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Assessment of the Primary Health Care Needs of North and South Omaha

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ASSESSMENT OF THE PRIMARY HEALTH CARE NEEDS OF NORTH AND SOUTH OMAHA

By

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Dedicated to:

Genevieve "Ginger" Burch, Ph.D.

(1932-1981)

Acknowledgements

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Vincent J. Webb, Ph.D.
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INTRODUCTION

A difference in perspective exists between the major health service providers on one hand and other human service providers and community leaders in Omaha on the need for more primary health care services for low income and minority residents in two of the older sections of Omaha, the near north side and southeast side.

Human service providers and community leaders point to the lack of health care facilities and personnel in the target communities to support their interpretation that health care providers are not sensitive to the needs of low income and minority residents.[1] For instance, a 1978 report by a sub-committee of the Health Planning Council of the Midlands (HPCM) found only seven primary care physicians in the total northeast section of the city compared with 75 in the southwest section of the city. The ratio of one physician to 12,081 persons in the target areas is far below the AMA national standard of 1:3,459.

Several major health care providers have made efforts to operate out-patient facilities in the areas and suggest that the services are not needed because they are under-utilized. Several facilities in the target areas have closed this year because the low patient population made the cost per patient too expensive. Several other health care facilities in these areas are in financial trouble because of low patient populations.

The health care providers and the community leaders agree that residents of these target areas under-utilize health services. They differ on what health care providers should do to increase utilization.

A variety of approaches has been used by health planners and health care organizations to increase the utilization of health facilities. The approach used is usually dependent on three factors:

1. The perceptions of planners/providers about the causes of under-utilization

2. The degree to which the planners/providers are willing or able to affect the causal factors

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[1]The information from community leaders and other human service providers is from interviews on health utilization patterns completed in January, 1981.

3. The professional model generally operating in western society with the values that: a) the professional knows the best procedures for the patients, based on scientific understanding of health and illness, and b) unless patients seek the medical care for themselves, they will not benefit from it.

Health care planners and providers seldom seek the answers to under-utilization from either potential clients or from research that others have undertaken on utilization patterns of similar clients.

This research was commissioned to determine the health utilization patterns of potential clients in two low income and minority target areas in Omaha.

The knowledge of services and the reasons for and pattern of their use can indicate causes for under-utilization of some services. Health providers can then make use of this knowledge in planning future services.

In the remainder of this section of the report the approach of previous research on health care utilization will be explained, the approach and research questions of this study clarified, and the target areas and the factors that cause their designation as problem health care areas described. Additional chapters include 1) a brief explanation of the methods used to survey area residents, 2) an analysis of the survey results, and 3) the conclusions and implications.

Approaches to Health Care Utilization Research

The research literature provides insights into both the causes or correlates of under-utilization and the degree to which certain aspects of the professional model may, in itself, cause under-utilization. Crandall and Duncan (1981:65), in summarizing the utilization literature for their analysis, distinguished two major factors that affect utilization: 1) situational factors such as technology, cost, and geographic access; and 2) attitudinal factors or the norms, values, and attitudes that affect utilization. In programs such as Medicaid and the British National Health Service, where the cost barrier has been removed, an increase is apparent in utilization for acute, episodic conditions, but preventive behavior seems to be determined more by attitudinal factors. Dutton (1978) adds a third barrier, a systems barrier. She cites additional studies that support her thesis that there are problems with delivery of care typically found in

health care facilities for the poor such as fewer private physicians and inadequate transportation along with long waits in the provider's office. Dutton also describes the attitudinal factors as elements in the "culture of poverty" including a crisis oriented approach to life, a greater willingness to put up with illness symptomatology, or not to define illness as such. Dutton suggests that the evidence is inconclusive, and there recently have been attacks on this idea of a culture of poverty. Nevertheless, evidence exists that the poor may have a different ordering of problems and priorities and different value systems and that these should be analyzed along with financial barriers and situational barriers to utilization of health care by the poor.

Dutton analyzed data collected in 1970 in Washington, D.C. from 681 families randomly selected and from the providers listed as their usual source of care. She developed a multivariate model in which the best explanation of health behavior occurred when the cost and attitudinal factors were analyzed along with information from providers.

The most thorough analyses of this preventive literature are provided by McKinlay (1972) and Aday (1972). Aday's monograph is an annotated bibliography of all health utilization studies to that date, a description of indices used to measure utilization, and an examination of the relationship between the dependent variables of utilization and all independent variables affecting utilization. She reported studies in which education, age, socio-economic status, health conditions, race and ethnicity, method of financing, organizational forms, and availability of service, among others affect some aspect of utilization. She reported no studies in which health attitudes had an effect on utilization.

McKinlay's analysis is more integrated. He examines the literature and summarizes it by describing several approaches that have been taken to study utilization behavior and detailing the evidence that has been developed to support each approach.

The Economic Approach. One approach suggests that economic factors are the major cause of under-utilization. Two independent variables have usually been measured: 1) direct cost of services and 2) method of payment. Little evidence exists to support the direct cost of services as a causal factor. The numerous studies of under-utilization of medical services in

Great Britain before and after socialized medical care was adopted failed to support the cost variable. Economic class and ethnic group differences remained even when services were free. Other studies suggest that cost is a factor for the near-poor and/or persons with no health insurance.

Method of payment correlates more strongly with utilization, especially types of medical services and facilities used. Patients who have insurance or for whom cost is not a factor use more private physicians for primary care. Persons using Medicaid/Medicare resort to clinic and emergency rooms more.

Some indirect economic factors have not been explored. These include loss of salary while receiving medical care or the crises that rank higher than health care, especially preventive health care, in the lives of low income persons. Other approaches tend to explain these indirect economic factors well.

The Demographic Approach. This approach basically examines the correlation between health service utilization and socio-demographic variables. The research shows a definite relationship between utilization and age, sex, educational level, religion, occupational level, and income. Older people, males, persons with lower educational levels, Catholics, blue collar and farm workers, and persons with lower income generally are among under-utilizers. This type of analysis provides little guidance for increasing utilization because it describes relationships without explaining them. Demographic variables such as education, occupation, age, religion, income, etc. are useful as indicators of socio-cultural, economic, or family status.

The Geographic Approach. This approach is based on the premise that geographic proximity affects utilization, i.e., if services are located nearby, utilization will increase. The results of several research studies that tested this assumption are inconclusive. However, the United Kingdom has developed neighborhood health centers based on the theory that available services lead to more utilization.

The Socio-Cultural Approach. This approach deals with the values, beliefs, attitudes, definitions of the situation, and life styles that affect the health utilization behavior of an aggregate of people. More and more research indicates that this perspective, rather than ignorance or economic

cost, affects health service utilization. Three factors have been found to relate to health utilization:

1. the health orientation or value system to which a person adheres
2. the structure of the group to which a person belongs
3. learning, early socialization, formal education, and prior contacts/experience of health care that interact with attitudes, opinions, beliefs, and values.

The health orientation or value system includes the degree of acceptance of modern scientific medicine, the usage of preventive medicine, the search for knowledge about symptoms, the degree of reliance on self-medication, traditional illness patterns, degree of pain expected with aging, etc. The group structure includes family roles and patterns or traditions, family insistence on or lack of support for medical utilization for certain symptoms, intergenerational networks, orientations to children and child health, occupational and social relationships, etc.

The effect of socialization, learning, and past experience on health behavior leads to the continuation of under-utilizing patterns in that the family and culture dictate a set of values, attitudes, and norms which are reinforced by contacts with the delivery system.

The major contribution of this approach to health planning is to indicate to health planners and providers that the under-utilizing behavior of certain groups is not idiosyncratic nor is it deviant or ignorant behavior. It is based on the realities that members of the sub-culture have faced over generations and is not likely to change without some attention to the cultural patterns of a sub-group. Health providers can either ignore these factors or recognize them as major inputs into the health delivery systems for specific populations.

Delivery Systems Factors

Finally, a growing body of research on the effect of organizational factors on client utilization of health services reiterates the results of some of the socio-cultural findings and delineates some common problems. Several general hypotheses have been supported by the research:

1. Because of the different orientations, world views, values, life styles, and patterns of behavior of low income and ethnic consumers of health services and health service delivery personnel, a lack of

understanding tends to exist between them resulting in frustration and under-utilization by low income ethnic populations.

2. The nature of large, bureaucratic organizations causes the organizational structure rather than service to the client to become the major goal.

3. Persons and groups not accustomed to operating within bureaucracies or who normally operate in the lower strata of bureaucracies receive poorer services.

4. Health services in which the patient does not pay directly for the services are characterized by greater interest on the part of providers in satisfying the needs of the third party payor than in satisfying the needs of the patient.

This approach moves utilization studies away from "what is wrong with the people who under-utilize the services?" (which tends to blame under-utilization on the client/user) to "what organizational factors present in the health delivery system are barriers to their utilization?" Dutton (1978:350) suggested, "Beyond access lies a more fundamental problem; a dual system of medical care, in which the poor utilize 'public' sources...while middle and upper income groups utilize 'private' sources. In the so-called public sources organizational problems are commonplace. Patients must often maneuver between multiple clinics to obtain basic primary care services, and their services are generally disease oriented rather than preventive. Furthermore, the atmosphere in such institutions is often dehumanizing."

The Approach of This Research

This research has two major purposes: 1) to determine actual primary health care patterns of the target population related to utilization of health care facilities and 2) to determine those factors that affect utilization of primary health care facilities.

Two sets of factors should offer the most valuable answers to the questions under study. First, socio-cultural factors, including economic status, should explain some of the differences in health care utilization among the target populations. Second, the nature and structure of health care systems themselves including geographical areas should affect utilization of these facilities. The research is structured so that the effect of these hypothesized factors can be measured.

Description of the Target Areas

North Omaha

The area originally designated as North Omaha extends from Dodge Street on the south to Ponca Road on the north and from the Missouri River on the east to 48th Street on the west. Map 1 shows the area. Part of the true northeast segment (from 13th to 41st Street and from Dodge to Cuming) was excluded because it contains part of the downtown commercial district. This total north area has a population of 62,377, according to the 1980 Census, and contains about 16% of the Douglas County population.[1]

A summary of this area on either geographic factors, demographic factors, or health status/utilization factors would be misleading. The area is too large and too diverse for either research or planning purposes. After careful examination, four broad subareas can be distinguished. A description of these areas will form the basis for a redefinition of the target area and for the design of the sample for the field survey.

North Omaha Community Development Subarea. The North Omaha Community Development Area (NOCD) extends basically from Cuming Street on the south to Ames on the north and from Carter Lake on the east to 30th Street on the west. Part of the southeastern-most tract extends south to Dodge. However, this section contains primarily railroad tracks and old industrial areas. The name of the subarea is taken from an organization founded in 1979 as a coalition of neighborhood groups funded primarily by the Old West Regional Commission and Community Development Block Grants. The organization is active in redevelopment of the subarea.

The subarea contains Census Tracts 7, 8, 9, 10, 11, 12, 13.01, 13.02, 14, and 15 and is outlined on Map 1. One of the oldest in the city, it is comprised of decaying housing stock mostly built around 1935. About one-fifth (19%) of the population lived in census tracts where the value of the housing was less than $5,000 in 1970. An additional three-fourths (76%) lived in census tracts where the housing had a mean value of less than $10,000. Of the 5,237 housing units in the area, 823 (16%) were public housing units, many of them built in the 1950's and already deteriorating.

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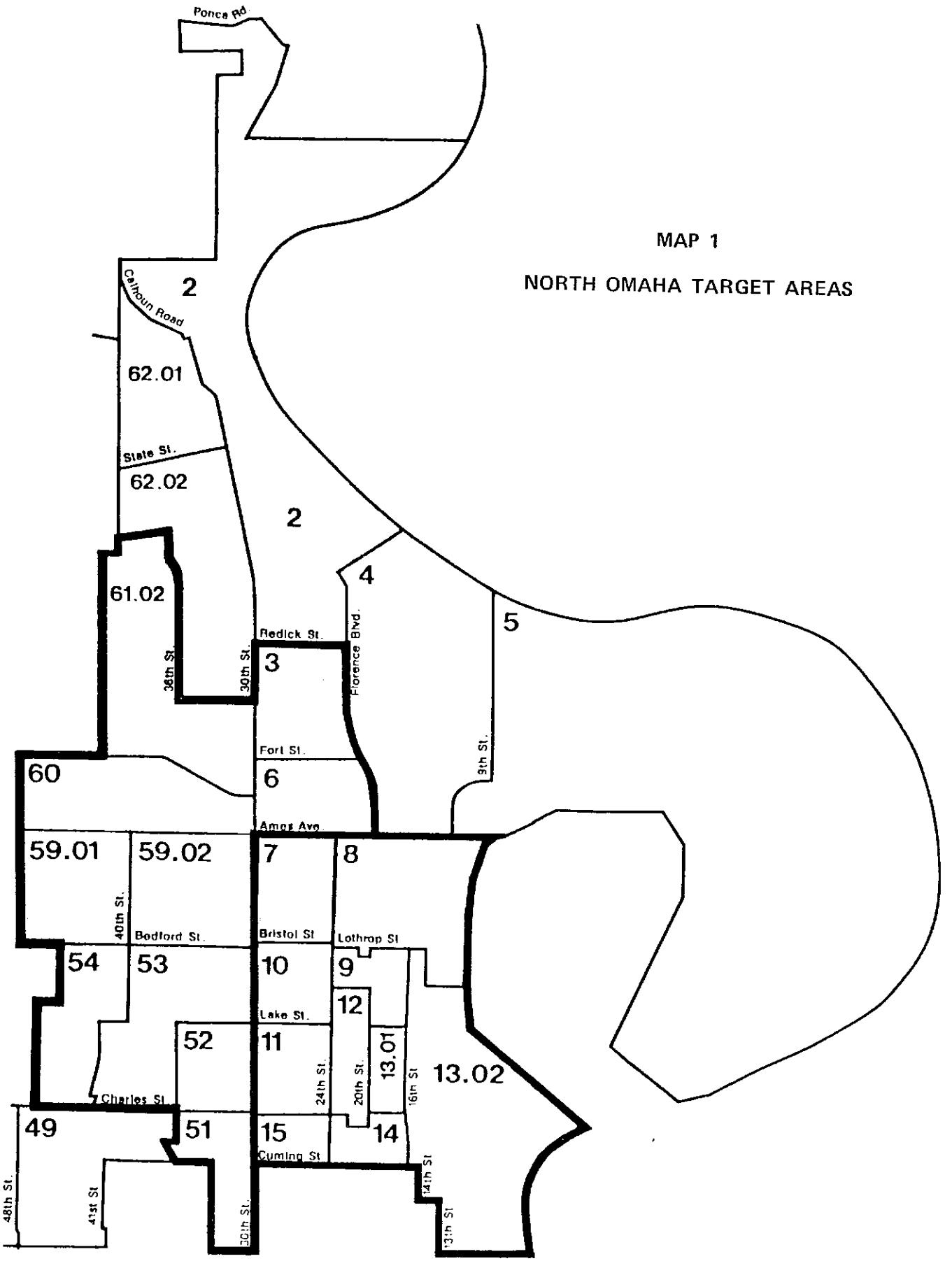
[1]Data for the remainder of this section are from a variety of places. Data references will not be included in the text or on the summary tables.

MAP 1

NORTH OMAHA TARGET AREAS



In 1980 almost three-fifths (59%) of the total housing units were single family houses; only 45% of housing units were owner occupied. Approximately 18% of housing units were estimated to be vacant in late 1979. These data can be found in Tables 1, 2, and 3.

The population in 1980 was 11,501, of which 84% were Black and about 14% were 65 and over. In 1979, about 37% of the population were on public assistance, mostly Aid to Families with Dependent Children (AFDC). About 11% of the labor force were unemployed that year. These data can be found in Tables 4 and 5. The median income shown in Figure 1, although from 1974 data, indicates that the relative economic level of this area was among the lowest in the city.

Consolidated Neighborhoods. This subarea is to the west of the NOCD subarea and slightly north and is outlined on Map 1. It is changing rapidly and at risk of developing problems similar to its eastern neighbor. The major part of this subarea extends from Dodge Street on the south to Ames Avenue on the north and from 30th to 48th Streets. A northeastern segment extends west from Florence Boulevard to between 42nd and 48th Streets and from Ames Avenue to several points north. The subarea includes Census Tracts 51, 52, 53, 54, 59.01, 59.02, 60, 61.02, 3, and 6. The latter four tracts are on the edge of the subarea. The name comes from an Omaha Community Development Department proposal for a revitalization project. Several strong neighborhood association groups are active and concerned with potential problems in the rapid change that the subarea is experiencing.

This subarea is characterized by modest but old single family houses, some multi-family housing, several public housing projects, and some manufacturing and strip commercial areas. Approximately one-third (32%) of the population lives in census tracts in which housing values average under $10,000. In 1980, 79% of the total housing units were single family dwellings; 59% were owner occupied. Four percent (4%) of the housing units were in public housing developments.

The population was 32,356 in 1980. The population has changed from nearly all White in 1960 to about 44% White in 1980. This rapid change along with the aging housing and the high percentage of non-White births (65%) indicates that this area is a transitional area that might be in

TABLE 1

HOUSING TYPE IN TARGET AREAS

North Omaha

	NOCD		Consolidated Neighborhoods		Census Tract 49		North Omaha/Loop	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Housing Type								
Single family units	3,115	59	9,598	79	843	36	4,300	86
Multifamily units	2,122	41	2,577	21	1,520	64	262	5
Public housing units	823	16	489	4	0	0	0	0
Owner occupied units	2,333	45	7,139	59	748	32	4,134	83
Vacant units	938	18	862	7	26	1	95	2
Total housing units	5,237		12,086		2,363		4,980	

South Omaha

	Census Tract 29		Ethnic		Stable-Hospital	
	Number	Percent	Number	Percent	Number	Percent
Housing Type						
Single family units	1,024	64	10,820	78	2,699	61
Multifamily units	575	36	3,034	22	1,707	39
Public housing units	386	24	369	3	223	5
Owner occupied units	877	55	9,362	68	2,555	58
Vacant units	89	6	557	4	299	7
Total housing units	1,602		13,854		4,406	

Omaha

	Number	Percent
Housing Type		
Single family units	97,843	68
Multifamily units	44,825	31
Public housing units	2,868	2
Owner occupied units	89,536	62
Vacant units	8,976	6
Total housing units	144,358	

TABLE 2

HOUSING TYPE IN TARGET AREAS AS A PROPORTION OF OMAHA

		Proportion of Omaha Total						
		North Omaha				South Omaha		
	Omaha Total	NOCD	Consolidated Neighborhoods	Census Tract 49	North Omaha Loop	Census Tract 29	Ethnic	Stable-Hospital
Single family units	97,843	3	10	1	4	1	11	3
Multifamily units	44,825	5	6	3	1	1	7	4
Public housing units	2,868	29	17	0	0	13	13	8
Owner occupied units	89,536	2	8	1	5	1	10	3
Vacant units	8,976	10	10	* a/	1	1	6	3
Total housing units	144,358	4	8	2	3	1	10	3

a/ * = less than .5%

TABLE 3

MEAN HOUSING VALUE

	North Omaha								South Omaha					
	NOCD		Consolidated Neighborhoods		Census Tract 49		North Omaha/ Loop		Census Tract 29		Ethnic		Stable-Hospital	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Population living in census tracts with mean housing value:														
Below 4,900	2,194	19												
5,000-9,999	8,784	76	10,415	32										
10,000-14,999	523	5	7,166	22			3,191	23						
15,000-19,999			14,775	46					4,331	100	14,062	40		
20,000-24,999							5,133	38			14,885	42		
25,000-29,999					4,858	100	5,338	39			6,212	18	3,449	33
30,000 and over													7,122	67
Total	11,501	100	32,356	100	4,858	100	13,662	100	4,331	100	35,159	100	10,571	100

TABLE 4

POPULATION CHARACTERISTICS IN TARGET AREAS

North Omaha

	NOCD		Consolidated Neighborhoods		Census Tract 49		North Omaha/Loop	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Population of Area								
Total population 1980	11,501		32,356		4,858		13,662	
Total Black 1980	9,709	84	17,360	54	354	7	1,043	8
Total Spanish origin 1980	146	1	603	2	97	2	182	1
Total American Indian 1980	214	2	362	1	27	1	91	1
Total 65 and over (ICES)[a/]	1,726	14	3,566	11	716	14	2,463	16
Economic Characteristics of Area								
Total labor force	9,958	87	21,382	66	3,892	80	9,477	69
Total unemployed[b/]	1,135	11	1,258	6	98	3	401	4
Total on public assistance	4,201	37	6,979	22	300	6	875	6

South Omaha

	Census Tract 29		Ethnic		Stable-Hospital	
	Number	Percent	Number	Percent	Number	Percent
Population of Area						
Total population 1980	4,331		35,159		10,571	
Total Black 1980	1,266	29	260	1	92	1
Total Spanish origin 1980	601	14	3,003	9	223	2
Total American Indian 1980	91	2	305	1	47	*[c/]
Total 65 and over (ICES)[a/]	442	9	6,120	17	1,700	16
Economic Characteristics of Area						
Total labor force	2,208	51	24,494	70	6,887	65
Total unemployed[b/]	183	8	1,301	5	267	4
Total on public assistance	1,070	25	2,044	6	566	5

Douglas County

	Number	Percent
Population of Area		
Total population 1980	397,884	
Total Black 1980	39,831	10
Total Spanish origin 1980	8,240	2
Total American Indian 1980	1,947	*[c/]
Total 65 and over (ICES)[a/]	41,619	11
Economic Characteristics of Area		
Total labor force	148,193	37
Total unemployed[b/]	7,218	5
Total on public assistance	22,717	6

[a/] Based on population estimates in ICES–Intercensal Estimating System, calculated as a proportion of 1980 census total.

