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Health Services Survey of Residents of Lexington, Nebraska

Curtis R. Winkle

University of Nebraska at Omaha

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HEALTH SERVICES SURVEY
OF RESIDENTS OF
LEXINGTON, NEBRASKA

by

Curtis R. Winkle, Ph.D.

August 1986



Center for Applied Urban Research
College of Public Affairs and Community Service
University of Nebraska at Omaha



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EXECUTIVE SUMMARY

The results of a health services questionnaire administered to over 300 Lexington area residents in April/May 1986 are presented in this report. The sample constituted 6.7 percent of the 4,507 households in the study area.

Over half of all households in the study area and nearly 60 percent of those in the Lexington ZIP code area had a member of the household hospitalized at Tri-County Hospital within the past 5 years. Respondents were much more likely to state that they would go to Tri-County Hospital over another hospital for emergency care or minor surgery rather than for major surgery. Respondents were more likely to select Tri-County Hospital over another hospital because of its location/convenience, and they were more likely to select another hospital because of availability of a medical specialty.

Twenty-seven percent of all hospitalizations within the Lexington area could have occurred at Tri-County Hospital but did not. In the Lexington ZIP code area, 19 percent of all hospital visits were leaked from the community. Approximately \$1 million in leaked hospital visits occurred in the study area during the past year. Among households located within the Lexington ZIP code area, \$25,000 leaked from the community in 1 year. Leakage from the study area was responsible for \$3 million in lost economic activity in the Lexington area. Leakage from the Lexington ZIP code area alone was responsible for \$75,000 in lost economic activity.

When a hospital other than Tri-County was chosen to provide services that could have been provided by Tri-County, the most common responses stated by respondents were the recommendation of a physician and the quality of physician. Respondents were significantly less satisfied with visits to Tri-County Hospital than with visits to other hospitals. The greatest dissatisfaction was expressed for the availability of specialized care, cost, and the billing process. Respondents who had visited Tri-County Hospital rated it higher on all aspects of service than those who had not visited it.

Efforts to reduce leakage should be directed at providing more specialized care, improving the perceived quality of physicians, and reducing leakage of visits to physicians who may recommend other hospitals. Over 60 percent of all physician visits made from within the study area in the last 3 years were made to Plum Creek Medical Group. Over 80 percent of visits made from the Lexington ZIP code area were made to Plum Creek Medical Group. About 20 percent of all physician visits made from the study area could have been made to Plum Creek Medical Group but were not. Leakage from the Lexington ZIP code area was 10 percent. Leakage from physician visits in the study area was responsible for a loss of \$18,000 to Plum Creek Medical Group, and leakage from the Lexington ZIP code area was responsible for a loss of \$4,500. Leakage accounted for a loss of \$65,000 for the study area, and \$23,500 for the Lexington ZIP code area.

While the economic impact of leakage of physician visits seems small compared with that for hospital visits, it may indirectly lead to leakage of hospital visits as physicians outside Lexington recommend hospitals outside Lexington.

Respondents were significantly less satisfied with their visits to Plum Creek Medical Group than with visits to other clinics. Most visits that could have been made to Plum Creek Medical Group but were not, were made elsewhere because of habit or the recommendation of a friend or relative.

Almost half of all respondents reported that there was a need for additional physicians in the Lexington area. Many reported that there was a need for more specialists and that physicians were overworked or too busy. Efforts to curtail leakage of physician visits should be directed at making more specialized care available and at breaking old habits.

Pharmacists had the lowest rate of leakage, followed by dentists, eye care providers, and mental health care providers. One of four respondents said that they would be more likely to use health services in Lexington if they thought it would improve the Lexington economy.

Ten percent of all households were uninsured. Ten percent of households with insurance had at least one household member who was uninsured. About 30 percent of respondents believed that they were underinsured. A total of 37 percent of all households were either uninsured or underinsured.

Up to 10 percent of all households failed to seek the services of a physician in the past year because of inability to pay. Eleven percent of households failed to seek the care of a dentist and 9 percent did not seek the care of an eye doctor when needed because of inability to pay.

While the percentage of respondents who thought there was a need for more clinics is small, most respondents thought that a satellite clinic associated with Tri-County Hospital would be useful. About half of all respondents thought they would use such a clinic.

INTRODUCTION

This study reports the results of a survey of over 300 Lexington area households which focused on health services utilization and need. The study address three general areas: (1) utilization and satisfaction with Tri-County Hospital, Plum Creek Medical Group, and other health services; (2) the degree to which economic development of Lexington can be facilitated through the way health services are provided; and (3) a general needs assessment for health services. Because of the range of issues addressed, the first two areas received the most attention.

THE STUDY DESIGN

A detailed telephone questionnaire was administered to 303 Lexington area households between April 24, 1986, and May 13, 1986 (Appendix A). The survey was designed after the author met with the Director of Tri-County Hospital and members of the community. It includes questions about a range of health related behavior, including household members' last three visits to hospitals and clinics and patterns for purchasing other goods and services. Each survey took 20-45 minutes to complete by telephone.

The hospital administrator at Tri-County Hospital helped define the study area to include the communities shown in figure 1. We thought this area included most of the communities from which Tri-County Hospital drew patients. It also included some communities that rely on other hospitals. This allowed comparisons between users of Tri-County Hospital and users of other hospitals.

The study area was estimated to contain 4,507 households. From these, a stratified systematic random sample of 303 households (6.7 percent) were selected and interviewed. This sample allowed us to make estimates for the city of Lexington, for the area within a 20-minute radius of Lexington, and for selected ZIP code areas. The sample was stratified by community so that an equal percentage of households from each community was included. Telephone directories were used as a sampling frame. A list of the communities included in the sample, the number of households in each community, and the number of interviews conducted in each community are shown in table 1.

Interviews were conducted by trained interviewers at the Center for Applied Urban Research at the University of Nebraska at Omaha. Interviewers ranged in age from 20 to 60. Calls were made between 9:00 a.m. and 9:00 p.m. from April 24, 1986, to May 13, 1986, on weekdays and weekend days. In only 5 percent of cases did a sampled household refuse to participate in the survey. In such cases, the next household listed in the telephone directory was sampled.

The characteristics of survey respondents are presented in table 2. Respondents ranged in age from 18 to 92, with an average and a median age of 50. Seventy-eight percent of respondents were females. The mix of primary earner and spouse respondents was fairly even, with only a few children and other relatives of the primary earner responding. Mean and median years of education were both about 12 (a high school degree or equivalent); no respondent had below a 6th grade education. Forty-three percent of respondents lived in Lexington, 28 percent lived in other towns, 20 percent

lived on farms, and 8 percent lived in rural nonfarm areas. Most respondents had lived in the Lexington area for over 9 years; the average length of residency was 15 years. Only 3 percent of respondents anticipated moving out of the Lexington area within the next year. Travel time to Lexington varied from 1 to 60 minutes, with an average of 17 minutes.

Respondents reported that their health was good. Forty percent were in excellent health, 29 percent were in good health, 17 percent were in fair health, and 4 percent were in poor health. Fifty-three percent of respondents had a member of the household hospitalized within the past 3 years.

TRI-COUNTY HOSPITAL

Respondents were asked to identify the hospital they would choose for emergency care, minor surgery, and major surgery. Table 3 shows that Tri-County Hospital was named as the preferred place of treatment for emergency care by 61 percent of respondents. Fifty percent indicated that they would choose Tri-County for minor surgery, and 20 percent said they would choose Tri-County for major surgery. Fifty-four percent of the surveyed households had a member hospitalized at Tri-County Hospital within the past 5 years. Figures 2 through 5 show the 95-percent confidence intervals for these estimates of proportion. The confidence intervals represent the two proportions between which we can be 95 percent confident that the true population proportion falls. For example, 61 percent of the respondents said that they would use Tri-County Hospital for emergency care. Because we did not interview a member of all households, we must account for random error and estimate that the true percentage is likely to be between 54 and 68 percent.

Travel time from the respondent's residence to Lexington has a big effect on preference for treatment at Tri-County Hospital. Eighty-one percent of the respondents who live within 10 minutes travel time of Lexington and 69 percent of those who live within 11-20 minutes travel time of Tri-County Hospital would select it for emergency care. The percentage drops off sharply when travel time increases to 21-30 minutes (figure 2). Similar patterns are shown for minor surgical treatment and for actual hospitalizations during the past 5 years (figures 3 and 5). The slope is less steep for major surgery (figure 4), with only 25 percent of households located within 20 minutes of Lexington selecting Tri-County Hospital for treatment. Tri-County's strongest market is emergency care and minor surgery for individuals living within a 20-minute radius of the hospital.

The percentage of households preferring treatment at Tri-County Hospital was estimated for selected ZIP code areas (table 4). It was not possible to make such estimates for all ZIP code areas within the study area because of the sample size. Ninety-five percent confidence intervals are reported where possible. Patterns similar to those already described appear; Tri-County Hospital has its strongest market in emergency care and minor surgery, and its attraction diminishes with distance.

Why do respondents chose Tri-County Hospital over other hospitals? Information about hospital visits (1-3) during the past 3 years was collected from each household. The 303 households sampled reported 298 hospital visits during the past 3 years. Table 5 shows respondents reasons for selecting Tri-County Hospital for treatment. Sixty percent of respondents chose Tri-County

Hospital for location/convenience, compared with 11 percent of respondents who selected another hospital. Conversely, other hospitals were more likely to be chosen because a medical specialty was available or because of a physician's recommendation.

Tables 6 and 7 compare other aspects of visits to Tri-County Hospital with those of other hospitals. Table 6 shows that the sources of payment for visits to Tri-County and other hospitals are about the same. Patients at Tri-County Hospital are hospitalized for less time than patients at other hospitals, 4.6 days compared with 6.5 days (table 7). This finding is consistent with Tri-County Hospital being less likely to be selected because of the availability of specialized care.

Respondents general patterns of use and preference for care at Tri-County Hospital and reasons for selecting other hospitals appear appropriate. Tri-County Hospital is preferred for emergency care and minor surgery, and other hospitals are more likely to be selected because of the availability of a medical specialty or because of the recommendation of a physician.

Leakage

While these general patterns are appropriate, it does not mean that Tri-County Hospital is attracting all of the patients for whom it could provide treatment and who live in close proximity to the hospital. The degree to which households in the Lexington area utilize hospitals other than Tri-County for services that could be provided by Tri-County is discussed below.

Table 8 shows hospital visits by three categories: (1) those made to Tri-County, (2) those made to a hospital other than Tri-County for a good reason (that is, service could not be provided at Tri-County, location/convenience, or medical specialty available), and (3) those made to a hospital other than Tri-County for reasons other than those listed above. The last category represents leakage from the Lexington area.

Reasons for selecting a hospital (for example, location or availability of a medical specialty) were taken from household survey responses. Several steps were taken to determine whether a particular condition could have been treated at Tri-County Hospital. The physicians at Plum Creek Medical Group (5) and the Hospital Administrator were given a list of all of the illnesses or reasons for admissions reported by respondents. The complete survey is included as Appendix B.

Each individual was asked to determine whether each illness or condition "could definitely be treated at Tri-County," "could probably be treated at Tri-County," "could probably not be treated at Tri-County," or "could definitely not be treated at Tri-County." Four of the six questionnaires were returned. If a majority of the physician/administrator responses indicated that a condition could definitely or could probably be treated at Tri-County, the condition was considered to be treatable at Tri-County. This assumption may slightly overestimate the percentage of leakage as conditions and illnesses were not always reported by respondents with enough specificity to determine whether they could be treated at Tri-County. In such cases, physician/administrator responses may have indicated that the condition probably could be treated at Tri-County, when, if more information were available, it might be determined that it could not.

Table 8 shows that 48 percent of 289 visits in the sample were made to Tri-County Hospital, 25 percent were made to other hospitals for good reasons (as defined above), and 27 percent were made to other hospitals for no good reason (may actually be 22-32 percent based on a 95-percent confidence interval). Twenty-seven percent may be an overestimate of leakage because the study area included areas which are closer to other hospitals. Nevertheless, households that selected other hospitals because of location/convenience are excluded from this category.

Figure 6 shows how the percentage of hospital visits representing leakage from Tri-County Hospital vary because of travel time between the hospital and the respondent's residence. The leakage was 12-24 percent for households located within 10 minutes of Lexington; 8-35 percent for households located within 11-20 minutes, and 28-65 percent for households located within 21-30 and 41-50 minutes of Lexington.

Similar figures for leakage were reported for ZIP code areas in which there were enough responses to make reasonable estimates (table 9). Leakage from Lexington was 13-25 percent, Overton was 15-54 percent, Arapahoe was 37-69 percent, and Elwood was 15 percent, although a confidence interval cannot be estimated for the entire population.

Economic Impact

The economic impact of this leakage on the Lexington economy is estimated in table 10. Estimates are made for all households, by travel time from Lexington, and for those ZIP code areas in which there were enough responses to make estimates. All estimates are based on a 3-year period.

Estimates were made by dividing the number of households in the sample from each category by 0.067 (the proportion of all households sampled) to determine the number of households in each category. The number of households in each category was then multiplied by the percentage of all visits from that category to obtain an estimate of the number of visits leaked. The number of leaked visits was then multiplied by \$1,844.17, the gross patient revenue per discharge for Tri-County Hospital for the year ending June 30, 1986. Because estimates of the percentage of leakage were based on sample data rather than a census of the population, the 95-percent confidence interval is given for the monetary value of leakage.

Respondents were asked to provide extensive information about the last three hospital visits made by members of their households during the past 3 years. Estimates are based on these values. About 50 percent of hospital visits reported in the survey, however, were made within the past year. Respondents may not have remembered earlier visits. This suggests that table 10 reflects information for 2-year rather than 3-year periods.

With this in mind, about \$1 million in leakage occurred in the study area during the past year. Some sections of the study area are closer to other hospitals, however, so this figure may overestimate leakage. Among households living within the Lexington ZIP code area, \$425,000 leaked from the community unnecessarily within the past year. This represents about \$500,000 for households located within 20 minutes of Lexington.

The total economic impact on the community is much larger, however, because this money would have been injected into the Lexington economy and re-spent to create a multiplier effect. Fifty-five percent of all hospital visits are paid for by sources located outside of Lexington, including Medicare, Medicaid, and private or group insurance. This constitutes new money being injected into the Lexington economy. Further, the purchase of hospital services is not discretionary spending. Most of the money originating in the Lexington area and being used to purchase hospital services would not have been spent in Lexington.

Most communities in the nation have a multiplier of three to one. That is, for each \$1 spent, \$3 are added to the economy. Lexington's multiplier may be even higher if its residents are less likely to spend than are residents of other communities. The three to one multiplier provides a conservative estimate of economic activity lost to Lexington by leakage of hospital patients.

Based on this multiplier, leakage from all parts of the study area reduces the economic activity of Lexington by \$3 million per year. Leakage from the Lexington ZIP code area is responsible for a \$1.3 million loss of economic activity. Leakage from within a 20-minute radius of downtown Lexington is responsible for an additional \$1.5 million loss.

Reasons for Leakage

Why does this leakage occur and can it be prevented? Table 11 shows respondents' reasons for selecting a hospital when that selection constituted leakage from the Lexington area. In addition to the criteria for leakage discussed above (that is, services could have been provided at Tri-County Hospital and the hospital was not selected because of convenience/location or because a medical specialty was available), Table 11 shows leaked visits made from within a 20-minute radius of Lexington because these households are in relatively close proximity to Tri-County Hospital. Thirty-six (19 percent) of 191 hospital visits made from this area within the past 3 years were leaked.

Inferences about the percentages reported in table 11 cannot be made for the entire population because of the small number of cases. The reason reported most often for selecting a hospital (44 percent) was the recommendation of a physician. It is not known whether the recommendation was made because physicians who would have recommended Tri-County could not because Tri-County was unable to provide the needed service or because individuals were treated by physicians who were not associated with Tri-County and would not have recommended it under any circumstances. Other controls were used to ensure that visits to other hospitals for other reasons were classified properly. Nevertheless, the amount of leakage indicated above may slightly overestimate the number of visits that were made to other hospitals for inappropriate reasons.

The second most frequently reported reason (25 percent) for selecting a hospital was quality of physician. This suggests that some Lexington area residents are willing to travel further because they perceive other hospitals to have higher quality physicians. Other reasons for selecting a hospital other than Tri-County constitute 19 percent of the leaked visits. Only a few visits (5 of 36) were made to other hospitals because of habit. This suggests that leakage occurs for specific reasons.

The level of satisfaction with services at Tri-County Hospital compared with those at other hospitals may also provide clues about how to stop leakage. Table 12 shows that respondents are statistically significantly less satisfied with visits to Tri-County Hospital than with visits to other hospitals. On a scale of one to four, with one indicating "very satisfied" and four indicating "very dissatisfied," the average level of satisfaction with Tri-County Hospital was 1.6, compared with 1.3 for all other hospitals. Despite an overall lower level of satisfaction, only a few respondents were dissatisfied or very dissatisfied with visits to Tri-County Hospital. Only 8 visits (5.6 percent) were rated as dissatisfactory or very dissatisfactory. Whether this represents actual differences in quality of care and service or different expectations for various hospitals cannot be determined.

What is the source of this lower level of satisfaction? Table 13 shows the quality assessment of various components of services at Tri-County Hospital. All respondents, whether they or a member of their households had ever used Tri-County Hospital, were asked to rate each aspect of service as "very good," "good," "fair," "poor," or "very poor." About 100 respondents declined to answer, usually stating that they had nothing upon which to base their responses. Most people who expressed opinions (43 percent) rated the hospital as good overall.

Four of the 12 service components received average ratings of less than good. Based on the average rating for each service component, Tri-County Hospital's greatest weakness was the availability of specialized care. Fifteen percent of respondents rated this aspect of Tri-County's services as poor or very poor. The billing process and cost of services were perceived as poor or very poor by 17 and 14 percent of respondents respectively. Admissions procedures and scheduling received average ratings of good. Admissions procedures were rated as poor or very poor by 8 percent of respondents, followed by the competence of physicians which received poor or very poor ratings by 7 percent of respondents.

Respondents were asked to give specific reasons for their ratings if they rated a service component as poor or very poor. These comments are reported verbatim in Appendix C. Each comment is preceded by a number which refers to a particular service component in the survey instrument as shown in Appendix A.

Tri-County Hospital's strengths (that is, average ratings of "better than good"), in descending order, were friendliness and courtesy of doctors, location and accessibility, competence of nurses, friendliness and courtesy of other staff, and the availability of emergency care.

While Tri-County Hospital may be able to reduce leakage somewhat by improving its areas of weakness, it has another problem. Respondents whose households had not used Tri-County Hospital within the past 5 years consistently rated it lower than those who had used its services (table 13). On average, nonusers rated the hospital's overall performance as fair while users rated it as good. Both users and nonusers identified the hospital's greatest problems as being availability of specialized care, cost, and the billing process. Perhaps measures should be taken to improve the image of the hospital among those who have not used its services.

PLUM CREEK MEDICAL GROUP

The percentage of all visits to physicians at Plum Creek Medical Group was higher than the percentage of all visits to Tri-County Hospital. Sixty-three percent of all physician visits made within the last 3 years were made to Plum Creek Medical Group, compared with 48 percent of all hospital visits being made to Tri-County Hospital. Like Tri-County Hospital, it is the main service provider for households located within a 20-minute radius of Lexington. Beyond that point, respondents were more likely to seek care elsewhere (table 15).

Utilization and Leakage

As with hospital visits, physician visits were classified as those made in Lexington (that is, Plum Creek Medical Group), those made outside of Lexington for a good reason, and those made outside of Lexington for no good reason (which constitutes leakage from the Lexington economy).

Visits to clinics other than Plum Creek were considered to have been made outside of Lexington for a good reason if the respondent's condition or illness could not have been treated by Plum Creek physicians, if another clinic was chosen because of its location/convenience, or if the clinic was chosen because a medical specialty was available. This constitutes a fairly liberal definition of "good reason." Visits to clinics other than Plum Creek were not considered to be for good reason if they did not fit the criteria listed above.

As with hospital care, all physicians and the hospital administrator at Tri-County were given a list of the conditions and illnesses respondents reported as reasons for visiting a physician. If a majority of the four physician/administrator responses indicated that the condition or illness definitely could or probably could be treated at Plum Creek, the condition was considered treatable at Plum Creek.

Table 15 and figure 7 show that 19-26 percent of all physician visits made from within the study area constituted leakage. This compares with 22-32 percent leakage for hospital visits. By comparing figures 6 and 7, we can see that leakage for physician visits and hospital visits increases with distance from Lexington. For households located within 10 minutes of Lexington, the percentage of physician visits constituting leakage was 7-13 percent. This figure increases to 21-40 percent for households located within 11-20 minutes, and 28-49 percent for households located within 21-30 minutes of Lexington. At 31-40 minutes, the estimated percentages, based on the sample, drop to the 9-36 percent range; this finding is inconsistent with the overall pattern. This may be due to random error because only 39 households located within this area were in the sample. Or, it could be because households at this distance are more conveniently located to another clinic and reported the good reason of location/convenience for seeking care elsewhere.

Leakage was calculated for those communities (ZIP code areas) for which the sample was large enough to make an estimate (table 16). Leakage was 6-12 percent from Lexington, 35-62 percent from Overton, and 38-64 percent from Arapahoe. A confidence interval could not be calculated for Elwood because of the small sample size, but the leakage in the sample was 12 percent.

