Sanford Health Network
Community Health Needs Assessment
2012-2013
Sanford Webster Medical Center

Community Health Needs Assessment
2012-2013

rev. 6/12/13
# Table of Contents

Purpose .......................................................... 4  
Acknowledgements .............................................. 5  
Executive Summary .............................................. 7-9  
Description of Sanford Webster Medical Center ........ 11  
Description of the Community Served ...................... 11  
Study Design and Methodology ............................... 11  
Resource Identification ....................................... 12  
Primary Research .............................................. 13  

Summary of the Survey Results ............................. 13  
  • Community Assets/Best Things About the Community  
    o Figure 1. Level of agreement with statements about the community regarding PEOPLE  
    o Figure 2. Level of agreement with statements about the community regarding SERVICES AND RESOURCES  
    o Figure 3. Level of agreement with statements about the community regarding QUALITY OF LIFE  
    o Figure 4. Level of agreement with statements about the community regarding GEOGRAPHIC SETTING  
    o Figure 5. Level of agreement with statements about the community regarding ACTIVITIES  

  • General Concerns About the Community  
    o Figure 6. Level of concern with statements about the community regarding ECONOMIC ISSUES  
    o Figure 7. Level of concern with statements about the community regarding SERVICES AND RESOURCES  
    o Figure 8. Level of concern with statements about the community regarding TRANSPORTATION  
    o Figure 9. Level of concern with statements about the community regarding ENVIRONMENTAL POLLUTION  
    o Figure 10. Level of concern with statements about the community regarding YOUTH CONCERNS  
    o Figure 11. Level of concern with statements about the community regarding SAFETY CONCERNS  

  • Community Health and Wellness Concerns  
    o Figure 12. Level of concern with statements about the community regarding ACCESS TO HEALTH CARE  
    o Figure 13. Level of concern with statements about the community regarding SUBSTANCE USE AND ABUSE  
    o Figure 14. Level of concern with statements about the community regarding PHYSICAL HEALTH  
    o Figure 15. Level of concern with statements about the community regarding MENTAL HEALTH
• Figure 16. Level of concern with statements about the community regarding ILLNESS

• Delivery of Health Care in the Community
  o Figure 17. How well topics related to DELIVERY OF HEALTH CARE in the community are being addressed

• Personal Health Care Information
  o Cancer Screening
  o Health Care Coverage
  o Primary Care Provider
  o Respondent’s Primary Care Provider
  o Respondents Representing Chronic Disease

• Demographic Information

Secondary Research
• Health Outcomes
  o Mortality
  o Morbidity

• Health Factors
  o Health Behaviors
  o Clinical Care
  o Social and Economic Factors
  o Physical Environment
  o Demographics
  o Population by Age
  o Housing
  o Economic Security
  o Diversity Profile

Health Needs Identified
• Community Assets/Prioritization Process

Implementation Strategy

Appendix
• 2011 County Health Profile – Day County, SD
• Definitions of Health Variables
• Aging Profiles
• Diversity Profiles
• Maps:
  o Mortality – Map 1 – Premature Death
  o Morbidity – Maps 2-5
  o Health Factors – Maps 6-12
  o Clinical Care – Maps 13-20
  o Social and Economic – Maps 21-27
  o Physical Environment – Maps 28-31
  o Demographic – Maps 32-36
• Table 1 – Asset Map
• Table 2 – Prioritization Worksheet
Sanford Webster Medical Center
Community Health Needs Assessment
2012-2013

Purpose

Sanford Webster Medical Center is part of Sanford Health, an integrated health system headquartered in the Dakotas and the largest, rural, not-for-profit health care system in the nation with locations in 126 communities in eight states.

Sanford Webster Medical Center has undertaken a community health needs assessment as required by the Patient Protection and Affordable Care Act, and as part of the IRS 990 requirement for a not-for-profit health system to address issues that have been assessed as unmet needs in the community.

The 2010 PPACA enactment requires that each hospital must have: (1) conducted a community health needs assessment in the applicable taxable year; (2) adopted an implementation strategy for meeting the community health needs identified in the assessment; and (3) created transparency by making the information widely available. For tax-exempt hospital organizations that own and operate more than one hospital facility, as within Sanford Health, the new tax-exemption requirements apply to each individual hospital. The first required needs assessment falls within the fiscal year July 1, 2012 through June 30, 2013.

The purpose of a community health needs assessment is to develop a global view of the population’s health and the prevalence of disease and health issues within the community. Findings from the assessment serve as a catalyst to align expertise and develop a Community Investment/Community Benefit plan of action. There is great intrinsic value in a community health needs assessment when it serves to validate, justify and defend not-for-profit status and create opportunity to identify and address public health issues from a broad perspective.

A community health needs assessment is critical to a vital Community Investment/Community Benefit Program that builds on community assets, promotes collaboration, improves community health, and promotes innovation and research. A community health needs assessment also serves to validate progress made toward organizational strategies and provides further evidence for retaining not-for-profit status.
Acknowledgements

Sanford Health would like to acknowledge and thank the Steering Committees for their expertise while performing the assessment and analysis of the community health data. The assessment provides support for the future direction of our work as the region’s leading health care system.

Sanford Enterprise Steering Group:

• **Enterprise Lead:** Carrie McLeod, MBA, MM, LRD, CDE; Office of Health Care Reform, Community Benefit/Community Health Improvement
• **Sioux Falls Region Co-Lead:** Bruce Viessman, CFO, Sanford Health Network Sioux Falls
• Mike Begeman, Chief of Staff/Vice President of Public Affairs
• Maxine Brinkman, CPA; Director of Financial Decisions and Operations Support
• Michelle Bruhn, CPA; CFO, Health Services Division
• Randy Bury, COO, Sanford Medical Center USD
• Jane Heilman, BA; Senior Corporate Communication Strategist
• Kristie Invie, BS, MBA; Vice President for Clinical Performance
• Joy Johnson, Bemidji Region Co-Lead, VP, Business Development and Marketing, Bemidji
• Ashley King, Bemidji Co-Lead, Intern in Bemidji
• JoAnn Kunkel, CFO, Sanford Health
• Tiffany Lawrence, CPA; Fargo Region Co-Lead, CFO, Sanford Medical Center Fargo
• Martha Leclerc, MS; Vice President, Office of Health Reform and Strategic Payment
• Doug Nowak, MBA; Executive Director, Decision Support
• Heather Vanmeveren, CPA; Director of Accounting

Sanford Sioux Falls Network Steering Group:

• **Enterprise Lead:** Carrie McLeod, MBA, MM, LRD, CDE; Office of Health Care Reform, Community Benefit/Community Health Improvement
• **Sioux Falls Region Co-Lead:** Bruce Viessman, CFO, Sanford Health Network Sioux Falls
• Michelle Bruhn, CPA; CFO, Health Services Division
• Mike Daly, Director, Public Affairs
• Doug Nowak, Executive Director, Decision Support
• Jeff Rotert, COO/CFO, Sanford Worthington Medical Center
• Cindy Schuck, Manager, Accreditation Standards Program
• Dan Staebell, Communications Department
• Justin Tiffany, Project Specialist, Health Network, Sanford Medical Center

Sanford Webster Steering Group:

• David Rogers, CEO
• Sheryl Pappas, CFO
• Karen Wolter, CNO
• Evelyn Christensen, Director of Clinic Operations
• Mike Ewalt, Nursing Home Administrator

We express our gratitude to the following individuals and groups for their participation in this study.

We extend special thanks to the city mayors, city council/commission members, physicians, nurses, school superintendents and school board members, parish nurses, representatives from the Native American community, Faith Community Leaders, as well as legal services, mentally and physically disabled, social services, non-profit organizations, and financial services for their participation in this work. Together we are reaching our vision “to improve the human condition through exceptional care, innovation and discovery.”
Our Guiding Principles:

- All health care is a community asset
- Care should be delivered as close to home as possible
- Access to health care must be provided regionally
- Integrated care delivers the best quality and efficiency
- Community involvement and support is essential to success
- Sanford Health is invited into the communities we serve

The following key community stakeholders participated in this assessment work:

- Denise Below, RN, Sanford Webster, Webster, SD
- Vicki Benike, Lab Manager, Sanford Webster, Webster, SD
- Elaine Bistodeau, Rad Tech, Sanford Webster, Webster, SD
- Renae Christensen, RN, Sanford Webster, Webster, SD
- Lorraine DeWitte, Fiscal Services, Sanford Webster, Webster, SD
- Morgan C. Dorsett, Chiropractor, Dorsett Chiropractic Center, Webster, SD
- Larry Ewalt, Maintenance Director, Bethesda Home, Webster, SD
- Nick Fosheim, Executive Director, Webster Area Development Corporation, Webster, SD
- Ilia Gaikowski, RN, Sanford Webster, Webster, SD
- Elizabeth Gravley, Family Practice Physician, Sanford Webster, Webster, SD
- Dave Hahler, Owner, Dave Hahler Automotive, Inc., Webster, SD
- Cheryl Hairgrove, Physician’s Assistant/Nursing Educator, Sanford Webster, Webster, SD
- Suzanne Hayes, Receptionist in Fiscal Services, Sanford Webster, Webster, SD
- Charlene Johnson, Health Information Technologist, Sanford Webster, Webster, SD
- Jeannine Johnson, Housekeeping Dept., Sanford Webster, Webster, SD
- Kari Johnson, RN, Sanford Webster, Webster, SD
- Kim Kaufman, RN, Sanford Webster, Webster, SD
- Donna Kwasniewski, RN, Sanford Webster, Webster, SD
- Colleen Lesnar, MLT, Sanford Webster, Webster, SD
- Sherry Markve, Receptionist/Admissions, Sanford Webster, Webster, SD
- Cindy McClurg, Health Information Director, Sanford Webster, Webster, SD
- Dan Menking, President, Dacotah Bank, Webster, SD
- Jen Moos, Social Worker, Sanford Webster, Webster, SD
- Lana Nash, RT Manager, Sanford Webster, Webster, SD
- Peggy Ninke, VP, CorTrust Bank, Webster, SD
- Sheryl Pappas, Chief Financial Officer, Sanford Webster, Webster, SD
- Heather Pieper, PTA Member, Webster, SD
- Lola Pollard, Family Medicine Physician’s Assistant, Sanford Webster, Webster, SD
- Monte Rougemont, Hospital Board Member, Roslyn, SD
- Tom Sannes, Attorney, Webster Area Development Corporation, Webster, SD
- DeAnna Trautner, Dietary Manager, Bethesda Home, Webster, SD
- Greg Wagner, Radiology Manager, Sanford Webster, Webster, SD
- Mara Wagner, Geriatric Nurse, Webster, SD
- Kathy Wojcik, RN, Sanford Webster, Webster, SD
- Erin, RN, Bethesda Home, Webster, SD
Executive Summary

Purpose

The purpose of a community health needs assessment is to develop a global view of the population’s health and the prevalence of disease and health issues within the community. Findings from the assessment serve as a catalyst to align expertise and develop a Community Investment/Community Benefit plan of action. There is great intrinsic value in a community health needs assessment when it serves to validate, justify and defend not-for-profit status and create opportunity to identify and address public health issues from a broad perspective. A community health needs assessment is critical to a vital Community Investment/Community Benefit Program that builds on community assets, promotes collaboration, improves community health, and promotes innovation and research. A community health needs assessment also serves to validate progress made toward organizational strategies and provides further evidence for retaining not-for-profit status.

Study Design and Methodology

The following qualitative data sets were studied:

- Day County Community Health Needs Assessment of Community Leaders

The following quantitative data sets were studied:

- 2011 County Health Profile for Day County
- Aging Profiles for Day County
- Diversity Profiles for Day County

Asset mapping was conducted by reviewing the data and identifying the unmet needs from the various surveys and data sets. The process implemented in this work was based on the McKnight Foundation model - Mapping Community Capacity by John L. McKnight and John P. Kretzmann, Institute for Policy Research at Northwestern University.

Each unmet need was researched to determine what resources were available in the community to address the needs. The Day County Community Collaborative performed the asset mapping and reviewed the findings. The group conducted an informal gap analysis to determine what needs remained after resources were thoroughly researched. Once gaps were determined the group proceeded to the prioritization process. The multi-voting methodology was implemented to determine what top priorities would be further developed into implementation strategies.
Key Findings – Primary Research

Sanford Webster distributed the community health needs assessment survey tool that was developed by the Greater Fargo-Moorhead Community Health Needs Assessment Collaborative to key stakeholder groups as a method of gathering input from a broad cross section of the Day County community.

The Internal Revenue Code 501 (r) statute requires that a broad base of key community stakeholders have input into the needs of the community. Those community members specified in the statute include: persons who represent the broad interests of the community served by the hospital facility including those with special expertise in public health; Federal, tribal, regional, state and or local health or other departments or agencies with information relevant to the health needs of the community served; leaders, representatives, or members of medically underserved, low-income, and minority populations.

