Identifying a Health Priority for Action:
A Health Needs Assessment of Minority Health in Sarpy and Cass Counties in Nebraska

Rahman Alim Strum
8/11/2008
MPA Capstone Project

This research conducts analyses of available data to test the hypothesis that there are racial/ethnic health disparities in Sarpy and Cass Counties in Nebraska. Data sources include vital statistics from the Nebraska Department of Health and Human Services, the results of a 2003 needs assessment conducted by the Sarpy/Cass Department of Health and Wellness, and the responses from a telephone interview conducted in the Spring of 2008. Based on an analytical framework, discovered disparities were prioritized for action based on the size and severity of the health condition and the perceived acceptability and feasibility of the health intervention. Health education programming is suggested to reduce infant mortality in Blacks and hypertension in Latinos/Hispanics in the target area.

Table of Contents

Table of Figures

I.   Introduction

Statement of the Problem

By utilizing available health data, public health officials can strategically develop and implement programming that leads to an improvement in the health status of program participants. One of the major causes of death in the US is chronic diseases (National Center for Health Statistics, 2000). And while this is true for all races, the health of racial and ethnic minorities is affected disproportionately by chronic diseases. Health education programming can change individual health behaviors that typically contribute to these diseases. By targeting health education programming to minorities based on identified needs, this research will help to reduce or eliminate disparities in health.

Since its early beginnings, the US health care system has experienced significant improvements in overall health and life expectancy largely due to the preventative initiatives of public health. The capacity of these preventative initiatives to prevent some diseases and to detect and treat other diseases in their early stages has allowed the healthcare workforce to target and reduce premature and costly illnesses and injuries. However, despite interventions that have improved the overall health of the majority of Americans, members of racial and ethnic minority groups have benefited at a lower rate than the U.S. population as a whole from these advances.

In Sarpy and Cass Counties in Nebraska, there are noted differences when comparing various health status indicators (incidence rates of cancer, diabetes, hypertension, etc.) of the different racial and ethnic groups. In many cases, it is the health status of minorities that is significantly lower. Public health researchers have determined there are several contributing factors that lead to underserved groups ranking consistently lower in many rural and urban areas across the U.S. Reported differences in socioeconomic status, health care access, availability of health care insurance, environmental and behavioral factors all have a dynamic effect on the health status of minorities.

The results of this inquiry will confirm that there are in fact disparities in health status among racial and ethnic minorities in Sarpy and Cass Counties. The findings and conclusions of this research will also allow the opportunity to develop and implement programming that will effectively change the health behavior of the residents in the target area. Short of legislative change in the areas of health care financing, environmental mandates, and greater equity in government subsidies to the underprivileged or poor, changing the health behaviors of individuals is the most direct way of improving health.

Importance of the Problem

It is the intent of this research that the targeted programming that will result from this research will positively affect the health status of minorities in Sarpy and Cass County. This research is important because it will allow the Sarpy/Cass Department of Health and Wellness (SCDHW) to develop programming that will target minority populations and deliver curriculum that is specific to their identified health education needs. For example, if it is determined from an analysis of the available data that African-Americans and Hispanics consistently have a higher incidence of diabetes than Whites, then it will be the recommendation to the SCDHW to develop diabetes prevention programming for African-Americans and Hispanics.

It is this targeted method of developing and implementing programming that will most effectively address lower health statuses among racial and ethnic minorities. And at a time where budgets and staff are inadequate in public service, effectiveness has high value and offers the best results. This is especially the case when effectiveness in programming can make a difference in the number of participants with an improved health status or the amount of health behavior change that will result from participation in SCDHW programming.

Health needs assessments are the standard for an objective and valid method of tailoring health services. In other words, this is an evidence-based approach to developing and implementing health care services. Also, in assessing the health of an entire population, it is important to distinguish between the health of an individual versus the health of the community. Too frequently, there is a danger of a top down approach to providing health services, which relies too heavily on what a few people perceive to be the needs of the population, rather than what they actually are (Wright et al., 1998).

Methodology for Addressing the Problem

In order to structure and organize this research, I will use a theoretical framework developed by Hooper and Longworth (2002) to examine and prioritize health disparities in Sarpy and Cass Counties. Utilizing the steps of this framework and data from a number of sources, I will be able to identify and assess health priorities for the target population. These sources include the SCDHW, the Nebraska Department of Health and Human Services, and the results of a professional survey of residents in the target area, among others. The critical and scientific analysis of available data will provide the opportunity to make an educated recommendation for the development of health programming.