Economic Impact of Leakage

The monetary value of leaked clinic visits is estimated in table 17. This value was estimated for the entire study area by travel time to Lexington and by ZIP code areas. Estimates were made using methods similar to those used to estimate the monetary value of leakage of hospital visits. The number of visits in the sample was divided by 6.7 to obtain the number of physician visits. This was multiplied by the appropriate percentage of leakage to obtain the number of leaked visits, and then multiplied by the average cost per physician visit, including all services, of \$18.19. This figure was based on the average cost of treatment at Plum Creek Medical Group over the past 11 months.

A total of \$37,500 were lost by Plum Creek Medical Group during the past 3 years through leakage. From within a 20-minute radius of downtown Lexington, \$17,500 were lost. The Lexington ZIP code area alone is responsible for a \$8,900 loss due to leakage.

These figures are very conservative. Respondents reported only their last three visits to physicians if they occurred within the past 3 years. Half of all households reported three visits within the past 3 years. Many of these households may have had more than three visits in the past 3 years. As with hospital visits, over 50 percent of all reported visits were likely to have occurred within the past year.

This information can be used to revise the above figures and to develop less conservative estimates of income loss per year. Plum Creek Medical Group loses \$18,800 from the study area per year. Leakage from within a 20-minute radius of Lexington is responsible for a loss of \$8,800, and the Lexington ZIP code area is responsible for a loss of \$4,500.

This lost money would have circulated in Lexington and had an even greater effect on its economy. When the multiplier is used to determine total economic impact on Lexington, the losses are \$56,400 from within the study area, \$26,400 from the area within a 20-minute radius of downtown Lexington, and \$23,500 from within the Lexington ZIP code area.

Although losses to the Lexington economy due to leakage of physician visits are small compared with those from hospital visit leakage, patients generally select hospitals from which their physicians have admitting privileges. Leakage from physician visits is likely to lead to leakage from hospitals as well.

Reasons for Leakage

Reasons for leakage can be identified by comparing satisfaction with visits to Plum Creek Medical Group with satisfaction with visits to other clinics, by examining reasons for selecting Plum Creek Medical Group with reasons for selecting other clinics, and by identifying reasons for selecting a clinic other than Plum Creek Medical Group when Plum Creek could have provided the needed service.

Patients are significantly less satisfied with their visits to Plum Creek than with their visits to other clinics (table 19). On a scale of one to four, where one indicates very satisfied and four indicates very dissatisfied, Plum Creek received an average score of 1.46, compared with 1.32 for other clinics. Nevertheless, only 6.7 percent of the 228 individuals who visited Plum Creek rated it as dissatisfactory or very dissatisfactory. The comparable figure for other clinics was 1.8 percent.

One possible reason for dissatisfaction with Plum Creek Medical Group may be its relative lack of specialists. Table 19 shows respondents' reasons for selecting Plum Creek over other clinics. Plum Creek was significantly less likely to be selected because specialists were not available. If individuals visited Plum Creek and found that they must visit another clinic to obtain treatment, they may have expressed dissatisfaction with Plum Creek. It was also less likely to be selected because of cost. Plum Creek was significantly more likely to be selected because of its location/convenience, the quality of its physicians, and the attitudes of its physicians.

It is particularly important for us to understand respondents' reasons for visiting other clinics to devise strategies to prevent leakage. Table 20 shows respondents' reasons for selecting a clinic/physician for those visits that were made from within 20 minutes of downtown Lexington, that could be treated at Plum Creek (as defined above), and that were not made because of another clinic's location/convenience or because of the availability of a medical specialty. Respondents made 63 visits (15 percent) to physicians who were located outside a 20-minute radius of downtown Lexington. The most common reason respondents gave for selecting a clinic outside the area was habit (44 percent), followed by the recommendation of a friend or relative (24 percent), the quality of physicians (18 percent), and the recommendation of a physician. Five percent of respondents reported that cost was a major reason for selecting a clinic and 5 percent reported that the quality of the clinic was a major reason. Less than 1 percent of respondents mentioned the attitudes of the physicians or staff as a reason.

Table 21 shows the various methods of payment respondents used for visits to Plum Creek Medical Group and other clinics. The method of payment used by respondents is similar for hospital, clinic, and physician visits.

Reasons for leakage of hospital and physician visits differ, but strategies for reducing both are similar. Much leakage from hospitals is based on substantive reasons. Either the respondent's physician recommended a hospital other than Tri-County or the patient chose another hospital because of the quality of physicians. Leakage of physician visits was based on habit and the recommendations of friends or relatives.

Clearly leakage of hospital and physician visits are related. To reduce the leakage of hospital visits the quality or perceived quality of physicians at Tri-County Hospital must be improved, and leakage of physician visits must be curtailed. If more local physicians were used (or available) more physicians would recommend Tri-County Hospital and, thus, reduce leakage.

Reducing leakage of physician visits requires breaking old habits and encouraging positive recommendations by friends and relatives. The relatively low level of patient satisfaction compared with other hospitals is one barrier

to this. Another is the widely held perception that Lexington needs additional physicians. Forty-two percent of respondents stated that they felt there was a need for additional physicians as shown in table 22. Forty percent of respondents who gave reasons for their opinions stated that patients must wait too long, that physicians are overworked, and that physicians are too busy. Twenty-four percent of respondents simply stated that more and better physicians were needed. Nearly as many respondents identified particular specialists that they felt Lexington needed.

OTHER HEALTH SERVICES

Table 23 shows the percentage of respondents who reported that their households used dentists, pharmacists, or eye doctors; purchased eyeglasses; and used mental health professionals located in Lexington rather than some other location. Ninety-five percent confidence intervals are given where appropriate.

Utilization

Lexington pharmacists have the highest percentage of utilization of their services (lowest rate of leakage) by Lexington area residents. Between 69 percent and 79 percent of all households in the study area used Lexington pharmacists. The rate of utilization was very high for households located within 20-minutes travel time of Lexington (98 percent for those located within 10 minutes and 89 percent for those located within 11-20 minutes). Utilization drops off sharply as distance increases.

Why do households located within 20-minutes travel time of downtown Lexington fail to use Lexington pharmacists? Table 24 shows that only eight households in the sample fell in this category and that their reasons for selecting a pharmacist were similar to those of all households, although the numbers were too small to be statistically significant. There is little leakage for pharmacy services.

Between 48-60 percent of all households obtain dental care in Lexington (that is, 40-52 percent leakage). Between 71-84 percent of households within a 10-minute radius of downtown Lexington seek dental services there, as do 26-59 percent of those living within an 11-20 minute radius. Again, the percentage of households using dental services in Lexington drops off sharply outside the 20-minute radius.

Within the 20-minute radius, 10 percent of the sampled households sought dental care outside of Lexington. Table 25 shows respondents reasons for choosing their dentists. The distribution of reasons for selecting a particular dentist is about the same for all households and for those that constitute leakage. The most frequently stated reasons for selecting a dentist were habit and quality.

The percentage of people going to eye doctors in Lexington and purchasing eyeglasses or contact lenses in Lexington is about the same, suggesting that people may often purchase eyeglasses and receive eye care at the same place. If Lexington loses an eye doctor, a proportionate share of eyeglass and contact lens sales can be expected to be lost. About 44-56 percent of all respondents seek eye care and purchase eyeglasses and contact lenses in the

Lexington area. This represents 55-72 percent of all households located within a 10-minute radius and 30-76 percent of all households located within 11-20 minutes of Lexington. A higher percentage of leakage occurs for eye care than for dental or pharmaceutical services.

Finally, 36-78 percent of all visits to mental health professionals by individuals residing within the study area are made in Lexington. The number of cases in which mental health professionals were sought is too low to make more specific references.

ECONOMIC DEVELOPMENT AND HEALTH SERVICES

Previous sections have shown that health care dollars lost to leakage from the Lexington area have a substantial impact on the Lexington community. Leakage of health care dollars may affect other sectors of the Lexington economy too. Fifty-nine percent of 299 respondents said they combined trips to their physicians or dentists with shopping. Thirteen percent of 295 respondents said they combined trips to the hospital with shopping. This may not have a great effect because the majority of these respondents purchased hospital and physician care in Lexington.

Table 26 shows the percentage of households that purchased a range of non-health goods and services in Lexington by travel time to Lexington. The willingness to purchase hospital services compares best to the willingness to purchase home furnishings and automobiles. The attraction of Tri-County Hospital to households located within a 20-minute radius of downtown Lexington is low compared with all other goods and services listed. Purchasing patterns for Plum Creek Medical Group are much like those for dining out.

There is potential for improving the Lexington economy by educating residents about the impact of their health services purchasing decisions. Over 26 percent of residents said that they would be more likely to use health services in Lexington if they thought it would improve the Lexington economy, 71.4 percent said they would be just as likely, and 2.1 percent said they would be less likely.

HEALTH CARE NEEDS ASSESSMENT

The following is a limited needs assessment for health services in the Lexington area. It addresses the need for several services, level of insurance coverage, the degree to which health services are not sought because individuals are unable to pay for services, and the perceived need for more physicians and clinics in the Lexington area.

Respondents were asked whether they, or anyone in their households, needed but did not receive home health services, such as, a visiting nurse, homemaker services for those who can not care for themselves, and adult day care. Table 27 shows that only a few respondents either receive these services or need them but do not receive them. The percentages are so small that confidence intervals could not be calculated. Only 1 of 302 households was found to need but not receive home health services and 1 of 300 was found to need but not receive adult day care.

Ninety percent of the households sampled were covered by some form of private or public health insurance as shown in table 28. Most respondents (64-75 percent) had private or group insurance, 14-30 percent had a combination of Medicare and supplemental private insurance, 4-11 percent had Medicare only, and 1-6 percent had Medicaid coverage. About 6-13 percent of the households had no form of health insurance. Only 27-39 percent of households with insurance had dental insurance, 28-45 had policies that covered services for alcoholism, and 36-53 percent had policies that covered mental health care. Ten percent of multi-individual households with insurance had policies that did not cover all members of the household. About 23-33 percent of all households covered by health insurance felt that they were underinsured. Overall, 37 percent of the households sampled either lacked health insurance or perceived that they were underinsured. This may be 39-46 percent of the general population.

Lack of health insurance is reflected in the failure of some households to seek health care services when they were needed. Table 29 shows that 7-15 percent of the households surveyed failed to seek the services of a dentist during the past year because of the inability to pay, while 6-13 percent did not seek the care of an eye doctor when needed, and 4-10 percent refrained from purchasing eyeglasses or contact lenses for the same reason. Up to 10 percent failed to seek the care of a physician, and 3-8 percent failed to go to the hospital when they thought it was needed.

Do Lexington area residents perceive the number of clinics and physicians available to be adequate? As shown in table 30, many respondents thought there was a need for more physicians (39-61 percent). The perceived need for additional clinics was somewhat less (22-33 percent). Respondents reasons for needing additional clinics and physicians are reported verbatim in Appendix D. Many of the comments refer to long waiting times in physicians' offices.

While the percentage of respondents who felt that additional clinics would be useful was relatively small, 71-81 percent of respondents felt that a satellite clinic associated with Tri-County Hospital would be useful, and 41-53 percent thought that they or a member of their household might use the clinic if it were available. When asked where such a satellite clinic should be located, 31-47 percent preferred Lexington, 14-30 percent preferred Elwood, 8-20 percent chose Overton, and 2-10 percent mentioned Arapahoe.

Respondents were asked what services they would like to see Tri-County Hospital provide that are not now available. A range of responses was given; these responses are reported in table 31. The most common answers were orthopedist (16), pediatrician (15), heart specialist (7), and a general call for more and better doctors (6).

When asked what they would like to see done to improve health services in the Lexington area, ten respondents said that the price was too high (table 32). Nine wanted better qualified doctors, eight wanted mental health counseling to be available, seven were very satisfied with the health services that are currently available, six wanted more services for the elderly, and five wanted OB/GYN specialists.

Table 1

Communities Included in Health Services Survey, Lexington, Nebraska, 1986

Community	Households in community ¹	Interviews conducted
		<u>Number</u>
Lexington	2,608	163
Arapahoe	560	36
Bertrand	148	10
Eddyville	54	4
Elwood	284	20
Eustis	183	12
Miller	58	4
Oconto	81	5
Overton	426	27
Sumner	105	7
Other		15
Total	4,507	303

¹1980 U.S. Census of Population.

Table 2

Characteristics of Survey Respondents, 1986

Item	Value	Survey respondents
		Number
Time to downtown Lexington from residence (minutes):		
Mean	17.3	297
Range	1-60	297
Time to downtown Kearney from residence (minutes):		
Mean	49.6	297
Range	5-95	297
Location of respondent's residence (percent):		
Lexington	42.9	303
Other town	28.4	303
Nonfarm, rural	7.6	303
Farm	20.8	303
Years at present address:		
Mean	15.2	303
Mode	1	303
Median	9	303
Range	1-87	303
Respondent plans to move from Lexington area in next year (percent)	3.0	292
Age of respondent:		
Mean	50.4	301
Mode	30	301
Median	50	301
Range	18-92	301
Relationship of respondent to household (percent):		
Primary wage earner	45.7	302
Spouse	51.3	302
Child	1.7	302
Relative	1.3	302
Nonrelative	0	302
Sex of respondent (percent):		
Female	77.9	303
Male	22.1	303
Education level of respondent (years):		
Mean	12.6	302
Mode	12.0	302
Median	12.0	302
Range	6-20	302
Respondents with a college degree (percent)	4.3	302
Health status of respondent (percent):		
Excellent	39.9	303
Good	38.6	303
Fair	17.2	303
Poor	4.3	303
Mean	1.9	303
Mode	excellent	303
Median	good	303
Households with a member hospitalized in past 3 years (percent)	53.5	303

Table 3

Characteristics of Respondents Use of Tri-County Hospital, 1986

Minutes to Lexington from residence	Respondents would seek care at Tri-County Hospital for			Hospitalized ¹	Respondents
	Emergency care	Minor surgery	Major surgery		
	----- <u>Percent</u> -----				<u>Number</u>
1-10	81.8	64.9	24.3	60.1	154
11-20	68.8	57.4	25.0	42.6	48
21-30	31.0	26.2	14.3	31.0	42
31-40	18.2	9.1	4.5	14.3	22
41-50	30.8	30.8	7.7	30.8	26
51-60	22.2	22.2	22.2	11.1	9
Over 60	0	0	0	0	2
All respondents	61.4	49.7	19.9	54.3	303

¹A member of the household was hospitalized at Tri-County Hospital during the past 5 years.

Table 4

Characteristics of Respondents Use of Tri-County Hospital, by ZIP Code, 1986

ZIP code	Respondents would seek care at Tri-County Hospital for			Hospitalized ¹	Households
	Emergency care	Minor surgery	Major surgery		
	-----Percent-----				<u>Number</u>
68850 Lexington	81.6 (75.7, 87.5) ²	66.3 (59.0, 73.6)	24.8 (18.1, 31.5)	59.0 (51.4, 66.6)	161
68863 Overton	51.9 (33.1, 70.7)	37.0 (18.9, 55.2)	22.2 (6.5, 37.9)	40.7 (22.2, 59.2)	27
68922 Arapahoe	19.4 (12.8, 26.0)	19.4 (6.5, 32.2)	8.3	19.4 (6.5, 32.3)	36
68937 Elwood	80.0	63.2 (41.5, 84.9)	15.0	55.0 (33.2, 76.8)	20

¹A member of the household was hospitalized at Tri-County Hospital during the past 5 years.

²Ninety-five percent confidence intervals. Percentages and confidence intervals are given only for ZIP code areas in which the number of households surveyed was large enough to calculate confidence intervals.

Table 5

Reasons Respondents Selected Tri-County Hospital for Treatment, 1986

Reason for selecting hospital ¹	Tri-County Hospital ²	All other hospitals ³	Significance of Chi-Square
	-----Percent-----		
Location/convenience	63.0	11.3	**
Cost	0	.1	NS
Habit	12.3	9.3	NS
Specialty available	4.3	26.5	**
Quality of physician	9.3	13.2	NS
Quality of hospital	3.6	4.6	NS
Recommendation of physician	37.0	47.0	*
Recommendation of friend or relative	3.6	2.6	NS
Attitudes of staff	2.2	.7	NS
Attitudes of physicians	0	0	NS
Other	8.0	5.3	NS

NS = not significant.

* = significant at 0.10.

** = significant at 0.05.

¹Each hospital visit was considered a case. Each household could report up to three hospital visits. Respondents could report as many reasons for each visit as applied.

²N = 138.

³N = 151.

Table 6

Comparison of Sources of Payment for Visits to Tri-County Hospital and Other Hospitals, 1986

Method of payment ¹	Tri-County Hospital ²	Other hospitals ³	Significance of Chi-Square
	-----Percent-----		
Self	45.5	43.9	NS
Private or group insurance	60.4	68.2	NS
Medicaid	4.5	1.4	NS
Medicare only	5.2	3.4	NS
Medicare plus:			
Supplemental private insurance	23.9	28.4	NS
Friend or relative	0	0	NS
Other	1.5	4.7	NS
Unable to pay	0	0	NS

NS = not significant.

¹Each hospital visit was considered a case. Each household could report up to three hospital visits. Respondents could report as many reasons for each visit as applied.

²N = 134.

³N = 148.

Table 7

Comparison of Number of Days Hospitalized at Tri-County Hospital and Other Hospitals, 1986

Item ¹	Tri-County Hospitals ²	Other hospitals ³
Days hospitalized (the difference is significant at .05)	4.6	6.5

¹Each hospital visit was considered a case. Each household could report up to three hospital visits. Respondents could report as many reasons for each visit as applied.

²N = 137.

³N = 151.

Table 8

Respondents Visits to Tri-County Hospital and Other Hospitals, 1986

Minutes to Lexington from residence	Visits to Tri-County Hospital	Visits to hospitals other than Tri-County for good reason ¹	Visits to hospitals other than Tri-County for no good reason ²	Hospital visits ³
		-----Percent-----		
1-10	58.4	23.4	18.2	154
11-20	64.9	13.5	21.6	37
21-30	26.3	28.9	44.7	38
31-40	27.3	50.0	22.7	22
41-50	21.4	32.1	40.4	28
51-60	28.6	0	71.4	7
Over 60	0	33.3	66.7	3
Total	47.8	25.3	27.0	289

¹Visits to hospitals other than Tri-County were considered to be for a good reason if the condition could not be treated at Tri-County Hospital (as reported on the Tri-County physician's survey) or if the respondent selected the hospital for location/convenience or for availability of a medical specialty.

²Visits to hospitals other than Tri-County were considered not to be for a good reason if none of the conditions listed in footnote 1 were met.

³Each hospital visit was considered a case. Each household could report up to three hospital visits.

Table 9

Respondents Reasons for Selecting a Hospital, by ZIP Code, 1986

ZIP code	Visits to Tri-County Hospital	Visits to hospitals other than Tri-County for good reason ¹	Visits to hospitals other than Tri-County for no good reason ²	Hospital visits ³
68850 (Lexington)	58.6	22.2	19.1 (13.0, 25.2)	162
68863 (Overton)	56.5	8.7	34.8 (15.5, 54.3)	23
68922 (Arapahoe)	13.9	33.3	52.8 (36.5, 69.1)	36
68937 (Elwood)	53.8	30.8	15.4	26

¹Visits to hospitals other than Tri-County were considered to be for a good reason if the condition could not be treated at Tri-County Hospital (as reported on the Tri-County physician's survey) or if the respondent selected the hospital for location/convenience or for availability of a medical specialty.

²Visits to hospitals other than Tri-County were considered not to be for a good reason if none of the conditions listed in footnote 1 were met. Ninety-five percent confidence intervals are given.

³Each hospital visit was considered a case. Each household could report up to three hospital visits.

Table 10

Estimate of Monetary Value of Leakage from Tri-County Hospital, 1983-86

Minutes to Lexington from residence	Estimated visits leaked	Estimated value of leaked visits	Low estimated value of leaked visits	High estimated value of leaked visits
	<u>Number</u>	<u>-----Thousand dollars-----</u>		
1-10	2,298	771	165	1,462
11-20	552	220	84	354
21-30	567	468	302	633
31-40	328	137	-	-
41-50	417	358	215	500
51-60	104	138	-	-
Over 60	45	551	-	-
Lexington ZIP	2,418	852	580	1,124
Overton ZIP	343	220	98	344
Arapahoe ZIP	537	523	362	685
Elwood ZIP	388	110	-	-
All households	4,313	2,148	1,742	2,553

- = cannot be computed.

Table 11

Respondents Reasons for Selecting a Hospital, 1986¹

Reason for selecting hospital ²	Respondents
	<u>Percent</u>
Cost	0
Habit	13.9
Quality of physician	25.0
Quality of hospital	1.3
Recommendation of physician	44.0
Recommendation of friend or relative	2.8
Attitude of staff	0
Attitude of physicians	0
Other	19.4

¹Includes households located within 20-minutes travel time of downtown Lexington that visited a hospital other than Tri-County without a good reason. Good reasons for not selecting Tri-County Hospital include: could not provide a particular service, location/convenience, or a medical specialty was available elsewhere; N = 36.