Sanford extended a good faith effort to engage all of the aforementioned community representatives in the survey process. The list of individuals who agreed to take the survey and also submit their names are included in the acknowledgement section of this report. In some cases there were surveys that were submitted without names or without a specified area of expertise or affiliation. We worked closely with public health experts throughout the assessment process.

Public comments and response to the community health needs assessment and the implementations strategies are welcome on the Sanford website under “About Sanford” in the Community Health Needs Assessment section.

The findings discussed in this section are a result of the analysis of the survey qualitative data.

Respondents had high levels of agreement that their community has quality healthcare services and resources available to them. Respondents felt strongly that there is an engaged government as well as access to a quality education system for children in the community. Overall respondents evaluated the community high in regards to quality of life questions and felt there was a sense of community/feeling that connected them together with others in the community.

Among health and wellness concerns, respondents were most concerned about costs associated with health insurance, costs of prescription drugs, and adequacy of health insurance. At the local level, respondents indicated concern with access to health services and the costs associated with those services. Respondents indicated concern with the overall physical health of the community citing areas of obesity, lack of exercise and access to exercise facilities as a concern. Furthermore the respondents indicated a need for more senior services and activities for seniors.

Among services and resources, respondents indicated concern about access to youth services and activities as well as services and activities for seniors in their community.

Respondents indicated little need for concern in areas related to violent crime, school dropout rate, driving habits, traffic congestion, water and noise pollution, homelessness, and hunger.

Respondents indicated their choice for primary health care was based on location, availability of services, and the quality of those services.
**Implementation Strategy**

The following unmet needs were identified through a formal community health needs assessment, resource mapping and prioritization process:

- Assisted living for seniors
- Adult and childhood obesity
- Medical providers recruitment plan

Strategies to address the identified needs include:

- **Implementation Strategy: Lack of Assisted Living for Elderly**
  - Study the feasibility of converting part of Bethesda’s Heritage Village Apartments into Assisted Living.

- **Implementation Strategy: Obesity among Adults and Children**
  - Work with Sanford WebMD Fit program to leverage this program to parents and children through our local school system.
  - Work with medical center dietitian to develop services for obesity prevention/control.
  - Work with exercise specialists to develop exercise programs (walking clubs, biking clubs, fitness center programs, etc.) for community members.

- **Implementation Strategy: Medical Providers Recruitment**
  - Recruit an additional provider to bring our medical staff to: 2 FT MD, 1 PT MD, 2 FT APP.
Sanford Health, long been dedicated to excellence in patient care, is on a journey of growth and momentum with vast geography, cutting edge medicine, sophisticated research, advanced education and a health plan. Through relationships built on trust, successful performance, and a vision to improve the human condition, Sanford seeks to make a significant impact on health and healing. We are proud to be from the Midwest and to impact the world. The name Sanford Health honors the legacy of Denny Sanford’s transformational gifts and vision.

**Our Mission:** *Dedicated to the Work of Health and Healing*
We provide the best care possible for patients at every stage of life, and support healing and wholeness in body, mind and spirit.

**Our Vision:** *To improve the Human Condition through Exceptional Care, Innovation and Discovery*
We strive to provide exceptional care that exceeds our patients’ expectations. We encourage diversity in thought and ideas that lead to better care, service and advanced expertise.

**Our Values:**
- **Courage:** *Strength to persevere, to use our voice and take action*
- **Passion:** *Enthusiasm for patients and work, commitment to the organization*
- **Resolve:** *Adherence to systems that align actions to achieve excellence, efficiency and purpose*
- **Advancement:** *Pursuit of individual and organizational growth and development*
- **Family:** *Connection and commitment to each other*

**Our Promise:** *Deliver a flawless experience that inspires*
We promise that every individual’s experience at Sanford—whether patient, visitor or referring physician—will result in a positive impact, and for every person to benefit from a flawless experience that inspires.

**Guiding Principles:**
- *All health care is a community asset*
- *Care should be delivered as close to home as possible*
- *Access to health care must be provided regionally*
- *Integrated care delivers the best quality and efficiency*
- *Community involvement and support is essential to success*
- *Sanford Health is invited into the communities we serve*
Description of Sanford Webster Medical Center

Sanford Webster Medical Center is a 25-bed Critical Access Hospital providing emergency services, nursing, radiology, laboratory, rehabilitations, and respiratory services to persons in need. Sanford Webster Medical Center has an adjoining rural health clinic with two physicians and two advance practice practitioners providing coverage to the hospital and rural health clinic.

Description of the Community Served

Sanford Webster Medical Center provides health care services to persons residing in communities such as Webster, Waubay, Bristol, Roslyn and other towns within Day County.

Study Design and Methodology

In May 2011 Sanford Health Fargo convened key health care leaders and other not-for-profit leaders in the Fargo Moorhead community to establish a Fargo Moorhead Community Health Needs Assessment Collaborative. A primary goal of this collaborative is to craft standardized tools, indicators and methodology that can be used by all group members when conducting assessments and also be used by all of the Sanford medical centers across the enterprise. After much discussion it was determined that the Robert Wood Johnson Framework for county profiles would be our secondary data model.

The Internal Revenue Code 501 (r) statute requires that a broad base of key community stakeholders have input into the needs of the community. Those community members specified in the statute include: persons who represent the broad interests of the community served by the hospital facility including those with special expertise in public health; Federal, tribal, regional, state and or local health or other departments or agencies with information relevant to the health needs of the community served; leaders, representatives, or members of medically underserved, low-income, and minority populations.

Sanford extended a good faith effort to engage all of the aforementioned community representatives in the survey process. The list of individuals who agreed to take the survey and also submit their names are included in the acknowledgement section of this report. In some cases there were surveys that were submitted without names or without a specified area of expertise or affiliation. We worked closely with public health experts throughout the assessment process.

Public comments and response to the community health needs assessment and the implementations strategies are welcome on the Sanford website under “About Sanford” in the Community Health Needs Assessment section.

A subgroup of this collaborative met with researchers from the North Dakota State University Center for Social Research to develop a survey tool for our key stakeholder groups. The survey tool incorporated the University of North Dakota’s Center for Rural Health community health needs assessment tool and the Fletcher Allen community health needs assessment tool. North Dakota State University and the University of North Dakota Center for Rural Health worked together to develop additional questions and to assure that scientific methodology was incorporated in the design.

Finally, it was the desire of the collaborative that the data would be shared broadly with others and that if possible it would be hosted on a web site where there could be access for a broad base of community, state and regional individuals and groups.
This community health needs assessment was conducted during FY 2012 and FY 2013. The main model for our work is the Association for Community Health Improvement’s (ACHI) Community Health Needs Assessment toolkit.

The following qualitative data set was studied:
- Survey of key stakeholders

The following quantitative data sets were studied:
- 2011 County Health Profile for Day County
- Aging Profiles for Day County
- Diversity Profiles for Day County

Asset mapping was conducted by reviewing the data and identifying the unmet needs from the various surveys and data sets. The process implemented in this work was based on the McKnight Foundation model - Mapping Community Capacity by John L. McKnight and John P. Kretzmann, Institute for Policy Research at Northwestern University.

Each unmet need was researched to determine what resources were available in the community to address the needs. The steering group performed the asset mapping and reviewed the findings. The group conducted an informal gap analysis to determine what needs remained after resources were thoroughly researched. Once gaps were determined, the group proceeded to the prioritization process. The multi-voting methodology was implemented to determine what top priorities would be further developed into implementation strategies.

**Resource Identification**

**2011 County Health Profiles**
The County Health Profiles are based largely on the County Health Rankings from the Mobilizing Action Toward Community Health (MATCH), a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. State and national benchmarking required additional data sources, including the U.S. Census Bureau, Small Area Health Insurance Estimates, and the Centers for Disease Control and Prevention’s National Center for Health Statistics – the Health Indicators Warehouse.

**Aging Profiles**
The Aging Profiles are based on data from the U.S. Census Bureau, 2010 Census Summary File 1, and 2006-2010 American Community Survey Five-Year Estimates (sample data). The estimates presented are meant to give perspective on characteristics across age categories; however, because they are based on sample data, one should use caution when interpreting small numbers. Blank values reflect data that is missing or not available.

**Diversity Profiles**
The Diversity Profiles are based on data from the U.S. Census Bureau, 2010 Census Summary File 1, and 2006-2010 American Community Survey Five-Year Estimates (sample data). The estimates presented are meant to give perspective on characteristics across race and ethnic categories; however, because they are based on sample data, one should use caution when interpreting small numbers. Blank values reflect data that is missing or not available.

**Limitations**
The Sanford Webster planning committee collaborative attempted to survey 100 key community and county stakeholders for the purpose of determining the needs of the community. There were 56 members of this key stakeholder group who completed the survey.
The survey asked for individual perceptions of community health issues and is subjective to individual experiences which may or may not be the current status of the community.

Primary Research

Sanford Webster Medical Center distributed the community health needs assessment survey tool that was developed by the Greater Fargo-Moorhead Community Health Needs Assessment Collaborative to key stakeholder groups as a method of gathering input from a broad cross section of the Webster community. The findings discussed in this section are a result of the analysis of the survey qualitative data.

Summary of the Survey Results

The following graphs depict the feedback received from the 56 respondents that were surveyed by Sanford Webster Medical Center.

Community Assets/Best Things about the Community

Using a 1 to 5 scale, with 1 being “not at all” and 5 being “a great deal,” respondents were asked to rate their level of agreement with various statements about their community regarding people, services and resources, and quality of life.

Respondents indicated the top five community assets or best things about the community were: the community is a good place to raise kids, there are quality school systems and programs for youth, there is quality health care, and people are friendly, helpful, and supportive.

Respondents were asked to rate their level of agreement with various statements regarding PEOPLE, SERVICES AND RESOURCES, QUALITY OF LIFE, GEOGRAPHIC SETTING, and ACTIVITIES in their community.

Figure 1. Level of agreement with statements about the community regarding PEOPLE

*Means exclude “do not know” responses.
**Figure 2. Level of agreement with statements about the community regarding SERVICES AND RESOURCES**

- There is quality health care (N=54) - Mean: 4.28
- There are quality school systems and programs for youth (N=52) - Mean: 3.75
- There is access to quality food (N=54) - Mean: 3.70
- There is effective transportation (N=54) - Mean: 3.56
- There are quality higher education opportunities and institutions (N=53) - Mean: 2.28

*Means exclude "do not know" responses.

**Figure 3. Level of agreement with statements about the community regarding QUALITY OF LIFE**

- The community has a family-friendly environment, is a good place to raise kids (N=54) - Mean: 4.22
- The community is a safe place to live, has little/no crime (N=54) - Mean: 4.11
- The community has a peaceful, calm, quiet environment (N=54) - Mean: 4.06
- The community has an informal, simple, "laidback lifestyle" (N=53) - Mean: 4.00
- The community is a "healthy" place to live (N=54) - Mean: 3.98
- The community has a sense of cultural richness (N=52) - Mean: 3.27

*Means exclude “do not know” responses.
Figure 4. Level of agreement with statements about the community regarding the GEOGRAPHIC SETTING

- In the community, it is a short commute/convenient access to work and activities (N=52)
  Mean (1=not at all, 5=a great deal)*
  4.15
- The community has a general cleanliness (e.g., fresh air, lack of pollution and litter) (N=52)
  Mean (1=not at all, 5=a great deal)*
  4.15

*Means exclude “do not know” responses.

Figure 5. Level of agreement with statements about the community regarding ACTIVITIES

- There are many recreational and sports activities (e.g., outdoor recreation, parks, bike paths, and other sports and fitness activities) (N=53)
  Mean (1=not at all, 5=a great deal)*
  3.45
- There are many activities for families and youth (N=53)
  Mean (1=not at all, 5=a great deal)*
  3.25
- There are great events and festivals (N=53)
  Mean (1=not at all, 5=a great deal)*
  2.91
- There are many activities for seniors (N=45)
  Mean (1=not at all, 5=a great deal)*
  2.76
- There are quality arts and cultural activities (N=54)
  Mean (1=not at all, 5=a great deal)*
  2.67

*Means exclude “do not know” responses.
General Concerns about the Community

Respondents were asked to rate their level of concern with various statements regarding ECONOMIC ISSUES, SERVICES AND RESOURCES, TRANSPORTATION, ENVIRONMENTAL POLLUTION, YOUTH CONCERNS, and SAFETY CONCERNS in their community.

Figure 6. Level of concern with statements about the community regarding ECONOMIC ISSUES

*Means exclude “do not know” responses.
Figure 7. Level of concern with statements about the community regarding SERVICES AND RESOURCES

Cost and/or availability of elder care (N=49) 3.76
Availability of youth activities (N=50) 3.52
Quality and/or cost of education/school programs (N=48) 3.52
Resources to meet the needs of the aging population (N=52) 3.52
Cost and/or availability of child care (N=46) 3.39
False sense of entitlement to services and resources (N=46) 3.35
Availability of family services (N=51) 3.27
Problems associated with health care systems/policies (not relating to cost) (N=51) 3.06
Problems associated with mental health care systems/policies (not relating to cost) (N=49) 2.94
Availability/access to a grocery store (N=51) 2.90

Mean (1=not at all, 5=a great deal)*

*Means exclude “do not know” responses.

