EvaluationGroup, LLC

2016
COMMUNITY HEALTH NEEDS ASSESSMENT

for

WARREN COMMUNITY HOSPITAL INC.,
d/b/a **NORTH VALLEY HEALTH CENTER**

December
2016

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Introduction Overview

Healthcare Reform Legislation (Patient Protection and Affordable Care Act) requires non-profit hospitals to perform a community health needs assessment every three years and adopt an implementation strategy to meet the outstanding community health needs identified in the assessment as a condition of maintaining the organizations federal tax exemption.

In 2013, The North Valley Health Center (NVHC) elected to collaborate with four community hospitals and public health organizations in the five-county region to prepare health needs assessments and use these documents as a planning tool to assist in initiating strategic initiatives to support medical services. The 2013 Community Health Needs Assessment (CHNA) planning committee and report served as a significant launching-off point for documenting needs and initiating the process of strategy implementation for years to come.

More recently in 2016, under the guidance of NVHC CEO Jon Linnell, the 2016 CHNA report incorporated the expertise of the director of North Valley Public Health, Gail Larson, and Dr. Garth Kruger of EvaluationGroup, LLC. Dr. Kruger's role was to gather demographic and health statistics to provide an understanding of the information available about the region and to gather and report community health needs data via a survey. Ms. Larson's role as the director of public health was to provide direction, feedback and guidance on the data collection activities as well as identify health priorities. North Valley Public Health provides financial oversight, grant management and administrative support for a wide range of local public health and human service support programs in Marshall County.

North Valley Health Center: Overview

The Warren Community Hospital, Inc. dba as North Valley Health Center (NVHC) is a 501c 3 rural medical facility that serves approximately 10,000 individuals. Located in northwest Minnesota, it's physically situated 30 miles from any other medical facility and is the only hospital in Marshall County. It is not financially organized as a part of any other large regional medical entity. NVHC provides a primary care clinic as well as emergency, diagnostic and ancillary services. Designations include Rural Health Clinic (RHC), and Critical Access Hospital (CAH). In addition, Marshall County is designated a geographic Health Provider Shortage Area (HPSA) for primary care, dental care and mental health. The recruitment and retention of qualified healthcare staff is an ongoing concern.

NVHC's community service area is Marshall County for the purposes of this CHNA, although three townships in northern Polk County are also served. Marshall County includes the municipalities of Oslo, Alvarado, Stephen, Argyle, and Warren plus nineteen townships.

Medical services provided by NVHC encompass: 12 licensed acute care beds (includes hospice and swing beds), emergency room services, a family practice medical clinic, diagnostic testing, physical therapy, cardiac rehabilitation – Phase II, stress testing, public health, and LifeLine (a personal home monitoring service).

Service Area Geography

Marshall County (70 miles long and 40 miles wide) is divided east and west by the Thief Lake Game Reserve. The sparse population and long distances between towns with services are a major health concern of area residents as travel time to health care facilities can range from 30 to 50 minutes. This is problematic when elderly patients seek care or when there are time sensitive emergencies or inclement weather. Having emergency services and primary health care close at hand is a priority of area citizens.

Service Area Demographics

Population Size/Age

- Marshall County has a total population of 9,423
    - Population density of 5.3 people per square mile.
- 23% of the population is over the age of 65 compared to the statewide average of 13%. (2015 census update)
- Approximately 97.3% of the population or 8,948 people of Marshall County are white.
    - Minority populations primarily include Hispanic, Asian and African American and American Indian.
- The average family size is 2.28 people.

Income

- Marshall County has a median household income of $53,110 for Minnesota it is $63,488 (2015 census update).
    - Across a working lifetime of 40 years this means that a household in the middle of the income distribution in Marshall County earns $380,000 to $500,000 less than other households across the state (Kruger, et.al 2013).
- The poverty rate for Marshall County is approximately 9%, for Minnesota it is 11.5% (2015 census update).

Lower income, blue-collar workers are representative of a large demographic swath of the population. The county's economy is driven by agriculture with some small manufacturing businesses adding to the financial climate. NVHC is a major employer in the service area and impacts the regional economy. Marshall county is known for its social and economic stability. Residents are generally aware of national and world events, local news about the activities of youth teams, social fraternal organizations, church outings and high school sports that dominate the local newspapers. Multiple generations of families live in and around Marshall County and the surrounding towns comprising northwestern Minnesota.

Education

- 18% of Marshall county residents (aged 25 and older) have a bachelor's degree or higher which is significantly lower than the average of 32% of residents statewide (census.gov).
    - Approximately 88% of the population aged 25 and older in Marshall County have a high school education or higher.

Needs Assessment Methodology

NVHC identified current and unmet community health care needs in the community by reviewing archival data and conducting a community needs assessment survey.