²Each hospital visit was considered a case. Each household could report up to three hospital visits. Respondents were able to report as many reasons for each visit as applied. This analysis was also conducted for households located in ZIP code areas in which at least 40 percent of hospital visits were to Tri-County Hospital. The results were very similar, therefore, they are not reported.

Table 12

Comparison of Satisfaction with Treatment at Tri-County Hospital and Other Hospitals, 1986

Satisfaction with treatment ¹	Tri-County Hospital ²	Other hospitals ³
	<u>Percent</u>	
Very satisfied	47.4	67.8
Satisfied	47.4	30.8
Dissatisfied	4.5	1.4
Very dissatisfied	.8	0
Chi-Square = 13.4 (significant at 0.01)		
	<u>Number</u>	
Average satisfaction (1 is highest and 4 is lowest); difference in average satisfaction is significant at 0.01.	1.58	1.34

¹Each hospital visit was considered a case. Each household could report up to three hospital visits. Respondents could report as many reasons for each visit as applied.

²N = 137.

³N = 146.

Table 13

Respondents Assessments of Tri-County Hospital's Performance by Service Component, 1986

Service component	Quality assessment					Average ¹	Respondents
	Very good	Good	Fair	Poor	Very poor		
	-----Percent-----						<u>Number</u>
Admission procedures	25.9	57.1	8.8	5.4	2.9	2.0	205
Friendliness and courtesy of doctors	43.0	45.5	7.9	3.3	.4	1.7	242
Friendliness and courtesy of other staff	41.9	44.9	7.6	2.5	3.0	1.8	236
Competence of physicians	28.1	36.0	8.9	4.3	2.6	2.0	242
Competence of nurses	35.4	51.5	9.3	2.5	1.3	1.8	237
Availability of emergency care	37.9	43.8	10.3	4.9	3.1	1.9	224
Availability of specialized care	15.5	37.6	31.4	12.9	2.6	2.5	194
Billing process	17.2	49.3	16.3	9.4	7.9	2.4	203
Cost	13.9	46.0	26.2	10.2	3.7	2.4	187
Waiting time and scheduling	27.1	55.3	11.1	3.5	3.0	2.0	199
Location and accessibility	43.0	50.0	6.1	.4	.4	1.7	244
Ability to educate patients or give patients instructions about what is needed to deal with an illness	38.0	48.4	9.4	2.3	1.9	1.8	213
Overall	24.1	42.9	9.9	3.6	1.0	2.0	247

¹Average computed when 1 = very satisfied, 2 = satisfied, 3 = dissatisfied, and 4 = very dissatisfied.

Table 14

Comparison of Respondents Assessments of Tri-County Hospital's Performance by Service Component, 1986

Service component	Households that have used Tri-County Hospital in the past 5 years	Households that have not used Tri-County Hospital in the past 5 years	Average rating for users of Tri-County Hospital	Average rating for nonusers of Tri-County Hospital	Significance of difference
	----- <u>Number</u> -----				
Admissions procedures	131	72	1.9	2.1	*
Friendliness and courtesy of doctors	134	105	1.6	1.9	***
Friendliness and courtesy of other staff	131	101	1.7	2.0	**
Competence of physicians	135	104	1.8	2.2	***
Competence of nurses	134	100	1.7	2.0	***
Availability of emergency care	125	97	1.8	2.1	**
Availability of specialized care	111	82	2.3	2.7	***
Billing process	128	73	2.4	2.5	
Cost	122	64	2.3	2.6	**
Waiting time and scheduling	122	76	1.8	2.2	***
Location and accessibility	133	108	1.5	1.8	***
Ability to educate patients or give patients instructions about what is needed to deal with an illness	124	87	1.7	2.0	**
Overall	132	112	1.8	2.2	***

* = Significant at 0.10.

** = Significant at 0.05.

*** = Significant at 0.01.

¹Scale ranges from 1 to 5 with 1 being very good and 5 being very poor.

Table 15

Respondents Visits to Physicians at Plum Creek Medical Group, 1986

Minutes to Lexington from residence	Visits to Plum Creek Medical Group	Visits to clinics other than Plum Creek Medical Group for good reason ¹	Visits to clinics other than Plum Creek Medical Group for no good reason ²	Visits ³
		-----Percent-----		
1-10	81.9	7.9	10.2	342
11-20	61.5	7.7	30.8	91
21-30	34.6	27.2	38.5	81
31-40	30.8	46.2	23.1	39
41-50	26.1	19.6	54.3	46
51-60	25.0	16.7	58.3	12
Over 60	0	50.0	50.0	6
Total	391	88	138	617
(percent)	63.4	14.3	22.4	100

¹Visits to clinics other than Plum Creek were considered to be for good reason if the condition could not be treated at Plum Creek Medical Group (as reported on the physician's survey) or if the respondent selected the hospital for location/convenience or for a medical specialty.

²Visits to clinics other than Plum Creek Medical Group were not considered to be for good reason if none of the conditions listed in footnote 1 were met.

³Each clinic visit was considered a case. Each household could report up to three hospital visits.

Table 16

Respondents Visits to Physicians at Plum Creek Medical Group, by ZIP Code Area, 1986

ZIP code area	Visits to Plum Creek Medical Group	Visits to clinics other than Plum Creek for good reason ¹	Visits to clinics other than Plum Creek for no good reason ²	Visits ³
68850 (Lexington)	82.5	8.3	9.1 (6.1, 12.1)	361
68863 (Overton)	46.2	5.8	48.1 (34.5, 61.7)	52
68922 (Arapahoe)	22.0	27.1	50.8 (38.6, 63.6)	59
68937 (Elwood)	67.4	20.0	11.6	43

¹Visits to clinics other than Plum Creek were considered to be for good reason if the condition could not be treated at Plum Creek Medical Group (as reported on the physician's survey) or if the respondent selected the hospital for location/convenience or for a medical specialty.

²Visits to clinics other than Plum Creek Medical Group were not considered to be for good reason if none of the conditions listed in footnote 1 were met.

³Each clinic visit was considered a case. Each household could report up to three hospital visits.

Table 17

Estimate of Monetary Value of Leakage from Clinic, 1983-86

Minutes to Lexington from residence	Estimate of visits leaked	Estimated value of visits leaked	Low estimated value of visits leaked	High Estimated value of visits leaked
	<u>Number</u>		<u>-----Thousand dollars-----</u>	
1-10	5,104	9.5	6.5	12.4
11-20	1,358	7.6	5.2	10.0
21-30	1,209	8.5	6.1	10.8
31-40	582	2.4	1.0	3.8
41-50	687	6.8	5.0	8.6
51-60	179	1.9	1.8	2.0
Over 60	90	8.1	-	-
Lexington ZIP	5,388	8.9	6.0	11.9
Overton ZIP	776	6.8	4.9	8.7
Arapahoe ZIP	881	8.1	6.2	10.2
Elwood ZIP	791	1.7	-	-
All households	9,209	37.5	32.0	43.1

- = cannot be computed.

Table 18

Respondents Satisfaction with Visits to Plum Creek Medical Group and Other Clinics, 1986

Satisfaction	Plum Creek Medical Group ¹	Other clinics ²
	<u>Percent</u> ³	
Very satisfied	62.4	70.2
Satisfied	30.9	28.1
Dissatisfied	5.4	1.8
Very dissatisfied	1.3	.0
	<u>Rating</u> ⁴	
Average satisfaction (1 is highest and 4 is lowest)	1.46	1.32

¹Each physician visit was considered a case. Each household could report up to three physician visits. Respondents were able to report as many reasons as applied; N = 388.

²N = 228.

³Chi-Square = 9.4; significant at 0.05.

⁴This difference is significant at the 0.01 level.

Table 19

Respondents Reasons for Visits to Plum Creek Medical Group and all Other Clinics, 1986

Reason for selecting clinic	Visits to Plum Creek Medical Group ¹	Visits to other clinics ²	Significance of Chi-Square
	-----Percent-----		
Location/convenience	29.7	21.8	**
Cost	.3	2.6	**
Habit	25.9	30.1	
Specialty available	7.4	17.5	***
Quality of physician	34.5	22.7	***
Quality of clinic	0	1.3	*
Recommendation of physician	8.7	13.5	*
Recommendation of friend of relative	12.1	11.4	NS
Attitudes of staff	.8	0	NS
Attitudes of physicians	5.6	.4	***
Other	8.5	2.2	***

NS = not significant.

* Significant at .10.

** Significant at .05.

*** Significant at .01.

¹Each physician visit was considered a case. Each household could report up to three physician visits. Respondents were able to report as many reasons as applied; N = 391.

²N = 229.

Table 20

Respondents Reasons for Selecting a Physician/Clinic, 1986¹

Reason for selecting clinic	Respondents
	<u>Percent</u>
Cost	4.8
Habit	44.4
Quality of physician	17.5
Quality of clinic	4.8
Recommendation of physician	11.1
Recommendation of friend or relative	23.8
Attitudes of staff	0
Attitudes of physicians	.7
Other	2.9

¹Includes only respondents who visited a clinic other than Plum Creek for no good reason and who lived within 20-minutes travel time of downtown Lexington. Visits to clinics other than Plum Creek Medical Group were not considered to be for good reason if the condition could be treated at Plum Creek (as reported on the physician's survey) or if the respondent did not select the hospital for location/convenience or a medical specialty. Each physician visit was considered a case. Each household could report up to three physician visits; N = 63.

Table 21

Respondents Reasons for Needing More Clinics/Physicians, 1986

Item	Respondents
	<u>Number</u>
Need more and better phsyicians	28
Physicians are too busy	17
Physicians are overworked	14
People have to wait too long	14
Need more competition	11
Need a wider range of specialists	9
Need sliding fee scale	1
Specialists needed:	
OB/GYN	8
Bone	3
Cancer	3
Dermatology	2
Surgeon	1
Pediatician	1
Heart	2
Pathology	1
Psychiatry	1
Radiology	1
Neurology	1

Table 22

Respondents Sources of Payment for Visits to Plum Creek Medical Group and Other Clinics, 1986

Method of payment	Plum Creek Medical Group ¹	Other clinics ²	Significance of Chi-Square
Self	69.5	62.3	*
Private or group insurance	37.2	35.1	NS
Medicaid	2.3	.9	NS
Medicare only	3.3	6.6	*
Medicare plus supplemental private insurance	16.4	16.2	NS
Friend or relative	0	.4	NS
Other	2.3	3.5	NS
Unable to pay	0	.9	NS

NS = not significant.

* Significant at 0.10.

¹Each physician visit was considered a case. Each household could report up to three physician visits. Respondents were able to report as many reasons as applied; N = 390.

²N = 228.

Table 23

Respondents Use of Health Services in Lexington, by Travel Time to Lexington, 1986

Minutes to Lexington from residence	Dentist ¹	Pharmacist ¹	Eye doctor ¹	Where purchase eyeglasses ¹	Mental health professional	Respondents ²	
						Percent	Number
1-10	77.2 (70.5, 83.9)	98.0	64.0 (56.0, 72.0)	63.3 (55.3, 71.3)	83.3	12	149
11-20	42.2 (25.9, 58.6)	89.0	53.5 (30.0, 76.0)	55.8 (41.0, 70.6)	50.0	2	45
21-30	26.3 (12.3, 40.3)	52.4 (37.3, 63.5)	46.2 (30.6, 61.8)	41.0 (26.0, 56.4)	0	3	38
31-40	27.3 (0.7, 45.9)	13.6	11.1	16.7	50.0	2	22
41-50	15.4	19.2	13.0	21.7	0	2	26
51-60	25.0	11.1	0	0	0	0	8
Over 60	.0	0	0	0	0	0	2
All respondents	53.8 (48.0, 59.5)	74.0 (69.0, 79.0)	49.6 (43.7, 55.5)	50.2 (43.8, 56.2)	57.1 (35.9, 78.3)		290

¹Ninety-five percent confidence intervals are included in parentheses.

²These numbers vary slightly because respondents may not have responded to all questions.

Table 24

Respondents Reasons for Selecting a Pharmacist, 1986

Reason for selecting a pharmacy	All respondents	Respondents living within 20 minutes of Lexington but who do not use a Lexington pharmacist
		<u>Percent</u>
Convenience/location	43.0	50.0
Quality	8.3	.0
Price	23.0	25.0
Habit	16.7	12.5
Other	8.7	12.5
Do not use	.3	
		<u>Number</u>
Respondents	300	8

Table 25

Respondents Reasons for Selecting a Dentist, 1986

Reason for selecting a dentist	All respondents	Respondents living within 20 minutes of Lexington but who do not use a Lexington dentist
		<u>Percent</u>
Convenience/location	19.7	15.5
Quality	23.5	25.9
Price	3.1	6.9
Habit	30.4	31.0
Other	20.4	19.0
Do not use	2.8	1.7
		<u>Number</u>
Respondents	289	58

Table 26

Respondents Purchases of Services or Goods In Lexington, 1986

Item	Minutes to Lexington from residence														All respondents	
	1-10		11-20		21-30		31-40		41-50		51-60		Over 60			
	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Clothing	71.4	147	48.9	47	52.4	92	31.8	22	20.0	25	22.0	9	0	2	55.8	294
Home furnishings	63.6	121	52.8	36	43.8	32	5.9	17	6.3	16	25.6	4	0	2	49.6	228
Large appliances	75.4	118	54.5	33	45.5	33	20.0	20	11.1	18	25.0	4	0	2	56.6	228
Hardware and small appliances	94.7	131	82.5	40	55.0	40	18.2	22	20.0	25	25.0	4	0	2	71.6	264
Lumber and building materials	97.1	103	72.2	36	38.7	31	17.6	17	0	13	0	3	0	2	68.8	205
Farm materials	90.5	42	70.0	20	52.9	17	0	11	0	8	0	1	0	1	61.0	100
Automobiles	67.5	117	51.3	36	17.6	34	5.6	18	8.7	23	16.7	6	0	2	45.6	239
Auto parts and services	94.4	143	72.4	44	35.9	39	9.5	21	8.0	25	143	7	0	2	66.2	281
Gasoline	95.1	144	42.2	45	23.1	39	9.1	22	4.0	25	11.1	9	0	2	59.1	286
Drugs and pharmaceuticals	99.3	150	87.0	46	57.5	40	13.6	22	16.0	25	22.2	9	0	2	75.2	294
Groceries and meats	98.0	151	75.6	45	39.6	41	13.6	22	0	26	22.2	9	0	2	68.6	296
Luxury items	77.7	103	69.2	26	52.0	25	23.5	17	35.3	17	50.0	2	0	2	63.5	192
Financial services	94.0	149	53.2	47	22.0	41	9.1	22	7.7	26	11.1	9	0	2	60.5	296
Personal services (barber)	95.7	140	75.6	41	32.4	37	10.5	19	4.8	21	14.3	7	0	1	68.0	266
Entertainment	71.0	107	30.8	26	22.2	27	7.7	13	6.7	15	100.0	1	0	1	48.9	190
Eating out	83.6	140	56.8	44	46.2	39	20.0	20	23.8	21	11.1	9	0	1	62.0	274

Table 27

Services Needed and Received by Survey Respondents, 1986

Service	Need but do not receive	Receive	Do not need or receive	Respondents
	<u>Percent</u>			<u>Number</u>
Home health services (for example, visiting nurse)	0.3	1.3	98.3	302
Homemaker services	0	2.0	98.0	302
Adult day care	.3	.7	99.0	300

Table 28

Types of Insurance Coverage Used by Survey Respondents, 1986

Types of insurance coverage	Respondents with insurance ¹	
	Percent	Number
Respondent covered by public or private health insurance	90.4 (87.1, 93.7)	303
Type of insurance if covered:		
Private/group insurance	69.3 (63.8, 74.8)	274
Medicaid	3.6 (1.4, 5.8)	274
Medicare only	7.3 (4.2, 10.5)	274
Medicare plus supplemental private insurance	21.5 (13.6, 29.4)	274
Other	2.3 (0.0, 4.1)	274
Do not know	0	274
Services covered if insured:		
Dental care	32.9 (27.2, 38.6)	258
Alcoholism services	36.8 (28.3, 45.3)	125
Mental health services	44.4 (35.7, 53.1)	124
If insured and live in multi-individual household, all members are covered	90.4 (88.5, 92.2)	251
If insured, household is:		
Over insured	3.8 (1.6, 6.0)	293
Under insured	27.6 (22.5, 32.7)	293
Just right	68.6 (63.3, 73.9)	293

¹Confidence intervals are included in parentheses.

Table 29

Health Services Not Sought by Respondents Because of Inability to Pay, 1986

Type of health service	Respondents who did not seek care ¹		Respondents
	<u>Percent</u>		<u>Number</u>
Hospital	5.0	(2.5, 7.5)	303
Physician	6.7	(0.4, 9.5)	299
Dentist	11.3	(7.7, 14.9)	293
Eye doctor	9.0	(6.4, 13.2)	301
Purchase:	7.4	(4.4, 10.4)	297
Glasses/contact lenses	88.9		18
Both	11.1		18

¹Confidence intervals are included in parentheses.

Table 30

Respondents Perceived Need for More Clinics and Physicians, 1986

Perceived need	Response ¹		Respondents
	<u>Percent</u>		<u>Number</u>
More clinics in Lexington area	27.4	(21.6, 33.2)	230
More physicians in Lexington area	45.2	(38.7, 60.7)	228
Satellite clinic would be useful	75.9	(70.5, 81.2)	254
Respondent or member of respondents family would use a satellite clinic if it were available	47.0	(40.8, 53.2)	253
Satellite clinic should be located: ²			
Lexington	39.2	(31.2, 47.2)	143
Elwood	20.3	(13.7, 26.9)	143
Overton	14.0	(8.3, 19.7)	143
Arapahoe	6.3	(2.3, 10.3)	143
Farnam	2.8		143
Bertrand	2.8		143
Cozad	2.8		143
Mason	2.1		143

¹Confidence intervals are included in parentheses.

²Other towns mentioned by any one respondent (0.7 of the total) include Broken Bow, Darr, Eddyville, Holdridge, Kearney, Sumner, Oxford, Holbrook, and Mason.

Table 31

Services Respondents Would Like Tri-County Hospital to Provide or Comments
About Services, 1986

Service/comment	Respondent s
	<u>Number</u>
ENT	1
GYN	4
Heart specialist	7
OB	1
GP	2
Eye specialist	1
Surgeon	4
Pediatrician	15
Kidney specialist	3
Orthopedist	16
Dermatologist	4
Emergency room	1
Radiologist	2
Cancer specialist	2
Urologist	1
Allergist	1
Psychologist	2
Mamogram	1
More and better doctors	6
Outside physicians should be scheduled once per week	3
Physicians are busy	2
Physicial therapists	1
Alcoholism treatment	1
More intensive care units	1
Home health care for elderly	3
Veterans' ward	1
Better access roads	2
Specialized care for older people	2
Better Medicare service for elderly	1
Equipment for heart	1
CAT scan	2
Medical supplies	2
X-ray	2

continued --

Table 31--continued

Services Respondents Would Like Tri-County Hospital to Provide or Comments
About Services, 1986

Service/comment	Respondents
	<u>Number</u>
Radiation treatment	2
Family planning clinic	2
Birthing chair	1
Pathology services	1
Establish a clinic in Elwood	1
Fast-paced outpatient clinic	1
Rehabilitation program for stroke or arthritis	1
Improved quality of service	3
Services are mostly adequate	6
Like my doctor, but wouldn't go to the others	2
Doctors should tell patients possible side-effects of medication	1
Helicopter	1

Table 32

Improvements Respondents Desire for Health Services in Lexington Area or Comments About Improvements, 1986

Improvement	Respondents
	<u>Number</u>
More services for elderly	6
Van for senior citizens	1
Better qualified doctors	9
Health education	3
Very satisfied with health services offered	7
Regular CPR classes	3
Home health care	4
More competent personnel at local hospital	1
Orthodontist	3
OB/GYN	5
Heart specialist	2
Surgeon	4
Dermatologist	2
Pediatrician	3
Orthopedist	1
Allergist	1
ENT	3
Dentist	3
Eye surgeon	1
Psychologist	1
Chiropractor	1
Geriatrics	1
Education for child abuse	2
Competition for eye doctor and eyeglass dispensary	1
Competition (in general)	2
Clinic and doctor in Bertrand	3
Outpatient care for elderly	1
Fire examinations for poor	2
Drug prevention programs	4
Mental health counseling	8
Price is too high	10
Doctors on duty for emergency	2