Figure 8. Level of concern with statements about the community regarding TRANSPORTATION

Road conditions (N=52) 3.23
Availability of public transportation (N=51) 2.47
Driving habits (e.g., speeding, "road rage") (N=52) 2.40
Traffic congestion (N=52) 1.46

Mean (1=not at all, 5=a great deal)*

*Means exclude “do not know” responses.
Figure 9. Level of concern with statements about the community regarding ENVIRONMENTAL POLLUTION

<table>
<thead>
<tr>
<th>Issue</th>
<th>Mean (1=not at all, 5=a great deal)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water pollution (N=52)</td>
<td>1.85</td>
</tr>
<tr>
<td>Air pollution (N=52)</td>
<td>2.12</td>
</tr>
<tr>
<td>Noise pollution (N=52)</td>
<td>2.19</td>
</tr>
</tbody>
</table>

*Means exclude “do not know” responses.

Figure 10. Level of concern with statements about the community regarding YOUTH CONCERNS

<table>
<thead>
<tr>
<th>Issue</th>
<th>Mean (1=not at all, 5=a great deal)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bullying (N=45)</td>
<td>3.58</td>
</tr>
<tr>
<td>Teen pregnancy (N=44)</td>
<td>3.18</td>
</tr>
<tr>
<td>Changes in family composition (e.g., divorce, single parenting) (N=47)</td>
<td>3.15</td>
</tr>
<tr>
<td>Youth crime (N=46)</td>
<td>2.93</td>
</tr>
<tr>
<td>School dropout rates/truancy (N=45)</td>
<td>2.76</td>
</tr>
</tbody>
</table>

*Means exclude “do not know” responses.

Figure 11. Level of concern with statements about the community regarding SAFETY CONCERNS

<table>
<thead>
<tr>
<th>Issue</th>
<th>Mean (1=not at all, 5=a great deal)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance abuse (N=46)</td>
<td>3.67</td>
</tr>
<tr>
<td>Child abuse and neglect (N=47)</td>
<td>3.09</td>
</tr>
<tr>
<td>Domestic violence (N=47)</td>
<td>3.00</td>
</tr>
<tr>
<td>Property crimes (N=50)</td>
<td>2.76</td>
</tr>
<tr>
<td>Violent crimes (N=51)</td>
<td>2.33</td>
</tr>
<tr>
<td>Prostitution (N=45)</td>
<td>1.60</td>
</tr>
</tbody>
</table>

*Means exclude “do not know” responses.
**Community Health and Wellness Concerns**

Respondents were asked to rate their level of concern about health and wellness issues in their community regarding ACCESS TO HEALTH CARE, SUBSTANCE USE AND ABUSE, PHYSICAL HEALTH, MENTAL HEALTH, and ILLNESS.

**Figure 12. Level of concern with statements about the community regarding ACCESS TO HEALTH CARE**

*Means exclude "do not know" responses.*
Figure 13. Level of concern with statements about the community regarding SUBSTANCE USE AND ABUSE

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean (1=not at all, 5=a great deal)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol use and abuse (N=49)</td>
<td>3.86</td>
</tr>
<tr>
<td>Drug use and abuse (N=48)</td>
<td>3.75</td>
</tr>
<tr>
<td>Smoking (N=49)</td>
<td>3.57</td>
</tr>
<tr>
<td>Presence and influence of drug dealers in the community (N=45)</td>
<td>3.47</td>
</tr>
</tbody>
</table>

*Means exclude “do not know” responses.

Figure 14. Level of concern with statements about the community regarding PHYSICAL HEALTH

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean (1=not at all, 5=a great deal)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity (N=51)</td>
<td>3.96</td>
</tr>
<tr>
<td>Poor nutrition/eating habits (N=51)</td>
<td>3.71</td>
</tr>
<tr>
<td>Lack of exercise and/or inactivity (N=51)</td>
<td>3.69</td>
</tr>
<tr>
<td>Availability of good walking or biking options (as alternatives to driving) (N=50)</td>
<td>3.56</td>
</tr>
<tr>
<td>Availability of exercise facilities (N=50)</td>
<td>3.44</td>
</tr>
<tr>
<td>Cost of exercise facilities (N=48)</td>
<td>3.40</td>
</tr>
</tbody>
</table>

*Means exclude “do not know” responses.
Figure 15. Level of concern with statements about the community regarding MENTAL HEALTH

- Stress (N=49) 3.84
- Availability of qualified mental health providers (N=46) 3.61
- Quality of mental health programs (N=45) 3.56
- Depression (N=47) 3.45
- Availability of services for addressing mental health problems (N=48) 3.42

*Means exclude “do not know” responses.

Figure 16. Level of concern with statements about the community regarding ILLNESS

- Cancer (N=49) 4.00
- Chronic disease (e.g., diabetes, heart disease, multiple sclerosis) (N=49) 3.88
- Communicable diseases (e.g., including sexually transmitted diseases, AIDS) (N=44) 2.98

*Means exclude “do not know” responses.
**Delivery of Health Care in the Community**

Respondents were asked to rate how well DELIVERY OF HEALTH CARE topics are being addressed in their community.

**Figure 17. How well topics related to DELIVERY OF HEALTH CARE in the community are being addressed**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Mean (1=not at all well, 5=very well)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to emergency services (e.g., ambulance and 911) (N=50)</td>
<td>3.96</td>
</tr>
<tr>
<td>Coordination/communication among providers (N=48)</td>
<td>3.73</td>
</tr>
<tr>
<td>Health services for diabetes (N=46)</td>
<td>3.70</td>
</tr>
<tr>
<td>Access to needed technology/equipment (N=47)</td>
<td>3.66</td>
</tr>
<tr>
<td>Health services for heart disease (N=47)</td>
<td>3.66</td>
</tr>
<tr>
<td>Number of health care staff in general (N=50)</td>
<td>3.64</td>
</tr>
<tr>
<td>Number of health care providers and specialists (N=50)</td>
<td>3.60</td>
</tr>
<tr>
<td>Distance/transportation to health care facility (N=49)</td>
<td>3.51</td>
</tr>
<tr>
<td>Health services for cancer patients (N=46)</td>
<td>3.37</td>
</tr>
<tr>
<td>Attention given to preventive services (N=47)</td>
<td>3.30</td>
</tr>
<tr>
<td>Needs of communities dealing with a hospital or clinic closure (N=31)</td>
<td>3.13</td>
</tr>
<tr>
<td>Costs of the delivery of health care (N=46)</td>
<td>3.11</td>
</tr>
<tr>
<td>Health services for obesity (N=44)</td>
<td>2.86</td>
</tr>
<tr>
<td>Mental health services (e.g., depression, dementia/Alzheimer's disease, stress) (N=43)</td>
<td>2.79</td>
</tr>
</tbody>
</table>

*Means exclude “do not know” responses.*
More than half of the respondents said they had not had a cancer screening or cancer care in the past year. “Not necessary” was the most common reason given for not having the test.

Respondents were asked whether they had a cancer screening or cancer care in the past year, and if they had not, reasons for not having done so.

**Cancer Screening**

**Figure 18. Whether respondents had a cancer screening or cancer care in the past year**

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (N=33)</td>
<td>68.80%</td>
</tr>
<tr>
<td>No (N=18)</td>
<td>31.20%</td>
</tr>
</tbody>
</table>

**Figure 19. Respondents cited reason for not having cancer screening or cancer care in the past year**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not necessary (N=10)</td>
<td>58.80%</td>
</tr>
<tr>
<td>Unable to access care (N=1)</td>
<td>11.80%</td>
</tr>
<tr>
<td>Other (N=1)</td>
<td>5.90%</td>
</tr>
<tr>
<td>Fear (N=0)</td>
<td>0.00%</td>
</tr>
<tr>
<td>Cost (N=4)</td>
<td>23.50%</td>
</tr>
<tr>
<td>Unfamiliar with the recommendations (N=1)</td>
<td>5.90%</td>
</tr>
<tr>
<td>Doctor hasn't suggested it (N=2)</td>
<td>5.90%</td>
</tr>
</tbody>
</table>
Health Care Coverage

Figure 20. Methods respondents have used to pay for health care costs over the last 12 months

*Means exclude “do not know” responses.

Primary Care Provider

Figure 21. Respondents’ reasons for choosing primary health care provider

*Means exclude “do not know” responses.
Respondents Representing Chronic Disease

Respondents were asked to select their personal general health conditions/diseases. Weight control received the most responses with 38% of participants selecting this condition. The chronic diseases found among respondents include arthritis, asthma, cancer, heart disease, diabetes, Alzheimer’s, hypertension, hypercholesterolemia and depression. The highest occurrences of these chronic diseases include hypertension, arthritis, hypercholesterolemia, and depression, stress or anxiety. (Figure 23)

Figure 23. Respondent’s health/chronic diseases
Demographic Information

Of the respondents who took part, 81.6% were female and 18.4% were male. Respondents’ age distribution ranged from 18 years to over 65 years old. Respondents between the ages of 25-34 were 21.6%, between the ages of 35-44 were 19.6%, between the ages of 45-54 were 21.6%, between 55-59 were 8.3%, between 60-64 were 13.7%, and 9.8% were 65 years and older. Respondents’ education: 5.9% had high school education or GED equivalent, 15.7% have had some college with no degree, 35.3% have an Associate level degree, 25.5% have a Bachelor’s degree, and 17.6% have a graduate or professional level degree.

Secondary Research

Sanford Webster Medical Center analyzed the 2011 County Profiles for Day County and secured benchmarking data for the state of South Dakota and for the United States as a whole. The 2011 County Profiles are based largely on the County Health Rankings from the Mobilizing Action Toward Community Health (MATCH), a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. State and national benchmarking required additional data sources, including the U.S. Census Bureau, Small Area Health Insurance Estimates, and the Centers for Disease Control and Prevention’s National Center for Health Statistics – the Health Indicators Warehouse.

Health Outcomes

Mortality

The Mortality health outcomes indicate that South Dakota as a state has more premature deaths than the national benchmark. (Map 1 in the Appendix)

<table>
<thead>
<tr>
<th></th>
<th>National Benchmark</th>
<th>South Dakota</th>
<th>Day County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premature death</td>
<td>Years of potential life lost before age 75 per 100,000 (age-adjusted), 2005-2007</td>
<td>5,564</td>
<td>6,815</td>
</tr>
</tbody>
</table>

Morbidity

The Morbidity health outcomes indicate that South Dakota citizens report more days of poor health (self-reported) than the national benchmark. Maps 1 -2 in the Appendix provide county views of the Morbidity indicators within the five-state region.

<table>
<thead>
<tr>
<th></th>
<th>National Benchmark</th>
<th>South Dakota</th>
<th>Day County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor or fair health</td>
<td>Percent of adults reporting fair or poor health (age-adjusted), 2003-2009</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>Poor physical health days</td>
<td>Average number of physical unhealthy days reported in past 30 days (age-adjusted), 2003-2009</td>
<td>2.6</td>
<td>2.8</td>
</tr>
<tr>
<td>Poor mental health days</td>
<td>Average number of mentally unhealthy days reported in past 30 days (age-adjusted), 2003-2009</td>
<td>2.3</td>
<td>2.6</td>
</tr>
<tr>
<td>Low birth weight</td>
<td>Percent of live births with low birth weight (&lt;2,500 grams), 2001-2007</td>
<td>6.0%</td>
<td>6.8%</td>
</tr>
</tbody>
</table>
Health Factors

The teen birth rate is higher in South Dakota (38.7) and Day County (33.4) than the national benchmark (22). Maps 6 -12 in the Appendix provide county views of the Health Behavior indicators within the five-state region.

Health Behaviors

<table>
<thead>
<tr>
<th>Health Behavior</th>
<th>National Benchmark</th>
<th>South Dakota</th>
<th>Day County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult smoking</td>
<td>Percent of adults who currently smoke and have smoked at least 100 cigarettes in their lifetime, 2003-2009</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>Adult obesity</td>
<td>Percent of adults that report a body mass index (BMI) of at least 30 kg/m2, 2008</td>
<td>25%</td>
<td>29%</td>
</tr>
<tr>
<td>Physical inactivity</td>
<td>Percent of adults reporting no leisure physical activity, 2008</td>
<td>20%</td>
<td>26%</td>
</tr>
<tr>
<td>Excessive drinking</td>
<td>Percent of adults reporting binge drinking and heavy drinking, ( consuming &gt;4 for women and &gt;5 for men on a single occasion ) 2003-2009</td>
<td>8%</td>
<td>19%</td>
</tr>
<tr>
<td>Motor vehicle crash death rate</td>
<td>Motor vehicle crash deaths per 100,000 population, 2001-2007</td>
<td>12.0</td>
<td>23.7</td>
</tr>
<tr>
<td>Sexually transmitted infections</td>
<td>Number of Chlamydia cases (new cases reported) per 100,000 population 2008</td>
<td>83.0</td>
<td>371.3</td>
</tr>
<tr>
<td>Teen birth rate</td>
<td>Number of teen births per 100,000 females ages 15-19, 2001-2007</td>
<td>22.0</td>
<td>38.7</td>
</tr>
</tbody>
</table>

Clinical Care

Maps 13-20 in the Appendix provide county views of the Clinical Care indicators within the five-state region.

