2012
Community Health Needs Assessment
Beltrami County, MN

Mississippi Headwaters Area Dental Health Center
BPHC Community Health Center Planning Grant
HRSA 11-021

Introduction

The area in and around Beltrami County, Minnesota has been noted as lacking in adequate community health center care for low-income populations. To determine whether the pursuit of such a project makes sense for the region, it is necessary to assess the current health condition of the target population, along with existing health care services.

The purpose of this community health needs assessment is to accurately portray the current health situation and to inform the possible design of a health center project that meets the identified needs. This assessment reflects the process and format recommended by the U.S. Department of Health, Health Resources and Services Administration (HRSA), which would be the primary administrator of any funding resources available for a community health center. HRSA provided funding for this assessment through a one-time grant to support community health center planning.

The findings presented in this document will comprise the needs assessment section for any future grant proposals to support a community health center concept.

Methodology

An independent consultant with professional experience in community assessment was identified to oversee the assessment process. Involvement and input from the community was a key goal in the assessment plan. A well-attended community forum officially launched the process. A community health needs assessment advisory team was established through a publicized call for volunteers and by direct recruitment to ensure broad representation within the group. This 30-member team provided ongoing guidance, insight and support in creating and carrying out the assessment plan. Key informants were identified by the assessment team and over 140 individuals were interviewed. Input from those interviews was recorded and analyzed. A health needs and barriers survey was created and tested with the target population. Over 300 surveys were completed and responses were analyzed along with qualitative data (input) gained through target population interviews. A literature review was conducted and relevant data was gathered from reliable sources following guidelines established by HRSA.

Acknowledgements

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Community Health Needs Assessment

I. Service Area

The focus of this community health needs assessment is Beltrami County in rural, northwestern Minnesota. Located 100 miles south of the Canadian border and about four hours northwest of Minneapolis/St. Paul, Beltrami County is noted for its remote location, abundantly beautiful natural resources and harsh winters. More than 275 lakes and extensive wetlands dot the county map and several streams and rivers meander through, including the Mississippi River. Much of the county's land is forested. Along the 2,000 miles of roads and highways, Beltrami County's topography varies, with rolling hills in the southern townships gradually giving way to flatter, low-lying areas in the north. Northwest Minnesota is subject to extreme weather conditions with long, frigid winters where air temperatures and wind chill drop well below zero, sometimes causing school closings as a precaution. Average annual snowfall is 37 inches, with snowstorms making travel treacherous at times, especially for those who live in outlying, remote areas. In the summer, temperatures hover around the high 70s, but can hit the 90s.[1]

Placing Focus on Beltrami County

The community partners who submitted the HRSA planning grant to fund this assessment decided to focus on Beltrami County as the service area, as this is where most of the potential patients of a Community Health Center project would reside.

In this remote, sparsely populated region, a Community Health Center service area could *eventually* include a massive 75 to 100-mile radius around the Beltrami County's largest community, Bemidji, crossing into several counties. In general, surrounding counties have similar demographics to Beltrami County.

Beyond the challenging climate and notable natural beauty of the area lies another distinct characteristic of Beltrami County—a persistent, high concentration of poverty. Year after year, the county consistently ranks as the 1st, 2nd or 3rd poorest in the state. In 2010, the poverty rate was 20.8%[2] and the low income rate was 39.1%.[3] Beltrami County's median household income of $43,394 is 24% lower than that of the state of

[1] National Climatic Data Center, NOAA Satellite and Information Service
[2] U.S. Census Bureau, 2010 Small Area Income and Poverty Estimates, http://www.census.gov/hhes/www/saipe.html
[3] UDS Mapper, 2010. http://www.udsmapper.org

Minnesota ($57,243).[4] In 2011, the annual average unemployment rate for the county was 8%, while the rate for Minnesota was 6.4%.[5]

Minnesota's fourth largest county, Beltrami County covers 2,500 square miles and shares a border with eight other Minnesota counties. Some of those counties also share similar poverty demographics and all face challenges due to their remote location. Red Lake Indian Reservation is located almost entirely within Beltrami County, while a small portion of Leech Lake Indian Reservation extends into the southeast portion of the county.

According to the 2010 U.S. Census, the county's population is 44,442, an increase of 12.1% when compared to the 2000 Census data, outpacing the 7.6% increase in Minnesota's population. During that same period, the racial and age distribution of the population remained stable. Note that Hispanics account for 1.5% of the county population and in the table below are included in the White population. When compared to the state's racial distribution, Beltrami County is actually more diverse, with American Indians making up over 1/5 of the population.

Table 1: Racial Distribution of Population

	Beltrami County %	Beltrami County #	Minnesota %
White	75.1%	33,359	85.3%
American Indian	20.3%	9,004	1.1%
Asian	0.7%	309	4.0%
Black or African American	0.6%	262	5.2%
Native Hawaiian or other Pacific Islander	0%	18	0%
Two or More Races	3.1%	1,377	2.4%

Source: U.S. Census Bureau, 2010

[4] U.S. Census Bureau, 2010
[5] Bureau of Labor Statistics, Local Area Unemployment Statistics, December 2010–January 2012 (not seasonally adjusted)

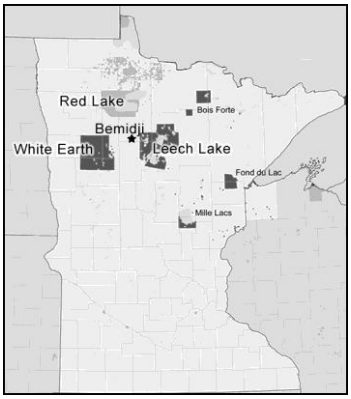
Table 2: Age Distribution

	Beltrami County %	Beltrami County #	Minnesota
Persons Under 5 years	7.6%	3,378	6.7%
Persons Under 18 years	17.4%	7,733	24.2%
Persons 18–64 years	62.1%	27,598	56.2%
Persons 65 years and over	12.9%	5,733	12.9%

Source: U.S. Census Bureau, 2010.

Beltrami County is sparsely populated with 17.7 people per square mile, while the state of Minnesota averages 66.6 per square mile.[6] A significant concentration of the population lies within a 10 to 15-mile radius of the city of Bemidji, located in the southern part of the county. Bemidji serves as the Beltrami County Seat and a regional center for health care, retail, education, finance and employment. Within Bemidji's city limits the population is only 13,431,[7] but retailers such as Walmart, Target and Home Depot draw in consumers from an area with a population over 40,000.[8] Bemidji Public School District enrolls more than 5,100 students drawn from a district area that is almost the geographical size of Rhode Island. Northwest Technical College, Bemidji State University and Oak Hills Christian College are also located in Bemidji.

Seven other incorporated "cities" lie within Beltrami County, but would be more fittingly referred to as small towns or villages. Blackduck (population 785) and Kelliher (population 262)[9] each have their respective K-12 public school systems enrolling students from a larger, sparsely populated area, a small main street district, a modest grocery store, and limited employment options. Funkley, Solway, Tenstrike, Turtle River and Wilton each consist of not much more than a cluster of homes, a church, a convenience store and one or two small businesses.