As an attempt to define this research, an inquiry into a variety of tested and published health needs assessment methodologies was conducted. The Hooper and Longworth (2002) model was selected because of the depth of the framework. For example, Wright, (1998) published a methodology for conducting a health needs assessment (Figure 1.)
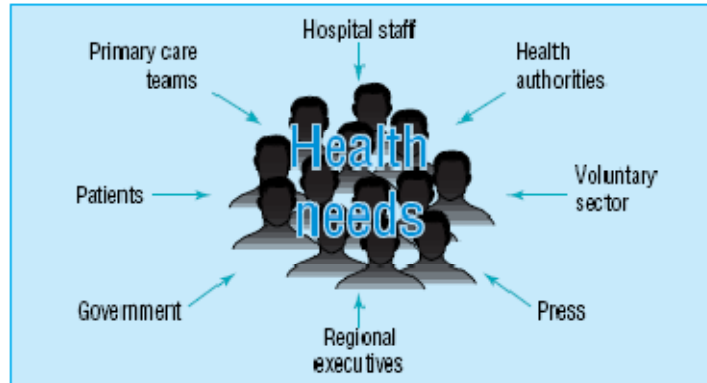

Figure 1 (Wright, 1998)

This illustration represents a component of the model that identifies all of the entities that must be involved in a health needs assessment including primary care teams, hospital staff, press, government, etc. Clearly, this ambitious level of assessment is of greater depth than is the Sarpy/Cass research as it is simply an analysis of available data.
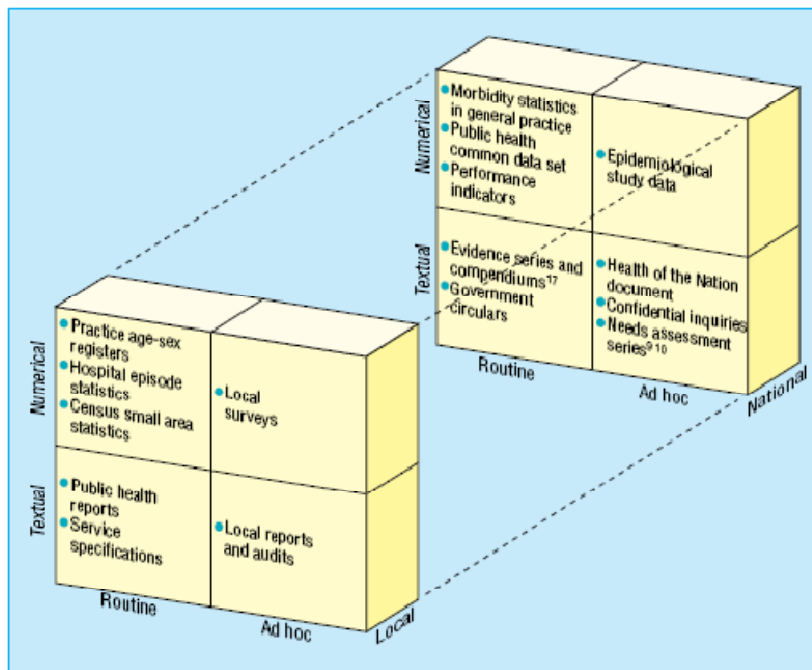

Figure 1 (Stevens and Gillam, 1998)

To be more specific in the definition of this research, a second inquiry was conducted among health needs assessments that focus on a review of available data as the primary method of analyzing health needs. A methodology published by Stevens and Gillam (1998) meets this criterion. As presented, this method of assessing the health needs of a population involves an intensive survey and analysis of available data (Figure 2.) However, what makes this method inappropriate for the Sarpy/Cass research is that it requires a thorough analysis of a variety of national data sources and more data sources on the local level than is necessary in order to develop informed recommendations for health programming in the target area.

Organization of the Report

This research is organized in accordance to widely-accepted research standards. This includes a sound introduction of the research, its importance, process, results, and implications. Next, I will describe the theoretical framework that will guide this research. This research report will continue with a characterization of the data collection process and the results of the data analysis. Finally, through the application of the framework to the results of the data analysis, this research can accurately determine findings and discuss the implications of these findings.

II.   *Analytic Framework*

To provide guidance and structure to this research process, a brief literature review on the topic of health needs assessments was conducted. This was done in an attempt to identify research methodologies that have been used in previous efforts to bridge the gaps that are health disparities. The most important result of the literature review was the identification of a health needs assessment that has successfully led to effective health intervention programming. This is important because it is the accuracy and validity of the health needs assessment that will eventually improve the health status of the target population. Using an assessment tool that does not measure what you intend to measure, or one that produces inaccurate results will waste time, money, effort, and possibly lives.

A health needs assessment is a recommended public health tool to provide evidence about the health of a particular population. It is this information that is used to plan services and address health inequalities. Some in-depth health needs assessments provide the opportunity to engage with specific populations and enable them to contribute to targeted service planning and resource allocation. And in some cases (including the case of Sarpy and Cass County minorities), a health needs assessment provides the opportunity for collaboration between various public-serving agencies such as the local department of health, local health provider systems, nonprofit organizations, etc. for the purposes of health program planning and development.

After conducting a review of relevant research on assessments of health needs of target populations, an assessment tool developed in 2002 by Judith Hooper and Phil Longworth was chosen. This 5-step health needs assessment tool provides a systematic method for reviewing the health issues facing a population. It is the intent that this strategic review will lead to agreed priorities and resource allocation (including program development) that will improve health and reduce inequities in health status. The five steps of the Hooper and Longworth (2002) health needs assessment model are summarized below.

It should be noted that only relevant components of the steps of this model were included. Certain components of the Hooper and Longworth (2002) model were not deemed to be relevant due to the scope of this research. For the purposes of identifying a health priority for action, the first three steps of health needs assessment model are all that is needed. The goal of this research is to produce results that will allow me to make an educated and informed recommendation for the development of health programming. The final two steps involve program development and evaluation and are outside of the scope of this research. This will be addressed below as part of the recommendations for future research.