<table>
<thead>
<tr>
<th>Clinical Care</th>
<th>National Benchmark</th>
<th>South Dakota</th>
<th>Day County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uninsured adults</td>
<td>Percent of adult population ages 18-64 without health insurance, 2007</td>
<td>13%</td>
<td>16%</td>
</tr>
<tr>
<td>Uninsured youth</td>
<td>Percent of youth ages 0-18 without health insurance.</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Primary Care Physicians</td>
<td>Ratio of population to primary care physicians, 2008</td>
<td>631:1</td>
<td>769:1</td>
</tr>
<tr>
<td>Mental Health Providers</td>
<td>Ratio of total population to mental health providers, 2008</td>
<td>2,242:1</td>
<td>3,544:1</td>
</tr>
<tr>
<td>Dentist rate</td>
<td>Number of professionally active dentists per 100,000 population, 2007</td>
<td>69.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Preventable hospital stays</td>
<td>Hospitalization discharges for ambulatory care-sensitive conditions per 1,000 Medicare enrollees, 2006-2007</td>
<td>52.0</td>
<td>68.6</td>
</tr>
<tr>
<td>Diabetes screening</td>
<td>Percent of Medicare enrollees with diabetes that receive HbA1c screening, 2006-2007</td>
<td>89%</td>
<td>83%</td>
</tr>
<tr>
<td>Mammography screening</td>
<td>Percent of female Medicare enrollees that receive mammography screening, 2006-2007</td>
<td>74%</td>
<td>68%</td>
</tr>
</tbody>
</table>
**Social and Economic Factors**

Maps 21-27 in the Appendix provide county views of the Social and Economic indicators within the five-state region.

<table>
<thead>
<tr>
<th></th>
<th>National Benchmark</th>
<th>South Dakota</th>
<th>Day County</th>
</tr>
</thead>
<tbody>
<tr>
<td>High school graduation</td>
<td>92%</td>
<td>83%</td>
<td>85%</td>
</tr>
<tr>
<td>Some college</td>
<td>68%</td>
<td>64%</td>
<td>63%</td>
</tr>
<tr>
<td>Unemployment</td>
<td>5.3%</td>
<td>4.8%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Child poverty</td>
<td>11%</td>
<td>18%</td>
<td>22%</td>
</tr>
<tr>
<td>Inadequate social support</td>
<td>14%</td>
<td>17%</td>
<td>25%</td>
</tr>
<tr>
<td>Children in single parent households</td>
<td>20%</td>
<td>29%</td>
<td>31%</td>
</tr>
<tr>
<td>Homicide rates</td>
<td>1.0</td>
<td>2.5</td>
<td>-</td>
</tr>
</tbody>
</table>

**Physical Environment**

Maps 28 – 31 in the Appendix provide county views of the Physical Environment indicators within the five-state region.

<table>
<thead>
<tr>
<th></th>
<th>National Benchmark</th>
<th>South Dakota</th>
<th>Day County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air pollution-particulate matter</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Air pollution-ozone</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Access to healthy foods</td>
<td>92%</td>
<td>42%</td>
<td>29%</td>
</tr>
<tr>
<td>Access to recreational facilities</td>
<td>17.0</td>
<td>13.0</td>
<td>0</td>
</tr>
</tbody>
</table>
Demographics

Maps 32 –36 in the Appendix provide county views of the demographics within the five-state region.

<table>
<thead>
<tr>
<th></th>
<th>National Benchmark</th>
<th>South Dakota</th>
<th>Day County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth</td>
<td>Percent of total population ages 0-17, 2009</td>
<td>24%</td>
<td>25%</td>
</tr>
<tr>
<td>Elderly</td>
<td>Percent of total population ages 65 and older, 2009</td>
<td>13%</td>
<td>14%</td>
</tr>
<tr>
<td>Rural</td>
<td>Percent of total population living in rural area, 2000</td>
<td>21%</td>
<td>48%</td>
</tr>
<tr>
<td>Not English Proficient</td>
<td>Percent of total population that speaks English less than “very well”. 2005-2009</td>
<td>9%</td>
<td>2%</td>
</tr>
<tr>
<td>Illiteracy</td>
<td>Percent of population ages 16 and older that lacks basic prose literacy skills, 2003</td>
<td>15%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Population by Age

<table>
<thead>
<tr>
<th></th>
<th>National Benchmark</th>
<th>South Dakota</th>
<th>Day County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>308,745,538</td>
<td>814,180</td>
<td>5,710</td>
</tr>
<tr>
<td>Percent ages 65 and older</td>
<td>13%</td>
<td>14%</td>
<td>23%</td>
</tr>
<tr>
<td>Percent 85 and older</td>
<td>2%</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>Percent male</td>
<td>49%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Percent female</td>
<td>51%</td>
<td>50%</td>
<td>50%</td>
</tr>
</tbody>
</table>

*Based on 2010 Census data*

Housing

<table>
<thead>
<tr>
<th></th>
<th>National Benchmark</th>
<th>South Dakota</th>
<th>Day County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of occupied housing that is owner-occupied</td>
<td>65%</td>
<td>74%</td>
<td>77%</td>
</tr>
<tr>
<td>Percent of occupied housing that is renter-occupied</td>
<td>35%</td>
<td>26%</td>
<td>23%</td>
</tr>
</tbody>
</table>

*Based on 2010 Census data*
### Economic Security

<table>
<thead>
<tr>
<th></th>
<th>National Benchmark</th>
<th>South Dakota</th>
<th>Day County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of working age population in the labor force</td>
<td>65%</td>
<td>69%</td>
<td>63%</td>
</tr>
<tr>
<td>Percent of total population with income less than 100% of poverty</td>
<td>14%</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>Percent of total population with income less than 200% of poverty</td>
<td>32%</td>
<td>33%</td>
<td>36%</td>
</tr>
<tr>
<td>Median household income</td>
<td>$51,914</td>
<td>$46,369</td>
<td>$36,818</td>
</tr>
<tr>
<td>Owner occupied housing units</td>
<td>76,089,650</td>
<td>217,250</td>
<td>1732</td>
</tr>
<tr>
<td>Percent spending 30% or more income toward housing costs</td>
<td>30%</td>
<td>20%</td>
<td>19%</td>
</tr>
<tr>
<td>Renter occupied housing units</td>
<td>38,146,346</td>
<td>98,218</td>
<td>772</td>
</tr>
<tr>
<td>Percent renters spending 30% or more of income toward housing costs</td>
<td>47%</td>
<td>35%</td>
<td>20%</td>
</tr>
</tbody>
</table>

### Diversity Profile

<table>
<thead>
<tr>
<th></th>
<th>National Benchmark</th>
<th>South Dakota</th>
<th>Day County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>308,745,538</td>
<td>814,180</td>
<td>5,710</td>
</tr>
<tr>
<td>White alone</td>
<td>223,553,265</td>
<td>699,392</td>
<td>5,030</td>
</tr>
<tr>
<td>Asian alone</td>
<td>14,674,252</td>
<td>7,610</td>
<td>12</td>
</tr>
<tr>
<td>Black alone</td>
<td>38,929,319</td>
<td>10,207</td>
<td>8</td>
</tr>
<tr>
<td>Hispanic origin – of any race</td>
<td>50,477,594</td>
<td>22,119</td>
<td>62</td>
</tr>
<tr>
<td>American Indian</td>
<td>2,932,248</td>
<td>71,817</td>
<td>542</td>
</tr>
</tbody>
</table>
Health Needs Identified

The identified needs from the surveys and analysis of secondary data indicated the following:

- Access to Healthcare Service
- Services for the Elderly
- Adult and Childhood Obesity

Community Assets/Prioritization Process

A review of the primary and secondary research concerns was conducted followed by an asset mapping exercise to determine what resources were available to address the needs. An informal gap analysis was conducted at the conclusion of the asset mapping work.

Table 1 in the Appendix displays the concerns and assessed needs that were determined by the assessment and includes the assets in the community that address the needs.

The priorities that remain include:

- Dental care
- Services for the elderly
- Mental health services
- Physical health specific to obesity

Table 2 in the Appendix displays the unmet needs that were determined after the asset mapping exercise and the prioritized list of remaining needs.
IMPLEMENTATION
STRATEGY
2013 Community Health Needs Assessment
Sanford Webster Implementation Strategy

The following unmet needs were identified through a formal community health needs assessment, resource mapping and prioritization process:

• Assisted living for seniors
• Adult and childhood obesity
• Medical providers recruitment plan

Strategies to address the identified needs include:

• **Implementation Strategy: Lack of Assisted Living for Elderly**
  
  o Study the feasibility of converting part of Bethesda’s Heritage Village Apartments into Assisted Living.

• **Implementation Strategy: Obesity among Adults and Children**
  
  o Work with Sanford WebMD Fit program to leverage this program to parents and children through our local school system.
  
  o Work with medical center dietitian to develop services for obesity prevention/control.
  
  o Work with exercise specialists to develop exercise programs (walking clubs, biking clubs, fitness center programs, etc.) for community members.

• **Implementation Strategy: Medical Providers Recruitment**
  
  o Recruit an additional provider to bring our medical staff to: 2 FT MD, 1 PT MD, 2 FT APP.
2013 Community Health Needs Assessment
Enterprise Implementation Strategy

The following unmet needs were identified through a formal community health needs assessment, resource mapping and prioritization process:

- Mental Health Services
- Obesity

Implementation Strategy: Mental Health Services - Sanford One Mind

- Completion (to the extent resources allow) of full integration of Behavioral Health services in all primary care clinics in Fargo and Sioux Falls
- Completion (to the extent resources allow) of full integration of Behavioral Health services or access to Behavioral Health outreach in all regional clinic sites in the North, South and Bemidji regions
- Complete presentation of outcomes of first three years of integrated Behavioral Health services
- Implementation of integrated Behavioral Health into clinics in new regions
- Design Team for Inpatient Psychiatric Unit, Partial Hospitalization and Clinic Space for Fargo presents recommendations for design of new spaces
- Design Team for Sioux Falls Inpatient Psychiatric Units and Partial Hospitalization

Implementation Strategy: Obesity

- Medical Management for Obesity
  - Develop CME curriculum for providers and interdisciplinary teams across the enterprise inclusive of medical, nutrition, nursing, and Behavioral Health professionals
- Develop community education programming
  - Include the following program options in the curriculum to create awareness of existing resources:
    - Family Wellness Center
    - Honor Your Health Program
    - WebMD Fit Program
    - Bariatric Services
    - Eating Disorder Institute
    - Mental Health/Behavioral Health
    - Profile
- Actively participate in community initiatives to address wellness, fitness and healthy living
APPENDIX
## HEALTH OUTCOMES

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Nation Benchmark</th>
<th>South Dakota</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mortality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Premature death</td>
<td>10,386</td>
<td>5,564</td>
</tr>
<tr>
<td><strong>Morbidity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor or fair health</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>Poor physical health days</td>
<td>2.5</td>
<td>2.6</td>
</tr>
<tr>
<td>Poor mental health days</td>
<td>2.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Low birthweight</td>
<td>-</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

## HEALTH FACTORS

### Health Behaviors

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Nation Benchmark</th>
<th>South Dakota</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult smoking</td>
<td>17%</td>
<td>15%</td>
</tr>
<tr>
<td>Adult obesity</td>
<td>29%</td>
<td>25%</td>
</tr>
<tr>
<td>Physical inactivity</td>
<td>30%</td>
<td>20%</td>
</tr>
<tr>
<td>Excessive drinking</td>
<td>16%</td>
<td>8%</td>
</tr>
<tr>
<td>Motor vehicle crash death rate</td>
<td>-</td>
<td>12.0</td>
</tr>
<tr>
<td>Sexually transmitted infections</td>
<td>72.4</td>
<td>83.0</td>
</tr>
<tr>
<td>Teen birth rate</td>
<td>33.4</td>
<td>22.0</td>
</tr>
</tbody>
</table>

### Clinical Care

<table>
<thead>
<tr>
<th>Category</th>
<th>Nation Benchmark</th>
<th>South Dakota</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uninsured adults</td>
<td>22%</td>
<td>13%</td>
</tr>
<tr>
<td>Uninsured youth</td>
<td>13%</td>
<td>7%</td>
</tr>
<tr>
<td>Primary care physicians</td>
<td>1,105:1</td>
<td>631:1</td>
</tr>
<tr>
<td>Mental health providers</td>
<td>5,525:0</td>
<td>2,242:1</td>
</tr>
<tr>
<td>Dentist rate</td>
<td>36.2</td>
<td>69.0</td>
</tr>
<tr>
<td>Preventable hospital stays</td>
<td>56.3</td>
<td>52.0</td>
</tr>
<tr>
<td>Diabetic screening</td>
<td>79%</td>
<td>89%</td>
</tr>
<tr>
<td>Mammography screening</td>
<td>54%</td>
<td>74%</td>
</tr>
</tbody>
</table>
## 2011 County Health Profile