[b/] Calculated as a proportion of the total labor force.

[c/] * less than .5%.

TABLE 5

POPULATION CHARACTERISTICS IN TARGET AREAS
AS A PROPORTION OF DOUGLAS COUNTY

		Proportion of Douglas County Total						
		North Omaha				South Omaha		
	Douglas County Total	NOCD	Consolidated Neighborhoods	Census Tract 49	North Omaha Loop	Census Tract 29	Ethnic	Stable-Hospital
Population	397,884	3	8	1	3	1	9	3
Black	39,831	24	44	1	3	3	1	*[a]
Spanish origin	8,240	2	7	2	2	7	36	3
American Indian	1,947	11	19	1	5	5	16	2
65 and over[b]	41,619	4	8	2	6	1	12	4
Labor force	148,193	7	14	3	6	1	17	5
Unemployed	7,218	16	17	1	6	3	18	4
Public assistance	22,717	18	31	1	4	5	9	2

[a] * less than .5%

[b] Based on population estimates in ICES—Intercensal Estimating System

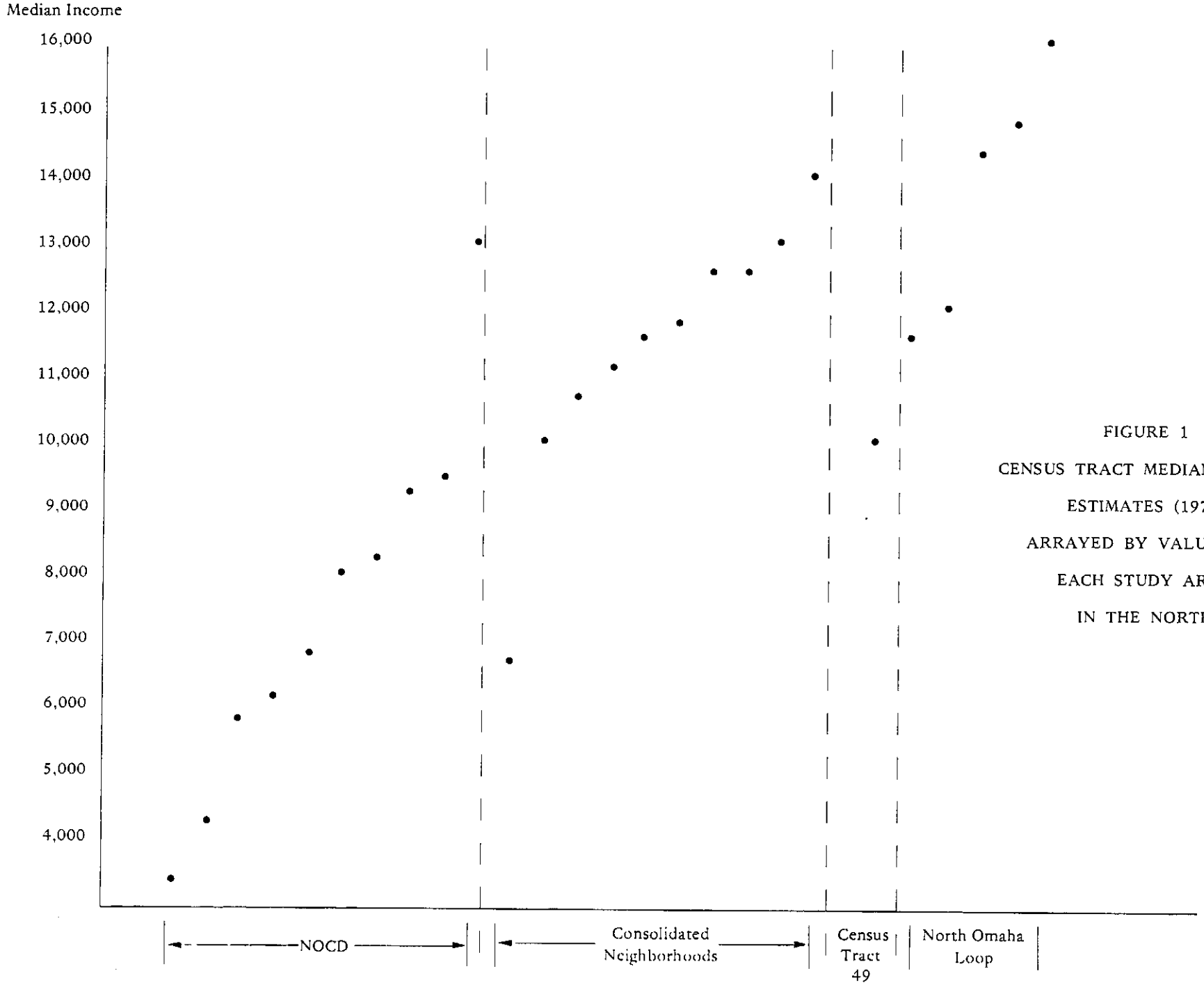


FIGURE 1

CENSUS TRACT MEDIAN INCOME ESTIMATES (1974) ARRAYED BY VALUE FOR EACH STUDY AREA IN THE NORTH

danger of deterioration. It has traditionally been an area of working class people with modest incomes.

In 1974, no census tract had a median income lower than $5,000, and about 68% of the population lived in census tracts with the median income above $10,000. Figure 1 has these data. In 1980, while only 6% of the labor force were unemployed, 22% of the population were receiving public assistance. These data are shown in Tables 5 and 6.

North Omaha/Loop. This subarea includes the far northern parts of northeast Omaha and the loop that extends east of Carter Lake, Iowa, including Eppley Airfield. The name comes from several neighborhood associations and community groups having North Omaha in the name, one of which is the North Loop Coalition. The subarea is made up of Census Tracts 2, 4, 5, 62.02 and 62.01 and includes Miller Park on the south and Florence.

Data from these census tracts show a subarea similar to many other parts of Omaha. Eighty-six percent (86%) of the area housing units were single family dwellings; 83% were owner occupied. About 77% of the population lived in census tracts where housing values averaged over $20,000. Of the 4,980 housing units only 2% were vacant in 1980.

The population was 13,662 in 1980. About 8% of the population were Black and about 16% 65 or over. All of the census tracts had a median income over $10,000 in 1974. Only about 4% of the labor force were unemployed in 1980, and 6% were on public assistance.

Census Tract 49. This subarea between Dodge and Cuming from 35th to 48th Streets is quite atypical from its northern neighbors. It contains older single and dual family housing with much four-plex and six-plex housing in good condition. It is near to three universities, including a medical school, and has many rental units occupied by students.

Of the 2,363 housing units in the subarea, only 36% were single family houses, and only 32% were owner occupied housing units. However, the median value of the housing was $18,729, and only 1% of the housing units were estimated to be vacant in 1980.

In 1980, the population was 4,858. About 14% were over 65 and about 7% were Black. While the median income in 1974 of $10,000 was not high, only 6% of the population were on public assistance in 1979, and only 3% of the labor force were unemployed. The low income reflects the number of students in the subarea.

TABLE 6

BIRTH/INFANT DEATH STATISTICS IN TARGET AREAS

North Omaha

	NOCD		Consolidated Neighborhoods		Census Tract 49		North Omaha/Loop	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Birth Statistics								
Births (1977)	313		719		80		247	
Mothers under 17 (1977)	48	15	99	14	4	10	19	8
Births (1978)	284		773		84		224	
Non-White births (1978)	245	86	508	66	17	20	28	13
Low-weight births (1978)	36	13	90	12	8	9	24	11
Births (1979)	254		766		101		211	
Non-White births (1979)	222	87	497	65	12	12	26	12
Infant/fetal deaths (1979)	11	4	29	4	2	2	7	3
Infant deaths (1979)	6		16		2		2	
Non-White infant deaths (1979)	5	83	11	69	0	0	0	0

South Omaha

	Census Tract 29		Ethnic		Stable-Hospital	
	Number	Percent	Number	Percent	Number	Percent
Birth Statistics						
Births (1977)	71		597		162	
Mothers under 17 (1977)	7	10	47	8	11	7
Births (1978)	93		628		175	
Non-White births (1978)	48	52	116	18	15	9
Low-weight births (1978)	14	15	30	5	11	6
Births (1979)	117		689		171	
Non-White births (1979)	37	32	19	3	3	2
Infant/fetal deaths (1979)	2	2	17	2	2	1
Infant deaths (1979)	1		10		2	
Non-White infant deaths (1979)	1	100	0	0	1	50

Omaha

	Number	Percent
Birth Statistics		
Births (1977)	6,614	
Mothers under 17 (1977)	361	5
Births (1978)	6,653	
Non-White births (1978)	1,303	20
Low-weight births (1978)	467	7
Births (1979)	7,020	
Non-White births (1979)	1,121	16
Infant/fetal deaths (1979)	160	2
Infant deaths (1979)	89	
Non-White infant deaths (1979)	27	30

Summary. Northeast Omaha, as a whole, has very different areas. Even within the four subareas delineated, some atypical factors are found. The NOCD subarea is one of deteriorating housing, with a population almost totally non-White. Many persons are unemployed and/or receiving public assistance.

The Consolidated Neighborhoods subarea is a transitional one with older, modest housing and working class families. The population has slightly more Black persons than White and the change has been rapid. Several blocks within this subarea are approaching deterioriating conditions, but several of the border blocks are quite similar to other non-problem areas of Omaha. The entire subarea, however, can be called a transitional one and at risk of following the NOCD subarea into more deterioriation.

The North Omaha Loop subarea is similar to the rest of Omaha's population and therefore has fewer of the needs of the previous two subareas. Census Tract 49 is quite different from its neighboring subareas with a low minority population, more multi-family housing, and lower unemployment.

The comparison of the North Omaha subareas on Tables 2 and 5 with the total Douglas County population indicates the subareas with problems. While NOCD and Consolidated Neighborhoods together contain only 12% of the housing units, they contain 46% of the public housing units and 20% of Omaha's vacant housing units. The other two subareas with 5% of Omaha's housing units contain no public housing units and approximately 1% of the vacant housing.

Table 5 shows that NOCD and Consolidated Neighborhoods have only 11% of Omaha's population. However, they contain 68% of its Black population, 33% of the unemployed, and 49% of the public assistance care load. These comparisons make a convincing argument for a designation of these two subareas as a target for study. The other two subareas in North Omaha do not show the same pattern. For the reasons summarized here, and the health status data described below, this research will include only the NOCD and Consolidated Neighborhood areas as the target population in North Omaha.

Health Status. Tables 6, 7, 8, and 9 confirm the general assumption that minorities with economic problems in deteriorating areas tend to have poorer health than the norm. Table 6 shows that in the NOCD subarea, 13% of

TABLE 7

BIRTH/INFANT DEATH STATISTICS IN TARGET AREAS
AS A PROPORTION OF OMAHA/DOUGLAS COUNTY

	Omaha/ Douglas County Total	Proportion of Omaha/Douglas County Total						
		North Omaha				South Omaha		
		NOCD	Consolidated Neighborhoods	Census Tract 49	North Omaha Loop	Census Tract 29	Ethnic	Stable-Hospital
Omaha births (1977)	6,614	5	11	1	4	1	9	2
Mothers under 17 (1977)	361	13	27	1	5	2	13	3
Omaha births (1979)	7,020	4	11	1	3	2	10	2
Low-weight births	467	8	19	2	5	3	6	2
Omaha non-White births (1979)	1,121	20	44	1	2	3	2	*[a]
Infant/fetal deaths	160	7	18	0	4	1	11	1
Non-White infant deaths	27	19	41	0	0	4	0	4

[a] * less than .5%

TABLE 8

DISEASE/DEATH STATISTICS IN TARGET AREAS

	North Omaha							
	NOCD		Consolidated Neighborhoods		Census Tract 49		North Omaha/Loop	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Disease/Death Statistics								
Communicable diseases (1978)[a/]	19	1.7	26	.8	2	.4	2	.1
Deaths (1978)	174		268		56		150	
Non-White deaths (1978)	130	75	93	35	0	0	4	3
Deaths from pneumonia/flu	5		11		1		5	
Deaths from diabetes	4		3		0		2	
Deaths from cirrhosis	5		3		0		1	
Deaths from heart/circulation	77		80		31		59	
Deaths from cerebro-vascular	8		16		6		25	

	South Omaha					
	Census Tract 29		Ethnic		Stable-Hospital	
	Number	Percent	Number	Percent	Number	Percent
Disease/Death Statistics						
Communicable diseases (1978)[a/]	1	.2	14	.4	6	.6
Deaths (1978)	58		460		121	
Non-White deaths (1978)	15	26	19	4	3	2
Deaths from pneumonia/flu	1		13		1	
Deaths from diabetes	1		7		1	
Deaths from cirrhosis	1		12		1	
Deaths from heart/circulation	23		214		63	
Deaths from cerebro-vascular	3		46		5	

	Omaha/Douglas County	
	Number	Percent
Disease/Death Statistics		
Communicable diseases (1978)[a/]	154	.4
Deaths (1978)	3,198	
Non-White deaths (1978)	307	10
Deaths from pneumonia/flu	116	
Deaths from diabetes	45	
Deaths from cirrhosis	49	
Deaths from heart/circulation	1,137	
Deaths from cerebro-vascular	313	

a/Percent based on $\frac{\text{No. of communicable diseases (1978)}}{\text{Population (1980)}} \times 1{,}000$

TABLE 9

DISEASE/DEATH STATISTICS IN TARGET AREAS
AS A PROPORTION OF OMAHA/DOUGLAS COUNTY

		Proportion of Omaha/Douglas County Total						
		North Omaha				South Omaha		
	Omaha/ Douglas County Total	NOCD	Consolidated Neighborhoods	Census Tract 49	North Omaha Loop	Census Tract 29	Ethnic	Stable-Hospital
Population (1980)	397,884	3	8	1	3	1	9	3
Communicable disease (1978)	154	12	17	1	1	1	9	4
Non-White deaths	307	42	30	0	1	5	6	1
Deaths from pneumonia	116	4	9	1	4	1	11	1
Deaths from diabetes	45	9	7	0	4	2	16	2
Deaths from cirrhosis	49	10	6	0	2	2	24	2
Deaths from heart/circulation	1,137	7	7	3	5	2	19	6
Deaths from cerebro-vascular	313	3	5	2	8	1	15	2

the babies born had a lower than normal birth weight and a 4% infant/fetal death-to-birth ratio compared with total Omaha's 7% and 2%. Fifteen percent (15%) of babies were born to mothers 17 and younger compared with Omaha's 5%. In the Consolidated Neighborhoods subarea, 12% of the babies had a low birth weight, and 14% were born to mothers 17 and younger. It also had an infant/fetal death-to-birth ratio of 4%.

Table 7 shows that while the two subareas had only 16% of Omaha's births, they had 25% of the infant/fetal deaths, 41% of Omaha's mothers 17 and under, and 27% of the low birth weight babies. The other two subareas did not show the same problem pattern.

Table 9 shows the same trends as the birth data, using available disease/death statistics. NOCD and Consolidated Neighborhoods together had 11% of the population but 29% of the communicable diseases, 16% of the deaths by diabetes, and 16% of the deaths by cirrhosis of the liver. NOCD had a very high death rate of 9.5 per 1,000 for persons under 65.

South Omaha

South Omaha, as originally designated, extends from Pacific Street on the north to Harrison Street on the south and from the Missouri River on the east to 42nd Street on the west. The area has basically been an ethnic area with distinct pockets of Polish, Italian, and Czech residents. An analysis of individual census tracts supports a division of the area into the three subareas described below. See Map 2.

Census Tract 29. This is a subarea in the southern part of South Omaha that extends from Harrison to Q Street at one place and 36th Street at another on the west. Map 2 shows the area. The subarea is the only one in South Omaha with substantial minorities, about 29% Black and 14% of Spanish origin. Many of the minorities reside in the public housing units which comprise 24% of all housing units.

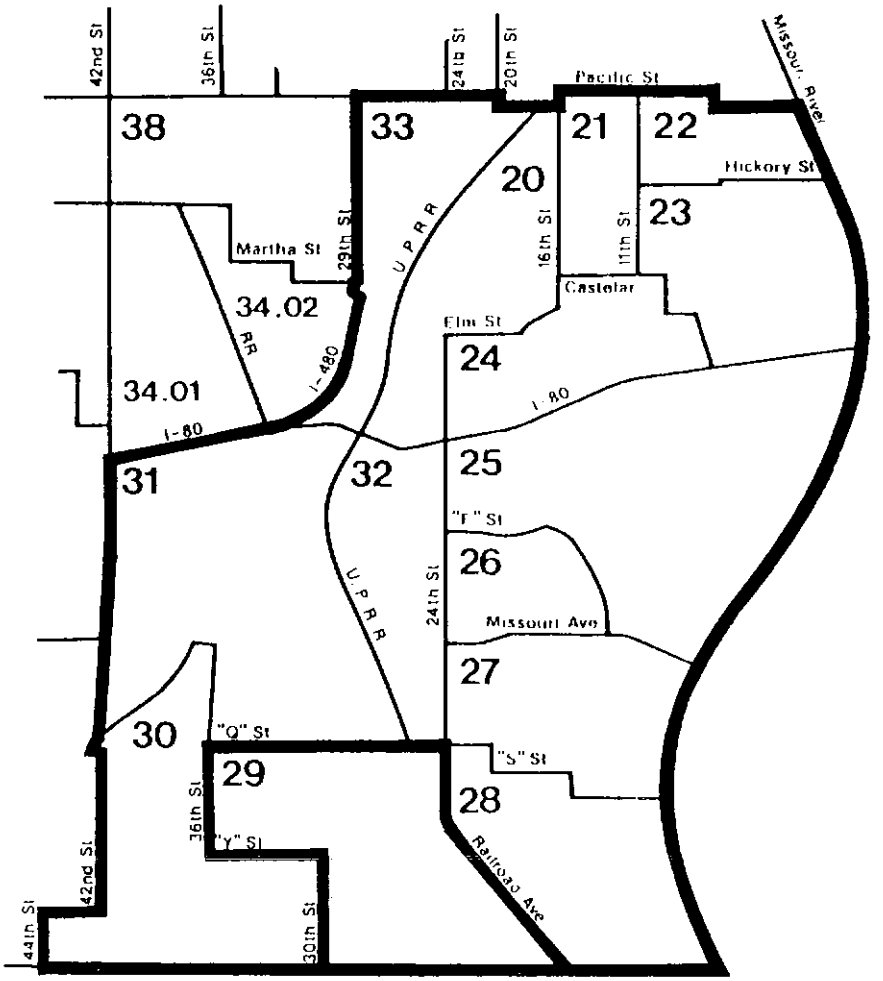
In 1980 64% of the subarea housing units were single family houses; 55% were owner occupied. The vacancy rate was 6% in 1980. The housing was mostly built in the 1930's and averages between $15,000 and $20,000 in value. Tables 1 and 3 show these data.

