2014
Community Health Assessment

Pembina County Memorial Hospital

Cavalier, North Dakota

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Public Health
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Completed by North Dakota Medicare Rural Hospital Flexibility (FLEX) Program

Table of Contents

Executive Summary

To help inform future decisions and strategic planning, Pembina County Memorial Hospital (PCMH) in Cavalier, N.D., along with Pembina County Public Health (PCPH) conducted a community health needs assessment in Pembina County. The Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences facilitated the assessment, which included the solicitation of input from area community members and health care professionals as well as analysis of community health-related data.

To gather feedback from the community, residents of the health care service area and local health care professionals were given the chance to participate in a survey. Additional information was collected through a Community Group comprised of community members and through key informant interviews with community leaders.

The study took into account input from approximately 107 community members and health care professionals from Pembina County as well as seven community leaders. This input represented the broad interests of the community served by PCMH and PCPH. 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.

The population in Pembina County is shrinking and aging. Compared to a growing statewide population influx, Pembina County experienced a 3.1% decline in population over the last three years. Approximately 21.3% of the population of Pembina County is over age 65. This percentage is significantly higher than the rate for the rest of the state (14.2%). In addition, Pembina County has a higher percentage of those individuals over age 65 living alone than either North Dakota or U.S. averages. Furthermore, the median age for Pembina County residents is 47.1, compared to a state median age of 36.9. This likely indicates increased need for medical services to attend to an aging population.

The data compiled by County Health Rankings show that with respect to health outcomes, Pembina County was generally faring favorably when compared to the rest of North Dakota, except in terms of diabetes. An examination of health factors, which include health behaviors, clinical care measures, social and economic factors, and physical environment revealed several patterns in the county. Pembina County was performing significantly worse than the state average in terms of the rate of adult obesity and physical inactivity and with respect to ratios of residents to primary care physicians and dentists. Pembina County also reported rates inferior to the state averages on the measures of access to healthy foods, access to exercise opportunities, excessive drinking and alcohol-impaired driving deaths.

Social and economic factors that stood out as problematic were the number of deaths from injury which were significantly higher than state rate. In terms of the physical environment, Pembina County had five times the number of drinking water violations than the state average and residents experience longer commutes to work.

On the positive side, the county was a top performer, beating the top 10% of counties nationally on the measures of sexually transmitted infections, violent crime, and severe housing problems. Additionally, county residents self-reported fewer poor physical health days and mental health days than national and state rates. Another positive measure is the rate of teen births was significantly lower than the state average.

Results from the survey revealed that among community members the top five overall community health concerns were: (1) attracting and retaining young families, (2) not enough jobs with livable wages, (3) cost of health insurance, (4) adequacy of health insurance and (5) dementia/Alzheimer's disease. Health care professionals were in alignment with respect to health care costs, but also focused on chronic disease and addiction/substance abuse. Specifically, health care professionals ranked as the top five community health concerns: (1) adequacy of health insurance, (2) heart disease and diabetes, (3) cost of health insurance, (4) cancer and (5) alcohol use and abuse.

The survey also revealed generally good awareness of locally available health care services and that residents choose to receive care locally due to convenience, proximity and familiarity with providers. Residents travel out of the area for service primarily for access to necessary specialists, because of a referral and perceived high quality care.

Input from Community Group members and community leaders provided via a focus group and key informant interviews echoed many of the concerns raised by survey respondents. Thematic concerns emerging from these sessions were (1) meeting mental health needs including drug and alcohol use, (2) lack of available resources to help elderly stay in their homes, (3) need for more public transportation options, (4) lack of jobs with livable wages and (5) more collaboration between PCMH and Altru Clinics.

Following careful consideration of the results and findings of this assessment, Community Group members determined that the overall top health needs or issues in the community are (1) cost and adequacy of health insurance; (2) mental health including alcohol use and abuse; (3) obesity; (4) not enough jobs with livable wages; and (5) lack of resources for elderly to stay in their homes.

Overview

Pembina County Memorial Hospital

Opened in 1953, Pembina County Memorial Hospital (PCMH) is one of the most important assets in the community and the largest charitable organization in the Cavalier area. PCMH includes a 25-bed, critical access hospital located in Cavalier. As a hospital and designated level IV trauma center, the hospital provides comprehensive care for a wide range of medical and emergency situations. PCMH is part of the local health care system which also included Wedgewood Manor and CliniCare. PCMH provides comprehensive medical care with physician and mid-level medical providers and consulting/visiting medical providers. With nearly 185 employees, PCMH is the largest employer in the region. It has one part-time physician, three physician assistants, five certified nursing assistants, and eight nurses for a combined total of 17 health care providers.

A 2009 economic impact study estimated that PCMH had a total economic impact on Pembina County of slightly over $6 million.

The mission of PCMH and Wedgewood Manor is to:

"provide a family centered approach to the delivery of health services and to promote a healthy lifestyle to those we serve."

Services that PCMH offers locally include:

General and Acute Services

- Cardiology (visiting physician)
- Clinic
- Emergency room
- Gynecology (visiting physician)
- Hospital (acute care)
- Independent senior housing
- Nutrition counseling
- Obstetrics (visiting physician)
- Ophthalmology evaluation and surgery services (mobile)
- Orthopedics (visiting physician)
- Pharmacy
- Podiatry – evaluation and surgery
- Surgical services
- Swing bed services

Screening/Therapy Services

- Chiropractic services
- Chronic disease management
- Holter monitoring
- Laboratory services
- Lower extremity circulatory assessment
- Massage therapy
- Occupational physicals
- Occupational therapy
- Pediatric services
- Physical therapy
- Respiratory care
- Sleep studies
- Social services

Radiology Services

- CT scan (mobile unit)
- Digital mammography (mobile unit)
- General x-ray
- Nuclear medicine (mobile unit)
- MRI (mobile unit)
- Ultrasound (mobile unit)

Pembina County Public Health

Pembina County Public Health (PCPH) provides public health services that include environmental health, nursing services, the WIC (women, infants, and children) program, health screenings and education services. Each of these programs provides a wide variety of services in order to accomplish the mission of public health, which is to assure that North Dakota is a healthy place to live and each person has an equal opportunity to enjoy good health. To accomplish this mission, PCPH is committed to the promotion of healthy lifestyles, protection and enhancement of the environment, and provision of quality health care services for the people of North Dakota.

Specific services that PCPH provides are:

- Bicycle helmet safety education
- Blood pressure checks
- Breastfeeding resources
- Car seat program
- Child health (well baby checks)
- Correction facility health
- Blood sugar testing
- Emergency response and preparedness program
- Flu shots for children 18 and younger
- Health Tracks (child health screening)
- Home visits
- Immunizations
- Medications setup—home visits
- Office visits and consults
- Preschool education programs
- Assist with preschool screening
- Radon testing kits
- School health (vision screening, puberty talks, school immunizations)
- Tobacco Prevention and Control
- Tuberculosis testing and management
- West Nile program—surveillance and education
- WIC (Women, Infants & Children) Program
- Youth education programs (first aid, bike safety)

Community Resources

PCMH is located in northeastern North Dakota, approximately 80 miles north of Grand Forks and 16 miles from the Canadian border. Along with the hospital, agricultural and border patrol operations provide the economic base for the town of Cavalier and Pembina County. Pembina County is the state's oldest county and the lowest point in North Dakota. It is located on the Red River of the North in Pembina Township where it flows out of the state and into the Canadian province of Manitoba. According to the 2010 U.S. Census, Pembina County had a population of 8,585 while Cavalier, the county seat, had a population of 1,276.

Pembina County has a number of community assets and resources that can be mobilized to address population health improvement. In terms of physical assets and features, the community includes a bike path, swimming pool, city park, tennis courts, golf course, skating rink, and movie theatre. Pembina Gorge State Recreation Area offers offers multi-use trails for biking, hiking and ATV riding. Icelandic State Park offers recreation and camping opportunities as well as hosting the Pioneer Heritage Center, Gunlogson Homestead and Nature Preserve. Pembina County offers several cultural attractions such as the Pembina State Museum, which pays tribute to the early history of the region including several groups of native peoples and the fur trapping business, and Pembina County Historical Museum. Also, the Cavalier Air Force Station provides insights into the monitoring and tracking of earth-orbiting objects.

Each major town in Pembina County has a fitness center and public transportation and good grocery stores are other valued community assets. The Pembina County school system offers a comprehensive program for students K-12.

Other health care facilities and services in the area include Altru Clinics in Cavalier and Drayton, multiple pharmacies, an optometrist, dentist and chiropractor. The PCPH is located in Cavalier.

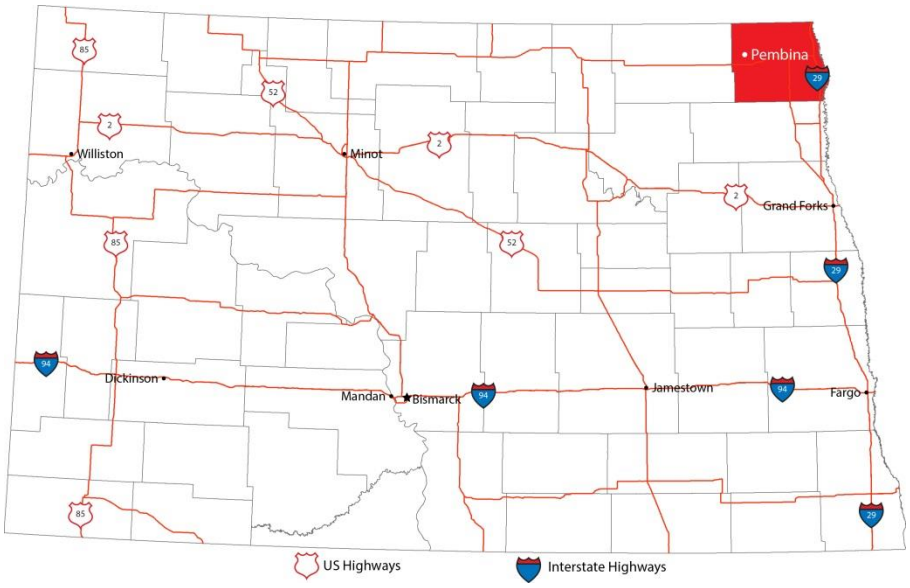
Assessment Process

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

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

This assessment examines health needs and concerns in Pembina County. In addition to Cavalier, located in the county are the communities of Bathgate, Crystal, Edinburg, Gardar, Hamilton, Hoople, Hensel, Mountain, Neche, Pembina, St. Thomas, and Walhalla.

Figure 1: Pembina County, North Dakota



The assessment process was highly collaborative. Administrators and other professionals from PCMH, PCPH, and Altru Clinic were considerably involved in planning and implementing the process. Along with representatives from the Center for Rural Health, they met regularly by telephone conference and via email. The Community Group (described in more detail below) provided in-depth information and informed the assessment in terms of community perceptions, community resources, community needs, and ideas for improving the health of the population and health care services. Representatives from both PCMH and PCPH were heavily involved in planning the Community Group meetings. The Community Group was comprised of many residents from outside the hospital and health department, including representatives from local government, businesses, and social services.

The survey instrument was developed out of a collaborative effort that took into account input from health organizations around the state. The North Dakota Department of Health's public health liaison organized a series of meetings that garnered input from the state's health officer, local public health unit professionals from around North Dakota, representatives of the Center for Rural Health, and representatives from North Dakota State University.

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

- A survey solicited feedback from area residents, including health care

professionals who work at PCMH, PCPH, Altru Clinic, and other health organizations;
- Community leaders representing the broad interests of the community took part in one-on-one key informant interviews;
- The Community Group, comprised of community leaders and area residents, was convened to discuss area health needs and inform the assessment process; and
- 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 preventive measures; rates of disease; and at-risk behavior.

The Center for Rural Health provided substantial support to PCMH and PCPH in conducting this needs assessment. The Center for Rural Health's involvement was funded partially through its Medicare Rural Hospital Flexibility (Flex) Program. The Flex Program is federally funded by the Office of Rural Health Policy, part of the Health Resources and Services Administration.

The Center for Rural Health is one of the nation's most experienced organizations committed to providing leadership in rural health. Its mission is to connect resources and knowledge to strengthen the health of people in rural communities. As the federally designated State Office of Rural Health (SORH) for the state and the home to the North Dakota Medicare Rural Hospital Flexibility (Flex) program, the Center connects the School of Medicine and Health Sciences and the university to rural communities and their health institutions to facilitate developing and maintaining rural health delivery systems. In this capacity the Center works both at a national level and at state and community levels.

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

Community Group

A Community Group consisting of seven community members was convened and first met on June 10, 2014. During this first Community Group meeting, group members were introduced to the needs assessment process, reviewed basic demographic information about Pembina County, and served as a focus group. Focus group topics included community assets and challenges, the general health needs of the community, community concerns, and suggestions for improving the community's health.

The Community Group met again on August 26, 2014 with twelve community members in attendance. At this second meeting the Community Group was presented with survey results, findings from key informant interviews and the focus group, and a wide range of secondary data relating to the general health of the population in Pembina County. The group was then tasked with identifying and prioritizing the community's health needs.

Members of the Community Group represented the broad interests of the community served by PCMH and PCPH. They included representatives of the health community, business community, political bodies, law enforcement, education, faith community, and social service agencies. Not all members of the group were present at both meetings.

Interviews

One-on-one interviews with four key informants were conducted in person in Cavalier on June 10, 2014. A representative from the Center for Rural Health conducted the interviews. Interviews were held with selected members of the Community Group as well as other key informants who could provide insights into the community's health needs. Included among the informants were public health professionals with special knowledge in public health acquired through several years of direct experience in the community, including working with medically underserved, low income, and minority populations, as well as with populations with chronic diseases.

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

Survey

A survey was distributed to gather feedback from the community. The survey was not intended to be a scientific or statistically valid sampling of the population. Rather, it was designed to be an additional tool for collecting qualitative data from the community at large – specifically, information related to community-perceived health needs.

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

Community Member Survey

The community member survey was distributed to various residents of Pembina County. The survey tool was designed to:

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

Specifically, the survey covered the following topics: residents' perceptions about community assets, levels of collaboration within the community, broad areas of community and health concerns, need for health services, concerns about the delivery of health care in the community, barriers to using local health care, preferences for using local health care versus traveling to other facilities, travel time to a clinic and hospital, use of preventive care, use of public health services, suggestions to improve community health, and basic demographic information.

To promote awareness of the assessment process, press releases led to published articles in four newspapers in Pembina County including in the communities of Cavalier, Drayton, Pembina and Walhalla. Additionally, information was published in PCMH's newsletter and on its website.

Approximately 500 community member surveys were available for distribution in Pembina County. The surveys were distributed by Community Group members and at PCMH, PCPH, banks, the courthouse, and area business offices.

To help ensure anonymity, included with each survey was a postage-paid return envelope to the Center for Rural Health. In addition, to help make the survey as widely available as possible, residents also could request a survey by calling PCMH or PCPH. The survey period ran from June 10 to July 11, 2014. Fifty-nine completed surveys were returned.

Area residents also were given the option of completing an online version of the survey, which was publicized in four community newspapers and on the websites of both PCMH and PCPH. Thirty-five online surveys were completed. In total, counting both paper and online surveys, 94 community member surveys were completed, equating to a 19% response rate. This response rate is on par for this type of unsolicited survey methodology and indicates an engaged community.

Health Care Professional Survey

Employees of PCMH, PCPH, and Altru Clinic, as well as other local health-related organizations were encouraged to complete a version of the survey geared to health care professionals. This health care professional version of the survey was administered online only, and 13 surveys were completed. The version of the survey for health care professionals covered the same topics as the consumer survey, although it sought less demographic information.

Combining the number of community member and health care professional surveys, the grand total is **107 completed surveys,**

Secondary Data

Secondary data was collected and analyzed to provide descriptions of: (1) population demographics, (2) general health issues (including any population groups with particular health issues), and (3) contributing causes of community health issues. Data were 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 15 primary data sources); the National Survey of Children's Health Data Resource Center; the Centers for Disease Control and Prevention; the North Dakota Behavioral Risk Factor Surveillance System; and the National Center for Health Statistics.

Demographic Information

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

TABLE 1: PEMBINA COUNTY INFORMATION AND DEMOGRAPHICS (From 2010 Census/2012 American Community Survey; more recent estimates used where available)		
	Pembina County	**North Dakota**
Population, 2013 est.	**7,181**	**723,393**
Population change, 2010-2013	**-3.1%**	**7.6%**
Land area, square miles	**1,119**	**69,001**
People per square mile, 2010	**6.6**	**9.7**
White persons (not incl. Hispanic/Latino), 2013 est.	**93.1%**	**87.3%**
Persons under 18 years, 2013 est.	**20.8%**	**22.5%**
Persons 65 years or older	**21.3%**	**14.2%**
Median age	**46**	**36.9**
Non-English spoken at home, 2012 est.	**4.6%**	**5.2%**
High school graduates, 2012 est.	**88.3%**	**90.5%**
Bachelor's degree or higher, 2012 est.	**19.9%**	**27.1%**
Live below poverty line, 2012 est.	**8.2%**	**12.1%**

While the population of North Dakota has grown in recent years, Pembina County has seen a slight decrease in population since 2010. Demographic information and trends that have implications for the community's health and the delivery of health care include:

- An elevated rate of people aged 65 and older indicates an increased need for health care services.
- A rate of residents with at least a bachelor's degree that is well below the state rate may have health care workforce implications.
- A very low population density means emergency medical services face challenges in responding to emergencies with a population that is dispersed over a large area.

Health Conditions, Behaviors, and Outcomes

As noted above, several sources of secondary data were reviewed to inform this assessment. This data are presented below in three categories: (1) County Health Rankings, (2) the public health community profile, and (3) children's health.

County Health Rankings

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

The data used in the 2014 County Health Rankings are pulled from more than 20 data sources and then are compiled to create county rankings. Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks, such as 1 or 2, are considered to be the "healthiest." Counties are ranked on both health outcomes and health factors. Below is a breakdown of the variables that influence a county's rank. A model of the 2014 County Health Rankings – a flow chart of how a county's rank is determined – may be found in Appendix B. For further information, visit the County Health Rankings website at www.countyhealthrankings.org.

Health Outcomes

- Length of life
- Quality of life

Health Factors

- Health Behavior
  - Smoking
  - Diet and exercise
  - Alcohol and drug use
  - Sexual activity
- Clinical Care
  - Access to care
  - Quality of care

Health Factors (continued)

- Social and Economic Factors
  - Education
  - Employment
  - Income
  - Family and social support
  - Community safety
- Physical Environment
  - Air and water quality
  - Housing and transit

Table 2 summarizes the pertinent information gathered by County Health Rankings as it relates to Pembina County. It is important to note that these statistics describe the population of a county, regardless of where county

residents choose to receive their medical care. In other words, all of the following statistics are based on the health behaviors and conditions of the county's residents, not necessarily the patients and clients of PCMH and PCPH.

For most of the measures included in the rankings, the County Health Rankings' authors have calculated the "Top U.S. Performers" for 2014. The Top Performer number marks the point at which only 10% of counties in the nation do better, i.e., the 90th percentile or 10th percentile, depending on whether the measure is framed positively (such as high school graduation) or negatively (such as adult smoking).

Pembina County's ranking also is included in the summary below. For example, Pembina County ranks 24th out of 45 ranked counties in North Dakota on health outcomes and 39th on health factors. The results listed below in **red** are areas where Pembina County is not measuring up to the state average (and, by extension, on most measures the Top U.S. Performers); the variables listed in **blue** indicate that the county is faring better than the North Dakota average, but may not be meeting the Top U.S. Performer rate on that measure.

TABLE 2: SELECTED MEASURES FROM *COUNTY HEALTH RANKINGS* – PEMBINA COUNTY

	Pembina County	U.S. Top 10%	North Dakota
Ranking: Outcomes	**24th**		**(of 45)**
Premature death	**6,179**	5,317	6,244
Poor or fair health	**10%** ☺	10%	12%
Poor physical health days (in past 30 days)	**2.2** ☺	2.5	2.7
Poor mental health days (in past 30 days)	**2.0** ☺	2.4	2.4
% Diabetic	**10.0%**	-	8%
Ranking: Factors	**39th**		**(of 45)**
Health Behaviors			
Adult smoking	**17%**	14%	18%
Adult obesity	**33%**	25%	30%
Food environment index (10 is best)	**8.4**	8.7	8.7
Physical inactivity	**34%**	21%	26%
Access to exercise opportunities	**49%**	85%	62%
Excessive drinking	**24%**	10%	22%
Sexually transmitted infections	**68** ☺	123	358
Teen birth rate	**21**	20	28
Clinical Care			
Uninsured	**12%**	11%	12%
Primary care physicians	**3,671:1**	1,051:1	1,320:1
Dentists	**2,474:1**	1,439:1	1,813:1
Mental health providers	N/A	536:1	1,071:1

Preventable hospital stays	**78**	46	59
Diabetic screening	**84%**	90%	86%
Mammography screening	**60%**	71%	68%
Social and Economic Factors			
Unemployment	**6.5%**	4.4%	3.1%
Children in Poverty	**10%** ☺	13%	14%
Inadequate social support	**16%**	14%	16%
Children in single-parent households	**24%**	20%	26%
Violent crime	**58** ☺	64	226
Physical Environment			
Air pollution – particulate matter	**10.7**	9.5	10.0
Drinking water violations	**5%**	0%	1%
Severe housing problems	**7%** ☺	9%	11%

The data from County Health Rankings show that Pembina County is doing well as compared to the rest of North Dakota on measures of health *outcomes*, even exceeding the top 10% of counties nationally of self-reported measures of behavioral, social and physical health. Measures that deserve boasting about and are denoted with a ☺ are:

- Lower levels of self-reported poor physical **and** mental health days
- Significantly lower levels of STIs
- Significantly lower percentages of children living in poverty
- Significantly lower levels of violent crime
- Low levels of housing problems

However, Pembina County is faring worse than other North Dakota counties on many measures. Pembina County lags the state on adult obesity and ratios of community members to primary care and dentists.

Some of the measures are particularly concerning:

- Physical inactivity rate–8 points higher than state rate
- Access to exercise opportunities—13 points lower than state rate
- Preventable hospital stays—19 points higher than state rate
- Mammography screening—8 points lower than state rate
- Unemployment—3.4% higher than state rate
- Drinking water violation—4 points higher than state rate

Trends

In addition to the reported rates and levels of some of these measures, also concerning are the trends indicating that several measures are rapidly getting worse. For example, as shown in Figures 2 and 3, the rates for adult obesity and physical inactivity have increased considerably since 2008 and are higher than both the state and national averages.