Red Lake Indian Reservation's population is 5,896, which accounts for just under 2/3 of Beltrami County's American Indian population.[10] Its southern border lies 25 miles north of Bemidji. The Red Lake Nation is unique in that it is a "closed" reservation, where land is held in common by Band members. Red Lake's people strive to honor their Anishinaabe traditions, culture and language and maintain their sovereignty. Communities

[6] U.S. Census Bureau, 2010
[7] Ibid
[8] Greater Bemidji Joint Economic Development Commission at http://www.bemidjiusa.com/index.htm
[9] U.S. Census Bureau, 2010
[10] Ibid

on the Reservation include Red Lake and Redby, both located on the south shore of Lower Red Lake; Little Rock; and Ponemah, a community tucked between Lower and Upper Red Lake more than an hour's drive from Bemidji (when road and weather conditions are good). The Reservation's education options include a K-12 public school system and Red Lake Nation Tribal College. An Indian Health Service hospital/clinic and tribal health services are also found there. Employment options are quite limited, as is access to retail goods including groceries. The Reservation population must travel to Bemidji for their county service needs. They are governed by an elected Tribal Government and currently represented on the Beltrami County Board of Commissioners by an enrolled Red Lake tribal member.

Federal Designations

Beltrami County holds several designations related to health care access issues, including: 1) Medically Underserved Area; 2) Mental Health Care Health Professional Shortage Area (HPSA); 3) Dental Health HPSA; 4) Primary Care HPSA (for northern and eastern portions of Beltrami County).[11]

There are no Federally Qualified Health Centers in Beltrami County. Less than 1% of the county's low-income population is served by an existing FQHC, the nearest of which is Scenic Rivers Health Services in Itasca County.[12] Within the Scenic Rivers system, the closest access point is located in the small town of Northome, Minnesota, more than 40 miles northeast of Bemidji (50 minutes when roads conditions are good). Services there are limited to medical only. Dental and behavioral health services through Scenic Rivers are located even farther away in Floodwood or Bigfork, Minnesota, about 75 miles from Bemidji. Beyond the barriers presented by these long distances, Beltrami County residents very rarely travel in the direction of Scenic Rivers access points. Rather, they converge at the regional center of Bemidji to access retail, employment, health care, education and government services.

[11] HRSA, Shortage Designation: Health Professional Shortage Areas & Medically Underserved Areas/Populations, http://bhpr.hrsa.gov/shortage/

[12] UDS Mapper, http://www.udsmapper.org. Accessed Dec.27, 2011

II. Target Population

This snapshot of need is focused on the low-income population living in the service area. Estimates show that more than 17,300 residents of Beltrami County are low income (below 200% poverty)[13] and over 8,300 residents live below the poverty level (below 100% poverty).[14]

In 2009, the uninsured rate for Beltrami County citizens under age 65 was 14.4% and the rate for Minnesota was 10.2%. Among low-income Beltrami County residents under age 65, the uninsured rate was 17.3%. Over 1/5 of the county's uninsured, low-income population was under age 19.[15]

One phenomenon unaccounted for in uninsured data is the large number of *underinsured*, particularly in remote geographical areas like Beltrami County. A study funded by the federal Office of Rural Health Policy found that "individuals living in rural counties not adjacent to an urban area are almost twice as likely as urban residents to be underinsured."[16] Throughout this assessment process, both members of the target population and key informants who work with this population repeatedly expressed concern about high insurance deductibles, high co-pays, and health insurance with very limited coverage. As a result of having such costly and limited plans, underinsured households report making tough decisions about when to access care based the burden it will place on their already stretched budget. Referencing the underinsured, low-income population, one stakeholder noted, "Is health care really accessible if they can't pay for it?"

Medical Assistance (MA) is Minnesota's expanded Medicaid program for children and adults in poverty. **MinnesotaCare** is a publicly subsidized program for Minnesota residents who do not have access to affordable health care coverage and meet low-income guidelines and asset limits. Enrollees pay a monthly fee (with a few exceptions) based on a sliding fee determined by family size and income. A household is not eligible if their current employer offers health insurance and pays half or more of the monthly cost of insurance. **General Assistance Medical Care** ended in February 2011 and enrollees (single adults without children) were automatically moved to Medical Assistance (MA), Minnesota's Medicaid program. Please see Table 3 for enrollment data.

[13] U.S. Census, American Community Survey 2006–2010, "Poverty Status in the Past 12 Months" (Table S1701)
[14] U.S. Census Bureau, American Community Survey 2006–2010 "Selected Characteristics of People in Poverty" (Table S1703)
[15] U.S. Census Bureau, Small Area Health Insurance Estimates for Counties and States, 2009 http://www.census.gov/did/www/sahie/data/2009/tables.html. Released Oct. 2011
[16] University of Southern Maine, Muskie School of Public Service, "Rural Residents More Likely to Be Underinsured," 2006

Table 3: Public Insurance Enrollment

	Beltrami County
Medical Assistance or MA	12,482
MinnesotaCare	2,500
General Assistance Medical Care	1,286
Medicare	7,278

Source: *MN Department of Human Services, Reports and Forecasts Division. "Medical Assistance, General Assistance and Minnesota Care Eligible Persons in Calendar Year 2010." May 26, 2011. http://www.dhs.state.mn.us*

Source: *Center for Medicare and Medicaid Services, "Medicare Aged and Disabled by State and County," July 2010. https://www.cms.gov/MedicareEnrpts/*

Poverty/Low-Income Status and Race

The preponderance of poverty and low-income status is homogeneous in the region, affecting both the Caucasian and American Indian populations. This is evident in the data displayed in Tables 4 and 5.

Table 4: Racial Distribution of Population in Poverty (Below 100%)

	Beltrami County		Minnesota
	Racial Distribution of Population in Poverty	# in Poverty	Racial Distribution of Population in Poverty
White	**45%**	**3,739**	**67%**
American Indian	**48%**	**3,985**	**4%**
Two or More Races	**5%**	**487**	**5%**
Asian	**1%**	**84**	**6%**
Black or African American	**<1%**	**69**	**16%**
Other	**<1%**	**19**	**3%**
Native Hawaiian or Pac. Isl.	**0%**	**0**	**<1%**

Source: *U.S. Census Bureau, American Community Survey, "Selected Characteristics of People at Specified Levels of Poverty," 2006–2010. Note: Population for whom poverty status was determined for Beltrami County was 42,043.*

Note: Hispanic/Latino is included in "White" data in the table above.

- In Beltrami County, White/Hispanics account for 1.7% of the population in poverty.
- In Minnesota, White/Hispanics account for 10% of the population in poverty.

Table 5: Racial Distribution of Low-Income Population (Below 200% Poverty)

	Beltrami County	
	Racial Distribution of Low-Income Population	# Low Income
White	**57%**	**9,903**
American Indian	**34%**	**5,843**
Two or More Races	**6%**	**951**
Asian	**2%**	**187**

Source: *U.S. Census Bureau, American Community Survey, "Selected Characteristics of People at Specified Levels of Poverty," 2006–2010. Note: Population for whom poverty status was determined for Beltrami County was 42,043.*

Note: Hispanic/Latino is included in "White" data in the table above.