Figure 1
Study Area

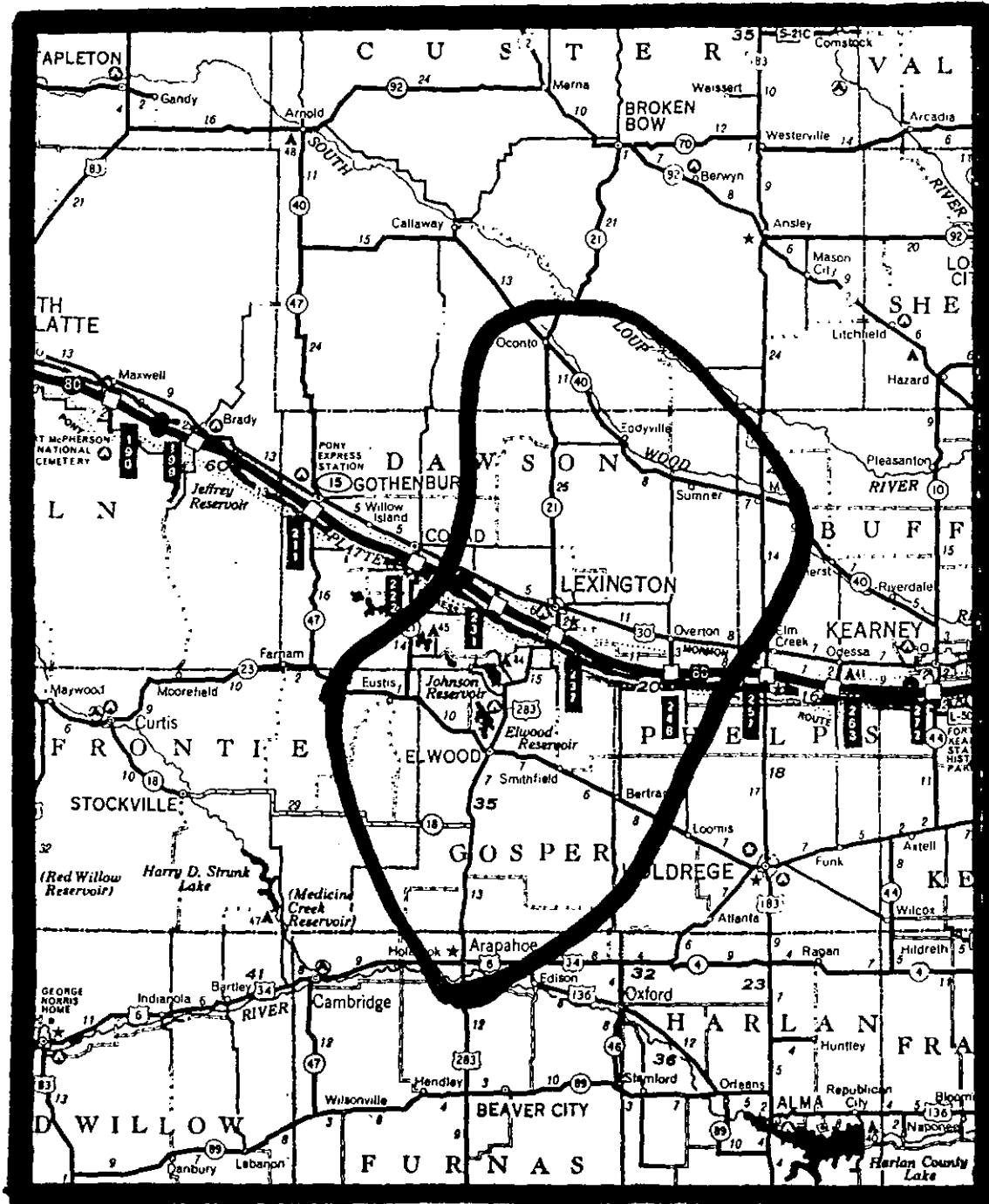
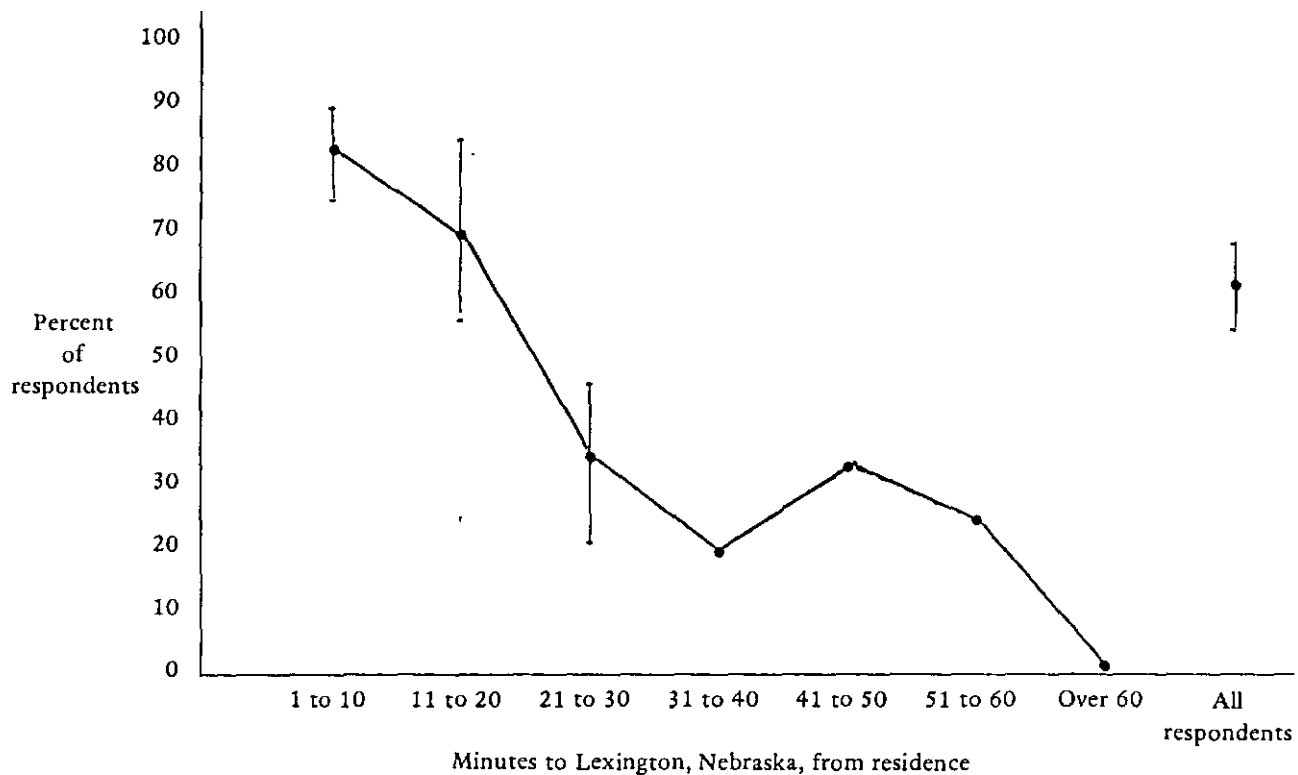


Figure 2

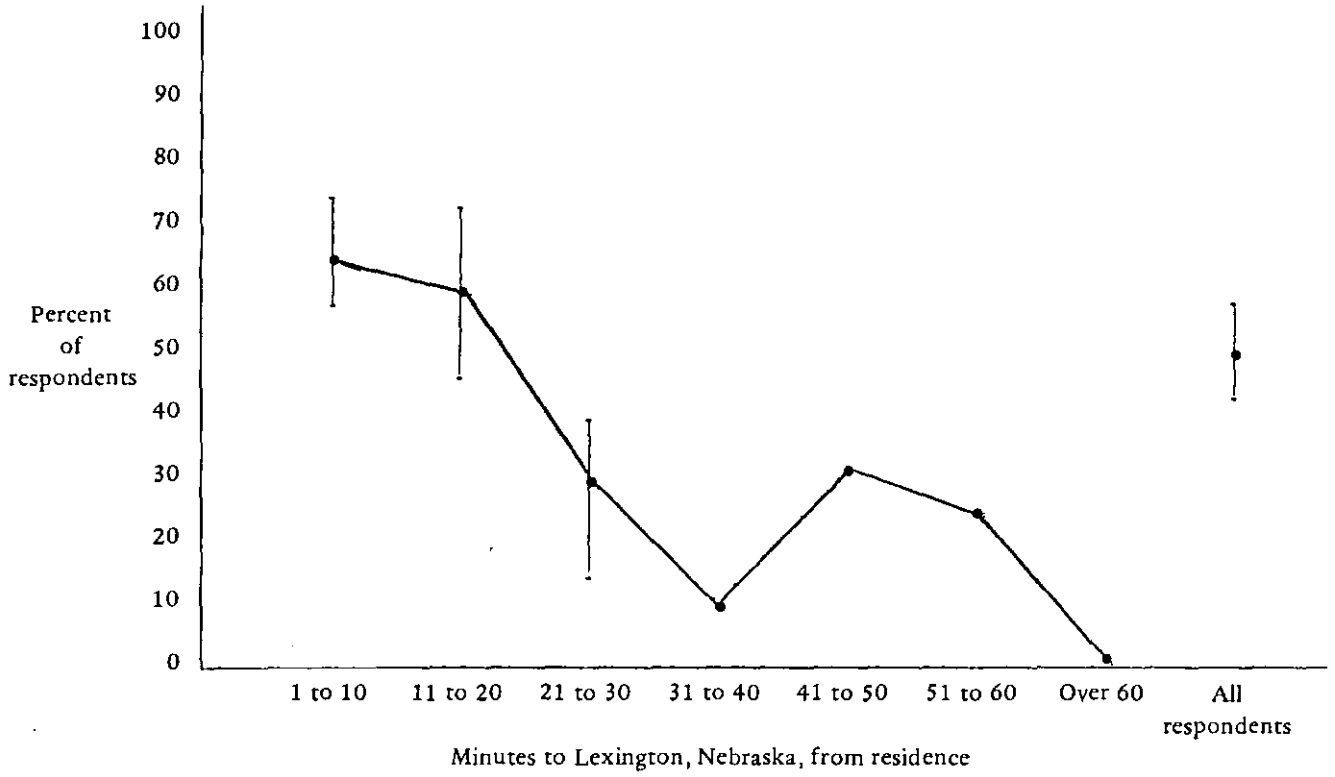
Respondents Who Would Use Tri-County Hospital
for Emergency Care, 1986



Note: Ninety-five percent confidence intervals are shown where appropriate; N = 303.

Figure 3

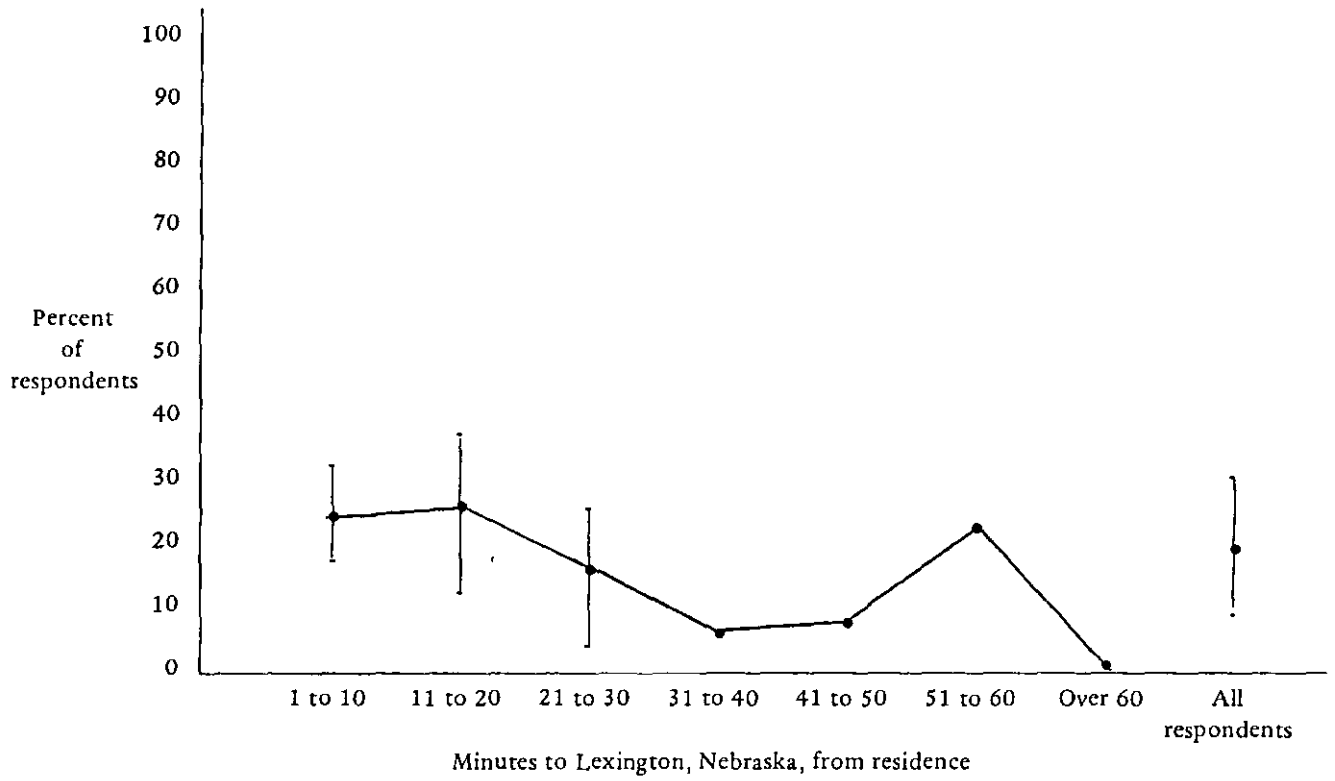
Respondents Who Would Use Tri-County Hospital
for Minor Surgery, 1986



Note: Ninety-five percent confidence intervals are shown where appropriate; N = 303.

Figure 4

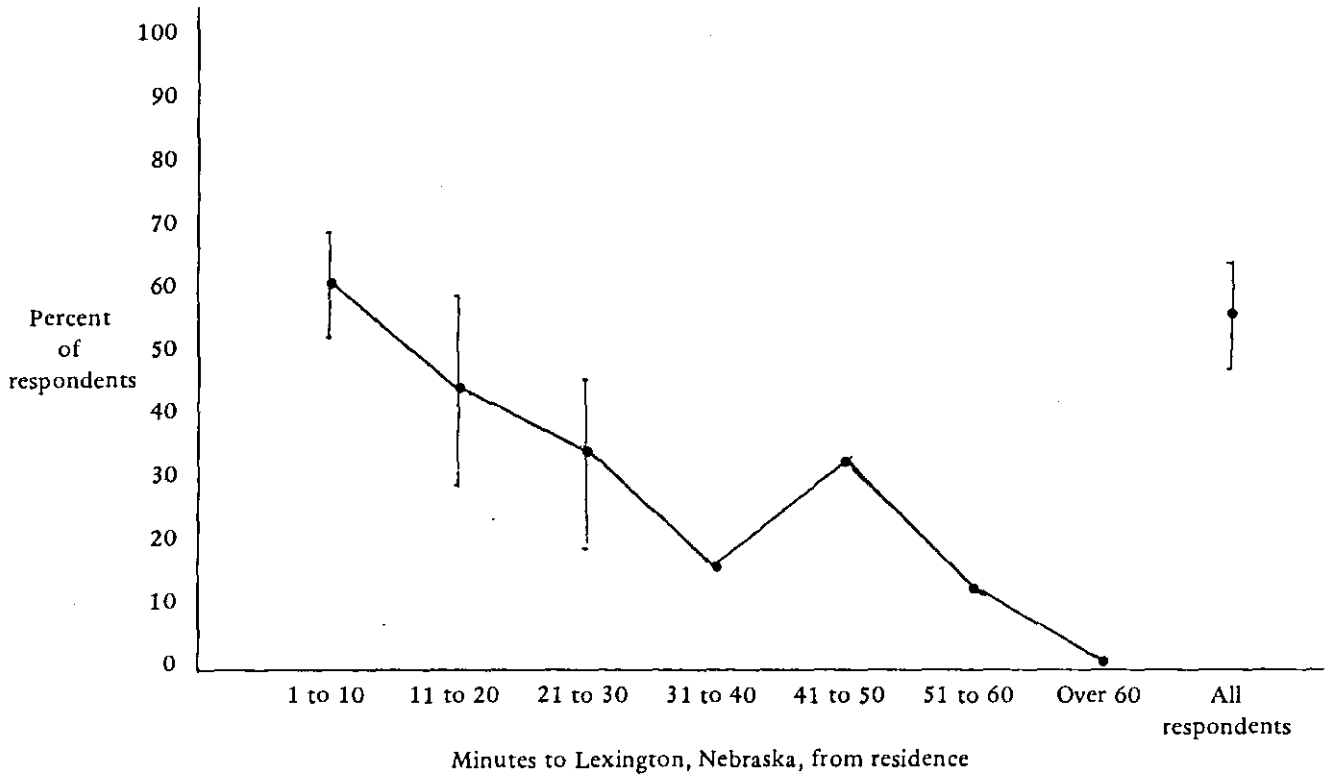
Respondents Who Would Use Tri-County Hospital
for Major Surgery, 1986



Note: Ninety-five percent confidence intervals are shown where appropriate; N = 303.

Figure 5

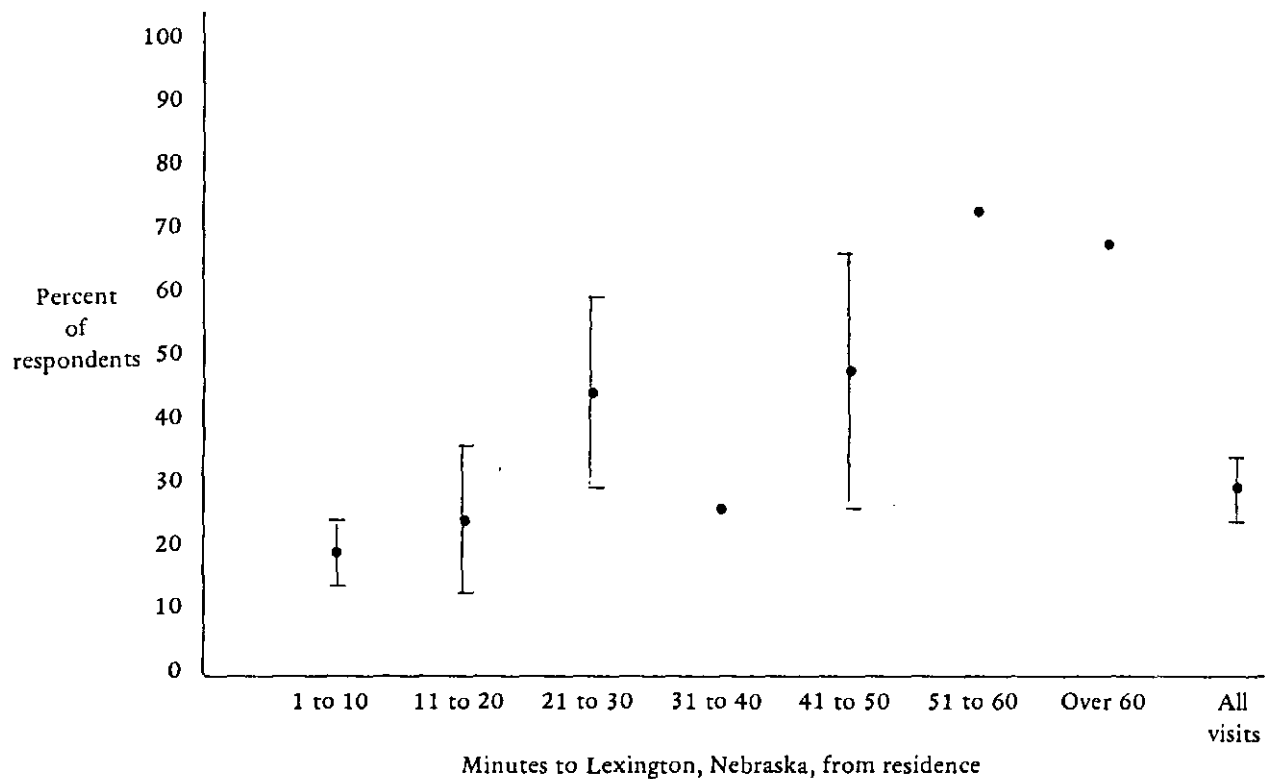
Respondents Who Had a Household Member Hospitalized
at Tri-County Hospital Within the Past Five Years, 1986



Note: Ninety-five percent confidence intervals are shown where appropriate.