In 1980 the population was 4,331. About 9% were over 65.

In 1974, the median income was less than $10,000. (See Figure 2.) In 1979, 25% of the population were receiving public assistance, and 8% of the labor

MAP 2

SOUTH OMAHA TARGET AREAS



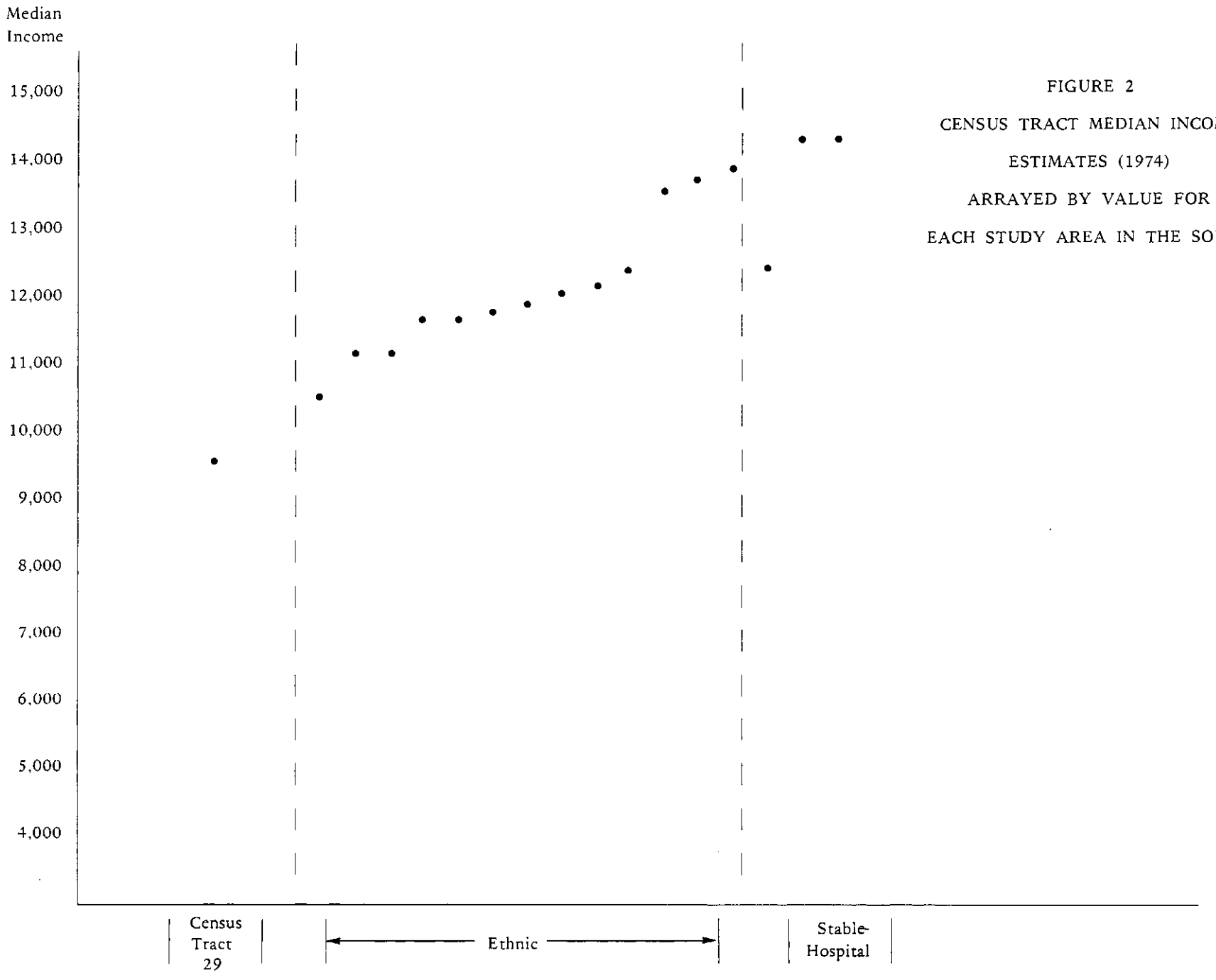


FIGURE 2

CENSUS TRACT MEDIAN INCOME ESTIMATES (1974) ARRAYED BY VALUE FOR EACH STUDY AREA IN THE SOUTH

force were unemployed.

Ethnic Subarea. Surrounding Census Tract 29 on three sides is the Ethnic subarea. It extends from the Missouri River on the east to 42nd Street on the west and from Harrison Street on the south to Interstate 480 which cuts off the northwest corner. This subarea has many dividing barriers such as Interstate 80, the railroad tracks and yards, the stockyards and packing plants, and the Rosenblatt Stadium and Henry Doorly Zoo areas. The dividing areas also separate the population into ethnic, rapidly changing, older, and stable areas. The major common characteristic is that the population is older and from various ethnic backgrounds.

The subarea contains Census Tracts 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 31, 32, and 33. The subarea is outlined on Map 2. Housing is primarily old and single family (78%) built in the 1930's. Much of the housing has been kept in good condition. The entire population lives in census tracts where housing values average $15,000-$19,999. Of the 13,854 housing units, 68% were owner occupied and 3% were public housing units. In 1980 only 4% of housing units were vacant.

The population was 35,159 in 1980 with 1% Black and 9% of Spanish origin. About 17% were 65 and older. The median salary of the entire subarea was between $10,000 and $15,000 in 1974. In 1979, 6% of the population were on public assistance, and 5% of the labor force were unemployed.

Stable-Hospital. The Stable-Hospital subarea (Census Tracts 34.01, 34.02, and 38) is set off from the rest of South Omaha by Interstate 80 and 480 and is quite different from the other areas. It has many multi-family units and is in close proximity to the University of Nebraska Medical Center, therefore having many rental units. Only 61% of the housing units were single family and 58% were owner occupied. The average value of all housing in the area in 1980 was over $20,000.

Of the total population of 10,571 in 1980, only 3% were minority. About 16% were 65 or older. The relatively low median income of $10,000 - $15,000 may reflect the student population.

In 1980, only 4% were unemployed and 5% of the population were on public assistance.

Summary. Most of Southeast Omaha appears to exhibit fewer problems than North Omaha when housing, economic factors, and population distribution are

compared. However, Census Tract 29 has a high minority population, high percentage of public housing, and high percentage of population on public assistance. This analysis along with the health data discussed below confirms that the Ethnic subarea and Census Tract 29 should be the South target population in this research.

Health Status. The birth/health statistics in Table 6 indicate several problem factors in these two South Omaha subareas. Census Tracts 29's birth data show 10% of the mothers were 17 and under, and 15% of the babies had a low birth weight.

In Census Tract 29, 52% of the deaths were of persons under 65; its death rate per 1,000 was 7.0. Comparison with Douglas County shows that the Ethnic subarea had a high death rate. (See Table 9.) With 9% of the Douglas County population in 1980, it had 14% of the deaths in 1978, 16% of Douglas County's deaths from diabetes, and 24% of the deaths from cirrhosis of the liver. While only 29% of the deaths in this area were of persons under 65 years old, 50% of the non-White deaths were under 65. These data indicate health problems of both White and non-White populations in the Ethnic subarea.

Health Status of the Minority Population

As an addendum to this discussion a brief description of the minority population in the four target areas (NOCD, Consolidated Neighborhoods, Census Tract 29, and Ethnic) seems appropriate since 72% of Blacks, 52% of Spanish origin, and 51% of American Indians live in the target areas.

The Douglas County data on number of prenatal visits and age of mothers of White and non-White births in 1977 are an indication of the problems faced by minorities at the beginning of life. Minorities in Omaha, particularly in the target areas covered by this report, are disadvantaged in health status from birth to death.

Number of Prenatal Visits. The mean number of prenatal visits by non-White mothers in Douglas County in 1977 was 8.95. For Whites it was 10.44. While this does not seem to be a large difference, it is statistically significant. A look at the percentage of mothers making visits is even more striking. Table 10 shows that 2.3% of non-White mothers made no prenatal visits, and an additional 9.3% made only one to four visits. This is compared with .7% of White mothers with no visits and an additional 2.6% with one to four.

TABLE 10

NUMBER OF PRE NATAL VISITS BY RACE IN DOUGLAS COUNTY 1977

Number of Pre-natal Visits		White No.	White %		Non-white No.	Non-white %
None		37	.7		23	2.3
1 visit	8			12		
2 visits	31	147	2.6	21	94	9.3
3 visits	43			24		
4 visits	65			37		
5 or more visits		5,443	96.7		890	88.4
		5,627	100.0		1,007	100.0
Mean		10.44			8.95	

TABLE 11

MOTHER'S AGE AND RACE IN DOUGLAS COUNTY 1977

Mother's Age	White No.	White %	Non-white No.	Non-white %
17 and under	231	4.1	135	13.4
18	207	3.7	91	9.0
19 and over	5,189	92.2	781	77.6
Total	5,627	100.0	1,007	100.0

Age of Mothers. The age of mothers is another indication of a poor health start for non-White children. The younger age of the mother generally correlates with fewer prenatal visits, poorer diet, and more tension and stress and greater likelihood of negative outcomes for the baby. This is particularly true for young unmarried mothers.

Table 11 shows that 13.4% of non-White mothers and 4.1% of White mothers were 17 years old or younger. An additional 9.0% of non-White and 3.7% of White mothers were 18 years old. This means that nearly one-quarter of all non-White children began life with the possiblity of poor prenatal care and other factors related to negative outcomes.

Perinatal/Infant Death. The consequences of poor prenatal care of non-White mothers is suggested in the perinatal/infant death rate shown in Table 12. While 42% of all births in the target areas in 1979 were non-White children, 53% of the perinatal/infant deaths were among non-White.

Low-weight Births. Another indication of poor prenatal care is low-weight births. Table 13 shows that in 1978, while 52% of the births in the area were non-White, 68% of the low-weight births were non-White.

During Life. Several health statistics indicate continued health problems for non-Whites in Omaha. An indication of the need for immunization is the incidence of communicable disease. In 1978, 154 cases of communicable diseases were reported to the Douglas County Health Department. Thirty-nine percent (39%) were in the target areas that contained only 31% of the total population.

The causes of death among minorities indicate further health problems, especially those related to poor health care.

While Blacks made up 59% of the population in the target areas, they accounted for a far greater percentage of deaths by cirrhosis of the liver, 89%; diabetes, 75%; and pneumonia, 70%. Blacks in the target areas were proportionally under-represented in deaths from the three major causes of death in Omaha: heart/circulatory, 42%; cancer, 16%; and cerebro-vascular disease, 48%. Perhaps by dying at an earlier age, they do not contact illnesses of the aging process.

TABLE 12

PERINATAL INFANT DEATHS IN FOUR HIGH-MINORITY TARGET AREAS

	Births (1979)		Deaths (1979)	
	No.	%	No.	%
White	1,052	58	20	47
Non-white	776	42	23	53
Total	1,828	100	43	100

TABLE 13

LOW-WEIGHT BIRTHS IN FOUR HIGH-MINORITY TARGET AREAS

	Births (1978)		Low-weight Births (1978)	
	No.	%	No.	%
White	861	48	54	32
Non-white	917	52	116	68
Total	1,778	100	170	100

II

RESEARCH METHODS

Four research procedures were utilized in the project: 1) an analysis of available health service utilization data by area providers; 2) interviews with major health care providers and institutions serving the areas, especially hospitals, clinics, schools, and private physicians; 3) interviews with key persons in the communities and in the larger community who are concerned about the health care in the target areas; and 4) a survey of the need for and utilization of health care facilities by area residents.

A variety of approaches was used in order to avoid the possible bias of research findings by one interest group or the other and to gain insight into all of the sub-systems involved in the provision of health care.

The remainder of this chapter describes key procedural decisions made in implementing the research.

Key Informant Interviews

The purpose of key informant interviews was to get a feeling for the populations and the subjects under study from the perspective of groups directly involved. When used as a preliminary study before a large scale survey, the subject matter of questions and the response frame can be clarified by interviews with community leaders. Definitions of variables and the technical and planning parameters can be tested on experts in the substantive field.

Key informants may be informal community leaders, providers of human services to the community, experts in the substantive area, or other persons perceived by some members of the population to be informed. In this study two types of key informants were interviewed: community leaders and health providers.

Community leaders can serve as a valuable resource in the study of minority and low income populations. They are more aware of the relative disadvantages of their own community, more informed about innovations not currently available to them, and are less afraid to articulate criticism of the status quo. They also provide access to a sometimes suspicious target population.

Inclusion of health providers in this study is extremely important. They provide technical assistance on content, language, philosophy, and economic viability of primary health care. They also provide the access to data necessary for a total picture of the primary health care system. Finally, many of the questions posed for the research were suggested by health providers.

The Data Gathering Method Used

A focused interview was used to gather these data. The focus of the interview was on why the target population under-utilize health facilities and what can be done to encourage or facilitate utilization. Most of the questions were open-ended with several exceptions where lists of items were read and respondents were asked to comment on the items. Many of the questions and items included were from previous health care research reports.

Selection of Community Informants

Community leaders selected as key informants represented a variety of sources with several perspectives. They were selected because they worked in the areas, were knowledgeable about the problem and the populations, and/or were leaders in area groups. Local neighborhood association leaders, directors, and board members of area organizations, local clergy, educators, and other human service providers were among those interviewed. A total of 51 persons was interviewed and 14 additional informal discussions were held. Selection began with a few key interviews. Each person interviewed was asked for the names of others who should be interviewed.

Selection of Health Provider Informants

Health care professionals selected as key informants represented the administrations of the major hospitals and clinics in the areas, the medical schools (especially in the primary care areas), the Visiting Nurse Association, the nursing schools, the Omaha Hospital Association, the Omaha Medical Society, the State Health Department, and several nursing homes. Though the private physicians were approached, they declined to be interviewed. A total of 28 health providers was interviewed and 19 additional more specific, information seeking contacts made.

The Population Survey

In general, the standard procedures of survey methodology were used for the survey. Three factors may be of interest to the reader: the method by which the sample was selected, the characteristics of the interviewers, and the development of the interview schedule.

Selection of the Sample

Based on the demographic and health statistics reported in the previous section, the decision was made to limit the study area to two subareas in North Omaha--NOCD and Consolidated Neighborhoods--and to two subareas in South Omaha--Census Tract 29 and Ethnic. The sample households in the target subareas were selected using a stratified, random, multi-stage technique. To avoid bias in the results the sample was designed so that, at the beginning, every household in the target areas had a chance of being selected. This means that the sample was a random sample and represented the total population.

The sample was selected in four stages. First, the population was stratified on the basis of the two factors that are known to be associated with high health risk, age and income. Several high rise apartments for the elderly operated by the Omaha Housing Authority were the population base for the elderly sample. The Omaha Housing Authority also operates low income public housing in both North and South Omaha. This housing was sampled to form the low income sample.

In the second stage, the general population in the four subareas was sampled using a cluster technique. Every street corner in the target areas was listed and given a number. North Omaha had a total of 1,203 corners and South Omaha 953. The street corners were then randomly selected using computer generated random numbers. A total of 55 street corners in North Omaha and 60 in South Omaha was selected. Each street corner was then scanned using an aerial map or in person to determine if at least one block face contained residential unts. If not, a substitute corner was selected.

The third stage of the sample design was to select randomly one of the four corners--northeast, southeast, northwest, or southwest--to begin the sample.

The fourth stage was to use a systematic random technique to select specific households. Again using the aerial map, the number of housing units around the block starting at the pre-selected corner was determined. A total of 10 households was randomly selected from that block. If fewer than 10 residential units were counted, then the entire population of that block was included. As an example of the selection process, if 40 housing units were contained on the block, the first household was selected by randomly selecting a number from one to four. If the number were three, then the third household was selected and then every fourth household around the block. Housing units within multi-family units were similarly selected. Since housing units within the elderly high rise and low income housing were already numbered, they were selected using the random numbers list.

After the street corners, the direction, and the first house had been selected in the office, research assistants went to the corner and took the address of each selected housing unit around the block. These addresses were written on the interview schedule to preclude substitution by interviewers.

Map 3 (North Omaha) and Map 4 (South Omaha) show the location of street corners, elderly high rise units, and public housing units.

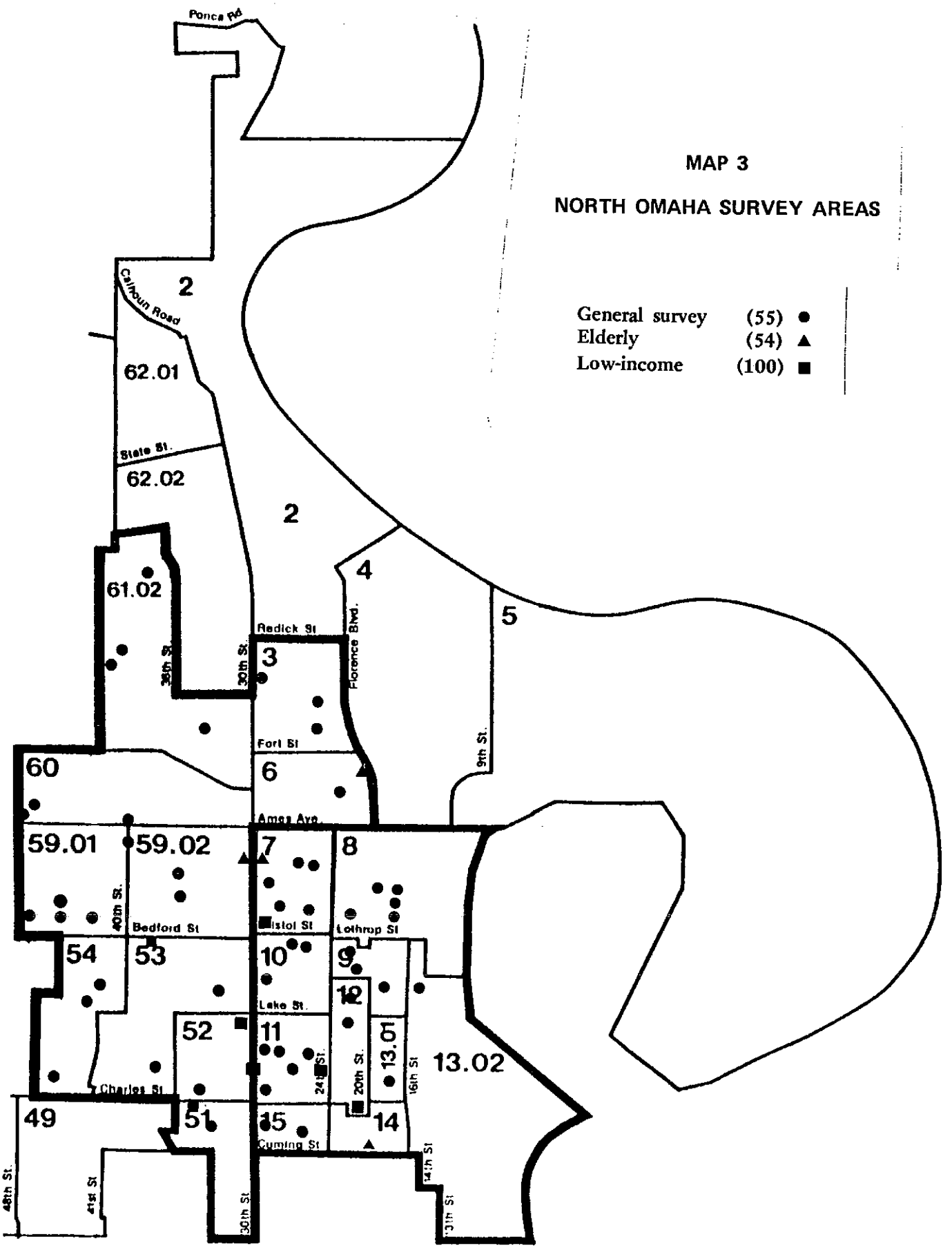
The population in the NOCD Area in North Omaha was more heavily represented in the survey than the Consolidated Neighborhoods population because the former area contains approximately the same number of street corners but only about a third of the population. However, since this subarea seemed to be particularly troubled, this disproportionate sampling was allowed to occur.

