwest District and North Dakota



Demographics

Population and Percentage of County Population for Ages 0-17 and 65 and Older, 2005-2007

	Adams		Billings		Bowman		Dunn		Golden Valley	
0-17	601	23.2%	221	24.9%	780	24.1%	986	27.4%	545	28.3%
65+	624	24.1%	142	16.0%	707	21.8%	625	17.4%	410	21.3%
Total	2,593	100.0%	888	100.0%	3,242	100.0%	3,600	100.0%	1,924	100.0%

Age	Hettinger		Slope		Stark		South West District		North Dakota	
0-17	634	23.4%	194	25.3%	5,781	25.5%	9,742	25.4%	143,500	22.5%
65+	683	25.2%	137	17.9%	3510	15.5%	6,838	17.8%	92,750	14.5%
Total	2,715	100.0%	767	100.0%	22,636	100.0%	38,365	100.0%	637,709	100.0%

Population Change from 1990 to 2000 Census

Census	Adams	Billings	Bowman	Dunn	Golden Valley	Hettinger	Slope	Stark	South West District	North Dakota
1990	3,174	1,108	3,596	4,005	2,108	3,445	907	22,832	41,175	638,800
2000	2,593	888	3,242	3,600	1,924	2,715	767	22,636	38,365	642,200
Change	-18.3%	-19.9%	-9.8%	-10.1%	-8.7%	-21.2%	-15.4%	-0.9%	-6.8%	0.50%

Percentage Female by County, 2000 Census

Age	Adams	Billings	Bowman	Dunn	Golden Valley	Hettinger	Slope	Stark	South West District	North Dakota
0-9	51.3%	42.7%	53.6%	45.2%	53.7%	47.6%	49.4%	48.5%	48.8%	48.8%
10-19	49.6%	49.0%	51.6%	50.2%	45.2%	49.5%	45.6%	46.3%	47.5%	48.3%
20-29	51.0%	37.0%	46.7%	43.7%	50.0%	35.9%	43.2%	50.9%	49.3%	47.3%
30-39	51.7%	57.4%	47.6%	50.7%	51.7%	53.1%	41.8%	50.2%	50.4%	49.2%
40-49	50.6%	44.9%	48.7%	48.7%	49.0%	46.0%	47.8%	49.7%	49.1%	49.3%
50-59	49.4%	45.8%	51.7%	48.1%	49.8%	47.1%	44.6%	49.8%	49.3%	49.0%
60-69	48.1%	53.3%	51.9%	45.9%	52.4%	51.2%	47.6%	54.3%	52.1%	52.3%
70-79	58.8%	48.6%	53.1%	52.6%	58.7%	56.8%	46.0%	57.9%	56.5%	55.2%
80 +	63.7%	30.8%	61.2%	60.8%	66.2%	60.2%	48.4%	63.0%	61.9%	65.1%
Total	52.2%	47.0%	51.4%	49.0%	51.9%	49.9%	46.2%	50.8%	50.6%	50.1%

Demographics

Population and Percentage by Race, 2000 Census

	Adams County		Billings County		Bowman County		Dunn County		Golden Valley	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	2593	100.0%	888	100.0%	3242	100.0%	3600	100.0%	1924	100.0%
White	2554	98.5%	877	98.8%	3209	99.0%	3117	86.6%	1881	97.8%
Black	14	0.5%	0	0.0%	1	0.0%	1	0.0%	0	0.0%
Am.Indian	8	0.3%	1	0.1%	5	0.2%	448	12.4%	14	0.7%
Asian	4	0.2%	0	0.0%	1	0.0%	3	0.1%	2	0.1%
Pac. Is.	1	0.0%	1	0.1%	0	0.0%	0	0.0%	0	0.0%
Other	3	0.1%	1	0.1%	5	0.2%	0	0.0%	6	0.3%
Multirace	9	0.3%	8	0.9%	21	0.6%	31	0.9%	21	1.1%

	Hettinger County		Slope County		Stark County		South West District		North Dakota	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	2715	100.0%	767	100.0%	22636	100.0%	38365	100.0%	642,200	100.0%
White	2686	98.9%	765	99.7%	22074	97.5%	37163	96.9%	593,181	92.4%
Black	4	0.1%	0	0.0%	51	0.2%	71	0.2%	3,916	0.6%
Am.Indian	10	0.4%	1	0.1%	212	0.9%	699	1.8%	31,329	4.9%
Asian	2	0.1%	0	0.0%	52	0.2%	64	0.2%	3,606	0.6%
Pac. Is.	2	0.1%	0	0.0%	6	0.0%	10	0.0%	230	0.0%
Other	1	0.0%	0	0.0%	64	0.3%	80	0.2%	2,540	0.4%
Multirace	10	0.4%	1	0.1%	177	0.8%	278	0.7%	7,398	1.2%

Median Age and Average Household Size, 2000 Census

	Adams County	Billings County	Bowman County	Dunn County	Golden Valley County	Hettinger County	Slope County	Stark County	North Dakota
Median Age	45.6	41.9	43.0	40.9	41.2	46.2	42.5	36.9	36.2
Average	2.24	2.43	2.32	2.57	2.38	2.30	2.45	2.44	2.41

Household Populations, 200 Census

	Adams County		Billings County		Bowman County		Dunn County		Golden Valley County	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total:	2,593	100.0%	888	100.0%	3,242	100.0%	3,600	100.0%	1,924	100.0%
In households	2,514	97.0%	888	100.0%	3,152	97.2%	3,547	98.5%	1,809	94.0%
In family households	2,081	80.3%	763	85.9%	2,637	81.3%	3,108	86.3%	1,538	79.9%
In nonfamily households	433	16.7%	125	14.1%	515	15.9%	439	12.2%	271	14.1%
In group quarters	79	3.0%	0	0.0%	90	2.8%	53	1.5%	115	6.0%
Institutionalized population	71	2.7%	0	0.0%	82	2.5%	53	1.5%	114	5.9%
Noninstitutionalized population	8	0.3%	0	0.0%	8	0.2%	0	0.0%	1	0.1%

	Hettinger County		Slope County		Stark County		SW District		North Dakota	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total:	2,715	100.0%	767	100.0%	22,636	100.0%	38,365	100.0%	642,200	100.0%
In households	2,650	97.6%	767	100.0%	21,765	96.2%	37,092	96.7%	618,569	96.3%
In family households	2,262	83.3%	669	87.2%	18,114	80.0%	31,172	81.3%	507,581	79.0%
In nonfamily households	388	14.3%	98	12.8%	3,651	16.1%	5,920	15.4%	110,988	17.3%
In group quarters	65	2.4%	0	0.0%	871	3.8%	1,273	3.3%	23,631	3.7%
Institutionalized population	59	2.2%	0	0.0%	316	1.4%	695	1.8%	9,688	1.5%
Noninstitutionalized population	6	0.2%	0	0.0%	555	2.5%	578	1.5%	13,943	2.2%

Demographics

Population in Nursing Homes, 2000 Census

Adams	Billings	Bowman	Dunn	Golden Valley	Hettinger	Slope	Stark	South West District	North Dakota
63	0	82	53	39	59	0	256	552	7254
9.5%	0.0%	11.2%	7.8%	9.3%	8.2%	0.0%	7.0%	7.9%	7.1%

Institutionalized patients are counted by county of institutional residence not county of origin. If a county has no nursing home, then the % is zero.

Marital Status Among Persons Age 15 and Older, 2000 Census

	Adams		Billings		Bowman		Dunn		Golden Valley	
Total	2,117	100.0%	731	100.0%	2,642	100.0%	2,816	100.0%	1,534	100.0%
Never Married	402	19.0%	164	22.4%	483	18.3%	674	23.9%	354	23.1%
Now Married	1,310	61.9%	469	64.2%	1,711	64.8%	1,703	60.5%	929	60.6%
Separated	8	0.4%	3	0.4%	3	0.1%	21	0.7%	4	0.3%
Widowed	279	13.2%	41	5.6%	277	10.5%	218	7.7%	136	8.9%
Female	228	10.8%	32	4.4%	212	8.0%	169	6.0%	130	8.5%
Divorced	118	5.6%	54	7.4%	168	6.4%	200	7.1%	111	7.2%
Female	64	3.0%	19	2.6%	78	3.0%	102	3.6%	57	3.7%

	Hettinger		Slope		Stark		Southwest District		North Dakota	
Total	2,222	100.0%	626	100.0%	18,007	100.0%	30,695	100.0%	512,281	100.0%
Never Married	421	18.9%	147	23.5%	4,680	26.0%	7,325	23.9%	141,300	27.6%
Now Married	1,437	64.7%	411	65.7%	10,692	59.4%	18,662	60.8%	290,833	56.8%
Separated	13	0.6%	0	0.0%	66	0.4%	118	0.4%	3,610	0.7%
Widowed	239	10.8%	32	5.1%	1,266	7.0%	2,488	8.1%	36,702	7.2%
Female	211	9.5%	30	4.8%	1,036	5.8%	2,048	6.7%	30,346	5.9%
Divorced	112	5.0%	36	5.8%	1,303	7.2%	2,102	6.8%	39,836	7.8%
Female	47	2.1%	9	1.4%	756	4.2%	1,132	3.7%	21,235	4.1%

Educational Attainment, 2000 Census

	Adams		Billings		Bowman		Dunn		Golden Valley	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No schooling	1	0.1%	0	0.0%	2	0.1%	15	0.6%	2	0.2%
No High School	183	9.7%	66	10.2%	211	9.2%	288	12.0%	87	6.8%
Some High School	134	7.1%	77	12.0%	195	8.5%	236	9.9%	72	5.6%
High school or GRE	667	35.4%	206	32.0%	735	32.1%	771	32.2%	435	34.0%
Some College	588	31.2%	174	27.0%	738	32.2%	694	29.0%	429	33.6%
Bachelor's degree	236	12.5%	108	16.8%	330	14.4%	315	13.2%	227	17.8%
Post Graduate Deg	76	4.0%	13	2.0%	79	3.4%	74	3.1%	26	2.0%

	Hettinger		Slope		Stark		Southwest District		North Dakota	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
No schooling	7	0.4%	0	0.0%	83	0.6%	110	0.4%	1605	0.4%
No High School	336	17.0%	45	8.4%	1792	12.6%	3,008	11.9%	34053	8.3%
Some High School	155	7.8%	49	9.1%	995	7.0%	1,913	7.6%	30326	7.4%
High school or GRE	645	32.6%	196	36.4%	3955	27.8%	7,610	30.1%	113931	27.9%
Some College	551	27.9%	162	30.1%	4250	29.8%	7,586	30.0%	138855	34.0%
Bachelor's degree	246	12.4%	70	13.0%	2430	17.1%	3,962	15.7%	67551	16.5%
Post Graduate Deg	38	1.9%	16	3.0%	747	5.2%	1,069	4.2%	22292	5.5%