Figure 6

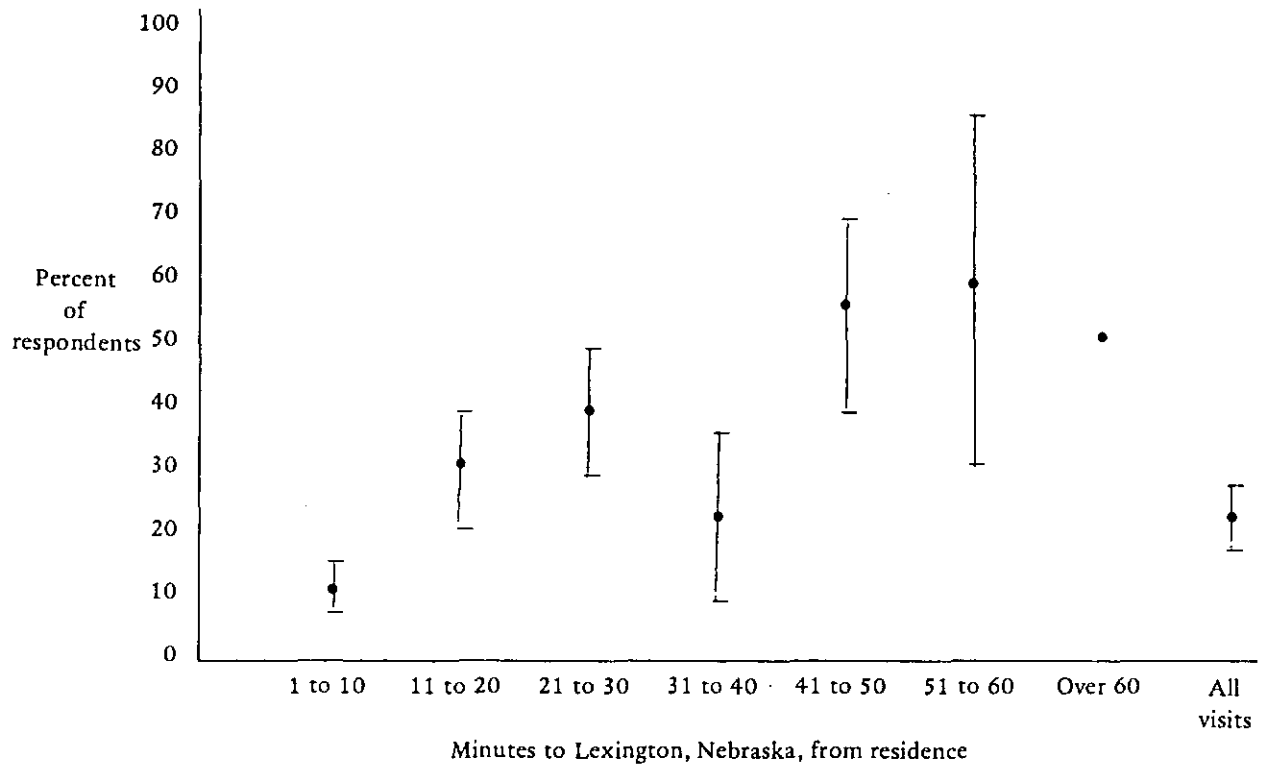
Percentage of Visits Made to Hospitals Other Than Tri-County
For No Good Reason¹



¹Ninety-five percent confidence intervals are shown where appropriate; N = 289. Each hospital visit was considered a case. Each household could report up to three hospital visits.

Figure 7

Percent of Visits Made to Clinics Other Than Plum Creek Medical Group
For No Good Reason¹



¹Ninety-five percent confidence intervals are shown where appropriate; N = 617. Each hospital visit was considered a case. Each household could report up to three physician visits.

APPENDIX A

LEXINGTON TRI-COUNTY HOSPITAL SURVEY

Interviewer Name _____
Telephone Number _____
Name Listed for Telephone Number _____

ATTEMPTED CONTACTS:

	Date	Time	Status (complete, no answer, request to call back)
First Attempt	_____	_____	_____
Second Attempt	_____	_____	_____
Third Attempt	_____	_____	_____

*A (Col 1 2-4)

Survey Number _____

Time interview began _____:

I'm _____, calling from the Center for Applied Urban Research at the University of Nebraska. We're doing a study of health services in the Lexington area and are interested in your feelings about the hospitals, clinics, and other health care providers in your area. We chose your telephone number at random and your responses will be kept completely confidential. Your answers to these questions are very important in developing an accurate picture of the need for and adequacy of health services in your area.

Are you 18 years or older?

IF YES, PROCEED; IF NO, ASK FOR ADULT AND REPEAT LEAD

First I'm going to ask a few questions about where you live and the number of people in your household, then I will ask about your health and use of health services.

1. Approximately how many minutes does it take you to get to downtown Lexington? _____

2. Approximately how many minutes does it take you to get to downtown Kearney? _____

3. What is your zip code?
(NOTE: Enter Last 4 digits only) _____

4. Do you live in Lexington city, a town, a rural but nonfarm area, or on a farm?

- Lexington..... 1
- Town (specify)..... 2
- Nonfarm, rural..... 3
- Farm..... 4
- Other (specify)..... 5

5. How many years have you lived at your present address? _____

6. How many years have you lived in the Lexington area? _____

7. Do you plan to move out of the Lexington area within the next year?

- Yes..... 1
- No..... 0
- Don't know..... 9

8. What is the age of each person in your household, starting with yourself? RECORD BELOW BEGINNING WITH THE RESPONDENT. PEOPLE WHO DO NOT NORMALLY LIVE IN THE HOUSEHOLD, SUCH AS VISITORS OR COLLEGE STUDENTS WHO LIVE AWAY FROM HOME, SHOULD NOT BE COUNTED.

ASK EACH OF THE FOLLOWING QUESTIONS FOR EACH PERSON IN THE HOUSEHOLD AND RECORD RESPONSES ON HOUSEHOLD COMPOSITION SUMMARY SHEET.

- 9. Is this person the principal income earner, spouse of the principal income earner, a child, other relative, or nonrelative?
- 10. Is this person male or female?
- 11. What is the highest grade of school completed or the highest degree earned?
- 12. Would you say your (and then each household member's) health is excellent, good, fair, or poor?

LIST HOUSEHOLD MEMBERS STARTING WITH RESPONDENT. DO NOT INCLUDE INDIVIDUALS WHO ARE NOT NORMALLY HOUSEHOLD MEMBERS

I.D. Number	AGE	RELATIONSHIP					SEX		NUMBER OF YEARS OF EDUCATION OR HIGHEST DEGREE	HEALTH STATUS (* CARD B)				
	Age in Years	Primary Earner	Spouse	Child	Relative	Nonrel.	Male	Female	Enter number of years of education or H.S.=12, Assoc.=14, Col.=16, MA/MS 18 Ph.D., J.D., or M.D.=20	Excellent	Good	Fair	Poor	U.K.
01	___	1	2	3	4	5	0	1	___	1	2	3	4	9
02	___	1	2	3	4	5	0	1	___	1	2	3	4	9
03	___	1	2	3	4	5	0	1	___	1	2	3	4	9
04	___	1	2	3	4	5	0	1	___	1	2	3	4	9
05	___	1	2	3	4	5	0	1	___	1	2	3	4	9
06	___	1	2	3	4	5	0	1	___	1	2	3	4	9
07	___	1	2	3	4	5	0	1	___	1	2	3	4	9
08	___	1	2	3	4	5	0	1	___	1	2	3	4	9
09	___	1	2	3	4	5	0	1	___	1	2	3	4	9
10	___	1	2	3	4	5	0	1	___	1	2	3	4	9

13. Have you or a member of your household been hospitalized within the past three years?

No (GO TO QUESTION 14) 0
 Yes..... 1
 Don't know..... 9

IF YES, Please tell me, for each of the last three visits, which member of the household was hospitalized, whether it was within the last one, two, or three years, the number of days hospitalized, the major reason for hospitalization, the name of the hospital, your reason for selecting that particular hospital, the distance of the hospital from your home, and your overall level of satisfaction with the hospital visit.

(START WITH MOST RECENT VISIT)

	<u>VISIT ONE</u>		<u>VISIT TWO</u>		<u>VISIT THREE</u>	
A. I.D. number of household member hospitalized.....	_____	_____	_____	_____	_____	_____
B. Number of years ago (1, 2, or 3).....	_____	_____	_____	_____	_____	_____
C. Number of days hospitalized..	_____	_____	_____	_____	_____	_____
D. Major reason for hospitalization.....	_____	_____	_____	_____	_____	_____
E. Name of hospital.....	_____	_____	_____	_____	_____	_____
CODE NUMBER FOR HOSPITAL TO BE <u>LEFT BLANK</u>	_____	_____	_____	_____	_____	_____
F. Reason for selecting this particular hospital (CIRCLE YES FOR ALL THAT APPLY, BUT DO NOT READ OPTIONS)						
	Yes	No	Yes	No	Yes	No
Location/convenience.....	1	0	1	0	1	0
Cost.....	1	0	1	0	1	0
Habit.....	1	0	1	0	1	0
Specialty available.....	1	0	1	0	1	0
Quality of physician.....	1	0	1	0	1	0
Quality of hospital.....	1	0	1	0	1	0
Recommendation of physician....	1	0	1	0	1	0
Recommendation of friend or relative.....	1	0	1	0	1	0
Attitudes of staff.....	1	0	1	0	1	0
Attitudes of physicians.....	1	0	1	0	1	0
Other (specify _____)...	1	0	1	0	1	0
*C G. How many miles is the hospital from your home?.....	_____	_____	_____	_____	_____	_____
H. Overall, how would you rate your satisfaction with the hospital based on the visit? (READ OPTIONS AND CIRCLE)						
Very satisfied.....	1		1		1	
Satisfied.....	2		2		2	
Dissatisfied.....	3		3		3	
Very dissatisfied.....	4		4		4	
Don't know.....	9		9		9	
I. How did you pay for the hospital visit? (CHECK ALL THAT APPLY).....	Yes	No	Yes	No	Yes	No
Self.....	1	0	1	0	1	0
Private/group insurance.....	1	0	1	0	1	0
Medicaid.....	1	0	1	0	1	0
Medicare only.....	1	0	1	0	1	0
Medicare plus supplemental private insurance.....	1	0	1	0	1	0
Friend or relative.....	1	0	1	0	1	0
Other (specify).....	1	0	1	0	1	0
Unable to pay.....	1	0	1	0	1	0
Don't know.....	1	0	1	0	1	0

Lexington 5

14. What hospital would you go to for emergency care?

Tri-County..... 01
Good Samaritan (Kearney)... 02
Other _____
No preference..... 98

15. What hospital would you go to for minor surgery?

Tri-County..... 01
Good Samaritan (Kearney)... 02
Other _____
No preference..... 98

16. What hospital would you go to for major surgery?

Tri-County..... 01
Good Samaritan (Kearney)... 02
Other _____
No preference..... 98

17. Have you or a member of your household been hospitalized at the Tri-County Hospital at Lexington within the past five years?

Yes..... 1
No..... 0
Don't know..... 9

Lexington 6

I am going to mention a number of hospital characteristics. Please tell me how well Tri-County Hospital in Lexington performs on each characteristic based on whatever knowledge of the hospital you have. IF RESPONDENT FEELS THAT PERFORMANCE IS POOR OR VERY POOR, PROBE TO FIND OUT SPECIFIC REASON AND RECORD UNDER 31.

	Very Good	Good	Fair	Poor	Very Poor	Don't Know
18. Admission procedures.....	1	2	3	4	5	9
19. Friendliness and courtesy of doctors.....	1	2	3	4	5	9
20. Friendliness and courtesy of nurses and other staff.....	1	2	3	4	5	9
21. Competence of physicians.....	1	2	3	4	5	9
22. Competence of nurses.....	1	2	3	4	5	9
23. Availability of emergency care.....	1	2	3	4	5	9
24. Availability of specialized care.....	1	2	3	4	5	9
25. The billing process.....	1	2	3	4	5	9
26. Cost.....	1	2	3	4	5	9
27. Waiting time and scheduling.....	1	2	3	4	5	9
28. Location and accessibility.....	1	2	3	4	5	9
29. Ability to educate patients or give patients instructions about what is needed to deal with a condition or an illness.....	1	2	3	4	5	9
30. Overall.....	1	2	3	4	5	9

31. IF RESPONDENT ANSWERED POOR OR VERY POOR FOR ANY OF THE ABOVE CHARACTERISTICS, PROBE FOR AN EXPLANATION WRITE REASON BELOW, INDICATING THE QUESTION TO WHICH IT REFERS (E.G., #27. "I HAD TO WAIT MORE THAN TWO HOURS TO BE SEEN AT THE EMERGENCY ROOM.")

*D

32. How would you get to the hospital? Would you walk, take a bus, go in your own car, ride in someone else's car, or take a taxi or handivan?

- Walk..... 1
- Bus..... 2
- Own car..... 3
- Other's car..... 4
- Taxi or handivan..... 5
- Other (specify)..... 6
- Don't know..... 9

33. Have you or a member of your household not gone to the hospital when you thought they should have within the last year because of the inability to pay?

- Yes..... 1
- No..... 0
- Don't know..... 9

Now I'm going to ask you a few questions about visits to the doctor.

34. Have you or a member of your household gone to a physician within the past year?

- No (GO TO QUESTION 39)..... 0
- Yes..... 1
- Don't know..... 9

IF YES, Please tell me, for each of the last three visits, which member of the household went, the major reason for the visit, the name of the clinic, if any, the name of the physician, the distance of the hospital from your home, and your overall level of satisfaction with the visit.

(STARTING WITH MOST RECENT)

VISIT ONE VISIT TWO VISIT THREE

A. I.D. number of household member..... _____

B. Major reason for visit..... _____

C. Name of clinic..... _____

CODE NUMBER FOR CLINIC
TO BE LEFT BLANK _____

D. Name of physician..... _____

CODE NUMBER FOR PHYSICIAN
TO BE LEFT BLANK _____

E. Reason for selecting this particular physician/clinic (CIRCLE YES FOR ALL THAT APPLY, BUT DO NOT READ OPTIONS)

	Yes	No	Yes	No	Yes	No
Location/convenience.....	1	0	1	0	1	0
Cost.....	1	0	1	0	1	0
Habit.....	1	0	1	0	1	0
Specialty available.....	1	0	1	0	1	0
Quality of physician.....	1	0	1	0	1	0
Quality of hospital.....	1	0	1	0	1	0
Recommendation of physician....	1	0	1	0	1	0
Recommendation of friend or relative.....	1	0	1	0	1	0
Attitudes of staff.....	1	0	1	0	1	0
Attitudes of physicians.....	1	0	1	0	1	0
Other.....	1	0	1	0	1	0
(Specify) _____						

*E

F. Overall, how satisfied are you with the doctor visit?
(READ OPTIONS AND CIRCLE)

Very satisfied.....	1	1	1
Satisfied.....	2	2	2
Dissatisfied.....	3	3	3
Very dissatisfied.....	4	4	4
Don't know.....	9	9	9

G. How did you pay for the doctor visit? (CHECK ALL THAT APPLY)

	Yes	No	Yes	No	Yes	No
Self.....	1	0	1	0	1	0
Private/group insurance.....	1	0	1	0	1	0
Medicaid.....	1	0	1	0	1	0
Medicare only.....	1	0	1	0	1	0
Medicare plus supplemental private insurance.....	1	0	1	0	1	0
Friend or relative.....	1	0	1	0	1	0
Other (specify).....	1	0	1	0	1	0
Unable to pay.....	1	0	1	0	1	0
Don't know.....	1	0	1	0	1	0

H. How many miles is the doctor from your home?.....

I. In what city or town is the doctor located?.....

CODE NUMBER FOR TOWN
TO BE LEFT BLANK

35. Where do you usually go when you see a doctor--a doctor's office, hospital emergency room, hospital outpatient clinic, health maintenance organization (HMO), company clinic, or some other place?

Doctor's office.....	1
Hospital emergency room.....	2
Hospital clinic.....	3
HMO.....	4
Company clinic.....	5
Other (specify).....	6
Don't know.....	9

36. When you call your doctor, how many days does it usually take to get an appointment?

Number of days.....	_____
Don't know/not applicable.....	99

37. When you arrive at the doctor's office, how long do you usually have to wait to see the doctor?

Minutes.....	_____
Don't know/not applicable.....	99

38. How do you get to your doctor? Do you usually walk, take a bus, go in your car, ride in someone else's car, or take a taxi or handivan?

Walk.....	1
Bus.....	2
Own car.....	3
Other's car.....	4
Taxi or handivan.....	5
Other (specify).....	6
Don't know.....	9

39. Have you or a member of your household not sought the care of a physician in the past year because of the inability to pay?

Yes.....	1
No.....	0
Don't know.....	9

Lexington 9

Lexington now has one clinic and five doctors.

40. Do you feel that there is a need for more clinics in the Lexington area?

Yes.....1
No.....0
Don't know.....9

41. Do you feel that there is a need for more physicians in the Lexington area?

Yes.....1
No.....0
Don't know.....9

IF ANSWERED YES TO EITHER QUESTION 40 OR QUESTION 41, ASK

Why do you feel there is a need for more clinics/physicians?

BLANK

Tri-County Hospital is thinking about starting a clinic that would provide basic health services somewhere in the community apart from the hospital [EXPLAIN THE CONCEPT OF SATELLITE CLINIC FURTHER IF NEEDED].

42. Do you think such a clinic would be useful?

Yes.....1
No.....0
Don't know.....9

IF YES, in what city or town would you like to see such a clinic located?

BLANK

Don't know..... 99

43. Would you or a member of your family be likely to use such a clinic should it open?

Yes.....1
No.....0
Don't know.....9

Let me ask a few questions about other health services.

44. How many trips to a dentist or dental hygenist have you (personally) made within the past year? (ENTER 0 IF NO TRIPS)

Number..... _____
Don't know/not applicable..... 99

45. In what city or town is the last dentist you visited located?

BLANK

*F

46. Why do you see the dentist that you do? (MAJOR REASON ONLY)

- Convenience/location..... 1
- Quality..... 2
- Price..... 3
- Habit (gone before)..... 4
- Other (specify)..... 6
- Don't go..... 8
- Don't know..... 9

47. How many minutes does it take you to get to the dentist from your home?

- Minutes..... _____
- Don't know/not applicable..... 99

48. Have you or a member of your household not sought dental treatment during the past year because of the inability to pay?

- Yes..... 1
- No..... 0
- Don't know..... 9

49. In what city or town is the pharmacist you (PL) most often visit located?

_____ BLANK _____

- Don't use pharmacy..... 98
- Don't know..... 99

50. Approximately how many minutes does it take you to get to the pharmacy from your house?

- Minutes..... _____
- Don't know/not applicable..... 99

51. Why do you purchase pharmaceuticals where you do? (MAJOR REASON ONLY)

- Convenience/location..... 1
- Quality..... 2
- Price..... 3
- Habit (gone before)..... 4
- Other (specify)..... 6
- Don't go..... 8
- Don't know..... 9

52. Do you or a member of you household wear glasses or contact lenses?

- Yes..... 1
- No (SKIP TO QUESTION 53)..... 0
- Don't know..... 9

A. IF YES, In what town or city do members of your household go to see an eye doctor?

_____ BLANK _____

B. How many times have you or a member of your household visited an eye doctor in the past year?

- Number..... _____
- Don't know/not applicable..... 99

C. In what city do you or members of your household purchase eye glasses or contact lenses?

_____ BLANK _____

53. Have you or a member of your family not gone to an eye doctor during the past year because of the inability to pay?

Yes..... 1
 No..... 0
 Don't know..... 9

54. Have you or a member of your family not purchased eye glasses or contact lenses during the past year because of the inability to pay?

Yes..... 1
 No..... 0
 Don't know..... 9

IF YES, were they unable to buy glasses, contact lenses, or both?

Glasses..... 1
 Contact lenses..... 2
 Both..... 3
 Don't know..... 9

55. Have you or a member of your household sought professional help in the past year for a mental disorder, emotional problem, or nervous condition which you consider to be more serious than the normal ups and downs of everyday life? (READ EXACTLY AS IS).

Yes..... 1
 No..... 0
 Don't know..... 9

A. IF YES, to what kind of professional did you or your household member go? (CIRCLE ALL THAT APPLY, BUT DO NOT READ OPTIONS)

	<u>Yes</u>	<u>No</u>
Psychiatrist.....	1	0
Psychologist.....	1	0
Pastor.....	1	0
Mental health center.....	1	0
Psychiatric hospital.....	1	0
General hospital.....	1	0
General physician.....	1	0
Other counselor.....	1	0
Other (specify).....	1	0
Don't know.....	1	0

B. In what town or city was the professional (or the one most often used) located?

BLANK

Don't know..... 99

56. Are you covered by any public or private health insurance plan?

Yes..... 1
 No (SKIP TO QUESTION 57)..... 0
 Don't know..... 9

A. What type of health insurance plan do you have? (CHECK ALL THAT APPLY)

	<u>Yes</u>	<u>No</u>
Private/group insurance.....	1	0
Medicaid.....	1	0
Medicare only.....	1	0
Medicare plus supplemental private insurance.....	1	0
Other (specify).....	1	0
Don't know.....	1	0

B. Does your health insurance plan include coverage for the treatment of the following:

	<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
i) Dental care.....	1	0	9
ii) Alcoholism services.....	1	0	9
iii) Mental health services.....	1	0	9

C. IF MULTIPERSON HOUSEHOLD, is everyone in your family covered by your insurance plan?

Yes..... 1
 No..... 0
 Don't know..... 9

D. Were you (and members of your household) covered for the entire year?

Yes..... 1
 No..... 0
 Don't know..... 9

57. Do you feel that you (and members of your household) are overinsured, underinsured, or have just the right amount of medical insurance?

Overinsured..... 1
 Underinsured..... 2
 Just right..... 3
 Don't know..... 9

58. Do you or any member of your household regularly receive or now require the following services?

	<u>Need But Do Not Receive</u>	<u>Receive</u>	<u>Neither Need or Receive</u>	<u>Don't Know</u>
Home health services (for example, visiting nurse).....	1	2	3	9
Homemaker services (for those who are unable to perform household chores).....	1	2	3	9
Adult day care (adult taken to center for supervised care during the day).....	1	2	3	9

*G

Some people say that health care in a community has an effect on the economic health of the community.

59. I'm going to ask you about several economic activities. Please tell me in what city or town you and your family most frequently purchase each item and how often.