As noted, both the Caucasians and American Indians are represented within the poor and low-income populations of Beltrami County. However, the high incidence of poverty within the American Indian population is striking. Consider that:

- **50%** of American Indians in Beltrami County live below the poverty line, while only **12%** of Caucasians (Whites) in the county live below the poverty line.[17]
- Only **26%** of American Indians in Beltrami County are above 200% poverty (not in poverty or low income), while **68%** of Caucasians (Whites) in the county are above 200% poverty.[18]

III. Health Determinants

"The context of people's lives determines their health," states the World Health Organization.[19] Biological, social, economic, and environmental factors—and their interrelationships—influence the ability of individuals and communities to make progress on health outcomes.[20] In the

[17] US Census Bureau, American Community Survey 2006–2010

[18] US Census Bureau, American Community Survey, "Selected Characteristics of People at Specified Levels of Poverty," 2006–2010. Special data request. Received April 6, 2012

[19] World Health Organization, "Health Impact Assessment: The determinants of health," http://www.who.int/hia/evidence/doh/en/ Accessed Nov. 22, 2011

[20] http://www.healthypeople.gov/2020/about Accessed April 17, 2012

following section, health determinants that impact the service area's target population are explored.

Poverty and lack of education

As noted, Beltrami County has a high concentration of poverty, a factor inextricably linked to poorer health. Daily struggles for those in poverty are many-layered and the personal resources available to address those struggles are limited. As a result, target population members develop a keen focus on the present as a means to survive the challenges that life presents.

The impact of poverty begins at a young age. Nearly one in three Beltrami County children under age 5 live in poverty and 28% of those under 18 are living in poverty.[21] 60.5% of Beltrami County children and teens are enrolled in the Free and Reduced Lunch program. This is the third highest rate in the state. When children live in poverty, their education is in jeopardy; without a solid education their prospects for climbing out of poverty diminish.

- Four-year graduation rate: Beltrami County's is the lowest in the state at 58.4%.
- Student Mobility: Beltrami County ranks 4th among Minnesota counties for the rate at which students transfer from school to school during the academic year. This greatly impacts learning and development.
- Special Education rate: 16.3% of Beltrami County's students are enrolled in Special Education in Beltrami County. Out of Minnesota's 87 counties, Beltrami has the 15th highest Special Education rate.[22]
- Educational attainment: On average, people in poverty have a much lower level of educational attainment than the general population. This affects whether one can climb out of poverty, and, in turn, affects health and health care access in multiple ways. Sixty-one percent of those in poverty in Beltrami County either do not have a high school diploma or their education ended when they received a high school diploma (or equivalent).[23]

[21] U.S. Census Bureau, American Community Survey 2006–2010
[22] Minnesota Department of Education, 2010
[23] US Census Bureau, American Community Survey 2006–2010

Employment and housing

As noted, poverty is linked to poor health status. Climbing *out* of poverty is far from easy in this region. Economic challenges include a lack of living wage jobs and a shortage of affordable housing.

The top industries for employment in Beltrami County are Education and Health Services (32% of jobs); Trade, Transportation and Utilities (22%); Leisure and Hospitality (11%); Public Administration (9.5%); Construction (6.4%); and Manufacturing (5.7%).[24] The logging industry played a significant role in the settlement of the area, but since then, its role has diminished. The area suffered the loss of 150 jobs in 2009 when a wood products manufacturer closed its doors.

Although Bemidji is considered a region of economic growth, the rewards of that growth are not seen by all. In particular, the availability of living wage jobs for less skilled workers is quite limited. A recent study of wages and cost of living in the Headwaters Region (which includes Beltrami and four neighboring counties) calculated that "the annual cost of basic needs for a single person with one child is $31,500—more than twice the federal poverty guideline. To cover these costs, a person must earn $15.14 per hour." In the Headwaters Region, 61% of jobs pay less than that. In fact, 29% of jobs pay less than $9.95 per hour.[25] In calculating the cost of "basic needs," the study makes no allowance for items such as education or training beyond high school; debt payments; life insurance; retirement and other savings; down payments for a home mortgage; vacations, pets, movies, gifts, and restaurant meals; or big ticket items such as washers, dryers or refrigerators.

For those without living wage jobs, finding affordable housing is also a challenge. Of the county's households who rent, 42% spent more than 30% of their income on housing, and are technically considered "housing burdened." Twenty percent of households who rent spend more than 50% of their income on housing, and are considered "extremely housing burdened."[26] Local housing assistance providers report a high rate of substandard housing and difficulty in finding units that will pass inspection for participation in rental subsidy programs. The Housing and

[24] MN Department of Employment and Economic Development, *Quarterly Census of Employment and Wages,* 2010, http://www.positivelyminnesota.com/Data_Publications/Data/All_Data_Tools/Quarterly_Census_of_Employment_Wages_QCEW)_2.aspx.

[25] Jobs Now Coalition, "Key Region 2 Findings and Analysis," March 2010

[26] Minnesota Housing Partnership, "Housing Affordability in Beltrami County 2011"

Redevelopment Authority of Bemidji (HRA) reports an approximate 9-month wait for Section 8 rental assistance housing.

Wilder Research of St. Paul has documented that northwest Minnesota has a high rate of "doubling up" or "couch hopping," where people are taken in by friends or family when they cannot afford their own permanent housing. Conditions for those who are doubled up are often unstable, more likely to be sub-standard, overcrowded, lacking in privacy, and ripe for spreading communicable disease.[27]

Homelessness is more prevalent than one might imagine in this remote, rural area. During the annual Northwest Minnesota Point in Time Homeless Count, 301 adults and children were identified as homeless on the night of January 25, 2012.[28] This figure does not include those who were doubled up. The limited inventory of available Emergency Shelter includes a 10-bed youth shelter and two Emergency Shelters (one on Red Lake Reservation for families and individuals and the other in Bemidji for families only) with a total of only 44 beds. A seasonal emergency shelter program operating at various churches on a rotating basis provides beds for up to 20 individuals during frigid winter months. Every year, hundreds of homeless households are turned away from Emergency Shelters in Beltrami County due to capacity issues. In 2011, Bemidji's shelter reported turning away families that included 717 children (unduplicated count).

Family composition and births to teenage mothers

According to the Robert Wood Johnson Foundation, single parent homes are "susceptible to chronic stress due to economic factors, social isolation and stigma." More than half (57%) of the children born in Beltrami County are born to unmarried mothers, and for nearly 1/5 of those births no father is listed on the birth certificate. In Minnesota, single people are almost twice as likely to be uninsured.[29]

An alarming 15% of all births in Beltrami County are to teen mothers (ages 15–19), the second highest rate for Minnesota counties. Beltrami County's rate of births to teen mothers per 1,000 is *triple* the statewide rate.[30] Given the extreme financial and emotional pressures of parenting, these young mothers struggle to complete their basic education. Over 15% of all

[27] Northwest Minnesota Continuum of Care, "Heading Home Northwest Minnesota," November 2008.
[28] Northwest Minnesota Continuum of Care, Point in Time Summary for MN-506, January 25, 2012.
[29] Minnesota Department of Health, "Health Insurance Coverage in Minnesota," January 2011
[30] Minnesota Department of Health, MN County Health Tables 2010

county births in 2010 were to mothers with a low Maternal Education Status,[31] a statistically noted setback to the health and development of children.

Nutrition

Throughout the assessment process, community members expressed concern about the area's high rate of obesity (28.9% for adults[32]) brought on by a lack of physical activity and poor nutrition. For some households, financial stressors put healthy foods out of reach. For others living in remote areas of the county, getting access to groceries that include healthy options requires money for transportation. Only 44% of the Beltrami County population has easy access to healthy foods.[33] A frozen pizza at the nearby convenience store might be the answer. Meanwhile, the demand on local food shelves is ever-increasing as household incomes are stretched in the current economic downturn. Not surprisingly, Bemidji School's District Health Nurse reported that children return to school hungry after the weekend.