Demographics

	Adams		Billings		Bowman		Dunn		Golden Valley	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	2,352	100.0%	850	100.0%	3,006	100.0%	3,345	100.0%	1,703	100.0%
Total disability	476	19.9%	113	13.3%	438	14.6%	544	16.3%	349	20.5%
Percentage of those 5-15 Years with Disability	20	5.0%	2	1.5%	17	3.3%	12	1.8%	6	2.0%
Percentage of those 16-64 Years with Disability	260	18.0%	76	13.1%	208	11.2%	289	13.7%	201	19.2%
Percentage of those 65+with Disability	196	35.8%	35	24.8%	213	33.7%	243	42.6%	142	39.2%
Percentage of those 5-15 Years with Two Disabilities	0	0.0%	2	1.5%	4	0.8%	3	0.5%	0	0.0%
Percentage of those 16-64 Years with Two Disabilities	104	7.2%	28	4.9%	87	4.7%	122	5.8%	65	6.2%
Percentage of those 65+with Two Disabilities	110	20.1%	10	7.1%	91	14.4%	99	17.4%	70	19.3%

	Hettinger		Slope		Stark		Southwest District		North Dakota	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	2,526	100.0%	729	100.0%	20,970	100.0%	35,529	100.0%	586,289	100.0%
Total disability	459	18.2%	205	28.1%	3,897	18.6%	6,481	18.2%	97,817	16.7%
Percentage of those 5-15 Years with One Disability	15	3.6%	0	0.0%	165	4.5%	237	3.8%	5,586	5.6%
Percentage of those 16-64 Years with One Disability	196	13.2%	167	35.3%	2,436	17.3%	3,833	16.6%	58,630	14.7%
Percentage of those 65+with One Disability	248	39.1%	38	27.7%	1,296	40.2%	2,411	38.6%	33601	38.5%
Percentage of those 5-15 Years with Two+ Disabilities	0	0.0%	0	0.0%	23	0.6%	32	0.5%	986	1.0%
Percentage of those 16-64 Years w/ Two+ Disabilities	102	6.9%	36	7.6%	976	6.9%	1,520	6.6%	24,765	6.2%
Percentage of those 65+with Two+ Disabilities	111	17.5%	12	8.8%	628	19.5%	14,131	18.1%	15,537	17.8%

Income and Poverty

	Adams		Billings		Bowman		Dunn		Golden Valley	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Median Household Income	$29,079		$32,667		$31,906		$30,015		$29,967	
Per Capita Income	$18,425		$16,186		$17,662		$14,624		$14,173	
Below poverty level, All Ages	262	10.4%	113	12.8%	259	8.2%	620	17.5%	276	15.3%
Under 5 years	13	11.9%	4	10.5%	9	6.2%	59	29.4%	22	20.8%
5 to 11 years	26	11.6%	12	15.8%	49	15.3%	96	26.2%	39	22.5%
12 to 17 years	28	10.3%	7	7.3%	19	6.1%	66	15.7%	42	20.7%
18 to 64 years	134	9.9%	72	13.6%	116	6.6%	318	16.1%	145	15.0%
65 to 74 years	20	7.1%	16	18.0%	22	6.8%	32	11.1%	6	3.5%
75 years and over	41	15.4%	2	3.8%	44	14.3%	49	17.4%	22	11.5%

	Hettinger		Slope		Stark		Southwest District		North Dakota	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Median Household Income	$29,209		$24,667		$32,526		NA		$34,604	
Per Capita Income	$15,555		$14,513		$15,929		NA		$16,227	
Below poverty level, All Ages	393	14.8%	130	16.9%	2691	12.3%	4744	12.8%	73,457	11.9%
Under 5 years	27	22.1%	5	13.2%	179	13.8%	318	15.5%	6,784	17.6%
5 to 11 years	58	24.3%	14	20.9%	298	12.9%	592	15.7%	8,666	14.3%
12 to 17 years	49	18.0%	15	16.1%	211	10.0%	437	11.6%	6,713	11.3%
18 to 64 years	183	13.2%	85	19.7%	1464	11.3%	2517	11.8%	41,568	11.1%
65 to 74 years	41	12.0%	7	6.5%	188	11.6%	332	10.3%	3,797	8.4%

Demographics

Family Household Size by Household Type	Adams	Billings	Bowman	Dunn	Golden Valley
Total Households	1,121	366	1,358	1,378	761
Family households	725	256	891	987	507
2-person household	415	127	456	458	257
3-person household	110	50	173	191	97
4-person household	120	45	150	174	80
5-person household	51	26	76	109	37
6-person household	25	7	28	36	28
7-or-more person household	4	1	8	19	8

	Hettinger	Slope	Stark	South West District	North Dakota
Total Households	1,152	313	8,932	4,984	257,152
Family households	779	223	5,874	3,366	166,150
2-person household	433	114	2,666	1,713	76,904
3-person household	127	42	1,187	621	34,869
4-person household	126	32	1,227	569	32,621
5-person household	66	25	551	299	15,206
6-person household	19	8	173	124	4,583
7-or-more person household	8	2	70	40	1,967

Year Housing Built	Adams		Billings		Bowman		Dunn		Golden Valley	
	Number	Percentag	Number	Percentag	Number	Percentag	Number	Percentag	Number	Percentag
Housing units: Total	1,416	100.0%	529	100.0%	1,596	100.0%	1,965	100.0%	973	100.0%
1980 and Later	160	11.3%	169	31.9%	293	18.4%	435	22.1%	125	12.8%
1970 to 1979	301	21.3%	100	18.9%	347	21.7%	322	16.4%	168	17.3%
Prior to 1970	955	67.4%	260	49.1%	956	59.9%	1,208	61.5%	680	69.9%

	Hettinger		Slope		Stark		Southwest District		North Dakota	
	Number	Percentag	Number	Percentag	Number	Percentag	Number	Percentag	Number	Percentag
Housing units: Total	1,419	100.0%	451	100.0%	9,722	100.0%	18,071	100.0%	289,677	100.0%
1980 and Later	164	11.6%	68	15.1%	2,931	30.1%	4,345	24.0%	76,239	26.3%
1970 to 1979	243	17.1%	63	14.0%	2,606	26.8%	4,150	23.0%	68,376	23.6%
Prior to 1970	1,012	71.3%	320	71.0%	4,185	43.0%	9,576	53.0%	145,062	50.1%

Vital Statistics Data

Birth Data

	Adams	Billings	Bowman	Dunn	Golden Valley
Number of Live Births	99	30	162	162	74
Live Birth Rate*	8	6.8	10	9	7.7
Number of Teen Pregnancies	NA	NA	NA	NA	NA
Teen Pregnancy Rate**	NA	NA	NA	NA	NA
Number of Low Birthweight Births	0	0	0	0	0
Low Birthweight Ratio***	0	0	0	0	0

	Hettinger	Slope	Stark	South West District	North Dakota
Number of Live Births	91	21	1,402	2,041	42,925
Live Birth Rate*	6.7	5.5	12	11	13
Number of Teen Pregnancies	NA	NA	83	NA	4,097
Teen Pregnancy Rate**	NA	NA	17	NA	32
Number of Low Birthweight Births	0	0	85	0	2823
Low Birthweight Ratio***	0	0	12.1	0	13.2

Note: Rates based on fewer than 20 events are unstable. They are displayed in italics.
* Live Birth Rate: Number of live births per 1000 population
** Teen Pregnancy Rate: Number of teen pregnancies per 1000 female teens
***Low Birthweight Ratio: Number of low birthweight births per total births.

Marriages and Divorces by County, 2004-2008	Adams	Billings	Bowman	Dunn	Golden Valley
Number of Marriages	91	47	104	55	47
Marriage Rate*	7.0	10.6	6.4	3.1	4.9
Number of Divorces	NA	NA	NA	NA	NA
Divorce Rate**	NA	NA	NA	NA	NA

	Hettinger	Slope	Stark	South West District	North Dakota
Number of Marriages	~38	NA	807	~1192	4,393
Marriage Rate*	2.8	NA	7.1	~6.2	6.8
Number of Divorces	NA	NA	371	NA	9,678
Divorce Rate**	NA	NA	3	NA	3

Symbol ~ = Approximate
* Marriage Rate: Marriages per 1000 population
**Divorce Rate=Divorces per 1000 population

Vital Statistics Data

Death Data

Age-Adjusted Death Rate by County and Cause of Death, 2004-2008					
Cause of Death	Number (Rate)				
	Adams	Billings	Bowman	Dunn	Golden Valley
All Causes	176 (744)	16 (323)	204 (737)	175 (728)	77 (510)
Heart Disease	48 (181)	<6 (58)	77 (247)	55 (209)	25 (152)
Cancer	40 (175)	<6 (93)	49 (197)	36 (153)	18 (120)
Stroke	6 (16)	<6 (21)	7 (20)	6 (22)	<6 (17)
Alzheimers Disease	6 (20)	0	8 (25)	<6 (18)	<6 (6)
COPD	8 (30)	<6 (36)	<6 (17)	7 (27)	<6 (47)
Unintentional Injury	13 (85)	<6 (75)	8 (61)	13 (73)	7 (57)
Diabetes	<6 (14)	0	7 (23)	<6 (18)	<6 (11)
Pneumonia and Influenza	6 (21)	0	10 (26)	<6 (11)	<6 (4)
Cirrhosis	2 (9)	0	0	<6 (13)	0
Suicide	<6 (5)	0	<6 (10)	<6 (22)	<6 (8)
Hypertension	<6 (11)	0	0	<6 (12)	<6 (6)
Atherosclerosis	<6 (8)	0	0	<6 (3)	0

	Hettinger	Slope	Stark	SWDHU	North Dakota
All Causes	159 (626)	23 (555)	1044 (735)	1874 (677)	28494 (739)
Heart Disease	45 (157)	9 (213)	268 (178)	530 (151)	7327 (183)
Cancer	42 (171)	7 (146)	253 (187)	450 (145)	6573 (180)
Stroke	15 (54)	0	74 (49)	111 (31)	1872 (45)
Alzheimers Disease	7 (23)	0	55 (35)	82 (22)	1679 (38)
COPD	12 (45)	0	42 (30)	83 (26)	1449 (37)
Unintentional Injury	7 (55)	7 (196)	49 (40)	107 (43)	1477 (42)
Diabetes	<6 (18)	0	26 (19)	47 (15)	1059 (28)
Pneumonia and Influenza	<6 (9)	0	31 (20)	54 (14)	760 (18)
Cirrhosis	<6 (9)	0	8 (7)	15 (6)	295 (9)
Suicide	0	0	22 (19)	29 (12)	433 (13)
Hypertension	<6 (6)	0	10 (7)	20 (5)	307 (7)
Atherosclerosis	<6 (7)	0	8 (5)	14 (4)	99 (2)

Vital Statistics Data

Death Data

Leading Causes of Death for Southwest District Health Unit, 2004-2008			
Age	1	2	3
0-4	Congenital Anomaly		
5-14	Unintentional Injury	Cancer	
15-24	Unintentional Injury 25	Suicide 9	Cancer
25-34	Unintentional Injury 12	Suicide	Cancer
35-44	Unintentional Injury	Suicide	Cancer
45-54	Cancer 34	Unintentional Injury 21	Heart 12
55-64	Cancer 59	Heart 28	Unintentional Injury 8
65-74	Cancer 106	Heart 69	COPD 17
75-84	Cancer 140	Heart 136	COPD 40
85+	Heart 283	Cancer 104	Stroke 63

Behavioral Risk Factors

General Health and Disability

Table 1: Percentage of Respondents 18 and Older Who Reported Any Activity Limitation, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
20.7 (13.6-27.8)	NA	19.1 (12.0-26.2)	17.7 (10.9-24.5)	13.8 (7.1-20.5)
Hettinger	Slope	Stark	SWDHU	North Dakota
14.1 (8.0-20.2)	NA	15.9 (13.3-18.4)	16.5 (14.6-18.5)	15.2 (14.7-15.7)

