COMMUNITY HEALTH SURVEY RESULTS
Kearny County, Kansas

Submitted by Felix, Burdine and Associates
with support from the Kansas Health Foundation

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Executive Summary

This report describes of the results from a community health survey conducted in Kearny County, Kansas from January through March, 1998 by Felix, Burdine and Associates (FBA) for the Kansas Partnership (a partnership of state organizations supported by the Kansas Health Foundation) and the National Health Service Corps (NHSC), in the Bureau of Primary Care, Health Resources and Services Administration.

The survey had an overall response rate of 66% (a combined rate of 86% cooperation to a phone recruitment and 77% to the mailed survey). Four hundred and twenty (420) persons from Kearny County are included in the sample.

The sample is generally representative of Kearny County with three exceptions: there are more women, more White persons, and more persons with higher levels of education than comparative figures from 1990 for Kearny County indicate. The higher proportion of women is the only statistically significant difference.

The survey was analyzed to identify major findings in seven areas. Key findings in each of those areas are:

Health Status
Respondents are asked to rate their health as either excellent, very good, good, fair, or poor. The overall responses to this question in Kearny County were: excellent (13%), very good (40%), good (33%), fair (12%), and poor (2%). Respondents with lower incomes and lower levels of education were more likely to report lower health status than persons with higher incomes or higher levels of education.

Prevalence of Disease and Disability
The most frequently reported conditions by respondents to the survey included arthritis (31%), hypertension (28%), high cholesterol (28%), and depression (18%). Both women and men over age 65 report hypertension in a higher proportion than current state or national figures indicate. Women age 55 and over report high cholesterol significantly more than the state or national figures indicate.

Risks for Disease
Differences between Kearny County and Kansas state figures exist for the following risks:
1) Not always wearing a seatbelt, for which Kearny County has a higher proportion than the state. Kearny County is ranked **3rd** of all Kansas counties for motor vehicle injury death rates (number of deaths per 100,000 people, calculated based on deaths between 1979-1994); this risk factor may be a contributor to that high rank.

2) Overweight, for which Kearny County reports has a higher proportion than the state.
Another important finding from the Kearny County survey is that health risks do not occur alone: *persons who report any risk factor are most likely to also have three or more of those risks.*

Opportunities for Prevention
For preventive screening, the following is a summary of areas for health improvement in Kearny County: blood pressure screening among adults, dental screening, colon-rectal cancer screening, prostate cancer screening for men, and mammography screening for women over 40. The following are areas where Kearny County should maintain its successful screening practices: cholesterol screening and Pap Smear screening for women.

Factors that Impact Access to and Quality of Primary Care
Kearny County respondents have very good access to health services, both in reality and perception. Overall, 81% of respondents report being satisfied with both the quality and the results of their health care. A majority of community members report having a primary care provider or a regular place for care. For persons with a primary care provider, they rate aspects of their relationship with that provider as good or very good, including how they are treated by that person and how they experience the process of obtaining care from them.

Access to pharmacy care is the greatest perceived access challenge at this time, and the immediate cost of care for both insured and uninsured persons is the largest financial challenge to access. This is evident in the lack of insurance coverage for some basic primary care services, such as dental care, and the predominant insurance arrangement of a deductible among those with employer-based or commercial insurance.

Consumption of Medical and Human Services
The results from the survey confirm that the most "vulnerable" of the population -- persons with incomes less than 200% of the Federal Poverty Level and the uninsured -- report needing and consuming health and human services in a greater proportion than community members with higher incomes, insurance, or employment.

Social Capital
The social capital -- the trust, networks, and involvement of community members -- necessary to organize and implement health improvement activities is available in Kearny County. More importantly, "health improvement" also includes those ideas and activities that help community members to work together, build trusting relationships, and accept both the responsibility and benefit of being involved in community activities.

Application
The data from this survey can be applied in Kearny County to inform the Community Health Assessment Process underway in the county, determine local progress toward nationally established goals for health improvement, inform the community about Kearny County's health issues, inform strategic planning by Kearny County Hospital or other health providers in Kearny County, and devise strategies that can improve the trust, networks, and social integration of the community as a means to

improving community health. For example, a summary of the survey results can be published in the local newspaper as one method to inform Kearny County residents about their health.

What Is In This Report And How It Can Be Used

This report describes of the results from a community health survey conducted in Kearny County from January through March, 1998 by Felix, Burdine and Associates (FBA) for the Kansas Partnership (a partnership of state organizations supported by the Kansas Health Foundation) and the National Health Service Corps (NHSC), in the Bureau of Primary Care, Health Resources and Services Administration.

The survey was conducted in Kearny County and three other communities (Wallace and Greeley Counties in Kansas, and the city of Providence, RI) to help the NHSC to assess its impact on the communities it serves. In total, 420 people in Kearny County responded to the survey.

This report is organized into sections, one for each of the seven concepts that define population health:

- *Demographics of a population* describe the "dimensions" of a population: its size, age, cultural and ethnic mix, income structure, employment levels, and educational attainment. The *social determinants of health* are the environmental, behavioral, cultural, and political factors that influence the health of populations; these determinants include the distribution of income in a population, housing available, and educational attainment.
- *Functional health status* is a measurement of an individual's ability to function in every day life, both mentally and physically.
- *Prevalence of disease* is the extent to which conditions such as hypertension or depression, or impaired physical abilities are found in the population.
- *Risk for disease and opportunities for prevention* are measures of the prevalence of health behaviors that put individuals at risk for disease (smoking, exercise habits, drinking habits, stress) and, additionally, the availability and use of activities designed to curb or detect the impact of these risks on health.
- *Factors influencing access to and quality of care* includes those measures which indicate if and how individuals obtain a basic service: primary medical care. Insurance status, health manpower available in a community, organization of medical-care services, and provider characteristics are contributing factors.
- *Consumption of medical, health and human services* is an indication of resources needed and used by a population to address individual health challenges.
- *Social capital* is defined as the social networks, trust, civic involvement, and problem solving potential and ability present in a population or community. Dimensions of social capital include the perceived disparities in income or power in a community, perceptions of individual influence in a community, and religiosity.

The survey is designed to provide information in each one of these concept areas.

Community discussion groups, comprised of 80 residents of Kearny County were also conducted in January, 1998. The results from those discussions, and this survey are two "volumes" of reports available to the Kearny County community from the NHSC Community Assessment project.

It is important to use available secondary data in a community as a complement to survey data that are collected. The sources available from Kearny County were listed in the community discussion group report issued in February 1998. Since that time, another source of county-level data was made available: Health and Social Factors in Kansas, A Data and Chartbook 1997-98, published by the Kansas Health Foundation.

Additionally, National Health Survey™ provides comparative statistics for the results obtained from the survey in Kearny County. The National Health Survey™ (NHS) was conducted in 1995 by FBA using a similar methodology and questionnaire as the *Community Health Survey*. The NHS provides a national comparison figure for many of the questions asked in the *Community Health Survey* that are not available through other sources. Where possible in this report, comparisons with the NHS will be given for *Community Health Survey* data.

In the report issued on the findings from the community discussion groups, the following were listed as benefits of a health status assessment survey to Kearny County:

- The information can be used by Kearny County Hospital for internal strategic planning. As a rural hospital participating in the Pioneer Health Network (PHN), Kearny County Hospital must understand the health needs and access patterns of a broad population, and to prepare for how it might reach other communities in southwest Kansas. Information from the assessment on these population characteristics will aid in this planning and can be used as a model for other hospitals that are part of the PHN.
- In accreditation processes for the hospital, such as for the Joint Commission for the Accreditation of Health Care Organizations (JCAHO), a compliance issue is "planning and assessing community needs." The health status assessment conducted as part of this process can fulfill this compliance component.
- The beginning of a community health plan has been developed as part of the Community Health Assessment Process (CHAP) in Kearny County. The results of this assessment can be used to set both process and outcome measures for the strategies developed to meet the health issues identified, specifically in the area of heart health, cancer prevention, and health habit behavior modification.
- The survey results can be used to compare local progress toward the Healthy People 2000 Objectives for the Nation in many of the objective areas chosen as part of that project.
- Policy forums were suggested as a process for Kearny County leaders in local government, health professions, and local businesses to keep all county leaders informed of critical policy issues facing the county. Kearny County Hospital can take a lead in organizing these discussions and focus on county health policy issues in this leadership role. The results of the survey can contribute to this education process.

These proposed benefits will be reviewed at the conclusion of this document in a discussion of application of the survey results. Other uses for the survey data and this report include:

- use of the data to secure funds from the community by including information from this report into grant applications for federal, state, or philanthropic dollars;
- use of the report to generate ideas for health improvement programs that focus on prevention or education; and
- use of the report to educate community members about health in Kearny County.

Demographics

The 420 respondents to the Kearny County survey help us understand more about Kearny County -- what its residents look like, how long they have lived in their community, the level of education they have achieved, their current level of employment, and other characteristics that help to paint a picture of the community as a whole. This section of the report describes the survey sample.

The second column of the table on this page contains percentages that describe demographics of Kearny County survey respondents. The third column contains, where available, a comparison for that number.