	Where	Code (LEAVE BLANK)	How Often			
			At Least Weekly	At Least Monthly	Occasionally	Not at All
Clothing.....	_____	_____	1	2	3	4
Furniture and home furnishings....	_____	_____	1	2	3	4
Large appliances....	_____	_____	1	2	3	4
Hardware, house- wares, and small appliances.....	_____	_____	1	2	3	4
Lumber and building supplies...	_____	_____	1	2	3	4
Farm materials and supplies.....	_____	_____	1	2	3	4
Automotive/car dealers.....	_____	_____	1	2	3	4
Automobile parts and service.....	_____	_____	1	2	3	4
Gasoline.....	_____	_____	1	2	3	4
Drugs and pharmacy..	_____	_____	1	2	3	4
Groceries and meats.	_____	_____	1	2	3	4
Luxury items, such as cameras, jewelry, etc.....	_____	_____	1	2	3	4
Financial services, such as banks.....	_____	_____	1	2	3	4
Personal services, such as barbers.....	_____	_____	1	2	3	4
Entertainment, such as movies.....	_____	_____	1	2	3	4
Eating out at restaurants.....	_____	_____	1	2	3	4

60. Do you ever combine trips to the doctor or dentist with trips to go shopping?

Yes..... 1
 No..... 0
 Don't know..... 9

61. Do you ever combine trips to the hospital with trips to go shopping?

Yes..... 1
 No..... 0
 Don't know..... 9

(*H)

Lexington 14

62. If it was found that purchasing health related services in the Lexington area would improve the economic condition of the area, would you be more likely, less likely, or just as likely as now to purchase health services in the Lexington area?

- More likely..... 1
- Just as likely..... 2
- Less Likely..... 3
- Don't know..... 9

63. A. Are there any services that are not available at Tri-County Hospital in Lexington which you would like them to provide? (PROBE, e.g., IF THEY SAY SPECIALIZATIONS, ASK WHICH SPECIALIZATIONS. USE BACK OF SHEET TO RECORD ANSWERS IF NECESSARY.)

B. What would you most like to see done to improve the provision of other health services in the Lexington area?

Just a few final questions about your household.

64. Is the principal earner of the family self-employed, working for someone else, a homemaker, retired, or unemployed?

- Self-employed..... 1
- Working for someone else..... 2
- Homemaker..... 3
- Retired..... 4
- Unemployed..... 5
- Other (specify)..... 8
- Don't know..... 9

IF SELF-EMPLOYED, WORKING FOR SOMEONE ELSE, OR UNEMPLOYED, ASK:
A. What is the principal earner's (current, usual) line of work?

_____ BLANK _____

RECORD ANSWER, THEN PROBE TO FIT OCCUPATION INTO THE FOLLOWING SCHEME:

DON'T READ

- Managerial professional (with teachers and engineers)..... 1
- Technicians/sales/administrative support (with secretaries and clerks)..... 2
- Service (with food/health/cleaning/protective personal services)..... 3
- Precision/crafts/repair (with mechanics, construction, tool and die, electricians)..... 4
- Machine operators/laborers (with transportation)..... 5
- Farm, forest, and fishery..... 6

B. In which of the following industries is the principal earner (currently, usually) employed?

READ

- Agriculture [DON'T READ forestry or fishing]..... 1
- Construction [DON'T READ mining]..... 2
- Transportation, communications, or utilities..... 3
- Finance, insurance or real estate..... 4
- Wholesale trade..... 5
- Retail trade..... 6
- Manufacturing..... 7
- Entertainment and recreation services..... 8
- Professional services (doctor, lawyer, engineer, teacher)..... 9
- Personal services (barber, hotel, laundry, dressmaking)..... 10
- Repair services and service to businesses..... 11
- Public administration..... 12

C. Near or in what town or city does the principal earner work?

BLANK

IF MARRIED, ASK QUESTION 65 OTHERWISE PROCEED TO QUESTION 66.

65. Is the spouse currently self-employed, working for someone else, a homemaker, retired, or unemployed?

- Self-employed..... 1
- Working for someone else..... 2
- A homemaker..... 3
- Retired..... 4
- Unemployed..... 5
- Other (specify) 6
- Don't know..... 9

IF SPOUSE SELF-EMPLOYED, WORKING FOR SOMEONE ELSE, OR UNEMPLOYED, ASK;

A. What is (his/her) (current, usual) line of work?

RECORD ANSWER, THEN PROBE TO FIT OCCUPATION INTO THE FOLLOWING SCHEME:

DON'T READ

- Managerial professional (with teachers and engineers)..... 1
- Technicians/sales/administrative support
(with secretaries and clerks)..... 2
- Service (with food/health/cleaning/protective
personal services)..... 3
- Precision/crafts/repair (with mechanics, construction,
tool and die, electricians)..... 4
- Machine operators/laborers (with transportation)..... 5
- Farm, forest, and fishery..... 6

B. In which of the following industries is the spouse (currently, usually) employed?

READ

- Agriculture [DON'T READ forestry or fishing]..... 1
- Construction [DON'T READ mining]..... 2
- Transportation, communications, or utilities..... 3
- Finance, insurance or real estate..... 4
- Wholesale trade..... 5
- Retail trade..... 6
- Manufacturing..... 7
- Entertainment and recreation services..... 8
- Professional services (doctor, lawyer, engineer, teacher)..... 9
- Personal services (barber, hotel, laundry, dressmaking)..... 10
- Repair services and service to businesses..... 11
- Public administration..... 12

C. Near what town or city does he/she work?

BLANK

Lexington 16

66. Is your family income more or less than \$20,000?

More..... 1
Less..... 0
Don't know..... 9

IF LESS Is it more or less than \$10,000?

More..... 1
Less..... 0
Don't know..... 9

IF MORE Is it more or less than \$30,000?

More..... 1
Less..... 0
Don't know..... 9

Thank you for your help. Your responses are greatly appreciated and will be used to improve health services in the Lexington area.

RECORD ANYTHING UNUSUAL ABOUT THE INTERVIEW SUCH AS AN UNCOOPERATIVE RESPONDENT, RESPONDENT IS FROM A GROUP HOME, INTERVIEW WAS INTERRUPTED, ETC.

APPENDIX B

SURVEY OF LEXINGTON PHYSICIANS
REASONS FOR HOSPITALIZATION

The following list represents the reasons for hospitalization of Lexington area residents who we surveyed. Please circle the appropriate number to indicate whether the following could definitely be taken care of at Tri-County Hospital, probably could be taken care of at Tri-County, probably could not be taken care of at Tri-County, or definitely could not be taken care of at Tri-County.

Please respond with your best guess, though you may also indicate that there is not enough information to make a reasonable guess by circling the number 9 for "don't know."

CAN TRI-COUNTY HOSPITAL MEET THE FOLLOWING NEEDS? Circle the appropriate response.

<u>Reason for Hospitalization</u>	<u>Definitely Yes</u>	<u>Probably Yes</u>	<u>Probably Not</u>	<u>Definitely Not</u>	<u>Don't Know</u>
adhesion	1	2	3	4	9
aneurysm	1	2	3	4	9
angina	1	2	3	4	9
appendix	1	2	3	4	9
artery surgery	1	2	3	4	9
arthritis	1	2	3	4	9
asthma	1	2	3	4	9
back problems	1	2	3	4	9
back surgery	1	2	3	4	9
bladder removal	1	2	3	4	9
blood disease	1	2	3	4	9
bloodclots	1	2	3	4	9
bowel problems	1	2	3	4	9
breathing difficulty	1	2	3	4	9

<u>Reason for Hospitalization</u>	<u>Definitely Yes</u>	<u>Probably Yes</u>	<u>Probably Not</u>	<u>Definitely Not</u>	<u>Don't Know</u>
broken leg or arm	1	2	3	4	9
burns	1	2	3	4	9
cancer surgery	1	2	3	4	9
car accident	1	2	3	4	9
cat scan	1	2	3	4	9
childbirth	1	2	3	4	9
cold and bronchitis	1	2	3	4	9
concussion	1	2	3	4	9
cracked pelvis	1	2	3	4	9
cut and stitches	1	2	3	4	9
cystitis	1	2	3	4	9
detached retina	1	2	3	4	9
diabetes	1	2	3	4	9
dizziness	1	2	3	4	9
ear infection	1	2	3	4	9
ear surgery (tubes)	1	2	3	4	9
electrolytes	1	2	3	4	9
exhaustion	1	2	3	4	9
flu	1	2	3	4	9
foot problems/ or foot surgery	1	2	3	4	9
gall bladder attack & gall bladder surgery	1	2	3	4	9
head surgery	1	2	3	4	9

<u>Reason for Hospitalization</u>	<u>Definitely Yes</u>	<u>Probably Yes</u>	<u>Probably Not</u>	<u>Definitely Not</u>	<u>Don't Know</u>
heart failure	1	2	3	4	9
heart surgery	1	2	3	4	9
hemolytic syndrome	1	2	3	4	9
hemorrhoid surgery	1	2	3	4	9
hernia	1	2	3	4	9
high blood pressure	1	2	3	4	9
hives	1	2	3	4	9
hormone imbalance	1	2	3	4	9
hysterectomy	1	2	3	4	9
infection	1	2	3	4	9
injury	1	2	3	4	9
kidney failure	1	2	3	4	9
kidney stones	1	2	3	4	9
knee surgery	1	2	3	4	9
liver biopsy	1	2	3	4	9
meningitis	1	2	3	4	9
menopausal problems	1	2	3	4	9
miscarriage	1	2	3	4	9
muscle spasms	1	2	3	4	9
neck problems	1	2	3	4	9
nerve study (numbness)	1	2	3	4	9
nose reconstruction	1	2	3	4	9
OB-GYN	1	2	3	4	9
parasite in intestine	1	2	3	4	9

<u>Reason for Hospitalization</u>	<u>Definitely Yes</u>	<u>Probably Yes</u>	<u>Probably Not</u>	<u>Definitely Not</u>	<u>Don't Know</u>
Parkinson's disease	1	2	3	4	9
pinched nerve	1	2	3	4	9
pneumonia	1	2	3	4	9
prostate surgery	1	2	3	4	9
rest	1	2	3	4	9
retaining fluids	1	2	3	4	9
seizure	1	2	3	4	9
sleep syndrome	1	2	3	4	9
slipped disk	1	2	3	4	9
spinal tap	1	2	3	4	9
sport physical	1	2	3	4	9
sterilization	1	2	3	4	9
stomach problems/ (or diarrhea)	1	2	3	4	9
stroke	1	2	3	4	9
surgery (unknown)	1	2	3	4	9
testing	1	2	3	4	9
throat infection	1	2	3	4	9
thyroid trouble	1	2	3	4	9
tonsil-adenoid surgery	1	2	3	4	9
tonsillitis	1	2	3	4	9
trachea surgery	1	2	3	4	9
transfusion	1	2	3	4	9
triple by-pass	1	2	3	4	9

<u>Reason for Hospitalization</u>	<u>Definitely Yes</u>	<u>Probably Yes</u>	<u>Probably Not</u>	<u>Definitely Not</u>	<u>Don't Know</u>
tubal ligation	1	2	3	4	9
tumor surgery	1	2	3	4	9
ulcers	1	2	3	4	9
urinary track problems	1	2	3	4	9
viral encephalitis	1	2	3	4	9
wrist surgery	1	2	3	4	9

THANK YOU FOR YOUR RESPONSES. PLEASE RETURN THE TWO COMPLETED SURVEYS IN THE ENCLOSED PRE-ADDRESSED, STAMPED ENVELOPE OR RETURN TO:

Curtis R. Winkle
Center for Applied Urban Research
Peter Kiewit Conference Center
1313 Farnam-on-the-Mall
Omaha, NE 68182.

Survey #

SURVEY OF LEXINGTON PHYSICIANS
REASONS FOR VISITS TO PHYSICIANS

The following list represents major reasons for visits to physicians offices in the past year reported by surveyed residents in the Lexington area. Please circle the appropriate number to indicate whether the following could definitely be taken care of at the Plum Creek Medical Group, probably could be taken care of at Plum Creek, probably could not be taken care of at Plum Creek, or definitely could not be taken care of at that clinic.

Please respond with your best guess, though you may also indicate that there is not enough information to make a reasonable guess by circling the number 9 for "don't know."

<u>Reason for Physician Visit</u>	<u>Definitely Yes</u>	<u>Probably Yes</u>	<u>Probably Not</u>	<u>Definitely Not</u>	<u>Don't Know</u>
allergy shots	1	2	3	4	9
angiomas	1	2	3	4	9
appendix	1	2	3	4	9
arthritis	1	2	3	4	9
back trouble	1	2	3	4	9
bladder infection, bladder surgery, tumors	1	2	3	4	9
blood problems	1	2	3	4	9
blood sugar check	1	2	3	4	9
breathing difficulties	1	2	3	4	9
bronchitis	1	2	3	4	9
bump	1	2	3	4	9
bursitis	1	2	3	4	9
cancer	1	2	3	4	9

Reason for	Definitely	Probably	Probably	Definitely	Don't
<u>Physician Visit</u>	<u>Yes</u>	<u>Yes</u>	<u>Not</u>	<u>Not</u>	<u>Know</u>
cataracts	1	2	3	4	9
check up / (follow-up to surgery)	1	2	3	4	9
check up/ (physical)	1	2	3	4	9
chest pains	1	2	3	4	9
cholesterol check	1	2	3	4	9
cold	1	2	3	4	9
colic	1	2	3	4	9
cough	1	2	3	4	9
depression	1	2	3	4	9
dermatology	1	2	3	4	9
diarrhea	1	2	3	4	9
dizziness	1	2	3	4	9
ear infection	1	2	3	4	9
enlarged heart	1	2	3	4	9
eczema	1	2	3	4	9
eye problems	1	2	3	4	9
fainting	1	2	3	4	9
fever	1	2	3	4	9
flu	1	2	3	4	9
fluid in lungs	1	2	3	4	9
foot surgery	1	2	3	4	9

<u>Reason for Physician Visit</u>	<u>Definitely Yes</u>	<u>Probably Yes</u>	<u>Probably Not</u>	<u>Definitely Not</u>	<u>Don't Know</u>
fracture	1	2	3	4	9
gout	1	2	3	4	9
growth problem	1	2	3	4	9
GYN & OB	1	2	3	4	9
headaches	1	2	3	4	9
heart condition	1	2	3	4	9
hemorrhoids	1	2	3	4	9
hemolytic syndrome	1	2	3	4	9
hernia	1	2	3	4	9
high blood pressure	1	2	3	4	9
high temperature	1	2	3	4	9
infection	1	2	3	4	9
injury	1	2	3	4	9
kidney infection	1	2	3	4	9
knee problem	1	2	3	4	9
kneecap deteriorating	1	2	3	4	9
lump in neck	1	2	3	4	9
lump on leg	1	2	3	4	9
mammogram	1	2	3	4	9
mastitis	1	2	3	4	9
medication refill	1	2	3	4	9
minor surgery	1	2	3	4	9

<u>Reason for Physician Visit</u>	<u>Definitely Yes</u>	<u>Probably Yes</u>	<u>Probably Not</u>	<u>Definitely Not</u>	<u>Don't Know</u>
miscarriage	1	2	3	4	9
mono	1	2	3	4	9
nervous condition	1	2	3	4	9
nose	1	2	3	4	9
pain (chronic)	1	2	3	4	9
pinched nerve	1	2	3	4	9
pregnancy (test)	1	2	3	4	9
rash	1	2	3	4	9
respiratory infection	1	2	3	4	9
retaining fluids	1	2	3	4	9
scabies	1	2	3	4	9
school physical	1	2	3	4	9
shingles	1	2	3	4	9
shots	1	2	3	4	9
shoulder pain	1	2	3	4	9
sinusitis	1	2	3	4	9
skin cancer	1	2	3	4	9
skin sores	1	2	3	4	9
sore throat	1	2	3	4	9
spinal tap	1	2	3	4	9
stiff neck	1	2	3	4	9
stitches	1	2	3	4	9
stitches out	1	2	3	4	9
stomach pain	1	2	3	4	9

<u>Reason for Physician Visit</u>	<u>Definitely Yes</u>	<u>Probably Yes</u>	<u>Probably Not</u>	<u>Definitely Not</u>	<u>Don't Know</u>
strep throat	1	2	3	4	9
tendonitis	1	2	3	4	9
thyroid	1	2	3	4	9
tonsillitis	1	2	3	4	9
ulcer	1	2	3	4	9
vasectomy	1	2	3	4	9
vomiting	1	2	3	4	9
warts	1	2	3	4	9
weight problem	1	2	3	4	9

THANK YOU FOR YOUR RESPONSES. PLEASE RETURN THE TWO COMPLETED SURVEYS IN THE ENCLOSED PRE-ADDRESSED, STAMPED ENVELOPE OR RETURN TO:

Curtis R. Winkle
Center for Applied Urban Research
Peter Kiewit Conference Center
1313 Farnam-on-the-Mall
Omaha, NE 68182

Survey #

APPENDIX C

Responses to Survey Question 31: Probes on negative comments about hospital characteristics:

001"I've heard the billing process is bad--poor communication, but it was over a year ago and may have changed."

002

003"The billing is confusing; several billings for each member of the household. Cost has increased quite a lot."

004"I've heard the billing is poor on one occasion."

005

006

007

008"Computer and communications problems at the time; problems between insurance company and hospital--monitor not itemized on the bill; made several trips to find out information."

009

010"When they take x-rays and tests they never do inform you of test results. Expensive tests and need for specialist. No radiologist usually present--results are not made available without insistence, poor communication."

011

012"An emergency takes forever, have to wait for a doctor wouldn't want to have to go there for an emergency."

013

014"Would not want any other doctors; emergency waiting time is very poor; my doctor is excellent, but the others are not."

015

016

017"Don't think they have any resident specialists. Friend spent lots on calls to Kearney to get specialist to Tri-County."

018"They are all general practitioners except surgeon, who is questionable."

019"#25. "Takes forever, sometimes mess up." #26. "In general medicine is costly." #27. "Slow getting you in."

020

021"Office staff poor."

022

023y

024"They would not set up payments based on what we could afford to pay and put a judgment against us--(we tried to pay \$50. as opposed to \$100 per month). Rude office staff. Unreasonable expectations."

025y

026

027

028

029 #20 "Nurses are sometimes too rough and rude but were very good. #22 All but two!"

030 #30 "Just don't like the hospital."

031

032

033 26."Cost was too high. #29. Upon reflection respondent was thinking of doctor."

034#20. "People connected with billing and admin. #25. Seemed to be overanxious about money--more interested in that their care of patient. #24. OB/GYN needed."

035

036

037

038

039"#24. Person feels there is need for more specialized care. Unsure that town could support full time specialists but would like to see more frequent visits of specialists to ease up the time it takes to see one."

040

041"Whenever there is anything seriously wrong they send you to Kearney. They seem to want to try out more medicines rather than to treat patients consistently and clear up the problems. They keep patients on very expensive medications. (\$90) Emergency care is poor and doctors don't explain treatment. The care is too rapid and sketchy."

042

043

044"#18. Some have had to wait for x-rays, etc. #22. Someone's hip replacement had to be re-done. #23. "Some have to wait. #24. Waiting time is long. #28. Too long to get to hospital and it is too large and inconvenient."

045

046"Bill sent immediately and want check immediately."

047

048

049

050"Cost poor everywhere."

051

052"Just so discourteous and they don't explain anything to you. I don't feel they give proper care probably due to the fact that they are so overworked. I've heard of people having very serious complications because they didn't get the care that they should have had."

053"They don't explain about medicines and reactions to them or follow up care required."

054

055

056

057"#25. No itemized bills--just dollar amount and say how many days to pay. #26. Higher than what insurance considers normal. #27. Wait when you go there."

058"#25. Slow on filing Medicare claims. (don't keep you in the hospital (Medicare patients) as long as they should."

059"#26Expensive."

060

61"They bring people in (specialists) if necessary."

062"Hears they are pretty good. New."

063

064"In emergency room 2 hours with twisted ankles and had to pay for it. #24 Always have to go to Kearney for any specialty. Seem to have to have all kinds of information about insurance--must know deductible (nosey) Break privacy act before treatment. More interested in money than treating patients. Receptist is rude and nosey. Nurses and staff are rude. Charged (\$110 for x-rays and even charged for ace bandage)."

065

065

066

068

069"#25Aunt had a bill kept getting billed even after paying. Male employee had embezled their money."#21. Cyst on ovary and was treated for kidney stones at Tri-County, went to Kearney and they were amazed."

070

071

072"When daughter was in--no room, not enough blankets had to bring from home had to furnish own humidifier--room was cold."

073

074"#26Toohigh--this person feels that cost of services and the method of procuring payment is too rigid, impersonal and 'pushy'. This person feels cost is too high based on the 'excess' amount of money. She understands the Tri-County hospital to have accumulated."

075"#21No faith in them--person feels that doctors are incompetent, and unknowledgable in their fields. Based on an incident in which a child was poorly attended to on an emergency basis."#28Located okay--parking could be better."

076"Feels cost is too high!"

077

078

079

080

081

082

083

084"They can't keep up with the accounts on the computer. you pay your bill and they don't give credit and then you have to go down there to get it all straightened out again. Its a damned nuisance."

085

086

087

088"Outraged at cost for childbirth."

089"#18Hassle if no maternity insurance. Must pay \$300 down in advance. #25Difficult to determine what billing was for itemization hard to understand"

090y

091

092

092"#20Some didn't want to be bothered. #25 Very slow--still not settled accurately."

094"Her room not cleaned during 6 days she was there. Asked and was moved to a clean room."

095"#25 Patient does not get a copy of hospital bill--no itemization. Should have even if it is sent to insurance for payment. #29. Patient not given enough info upon discharge. A relative was told only that she was being discharged--could not even get from bed to bathroom but was given no instructions on self-care!."