Table 2: Percentage of Respondents 18 and Older Who Reported Eight or More Days in the Past 30 During Which They Had Poor Physical Health, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
11.3 (5.6-16.9)	NA	11.5 (5.5-17.5)	12.7 (7.0-18.3)	13.6 (5.8-21.4)
Hettinger	Slope	Stark	SWDHU	North Dakota
9.8 (4.2-15.3)	NA	9.3 (7.2-11.5)	10.4 (8.8-12.1)	10.0 (9.5-10.4)

Table 3: Percentage of Respondents 18 and Older Who Reported Eight or More Days in the Past 30 During Which They Had Poor Mental Health, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
7.3 (2.4-12.2)	5.3 (0.0-12.5)	7.4 (2.0-12.8)	7.5 (2.7-12.4)	2.2 (0.0-5.1)
Hettinger	Slope	Stark	SWDHU	North Dakota
9.2 (2.7-15.8)	6.1 (0.0-14.3)	9.2 (6.9-11.4)	8.2 (6.6-9.8)	9.7 (9.3-10.2)

Table 4: Percentage of Respondents 18 and Older Who Reported Eight or More Days in the Past Thirty in Which Poor Physical or Mental Health Limited Their Activities, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
8.8 (3.1-14.4)	1.3 (0.0-3.8)	5.5 (1.2-9.9)	7.4 (3.0-11.7)	2.1 (0.0-4.5)
Hettinger	Slope	Stark	SWDHU	North Dakota
3.8 (0.3-7.3)	8.7 (0.0-17.4)	3.7 (2.4-5.0)	4.7 (3.5-5.8)	5.6 (5.2-5.9)

Behavioral Risk Factors

Body Weight and Diabetes

Table 5: Percentage of Respondents 18 and Older Who Are Overweight or Obese by Body Mass Index,* 200-2007

Adams	Billings	Bowman	Dunn	Golden Valley
61.1 (51.6-70.7)	NA	60.1 (50.3-69.8)	64.3 (55.2-73.4)	58.2 (47.0-69.4)
Hettinger	**Slope**	**Stark**	**SWDHU**	**North Dakota**
67.5 (57.7-77.3)	NA	61.5 (57.7-65.3)	61.5 (58.6-64.3)	62.9 (62.2-63.6)

* Body Mass Index (BMI)=weight in kg /height in m^2

Table 6: Percentage of Respondents 18 and Older Who are Overweight by Body Mass Index, 1999-2007

Adams	Billings	Bowman	Dunn	Golden Valley
37.1 (28.1-46.0)	NA	41.5 (32.6-50.4)	35.3 (26.6-43.9)	39.5 (28.5-50.5)
Hettinger	**Slope**	**Stark**	**SWDHU**	**North Dakota**
40.9 (30.9-50.9)	NA	39.2 (35.5-42.9)	38.6 (35.9-41.3)	38.8 (38.1-39.5)

* Body Mass Index (BMI)=weight in kg /height in m^2

Table 7: Percentage of Respondents 18 and Older Who Are Obese by Body Mass Index, 1999-2007

Adams	Billings	Bowman	Dunn	Golden Valley
27.1 (19.1-35.1)	NA	18.9 (12.5-25.4)	27.8 (19.1-36.5)	23.5 (14.2-32.8)
Hettinger	**Slope**	**Stark**	**SWDHU**	**North Dakota**
22.6 (14.6-30.6)	NA	22.6 (19.4-25.8)	23.0 (20.7-25.3)	23.2 (22.6-23.8)

* Body Mass Index (BMI)=weight in kg /height in m^2

Table 8: Percentage of Respondents 18 and Older Who Reported That They Have Diabetes*, 2004-2007

Adams	Billings	Bowman	Dunn	Golden Valley
8.3 (1.9-14.7)	NA	11.2 (4.2-18.2)	3.5 (0.3- 6.6)	4.6 (0.0- 9.9)
Hettinger	**Slope**	**Stark**	**SWDHU**	**North Dakota**
8.7 (2.4-15.0)	NA	5.4 (3.6- 7.3)	6.2 (4.7- 7.8)	6.4 (6.0- 6.8)

*Excludes pre-diabetes and diabetes of pregnancy

Behavioral Risk Factors

High Blood Pressure and Cholesterol

Table 9: Percentage of Respondents 18 and Older Who Reported That They Have High Blood, 2002-2007 Pressure				
Adams	Billings	Bowman	Dunn	Golden Valley
26.8 (17.3-36.4)	NA	24.3 (14.4-34.1)	34.4 (21.4-47.4)	39.3 (24.3-54.3)
Hettinger	Slope	Stark	SWDHU	North Dakota
25.0 (14.7-35.3)	NA	25.3 (21.3-29.4)	26.5 (23.3-29.6)	24.5 (23.8-25.3)

Table 10: Percentage of Respondents 18 and Older Who Reported That They Have Never Had Their Cholesterol Checked, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
19.9 (10.2-29.5)	NA	27.5 (15.8-39.2)	21.8 (11.4-32.1)	17.9 (5.1-30.8)
Hettinger	Slope	Stark	SWDHU	North Dakota
28.8 (17.7-39.9)	NA	28.9 (24.5-33.3)	26.9 (23.7-30.2)	25.3 (24.5-26.0)

Table 11: Percentage of Respondents 18 and Older Who Reported That They Had Ever Been Told They Had High Cholesterol, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
NA	NA	NA	NA	NA
Hettinger	Slope	Stark	SWDHU	North Dakota
NA	NA	33.8 (28.8-38.8)	34.4 (30.7-38.1)	25.3 (24.5-26.0)

Behavioral Risk Factors

Asthma and Arthritis

Table 12: Percentage of Respondents 18 and Older Who Reported Ever Having Been Told They Had Asthma, 1999-2007

Adams	Billings	Bowman	Dunn	Golden Valley
9.1 (3.5-14.7)	NA	5.9 (2.7- 9.1)	10.8 (5.2-16.5)	8.0 (2.2-13.9)
Hettinger	**Slope**	**Stark**	**SWDHU**	**North Dakota**
13.0 (6.2-19.8)	5.0 (0.0-14.4)	9.2 (6.9-11.6)	9.2 (7.6-10.9)	10.5 (10.0-10.9)

Table 13: Percentage of Respondents 18 and Older Who Reported Currently Having Asthma, 1999-2007

Adams	Billings	Bowman	Dunn	Golden Valley
9.1 (3.5-14.7)	9.6 (0.2-19.0)	5.0 (2.0- 7.9)	5.8 (2.0- 9.6)	7.4 (1.7-13.2)
Hettinger	**Slope**	**Stark**	**SWDHU**	**North Dakota**
8.3 (3.5-13.0)	5.0 (0.0-14.4)	6.7 (4.9- 8.6)	6.9 (5.5- 8.2)	7.3 (6.9- 7.7)

Table 14: Percentage of Respondents 18 and Older Who Reported Doctor Diagnosed Arthritis, 2002-2007

Adams	Billings	Bowman	Dunn	Golden Valley
23.2 (14.0-32.5)	NA	28.9 (18.5-39.3)	21.8 (12.7-30.9)	NA
Hettinger	**Slope**	**Stark**	**SWDHU**	**North Dakota**
33.5 (22.0-44.9)	NA	24.7 (20.7-28.7)	26.1 (23.1-29.1)	27.2 (26.3-28.0)

Table 15: Percentage of Respondents 18 and Older Who Reported Chronic Joint Pain or Stiffness, 2002-2007

Adams	Billings	Bowman	Dunn	Golden Valley
NA	NA	NA	NA	NA
Hettinger	**Slope**	**Stark**	**SWDHU**	**North Dakota**
NA	NA	39.6 (34.6-44.6)	40.6 (36.8-44.4)	35.3 (34.4-36.2)

Table 16: Percentage of Respondents 18 and Older Who Reported Activity Limitation Due to Arthritis, 2002-2007

Adams	Billings	Bowman	Dunn	Golden Valley
11.3 (4.9-17.7)	5.4 (0.0-15.7)	14.4 (7.0-21.7)	11.5 (4.0-18.9)	26.5 (13.2-39.8)
Hettinger	**Slope**	**Stark**	**SWDHU**	**North Dakota**
15.7 (7.6-23.8)	11.3 (1.5-21.2)	12.4 (9.4-15.4)	13.2 (10.9-15.4)	10.9 (10.4-11.5)

Behavioral Risk Factors

Cardiovascular Disease Prevalence

Table 17: Percentage of Respondents 18 and Older Who Reported Ever Having Had a Heart Attack, 2001-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
4.5 (0.9- 8.2)	3.9 (0.0-11.5)	5.3 (1.9- 8.6)	7.4 (2.7-12.1)	3.1 (0.0- 6.7)
Hettinger	Slope	Stark	SWDHU	North Dakota
3.6 (0.3- 6.8)	NA	4.1 (2.6- 5.7)	4.4 (3.3- 5.5)	4.0 (3.7- 4.3)

Table 18: Percentage of Respondents 18 and Older Who Reported Ever Having Coronary Artery Disease, 2001-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
2.0 (0.0- 4.3)	NA	6.7 (2.8-10.6)	5.9 (1.5-10.3)	3.4 (0.0- 7.2)
Hettinger	Slope	Stark	SWDHU	North Dakota
6.2 (2.0-10.3)	3.4 (0.0-10.1)	4.1 (2.6- 5.6)	4.4 (3.3- 5.5)	4.1 (3.8- 4.4)

Table 19: Percentage of Respondents 18 and Older Who Reported Ever Having Had a Stroke, 2001-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
4.6 (0.0- 9.1)	NA	2.0 (0.0- 3.9)	2.8 (0.0- 5.8)	1.3 (0.0- 3.9)
Hettinger	Slope	Stark	SWDHU	North Dakota
1.9 (0.0- 4.1)	1.9 (0.0- 5.6)	1.3 (0.4- 2.3)	1.8 (1.1- 2.6)	2.1 (1.9- 2.3)

Table 20: Percentage of Respondents 18 and Older Who Reported Having Cardiovascular Disease, 2001-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
8.3 (2.7-13.9)	3.9 (0.0-11.5)	9.9 (5.3-14.6)	10.7 (5.0-16.3)	5.4 (0.6-10.2)
Hettinger	Slope	Stark	SWDHU	North Dakota
8.4 (3.5-13.3)	5.3 (0.0-12.9)	6.7 (4.7- 8.7)	7.6 (6.1- 9.0)	7.4 (7.0- 7.8)

Behavioral Risk Factors

Health Care and Vaccination

Table 21: Percentage of Respondents 18 and Older Who Reported Not Having Any Health Insurance, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
12.3 (6.3-18.3)	NA	12.9 (4.9-20.8)	16.9 (8.4-25.5)	12.2 (5.3-19.1)
Hettinger	Slope	Stark	SWDHU	North Dakota
9.1 (2.5-15.7)	4.7 (0.0-10.1)	11.7 (9.3-14.1)	12.2 (10.2-14.2)	11.4 (10.9-11.9)

Table 22: Percentage of Respondents 18 and Older Who ReportedBeing Unable To See a Doctor Due to Cost One or More Times in the Past 12 Months, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
9.3 (3.1-15.5)	9.6 (0.0-19.3)	6.0 (1.8-10.2)	5.7 (1.4- 9.9)	8.3 (2.0-14.7)
Hettinger	Slope	Stark	SWDHU	North Dakota
4.2 (0.4- 8.0)	NA	7.8 (5.6- 9.9)	7.2 (5.7- 8.7)	6.9 (6.5- 7.3)