Archival Data Review

A wide range of available archival data and reports were reviewed to identify health care needs. Key data points included, but were not limited to:

- NVHC Diagnosis Related Group (DRG) treatment data from 1) inpatient, 2) emergency room and 3) clinic services
- 2014 Northwest Regional Adult Behavioral Health Survey (NRABS)
    - The NRABS survey was the first randomized household survey of adult health of its kind in northwest Minnesota and is a vast improvement in data quality. It captures a broad snapshot of the health of adults in the region.
- Minnesota All Payer Claims Database (MN APCD).
    - MN APCD is a state repository of health care claims data that is derived from medical providers' billing records sent to insurance companies, plan administrators and public payers. Because of the completeness of data and its geographic richness for the state, these data offer an unprecedented opportunity to learn more about what types of services are provided across the state, how much they cost, and what outcomes are being achieved.
    - http://www.health.state.mn.us/healthreform/allpayer/
- Community Collaborative Reports
    - Data was drawn from a collection of over 20 reports conducted by EvaluationGroup,LLC that highlight the health of residents in the region.
    - http://www.evaluationgroupllc.com/heathdata
- Census Data
    - 2010 and 2015 updates where available.

Community Needs Assessment Survey

Community feedback on health services/needs for NVHC and Quin CHS was completed through a convenience survey (See Appendix A). A press release was distributed to all local/regional news outlets highlighting the efforts of the study. Readers were encouraged to complete the survey either online or in paper form at NVHC (where they were placed in the front entry waiting room). The survey was also administered to participants receiving food at a local food shelf. Those who completed it were provided with a $5 food gift card from a local grocery store. Surveys were administered from November 15th to December 20th, 2016.

All surveys were forwarded on to Garth Kruger, EvaluationGroup,LLC who compiled them into a comprehensive list of community health needs.

Archival Data Findings

Access to Care

Kruger et. al., 2013 summarized over 20 public forum meetings that involved hundreds over people across northwest Minnesota. Overarching themes and concepts from those discussions are presented in Figure 1 (on the next page). Many of the community meetings highlighted affordable and accessible health care as a significant priority. However, affordable and accessible care is a complex and multi-faceted concern that also involves issues surrounding poverty, employment, income, transportation and appropriate care to name a few. Some of the more specific points mentioned numerous times at these meetings and are relative to this report include:

Health Insurance Cost

- Cost of healthcare is growing more unaffordable.
- Inability of employers to continue offering affordable coverage.
- Higher number of uninsured people not seeking medical care until it requires an ER visit.

Access to Appropriate Care

- Easier access to primary care providers – people want to get in quickly when they need to see their primary care provider.
- Maintaining qualified medical providers employed at the same facility long-term.
- Providing medical, dental, mental health for the uninsured, working poor and those who cannot take time away from hourly wage jobs to take children to regular appointments

