

# Emerging Health Trends in North Dakota: Community Health Needs Assessments Aggregate Data Report

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# **Executive Summary**

Needs assessments are commonly practiced and encouraged among health care providers to ensure they are meeting the needs of their patients. The Patient Protection and Affordable Care Act (PPACA) of 2010 mandates that all non-profit hospitals conduct a Community Health Needs Assessment (CHNA) once every three years. From 2011-2013 the Center for Rural Health (CRH) at the University of North Dakota School of Medicine and Health Sciences has conducted CHNAs on more than half of the Critical Access Hospitals (CAHs) in North Dakota. Specifically, of the 36 CAHS, the CRH has conducted 21 CHNAs for hospitals across the state representing 58 percent of all CAHs.

Research designs vary on how best to conduct a CHNA but the overarching goal is to solicit community input from a broad sample, including input from a public health official. As part of the CHNA process, community participants are asked to prioritize the most pressing needs confronting their community from a compiled list of potential needs that were identified during the needs assessment process. Termed Tier 1 needs, these needs reflect the health concerns community participants selected and ranked as most prevalent, most persistent, and most substantial. With this prioritized list of Tier 1 needs, the hospital can attend to the needs of its constituents and address the health needs impacting the community.

A systematic review of all the Tier 1 needs collected from 21 CHNAs was conducted to compose a macro understanding of community health needs in rural North Dakota. In this way, the Tier 1 needs were aggregated with an eye for overlapping and recurring significant needs. With a sample size of 21 rural hospitals, or more than half of the CAHs in North Dakota and including hospitals from all geographic corners, the results may be representable of the state's health care needs.

The Tier 1 needs occurring most frequently are: limited number of health care providers, higher costs of health care for consumers, financial viability of hospitals, mental health, and elevated rates of adult obesity.

As a whole, these needs paint the current picture of health needs affecting the state. With the PPACA in its infancy, documenting the most significant needs at this juncture provides the baseline for which to measure change in the future.

Additionally, an analysis of how the significant needs were determined is included. Findings show that primary data sources outweigh secondary data sources when participants are tasked with prioritizing health needs. Within primary data, focus group responses hold the most influence. This conclusion highlights the value of collaborative communication opportunities and may implicate that more CHNA research designs should include focus groups in the future.

As the CHNA is just part of the legal mandate delineated in the PPACA, the other piece of the directive is for the hospital to develop a strategic implementation plan which outlines programmed activities that address the prioritized needs. Although this report focuses on the emerging health needs and trends as determined by the CHNA significant needs, it is important to keep an eye toward creative and efficient ways hospitals are meeting these demands.

## Introduction

In early 2010, President Obama signed the Patient Protection and Affordable Care Act (PPACA) into law, putting in place comprehensive reforms designed to improve access to affordable health coverage. One of the mandates of the PPACA requires all non-profit hospitals to conduct a Community Health Needs Assessment (CHNA) once every three years. The purpose of conducting a CHNA is to describe the health of local people, identify use of local health care services, identify and prioritize community needs, and lay the groundwork for identifying action needed to address health needs. Hospitals that fail to meet the CHNA requirement are subject to a \$50,000 excise tax.

Newly passed into law, the PPACA mandate is in its infancy and little has been written about the best methodology to conduct a CHNA. A review of assessment methodology currently in practice reveals that research designs vary from state to state, and community to community, depending on who is conducting them (hospital, public sector program, or private consulting firm), size and location of community (urban or rural), and timeline (three months to a year). Given that these CHNAs will be routinely conducted and have a wide-ranging scope, affecting non-profit hospitals in every state, there is critical need to review research designs and share best practices.

The ability to wear many hats is recognized as a needed skill in small towns. Unlike in cities where information is stored in websites and directories, often a central repository of information is lacking in small towns. Information is largely disseminated through word of mouth. To capitalize on the oral communication method of information dissemination and to take advantage of community members serving in multiple roles a methodology is needed that caters to rural communities.

Borrowing from the CHNA methodology crafted by the National Center for Rural Health Works, Center for Rural Health staff Karin Becker and Ken Hall (with input from other CRH staff) developed a research design that accommodates rural communities and their unique characteristics in terms of communication practices, informal decision making, and available resources. Called the Rural Community Group Model (RCGM), it is a method employed by the Center for Rural Health (CRH) at the University of North Dakota School of Medicine and Health Sciences and is a model research design for replication in rural settings. It has been used to conduct CHNAs on over half of the critical access hospitals in the state and has been demonstrated to yield valuable community feedback representing broad community demographics. It offers an empirical model intended to satisfy PPACA regulations and provide reliable results. Its strengths lie in its ability to invite community involvement in an efficient and anonymous way so that community members can respond openly and honestly.

The Center for Rural Health's involvement was funded through its Medicare Rural Hospital Flexibility (Flex) Program. The Center created the North Dakota Flex Program in 1999. The Flex Program is federally funded by the Office of Rural Health Policy, U.S. Department of Health and Human Services and was created as a national program to be a companion to the federal designation of rural hospitals as Critical Access Hospitals. Flex provides technical assistance and resources to CAHs and is a significant federal and state partnership intended to strengthen and stabilize rural health. The assessment costs associated with the CHNA were covered by the federal Flex grant.

A health needs assessment benefits the community in a number of ways including the following: 1) collecting timely input from the local community, providers, and staff; 2) providing an analysis of secondary data related to health conditions, risks, and outcomes; 3) compiling and organizing information to guide decision making, education, and marketing efforts, and to facilitate the development of a strategic plan; 4) engaging community members about the future of health care delivery and designing community responsive solutions to improve local population health; and 5) allowing the charitable hospital to meet federal regulation requirements of the PPACA.

To gather feedback from the community, residents of the health care service area and staff were given the chance to participate in a widely distributed survey. Additional information was collected through a Focus Group comprised of community residents as well as through one-on-one key informant interviews with community leaders. Moreover, secondary data were gathered to examine health behaviors and statistics in the counties comprising the hospital's service area.

The RCGM proved to be an effective model to gain esteemed community feedback under the veil of anonymity and positioned hospitals to be in compliance with the PPACA mandate. Through conducting several CHNAs, it was noted that substantial information was gathered that served not only to assist individual hospitals in understanding local perspectives with regard to perceived needs, but also offered a more systemic or macro-level opportunity to think through broader statewide health status and system implications and policy options. Thus, following the individual assessments the North Dakota Flex program elected to develop a consolidated data file to be analyzed as an aggregate so as to form a comprehensive overview of statewide rural health issues.

The Center for Rural Health provided substantial support in conducting community health needs assessments (CHNAs). Center for Rural Health representatives collected data for the assessments in a variety of ways: (1) designing and disseminating a print survey to solicit feedback from area residents; (2) designing an online version of the survey to gather input from health care professionals who work at the local hospital; (3) conducting one-on-one key informant interviews with community leaders representing

the broad interests of the community; (4) facilitating a Focus Group comprised of community leaders and area residents to discuss and prioritize area health needs; and (5) analyzing a wide range of secondary sources of data to provide information on a multitude of measures including demographics; health conditions, indicators, and outcomes; rates of preventive measures; rates of disease; and at-risk activities.

# **CHNA Methodology**

#### **Interviews**

One-on-one interviews with key informants were conducted in person at the local hospital. A representative of the Center for Rural Health conducted the interviews. Interviews were held with key informants who could provide insights into the community's health needs. These interviewees represented the broad interests of the community served by the local hospital. They included representatives of the medical community, business community and local government. Included among the informants in each community was a public health nurse with special knowledge in public health acquired through several years of direct care experience in the community, including working with medically underserved, low income and American Indian populations, as well as with populations with chronic diseases.

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

#### **First Focus Group**

A Focus Group of locally invested community leaders who were selected by the hospital's CEO was convened to discuss community health needs. During this first Community Group meeting, group members were introduced to the needs assessment process, reviewed basic demographic information about the service area, and served as a focus group. Focus group topics included the general health needs of the community, general community concerns, community health concerns, delivery of health care by local providers, awareness of health services offered locally, barriers to using local services, suggestions for improving collaboration within the community, reasons community members use local health care and reasons community members use other facilities for health care.