### Health Factors (continued)

#### Social and Economic Factors

<table>
<thead>
<tr>
<th>High school graduation</th>
<th>Percent of ninth-grade cohort in public schools that graduates from high school in four years, 2006-2007</th>
<th>Day: 85%</th>
<th>South Dakota: 83%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some college</td>
<td>Percent of adults ages 25-44 with some post-secondary education, 2005-2009</td>
<td>Day: 63%</td>
<td>South Dakota: 64%</td>
</tr>
<tr>
<td>Unemployment</td>
<td>Percent of population ages 16 and older that is unemployed but seeking work, 2009</td>
<td>Day: 6.7%</td>
<td>South Dakota: 4.8%</td>
</tr>
<tr>
<td>Child poverty</td>
<td>Percent of children ages 0-17 living below the Federal Poverty Line, 2008</td>
<td>Day: 22%</td>
<td>South Dakota: 18%</td>
</tr>
<tr>
<td>Inadequate social</td>
<td>Percent of adults that never, rarely, or sometimes get the social and emotional support they need, 2003-2009</td>
<td>Day: 25%</td>
<td>South Dakota: 17%</td>
</tr>
<tr>
<td>support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children in single-</td>
<td>Percent of children in families that live in a household headed by a parent with no spouse present, 2005-2009</td>
<td>Day: 31%</td>
<td>South Dakota: 29%</td>
</tr>
<tr>
<td>parent households</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Physical Environment

| Air pollution-          | Number of days air quality was unhealthy for sensitive populations due to fine particulate matter, 2006 | Day: 0  | South Dakota: 0 |
| particulate matter     |                                                                                                      |         |                   |
| Air pollution-ozone    | Number of days air quality was unhealthy for sensitive populations due to ozone levels, 2006       | Day: 0  | South Dakota: 0 |
| Access to healthy      | Percent of zip codes with a healthy food outlet (i.e., grocery store or produce stand/farmers' market), 2008 | Day: 29% | United States: 92% |
| foods                  |                                                                                                      |         | South Dakota: 42% |
| Access to recreational | Number of recreational facilities per 100,000 population, 2008                                        | Day: 0.0 | United States: 17.0 |
| facilities             |                                                                                                      |         | South Dakota: 13.0 |

#### Demographics

| Youth                  | Percent of total population ages 0-17, 2009                                                        | Day: 23% | United States: 24% |
| Rural                  | Percent of total population living in a rural area, 2000                                           | Day: 100% | United States: 21% |
| Not English proficient | Percent of total population that speaks English less than "very well," 2005-2009                   | Day: 1%  | United States: 9%  |
| Illiteracy             | Percent of population ages 16 and older that lacks basic prose literacy skills, 2003               | Day: 8%  | United States: 15% |

*The national benchmark is the 90th percentile (i.e., 10% of counties nationwide ranked better). **Binge drinking is defined as consuming more than 4 (for women) or 5 (for men) alcoholic beverages on a single occasion in the past 30 days. Heavy drinking is defined as drinking more than 1 (for women) or 2 (for men) alcoholic beverages per day on average. - Blank values reflect unreliable or missing data.


Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. The 2011 County Health Profile was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011.
## Definitions of Health Variables

<table>
<thead>
<tr>
<th>Definitions of Health Variables from the County Health Rankings 2011 Report Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor or Fair Health</td>
<td>Self-reported health status based on survey responses to the question: “In general, would you say that your health is excellent, very good, good, fair, or poor?”</td>
</tr>
<tr>
<td>Poor Physical Health Days (in past 30 days)</td>
<td>Estimate based on responses to the question: “Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?”</td>
</tr>
<tr>
<td>Poor Mental Health Days (in past 30 days)</td>
<td>Estimate based on responses to the question: “Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?”</td>
</tr>
<tr>
<td>Adult Smoking</td>
<td>Percent of adults that report smoking equal to, or greater than, 100 cigarettes and are currently a smoker</td>
</tr>
<tr>
<td>Adult Obesity</td>
<td>Percent of adults that report a BMI greater than, or equal to, 30</td>
</tr>
<tr>
<td>Excessive Drinking</td>
<td>Percent of as individuals that report binge drinking in the past 30 days (more than 4 drinks on one occasion for women, more than 5 for men) or heavy drinking (defined as more than 1 (women) or 2 (men) drinks per day on average)</td>
</tr>
<tr>
<td>Sexually Transmitted Infections</td>
<td>Chlamydia rate per 100,000 population</td>
</tr>
<tr>
<td>Teen Birth Rate</td>
<td>Birth rate per 1,000 female population, ages 15-19</td>
</tr>
<tr>
<td>Uninsured Adults</td>
<td>Percent of population under age 65 without health insurance</td>
</tr>
<tr>
<td>Preventable Hospital Stays</td>
<td>Hospitalization rate for ambulatory-care sensitive conditions per 1,000 Medicare enrollees</td>
</tr>
<tr>
<td>Mammography Screening</td>
<td>Percent of female Medicare enrollees that receive mammography screening</td>
</tr>
<tr>
<td>Access to Healthy Foods</td>
<td>Healthy food outlets include grocery stores and produce stands/farmers’ markets</td>
</tr>
<tr>
<td>Access to Recreational Facilities</td>
<td>Rate of recreational facilities per 100,000 population</td>
</tr>
<tr>
<td>Physical Inactivity</td>
<td>Percent of adults aged 20 and over that report no leisure time physical activity</td>
</tr>
<tr>
<td>Primary Care Provider Ratio</td>
<td>Ratio of population to primary care providers</td>
</tr>
<tr>
<td>Mental Health Care Provider Ratio</td>
<td>Ratio of population to mental health care providers</td>
</tr>
<tr>
<td>Diabetes Screening</td>
<td>Percent of Medicare enrollees with diabetes that receive HbA1c screening</td>
</tr>
<tr>
<td>Binge Drinking</td>
<td>Percent of adults that report binge drinking in the last 30 days. Binge drinking is consuming more than 4 (women) or 5 (men) alcoholic drinks on one occasion.</td>
</tr>
</tbody>
</table>
### Aging Profile
2010 Demographic and Socio-Economic Profile for the Aging Population Ages 65 and Older

#### Day County
South Dakota

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>Total</th>
<th>Less than 65 Years</th>
<th>Ages 65 and Older</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total population</td>
<td>5,710</td>
<td>4,401</td>
<td>1,309</td>
</tr>
<tr>
<td>Percent ages 65 and older</td>
<td>23%</td>
<td>-</td>
<td>100%</td>
</tr>
<tr>
<td>Percent ages 85 and older</td>
<td>4%</td>
<td>-</td>
<td>18%</td>
</tr>
<tr>
<td>Percent male</td>
<td>50%</td>
<td>52%</td>
<td>44%</td>
</tr>
<tr>
<td>Percent female</td>
<td>50%</td>
<td>48%</td>
<td>56%</td>
</tr>
</tbody>
</table>

| Living Arrangements |       |                    |                   |
| Total households (by age of householder) | 2,504 | 1,665              | 839 |
| Percent with family households (i.e., at least two people who are related) | 62% | 68% | 51% |
| Percent with householder living alone | 34% | 27% | 47% |
| Grandparents living with their grandchildren* | 52 | 37 | 15 |
| Percent who are responsible for their grandchildren | 56% | 68% | 27% |

| Housing |       |                    |                   |
| Percent of occupied housing that is owner-occupied | 77% | 76% | 79% |
| Percent of occupied housing that is renter-occupied | 23% | 24% | 21% |

| Economic Security |       |                    |                   |
| Percent of working-age population in labor force | 63% | 81% | 17% |
| Percent of total population with income less than 100% of poverty | 12% | 12% | 12% |
| Percent of total population with income less than 200% of poverty | 36% | 36% | 36% |
| Median household income (by age of householder) | $36,818 | $36,243 | $28,781 |
| Owner-occupied housing units (by age of householder) | 1,732 | 1,206 | 526 |
| Percent spending 30% or more of income toward housing costs | 19% | 19% | 18% |
| Renter-occupied housing units (by age of householder) | 772 | 599 | 173 |
| Percent spending 30% or more of income toward housing costs | 20% | 20% | 22% |

Note: *The age categories for this indicator are grandparents ages 35 to 59 and grandparents ages 60 and older.
Source: U.S. Census Bureau, 1 2010 Census Summary File 1 and 2 2006-2010 American Community Survey 5-Year Estimates (sample data). The estimates presented are meant to give perspective on characteristics across age categories; however, because they are based on sample data, one should use caution when interpreting small numbers. *Blank values reflect data that are missing or not applicable.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. The Aging Profile was prepared by researchers at North Dakota State University in Fargo for Sanford Health. May 2012
### Diversity Profile
#### 2010 Demographic and Socio-Economic Profile for Racial and Ethnic Populations

**Day County**

**South Dakota**

<table>
<thead>
<tr>
<th>CHARACTERISTICS</th>
<th>Total</th>
<th>White alone</th>
<th>Black alone</th>
<th>American Indian alone</th>
<th>Asian alone</th>
<th>Hispanic Origin - of any race</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
<td>5,710</td>
<td>5,030</td>
<td>8</td>
<td>542</td>
<td>12</td>
<td>62</td>
</tr>
<tr>
<td>Total population</td>
<td>22%</td>
<td>19%</td>
<td>50%</td>
<td>39%</td>
<td>0%</td>
<td>40%</td>
</tr>
<tr>
<td>Percent ages 0 to 17</td>
<td>24%</td>
<td>23%</td>
<td>38%</td>
<td>35%</td>
<td>67%</td>
<td>42%</td>
</tr>
<tr>
<td>Percent ages 18 to 44</td>
<td>31%</td>
<td>32%</td>
<td>13%</td>
<td>21%</td>
<td>33%</td>
<td>18%</td>
</tr>
<tr>
<td>Percent ages 45 to 64</td>
<td>23%</td>
<td>25%</td>
<td>0%</td>
<td>6%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Percent ages 65 and older</td>
<td>47.9</td>
<td>50.2</td>
<td>19.0</td>
<td>23.8</td>
<td>42.0</td>
<td>25.0</td>
</tr>
</tbody>
</table>

**Living Arrangements**

| Total households<sup>1</sup> | 2,504 | 2,310 | 3 | 160 | 5 | 12 |
| Percent with householder living alone | 34% | 35% | 33% | 21% | 80% | 0% |
| Percent with families with children ages 0 to 17 | 22% | 21% | 33% | 39% | 0% | 50% |
| Grandparents living with their grandchildren<sup>2</sup> | 52 | 12 | 0 | 40 | 0 | 0 |
| Percent who are responsible for grandchildren | 56% | 92% | - | 45% | - | - |

**Housing**<sup>1</sup>

| Percent occupied housing that is owner-occupied | 77% | 79% | 67% | 43% | 60% | 50% |
| Percent occupied housing that is renter-occupied | 23% | 21% | 33% | 57% | 40% | 50% |

**Educational Attainment**<sup>2</sup>

| Percent of persons ages 25 and older with high school degree or higher | 89% | 88% | 100% | 98% | - | 50% |
| Percent of persons ages 25 and older with Bachelor's degree or higher | 18% | 18% | 100% | 16% | - | 50% |

**Economic Security**<sup>2</sup>

| Unemployment rate | 4% | 3% | - | 10% | - | 0% |
| Median household income | $36,818 | $38,704 | - | $19,583 | - | $51,000 |
| Percent of households with income <$25,000 | 33% | 30% | 100% | 57% | - | 30% |
| Percent of persons with income <100% poverty | 12% | 9% | 100% | 33% | - | 0% |
| Percent of children ages 0 to 17 in families with income <100% poverty | 12% | 5% | - | 27% | - | 0% |
| Percent of elderly ages 65 and older with income <100% poverty | 14% | 14% | - | 15% | - | - |

Source: U.S. Census Bureau. <sup>1</sup>2010 Census Summary File 1 and <sup>2</sup>2006-2010 American Community Survey (ACS) 5-Year Estimates (sample data). The estimates presented are meant to give perspective on characteristics across race and ethnic categories; however, because they are based on sample data, one should use caution when interpreting small numbers. - Blank values reflect data that are missing or not applicable. Racial categories not represented include Native Hawaiian and Other Pacific Islander alone, Some Other Race alone, and Two or More races.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. The Diversity Profile was prepared by researchers at North Dakota State University in Fargo for Sanford Health. May 2012.
Years of potential life lost before age 75 per 100,000 population (age-adjusted), 2005-2007

- 3,624 - 5,999
- 6,000 - 8,899
- 8,900 - 14,999
- 15,000 - 24,829
- Unreliable or missing data

**CONTEXT**

**What It Is:** Premature death is represented by the years of potential life lost before age 75 (YPLL-75). Every death occurring before the age of 75 contributes to the total number of years of potential life lost. For example, a person who dies at age 25 contributes 50 years of life lost, whereas a person who dies at age 65 contributes 10 years of life lost to a county’s YPLL. The YPLL measure is presented as a rate per 100,000 population and is age-adjusted to the 2000 U.S. population.