Figure 2 – Rising rate of adult obesity in Pembina County

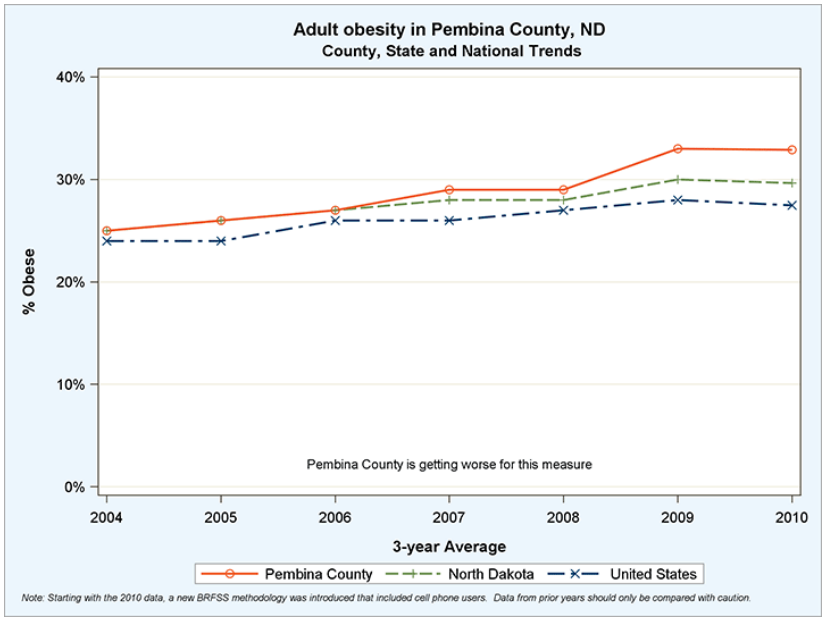
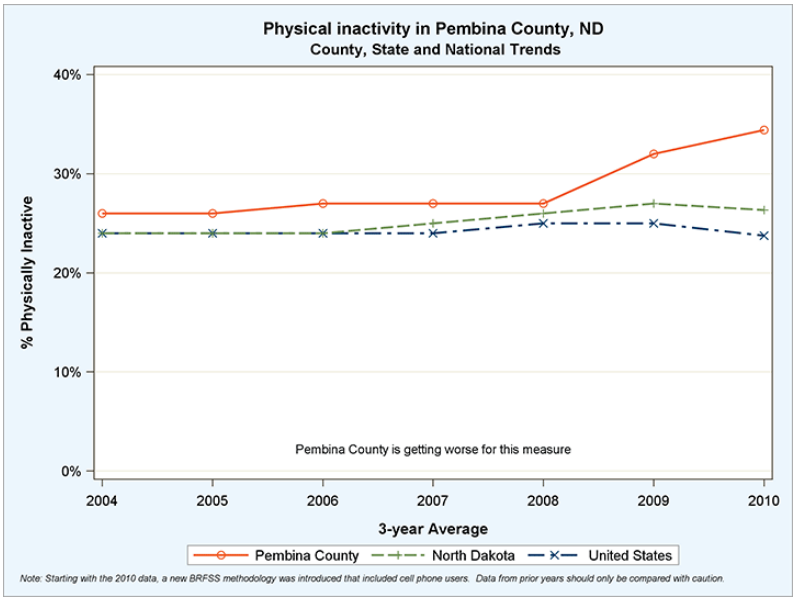
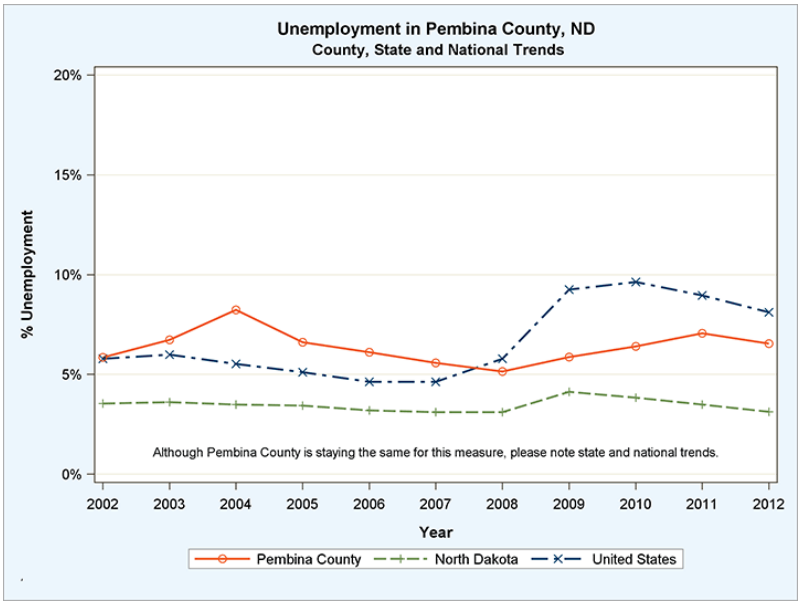


Figure 3 – Rising rate of physical inactivity in Pembina County



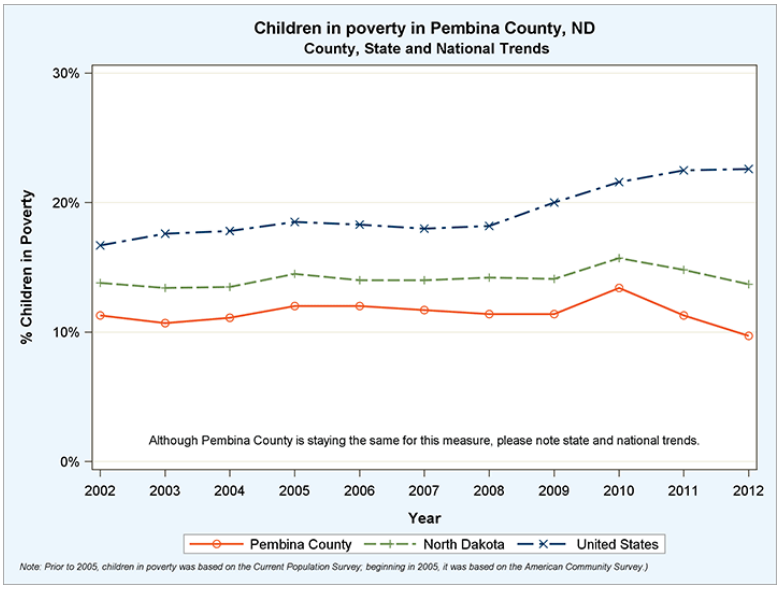
While North Dakota leads the nation with the lowest unemployment rates, Pembina County is getting worse for this measure. Results are shown in Figure 4.

Figure 4 – Rising rate of unemployment in Pembina County



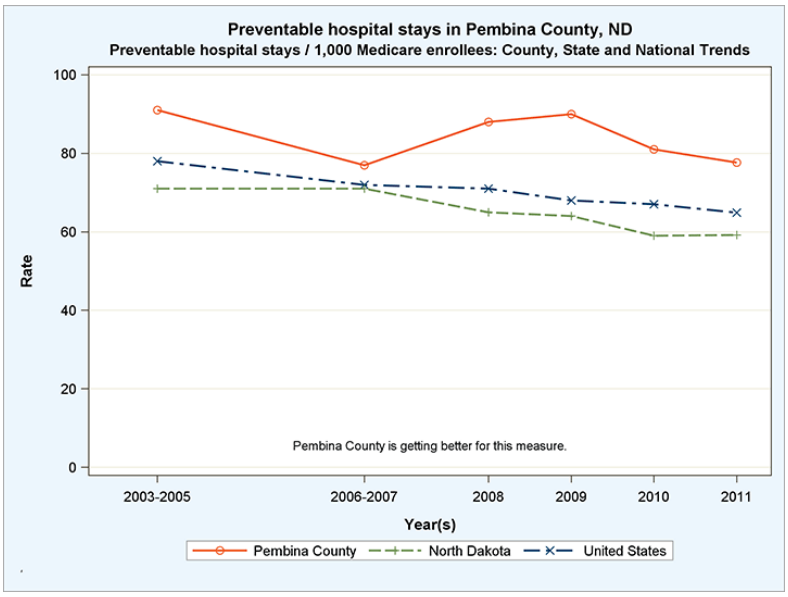
Similarly, the number of children living in poverty is trending upward, as shown in Figure 5. Although Pembina's County rate is still lower than state and national rates, it is important to monitor this measure because of its recent increase.

Figure 5 – Rising rate of children living in poverty in Pembina County



On a positive note, even though Pembina County exceeds the state rate of preventable hospital stays, within the last decade this level has shown some improvement. This factor measures the number of patients being hospitalized for conditions that may be amenable to outpatient care. Thus, it may suggest a tendency to overuse the hospital as a main source of care. This positive trend is illustrated in Figure 6.

Figure 6 – Level of preventable hospital stays in Pembina County



Other promising trends include a decline in the number of uninsured in Pembina County as well as a decrease in the already low rate of sexually transmitted infections. Both of these favorable trends are illustrated in Figures 7 and 8.

Figure 7 – Uninsured in Pembina County

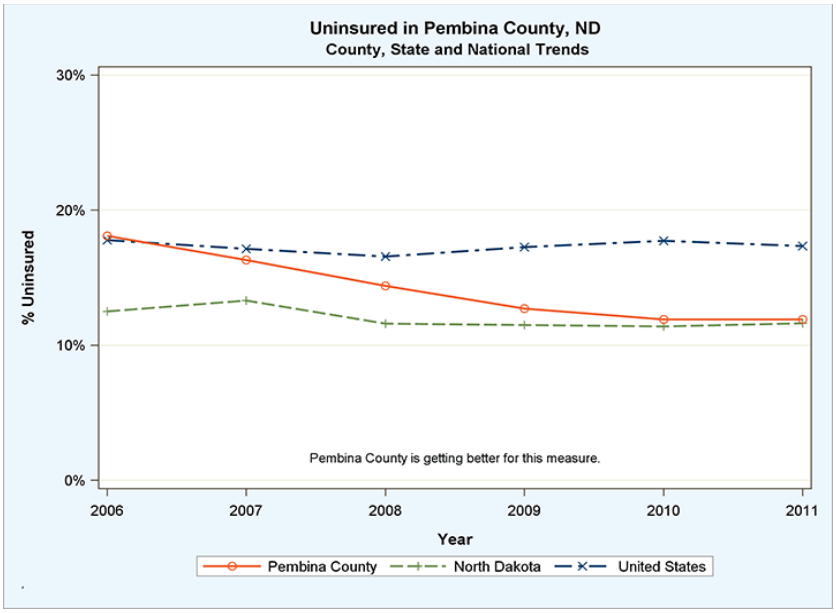
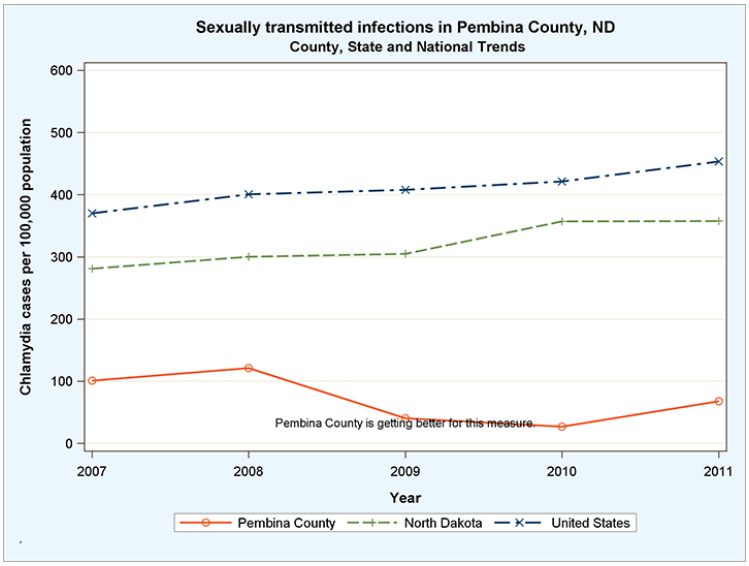


Figure 8– Sexually transmitted infections in Pembina County



Public Health Community Health Profile

Included as Appendix C is the health profile for Pembina County. Prepared by the North Dakota Department of Health, the profile includes county-level information about population and demographic characteristics, birth and death data, behavioral risk factors, crime, and child health indicators.

In Pembina County, the most commonly reported causes of death in adults were unintentional injury, cancer, heart disease, and chronic obstructive pulmonary disease. A graph illustrating leading causes of death in various age groups in the public health unit may be found in Appendix C.

With regard to adult behavioral risk factors, in comparison to North Dakota Pembina County had lower rates of binge and heavy drinking as well as drunk driving. Overall heart health was another strength with low reported levels of heart attack and stroke but elevated reports of angina and cardiovascular disease. Residents do have higher rates of diabetes, asthma, obesity, cholesterol and hypertension. Relating to the high rate of unintentional injury, a large amount of Pembina County residents reported not wearing their seatbelts (57.8% not wearing seatbelt compared to 41.9% state average). Pembina County reported substantially lower rates of violent crime and property crime compared to the state averages.

Children's Health

The National Survey of Children's Health touches on multiple intersecting aspects of children's lives. Data are not available at the county level; listed below is information about children's health in North Dakota. The full survey includes physical and mental health status, access to quality health care, and information on the child's family, neighborhood, and social context. Data are from 2011-12. More information about the survey may be found at: www.childhealthdata.org/learn/NSCH.

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

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

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

- Obese or overweight children
- Children with health insurance
- Preventive primary care and dentist visits
- Developmental/behavioral screening
- Children in smoking households

Importantly, more than one in five of the state's children are not receiving an annual preventive medical visit or a preventive dental visit. Lack of preventive care now affects these children's future health status.

Table 5 includes selected county-level measures regarding children's health in North Dakota. The data come from North Dakota KIDS COUNT, a national and state-by-state effort to track the status of children, sponsored by the Annie E. Casey Foundation. KIDS COUNT data focus on main components of children's well-being; more information about KIDS COUNT is available at www.ndkidscount.org. The measures highlighted in **red** in the table are those on which Pembina County is doing worse than the state average. The year of the most recent data is noted.

The data show that Pembina County is underperforming compared to state averages on a few measures. The most marked differences were on the measures of uninsured children and limited licensed child care capacity.

TABLE 5: COUNTY-LEVEL MEASURES REGARDING CHILDREN'S HEALTH

	Pembina County	North Dakota
Uninsured children (% of population age 0-18), 2011	**8%**	6.1%
Uninsured children below 200% of poverty (% of population), 2012	**55.6%**	51.9%
Medicaid recipient (% of population age 0-20), 2012	28%	28%
Children receiving free & reduced priced lunches, 2012	**35%**	32%
Supplemental Nutrition Assistance Program (SNAP) recipients (% of population age 0-18), 2012	18% ☺	24%
Licensed child care capacity (% of population age 0-13), 2012	**29%**	44%
High school dropouts (% of grade 9-12 enrollment), 2012	0.5% ☺	2.2%

Survey Results

Survey Demographics

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

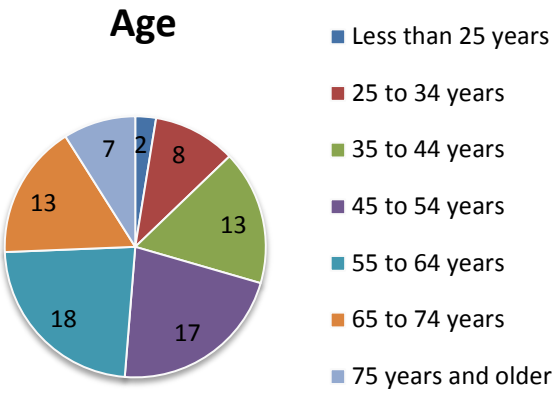
With respect to community member demographics of those who chose to take the survey:

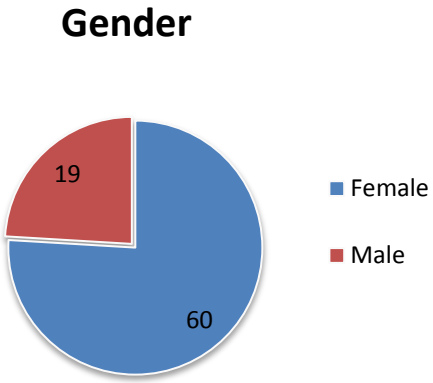
- Close to half (N=38) were aged 55 or older, although there was a fairly even distribution of ages;
- Female respondents outnumbered male respondents by a 3:1 ratio;
- A majority (N=47) had associate's degrees or higher, with a plurality of respondents (N=22) having bachelor's degrees;
- Most (N=51) worked full-time, with a substantial number (N=18) also retired; and
- A majority of respondents (N=25) had household incomes of less than $50,000.

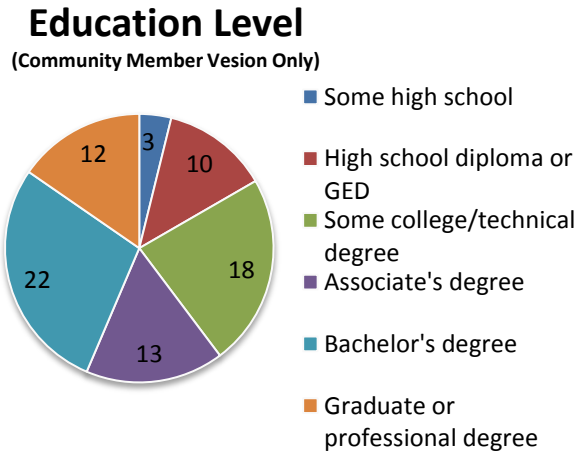
Figure 9 shows these demographic characteristics. It illustrates the wide range of community members' household income and indicates how this assessment took into account input from parties who represent the broad interests of the community served, including wide age ranges, those in varying work situations, and lower-income community members. Of those who provided a household income, four community members reported a household income of less than $25,000, with two of those indicating a household income of less than $15,000.

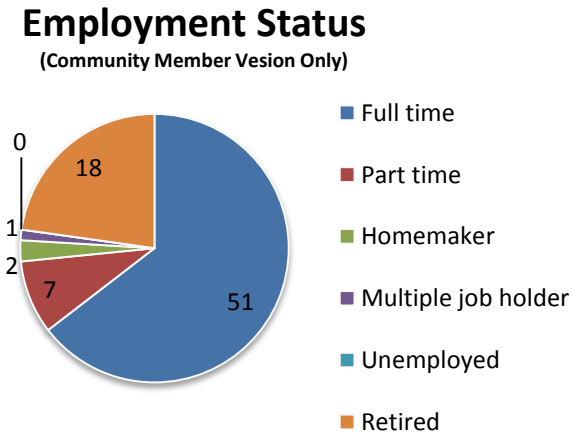
Figure 10 illustrates the demographics of health care professionals who completed the survey.

Figure 9: Demographics of Community Member Survey-Takers









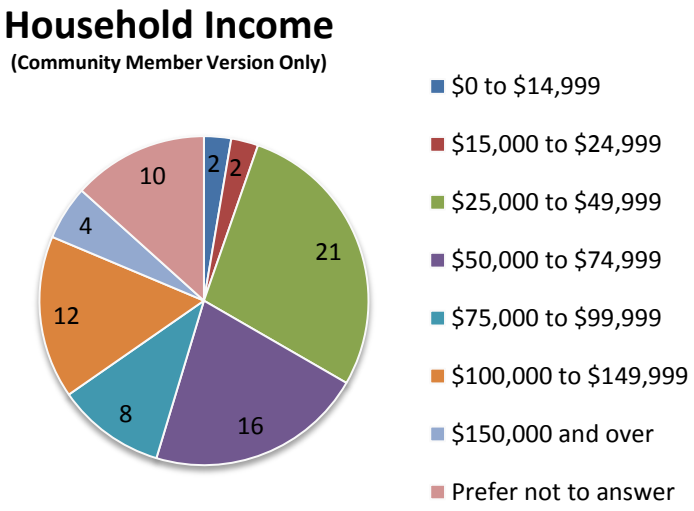
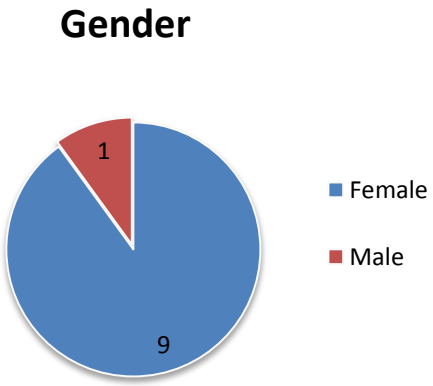
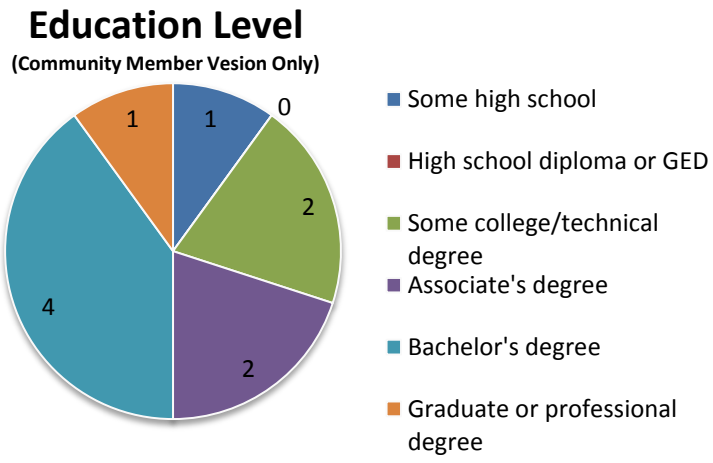
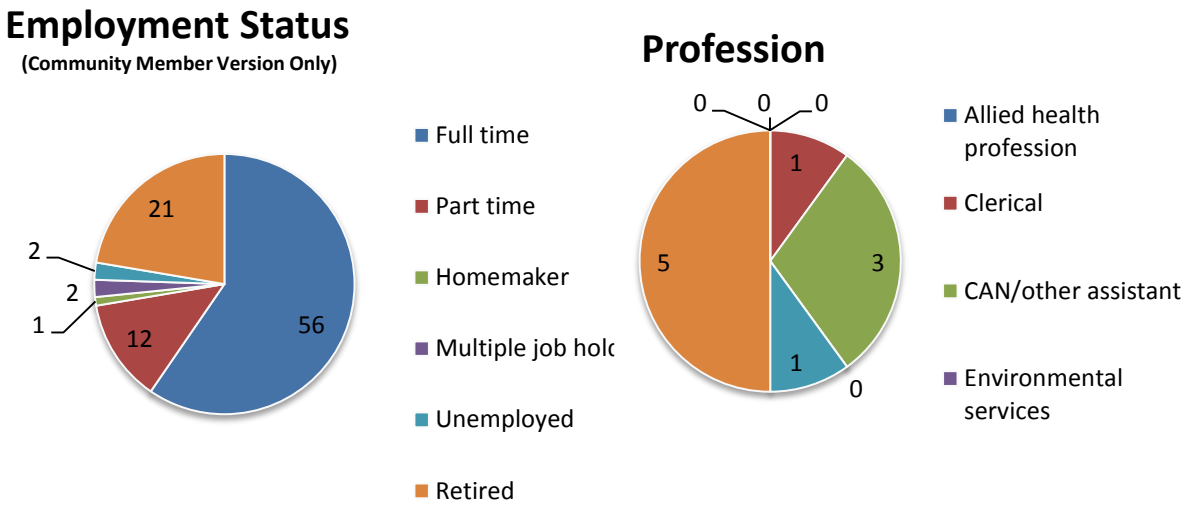


Figure 10: Demographics of Health Care Professional Survey-Takers







Health Care Access

Community members were asked how far they lived from the hospital and clinic they usually go to. A large plurality (N=31) reported living within 10 miles of the hospital they usually go to, while 11 respondents indicated they live more than an hour from the hospital they usually go to. Driving distances, along with lack of transportation options, can have a major effect on access to health care services, especially in winter when weather conditions lead to hazardous driving conditions.

With respect to distance to respondents' clinic of choice, a majority (N=43) said they lived less than 10 minutes from the clinic. Three reported driving more than an hour to the clinic they usually go to. Figures 11 and 12 illustrate these results.

Figure 11: Respondent Travel Time to Hospital (Community Member Survey Version Only)

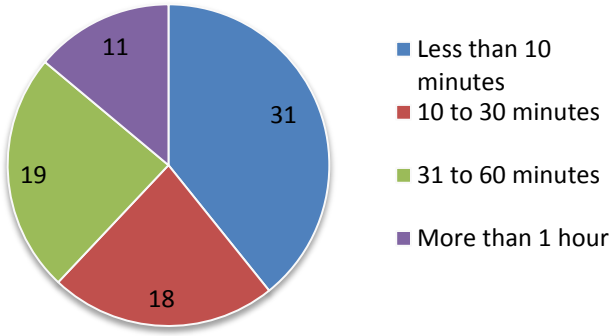
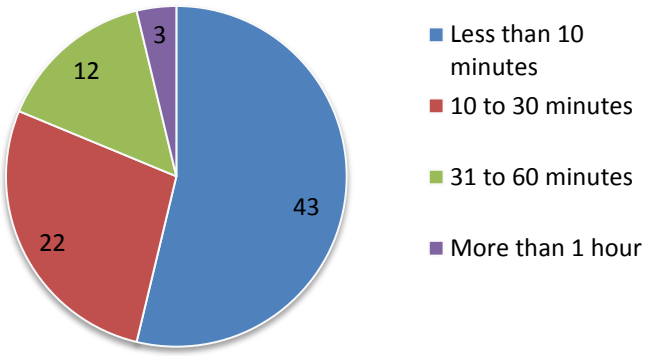
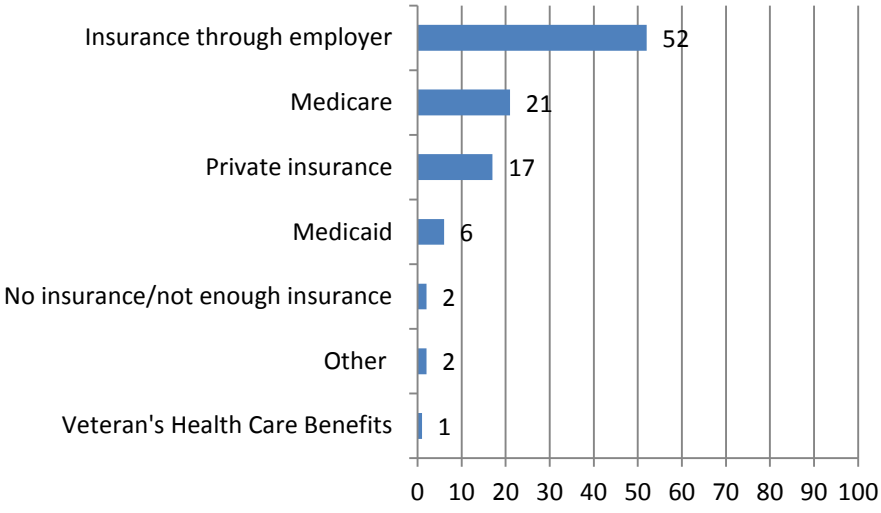


Figure 12: Respondent Travel Time to Clinic (Community Member Survey Version Only)



Community members also were asked what, if any, health insurance they have. Health insurance status often is associated with whether people have access to health care. Two of the respondents reported having no health insurance or being under-insured. As demonstrated in Figure 13, the most common insurance types were insurance through one's employer (N=52), Medicare (N=21) and private insurance (N=17).

Figure 13: Insurance Status – Community Members (Community Member Survey Version Only)



Community Assets, Challenges, and Collaboration

Survey-takers were asked what they perceived as the best things about their community in five categories: people, services and resources, quality of life, geographic setting, and activities. In each category, respondents were given a list of choices and asked to pick the top three. Respondents occasionally chose less than three or more than three choices within each category. The results indicate there is consensus that community assets include:

- friendly and helpful people;
- health care;
- a safe place to live;
- the cleanliness of the area; and
- recreational and sports activities

Figures 14 to 18 illustrate the results of these questions.