The total sample had six sub-samples. Table 14 shows the number of households in each sample and the number of interviews completed after at least three visits.

The Interview Schedule

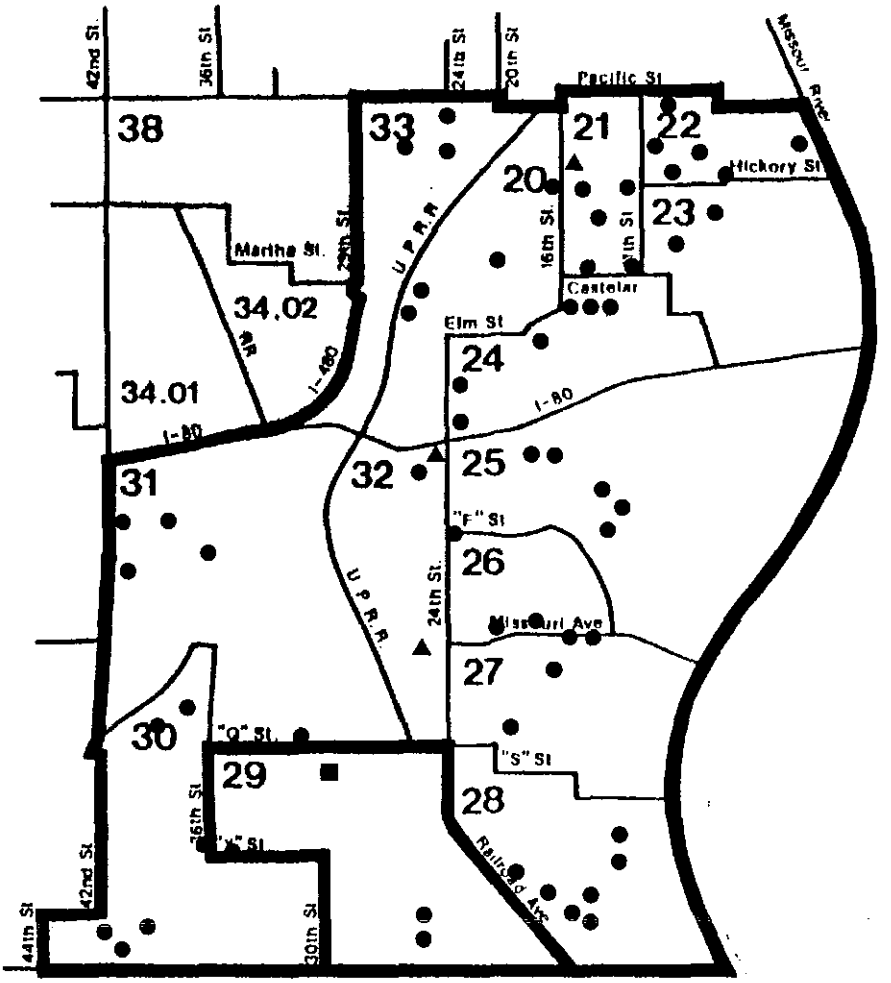
The interview schedule was developed to determine five basic sets of information about residents in the target areas:

1. Some socio-economic and situational information that might affect utilization of health services


MAP 3
NORTH OMAHA SURVEY AREAS
General survey (55) ●
Elderly (54) ▲
Low-income (100) ■
Ponca Rd
Calhoun Road
State St.
Redick St
Florence Blvd.
Fort St
Ames Ave
Bedford St
Bristol St
Lothrop St
Lake St.
Charles St
Cuming St
30th St.
36th St.
40th St.
24th St.
20th St.
16th St
9th St.
48th St.
41st St
14th St
13th St
2
62.01
62.02
61.02
3
4
5
6
7
8
60
59.01
59.02
54
53
52
10
9
12
11
13.01
13.02
49
51
15
14

MAP 4

SOUTH OMAHA SURVEY AREAS



General survey	(60)	●
Elderly	(57)	▲
Low-income	(60)	■

TABLE 14

DISPOSITION OF TOTAL SAMPLE

	Number Households in Original Sample	Vacant or Torn Down	Revised Sample	Refused		Not Home[a/]		Total Interviewed	
				No.	%	No.	%	No.	%
North Total	650	61	589	56	10	101	17	432	73
South Total	649	28	621	97	16	105	17	419	67

[a/] Includes dog in yard, gates locked, couldn't get in building.

2. Health status
3. Health attitudes that might affect utilization of services
4. Knowledge about current utilization of services in general
5. Information about specific services used, satisfaction with those services, possible changes that could be made to increase utilization, and insights, etc.

Construction of the Interview Schedule

Several sources were valuable in development of the interview schedule. At the beginning of the study a number of community leaders and human service providers were interviewed to gain their insights into the health problems of the population.

Several national and state interview schedules were found to contain previously validated questions that would obtain the needed information. Where appropriate, these questions were used instead of new ones, and not only did this speed the process but it also allowed comparison of the population of North and South Omaha with national and statewide populations. Health questions on the 1980 and 1981 Nebraska Annual Social Indicators Survey were replicated on this survey for comparison.

When a preliminary form of the interview schedule was ready, a number of professionals in the health field were interviewed for their comments.

Finally, the interview schedule was reviewed and approved by the University's Committee on Human Subjects.

Pre-testing the Interview

The interview schedule went through a vigorous pre-testing procedure to insure that questions had the same meaning to the target population as to the research team. A preliminary version of the schedule was used to train the first four groups of interviewers. As part of the training a member of the research team interviewed a "respondent." Trainees were urged to interrupt with any questions they might have. Most of the questions dealt with the content of the schedule rather than the procedures of the interview. Following the interviewing of each other during the same sessions, issues about the wording of the questions, the limitations of the response form, etc., were raised. Since interviewers were often residents of the target areas, this process served to make the interview more valid for measuring the target population.

Fewer South Omaha residents were interviewed for two reasons. First, in several of the areas with high ethnic populations, older persons interviewed reported general hostility and suspicion. One interviewer reported that several respondents spoke English poorly and might have been embarrassed to talk to strangers. While translators for Spanish speaking and Asian respondents had been provided for, the possibility was overlooked that a need for Polish, Italian, and Czech translators might arise.

A second factor explaining the lower number of respondents in South Omaha was the presence in the sample of several high rise apartments with complicated security systems. Interviewers were unable to enter these units.

In view of these factors, then, the South Omaha sample probably underrepresents older ethnic residents and middle income apartment dwellers. Both samples probably under-represent households composed only of working adults.

Interviewers

Where possible, interviewers who were residents of the area were used. Although persons without a college education may have more trouble completing complicated interviews, interviewers with characteristics similar to the persons they are interviewing have a better record of access into households, especially in their own neighborhoods. When community leaders were interviewed, they were asked the names of possible interviewers. Some of the leaders interviewed became interviewers for the survey. Other interviewers were obtained through response to flyers distributed around the area to social agencies. Several employees from both the North and South area Boys Clubs interviewed a large number of households. Several graduate students from UNO and some teachers out of work for the summer also were interviewers. All interviewers were trained in a three-hour session and closely supervised on their first few interviews. Respondents were called at random to verify that interviews had been conducted.

Interviewers varied widely in their previous experience, their skill in interviewing, and their ability to gain access to households. Some interviewers had extensive previous experience in a wide variety of surveys and lived in the area. They were among the best of the interviewers and had the fewest refusals. Other excellent interviewers were persons who

worked in social agencies or with people in the area or who were graduate students in social work.

Presentation of the Data

The data are presented in three ways. Chapter III presents a description of the target populations from each area and compares the sub-samples on their socio-economic characteristics, health status characteristics, and health attitudes. Chapter IV presents a description of the general health utilization of the target populations and indicates some of the socio-economic, health, and attitude factors that seem to affect utilization. The perspectives of key informants on some factors affecting under-utilization are presented also.

Chapter V describes the primary health care providers located in or near the target area, the origin of their patients, and which services were used by the target populations. Satisfaction with specific health care facilities and suggestions for improvement made by residents of North and South Omaha and the key informants conclude the data analysis.

III

RESULTS - SOCIO-ECONOMIC AND HEALTH FACTORS

The results of the survey are presented in three chapters. In this chapter, the general population characteristics and the health of the samples will be described, along with a discussion of factors that affect health care utilization.

The remainder of this chapter contains three sections: 1) a general description of the socio-economic characteristics of the respondents, 2) a description of their health characteristics, and 3) a description of their health attitudes.

Summary of Findings

- The target population had fewer years of education, lower median income, and fewer married persons than the population of Nebraska.
- South Omaha had an older population with more ethnic persons, fewer Blacks, and more Catholics than North Omaha.
- Adults in the target populations reported poorer health status than did Nebraska residents.
- More Blacks, Native Americans, and elderly poor persons reported poor health.
- The adults in the target population reported more physical limitations than the adults in Nebraska.
- Physical limitations were higher among Blacks, the poor, "near poor," and the elderly.
- More low income people and those who paid for their medical care out-of-pocket reported self-help medical values, and fewer reported preventive values.
- More high income people reported belief in medical science, and fewer felt a person must expect a lot of pain.

Socio-Economic Characteristics

Three sets of socio-economic characteristics were included in the survey to determine their effects on primary health care utilization. These were 1) cultural, 2) family, and 3) economic characteristics.

The cultural characteristics included were religion, ethnicity, level of education, and occupation. Previous research indicates that these groups help socialize children toward certain behaviors.

Family characteristics included in the research were age, marital status, and number of persons living in the household. Research indicates that health care behavior is related to stages of the family life cycle. Housing characteristics such as type, ownership, and years in housing often correlate with the stability of an area.

Economic characteristics included were income, source of income, method of payment for health care, and current employment status. These variables allowed testing of the effect of economic status and condition on health care utilization.

Cultural Background

Respondents in North and South Omaha were often quite different.

North Omaha. In North Omaha, the modal respondents within the general population sample were Black, Baptist, high school educated, and in low skilled occupations. About 87% had lived in Omaha more than five years. These data can be seen in Table 15. The sub-sample residing in elderly high rise apartments was quite similar to the general population with less education, a longer tenure in Omaha, and a larger proportion of private household workers. More residents of the low income public housing sample were Black and Baptist and with less education than the general population.

South Omaha. In South Omaha the modal respondents in the general population sample were White, Catholic, high school educated, and skilled factory workers. Ninety-three percent (93%) had lived in Omaha more than five years. A smaller proportion of the elderly residents in the high rise housing were Polish, Italian, or Czech; fewer were Catholic and the median education was lower. Table 15 shows these data.

The residents of the low income public housing were quite different from the general population. A majority (58%) were Black, only 21% were Catholic, and a larger proportion were in unskilled and service occupations. Only 69% had lived in Omaha more than five years compared with 93% of the general population and 93% of the elderly.

Summary. The two areas were found to be quite different culturally. South Omaha had more Catholics, Whites, and those in skilled operative, pro-

TABLE 15

CULTURAL CHARACTERISTICS
(Respondents)

	North Omaha			South Omaha			Nebraska
	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	1980 NASIS (Percent)
N	285	38	109	321	55	43	
Ethnic							
Black Americans	66	62	92	2	2	58	3 [a/]
Mexican Americans	1	3	0	5	4	5	2 [b/]
Native Americans	1	0	2	2	0	2	1
Asian	1	0	0	0	0	9	
Polish/Italian/Czech Americans	4	9	1	20	12	2	95
Other Caucasian	26	27	5	70	83	23	
Total	99	101	100	99	101	99	101
Religion							
Catholic	16	21	9	56	36	21	24
Baptist	49	38	68	6	9	54	67
Other Protestant	22	27	10	28	36	7	
Other	8	5	8	8	15	9	4
None	5	8	6	2	4	9	5
Total	100	99	101	100	100	100	100
Education							
None	3	0	2	0	2	7	
1-6 years	4	18	8	7	10	17	20
7-8 years	10	24	11	14	28	12	
9-11 years	25	26*	43*	18	24*	33*	
12 years	32*	16	28	40*	29	14	43*
13-15 years	21	11	7	15	8	17	21
16 and more	5	5	2	6	0	0	16
Total	100	100	101	100	101	100	100
Years in Omaha							
Less than 1 year	6	3	6	3	0	10	
1-5 years	7	0	8	4	7	21	
More than 5 years	87	97	86	93	93	69	
Total	100	100	101	100	100	100	
Occupation Head of Household							
Professional	8	8	1	12	2	2	
Manager, official, proprietor	4	0	0	4	7	0	
Self-employed	13	0	4	1	2	0	
Clerical	4	8	3	4	11	7	
Sales	4	3	0	8	9	2	
Skilled operative	4	0	0	24	5	0	
Unskilled operative	8	5	2	17	7	19	
Private household worker	2	24	2	0	0	5	
Other service workers	11	21	23	11	15	19	
Laborer/farm	13	8	7	5	0	5	
Unemployed	3	5	11	2	0	0	
Not in labor force	25	18	56	13	42	40	
Total	99	100	99	101	100	99	

NOTE: N varies according to the number answering a question. The maximum N for each sample in all tables based on respondents' replies is reported here.

[a/] Data from 1980 Census

[b/] Census data for Spanish-origin.

* Median group

fessional, and sales occupations. North Omaha had more Blacks, Protestants, and people not in the labor force. The major exception was the low income sample in South Omaha. This sub-sample was more similar to the general population of North Omaha in cultural characteristics than to the general population of South Omaha. Both samples differed significantly from Nebraska's population as seen from the random sample of 1,600 Nebraska households made in 1980 by the University of Nebraska at Lincoln. For example, only 3% of that sample were Black, 2% Mexican-American, and less than 1% Native American.

Household and Family Characteristics

North Omaha. The modal respondents in the North Omaha general population sample were between 25-44 years old, married, living in a single-family house owned by the occupant, and had lived in their homes more than five years. Table 16 shows these data. Less than half (45%) of the respondents in the general population were married, and 17% had never been married.

A larger proportion of the elderly residents had been married and widowed (47%) or divorced (23%). Fewer of the elderly had lived at their present addresses five years or more because most moved into their present housing after retirement. The low income public housing population was younger than the norm, and a significantly larger proportion than the general population had never been married (35%); only 10% were married at the time of the survey, with 38% divorced or separated and 18% widowed.

South Omaha. The modal South Omaha respondents in the general population sample were older, married, with more living in single-family housing and more buying their housing (78%). A slightly larger proportion had lived in Omaha longer than five years. About 9% of the population were separated or divorced, 23% widowed, and 61% were married.

Residents of the elderly high rise apartments were similar in family characteristics except for the large number of widowed (76%). About 19% were separated or divorced. Almost half (48%) had lived in the same housing for more than five years.

Residents of the low income public housing were more similar to North Omaha household/family characteristics than to the other South Omaha populations. Those living in low income public housing were a younger popula-

TABLE 16

HOUSEHOLD AND FAMILY CHARACTERISTICS
(Respondents)

	North Omaha			South Omaha			Nebraska
	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	1980 NASIS (Percent)
Ages							
Under 19 years	3	0	4	2	0	4	
20-24 years	9	0	22	12	0	19	
25-44 years	41	0	42	28	0	44	
45-64 years	28	8	18	25	7	26	
65 and over	18	92	15	32	93	7	
Total	99	100	101	99	100	100	
Marital Status							
Married	45	13	10	61	4	14	71
Separated	9	5	12	1	6	2	1
Divorced	15	23	26	8	13	23	4
Widowed	15	47	18	23	76	23	8
Never married	17	11	35	7	2	37	16
Total	101	99	101	100	101	99	100
Housing Type							
Single family	91	0	0	94	0	0	82
Duplex/4-plex, row houses[a/]	8	0	0	2	0	0	–
Apartment house[a/]	1	100	100	5	100	100	9
Other	–	–	–	–	–	–	9
Total	100	100	100	101	100	100	100
House Ownership							
Owner	59	0	0	78	0	0	79
Rent or help with rent	41	100	100	22	100	100	21
Total	100	100	100	100	100	100	100
Years in Housing							
Less than 1 year	21	11	28	10	11	36	
1-5 years	23	49	44	23	41	38	
More than 5 years	57	40	28	68	48	26	
Total	101	100	100	101	100	100	

NOTE: See Table 15 for note about sample sizes (N).

[a/] All residents in the low income public housing samples were classified in the apartment house category.

tion with a significantly higher proportion of never-married (37%) and divorced and separated (25%) and a lower proportion of married (14%). Thirty-six percent (36%) had been in residence for less than one year.

Summary. The general population samples in North and South Omaha differed in several aspects. The South Omaha sample had a larger proportion of older respondents (32% were 65 or over compared to 18%), more currently married respondents (61% compared to 45%), more home owners (78% compared to 59%), and fewer new residents (10% lived in their homes for less than one year compared to 21%). South Omaha low income housing residents were more like their counterparts in North Omaha than they were like the other South Omaha samples.

Economic Characteristics

North Omaha. Approximately one-third (34%) of the households in the North Omaha general population sample had an income of less than $5,000 per year, with another 26% making between $5,000 and $10,000, and less than 25% over $15,000. For the majority of the households, the principal source of income was from salary (55%). For 17% it was Social Security and for 13% it was AFDC. Only 37% worked full time and 9% part time;17% were retired and 17% were homemakers. Table 17 shows these data. A relatively low 47% (compared to the rest of the state) of the general population households had health insurance with 34% using Medicaid or Medicare to pay for health care and a relatively high 15% (again in comparison with the rest of the state) paying for all health care out-of-pocket.

As expected, 88% of the residents of the elderly high rises had an income under $5,000. For most (87%) income was predominantly from Social Security. Most health care was paid for with Medicaid and Medicare although 13% paid out-of-pocket. Only 17% had health insurance. Only 2% of this sub-population were employed full time.

Residents of the low income housing had a lower income than the general population with 76% under $5,000. AFDC was the principal source of income for 47%, Social Security for 25%, and salary for 17%. Only 14% worked full time and 9% part time. Another 23% were laid off or on strike at the time of the survey. While 72% paid for health care through Medicaid/Medicare, 15% paid for all costs out-of-pocket.

TABLE 17

ECONOMIC CHARACTERISTICS
(Respondents)

	North Omaha			South Omaha			Nebraska
	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	1980 NASIS (Percent)
Family Income							
Under $5,000	34	88*	76*	22	90*	77*	
$5,000-$9,999	26*	9	20	25	8	21	
$10,000-$14,999	16	3	4	24*	2	2	
$15,000-$19,999	9	0	0	14	0	0	Median
$20,000-$24,999	9	0	0	7	0	0	15,060
$25,000 and more	6	0	0	9	0	0	
Total	100	100	100	101	100	100	
Major Source of Income							
Salary	55	8	17	52	2	21	76[a/]
AFDC	13	0	47	2	0	47	1
Social Security	17	87	25	32	96	21	21
Pension from work	6	3	2	6	0	2	5
Other/no response	9	2	9	8	2	9	
Total	100	100	100	100	100	100	
Employment Status							
Works full time	37	2	14	27	2	12	47
Works part time	9	0	9	10	0	5	13
Laid off/strike	9	8	23	5	0	14	1
Unemployed	1	3	2	1	0	2	1
Retired	17	71	13	31	91	7	14
Keeping house	17	0	23	20	5	30	21
Student	5	0	6	3	0	9	2
Unable to work	5	16	10	3	1	19	1
Total	100	100	100	100	99	98	100
Source of Payment for Health Care							
Out-of-pocket only	15	13	15	9	5	10	7
Medicare/Medicaid only	26	47	64	7	29	69	5
Medicare/Medicaid/pocket	8	17	8	13	27	10	
Health insurance/pocket	43	7	7	49	5	5	84
Insurance and other	4	10	4	14	33	5	
Other	5	7	2	8	0	2	3
Total	101	101	100	100	99	101	99

NOTE: See Table 15 for note about sample sizes (N).
[a/] Source 1977 NASIS and not completely comparable.
*Category in which the median is located.