Table 23: Percentage of Respondents 18 and Older Who Reported That They Did Not Have a Person That They Considered to be Their Personal Doctor or Health Care Provider, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
16.8 (9.7-23.8)	NA	22.6 (13.2-32.0)	31.8 (21.7-41.9)	24.6 (14.5-34.7)
Hettinger	Slope	Stark	SWDHU	North Dakota
26.2 (15.8-36.5)	NA	21.5 (17.9-25.0)	22.5 (19.9-25.2)	23.7 (23.0-24.3)

Table 24: Percentage of Respondents 65 and Older Who Reported That They Did Not Receive an Influenza Vaccination in the Past 12 Months, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
23.8 (11.6-36.0)	NA	23.7 (13.0-34.3)	NA	NA
Hettinger	Slope	Stark	SWDHU	North Dakota
NA	NA	48.1 (23.1-73.0)	28.4 (24.1-32.8)	28.7 (27.4-30.0)

Table 25: Percentage of Respondents 65 and Older Who Reported They Have Never Received a Pneumococcal Vaccine, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
16.3 (6.6-26.1)	NA	NA	NA	NA
Hettinger	Slope	Stark	SWDHU	North Dakota
NA	NA	30.8 (17.3-44.2)	34.2 (29.4-39.0)	32.4 (31.1-33.8)

Behavioral Risk Factors

Alcohol Use, Fruit and Vegetable Consumption, Folic Acid Awareness

Table 26: Percentage of Respondents 18 and Older Who Reported Who Reported Binge Drinking, 1999-2007

Adams	Billings	Bowman	Dunn	Golden Valley
11.9 (5.0-18.8)	9.4 (0.4-18.5)	18.8 (10.6-27.1)	14.5 (7.5-21.4)	19.3 (9.4-29.3)
Hettinger	**Slope**	**Stark**	**SWDHU**	**North Dakota**
18.6 (9.9-27.3)	NA	19.1 (15.8-22.4)	17.6 (15.3-20.0)	21.1 (20.4-21.7)

Table 27: Percentage of Respondents 18 and Older Who Reported Who Reported Heavy Drinking, 1999-2007

Adams	Billings	Bowman	Dunn	Golden Valley
2.0 (0.0- 4.4)	5.3 (0.0-12.8)	5.9 (0.9-10.9)	2.6 (0.0- 5.3)	1.9 (0.0- 4.6)
Hettinger	**Slope**	**Stark**	**SWDHU**	**North Dakota**
2.2 (0.0- 5.2)	2.9 (0.0- 8.6)	6.0 (3.7- 8.3)	4.7 (3.3- 6.1)	5.1 (4.7- 5.4)

Table 28: Percentage of Respondents 18 and Older Who Reported That They Do Not Each Five Servings of Fruit and Vegetables Daily, 1999-2007

Adams	Billings	Bowman	Dunn	Golden Valley
74.1 (64.3-84.0)	NA	78.7 (69.1-88.3)	78.1 (68.9-87.3)	76.8 (64.8-88.9)
Hettinger	**Slope**	**Stark**	**SWDHU**	**North Dakota**
84.6 (76.8-92.3)	NA	75.6 (71.6-79.6)	76.9 (74.0-79.8)	78.1 (77.4-78.8)

Table 29: Percentage of Respondents 18 and Older Who Did Not Know that Folic Acid Consumption Reduced Birth Defects, 1999-2004

Adams	Billings	Bowman	Dunn	Golden Valley
NA	NA	NA	NA	NA
Hettinger	**Slope**	**Stark**	**SWDHU**	**North Dakota**
NA	NA	62.4 (54.8-70.1)	64.6 (58.8-70.3)	60.2 (58.8-61.6)

Behavioral Risk Factors

Oral Health, Physical Activity and Smoking

Table 30: Percentage of Respondents 18 and Older Who Reported That They Had Not Seen a Dentist in the Past Two Years, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
NA	NA	NA	NA	NA
Hettinger	Slope	Stark	SWDHU	North Dakota
NA	NA	20.7 (15.9-25.6)	24.0 (20.3-27.7)	19.6 (18.7-20.4)

Table 31: Percentage of Respondents 18 and Older Who Reported Having Lost Six or More Permanent Teeth Due to Decay or Gum Disease, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
25.9 (14.8-37.1)	NA	16.1 (6.8-25.4)	10.9 (2.9-19.0)	10.7 (1.8-19.7)
Hettinger	Slope	Stark	SWDHU	North Dakota
13.4 (4.1-22.7)	NA	19.3 (15.0-23.6)	18.1 (15.0-21.1)	18.4 (17.6-19.2)

Table 32: Percentage of Respondents 18 and Older Who Reported That They Did Not Get the Recommended Amount of Physical Activity, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
NA	NA	NA	NA	NA
Hettinger	Slope	Stark	SWDHU	North Dakota
NA	NA	40.4 (35.5-45.2)	39.6 (36.0-43.2)	40.5 (39.6-41.4)

Table 33: Percentage of Respondents 18 and Older Who Reported That They Engaged in No Leisure Time Physical Activity, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
13.1 (3.7-22.6)	NA	9.0 (2.6-15.5)	NA	10.0 (0.0-19.9)
Hettinger	Slope	Stark	SWDHU	North Dakota
4.8 (0.1- 9.6)	3.1 (0.0- 9.1)	7.1 (4.1-10.1)	8.7 (6.1-11.3)	6.9 (6.4- 7.5)

Table 34: Percentage of Respondents 18 and Older Who Reported That They Were Current Smokers, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
16.1 (9.7-22.5)	NA	16.4 (9.2-23.5)	14.6 (8.2-21.0)	19.1 (10.6-27.7)
Hettinger	Slope	Stark	SWDHU	North Dakota
21.5 (12.9-30.0)	22.4 (7.5-37.3)	19.4 (16.5-22.3)	18.7 (16.5-20.8)	21.1 (20.5-21.7)

Behavioral Risk Factors

Cancer Screening

Table 35: Percentage of Female Respondents 40 and Older Who Reported That They Had Not Had a Mammogram in the Past Two Years, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
9.5 (0.9-18.1)	NA	NA	NA	NA
Hettinger	Slope	Stark	SWDHU	North Dakota
NA	NA	26.0 (19.0-33.0)	26.2 (21.1-31.2)	24.7 (23.4-26.0)

Table 36: Percentage of Female Respondents 18 and Older Who Reported That They Had Not Had a				
Adams	Billings	Bowman	Dunn	Golden Valley
5.2 (0.0-10.5)	NA	25.0 (9.7-40.2)	NA	NA
Hettinger	Slope	Stark	SWDHU	North Dakota
10.2 (0.1-20.3)	NA	18.5 (12.1-24.8)	17.7 (13.3-22.2)	13.0 (12.1-14.0)

Table 37: Percentage of Male Respondents 40 and Older Who Reported Not Having a Prostate Specific Antigen (PSA) Test in the Past Two Years, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
NA	NA	NA	NA	NA
Hettinger	Slope	Stark	SWDHU	North Dakota
NA	NA	58.8 (48.2-69.5)	57.5 (50.0-65.0)	50.9 (48.8-52.9)

Table 38: Percentage of Respondents 50 and Older Who Reported Not Having a Blood Stool Test in the Past Two Years, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
NA	NA	NA	NA	NA
Hettinger	Slope	Stark	SWDHU	North Dakota
93.3 (85.6- 100)	NA	75.7 (68.3-83.1)	80.9 (76.4-85.4)	77.7 (76.4-79.0)

Table 38: Percentage of Respondents 50 and Older Who Reported That They Have Never Had a Sigmoidoscopy or Colonoscopy, 1999-2007				
Adams	Billings	Bowman	Dunn	Golden Valley
NA	NA	NA	NA	NA
Hettinger	Slope	Stark	SWDHU	North Dakota
NA	NA	50.1 (40.2-60.0)	48.2 (41.6-54.8)	44.8 (43.0-46.6)

Southwest District Community Health Profile

Crime

Adams							
	2004	2005	2006	2007	2008	5 year	5-Year Rate
Murder	1	0	0	0	0	1	8.9
Rape	1	0	0	1	2	4	32.8
Robbery	0	0	0	1	0	1	8.2
Assualt	0	0	2	1	2	5	41.0
Violent crime	2	0	2	3	4	11	90.2
Burglary	2	5	0	4	4	15	123.1
Larceny	10	11	10	5	5	41	336.3
Motor vehicle theft	4	1	1	1	0	7	57.4
Property crime	16	17	11	10	9	63	516.8
Total	18	17	13	13	13	74	607.1

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

* Billings County did not report

Bowman							
	2004	2005	2006	2007	2008	5 year	5-Year Rate
Murder	**	0	0	**	**	**	**
Rape	**	0	0	**	**	**	**
Robbery	**	0	0	**	**	**	**
Assualt	**	0	2	**	**	**	**
Violent crime	**	0	2	**	**	**	**
Burglary	**	0	0	**	**	**	**
Larceny	**	4	1	**	**	**	**
Motor vehicle theft	**	0	0	**	**	**	**
Property crime	**	4	1	**	**	**	**
Total	**	4	3	**	**	**	**

** Repots incomplete

Crime

Dunn

	2004	2005	2006	2007	2008	5 year	5-Year Rate
Murder	0	0	0	0	0	0	0.0
Rape	0	0	0	0	0	0	0.0
Robbery	0	0	0	0	0	0	0.0
Assualt	0	0	0	0	0	0	0.0
Violent crime	0	0	0	0	0	0	0.0
Burglary	0	0	0	0	0	0	0.0
Larceny	0	0	0	0	0	0	0.0
Motor vehicle theft	0	0	0	0	0	0	0.0
Property crime	0	0	0	0	0	0	0.0
Total	0	0	0	0	0	0	0.0

Golden Valley

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

* Golden Valley County did not report

Hettinger

	2004	2005	2006	2007	2008	5 year	5-Year Rate
Murder	0	0	0	0	0	0	0.0
Rape	0	0	0	2	0	2	16.7
Robbery	0	0	0	0	0	0	0.0
Assualt	0	0	1	0	0	1	8.3
Violent crime	0	0	1	2	0	3	25.0
Burglary	2	0	2	1	1	6	50.0
Larceny	7	1	3	12	6	29	241.5
Motor vehicle theft	0	0	2	0	2	4	33.3
Property crime	9	1	7	13	9	39	324.7
Total	9	1	8	15	9	42	349.7

Crime

Slope							
	2004	2005	2006	2007	2008	5 year	5-Year Rate
Murder	0	0	*	0	*	**	**
Rape	0	0	*	0	*	**	**
Robbery	0	0	*	0	*	**	**
Assualt	0	0	*	0	*	**	**
Violent crime	0	0	*	0	*	**	**
Burglary	0	0	*	1	*	**	**
Larceny	0	1	*	1	*	**	**
Motor vehicle theft	0	0	*	0	*	**	**
Property crime	0	1	*	2	*	**	**
Total	0	1	*	2	*	**	**
* Slope County did not report in 2002, 2003, and 2005							
5 Year totals and Rates can't be calculated							