Figure 14: Best Things about the PEOPLE in Your Community

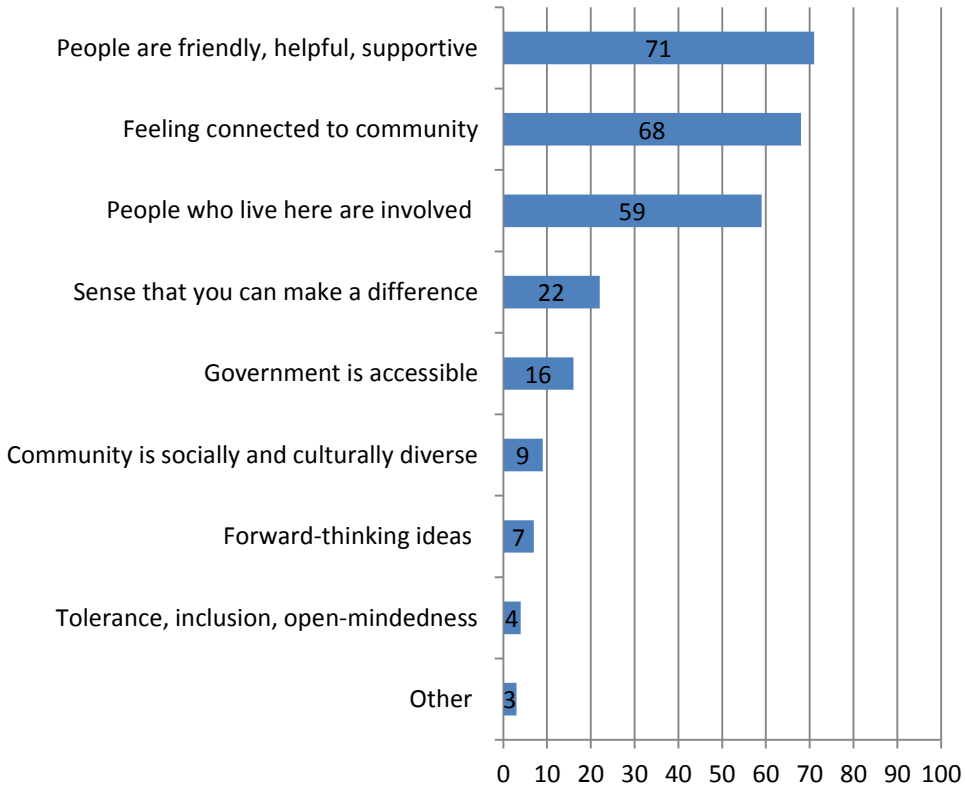


Figure 15: Best Things about the SERVICES AND RESOURCES in Your Community

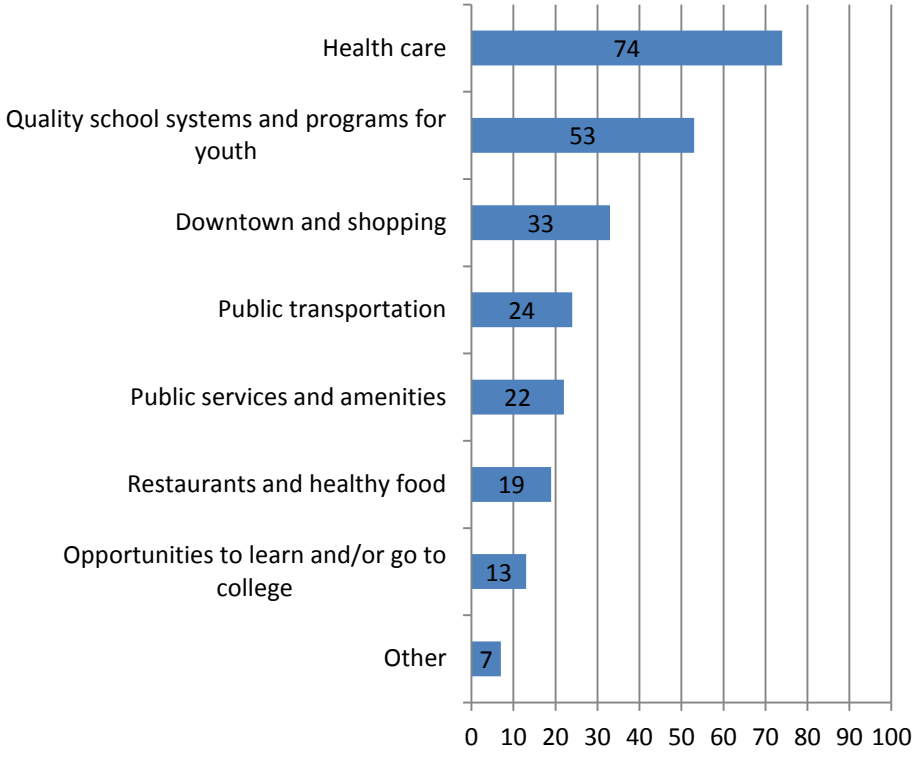


Figure 16: Best Things about the QUALITY OF LIFE in Your Community

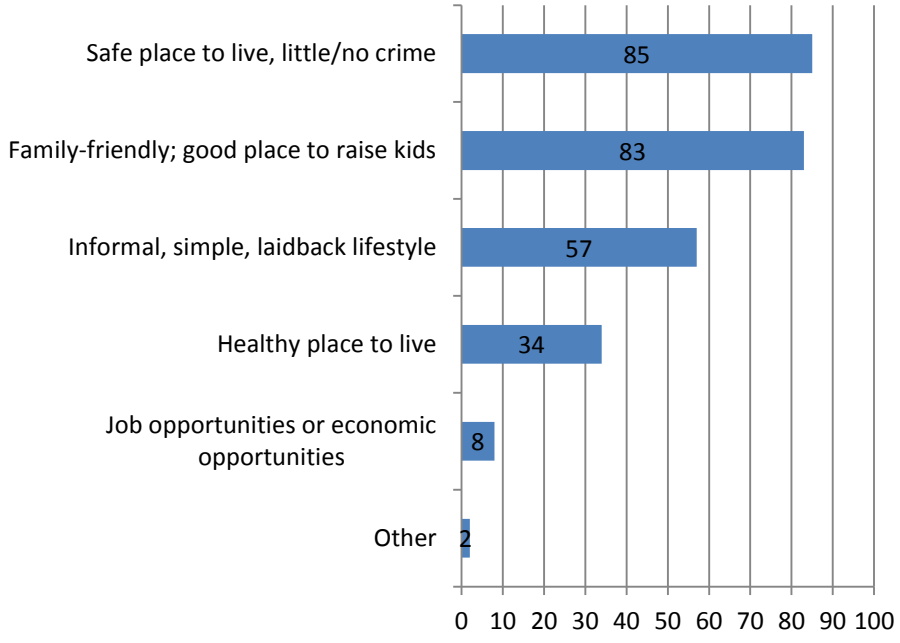


Figure 17: Best Things about the GEOGRAPHIC SETTING of Your Community

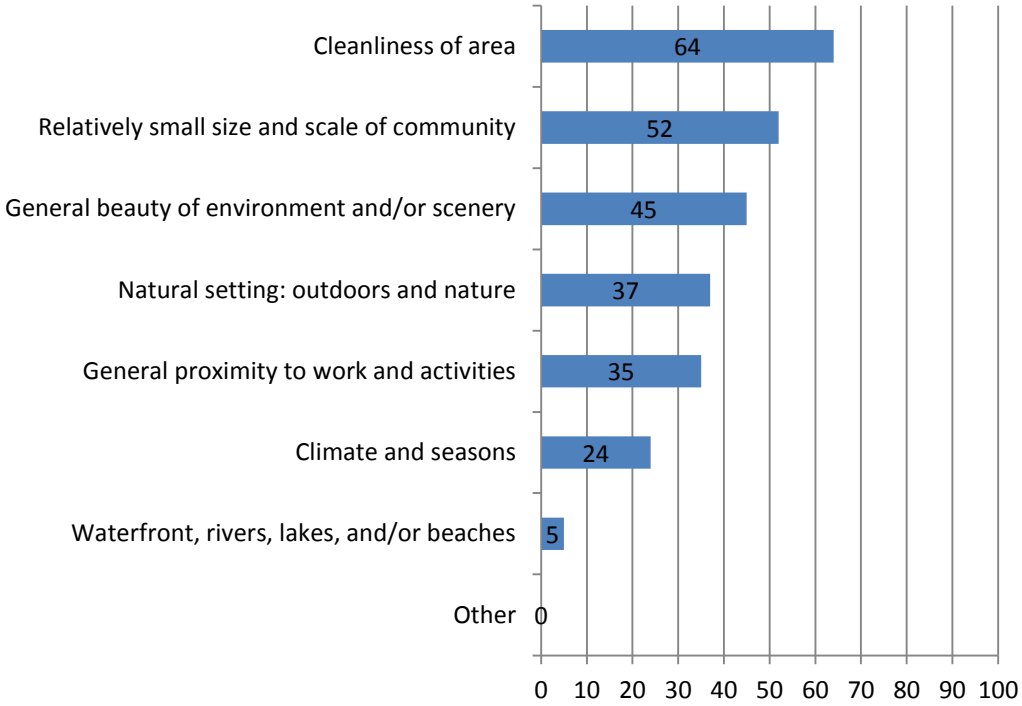
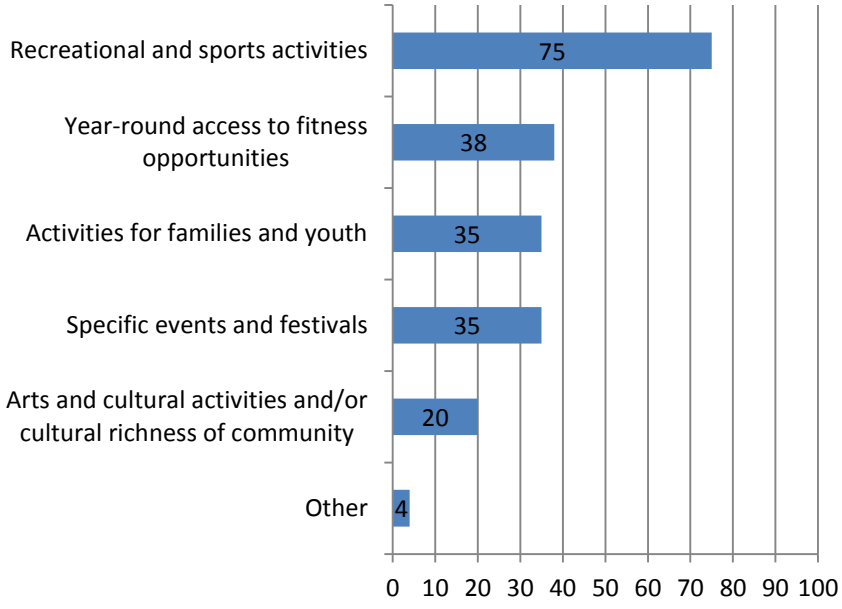


Figure 18: Best Thing about the ACTIVITIES in Your Community



The survey also included the question, "What are other 'best things' about your community that are not listed in the questions above?" The most common response (N=10) revolved around the friendliness of the community's people and the sense of a close-knit caring community. Next most common (N=7) was a mention of the number and variety of the recreational opportunities and clean, healthy environment. Also cited were: churches (N=3), state parks (N=3), summer activities (N=3) and services and care for the elderly (N=3). Specific responses included:

- We enjoy the State Park and the activities there, also the Pembina River in Walhalla for its canoeing and recreation. We also like close proximity of cities like Grand Forks and Winnipeg. Communities are rich in faith based activities and adequate churches to participate in.
- The rural nature and ability to get away from it all.
- Close knit community; members show willingness to help.
- People willing to volunteer their time and talent.
- Community pride; self-sufficient citizens.
- Young people moving back to community. Swimming pool. Leadership of the retail committee to generate activities.
- City park is beautiful. Icelandic State Park is a valuable asset to our area.
- Senior living, nursing home, the pool, public health, ER, churches, public transportation, daycares, city park.
- Faith in Action - opportunities for volunteers, hospice, and home health, meals and transportation options.
- Location—far enough away from large cities, but close enough to have access to Level 3 trauma center and groceries.
- The best things are the friendliness of the people. How community stands by people that need help.
- We have everything we need here without having to leave town.

Challenges

In another open-ended question, residents were asked, "What are the major challenges facing your community?" An outpouring of responses came in, totaling 70 unique comments. The most common response (N=20) related to a perceived lack of jobs or well-paying jobs. Along with that employment concern was a desire to increase economic development and recruit new businesses to town (N=15). Specifically, grocery stores and retail stores were often mentioned. A third frequently cited challenge was the combination of an aging population and declining sense of community (N=13). A need for volunteering and getting

young people to get engaged was often cited (N=4). Other commonly cited challenges include:

- Jobs that pay a living wage for families, keeping youth in our communities, keeping businesses in Cavalier and other communities alive with Grand Forks and Fargo being close enough to shop there.
- Volunteerism and connectedness -- engaging young people and young families in their community and local organizations like churches. People want to have amenities and activities, but are often reluctant to put their own energy into having those things.
- Working together to improve our community, lack of volunteerism except for a core group of people.
- Absolutely no industry which results in very few job opportunities. At this time, we have no health facility such as clinics that are in the process of being remodeled. You have to travel a long way for most necessities.
- Keeping young people and/or getting college grads to return. Lack of advanced employment opportunities.
- We could use more in the line of places to shop for groceries, they might be less expensive if there were competition. Things, all things, are too high priced compared to larger cities.
- The lack of economic growth. No new businesses coming in. Our citizens travel to GF for nearly everything.
- Opportunities for growth, new businesses in town. We need growth, this town seems to turn away businesses wanting to come. Need improvement BAD!!
- Not enough competition with TV/internet service, gas station, or grocery stores.
- Some of the buildings that are empty on Main Street need to be updated to taken down.
- Local council seems to drag feet on letting new businesses into town. City council also spends money foolishly.
- Getting the youth to "step up" and volunteer.
- Concern about closing of workplaces.
- White collar jobs.
- Resistance to change. Generational differences. Limited job pool. Lack of succession plan for baby boomers.
- No assisted living, basic care. The goods that are near are expensive -- would rather drive to get them cheaper.
- Bringing issues such as mental illnesses and drug/alcohol abuse to the forefront and leaders who will support treatment and follow-up.
- Need for economic development that creates jobs. Need for a quality hotel. Need for improvement in restaurants - cleanliness, food choices. Would love to see a Pizza Ranch and a Cobblestone Inn and Suites. They

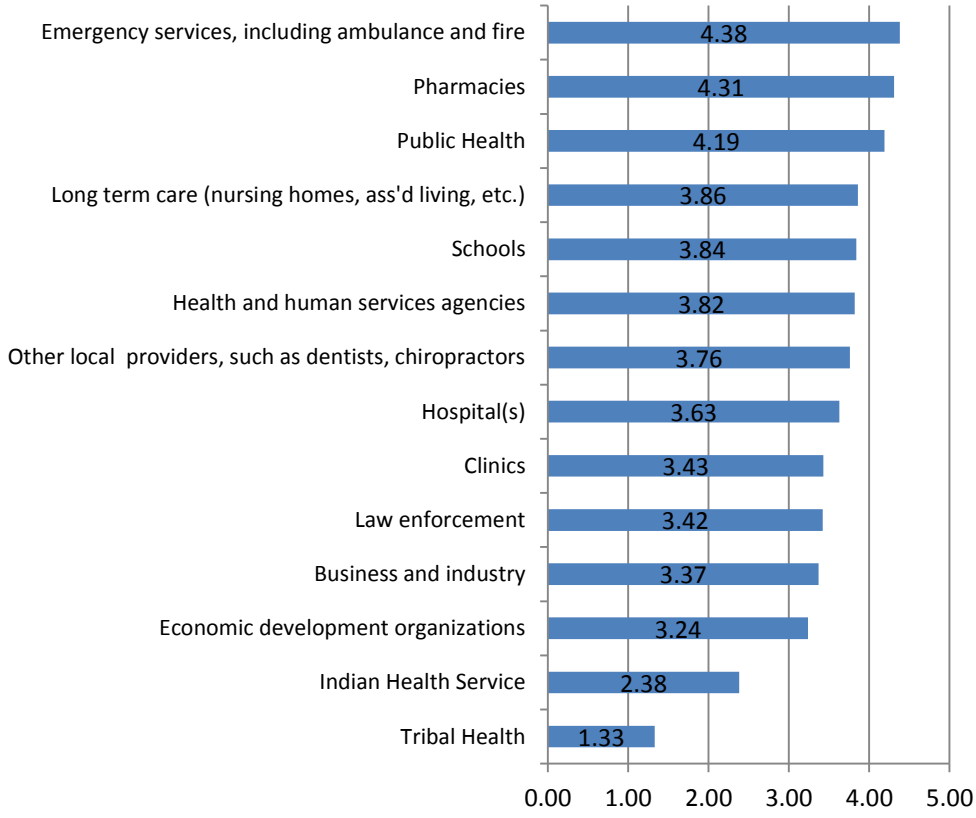
are located in many other communities of this size. Need for condominium housing and assisted living housing so as adults age and choose not to remain in their home or on their farm, there are options instead of moving away.

- Growth, business opportunities are poor. Keeping Main Street alive.

Collaboration

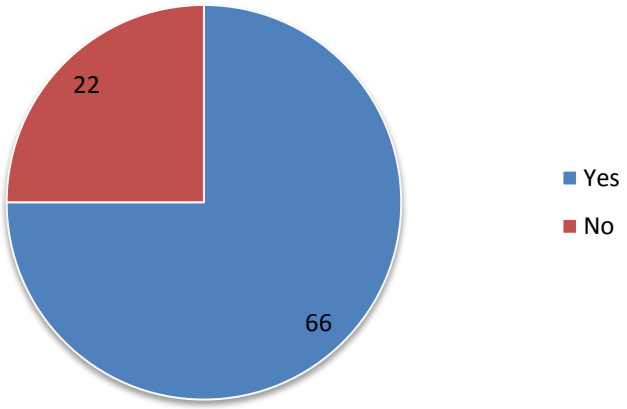
Those taking the survey generally agreed that when it comes to collaboration among various organizations and constituencies in the community, there was room for improvement. Respondents were asked to rate the level of collaboration, or "how well these groups work with others in the community," on a scale of 1 to 5. The results show that residents perceived emergency services, pharmacies, and public health as having the most effective collaboration with other community stakeholders. Groups that were perceived as needing improvement in collaborating included economic development, business and industry, and law enforcement. Figure 19 illustrates community perceptions about collaboration among various organizations and groups. (Indian Health Services and Tribal Health organizations have very limited interactions within Pembina County, which likely accounts for their placement in the ranked list.)

Figure 19: Community Collaboration



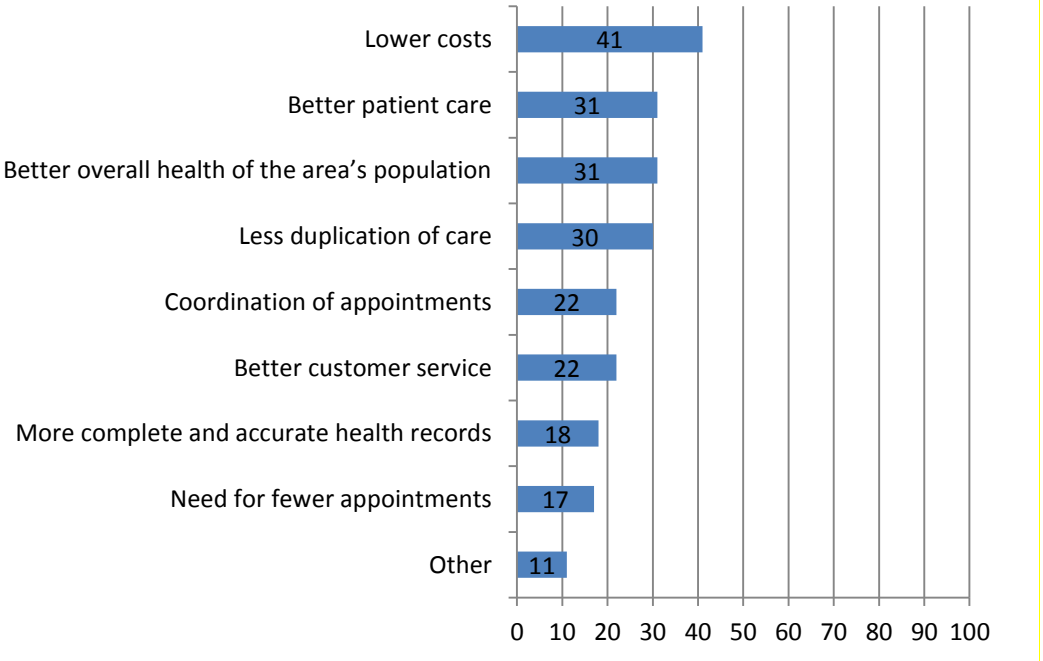
Survey-takers were asked whether they believe health-related organizations in the community are working together to improve the overall health of the area population. As shown in Figure 20, residents answered this question in the affirmative, representing a 3:1 ratio of respondents answering yes more than no.

Figure 20: Coordination to Improve Overall Population Health



To gain an understanding of residents' perceptions about better coordination and collaboration among health care organizations, they were asked what they thought would result from health entities working together. As shown in Figure 21 lower costs, better patient care and better overall population health were the top three potentially improved outcomes. Respondents tended to be less inclined to believe that better care coordination would result in a need for fewer appointments or in more complete and accurate health records.

Figure 21: Potential Effects of Improved Collaboration among Health Entities



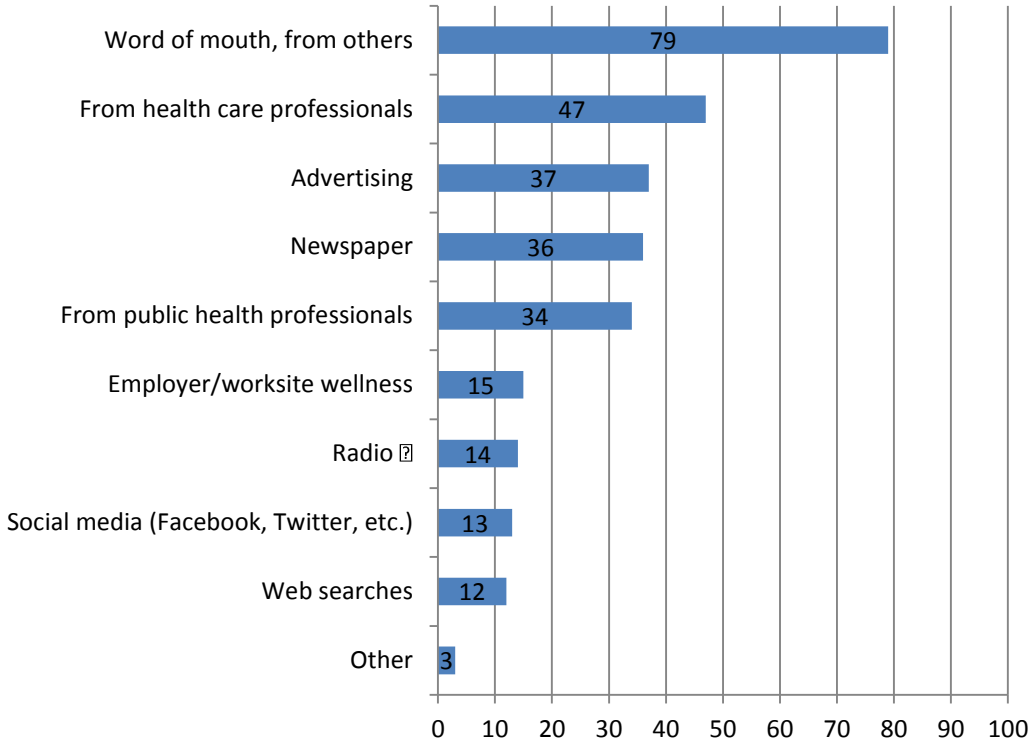
Residents also were asked if they had any suggestions for ways that health-related organizations could work together to provide better services and improve overall health in the area. Thirty-nine respondents offered suggestions. The most common response (N=10) was a recommendation for more coordination and less competition. A specific recommendation was to form a county/city health team with all entities engaged and invited to attend and meets on a regular basis. There were many comments (N=9) addressing the need for Altru and PCMH to work more cooperatively. The need for better communication between entities was the third most cited suggestion (N=7). Other suggestions made by more than one respondent include: More publicity of health services offered and education to the public (N=3).

Specific individual comments include:

- Hospital should work with Altru clinic better - not be so close-minded. Hospital refuses to coordinate.
- Altru has many specialty providers, it would be nice for those providers to be able to care for patients in PCHM.
- The clinic and hospital to work together for the benefit of the patients not their pockets.
- Work with Cavalier Co. CCHM Langdon.
- Less competition and more attitude towards helping others.
- Work together, there is almost a feeling of hostility from network to network. Stop duplication of services/resources like lab/xray.
- Our clinic (Altru) and hospital (PCMH) are seemingly competing all the time. Competing for services, employees, etc. I believe one health care facility in a town this size is all that is needed. The hospital (PCMH) does a great job meeting our health care needs.
- We should work toward a "healthy community" type of designation.
- More information provided to the general public on available services.
- Better communication among electronic health charts and providers; "all for one" mentality instead of "one for all".
- This is a trick question because as a hospital employee, I see the Altru Clinic, Cavalier, actively competing to have the hospital and it's services suffer in favor of referrals to Altru, Grand Forks, and also Altru Clinic, Cavalier, brings in competing specialty MD's to their clinic, when they know those services are already available through the hospital or CliniCare.