South Omaha. The South Omaha economic situation was brighter according to economic characteristics. Only 22% of the South Omaha general population sample had incomes under $5,000 and 30% were over $15,000. For more than half (52%) most of the income was from salaries; for almost one-third (32%) it was Social Security. Only 37% of the population were employed (27% full time), 31% were retired, and 20% were homemakers. Health insurance (63%) was the dominant method of payment of medical costs.

The elderly high rise residents had a lower income with 90% under $5,000. Social Security was the major source of income, and only 2% of the population were currently employed. Medicaid/Medicare (56%) and insurance (38%) were major sources of payment for health care costs.

Over three-fourths (77%) of the low income public housing residents had incomes under $5,000, mostly from AFDC and Social Security. Only 12% worked full time, and another 14% were laid off; 30% were homemakers. Only 10% reported having health insurance.

Summary. Neither North nor South Omaha was similar to the total Nebraska population. Nebraska had a higher median income, a larger proportion of persons with income from salary, and more households with at least one person working full time. It had fewer retired persons and more were homemakers. Only 7% of Nebraskans paid for medical care out-of-pocket, and only 5% used Medicaid/Medicare. The dominant method of health care payment for Nebraskans was health insurance with 84% of households paying this way.

Health Status of the Target Population

Two sets of health characteristics are used here to give a description of the health of the target population, thus indicating the need for primary health care. The first is a general picture indicated by respondents' reports of their general health status, worry about health, incidence of pain, and number of days confined in the past year. The second is a report of physical limitations and/or needs in the past year.

General Health Status

Four questions were asked to determine general health. Table 18 has the questions and the responses. All six of the sub-populations reported

TABLE 18

GENERAL HEALTH
(All Household Members)

	North Omaha			South Omaha			
	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	1980 NASIS (Percent)
N	802	41	318	808	57	134	
General Health Status							
Excellent	28	7	39	39	21	28	47
Good	57	37	42	45	29	58	40
Fair	11	42	14	11	36	13	10
Poor	4	15	5	4	14	2	3
Total	100	101	100	99	100	101	100
Worry About Health							
A great deal	5	13	7	7	4	7	
Some	17	33	19	18	34	28	
Hardly any	32	15	24	23	32	13	
None at all	47	39	50	52	30	53	
Total	101	100	100	100	100	101	
Incidence of Pain							
Very often	6	31	6	7	31	4	
Fairly often	7	11	5	7	13	8	
Occasionally	39	37	26	37	38	42	
Not at all	48	20	63	50	18	47	
Total	100	99	100	101	100	101	
Days Family Members Confined Indoors Last Year							
None	63	49	79	72	57	73	
1-5	20	8	10	18	21	16	
6-10	8	15	4	4	4	5	
11-30	6	5	5	3	4	6	
31-98	3	23	3	3	14	0	
Total	101	100	101	100	100	100	

NOTE: N varies according to the number answering a question. The maximum N for each sample in all tables based on household members is reported here.

their general health as being poorer than the general Nebraska population. Over one-fourth (28%) of the North Omaha and 39% of the South Omaha general populations reported excellent health, compared with 47% of the Nebraska population. As expected, residents of the elderly high rise apartments reported poorest health with 15% of the North and 14% of the South areas reporting poor health and 42% of North and 36% of the South reporting fair health.

The second indicator was the degree of worry respondents had about their health. In both North and South Omaha the samples of elderly residents reported more worry about health than did the general population samples. The low income public housing samples were more like the general population than they were like the elderly samples.

The third indicator was how often pain was felt by respondents. Eighty-seven percent (87%) of the general North group felt pain only occasionally or not at all, and the same was true for South Omaha. Forty-two percent (42%) of the elderly felt pain often or fairly often in North Omaha, and the percentage was comparable (44%) in South Omaha.

A fourth measure--days of confinement indoors because of illness--indicated a majority of all populations (except North Omaha elderly at 49%) reported they had no days lost due to illness. The elderly populations, however, were most likely to have been confined more than one month during the year (23% in the North and 14% in the South).

Who Has Poor Health Status?

A major finding of an analysis of all samples combined was that people with higher incomes reported better health than low income persons. In addition, more older people reported poor health than younger people. Several other variables correlated with poor health, but some were also related to age. For instance, the Czech sample was older and also reported poorer health status. More Blacks and Native Americans reported poor health, and more divorced persons than married, single, and never married reported poor health. More widowed reported poor health, but a higher proportion of widows were old. Worry about health showed a similar relationship but weaker. Table III in the Appendix shows some of the data.

More low income persons also reported frequent pain and more days spent confined in the last year.

Summary. The adult respondents of this survey reported poorer general health than the population of Nebraska. While 47% of Nebraskans reported themselves in excellent health, only 28%-39% of the respondents in the general population samples reported this high status. North and South Omaha were similar on the other indicators.

Income and age were major factors affecting health status, with younger people in better health than older persons and high income in better health than low income. Blacks and Native Americans reported poorer health than the rest of the population.

Health Conditions

Five indicators of health conditions were included in the analysis: physical limitations, transportation limitations due to handicaps, mechanical aid required to get around, chronic conditions, and pregnancy. The presence of any of these conditions within the last year indicated a need for health care.

North Omaha. In North Omaha, 33% of the older population, 7% of the general population, and 7% of the low income population reported physical limitations. These data can be seen in Table 19. Ten percent (10%) of the elderly population, 3% of the general population, and 3% of the low income had transportation limitations because of physical or health conditions. Two percent (2%) of the general population, 12% of the elderly, and 2% of the low income required mechanical aid to get around, generally crutches or a wheel chair.

Sixteen percent (16%) of the general population reported a chronic condition while 61% of the elderly and 14% of the low income population reported chronic health problems. Only 3% of the general population and 7% of the low income population reported pregnancies in the last year.

South Omaha. Residents reported health conditions somewhat similar to North Omaha. Three percent (3%) of the general and low income populations reported physical limitations and 36% of the elderly. Four percent (4%) of the general, 2% of the low income population, and 22% of the elderly were limited in their transportation, and 2% of the general population, 3% of

TABLE 19

HEALTH CONDITION
(All Household Members)

	North Omaha			South Omaha			Nebraska
	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	1980 NASIS Adults (Percent)
Physical Limitations							
No	93	67	93	97	64	97	89
Yes	7	33	7	3	36	3	11
Total	100	100	100	100	100	100	100
Have Transportation Limitations							
No	97	90	97	96	78	98	92
Yes	3	10	3	4	22	2	8
Total	100	100	100	100	100	100	100
Type of Limitation	(N=31)	(N=13)	(N=14)	(N=24)	(N=17)	(N=2)	
Need help housekeeping, dressing, etc.	35	38	50	21	41	100	
Limited work, can keep house	35	31	29	46	35	0	
Limited outside activity/ exercise	29	31	21	33	24	0	
Total	99	100	100	100	100	100	
Require Mechanical Aid for Movement							
No	98	88	98	98	83	97	96
Bed or wheel chair	*[a]	2	1	*[a]	2	0	
Cane or crutch	2	10	1	2	15	3	4
Total	100	100	100	100	100	100	100
Have Chronic Illness							
No	84	39	86	79	34	90	
Yes	16	61	14	21	66	10	
Total	100	100	100	101	100	100	
Pregnant Last 12 Months							
No	97	100	93	97	100	90	
Yes	3	0	7	3	0	10	
Total	100	100	100	100	100	100	

NOTE: See Table 18 for note about sample sizes (N).
[a] * = less than .5%

the low income, and 17% of the elderly required mechanical aids.

Twenty-one percent (21%) of the South Omaha general population had chronic conditions. Sixty-six percent (66%) of the elderly and 10% of the low income populations had chronic physical conditions.

Who Has Health Limitations?

More persons with low income reported limiting physical conditions and chronic illness than with higher incomes. As income increased, poor health decreased. As expected, more older people also reported poor health. In fact, 59% of all persons over 65 and 38% of those 45-64 reported a chronic condition. Table IV in the Appendix shows some of these data.

Summary

The adults from the target population reported more health problems than the 1980 Nebraska population.

Health conditions were affected by socio-economic factors. Physical limitations were significantly higher among the elderly, the low income persons, and persons on Social Security (related to age). Chronic conditions were also significantly related to these factors.

Health Attitudes

A number of deep seated attitudes may be responsible, to some extent, for the patterns of health care that people have. To test this assumption, a set of attitude questions was included in this survey. Some items in the set were selected from a number of other surveys so that comparison with other populations could be made. During the pre-test of the interview schedule, both interviewers and respondents were critical of the attitude items. Many could see little use in their inclusion and were embarrassed to read them. Consequently, many of the prevalidated items were deleted or the wording changed so that the target populations were comfortable with them.

Attitude items were put in a modified Likert-type scale with the choice of "agree" or "disagree" given to respondents. Indigenous interviewers were found to be awkward in reading the response frame usual with this type of scale. If a respondent hesitated too long or could not decide, a neutral/don't know response was circled.

Six attitude areas were included in the scale that might affect health care utilization or under-utilization. First was an item that was a measure the degree to which people feel they have control over what happens to them. If the item is valid, those who agree with it would have an external locus of control. They would expect pain as a matter of course and would be less likely actively to seek relief. Those who disagree would have an internal locus of control. They would more likely take preventive health steps sooner than those who agree. Persons who are older, less educated, and with lower incomes would be expected to agree with this item most often. Furthermore, they are less likely to know about available alternatives or to have the physical and financial resources to seek alternatives. Table 20 shows the results.

In the general populations, about half of the respondents agreed with the item. As expected, more than three-fourths of the respondents in the high rise elderly public housing agreed. Residents of the low income public housing were mixed, with a larger proportion of the North than South agreeing with the statement.

The second item, "I seek advice from my family when I'm ill," was included to understand more clearly the effect of family on the process of seeking health care. Table 20 indicates those in the low income public housing samples were most likely to agree, and those in the elderly high rise samples were least likely to agree. Other data, not reported in Table 20, indicate a stronger relationship of this attitude with age than ethnic identification.

The third attitude investigated was in regard to the belief in the effectiveness of modern medicine. Two items were used to measure this attitude. One item stated negatively, "If you wait long enough, you can get over almost any illness without getting medical aid," and one stated positively, "Modern medicine can cure almost any illness."

Eleven percent (11%) of the general population and 17% of the low income samples in the North agreed that one can get over most illnesses without medical aid. In the South the percentages were somewhat higher for these two groups--14% and 20%, respectively. The group with the highest percentage agreeing with this item was elderly persons in the North (22%) while 19% of the elderly in the South agreed. On the other hand, older

TABLE 20

HEALTH PRACTICE ATTITUDES
(Respondents)

	Percent Agreeing					
	North Omaha			South Omaha		
	General Population	Elderly High Rise	Low Income Public Housing	General Population	Elderly High Rise	Low Income Public Housing
A person must expect a good deal of pain in life	52	78	70	51	80	51
Seek advice from family when ill	38	32	53	46	35	63
Belief in Effectiveness of Medical Science						
If you wait long enough you can get over almost any illness without medical aid	11	22	17	14	19	20
Modern medicine can cure most any illness	32	50	35	42	43	63
Self Treatment						
A person understands his/her own overall physical health better than doctors	53	62	51	38	59	44
I usually try several treatments before going to the doctor	64	54	47	56	32	56
I usually forget the doctor's instructions by the time I get home	14	24	12	10	15	22
Prevention						
Going to doctor for an annual check up usually takes more time than it's worth	45	38	44	26	20	39
A severe headache calls for medical care only if it's still there after a couple of weeks	42	30	56	45	57	37
I only go to the dentist when I have a toothache or other dental problem	58	78	59	45	64	68
Family Health Care Pattern						
Father seldom went to the doctor	46	51	41	75	87	56
Mother went to doctor only when she had a severe illness or a baby	48	60	56	74	83	68

NOTE: See Table 15 for note about sample sizes (N).

persons appeared to have more faith in modern medicine, 50% (North) and 43% (South). In the general population samples, 32% (North) and 42% (South) agreed with the statement that modern medicine can cure almost any illness.

The fourth attitude measured was that of active participation in health care including self-treatment. A positive relationship would be expected between most of these items and the prevention items that follow. The attitude was measured by three items: "A person understands his/her overall physical health better than his/her doctor does," "I usually try several treatments for myself before going to the doctor," and "I usually forget the doctor's instructions by the time I get home." These items did not measure precisely the same attitudes but were correlated with each other. On the first item persons from traditional cultures would be expected to have more faith in authority, including medical authority. This expectation was supported by the data. A lower percentage of persons from more traditional South Omaha agreed with this statement. Interestingly, both older samples agreed with the item most strongly. Perhaps their experiences in old age with its medical problems have affected their beliefs.

More than half of all groups except South Omaha elderly and North low income agreed that they tried several self-treatments before going to the doctor. The North Omaha general population had the highest agreement with this item (64%). The method of payment for medical care might affect responses to this item.

The negative self-help item had little agreement. Only 14% of the North Omaha general population and 10% of the South agreed. The strongest agreement was from the elderly in the North and the low income group in the South.

The fifth attitude related to prevention. Three items, all negatively stated, were used to measure these attitudes. The negative statements were used to avoid a possible halo effect where the general culture expect preventive measures, and a tendency is present to agree with them without thinking. The items were: "Going to the doctor for an annual check-up usually takes more time than it's worth," "A severe headache calls for medical care only if it's still there after a couple of weeks," and "I only go to the dentist when I have a toothache or other problem."

The North general and elderly populations agreed somewhat less than their equivalents in the South about medical care for a severe headache.

The low income populations did not fit the pattern. The strongest agreement on a prevention item was on dental care. The elderly showed strong agreement with the statement that they would go to the dentist only when they had a problem.

The final attitude was measured to determine the family health behavior. Family health behavior might be expected to affect respondents' health behaviors. The attitude was measured by two items: "When I was a child, my father seldom went to the doctor," and "My mother went to the doctor only when she had a severe illness or a baby." A larger percentage of each South population than the North populations agreed to the item. The most agreement was in the elderly high rise population.

What Affects Attitudes?

People who paid for all of their health care out-of-pocket were more likely than others to have values favoring self-treatment and question the value of an annual checkup. Those relying on insurance for their health costs were least likely to agree that they understood their health better than physicians. Poorer persons were more likely than those earning more to agree with the anti-prevention attitude questions. Table V in the Appendix shows these data.

Fewer Blacks, Mexican Americans, and older persons reported values of prevention, and more reported self-treatment values.

More people with strong ethnic identification and more older people reported consultations with family on medical treatment and showed family patterns where parents seldom sought medical care.

Expectation of pain in life was related to low income, old age, and source of payment for medical care.

Whether these attitudes and practices were related to socialization at a young age or were a result of life experience is difficult to say with these data.

Summary

The target populations shared the value of prevention with the rest of the United States population. However, further analysis indicated that socio-economic factors had an effect on many of the items. In general, age, income, and source of payment for medical care affected expectation of pain, three prevention items, and the self-treatment items.

IV

RESULTS - UTILIZATION OF HEALTH CARE FACILITIES

The patterns of health care utilization discovered in the survey are reported here in three sections: 1) a report of the last medical and dental utilization and some greater detail on the most recent use, 2) a description of the usual source of medical care, and 3) a report on satisfaction with medical services.

Summary of Findings

- North and South Omaha populations reported about the same proportion of doctor visits in the last year with the highest proportion in the South Omaha low income public housing sample.
- The proportion of the target population making doctor visits in the last year was similar to Nebraska even though fewer in the target population reported their health as excellent.
- Persons with income over $20,000, those who paid for health care with insurance, and persons under 19 had the most preventive doctor and dental visits and were more likely to telephone the doctor for advice.
- More Blacks, persons with income under $5,000, and people from 20-44 (those with children) used the emergency room for evening and weekend medical care; more older people waited until regular hours.
- The usual source of medical care was directly related to income, ethnicity, and method of payment. More Blacks and low income persons used hospital outpatient and other public clinics. Those paying out-of-pocket only used private physicians less frequently than those relying on insurance. Use of a car, less travel time, and shorter waits were more often true of high income persons and Caucasians.
- North Omaha populations were generally less satisfied with medical care.
- South Omaha low income populations were most satisfied with most aspects of medical care.
- People who paid for medical care out-of-pocket only were least satisfied.

Recent Utilization of Health Care Facilities

Doctor Visits and Reasons for Visits

One of the early questions asked in the interview was, "How long ago did (person) have an examination or check-up or was seen by a doctor?" Seventy-four percent (74%) of the general North sample and 75% of the general South sample had seen a doctor within the last year. Table 21 shows these data. In both areas, more residents in high rise apartments for the elderly and low income public housing reported doctor visits in the last year than did the general population samples (88% for elderly and 81% and 92% for low income housing residents).

The high percentage of doctor visits in the low income housing occurred because children usually have more regular visits for medical care than adults. When doctor visits for persons 19 years old and older were examined, a different picture emerged. Table 22 shows the distribution.

Respondents in the survey had seen a doctor in the last year in a pattern similar to respondents to the Nebraska Annual Social Indicators Survey. Seventy-five percent (75%) reported seeing the doctor in the last year.

Reasons for the last doctor visit included not feeling good, required, time for an examination, and pregnant. Time for an examination was considered a preventive visit. South Omaha residents in the elderly high rises and low income public housing had fewer of these visits than did their North Omaha counterparts. When only residents over 19 were examined, residents of the target areas reported a similar distribution of preventive but more illness-related visits than Nebraskans.

Even fewer people reported dental examinations in the last year especially residents of the elderly high rises. Only 23% of South and 32% of North elderly high rise residents had visited a dentist in the last year. More then one third (37%) North and 50% South had not visited the dentist for over five years. The other South populations had more visits than the North populations in the last year. Only 43% of the adults had visited the dentist in the last year compared with 58% of Nebraskans.

A majority of dental visits for adults were for problems (54%), and only 37% were for regular check-ups.

TABLE 21

UTILIZATION OF PRIMARY HEALTH CARE SERVICES
(All Household Members)

	North Omaha			South Omaha		
	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)
Last Doctor Visit						
Last 3 months	29	49	45	39	61	51
3-6 months	16 } 74	17 } 88	14 } 81	15 } 75	20 } 88	10 } 92
6 months-1 year	29	22	22	21	7	31
1-2 years	17	10	15	14	9	5
2-5 years	6	2	2	7	2	2
More than 5 years	4	1	1	4	2	2
Never	0	0	0	0	0	0
Total	101	101	99	100	101	101
Reason for Last Doctor Visit						
Not feeling good	32	30	27	31	34	37
Required	20	20	15	20	34	13
Time for an examination	46	50	52	46	32	41
Pregnant	3	0	5	2	0	9
Total	101	100	99	99	100	100
Last Dentist Visit						
Last 3 months	13	15	14	18	7	18
3-6 months	14 } 47	7 } 32	8 } 43	14 } 51	5 } 23	17 } 58
6 months-1 year	20	10	21	19	11	[illegible]
1-2 years	23	12	14	15	11	13
2-5 years	11	12	13	11	14	10
More than 5 years	11	37	10	15	50	5
Never	8	7	20	9	2	14
Total	100	100	100	101	100	100
Reason for Last Dentist Visit						
Toothache/problem	44	78	43	40	82	31
Regular checkup	43	13	50	55	15	65
Don't know	13	8	7	5	4	4
Total	100	99	100	100	101	100

NOTE: See Table 18 for note about sample sizes (N).