Members of the Focus Group represented the broad interests of the community served by the local hospital. They included representatives of the health community, public schools, business community, faith community, city personnel, business leaders and elected officials. To add varying perspectives, various age brackets were represented including senior citizens as well parents with young children.

#### Survey

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

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

#### **Community Member Survey**

The community member survey was distributed to residents of the hospital's service area. The survey tool was designed to:

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

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

Approximately 500-1,500 community member surveys were available for distribution in the service area of each hospital, depending on the community's size. The surveys were distributed by Community Group members and were made available at the hospital and clinic as well as locally at such places as banks, oil companies, area businesses, fitness centers, churches, service organizations, grocery stores, and quilters' guilds. 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 the local hospital. The survey period usually ran for three to four weeks.

Area residents were given the option of completing an online version of the survey which was publicized in area newspapers.

#### **Health Care Professional Survey**

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

The combined print and online community member survey response rate averaged about 20 percent per community. This figure is derived from the total number of surveys completed by community members divided by the number of print surveys distributed to the community.

#### **Secondary Research**

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

#### Second Focus Group

At the end of the CHNA process, once all data had been collected, analyzed and synthesized, the Focus Group met again for approximately 90 minutes. At this second meeting a representative from the Center for Rural Health presented the group with a summary of the assessment's findings, including background and explanation about the secondary data relating to the general health and behaviors of the population in the

service area, highlights from the results of the survey (including perceived community health concerns, awareness of local services, why patients seek care at the local hospital, community collaboration, and barriers to care), and findings from the focus group and key informant interviews.

Following the presentation of the assessment findings and after careful consideration of and discussion about the findings, each member of the group received a ballot card containing all of the potential community needs and was asked to rank what they perceived as the most pressing community needs. The ballot card included the source of the potential concern, identifying if the concern was expressed from the interviews and focus group, print and online survey responses, or secondary data. Participants were instructed to review the list and then select their top five concerns they deemed most significant to the community. To further help with the ranking of data, the prioritization criteria recommended participants to think of the community need in terms of its importance, impact, severity, and reach it has on the community.

Once all of the votes had been cast, a representative of the CRH tallied them to determine the rank order of concerns. A discussion followed to ensure that the ranked needs correctly aligned with the community concerns. To tap into local knowledge and encourage buy-in, residents were asked if they felt comfortable submitting the concerns to the hospital as representing the most significant needs affecting the community. Often times, a robust discussion ensued where community members would change their minds about certain needs, re-prioritizing needs after hearing local input. In cases of a tie, some communities opted for a second vote to cull the needs.

The results were totaled and categorized into three tiers based on the number of votes received. For example, in a smaller community with a small Focus Group, the tiers might be broken out by those receiving five or more votes, those receiving three or four votes, and those receiving one or two votes. After ranking the concerns, the Focus Group ratified the list as adequately reflecting the health needs of their community and would serve as a guiding light for the hospital's strategic planning. Local hospitals used the list of prioritized needs for informational purposes – and as one form of community feedback – as they developed their implementation strategies, which are formal plans for addressing community health needs. The identified needs satisfy the terms of the community health needs assessment as mandated by the PPACA and provide hospitals with a clear list of needs to address to improve community health.

# **Aggregating Data Methodology**

Of the 36 CAHs in North Dakota, the CRH has conducted 21 CHNAs. This means that over half of the CAHs in the state (58 percent) have utilized the same CHNA methodology which helps to create a more consistent dataset to analyze. Given the wide geographic distribution of these CAHs, this sample of 21 CHNAs most likely presents a representative view of the entire population.

In reviewing each CHNA individually, specific information was pulled from the various data sets. First, the thematic list of concerns summarized from the key informant interviews and Community Group was pulled and included in a spread sheet. This list was not presented in any particular order and often, four or five emerging themes were discussed.

Secondly, from both the online and print surveys completed by both community members and health care providers, one question in particular was reviewed: community health concerns. This question included an alphabetized list of about 15-20 community concerns.

Although the list of concerns differed from community to community there was a stock battery of initial health concerns which provides some internal consistency. As each survey was customized to suit each individual hospital's issues, health concerns varied with a marked difference in oil patch communities. Respondents were asked to rank each concern on a scale of one to five, with one being less of a concern and five being more of a concern. Responses were averaged and those concerns with the top five highest averages were taken from each CHNA. To compare the differences in perceptions of community concerns, community members' responses were tallied separately from health care providers' responses.

Finally, secondary data was reviewed from each CHNA with a particular eye on how the county where the hospital is located fared compared to other state averages. The County Health Rankings information was instrumental in collecting this data. In order to determine the top five most pressing health conditions, behavior and outcomes, the measures where the county was underperforming the state average by five percentage points or more were recorded. Although some hospitals have a wide service area, extending into multiple counties, to simplify the data collection only the information from the hospital's host county was included. Since this study is looking solely at emerging health trends and patterns within the state of North Dakota, assessments of how the county performed compared to national benchmarks were not considered. Additionally, selected preventative measures as compiled by the North Dakota Health Care Review, Inc. (the state Medicare Quality Improvement Organization) were reviewed to conclude the top five most pressing needs.

# **Emerging Health Trends Across North Dakota's CAHs**

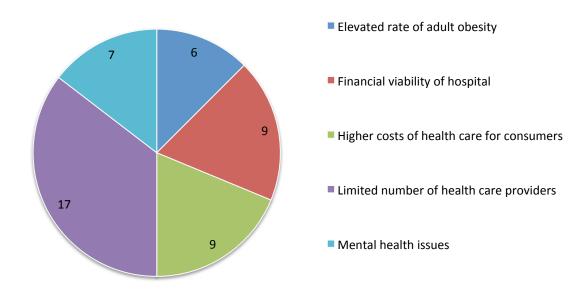
The first area of analysis is a composite list of prioritized community needs. In reviewing each prioritized list identified in the CHNA report, the top five significant needs were categorically reviewed and categorized into themes. For example, the need of substance abuse issues was absorbed into mental health issues. Education on chronic disease prevention was clustered into the theme of wellness and prevention. Any mention of a need for more health care staff, providers, primary care physicians or visiting specialists was grouped into the need for more health care providers. This health care grouping does not include mental health providers as mental health is categorized as its own need. Once the data was collapsed, 23 distinct needs emerged.

Similarly to how the CHNA's methodology grouped prioritized needs into tiers with those community concerns which received the most votes from the community group classified into Tier 1 and those community concerns which received the fewest votes classified into Tier 4 needs, the overall state's significant concerns are categorized into four tiers. Tier 1 includes those community needs that occurred on a plurality of CHNA prioritization lists, including those community needs that were expressed in six to 17 CHNAs. Tier 2 represents those community needs that were expressed on four or five CHNA prioritization lists. Tier 3 includes those community needs that were expressed on two or three CHNA prioritization lists and Tier 4 includes all the community needs expressed singly.

Tier 1 needs are illustrated in Figure 1.

Figure 1: Tier 1 Significant Needs:

#### Number of Community Health Needs Assessments Ranking Need as Significant



#### **Tier 1 Needs: Workforce Issues**

Findings show that the health concern most often ranked as a significant need facing the state of North Dakota in 2011-13 is a workforce issue. The most significant need by a substantial margin is maintaining enough health care providers (N=17), which includes primary care providers, visiting specialists as well as health care staff. This means that on 17 separate CHNAs conducted across the state, community members ranked the lack of adequate health care providers as a significant Tier 1 need. From this data , 17 out of the total sample size of 21 CHNAs equates to 80 percent, meaning four out of five communities studied perceive the limited number of health care professional as a pressing problem.

It is important to point out that the small number accounts for hundreds of community members' and health care professionals' input. For example, one CHNA may have garnered participation from 130-400 residents. Taking that number and multiplying it by 17 represents thousands of community voices; this larger number legitimizes the needs and hints at the level of concern from the state's population.

Although the figures may be alarming, they are not unique to North Dakota; similar to the rest of the United States of America, North Dakota is facing a major health care delivery challenge and is well aware of the lack of primary care doctors. Rural states in particular are hard pressed to recruit and retain physicians and suffer from chronic shortages of primary care providers. The aging baby boomer population and the accelerated growth in the oil patch only exacerbate this deficit.