Step 1- Getting Started

- Defining the population- Who is the population to be assessed? What specific issues affect this population and what makes them different than other populations? Are there health inequalities?
- Purpose of assessment- What is the goal or aim of the health needs assessment? Why is this assessment being conducted? What is the scope of the assessment?
- Resources and Collaborations- What resources (financial, staff, time, etc.) are required? Who should facilitate and who should participate in the health needs assessment?

Step 2- Identifying Health Priorities for the Population

- Profile of the Population- This phase includes the data collection process including available data on the health status of that population. Use data to create a profile of the target population.
- Size and Severity- What are the conditions/factors that have the most significant impact in severity and size on health functioning? This information will determine the priority of health issues to be addressed.
  - Use the following criteria:
    - Severity- does the condition/factor significantly:
      - affect health functioning?
      - affect other conditions/factors?
      - affect health transiently or long term?
      - cause death?
    - Size- does the condition/factor significantly affect a lot of people in the profiled population?

Step 3- Assessing the Health Priority for Action

- Review of Step 1- Why is this health needs assessment necessary for this population? What is purpose of this health needs assessment?

- Identified Priorities- Based on size and severity of conditions/factors affecting the health of the target population, which are priorities?
- Acceptability- What is already being done to address the identified health conditions? Are the changes acceptable to the target population and the wider community? Are the changes acceptable to the staff and organizations delivering the activity?
- Feasibility- Based on organizational capacity, available time, money and staff, can this be done? Are the resources required to implement the proposed actions available? Can existing resources be used differently?

Step 4- Planning for Health

- Clarifying aims of intervention
- Action planning
- Monitoring and evaluation strategy
- Risk-management strategy

Step 5- Evaluation

- Learning from the project
- Measuring impact
- Choosing the next priority

III. Methodology

In researching the health status of minority groups in Sarpy and Cass counties, importance must be placed on the structure of the research topic. The techniques utilized in conducting this public health research are detailed in this section. This methodology describes what was done to reach the findings and implications discussed below. This includes the research questions, the strategic plan of the research, types, sources, and methods of data and data collection, sampling procedures, etc.

This research has been conducted under the guidance of a theoretical framework offered by Hooper and Longworth's (2002) model for conducting a health needs assessment (See appendix A). *Step 1* of this model, *Getting Started*, suggests that research begins with a definition and discussion of who and what is being assessed. This will lead to the determination that there are inequalities in health outcomes among racial/ethnic minorities. Deeper discussion should include the purpose and scope of the research. Finally, before conducting a health needs assessment, it is suggested that researchers make an inventory of available resources (funding, staff, etc.) and determine who should facilitate and participate in the assessment. These starting points are discussed in the *Conclusions* section below.

Research Questions

R1. Are there racial/ethnic disparities in health status of minority residents when compared to whites in Sarpy and Cass counties in Nebraska?

R2. Which health indicators (incidence rates of cancer, infant mortality, communicable diseases, etc.) affect minority populations in the target area at higher rates than whites?

R3. What types of health programming might be developed to achieve greater equity in the health statuses of all population groups?

R1- As mentioned above, it is crucial that this research first confirms that there are racial and ethnic disparities in health outcomes in the target area. This question is of most importance because if the health outcomes for all of the residents in Sarpy and Cass counties were the same, regardless of race or ethnicity, that fact would render any findings from this research inaccurate and useless. In order to answer this first research question, a comparative analysis should be conducted to determine whether or not health disparities exist among different races and ethnicities. From this point, health indicators that warrant special attention will be determined.

R2- Once it has been confirmed that there are differences in health outcomes (low birth weights, percents receiving prenatal care, etc.) for the different racial and ethnic groups, this research can proceed guided by Step 2 of Hooper and Longworth's (2002) model for conducting a health needs assessment. This will allow the explicit identification of which health conditions should be addressed. The appropriate piece from this stage of the process involves assessing the size of the affected population and a few dimensions (effect on health functioning, mortality, etc.) of the severity of the health conditions. The process of identifying a health priority for action, the point of this research, is highly dependent on the results realized in *Step 2*. While the answer to this research question will identify health conditions should be addressed, the answer to the final research question will determine how to address them.

R3- The final objective of this research is to determine which health conditions can be addressed by health programming and what types of health interventions should be developed (outreach/education, screening events, etc.) for those conditions. Based on the results from this research, I will be able to make an informed recommendation to the Sarpy/Cass Department of Health and Wellness, which will lead to the development of effective health programming. This is the research question whose answer ties together theory from the analytic framework with real data from valid and reliable sources to offer the prospect of improved health status for minorities in the target area.

Plan of the Research

This research will be guided by the structure outlined above in the analytic framework section of this project. The plan of this research will be derived from *Step 3* of this framework. Similar to a strategic planning in organizational management, this step of Hooper and

Longworth's (2002) model provides the process for planning the action that will stem from this research. The purpose of this step of the model is to assess a health priority for action based on its size and severity. Part of this step involves a review and synthesis of determinations from the two earlier steps. And as part of traditional strategic planning, this research will discuss the acceptability and the feasibility of the recommendations. This too will be addressed in the *Conclusions* section below.