**Where It Comes From:** Data on deaths, including age at death, are based on death certificates and are routinely reported to the National Vital Statistics System (NVSS) at the National Center for Health Statistics, part of the Centers for Disease Control and Prevention (CDC). NVSS calculates age-adjusted YPLL rates based on three-year averages to create more robust estimates of mortality, particularly for counties with smaller populations.

**Importance:** Age-adjusted YPLL-75 rates are commonly used to represent the frequency and distribution of premature deaths. Measuring YPLL allows communities to target resources to high-risk areas and further investigate the causes of death.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, [http://www.countyhealthrankings.org/](http://www.countyhealthrankings.org/).

**Disclaimer:** The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Poor or Fair Health - A health outcome measure focusing on morbidity

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Percent of adults reporting fair or poor health (age-adjusted), 2003-2009

- 3.5% - 8.9%
- 9.0% - 11.9%
- 12.0% - 16.9%
- 17.0% - 29.1%
- Unreliable or missing data

CONTEXT

What It Is: Self-reported health status is a general measure of health-related quality of life in a population. This measure is based on survey responses to the question: "In general, would you say that your health is excellent, very good, good, fair, or poor?" The value reported is the percent of adult respondents who rate their health "fair" or "poor." The measure is age-adjusted to the 2000 U.S. population.

Where It Comes From: This measure was calculated by the National Center for Health Statistics using data from the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (BRFSS), a random-digit dial survey. BRFSS data are representative of the total non-institutionalized U.S. population ages 18 and older living in households with a landline telephone. Seven years of data are used to generate more stable estimates of self-reported health status.

Importance: Self-reported health status is a widely used measure of people's health-related quality of life. In addition to measuring how long people live, it is important to also include measures of how healthy people are while alive — self-reported health status has been shown to be a very reliable measure of current health.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
**CONTENTS**

**What It Is:** The poor physical health days measure is based on responses to the question: “Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?” Presented is the average number of days a county’s adult respondents report that their physical health was not good. The measure is age-adjusted to the 2000 U.S. population.

**Where It Comes From:** This measure was calculated by the National Center for Health Statistics using data from the Centers for Disease Control and Prevention’s Behavioral Risk Factor Surveillance System (BRFSS), a random-digit dial survey. BRFSS data are representative of the total non-institutionalized U.S. population ages 18 and older living in households with a landline telephone. Seven years of data are used to generate more stable estimates of poor physical health days.

**Importance:** In addition to measuring how long people live, it is also important to include measures of how healthy people are while alive – people’s reports of days when their physical health was not good are a reliable estimate of their recent health.

---

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011.
Poor Mental Health Days - A health outcome measure focusing on morbidity

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Average number of mentally unhealthy days reported in past 30 days (age-adjusted), 2003-2009

- 0.7 - 1.9
- 2.0 - 2.9
- 3.0 - 3.9
- 4.0 - 4.8
- Unreliable or missing data

CONTEXT

What It Is: The poor mental health days measure is based on responses to the question: "Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" Presented is the average number of days a county’s adult respondents report that their mental health was not good. The measure is age-adjusted to the 2000 U.S. population.

Where It Comes From: This measure was calculated by the National Center for Health Statistics using data from the Centers for Disease Control and Prevention’s Behavioral Risk Factor Surveillance System (BRFSS), a random-digit dial survey. BRFSS data are representative of the total non-institutionalized U.S. population ages 18 and older living in households with a landline telephone. NCHS used seven years of data to generate more stable estimates of poor mental health days.

Importance: Overall health depends on both physical and mental well-being. Measuring the number of days when people report that their mental health was not good, i.e., poor mental health days, represent an important facet of health-related quality of life. The County Health Rankings considers health-related quality of life to be an important health outcome.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.
Low Birthweight - A health outcome measure focusing on morbidity
County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Percent of live births with low birthweight (<2,500 grams), 2001-2007

- 4.7% - 5.9%
- 6.0% - 6.9%
- 7.0% - 7.9%
- 8.0% - 9.1%
- Unreliable or missing data

CONTEXT

What It Is: Low birthweight is the percent of live births for which the infant weighed less than 2,500 grams (approximately 5 lbs., 8 oz.).

Where It Comes From: Data on births, including weight at birth, are based on birth certificates and are routinely reported to the National Vital Statistics System (NVSS) at the National Center for Health Statistics (NCHS), part at the Centers for Disease Control and Prevention (CDC). NCHS provides this measure based on the percent of live births with low birthweight for a seven-year period. They use seven-year averages to create more robust estimates, particularly for counties with smaller populations.

Importance: Low birthweight represents two factors: maternal exposure to health risks and an infant’s current and future morbidity, as well as premature mortality risk. The health consequences of low birthweight are numerous.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Adult Smoking - A health factor measure focusing on health behaviors

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Percent of adults that currently smoke and have smoked at least 100 cigarettes in lifetime, 2003-2009

- 3.6% - 15.9%
- 16.0% - 20.9%
- 21.0% - 29.9%
- 30.0% - 48.5%
- Unreliable or missing data

CONTEXT

What It Is: Adult smoking prevalence is the estimated percent of the adult population that currently smokes every day or “most days” and has smoked at least 100 cigarettes in their lifetime.

Where It Comes From: This measure was calculated by the National Center for Health Statistics using data from the Centers for Disease Control and Prevention’s Behavioral Risk Factor Surveillance System (BRFSS), a random-digit dial survey. BRFSS data are representative of the total non-institutionalized U.S. population ages 18 and older living in households with a landline telephone. The estimates are based on seven years of data.

Importance: Each year approximately 443,000 premature deaths occur in the U.S. primarily due to smoking. Cigarette smoking is identified as a cause in multiple diseases including various cancers, cardiovascular disease, respiratory conditions, low birthweight, and other adverse health outcomes. Measuring the prevalence of tobacco use in the population can alert communities to potential adverse health outcomes and can be valuable for assessing the need for cessation programs or the effectiveness of existing programs.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Map 7

Adult Obesity - A health factor measure focusing on health behaviors

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Percent of adults that report a body mass index (BMI) of at least 30 kg/m², 2008

- 22.5% - 27.9%
- 28.0% - 29.9%
- 30.0% - 33.9%
- 34.0% - 41.0%

CONTEXT

What It Is: The adult obesity measure represents the percent of the adult population (age 20 and older) that has a body mass index (BMI) greater than or equal to 30 kg/m².

Where It Comes From: Estimates of obesity prevalence by county were calculated by the CDC’s National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation, using multiple years of Behavioral Risk Factor Surveillance System (BRFSS) data. BRFSS data are representative of the total non-institutionalized U.S. population ages 18 and older living in households with a land-line telephone.

Importance: Obesity is often the end result of an overall energy imbalance due to poor diet and limited physical activity. Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, and osteoarthritis.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Physical Inactivity - A health factor measure focusing on health behaviors

Country distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Percent of adults reporting no leisure time physical activity, 2008

- 14.6% - 19.9%
- 20.0% - 25.9%
- 26.0% - 29.9%
- 30.0% - 35.7%

CONTEXT

What It Is: Physical inactivity is the estimated percent of adults ages 20 and older reporting no leisure time physical activity.

Where It Comes From: Estimates of physical inactivity by county were calculated by the CDC’s National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation, using multiple years of Behavioral Risk Factor Surveillance System (BRFSS) data. BRFSS data are representative of the total non-institutionalized U.S. population ages 18 and older living in households with a land-line telephone.

Importance: Regular physical activity is one of the most important things one can do for their health. It can help control weight, reduce risk of cardiovascular disease, reduce risk for type 2 diabetes and metabolic syndrome, reduce risk of some cancers, strengthen bones and muscles, improve mental health and mood, improve ability to do daily activities and prevent falls in older adults, and increase chances of living longer (Centers for Disease Control and Prevention, http://www.cdc.gov/physicalactivity/everyone/health/index.html).

- Data were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Excessive Drinking: A health factor measure focusing on health behaviors

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Percent of adults reporting binge drinking and heavy drinking, 2003-2009

- 7.5% - 14.9%
- 15.0% - 19.9%
- 20.0% - 24.9%
- 25.0% - 35.9%
- Unreliable or missing data

CONTEXT

What It Is: The excessive drinking measure reflects the percent of the adult population that reports either binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than 1 (women) or 2 (men) drinks per day on average.

Where It Comes From: This measure was calculated by the National Center for Health Statistics using data obtained from the Centers for Disease Control and Prevention’s Behavioral Risk Factor Surveillance System (BRFSS), a random-digit dial survey. BRFSS data are representative of the total non-institutionalized U.S. population ages 18 and older living in households with a land-line telephone. The estimates are based on seven years of data.

Importance: Excessive drinking is a risk factor for a number of adverse health outcomes such as alcohol poisoning, hypertension, acute myocardial infarction, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
**Motor Vehicle Crash Death Rate** - A health factor measure focusing on health behaviors

*County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota*

---

**Motor vehicle crash deaths per 100,000 population, 2001-2007**

- **7.1 - 17.9**
- **18.0 - 31.9**
- **32.0 - 59.9**
- **60.0 - 135.7**
- Unreliable or missing data

---

**CONTEXT**

**What It Is:** Motor vehicle crash deaths are measured as the crude mortality rate per 100,000 population due to on- or off-road accidents involving a motor vehicle. Motor vehicle deaths includes traffic and non-traffic accidents involving motorcycles and 3-wheel motor vehicles; cars; vans; trucks; buses; street cars; ATVs; industrial, agricultural, and construction vehicles; and bikes and pedestrians when colliding with any of the vehicles mentioned. Deaths due to boating accidents and airline crashes are not included in this measure.

**Where It Comes From:** These data were calculated by National Center for Health Statistics (NCHS), part of the Centers for Disease Control and Prevention (CDC), based on data reported to the National Vital Statistics System (NVSS). NCHS used data for a seven-year period to create more robust estimates of cause-specific mortality, particularly for counties with smaller populations.

**Importance:** A strong association has been demonstrated between excessive drinking and alcohol-impaired driving, with approximately 17,000 Americans killed annually in alcohol-related motor vehicle crashes.

---

*Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.*

---

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Sexually Transmitted Infections - A health factor measure focusing on health behaviors
County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Number of chlamydia cases (new cases reported) per 100,000 population, 2008
- 15.4 - 176.9
- 177.0 - 399.9
- 400.0 - 1,015.9
- 1,016.0 - 2,326.8
- Unreliable or missing data

CONTEXT

What It Is: The Sexually Transmitted Infection (STI) rate is measured as chlamydia incidence (the number of new cases reported) per 100,000 population.

Where It Comes From: The county-level measures were obtained from the CDC’s National Center for Hepatitis, HIV, STD, and TB Prevention.

Importance: Chlamydia is the most common bacterial STI in North America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain. STIs in general are associated with a significantly increased risk of morbidity and mortality, including increased risk of cervical cancer, involuntary infertility, and premature death. However, increases in reported chlamydia infections may reflect the expansion of chlamydia screening, use of increasingly sensitive diagnostic tests, an increased emphasis on case reporting from providers and laboratories, improvements in the information systems for reporting, as well as true increases in disease.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Number of teen births per 1,000 females ages 15 through 19, 2001-2007

- 8.1 - 28.9
- 29.0 - 45.9
- 46.0 - 79.9
- 80.0 - 137.8
- Unreliable or missing data

CONTEXT

What It Is: Teen births are reported as the number of births per 1,000 female population ages 15 through 19.

Where It Comes From: Teen birth rates were obtained from the National Vital Statistics System (NVSS) at the National Center for Health Statistics, part of the Centers for Disease Control and Prevention (CDC).

Importance: Teen pregnancy is associated with poor prenatal care and pre-term delivery. Pregnant teens are more likely than older women to receive late or no prenatal care, have gestational hypertension and anemia, and achieve poor maternal weight gain. They are also more likely to have a pre-term delivery and low birth weight, increasing the risk of child developmental delay, illness, and mortality.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Uninsured Adults - A health factor measure focusing on clinical care

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

<table>
<thead>
<tr>
<th>Percent of adult population ages 18 through 64 without health insurance, 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.3% - 12.9%</td>
</tr>
<tr>
<td>13.0% - 16.9%</td>
</tr>
<tr>
<td>17.0% - 20.9%</td>
</tr>
<tr>
<td>21.0% - 27.5%</td>
</tr>
</tbody>
</table>

CONTEXT

What It Is: The uninsured adults measure represents the estimated percent of the adult population under age 65 that has no health insurance coverage.

Where It Comes From: The Small Area Health Insurance Estimates from the U.S. Census Bureau provide annual estimates of the population without health insurance coverage for all U.S. states and their counties. The estimates used are for the most recent year for which reliable county-level estimates are available.