Nor are these figures surprising. The CHNA findings coincide with the results summarized in The Second Biennial Report 2013: Health Issues for the State of North Dakota which was prepared by the School of Medicine and Health Sciences Advisory Council, the UND School of Medicine and Health Sciences and the Center for Rural Health. According to the Report, North Dakota is slightly (2 percent) behind the U.S. as a whole and lags a bit further (4 percent) behind other comparable Midwest regions as to the number of physicians per population. However, the geographic displacement of these physicians is not proportionate, with physicians more likely to practice in metropolitan areas of the state rather than the small, rural towns. In addition, the Center for Rural Health's 2011 survey of ND CAH administrators found that over 90 percent identified physician workforce supply as a problem, moderate problem, or severe problem; 85 percent indicated the same for nursing workforce supply. Thus, community members and hospital administrators perceive rural health workforce to be a concern.

The Biennial Report outlines a plan, called the Health Care Workforce Initiative (HWI), to address the identified health care workforce need including steps to reduce disease burden, increase the provider workforce through programs designed to increase provider retention, and expand provider network through class size enlargement. While this plan has received widespread endorsement from UND and the legislature, the CHNA findings serve as a reminder that the workforce need is not only perceived by invested stakeholders but also by community residents.

Additionally, the Assessing Critical Access Hospital (CAH) Assets and Capabilities for Recruiting and Retaining Physicians: The North Dakota CAH Community Apgar Program report studies factors which play an important role in physician recruitment and retention and recommends ways in which rural communities can be attractive to potential providers. Five factors were analyzed: geographic, economic, scope of practice, medical support and hospital and community support. As summarized in the Apgar report, spousal satisfaction was identified as one of the most important factors in physician recruitment and retention, followed by perception of quality and physician workforce stability. Physical plant/equipment and call/practice coverage were also scored among the most important factors in maintaining physician satisfaction.

The largest community assets in recruiting a physician include availability of hospital internet access (primarily the availability of WiFi), perception of quality, transfer agreements, income guarantee, and loan repayment. The biggest challenges identified were climate, spousal satisfaction, shopping/other services, mental health, and access to a larger community.

The findings presented in the Apgar report provide unique insights into the prevalent problem of health work force shortages. Putting more emphasis on spousal support and workforce stability may provide areas to focus on when designing physician recruitment campaigns.

#### **Tier 1 Needs: Economic Issues**

There was a tie between increased costs of health care for consumers and financial viability of the hospital for the second most frequently cited need, with each need prioritized in nine (N=9) different CHNAs. Both of these needs can be classified as economic in nature and represent the patient's and the provider's financial concerns when receiving or delivering health care. The financial burden of paying for health care services and insurance are important to keep in mind given the context of the recession and the many elderly residents who live on fixed incomes. Financial concerns have a direct effect on both the individual and/or family and on the health facility. The previously cited survey of CAH administrators also found that over 90 percent of the CEOs identified both impact of the uninsured and impact of the underinsured as problems faced by the hospitals. About 95 percent indicated that another economic issue was a problem – hospital reimbursement. The Center for Rural Health has periodically surveyed citizens at community meetings dating back to the development of the Flex State Rural Health Plan in 2008. It is another process employed to monitor community attitude. The aggregate data (2008-2012) indicated that the number one concern for those attending Center for Rural Health events was financial issues facing rural hospitals. As in the previous discussion on workforce needs, there are a number of statewide sources that support the CHNA findings with regard to financial concerns.

During the CHNA process community members often phrased their financial viability concern by saying they worried the hospital would close. This fear caused economic anxieties as some predicted that if the hospital closed, the whole town would fold. CAHs serve as large employers and contribute economically to the local community. For some, the uncertainty surrounding whether the hospital's doors may close was more of an economic issue than an access issue. While some may be willing to travel or are used to traveling to receive specialized care, the value of having an economic contributor such as a hospital is profound.

The ND Flex program has found that the average ND CAH has an economic impact of approximately \$6.4 million in payroll and contributes about 224 direct and indirect jobs to the local economy. Across the state this translates into an overall impact of about \$230 million to the state's rural economy and approximately 8,000 jobs. Rural hospitals impact their communities by producing employment, serving as economic generators for the area economy, producing community leaders for civic activities, contributing to a

sense of community pride, and supporting other important community infrastructure such as schools, business, local government, faith institutions, and other community endeavors and sectors.

#### Tier 1 Needs: Mental Health Issues

Mental health issues emerged in seven (N=7) CHNAs. This gives testament to the severity of the problem. Moreover, it is important to interpret the concern not solely as a workforce issue, needing more mental health practitioners, but a broader need which encompasses resources to address substance abuse, prescription medicine abuse, depression and suicide. Additionally, the 2011 CAH Administrator survey found that about 60 percent of ND CAH administrators rated access to mental health services as a problem, serious problem, or severe problem. Over 45 percent rated it a severe problem ranking this issue as the third highest severe issue out of 21 issues. It was surpassed only by physician workforce supply and third party hospital reimbursement.

#### Tier 1 Needs: Elevated Rates of Obesity

Elevated rate of obesity was the fifth most oft-cited significant need, occurring in six CHNAs (N=6). Although the Biennial Report indicates North Dakotans have a slightly lower problem with obesity than the rest of the U.S., the fact that obesity is the fifth most frequently cited health concern shows that this concern is on the minds of North Dakota residents and gives testament to its severity. Furthermore, the Biennial Report found that rural North Dakota, in comparison to urban areas, is marked by increased health disparities and elevated rates of obesity, disability, physical inactivity, drinking, smoking, only fair or poor health, and days with poor health. Additionally, rural North Dakotans have higher rates (in comparison to urban North Dakotans) for certain health conditions: high cholesterol, high blood pressure, arthritis, asthma, cardiovascular disease, and obesity. Obesity is a significant factor associated with many health conditions.

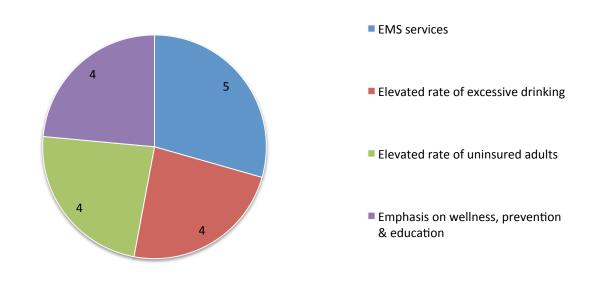
These prioritized health concerns as iterated by community members during the CHNA process need to be taken into consideration when looking at health needs of the state. The Biennial Report outlines four recommendations to improve health care in the state with three out of the four efforts aimed at increasing the health care workforce. The fourth recommendation, aimed at reducing disease burden, encompasses obesity and other health-related behaviors but does not target obesity directly. Therefore, it is important to take stock of the plurality of voices who have expressed grave concern with the epidemic of obesity.

#### Tier 2 Needs:

Tier 2 represents the significant needs which were prioritized in four or five separate CHNAs. An increase in volunteers and staff for Emergency Medical Services (EMS) occurred in five (N=5) CHNAs. Elevated rates of excessive drinking, elevated rates of uninsured adults and emphasis on wellness, prevention and education were prioritized in four (N=4) CHNAs. Amidst all of these needs it is encouraging to have a preventative measure prioritized as a top concern. Figure two illustrates Tier 2 needs.

Figure 2: Tier 2 Significant Needs:

Number of Community Health Needs Assessments Ranking Need as Significant

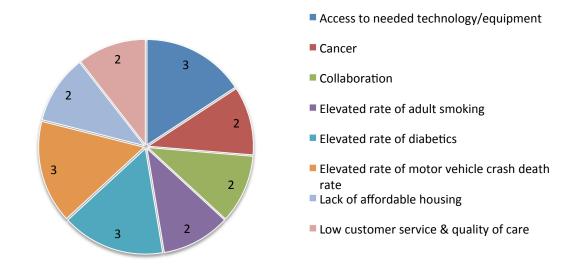


#### Tier 3 Needs:

Tier 3 represents the significant needs which were prioritized in two or three CHNAs. Access to needed technology and equipment, elevated rate of diabetics and elevated motor vehicle crash death rates and traffic concerns occurred in three (N=3) CHNAs. Cancer, elevated rates of adult smoking, increase in hospital collaboration with various other community organizations, increase in customer service and quality of care, and lack of affordable housing were prioritized as significant needs in two different (N=2) CHNAs. These results are shown in Figure 3.