Mental health

People in poverty are often managing daily crises brought about directly or indirectly by their socio-economic status and lack of power in the larger community. A profound shortage of resources creates high levels of stress that can lead to depression, anxiety, a cycle of poor health behaviors, violence, and substance use.

- Beltrami County consistently has one of the highest rates of suicide in the state.
- MN Department of Health youth survey results for Beltrami County:[34]
    - 28% of ninth grade girls and 17% of ninth grade boys reported that in the last 30 days they are often unhappy, depressed or tearful (Minnesota rates=22% and 14%)
    - 21% of ninth grade girls and 12% of ninth grade boys reported feeling so discouraged or hopeless that they wondered if anything was worthwhile

[31] Minnesota Department of Health, MN County Health Tables 2010. Note: Definition of Maternal Education Status takes into account the age of mother as a variable

[32] CDC National Diabetes Surveillance System, 2008

[33] University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation, County Health Rankings 2011, www.countyhealthrankings.org

[34] Minnesota Department of Health, "Minnesota Student Survey: Beltrami County," 2010

extremely often or quite a bit in the last 30 days (Minnesota rates=16% and 11%)

- 41% of ninth grade girls and 17% of ninth grade boys reported thinking about killing themselves (Minnesota rates=29% and 18%)
- 18% of ninth grade girls and 8% of ninth grade boys reported having tried to kill themselves (Minnesota rates=8% and 5%)

Substance use

Smoking in Beltrami County:

- **17%** are current smokers.[35] This rate is likely far higher for the target population, as smoking is more prevalent for those in poverty.
- **61%** of Northern Dental Access patients (target population) report that they are smokers.[36]
- **30.6%** of women smoked during pregnancy (4th highest rate in the state)[37]

Alcohol use:

- Acute Drinking: **20.2%** of the county population over age 18 consumed five or more drink on an occasion, one or more times in the last month.[38]
- Youth Survey: **17%** of Beltrami County ninth graders reported that alcohol use by a family member has *repeatedly caused* family, health, job or legal problems.[39]
- Medical and behavioral health professionals express concern over the high incidence of Fetal Alcohol Syndrome in the service area.

Illegal Substance Use:

- Recent drug users (within the past month): 3,293 Beltrami County residents[40]
- Youth Survey: **13%** of Beltrami County ninth graders reported that drug use by a family member has *repeatedly caused* family, health, job or legal problems.[41]

[35] Minnesota Department of Health, MN County Health Tables 2010 (MDH synthetic estimate of 2009 BRFSS data by age and gender)
[36] Northern Dental Access Center Survey
[37] Ibid
[38] Ibid
[39] Minnesota Department of Health, "Minnesota Student Survey: Beltrami County," 2010
[40] U.S. Department of Health and Human Services, Community Health Status Indicators, 2008
[41] Ibid

- Medical and behavioral health professionals express concern over prescription drug abuse in the service area. Both Red Lake and White Earth Reservations have declared public health emergencies with respect to abuse of prescription medication.

Noting the epidemic of untreated substance abuse in the region, an Emergency Room physician remarked that substance abuse leads to poor judgment, violence, and unplanned pregnancy.

Out of Home placements

Beltrami County has one of the highest rates of out-of-home placement of any county in Minnesota at 18.6 per 1,000 compared to the state rate of 9.3 per 1,000.[42] Traumatic and sometimes violent events can occur before a child is removed from the home and can have a lasting impact on the child's wellbeing. On the 2010 Minnesota Student Survey, 17% of Beltrami County ninth grade girls reported "being hit so hard or so often by an adult in their home that they had marks on their body or were afraid of that person." This compares to 12% of 9th grade girls statewide.[43]

Crime and perceptions of safety

Among all Minnesota counties, Beltrami County has the fourth highest Serious Crime Rate at 3,731 per 100,000 residents.[44] The implications of this in daily life are different depending on one's socioeconomic status. County residents whose incomes are below $60,000 were three times more likely to report that they "feel it is unsafe to walk on their street after dark." They were also more likely to be a victim of violent crime in the last 12 months (2.6% for those below $60,000 compared to 0.3% for those making over $60,000 per year).[45] Obviously, violent crime affects health in that it involves bodily injury and sometimes death. Beyond that, when people feel unsafe in their neighborhood, anxiety levels are heightened, social connection and support is impeded, and the ability to be physically active is limited.

[42] The Annie E. Casey Foundation, KIDS COUNT Data Center, 2009, datacenter.kidscount.org
[43] Minnesota Department of Health, "Minnesota Student Survey: Beltrami County," 2010
[44] Minnesota Department of Safety, 2010
[45] MNCompass, Minnesota State Survey, 2009

Occupational and environmental hazards

A portion of the target population has been exposed to pesticides and other chemicals through agricultural labor. Others are employed in sectors such as logging that require hard physical labor in harsh climate conditions that tax the body and can compromise health. A federal Super Fund site is located in nearby Cass Lake, Minnesota on the Leech Lake Indian Reservation. Wood-preserving activities from decades ago contaminated the site with arsenic and dioxin.

Veteran disparities

The county's estimated Veteran population is 3,548 or 11.2% of the adult civilian population,[46] slightly higher than the state of Minnesota. The age distribution of this group shifts somewhat with the aging of World War II and Korean Vets and ongoing conflict deployments.

During the community assessment process, a local Veterans group shared a deep concern about the unmet needs for behavioral health services for both substance abuse and mental health issues within this population. They noted that the social stigma around mental health issues is particularly strong and that Veterans fear career repercussions that might occur if they are labeled with Post-Traumatic Stress Disorder.

A Veteran's Administration (VA) Outpatient Clinic located in Bemidji provides primary care services for Veterans in the area, including behavioral health. Veterans indicated that the wait time is long for an appointment and that they dislike the mental health tele-medicine option, referring to it as impersonal and noting technology glitches that can interrupt sessions. Another barrier to effective mental health services noted by Veterans is that some therapists do not have military experience. When that "culture" and experience is not held in common, Veterans noted that it leaves a gap in the connection between client and counselor. In addition, they also indicated that transportation and getting time off from work is a barrier, as they must travel more than 2½ hours to Fargo, North Dakota for VA specialty care.

American Indian disparities

Research recently published by the Minnesota Department of Health revealed health disparities for racial and ethnic groups in the state. According to the report, **Minnesota's American Indian population faces a disparity for all 16 of the indicators** that the study measured and was the

[46] U.S. Census Bureau, American Community Survey, 2006-2010

only population without at least one indicator for which they ranked best in the state. The indicators included (in order of the degree of disparity for American Indians ranked highest to lowest): homicide, prenatal care initiated at 3rd trimester or none, teen births, gonorrhea incidence, diabetes mortality, suicide, motor vehicle mortality, unintentional injury mortality, Chlamydia incidence, heart disease mortality, Chronic Lower Respiratory Disease mortality, infant mortality, cancer mortality, stroke mortality, low birth weight, and preterm births. The level of these disparities is striking. Consider the following examples. In Minnesota, American Indians are approximately 4 times more likely to die from diabetes, 4½ times more likely to die by suicide, and greater than 3 times more likely to die from heart disease than those in the state's White population.[47] Nationally, about 1 in 5 (18%) American Indian individuals have two or more chronic conditions, making regular access to care even more critical.[48]

These alarming disparities are a result of complex, inter-related social determinants that American Indians have faced for generations. Along with a persistently high poverty rate and all of the barriers associated with that significant variable, this population has experienced historical trauma that continues to negatively affect their health outcomes and increase their barriers to health care.