Data Details

In order to conduct research on public health issues, I must use data from a variety of sources as previously discussed. This data will be in the form of both qualitative and quantitative statistics from a variety of sources including data from the Sarpy/Cass Department of Health and Wellness, the Nebraska Department of Health and Human Services, and the results of a telephone survey conducted by Professional Research Consultants (PRC). In conducting the telephone interviews, from which this research draws some conclusions, the PRC survey was designed to produce data that attempts to describe intangible, yet measurable information. For example, in analyzing the responses from the survey interviews, I can say that 10.2 percent of the survey respondents would rate their mental health status as poor or fair. I could then infer that roughly 10% of the population in Sarpy and Cass counties has an unfavorable mental health status (PRC, 2008).

This qualitative information is relatively subjective but is equally as important as the quantitative data. Most of the data obtained from United States Census and the Nebraska Department of Health and Human Services is of a quantitative nature. These sources of secondary data provide a wealth of leverage in developing research-based conclusions, all while avoiding the need to replicate previous research efforts and saving in research-related costs. An example of qualitative results produced from this data source is the fact that the infant mortality rate for blacks in Sarpy and Cass counties is twice as high the rate for whites (NDHHS, 2005).

Data Collection

In examining the sources and types of data used in this research, various methods of data collection are used. In addition to using secondary data sources as a method of data collection (as discussed above), the two other data collection methods used include the use of telephone interviews and a limited use of observational data. To avoid committing the research error of sampling bias, the PRC sampling procedure (discussed in next subsection) ensures that the conclusions developed based on the telephone interview accurately represents the perceptions and opinions of the population in the targeted area. To get an alternate representation of health status indicators of the target population, personal interviews will be conducted with health and social professionals and others who are responsible for providing services to those residents who may be disproportionately affected by various health conditions.

Sampling Procedure

To verify that the sample group used by PRC accurately represents the population in the target area, figures from an independent source were compared to the results of the PRC survey instrument. Of particular interest to this research, it is important to establish that demographically, the PRC sample is comparable to the population in Sarpy and Cass counties in terms of racial/ethnic division. Population estimates obtained from United States Census estimates indicate that the racial make-up of the PRC survey group provides an accurate representation of the population in the target area to the level of significance that will allow this research to develop accurate conclusions (Census, 2004). The chart below (Table 1) shows that the percentages of the different racial groups are comparable. Therefore, it can be said that the PRC sample population accurately represents the true population in the target area.

PRC sample population (2008)			United States Census estimates, Sarpy and Cass Counties (2004)		
Race/Ethnicity	N=329	100%	Race/Ethnicity	N=166,030	100%
White	290	**88.4%**	White	149,244	**89.9%**
Black	12	**3.6%**	Black	5,736	**3.4%**
American Indian/Alaskan Native	7	**2.0%**	American Indian/Alaskan Native	658	**.4%**
Asian	7	**2.1%**	Asian	3,123	**1.9%**
Hispanic	10	**3.1%**	Hispanic	7,269	**4.4%**
Other/mixed	3	**.8%**	Other/mixed	N/A	**N/A**

Table 1 (PRC, 2008; Census, 2004)

IV.   Findings

The data presented below are the results from a comprehensive data collection effort using a variety of sources. These sources include data from a 2003 needs assessment conducted by the Sarpy/Cass Department of Health and Wellness, a data profile published in 2005 by the Nebraska Department of Health and Human Services, and the results of a second needs assessment from 2008 conducted by Professional Research Consultants, Inc. a professional research firm.

Four hundred residents from each of Cass and Sarpy County completed a 17-minute telephone interview in July 2003. Respondents were 18 years and older, identified through random digit dialing, and selected to ensure demographic representation. However, in conducting the data analysis from the results of this personal interview, it was noted that neither the race nor the ethnicity of the respondent was collected. Therefore, a direct relationship to the characteristics of the respondent and the responses they offered could not be inferred.

However, the information provided by the 2003 assessment helps illustrate the perceived importance of minority health needs among local residents in Sarpy and Cass Counties. For example:

- Results from the 2003 service area-wide needs assessment show that 16% of the sample population *would rate the health of minorities is major health problem* (SCDHW, table 8, 2003).
- Same needs assessment results show that 33% of the sample population *would rate the health of minorities as a service area need that is important to address* (SCDHW, table 9, 2003).
- Same needs assessment results show that 17% and 8% of the sample population from Sarpy and Cass counties respectively *would rate the health of minorities as a major health problem* (SCDHW, table 10, 2003).
- Same needs assessment results show that 36% and 21% of the sample population from Sarpy and Cass counties respectively *would rate the health of minorities as an important area for the SCDHW to address* (SCDHW, table 11, 2003).

The next source of information is the official representation of vital statistics from the Nebraska Department of Health and Human Services. This profile is assembled using data from a variety of sources including the 2000 US Census and estimates, required reports from hospitals and other facilities, health care providers, and others mandated to submit reports. After careful review of most recent and available statistics, the highest level of racial/ethnic disparities exists in the following two areas: Incidence Rates of Sexually Transmitted Diseases-Blacks and Infant Mortality- Blacks (Tables 2 and 3).