Why do we provide this comparison? Communities often have questions about how closely the sample of people from their community who answered the survey, represent the entire community. Demographic comparisons such as from the Census or other state level sources help those who will use the data to form a judgement about its quality in this regard. The caveat in making these comparisons is that comparative figures are usually much "older" than the survey data. Therefore, changes that have occurred over time in the community are not reflected in available "comparison" statistics.

Demographic Characteristics	***Community Health Survey***	**Kearny County Comparison Statistics (1990)**	**Source For Kearny County Statistics**
% Total Population <100% of the Federal Poverty Level	7	10	County Profile/US Census
% Total Population <200% of the Federal Poverty Level	27	34	County Profile
% of Adults Unemployed	2.2	3.6 (1992)	County Profile
High School Graduates (% Population Age 25+ with at Least a High School Diploma)	80	74	County Profile
% of Population that is Not White	10	17	Health and Social Indicators Chartbook (1990 figure)
% Female	67	49	County Profile
% of Population Age 65+ (as a % of Population Age 18+)	20	17	County Profile (data used for calculation)

The comparison between demographics for the sample and statistics on Kearny County from 1990 show the sample to have higher proportion of women, White persons, and persons with higher education. The percentage of women in the sample is the only figure significantly higher than the comparison population figure. Given the populations that *may* be under-represented in this sample, it is important to consider that the survey results may present a "rosier" reality: persons experiencing poorer health status are found more frequently among groups under represented in this sample.

Pie charts illustrating the distribution of survey respondents by other demographic characteristics measured in the survey are included in Appendix 1 to this report. Additionally, community members asked if there were significant differences between Deerfield and Lakin residents, and between White and non-White county residents. A table that compares a series of health indicators from the survey for these two population groups is provided in the Appendix as well. The results of that analysis show that there are few significant differences between Lakin and Deerfield respondents, but quite a few differences between White and non-White respondents.

Health Status

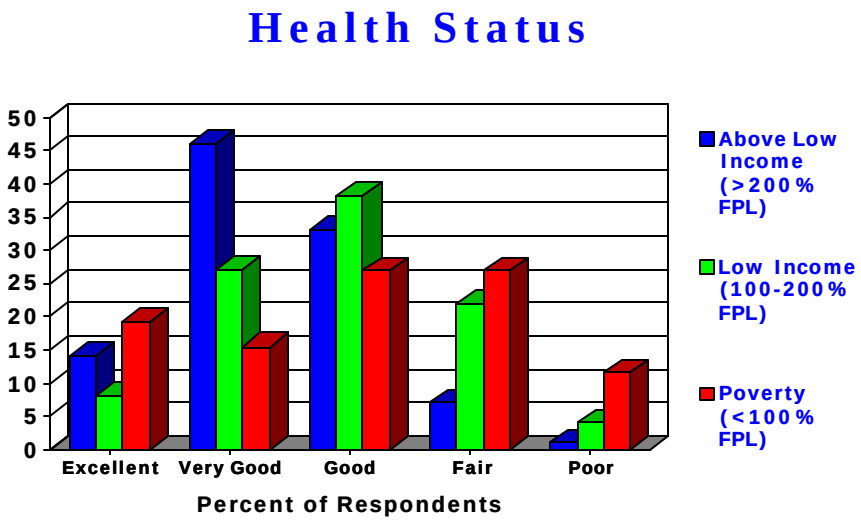
Health is an individuals capacity, relative to his or her aspirations or potential for living fully in the social, economic or political environment (FBA, 1994). This means that a person's ability to function -- their ability to live fully -- within the context of their community's cultural, social, and economic circumstances is the most important measure of health. This also means that to measure *health*, we must measure a persons's ability to function. This section of the report describes what we know about the functional health of Kearny County survey respondents.

Included in the community health survey are a series of questions called the SF-12 ("Short-Form" 12). These questions have been developed and tested by researchers who seek to measure how people function mentally and physically, and how they feel about their overall level of health. The results of these questions will be discussed in this section as the first step to describing the health of Kearny County.

Research, study, and practice also tell us that the income, education, and sufficiency of the housing a person lives in influences their ability to function, more so than any medicines or medical services that are available in a community. Therefore, it is important to look at how people with different incomes or education levels, describe their health and how they are feeling. Differences in the ability to function because of these differences is the first step to understanding who is "healthy" and who is "unhealthy."

Overall Health Status

The single best measure of health status in a population is the response to the question: In general, would you say your health is . . .? Respondents are asked to rate their health as either excellent, very good, good, fair, or poor. The overall responses to this question in Kearny County were: excellent (13%), very good (40%), good (33%), fair (12%), and poor (2%). The chart below illustrates the response to this question on the basis of household income. These results show that income has a relationship to how people feel about their health.



In addition to overall health status, the SF-12 allows us to understand how people are currently functioning both mentally and physically. We learn this through questions about how much pain people experience, how difficult it is for them to fulfill their roles in life, and how their health has influenced their social lives and their emotions. The results of these questions, for example, tell us if people are functioning well in everyday life, or if they have difficulty, functioning either mentally or physically.

From Kearny County respondents, there are two major findings from the SF-12:

- People with a higher level of education report higher levels of physical health.
- People with higher incomes report higher levels of mental health and physical health.

These findings confirm that income and education relate to how people function, or how healthy they are. What does this mean for improving health in Kearny County? First, people with lower incomes and lower education should be a focus of health improvement strategies; as they are the groups with poor health. However, because of their comparatively lower level of mental and physical functioning, persons who have a lower level of education and income may require outreach to participate in activities or programs that improve their health.

Prevalence Of Disease

This section of the report describes the reported levels of chronic disease by Kearny County survey respondents.

Conditions such as heart disease and diabetes impact the ability of people to function physically and mentally. It is important to measure the amount (or prevalence) of disease and disability in a community for this reason.

Survey respondents indicated if they had ever been diagnosed by a clinician with any one of a list of chronic conditions. Hypertension, high cholesterol, depression, and arthritis were the most frequently reported clinician-diagnosed conditions in Kearny County. Responses are illustrated in the tables below, by age and gender of effected individuals. Kearny County figures for the entire population are in the first row, under the name of the chronic condition. National and state figures for the prevalence of chronic conditions obtained from Healthy People 2000 or the 1995 Kansas Behavioral Risk Factor survey report are included for comparison.

Percent of Respondents with Condition

Hypertension (28%)	**Age 18-34**	**Age 35-44**	**Age 45-54**	**Age 55-64**	**Age 65+**	**Kansas***	**Nation**
Women	9	16+	12	21+	44+	23	22% (US Median Rate, 1995)*
Men	15	15	34+	29	67+	22	

High Cholesterol (28%)	**Age 18-34**	**Age 35-44**	**Age 45-54**	**Age 55-64**	**Age 65+**	**Kansas***	**Nation**
Women	9	14+	29+	49+	41+	35	19% (people age 20-74, 1994)#
Men	12	18	37+	47	50	28	

Depression (18%)	**Age 18-34**	**Age 35-44**	**Age 45-54**	**Age 55-64**	**Age 65+**	**Kansas***	**Nation**
Women	17	29+	24	28+	14	6% (reported sad, blue, depressed) *	N/A
Men	0	6	20	6	11		

Arthritis (31%)	Age 18-34	Age 35-44	Age 45-54	Age 55-64	Age 65+	Kansas*	Nation
Women	6	20+	16	64+	70+	N/A, but 16% reported arthritis as source of activity limitation	N/A
Men	15	24	26	29	56+		

*Figures from 1995 Kansas BRFS Report
#Healthy People 2000 report
+ Figures based on over 10 respondents; can be considered "reliable"

Conditions reported to affect less than 10% of the population include: asthma, angina, emphysema/chronic bronchitis, cancer, congestive heart disease, diabetes, and mental health problems.

Cancer was identified as a priority in the Community Health Assessment Process (CHAP) organized by Kearny County Hospital and other community partners. The following table is provided to contribute additional information to that process. Because of the small number of respondents with cancer, these numbers should be interpreted with caution.

Cancer (7%)	Age 18-34	Age 35-44	Age 45-54	Age 55-64	Age 65+	Kansas	Nation
Women	4	3	0	15	15	Figures for state and nation are for specific cancers; survey question was not specific	
Men	0	3	3	6	24		

Similarly, diabetes is an important focus of many federal, state, and local programs around chronic disease management, so data are provided on this condition as well. Again, because of the small number of respondents with diabetes, numbers should be interpreted with caution.

Diabetes (6%)	Age 18-34	Age 35-44	Age 45-54	Age 55-64	Age 65+	Kansas	Nation
Women	0	3	5	13	40	5	4% (Median prevalence in US,1994)*
Men	12	9	3	0	13	4	

*Figures from 1995 Kansas BRFS Report

These data are challenging to analyze because of the relatively small number of "cases" from Kearny County. However, based on reliable data, the following are true:

- Both women and men over age 65 report hypertension in a higher proportion than current Kansas or national figures for prevalence of hypertension.
- Women age 55 and over report high cholesterol in a higher proportion than current Kansas or national figures for prevalence of high cholesterol.

Kearny County women between the ages of 35 and 65 are also more likely to report depression, and women and men over age 65 are most likely to report arthritis. There are no direct state or national comparisons for these figures.