TABLE 22

LAST DOCTOR VISIT FOR ADULTS

	Percent		Nebraska 1980 NASIS
Last Doctor Visit			
Last 3 months	41		
3-6 months	14	75	75
6 months-1 year	20		
1-2 years	14		
2-5 years	7		
More than 5 years	4		
Never	—		
Total N=1,229	100		
Reason for Last Doctor Visit			
Not feeling good	37		
Required/time for an examination	59		
Pregnant	4		
Total N=1,201	100		
Last Dentist Visit			
Last 3 months	15		
3-6 months	11	43	58
6 months-1 year	17		
1-2 years	18		
2-5 years	18		
More than 5 years	20		
Never	2		
Total N=1,212	101		
Reason for Last Dentist Visit			
Toothache/problem	54		
Regular check up	37		
Don't know	9		
Total N=1,171	100		

Who Reported the Most Preventive Utilization?

Age, income, and source of payment were noticeable factors affecting prevention. Preventive patterns with different economic, age, ethnic, and source of payment groups are detailed on Table VI in the Appendix. Persons who combined health insurance and out-of-pocket as payment, persons with household income over $20,000, and children under 19 had most preventive doctor and dental visits. While 23% of the population from 45-64 had not visited a dentist in over five years, this percentage was 40% for persons over 65. A direct linear relationship can be seen between income and percent of the population whose last dental visit was preventive.

Visits Since First of the Year

A more specific set of questions was asked about doctor visits since the first of the year (three to six months prior to the interviews). Previous health studies have shown that more valid information comes from asking questions about a specific, recent doctor visit. In the North 40% of the general population reported a visit since the first of the year. This was the lowest percentage of any of the populations. The elderly reported the most visits, 63% in North and 66% in South. Fifty-three percent (53%) of the North and 45% of South low income populations reported visits since the first of the year. Table 23 shows these data.

Fewer residents in the elderly high rise apartments than those in the general population reported visits for a check-up, and more reported chronic illness, receiving medication, and illnesses as the reasons for their visit since the first of the year. When adults only were examined, 50% had a doctor visit since the first of the year. Of these visits, 36% were for a check-up, and 1% were for an immunization.

Doctor-Patient Interaction at Visit. A number of questions were asked about interactions at the most recent visits. Table 24 shows the results, and Table VII in the Appendix gives socio-economic factors. Most people were told the name of the illness if they didn't know it (78%-100% of the six sub-samples). Most were given an explanation if needed (82%-95%). Most of those answering the question had drugs prescribed at their last visit (63%-76%) and had the drugs explained to them (78%-86%).

TABLE 23

DOCTOR VISIT SINCE FIRST OF THE YEAR
(All Household Members)

	North Omaha			South Omaha		
	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)
Doctor Visit Since First of the Year						
Yes	40	63	53	51	66	45
No	60	37	47	49	34	55
Total	100	100	100	100	100	100
Reason						
Illness	29	31	31	28	32	43
Injury	7	8	6	8	3	7
Pregnancy	5	0	8	3	0	15
Check-up	44	38	37	41	37	28
Immunization	5	0	9	1	0	2
Regular medication or care	2	4	1	2	11	0
Chronic	5	15	4	12	11	7
Other	2	4	4	4	8	0
Total	99	100	100	99	102	102

NOTE: See Table 18 for note about sample sizes (N).

TABLE 24

OTHER HEALTH CARE UTILIZATION FACTORS
(Respondents)

		North Omaha			South Omaha		
		General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)
Diagnosis							
Told Name of Illness	(N)	(35)	(8)	(25)	(52)	(11)	(9)
Yes		89	100	76	83	82	78
No		11	0	24	17	18	22
Total		100	100	100	100	100	100
Explanation Given if Needed	(N)	(78)	(19)	(56)	(130)	(26)	(17)
Yes		95	79	98	87	85	82
No		5	21	2	13	15	18
Total		100	100	100	100	100	100
Drugs							
Drugs Given	(N)	(102)	(21)	(62)	(143)	(32)	(19)
Yes		72	76	76	73	69	63
No		28	24	24	27	31	37
Total		100	100	100	100	100	100
Explanation of Drugs Given	(N)	(76)	(18)	(49)	(113)	(23)	(12)
Yes		91	78	96	84	78	92
No		9	22	4	16	22	8
Total		100	100	100	100	100	100
Home Care							
Explanation Given	(N)	(83)	(20)	(61)	(127)	(29)	(20)
Yes		95	100	97	89	86	95
No		5	0	3	11	14	5
Total		100	100	100	100	100	100
Advice Followed	(N)	(118)	(25)	(63)	(140)	(35)	(21)
Yes		76	84	87	84	69	86
No		24	16	13	16	31	14
Total		100	100	100	100	100	100
Telephone Care							
Doctor Telephoned for Advice	(N)	(279)	(38)	(105)	(318)	(54)	(40)
Yes		16	21	10	24	30	15
No		84	79	90	76	70	85
Total		100	100	100	100	100	100
Put on Hold or Called Back	(N)	(77)	(14)	(16)	(88)	(18)	(10)
Yes		44	50	44	51	39	20
No		56	50	56	49	61	80
Total		100	100	100	100	100	100
Evening/Weekend Care							
Needed Evening/Weekend Care	(N)	(246)	(37)	(94)	(302)	(52)	(34)
Yes		10	3	16	10	4	15
No		90	97	84	90	96	85
Total		100	100	100	100	100	100
How Obtained	(N)	(27)	(1)	(17)	(35)	(3)	(5)
Waited		22	100	6	6	67	20
Called Regular Doctor		26	0	12	43	0	0
Emergency Room		41	0	71	40	33	80
Other		11	0	12	11	0	0
Total		100	100	101	100	100	100

Most respondents said that if applicable they had been given advice for home care (86%-100%). When asked if the doctor's advice had been followed, most said yes (69%-87%). More people in the 20-44 age group (30%) and with incomes over $20,000 (29%) said that they did not follow the doctor's orders. Probably these groups had more education and were less likely to accept the authority of the doctor without question.

Other Utilization of Service

Respondents were asked if they had telephoned a doctor for advice since the first of this year. Relatively few said yes (10%-30%). Younger people 20-44, high income people, and non-Blacks were more likely to telephone. These may also be the groups that used private physicians.

Respondents were asked if they had needed medical care evenings and weekends since the first of the year and if so how they obtained that care. Approximately 40% of persons in the general population samples who needed evening/weekend care went to the emergency room of a hospital.

Blacks, people with incomes under $5,000, and those 20-44 years old used emergency rooms more for evening and weekend care. Those with low incomes (19%) were more likely to wait than those with higher incomes.

Summary

More low income and elderly persons reported doctor visits in the last year than either the general, the Nebraska, or the national populations. Most respondents reported that the doctor explained the illness or problem, the medicines given, and the home care that was necessary. Respondents generally followed the doctor's advice on home care, but few telephoned for advice or sought health care on evenings or weekends.

Income and age were two factors that helped explain different patterns of utilization. In most cases higher income and younger age were associated with more preventive utilization. However, the reverse was true for those who reported following a doctor's advice at home.

Usual Source of Medical Care

When asked if they had a usual source of medical care, most respondents said yes. Of the few who replied no, the dominant reason was because they had not been ill. This section will concentrate on the nature of the usual source of care.

Type of Care

Table 25 shows the type of care usually used by the area populations. A smaller proportion of the North populations received their medical care in a physician's office than did the corresponding South populations. In the North only 58% of the general, 58% of elderly, and 33% of the low income public housing populations received their care in a physician's office while 52% of low income, 24% of elderly, and 30% of the general population used hospital outpatient services. Approximately 9% to 18% used other public clinics. In South Omaha 80% of the general, 75% of the elderly, and 49% of the low income populations used a private physician. From 10 to 17% of the population used outpatient clinics and 6% to 32% used other public clinics, the 32% being unique to one South Omaha facility. Less than 4% of any group of respondents used hospital emergency rooms as a usual source of care.

Reason for Use of Care Source

Table 25 shows the reason for the choice of care source. South's low income public housing population had an atypical reason unique to its location. The one low income housing project is situated quite near to the South Omaha Neighborhood Association building which houses a variety of public clinics operated by the Douglas County Health Department and University of Nebraska Medical Center. Only 19% of the South general and elderly populations chose a care source because of proximity compared to 41% of those in the housing project. Among the North populations, 26% of the general, 15% of the elderly, and 23% of the low income chose their care sources because of proximity.

Family and friends played a dominant part in the choice of the usual source of care. Thirty-six percent (36%) of the North's and 41% of the South's general populations used facilities that their families had always used or recommended. Another 15% of the South and 13% of the North had facilities recommended by friends. From 42% to 51% of all other populations used medical facilities because of family or friends. The elderly used more facilities recommended by other doctors, 32% for North and 19% for South. Social agencies played a larger part in the choice among low income public housing residents than for other groups, and fewer than 13%

TABLE 25

USUAL SOURCES OF CARE
(Respondents)

	North Omaha			South Omaha			Nebraska	National
	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	1980 NASIS (Percent)	1970 (Percent)
Have a Usual Source of Care								
Yes	97	91	94	97	98	95		89
No	3	9	6	3	2	5		11
Total	100	100	100	100	100	100		100
Type of Care								
Private doctor	58	58	33	80	75	49	67	67
Outpatient clinic	30	24	52	10	14	17		
Hospital emergency room	2	0	2	0	2	2		18
Other public clinic/facility	9	18	11	9	6	32		
Other	1	0	1	1	4	0		15
Total	100	100	99	100	101	100		100
Reason for Choice								
Nearby	26	15	23	19	19	41		
Family always went there	24	15	26	23	21	21		
Recommended by family	12	15	13	18	17	7		
Recommended by friend	13	12	12	15	12	14		
Referred by other doctor	11	32	8	11	19	5		
Referred by social agency	4	0	6	1	2	5		
Newspaper/media	10	12	13	12	10	7		
Total	100	101	101	99	100	100		
Years Using Source								
Under 1 year	10	11	12	9	19	21		
1-2 years	8	14	11	10	8	7		
3-4 years	17	11	15	12	21	26*		
5-9 years	21*	17*	26*	20*	15*	24		
10-14 years	20	22	11	16	10	10		
15-19 years	8	8	5	10	10	2		
20-24 years	7	0	12	10	6	2		
25 + years	9	17	9	13	12	7		
Total	100	100	101	100	101	99		

NOTE: See Table 15 for note about sample sizes (N).
* = median value

of any population chose sources of care because of public relations or advertising through the media.

Years Using Source of Care

The number of years respondents had been using their medical facilities illustrates the difficulty that new medical services are likely to have. Almost half (49%) of the South and 44% of the North general populations had used the same source of care for 10 years or more. Forty-seven percent (47%) of the North elderly and 38% of the South elderly had used the same source of care that long. Twenty-three (23%) of the North low income population had used their facilities only one or two years. Some of this may be explained by the move of St. Joseph Hospital to North 30th Street.

Patterns of Use of Health Care Facilities

More Caucasians, people with health insurance, and higher income persons used private physicians as their usual source of care. More Blacks, people who paid for health care out-of-pocket, and those with income under $5,000 used hospital outpatient clinics and other public clinics.

Travel and Office Waiting Time at Usual Source of Care

The dominant mode of reaching usual sources of care for the general population was by their own cars, 61% in the North and 73% in the South. Table 26 shows the data. Another 15% in the North and 12% in the South used someone else's car. The dominant mode for other North populations was by bus, 40% for elderly and 41% for low income. Other South populations used their own or someone else's car, with 27% of the elderly and 33% of the low income relying on others for rides. Other frequent modes were the bus for elderly (25%), and walking (28%) and bus (16%) for low income. The large proportion of walkers was due to the proximity of the SONA facilities.

Travel time to medical care was faster for the South populations than the North. Approximately two-thirds (66% to 69%) of the South populations traveled 15 minutes or less. Only 40% to 52% of the North populations traveled this small an amount of time. More than a half hour was spent by 26% of the North elderly and 20% of the North low income populations to reach their medical facilities.

The modal waiting time for the doctor after reaching the office was 15 to 30 minutes for all populations except the North Omaha elderly high

TABLE 26

TRANSPORTATION METHOD, TIME TO REACH, AND SCHEDULING FOR REGULAR SOURCE OF CARE
(Respondents)

	North Omaha			South Omaha			National
	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	1970 (Percent)
Transportation Method							
Own car	61	6	16	73	10	19	
Other car	15	17	23	12	27	33	
Taxi	7	26	16	1	14	2	
Bus	13	40	41	10	25	16	
Walk	2	6	1	3	15	28	
Other	2	6	2	1	10	2	
Total	100	101	99	100	101	100	
Travel Time to Regular Source of Care							
1-10 minutes	22	20	26	42	34	49	51
11-15 minutes	30	20	16	24	32	20	
16-20 minutes	21	14	20	20	12	15	40
21-30 minutes	15	20	19	10	12	7	
Over 30 minutes	12	26	20	4	10	10	9
Total	100	100	101	100	100	101	100
Length of Time to Wait							
Under 15 minutes	14	31	22	25	30	12	55
15-30 minutes	43	28	31	36	38	61	
30-60 minutes	35	28	21	25	20	12	21
Over 1 hour	8	13	25	14	12	15	25
Total	100	100	99	100	100	100	101

NOTE: See Table 15 for note about sample sizes (N).

rise residents. However, 8% to 25% of the populations reported waiting an hour or longer at their usual sources of care.

Factors Affecting Travel and Office Waiting Time

In general more Blacks, older people, persons with incomes under $5,000, persons who paid for medical care out-of-pocket only and with Medicare or Medicaid traveled to the doctor by bus, traveled longer, and waited longer for care.

Travel by car or bus, travel time, and waiting time were all significantly related to income.

Summary

The usual sources of care of the target populations were similar to state and national patterns which showed that low income and minority populations used hospital outpatient and other clinics more than higher income groups but that the dominant pattern was still use of the private physician. In the state, 67% of the adult population reported using a private physician. This is more than all North Omaha samples and the South low income public housing samples but less than the other South Omaha samples. Of all adults in the study, 64% used private physicians.

Waiting time after arrival at a medical facility showed about the same pattern, with Blacks, older people, and lower income persons waiting slightly longer.

Satisfaction with Usual Source of Care

Satisfaction was asked in two ways, first as a set of general attitude items and second in reference to usage of a specific facility. The latter will be discussed in the next chapter. Analysis of the general attitude item is mitigated by three well-recognized factors:

1. Older persons are more likely to accept the institutional arrangements made by those in authority especially if these arrangements have been in effect most of their lifetimes. The "status quo" is more comfortable and acceptable than change, even if a change might benefit them.
2. To some extent, immigrants traditionally have been careful in their criticism of institutional arrangements, especially official ones.
3. People who are not aware of scientific advances that increase the quality of life are apt to be more satisfied with their lives without the availability of the advances.

These three factors are a major reason for the inclusion of key informants in this research. Community leaders usually are more aware of the situation and are less afraid to speak out about poor services or lack of them. They are also aware of and can speak to the cultural factors that affect utilization.

Health program administrators are aware of the new scientific advances and knowledge and know what it means to later life if blood pressure remains high, venereal disease runs unchecked, and pregnant woman are not counseled.

This section will include results from the general satisfaction items. Responses to items about usage of specific providers in Omaha and responses from key informants will be found in the next chapter.

General Satisfaction

Residents of both North and South Omaha were generally satisfied with their over-all medical care, but the South was more satisfied than the North. Table 27 shows their responses to a set of questions about satisfaction. When asked if they were satisfied or dissatisfied with the over-all quality of their medical care, 92% to 95% of the South populations and 82% to 87% of the North reported satisfaction. The South populations reported even more satisfaction (92% to 98%) with the over-all quality of doctors. Again, 82% to 85% of the North populations were satisfied. The difference betwen the two general populations was significant and remained the pattern for the other satisfaction items.

Respondents reported similar satisfaction with other medical service items. Between 90% and 93% of the South populations and 79% to 89% of the North populations were satisfied with follow-up care, and 87% to 93% of the South and 79% to 83% of the North populations were satisfied with the concern of doctors for their over-all health.

Costs. Less satisfaction was reported with other aspects of medical care. The smallest proportion was satisfied with cost factors. Only 61% to 70% of South and 49% to 66% of the North populations were satisfied with the out-of-pocket costs of medical care, with the general populations least satisfied. Respondents were also dissatisfied with the availability and cost of parking with only 52% to 70% of the South and 45% to 65% of the North populations satisfied. Fewer elderly from both North and South were

TABLE 27

SATISFACTION WITH HEALTH CARE
(Respondents)

	Percent Satisfied					
	North Omaha			South Omaha		
	General Population	Elderly High Rise	Low Income Public Housing	General Population	Elderly High Rise	Low Income Public Housing
Satisfaction with Service						
Overall quality of medical care	83	82	87	92	93	95
Overall quality of doctors	85	82	85	92	96	98
Follow-up care after first treatment	84	79	89	90	91	93
Concern of doctors about overall health	83	79	81	89	87	93
Satisfaction with Cost						
Out-of-pocket costs	49	61	66	61	70	67
Availability/cost of parking	57	45	65	70	52	67
Satisfaction with Convenience/Availability of Care						
Waiting time in doctor's office	52	82	55	65	80	70
Availability of care evenings/weekends	51	50	67	60	59	65
Ease of travel to doctor's location	77	92	79	89	92	91
Satisfaction with Informtion/ Communication						
Information about where to find special kind of medical, mental health, dental care	64	76	81	64	83	91
Information given about what was wrong	80	82	82	89	89	88
Information given about how to take care of self at home	86	86	93	91	89	100
Information about medication	83	84	90	91	89	100

NOTE: See Table 15 for note about sample sizes (N).

satisfied with this aspect of service.

Convenience/Availability. Respondents were not very satisfied with the convenience and availability of their medical care. Only 52% of the North and 65% of the South general populations were satisfied with waiting time in doctors' offices. Both low income populations were slightly more satisfied with waiting time. The same general pattern was true of satisfaction with services available evenings and weekends, except that the older populations were less satisfied.

Larger proportions were satisfied with ease of travel to doctors' offices, 77% of the North and 89% of the general populations, 79% of the North and 91% of the low income populations, and 92% of the North and South elderly were satisfied with ease of travel.

Information/Communications. From 80% to 89% of the populations expressed satisfaction with the information given to them by the doctor about their physical conditions, and 83% to 100% were satisfied with information about home care and medicine. The North general population usually had the smallest proportion expressing satisfaction on all of these items.

The general and elderly populations expressed less satisfaction on information available about other services such as mental health, dental services, alcohol treatment, etc. Only 64% of the North and South general populations and 76% of the North and 83% of the South elderly populations expressed satisfaction. Low income populations were most satisfied.

Who is Least Satisfied?

Table X in the Appendix shows the patterns of satisfaction. The most predictable is that people who paid out-of-pocket only showed least satisfaction with all aspects of medical care. Fewer Blacks and Mexican Americans were satisfied with cost, convenience, and availability of care. Those earning between $5,000 and $19,999 were least satisfied with cost and quality of care.

Summary

Two facts stood out in the analysis of the satisfaction items. First, South Omaha populations expressed more satisfaction on nearly all items than did the North Omaha populations. Second, South Omaha low income persons expressed more satisfaction than did the South general population

on nearly all items. This may be related to the presence of the SONA facilities.

V

UTILIZATION OF PRIMARY HEALTH CARE FACILITIES BY NORTH AND SOUTH OMAHA RESIDENTS

One of the questions that health care providers were asked was, "If you could have any information from users of your facility for use in your future planning, what would it be?" The usual response was that they would like to know how people felt about their facility; what they liked and did not like. This chapter is a response to that query. The data will be presented in three sections with little interpretive comment or summary.