Research shows that experiencing discrimination can increase blood pressure, heart rate, and stress, as well as undermine self-esteem and self-efficacy.[49] Far beyond scattered incidents of discrimination, American Indians have endured a succession of traumatic events over generations.

Researcher Maria Yellow Horse Braveheart provides a concise explanation of historical trauma and its impact: "Historical trauma (HT) is cumulative emotional and psychological wounding over the lifespan and across generations, emanating from massive group trauma experiences; the historical trauma response (HTR) is the constellation of features in reaction to this trauma. The HTR often includes depression, self-destructive behavior, suicidal thoughts and gestures, anxiety, low self-esteem, anger, and difficulty recognizing and expressing emotions. It

[47] Minnesota Department of Health, "Health Disparities by Racial/Ethnic Populations in Minnesota," December 2009
[48] Kaiser Family Foundation, "A Profile of American Indians and Alaska Natives the Their Health Coverage," September 2009
[49] U.S. Department of Health and Human Services Office of the Surgeon General, National Prevention Council National Prevention Strategy 2011

may include substance abuse, often an attempt to avoid painful feelings through self-medication."[50]

IV. Health Indicators/Outcomes

Health outcomes underscore the disparities faced in this high poverty county. Below is list of outcomes, most of which are required by the Health Resources and Services Administration (HRSA), the federal agency that provided funding for this assessment. For many of the health indicator categories, Beltrami County outcomes are considered worse than the national benchmark set by HRSA, and are, in some cases, worse than the "severe" benchmark set by HRSA.[51] Where HRSA benchmarks are established, they are noted below.

Health Indicator Categories:

Prenatal and perinatal health

Late entry into prenatal care (after first trimester as a percent of all births) [52]

Beltrami County	**28.1%** did not initiate care in the 1st trimester
Minnesota statewide	**14%** did not initiate care in the 1st trimester
HRSA "severe" benchmark	Anything over **20%**

Adequacy of prenatal care

Beltrami County	**67.8%** received adequate or better care
Minnesota statewide	**80%** received adequate or better care

Infant Mortality Rate

Beltrami County	**7.7** per 1,000 births[53]
Minnesota statewide	**5.3** per 1,000 births[54]
HRSA benchmark	Anything over **6.9** per 1,000 births

Pre-term births[55]

Beltrami County	**10%**
Minnesota statewide	**8.1%**

[50] Yellow Horse Braveheart, Maria, "The Historical Trauma Response among Natives and Its Relationship with Substance Abuse," Sept 7, 2011. Available at http://www.tandfonline.com/doi/abs/10.1080/02791072.2003.10399988
[51] HRSA, "Required Indicators Service Area Competition Funding FY 2011"
[52] Minnesota Department of Health, Center for Health Statistics, "Natality Beltrami," 2006–2010
[53] Minnesota Department of Health, Center for Health Statistics, 2005–2009
[54] Kaiser Family Foundation, 2000–2005, Statehealthfacts.org
[55] Minnesota Department of Health, Center for Health Statistics, 2005–2009

Births to teenage mothers[56]

Beltrami County	**15%** of all births
HRSA "severe" benchmark	**9.2%** of all births

Cigarette use during pregnancy[57]

Beltrami County	**30.6%** of all births
HRSA "severe" benchmark	**14.3%** of all births

Suicide rate

Beltrami County	**18.0** per 100,000[58]
Minnesota statewide	**10.7** per 100,000
HRSA "severe" benchmark	Anything over **16** per 100,000

For the period 2000–2009, Beltrami County had the 2nd highest suicide rate among Minnesota counties.

Unintentional injury deaths

Beltrami County	**54.3** per 100,000[59]
Minnesota statewide	**36.0** per 100,000
HRSA benchmark	Anything over **35** per 100,000 (no "severe" benchmark established)

Diabetes

Adult prevalence of obesity[60]

Beltrami County	**28.9%**
HRSA "severe" benchmark	Anything above **24.5%**

Percentage of Adults with diagnosed diabetes[61]

Beltrami County	**7%**
County Rank in MN	**83rd** out of 87 counties
HRSA benchmark	Anything over **6.5%**

[56] Minnesota Department of Health, MN County Health Tables 2010
[57] Ibid

[58] Minnesota Department of Health, MN County Health Tables 2010
[59] Minnesota Department of Health Center for Health Statistics, Minnesota Vital Statistics Interactive Queries, 2005-2009 (age-adjusted)
[60] CDC National Diabetes Surveillance System, 2008
[61] Centers for Disease Control and Prevention: National Diabetes Surveillance System, http://apps.nccd.cdc.gov/DDTSTRS/default.aspx (age-adjusted rate; adult= 20 years and older)

Cancer

Percent of women 18 and older with No Pap test in past 3 years[62]

Beltrami County	**21.7%** NO pap test in past 3 years
Minnesota statewide	**17.2%** NO pap test in past 3 years
HRSA "severe" benchmark	Anything above **16%**

Percent of women 40 and older with NO Mammogram in past 2 years[63]

Beltrami County	**34.7%** NO mammogram in past 2 years
Minnesota statewide	**27.1%** NO mammogram in past 2 years

HRSA "severe" benchmark is established for **3 year period**

Age-Adjusted Death Rates [64]

Beltrami County 2006-2010	**765** per 100,000
Beltrami County American Indian 2006-2010	**1,529** per 100,000
MN statewide 2006-2010	**663** per 100,000
HRSA benchmark (no "severe" benchmark)	**870** per 100,000

Sexually Transmitted Diseases[65]

Gonorrhea

Beltrami County **61** per 100,000

Only Hennepin and Ramsey Counties (Minneapolis/St. Paul metro area) had a higher Gonorrhea rate per 100,000.

Chlamydia

Beltrami County **361** per 100,000

Only Hennepin, Ramsey and Blue Earth Counties had a higher Chlamydia rate per 100,000.

Three Year Average Pneumonia Death Rate

Beltrami County **12.7** per 100,000 (**1.27 per 10,000**) [66]

HRSA benchmark Anything over **1 per 10,000**

[62] State Cancer Profiles 2000–2003, www. statecancerprofiles.cancer.gov (Bias-adjusted Modeled Estimate Combining Behavioral Risk Factor Surveillance System and National Health Interview Survey)

[63] Ibid

[64] Minnesota Department of Health, Center for Health Statistics. MN Vital Statistics Interactive Queries and Vital Statistics Summary

[65] MN Department of Health, 2010 MN Sexually Transmitted Disease Statistics

[66] Minnesota Department of Health, Center for Health Statistics, 2008-10. (Data analysis by Kim Edelman. March 8, 2012)

Child Health

Percent of children not receiving recommended immunizations (*4-3-1-3-3) [67]
4-3-1-3-3 = 4 DTaP, 3 polio, 1 MMR, 3 Hib, 3 hepatitis B

Beltrami County **30.5%** of children 24-36 months NOT complete for (4-3-1-3-3)
HRSA "severe" benchmark Anything over **21.4%**

Cases of vaccine preventable disease morbidity, 2009 [68]
30 cases of Pertussis in Beltrami County
Only 8 other MN counties had a higher incidence

Preventable Hospitalization Rates[69]

Diabetes Short-Term Complication Potentially Preventable Hospitalization Rate
Beltrami County **61** per 100,000
MN Statewide **34** per 100,000
HRSA benchmark **46.7** per 100,000

Bacterial Pneumonia Potentially Preventable Hospitalization Rate
Beltrami County **408** per 100,000
MN Statewide **291** per 100,000

V. Service Area Providers

As referenced earlier in the assessment, Beltrami County is a Medically Underserved Area, designated as a Health Professional Shortage Area countywide in Mental Health, Dental Health and in Primary Care (north and east parts of the county). There are no Federally Qualified Health Centers in the county.