The disease patterns found in Kearny County are not unusual, but hypertension and high cholesterol as chronic conditions deserve attention, particularly among persons age 55 and over. These conditions can also be influenced by community interventions, in addition to clinical interventions. For example, among persons with hypertension that have been diagnosed by a clinician, blood pressure is often maintained by medications. Uncontrolled hypertension –hypertension that re-occurs because persons do not or cannot adhere to their prescribed medications--can be addressed by simple outreach programs, for example, phone calls by neighbors or friends to check on elderly neighbors. Incorporating persons in this outreach who are in their 30s and 40s might also serve an educational purpose, and prevent habits that make these individuals prone to hypertension as they age.

Risks For Disease

This section of the report describes behaviors (or "health risks") that make Kearny County respondents more prone to disease or death.

Health risks such as smoking or overweight are an indicator of future health problems; for example, if there is a high proportion of obese individuals in a community, a higher rate of heart disease might be expected. Behaviors such as smoking or excessive drinking can be modified by health promotion or education programs, so a decrease in these risks can lead to a healthier population.

The prevalence of risk and health behaviors as reported by respondents to the *Community Health Survey* are detailed in the following table; health behaviors of respondents to the survey are compared to results from Kansas data from the 1995 Behavioral Risk Factor Survey and The National Health Survey™.

Health Risk Behaviors	*Community Health Survey*	Kansas Behavioral Risk Factor Survey 1995	National Health Survey™ 1995
Smokers	21%	20% (rural)	23%
Do Not "Always" Wear Seatbelt	72%	52% (rural)	36%
Fourteen or More Drinks Per Week	2%	3% (chronic drinkers)	10%
Drive After Drinking	7%	3%	6%
Do Not Exercise/Sedentary Lifestyle	26%	28%	14%
Stress (Report Most Days as "Extremely" or "Quite" Stressful)	25%	N/A	N/A
Overweight (Moderate to High Risk Based on Body Mass Index Calculation)	40%	28%	33%

Differences between Kearny County and Kansas state figures exist for the following risks:

- Not always wearing a seatbelt, for which Kearny County has a higher proportion than the state. Kearny County is ranked **3rd** of all Kansas counties for motor vehicle injury death rates (number of deaths per 100,000 people, calculated based on deaths between 1979-1994); this risk factor may be a contributor to that high rank.
- Overweight, for which Kearny County reports has a higher proportion than the state.

In Kearny County, persons under age 44 were more likely to report that they are still smoking. Based on the average number of times respondents reported exercising in a week (not reported in the table

above), persons in poverty reported exercising more frequently than the overall population; this figure may also be a reflection of the slightly higher proportion of younger persons who report poverty level incomes in Kearny County.

Respondents age 35-44 and respondents with incomes greater than 200% of the Federal Poverty Level were most likely to report having fourteen or more alcoholic drinks per week. Persons with incomes greater than 200% of the Federal Poverty Level also reported driving after drinking more frequently. Although not significantly different than the state, these findings indicate that the alcohol consumption priority identified in the Community Health Assessment Plan (CHAP) might be targeted at adults with these characteristics.

To analyze health risks further, survey respondents were divided into two categories: persons who have 0-2 health risks, and those with three or more risks. Another important finding from the Kearny County survey is that health risks do not occur alone: *persons who report any risk factor are most likely to also have three or more of those risks.* For example, 51% of current smokers report three or more health risks, as do 40% of those who report zero exercise in a week. Interventions for any one health risk then, would achieve maximum benefit if that intervention has components that help people to address their other health risks as well.

In summary, lack of seatbelt use and overweight are two risks Kearny County might consider taking steps to modify. There are many examples of effective county-wide campaigns to increase seat-belt use. Overweight is an important risk for coronary heart disease and stroke; an example of a fun, but effective intervention to encourage weight loss through competition is included with this report as an additional source of ideas for health improvement.

Opportunities For Prevention Of Disease

There are two ways to reduce disease in a population: reduce the behaviors or risks that can produce disease, and detect diseases earlier so they can be treated or managed. This section describes survey results that show how Kearny County is both decreasing its risk and working to detect disease.

Decreasing Risk

Health care providers -- particularly primary care providers -- have the opportunity to counsel persons in the context of an office or clinic visit about their health risks and risk behaviors. Respondents were asked to indicate if they visited a doctor, nurse, physician assistant, or nurse practitioner in the past year, if that provider talked with them about their diet, stress level, weight, level of exercise, smoking, and other risks to poor health. The following table describes the level of this risk counseling:

Health Risk Area	Counseled by a Doctor, Nurse, Physician Assistant or Nurse Practitioner	Counseled by a Doctor, Nurse, Physician Assistant or Nurse Practitioner AND had a Regular Check up in the Past Year
Diet	29%	35%
Stress Level	24%	27%
Weight	27%	30%
Heart Disease Risk	20%	25%
Stroke Risk	13%	20%
High Blood Pressure Risk	26%	32%
Sexually Transmitted Disease Risk	5%	5%
Level of Exercise	24%	30%
Smoking	15%	14%
Preventing Falls or Accidents in Home	6%	8%
Alcohol Consumption	5%	5%

In order to change the prevalence of risk behaviors in the population, for example through interventions where clinicians advise their patients more frequently, the general "readiness" to change behaviors on the part of individuals with risk factors is an important piece of information. Respondents' readiness to change is reflected in responses to the question: What would you say if a health care provider told you to make lifestyle changes to improve your health? Response options were:

- I have some changes to make and I really think I should work on them;
- There is nothing I really want to change;
- I want to make changes but I find it too difficult;
- I am really working hard now to change; and
- I need help right now to maintain changes I have already made.

This scale was modeled after studies which have developed indicators of stages of change, most notably the University of Rhode Island Change Assessment Scale (URICA).

In addition to an individual's current "readiness" for behavior change, past attempts (or success) in changing health risk behaviors is a predictor for the success of future attempts to change risks. Respondents were asked: Have you ever done any of the following because of a health care provider's advice? The table below illustrates responses to this question:

Ever Made the Following Changes Based on a Providers Advice?	
Reduced Alcohol Consumption	7%
Cut Down or Quit Smoking	16%
Wore Your Seatbelt More	14%
Changed Your Diet by Reducing Intake	33%
Changed Your Diet to Healthier Foods	41%
Exercised More	33%
Learned to Relax or Reduce Stress	30%

Counseling by providers, current readiness to change, and behavior changes made in the past can inform how Kearny County can target programs to reduce health risks. For example:

- 21% of all respondents are smokers.
- 60% of current smokers have been counseled by a clinician about smoking in the past year.
- 40% of current smokers have, at some point, cut down or quit smoking based on a providers advice.
- 67% of current smokers are ready to "work on" or are "working now to change" some of their lifestyle habits -- one of which may be smoking.

A smoking cessation program in Kearny County would be successful with almost two-thirds of all current smokers. This figure could be used as a benchmark for a smoking cessation program in Kearny County. Forty percent (40%) of current smokers have made a change in this behavior because of the advice of a clinician; therefore, a smoking cessation program could incorporate specific education components that are clinician driven. This would help to continue Kearny County's history of clinician advising in this area, evident in the majority of smokers who have, in fact, been counseled by a clinician about their smoking habit.

Similarly:

- 40% of all respondents are overweight.
- 35% of those who are overweight have been counseled in the last year about their diet, 41% have been counseled specifically about their weight, 20% have been counseled

about their risk for heart disease, 30% have been counseled about their risk for high blood pressure, 24% about their level of exercise, and 17% about their risk for stroke.

- 42% of overweight respondents have, at some point, changed their diet to eat healthier foods; 44% of overweight respondents have changed their diet by reducing the amount of food they eat; and 36% have exercised more based on a provider's advice.
- 64% of persons who are overweight report that they are ready to "work on" or are "working now to change" some of their lifestyle habits -- one of which may be their weight.

A weight control program in Kearny County would be successful with almost two-thirds (64%) of those who are currently overweight, and again, this figure could be used as a benchmark for a weight control program in Kearny County. Forty two percent (42%) of those who are overweight have made a change in behaviors that relate to their weight because of the advice of a clinician. A counseling component that also incorporates discussion about risk for disease, such as heart disease or stroke would be important to consider in Kearny County.

Screening as an Opportunity to Prevent Disease

Preventive screenings are those activities that can detect chronic conditions before they become a serious health problem. The most familiar screenings are those which detect heart disease and cancer, two chronic conditions prevalent in American adults. The United States Preventive Services Task Force recommends specific types of health screenings on the basis of age and gender, for example, men and women age 50 and over should have a colon-rectal cancer screening annually by either a fecal-occult blood test or a procto-sigmoidoscopy.

In addition to these recommendations, Healthy People 2000 also establishes goals for preventive screening. For example, a goal is for 50% of persons who should have an annual colon-rectal cancer screening to have one.

Using these recommendations and guidelines, it is possible to determine who is not "up to date" on preventive screenings, and how well the county is making progress toward goals set for the nation.

Blood Pressure Screening

Blood pressure screening is conducted to detect hypertension, a condition which is indicative of heart disease. It is recommended that individuals have their blood pressure checked every 1 or 2 years. Within Kansas, the 1995 Kansas Behavioral Risk Factor Survey reported that 92% of people have had their blood pressure checked within the past two years.