Importance: Lack of health insurance coverage is a significant barrier to accessing needed health care.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011.
Uninsured Youth - A health factor measure focusing on clinical care

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Percent of youth ages 0 through 18 without health insurance, 2007

- 4.1% - 7.9%
- 8.0% - 10.9%
- 11.0% - 13.9%
- 14.0% - 20.5%

CONTEXT

What It Is: The uninsured youth measure represents the estimated percent of the children ages birth through 18 that has no health insurance coverage.

Where It Comes From: The Small Area Health Insurance Estimates from the U.S. Census Bureau provide annual estimates of the population without health insurance coverage for all U.S. states and their counties. The estimates used are for the most recent year for which reliable county-level estimates are available.

Importance: Children without health insurance are more likely than others to receive late or no care for health problems, putting them at greater risk for hospitalization. In addition to resulting in reduced access to health care, a lack of health insurance can also negatively influence children’s school attendance and participation in extracurricular activities, and increase parental financial and emotional stress. (Child Trends DataBank, http://www.childtrendsdb.org/?q=node/297)

- Data were obtained from the Small Area Health Insurance Estimates (SAHIE), a program of the U.S. Census Bureau, http://www.census.gov/did/www/sahie/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Primary Care Physicians - A health factor measure focusing on clinical care

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Number of primary care physicians per 100,000 population, 2008

- 0.0 - 60.9
- 61.0 - 139.9
- 140.0 - 339.9
- 340.0 - 793.0

CONTEXT

What It Is: Primary care physicians include practicing physicians specializing in general practice medicine, family medicine, internal medicine, pediatrics, and obstetrics/gynecology. The measure represents the number of providers per 100,000 population.

Where It Comes From: The data on primary care physicians were obtained from the Health Resources and Services Administration’s Area Resource File (ARF). The ARF data on practicing physicians come from the AMA Master File (2008), and the population estimates are from the U.S. Census Bureau’s 2008 population estimates.

Importance: Having access to care requires not only having financial coverage but also access to providers. While high rates of specialist physicians has been shown to be associated with higher, and perhaps unnecessary, utilization, having sufficient availability of primary care physicians is essential so that people can get preventive and primary care, and when needed, referrals to appropriate specialty care.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Mental Health Providers - A health factor measure focusing on clinical care

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Number of mental health providers per 100,000 population, 2008

- 0.0 - 10.9
- 11.0 - 31.9
- 32.0 - 57.9
- 58.0 - 155.1

CONTEXT

What It Is: Mental health providers include psychiatrists, clinical psychologists, clinical social workers, psychiatric nurse specialists, and marriage and family therapists who meet certain qualifications and certifications. This measure represents the number of mental health providers per 100,000 population.

Where It Comes From: Data on mental health providers were obtained from the Health Resources and Services Administration's (HRSA) Area Resource File (ARF).

Importance: Even more than other areas of health and medicine, the mental health field is plagued by disparities in the availability of and access to its services. These disparities are viewed readily through the lenses of racial and cultural diversity, age, and gender. A key disparity often hinges on a person’s financial status; formidable financial barriers block off needed mental health care from too many people regardless of whether one has health insurance with adequate mental health benefits, or is one of the 44 million Americans who lack any insurance. (David Satcher, M.D., Ph.D., Surgeon General, http://www.surgeongeneral.gov/library/mentalhealth/home.html)

- Data were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Dentist Rate - A health factor measure focusing on clinical care

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Number of professionally active dentists per 100,000 population, 2007

- 0.0 - 15.9
- 16.0 - 37.9
- 38.0 - 60.9
- 61.0 - 149.9
- Unreliable or missing data

CONTEXT

What It Is: The dentist rate is defined as the number of professionally active dentists per 100,000 population. Professionally active dentist occupation categories include active practitioners; dental school faculty or staff; armed forces dentists; government-employed dentists at the federal, state, or local levels; interns and residents; and other health or dental organization staff members.

Where It Comes From: Data on the number of dentists are tracked by the American Dental Association (ADA) and the American Medical Association (AMA). County-level data are housed in the Health Resources and Services Administration’s Area Resource File (ARF) and made available through the Health Indicators Warehouse developed by the National Center for Health Statistics.

Importance: Today, thanks to fluoride, healthier lifestyles and quality dental care, more people than ever before are keeping their natural teeth throughout their lifetime. Yet for those who live in areas where a dentist is not available or those who cannot afford treatment, getting dental care can be difficult (American Dental Association, http://www.ada.org).

- Data were obtained from the Health Indicators Warehouse at http://healthindicators.gov/ which is maintained by the Centers for Disease Control and Prevention’s National Center for Health Statistics.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011.
Preventable Hospital Stays - A health factor measure focusing on clinical care

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Hospitalization discharges for ambulatory care-sensitive conditions per 1,000 Medicare enrollees, 2006-2007

- 28.9 - 60.9
- 61.0 - 79.9
- 80.0 - 116.9
- 117.0 - 205.8
- Unreliable or missing data

CONTEXT

What It Is: Preventable hospital stays are measured as the hospital discharge rate for ambulatory care-sensitive conditions per 1,000 Medicare enrollees.

Where It Comes From: Estimates of preventable hospital stays were calculated by the authors of the Dartmouth Atlas of Health Care using Medicare claims data.

Importance: Hospitalization for diagnoses amenable to outpatient services suggests that the quality of care provided in the outpatient setting was less than ideal. The measure may also represent the population’s tendency to overuse the hospital as a main source of care.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project – a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Diabetic Screening - A health factor measure focusing on clinical care
County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Percent of diabetic Medicare enrollees that receive HbA1c screening, 2006-2007

- 31.4% - 52.9%
- 53.0% - 80.9%
- 81.0% - 88.9%
- 89.0% - 100.0%
- Unreliable or missing data

CONTEXT

What It Is: Diabetic screening is calculated as the percent of diabetic Medicare patients whose blood sugar control was screened in the past year using a test of their glycated hemoglobin (HbA1c) levels.

Where It Comes From: Estimates of diabetic screening were calculated by the authors of the Dartmouth Atlas of Health Care using Medicare claims data.

Importance: Regular HbA1c screening among diabetic patients is considered the standard of care. It helps assess the management of diabetes over the long term by providing an estimate of how well a patient has managed his or her diabetes over the past two to three months. When hyperglycemia is addressed and controlled, complications from diabetes can be delayed or prevented.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Mammography Screening - A health factor measure focusing on clinical care

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Percent of female Medicare enrollees that receive mammography screening, 2006-2007

- 40.0% - 59.9%
- 60.0% - 69.9%
- 70.0% - 79.9%
- 80.0% - 100.0%
- Unreliable or missing data

CONTEXT

What It Is: This measure represents the percent of female Medicare enrollees ages 40 through 69 that had at least one mammogram over a two-year period.

Where It Comes From: Estimates were calculated by the authors of the Dartmouth Atlas of Health Care using Medicare claims data.

Importance: Evidence suggests that mammography screening reduces breast cancer mortality, especially among older women. A physician’s recommendation or referral—and satisfaction with physicians—are major facilitating factors among women who obtain breast cancer screening. The percent of women ages 40 through 69 receiving a mammogram is a widely endorsed quality of care measure.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
High School Graduation - A health factor measure focusing on education

Percent of ninth-grade cohort in public schools that graduates from high school in four years, 2006-2007

- 40.0% - 59.0%
- 60.0% - 79.0%
- 80.0% - 89.0%
- 90.0% - 100.0%
- Unreliable or missing data

CONTEXT

What It Is: High school graduation, commonly referred to as the averaged freshman graduation rate, is reported as the percent of a county's ninth-grade cohort in public schools that graduates from high school in four years.

Where It Comes From: Estimates of high school graduation are based on the restricted-use versions of the LEA Universe Survey Dropout and Completion data and the Public Elementary/Secondary School Universe Survey data. These data were requested from NCES for the school year 2006-07.

Importance: The relationship between more education and improved health outcomes is well known, with years of formal education correlating strongly with improved work and economic opportunities, reduced psychosocial stress, and healthier lifestyles.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011.
Percent of adults ages 25 through 44 with some post-secondary education, 2005-2009

- 25.2% - 49.9%
- 50.0% - 59.9%
- 60.0% - 69.9%
- 70.0% - 85.6%

**CONTEXT**

**What It Is:** This measure represents the percent of the population ages 25 through 44 with some post-secondary education, such as enrollment at vocational/technical schools, junior colleges, or four-year colleges. It includes individuals who pursued education following high school but did not receive a degree.

**Where It Comes From:** Estimates of the population ages 25 through 44 with some post-secondary education were calculated using the 5-year estimates from the U.S. Census Bureau’s American Community Survey (ACS).

**Importance:** The relationship between higher education and improved health outcomes is well known, with years of formal education correlating strongly with improved work and economic opportunities, reduced psychosocial stress, and healthier lifestyles.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

**Disclaimer:** The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011.
Unemployment - A health factor measure focusing on labor

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Percent of population ages 16 and older that is unemployed but seeking work, 2009

- 2.4% - 4.9%
- 5.0% - 6.9%
- 7.0% - 9.9%
- 10.0% - 15.1%

CONTEXT

What It Is: Unemployment is measured as the percent of the civilian labor force ages 16 and older that is unemployed but seeking work.

Where It Comes From: Data on unemployment is obtained from the Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics (LAUS).

Importance: Unemployment may lead to physical health responses ranging from self-reported physical illness to mortality, especially suicide. It has also been shown to lead to an increase in unhealthy behaviors related to alcohol and tobacco consumption, diet, exercise, and other health-related behaviors, which in turn can lead to increased risk for disease or mortality. Because employee-sponsored health insurance is the most common source of health insurance coverage, unemployment can also limit access to health care.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countywellness.org/

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Children in Poverty - A health factor measure focusing on income and poverty

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Map 24

Percent of children ages 0 through 17 living below the Federal Poverty Line, 2008

- 4.7% - 12.9%
- 13.0% - 19.9%
- 20.0% - 34.9%
- 35.0% - 67.1%

CONTEXT

What It Is: Children in poverty is the percent of children under age 18 living below the Federal Poverty Line (FPL).

Where It Comes From: Children in poverty estimates are provided by the Small Area Income and Poverty Estimates (SAIPE) program through the U.S. Census Bureau.

Importance: Poverty can result in negative health consequences, such as increased risk of mortality, increased prevalence of medical conditions and disease incidence, depression, intimate partner violence, and poor health behaviors. While negative health effects resulting from poverty are present at all ages, children in poverty experience greater morbidity and mortality due to an increased risk of accidental injury and lack of health care access. Children’s risk of poor health and premature mortality may also be increased due to the poor educational achievement associated with poverty. The children in poverty measure is highly correlated with overall poverty rates.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Inadequate Social Support - A health factor measure focusing on social networks

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Percent of adults that never, rarely, or sometimes get the social and emotional support they need, 2003-2009

- 7.1% - 13.9%
- 14.0% - 17.9%
- 18.0% - 22.9%
- 23.0% - 39.1%
- Unreliable or missing data

CONTEXT

What It Is: The social and emotional support measure is based on responses to the question: "How often do you get the social and emotional support you need?" The value presented is the percent of the adult population that responds that they "never," "rarely," or "sometimes" get the support they need.

Where It Comes From: This measure was calculated by the National Center for Health Statistics using data obtained from the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System (BRFSS), a random-digit dial survey. BRFSS data are representative of the total non-institutionalized U.S. population over 18 years of age living in households with a land-line telephone. The estimates are based on seven years of data.

Importance: Poor family support, minimal contact with others, and limited involvement in community life are associated with increased morbidity and early mortality. Furthermore, social support networks have been identified as powerful predictors of health behaviors, suggesting that individuals without a strong social network are less likely to participate in healthy lifestyle choices.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011.
Children in Single-Parent Households - A health factor measure focusing on families

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Percent of children in families that live in a household headed by a parent with no spouse present, 2005-2009

- 0.0% - 17.9%
- 18.0% - 25.9%
- 26.0% - 39.9%
- 40.0% - 72.0%

CONTEXT

**What It Is:** The single-parent household measure is the percent of all children in family households that live in a household headed by a single parent (male or female householder with no spouse present).

**Where It Comes From:** Estimates of the percent of children in single-parent households were calculated using data from the U.S. Census Bureau's American Community Survey (ACS) 5-year estimates.

**Importance:** Adults and children in single-parent households are both at risk for adverse health outcomes such as mental health problems (including substance abuse, depression, and suicide) and unhealthy behaviors such as smoking and excessive alcohol use.

---

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Homicide Rate - A health factor measure focusing on violent crime

Count distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Number of deaths due to murder or non-negligent manslaughter per 100,000 population, 2001-2007

- 1.3 - 2.9
- 3.0 - 4.9
- 5.0 - 8.9
- 9.0 - 22.7
- Unreliable or missing data

CONTEXT

What It Is: Homicide is represented as a crude death rate due to murder or non-negligent manslaughter per 100,000 population.

Where It Comes From: These data were calculated by National Center for Health Statistics (NCHS) at the Centers for Disease Control and Prevention (CDC) using data from the National Vital Statistics System (NVSS). NCHS used data for a seven-year period to create more robust estimates of cause-specific mortality, particularly for counties with smaller populations.