By far the largest provider of health care in Beltrami County is Sanford Health, a nonprofit system. Within the last two years, Sanford Health acquired the Bemidji-based clinic system (formerly part of MeritCare), and the regional hospital (formerly known as North Country Health Services). "Three quarters of the hospital's patients reside in Beltrami County, the hospital's primary service area. An additional 10 percent reside in northern Cass County,

[67] Minnesota Department of Health Data (Data analysis by Epidemiologist Karen E. White, MPH. March 9, 2012)
[68] Minnesota Department of Health, County Health Tables 2010
[69] Minnesota Department of Health, Health Economics Program, "Rates of Potentially Preventable Hospitalizations by County, 2007"

Hubbard, Clearwater, Itasca, Koochiching, and Polk counties. The population of the primary and secondary service area approaches 100,000."[70]

Sanford Bemidji Medical Center and Sanford Health patient care services include: acute inpatient rehabilitation, apartment living for seniors, cardiac rehabilitation, catered living apartments for seniors, chaplaincy and spiritual care, Diabetes Resource Center, emergency services, food and dining services, general and vascular surgeries, home care and hospice, hospitalist program, imaging/radiology, intensive care, laboratory, medical equipment and supplies, medical nutritional therapy, medical-surgical, memory care, nursing home, obstetrics, gynecology, nursery, pediatrics, pharmacy, quality care and social services, rehabilitation: physical and occupational therapies, and speech pathology, respiratory therapy, Senior Behavioral Health Unit, sleep medicine, and urology.[71] Beyond services in Bemidji, Sanford has one other location within Beltrami County—a small satellite clinic in Blackduck. According to Sanford administration, there are 26.6 Primary Care Physician FTEs for direct patient care and follow-up of primary care in inpatient settings (hospital and nursing homes). Just over 19% of the patients cared for by these primary care physicians are on Medicaid.[72]

Physicians Clinic of Minnesota is a small private provider in Bemidji with one .75 FTE Primary Care physician on staff.[73]

Indian Health Services and Tribal Health Comprehensive Services are located on Red Lake Reservation. Services available include: behavioral health, dental, optometry, physical therapy, radiology, nutrition therapy, diabetes education, outpatient department, and Emergency Department. The Emergency Department is a Level IV Trauma Center.[74] Leech Lake Reservation Tribal Health Services operates a small clinic in Bemidji.

In addition to the behavioral health options provided through IHS and Tribal Health, mental health service provider organizations in Beltrami County include Upper Mississippi Mental Health Center; a private non-profit, Rule 29, community mental health center; and three private mental health clinics.

[70] http://www.nchs.com/history Accessed April 16, 2012
[71] http://www.nchs.com/services Accessed March 25, 2012
[72] Sanford Bemidji, "Physician FTE Survey," submitted February 9, 2012
[73] Physician's Clinic, Administrative manager, phone interview on March 20, 2012
[74] http://www.ihs.gov/bemidji/index.cfm?module=bmj_health_facs_fdsp_redlake on March 25, 2012

Several years ago, the community spearheaded a project to address the dental professional shortage in our area. While private dentists in the area accept patients on Medicaid, the availability of appointments for this high need population is quite limited. Northern Dental Access Center opened three years ago and serves 10,000 patients per year from a 100-mile radius of Bemidji. Patients are either enrolled in a Minnesota Health Care Plan (Medicaid) or access a discounted rate for services based on income levels. An integrated and collaborative approach to care combines dental care with patient advocacy and other health services available on site. The clinic's unique and culturally competent approach has led to numerous state and national awards.

Beltrami County Health and Human Services provides programs aimed at improving overall health outcomes in the community. Health services are provided at the Community Service Center in Bemidji, the Blackduck Resource Center, and in Kelliher (northern Beltrami County), and include: car seat inspections, child and teen checkups, health education, health screenings, home care, immunizations, maternal and child health services, basic health in the jail, and nutritional support through WIC.

A number of community nonprofit agencies exist to serve low-income individuals and families, and their work certainly impacts the health of the target population. Examples of these agencies include: Bi-County Community Action Program for Head Start, housing, heat assistance, and case management; Adult Day Services for seniors; Day Activity Center and Occupational Development Center for developmentally disabled adults; Red Lake and Bemidji Boys & Girls Clubs; Evergreen Youth and Family Services; Hope House for adult mental health support; Planned Parenthood; and Village of Hope for homeless families. While these agencies provide helpful services, it is difficult for those in poverty to determine which agencies might meet their needs and to get information about how to access these programs.

VII. Health Care Barriers

As a part of the assessment process, a 30-member community health needs assessment advisory team was assembled, more than 140 key informants were interviewed, and the target population was surveyed to gain insight on a variety of topics. Among the many topics covered in interviews, forums and the survey was a very basic but important question–"What prevents the target population [you] from receiving the health care that they [you] need?" In other words, what are the barriers?

The following section summarizes findings related to health care barriers for the target population in the service area. Beneath each heading is an explanation of how the barrier impacts the target population. Barriers are listed in the order that allows the "story" to unfold without redundancy.

- **Cost of care**

The target population resoundingly reported that they cannot afford to pay for needed health care services—whether it's due to high deductibles, a lack of insurance, or a need for services that are not covered. Many reported that this is causing them to ration their family's care. Some target population members said that they were trying to pay off large medical bills and could not seek care for new health issues. This factor cannot be underestimated as a major barrier to the target population's health.

- **Issues with health care coverage**

The complexity of getting on and staying on Medicaid is a major barrier to care. College-degreed professionals who assist clients with completing Medicaid enrollment forms and navigating the application process attest to the complexity. With that said, it is not surprising that members of the target population express extreme frustration, confusion and hopelessness with the enrollment process. The illiteracy rate of Beltrami County is 6.4%,[75] the level of educational attainment for the target population is low, and many who are Medicaid-eligible suffer from mental illness or substance abuse issues that impact their ability to process information. With such high needs, there is simply not enough assistance available to guide them successfully through the enrollment process.

When people go on and off Medicaid or other health coverage, it leads to inconsistent access, which impacts health. During lapses in health care coverage, necessary prescriptions are not re-filled and chronic illnesses are not well managed. Preventive care visits become an unaffordable luxury.

- **Shortage of dental health services**

In Beltrami County, private dental clinics accept a limited number of Medicaid patients, but appointments for this high needs population are extremely limited. Prior to 2009, this region experienced significant dental access challenges for low-income families, so much so that for seven years, a broad community coalition worked tirelessly to plan, design, fund and launch

[75] U.S. Department of Education, Institute of Education Sciences, 2003 National Assessment of Adult Literacy

a nonprofit community access dental clinic—Northern Dental Access Center. In 2011, Northern Dental Access Center served over 9,900 patients with excellent outcomes.