096"#24. Perhaps available only on certain days or you may be 'forwarded' to another hospital. #19. Lack of good bedside manners (treatment at emergency room)."

097y

098"Had to park a long way from the emergency room, then wait. Too expensive."

099

100

101

102

103

104

105"One person lost ring there. Friends said poor care and poor service. Food is very bad. Many of the staff are rude. Has not been there personally nor has family."y

106"#24. No specialists, pediatricians or orthopedic doctors."

107

108

109

110"#25Lots of hassles with hospital insurance. #26 Outrageously high costs. Bandaid and aspirin charged for. Should be a package cost. #18. If no insurance you get treated like dirt."

111"Food is rotten. #22. Nurses used derogatory language to patients, and were cruel and lazy. Don't answer lights, intercoms, sit and visit with each other or put basins within patient's reach. This respondent, though a patient herself, cleaned up another patient in the emergency room, because the nurse failed to do so upon the doctor's orders."

112

y

014"#24have to bring in surgeons. #25. Too aggressive and pushy. Require payment before treatment. #26 Outgareous fee for what they called a physical, bp check, temp, pulse, heart and lung listened to NO urinalysis, or blood workup even though know diabetic. Nurse did most of physical. #27. Wait for 1 1/2 hour or more. #29. diabetic not given adequate instructions "don't know what is going on." #30. beautiful hospital, but I would never go there. #23 Available but inadequate for emergency needs."

115"#18No money--no treatment. Or a large delay. #26 outrageous."

116"Supply room are not convenient for nurses. Billing process has discourteous workers and cost is outrageous."

117"#26. Less than others. #29. Mrs. Samweon is excellent and dietician is also excellent."

118

119y

120

121

122"#21Doctors ignored bad pap smears. North Platte diagnosed cancer. #24 younger brother cut foot and had to wait 15-20 minutes and intern did poor job of sewing it up."

123

124"#24Bring in more specialists. #25office management terrible-one person used to work in billing office. #29too much jamming it down throats. Friend died on the treadmill a year ago."

125"#25Slow."

126"#24. Bring in specialists from North Platte or Kearney."

127

128

129

130"People usually are transferred on."

131"#21 Diagnosis was toatlly incorrect for mother-in-law and she will never go back. #23 husband's leg driven over. He was in shock, doctor seemed very unconcerned, no pain or antibiotics given. Will never go back. PA stitched up her fingernail crooked. #24 Have had foster children and used a specialist that comes in. He treated bedwetting as all in his head and didn't want to find out why. #25 Costs more than Kearney."

132

133

134y

135

136"From what I've heard it isn't very well supervised. they don't respond as soon as they should to an emergency."

137"Charges unclear on bill."

138"Respondent was 'disappointed' with physician's response and care when he was taken there on an emergency basis."

139"Do not get billings straight. Confusing. Recipients of bills often find charges on their bills for other patients."

140"#26Feels cost is muct too high for services rendered."

141

142"#19. Said doctors never have enough time for her."

143"Based on own physical therapy they are paid, somebody else (work) paid, but she kept getting the bill."

my

y

146

147"x-rays read in N. Platte so results are delayed."

148"#18Orders from doctors had been misplaced--mix-ups--persons working in admission had very unpleasant personalities. #25 slow in submitting to the insurance and slow in getting billing for the out-patient follow-up care. Should utilize respiratory more. PT is excellent!. Should have closer parking.

149"#24. Specialists only available at certain times not necessarily when you need them."

150"#23Sometimes no doctor is in the hospital and must be called. If you usually see Dr. X and Dr. Y is on duty then there is a delay for consultation."

151"Two weeks ago son cut head and waited 45 minutes for treatment (stitches) at Tri-County."

152y

153""Very dissatisfied with doctors and billing process. Doctors are impersonal and too busy to care about patients. Bad impression of competency of staff in billing."

154"Attitude of staff is poor. Waiting time in long."

155

156

157

158"Have to go to Kearney for specialized care from what she has heard."

159

160"Office personnel are very hard to talk to. One girl who messed up my bill told me she never makes mistakes. She was rude and inefficient. Several trips and three months passed before my bill was finally straightened out."

161

162

163"#25No itemized statement, no idea of what was charged to insurance for services performed. #24No idea what was charged."

164

165y

166"#18Slow admitting person when needed. #21 Sister took child to physician, then to second physician who admitted for 4 months for dehydration. #24Need to call in specialist from North Platte or Kearney."

167

168"#20 & 23. Bad attitudes of staff, especially in emergency room."

169"Hospital is very good, but very busy."

171

172

173"Respondent felt the staff was a bit impersonal and uncaring in their attitude."

174

175

176

177"Hospital might be okay, but Kearney has Good Samaritan and it is better."

178

179

180

181

182

183

184

185y

186

187

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191

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203

204

205y

206

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209

210"Good, based on daughter's stay at Tri-County."

211

212

213

214

215

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217

218

219

220

221

222

223

224

225"Tri-county serves the purpose as a general practice, small problem solver hospital. Something more goes to a bigger hospital with specialists."

226

227"#18Very slow #24Slow #27. Emergency room slow."

228

229"#24I've had heart problems and operations 6 or 7 times and they didn't have the specialists to help me. I had a stroke and they don't have the therapy for rehabilitation (like in NY and in Omaha). #26Too much for the low income people to pay."

230"#18 and 35Hosp and insurance have had a name mixup with another person in the town with the same name and it has not been corrected in three years despite regular complaints about it. Bills and checks sent to wrong person."

231"#21 made wrong decision and granddaughter was born severely retarded because c-section was not done two weeks earlier than when natural birth occurred after baby under stress was first detected."

232"#26 Sky high costs."

233"#18Staff are very bitchy. Need to retire, esp. nurses. #20 Very poor toward ambulance attendents, better toward patients. #21 very good. PA is allowed to do too much and makes decisions when a doctor should be making them. #22 Mostly good. #23Very good. #24 Dr. Harry is only specialist-surgeon. Emergency care poor. Poor judgement on part of PA's. One lady was neglected when she had internal injuries and her husband was treated. She ended up spending 5 months in the hospital."

234

235

236"Has heard disfavorable things about Tri-County. Waited 1 hour for emergency with child of friend before doctor showed up."

237

238"#24Get referred to Kearney"

239

240"We finally got a bill from last Oct. which had been turned over to a collection agency. We assumed that it had been turned in to the insurance company and had been paid. Poor."

241

242

243

244"#20Two doctors are excellent. #25 Hospital and insurance difficulties. Hospital didn't want to pay for some part of cost."

245

246"Mother was moved from hospital to home in wheel chair rather than a stretcher. This might have contributed to her death thirty minutes after arrival in the home."

247

248

249

250

251

252

253

254

255"These feelings are based on info the respondent has gotten from relatives who have been admitted to Tri-County and had overall bad experiences."

256

257y

258

259

260

261

262

263

264

265"Info that she has heard is that it is good."

266

267

268

269"#20 & 22. Two of nurses are rude and won't answer any of your questions. They ignored my father and were snippy. Not at all professional. The doctors are the same. They won't take the time to talk to you. The hospice is wonderful though. My mother was upset by what the doctors say in front of the patient."

270

271

272"Very poorly administered from the business aspect of hospital management. Once went for a tetanus shot after animal scratch. Mostly ignored until he found someone to give him a shot, charged emergency room rates for the shot. Acquaintance had pneumonia, later had lungs collapse and died under LEX doctor's supervision."

273

274

275

276y

277"He heard the doctors aren't all that good and Kearney is better."

278

279

280"#21Doctors keep her in trying to find problem before sending her to Kearney years ago."

281

282

283"The lady did not like Tri-County but wouldn't state why/"

284"A lady died there during childbirth."

285"Keep people at Tri-County too long while they muddle around trying to figure out what the problem is rather than sending individual to other health facilities with specialists."

286

287

288

289

290

291"Prefer to have specialists on once a week basis so they are accessible."

292

293"Went to LEX with cut that doctor did not stitch but bandaged and bleeding did not stop. Went to Kearney and they stitched his finger and said LEX used poor judgment. Will not go back."

294y

295

296

297"#19. 21 and 30. Impressions based on experience of a friend."

298

299

300

y

302

333"#25Some incorrect billing."

APPENDIX D

Responses to Survey Question 41: "Why do you feel there is a need for more clinics/physicians?"

001

002

003 "We need more specialists."

004

005

006 "Too busy and there is too long a wait to see a doctor."

007 "Physicians are busy."

008 "They are overworked."

009

010 "If we had another clinic we would need more and new doctors in a new group. People are going to Kearney regularly to see preferred doctors and specialists."

011

012 "Need more specialists, bones, gyn and cancer."

013

014 "There is only one good doctor. Would go to Kearney if he weren't available."

015

016 "Waiting time is bad."

017 "Because LEX doctors also have to serve other areas there is a need for more clinics and physicians."

018 "Not more doctors but different ones."

019

020

021 "Some days yes there should be more physicians."

022 "Need competition."

023

024 ""We need specialized clinic i.e., ENT and GYN clinic."

025 "They could have 'better' physicians."

026 "Some of the doctors are overloaded."

027

028

029

030

031

032

033

034 "Not enough doctors for # of people."

035

036

037 "I think if some new physicians came into the area that it would give the already existing ones an incentive to administer better service to more of the poor and needy who live here. There is a lot of unemployment here and they don't get health care. Guess what I'm saying is they can pick and choose because of the lack of doctors." "I's like to see some specialists such as ENT, neurological services, surgeons, the people who need these specialists have to go to either Kearney or Omaha."

038

039

040
041"A doctor recently left here because of a doctor's clique. (he didnt belong to the clinic) and couldn't therefore use facilities of the clinic."
042"Competition, convence increase."
043"More specialists, generally."
044
045"Feels there is a need for more specialists."
046"Orthopedist, dermatologist."
047"These five are too busy."
048
049"Competition is good for any business so if you had more clinics and more doctors they would be giving better service."
050"Wouldn't have to wait so long for an appointment."
051"Feel they have a monopoly."
052"I don't trust the ones who are here. I've heard of too many cases of them not doing enough soon enough. The doctors who are here are overworked so if they had more I think that the quality of care would improve. They would have time to care for people properly."
053"Doctors are rushed. Dr. Jones takes time with us but some of the other doctors are too rushed and don't seem to have time to explain things."
054
055"There is one doctor for 1,000 people and I feel that isn't enough. Get a wider range of specialists, now we have none. I really feel that a town of this size should have a gyn doctor and at least one more surgeon. we only have one surgeon now and that isn't enough for the population."
056"To have more choice and competition. when there is only one they can charge as much as they want and competition would perhaps lower their fees."
057"Cold with people, different bookkeeping system--different receptionist and accounting systems. Short with people and accounting system is poor."
058
059
060"To relieve some of the workload for the doctors who are here."
061"This one is good. People can come from all over."
062
063
064"They are all so busy."
065
065
066
068
069"Need better and more doctors. Two are good. I don't know any more."
070
071"Need more specialists"
072"If they were all like Dr. Jones."
073
074
075"Feels the need for more variety and choice because people she knows do not have faith in doctors there."
076
077
078"Specialized physicians--especially pediatrician."
079
080
081

082
083
084"They don't need more, they need better doctors."
085"More specialists needed. More surgeons and pediatrician are needed."
086
087"Competition would be good for the area. Some doctors very busy. Dr. Jones very busy. Also, staffing Overton is done by LEX doctors."
088"To help with workload we need more hysicians."
089"Sometimes doctors are swamped. Pluc Creek has room for two more doctors."
090"A higher level of public confidence in their ability to handle medical situations."
091
092
092"Need a really good GYN doctor."
094"They are too busy."
095"Doctors and hospital ned itemized billings for patients whether or not insurance pays. Not qualified help in their accounting and bookkeeping billing departments for insurance claims."
096"Too busy. Overscheduled."
097
098
099
100
101
102
103
104"I think some competition would be good. I think it would keep people from going out of town. If we had more doctors, the ones we have wouldn't have to work such long days. I don't think it has any negative effect on the quality of the care but they do work too hard and too long."
105"Wouldn't go to Tri-County under any circumstances."
106"Need more efficiency in clinic already here. Waiting time in clinic is very excessive."
107
108
109
110"Should be at least one more primary physician so people could make a choice."
111
112

014
115
116"Shorter waiting time if more doctors."
117"Should be a choice because there could be two emergencies at the same time."
118"More competition. Good physicians. OB-GYN specialists."
119"Sliding fee scale."
120"Specialization"
121"Competition, variety"
122"Specialists, SYN, dermatologist, hart, internal medicine,cancer specialist."
123
124

125

126"All real busy--some have moved away."

127"Jones is very busy."

128

129

130

131

132

133"It takes a while to see your own doctor."

134"Specialists. Pathological department would be useful. Long wait for test results. Staff and doctors should report results to patients."

135

136

137"Generally more doctors because the ones here seem overworked."

138

139"Doctors appear overworked. Especially need OB-GYN."

140

141

142"Always so busy, overloaded with patients."

143

m

"Patient advocate; ask patient a few questions the morning they are learning about satisfaction-dissatisfaction and why a full time person couldn't be necessary. The hospital administrator or a secretary could do it. Or, a printer survey could be taken hom and mailed back. The patients often do not make complaints because they do not have access to a responsible person, only to the one the complaints are against. A good PR campaign might be needed because some people who were irked about something years ago are still holding grudges."

146

147"Definitely need to have physicians in private practice outside of the PC clinic-should have a choice."

148

149

150"specialists needed more frequently."

151"Need competition in area."

152

153"Clinic too busy and impersonal."

154"There is need for improvement."

155"May need more doctors in an emergency."

156"LEX already lost so many people to Kearney because there weren't enough doctors here or they were too busy or not satisfactory. It would take another clinic and more doctors if LEX were to be able to entice them back."

157"There would be enough business for other doctors and clinics."

158"All doctors are extremely busy."

159

160"Specialists-heart in particular. Orthopedic. The hospital is large enough to support these specialists."

161"Unless you already have a physician, it is hard to get in to see one. They are so busy that they can't take new patients."

162"It is hard for a doctor to have to work so many hours. We need two younger well qualified doctors. Our doctor works so hard it is affecting his health."

163"Monopolized by a few doctors. Need to see better qualified doctors."

164"Choice of doctors. Hard to see doctor of choice."

165

166no

167

168

169"Specialists coming in help out a lot but there might be a need for more doctors."

171"Respondent does not feel there is a need for more clinics or doctors because so many residents are moving away."

172"I think it is always good to have competition. At this time due to the condition of the community (we've lost lots of our population) I don't think we could support any more doctors."

173"Specialists--ENT."

174

175

176"Some people not getting enough attention."

177

178

179

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183"Doctors are too busy. Quality may be affected adversely."

184

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186

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191

192"Need doctors in Beaver City"

193

194

195

196

197

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201"Doctors need more time for selves and rest. We need more choices. People would be apt to stay in own towns for doctors if there were more than one. Accidents with multiple victims need more than one doctor at the same time. (Recently an auto accident with four victims took one doctor five hours to sew them up.)"

202

203

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211
212
213
214"Because there is an overload on most of the doctors. They have to work too many hours. Friends say the doctors at LEX are overworked."
215
216
217
218
219
220"Bertrand needs a clinic and a physician."
221
222
223"Need more doctors in areas surrounding LEX."
224
225"Don't need the one they have in Elwood. People have easy access to LEX."
226
227
228
229"They need more because you have to wait too long.""Have a zipper club in LEX. (for people with by pass surgery.)"
230
231"accessibility"
232"Access"
233"If staffed by additional staff."
234
235
236
237
238
239"My doctor is too busy. They do have an intern so I am not sure if they need more physicians to staff another clinic or just my doctor has too many patients."
240"It is such a long drive. We're about 25 miles away. Doctors work 12 to 14 hour days We need some new good doctors."
241"Only specialists. Psychiatrists who would come in part-time."
242"They are too overcrowded and not readily available to patients when we need one. I went in to have blood sugar tested and finally had to leave because I had another appointment. That can be very dangerous when you have diabetes."
243
244"Really need another Dr. Jones. Since most people prefer to wait to see him."
245
246
247
248
249"Takes a while for an appointment once arriving."
250
251"Radiology Services. Cancer treatment center. Raditation treatment."
252
253
254
255"Better doctors"

256
257
258
259"People have to wait too long."
260
261
262
263
264
265
266
267
268"Wait is too long at LEX."
269
270
271
272
273
274
275
276
277
278"Competition will be good."
279"Better selection."
280
281
282
283
284
285"Specialists come on certain days. Neurologists."
286
287"More competition."

288
289"More specialists"
290
291"Doctors are too busy."
292
293"Better quality doctors"
294"Better doctors."
295
296
297"We could always use more doctors."
298
299
300"Need to have a doctor in small towns."

302
333

APPENDIX E

Responses to Survey Question 63a: "Are there any services that are not available at Tri-County Hospital in Lexington which you would like them to provide?"

001no
002"The physicians are busy."no
003"Separate clinic from Plum Creek and providing specialists."no
004no
005"Better informed doctors needed."no
006"Every town can't have expensive equipment. Kearney is not too far."yes
007"Had to transfer to Omaha for 14 days with and illness."yes
008"Better medicare service for elderly."yes
009no
010"Not qualified to know--I've been satisfied with care in LEX. Lab specimen results slow and communications poor."yes
011yes
012"Specialists or experts."no
013yes
014"Better and more doctors."no
015yes
016no
017"Family planning clinic concerned with teenage pregnancies. Sex ed and VD clinic."no
018no
019yes
020yes
021LEX
022no
023yes
024"ENT and GYN specialist and GYN sugeon should be available."yes
025"Heart and breathing monitor equipment--for home use (6 mos.) better medical equipment and supply."yes
026"Radiation treatment is far away."no
027"We need a convalescent unit for those requiring follow-up care or those who live alone--After hospitalization you need help while recovering--not going into a nursing home."yes
028yes
029"No. Heart surgeon or transplants are available in larger cities."yes
030yes
031yes
032yes
033no
034"Ob/Gyn."no
035"I really don't know because my doctor is in Kearney and I wouldn't consider changing because he knows my health problems and I've gone to him for years."no
036yes
037"More GPs would help keep health care costs down and I heard that another group of doctors wanted to come into LEX but the ones who are already here discouraged them from doing so. I don't know how but that is what I'm told.LEX

038yes
039"More specialists--bone."LEX
040yes
041"Another surgeon is needed." yes
042"Permanent specialists--urologist, allergist."no
043"Specialists--general."yes
044no
045"Better x-ray dept. Specialists--more often. Improved physical therapy."LEX
046"More home health care for elderly."farm
047"No. They are getting specialists every two weeks."no
048yes
049no
050no
051yes
052"Give people more of a choice by bringing in more doctors."no
053"Birthing chair."yes
054yes
055"None other than those mentioned before. There is a need for a pediatrician, too. We need some specialists--all we have now are GPs."yes
056"They don't have a CAT Scan or emergency infant care. It would be nice to have these services but they are expensive and Kearney has them, but that is a long trip."yes
057"Better emergency service."yes
058"Mostly adequate. May need available home health care of elderly or handicapped."LEX
059no
060no
061yes
062no
063"Satisfied."yes
064"Family planning clinic needed.no
065yes
065"Dermatologist needed.yes
066yes
068no
069"Another eye doctor."LEX
070yes
071"Heart, kidney specialists."yes
072"Physical fitness --indoor pool."yes
073yes
074"Orthopedics"yes
075no
076yes
077no
078"Pediatrician."yes
079"Specialists--kidney."LEX
080"I'm not familiar enough with what they have or don't have."no
081"Need orthopedic specialist."yes
082yes
083"It would be great to have a cat scan and a dialysis machine available but it isn't likely to happen because you need a metropolitan population to pay for the machine."yes

084"Heart specialists. There are a lot of people here who have a need for one but have to go elsewhere for care."yes
085"Surgeons, pediatricians."yes
086no
087yes
088yes
089yes
090yes
091yes
092"doctors should tell you about possible side effects of medication."yes
092yes
094"Alcoholism treatment. Hospice as part of the hospital."yes
095noRespondent retired RN. Says fire-rescue service excellent and volunteer so not a cost."
096no
097"Include a surgeon to the hospital."LEX
098no
099no
100yes
101"Major surgeries--bonework."yes
102"More specialists."yes
103no
104"Pediatricians."yes
105"Adult care service."LEX
106"Pediatrician, orthopedic specialist, ophthalmologist needed."Respondent mentioned several things that were available rather than what would be desirable. I.E. wellness course given and spiritual dietician and psychologist exercises and LaMaze classes."LEX
107"Podiatrist needed and dermatologist."yes
108no
109"Bone specialist, orthopedist"yes
110yes
111"Improve quality , need swing beds for medicare patients as Cozad and Gothenburg have."yes
112"Pediatricians, OB-GYN."no
LEX
014no
115yes
116no
117"Rehab programs for stroke victims or arthritis, indoor pool exercise programs."yes
118"Birthing chair."yes
119"Sliding fee scale."LEX
120yes
121yes
122no
123yes
124yes
125no
126no
127no
128no
129"Pediatrician would do great here."no
130no