Other Access Concerns

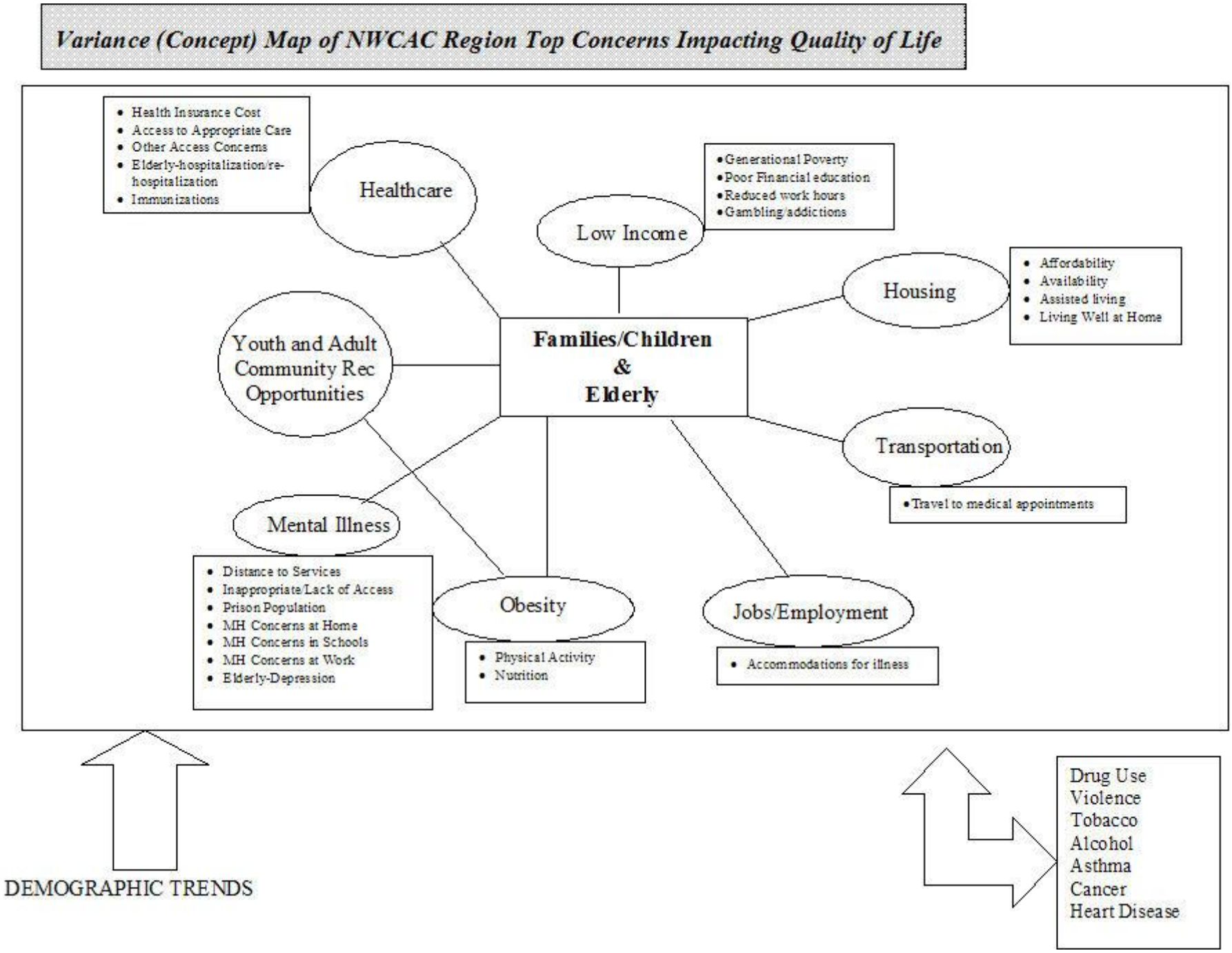
- Parents may not able to meet costs for both medical (eyeglasses) and non-medical (winter wear) for their students.
    - Could be attributed to lack of disposable income or lack of prioritization (or both).
- Access and affordability to exercise facilities and large group meeting spaces for health and wellness related activities
- People in the region go with untreated or unmanaged chronic health conditions

All of the themes mentioned in the brief outline above recurred in multiple datasets over the past decade if not longer in EvaluationGroup,LLC's archives. They are repeated throughout the data found in this report as well.

Income and transportation are two additional areas that significantly impact access. In the community survey conducted for this report, a number of respondents remarked that transportation to and from the medical facility was of significant concern. These transportation issues stem from a variety of factors, including age and income limitations -both of which substantially impact Marshall County residents. As noted previously, Marshall County has twice the number of people over the age of 65 compared to the state. Coupled with residents median income below the state average, concerns of healthcare access are not shocking.

One avenue for intervention is to work to ensure that those who qualify for state and federal assistance program are aware of and become enrolled in them. Access to most of these programs depend on income guidelines. In 2016 the federal poverty guideline was $24,300 for a family of four (projusticemn.org). But to qualify, many state and federal programs have set 200% of poverty as the threshold. For a family of four, 200% of FPL was $48,600. With a county median income of 53k, it would seem that nearly half of residents could potentially qualify for a variety of programs.

Figure 1


Variance (Concept) Map of NWCAC Region Top Concerns Impacting Quality of Life
Health Insurance Cost
Access to Appropriate Care
Other Access Concerns
Elderly-hospitalization/re-hospitalization
Immunizations
Healthcare
Generational Poverty
Poor Financial education
Reduced work hours
Gambling/addictions
Low Income
Affordability
Availability
Assisted living
Living Well at Home
Housing
Youth and Adult Community Rec Opportunities
Families/Children & Elderly
Transportation
Travel to medical appointments
Mental Illness
Distance to Services
Inappropriate/Lack of Access
Prison Population
MH Concerns at Home
MH Concerns in Schools
MH Concerns at Work
Elderly-Depression
Obesity
Physical Activity
Nutrition
Jobs/Employment
Accommodations for illness
DEMOGRAPHIC TRENDS
Drug Use
Violence
Tobacco
Alcohol
Asthma
Cancer
Heart Disease

Obesity/Overweight

- 75.2% of individuals residing in Marshall County are considered either overweight (38.6%) or obese (36.6%) according to the 2014 NRABS survey. That is a total of 7,000 people (Kruger, 2015).
    - This is significantly higher than the state average of 64% (37.5 overweight; 26.5%, obese).
- Only a total of 50% of respondents had been told by a healthcare provider that they were overweight or obese.
    - Room for improvement may exist in providing feedback to patients about weight.