Even with the addition of Northern Dental to the service area, target population members indicate that they have difficulty accessing the oral health services that they need. After serving more than 15,000 people in three years at the new Northern Dental Access Center, wait times for dental appointments still amount to 4-6 weeks for routine or preventive care, with 15-20 new patients registered every day.

When people face barriers to accessing dental health, the pain they experience leads to absences from work and school, self-medication using alcohol and illegal substances to relieve pain, and expensive visits to Emergency Departments. As the American Dental Association states, "Untreated dental disease can lead to serious health problems: infection, damage to bone or nerve, and tooth loss. Infection from tooth disease can spread to other parts of the body and may even lead to death. Clearly, oral health is just as important as the health of the rest of your body."[76]

- **Shortage of mental health services**

Resoundingly, this assessment process revealed a shortage of mental health service professionals as a barrier to care, given the target population's high incidence of mental health issues. The service area's mental health system was described as "inundated and overwhelmed" by what one local physician characterized as a "preponderance of mental health issues." Although region has highly competent mental health agencies and professionals, it is challenging to recruit enough mental health providers in this remote location where salaries rarely reach market levels. In particular, more psychiatrists are needed, and more specifically, *child psychiatrists* with a strong developmental background. Primary care providers noted that they do not have adequate time to address the growing demand for mental health medication, nor do they feel adequately trained to do so in some cases.

Behavioral health providers face an extreme challenge in that Medicaid reimbursements are low and the target population needs are high—a difficult equation to effectively solve in a way that keeps the provider's doors open and client outcomes met.

[76] American Dental Association, "Access to Dental Care/Oral Health Care," http://www.ada.org/2961.aspx

The result of this mental health professional shortage is a long wait time for appointments, especially for diagnostic assessments and medication management. During that wait, the client's urgency for help may temporarily subside, leading them to cancel or miss their appointment only to have the unaddressed issue re-emerge at another time. To alleviate some of this need, Upper Mississippi Mental Health Center recently added an Open Access Clinic where clients can be seen on the same day with no appointment. Through this program, clients can receive a diagnostic assessment or crisis therapy. Chronic no-show clients can also use the Open Access Clinic for their therapy needs, although this would not be an ideal practice over the long term.

- **Complexity of behavioral health and primary care systems**

Health care and supportive service providers reported that the behavioral health system is complex to navigate. The mix of private, government, tribal and faith-based providers along with layers of requirements and parameters for various programs confuse the potential client. Stakeholders note that it is difficult for the target population to find the "front door" and to advocate for what is needed, especially considering the state of hopelessness and anxiety that target population members are experiencing in these circumstances.

Senior citizens surveyed reported that their most significant barrier to medical care was that "the health care system is confusing," with one survey respondent commenting that there are "too many locations."

- **Wait times for primary care**

Some target population members and providers noted that long wait times for appointments are a barrier to receiving adequate primary care. Scheduling a preventive care appointment with some physicians can mean a 3-month wait. A few physicians in the Sanford system are no longer accepting new patients. Some households reported having a difficult time scheduling an appointment to see a primary care provider in a timely manner, which led to usage of the Walk-In Clinic and ER (although overuse of the ER is a many-layered issue). With the recent entry of Sanford Health into our community, a renewed surge of provider recruitment may alleviate wait times to some degree.

- **Navigating supportive services**

Living in poverty often means moving through crisis after crisis. A barrage of barriers emerges, each directly or indirectly linked to one's lack of resources. Although existing

supportive service programs could alleviate some of these stressors, accessing these programs can be a complex process that would be more easily navigated with assistance from an advocate who can match their needs to existing programs.

- **Transportation**

Resoundingly, transportation was noted as one of the most significant barriers to health care. Getting to appointments is extremely difficult for the target population due to long distances to care providers, a lack of affordable/reliable vehicles, the high cost of gasoline, a lack of public transportation outside the city of Bemidji, and four to five months of extreme winter weather conditions. The senior citizen population noted that transportation was a barrier to health care for their age group. They expressed dissatisfaction with the minimal public transportation available and dismay about the cost of taxi fare and Medi-Van.

- **Work obligations and child care**

Target population members report that their jobs do not allow them to take time off work for personal and family appointments. Those with young children expressed difficulty finding childcare. Health care providers reported that patient/clients sometimes bring young children along for appointments, which can interfere with the level of quality care that can be provided in some cases.

- **Missed appointments**

Providers noted the high rate of missed appointments by the target population. In some cases, patients exceed a maximum number of missed appointments and can no longer receive care at that provider. A mental health therapist noted that given the complex, chaotic world of poverty "a thousand things could have kept them from getting there that day."

- **Illiteracy and low level of educational attainment**

A segment of the target population lacks the literacy skills and education needed to understand instructions presented to them by their care providers. A Registered Nurse in family practice recalled a 27-year-old who was struggling with paperwork. Fortunately, she realized that this was a literacy issue and guided him. The literacy barrier is challenging for educated health care providers to keep in mind and detect, and time-consuming (but important) to address. The formal education of nearly 1/3 of Beltrami County's adult population living in poverty stopped before they received a high school diploma (or the

equivalent).[77] Thus, even if they are not technically considered illiterate, members of the target population struggle with the complex jargon of medical care, and this can impede their ability to comprehend their diagnosis, instructions about use of prescription medicines and follow-up care—all of which impacts their health. Care coordination at Northern Dental Access Clinic has helped alleviate this barrier for their patients.

- **Health literacy issues**

It is clear that the target population is not receiving adequate levels of preventive care, screenings, prenatal care, dental care, mental health care and uninterrupted access to necessary prescription medicines. Many do not have a primary care provider and some have not visited a dentist in many years. Some part of this is due to a lack of health literacy, but it is difficult to parse out how much education and public awareness campaigns would change behavior given the magnitude of other barriers to health care that they face. It is certainly a part of the equation.

Health literacy topics that surfaced during the assessment process included but were not limited to: the need for preventive care, the importance of oral health, the need for and definition of adequate perinatal care, risk behaviors and their consequences during pregnancy, family planning/pregnancy prevention, STD prevention, nutrition, reducing the stigma surrounding mental health and understanding how to utilize the service area's health care systems.

- **Challenge of self-advocacy**

For a variety of reasons, people in poverty are uncomfortable and unaccustomed to advocating for their health care needs. Their experience is that of having little control or power in the wider community. Target population members expressed that they don't know what to ask for and one forum participant shared that he did not believe that he deserved quality care.

- **Feeling judged or sensing prejudice**

Target population members reported feeling judged by care providers and support staff at times, which was intimidating for them. Some American Indians within the target population shared that they have experienced cultural insensitivity and prejudice when getting care.

[77] U.S. Census Bureau, American Community Survey 2006–2010, "Selected Characteristics of People at Specified Levels of Poverty"

- **Mental health stigma**

Segments of the target population are stymied by the stigma surrounding mental health, frozen in their fear of being labeled. More public awareness is needed to build acceptance around getting care for depression, anxiety and other mental health diagnoses.