Stark							
	2004	2005	2006	2007	2008	5 year	5-Year Rate
Murder	0	0	0	0	0	0	0.0
Rape	3	2	1	1	1	8	7.1
Robbery	8	3	2	0	1	14	12.4
Assualt	8	9	6	10	34	67	59.6
Violent crime	19	14	9	11	36	89	79.1
Burglary	70	122	100	81	40	413	367.1
Larceny	387	452	468	370	304	1,981	1760.8
Motor vehicle theft	28	26	43	36	51	184	163.5
Property crime	485	600	611	487	395	2,578	2291.5
Total	504	614	620	498	431	2,667	2370.6

Southwest District (for reporting areas)							
	2004	2005	2006	2007	2008	5 year	5-Year Rate***
Murder	1	0	0	0	0	1	0.7
Rape	4	2	1	4	3	14	9.2
Robbery	8	3	2	1	1	15	9.9
Assualt	8	9	11	11	36	75	49.3
Violent crime	21	14	14	16	40	105	69.0
Burglary	74	127	102	87	45	435	285.9
Larceny	404	469	482	388	315	2,058	1352.4
Motor vehicle theft	32	27	46	37	53	195	128.1
Property crime	510	623	630	512	413	2,688	1766.4
Total	531	637	644	528	453	2,793	1835.4

Crime

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 2007	Adams	Billings	Bowman	Dunn	Golden Valley
Children Ages 3 to 4 in Head Start (Percent of eligible 3 to 4 year olds)	1 (33)	1 (20)	7 (78)	10 (56)	7 (78)
Enrolled in Special Education Ages 3-21 (Percent of persons ages 3-21)	34 (12)	7 (17)	62 (11)	54 (12)	43 (14)
Speech or Language Impaired Children in Special Education (Percent of all special education children)	5 (15)	2 (29)	14 (23)	14 (26)	8 (19)
Mentally Handicapped Children in Special Education (Percentage of total special education children)	1 (3)	0	5 (8.1)	2 (3.7)	2 (4.7)
Children with Specific Learning Disability in Special Education (Percentage of total special education children)	15 (44)	1 (14)	26 (42)	24 (44)	18 (42)
High School Dropouts (Dropouts per 1000 persons ages 16-24)	0	0	0	0	1 (0.8)
Average ACT Composite Score	22.3	NA	20.6	22	19.7
Average Expenditure per Student in Public School	$8,091	$31,528	$9,532	$12,189	$11,056

Child Indicators: Education 2007	Hettinger	Slope	Stark	SWDHU	North Dakota
Children Ages 3 to 4 in Head Start (Percent of eligible 3 to 4 year olds)	15 (68)	1 (100)	119 (68)	NA	2,607 (65.2)
Enrolled in Special Education Ages 3-21 (Percent of persons ages 3-21)	30 (8.2)	4 (29)	468 (15)	NA	13,609 (7.0)
Speech or Language Impaired Children in Special Education (Percent of all special education children)	4 (13)	0	116 (25)	NA	4,032 (29.6)
Mentally Handicapped Children in Special Education (Percentage of total special education children)	0	0	38 (7.5)	NA	906 (6.7)
Children with Specific Learning Disability in Special Education (Percentage of total special education children)	10 (33)	4 (100)	149 (32)	NA	
High School Dropouts (Dropouts per 1000 persons ages 16-24)	0	0	22 (1.7)	NA	794 (8.4)
Average ACT Composite Score	20.7	NA	21.1	NA	21.6
Average Expenditure per Student in Public School	$8,838	$17,156	$7,371	NA	$7,487

CHILD HEALTH INDICATORS

Child Indicators: Economic Health 2007	Adams	Billings	Bowman	Dunn	Golden Valley
TANF Recipients Ages 0-19 (Percent of persons ages 0-19)	1 (0.2)	0	0	6 (0.7)	0
Food Stamp Recipients Ages 0-19 (Percent of all children ages 0-19)	46 (10)	2(1.3)	57 (9.4)	108 (14)	84(19)
Children Receiving Free and Reduced Price Lunches (Percent of total school enrollment	78 (28)	11 (26)	125 (22)	151 (33)	175 (50)
WIC Program Participants**	70	0	75	30	30
Medicaid Recipients Ages 0-20 (Percent of all persons ages 0-20)	74 (15)	15 (8.1)	97 (14)	180 (21)	105 (21)
Median Income for Families with Children Ages 0-17 (Percent of all women with children ages 0-17)*	$36,250	$40,417	$42,708	$35,750	$38,365
Children Ages 0-17 Living in Extreme Poverty (Percent of children 0-17 for whom poverty is determined)*	45 (7.4)	17 (8.1)	17 (2.2)	83 (8.4)	31 (6.4)
* Year 2000 data ** Year 2006 data					

Child Indicators: Economic Health 2007	Hettinger	Slope	Stark	SWDHU	North Dakota
TANF Recipients Ages 0-19 (Percent of persons ages 0-19)	10 (2.3)	0	126 (2.2)	NA	7,532 (4.5)
Food Stamp Recipients Ages 0-19 (Percent of all children ages 0-19)	66 (14)	6 (4.6)	968 (18)	NA	31,380 (20)
Children Receiving Free and Reduced Price Lunches (Percent of total school enrollment	111 (31)	0	1,050 (29)	NA	32,445 (32)
WIC Program Participants**	35	0	768	NA	24,289
Medicaid Recipients Ages 0-20 (Percent of all persons ages 0-20)	80 (14)	10 (6.4)	1,345 (22)	NA	41,376 (23)
Median Income for Families with Children Ages 0-17 (Percent of all women with children ages 0-17)*	$34,050	$23,125	$43,008	NA	$44,640
Children Ages 0-17 Living in Extreme Poverty (Percent of children 0-17 for whom poverty is determined)*	76 (12)	18 (9.1)	297 (5.2)	NA	11,000 (8)
* Year 2000 data ** Year 2006 data					

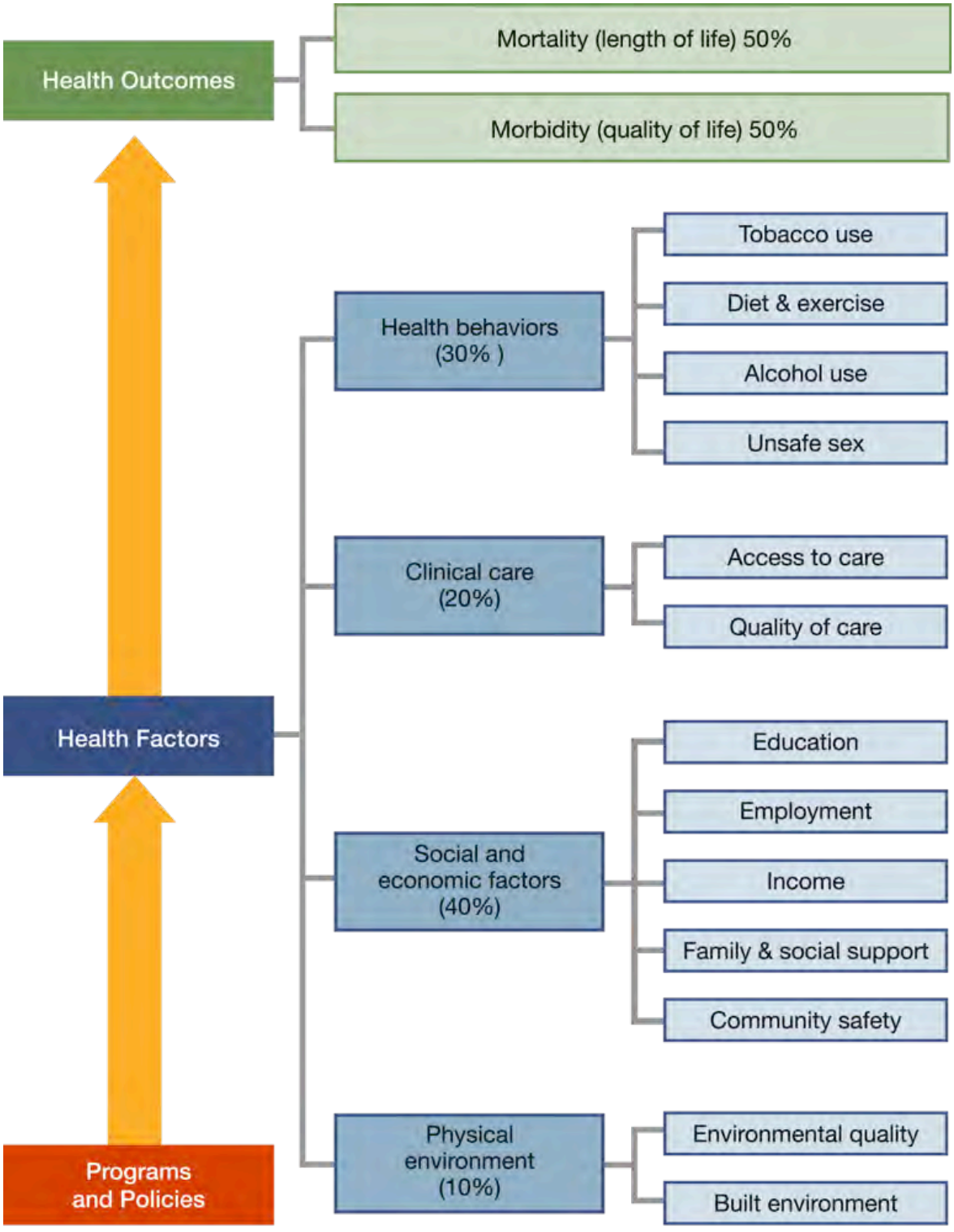
CHILD HEALTH INDICATORS

Child Indicators: Families and Child Care 2007	Adams	Billings	Bowman	Dunn	Golden Valley
Child Care Providers - all registered categories	11	2	10	6	10
Child Care Capacity	150	21	105	42	70
Mothers with a Child Ages 0-17 in Labor Force (Percent of all mothers with a child ages 0-17)*	229 (86)	82 (78)	358 (93)	331 (80)	163 (80)
Children Ages 0-17 Living in a Single Parent Family (Percent of all children ages 0-17)*	97 (16)	11 (5.0)	80 (10.3)	172 (17)	78 (14)
Children in Foster Care	4	1	11	9	8
Children Ages 0-17 with Suspected Child Abuse or Neglect (Cases per 100 children 0-17)	6 (1.5)	1 (0.7)	26 (4.7)	17 (2.4)	4 (1.0)
Children Ages 0-17 Impact by Domestic Violence (Percent of all children ages 0-17)	3 (0.5)	0	5 (0.6)	16 (1.6)	10 (1.8)
Births to Mothers with Inadequate Prenatal Care**	0	0	NA	NA	NA
* Year 2000 data					
Child Indicators: Families and Child Care 2007	**Hettinger**	**Slope**	**Stark**	**SWDHU**	**North Dakota**
Child Care Providers	5	0	116	NA	3,353
Child Care Capacity (As percent of all children 0-13 in child care)	69	0	1,239	NA	43,213
Mothers with a Child Ages 0-17 in Labor Force (Percent of all mothers with a child ages 0-17)*	209 (75)	63 (68)	2,410 (83)	NA	63,085 (81)
Children Ages 0-17 Living in a Single Parent Family (Percent of all children ages 0-17)*	71 (11)	21 (11)	990 (17)	NA	30,695 (18)
Children in Foster Care (Percent of children ages 0-18)	6	0	98	NA	2,134 (1.4)
Children Ages 0-17 with Suspected Child Abuse or Neglect (Cases per 100 children 0-17)	2 (0.5)	2 (1.7)	331 (6.8)	NA	6,982 (4.9)
Children Ages 0-17 Impact by Domestic Violence (Percent of all children ages 0-17)	0	0	448 (8.4)	NA	4,862 (3.0)
Births to Mothers with Inadequate Prenatal Care**	0	0	6 (2.1)	NA	478 (5.4)
* Year 2000 data					