The survey revealed that, by a large margin, residents learned about available health services through word of mouth from, for example, friends, family, co-workers, and neighbors. Other common sources of information about health services included the health care professionals, advertising and from newspapers. Figure 22 shows these results.

Figure 22: Sources of Information about Health Care Services



Community Concerns

At the heart of this health needs assessment was a section on the survey asking survey-takers to review a wide array of potential community and health concerns in five categories and rank them each on a scale of 1 to 5, with 5 being more of a concern and 1 being less of a concern. The five categories of potential concerns were:

- community/environmental concerns
- concerns about health services
- physical, mental health, and substance abuse concerns
- concerns specific to youth and children
- concerns about the aging population

To differentiate the responses from the two groups of respondents and to more readily compare similarities and differences perceived among them**, community member responses are colored in blue** and **health care professional responses are colored in red.** These issues stood out as the most important community concerns, with a large gap between these issues and the next most-noted concerns.

Community Members:

1.	**Attracting & retaining young families**	**4.36**
2.	**Not enough jobs with livable wages**	**4.21**
3.	**Cost of health insurance**	**4.19**
4.	**Adequacy of health insurance**	**4.00**
5.	**Dementia/Alzheimer's disease**	**3.96**

Health Care Professionals

1.	**Adequacy of health insurance**	**4.71**
2.	**Diabetes**	**4.67**
3.	**Heart disease**	**4.67**
4.	**Cost of health insurance**	**4.56**
5.	**Cancer**	**4.56**

The ways in which these two groups ranked concerns is quite different. Community members were more concerned with community growth and economic concerns such as the cost and adequacy of health insurance. Similarly, health care professionals ranked adequacy of health insurance as their overall highest concern, but differed by prioritizing chronic diseases such as diabetes and heart disease as their second and third (tie) highest overall concerns. There was another tie among costs of health insurance and cancer for the fourth and fifth highest ranked concerns.

Looking for areas of overlap among the two groups shows the extent of mirroring in community perceptions, where both groups' responses align. The shared concern of adequacy and cost of insurance shows the extent of this perceived need. These parallel results show consistency in community perceptions. Moreover, it is important to acknowledge that this alignment bodes well for health care professionals since they may do more advocating for resources. The unified perceptions make these individuals valid spokespeople for the community.

The issues that received the next highest rankings among community members were:

- **Cancer (3.94)**
- **Cost of health care services (3.94)**
- **Availability of resources for family & friends caring for elders (3.94)**
- **Availability of resources to help the elderly stay in their homes (3.91)**
- **Changes in population size (increasing or decreasing) (3.86)**

The issues that received the next highest rankings among health care professionals were:

- **Dementia/Alzheimer's disease (4.44)**
- **Obesity/overweight (4.44)**
- **Not enough jobs with livable wages, not enough to live on (4.40)**
- **Cost of prescription drugs (4.38)**
- **Attracting and retaining young families (4.30)**

Again the shared focus on dementia and Alzheimer's disease, available resources for seniors, and cost of health care services and prescription drugs shows strength in the perceptions and gives credence to the findings.

Figures 23 through 32 illustrate these results.