Figure 3: Tier 3 Significant Needs:

#### Number of Community Health Needs Assessments Ranking Need as Significant

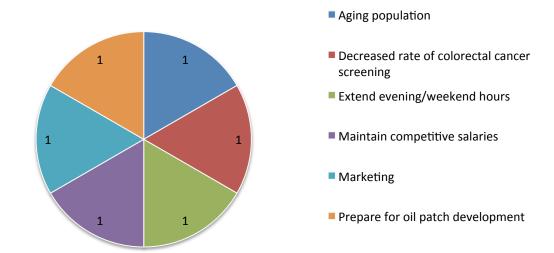


#### **Tier 4 Needs:**

Finally, those needs that were only mentioned in one CHNA are depicted in Figure 4. Although these needs were not echoed in other communities across the state, they still represent pressing needs for that particular community. In other words, their singularity of frequency does not dismiss their urgency. They are: aging population, decreased rate of colorectal cancer screening, a need for extending clinic hours on evenings and weekends, a need for offering competitive salaries, an increase in marketing efforts, and need for preparation for oil patch development. While an aging population emerged as a priority issue in only one CHNA, the other community engagement surveys conducted at community meetings and events (2008-2012 aggregate data) found that retaining/recruiting youth was the number one rated community issue out of 11 factors.

**Figure 4: Tier 4 Significant Needs:** 

#### Number of Community Health Needs Assessments Ranking Need as Significant



# **Decision-Making Process**

Now that we are aware of the emerging health care trends in North Dakota, it is important to understand what determinants affected the outcomes and how these significant needs were selected. To better comprehend these findings, an analysis of the decision making process follows. From the collected data, the significant needs were analyzed to determine the origin of the data source. Only the Tier 1 significant needs, or those needs deemed a priority, were consulted and reviewed. Specifically, we ascertained whether the prioritized need derived from a primary data source such as survey questions, key informant interview or focus group discussions, or if it stemmed from secondary data.

The objective of this analysis was to examine the presence of triangulation, or the occurrence of results from two or three data sets. Do the prioritized needs reflect overlapping areas of concern and therefore reflect a convergence of expressed voices? Or alternately, do they favor one data set? Does one data source have an undue influence in the community? Does the CHNA methodology privilege one set of voices or type of data at the expense of others? This data analysis is valuable in determining the validity of the above findings.

Four data sources were collected for this analysis and gathered in the following steps.

**Step One**: Key informant and focus group data sets; (one data set).

The key informant interviews and focus group responses were already thematically organized into five or six concerns listed in the CHNA so they were included in the database.

**Step Two**: Health care professional survey and community member survey; (two data sets).

To narrow the scope of the primary data, one specific survey question was examined: health concerns. Of this question, the top five concerns were selected from the health care professional survey and the community member survey. This question was chosen because it tapped into the heart of the community health needs assessment and was derived from a relatively stable stock of survey options, creating consistency in the data collection process. The exact wording of the question was:

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

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

The five concerns that had the highest averages were tabulated from each of the CHNAs. Some variations in the survey design include some CHNA methodology combining community member and health care provider responses and bracketing the health concern by a timeline such as indicating whether each potential concern was a concern now, at the present time, or in two to five years. Since this aggregate data report is concerned with the emergent health trends in this inaugural PPACA reporting period as of 2010-2013, the top five needs that presently pose a concern were tabulated.

**Step Three:** Secondary data; (one data set).

Of the many different secondary data sources contributing to the CHNA, two sources were consulted to gather secondary data for this study: County Health Rankings and North Dakota Health Care Review, Inc. These two sources were selected due to their focus on health behavior and measures on a county level. Since this aggregate study is exploring emerging health care trends in the state, this meta-data allows for a county-by-county comparison.

From County Health Rankings, health behaviors, including clinical care from the hospital's host county were analyzed for areas that were underperforming (meaning the majority of other counties in North Dakota are performing better on that measure) compared to North Dakota averages. Even though a hospital may have multiple counties in its service area, only the county in which the hospital is located was reviewed in order to narrow the results. To further delineate the data, those measures that were underperforming state averages by five percentage points or more were selected. For example, if a county was underperforming on many measures, the measure that had the greatest difference from the state average was selected. The top five lowest performing measures were collected.

The selected health behaviors under review were:

TABLE 1: Selected Measures from County Health Rankings	North Dakota	
Health Behaviors		
Adult smoking	19%	
Adult obesity	30%	
Physical inactivity	26%	
Excessive drinking	22%	
Sexually transmitted infections	357 per 100,000	
Motor vehicle crash death rate	17 per 100,000	
Teen birth rate	28 per 1,000 females ages 15-19	
Clinical Care		
Uninsured	11%	
Primary care provider ratio	1,297:1	
Preventable hospital stays	59 per 1,000 Medicare enrollees	
Diabetic screening	86%	
Mammography screening	71%	

Additional preventative care data were reviewed from North Dakota Health Care Review, Inc., the state's Medicare Quality Improvement Organization that reports on preventative care measures on a county-by-county basis. The selected preventative measures included are shown in Table. 2.

TABLE 2: Clinical Quality and Preventative Care Measures for North Dakotans 65 years and older	North Dakota
Colorectal cancer screening rates	55.5%
Pneumococcal pneumonia vaccination rates	51.3%
Influenza vaccination rates	50.4%
Annual hemoglobin A1C screening rates for patients with diabetes	92.2%
Annual lipid testing screening rates for patients with diabetes	81%
Annual eye examination screening rates for patients with diabetes	72.5%
PIM (potentially inappropriate medication) rates	11.1%
DDI (drug-drug interaction) rates	9.8%

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

# Determinants of the Decision Making Process

In social science research primary and secondary data are used to help address specific questions. In this CHNA research design primary data consist of data obtained first-hand by the CRH staff and include key informant interview responses, community member and health care professional responses and focus group responses. Secondary data involves the use of data that were collected by outside researchers for other purposes. Staff from the CRH used secondary data that were collected by County Health Rankings and North Dakota Health Care Review, Inc.

When examining what data sources community members looked to as they determined which potential health needs were significant, primary data outweighed secondary data significantly, at more than a 2:1 ratio. In looking at the prioritized needs compiled from all 21 CAHs, 99 needs were prioritized as Tier 1 needs. This number includes a need counted numerous times over many CHNAs. For example, one community's Tier 1 needs may have culminated in listing "limited number of health care providers" and "adequate number of visiting specialists." While both of these needs were collapsed in the above analysis into a workforce issue, for this analysis each need is looked at individually as opposed to the thematically grouped needs.

Of these 99 needs, 57 of them were expressed in a health care professional survey; 55 were expressed in a community member survey; and 47 of them were expressed during a key informant interview and focus group. Taken together these numbers exceed the total number of 99 because a need may have been expressed in more than one data source. Therefore, combining the three types of primary data, we get 57+55+47 = 159 total needs originating from primary data.

Conversely, twenty-three (N=23) Tier 1 needs were identified in secondary data.

From these numbers it is clear to see the influence primary data has on the decision making process. Needs identified from primary data sources more often get ranked as a prioritized need than secondary data at nearly a 7:1 ratio (as shown in Figure 5). These findings are not surprising given that there were three distinct data sources of primary data (health care professional survey, community member survey and key informant interview/focus group) and only one secondary data source (County Health Rankings and NDHCRI data were consolidated). On the contrary, what is surprising is how much sway secondary data does hold.

The results illustrated in Figure 5 reflect an overlapping of data where a need may have been identified from both primary and secondary sources.

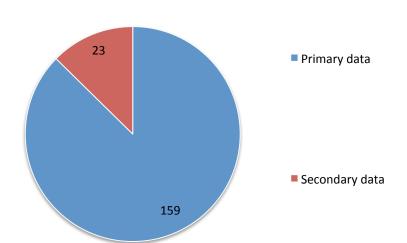


Figure 5: Number of Needs Identified Through Primary and Secondary Data

#### **Secondary Data**

From this data, if we look only at those prioritized needs that were derived solely from secondary sources, we can isolate the extent of influence secondary data has. Of the 99 Tier 1 needs listed in this sample, 13 (N=13; 13 percent) were expressed only in secondary data. This means that participants at the second community meeting who were tasked with prioritizing the potential health needs selected concerns derived from only one data set which was all secondary data in nature and which existed outside of their community feedback.