For Kearny County, 71% of survey respondents reported a blood pressure screening in the past year, 13% had a screening two years ago, 7% received their last screening between 2 and 5 years ago, 1% received this screening more than 5 years ago, and 8% of respondents have never had a blood pressure screening. Kearny County, then, is slightly behind the state level, at 84% of persons reporting a blood pressure screening within the past two years. Persons who are uninsured, and those with no regular source of care were most likely to report never having a blood pressure screening.

High Cholesterol Screening

The recommended guidelines for cholesterol screening for the adult population are given by the United States Preventive Services Task Force as every two years. For the nation as a whole, Healthy People 2000 reports the 1993 baseline figure for cholesterol screening as 54% of adults having a cholesterol screening in the past two years. The Healthy People 2000 goal is for 75% of people age 18 and over to have received a blood cholesterol screening within the past 5 years.

Kearny County has met this national goal already, with 79% of respondents indicating that they have had a cholesterol screening within the past 5 years. The county is also better than the state for cholesterol screening; the 1995 Behavioral Risk Factor Survey reported that 64% of Kansans have had their blood cholesterol checked within the last five years.

Dental Exam and/or Teeth Cleaning

An annual dental exam and teeth cleaning is recommended by preventive screening guidelines. The Healthy People 2000 goal is for 70% of persons age 35 and over to have a yearly dental exam. In Kearny County, 60% of persons age 35 and over have had a dental exam in the past year. For all respondents, only 2% of respondents have never had a dental exam, 57% have had an exam in the past year, 15% had a dental exam in the past two years, and 14% reported that they had a dental exam between 2 and 5 years ago. Persons in poverty were most likely to report "never" having a dental exam, as were persons with less than a high school diploma.

Survey respondents reported level of preventive screening can also be compared against the National Health Survey™ and Prevention Index™ standards. The Prevention Index™ is an annual study conducted for Prevention Magazine by Princeton Survey Research Associates. This study, which has ben conducted for over twenty years, asks adults to rate themselves on twenty-one (21) measures of health, including: diet, exercise and weight control, frequency of preventive medical exams, smoking, alcohol use, and auto and home safety. This Index can be used as a national comparison, along with the National Health Survey™ for items in the *Community Health Survey*. These comparisons are illustrated in the table below:

Screening Type	*Community Health Survey* (% in the past year)	Kansas BRFS (1995)	National Health Survey™ (% in the past year) 1995	Prevention Index™ (% within screening guidelines or the past year) 1996
Blood pressure				
Past year	71%	N/A	66%	85%
Past two years (cumulative total)	84%	92%		
Dental exam				
Past year	57% (60% age 35+)	N/A	68%	75%
Cholesterol				
Past year	47%	N/A	62%	60%
Past two years (cumulative total)	64%	N/A		
Past five years (cumulative)	79%	64%		

Colon-Rectal Cancer Screening

The United States Preventive Services Task Force recommendation for colon-rectal cancer screening is an annual exam for persons age 50 and above. The Healthy People 2000 goal for colon-rectal cancer screening is for 50% of people age 50 and over to report having a screening within the past two years.

Thirty-two percent of respondents (32%) age 50 and over have had a screening in the past year and 12% have had a screening in the past 2 years, for a total of 44% of persons age 50 and over with a screening in the past two years. This figure is slightly below the Healthy People 2000 goal. For respondents to the survey, 32% of persons age 50 and over have never had a colon-rectal cancer screening.

Prostate Cancer Screening

Men can receive a prostate cancer screening by either a blood test or a physical exam. Preventive screening guidelines recommend an annual prostate cancer screening for men age 40 and above. For men age 40 and over in Kearny County, 36% have had this screening within the past two years (33% in the past year, with an additional 2% reporting a screening in the past two years). Of men age 40 and over, 44%, have never had a prostate cancer screening.

Pap Smear (Screening for Cervical Cancer)

The United States Preventive Services Task Force and the American Cancer Society recommend an annual Pap Smear, as part of a pelvic examination, for women age 18 and over. Healthy People 2000 goals are for 95% of all women to have received a Pap Smear at some time in their lives. (Note: the FBA survey document does not distinguish women who do not have a uterine cervix in this question, as the Kansas Behavioral Risk Factor Survey does.)

Among all women in Kearny County, 53% have had a Pap Smear in the past year. A cumulative total of 67% of women have had Pap Smear in the past two years (closest analysis to "preceding three years" this survey can measure). Kearny County is also within the Healthy People 2000 goal in this area: only 94% of women report having a Pap Smear at some point in their lives (only 6% reported "never" having a Pap Smear).

Clinical Breast Exams and Mammograms

As reported in the Kansas Behavioral Risk Factor Survey report, the American Cancer Society recommends that women age 50+ have a clinical breast exam and a mammogram every year. The Healthy People 2000 goal is for 60% of women age 50+ to have a breast exam and a mammogram within the past two years. The table below shows Kearny County's compliance with this ACS and Healthy People 2000 standard:

Screening Type Received	Women Age 50+, in the past year	Women Age 50+, within the past 2 years (cumulative)	Healthy People 2000 Goal, Women 50+
Breast exam by a health care professional (clinical breast exam)	56%	72%	60% in the past 2 years
Mammogram	36%	46%	

In addition to the goal above, Healthy People 2000 goals for mammography and breast exams are for 80% of women age 40 and over to have had an exam of either type at some time in their lives. Ninety two percent (92%) of women age 40 and over in Kearny County have had a clinical breast exam at some point in their lives, but only 63% of women age 40 and over have had a mammogram at some point in their lives.

A higher proportion of women in poverty (incomes <100% Federal Poverty Level (FPL)) reported never having a breast exam (33%), and never having a Pap Smear (27%) than women with higher incomes. For this reason, the table below was constructed to illustrate the relationship between preventive screenings and income for women.

Screening Type Received "In the Past Year" by Women	Poverty (<100% FPL)	Low Income (100-200% FPL)	Above Low (>200% FPL)
Pap Smear	17%	49%	59%
Breast exam by a health care professional, age 40+	28%	54%	59%
Mammogram, age 40+	12%	32%	40%

The relationship between income, insurance coverage, and the ability of persons to pay for preventive screenings is important to understand. One-third (33%) of respondents in poverty and 27% of persons with low incomes in Kearny County are uninsured. An additional 50% of persons in poverty are Medicare insured, pointing out the challenges of the poor elderly. This is important to consider particularly for elderly women, as their age increases and screenings become recommended. These relationships will be considered more in depth in the next section.

For preventive screening, the following is a summary of areas for health improvement in Kearny County:

- blood pressure screening among adults,
- dental screening,
- colon-rectal cancer screening,
- prostate cancer screening for men, and
- mammography screening for women over 40.

The following are areas where Kearny County should maintain its successful screening practices:

- cholesterol screening and

- Pap Smear screening for women.

Factors Influencing Access To And Quality Of Primary Care

The Bantam Medical Dictionary (1990) defines primary care as: "health care rendered by the physician or other health professional who has first contact with a patient seeking medical treatment. The term is often applied to care provided by internists, pediatricians, and general practitioners or family practice physicians."

The *Community Health Survey* includes questions about access to primary care because it is an important aspect of population health: primary care is the care that detects disease, provides preventive screenings, and, in some cases, allows individuals or families to develop a relationship with a health care provider that ensures coordinated and comprehensive health care.

Primary care may mean different things to different people based on their experiences and their perceptions. For that reason, this section of the report describes results of survey questions that ask about the following components of access to primary care:

- regular providers and places for care;
- the characteristics of survey respondents' relationship with primary care providers;
- community perceptions of access to primary care services;
- experience of community members in the process of obtaining primary care; and
- challenges people face in obtaining primary care services (such as distance, cost, or lack of insurance).

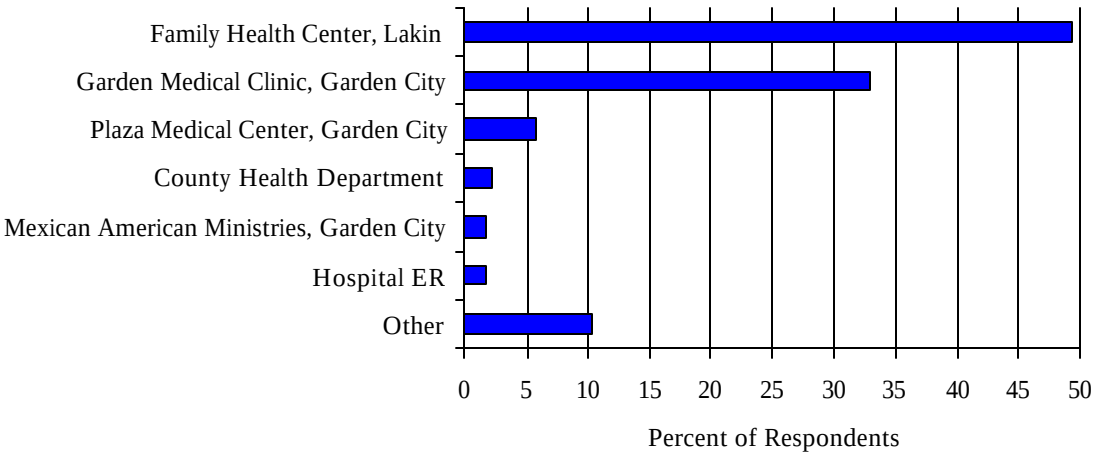
Analyzing these components also allows communities to pinpoint where challenges to accessing primary care might be: Is it in the relationships that people have with their primary care providers? Is it because community members perceive that services are available? With this knowledge, efforts to improve access to care can be better organized. The components of access to primary care will be discussed in turn in this section.