131no
132"Specialists, gyn and orthopedic."yes
133yes
134"Need small out-patient clinic, fast paced instead of using the emergency room. 24-hour service."rural
135
136"They don't have specialists to take care of broken bones. They send all these patients to Kearney. We need an orthopedic doctor."yes
137"Orthopedic department."yes
138no
139yes
140yes
141no
142yes"Says doctors are entirely too busy and don't spend enough time with patients."
143no
mLEX
"For a town this size, we have more services than most."LEX
146"More intensive care availability."yes
147no
148"Additional parking for out-patients. Overnight stay near hospital for out-of-town visitors."yes
149yes
150"More availability of specialty trauma unit, physical and emotional, sexual assault, incest, sexual abuse of children."n
151no
152LEX
153"Needs improvement."
154yes
155yes
156"Pathology Services. Have to wait too long for pathology results."yes
157"Orthopedist."no
158no
159yes
160"Orthopedic and heart care."yes
161yes
162"More intensive baby care-neonatal. More equipment to monitor the babies with special problems. They all are sent to Kearney now."yes
163yes
164yes
165LEX
166no
167y
168"More mental health services for people who can't afford other care. there used to be a psychologist at hospital or clinic. There should be one again."LEX
169"Pretty satisfied with what is offered."yes
171
172no
173"Veterans ward. Service."
174no
175farm
176no
177no

178no
179no
180no
181no
182no
183no
184no
185
186no
187no
188no
189no
190yes
191no
192"No need"no
193no
194no
195yes
196"Home health care"yes
197no
198"No"no
199no
200"None"yes
201"No."no
202yes
203"No, we don't go there enough for it to concern me."yes
204"No."no
205Arapahoe
206"Can't think of any."no
207Arapahoe
208no
209no
210no
211no
212no
213no
214"Don't know."no.
215no
216"No idea"no
217"Don't know. I wouldn't change to another doctor."no
218"We don't go to LEX because the roads aren't good as the roads from Bertrand to Holdridge."no
219no
220no
221yes
222"Don't know."no
223no
224no
225"no. There are only so many specialists to go around. With the good access roads and ability to get to the specialists they are best matched with the population centers."no
226"More x-ray equipment that they have in Lincoln that we don't have. a cat scan. It would make it more convenient for doctors and patients."yes
227yes

228"Establish a clinic in Elwood."Elwood
229yes
230yes
231no
232"None"yes
233"Pediatrician, dermatologist, ER physician ON DUTY in at least one hospital in Dawson county. Train nurses for evening ER care. Alzheimers training for staff. Radiologist and orthopedic doctors needed."yes
234yes
235no
236"Need specilized care for older people."no
237yes
238"Radiology"no
239"They have the emergency equipment now that we needed seven years ago."no
240"Women in billing are very nasty."yes
241"Think they are providing everything that we need."yes
242"yes
243no
244"Clinic in Eustis"Eustis
245no
246no
247no
248"Quite adequate."no
249"Pediatrician"no
250no
251"None"Eustis
252no
253farm
254no
255no
256no
257Miller
258no
259no
260no
261no
262yes
263"Not as well equipped as Kearney"no
264no
265"No. I would keep going to Kearney."no
266"More physical therapists."no
267no
268"Cancer treatment."yes
269"Improve the bedside manners of some doctors. Hire nurses who are trained to care for special illnesses such as cancer."no
270"Don't know."no
271"Mammogram."no
272no
273no
274no
275no
276rural
277no
278no

279no
280yes
281"Specialists come to LEX on a scheduled basis are a good idea."no
282yes
283no
284no
285"Idea of outside specialists coming in one afternoon a week would be good."no
286"Pediatrician"yes
287"Pretty well supplied with needs by those in LEX."yes
yes
288yes
289"Foot doctors and skin specialists."yes
290no
291"Likes system of various specialists coming once a week. Good use of specialists and is convenient."yes
292"Cardiac and pediatricians"yes
293yes
294Overton
295no
296"Don't know what they have."no
297"Helicopter"no
298no
299no
300no
farm
302no
333LEX

APPENDIX F

Responses to Survey Question 63b: "What would you most like to see done to improve the provision of other health services in the Lexington area?"

001

002

003

004

005

006"More services for elderly who need help--less expensive care in nursing home."

007

008

009

010

011

012

013

014

015Need orthodontist

016

017

018"In town specialists."

019

020

021

022"Something should be done about the drug problem."

023

024

025"More patient and careful doctors. Friendlier, happier nurses that make you feel they know what they are doing."

026"Kearney is not that far away. Tri-County is well rounded for the size."

027

028

029

030

031

032

033

034"More specialists--generally."

035"Have a clinic that has all the specialists such as a GYN and OB and cardiologists. We just have one surgeon and could use more. there is a dermatologist that comes in but I don't know how often. It would be nice to have them available always."

036

037yes

038

039yes

040

041"Better qualified doctors."

04224-hour physician."

043
044
045yes
046no
047"HMO"
048
049
050
051
052"Other than that I think they do have a lot of specialists come in when they need to so I don't know."
053"Doctors on duty for emergency use two doctors at once on call."
054
055"More specialists such as OB-GYN. Pediatrician maybe and another surgeon."
056"The only thing I can think of is if more helath care could be made available to the poor. I'm not sure that it isn't but if there isn't it should be."
057"Lower cost. Optical--competitive prices."
058yes
059
060"Other than bringing in additional doctors no. There is a vacant building available that another doctor was in but he left 4-5 years ago. It could be used for more doctors.
061
062"Cheaper."
063
064"Family planning clinic in community."
065
065
066
068
069yes
070
071"More doctors to meet needs of community."
072
073
074"Would like to see change and improvement in cost and billing process."
075
076
077"Cut cost."
078
079yes
080
081"Price is too high."
082
083"They call in specialists or send patients where there is one."
084"We seem to be pretty well covered except for heart specialists."
085
086
087"Competition"
088"Visiting nurse for mothers with newborns."
089
090farm

091"Be available and be affordable. Education (health) available--cassettes, videos. Awareness meetings on different illnesses. Education on physical fitness. Location convenient to address these issues in the community."
092"Drug prevention and wellness promotion, nutrition. Support services for elderly remaining in their own homes."
092"Sonogram machine. Health education. Grief resolution-self help group (for miscarriage)."
094 "In home alternatives to nursing home care."
095LEX
096
097no
098"Housecall doctors."
099"It is pretty well covered."
100
101"Include more major surgeries at the local location."
102
103
104
105n
106yes
107"Clean up welfare housing."
108"Need mental health services. More Mental Health workers for child abuse."
109
110LEX
111"Great improvement needed to provide better food and care at Westside nursing home."
112yes
114"Lower drug prices. Doctors that are more caring."
115
116"Lower prices."
117"Halfway house where elderly could stay and entertainment instead of just nursing homes."
118"Play area and clean toys during long waits to see the doctor."
119yes
120"Communiuty health education in many areas."
121"A little competition."
122LEX
123
124
125"Need orthopedist.""Expand physical therapy at hospital."
126"Adult day care. Check safety and purity of water supply."
127
128"Competition for eye doctor and eyeglass dispensary especially."
129"We're pretty well covered. A lot of specialists are brought in when needed. The only thing I think we need is a full time pediatrician."
130
131
132
133
134yes
135"We have everything we need now as far as I know."no
136"Better emergency services."
137"Orthodontist to be in Lexington."
138

139"More specialists, OB-GYN"
140"Allergist, specialist, ENT doctor."
141
142LEX
143
mno
no
146
147"Re-check office calls are really high for average citizen. Parenting skills."
148"Pharmacist on call or available on weekends and holidays."
149
150"More and better qualified mental health counselors, especially for child sexual abuse. Special training for local teachers and counselors in child sexual abuse."
151"Doctors more willing to help."
152yes
153
154
155"Another clinic and doctors would help."
156"West side care home is great. Better qualified mental health counselors."
157
158
159
160"They have most everything but OB-GYN here. They do well on teaching courses here such as CPR and diabetes."
161"Free medical counseling services for economically distressed people. Free mental health counseling for unemployed people."
162"Education on health care. For a small community we are in pretty good shape."
163
164
165yes
166
167
168no
169"Some programs could be extended."
171"Very satisfied with health services offered."
172"Free examinations for some of the poorer people, such as chlorestero1 checks and blood pressure."
173"Specialists, ENT"
174
175no
176
177"An ambulance service better than what they have. New doctor demanded the present system and people don't like it."
178
179"Lower cost prescription drugs."
180
181
182"Orthodontist. Generic drugs. Counseling or support group."
183
184
185no

186

187

188

189

190

191

192

193

194

195

196

197

198"Nothing. They are well provided now."

199

200"Classes to inform people on first aid. CPR classes"

201"Drug education for parents, not just for kids. More competition. Parenting skills and education on child abuse."

202

203"The eye doctor should be available more than one day a week. A van is needed to take senior citizens to their doctors. Could alternate towns which provide services on which days."

204"We really are pretty well taken care of here for a small community."

205yes

206More competent personnel at the local hospital. Cambridge and Oxford especially. The lady doctor who runs the hospital in Oxford is difficult to understand (from Pakistan) and I don't have any faith in her ability. She let my wife lay around for a day until her appendix burst and then they had to fly her to Kearney. Younger doctors are needed in both places. Doctors that we can trust and who are well qualified."

207no

208

209

210

211

212

213"Don't know that the area would support a doctor--we are used to traveling to get health care. Would be nice to have a doctor and a dentist."

214"We are well covered in Bertrand by emergency care with the rescue unit."

215"I'd like them to have a good cafeteria in the hospital at Holdridge."

216"Get the dentist back that we had."

217"We have what we need with the exception of a dentist and Bertrand can't support one."

218"We need a doctor in Bertrand but can't seem to support one."

219

220"A clinic and doctor are needed in Bertrand."

221

222"They have a good program. The emergency service is only as good as being able to get through by phone."

223"More good doctors."

224

225

226"A good eye surgeon that can do cataract operations."

227

228no

229Elwood
230"Clinic at Elwood"
231"Pediatician needed. Regular classes for CPR and an OB-GYN doctor for consulting available nearby. Ambulance service sketchy. Sometimes parents are asked to transport babies in special care equipment in own cars."
232"Access. Care home is biggest biggest business in Elwood."
233"Adult Day care for alzheimers patients. Continuation of home services and a good psychologist in LEX."
234
235
236"Geriatrics"
237
238"Nothing"
239"No idea."
240"Can't think of other services right now."
241"Need more out patient care for elderly. More care for wheel chair patients"
242Add a chirapractor. It should also be covered by insurance."
243
244yes
245
246
247
248 "Home health"
249
250
251yes
252
253yes
254
255
256"Lower cost of health care for poor people."
257yes
258"They have everything pretty well covered around here."
259"Doctors and clinics needed."
260
261
262Eddyville
263"Don't know."
264
265
266"Counseling for mental health."
267
268
269"Respondent feels they have everything now."
270"Can't tell you. Thinks they are good."
271
272
273
274
275
276no
277
278farm

279
280
281
282
283
284"Likes the doctors coming to OVerton from LEX but would stay with the
Kearney hospital if at all possible."
285
286
287
town
288
289
290
291
292
293
294no
295
296"City water. Don't have any."
297
298
299
300"Satellite clinic"
no
302
333no

APPENDIX G

Additional Comments of Respondents Noted at End of Interview

1

012

"He stressed many times a desire for specialists or experts to at least visit once a week.

2

017

"Need more dentists."

3

018

"Respondent indicated strong dissatisfaction with Tri-County's surgeon."

4

022

"Something should be done about the drug problem."

5

032

Tri-County employee

6

064

"Waited for doctor in office long time and left unattended."

7

077

"Thinks new clinic is 'crazy as hell' idea."

8

079

Respondent has retarded daughter on welfare (not household member) whose back was injured in Tri-County while moving her onto a bed. They would not use Tri-County.)

9

094

"Billing was awful. Paid cash and had difficulty (unresolved) getting Tri-County to refund insurance payment--wanted to give credit."

10

095

Respondent retired RN. Says fire-rescue service excellent and volunteer so not a cost."

11

105

"Closure of New Holland hurt the town badly economically. Half the town goes to Kearney for health services. Respondent negative about town, hospital and clinic."

12

106

Positive comments."

13

142

"Says doctors are entirely too busy and don't spend enough time with patients."

14

150my"#23Sometimes no doctor is in the hospital and must be called. If you usually see Dr. X and Dr. Y is on duty then there is a delay for consultation."y"specialists needed more frequently."More availability of specialty trauma unit, physical and emotional, sexual assault, incest, sexual abuse of children."More and better qualified mental health counselors, especially for child sexual abuse. Special training for local teachers and counselors in child sexual abuse."nLEXRespondent in law enforcement.

15

163y"#25No itemized statement, no idea of what was charged to insurance for services performed. #24No idea what was charged."y"Monopolized by a few doctors. Need to see better qualified doctors.yesLEXSome of the respondents friends are seeking medical care in surrounding areas."

16

165y"More competition for existing clinic and doctors."yesLEXQuality of care has dropped since Dr. Williams."

17

169y"Hospital is very good, but very busy."y"Specialists coming in help out a lot but there might be a need for more doctors."Pretty satisfied with what is offered."Some programs could be extended."yesLEXTransportation to health services could be improved."

18

20lmy"Doctors need more time for selves and rest. We need more choices. People would be apt to stay in own towns for doctors if there were more than one. Accidents with multiple victims need more than one doctor at the same time. (Recently an auto accident with four victims took one doctor five hours to sew them up.)"No."Drug education for parents, not just for kids. More competition. Parenting skills and education on child abuse."noArapahoeRespondent was knowledgeable about hospital care and emergency services."

APPENDIX H

Utilization and Satisfaction with Physicians

Table H.1 shows that of Plum Creek Medical Group physicians, Jones saw 15-22 percent of all patients from the Lexington area during the past 3 years. Miller and Weston each treated 13-19 percent and Ford saw 5-9 percent of all patients.

Table H.1 also shows that the percentage of respondents who were very satisfied, satisfied, dissatisfied, and very dissatisfied with each physician associated with Plum Creek Medical Group. All physicians scored well. When ratings were averaged with 1 indicating very satisfied and 4 indicating very dissatisfied, the differences among respondents satisfaction with physicians was statistically significant. Figure H.1 shows confidence intervals for all physicians. As can be seen, random error could account for differences among any two physicians.

Respondents expressed significantly different reasons for selecting a particular physician/clinic combination (table H.2). Weston and Ford were more likely to be selected out of habit. Physicians who were not associated with Plum Creek Medical Group, Ford, and Miller were more likely to be selected because of medical specialties. Miller and other physicians who were not associated with Plum Creek Medical Group were most likely to be selected because of the recommendation of another physician. Jones, Miller, and Weston were most likely to be selected because of the recommendation of a friend or relative. Ford and Miller were most likely to be selected for their attitudes, followed by Jones.

There are a few significant differences in propensity to serve patients who use different sources of payment (table H.3). Ford and Jones are most likely to see patients who pay for clinic visits themselves, while Weston is much more likely to see clients who pay with Medicare alone or with Medicare plus supplemental private insurance. Ford, physicians who are not associated with Plum Creek Medical Group, and Weston, are more likely than others to see patients who pay with Medicare plus supplemental private insurance.

Table H.1

Respondents Satisfaction with Physician Visits, by Physician, 1986

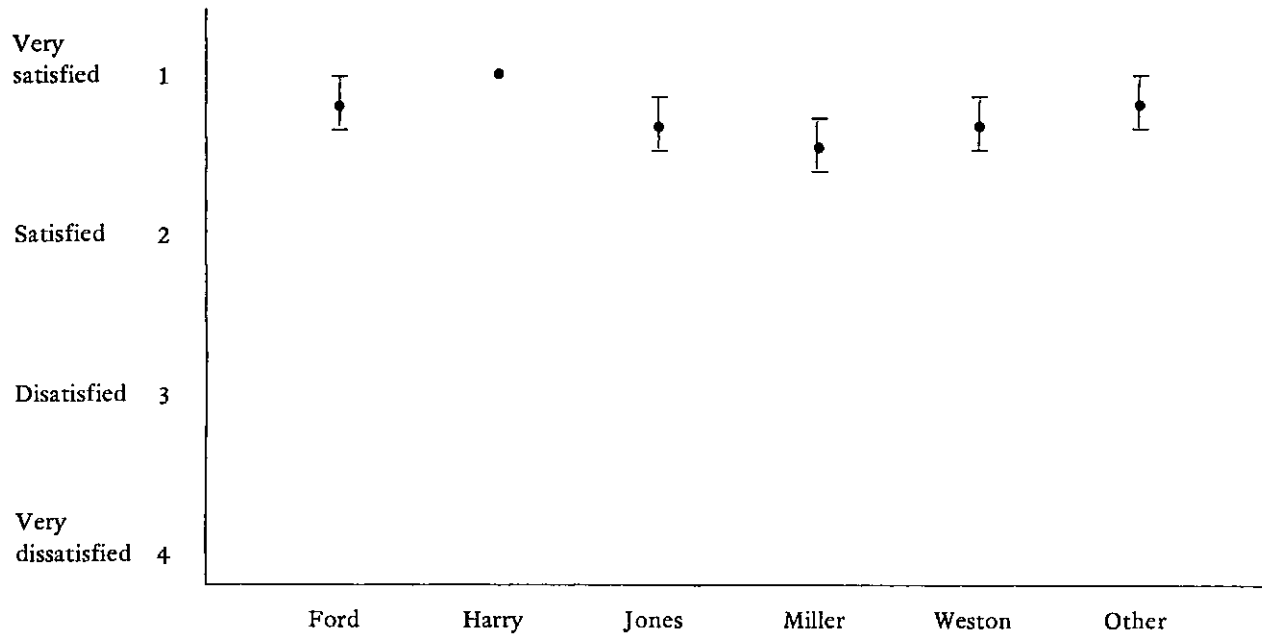
Level of satisfaction	Physicians						All physicians
	Ford	Harry	Jones	Miller	Weston	Other	
	<u>Percent</u>						
Very satisfied	76.7	100.0	64.1	56.3	65.0	68.8	65.9
Satisfied	20.9	0	30.8	34.0	30.1	28.2	29.4
Dissatisfied	2.3	0	4.3	7.8	3.9	2.6	41.6
Very dissatisfied	0	0	.9	1.9	1.0	.4	.8
	<u>Rating</u>						
Average satisfaction ¹	1.26	1.00	1.42	1.55	1.41	1.35	1.40
	<u>Number</u>						
Visits	43	1	117	103	103	266	633
	<u>Percent²</u>						
	6.8 (4.8, 8.8)	0	18.5 (15.4, 21.5)	16.3 (13.4, 19.2)	16.3 (13.4, 19.2)	42.0 (38.1, 45.8)	100

¹Satisfaction was measured on a 4-point scale with 1 being very satisfied.

²Confidence intervals are included in parentheses.

Figure H.1

Average Satisfaction With Physicians
With 95 Percent Confidence Intervals



Note: Satisfaction was measured on a four-point scale with 1 being very satisfied and 4 being very dissatisfied. Differences among physicians are statistically significant at 0.05.

Table H.2

Respondents Reasons for Selecting a Physician, by Physician, 1986

Reason for selection	Physician						All physicians	Significance of difference
	Ford	Harry	Jones	Miller	Weston	Other		
	<u>Percent</u>							
Location/ convenience	25.6	0.0	33.1	35.0	20.0	25.8	27.7	NS
Cost	0	0	0	0	0	2.6	1.1	*
Habit	44.2	0	12.8	10.7	53.8	27.0	27.2	***
Specialty available	11.6	0	6.0	10.7	1.9	17.6	11.3	***
Quality of physician	27.9	100.0	37.3	31.1	33.7	25.5	30.2	NS
Quality of hospital	0	0	0	0	0	1.1	.5	NS
Recommendation of physician	4.2	0	8.5	18.5	1.0	13.1	10.6	***
Recommendation of friend or relative	0	0	19.7	11.7	11.5	10.1	11.7	**
Attitudes of staff	0	0	0	0	0	1.1	.5	NS
Attitudes of physicians	7.0	100.0	5.51	6.8	1.9	1.5	3.6	***
Other	9.3	0	12.0	7.8	4.8	2.6	6.0	***
	<u>Percent</u>							
Visits	43	1	117	103	104	267	635	NS

NS = not significant.

* = significant at 0.10.

** = significant at 0.05.

*** = significant at 0.01.

Table H.3

Respondents Methods of Payment for Physician Visits, by Physician, 1986

Method of payment	Physicians						All physicians	Significance of difference
	Ford	Harry	Jones	Miller	Weston	Other		
	<u>Percent</u>							
Self	81.4	100.0	73.7	68.0	61.2	62.2	66.5	**
Private/group insurance	34.9	100.0	38.1	40.8	40.8	32.2	36.4	NS
Medicaid	0	0	.8	0	6.8	1.1	1.7	***
Medicare only	4.7	0	.8	0	9.7	5.6	4.4	***
Medicare plus supplemental private insurance	11.6	0	11.0	21.4	15.5	20.0	17.3	NS
Friend or relative	0	0	0	0	0	.4	.2	NS
Other	2.3	0	1.7	4.9	1.0	3.0	2.7	NS
Unable to pay	0	0	0	0	0	.7	.3	NS
	<u>Number</u>							
Visit	43	1	118	103	103	267	635	NS

NS = not significant.

* = significant at 0.10.

** = significant at 0.05.

*** = significant at 0.01.