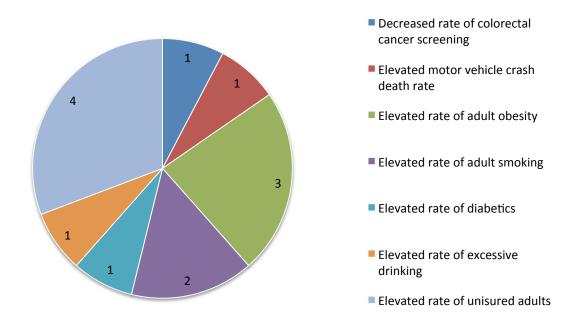
It is interesting to note the authority and influence secondary data have. While the data were objectively and remotely collected they established precedence over data that were expressed and gathered locally from community members and health care professionals. This reliance on secondary data illustrates that community members were open to alternative sources of information and were willing in some cases to factor that data into their local decision making.

In using both primary and secondary data it is important to understand that each contributes a significant and beneficial part to an interactive community-based decision making process. While it is clear that primary data most often accounted for the Tier 1 needs, secondary data did contribute to the determination of 13 percent of the needs.

Thus, it is vital that when organizations engage in community-based processes they consider employing both primary and secondary data.

Figure 6 illustrates the concerns derived from secondary data that community members ranked as Tier 1 needs.

Figure 6: Secondary Data Accounting for the 13 percent of Tier 1 Needs



#### **Primary Data**

Of the primary data, it is important to understand which source has the most influence: key informant and focus group responses; community member survey responses; or health care professional survey responses. Moreover, examining the data for commonalities in perception among different audiences can strengthen the validity of the findings. It is important to determine if health care professionals' ideas and perceptions are in sync with community members as the extent of mutual agreement can have significant implications. Health care professionals naturally serve as opinion leaders. Their advocacy for an idea or set of ideas in forming community-based health alliances with local citizens can be compelling. The greater extent of mirroring between

health care professionals and community members equates to a unified assessment which can allow for successful leveraging of resources and decrease respondent burden.

In reviewing all of the primary concerns expressed as Tier 1 needs, focus group and key informant interview responses were more likely to be prioritized as Tier 1 needs. Since some of the CHNA methodology varied and did not include a focus group, 23 Tier 1 needs from five CHNAs were omitted, resulting in a total data set of 16 CHNAs. Therefore, the total sample size for this group of primary data where all three data sets were employed is N=76. Of the 76 Tier 1 needs, 47 (N=47; 62 percent) of them were expressed in focus groups or key informant interviews. The next most influential group was health care professionals. Thirty-five (N=35; 46 percent) Tier 1 needs were attributed to the survey input from health care professionals. Close behind is the survey input from community members with 34 (N=354; 45 percent) Tier 1 needs attributed to community member survey input.

Again, data among these primary sources are not discrete, meaning that a Tier 1 need could have been expressed in a community member survey as well as in a focus group. Due to the amount of overlap, the individual primary data totals (N=47+35+34= 116) exceed the composite total of N=76. Still, it is important to know the extent of influence focus group and key informant interview responses have on the overall selection of determining prioritized community health needs.

The breakdown of primary data sources is conveyed in Figure 7.

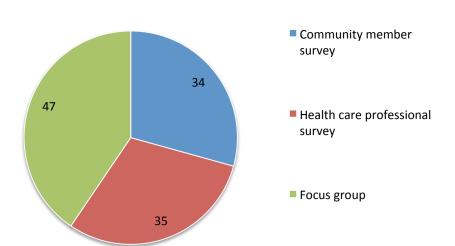


Figure 7: Influences of Primary Data

# A Focus on Focus Groups

Reasons as to why focus group responses are more likely to be prioritized as Tier 1 needs are many. First, focus groups take advantage of the "group effect" where people draw upon a shared fund of experiences and each person's turn of the conversation links to or chains from the expressions that came before it (Carey, 1994). Having the ability to discuss community concerns in an open environment allows for the transfer of opinions and experiences. Hearing others express concerns that echo an individual's legitimizes the concern, thus increasing their chance of seeing the concern as a community-wide problem.

Secondly, those that attended the focus group were selected by the hospital CEO and identified as community leaders. Often, the participants were long-time residents who had unique perspectives from their various leadership roles. Abelson (2001) warns that choosing an appropriate combination of public, elected officials, experts and stakeholders to participate in the assessment process can be complicated. The views and voices of those who are invited will have power and privilege in the decision-making process. As designated leaders these community members may have more experience speaking before groups and more confidence in speaking up or raising an alternate view. Focus group discussions tended to be fluid, with many entering the conversation. The CRH facilitator monitored against one or two speakers dominating the conversation or pushing for consensus.

Finally, the questions asked by the facilitator of the focus group were open ended in nature, lending to a robust discussion of health needs. Conversely, the survey questions asked respondents to rank concerns and although the surveys did include open ended questions, asking respondents to explain which health concern was most pressing and how it impacted the community, not all respondents took the time to complete the openended questions. All of these reasons shed light on why focus groups held the most influence and provide a foundation for a systematic, transparent and justified decision-making process.

# Ritual Recommendations for Rural Health

Learning of the influence that focus group discussions have on selecting prioritized needs has important implications for future CHNA designs. As this was the initial completion of conducting a CHNA as mandated by the PPACA and given that the law stipulates that non-profit hospitals must conduct a CHNA every three years, hospital administrators, state offices of rural health and private consulting companies would be wise to implement a focus group into their research design.

The prioritization of focus group responses has unique implications for communication practices. In terms of models of communication, Carey (2009) posits there are two models: transmission model and ritual model. In the transmission model, communication is transported where a sender transmits a message to a receiver. The transmission is deemed a success based on the accuracy of the transmission and if the receiver gets the message. The focus is on information dissemination. Secondary data, like a county's health measures and behaviors which are gathered remotely and transmitted across the internet so that others can receive and use the information, are examples of the transmission model

Primary data like focus groups, interviews and open ended surveys are examples of ritual communication where a message is not sent and received, but created mutually by participants. The criterion of success is if the message is built upon a shared experience and fosters a sense of community. This model of communication values the collaborative effort and social contribution to knowledge and decision making. Also known as the constitutive model of communication, this view acknowledges communion, participation, association and fellowship inherit in the communication process.

The decision making findings give testament to the significance of the ritualistic view of communication practices. Understanding the importance of the ritual model of communication has critical implications for health care providers. There is a need to provide more outlets for community input. Rural organizations, including community-based health facilities, benefit from targeted forms of community engagement where a sincere effort is made to create an open and invitational process. Community members can actively participate in local decision making, share their perspectives on health needs, and contribute to the implementation of community health plans. This communication opportunity recognizes that community members hold knowledge about health care needs. It engenders community benefit, builds bridges between health care professionals and community residents and shows a good faith effort in honoring the collective knowledge of community voices. Moreover, it shows that in rural areas,

communities prioritize knowledge that has been socially constructed and decisions that have been collectively made. Therefore, health care providers may need to focus less on information dissemination and more on providing communication opportunities.

# **Triangulated Communities**

A final analysis of the data is needed to look at the effect of triangulation, where two or three research methods are tasked with the same question; if two or three methods produce similar results then the results are validated. Triangulation puts the researcher in the "frame of mind to regard his or her own material critically, to test it, to identify its weaknesses, to identify where to test further doing something different" (Fielding and Fielding, 1986, p. 24-25). Prioritized needs that reflect triangulation reveal greater continuity in the community and greater reliability in the results. In qualitative research design instruments should be evaluated both for reliability and validity. Design instruments are said to be reliable if they consistently and dependably measure some concept or phenomenon with accuracy (Wiederman, 2010). Likewise, they exhibit validity if they accurately reflect what the researchers set out to measure (Glanz, Rimer & Viswanath, 2008). Since the data show a consensus of needs there is greater reliability and validity in the findings. The CHNAs that have Tier 1 needs representing multiple data sets may indicate communities that are more engaged and have stronger collaborative efforts. These communities may be good candidates for future grants for strategic implementation programming and serve as models for Community Transformation Grants.