Figure 23: CM Community/Environmental Concerns

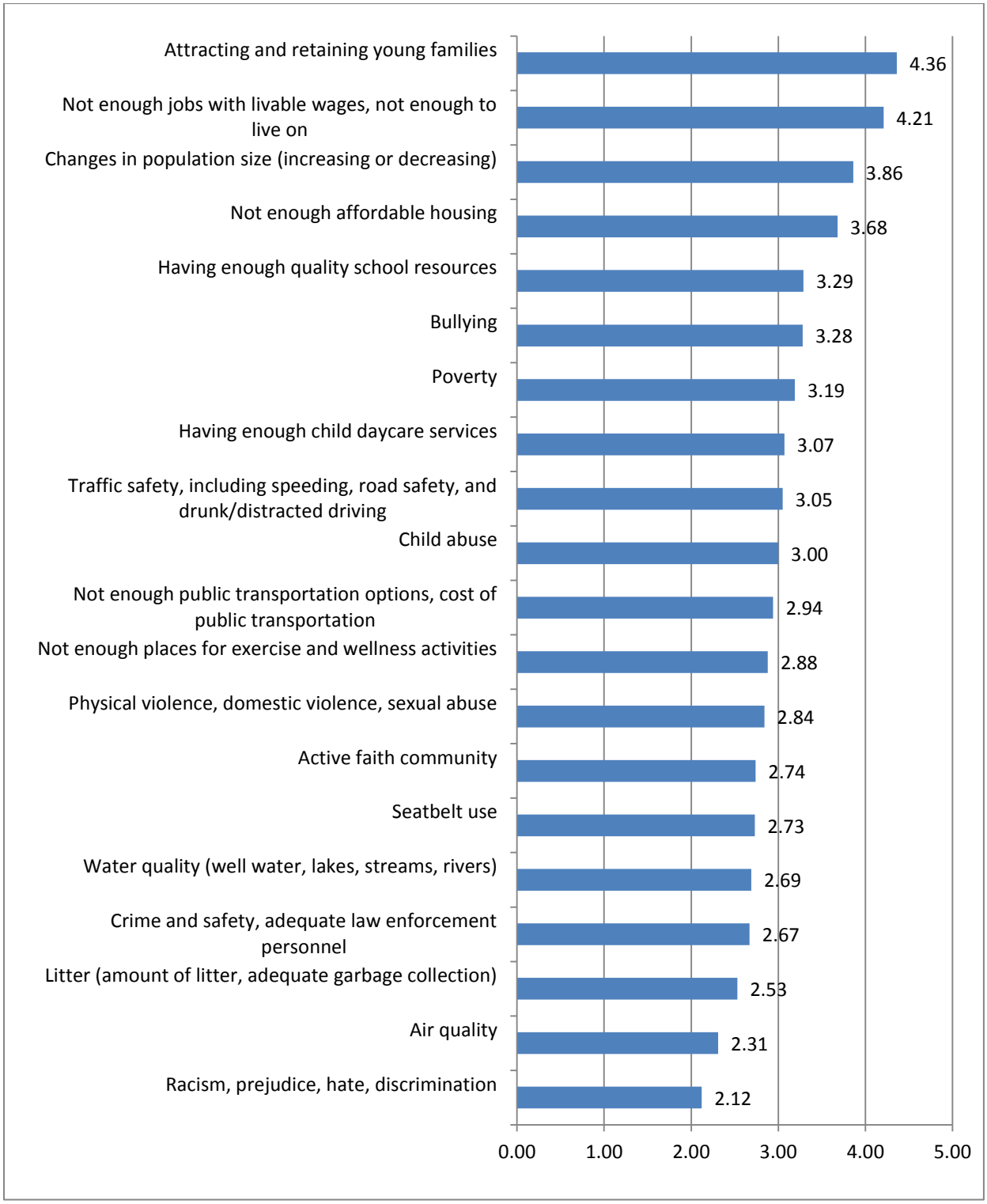


Figure 24: HCP Community/Environmental Concerns

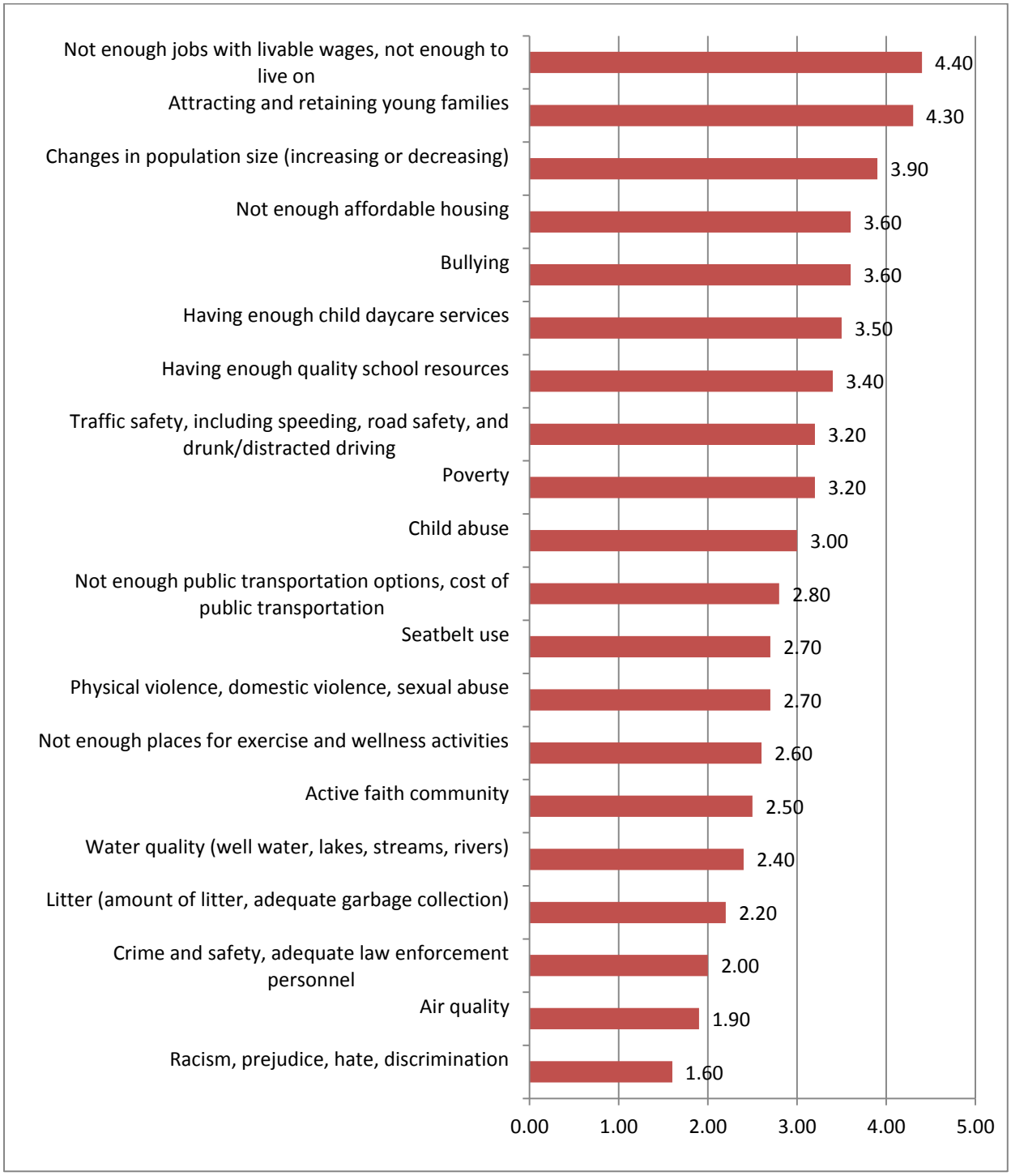


Figure 25: CM Concerns about Health Services

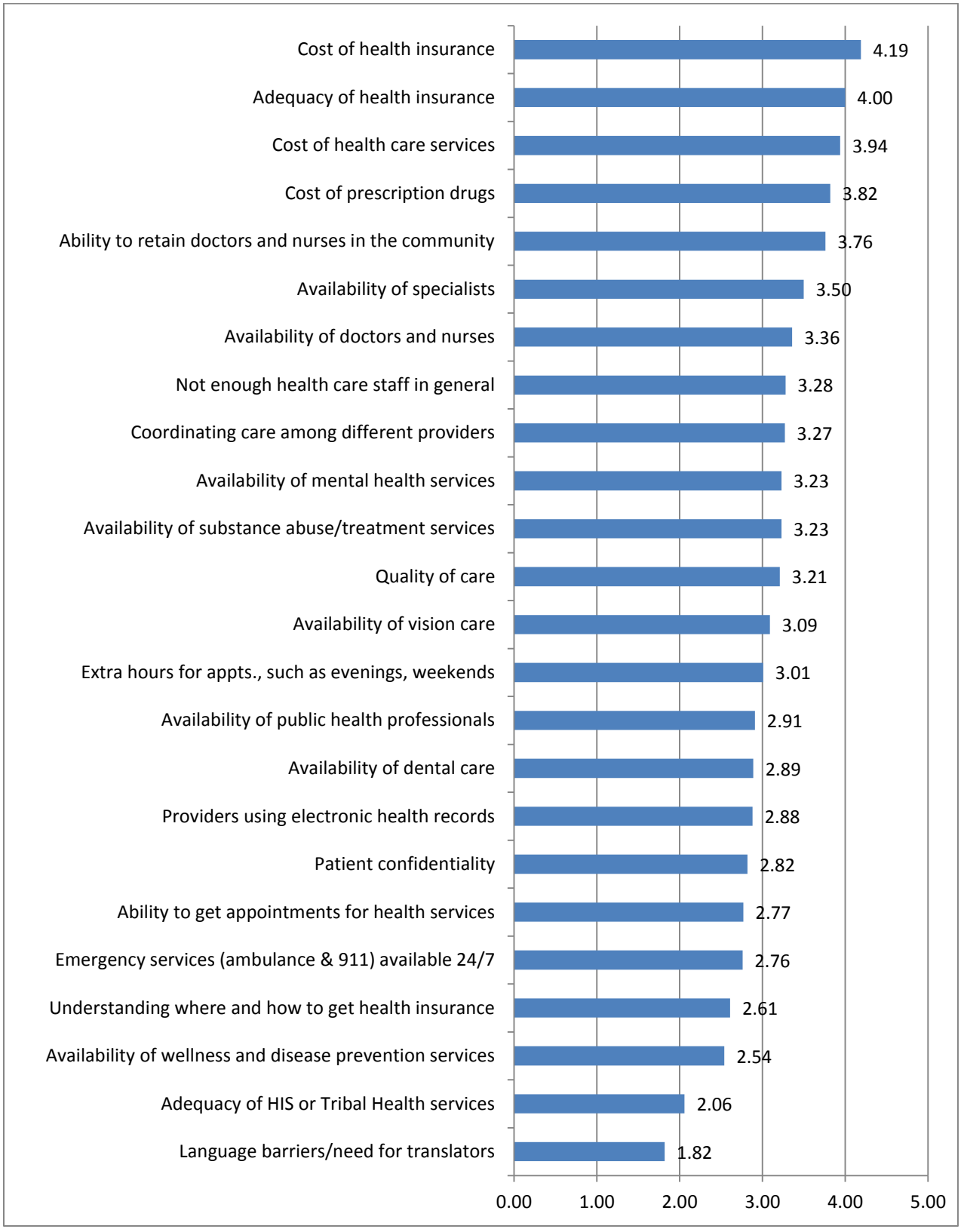


Figure 26: HCP Concerns about Health Services

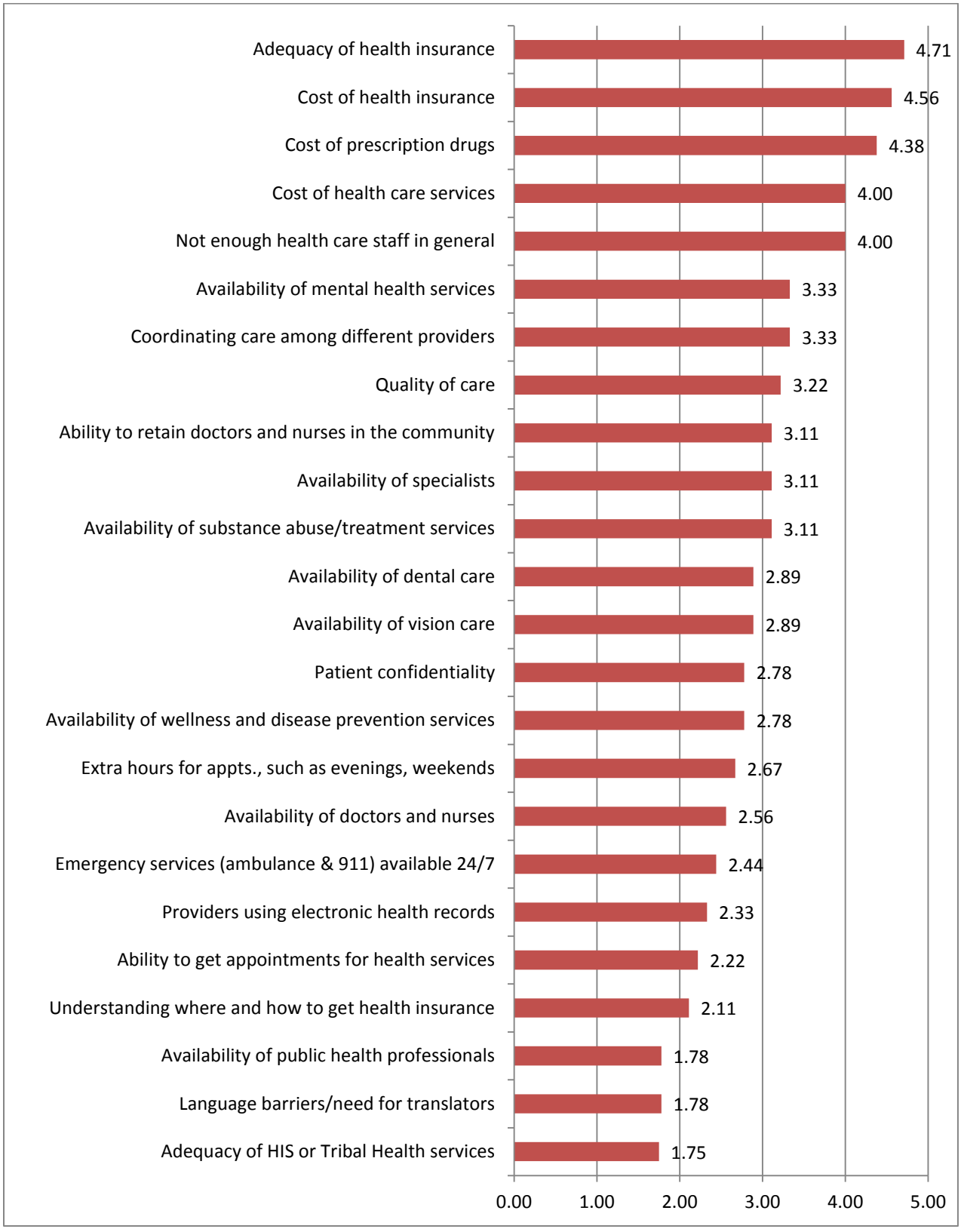


Figure 27: CM Physical, Mental Health, and Substance Abuse Concerns

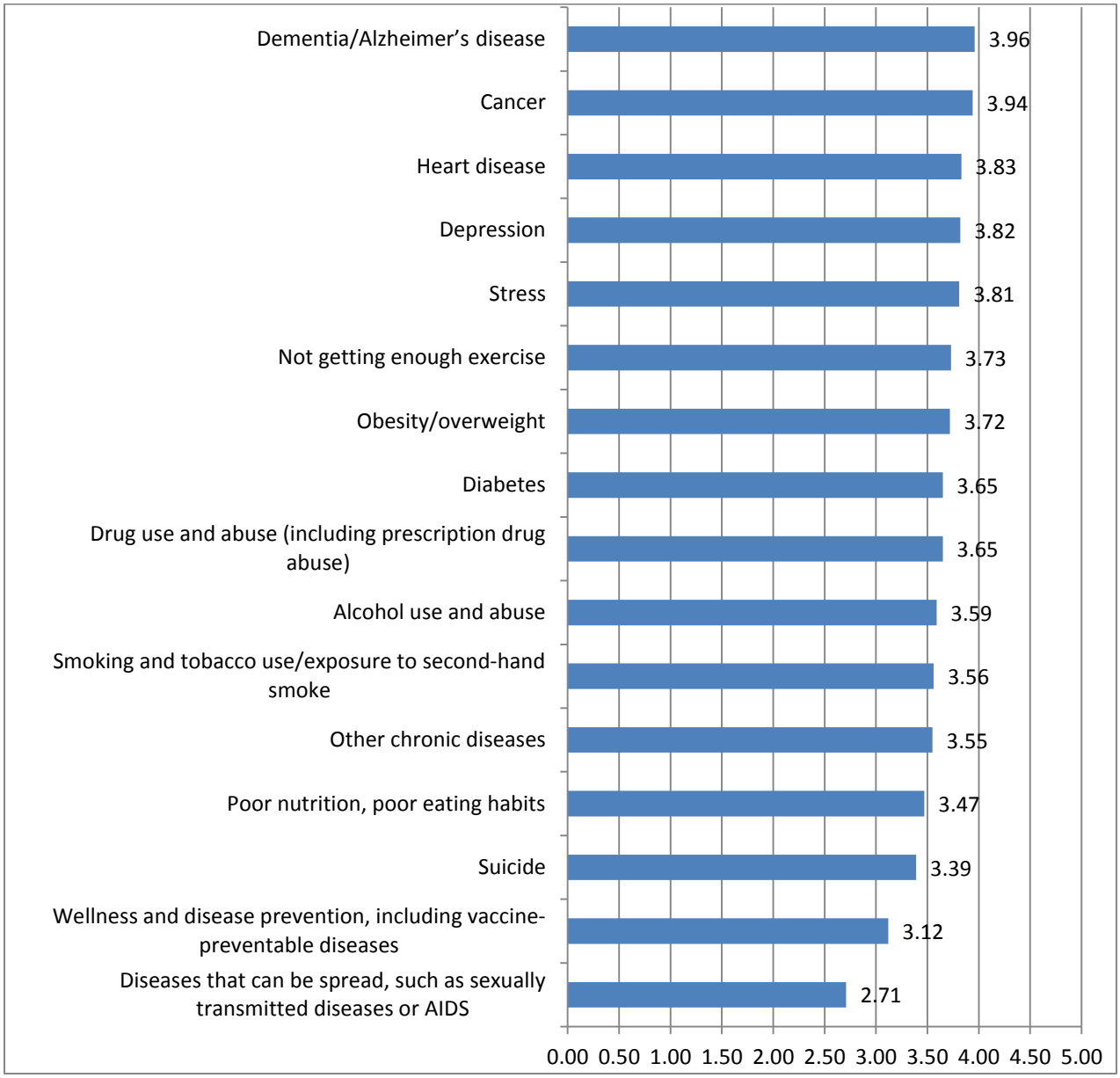


Figure 28: HCP Physical, Mental Health, and Substance Abuse Concerns

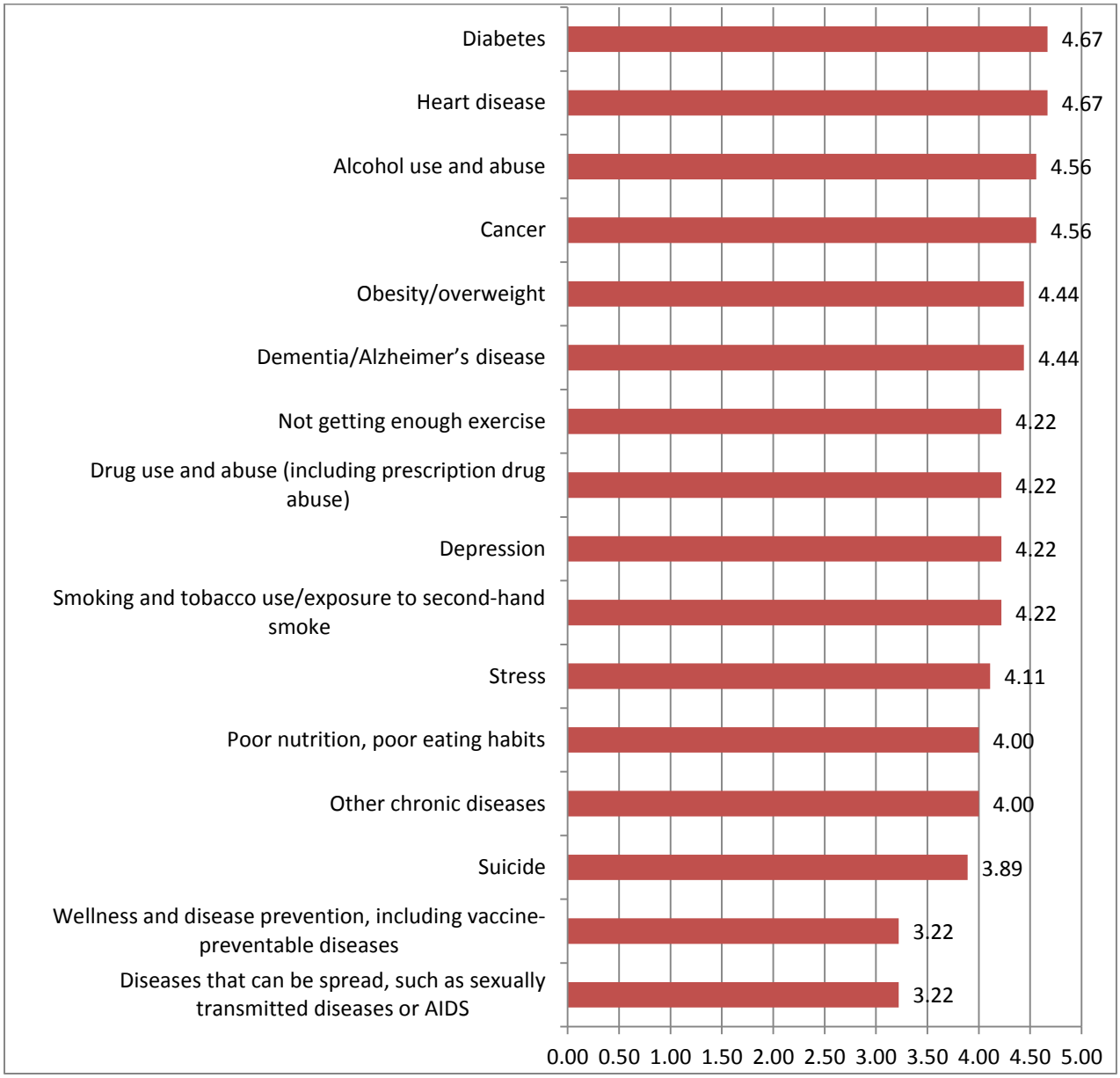


Figure 29: CM Concerns Specific to Youth and Children

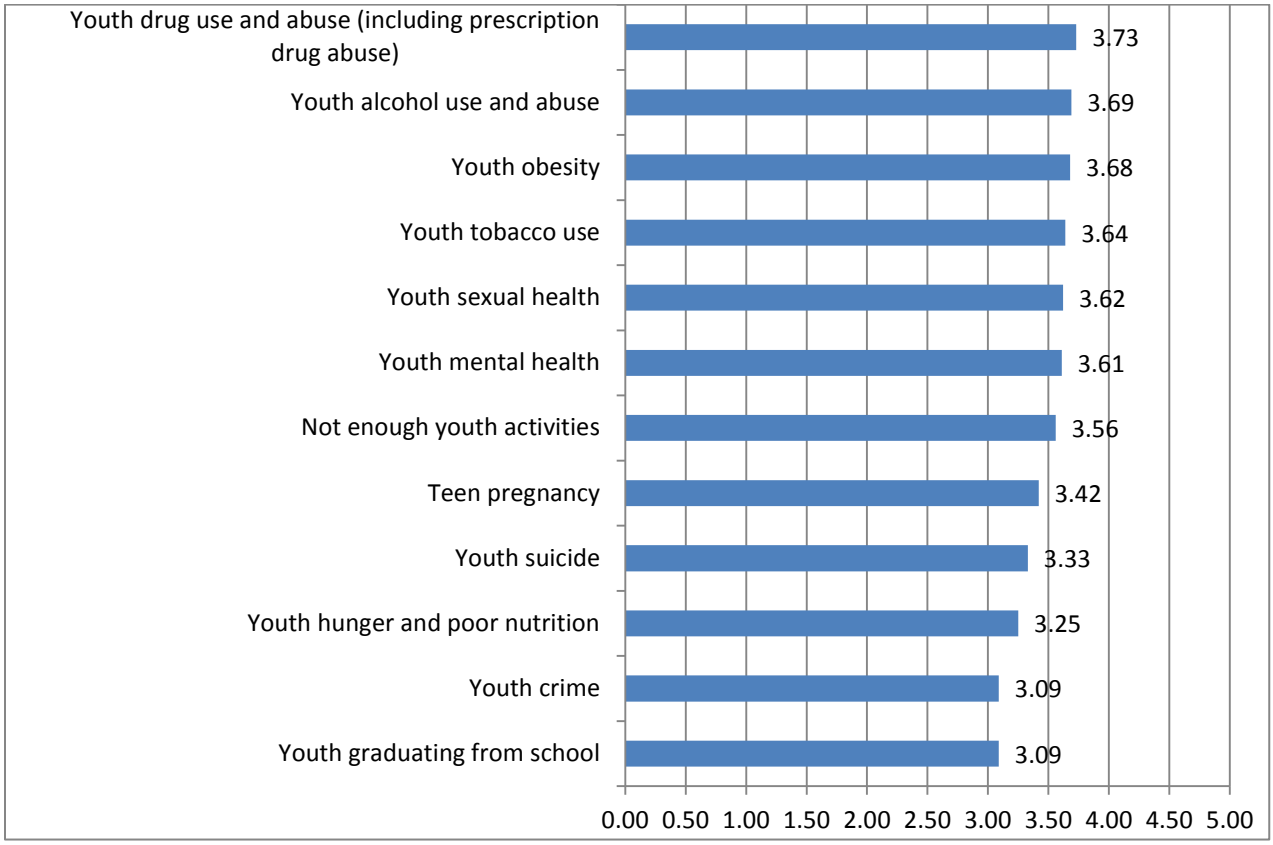


Figure 30: HCP Concerns Specific to Youth and Children

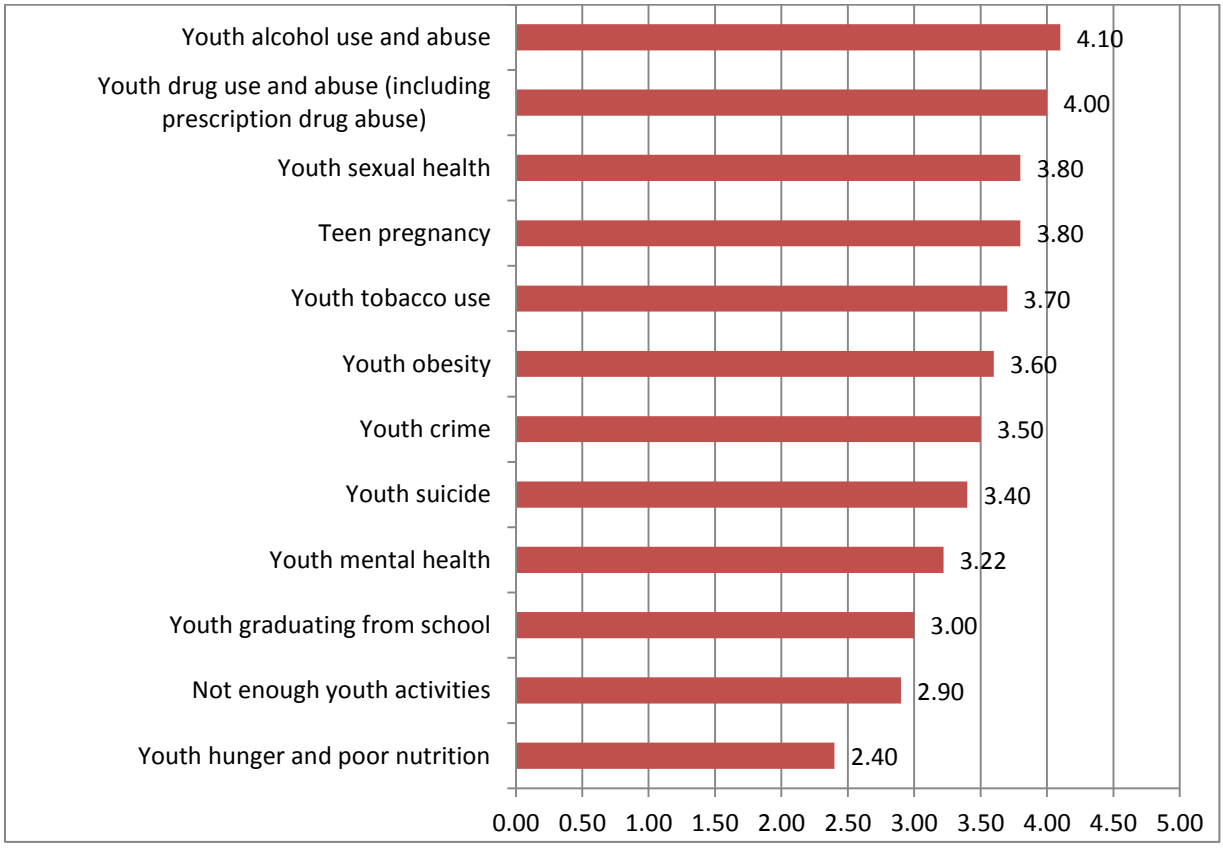


Figure 31: CM Concerns about the Aging Population

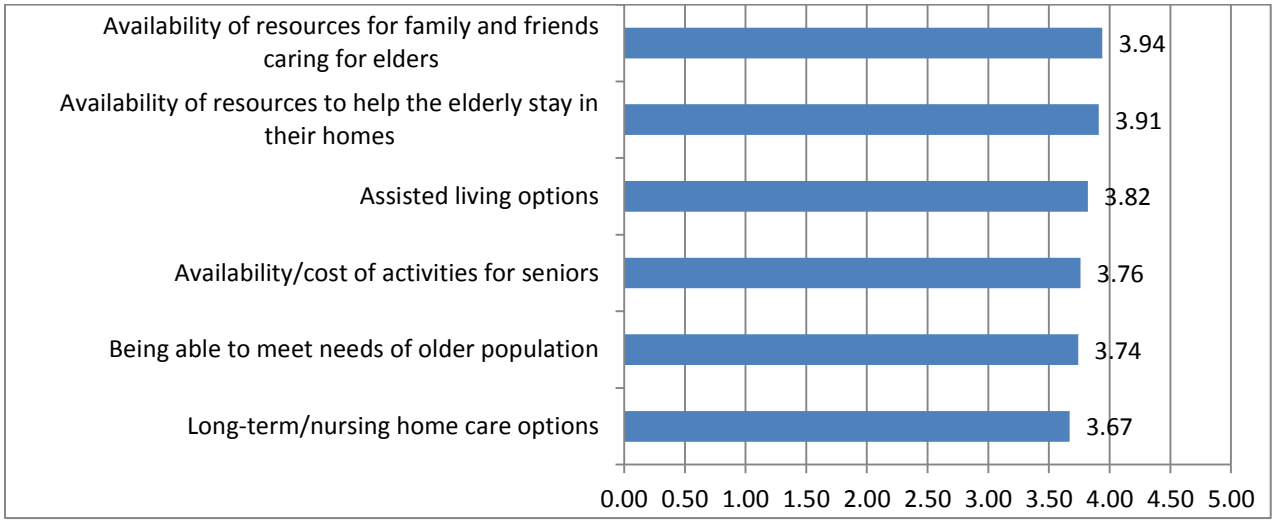
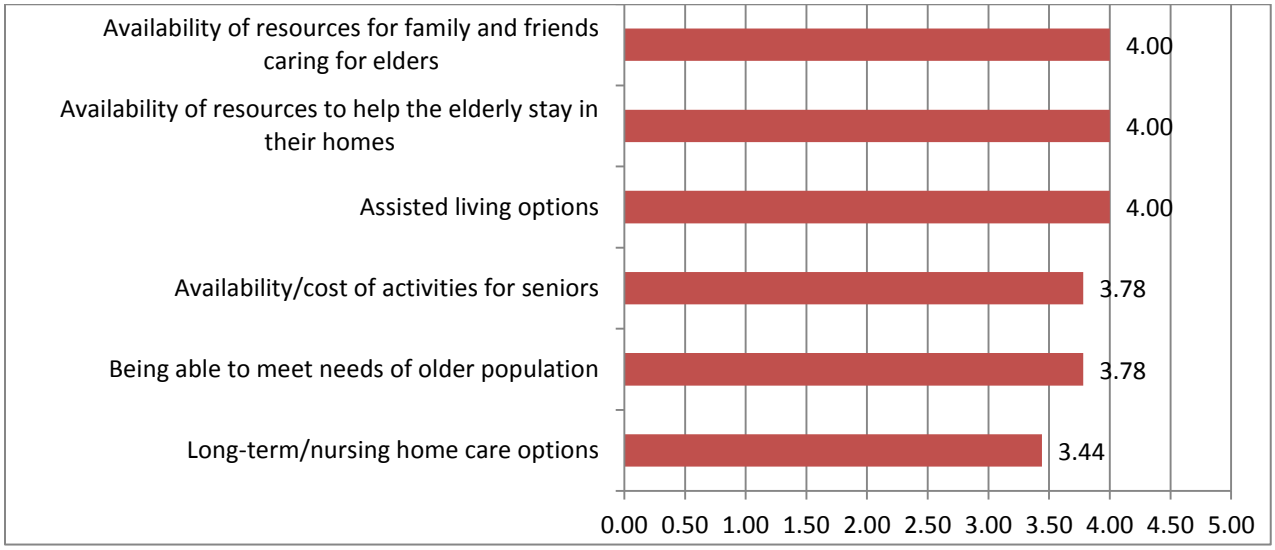


Figure 32: HCP Concerns about the Aging Population



Delivery of Health Care

The survey asked community members why they seek health care services close to home and why they go out of the area for health care needs. Health care professionals were asked why they think patients use services locally and why they think patients use services out of the area. Respondents were allowed to choose multiple reasons. Since the responses from both groups mirrored each other for these questions, these responses are reported in the aggregate.

Convenience (N=81) and proximity (N=77) topped the list of reasons that residents sought care locally, with familiarity with providers (N=60) also garnering a substantial number of responses.

With respect to the reasons community members seek health care services out of the area, the primary motivator for seeking care elsewhere was, by a considerable margin, for access to a needed specialist (N=74). Other oft-cited reasons for seeking care elsewhere were because of a referral (N=40) and perceived high quality of care (N=34). These results are illustrated in Figures 33 and 34.

Figure 33: Reasons Community Members Seek Health Care Services Close to Home

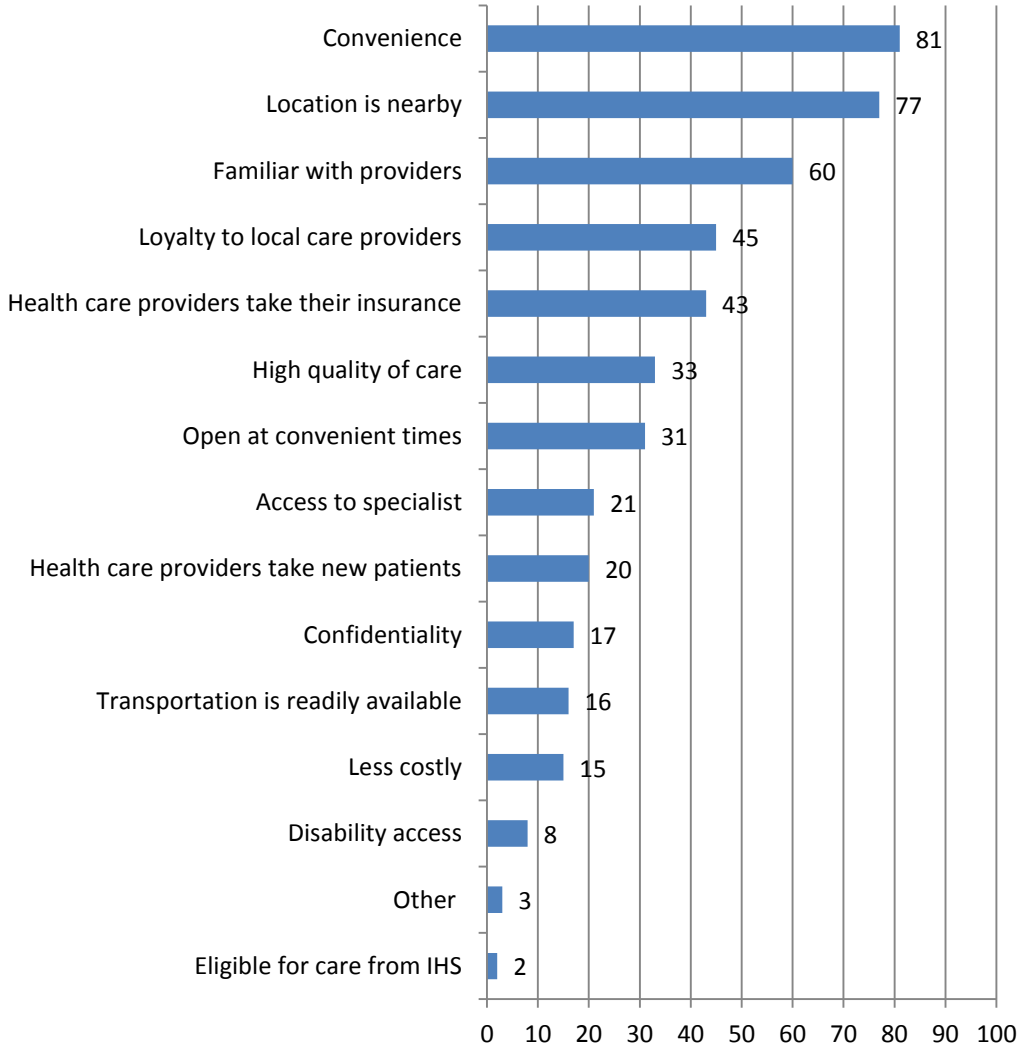
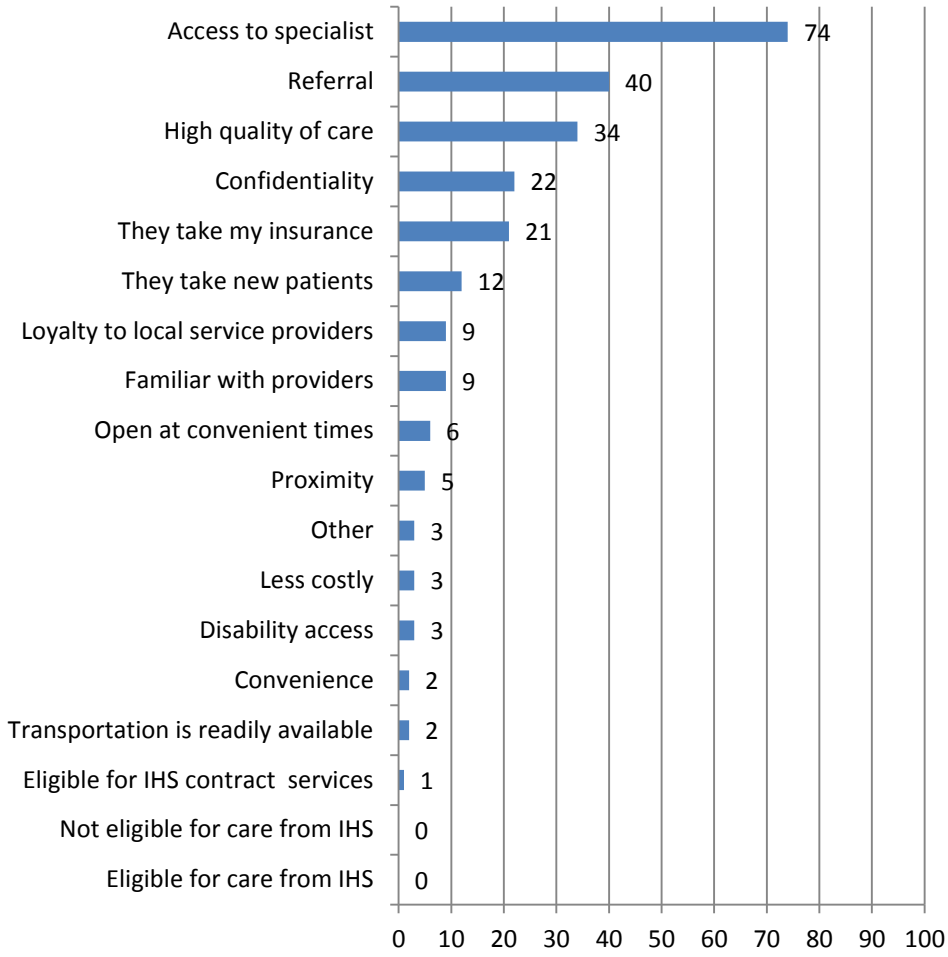


Figure 34: Reasons Community Members Seek Services Out of the Area



In an open-ended question, respondents were asked to share the specific health care services that they need to travel out of the area to receive. Fifty-nine respondents provided an answer. As with the multiple choice question, the most common reason to travel out of town was to see a specialist (N=11). Other common reasons were:

- dentists (N=9)
- eye doctor (N=9)
- obstetrics and gynecological services (N=9)
- cardiology services (N=9)
- surgery (N=7)
- pediatrician (N=7)
- mental health services (N=4)

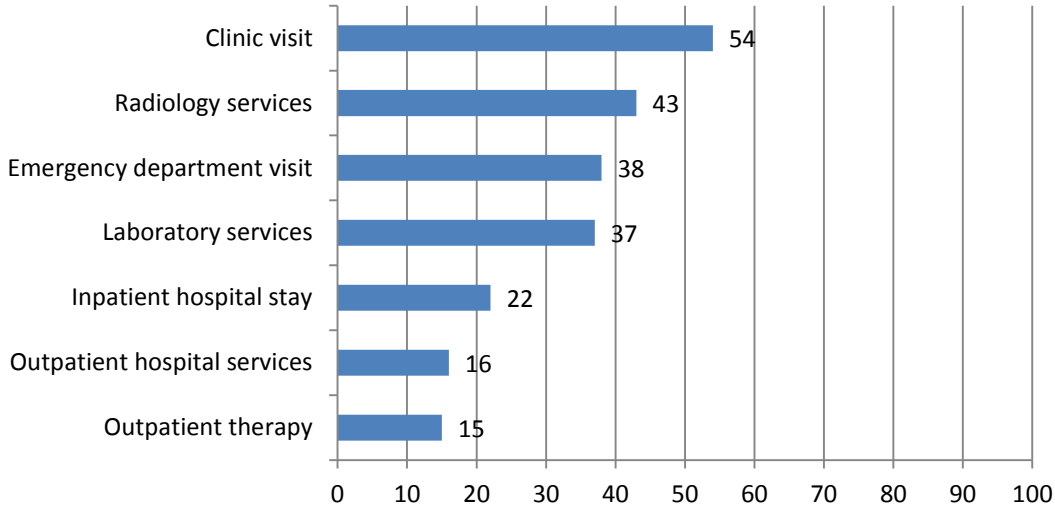
The survey also solicited input about what health care services should be added locally. Forty-four respondents provided suggestions. The most commonly requested service was for a clinic (N=7), with suggestions focusing on a walk-in clinic in mornings before people go to work and an urgent care clinic open on

Sundays. OB/GYN was the second most often cited request (N=6), especially a female provider. A request for mental health services encompassing children's mental health and face-to-face appointments with counselors and psychologists was the third most frequently expressed service (N-5).

Other commonly requested services were for dental and vision (N=4) pediatrics (N=3), and health education, including weight loss and athletic training (N=3).

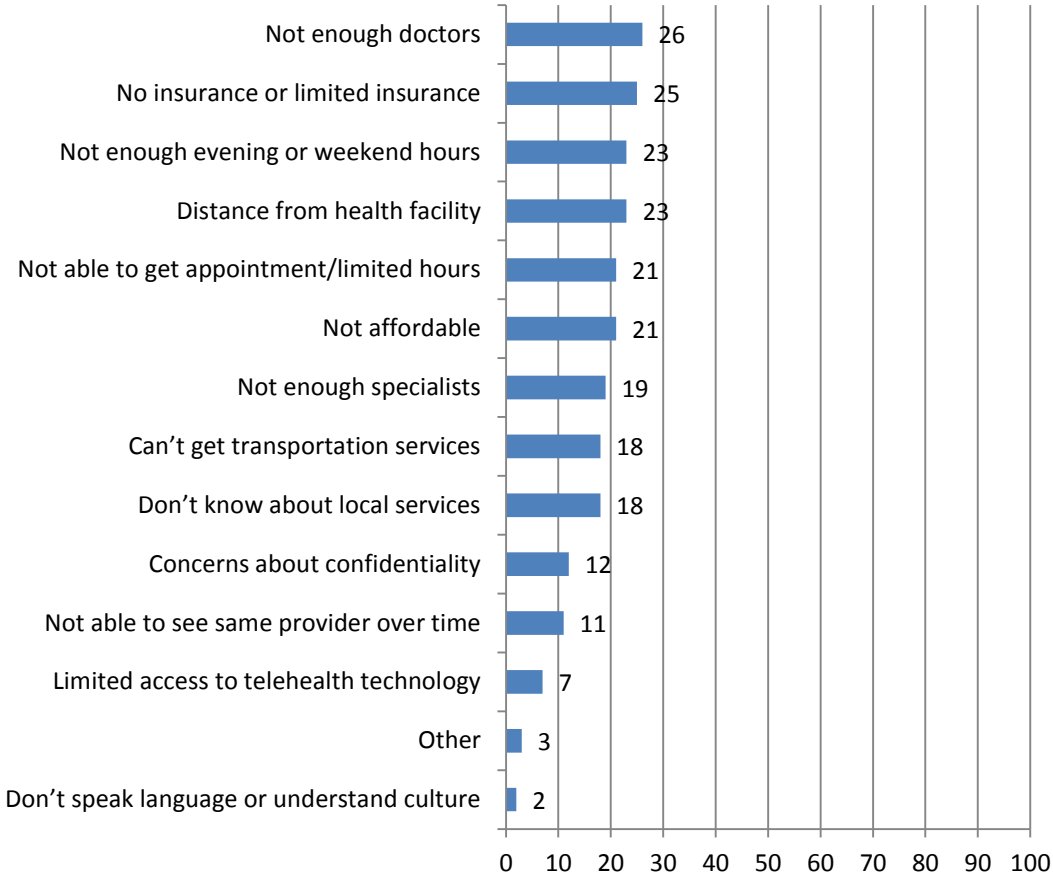
As shown below in Figure 35, when asked what services they or a family member had used within the last year at PCMH, survey-takers pointed to clinic visits (N=54), radiology services (N=43), and emergency department visits (N=38) as the most common interactions with PCMH.

Figure 35: Use of Services at PCMH



The survey asked residents what they see as barriers to that prevent them or others from receiving health care. Echoing the results of other survey inquiries, the most prevalent barrier perceived by residents was not having enough doctors (N=26). After access to doctors, the next most commonly identified barriers were no insurance or limited insurance (N=25), not enough evening or weekend hours for medical appointments and distance from health facility (N=23). Figure 36 illustrates these results.