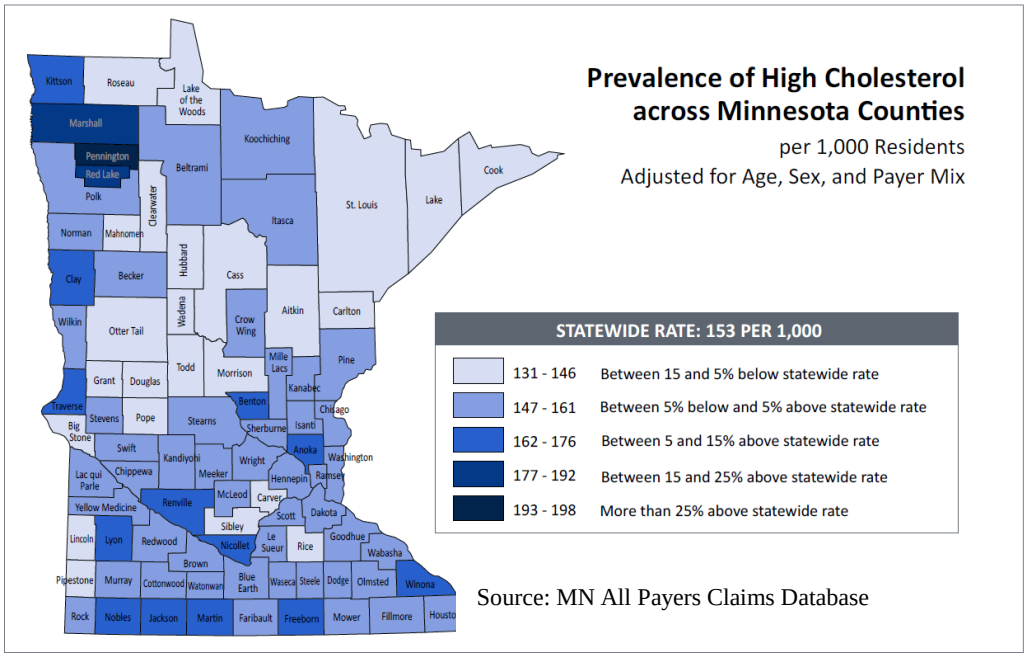
Several possibilities exist as to why the disparity exists about hearing the message of being overweight, including: 1) providers are not acknowledging the extent of their patients' weight for a variety of reasons, or 2) patients only marginally meet the requirements for overweight and so do not physically appear to be at risk. It is difficult to determine which of these scenarios (or others) exist without further investigation and discussion.

Throughout the 2013 community forums, overweight/obesity issues were most frequently discussed as one of the preeminent health concerns of the region. Attendees advocated for education starting very young regarding diabetes, nutrition, caloric needs and exercise. Concern was also expressed that fresh produce is not always readily available.

Elevated Cholesterol

In 2012, Marshall county had 1,816 individuals (22% of the population) receive reimbursable treatment for high cholesterol according to the MN APCD study. This was between 15-25% higher than the statewide rate. (see Figure 2).