Importance: Because homicide is one of the five offenses that comprise violent crime, a homicide rate is used as a proxy when violent crime data are not available.

Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Air Pollution-Particulate Matter Days - A health factor measure focusing on physical environment

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Number of days air quality was unhealthy for sensitive populations due to fine particulate matter, 2006

0
1
2
3 - 4

CONTEXT

What It Is: The air pollution—particulate matter measure represents the annual number of days that air quality was unhealthy for sensitive populations due to fine particulate matter (FPM, < 2.5 μm in diameter).

Where It Comes From: The Public Health Air Surveillance Evaluation (PHASE) project, a collaborative effort between the Centers for Disease Control and Prevention (CDC) and the EPA, used Community Multi-Scale Air Quality Model (CMAQ) output and air quality monitor data to create a spatial-temporal model that estimated fine particulate matter concentrations throughout the year. The PHASE estimates were used to calculate the number of days per year that air quality in a county was unhealthy for sensitive populations due to FPM.

Importance: The relationship between elevated air pollution—particularly fine particulate matter and ozone—and compromised health has been well documented. The negative consequences of ambient air pollution include decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary effects.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Air Pollution-Ozone Days - A health factor measure focusing on physical environment

Number of days air quality was unhealthy for sensitive populations due to ozone levels, 2006

0
1
2

CONTEXT

What It Is: The air pollution—ozone measure represents the annual number of days that air quality was unhealthy for sensitive populations due to ozone levels.

Where It Comes From: The Public Health Air Surveillance Evaluation (PHASE) project, a collaborative effort between the Centers for Disease Control and Prevention (CDC) and the EPA, used Community Multi-Scale Air Quality Model (CMAQ) output and air quality monitor data to create a spatial-temporal model that estimated daily ozone concentrations throughout the year. The PHASE estimates were used to calculate the number of days per year that air quality in a county was unhealthy for sensitive populations due to ozone.

Importance: The relationship between elevated air pollution—particularly fine particulate matter and ozone—and compromised health has been well documented. The negative consequences of ambient air pollution include decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary effects.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2013-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Access to Healthy Foods - A health factor measure focusing on physical environment

Map 30

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Percent of zip codes with healthy food outlets (i.e., grocery store or produce stand/farmers' market), 2008

- 0.0% - 24.9%
- 25.0% - 42.9%
- 43.0% - 69.9%
- 70.0% - 100.0%

CONTEXT

What It Is: Access to healthy foods is measured as the percent of zip codes in a county with a healthy food outlet, defined as a grocery store or produce stand/farmers' market.

Where It Comes From: The measure is based on data from the U.S. Census Bureau’s Zip Code Business Patterns. Healthy food outlets include grocery stores and produce/farmers' markets, as defined by their North American Industrial Classification System (NAICS) codes.

Importance: Studies have linked the food environment to consumption of healthy food and overall health outcomes.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Access to Recreational Facilities - A health factor measure focusing on physical environment

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Number of recreational facilities per 100,000 population, 2008

- 0 - 9
- 10 - 19
- 20 - 69
- 70 - 150

CONTEXT

What It Is: This measure represents the number of recreational facilities per 100,000 population in a given county. Recreational facilities are defined as establishments primarily engaged in operating fitness and recreational sports facilities, featuring exercise and other active physical fitness conditioning or recreational sports activities such as swimming, skating, or racquet sports.

Where It Comes From: This measure is based on a measure from United States Department of Agriculture (USDA) Food Environment Atlas, and is calculated using the most current County Business Patterns data set. Recreational facilities are identified by North American Industrial Classification System (NAICS) code 713940.

Importance: The availability of recreational facilities can influence individuals' and communities' choices to engage in physical activity. Proximity to places with recreational opportunities is associated with higher physical activity levels, which in turn is associated with lower rates of adverse health outcomes associated with poor diet, lack of physical activity, and obesity.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Persons ages 0 through 17 as a percent of the total population, 2009

- 14.7% - 20.4%
- 20.5% - 23.4%
- 23.5% - 28.4%
- 28.5% - 40.5%

**CONTEXT**

**What It Is:** This measure represents the percent of a county's population that is less than 18 years of age.

**Where It Comes From:** County demographic figures come from the U.S. Census Bureau's annual population estimates.

---

Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011.
**Elderly - A demographic measure**

*County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota*

Persons ages 65 and older as a percent of the total population, 2009

- 5.3% - 12.9%
- 13.0% - 17.9%
- 18.0% - 22.9%
- 23.0% - 37.2%

**CONTEXT**

**What It Is:** This measure represents the percent of a county's population that is 65 years of age and older.

**Where It Comes From:** County demographic figures come from the U.S. Census Bureau's annual population estimates.

-- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011.
**Context**

**What It Is:** This measure represents the percent of a county's population that lives in a rural area, which the U.S. Census Bureau defines as all territory located outside of urbanized areas and urban clusters. Urbanized areas and urban clusters are geographic areas with a core population density of at least 1,000 people per square mile that are surrounded by areas with an overall population density of at least 500 people per square mile.

**Where It Comes From:** This measure is calculated by the U.S. Census Bureau using data from 2000.

---

Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011.
Not English Proficient - A demographic measure

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Percent of total population that speaks English less than "very well", 2005-2009

0.0% - 0.9%
1.0% - 2.9%
3.0% - 8.9%
9.0% - 23.0%

CONTEXT

What It is: This measure represents the percent of the total population that reports speaking English less than "very well."

Where It Comes From: Data on spoken English proficiency come from the U.S. Census Bureau’s American Community Survey 5-year estimates.

- Data and associated context were obtained from County Health Rankings, a key component of the Mobilizing Action Toward Community Health (MATCH) project - a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, http://www.countyhealthrankings.org/.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011
Illiteracy - A demographic measure

County distribution map for Iowa, Minnesota, Nebraska, North Dakota, and South Dakota

Percent of population ages 16 and older that lacks basic prose literacy skills, 2003

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Legend</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0% - 6.9%</td>
<td>Light blue</td>
</tr>
<tr>
<td>7.0% - 8.9%</td>
<td>Medium blue</td>
</tr>
<tr>
<td>9.0% - 13.9%</td>
<td>Dark blue</td>
</tr>
<tr>
<td>14.0% - 21.4%</td>
<td>Deep blue</td>
</tr>
</tbody>
</table>

CONTEXT

What It Is: This measure reflects the percent of the population ages 16 and older that lacks basic prose literacy skills.

Where It Comes From: This measure is obtained from the National Center for Education Statistics and is based on the 2003 National Assessment of Adult Literacy.

Disclaimer: The data displayed are from the source indicated; we do not vouch for the accuracy of the data or ensure they are the most recent available. The information is intended for personal, non-commercial use. It can be shared freely if it is not used for profit and appropriate acknowledgments are given. This map was prepared by researchers at North Dakota State University in Fargo for the 2011-2013 Fargo-Moorhead Community Health Needs Assessment Collaborative. December 2011.
### Table 1
Community Health Needs Assessment Asset Mapping
Webster Stakeholders

<table>
<thead>
<tr>
<th>Identified Concerns</th>
<th>Specific concerns</th>
<th>Alignment with Sanford resources or other community resource partners</th>
<th>Unmet need</th>
</tr>
</thead>
</table>
| Access              | • Good quality healthcare close to home is essential  
                      • Need enough providers & specialists locally - if people go out of town for healthcare, they take their other shopping with them  
                      • Need a local pediatrician, gastroenterologist  
                      • Need outreach from a gastroenterologist  
                      • Need more surgical consults at the hospital | Sanford Cancer Biology Research Center |          |
| Cancer              | • Concern with high rates of cancer in our area  
                      • Would like more cancer treatment services in the community  
                      • Low rate of mammogram screenings | Sanford Medical Home |          |
| Chronic Disease     | • Concern with high rates of heart disease in the community  
                      • Diabetes screening with Hgb A1c for diabetics | Sanford Medical Home |          |
<p>| City Infrastructure | • City sidewalks are uneven &amp; unsafe to walk on | Sanford Medical Home |          |
| Dental Care         | • Concern about lack of dental services | Sanford Medical Home |          |
| Economic Situation/ Business community | • Concern about lack of qualified employees available | Sanford Medical Home |          |</p>
<table>
<thead>
<tr>
<th>Identified Concerns</th>
<th>Specific concerns</th>
<th>Alignment with Sanford resources or other community resource partners</th>
<th>Unmet need</th>
</tr>
</thead>
</table>
| Elderly            | • Elderly drivers who should not be driving  
|                     | • Lack of assisted living for the elderly |                                                                      |            |
| Healthcare Cost/Insurance Cost | • Concern about cost of healthcare & healthcare insurance  
|                     | • Lack of healthcare resources for those who have no employer healthcare benefits (farmers) – because of this, they fail to seek medical care in a timely manner  
|                     | • High rate of uninsured |                                                                      |            |
| Health Factors     | • High rate of binge drinking  
|                     | • High rate of ten births  
|                     | • Need more primary care providers  
|                     | • Need more mental health providers |                                                                      |            |
| Judicial / Police  | • Police show a “blind eye” to drug abuse in our city – there should be zero tolerance |                                                                      |            |
| Mental Health      | • Concern with high rates of depression in the community  
|                     | • Concern about stress & its affect on overall health  
|                     | • Domestic violence  
|                     | • Child abuse and neglect | Sanford One Care |            |
| Morbidity and mortality | • High rate of premature death |                                                                      |            |
| Obesity            | • Concern about the high number of obese people | Sanford WebMD Fit Kids |            |
| Physicians         | • Need a local pediatrician  
|                     | • Need a gastroenterologist – closest one is in SF or Fargo  
<p>|                     | • Chiropractor would be able to better serve the community &amp; work more closely with other healthcare specialties if he were able to obtain hospital privileges for access to radiology services. This would avoid the need for referral to a physician for radiology services. | |            |</p>
<table>
<thead>
<tr>
<th>Identified Concerns</th>
<th>Specific concerns</th>
<th>Alignment with Sanford resources or other community resource partners</th>
<th>Unmet need</th>
</tr>
</thead>
</table>
| Pollution/Environment | • Foul smell from Dakota Tube  
• Pollution from the foundry  
• Need a recycling program                                                                                                                                                                                   |                                                                        |            |
| Poverty             | • Concern about misuse of Medicaid, food stamps, & other SD financial assistance programs                                                                                                                                 |                                                                        |            |
| Schools             | • Concern about the turmoil in the local school – lack of finances, cancelation of programs, not enough teachers/coaches                                                                                              |                                                                        |            |
| Substance Abuse     | • Concern about abundance of drugs available  
• Concern about police showing a “blind eye” to drug abuse in our city – there should be zero tolerance                                                                                                    | Sanford One Care                                                       |            |
| Traffic             | • Elderly drivers who should not be driving  
• Concern about distracted driving  
• Concern about lack of seatbelt use  
• Concern about driving under influence of drugs or alcohol                                                                                                                                                | Sanford WebMD Fit Kids                                                 |            |
| Wellness            | • Need safer places to bike/walk/run  
• The track should be available to the public  
• Poor nutrition  
• Lack of exercise                                                                                                                                                                                       | Sanford WebMD Fit Kids                                                 |            |
| Youth               | • Need entertainment programs for youth (to keep them out of the bars)  
• Need a safe teen hangout for after school  
• Concern with substance abuse  
• Concern with teen sex, teen pregnancy  
• Concern with teen obesity epidemic  
• Concern with parental neglect  
• Concern with the large number of kids on ADD medications  
• Bullying  
• Child abuse and neglect                                                                                                                                                                           | Sanford WebMD Fit Kids, Sanford One Care                                |            |
<table>
<thead>
<tr>
<th>Identified Concerns</th>
<th>Specific concerns</th>
<th>Alignment with Sanford resources or other community resource partners</th>
<th>Unmet need</th>
</tr>
</thead>
</table>
| Sanford Specific    | • No response to tests (we pay for them but get no feedback)  
                   • Concern about confidentiality & lack of privacy at the clinic  
                   • Clinic staff are not friendly & perception that they gossip about people sitting in the waiting area  
                   • Concern about high bills – willingness of Sanford to work with people to meet financial needs | | |
Table 2  
Prioritization Worksheet

Criteria to Identify Priority Problem  
- Cost and/or return on investment  
- Availability of solutions  
- Impact of problem  
- Availability of resources (staff, time, money, equipment) to solve problem  
- Urgency of solving problem (H1N1 or air pollution)  
- Size of problem (e.g., # of individuals affected)

Criteria to Identify Intervention for Problem  
- Expertise to implement solution  
- Return on investment  
- Effectiveness of solution  
- Ease of implementation/maintenance  
- Potential negative consequences  
- Legal considerations  
- Impact on systems or health  
- Feasibility of intervention

<table>
<thead>
<tr>
<th>Health Indicator/Concern (from asset mapping and gaps analysis worksheet)</th>
<th>Round 1 Vote</th>
<th>Round 2 Vote</th>
<th>Round 3 Vote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of assisted living for the elderly</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Concern about obesity among adults and children</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Need more local provider</td>
<td></td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>