Four types of primary care health services were considered primary health care facilities in the research: hospitals, clinics, private physicians/groups, and Visiting Nurse Association health maintenance sites. Although the latter are seldom considered primary care, much screening and/or preventive care is provided by these facilities.

The chapter has four sections: 1) a description of the area's facilities, with details about the public clinics and where patients using the facilities originate; 2) an analysis of which facilities were designated as the "usual source of care" by respondents of the survey; 3) reported satisfaction with health care analyzed by facility; and 4) a discussion of factors suggested by survey respondents and key informants that seem to affect utilization of facilities by the target population.

Summary of Findings

- More health care providers are found in South Omaha than in North Omaha.
- More South Omaha residents visit clinics and use VNA services than North Omaha residents.
- People generally tend to use health care facilities near to their homes.
- The UNMC Outpatient Clinic and St. Joseph Outpatient Clinic are most frequently used by lower income residents, and private physicians are most frequently used by the general population.
- The SONA Health Clinics are used by 49% of the South low-income housing residents.
- Users of private physicians are most satisfied with most aspects of their care and users of the outpatient clinics least satisfied.

Primary Health Care Providers and Patient Origin

North Omaha Providers

Three public clinics, two private physicians, and four VNA health maintenance sites were the only primary care providers in the North Omaha target area at the time of the survey. Since then, one of the clinics, the Community Plaza Health Center, has ceased operations. Two additional VNA sites and St. Joseph Hospital are just outside of the area, and the University of Nebraska Medical Center, Clarkson Hospital, and Lutheran Hospital are fairly near. Figure 3 lists the facilities and Map 5 locates them.

Clark Street Clinic. The Clark Street Clinic, operated by the Douglas County Health Department, is located in the Logan Fontenelle housing area on the corner of 22nd and Clark Streets. The clinic was designed to provide health screening, immunizations, and well care to children. The clinic is also providing sickness care, although that was not the original intent of the program. Many services at the clinic are free. The clinic has been operating in the same location for 15 years in an older brick building owned by the Omaha Housing Authority. The waiting area appears clean but plain. A small table and chairs are available for children and chairs for adults.

Services are available by appointment. Waiting time for appointments does not seem excessive. A parent must accompany the child to the clinic. The clinic has recently expanded its hours of operation to accommodate the schedules of school children. The clinic is open every weekday afternoon. Staff appear to be friendly and helpful and seem to have a personal relationship with the patients.

Douglas County also operates a venereal disease clinic at this center two evenings per week, and an OB/GYN clinic operated by the University of Nebraska Medical Center is held one evening per week at this location. A satellite office of the Visiting Nurse Association is also located in the building

Community Plaza Health Center. The Community Plaza Health Center at 4601 N. 36th Street in the old Immanuel Hospital building housed two different health clinics where a wide variety of primary health services were provided. Since the center closed, clients are now being served through

FIGURE 3

PRIMARY CARE PROVIDERS IN NORTH OMAHA

North Omaha providers found within or on the periphery of the target area include the following:

Clark Street Clinic (N. 22nd)
1. Immunization
2. Pediatric Clinic
3. VD Clinic
4. OB/GYN Clinic

Community Plaza Health Center (36th & Meredith)
Community Plaza Family Practice Clinic
1. Adult Clinic
2. Dental Clinic

University Nebraska Medicare Center North Clinic
1. Children and Youth/Pediatric Clinic
2. Family Planning Clinic
3. OB/GYN Clinic
4. WIC Program
5. Maternal and Infant Care Clinic

Creighton Family Practice Clinic (4415 N. 28th Ave.)

Visiting Nurse Association Health Maintenance Sites/Van
1. Evans Tower (3600 N. 24th)
2. Florence Towers (5100 Florence)
3. Miller Park Presbyterian Church
4. St. Theresa's (14th & Ogden)
5. St. Benedict's (24th & Grant)
6. Wesley Methodist (N. 34th)

Clarkson Hospital Emergency Room

Immanuel Hospital Emergency Room

Immanuel Outpatient Clinic

Lutheran Hospital Emergency Room (515 S. 26th St.)

Saint Joseph Hospital Emergency Room (601 North 30th)

Saint Joseph Hospital Outpatient Clinic (601 North 30th)

University Hospital Emergency Room

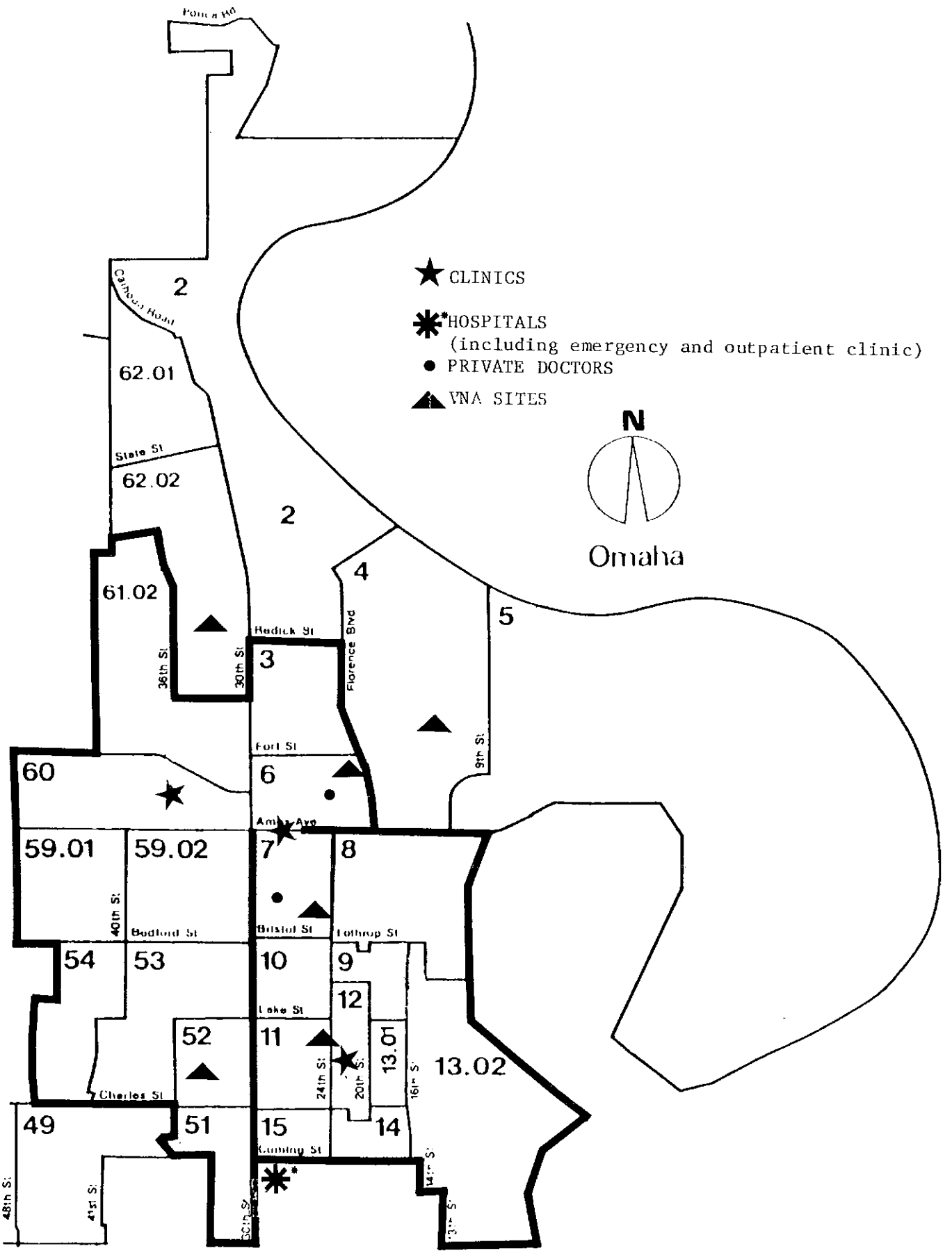
University of Nebraska Medical Center Outpatient Clinics

VNA main office (4500 Ames Ave.)

Private Physicians
1. John N. Walburn (4615 N. 24th St.)
2. William H. Johnson (2915 Manderson)

Map 5

LOCATIONS OF HEALTH PROVIDERS IN NORTH OMAHA



the Northeast Omaha Health Services at 4500 Ames Avenue. They were sent letters informing them of the change.

The WIC Program and the Maternal and Infant Care Program moved to the University of Nebraska Medical Center when Community Plaza closed.

The Community Plaza or Family Practice Clinic maintained both an adult clinic and a dental clinic and was funded by federal grants.

Also in the same building was the University of Nebraska Medical Center's North Clinic. Several specialized clinics were located in the same space. They were funded by a Maternal/Child Health grant through the UNMC Department of Pediatrics. The Pediatric and Children and Youth Clinics were supervised by the Department of Pediatrics while the Maternal and Infant Care, Family Planning, and OB/GYN Clinics were supervised by the Obstetrics Department.

The WIC Clinic, a nutrition program, shared the space and was used to supplement the medical care provided by the other clinics. The WIC program was supervised by the Obstetrics Department but was funded by a federal grant from the Department of Agriculture.

Creighton Family Practice Clinic. Creighton Family Practice Clinic, located in a one story red brick building at 4415 N. 28th Avenue (28th and Ames), is operated by Creighton University College of Medicine. The clinic is staffed by medical and nursing students from Creighton with a staff doctor on duty daily. Services are available by appointment Monday through Friday from 9:00-11:00 a.m. and 1:00-4:00 p.m. Walk-in patients are seen on an emergency basis. They also accept Medicaid and Medicare patients. The clinic is a new, modern facility and has been in operation approximately one and a half years. The waiting room is bright and comfortable. Magazines and educational pamphlets are available for patients to read. The staff is friendly and helpful. Parking is available free of charge. The clinic, located on two bus routes, is easily accessible.

Visiting Nurse Association Health Maintenance Sites. Health maintenance sites are located throughout the city in community centers, churches, sites for the elderly, and city buildings. Four are located in the North Omaha target area and seven in the South Omaha target area. (See Figures 3 and 4 for locations.)

FIGURE 4

PRIMARY CARE PROVIDERS IN SOUTH OMAHA

Douglas County Health Department Clinic
- South Omaha Clinics (24th & O)
  1. Pediatric Clinic
  2. Childhood Immunization Clinic

- Central Clinic (1201 S. 42nd St.)
  1. Pediatric Clinic
  2. Childhood Immunization Clinic

Indian Chicano Health Clinic (2702 S. 20th St.)

SONA building (31st & O)
1. Family Practice Clinic
2. Maternal and Infant Care Clinic
3. Family Planning Clinic
4. Children and Youth/Pediatric Clinic
5. WIC Program

Visiting Nurse Association's Health Maintenance Sites/Van
1. Christ Child (S. 10th)
2. Christ Child West (S. 24th)
3. Christie Heights (36th & P)
4. Our Lady of Guadalupe Van (23rd & O)
5. Highland Towers (24th & B)
6. Kay-Jay Towers (S. 25th)
7. Lefler United Methodist Church (15th & Madison Ave.)

Visiting Nurse Association Preventive Home Health Care
1. South Station (24th & O)
2. Central Office (1201 S. 42nd)

Clarkson Hospital Emergency Room

Lutheran Hospital Emergency Room

Old Saint Joseph Emergency Room (10th and Dorcas)

Saint Joseph Hospital Emergency Room (601 North 30th)

St. Joseph Hospital Outpatient Clinic

University Hospital Emergency Room

University of Nebraska Medical Center Outpatient Clinics

Private Doctors/Clinics
1. Richard N. Johnson (3932 S. 24th)
2. Daniel Kemp (2222 L)
3. James Ryder (1901 Missouri Ave.)
4. Adam Zoucha (4320 S. 24th)
5. Prairie Clinic (2602 J St.)
   (Four primary care doctors listed)

Their clients are mostly individuals aged 60 or over. The objective of the VNA Health Maintenance Program is to help individuals function within the community, maintain health, and have reasonable independence. Most of the program is funded by Douglas County through the Eastern Nebraska Office on Aging.

Their services emphasize preventive health care. Clients are assisted in developing and/or maintaining those abilities needed for optimum functioning. Help is given in such areas as recognizing and correcting deficiencies and developing and maintaining personal care and hygiene. Teaching and counseling for questions and concerns is also offered, and referrals to other resources are made if necessary. Special projects include educational programs, screenings (glaucoma, diabetes, etc.), and immunization.

A visit to a health maintenance center, however, does not take the place of a visit to a physician. Complete records are kept on each client at each center.

South Omaha Providers

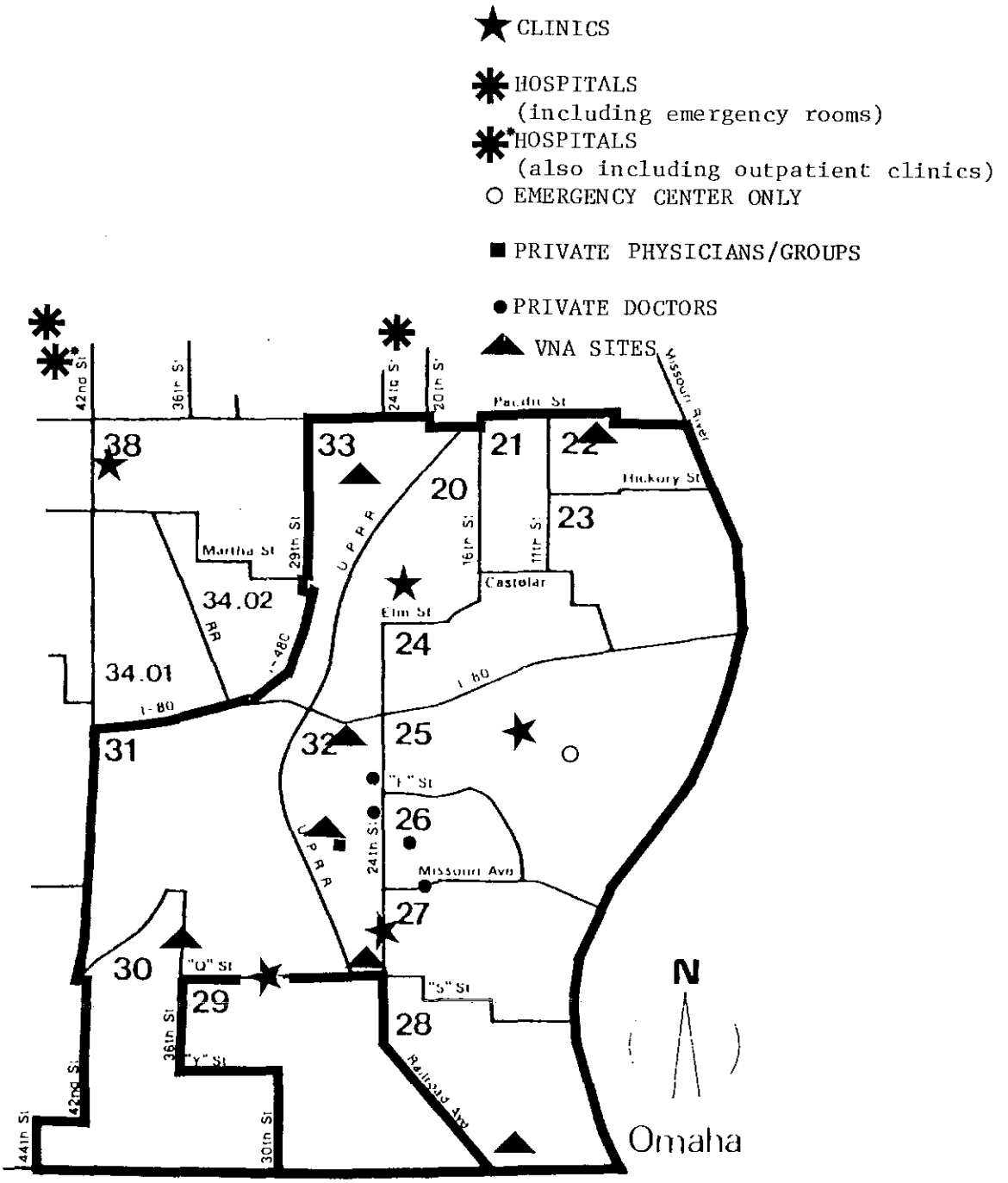
The South Omaha target area has four public clinics, seven VNA health maintenance sites, two VNA preventive home health care sites, one hospital emergency room, four individual primary care physicians, and a physician's group with four primary care physicians listed. In addition, the University of Nebraska Medical Center, Clarkson and Lutheran Hospitals, the Veterans Administration Hospital, and the Douglas County Hospital are all directly adjacent to the area. Figure 4 lists the facilities, and Map 6 shows their location.

South Omaha Clinic. The Omaha-Douglas County Health Department has a South Omaha Clinic in the Omaha/Douglas County Building at 24th and O Streets. The clinic provides several services at the same location. For example, the Pediatric Clinic operates Mondays, Wednesdays, and Fridays, and the Child Immunization Clinic operates from 3:00-4:30 p.m. on Mondays only.

The waiting room is quite small and plain, but the atmosphere is friendly. A sign written in Spanish is on the door, telling clients to come on in. Spanish speaking staff are available to help them. Staff seem to be friendly and helpful even when they are very busy. A small table and

Map 6

LOCATIONS OF HEALTH PROVIDERS IN SOUTH OMAHA



chairs are available for the children. Posters containing health related messages are on the walls.

Creighton Family Practice Clinic. This clinic moved from 3374 S. 13th Street to 4415 N. 28th Avenue (28th and Ames) on June 1 and was consolidated with the clinic already in operation there. Letters were sent out to all patients informing them of the move.

Indian-Chicano Health Clinic. The Indian-Chicano Health Center is located at 2702 South 20th Street. The clinic provides preventive medical care and treatment for minor illnesses. Dental services are available every second Wednesday night. The clinic primarily serves Native Americans and Chicanos but will help anyone in need. Services are provided free of charge, eliminating paperwork for patients. All medical staff members are volunteer doctors and dentists from Creighton University and the University of Nebraska Medical Center. Dental services are available by appointment. Doctors' services are available on a first come, first served basis. The clinic is open from 6:00 to 9:00 p.m. Mondays and Wednesdays. Both outreach and transportation services are provided. Staff members are friendly and helpful, and the two Chicano social workers on the staff speak Spanish fluently. A Native American staff member acts as receptionist and outreach worker and assists with transportation.

The clinic is bright and clean. Walls are papered with various Native American and Hispanic designs. Paintings, wall hangings, and other decorations are reflective of both cultures. The waiting room is spacious and cheerful. Toys are available for children. Health related pamphlets as well as other reading materials are available for adults.

South Omaha Neighborhood Association (SONA). M & I (Maternal and Infant Care), C & Y (Children and Youth Clinic), Family Planning Clinic, and the Family Practice Clinic are services operated by the University of Nebraska Medical Center in the SONA Building located at 31st and Q Streets. All fees at these clinics are based on a sliding scale.

The SONA Building is a large, two-story modern brick structure. Ample parking is provided free of charge at 31st and Q and in the south lot at 31st and R Streets. Conveniently located near public transportation, SONA houses a variety of non-profit community services. In addition to the UNMC

clinics are a WIC program, Douglas County Social Services, Greater Omaha Community Action, and South Omaha Alcoholism Counseling Agency. The building is fully carpeted, pleasant, and clean.

M & I, C & Y, and Family Planning are all located on the top floor of the building in Room 5. The waiting room is clean but small and plain. One wall has a large bulletin board covered with health care and community interest posters. A small box of toys is provided for children. No waiting for appointments appears necessary.

M & I provides an intensive prenatal care and counseling program for expectant mothers. Immunizations and infant health care are provided for babies to one year of age. The clinic is supervised by the Obstetrics Department at UNMC.

C & Y is a new pediatric clinic for children ages 1-18. It is open Tuesdays through Fridays in the mornings and all day Mondays and is supervised by the Pediatric Department at UNMC.