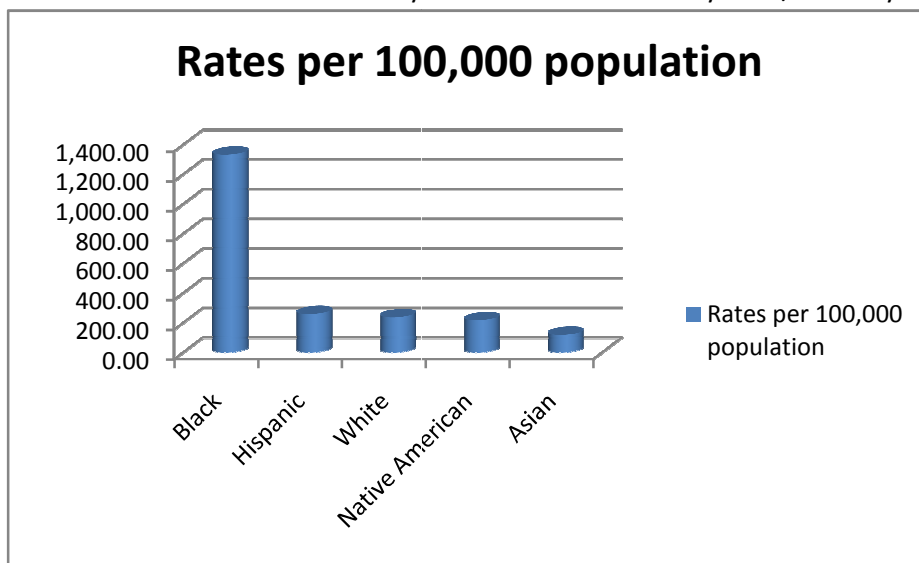Incidence Rates of Sexually Transmitted Diseases by Race/Ethnicity

Table 2 (NDHHS, 2005)

Infant Mortality by Race/Ethnicity
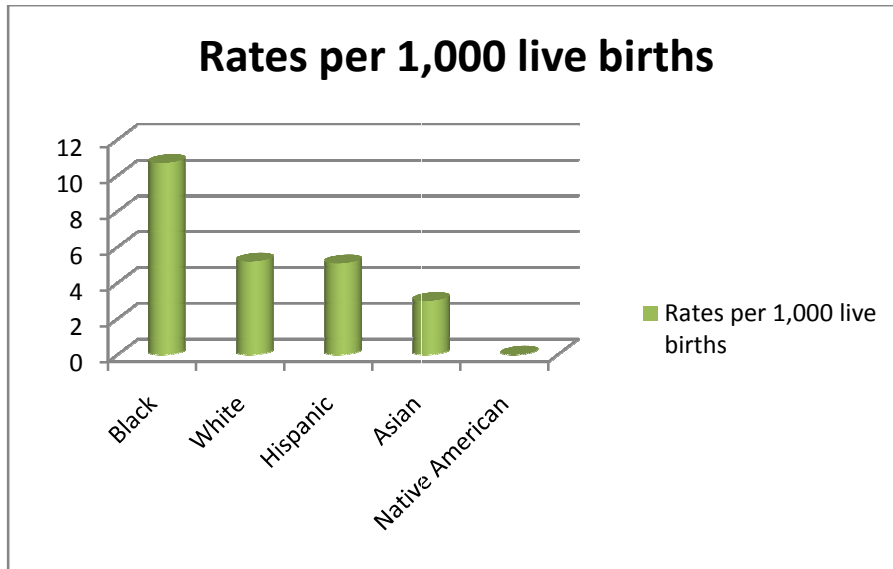

Rates per 1,000 live births

Table 3 (NDHHS, 2005)

In conducting a thorough analysis of the data made available through the PRC survey, more than 150 variables were tested to see whether or not there is a relationship between two or more of the variables. More specifically, this research is interested in establishing a relationship between the variable "race" and other indicators of health status such as incidence rates of prostate cancer or diabetes. After testing for both quantitative and qualitative relationships among race and all of the indicators of health, statistically significant relationships were found. These relationships show that there are differences in health outcomes based on the race/ethnicity of residents in Sarpy and Cass Counties.

In order to determine the statistical significance of a relationship, the chi-square significance test is used and its results displayed in the last row of each data table. This test measures the likelihood that the observed association between the independent variable (race) and the dependent variable (incidence rates, rates of uninsurance, etc) is caused by chance. Among traditional research methods, a chi square statistic of .05 is the conventionally accepted threshold of statistical significance; values of less than .05 are commonly referred to as "statistically significant." What this means is that as the chi-square statistic increases above .05 the likelihood that the observed association occurred by chance increases.

The most statistically significant relationship that was discovered was between race and insurance status. It was determined that there is a disparity in that Latinos/Hispanics are uninsured at a rate of 22% among the sample population. This is compared to the next highest rates of uninsurance of 4.3% among Whites, and 0.0% among Blacks, Asians, Native Americans, and those with "Mixed" race/ethnicity. This relationship has been determined to be statistically significant with a chi-square statistic of .000. This data can be seen in Table 4.

The next statistically significant relationship that can be drawn from the available data is between race and hypertension status. The sample was asked the question, "Have you ever been told by a doctor, nurse or other health care professional that you have high blood pressure? It was determined that the disparity exists among Latinos. 33.1% of the total sample had reported to have been told that they have hypertension, while 60% of Latinos had been told they have hypertension. All other races had rates near or below the average of 33.1%. This relationship has been determined to be statistically significant with a chi-square statistic of .059. This data can be seen in Table 5.