Figure 2

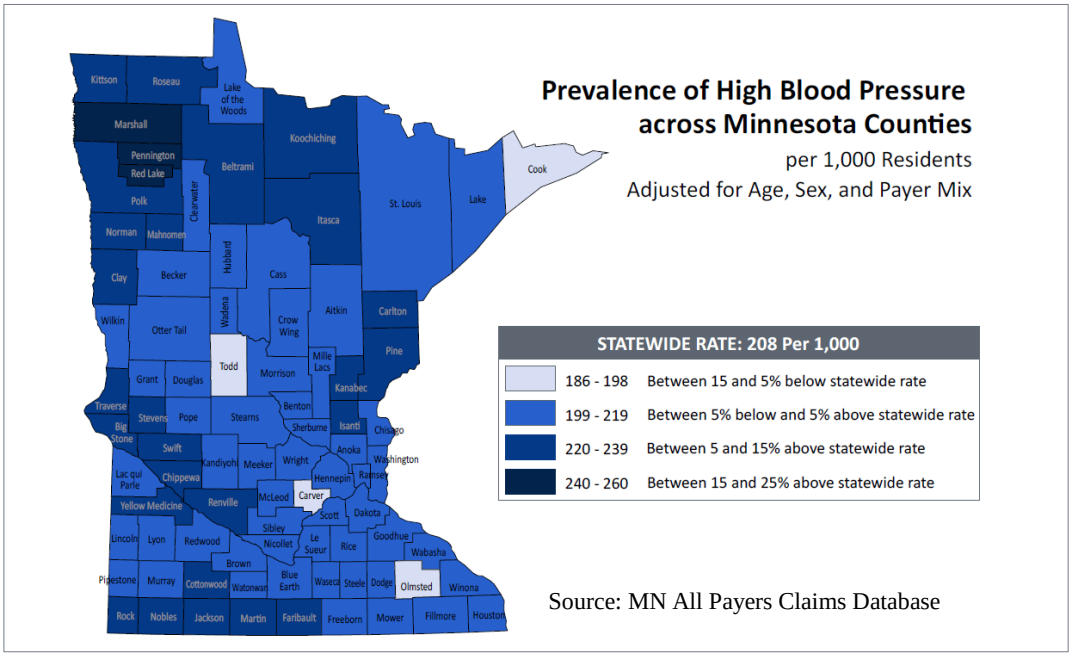


The 2014 NRABS study found that approximately 41% of Marshall County residents had been informed they had elevated cholesterol which is nearly double than what was reported as paid treatment by the MN APCD. Potential explanations for this difference includes: 1) an under-estimation by the MN ACPD study, (which the authors concede is highly likely), or 2) many more people are diagnosed with high cholesterol than who are receiving reimbursed medical care for that condition. Diet and exercise being chief among the 'free treatment' alternatives.

Elevated Blood Pressure

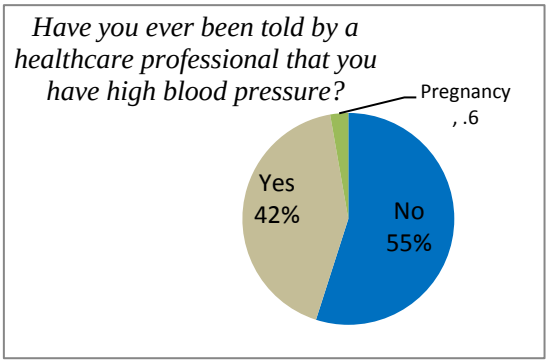
The MN APCD study indicated that 2,508 people in Marshall County received treatment for blood pressure in 2012 (approximately 30% of the population). This places the county in the range of between 15% and 25% above the statewide rates of elevated blood pressure as shown in Figure 3 below.

Figure 3



Corroborating evidence for this level of pathology was found in the 2014 NRABS study. That survey found 42.3% of respondents (3,976 Marshall County residents) reported having at one time or another been informed by a healthcare provider they had high blood pressure (non-pregnancy related). See Figure 4

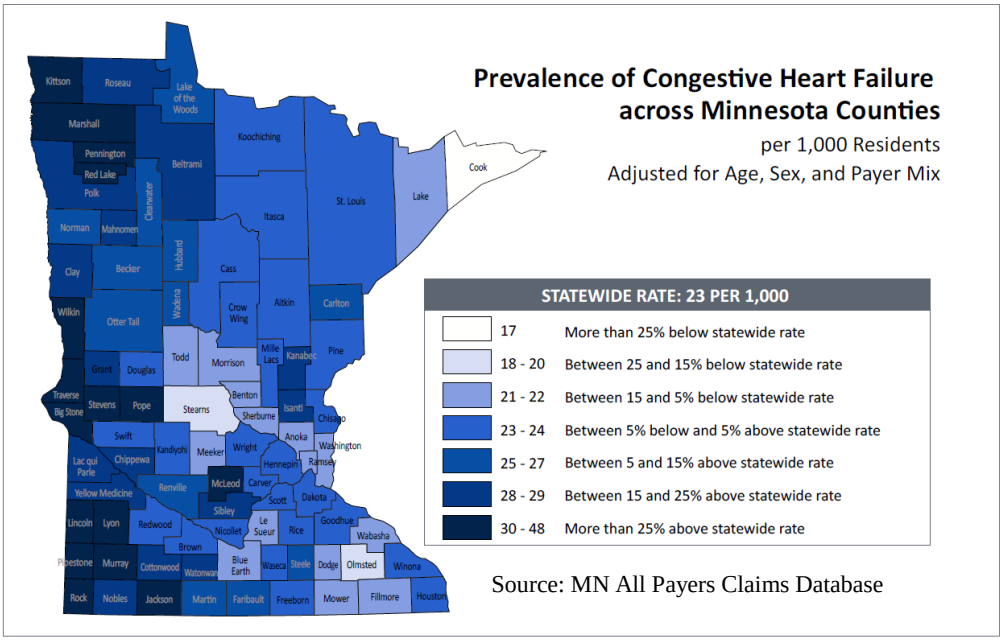
Figure 4: 2014 NRABS Survey Item



Congestive Heart Failure

Being overweight in combination with high blood pressure and elevated cholesterol create the perfect storm for heart disease and failure. It should be no surprise then that Marshall county is among the worst counties in the state for rates of congestive heart failure. According to the MN APCD, Marshall county had (in 2012) healthcare claims submitted for congestive heart failure at more than 25% above the state rate (see Figure 5). Congestive Heart Failure occurs when the heart muscle cannot pump enough blood and oxygen through the body resulting in a build-up of fluid in the legs, lungs, or other tissues. Similarly, Marshall county is more than 25% above the state rate for Ischemic Heart Disease (caused by narrowed arteries that reduce the blood and oxygen supply to the heart). In the U.S., heart disease is the leading cause of death (cdc.gov).