Regular Providers and Places for Care

Twenty-nine percent (29%) of Kearny County respondents do not have a doctor, nurse practitioner, or physician assistant they considered to be their regular health care provider. Only 9% of respondents overall indicate that they do not have a regular "place" for care. This proportion was much higher for Hispanic respondents, as 49% of Hispanic respondents report that they do not have a regular health care provider, and 24% of Hispanic respondents report that they do not have a regular place for care. Similarly, 41% of uninsured respondents report that they do not have a regular primary care provider and 20% of the uninsured report they do not have a regular place for care.

Using results from the regular "place" for care, Kearny County is almost within the Healthy People 2000 goal, which is to have 95% of persons age 18 and over reporting a regular "source" of primary care. Certain population groups, however, such as the uninsured and Hispanic persons, are not within these goals.

The following chart shows the regular places of care reported by survey respondents:



These answers total more than 100% because respondents were allowed to choose more than one option for their ususal place of care. Less than two percent of respondents indicated that their regular place for care was a hospital emergency room, a County Health Department, Mexican American Ministries, or an Area Mental Health Center (not shown on the chart above).

Persons who usually use the emergency room for care were asked to indicate from several choices why they usually use the emergency room. Among those who indicated they usually use the emergency room for care, the most frequent response was "medical doctor's office is not open when I can go for care." The next most frequent response was "I don't have a regular doctor."

Relationship with Primary Care Providers

The relationship between a primary care provider and a patient is important to understand; research has shown that if this relationship is a trusting one, patients have better health outcomes. One survey question asked respondents to rate how much they trust their primary care provider on a scale of 1-10. This scale was then organized into three categories: 8-10=high level of trust; 4-7= some trust; and 1-3= low level of trust. Overall, 71% of respondents in Kearny County have a high level of trust their primary care provider.

Four types of "knowledge" have been identified as important for primary care providers to have about their regular patients. These are knowledge of values and beliefs, knowledge of responsibilities (at home, work or school) that might influence health, knowledge of what worries individuals about their health, and knowledge of a patient's entire medical history. Each of these questions asked respondents to rate their primary care provider's knowledge on a scale of 1 to 6, with 1 corresponding to "very

poor" and 6 corresponding to "excellent." Overall, the average response for each question was between 4.1 and 4.2, meaning, for Kearny County as a whole, respondents rated their primary care providers as having "good" knowledge of them as a patient.

There are several survey questions that ask respondents with a primary care provider to rate aspects of how their primary care provider treats them on an interpersonal level. These aspects are:

- explanations given of problems or treatments;
- attention given to what (you) have to say;
- thoroughness of questions about symptoms and how (you) are feeling;
- instructions about symptoms to report and when to seek further care;
- advice and help given in making decisions about (your) care; and
- amount of time (you) have with doctor/nurse and staff during visit.

Each of these questions was asked on a rating scale of 1 to 6, with 1 corresponding to "very poor" and 6 corresponding to "excellent." The average response for each question was between 4.5 and 4.7, meaning, overall, respondents rated their primary care providers as "good" or "very good" for their personal treatment. There were no significant differences in the average rating for these aspects of primary care providers among sub-groups in Kearny County.

In summary, respondents with a primary care provider are positive about all dimensions of the relationship with their primary care provider.

Perceptions of Access to Primary Care in Kearny County

Perception is reality in many circumstances. When considering access to care, perceptions are especially important because these perceptions influence the choices individuals make about when, why, and even if they can access the services they need. The survey included questions about perceptions of access to care, additionally, perceptions of access to hospital and specialty care were asked. Respondents rated their perceived access on a six point scale, which ranged from 1 = "very poor" to 6 = "excellent." Responses in all categories for each perception question are shown in the table below.

Perceived Access to Care

	Very Poor	Poor	Fair	Good	Very Good	Excellent
Access Whenever you Need it	<1	3%	12%	34%	36%	14%
Access to Specialty Care	2%	2%	15%	32%	36%	14%
Access to Hospital Care	2%	3%	8%	30%	38%	20%

The average rating for these measures of access for all survey respondents was equivalent to "good" or "very good." However, older persons tend to rate their perceived access higher on average ("very good" or "excellent"), and the uninsured report their perceived access as lower ("poor" or "fair"). Among respondents who reported very poor, poor, or fair access "whenever you need it," the majority

were persons who had a high school education or less, or persons with incomes less than 200% of the Federal Poverty Level.
In a separate section of the survey, survey respondents were asked again to provide their perception about the seriousness of access to certain primary care services. Responses to these issues are shown here:

Perception of Access to Health Services

Issue	% of Respondents Rating this as a "Serious" or "Very Serious" Community Issue
Access to Pharmacy Services	32%
Access to Mental Health Services	9%
Access to Health Services	5%
Access to Dental Services	4%

As part of the community discussions in Kearny County, lack of local pharmacy care was most often mentioned as a pressing health service issue. The data on the perceived seriousness of that problem supports the community discussion group findings. Overall, Kearny County survey respondents perceive their access to care as very good.

Experience with the Process of Obtaining Primary Care
The April, 1997 "Issue Brief" from the Center for Studying Health System Change -- a center conducting a large national study on health system change and how it influences the health of populations -- stated that:

> "Population-based surveys have advantages to measuring access . . . Population-based surveys use a broader set of measures that capture dimensions of access, including aspects of primary care, the process of care seeking, barriers to care and unmet health needs. With this information, researchers can make inferences about who is at greatest risk for lacking access to care by comparing vulnerable populations, such as the uninsured, poor and low income persons and persons in poor health to the rest of the population."

The "process of care seeking" is the dimension of access discussed in this section. This process is very different for persons who do and do not have a primary care provider, and for that reason, only persons with a regular primary care provider were asked to rate the following aspects of accessing services:

Access Measure*	Very Poor	Poor	Fair	Good	Very Good	Excellent
Convenience of Location	<1%	1%	13%	26%	32%	27%
Hours Open	0%	1%	9%	37%	36%	17%
Length of Time Between Making an Appointment When you are Sick and Visit	2%	4%	19%	30%	26%	20%

Access Measure*	Very Poor	Poor	Fair	Good	Very Good	Excellent
Length of Time Spent Waiting in Office	3%	7%	23%	27%	26%	14%
Ability to Make Appointments by Phone	<1%	2%	5%	26%	36%	30%
Ability to get Advice Over the Phone	1%	5%	10%	29%	32%	23%

* Numbers are for respondents who report having a regular primary care provider

As the table illustrates, most respondents feel that their process for obtaining care is good, very good, or excellent. In general, the only dimensions that may be challenges for Kearny County respondents in the process of accessing services are those that involve "waiting" for appointments, either physically in an office, or for a visit to be scheduled.

Challenges to Access

Distance

Travel distance or time is often a large component of how people in communities perceive their access to care. Because of the importance of travel distances in rural communities, questions were asked about the distance, both time and miles, traveled for medical, dental, and pharmacy services. The average responses for each of these is shown in the next table:

Type of Service for Kearny County Respondents	Average Minutes for Care	Average Miles for Care	% of Respondents Rating this as a "Serious" or "Very Serious" Community Issue
Medical (Health)	29	20	5%
Dental	26	17	4%
Pharmacy	34	25	32%

Although the mileage and average amount of time traveled for pharmacy care is only slightly higher than for medical or dental services, access to this service is perceived as a much more serious community issue than access to medical or dental health services.

Cost

Community members often face financial challenges to obtaining primary care. To determine the challenge that out-of-pocket or other costs often present in seeking care, the *Community Health Survey* asked if respondents had delayed making a visit to a doctor or nurse, or if respondents "skip" medications or treatments, because it was too expensive. Forty-six percent (46%) of respondents indicated that they "often" or "occasionally" delay a visit to the doctors' office because of cost, and 28% of respondents indicated that they "often" or occasionally" delay medications or treatments because of cost. The figure for delaying prescription care is much lower than expected: 39% of all *insured* respondents indicated that they did *not* have coverage for prescription services, and there is an additional 10% of respondents who are currently uninsured for all services. Therefore, of the potentially 50% of Kearny County respondents who are uninsured for prescriptions, only half will delay taking/obtaining them because of the cost.

The example of prescriptions above illustrates another cost barrier for primary care services: even if an individual or family has insurance coverage, many primary care services may not be paid for as part of the insurance package. The following table illustrates for Medicare and commercially insured respondents, types of services that are not covered by their insurance plans. [There were too few Medicaid respondents in the survey sample to include their responses in this table.] These services probably require an out-of-pocket payment, which may be a barrier to receiving services.