CHILD HEALTH INDICATORS

Child Indicators: Juvenile Justice 2007	Adams	Billings	Bowman	Dunn	Golden Valley
Children Ages 0-17 Referred to Juvenile Court (Percent of all children ages 0-17)	13 (5.9)	8 (11)	15 (5.3)	10 (2.5)	18 (6.9)
Offense Against Person Juvenile Court Referral (Percent of total juvenile court referral)	2 (10)	0	0	0	10 (33)
Alcohol-Related Juvenile Court Referral (Percent of all juvenile court referrals)	6 (30)	4 (44)	8 (32)	2 (11)	0
Child Indicators: Juvenile Justice 2007	**Hettinger**	**Slope**	**Stark**	**SWDHU**	**North Dakota**
Children Ages 0-17 Referred to Juvenile Court (Percent of all children ages 0-17)	3 (1.3)	0	202 (8.6)	NA	5,555 (8.4)
Offense Against Person Juvenile Court Referral (Percent of total juvenile court referral)	0	0	16 (3.9)	NA	808 (7.8)
Alcohol-Related Juvenile Court Referral (Percent of all juvenile court referrals)	2 (25)	0	114 (28)	NA	1,845 (18)

Appendix E
County Health Rankings Model



County Health Rankings model ©2010 UWPHI

Appendix F
Definitions of Health Variables

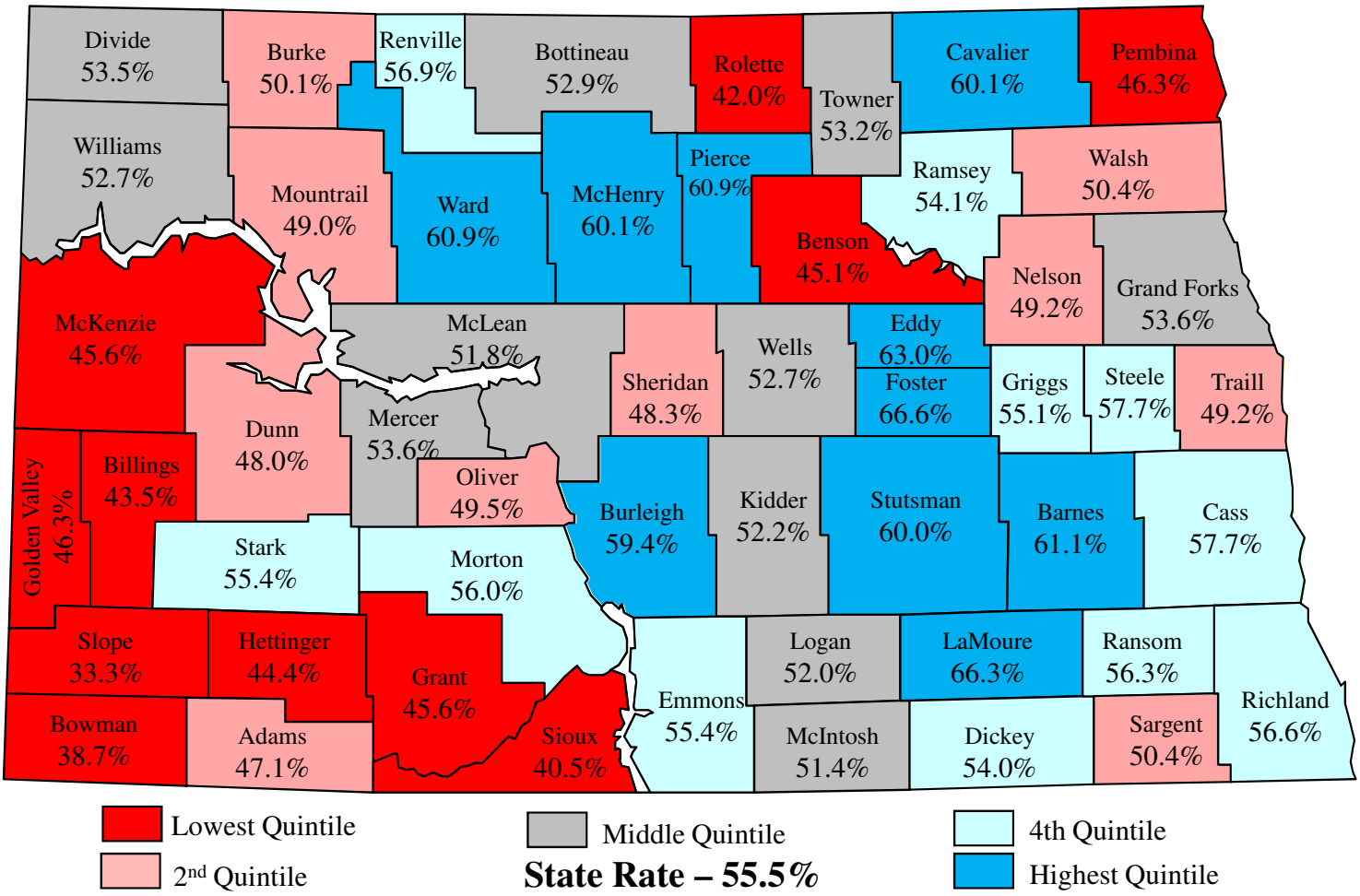
Definitions of Health Variables from the County Health Rankings 2011 Report

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 G - County Analysis by North Dakota Health Care Review, Inc.

North Dakota Colorectal Cancer Screening Rates

Medicare Claims Data Measurement Timeframes: Numerator—06/01/09-06/30/10
Denominator—FOBT: 06/01/08-06/30/10; BE and SIG: 06/01/05-06/30/10; COLO: 06/01/00-06/30/10