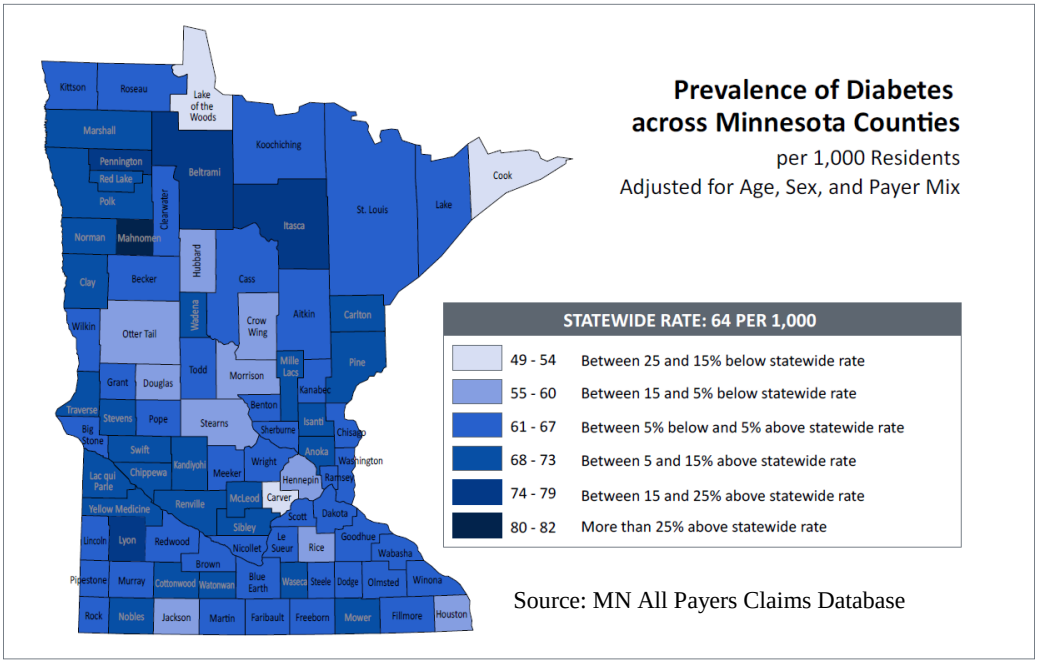
Figure 5



Diabetes

The MN APCD Database study indicated that 701 individuals in Marshall County received treatment for diabetes (among the insured population in 2012). This rate ranged between 5 and 15% above the statewide rates of diabetes treatments reimbursed during that similar time frame as shown in Figure 6 below.

Figure 6



While only 700 individuals received paid treatment for diabetes (MN APCD), approximately 1,413 individuals reported that they were told by a healthcare professional they had diabetes (according to the NRABS study). And in fact, the data from the NRABS study may be underestimating the actual incidence of diabetes because it reports only those who have been told they have it by a healthcare professional. In the case of the MC APCD, it is reimbursed expenses for those who are actively seeking treatment for the disease. The disparity between these two numbers may be due in part because initial treatment for Type II diabetes includes diet and exercise modification (not paid medical care). However, given the extent of overweight residents, untreated and undiagnosed Type II diabetes remains as a significant concern in terms of health and medical care costs. And while diabetes tends to be higher in older populations, data from both studies have been age adjusted to reflect accurate comparisons across counties and the state. In other words, even if Marshall County did not have an older than average population, it would still have a higher than average rate of diabetes

Mental Health

As discussed previously, Kruger et. al., (2013) summarized over 20 public forum meetings that involved hundreds of people across northwest Minnesota. Overarching themes in Figure 1 covered mental health as a major regional concern across all communities.

Specifically, forum participants indicated that distance to accessing services was a major concern. The nearest community mental health center from Warren is located in Crookston or in Thief River Falls at the Sanford psychiatric unit. Both are over 30 miles away. The lack of skilled mental health service providers was also discussed as adding great challenges to an already overloaded system (Marshall County is a designated mental health HPSA). And the problem spills over into local jails as well. Many participants felt that up to 90% of cases in the local jail were mental health related and that it had become the de-facto community mental health center. Finally, the lack of adequate, local mental health services meant that individuals may also be inappropriately using emergency room services for non-emergent mental health problems.

Lack of Reliable Mental Health Data

Over the past decade, EvaluationGroup,LLC staff have reviewed countless data points showing that suicide-relevant statistics are lower in Marshall County than statewide. Primarily, reasons for this include small sample sizes, poorly organized tracking systems and the relative infrequency of suicide in general, which have made all suicide data misleading. We believe it is seriously under-reported.