Four communities represent triangulated communities or communities where there is consensus among all of the primary data and some secondary data:

- Dickinson
- Stanley

- Watford City
- Williston

All of these are located in the oil patch where the impact of oil development has caused rapid social change, taxed local resources and stressed the communities. Perhaps because of this widespread strain, community members, key leaders and health care professionals are in agreement about the most pressing needs. In a sense, the impacts of the oil boom are forming a bond among residents where their experiences and perceptions create common understandings and perceptions.

Other communities that hold partial convergence where one or two of the prioritized needs are represented across all data sets are:

• Grafton

Northwood

McVille

Tioga

Having a common perception of a significant need can position these communities well to address the needs. These communities have the potential to be engaged and ready to implement action.

### **Limitations**

When reviewing multiple data sources assembled from numerous research efforts there are bound to be constraints to the data analysis. Although efforts were made for uniformity and consistency, the evolving research method hampered some of the results. CHNAs conducted initially did not employ the prioritization method so several CHNA findings were dismissed from the aggregate data. Gathering only the top five concerns from a survey question listing 16 options and secondary data providing 20 different measures offers only a surface level look at the health needs. A health behavior which was identified as falling below North Dakota averages on County Health Rankings may have been echoed among community members and health care professionals in the survey, but because the outcome was not lagging significantly below state averages, it was not included in the spreadsheet. For example, obesity may be ranked among the top five community health concerns and was expressed in the focus group but because the county lagged only 3 percent behind state averages on obesity measures, it was not included in the secondary data.

Additionally, the original research design did not include a focus group or interview with key informants so five CHNAs were omitted since they were missing a primary data set. Therefore, the total sample size for the decision making analysis was 16 (N=16).

As more hospitals become in compliance with the PPACA and post their CHNA report on their website, the new findings will be added to the Tier 1 needs. However, due to the variances in methodology, the breakdown of the findings will not be evaluated nor included in the decision making process analysis.

### **Conclusion**

Looking at the individual CHNAs as a composite data set allows us to see emerging health patterns confronting North Dakota. Learning of these needs can have implications for allocation of resources and funds, job training and development, and policy recommendations. These significant needs affect North Dakota citizens at the community, state and national level. The best way in which to address these needs is beyond the scope of this research but identification is the first step. With awareness, hospitals can initiate collaborative efforts with other hospitals, public health units, medical providers, other health providers, school districts, park districts, local government, the area faith community, and other key vital sectors in the community or in other communities facing similar needs. Joint ventures can help foster a willingness to change and prevent duplicative energies. Furthermore, partnerships can extend outside of the state of North Dakota as these health trends affect rural states throughout the nation.

The CHNA process, as developed and practiced by the Center for Rural Health, represents the 30 plus year history of the Center's commitment to rural communities and the value of community development and engagement in improving the health of rural North Dakotans. The health system is too complicated and at times too cumbersome to be either insulated or isolated from natural constituencies. Call them patients, clients, customers, or consumers – regardless, collectively the people rural hospitals serve are the community. It is imperative for the survival of strong local rural health systems that those providers not only work with and listen to community members, but also actively encourage them to be involved in decision making and the implementation of "their" ideas to improve local health. It is not an easy process. It is not always quick. It is not risk-free. It is, however, a legitimate effort to build community involvement and support, to broaden and even democratize local decision making, and to build and enhance local capacity.

It is important to look at the identified needs not as a weakness but as an opportunity to make improvements in the health of our communities. Community resources can be leveraged with external funding such as through private foundations and/or federal grants. In order for change to occur, participants must be willing to change and choose to change. The high numbers of community member and health care professional involvement in the CHNA process are testament to this readiness. Completing this first round of the PPACA mandate is an exciting time to document the needs and benchmark the progress that has been made as a result of this endeavor. With this new initiative there is great momentum and great potential to fill the health gaps and address the most pressing health concerns.

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#### **Appendix A1- Community Member Instrument**

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





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

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

Please take a few moments to complete the survey. If you prefer, this survey may be completed online by visiting: <a href="http://tinyurl.com/mountrailcommunitysurvey">http://tinyurl.com/mountrailcommunitysurvey</a>. Your responses are anonymous – and you may skip any question you do not want to answer. Your answers will be combined with other responses and reported in aggregate form. If you have questions about the survey, you may contact Karin Becker at the Center for Rural Health, 701.777.4499 or Karin.becker@email.und.edu

Surveys will be accepted through February 1, 2013. Your opinion matters – thank you in advance!

#### **Community Assets/Best Things about Your Community**

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

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

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

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

Academic opportunities and institutions (benefits that come from the proximity to colleges and universities)	Public services and amenities
Downtown and shopping (e.g., close by, good variety, availability of goods)	Restaurants and food

		Health care		Transportation
		Quality school systems and other educational institutions and programs		Other (please
		for youth		specify)
Q1c.	Consid	dering the QUALITY OF LIFE in your commu	nity, the	best things are (choose the top
THRE	E):		T	
		Economic/employment opportunities		Informal, simple, "laidback" lifestyle
		Family-friendly environment; good place to raise kids		Safety and safe places to live, little/no crime
		Healthy place to live		Other (please specify)
		Hustle and bustle of oil patch		
Q1d. THRE		dering the GEOGRAPHIC SETTING in your co	ommunit	y, the best things are (choose the top
		Cleanliness of area (e.g., fresh air, lack of pollution and litter)		Natural setting: outdoors and nature
		Climate and seasons		Relatively small size and scale of community
		General beauty of environment and/or scenery		Waterfront, rivers, lakes, and/or beaches
		General proximity to work and activities (e.g., short commute, convenient access)		Other (please specify)
		Mix of rural and city areas		
Q1e.	Consid	dering the ACTIVITIES in your community, t	he best t	
		Activities for families and youth		Specific events and festivals (e.g., parades, fireworks, etc.)
		Arts and cultural activities and/or cultural richness of community		Year-round access to fitness opportunities (indoor activities, winter sports, etc.)
		Recreational and sports activities (e.g., outdoor recreation, parks, bike paths, and other activities)		Other (please specify)
Q1f.	What are	e other "best things" about your communit	y that ar	e not reflected in the questions above?

#### **Community Concerns**

Q2. Regarding the conditions in your community, please rank each of the potential concerns on a scale of 1 to 6, with 1 being less of a concern and 6 being more of a concern:

Community Concerns						
	Less	of			More	e of
	a co	nceri	1		a concern	
	1	2	3	4	5	6
Adequate number of school resources						
Aging population, lack of resources to meet growing needs						
Alcohol and drug use and abuse						
Crime and community violence						
Domestic violence, including child abuse						
Environmentally unsound (or unfriendly) place to live						
Impact of increased oil/energy development						
Increasing population, including residents moving in						
Insufficient facilities for exercise and well-being						
Lack of affordable housing						
Lack of employees to fill positions						
Lack of employment opportunities						
Lack of police presence in community						
Litter						
Low wages, lack of livable wages						
Maintaining enough health workers (e.g., medical, dental, wellness)						
Poverty						
Property taxes						
Racism, prejudice, hate, discrimination						
Traffic safety, including speeding, road safety and drunk driving						
Other. Please specify:						

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

#### **Health Care Services**

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

- a) Whether you are aware that the health care service is offered at Mountrail County Health Center (MCHC).
- b) Whether you have used the health care service at Mountrail County Health Center (MCHC), at another facility, or both.