Insured Status by Race/Ethnicity

Insured Status (18 to 64)		No Insurance/ Self-Pay	Total
What is your race?	American Indian, Alaska Native	0 .0%	5 100.0%
	Asian	0 .0%	7 100.0%
	Black/African American	0 .0%	11 100.0%
	White	11 4.3%	256 100.0%
	Latino/Hispanic	2 22.2%	9 100.0%
	Mixed	0 .0%	3 100.0%
Total		13 4.5%	291 100.0%
Chi-Square Tests	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	$1.097E2^a$	35	.000

Table 4 (PRC, 2008)

Hypertension Status by Race/Ethnicity

Have you ever been told by a doctor, nurse or other health care professional that you have high blood pressure?		
	Yes	No
American Indian, Alaska Native	2 **28.6%**	5 **71.4%**
Asian	1 **14.3%**	6 **85.7%**
Black/African American	0 **0.0%**	12 **100.0%**
White	99 **34.5%**	188 **65.5%**
Latino/Hispanic	6 **60.0%**	4 **40.0%**
Mixed	0 **0.0%**	3 **100.0%**
Total	108 **33.1%**	218 66.9%

Chi-Square Test	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.120[a]	6	**.059**

Table 5 (PRC, 2008)

V. Conclusions

In order to interpret the results of my data analysis, these results must be viewed through the lens of the Hooper and Longworth (2002) analytic framework. In other words, this research must apply the Sarpy and Cass County data to the health needs model to in an attempt to answer the three research questions presented above. This research is being conducted with the intent of improving the health status of racial and ethnic minorities. In order to best effect the health of this group, recommendations for programming will be made to the Sarpy/Cass Department of Health and Wellness (SCDHW). These recommendations will be based on this research, which employs sound data analysis and interpretation made clear with the theoretical model.

Step 1

The population being assessed includes all racial and ethnic minorities in Sarpy and Cass Counties in Nebraska. This subset of the American population is disproportionately affected by inequalities in health care access, quality and cost. The purpose of this research is to specifically identify whether or not those inequalities exist among racial and ethnic minorities when compared to Whites in the target area, which health indicators affect minority populations in the target area at higher rates than Whites, and what types of health programming might be developed to achieve greater equity in the health statuses of all population groups.

To make a change, the SCDHW must consider committing resources to the cause of reducing racial and ethnic health disparities. These resources include staff time to implement health education programs, educational materials for participants, and other administrative costs associated with public health education. Equally as important, time should be spent developing quality programming complete with evaluative measures as well as being strategic about where and how to market programming to the target population.

Step 2

Based on the results of the data analysis, this research identifies specific health priorities for action. The first source of data comes from the results of the SCDHW needs assessment (2003). The data from this source illustrates the perceived importance of the health of minorities in the target area among all residents. Of a list of the top 28 health problems in their community, the health of minorities was ranked 25th. This equates to 16% of the sample population *rating the health of minorities as a major health problem*. On a list of the 28 most important areas for the SCDHW to address, the health of minorities was ranked 23rd. This equates to 33% of the sample population *rating the health of minorities as a service area need that is important to address* (SCDHW, 2003)

According to research published by Lillie-Blanton and Laveist (1996), there is typically an underdevelopment of knowledge in most communities about the health status and health disparities encountered by racial and ethnic minority populations. It was presumed that if the public were more knowledgeable about the health of minorities, this could help shape public policies, political pressure, and preventive interventions to reduce disparities in health. Because the health of minorities consistently ranked low in analyzing SCDHW data, it can be deduced that there is a low level of knowledge in the community of the health status of minorities in Sarpy and Cass Counties. And it is this lack of knowledge that negatively affects minority health. An effort should be made to educate the general public about the importance of minority health. This will have a relatively positive effect on minority health.

The next source of data comes from vital statistics published by the Nebraska Department of Health and Human Services. This data specifically illustrates the vast racial and ethnic health disparities that exist in the target area. According to this data, Blacks are disproportionately affected by sexually transmitted diseases at an incidence rate of 1,332.60 per 100,000. This represents an incidence rate almost six times higher than any other racial/ethnic group. Please note that this statistic is less than half of the statewide STD incidence rate of 2,847.6 per 100,000 for Blacks.

Moran et al. (1989) indicates that racial/ethnic minority status has traditionally been recognized as a risk factor for STD. Other variables, such as sexual behaviors, or health care behaviors, are directly related to the probability of exposure to STD, to infection following exposure, or to complications if infected, and can be referred to as true risk factors. While racial/ethnic status cannot be changed, individual sexual behavior is a variable that can be targeted in developing health education programming.

Also derived from the vital statistic data source is the rate of infant mortality and the health disparity that affects minorities. According to the data, Blacks suffer from infant mortality at a rate of 10.7 per 1,000 live births, while compared to 5.2 for Whites. This two-fold difference in the infant mortality rate illustrates the need for intervention. While black infants die at twice the rate of white infants in Sarpy and Cass Counties, this disparity widens to three-fold when analyzing statewide data.