Unfortunately, systematic mental health data tracking in Marshall County is virtually non-existent. The MN APCD finds that Marshall County is between 5-15% lower in the prevalence of depression compared to the rest of the state. Rather than viewing this data as a statement of less need, what it may be really saying is that few people are getting their mental health services paid through insurance, if they are even accessing services at all.

Alcohol Consumption

One aspect of mental health for which clear statistics exist is in self-reported alcohol consumption. In the 2014 NRAB survey, 62% of adults reported that they consumed at least one alcoholic beverage within the previous 30 days of the study. Of those people, half of them binge drank (5 or more drinks per sitting male, 4 or more female). In other words, 30% of the adult population binge drinks at least once a month in Marshall County.

Income and Mental Health Concerns

A recent analysis by Marshall County Public Health (2016) highlights the nexus between income and mental health. In a comparison between families with annual household incomes below and above $35,000, they found that families in the region making less than 35k annually were:

- ✓ Four times more likely to feel mental distress;
- ✓ Three times as likely to have anxiety/panic attacks;
- ✓ Twice as likely to delay seeking mental health services; and
- ✓ Twice as likely to be a smoker.

Community Survey Findings

A total of 105 survey were completed by community residents, with 21 surveys coming from food shelf recipients. A number of the participants at the food shelf appeared to have some difficulty reading and understanding some of the survey questions. Such difficulties were not unexpected and assistance was given as needed.

Overall, the services reported most frequently used at NVHC included scheduled clinic visits, lab, routine physicals, and the emergency room. Among the things respondents felt that NVHC excels at are competent and personal patient care, friendly staff (medical and receptionists), fast service and an attractive new facility.

Top items listed for areas of improvement included frustrating wait times, increasing urgent care hours instead of being forced to use the emergency room, and better patient communication/follow through when patients call in requests to nurses/staff. Top services listed as sought elsewhere included OB/GYN, pediatric, eye care, pregnancy monitoring, mental health care, cardiac care and major medical surgeries.

Additional services respondents would like to see from NVHC included a birthing center, obstetric care, more pediatric services, mental health services, and dialysis.

Respondents felt that some of the issues holding the community back from addressing health concerns included, no OB/GYN, not enough healthcare staff, healthcare insurance/medical costs, and a lack of money.

To help build a better community and improve the quality of life for people in the region, respondents listed the following items: 1) better transportation systems (food shelf participants overwhelmingly endorsed this item), 2) wellness programs, 3) more information on chronic diseases, 4) enhanced knowledge on affordable and healthy nutrition, 5) exercise programs for heart health, 6) awareness of chronic conditions, 7) help paying for medications, 8) counseling groups, 9) helping those with mental health issues, and 10) more efforts to reach out to the community. One individual stated "I would support our community in doing seminars on certain health issues and improving our health by bringing in doctors/physicians from different medical departments from around the region to give talks." On this issue, NVHC has been actively engaged in community education through news releases and Local Public Health programs to the extent that financial and staff resources allow.

While the survey process has provided some useful suggestions and areas to explore, many healthcare services are not financially feasible to provide, and some services are not covered by malpractice insurance unless a minimum number of them can be performed annually to remain proficient in the procedures (e.g. obstetrics and surgeries). Future research efforts might consider exploring semi-structured interviews with key stakeholders to help shed light on more nuanced and complex details. Case-studies of treatment experiences may also help to review formal or informal processes that may need improvement or expansion.

Summary

Many of the highest risk individuals in the NVHC service area are in lower wage jobs, have treatable conditions such as high cholesterol or high blood pressure, and delay getting treatment due to a range of factors or may not adhere to treatment regimes. Many of these same clients may have overriding mental health issues such as substance use/abuse and depression/anxiety. Furthermore, room for improvement may exist in providing feedback to patients about their weight. As a nation, we have reached the point where healthcare expenses related to overweight/obesity are greater costs than even smoking (Journal of Public Health, n.d).

Potential solutions could incorporate:

- ✓ Focusing additional resources and ideas on areas that develop access to and encourage physical activities in adult populations.
- ✓ Formulate a broad reaction panel to results that includes pharmacists, nutritionists, community members and frontline healthcare staff.
- ✓ Address mental health issues through multi-disciplinary cross collaborative efforts.

Progress from Previous Report

In 2013, NVHC undertook a priority setting process that identified top health needs facing the community. This simple process asked the following questions when reviewing information:

- ✓ How many people in Marshall County are affected by this issue?
- ✓ How serious is this issue?
- ✓ What is the level of public concern/awareness about this issue?
- ✓ Does this issue contribute directly or indirectly to premature death?
- ✓ Are there inequities associated with this issue?
  - Health inequities are differences in health status, morbidity, and mortality rates across populations that are systemic, avoidable, unfair, and unjust.