- **Untreated mental health issues**

The high rate of untreated mental health issues in Beltrami County is, in itself, a barrier to accessing other health care. Mental illness "may prevent or diminish self-advocacy due to such symptoms as limited insight, low motivation, disorganized thinking, poor judgment, inadequate finances, lack of transportation, and other unmet psychosocial factors. Patients often exhibit disorganization in daily affairs and lack of follow-through—creating a significant barrier to attention to primary and secondary preventive measures or chronic care management."[78]

According to assessment interviews, untreated chronic mental health issues are resulting in visits to the Emergency Room (ER)—hardly the most effective or cost-efficient way to treat these needs. Cases range from mild depression to suicidal ideation. Emergency Room medical staff expressed concern over how young some of these patients in need of mental health services are. Due to this surge of ER patients with mental health issues, a 24-hour Mobile Crisis Team is now available to the Sanford Medical Center Emergency Room. ER staff can call in this team of therapists who evaluate patients with mental health issues to determine whether they are safe to return home. If so, a safe plan is developed and if not, arrangements are made for in-patient placement. Patients also receive assistance in finding ongoing mental health care. Even with this and other efforts in place, the need is still great and the barriers to receiving care are resulting in visits to the ER.

- **Unrecognized or undiagnosed mental health issues**

Target population members are sometimes unaware that they have a need for mental health services. "I didn't know that I had a problem," commented one survey respondent. Families in this region have experienced generations of persistent mental health issues, and this "way of being" becomes the norm. They have become accustomed to the feelings and thoughts that

[78] Dickerson, Faith, "Health Status of Individuals with Serious Mental Illness," http://schizophreniabulletin.oxfordjournals.org/content/32/3/584.full.pdf+html

they are living with; or, as parents, they become conditioned to their child's depressed, angry or anxious demeanor.

- **Substance abuse**

Like persistent mental health issues, untreated substance abuse is a barrier to accessing health care. In some cases, patients feared that if they revealed their substance abuse issues they would face harsh judgment or denigration from health care providers. During the assessment process, supportive service and health care providers repeatedly noted their belief that some pregnant mothers avoid prenatal care when they have a substance use issue. In this circumstance, the pregnant mothers may fear the loss of their infant or other children or a myriad of other consequences if they bring their addictions to light.

The reported high rate of substance abuse is linked to a shortage of mental health care access. Some members of the target population self-medicate with alcohol, prescription drugs and illegal substances.

- **Mistrust of the system**

An element of mistrust toward the health care system pervades segments of the target population. This plays out in several ways. Some find contemporary health care impersonal and high-volume; they always feel rushed and unable to make a connection with the provider. Others expressed a sense of doubt about whether they or their families were getting proper screenings, medications and care—wondering if being on Medicaid was adversely affecting the type of care they were offered and questioning whether it also affected the attitude and effort put forth by the provider. These perceptions may make the target population less likely to return for follow-up care.

- **Desire for holistic and traditional treatment options**

Some target population members expressed an aversion to medication as treatment for health issues and noted that they thought providers "pushed pills." Some preferred more holistic methods or Anishinaabe (Ojibwe) traditional ways of healing. Upper Mississippi Mental Health recently received a grant that will allow more integration of Anishinaabe culture as an optional element in the care that clients receive. Other providers noted that they are constantly working on building trust and cultural competence, as this is widely recognized as vital to reducing barriers to health care.

- **Underfunding of Indian Health Service**

Although treaties and laws established that the federal government is responsible for American Indian health care through the Indian Health Service, a myriad of issues including chronic underfunding and bureaucratic processes have hindered and limited the scope and effectiveness of IHS. Of the 12 IHS areas in the nation, the Bemidji Indian Health Service Area is historically the most underfunded. "The Bemidji Area was funded at only 45% of need in 2009. In comparison, the average funding of IHS nationwide was only 55.2% of what was necessary to provide parity in healthcare." Federal prisoners receive twice as much per capita for health care than Indian Health Service does.[79] Also grossly underfunded is the Contract Health Service Program that is designed to cover costs for IHS patient referrals to other providers. As a result, appropriations run out before the end of the fiscal year and patients have to wait for care they need.

- **Emergency Room use**

The reasons why the target population may seek Emergency Room care for non-emergency issues are many. According to Sanford Bemidji, 11% of ER visits at their facility are Level I and II, which is non-urgent care. In 2007, the nationwide rate of non-urgent visits to Emergency Rooms was approximately 8%.[80] When patients access care for non-emergency issues in the ER setting, the cost is seven times more than that for a community health center visit.[81] The cost to their personal health is also notable. It is unlikely that these patients are receiving preventive care with a primary care physician who could better direct their care.

Patients with chronic illnesses who cannot access ongoing health care experience a degradation of their condition or disease. When their symptoms reach a crisis level, the Emergency Room treats their complications, but cannot provide the necessary long-term, ongoing care that is needed for improved chronic disease management.

- **Continuity of care and fragmentation of care**

During the assessment, key stakeholders noted the need to focus on continuity of care and efforts to reduce fragmentation of care for the target population. These phenomena are

[79] Great Lakes Inter-Tribal Epidemiology Center, "Community Health Data Profile: Michigan, Minnesota and Wisconsin Tribal Communities," 2010

[80] Government Accountability Office, "Hospital Emergency Departments: Health Center Strategies That May Help Reduce Their Use." April 11, 2011

[81] Ibid

pervasive in the U.S. health care system, especially for poor and low-income underserved populations.

"Better **continuity of care** is a hallmark and primary objective of family medicine and is consistent with quality patient care. The continuity of care inherent in family medicine helps family physicians gain their patients' confidence and enables family physicians to be more effective patient advocates. It also facilitates the family physician's role as a cost-effective coordinator of the patient's health services by making early recognition of problems possible. Continuity of care is rooted in a long-term patient-physician partnership in which the physician knows the patient's history from experience and can integrate new information and decisions from a whole-patient perspective efficiently without extensive investigation or record review."[82]

"Fragmentation means having multiple decision makers making a set of health care decisions that would be better made through unified decision making. When individuals are only responsible for one fragment of a relevant set of health care decisions, they may fail to understand the full picture, may lack the power to take all the appropriate actions given what they know, or may even have affirmative incentives to shift costs onto others."[83]

When the target population does get care in our service area, they move in and out of different systems (IHS, tribal health, Sanford Health, substance abuse treatment programs, mental health providers, different pharmaceutical providers, jail, public health) and in and out of various parts of any one system (Urgent Care, family practice, ER department, chronic disease management). Communication between and within systems is critical to the target population's health outcomes, especially given the health disparities they face. Having a regular, primary care provider guide their care is ideal—someone who the patient trusts and who knows their health history.

Sanford Health only recently established its presence in the service area, and they are working on several initiatives related to these issues. Of note, the relatively new hospitalist program at Sanford Medical is reducing fragmentation for patients through better communication between systems.

[82] American Academy of Family Physicians, "Continuity of Care" http://www.aafp.org/online/en/home/policy/policies/c/continuityofcaredefinition.html

[83] Elhuage, Einer. *Why We Should Care about Health Care Fragmentation and How to Fix It.* 2010

VIII. Conclusion

This assessment process revealed the significant health determinants, disparities and barriers faced by the low-income population in Beltrami County. It also revealed a strong desire and energy within the broader community to change the trajectory of health outcomes for this population by launching innovative, collaborative solutions. Fixing broad systemic issues with the health care system is far beyond the scope of our regional efforts; however, by keeping a keen focus on the needs of the target population, effective responses that will affect health outcomes can be found.

It is clear that navigating the complex health care system and maintaining health care coverage are two significant barriers for the low-income population. The care that they do receive is often fragmented and lacks continuity due to the sporadic access they experience as a result of barriers addressed in this assessment.

IV. Next Steps

Upon publication, the Community Health Needs Assessment findings are to be analyzed by a Planning Team charged with determining how best to respond to the health needs and barriers experienced by the target population.