Figure 36: Perceptions about Barriers to Care



Preventive Care and Public Health Services

To gauge the impact and effectiveness of PCPH services in the community, the survey included questions specific to public health services. The results revealed that a substantial majority of respondents or their family members had not had at least one interaction with PCPH within the previous year. Of those respondents who had used PCPH's services the most common services, by a wide margin, was influenza shots (N=30). Blood pressure checks (N=16) and immunizations (N=15) were also commonly used services. These results are shown in Figures 37 and 38.

Figure 37: Interaction with Pembina County Public Health in Last Year

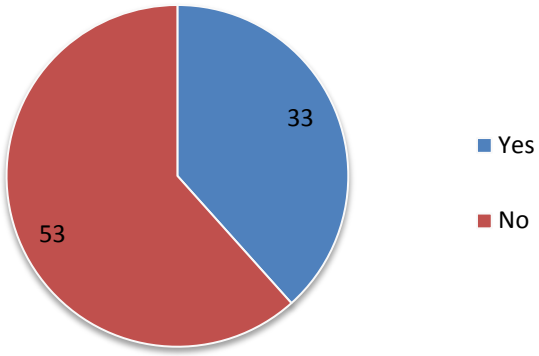
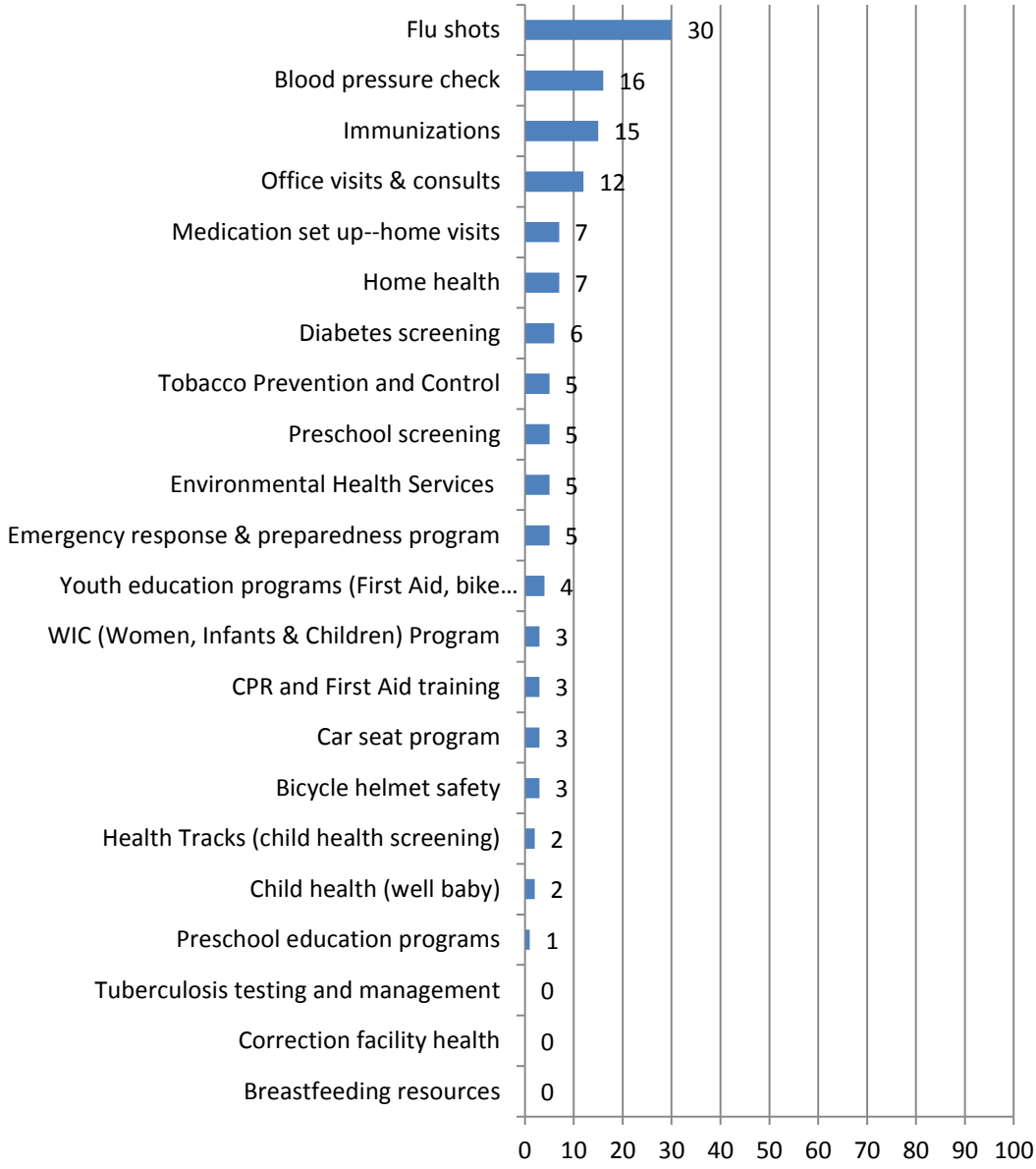


Figure 38: Use of Pembina County Public Health Services



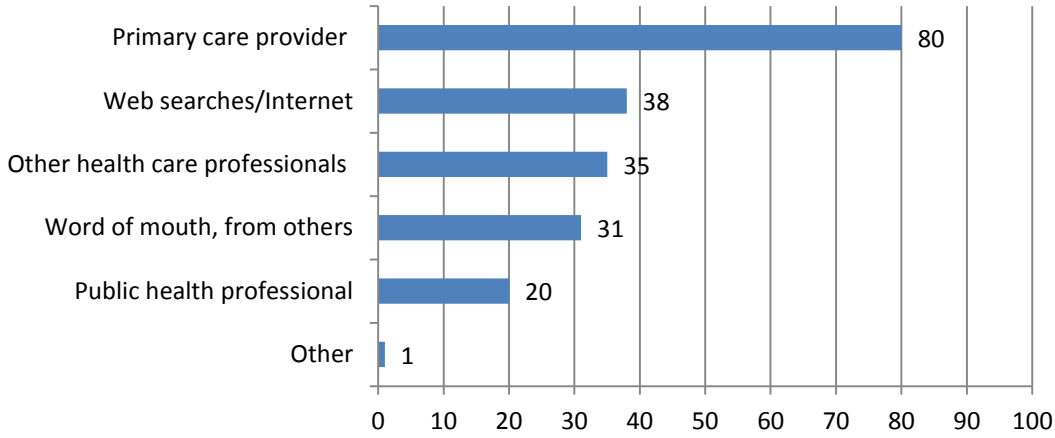
In an open ended question respondents were asked what interactions they had with PCPH. Of the 28 responses, the majority of them indicated they had received immunizations and shot records as well as medication set up. Specific comments testify to the value of these services:

- Uncle has meds set up every 2 weeks, very important
- Home health nurse stops to check meds
- Nurse provider services every 2 weeks. Glad to have it close, it's been good.

Other public health services used that are not captured in Figure 38 include parenting classes, migrant program, radon kits, diabetes check, school visits and general information. Other comments reveal confusion about what services PCPH offers. Respondents confused public health services with hospital services. Two respondents talked of being in the hospital or E.R. and two talked of receiving a flu shot from Altru Clinic or Clinicare. Three others expressed they had no idea what services public health offers.

Survey-takers also were asked where they turn for trusted health information. Overwhelmingly, residents identified their primary care provider (N=80) as the primary source of trusted health information. As shown in Figure 39, respondents also relied on other web searches/the Internet (N=38), and health care professionals ((N=35) for health-related information.

Figure 39: Where Turn for Trusted Health Information



Pembina County Memorial Hospital Foundation

Community members were asked if they were aware of PCMH's Foundation, which exists to promote, develop, and expand support for PCMH and Wedgewood Manor. A vast majority of respondents were aware of the Foundation, as shown in Figure 40. Asked of the ways they had supported the Foundation, the most popular outlets of support came in the form of a memorial or honorarium (N=11) followed by cash or stock gift (N=10). The various channels of support are illustrated in Figure 41.

Figure 40: Awareness of PMCH's Foundation

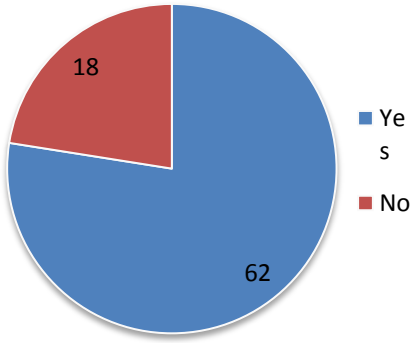
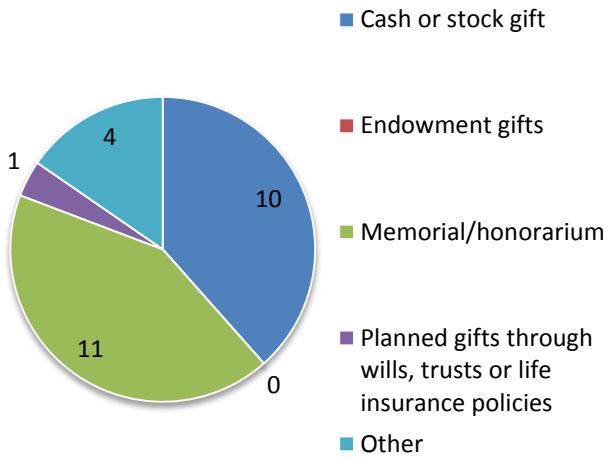
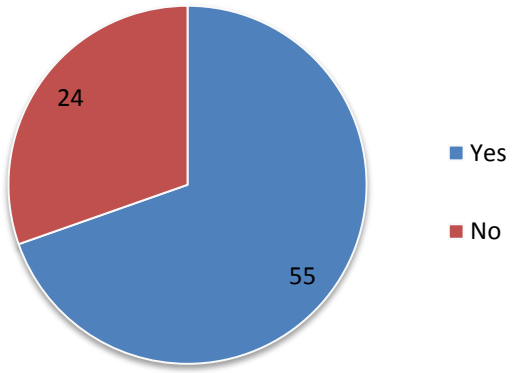


Figure 41: Support of PCMH's Foundation



Finally, the survey inquired if respondents were aware of CliniCare's hours on Saturdays from 9-3pm. The majority indicated they were aware of the extended hours, as demonstrated in Figure 42 below.

Figure 42: Awareness of CliniCare's Saturday Hours



Other Concerns and Suggestions to Improve Local Health

The survey concluded with an open-ended question that asked, "Overall, please share concerns and suggestions to improve the delivery of local health care." Fewer residents responded to this question than to other open-ended survey questions, with a total of 18 responses. Respondents shared a wide range of concerns and advice. One issue that came up numerous times (N=4) had to do with cooperation among Altru and PCMH. Respondents expressed a need for the two organizations to improve their relationship and to work together to benefit the community and stay independent. A need for more professionalism, technology and services for seniors were also expressed. Other comments expressed satisfaction with health care delivery.

Specific comments included:

- Overall I believe Pembina County is fortunate to have a great Public Health Department and a Wonderful Health Care Facility. We have a number of options for quality health care.
- Would like to see clinic/Altru open M-F (all day) and a Dr. available.
- If this town DOES NOT grow and keeps losing people our health care facility will be in jeopardy. We need new business, industry, better

shopping, better eating place, more variety. We need new council members that will let new business in town. It's time for changing or this town will be like a graveyard.

- Keep up the good work.
- Shared strategy for improving health and treatment for chronic diseases.
- Keeping doctors and health care providers and good workers in Pembina County to care for the needs of the community.
- Walk-in clinic in mornings or evenings. Urgent care vs. ER for less emergent things so not billed for ER visit. Rotation of ER doctors so not eh same on all the time. Get an "ask a nurse" line.
- Improve the computer program system and software for doctors to use and communicate with. E-scripting has failed from Dr. to pharmacy several times for me, personally.
- Improve the quality of the physician providers and the mid-level providers. Improve the professionalism of staff.
- I believe the overall healthcare in Cavalier is doing very well. The community is fortunate to have a full service hospital. The biggest area of concern is a lack of pediatricians despite what appears to be a growing under 18 demographic and support services for seniors.
- I am pleased with the quality of health care locally. There is access 24/7 to what people truly have a need for.
- There needs to be better quality of care for elderly in nursing home facilities and less bullying of employees.

Findings from Key Informant Interviews and Focus Group

Questions about the health and well-being of the community, similar to those posed in the survey, were explored during a focus group session with the Community Group as well as during key informant interviews with community leaders and public health professionals. The themes that emerged from these sources were wide-ranging, with some directly associated with health care and others more rooted in broader community matters. Generally, overarching thematic issues that developed during the interviews and focus group can be grouped into five categories (listed in no particular order):

1. Mental health including drug & alcohol use and abuse
2. Lack of available resources to help elderly stay in their homes
3. Not enough public transportation options
4. Not enough jobs with livable wages/not enough to live on
5. More collaboration between PCMH and Altru

A more detailed discussion about these issues follows:

1. Mental health including drug & alcohol use & abuse

Mental health was a broad concern that encompassed iterations including use and abuse of alcohol and drugs for all age demographics, the need for substance abuse treatment centers and adult depression. These concerns were also expressed in a variety of ways.

The concern for alcohol abuse was mentioned in each age bracket: for youth, adults and elderly. Substance abuse in general was noted as a challenge facing the community. There is a strong level of acceptance associated with alcohol and the level of binge drinking is perceived to be rising. Some respondents said drinking was part of the socialization process; the acceptable social outlets are church and the bar. Some attributed teenage drinking to the lack of things to do.

Illegal drugs like meth and marijuana were of concern for the youth population whereas prescription drug abuse was a concern for the aging population. As one community member explained the pill-popping norm of the elderly, "Everything is fixed by a pill." Others expressed concern with the resale value of prescription drugs. Known as "frequent flyers" some users quickly refill their prescription, giving excuses that they lost the bottle, flushed the pills down the toilet or had a bad pain day and consumed them all, only to resell them on the street. To help

monitor this problem it was noted that electronic health records will help curb the frequent filling of prescriptions.

A strong need for more mental health counseling services was expressed. Both the unavailability of mental health services and substance abuse/treatment services came up as frequent concerns about health services.

Depression was another oft noted concern for adults. Additionally, respondents said there is a large prevalence of Seasonal Affective Disorder. When discussing concerns specific to youth and children, both youth alcohol use and abuse and youth mental health were frequently expressed. Some participants commented that many kids are home alone while their parents are working two jobs. Youth in turn are acting more like adults, taking on more responsibility and are under lots of pressure. Increasingly, counseling services are being requested.

2. Lack of available resources to help elderly stay in their homes

Many respondents expressed a need for home health services that would enable seniors to stay in their own homes. According to the 2010 census, Pembina County is seven points higher than the state average for the percentage of persons 65 years and older and this aging population does have unique health care needs.

Specifically, it was noted that these services should be self-pay, not Medicaid/Medicare as many potential clients do not qualify for those programs. A gap was noted between home care and support systems, between insurance and private pay. Often what is desired is a personal medical assistant, someone to schedule and accompany seniors to appointments and help them follow out physician's instructions. Also, there was a need for a shopping companion and personal care assistant, someone who could help with prescription refills and dosages. This service does not exist so public health is the default organization. However, there is a quality assurance problem as public health professionals are not trained specifically for this line of work.

There was also a perception that seniors are reluctant to ask for help for fear of seeming incompetent. Pride was another deterrent. Rather than risk losing their independence, seniors refrain from asking for help however there is a strong need for more assisted living options and other resources. On the opposite side, it was perceived that there was a lack of interest by family members in caring for their aging parents. This apathy emphasizes the need for more available resources.

3. Not enough public transportation options

Transportation was the overwhelmingly most frequently cited concern for the aging population. While some respondents praised the availability and flexibility of public transportation as a community asset, it was also noted that the cost of the transportation was prohibitive; a round trip fare of $50 to go to Grand Forks is expensive. A specific request for public transportation available on weekends was made, adding that this offering may reduce some mental health needs by encouraging socialization and minimizing isolation. Others commented that more advertising of public transportation was needed to increase community awareness.

On a related note, there was a desire for extra hours for appointments, such as evenings and weekends, however without the necessary transportation offerings in place, this offering is moot.

4. Not enough jobs with livable wages/not enough to live on

This concern was expressed in tandem with the need to attract and retain young families. These concerns go hand-in-hand as a weak economy has negative effects on recruitment. Secondary data support these perceptions as Pembina County is suffering from a shrinking population (-3.1%), despite the ballooning statewide population thanks to the oil boom. Both the levels of unemployment (6.5%) and the number of children living in poverty (8%) have been increasing over the past decade.

Also expressed was a concern that jobs don't pay enough to live on, which requires some people to work two or three jobs. As discussed earlier, the long hours away from home have negative effects on families and may be correlated to substance abuse.

The aging population, exacerbated by the fact that young families are not moving into the community, makes it hard to fill volunteer positions. Moreover, with adults working multiple jobs they have little time or energy to volunteer. There is need for people to step up in leadership and board positions. Given the limited pool, there is a concern that those serving in the positions may not be the best qualified.

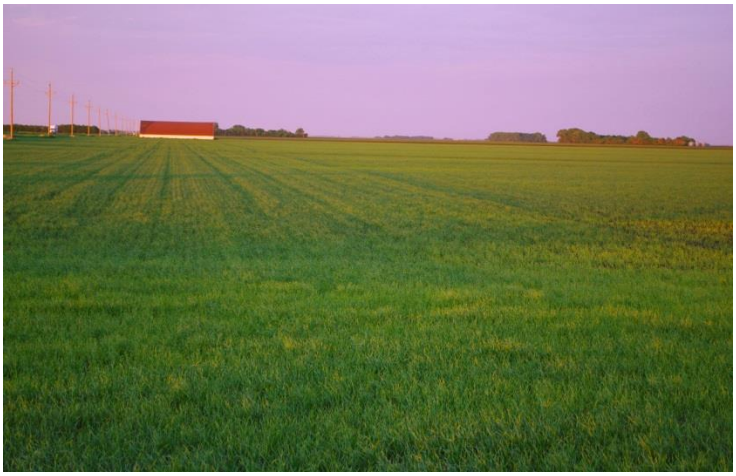
5. More collaboration between PCMH and Altru

It was noted that there is bad blood between PCMH and Altru Clinic, who are located next door to each other in Cavalier. Although there are signs of willingness to collaborate with new people in leadership roles at both facilities, patients are discouraged. Change is hard to come by and accept in small towns. It was noted that even if the two facilities are currently venturing down a positive path, it is hard for community members to get the bad taste out of their mouths. So far, community members have not seen the benefits of collaboration and the two "must take small steps to prove to the community that they can work together."

The need to work as a team was repeatedly expressed. It is confusing for other health care providers to know where to refer patients. Ideas for greater communication, monthly meetings, and forming a team were brainstormed to better the delivery of health care.

Some respondents would like to see less territorial inclinations and more neutral turf in terms of health care services. It was expressed that there needs to be more give and take among the two facilities. For example, Altru may need to pull back on some ancillary services and vice versa. Other models for management were also suggested, where the hospital may employ all physicians and Altru provide all labs, x-rays and screenings.

Community members stated they liked having options but there is a need to erase duplicative services and look at where both PCHM and Altru offer the same service and compile them. With the redundancy reduced, there may be resources available to invest in new services. Dialysis, grief counseling and oncology were expressed as desired new services.



Priority of Health Needs

The Community Group held its second meeting on August 26, 2014. Twelve members of the group attended the meeting. A representative from the Center for Rural Health presented the group with a summary of this report's findings, including background and explanation about the secondary data, highlights from the results of the survey (including perceived community health and community concerns, why patients seek care at PCMH, community collaboration, and barriers to care), and findings from the focus group and key informant interviews.

Following the presentation of the assessment findings, and after careful consideration of and discussion about the findings, all members of the group were asked to identify on a ballot what they perceived as the top five community health needs. Group members were advised they could consider a number of criteria when prioritizing needs, such as a need's burden, scope, severity, or urgency, as well as disparities associated with the need and the overall importance the community places on addressing the need. The results were totaled, and the concerns most often cited were:

- Cost & adequacy of health insurance
- Mental health, including alcohol use & abuse
- Elevated rate of adult obesity
- Not enough jobs with livable wages
- Lack of resources for elderly to stay in their homes

Based on the Community Group's feedback about the prioritization of community health needs, the needs were categorized into four groups: those receiving five or more votes (listed above), those receiving three to four votes, those receiving one or two votes, and those receiving no votes. A summary of this prioritization may be found in Appendix G.

Appendix A1 – Community Member Survey Instrument

Pembina County Memorial Hospital

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

Public Health
Prevent. Promote. Protect.

Pembina County Community Health Survey

Pembina County Memorial Hospital and Pembina County Health Department are interested in hearing from you about area health issues and concerns. The focus of this effort is to:

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

Please take a few moments to complete the survey. If you prefer, you may take the survey online at **http://tinyurl.com/Pembinacountysurvey** . Surveys will be tabulated by the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences. Your responses are anonymous, and you may skip any question you do not want to answer. Your answers will be combined with other responses and reported only in total. If you have questions about the survey, you may contact Karin Becker at 701.777.4499.

Surveys will be accepted through June 27, 2014. Your opinion matters – thank you in advance!

Community Assets and Collaboration

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

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

☐	Community is socially and culturally diverse or becoming more diverse	☐	People who live here are involved in the community
☐	Feeling connected to people who live here	☐	Sense that you can make a difference through community engagement
☐	Forward-thinking ideas (social values, government)	☐	Tolerance, inclusion, open-minded
☐	Government is accessible	☐	Other (please specify)_____
☐	People are friendly, helpful, supportive		

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

☐	Downtown and shopping (close by, good variety, availability of goods)	☐	Public services and amenities
☐	Health care	☐	Public transportation
☐	Opportunities to learn and/or go to college	☐	Restaurants and healthy food
☐	Quality school systems and programs for youth	☐	Other (please specify)_____

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

☐	Family-friendly; good place to raise kids	☐	Job opportunities or economic opportunities
☐	Healthy place to live	☐	Safe place to live, little/no crime
☐	Informal, simple, laidback lifestyle	☐	Other (please specify)_____

Q4. Considering the ACTIVITIES in your community, the best things are (choose up to THREE):

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

Q5. Considering the GEOGRAPHIC SETTING in your community, the best things are (choose up to THREE):

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

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

_____

_____

Q7. What are the major challenges facing your community?

_____

_____

Q8. For each choice on the next page please rank the level of collaboration, or how well these groups work with others in the community, on a scale of 1 to 5, with 1 being no collaboration (not working well with others) and 5 being excellent collaboration (working well with others).

Community Collaboration	No collaboration				Excellent collaboration	Don't Know/Not Applicable
	1	2	3	4	5	
Business and industry						
Clinics						
Economic development organizations						
Emergency services, including ambulance and fire						
Health and human services agencies						
Hospital(s)						
Indian Health Service						
Law enforcement						
Long term care, including nursing homes and assisted living						
Other local health providers, such as dentists and chiropractors						
Pharmacies						
Public Health						
Schools						
Tribal Health						

Q9. Do you believe that health-related organizations in the community are working together to improve the overall health of the area population?

- ☐ No
- ☐ Yes

Q10. Which, if any, of the following do you think would result from better collaboration among health care providers and health-related organizations? (Choose ALL that apply.)

- ☐ Better customer service
- ☐ Better patient care
- ☐ Better overall health of the area's population
- ☐ Coordination of appointments
- ☐ Other (Please specify)_____
- ☐ Less duplication of care
- ☐ Lower costs
- ☐ More complete and accurate health records
- ☐ Need for fewer appointments

Q11. What suggestions do you have for health-related organizations to work together to provide better services and improve the overall health of the area population?

_____

_____

Q12. Where do you find out what health services are available in your area? (Choose ALL that apply.)