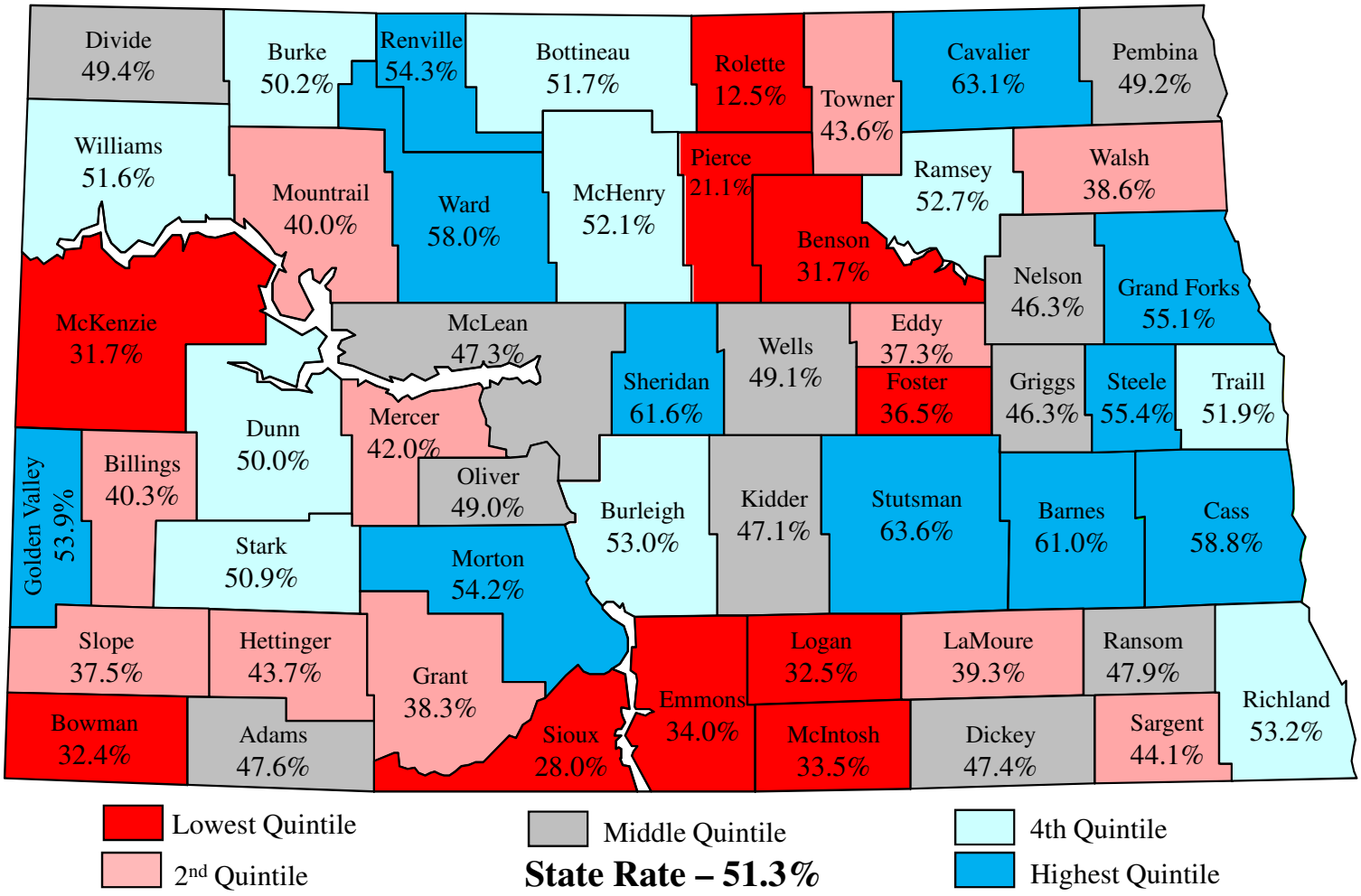


Analysis provided by North Dakota Health Care Review, Inc., Minot, North Dakota

January 2011

North Dakota Pneumococcal Pneumonia Vaccination Rates

Medicare Claims Data – Claims through 06/30/10

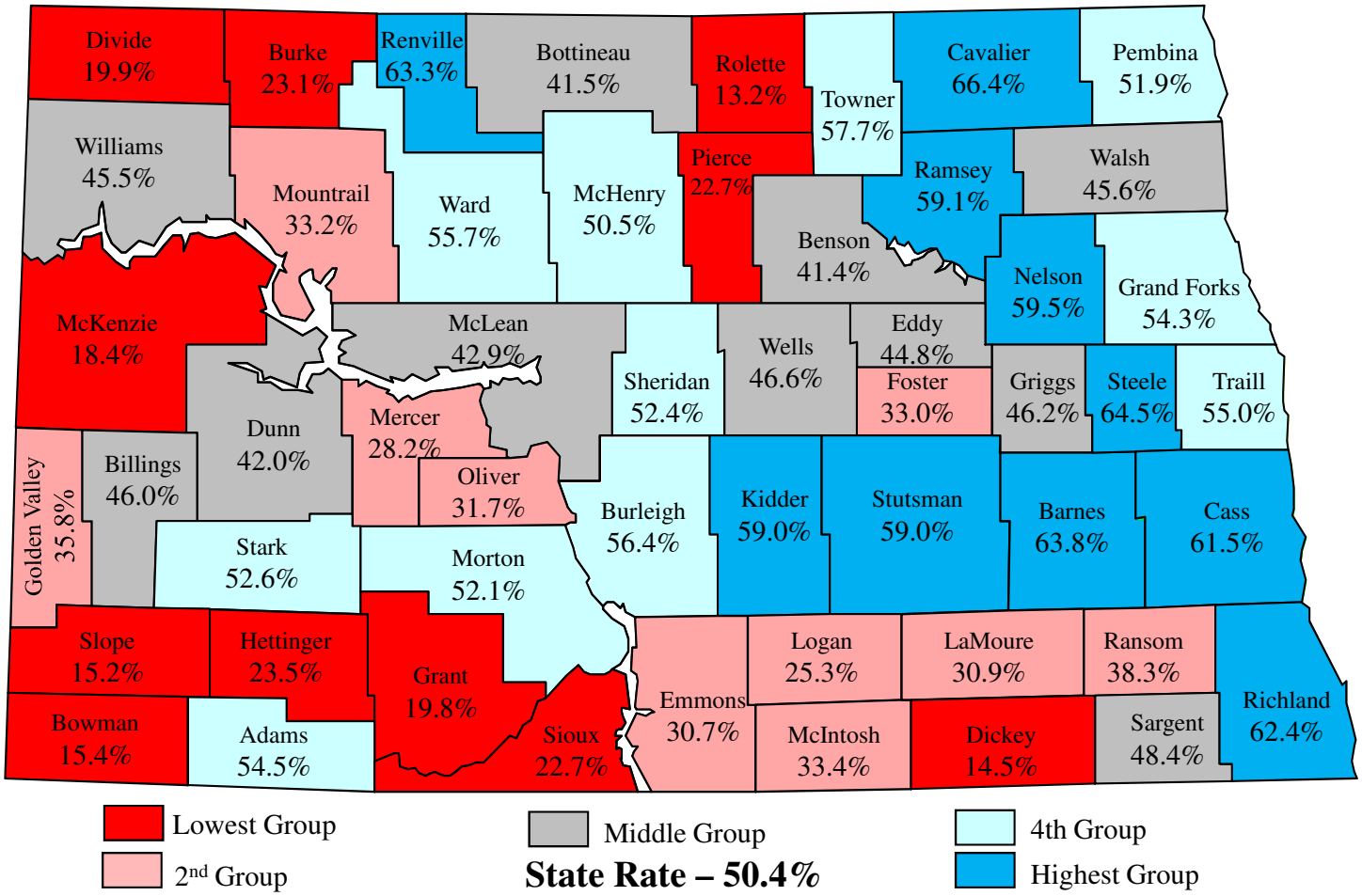


Analysis provided by North Dakota Health Care Review, Inc., Minot, North Dakota

January 2011

North Dakota Influenza Vaccination Rates

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

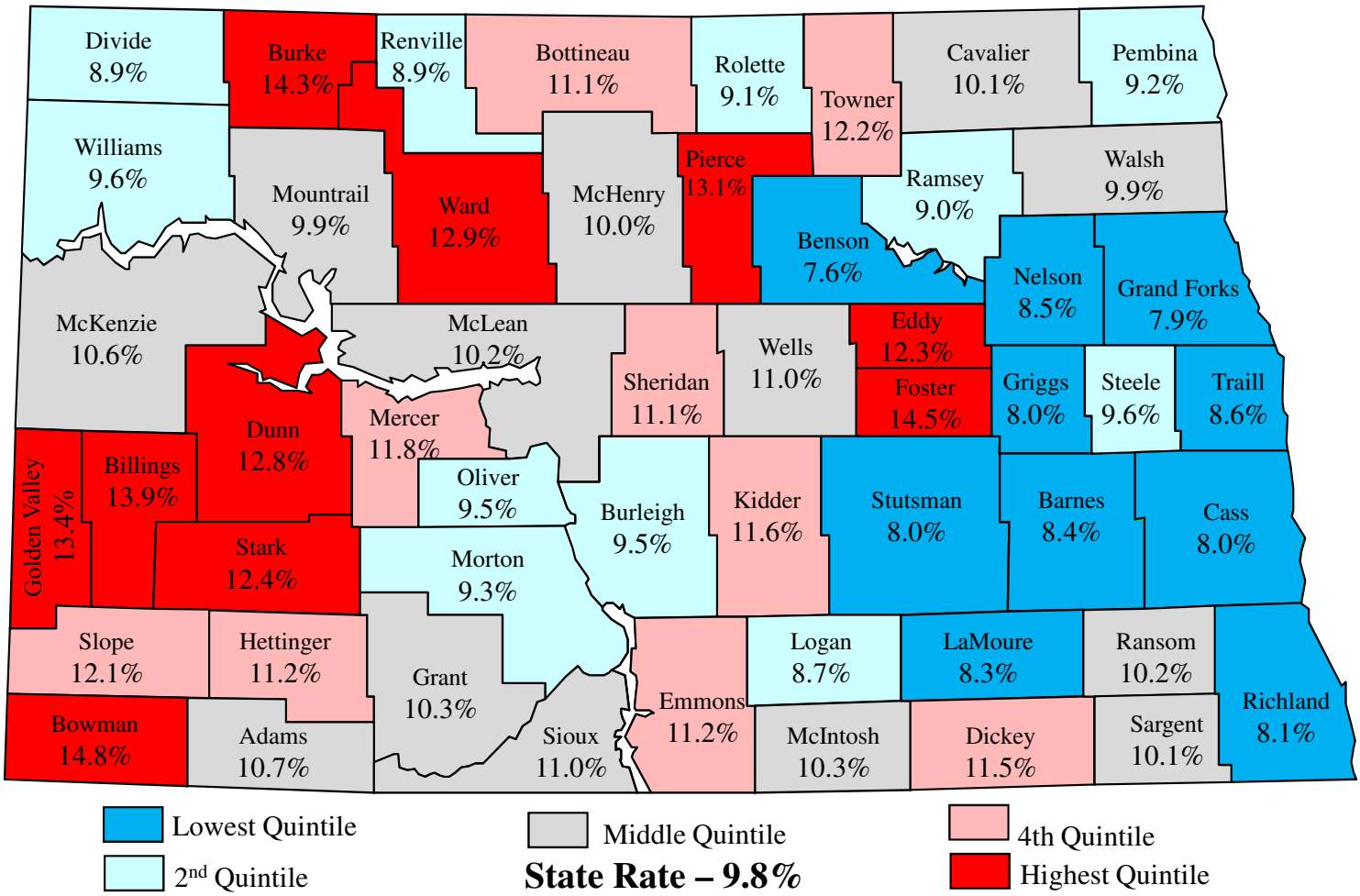


Analysis provided by North Dakota Health Care Review, Inc., Minot, North Dakota

October 2010

North Dakota DDI Rates

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

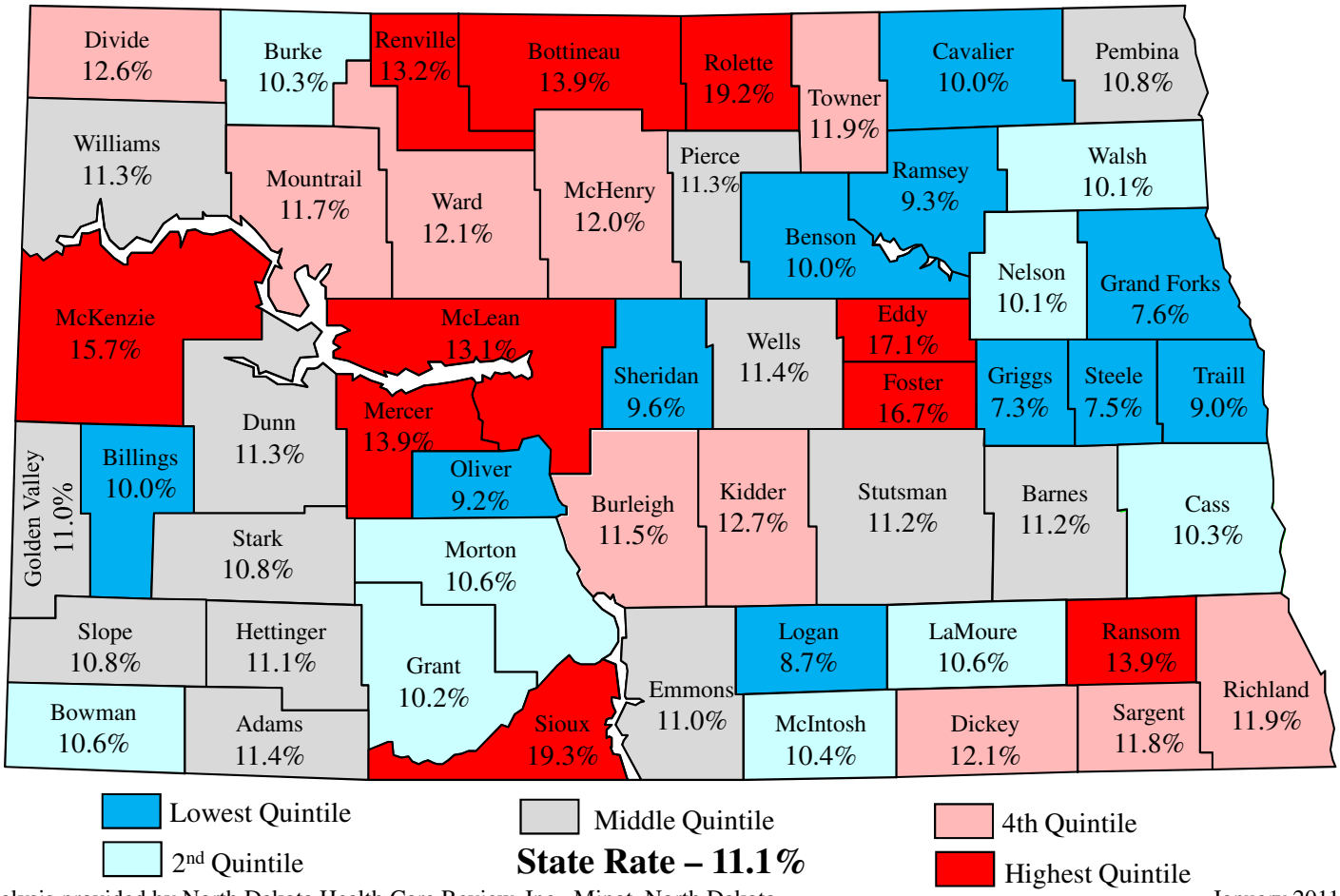


Analysis provided by North Dakota Health Care Review, Inc., Minot, North Dakota

January 2011