Lack of Coverage for Primary Care Services Among Insured persons

Insurance Type	Dental Services Not Covered	Vision Services Not Covered	Mental Health Services Not Covered	Drug/Alcohol Detox. Services Not Covered	Prescriptions Not Covered
Medicare	64%	57%	38%	46%	62%
Employer/ Commercial Coverage	36%	57%	16%	22%	30%

Health Plan Requirements

There has been much change in the insurance options available to persons in our country over the past several years. Although many persons may have insurance coverage of some kind, there are often immediate financial or other requirements that are required to obtain health services. The following table details for survey respondents what these requirements are for the different insurance coverages reported in the survey:

Requirements to Obtain Primary Care

Insurance Type	Select a Certain Doctor	Obtain Permission Before Getting Other Services	Pay a Deductible	Use Only Certain Doctors	Use Any Doctor You Want But Have to Pay More
Medicare	12%	16%	56%	17%	25%
Employer/ Commercial Coverage	19%	26%	92%	26%	46%

Lack of Insurance

Currently, 10% of all Kearny County survey respondents are uninsured. The Kansas Behavioral Risk Factor Survey estimated that 11% of all Kansas adults were uninsured in 1995. A 1997 study done by Kansas University on insurance coverage in the state estimated that less than 3% of adults in frontier areas were uninsured, and that 9% of adults age 18-64 were uninsured. Lack of insurance does not effect all persons equally: for example, 36% of non-White respondents are uninsured, 20% of respondents age 18-34 are uninsured, and 33% of respondents in poverty are uninsured. This latter

figure raises a question about Medicaid eligibility in the county, and if there is an opportunity to increase enrollment for those who are in poverty and eligible for Medicaid coverage.

To understand the relationships between access and health insurance, it is important to ask more than "Do you have health insurance?" The history or consistency of an individual's coverage is as important as their current insurance status. This history gives a community an indication of the stability of the insurance resources available to individuals and families. In Kearny County, approximately 15% of survey respondents indicated that, over the past three years, they have had some lapse in their insurance coverage, three-quarters of that 15% indicated this lapse had been for a year or more. Low income persons (persons with incomes between 100-200% of the Federal Poverty Level) were most likely to experience a gap in their insurance coverage that lasted a year or more.

The relationship between employment and insurance coverage is also important to understand in a community. For example, if a large employer does not provide health insurance to its employees, the local health system might expect to provide a higher level of services for which it is not fully compensated. The following table details the insurance status of respondents who are both *uninsured and working* in Kearny County.

Employment Status

Insurance Type	Full Time or Self-Employed	Part Time	Retired	Homemaker	Student
Uninsured	44%	23%	3%	21%	--

Among uninsured Kearny County respondents, 44% are working full time or are self-employed (28% of the uninsured are employed full-time, an additional 15% are self-employed). It is these employed persons who would be expected to have insurance coverage, but do not.

In summary, Kearny County respondents have very good access to health services, both in reality and perception. Overall, 81% of respondents report being satisfied with both the quality and the results of their health care. A majority of community members report having a primary care provider or a regular place for care. For persons with a primary care provider, they rate aspects of their relationship with that provider as good or very good, including how they are treated by that person and how they experience the process of obtaining care from them.

Opportunities to increase access to care in Kearny County can be focused on increasing access to pharmacy care, which is the greatest perceived access challenge at this time. The immediate cost of care for both insured and uninsured persons is the largest financial challenge to access. This is evident in the lack of insurance coverage for some basic primary care services, such as dental care, and the predominant insurance arrangement of a deductible among those with employer-based or commercial insurance. Policies that make it increasingly difficult for Kearny County residents to pay for health services of any kind, such as changes in either private or public insurance programs, should be monitored by health providers. Regular discussions among local policy makers to keep abreast of these changes might be one approach to consider.

Consumption Of Health And Human Services

This section of the report describes the health and human services that have been consumed or needed by Kearny County respondents.

Sometimes, in order to function better, people "consume" medical, or other health services. This is most obvious in trauma cases, for example, when hospital care must be "consumed" to bring someone back to health. Similarly, for families to function, they must sometimes "consume" resources such as counseling for children or services to help resolve domestic violence. These types of resources are often called "human services." Understanding both the amount and type of health and human services consumed in a community is another key to understanding population health.

Hospital Stay-over
Eleven percent (11%) of respondents to the *Community Health Survey* indicated that they had stayed in a hospital for one night or more in the past year. This was most frequently reported by respondents over age 65, those who are Medicare insured, and by respondents who have a chronic disease.

Last Routine Check-up
It is important to determine the level of "contact" that community members have with their local health system. Fifty-five percent (55%) of all respondents have visited a doctor in the past twelve months for a "routine check-up," 13% have seen a doctor within the last two years, 13% had a routine check-up between 2 and 5 years ago, and 20% of respondents indicated that their last routine check-up was over 5 years ago. Women were almost twice as likely as men to report that they had been for a regular check up in the last year (62% of women vs. 39% of men). Persons with a regular primary care provider were more than twice as likely to report having a regular check-up within the last year (66% of those with a regular source of care vs. 27% of those who did not have a regular source of care).

Number of Times Visited Places for Care
Survey respondents were asked to indicate how often they used local facilities or options for health care services in the past year. The response options included facilities in both Kearny County and in Garden City. In the responses to this question, there are a few significant results:

- Persons in poverty or with low incomes reported receiving care in their homes more frequently.
- Persons who were enrolled in Medicaid, poor/low income, or uninsured reported using the Area Mental Health Center more frequently than other respondents.

Human Services
To determine the extent to which respondents perceive need for and actual use of a variety of other health and human services, respondents were asked to indicate whether they or any family member needed that particular service in the past year. The table below details the responses for reported need for services by survey respondents:

Human Service Needed	% of Respondents who Report "Need" for Service	Groups Most Likely to Report Need for This Service
Alcohol/Drug Abuse	3%	
Children and Youth	4%	Persons Age 35-44
Employment	5%	Unemployed Persons
Financial Assistance (Medical)	12%	Persons in Poverty or with Low Incomes, Uninsured Respondents
Financial Assistance (Welfare)	8%	
Food Stamps	6%	Persons in Poverty or with Low Incomes
Financial Assistance (Disability)	5%	
Family (Domestic Violence, Counseling)	4%	
Housing	2%	
Senior Citizens'	3%	
Veterans'	3%	
Day Care (for Children)	10%	College Educated, Age 18-34

Results from the survey confirm that the most "vulnerable" of the population -- persons with incomes less than 200% of the Federal Poverty Level, and the uninsured -- report needing and consuming health and human services in a greater proportion than community members with higher incomes, insurance, or employment.

Social Capital

This section of the report describes the social capital available in Kearny County and how it might be applied for community health improvement.

Social capital is not a new idea. By definition, social capital is the collective trust members of a community have for one another, their involvement in the community, the networks and social support they have available, and how the community works together to solve problems. What *is* new is the idea that not only is social capital related to a population's health, but that for communities to improve their health status, there must be social capital available for that purpose.

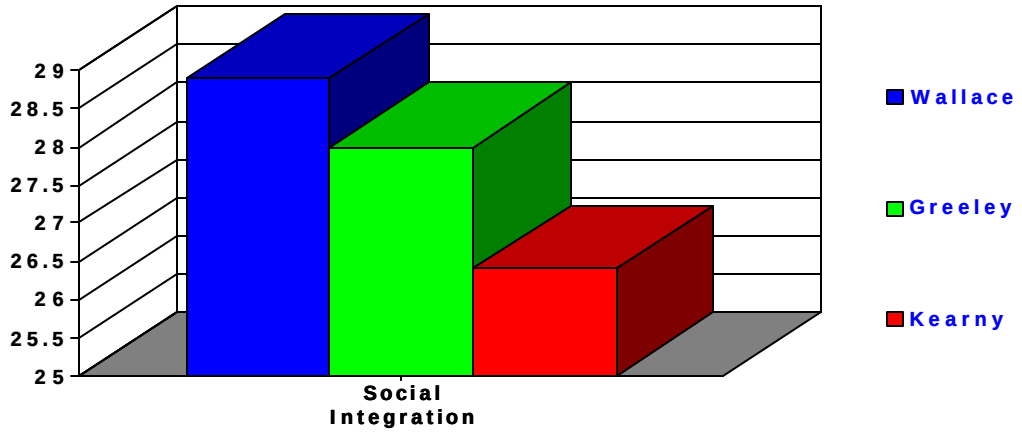
This idea of social capital was explored in the survey by asking about civic involvement, trust, community members' perceived influence over their environment, perceptions of disparity in power or income in the community, the social support available to community members, and the religiosity/spirituality of the community. The results for Kearny County to these social capital questions are the following:

- 89% of respondents have voted in an election in the past 12 months.
- 51% of respondents volunteer.
- 53% of respondents agree that if there is a problem in the community, people who live there can work together to solve it.
- 59% of respondents disagree that "there is nothing I can do to solve problems in my community when they happen."
- 54% of respondents disagree that people in the community are "only out for themselves."
- 70% of people disagree with the statement: "I am afraid when I am out after dark in my community."
- 37% of people disagree with the statement: "In my community, a small group of people have all the power."
- 68% of respondents disagree with the statement: "I feel like an outsider in my community."
- 50% of respondents have never been treated badly because of their age, race, religion or gender.
- 85% of respondents have strong religious beliefs, and 77% have reported praying for healing of medical problems.
- Respondents reported that an average of 10 friends/relatives were available to help them with a problem if they needed it.
- Respondents have lived in the county for an average of 10 years.