- ☐ Advertising
- ☐ From public health professionals
- ☐ Indian Health Service
- ☐ Newspaper
- ☐ Radio
- ☐ Word of mouth, from others (friends, neighbors, co-workers, etc.)
- ☐ From health care professionals
- ☐ Social media (Facebook, Twitter, etc.)
- ☐ Tribal health
- ☐ Web searches
- ☐ Employer/worksite wellness
- ☐ Other (Please specify)_____

Community Concerns

Q13. Regarding the conditions in your community, in the following series of categories please rank each of the potential concerns on a scale of 1 to 5, with 1 being less of a concern and 5 being more of a concern:

Community/environmental concerns	Less of a concern				More of a concern
	1	2	3	4	5
Active faith community					
Attracting and retaining young families					
Not enough jobs with livable wages, not enough to live on					
Not enough affordable housing					
Poverty					
Changes in population size (increasing or decreasing)					
Crime and safety, adequate law enforcement personnel					
Water quality (well water, lakes, streams, rivers)					
Air quality					
Litter (amount of litter, adequate garbage collection)					
Having enough child daycare services					
Having enough quality school resources					
Not enough places for exercise and wellness activities					
Not enough public transportation options, cost of public transportation					
Racism, prejudice, hate, discrimination					
Seatbelt use					
Traffic safety, including speeding, road safety, and drunk/distracted driving					
Physical violence, domestic violence, sexual abuse					
Child abuse					
Bullying					

Concerns about health services	Less of a concern				More of a concern
	1	2	3	4	5
Ability to get appointments for health services					
Extra hours for appointments, such as evenings and weekends					
Availability of doctors and nurses					
Availability of public health professionals					
Ability to retain doctors and nurses in the community					
Availability of specialists					
Not enough health care staff in general					
Availability of providers that speak my language and/or have translators					
Availability of wellness and disease prevention services					
Availability of mental health services					
Availability of substance abuse/treatment services					
Availability of dental care					
Availability of vision care					
Different health care providers having access to health care information and working together to coordinate care					
Providers using electronic health records					

Concerns about health services	Less of a concern				More of a concern
	1	2	3	4	5
Patient confidentiality					
Quality of care					
Emergency services (ambulance & 911) available 24/7					
Cost of health care services					
Cost of health insurance					
Adequacy of health insurance (concerns about out-of-pocket costs)					
Adequacy of Indian Health Service or Tribal Health Services					
Understanding where and how to get health insurance					
Cost of prescription drugs					

Physical, mental health, and substance abuse concerns (Adults)	Less of a concern				More of a concern
	1	2	3	4	5
Cancer					
Diabetes					
Heart disease					
Other chronic diseases					
Dementia/Alzheimer's disease					
Depression					
Stress					
Suicide					
Alcohol use and abuse					
Drug use and abuse (including prescription drug abuse)					
Smoking and tobacco use/exposure to second-hand smoke					
Not getting enough exercise					
Obesity/overweight					
Poor nutrition, poor eating habits					
Diseases that can be spread, such as sexually transmitted diseases or AIDS					
Wellness and disease prevention, including vaccine-preventable diseases					

Concerns specific to youth and children	Less of a concern				More of a concern
	1	2	3	4	5
Not enough youth activities					
Youth obesity					
Youth hunger and poor nutrition					
Youth alcohol use and abuse					
Youth drug use and abuse (including prescription drug abuse)					
Youth tobacco use					
Youth mental health					
Youth suicide					
Teen pregnancy					
Youth sexual health					
Youth crime					
Youth graduating from school					

Concerns about the aging population	Less of a concern				More of a concern
	1	2	3	4	5
Being able to meet needs of older population					
Long-term/nursing home care options					
Assisted living options					
Availability of resources to help the elderly stay in their homes					
Availability/cost of activities for seniors					
Availability of resources for family and friends caring for elders					

Delivery of Health Care

Q14. How long does it take you to reach the clinic you usually go to?

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

Q15. How long does it take you to reach the hospital you usually go to?

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

Q16. Please tell us why you seek health care services close to home. (Choose ALL that apply.)

- ☐ Access to specialist
- ☐ Confidentiality
- ☐ Convenience
- ☐ Disability access
- ☐ Eligible for care from IHS
- ☐ Familiar with providers
- ☐ High quality of care
- ☐ Less costly
- ☐ Location is nearby
- ☐ Loyalty to local care providers
- ☐ Open at convenient times
- ☐ They take my insurance
- ☐ They take new patients
- ☐ Transportation is readily available
- ☐ Other (Please specify)_____

Q17. Please tell us why you go out of the area for health care needs. (Choose ALL that apply.)

- ☐ Access to specialist
- ☐ Confidentiality
- ☐ Convenience
- ☐ Disability access
- ☐ Familiar with providers
- ☐ High quality of care
- ☐ Less costly
- ☐ Eligible for contract health services under IHS
- ☐ Loyalty to local service providers
- ☐ Not eligible for care from IHS
- ☐ Open at convenient times
- ☐ Proximity
- ☐ Referral
- ☐ They take my insurance
- ☐ They take new patients
- ☐ Transportation is readily available
- ☐ Other (Please specify)_____

Q18. What specific health care services do you need to travel out of the area to receive?

_____
_____

Q19. What specific health care services, if any, do you think should be added by local health care providers?

_____

_____

Q20. What barriers prevent you or other community members from receiving health care? (Choose ALL that apply.)

- ☐ Can't get transportation services
- ☐ Concerns about confidentiality
- ☐ Distance from health facility
- ☐ Don't know about local services
- ☐ Not able to get appointment/limited hours
- ☐ Not able to see same provider over time
- ☐ Limited access to telehealth technology (patients seen by providers at another facility through a monitor/TV screen)
- ☐ Not affordable
- ☐ No insurance or limited insurance
- ☐ Not enough doctors
- ☐ Not enough evening or weekend hours
- ☐ Not enough specialists
- ☐ Don't speak language or understand culture
- ☐ Other (Please specify)_____ _____

Q21. Which of the following services have you or a family member used at Pembina County Memorial Hospital during the past year? (Choose ALL that apply.)

- ☐ Emergency department visit
- ☐ Clinic visit
- ☐ Outpatient hospital services
- ☐ Outpatient therapy (physical, occupational, cardiac rehab)
- ☐ Laboratory services
- ☐ Inpatient hospital stay
- ☐ Radiology services (x-ray, MRI, CT scan, mammography, ultrasound)

Preventive care and public health services

Q22. In the past year, have you or a family member had any interaction with the local public health unit?

- ☐ No
- ☐ Yes

Q22b. If yes, what interactions have you or a family member had with the local public health unit?

_____

Q23. Which of the following public health services have you or a family member used in the past year? (Choose ALL that apply.)

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

Q24. Where do you turn for trusted health information? (Choose ALL that apply.)

- ☐ Primary care provider (my doctor, nurse practitioner, physician assistant)
- ☐ Public health professional
- ☐ Other health care professionals (nurses, chiropractors, dentists, etc.)
- ☐ Web searches/Internet (WebMD, Mayo Clinic, Healthline, etc.)
- ☐ Word of mouth, from others (friends, neighbors, co-workers, etc.)
- ☐ Other (Please specify) _____

Pembina County Memorial Hospital services

Q25. Are you aware of Pembina County Memorial Hospital's Foundation, which exists to support PCMH and Wedgewood Manor?

☐ Yes ☐ No

Q26. Have you supported the Pembina County Memorial Hospital Foundation in any of the following ways? (Choose ALL that apply.)

- ☐ Cash or stock gift
- ☐ Endowment gifts
- ☐ Memorial/Honorarium
- ☐ Planned gifts through wills, trusts or life insurance policies
- ☐ Other: (please specify)

_____

Q27. Are you aware of CliniCare's hours on Saturdays from 9-3pm?

☐ Yes ☐ No

Demographic Information

Please tell us about yourself.

Q28. Health insurance status. (Choose ALL that apply.)

- ☐ Insurance through employer
- ☐ Medicaid
- ☐ Medicare
- ☐ Private insurance
- ☐ No insurance/not enough insurance
- ☐ Veteran's Health Care Benefits
- ☐ Other. Please specify:_____

Q29. Age:

- ☐ Less than 25 years
- ☐ 25 to 34 years
- ☐ 35 to 44 years
- ☐ 45 to 54 years
- ☐ 55 to 64 years
- ☐ 65 to 74 years
- ☐ 75 years and older

Q30. Highest level of education:

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

Q31. Gender:

- ☐ Female
- ☐ Male

Q32. Your zip code: _____

Q33. Marital status:

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

Q34. Employment status:

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

Q35. Annual household income before taxes:

- ☐ Less than $15,000
- ☐ $15,000 to $24,999
- ☐ $25,000 to $49,999
- ☐ $50,000 to $74,999
- ☐ $75,000 to $99,999
- ☐ $100,000 to $149,999
- ☐ $150,000 and over
- ☐ Prefer not to answer

Q36. Overall, please share concerns and suggestions to improve the delivery of local health care.

Thank you for assisting us with this important survey!

Appendix A2 – Health Care Professional Survey Instrument

Pembina County Memorial Hospital and Pembina County Public Health are interested in hearing from local health care professionals about area health needs. The focus of this effort is to:

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

Please take a few moments to complete the survey. Surveys will be tabulated by the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences. Your responses are anonymous, and you may skip any question you do not want to answer. Your answers will be combined with other responses and reported only in total.

If you have questions about the survey, you may contact Karin Becker at (701)777-4499.

Surveys will be accepted through June 27, 2014.
Your opinion matters – thank you in advance!

Community Assets and Collaboration

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

1. Considering the PEOPLE in your community, the best things are (choose up to THREE):

- ☐ Community is socially and culturally diverse or becoming more diverse
- ☐ Feeling connected to people who live here
- ☐ Forward-thinking ideas (social values, government)
- ☐ Government is accessible
- ☐ People are friendly, helpful, supportive
- ☐ People who live here are involved in the community
- ☐ Sense that you can make a difference through community engagement
- ☐ Tolerance, inclusion, open-minded

☐ Other (please specify)

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

- ☐ Downtown and shopping (close by, good variety, availability of goods)
- ☐ Health care
- ☐ Opportunities to learn and/or go to college
- ☐ Quality school systems and programs for youth

- ☐ Public services and amenities
- ☐ Public transportation
- ☐ Restaurants and healthy food
- ☐ Other (please specify)

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

- ☐ Family-friendly; good place to raise kids
- ☐ Healthy place to live
- ☐ Informal, simple, laidback lifestyle
- ☐ Job opportunities or economic opportunities
- ☐ Safe place to live, little/no crime
- ☐ Other (please specify)

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

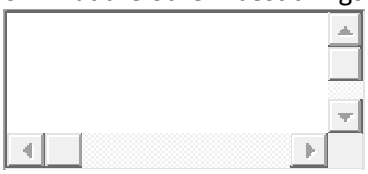
- ☐ Activities for families and youth
- ☐ Arts and cultural activities and/or cultural richness of community
- ☐ Recreational and sports activities (e.g., outdoor recreation, parks, bike paths, and other activities)
- ☐ Specific events and festivals
- ☐ Year-round access to fitness opportunities (indoor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

5. Considering the GEOGRAPHIC SETTING in your community, the best things are (choose up to THREE):

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

- Other (please specify)

6. What are other “best things” about your community that are not listed in the questions above?



7. What are the major challenges facing your community?

8. For each choice below, please rank the level of collaboration, or how well these groups work with others in the community, on a scale of 1 to 5, with 1 being no collaboration (not working well with others) and 5 being excellent collaboration (working well with others).

	1 = No collaboration	2	3	4	5 = Excellent collaboration	× Don't Know/Not Applicable
Business and industry						
Clinics						
Economic development organizations						
Emergency services, including ambulance and fire						
Health and human services agencies						
Hospital(s)						
Indian Health Service						
Law enforcement						
Long term care, including nursing homes and assisted living						
Other local health providers, such as dentists and chiropractors						

	1 = No collaboration	2	3	4	5 = Excellent collaboration	× Don't Know/Not Applicable
Pharmacies	○	○	○	○	○	○
Public Health	○	○	○	○	○	○
Schools	○	○	○	○	○	○
Tribal Health	○	○	○	○	○	○

9. Do you believe that health-related organizations in the community are working together to improve the overall health of the area population?

- ○ No
- ○ Yes

10. Which, if any, of the following do you think would result from better collaboration among health care providers and health-related organizations? (Choose ALL that apply.)

- ☐ Better customer service
- ☐ Better patient care
- ☐ Better overall health of the area's population
- ☐ Coordination of appointments
- ☐ Less duplication of care
- ☐ Lower costs
- ☐ More complete and accurate health records
- ☐ Need for fewer appointments
- ☐ Other (please specify in the box below)

11. What suggestions do you have for health-related organizations to work together to provide better services and improve the overall health of the area population?

- Where do you find out -- or where do you think community members find out -- what health services are available in your area? (Choose ALL that apply.)

- ☐ Advertising
- ☐ From public health professionals
- ☐ Indian Health Service
- ☐ Newspaper
- ☐ Radio
- ☐ Word of mouth, from others (friends, neighbors, co-workers, etc.)
- ☐ From health care professionals
- ☐ Social media (Facebook, Twitter, etc.)
- ☐ Tribal health
- ☐ Web searches
- ☐ Employer/worksite wellness
- ☐ Other (please specify in the box below)

- **Community/environmental concerns**

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

	1 = less of a concern	2	3	4	5 = more of a concern
Active faith community	○	○	○	○	○
Attracting and retaining young families	○	○	○	○	○
Not enough jobs with livable wages, not enough to live on	○	○	○	○	○
Not enough affordable housing	○	○	○	○	○
Poverty	○	○	○	○	○
Changes in population size (increasing or decreasing)	○	○	○	○	○
Crime and safety, adequate law enforcement personnel	○	○	○	○	○
Water quality (well water, lakes, streams, rivers)	○	○	○	○	○

	1 = less of a concern	2	3	4	5 = more of a concern
Air quality	○	○	○	○	○
Litter (amount of litter, adequate garbage collection)	○	○	○	○	○
Having enough child daycare services	○	○	○	○	○
Having enough quality school resources	○	○	○	○	○
Not enough places for exercise and wellness activities	○	○	○	○	○
Not enough public transportation options, cost of public transportation	○	○	○	○	○
Racism, prejudice, hate, discrimination	○	○	○	○	○
Seatbelt use	○	○	○	○	○
Traffic safety, including speeding, road safety, and drunk/distracted driving	○	○	○	○	○
Physical violence, domestic violence, sexual abuse	○	○	○	○	○
Child abuse	○	○	○	○	○
Bullying	○	○	○	○	○

- **Concerns about health services**

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

	1 = less of a concern	2	3	4	5 = more of a concern
Ability to get appointments for health services	○	○	○	○	○
Extra hours for appointments, such as evenings and weekends	○	○	○	○	○
Availability of doctors and nurses	○	○	○	○	○

	1 = less of a concern	2	3	4	5 = more of a concern
Availability of public health professionals	○	○	○	○	○
Ability to retain doctors and nurses in the community	○	○	○	○	○
Availability of specialists	○	○	○	○	○
Not enough health care staff in general	○	○	○	○	○
Availability of providers that speak patients' languages and/or have translators	○	○	○	○	○
Availability of wellness and disease prevention services	○	○	○	○	○
Availability of mental health services	○	○	○	○	○
Availability of substance abuse/treatment services	○	○	○	○	○
Availability of dental care	○	○	○	○	○
Availability of vision care	○	○	○	○	○
Different health care providers having access to health care information and working together to coordinate care	○	○	○	○	○
Providers using electronic health records	○	○	○	○	○
Patient confidentiality	○	○	○	○	○
Quality of care	○	○	○	○	○
Emergency services (ambulance & 911) available 24/7	○	○	○	○	○
Cost of health care services	○	○	○	○	○
Cost of health insurance	○	○	○	○	○
Adequacy of health insurance (concerns about out-of-pocket costs)	○	○	○	○	○

	1 = less of a concern	2	3	4	5 = more of a concern
Adequacy of Indian Health Service or Tribal Health services	○	○	○	○	○
Understanding where and how to get health insurance	○	○	○	○	○
Cost of prescription drugs	○	○	○	○	○

15. Physical, mental health, and substance abuse concerns (Adults)

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

	1 = less of a concern	2	3	4	5 = more of a concern
Cancer	○	○	○	○	○
Diabetes	○	○	○	○	○
Heart disease	○	○	○	○	○
Other chronic diseases	○	○	○	○	○
Dementia/Alzheimer's disease	○	○	○	○	○
Depression	○	○	○	○	○
Stress	○	○	○	○	○
Suicide	○	○	○	○	○
Alcohol use and abuse	○	○	○	○	○
Drug use and abuse (including prescription drug abuse)	○	○	○	○	○
Smoking and tobacco use/exposure to second-hand smoke	○	○	○	○	○
Not getting enough exercise	○	○	○	○	○
Obesity/overweight	○	○	○	○	○
Poor nutrition, poor eating habits	○	○	○	○	○
Diseases that can be spread,	○	○	○	○	○

	1 = less of a concern	2	3	4	5 = more of a concern
such as sexually transmitted diseases or AIDS					
Wellness and disease prevention, including vaccine-preventable diseases	○	○	○	○	○

16. Concerns specific to youth and children

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

	1 = less of a concern	2	3	4	5 = more of a concern
Not enough youth activities	○	○	○	○	○
Youth obesity	○	○	○	○	○
Youth hunger and poor nutrition	○	○	○	○	○
Youth alcohol use and abuse	○	○	○	○	○
Youth drug use and abuse (including prescription drug abuse)	○	○	○	○	○
Youth tobacco use	○	○	○	○	○
Youth mental health	○	○	○	○	○
Youth suicide	○	○	○	○	○
Teen pregnancy	○	○	○	○	○
Youth sexual health	○	○	○	○	○
Youth crime	○	○	○	○	○
Youth graduating from school	○	○	○	○	○

17. Concerns about the aging population

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

	1 = less of a concern	2	3	4	5 = more of a concern

	1 = less of a concern	2	3	4	5 = more of a concern
Being able to meet needs of older population	○	○	○	○	○
Long-term/nursing home care options	○	○	○	○	○
Assisted living options	○	○	○	○	○
Availability of resources to help the elderly stay in their homes	○	○	○	○	○
Availability/cost of activities for seniors	○	○	○	○	○
Availability of resources for family and friends caring for elders	○	○	○	○	○

18. Delivery of Health Care

Please tell us why you think community members seek health care services close to home. (Choose ALL that apply.)

- ☐ Access to specialist
- ☐ Confidentiality
- ☐ Convenience
- ☐ Disability access
- ☐ Eligible for care from IHS
- ☐ Familiar with providers
- ☐ High quality of care
- ☐ Less costly
- ☐ Location is nearby
- ☐ Loyalty to local care providers
- ☐ Open at convenient times
- ☐ Health care providers take their insurance
- ☐ Health care providers take new patients
- ☐ Transportation is readily available
- ☐ Other (please specify in the box below)

19. Please tell us why you go out of the area for health care needs. (Choose ALL that apply.)

- ☐ Access to specialist
- ☐ Confidentiality
- ☐ Convenience
- ☐ Disability access
- ☐ Familiar with providers
- ☐ High quality of care
- ☐ Less costly
- ☐ Eligible for contract health services under IHS
- ☐ Eligible for care from IHS
- ☐ Loyalty to local service providers
- ☐ Not eligible for care from IHS
- ☐ Open at convenient times
- ☐ Proximity
- ☐ Referral
- ☐ Health care providers take their insurance
- ☐ Health care providers take new patients
- ☐ Transportation is readily available
- ☐ Other (please specify in the box below)

20. What specific health care services do community members need to travel out of the area to receive?

21. What specific health care services, if any, do you think should be added locally?

22. What barriers prevent community members from receiving health care? (Choose ALL that apply.)

- ☐ Can't get transportation services
- ☐ Concerns about confidentiality
- ☐ Distance from health facility
- ☐ Don't know about local services
- ☐ Not able to get appointment/limited hours
- ☐ Not able to see same provider over time
- ☐ Limited access to telehealth technology (patients seen by providers at another facility through a monitor/TV screen)
- ☐ Not affordable
- ☐ No insurance or limited insurance
- ☐ Not enough doctors
- ☐ Not enough evening or weekend hours
- ☐ Not enough specialists
- ☐ Don't speak language or understand culture
- ☐ Other (please specify)

23. Which of the following services have you or a family member used at Pembina County Memorial Hospital during the past year? (Choose ALL that apply.)

- ☐ Emergency department visit
- ☐ Clinic visit
- ☐ Outpatient hospital services
- ☐ Outpatient therapy (physical, occupational, cardiac rehab)
- ☐ Laboratory services
- ☐ Inpatient hospital stay
- ☐ Radiology services (x-ray, MRI, CT scan, mammography, ultrasound)

24. **Preventive care and public health services**

In the past year, have you or a family member had any interaction with Pembina County Public Health?

- ○ No
- ○ Yes

25. What interactions have you or a family member had with Pembina County Public Health?

26. Which of the following Pembina County Public Health services have you or a family member used in the past year? (Choose ALL that apply.)

- ☐ Bicycle helmet safety
- ☐ Blood pressure check
- ☐ Breastfeeding resources
- ☐ Car seat program
- ☐ Child health (well baby)
- ☐ Correction facility health
- ☐ Diabetes screening
- ☐ Environmental Health Services (water, sewer, health hazard abatement)
- ☐ Emergency response and preparedness program
- ☐ Flu shots
- ☐ Health Tracks (child health screening)
- ☐ Home health
- ☐ Immunizations
- ☐ Medication setup-home visits
- ☐ Office visits and consults
- ☐ Preschool screening
- ☐ Preschool education programs
- ☐ School health (vision screening, puberty talks, school immunizations)
- ☐ Tobacco Prevention and Control
- ☐ Tuberculosis testing and management
- ☐ WIC (Women, Infants & Children) Program
- ☐ Youth education programs (First Aid, Bike safety)

27. Where do you think community members turn for trusted health information? (Choose ALL that apply.)

- ☐ Primary care provider (my doctor, nurse practitioner, physician assistant)
- ☐ Public health professional
- ☐ Other health care professionals (nurses, chiropractors, dentists, etc.)
- ☐ Web searches/Internet (WebMD, Mayo Clinic, Healthline, etc.)
- ☐ Word of mouth, from others (friends, neighbors, co-workers, etc.)
- ☐ Other (please specify in the box below)

Demographic Information

Please tell us about yourself.

28. Age:

- ○ Less than 25 years
- ○ 25 to 34 years
- ○ 35 to 44 years
- ○ 45 to 54 years
- ○ 55 to 64 years
- ○ 65 to 74 years
- ○ 75 years and older

29. Highest level of education:

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

30. Profession:

- ○ Allied health professional
- ○ Clerical
- ○ CNA/other assistant
- ○ Environmental services
- ○ Health care administration

- Nurse
- Physician
- Physician Assistant/Nurse Practitioner
- Other (please specify in the box below)

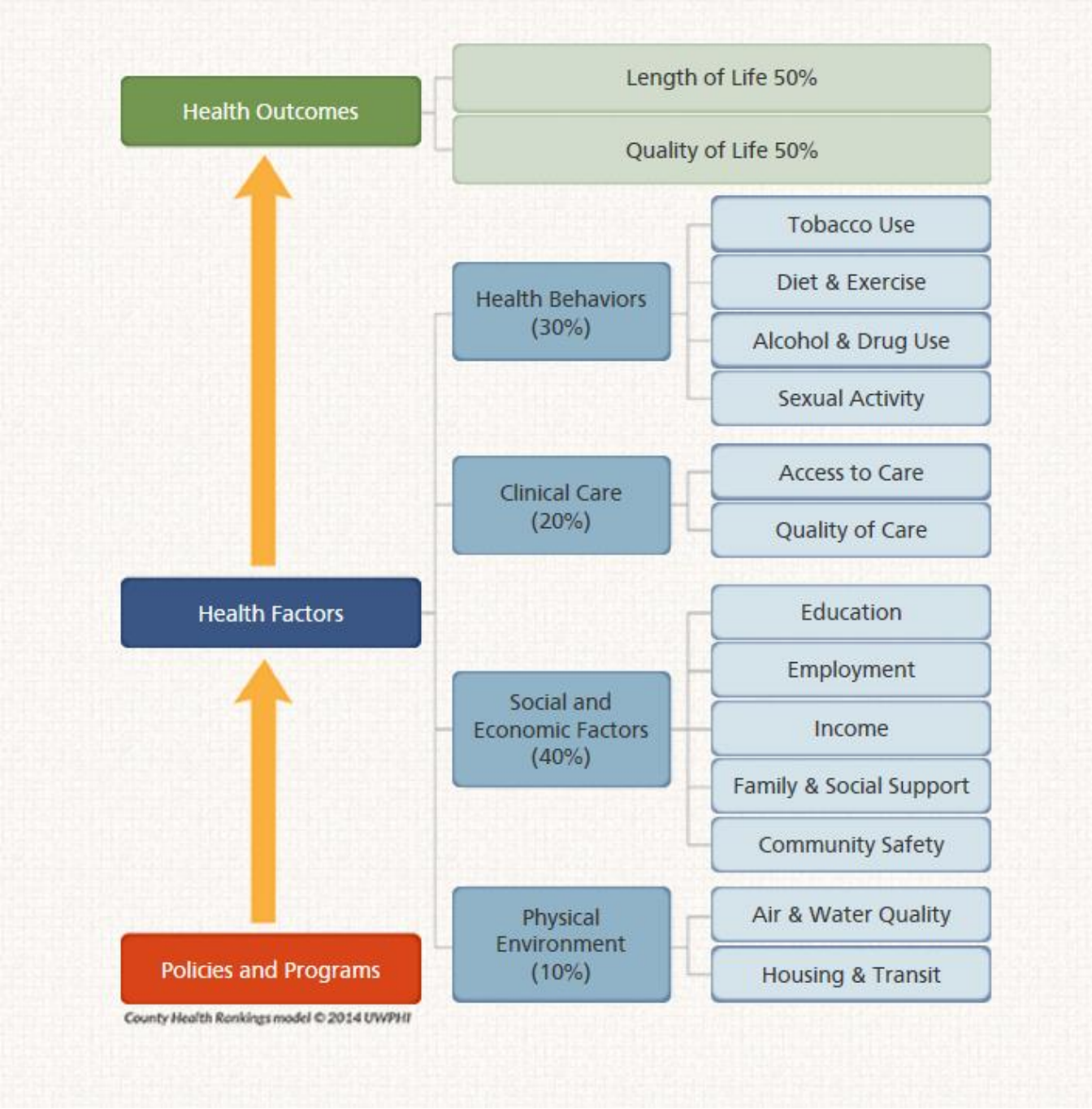
31. Gender:

- Female
- Male

32. Your zip code:

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

Appendix B – County Health Rankings Model



Appendix C – Pembina County Community Health Profile

Pembina County Community Health Profile

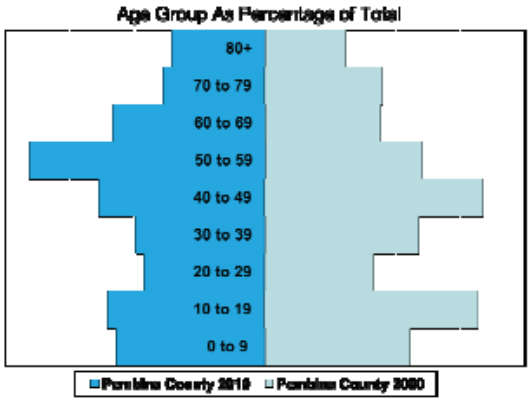
POPULATION

The Demographic Section of this report comes from the US Census Bureau (www.census.gov). Most tables are derived either from the full (100%) census taken in 2010 or from the Community Population Survey aggregrated over a several year period. The table header describes the specific years from which the data is derived. The table showing percent population change uses census data from 2000 also. Tables present number of persons and percentages which in almost all circumstances represent the category specific percentage of all persons referenced by the table (e.g., percentage of persons age 15 and older who are married). Age specific poverty rates represent the percentage of each age group which is in poverty (e.g., percentage of children under five years in poverty).