North Dakota PIM Rates

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

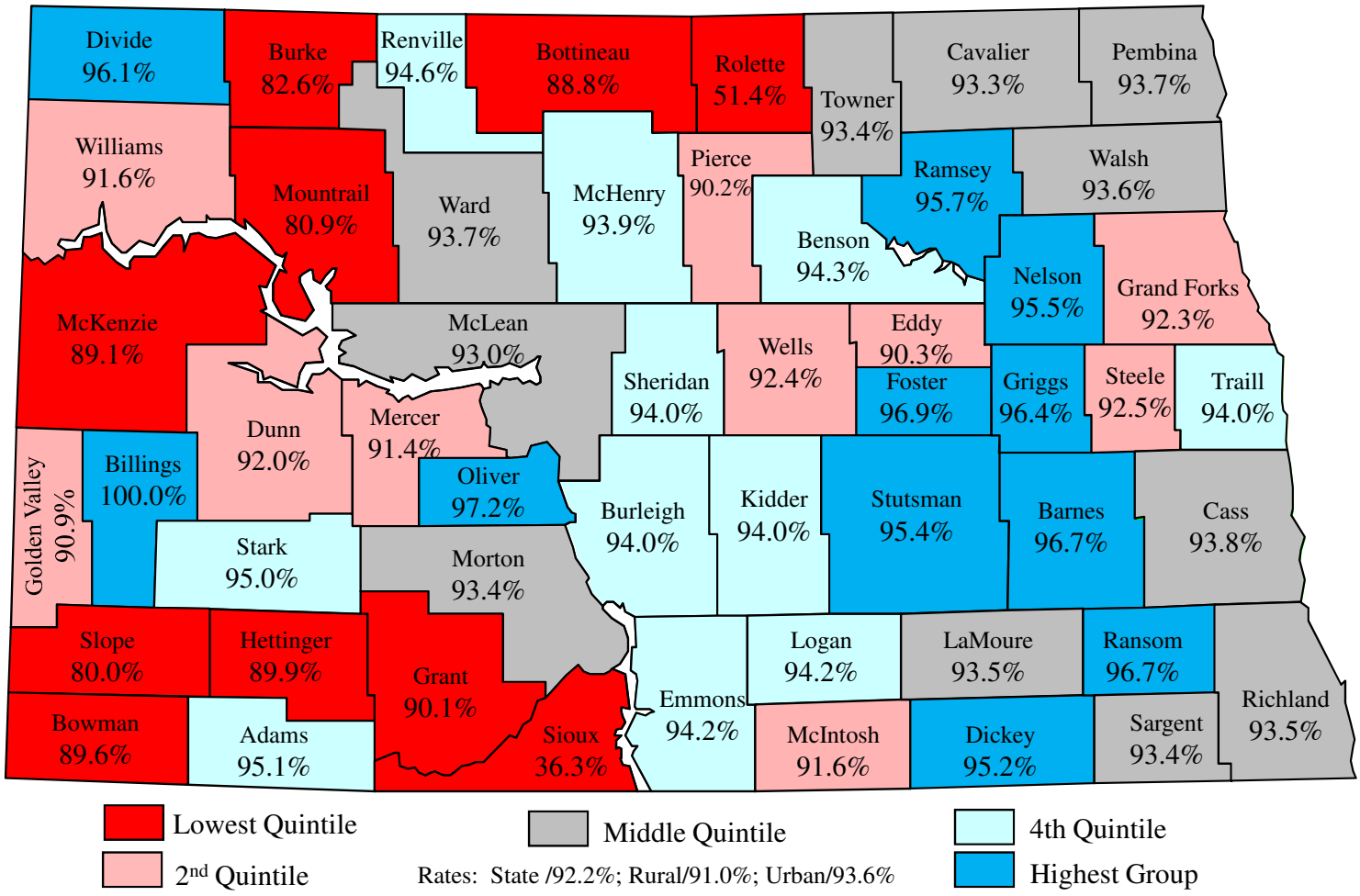


Analysis provided by North Dakota Health Care Review, Inc., Minot, North Dakota

January 2011

Annual Hemoglobin A1C Screening Rates for Patients with Diabetes

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

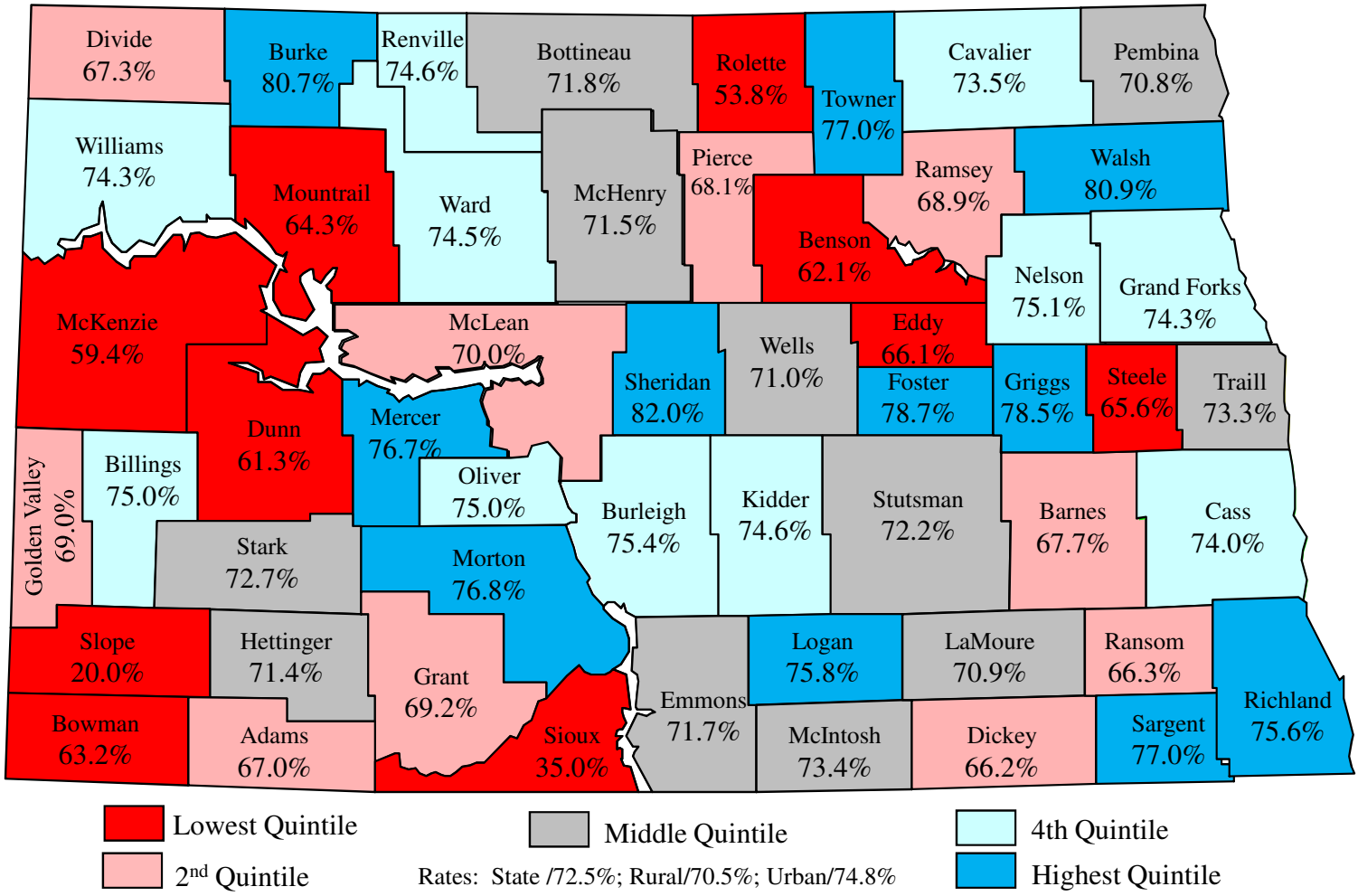


Analysis provided by North Dakota Health Care Review, Inc., Minot, North Dakota

January 2011

Annual Eye Examination Screening Rates for Patients with Diabetes

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

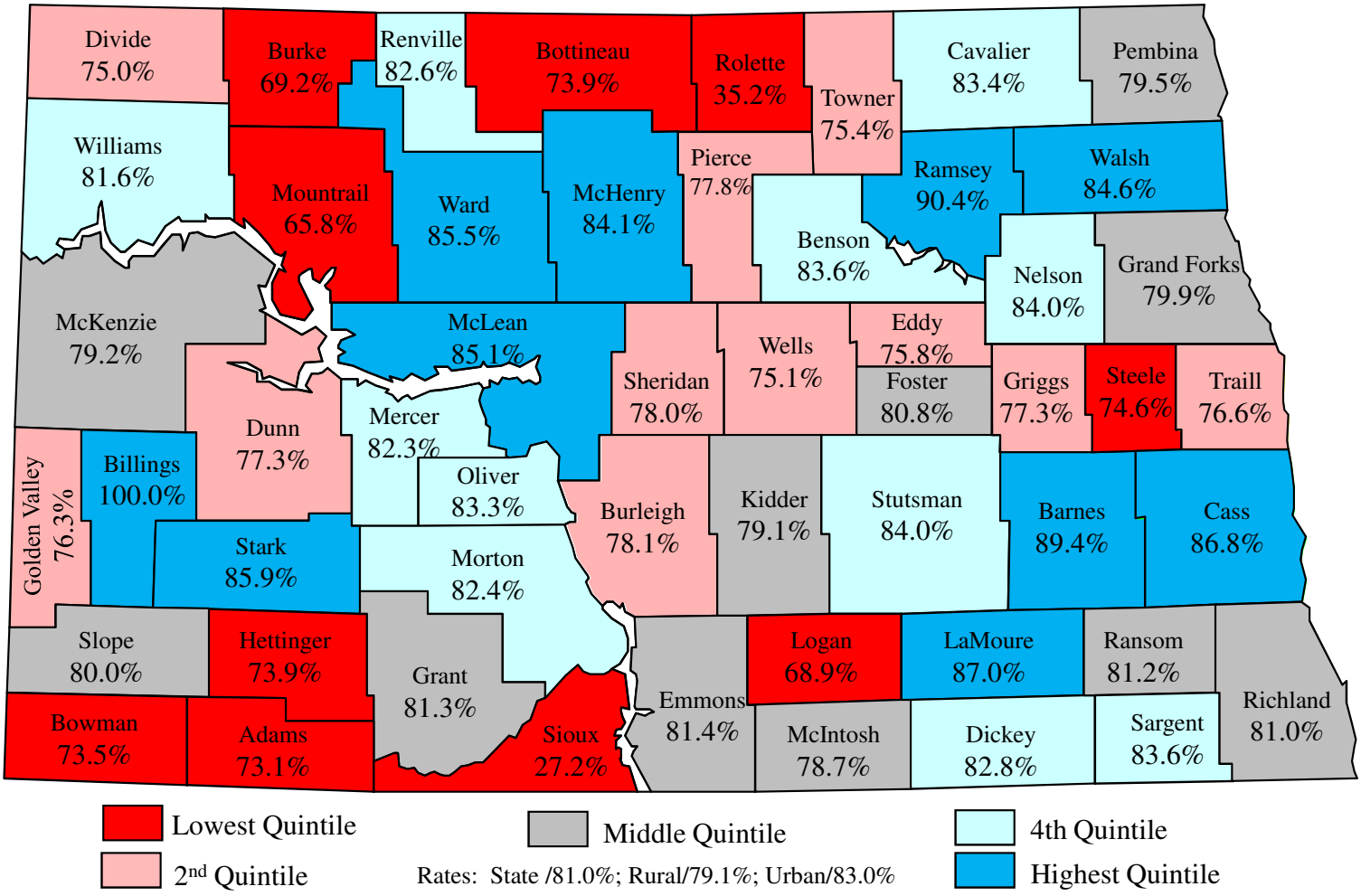


Analysis provided by North Dakota Health Care Review, Inc., Minot, North Dakota

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 H
Prioritization of Community's Health Needs