#### Q3a. General services

a) A	ware		b) Used serv	ices, either at
of services			MCHC or another facility?	
at M	CHC?		(Check both	if applicable)
			Used	Used Services
		Type of service offered	Services at	at another
Yes	No		MCHC	facility
		Acne treatment		
		Allergy, flu & pneumonia shots		
		Blood pressure checks		
		Clinic		
		Long-term care		
		Mole/wart/skin lesion removal		
		Patient education & teaching		
		Physicals: annual, D.O.T., sports & insurance		
		Prenatal care up to 32 weeks		
		Referrals and follow-up care		
		Sports medicine		
		Swing bed services		

#### Q3b. Acute services

a) Aware of services at			b) Used services, either a MCHC or another facility	
MC	HC?		(Check both	if applicable)
			Used	Used Services
		Type of service offered	Services at	at Another
Yes	No		MCHC	Facility
		Cardiac rehab		
		Emergency room		
		General surgeon—visiting specialist		
		Hospital (acute care)		
		Senior housing		
Surgical services – biopsies		Surgical services – biopsies		
Surgical services – outpatient		Surgical services – outpatient		
		Surgical services – podiatry procedures		

## Q3c. Screening/therapy services

a) Aware of services at			b) Used services, either a MCHC or another facility	
				•
MC	HC?		(Check both	if applicable)
			Used	Used Services
		Type of service offered	Services at	at Another
Yes	No		MCHC	Facility
		Diet instruction		
		Health screenings		
		Laboratory services		
		Occupational therapy		
		Physical therapy		
		Social services		
		Speech therapy	-	

## Q3d. Radiology services

a) Aware of			b) Used services, either a		
services at			MCHC or another facility?		
MC	HC?		(Check both	if applicable)	
			Used	Used Services	
		Type of service offered	Services at	at Another	
Yes	No		MCHC	Facility	
		EKGElectrocardiography			
		CT scan			
		Echocardiogram			
		General x-ray			
		Mammography			
		MRI			
		Ultrasound			

## Q3e. Services offered locally by other providers/organizations

a) Aware of					
services			b) Used services, either local		
offe	ered		non-locally? (Check both if		
loca	ally?		applicable)		
		Type of service offered	Used Services	Used Services	
Yes	No		Locally	Non-Locally	
		Ambulance			
		Chiropractic services			
		Dental services			
·		Massage Therapy			
		Optometric/vision services			

		Optometric/	vision services				
Q3f. why?	What s	pecific service	s, if any, do yo	u think Mountrai	l County He	ealth Center needs	to add, and

## **Delivery of Health Care**

Q4. Regarding the delivery of health care <u>in your community</u>, please rank each of the potential health concerns listed below on a scale of 1 to 6, with 1 being <u>less of a concern</u> and 6 being <u>more of a concern</u>:

Health Concerns			Less of		More of					
					a cor	ncern			a con	cern
					1	2	3	4	5	6
Acce	ss to ne	eeded technology/equipment								
Accio	dent/inj	jury prevention								
Addi	ction/s	ubstance abuse								
Adec	quate ni	umber of health care providers and sp	pecialists							
Cano	er									
Diab	etes									
Dista	nce/tra	ansportation to health care facility								
Eme	rgency	services (ambulance & 911) available	24/7							
Finar	ncial via	bility of hospital								
Focu	s on we	ellness and prevention of disease								
Hear	t diseas	se (e.g., congestive heart failure, hear	t attack, st	roke,						
coro	nary art	tery disease)								
		s of health care for consumers								
Men	tal heal	th (e.g., depression, dementia/Alzhei	mer's)							
Not e	enough	health care staff in general								
Obes	sity									
Suici	de prev	vention								
Viole	nce (do	omestic, workplace, emotional, physic	cal, sexual)							
	b) H	low do these concerns impact your co	ommunity?							
Q5. Please tell us why you seek health care services at Mountrail County Health Center. (Choose ALL that apply.)										
		Access to specialist		Loyalty to				viders	6	
		Confidentiality		Open at co	onveni	ent t	imes			
		Convenience		Proximity						
		Disability access		They take						
		Familiarity with providers		They take	•					
		High quality of care		Transport			•	/ailab	le	
		Less costly		Other (ple	ase sp	ecify	)			

	apply.)			
	<ul> <li>☐ Access to specialist</li> <li>☐ Confidentiality</li> <li>☐ Disability access</li> <li>☐ High quality of care</li> <li>☐ Less costly</li> <li>☐ Open at convenient times</li> <li>☐ They take many types of insurance</li> </ul>	☐ Transı ☐ Other	cake new patients cortation is readily ava (please cify)	
Q7.	What barriers prevent you or other community me that apply.)	mbers from re	ceiving health care?(	Choose ALL
	<ul> <li>□ Distance from health facility</li> <li>□ Inability to get an appointment</li> <li>□ Lack of affordability</li> <li>□ Lack of awareness of local health services</li> <li>□ Lack of confidentiality</li> <li>□ Lack of continuity of care (inability to see same provider over time)</li> <li>□ Lack of doctors</li> </ul>	Lack of in Lack of sp Lack of tr Language Limited a (patien)	oecialists ansportation services	chnology t another screen)
Q8.	How long does it take you to reach the nearest clin	ic outside Mou	intrail County Health (	Center?
	<ul><li>Less than 10 minutes</li><li>10 to 30 minutes</li></ul>	_	o 60 minutes re than 1 hour	
Q9.	How long does it take you to reach Mountrail Coun	ity Health Cent	<u>er</u> ?	
	<ul><li>Less than 10 minutes</li><li>10 to 30 minutes</li></ul>	_	o 60 minutes e than 1 hour	
Q10.	Do you believe that Mountrail County Health Center	er could improv	ve its collaboration wit	:h:
	<ul> <li>a) Business and oil industry</li> <li>b) Hospitals and clinics in other cities</li> <li>c) Local job/economic development</li> <li>d) Other local health providers</li> <li>e) Public Health</li> <li>f) Schools</li> </ul>	Yes	No. It's fine as it is.	Don't know
Q11.	Are you aware of Mountrail County Health Foundar ] Yes ] No	tion, which exis	sts to support MCHC?	

Q6. Please tell us why you seek health care services at <u>another health care facility</u>. (Choose ALL that

Q12. Have you supported the Mountrail County Health	Four	ndation 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)								
Demographic Information								
Please tell us about yourself.								
Q13. Listed below are some general health conditions/	disea							
☐ Allergies		Diabetes						
☐ Arthritis		Heart conditions (e.g., congestive heart failure)						
☐ Asthma/COPD		High cholesterol						
Cancer		Hypertension						
Chronic pain	_	OB/Gyn related						
☐ Dementia	_	Weight control						
Depression, stress, etc.		Muscles or bones (e.g. back problems, broken bones)						
Q14. Health insurance status. (Choose all that apply.)								
☐ Indian Health Services		Tribal insurance						
Insurance through employer		Uninsured/underinsured						
☐ Medicaid		Veteran's Health Care Benefits						
☐ Medicare		Other						
Private insurance								
Q15. Age:		_						
Less than 25 years		55 to 64 years						
25 to 34 years		65 to 74 years						
35 to 44 years		75 years and older						
☐ 45 to 54 years								
Q16. Highest level of education:								
Some high school		☐ Associate's degree						
☐ High school diploma or GED		☐ Bachelor's degree						
☐ Some college/technical degree		☐ Graduate or professional degree						
Q17. Gender:								
□ Female		□ Male						

Q. 18. How	long have you lived in your community?	
	Less than 3 years	☐ 10 to 20 years
	☐ 3 to 9 years	☐ More than 20 years
Q19. Your:	zip code:	
Q20. Marit	al status:	
	Divorced/separated	Single/never married
	Married	Widowed
Q21. Emplo	oyment status:	
	Full time	Multiple job holder
	Part time	Unemployed
	Homemaker	Retired
Q22. Annu	ial household income before taxes:	
	\$0 to \$14,999	
	\$15,000 to \$24,999	
	\$25,000 to \$34,999	
	\$35,000 to \$49,999	
· <del></del>	\$50,000 to \$74,999	
_	\$75,000 to \$99,999	
· <del></del>	\$100,000 to \$149,999	
=	\$150,000 to \$199,999	
	\$200,000 and over	
	Prefer not to answer	

Q23. 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 Instrument



## **Mountrail County Health Center - Health Care Professional**

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

The focus of the assessment is to:

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

Please take a few moments to complete the survey. Your responses are anonymous – and you may skip any question you do not want to answer. Your answers will be combined with other responses and reported in aggregate form. If you have questions about the survey, you may contact Karin Becker at the Center for Rural Health, 701.777.4499 or Karin.becker@email.und.edu

Surveys will be accepted through February 1, 2013. Your opinion matters - thank you in advance!