1

2

Population by Age Group, 2012 Census Estimates				
Age Group	Pembina County		North Dakota	
	Number	Percent	Number	Percent
0-9	815	11.2%	89,523	12.8%
10-19	869	12.0%	87,701	12.5%
20-29	660	9.1%	117,200	16.8%
30-39	736	10.1%	84,747	12.1%
40-49	832	11.4%	81,458	11.6%
50-59	1,267	17.4%	98,949	14.1%
60-69	986	13.6%	68,259	9.8%
70-79	555	7.6%	39,239	5.6%
80+	551	7.6%	32,552	4.7%
Total	7,271	100.0%	699,628	100.0%
0-17	1,533	21.1%	154,608	22.1%
65+	1,518	20.9%	100,666	14.4%



3

Female Population and Percentage Female by Age, 2012 Census				
Age Group	Pembina County		North Dakota	
	Number	Percent	Number	Percent
0-9	405	49.7%	43,728	48.8%
10-19	413	47.5%	42,313	48.2%
20-29	315	47.7%	54,043	46.1%
30-39	333	45.2%	39,855	47.0%
40-49	422	50.7%	39,861	48.9%
50-59	616	48.6%	48,643	49.2%
60-69	432	43.8%	33,648	49.3%
70-79	294	53.0%	21,223	54.1%
80+	322	58.4%	20,572	63.2%
Total	3,552	48.9%	343,886	49.2%
0-17	751	49.0%	75,541	48.9%
65+	800	52.7%	56,368	56.0%

4

Decennial Population Change, 1990 to 2000, 2000 to 2010				
Census	Pembina County	10 Year Change (%)	North Dakota	10 Year Change (%)
1990	9,202		638,800	
2000	8,590	-6.7%	642,200	0.5%
2010	7,397	-13.9%	672,591	4.7%

Pembina County Community Health Profile

POPULATION

5

Race, 2012 Census

Race	Pembina County Number	Pembina County Percentage	North Dakota Number	North Dakota Percentage
Total	7,271	100.0%	699,628	100.0%
White	7,037	96.8%	636,983	91.0%
Black	53	0.7%	12,893	1.8%
Am.Indian	158	2.2%	40,716	5.8%
Asian or Pac. Islander	23	0.3%	9,036	1.3%

6

Household Populations, 2007-2011

Household Type	Pembina County Number	Pembina County Percentage	North Dakota* Number	North Dakota* Percentage
Total	7,440	100.0%	666,783	100.0%
In households	7,206	96.9%	641,748	96.2%
In family households:	6,015	80.8%	509,097	76.4%
In nonfamily households:	1,191	16.0%	132,651	19.9%
In group quarters	234	3.1%	25,035	3.8%
Institutionalized population	119	1.6%	9,675	1.5%
Noninstitutionalized population	115	1.5%	15,360	2.3%

* 2010

7

Marital Status of Persons Age 15 and Older, 2008-2012 ACS

Marital Status	Pembina County Number	Pembina County Percent	North Dakota* Number	North Dakota* Percent
Total Age 15+	6,100	100.0%	551,600	100.0%
Never Married	1,049	17.2%	168,790	30.6%
Now Married	3,837	62.9%	292,900	53.1%
Separated	85	1.4%	4,413	0.8%
Widowed	555	9.1%	34,751	6.3%
Divorced	580	9.5%	50,747	9.2%

* 2010

8

Educattional Attaiment, 2008-2012, ACS

	Pembina County Estimate	Pembina County Percent	North Dakota Estimate	North Dakota Percent
Population 25 years and over	5,370	100.0%	442,789	100.0%
Less than 9th grade	317	5.9%	21,254	4.8%
9th to 12th grade, no diploma	311	5.8%	20,811	4.7%
High school graduate or GED	1,837	34.2%	120,439	27.2%
Some college, no degree	1,267	23.6%	105,827	23.9%
Associate's degree	569	10.6%	54,463	12.3%
Bachelor's degree	918	17.1%	86,787	19.6%
Grad degree or prof degree	150	2.8%	32,766	7.4%

Pembina County Community Health Profile

POPULATION

9

Income and Poverty Status by Age Group, 2008--2012, ACS				
	Pembina County		North Dakota	
Median Household Income	$50,422		$51,641	
Per Capita Income	$27,438		$28,700	
	Number	Percent	Number	Percent
Below Poverty Level	588	8.2%	78,930	12.1%
Under 5 years	52	13.0%	8,183	18.8%
5 to 11 years	62	9.5%	8,039	14.4%
12 to 17 years	53	10.2%	5,613	11.6%
18 to 64 years	275	6.5%	46,366	11.2%
65 to 74 years	41	6.1%	4,025	8.6%
75 years and over	105	15.1%	6,704	14.9%
Total Known Children in Pov (0-17)	167	10.6%	21,835	14.8%
Total Known Age 65+ in Poverty	146	10.7%	10,729	11.7%

10

Family Poverty and Childhood and Elderly Poverty, 2008-2012, ACS				
	Pembina County		North Dakota	
	Number	Percent	Number	Percent
Total Families	2,183	100.0%	173,196	100.0%
Families in Poverty	103	4.7%	12,990	7.5%
Families with Related Children	824	37.8%	78,210	45.2%
Families with Related Children in Poverty	77	3.5%	9,933	5.7%
Families with Related Children and Female Parent Only	190	8.7%	16,207	9.4%
Families with Related Children and Female Parent Only in Poverty	77	3.5%	6,596	3.8%

Pembina County Community Health Profile

Vital Statistics Data

BIRTHS AND DEATHS

Vital Statistics Data comes from the birth and death records collected by the State of North Dakota aggregated over a five year period. All births and deaths represent the county of residence not the county of occurrence. The number of events is blocked if fewer than six. Formulas for calculating rates and ratios are as follows:

Birth Rate = Resident live births divided by the total resident population x 1000.
Pregnancies = Live births + Fetal deaths + Induced termination of pregnancy.
Pregnancy Rate = Total pregnancies divided b the total resident population x 1000.
Fertility Rate = Resident live births divided by female population (age 15-44) x 1000.
Teenage Birth Rate = Teenage births (age <20) divided by female teen population x 1000.
Teenage Pregnancy Rate = Teenage pregnancies (age<20) divided by female teen population x 1000.
Out of Wedlock Live Birth Ratio = Resident OOW live births divided by total resident live births x 1000.
Out of Wedlock Pregnancy Ratio = Resident OOW pregnancies divided by total pregnancies x 1000.
Low Weight Ratio = Low weight births (birth weight < 2500 grams) divided by total resident live births x 1000.
Infant Death Ratio = Number of infant deaths divided by the total resident live births x 1000.
Childhood & Adolescent Deaths = Deaths to individuals 1 - 19 years of age.
Childhood and Adolescent Death Rate = Number of resident deaths (age 1 - 19) divided by population (age 1 - 19) x 100,000.
Crude Death Rate = Death events divided by population x 100,000.
Age-Adjusted Death Rate = Death events with age specific adjustments x 100,000 population.

11

Births, 2008-2012	Pembina County		North Dakota	
	Number	Rate	Number	Rate
Live Births	371	10	46,299	14
Pregnancies	388	11	50,962	15
Fertility Ratio		72		71
Teen Births	0	0	3,231	19
Teen Pregnancies	6	3	3,913	22
	Number	Ratio	Number	Ratio
Out of Wedlock Births	94	253	15,244	329
Out of Wedlock Pregnancies	104	268	19,052	374
Low Birth Weight Births	17	46	3,007	65

12

Deaths, 2008-2012	Pembina County		North Dakota	
	Number	Ratio	Number	Ratio
Infant Deaths	0	0	277	6
	Number	Rate	Number	Rate
Child and Adolescent Deaths	0	0	261	32
Total Deaths	431	1168	29,358	868

Pembina County Community Health Profile

Vital Statistics Data

BIRTHS AND DEATHS

13

Deaths and Age Adjusted Death Rate by Cause, 2008-2012	Pembina County Number (Adj. Rate)	North Dakota Number (Adj. Rate)
All Causes	431 (678)	29358 (697)
Heart Disease	102 (152)	6829 (155)
Cancer	107 (176)	6429 (159)
Stroke	18 (22)	1667 (37)
Alzheimers Disease	29 (35)	2125 (44)
COPD	34 (51)	1709 (41)
Unintentional Injury	30 (69)	1628 (44)
Diabetes Mellitus	16 (25)	1026 (25)
Pneumonia and Influenza	5 (7)	693 (15)
Cirrhosis	*	368 (10)
Suicide	7 (16)	499 (15)

Pembina County Community Health Profile

BIRTHS AND DEATHS

14

Leading Causes of Death by Age Group for Pembina County, 2008-2012			
Age	1	2	3
0-4	Anomaly		
5-14	Unintentional Injury		
15-24	Unintentional Injury	Suicide	
25-34	Suicide Unintentional Injury		
35-44	Unintentional Injury	Cancer	Heart
45-54	Unintentional Injury 7	Heart 6	Cancer 5
55-64	Cancer 12	Unintentional Injury	COPD
65-74	Cancer 22	Heart 12	Diabetes COPD
75-84	Cancer 40	Heart 31	COPD 16
85+	Heart 47	Cancer 26	Alzheimer's Dz 24

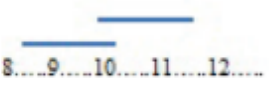
15

Leading Causes of Death by Age Group for North Dakota, 2008-2012			
Age	1	2	3
0-4	Anomaly 46	SIDS 39	Prematurity 25
5-14	Unintentional Injury 24	Cancer 9	Anomaly 5
15-24	Unintentional Injury 193	Suicide 104	Cancer 17
25-34	Unintentional Injury 180	Suicide 183	Heart 35
35-44	Unintentional Injury 175	Heart 99	Cancer 87
45-54	Cancer 432	Heart 313	Unintentional Injury 203
55-64	Cancer 998	Heart 613	Unintentional Injury 147
65-74	Cancer 1530	Heart 826	COPD 323
75-84	Cancer 1948	Heart 1661	COPD 653
85+	Heart 3270	Alzheimer's Dz 1554	Cancer 1384

Pembina County Community Health Profile

ADULT BEHAVIORAL RISK FACTORS, 2001-2010*

Adult Behavioral Risk Factor data are derived from aggregated data (the number of years specified is in the table) continuously collected by telephone survey from persons 18 years and older. All data is self-reported data. Numbers given are point estimate percentages followed by 95% confidence intervals. Statistical significance can be determined by comparing confidence intervals between two geographic areas. To be statistically significant, confidence may not overlap. For example the confidence intervals 9.3 (8.3-10.2) and 10.8 (10.0-11.6) overlap (see picture below) so the difference between the two numbers is not statistically significant. That means that substantial uncertainty remains whether the apparent difference is due to chance alone (due to sampling variation) rather than representing a true difference in the prevalence of the condition in the two populations. The less they overlap, the more likely it is that the point estimates represent truly different prevalences in the two populations.



	ALCOHOL	Pembina County %	North Dakota %
Binge Drinking	Respondents who reported binge drinking (5 drinks for men, 4 drinks for women) one or more times in the past 30 days.	17.3 (12.7-21.9)	21.1 (20.5-21.6)
Heavy Drinking	Respondents who reported heavy drinking (more than 2 drinks per day for men, more than 1 drink per day for women) during the past 30 days	4.4 (2.0- 6.7)	5.0 (4.7- 5.3)
Drunk Driving	Respondents who reported driving when they had too much to drink one or more times during the past 30 days	4.0 (0.0- 8.7)	5.7 (5.1- 6.2)
	ARTHRITIS		
Chronic Joint Symptoms	Respondents who reported pain, aching of stiff in a joint during the past 30 days which started more than 3 months ago	27.6 (21.1-34.0)	35.3 (34.4-36.2)
Activity Limitation Due to Arthritis	Respondents who reported being limited in any usual activities because of arthritis or joint symptoms.	12.7 (8.0-17.4)	13.0 (12.4-13.5)
Doctor Diagnosed Arthritis	Respondents who reported ever have been told by a doctor or other health professional that they had some form or arthritis.	33.3 (26.9-39.8)	27.2 (26.5-27.9)
	ASTHMA		
Ever Asthma	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had asthma.	13.2 (9.5-16.9)	10.7 (10.3-11.1)
Current Asthma	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had asthma and who still have asthma.	8.7 (5.8-11.6)	7.5 (7.2- 7.9)

16

*Due to a change in data collection methodology in 2011, data for years since 2010 will not be available until 2016. except for the largest counties. Approximately 50 to 70 surveys are collected in Pembina County per year, so many years of data are required for stable estimates.

Pembina County Community Health Profile

ADULT BEHAVIORAL RISK FACTORS, 2001-2010

	BODY WEIGHT	Pembina County %	North Dakota %
Overweight But Not Obese	Respondents with a body mass index greater than or equal to 25 but less than 30 (overweight)	38.8 (33.6-44.1)	38.7 (38.0-39.3)
Obese	Respondents with a body mass index greater than or equal to 30 (obese)	28.5 (23.8-33.3)	25.4 (24.9-26.0)
Overweight or Obese	Respondents with a body mass index greater than or equal to 25 (overweight or obese)	67.3 (62.3-72.4)	64.1 (63.5-64.8)
	CARDIOVASCULAR		
Heart Attack	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had a heart attack.	3.7 (2.0- 5.5)	4.0 (3.8- 4.2)
Angina	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had angina.	4.5 (2.2- 6.8)	4.0 (3.8- 4.3)
Stroke	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had a stroke.	1.4 (0.4- 2.5)	2.2 (2.1- 2.4)
Cardiovascular Disease	Respondents who reported ever having been told by a doctor, nurse or other health care professional that they had any of the following: heart attack, angina or stroke.	7.7 (4.9-10.5)	7.4 (7.1- 7.7)
	CHOLESTEROL		
Never Cholesterol Test	Respondents who reported never having a cholesterol test	26.9 (20.0-33.7)	23.0 (22.2-23.8)
No Cholesterol Test in Past 5 Years	Respondents who reported never having a cholesterol test in the past five years	31.8 (24.8-38.7)	28.2 (27.4-29.0)
High Cholesterol	Respondents who reported that they had ever been told by a doctor, nurse or other health professional that they had high cholesterol.	38.1 (31.0-45.2)	34.0 (33.2-34.8)
	COLORECTAL CANCER		
Fecal Occult Blood	Respondents age 50 and older who reported not having a fecal occult blood test in the past two years.	74.8 (66.8-82.8)	78.3 (77.5-79.2)
Never Sigmoidoscopy	Respondents age 50 and older who reported never having had a sigmoidoscopy or colonoscopy	41.8 (32.6-51.0)	42.6 (41.4-43.7)
No Sigmoidoscopy in Past 5 Years	Respondents age 50 and older who reported not having a sigmoidoscopy or colonoscopy in the past five years.	57.6 (49.0-66.1)	55.0 (54.0-56.1)
	DIABETES		
Diabetes Diagnosis	Respondents who reported ever having been told by a doctor that they had diabetes.	8.4 (5.6-11.3)	6.9 (6.6- 7.2)
	FRUITS AND VEGETABLES		
Five Fruits and Vegetables	Respondents who reported that they do not usually eat 5 fruits and vegetables per day	74.2 (67.6-80.7)	78.4 (77.7-79.1)

17

Pembina County Community Health Profile

ADULT BEHAVIORAL RISK FACTORS, 2001-2010

	GENERAL HEALTH	Pembina County %	North Dakota %
Fair or Poor Health	Respondents who reported that their general health was fair or poor	12.9 (9.7-16.2)	12.6 (12.2-12.9)
Poor physical Health	Respondents who reported they had 8 or more days in the last 30 when their physical health was not good	8.1 (5.6-10.6)	10.2 (9.8-10.5)
Poor Mental Health	Respondents who reported they had 8 or more days in the last 30 when their mental health was not good	6.6 (3.7- 9.4)	9.6 (9.2-10.0)
Activity Limitation Due to Poor Health	Respondents who reported they had 8 or more days in the last 30 when poor physical or mental health kept them from doing their usual activities.	5.4 (2.8- 8.0)	5.7 (5.4- 6.0)
Any Activity Limitation	Respondents who reported being limited in any way due to physical, mental or emotional problem.	17.2 (13.4-21.0)	16.0 (15.6-16.5)
	HEALTH CARE ACCESS		
Health Insurance	Respondents who reported not having any form or health care coverage	16.4 (12.4-20.5)	11.4 (11.0-11.9)
Access Limited by Cost	Respondents who reported needing to see a doctor during the past 12 months but could not due to cost.	7.5 (4.4-10.6)	6.8 (6.4- 7.1)
No Personal Provider	Respondents who reported that they did not have one person they consider to be their personal doctor or health care provider.	22.0 (17.3-26.7)	23.5 (23.0-24.1)
	HYPERTENSION		
High Blood Pressure	Respondents who reported ever having been told by a doctor, nurse or other health professional that they had high blood pressure.	31.8* (25.2-38.5)	25.0 (24.4-25.7)
	IMMUNIZATION		
Influenza Vaccine	Respondents age 65 and older who reported that they did not have a flu shot in the past year	27.1 (18.3-35.9)	28.6 (27.6-29.6)
Pneumococcal Vaccine	Respondents age 65 or older who reported never having had a pneumonia shot.	30.8 (22.0-39.6)	30.0 (28.9-31.0)
	INJURY		
Fall	Respondents 45 years and older who reported that they had fallen in the past 3 months	16.9 (9.5-24.3)	15.5 (14.7-16.2)
Seat Belt	Respondents who reported not always wearing their seatbelt	57.8 (50.0-65.6)	41.9 (40.9-42.9)

Pembina County Community Health Profile

ADULT BEHAVIORAL RISK FACTORS, 2001-2010

	ORAL HEALTH	Pembina County %	North Dakota %
Dental Visit	Respondents who reported that they have not had a dental visit in the past year	31.5 (25.4-37.5)	29.5 (28.8-30.3)
Tooth Loss	Respondents who reported they had lost 6 or more permanent teeth due to gum disease or decay.	18.7 (13.9-23.5)	16.0 (15.5-16.6)
	PHYSICAL ACTIVITY		
Recommend Physical Activity	Respondents who reported that they did not get the recommended amount of physical activity	50.6 (43.4-57.8)	50.5 (49.7-51.4)
No Leisure Physical Activity	Respondents who reported that they participated in no leisure time physical activity	7.8 (3.9-11.7)	6.9 (6.5- 7.4)
	TOBACCO		
Current Smoking	Respondents who reported that they smoked every day or some days	17.4 (13.5-21.2)	19.8 (19.3-20.4)
	WOMEN'S HEALTH		
Pap Smear	Women 18 and older who reported that they have not had a pap smear in the past three years	26.4* (14.6-38.1)	14.0 (13.1-15.0)
Mammogram Age 40+	Women 40 and older who reported that they have not had a mammogram in the past two years	30.2 (20.7-39.7)	24.3 (23.3-25.3)

19

Pembina County Community Health Profile

CRIME

Crime data is obtained from the North Dakota web site for the North Dakota Bureau of Criminal Investigation. The number of crimes are reported to BCI by local law enforcement agencies. Some years some agencies may not report so the data is designated as incomplete.

Pembina County

	2008	2009	2010	2011	2012	5 year	5-Year Rate
Murder	0	1	1	0	0	2	5.3
Rape	1	1	2	0	1	5	13.2
Robbery	0	0	0	0	0	0	0.0
Aggrevated Assualt	3	4	2	2	6	17	45.0
Violent crime	4	6	4	2	7	23	60.8
Burglary	7	15	6	22	14	64	169.2
Larceny	31	26	24	36	34	151	399.3
Motor vehicle theft	8	4	8	10	3	33	87.3
Property crime	46	45	38	68	51	248	655.8
Total	50	51	42	70	58	271	716.6

North Dakota

	2008	2009	2010	2011	2012	5 year	5-Year Rate
Murder	4	15	11	15	20	65	1.9
Rape	222	206	222	222	207	1,079	32.1
Robbery	71	102	85	85	91	434	12.9
Aggrevated Assualt	738	795	847	847	1,040	4,267	126.9
Violent crime	1,035	1,118	1,165	1,169	1,358	5,845	173.8
Burglary	2,035	2,180	1,826	1,826	2,227	10,094	300.2
Larceny	8,926	8,699	8,673	8,673	9,344	44,315	1317.7
Motor vehicle theft	854	825	763	763	854	4,059	120.7
Property crime	11,815	11,704	11,262	11,262	12,425	58,468	1738.6
Total	12,850	12,822	12,427	12,431	13,783	64,313	1912.4

Pembina County Community Health Profile

CHILD HEALTH INDICATORS

Child Health Indicators are selected from Kid's Count data reported on the web. The descriptive line tells what the number present and the part of the description in parentheses tells what the number in parentheses means. If the year of the data is different than other data in the table, the year is footnoted.

Child Indicators: Education 2012	Pembina County	North Dakota
Enrolled in Special Education Ages 3-21 (Percent of persons ages 3-21)	243 (%)	13,269 (13%)
High School Dropouts (Dropouts per 1000 persons ages 16-24)	2 (0.5%)	687 (2.2)
Average ACT Composite Score	21.0	21
Average Expenditure per Student in Public School	$11,091	$10,203

21

Child Indicators: Economic Health 2012	Pembina County	North Dakota
TANF Recipients Ages 0-19 (Percent of persons ages 0-19)	16 (0.9%)	6268 (3.6%)
SNAP Recipients Ages 0-19 (Percent of all children ages 0-19)	293 (18%)	38,493 (24%)
Children Receiving Free and Reduced Price Lunches (Percent of total school enrollment	428 (35)	34,012 (32%)
Children Ages 0-17 Living in Extreme Poverty (Percent of children 0-17 for whom poverty is determined)*	111 (7.0)	10,498 (7.2%)
Children Age 0-17 Living in Near Poverty (100%-149%)*	123 (7.7)	14,170 (9.7%)
Median Income for Families with Children Ages 0-17	63,208	66,042
Medicaid Recipients Ages 0-20 (Percent of all persons ages 0-20)	502 (28%)	52,757 (28%)

*Year 2011 data

22

Child Indicators: Families and Child Care 2012	Pembina County	North Dakota
Child Care Providers	14	2,411
Child Care Capacity (As percent of all children 0-13)	252 (29%)	34,545 (44%)
Mothers with a Child Ages 0-17 in Labor Force (Percent of all mothers with a child ages 0-17)*	569 (78%)	58,462 (83%)
Children Ages 0-17 Living in a Single Parent Family (Percent of all children ages 0-17)*	341 (21%)	32,181 (22%)
Children in Foster Care (Percent of children ages 0-18)	9 (0.5%)	1,878 (1.2%)
Children Ages 0-17 with Suspected Child Abuse or Neglect (Cases per 100 children 0-17)*	43 (2.8%)	6,172 (4.0%)
Children Ages 0-17 Impact by Domestic Violence (Percent of all children ages 0-17)**	18 (1.2%)	4,739 (2.9%)
Births to Mothers with Inadequate Prenatal Care*	NA	502 (5.4)

* 2011 ** 2010 data

23

Child Indicators: Juvenile Justice 2012	Pembina County	North Dakota
Children Ages 0-17 Referred to Juvenile Court (Percent of all children ages 0-17)	50 (6.7%)	4,473 (6.9%)
Offense Against Person Juvenile Court Referral (Percent of total juvenile court referral)	6 (5.7%)	741 (8.7%)
Alcohol-Related Juvenile Court Referral (Percent of all juvenile court referrals)	22 (21%)	1,308 (15%)

24

Appendix D – Prioritization of Community's Health Needs

Tier 1

- Cost & adequacy of health insurance (6 votes)
- Mental health including alcohol use & abuse (6 votes)
- Elevated rate of adult obesity (5 votes)
- Not enough jobs with livable wages (5 votes)
- Lack of resources for elderly to stay in their homes (5 votes)

Tier 2

- Attracting and retaining young families (4 votes)
- Excessive drinking (4 votes)
- Elevated levels of uninsured children (3 votes)
- Heart disease and diabetes (3 votes)
- Lack of collaboration between PCMH and Altru (3 votes)

Tier 3

- Elevated rate of diabetics (2 votes)
- Elevated rate of preventable hospital stays (2 votes)
- Dementia/Alzheimer's (2 votes)
- Lack of public transportation options (2 votes)
- Low food environment index (1 vote)
- Elevated rate of physical inactivity (1 vote)
- Low rates of diabetic and mammography screening (1 vote)

(No Votes)

- Limited access to exercise opportunities
- Limited access to healthy foods
- Not enough primary care physicians
- Note enough dentists
- Low levels of seatbelt use
- Elevated rates of deaths from injury
- Elevated levels of drinking water violations
- Elevated levels of unemployment
- Limited licensed child care capacity
- Cancer