Then completed results were ranked and reviewed for discussion. Based off the data presented, the top-ranked priority areas included:

- ➢ Access to Care
- ➢ Mental Health
- ➢ Obesity

From these recommendations, a strategy was set forward to work with the various medical agencies in the Northwestern Region to address these priority areas. After the completion of the strategic planning process in 2013 the CEO on NVHC, Ashley King resigned in 2014. The current CEO, Jon Linnell stepped into the director's role early in 2016. As a previous administrator of NVHC, he was not unfamiliar with the position, but efforts to establish new initiatives takes time. Mr. Linnell also remains the director of the North Region Health Alliance, from which he brings established working relationships with over 20 healthcare centers throughout Minnesota and North Dakota. Over the last 6 months, Mr. Linnell, has formed an ad-hoc committee to address the complex concerns and issues surround treating individuals with mental health problems. To date they have had several constructive meetings. Participants have included local law enforcement leadership, social services and community mental health service providers from Crookston.

Implementation Strategy Recommendations

NVHC is required to adopt an organization a specific implementation strategy in response to the needs covered in the Community Health Needs Assessment report. This implementation strategy is currently part of NVHC's strategic plan and will be repeated every three years as required by federal regulations. Below is an outline of the priority areas and recommended strategy for each one.

Priority 1: Access to Care

Goal: Conduct an assessment to determine the need for another medical provider.

Goal: Continue to provide education re: financial counseling & area transportation services.

Timeframe: Summer/Fall 2017

Priority 2: Mental Health

Goal: Review mental health services provided in the region and discuss opportunities for working with mental health service providers in the region.

Timeframe: Spring 2017

Priority 3: Obesity

Goal: Provide education to public, especially young population with nutrition information and promote improved physical health. Hold forums and methods to disseminate information. Identify ways to work with additional partners.

Goal: Explore ways for healthcare staff to improve communication with overweight/obese clients about their weight status.

Timeframe: Summer 2017

Community members who are interested in providing any feedback on the results of the assessment are encouraged to contact NVHC with their questions, suggestions or comments.

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Appendix A

2016 Community Health Needs Assessment Survey

Please take a moment to complete the following 10 questions. We anticipate it will take you 5-7 minutes. There are no right or wrong answers, only your opinions and ideas. If any of the questions make you feel uncomfortable or you are unsure how to respond, you do not need to answer that question. However, your ideas are important to North Valley Health Center and we appreciate any and all ideas that you have. If you have any questions about this survey, you may contact Jon Linnell, NVHC director at 218-745-4211.

1. Over the last year, how many times have you visited NVHC for healthcare services?

   None
   Once or twice
   Three or more times

2. What types of services do you use most at NVHC?

3. What does NVHC do really well?

4. Please share with us a few things we could do better.

5. What services (if any) do you receive from other healthcare centers?

6. What services would you like to see us offer?

7. What do you think are the most pressing health concerns for area residents?

8. What if anything is holding our community back from doing what needs to be done to improve health and quality of life for people?

9. What do you believe are the 2-3 most important issues that should be addressed in order to help further improve the quality of life for people in our region?

10. What types of actions or policies would you support in order to build a healthier community?

Appendix B: Limitations of selected data

1. One significant limitation of much of the data contained in this report is that the data is county-wide. Many, of the individuals who use NVHC likely come from the west side of the county. Those on the east end likely tend to go to Thief River Falls in Pennington County. However, a majority of the health concerns discussed in this report, while they are specific to Marshall County, are also region-wide concerns. The county names may change, but the overall issues are the same.

2. The difference in time between APCD report (2012) and NRABS survey (2014) was two years. Problems likely grew worse during that time frame.

3. The Minnesota Department of Health (MDH) conducted the insurance claims study using data from the Minnesota All Payer Claims Database (MN APCD), a large repository of health insurance claims, enrollment information, and costs for services provided to Minnesota residents. Both private and public insurers of Minnesota residents submit information on medical transactions for individuals with insurance coverage. The data allow them to assess care delivered to patients over time and across the spectrum of the health care system (including providers, settings, and payers), although it is de-identified, meaning that personal identifying information is removed from the data. The MN APCD currently contains data from 2009-2015. This analysis uses data from 2012 in order to establish a baseline against which future analyses can be compared. Because the MN APCD captures nearly all medical transactions for Minnesota residents, including both adults and children, it is well-representative of the state overall, and of smaller geographic areas. County-level estimates are based on the ZIP Code of each patient's residence.

4. For greater details about the extent of data modifications and nuances in the MN APCD, see www.health.state.mn.us/healthreform/allpayer/publications.html.