Infant mortality is a commonly-used indicator for assessing the health of any population. Matteson et al. (1998) finds that negative health behaviors and health resources of mothers are a leading variable in predicting infant death. This is mediated by the conclusion that support from the local health care environment can offset and counter infant mortality rates in minority populations. Health education programming should be developed and targeted to soon-to-be Black mothers in order to reduce this disparity.

The last source of data to be interpreted is the results of the professionally-conducted telephone survey. This data source highlighted two additional health disparities that disproportionately affect racial/ethnic minorities. A statistically significant relationship was discovered was between race and insurance status illustrates the disparity in that Latinos/Hispanics are uninsured at a rate of 22% among the sample population. This is compared to the uninsurance rates of 4.3% for Whites, and 0.0% for all other groups.

In 2004, the National Coalition on Health Care reported that as a practical matter, those without insurance receive less care — and receive it later — than those with coverage, they are on average less healthy and less able to function effectively in their daily lives. Unfortunately, those without health insurance have a risk of mortality 25 percent higher than it would be if they had health insurance. Health insurance information should be delivered via health

education programs for Latinos/Hispanics and must include available plan and financing options.

The next statistically significant relationship is between race and hypertension status. When asked, "Have you ever been told by a doctor, nurse or other health care professional that you have high blood pressure," 60 percent of Latinos/Hispanics as compared to the average of 33.1 percent of the sample had been told that they have hypertension. All other races had rates near or below the average.

Williams et al. (1998) argued that patients with hypertension may need to understand how to properly take multiple medications and modify their lifestyle (i.e., low salt diet, weight loss, or exercise) to achieve adequate blood pressure control. It was also documented 61.7% of Spanish-speaking patients seeking care at 2 public hospitals lack literacy skills adequate to function in the health care settings. In addition, it was found that lower literacy skills also correlate with poorer self-reported health status. Part of this comprehension can be achieved with an extensive health literacy and health education campaign. Such programming should be adopted or developed by SCDHW in order to combat Latino/Hispanic rates of hypertension and reduce this health disparity.

According to the Hooper and Longworth (2002) model, it is the size and severity a health condition that will determine its level of priority of health issues to be addressed. It appears that the health priorities for action are the infant mortality and hypertension disparities. Please note that this does not discredit or dismiss the need to address the public's perception of the health of minorities, the incidence rate of STDs in Blacks or insurance status of Latinos/Hispanics as programming in these areas should also be developed.

These two qualifiers (size and severity) were used in determining that infant mortality in Blacks and hypertension in Latinos/Hispanics were the two most important health conditions to address. It is no doubt that there is a large number in number of those in the respective racial/ethnic groups are affected disproportionately by the above health conditions. To determine severity, a health condition's impact on functioning, other health conditions, how acute or chronic the condition is, and its potential to cause death should all be assessed. Both hypertension and infant mortality are directly linked to death and should be considered most severe.

Step 3

In assessing the health needs of racial and ethnic minorities in Sarpy and Cass Counties, it is important to understand that these groups are disproportionately affected by inequalities in health care access, quality and cost, and are thus at a disadvantage. Based on size and severity of conditions/factors affecting the health of the target population, infant mortality in

Blacks and hypertension in Latinos/Hispanics are the identified health priorities for action. In accordance with the Hooper and Longworth (2002) model, the final justifications of the identified priorities are their acceptability and feasibility in the target area.

Acceptability refers to the likelihood that any health programming targeting a specific health condition will be acceptable to the target population and the wider community. In both cases, there is no evidence that targeted programming will not be accepted by the target populations. However, the lack of public knowledge of the issue of minority health is a factor that may contribute to public dissatisfaction of targeted programming for racial/ethnic minorities. Precautions should be taken to ensure that too many resources are not diverted from the existing operations of the SCDHW.

Feasibility refers to the likelihood that the proposed health intervention can be developed and implemented, based on organizational capacity, available time, money and staff. In communications with SCDHW, it was determined that resources can be made available as is appropriate based on the results of this research. These resources would be used to develop, implement and evaluate health education programming. Also to be considered is the use of existing resources in different ways.

Recommendations for future research

Future research should be conducted with the expressed intention of assessing and measuring health disparities of racial and ethnic minority groups when compared to Whites. When possible, more effort should be made to increase the sample size of the research methods cited above. With such a small population size, minorities would be better represented by including more interview respondents. Also, research should be conducted that would determine the most effective and efficient type of programming (lecture, discussion, group activities, etc.) and the best method of curriculum delivery (one-time presentations, recurring programs, internet/TV/billboard campaigns, etc.) by racial/ethnic group.