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

Q3	Q3 Considering the PEOPLE in your community, the best things are (choose the top THREE):					
	Community is socially and culturally diverse and/or becoming more diverse (1)					
	Forward-thinking ideas (e.g. social values, government) (2)					
	People who live here are aware of/ engaged in social, civic, or political issues (3)					
	People are friendly, helpful, supportive (4)					
	Sense of community/feeling connected to people who live here (5)					
	Sense that you can make a difference - government is accessible (6)					
	Tolerance, inclusion, open-mindedness (7)					
	Other (please specify) (8)					

	Considering the SERVICES AND RESOURCES in your community, the best things are (choose the top REE):
	Academic opportunities and institutions (benefits that come from the proximity to colleges and universities) (1)  Downtown and shopping (e.g., close by, good variety, availability of goods) (2)  Health care (3)  Quality school systems and other educational institutions and programs for youth (4)  Public services and amenities (5)  Restaurants and food (6)  Transportation (7)  Other (please specify) (8)
Q5	Considering the QUALITY OF LIFE in your community, the best things are (choose the top THREE):
	Economic/employment opportunities (1) Family-friendly environment; good place to raise kids (2) Healthy place to live (3) Hustle and bustle of oil patch (4) Informal, simple, "laid back" lifestyle (5) Safety and safe places to live, little/no crime (6) Other (please specify) (7)
	Considering the GEOGRAPHIC SETTING in your community, the best things are (choose the top REE):
	Cleanliness of area (e.g., fresh air, lack of pollution and litter) (1) Climate and seasons (2) General beauty of environment and/or scenery (3) General proximity to work and activities (e.g., short commute, convenient access) (4) Mix of rural and city areas (5) Natural setting: outdoors and nature (6) Relatively small size and scale of community (7) Waterfront, rivers, lakes, and/or beaches (8) Other (please specify) (9)
Q7	Considering the ACTIVITIES in your community, the best things are (choose the top THREE):
_ 	Activities for families and youth (1) Arts and cultural activities and/or cultural richness of community (2) Recreational and sports activities (e.g., outdoor recreation, parks, bike paths, and other activities) (3)

Specific events and festivals (e.g., parades, fireworks, etc.) (4)
Year-round access to fitness opportunities (indoor activities, winter sports, etc.) (5)
Other (please specify) (6)

Q8 What are other "best things" about your community that are not reflected in the questions above?

Q9 Community Concerns Regarding the conditions in your community, please rank each of the potential concerns on a scale of 1 to 6, with 1 being less of a concern and 6 being more of a concern:

	1 = less of a concern (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 = more of a concern (6)
Adequate number of school resources (1)	•	0	•	•	•	0
Aging population, lack of resources to meet growing needs (2)	•	•	•	•	•	•
Alcohol and drug use and abuse (3)	•	0	•	•	•	<b>O</b>
Crime and community violence (4)	•	•	•	•	•	<b>O</b>
Domestic violence, including child abuse (5)	•	•	•	•	•	•
Environmentally unsound (or unfriendly) place to live (6)	•	•	•	•	•	•
Impact of increased oil/energy development (7)	•	•	•	•	•	•
Increasing population, including residents moving in (8)	•	•	•	•	•	•
Insufficient	0	0	0	0	0	0

	Ι	Ι				
facilities for exercise and well-being (9)						
Lack of affordable housing (10)	•	•	•	•	•	•
Lack of employees to fill positions (11)	•	•	•	•	•	0
Lack of employment opportunities (12)	•	•	•	•	•	•
Lack of police presence in community (13)	0	0	0	0	0	0
Litter (14)	O	O	<b>O</b>	0	0	O
Low wages, lack of livable wages (15)	•	•	•	0	0	0
Maintaining enough health workers (e.g., medical, dental, wellness) (16)	0	0	0	0	0	0
Poverty (17)	O	O	O	•	<b>O</b>	O
Property taxes (18)	•	•	•	O	•	O
Racism, prejudice, hate, discrimination (19)	•	•	•	•	•	0
Traffic safety, including speeding, road safety and drunk driving (20)	•	•	•	•	•	O
Other. Please specify: (21)	•	•	•	•	•	<b>O</b>

Q10 a) Which concern above is the most important?

c) How do these concerns impact your community?

d) Q11 What specific services, if any, do you think Mountrail County Health Center needs to add, and why?

Q12 Delivery of Health Care Regarding the delivery of health care in your community, please rank each of the potential health concerns listed below on a scale of 1 to 6, with 1 being less of a concern and 6 being more of a concern:

	1 = less of a concern (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 = more of a concern (6)
Access to needed technology/equipment (1)	•	•	•	•	•	•
Accident/injury prevention (2)	•	O	O	O	<b>O</b>	O
Addiction/substance abuse (3)	•	O	0	O	•	O
Adequate number of health care providers and specialists (4)	•	•	•	•	•	•
Cancer (5)	0	O .	O .	O	O	O
Diabetes (6)	0	O .	O .	O	O	O
Distance/transportation to health care facility (7)	•	•	•	•	•	<b>O</b>
Emergency services (ambulance & 911) available 24/7 (8)	•	•	•	•	•	•
Financial viability of hospital (9)	•	<b>O</b>	<b>O</b>	<b>O</b>	•	O
Focus on wellness and prevention of disease (10)	•	•	•	•	•	•
Heart disease (e.g., congestive heart failure, heart attack, stroke, coronary artery disease) (11)	•	•	•	•	•	•
Higher costs of health care for consumers (12)	0	•	•	O	•	O
Mental health (e.g., depression, dementia/Alzheimer's) (13)	•	•	•	•	•	•

Not enough health care staff in general (14)	0	0	O	O	O	0
Obesity (15)	<b>O</b>	O .	<b>O</b>	<b>O</b>	O	O .
Suicide prevention (16)	<b>O</b>	O .	<b>O</b>	<b>O</b>	O	O .
Violence (domestic, workplace, emotional, physical, sexual) (17)	•	•	•	•	•	•

Q13 How do these concerns impact your community?

4 Please tell us why you think patients seek health care services at Mountrail County Health nter. (Choose ALL that apply.)
Access to specialist (1)
Confidentiality (2)
Convenience (3)
Disability access (4)
Familiarity with providers (5)
High quality of care (6)
Less costly (7)
Loyalty to local service providers (8)
Open at convenient times (9)
Proximity (10)
They take my insurance (11)
They take new patients (12)
Transportation is readily available (13)
Other (please specify) (14)
5 Please tell us why you think patients seek health care services at another health care lity. (Choose ALL that apply.)
Access to specialist (1)
Confidentiality (2)
Disability access (3)
High quality of care (4)
Less costly (5)
Open at convenient times (6)
They take many types of insurance (7)
They take new patients (8)

Transportation is readily available (9) Other (please specify) (10)							
116 What barriers prevent you or other community members from receiving health care? (Choose ALL hat apply.)							
Distance from health facility (1) Inability to get an appointment (2)							
Lack of affordability (3)							
Lack of awareness of local health services (4)							
Lack of confidentiality (5)							
Lack of doctors (6)							
Lack of continuity of care (inability to see same provider over time) (7)							
Lack of evening or weekend hours (8)							
Lack of insurance (9)							
Lack of specialists (10)							
Lack of transportation services (11)							
Language barriers (12)							
Limited access to telehealth technology (patients seen by providers at another facility through a							
monitor/TV screen) (13)							
Other (please specify) (14)							

Q17 Do you believe that Mountrail County Health Center could improve its collaboration with:

	Yes (1)	No. It's fine as it is. (2)	Don't Know (3)
Business and oil industry (1)	•	•	•
Hospitals and clinics in other cities (2)	•	•	•
Local job/economic development (3)	•	•	•
Other local health providers (4)	•	•	•
Public Health (5)	•	<b>O</b>	•
Schools (6)	O	<b>O</b>	<b>O</b>

Q1	8 Demographic Information: Please tell us about yourself.
Q1	9 Age:
0	Less than 25 years (1)
O	25 to 34 years (2)
O	35 to 44 years (3)
O	45 to 54 years (4)
O	55 to 64 years (5)
O	65 to 74 years (6)
0	75 years and older (7)
Q2	O Highest level of education:
O	Some high school (1)
O	High school diploma or GED (2)
O	Some college/technical degree (3)
O	Associates degree (4)
O	Bachelor's degree (5)
0	Graduate or professional degree (6)
Q2	1 How long have you been employed by Mountrail County Health Center?
0	Less than five years (1)
O	5 to 10 years (2)
0	More than 10 years (3)
Q2:	2 Gender:
0	Female (1)
	Male (2)
Q2:	3 Overall please share concerns and suggestions to improve the delivery of local health care.