To make interpretation of these results simpler, results of questions were combined to create two indices: one that reflects civic involvement in the community, and one to reflect "social integration," the trust, networks, and perceived influence of community members in their community. The indices are created by finding the average "sum" of responses to the questions that ask about civic involvement or social integration. The value of these indices for Kearny County, as compared to Wallace and Greeley County (the only other counties where these figures are available) are shown on the next page:

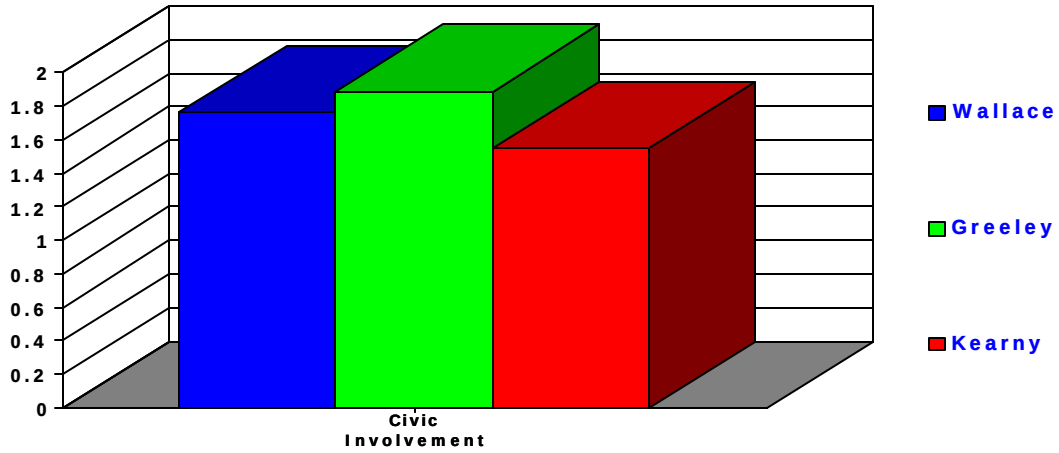
Social Integration Index

A measure of combined trust, networks, and influence



Civic Involvement Index

A measure of voting, volunteering and interaction with local government



These indices tell us the following about Kearny County:

- There are no significant barriers for Kearny County residents to work together to solve problems.
- There is a history of collaborative effort in the county, which was supported by findings from the community site visit.
- Compared to Wallace and Greeley Counties, Kearny County faces greater challenges to "social integration," probably due to its more diverse population and proximity to an urban center.
- Majority of the population currently serve as volunteers and are civically involved.
- Community members believe that problems can be solved by the community.
- There is a strong spiritual component to community life that can be utilized to address issues that impact the health of Kearny County residents.

The social capital necessary to organize and implement health improvement activities is available in Kearny County. More importantly, "health improvement" also includes those ideas and activities that help community members to work together, build trusting relationships and accept both the responsibility and benefit of being involved in community activities.

Application Of The Survey Data

Data that describe the health of a community are only useful if they can be applied. Based on knowledge of Kearny County, its current health issues, and the results of the survey, the following are proposed as ways the data can be used.

Informing the CHAP Process: Kearny County has implemented the CHAP process, and has arrived at several issues that are priorities for the community. These include cancer, heart disease, teenage pregnancy, alcohol consumption, and child care needs of the community. *In communities where a prioritization process has not yet occurred the survey data can be used to arrive at priorities; in Kearny County, however, it is more important that the survey data support the planning process that has already been completed. The data can provide insight to interventions that might best address those priority areas*. For example, cancer has been identified as a priority area. The survey data indicate that there are opportunities for Kearny County to improve its activities in the area of cancer detection and prevention, or general education and awareness of what causes cancer, for both men and women. Prostate cancer screening for men could be an area of focus that would contribute to the earlier detection of these cancers in men.

For child care, 10% of survey respondents overall indicated that they had day care services for children as a "need." Not surprisingly, respondents most likely to indicate this area of need were college educated persons, age 18-34 (28% of all persons in this age group reported a need for child care) -- those most likely to have young children and the desire to be in the workforce. This figure informs the CHAP process about the magnitude of the issue, and provides a benchmark. In the future, if child care is increased in the community, perceived need may decrease.

Measuring Local Progress Toward Healthy People 2000 Goals: The Healthy People 2000 goals are cited as benchmarks for some measures in this report. Many communities that do not have a process such as CHAP use survey results to determine if their community is currently better or worse than Healthy People 2000 goals, and use the differences as a means of setting priorities. Where these comparisons may be useful for Kearny County is in grant applications for Federal or State resources. In many of these applications, the ability to demonstrate the community's progress or position relative to a national goal --such as those in Healthy People 2000 -- is an important part of "stating the problem." or making a case for why resources should be directed to Kearny County.

Informing the Community About Kearny County's Health Issues: The community discussions held in Kearny County in January 1998 effectively accomplished one goal: informing community members about the status of health care providers currently in, and potentially coming to, the community. Educating and informing a community about its health is a significant undertaking -- it requires help from the media, health professionals, Board members, and community leaders. Education also happens in many different formats and venues, and community discussion groups are one example. The results of the survey and the community discussion groups can be compiled into one summary and made available to community members. Distribution of this document will continue this education process. Additionally, combining the results of the CHAP process, with pertinent data from the survey in such a document, will inform community members about the planning process already completed around health

issues. Ideas from community members about interventions that address the issues in the CHAP process would be one outcome of this education process.

Strategic Planning for Kearny County Hospital: Information from the survey around access to care, and what community members perceive to be the challenges to accessing care can be used by Kearny County Hospital in its planning process. For example, pharmacy care as a community need was supported by both the discussion groups and the survey results.

Improving the Trust, Networks and Social Integration of the Community as a Means to Improving Health: Research and study are now showing that the trust and connection between people in a community are as important to their health as the availability of medical services. The social capital available in a community is the strength it has to draw on to address health issues. Activities that can build connections between people and that help to develop trusting relationships are legitimate community health improvement activities. Consideration might be given to how interventions designed to address priority health issues can build in activities that can develop this trust and connections. Examples include leadership development initiatives or increased involvement in civic activities or decisions; many of these types of activities are often organized or ongoing in local churches, which would be a strong and natural connection for Kearny County residents.

Appendices

Appendix 1: Population Profiles

Population Profiles From The *Community Health Survey**

Population Health Measure	Non-White Respondents	White Respondents	
Health Status "Fair" or "Poor"	23%	12%	*
Health "Somewhat" or "Much Worse" Than 1 Year Ago	15%	13%	
Hypertension	20%	29%	
Diabetes	7%	6%	
Asthma	2%	12%	
Report Depression	11%	20%	*
Smokers	23%	21%	
Do Not Exercise	30%	25%	
Three or More Risk Factors	15%	10%	
Report Not Having a Primary Care Doctor or Nurse	43%	26%	*
Trust Primary Care Provider (if have one)	78%	70%	
Average Travel Distance for Medical Care	16 miles	21 miles	
Average Travel Distance for Dental Care	14 miles	18 miles	
Access Whenever Needed (excellent, very good, good)	82%	84%	
Access to Hospital Care (excellent, very good, good)	86%	89%	
Limited Access to Certain Doctors Because of Lack of Insurance Plan (a big problem)	25%	6%	*
Currently Uninsured	36%	6%	*
Medicaid Insured	5%	<1%	
Employer/Commercially Insured	50%	70%	*
Uninsured at Some Point in the Past Three Years	43%	13%	*
Employed Full-time, Part-time or Self-employed	67%	71%	
% Age 65 and Over	2%	21%	*
% Age 18-34	48%	17%	*
% With a High School Diploma or More	46%	88%	*
% With Incomes <200% of the Federal Poverty Level	65%	22%	*

The proper way to read these tables is that percentages are "of the population listed at the top of the column," for example "23% of those who are not White say their health status is fair or poor."

* Significantly different from each other

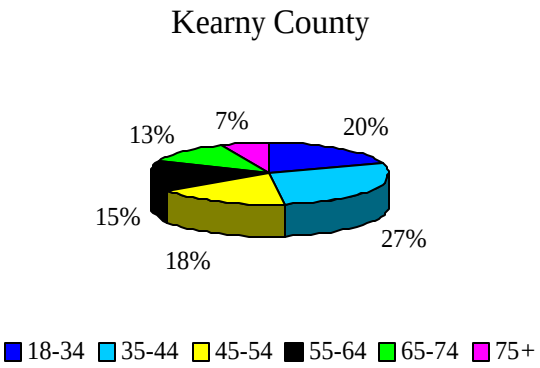
Population Health Measure	Lakin	Deerfield	
Health Status “Fair” or “Poor”	11%	20%	*
Health “Somewhat” or “Much Worse” Than 1 Year Ago	13%	11%	
Hypertension	28%	28%	
Diabetes	7%	3%	
Asthma	10%	6%	
Report Depression	15%	26%	
Smokers	23%	13%	
Do Not Exercise	25%	28%	
Three or More Risk Factors	10%	11%	
Report Not Having a Primary Care Doctor or Nurse	30%	23%	
Trust Primary Care Provider (if have one)	70%	75%	
Average Travel Distance for Medical Care	20 miles	19 miles	
Average Travel Distance for Dental Care	15 miles	25 miles	
Access Whenever Needed (excellent, very good, good)	85%	84%	
Access to Hospital Care (excellent, very good, good)	90%	83%	
Currently Uninsured	10%	9%	
Medicaid Insured	<1	<1	
Employer/Commercially Insured	67%	66%	
Uninsured at Some Point in the Past Three Years	16%	15%	
Employed Full-time, Part-time, Self-employed	72%	64%	*
Non-White	10%	19%	
% With Incomes <200% of the Federal Poverty Level	25%	34%	
% With a High School Diploma or More	92%	83%	

The proper way to read these tables is that percentages are “of the population listed at the top of the column,” for example “11% of respondents from Lakin say their health status is fair or poor.”