Appendix A

Health Needs Assessment at a Glance
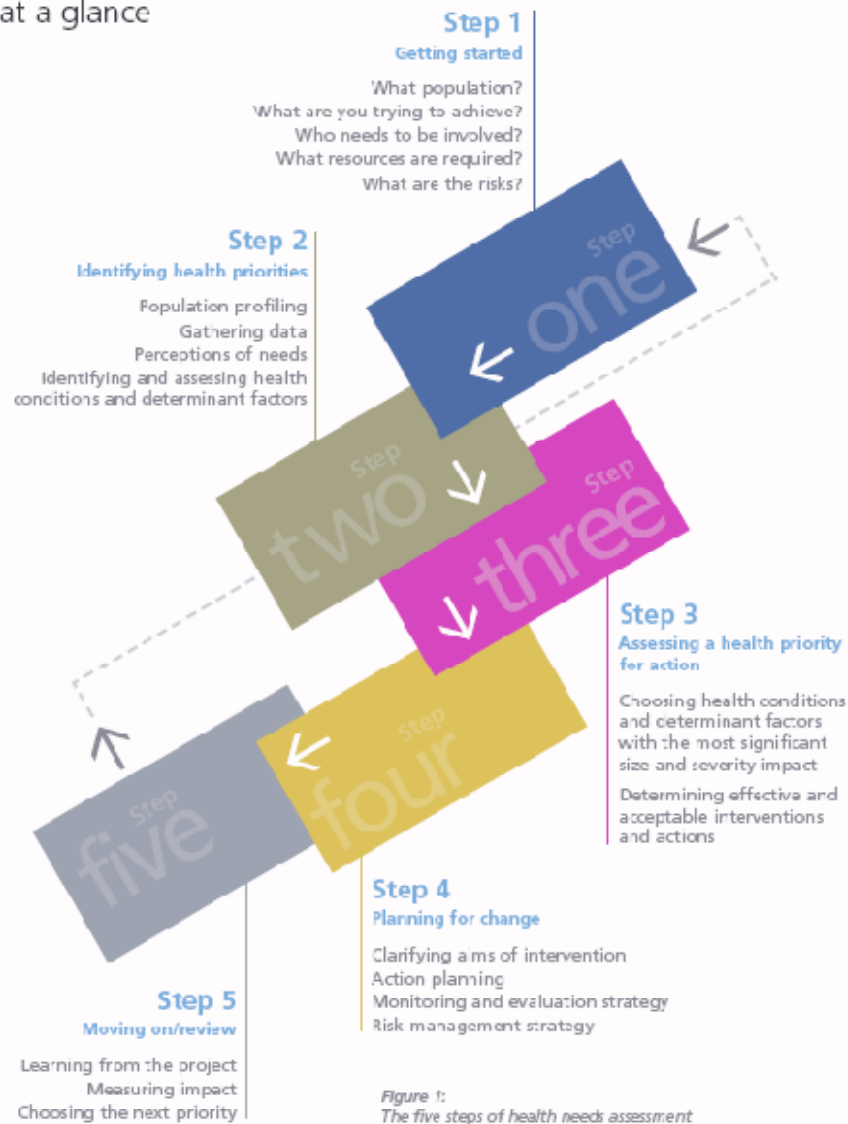
Summary:
Health needs assessment
at a glance

Step 1
Getting started

What population?
What are you trying to achieve?
Who needs to be involved?
What resources are required?
What are the risks?

Step 2
Identifying health priorities

Population profiling
Gathering data
Perceptions of needs
Identifying and assessing health
conditions and determinant factors

Step 3
**Assessing a health priority
for action**

Choosing health conditions
and determinant factors
with the most significant
size and severity impact

Determining effective and
acceptable interventions
and actions

Step 4
Planning for change

Clarifying aims of intervention
Action planning
Monitoring and evaluation strategy
Risk management strategy

Step 5
Moving on/review

Learning from the project
Measuring impact
Choosing the next priority

Figure 1:
The five steps of health needs assessment

2

References

Dahlgren, G. (1995). European health policy conference: Opportunities for the future. *Intersectoral action for health. 11.* Copenhagen: World Health Organization.

Hooper, J. &. (2002). *Health needs assessment workbook.* London: Health Development Agency.

Lillie-Blanton, M. L. (1996). Race/ethnicity, the social environment, and health. *Social Science & Medicine , 43* (1), 83-91.

Matteson, D. W. (1998). Infant mortality: A multi-level analysis of individual and community risk factors. *Social Science & Medicine , 47* (11), 1841-1854.

Moran, J. S. (1989). *The impact of sexually transmitted diseases on minority populations.* Atlanta: Centers for Disease Control.

National Center for Health Statistics. (2000). *Health, United States.* Hyattsville: Public Health Service.

National Coalition on Health Care. (2004). *Building a better health care system: Specifications for reform.*

Nebraska Department of Health and Human Services. (2008, August 4). *Health Department Profiles & Highlights.* Retrieved June 8, 2008, from Nebraska DHHS, Statistics & Reports: http://www.hhs.state.ne.us/profiles/sarpy_cass_HD.htm

Professional Research Consultants, Inc. (2008). *Community Health Assessment- Sarpy & Cass Counties, Nebraska.* Omaha: PRC.

Sarpy/Cass Department of Health and Wellness. (2003). *The results of a needs assessment conducted in Cass and Sarpy counties.* Papillion: Sarpy/Cass Department of Health and Wellness.

Stevens, A. &. (1998). Needs assessment: From theory to practice. *British Medical Journal* , 1448-1452.

United States Census Bureau. (2004). *US Census Population Estimates.* Silver Spring: US Census Bureau.

Williams, M. V. (1998). Relationship of functional health literacy to patients' knowledge of their chronic disease: A study of patients with hypertension and diabetes. *Archives of Internal Medicine* , 166-172.

Wright, J. (1998). Development and importance of health needs assessment . *British Medical Journal* , 1310-1313.