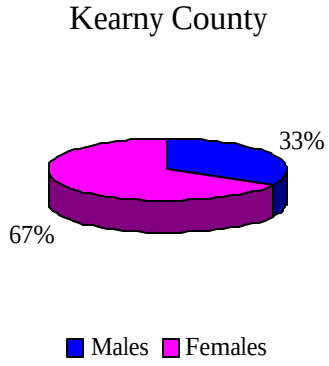
* Significantly different from each other

Appendix 2: Survey Respondent Demographics

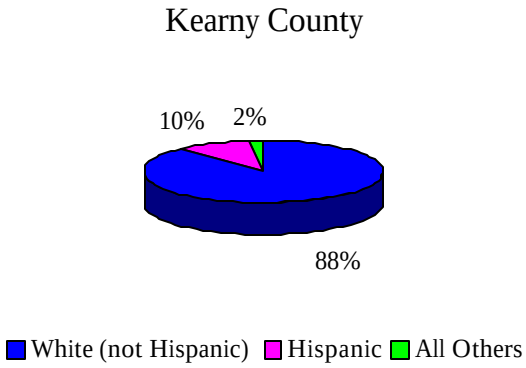
Respondents by Age



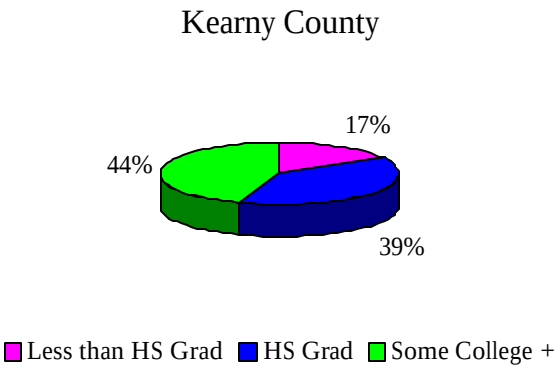
Respondents by Gender



Respondents by Culture/Ethnicity

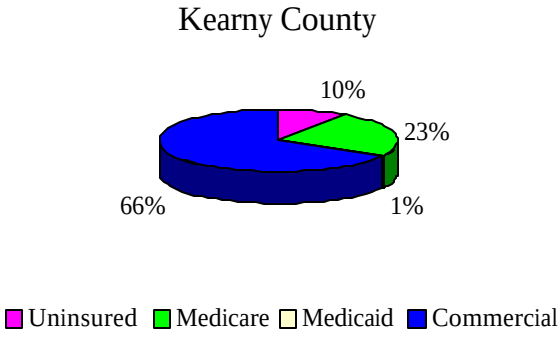


Respondents by Education Level

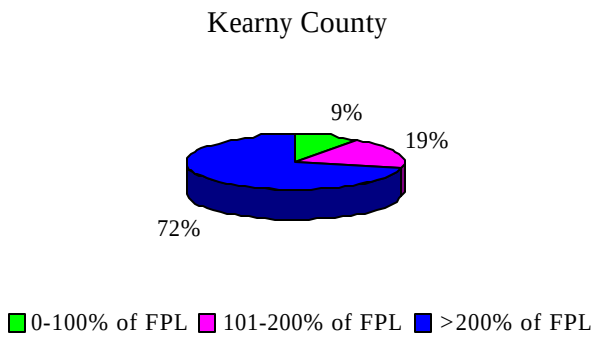


Respondents by Income

Respondents by Insurance Status



Appendix 3: Methods For The Community Health Survey



Survey Development

The survey questionnaire was modified from a base instrument used by FBA in surveying over twenty different communities, as well as in conducting The National Health Survey™. Modifications to this document for Kearny County included:

- tailoring questions about where people go for services to reflect the names and locations of health providers in both Kearny County and in Finney County (Garden City); and
- developing a Spanish-language version of the survey, translated into a Mexican dialect.

Method

The method used to gather the survey data is a modified version of a protocol refined by FBA, called a phone-mail method. Kearny County residents were called by telerecruiters from a random-digit dialing list of county residents; this list was produced and obtained from an outside vendor (Survey Sampling, Inc.). Interviewers made up to four attempts to reach each number. Interviewers captured names and addresses of those who were over 18 and agreed to participate. To capture Hispanic respondents in the sample, non-English speaking respondents were re-contacted by a trained bilingual interviewer.

The surveys were mailed from January 29, 1998 through February 17, 1998. The final cut-off for returned questionnaires was March 23, 1998. Each respondent was sent a personalized cover letter on Kearny County Hospital letterhead, a survey booklet, and a postage-paid return envelope. Respondents were given $2 for their participation in the study and were asked to mail the questionnaire back to a post office box in Emmaus, Pennsylvania.

Results from the survey recruitment are shown in the following table:

Recruitment Element	Kearny County
Phone Phase	
# of Persons Recruited	550
Phone Phase Co-operation Rate	86.2%
Mail Phase	
# of Mailed - English Questionnaires	517
# of Mailed - Spanish Questionnaires	33
# of Returned Questionnaires	420, Including 17 Spanish Language Surveys

Recruitment Element	Kearny County
Mail Phase Response Rate	76.9%
Overall Response Rate	66.3%

Strengths and Limitations of the Survey Method

There are several strengths to the data collection method used for the *Community Health Survey*:

- the randomness of the household selection reduces some sources of bias in the data;
- the recruiting phone calls, monetary incentive, and stamped return envelope encourage a high response rate to a mailed survey;
- the information is confidential and anonymous; and
- data obtained are specifically for Kearny County.

There are limitations to this methodology as well. Persons without phones are not reached in the recruitment phase for the survey. It is our experience that typically 95% of any given population has phones. We did learn while conducting the community discussions in Kearny County, that employees at IBP were being laid-off, and some families were disconnecting their phone service as a means to save money. Community discussions after the survey can be used to reach these populations if necessary. Persons who cannot read English at the 7th to 8th grade level may be limited in their ability to understand and answer the survey. (Spanish speaking persons recruited and answering the Spanish language version must also be able to read Spanish at the 7th to 8th grade level.) Persons who only speak or write a language other than English or Spanish cannot respond to a survey written in English or Spanish. Disabled persons who cannot answer the phone, cannot write, or cannot see are often missed in the recruitment and responding phase of the survey.

Analysis

The survey respondents were categorized in the following ways to conduct a preliminary analysis:

C	Gender	Males and females.
C	Age	18-34, 35-44, 45-64, and 65 and older.
C	Education	Persons with less than high school diploma, persons with a high school diploma, and persons with more than high school diploma.
C	Race/Ethnicity	Caucasian, Hispanic, African-American, Other.
C	Income	Total household income in 1997 before taxes is used in conjunction with household size to calculate persons with poverty level, low income (101-200% of the federal poverty level), and above low incomes (above 200% of the federal poverty level).
C	Insurance Status	Employer/commercially insured, Medicare insured, Medicaid insured, uninsured.
C	Insurance Status(2)	Length of time uninsured over the past three years, broken into two categories, persons who have never had a lapse in their insurance coverage, and those who have had some lapse in their coverage.
C	Regular Source of Care	A special category created for this project, which separates respondents who report that they do or do not have a regular primary care provider.
C	Health Status	Self-reported health status, broken down in the following categories: excellent, very good/good, fair/poor.
C	Housing	Adequate or inadequate (as measured by crowding).
C	Chronic Disease	Whether respondent has any one of the identified chronic diseases in the survey.

- Lifestyle Risk Factors — Whether respondent has 0-2 or three or more of the lifestyle/behavioral risks asked about in the survey.

Note: these categories were created for analysis and they are not necessarily a reflection of how the survey questions were asked. For example, in the race/ethnicity question, categories for American Indian and Asian/Pacific Islanders were included. Because of the low numbers of respondents with these categories, for analysis purposes, they are part of respondents categorized in the "other" category.

Statistical Tolerances of the Survey Data

All sample surveys are subject to sampling error, that is, the extent to which the results may differ from those that would be obtained if the entire population of Kearny County were surveyed. The size of such sampling error depends largely on the number of completed questionnaires.

For interpreting the percentages in this report, the following table may be used to determine the allowances that should be made for the sampling error of a percentage. The computed tolerances have taken into account the effect of the sample design. Tolerances indicate the range (plus or minus the figure shown) within which the results of repeated samplings in the same time period can be expected to vary 95% of the time, assuming the same sampling procedure, survey execution, and questionnaire were used.

The recommended allowance for sampling error of a percentage in percentage points at the 95% confidence level for a figure reported for Kearny County is:

Percentages near 10 or 90	+/-2.9
Percentages near 20 or 80	+/-3.9
Percentages near 30 or 70	+/-4.5
Percentages near 40 or 60	+/-4.8
Percentages near 50	+/-4.9