The Family Planning Clinic is open on Thursdays from 1:00-8:30 p.m. Patients are scheduled by appointment. It provides the same full-service family planning as the University Hospital Outpatient Clinic and is supervised by the Obstetrics Department at UNMC.

The University of Nebraska Medical Center Family Practice Clinic is located in the lower level of the SONA Building. It has its own entrance. The clinic is a full-service family primary care center that includes a pharmacy, limited emergency service, X-ray, social services, and a direct referral to University Hospital for emergencies. Hours are 8:00-4:30 p.m. Mondays through Fridays by appointment. The staff appear to be friendly, and waiting time for appointments is not excessive. The clinic is clean and bright with large, colorful graphics painted on the walls. Toys are provided in a separate, large playroom where children are supervised by their parents. The clinic is supervised by the Family Practice Clinic at UNMC.

Summary

More primary health care providers are found in South Omaha than in North Omaha even though the target population of South Omaha is smaller. At the time of the investigations made for this report, three clinics were operating in North Omaha target area and four in South Omaha. Four VNA health maintenance sites were in the North target area and seven in South

Omaha, and eight private physicians were practicing in South Omaha and two in North Omaha.

Patient Origin Data

An analysis of the providers used for primary health care by the target population is necessary to determine utilization patterns and consequently deal with under-utilization. Utilization patterns were determined from three patient origin data sources: providers, Blue Cross/Blue Shield, and the target population. Data from the first two sources are described here.

Patient Origin Data from Providers. In an attempt to determine which health care providers were most actively serving the target populations, patient origin data were requested from all providers of primary health care in or near the target areas. The request met with mixed results for a number of reasons. Many providers reported that they did not analyze their patient origin data. Hospitals are required to keep county origin data for the State Health Department. Most of them also had zip code data available. Some of the clinics allowed the researchers to go through appointments for one year to obtain the data. All private physicians declined to allow the use of their records. Emergency room data do not reflect either the hospital's position or the patient's choice since fire departments and emergency squads use emergency rooms based on the location of the emergency. The data in Table 28 show that most of the clinics serve patients primarily from their immediate geographic areas. The VNA facilities located in elderly high rise units are assumed to serve primarily residents of the high rise or the immediate surrounding area. These data will be compared later with usual source of care facility data from survey participants.

A larger proportion of South Omaha than the North Omaha populations are served at clinics and by the VNA. Table 29 shows the rate per 1,000 population per year of visits to all clinics at each site and the rate per 1,000 population per year over age 65 of VNA site visits and VNA home visits. The rate is significantly higher in the South target area for all visits except VNA home visits. If the services provided by the Community Plaza Health Center are not replaced, the rate difference per 1,000 population will be even greater than shown.

TABLE 28

PATIENT ORIGIN BY ZIP CODE BY HEALTH CARE PROVIDER

	North Zip Codes 68110	68111	Total Patients North	South Zip Codes 68107	68108	Total Patients South	Patients All Other Zip Codes		Total Patients Served By Provider	Total Patients From Test Area Number	Percent
Clark St. Clinic											
Immunization									1,959		
Pediatric	449	615	1,064	5	7	12	368		1,444	1,076	75
VD									2,389		
OB/GYN			(253)						342	253	74
Community Plaza											
Adult Clinic	400	1,800	2,200	48	28	76	872		3,150	2,276	72
CY/Pediatric									2,781		
Family Planning								5,482	1,420		
OB/GYN									1,281		
WIC			(8,402)			300			12,003	8,702	72
Maternal/Infant			237			8			339	245	72
Creighton Family Practice	2,682	1,750	4,432	39	140	179	617		5,228	4,611	88
South			54			355	159		568	409	72
Douglas County Clinic											
South Omaha											
Pediatrics	4	12	16	777	208	985	766		1,767	1,001	57
Childhood immunization									4,044		
Central											
Pediatrics									1,652	770	47
Childhood immunization									3,186		
Indian-Chicano Health Clinic	44	68	112	328	260	588	326		1,026	700	68
SONA Building Clinics											
Family practice				7,152	1,024	8,176	2,046		10,222	8,176	80
M/I care									2,393		
Family planning						3,192		3,991	924		
CY/pediatrics									674		
WIC						(3,233)			4,042	3,233	80
VNA Health Maintenance Sites (South)											
Chirst Child (main)						622			622	622	100
Christ Child (west)						310			310	310	100
Christie Heights						872			872	572	100
Our Lady of Guadalupe						564		3,672	564	564	100
Highland Towers						374			374	374	100
Kay-Jay Towers						660			660	660	100
Lefler United Methodist						270			270	270	100

TABLE 28– (Continued)

PATIENT ORIGIN BY ZIP CODE BY HEALTH CARE PROVIDER

	North Zip Codes 68110	68111	Total Patients North	South Zip Codes 68107	68108	Total Patients South	Patients All Other Zip Codes		Total Patients Served By Provider	Total Patients Patients From Test Area Number	Percent
VNA Health Maintenance Sites (North)											
Evans Towers			370						370	370	100
Florence Towers			858						858	858	100
Miller Park			668					2,186	668	668	100
St. Benedict's			290						290	290	100
VNA Home Visit	384	1,065	1,449			811				2,260	
Lutheran Hospital E.R.	2,496	1,306	3,796	1,196	156	1,352	4,891		10,039	5,148	51
St. Joseph Hospital E.R. St. Jospeh Outpatient Clinic	3,438	7,463	10,901	1,462	3,804	5,266	12,800		28,967	16,167	56
UNMC E.R.									23,243		
UNMC Outpatient									64,048		

TABLE 29

RATE OF PATIENT VISITS PER 1,000 POPULATION,
NORTH AND SOUTH OMAHA CLINICS AND VNA SERVICE

	North Omaha			South Omaha		
	Visit	Population[a/]	Visits per 1,000	Visit	Population[a/]	Visits per 1,000
Clinics (without WIC)	12,925	42,318	305	16,768	37,390	448
Clinics minus Community Plaza	6,651	42,318	157			
VNA-HMS	2,186	5,098	429	3,762	5,322	707
VNA-home visit	1,449	5,098	284	811	5,322	152
VNA-Total	3,635	5,098	713	4,573	5,332	859

[a/]Adjusted to fit zip code lines; VNA analysis based on population age 65 and over.

TABLE 30

HOSPITAL INPATIENT ORIGIN BY ZIP CODES IN TARGET AREA
PAID FOR BY BLUE CROSS/BLUE SHIELD IN 1978

	North Patient Population				South Patient Population				Total Patient Population		
Hospital	Patients from Zip 68110	68111	Total North	Percent Patients from North Omaha	Patients from Zip 68107	68108	Total South	Percent Patients from South Omaha	Patient Population	Total from North and South Omaha	Percent from North and South Omaha
Bergan	7	184	191	2.6	623	228	851	11.6	7,306	1,042	14.3
Clarkson	63	201	264	6.7	234	89	323	8.2	3,941	587	14.9
Childrens	47	149	196	8.8	127	56	183	8.2	2,226	379	17.0
St. Joseph	231	458	689	21.4	368	400	768	23.9	3,216	1,457	45.3
Immanuel	196	733	929	18.7	32	18	50	1.0	4,972	979	19.7
Lutheran	114	224	338	14.5	355	178	533	22.9	2,330	871	37.4
Methodist	52	136	188	2.9	106	44	150	2.3	6,497	338	5.2
UNMC	72	166	238	15.1	91	48	139	8.8	1,577	377	23.9
Midlands	4	9	13	2.6	73	15	88	17.7	498	101	20.3
Total			3,046	9.4			3,085	9.5	32,563	6,131	18.8
				Compared to				Compared to			
Total population of area			42,318				37,390		379,884		
Percentage of total population in test areas				11.1				9.8			21.0

Patient Origin Data from Blue Cross/Blue Shield. Table 30 shows the inpatient origin of patients insured by Blue Cross/Blue Shield. These data are weighted against the residents of the target areas, especially North Omaha, because many do not have hospital insurance. However, these data do indicate that patients tend to be geographically oriented in their choice of health care providers.

Summary

For the most part, primary care health providers in North and South Omaha tend to serve patients who live in their immediate areas or nearby. This is particularly true of public clinics, emergency rooms, and probably outpatient clinics, although data are incomplete. The fewer the providers, the lower the rate per 1,000 population per year.

Data from a third party payor, Blue Cross/Blue Shield, confirm this assessment for persons they insure. Except for specialty hospitals, a larger proportion of their Blue Cross/Blue Shield patients originate from the adjacent areas than their proportion of the total population. This proportion is undoubtedly even higher when all patients are considered, not just Blue Cross/Blue Shield payees.

These data indicate that patient visits per 1,000 population are apt to be related to the availability of conveniently located facilities. Lack of service providers would then be a major source of under-utilization of primary care health service.

Omaha Health Care Providers as a Usual Source of Care

In this section, facilities named as usual source of care by respondents will be analyzed in three sections: 1) facilities used, 2) factors relating to facilities used, and 3) satisfaction with health care facilities.

Facilities Used by Target Populations

North Omaha. The facility used most frequently by North Omaha residents was the UNMC Outpatient Clinic followed by the St. Joseph Outpatient Clinic. Table 31 shows the distribution. Almost half (48%) of the low income housing respondents reported using these two facilities, but only 22% of the elderly high rise residents and 26% of the general population used them. The one private physician in the area was used by 7% of the general population and 6% of the elderly in the high rises of the area.

TABLE 31

USUAL SOURCE OF CARE
(Respondents)

	North Omaha			South Omaha		
	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)
Creighton Family Practice Clinics	3	9	10	2	2	2
UNMC Outpatient	15	9	23	6	4	15
St. Joseph Outpatient	11	13	25	2	4	7
Hospital Emergency Rooms	3	0	3	2	10	0
SONA	0	0	0	1	2	49
Prairie Clinic	3	13	8	12	12	10
Methodist Hospital Area	7	6	2	7	14	0
Regency Area	4	0	2	4	0	2
Immanuel Area	6	0	2	1	2	0
Dr. Johnson	7	6	3	0	0	0
Downtown	7	9	3	1	0	0
22 - 24 & L - M physicians	0	0	0	10	14	2
42 & J - L	1	0	3	3	4	7
UNMC area	6	6	2	* a/	0	0
Other	28	28	15	48	31	5
Total	101	99	101	99	99	99

NOTE: See Table 15 for note about sample sizes (N).
a/ * less than .5%

South Omaha. A striking difference existed between South Omaha's low income residents and the other two populations primarily due to the SONA facilities. Almost half (49%) of the low income housing sample used the SONA clinic. An additional 22% used the St. Joseph Outpatient Clinic and UNMC Outpatient Clinic. A majority of the general population and the elderly high rise population were served by private physicians. The Prairie Clinic and several independent private physicians located within the area were most frequently used. For example, 12% of the general population sample patronized the Prairie Clinic.

Factors Affecting Facility Used

As expected, the location of facilities affected travel time and transportation methods. Table 32 shows the response on these factors. More people were able to walk to those facilities located in the area. Those outside the area required a car or bus. The two neighborhood health clinics had more walkers, the facilities out of the area more car riders. Users of downtown and other area facilities also used the bus more than did those who used West Omaha facilities.

The least waiting time also appeared to be in the health clinics with 64% of Creighton Family Practice users and 95% of SONA users waiting less than 30 minutes. As a group, the hospital outpatient clinics had longer waiting times with 60% of UNMC and St. Joseph patients waiting more than 30 minutes.

The two health clinics were the care sources used primarily because they were nearby. St. Joseph, Prairie Clinic, and the other private physicians were often used or recommended by family.

The facilities around Methodist and in the UNMC area were often recommended by other physicians.

Satisfaction with Health Care Facilities

Satisfaction with health care facilities usually used was determined in two ways. First, responses to the satisfaction items were analyzed for users of each facility or doctor if there were enough responses to analyze. Second, respondents were asked if they had any comments on a facility that would give insight to providers.

Satisfaction with Usual Source of Care

Table 33 shows respondent satisfaction with health care classified by respondents' usual source of health care. The assumption is made that satisfaction with health care depends upon the facility usually used. In

TABLE 32

FACTORS RELATED TO FACILITIES USED
(Respondents)

	Creighton Family Practice	UNMC Outpatient	St. Joseph Outpatient	All Emergency Rooms	SONA	Prairie Clinic	Methodist Hospital Area	Regency Area	Immanuel Area	Dr. Johnson	Downtown	22-24 & L - M	42 & J - L	UNMC Area	All Others
N[a/]	29	89	68	22	24	63	48	24	21	23	26	36	20	21	249
Transportation Method															
Own car	34	44	38	41	21	34	59	71	75	45	44	47	63	62	69
Other car	14	15	20	27	29	16	17	17	10	14	16	11	16	5	14
Taxi	14	11	10	14	0	11	0	4	5	5	8	6	11	10	4
Bus	17	28	26	9	0	26	17	8	10	23	32	19	5	24	11
Walk	10	0	3	0	50	11	0	0	0	14	0	17	5	0	1
Other	10	2	3	9	0	2	7	0	0	0	0	0	0	0	1
Total	99	100	100	100	100	100	100	100	100	101	100	100	100	101	100
Travel Time															
1-10 minutes	45	16	30	25	87	46	24	5	33	55	33	68	32	10	29
11-15 minutes	24	32	30	20	9	18	16	19	22	20	29	12	37	29	28
16-20 minutes	14	16	19	15	4	11	16	24	28	20	29	18	16	33	24
21-30 minutes	14	18	13	30	0	19	22	33	6	5	0	3	11	24	8
31+ minutes	3	18	9	10	0	7	22	19	11	0	10	0	5	5	11
Total	100	100	101	100	100	101	100	100	100	100	101	101	99	101	100
Waiting Time															
Under 15 minutes	32	3	16	20	14	12	23	38	21	16	16	24	18	17	27
15-30 minutes	32	39	24	30	82	30	45	38	43	53	42	30	35	50	40
30-60 minutes	28	42	36	40	0	20	25	14	29	21	32	27	29	33	24
Over 60 minutes	8	17	24	10	5	38	7	10	7	11	11	18	18	0	8
Total	100	101	100	100	101	100	100	100	100	101	101	99	100	100	99
Reason for Use of Facility															
Nearby	48	20	34	38	75	39	7	4	5	55	5	33	24	20	11
Family always used	17	25	31	24	8	24	20	13	26	18	14	22	12	15	24
Family/friend recommended	21	18	13	5	13	26	41	54	47	18	36	31	59	30	33
Doctor/social worker	7	18	16	19	4	6	26	13	11	5	32	6	6	30	18
Media	7	20	6	14	0	5	7	17	11	5	14	8	0	5	15
Total	100	101	100	100	100	100	101	101	100	101	101	100	101	100	101

[a/] N varies slightly with number answering specific questions.

TABLE 33

SATISFACTION BY USUAL SOURCE OF CARE
(Respondents)

	Percent Satisfied						
	Creighton Family Practice	UNMC Outpatient	St. Joseph Outpatient	All Emergency Rooms	SONA	Prairie Clinic	Dr. Johnson
N [a]	28	89	68	22	24	63	23
Satisfaction with Service							
Overall quality of medical care	89	83	83	86	92	91	86
Overall quality of doctors	96	83	82	90	96	84	91
Follow-up care after first treatment	93	84	89	84	92	90	77
Concern of doctors about overall health	93	76	83	84	88	83	81
Satisfaction with Cost							
Out-of-pocket costs	67	58	53	63	75	58	46
Availability/cost of parking	71	56	57	60	67	46	59
Satisfaction with Convenience/Availability of Care							
Waiting time in doctor's office	63	53	58	58	83	54	33
Availability of care evenings/weekends	70	60	62	45	66	43	38
Ease of travel to doctor's location	89	81	89	90	100	86	82
Satisfaction with Information/ Communication							
Information about where to find special kind of medical, mental health, dental care	71	69	67	55	83	76	68
Information given about what was wrong	80	93	75	83	81	92	81
Information given aobut how to take care of self at home	93	88	85	85	100	84	91
Information about medication	89	84	86	95	100	87	77

[a] N varies slightly with number answering specific questions.

general, less satisfaction was reported by users of hospital outpatient clinics and more satisfaction by users of private physicians or clinics.

Specific Comments on Facilities. After the respondents were questioned on their use of and satisfaction with specific facilities, they were asked if they wished to make any comments that would provide additional insights. Table 34 shows the categories into which responses were classified.

The facilities most used for regular care by the low income respondents, UNMC, St. Joseph Hospital, and Prairie Clinic, were among those with the lowest percentage of positive remarks.

By far, the most negative comment for most facilities was the long wait. Perhaps the comments which should be most closely considered are those about bad medical experiences. These included misdiagnosis, unnecessary operations, wrong medicine prescribed, etc. Three sets of comments were particularly interesting because they were not mentioned about any other facility. Five comments about one facility indicated that elderly persons were mistreated by staff. Another facility received four comments about the inordinate amount of paperwork. Another facility had four comments about only non-physicians treating patients. Finally, one facility had three comments about the non-appearance of personnel at scheduled times and another about the inability to be admitted to a facility because of income discrimination.

The distribution of the comments validated the responses on the satisfaction scales. While the percentages differed, the pattern remained virtually the same.

The Special Case of the VNA. The Visiting Nurse Association health maintenance sites were seen by few respondents as their usual source of care. However, they had been used by 8% of the South and 5% of the North populations, primarily older persons. The comments, shown in Table 34, were almost unanimously positive. This is an example of a relatively inexpensive way to provide preventive screening while utilizing the building facilities and social structure of already existing facilities such as churches, housing developments, and neighborhood houses.

Improvement Needed to Increase Utilization of Health Care Services and to Improve Health Services

The major purpose of the study was to determine causes of under-

TABLE 34

COMMENTS ON FACILITIES USED BY RESPONDENTS

(Percent in Each Category)

	UNMC Outpatient	UNMC Emergency Room	St. Joseph Outpatient	St. Joseph Emergency Room	Lutheran Emergency Room	Clarkson Emergency Room	Old St. Joseph Emergency Room	SONA	Douglas County	VNA	Prairie Clinic
General Care											
Positive	24	38	16	29	39	41	23	18	50	72	8
Negative (general)	7	0	5	14	11	6	5	0	0	0	5
Bad medical experience related	17	0	8	5	7	0	0	27	0	0	11
Service											
Good, efficient	0	8	5	0	4	6	0	0	0	7	3
Bad, long wait	31	35	27	29	7	12	36	9	0	9	35
Personnel											
Favorable	3	0	11	10	18	12	5	18	0	9	0
Cost											
High	3	0	11	10	0	0	8	0	0	0	5
Low	0	0	0	0	4	0	0	0	33	0	0
Other	14	19	16	5	11	24	23	27	17	2	32
Total Comments											
Number	29	26	37	21	28	17	39	11	6	43	37
Percent favorable	28	46	32	38	64	59	28	36	83	88	11

utilization of primary health care services and to suggest ways to increase utilization by the target population in order to increase their general health. A number of questions were asked of both key informants and survey respondents to gain insight on under-utilization. These data are reported in three sections: 1) areas of health need and services improvement, 2) perceived reasons for under-utilization of existing services, and 3) ways to increase utilization of health services.

Health Need and Services Improvement

The first question asked community leaders was what they considered the most pressing health need of their areas. The major responses could be grouped into services for the elderly, child and prenatal care, and economic factors. Table 35 shows the distribution. Ethnic South Omaha concerns were primarily services for the elderly; South Omaha Hispanic leaders felt that services for elderly and the general structuring of some services to fit their particular culture were needed. North Omaha leaders felt that more child, prenatal, and preventive services were needed. Other health care concerns mentioned by ethnic South Omaha leaders were health care for low income residents, alcohol and drug abuse problems, lack of dental care, community health problems such as odors and rats, a hospital facility (because of the move of St. Joseph), home health care for the home-bound, and a more centrally located ambulance service.

Bilingual assistance while receiving health care was a key concern of Hispanic South Omahans.

In North Omaha preventive services, such as screening for high blood pressure, were frequently mentioned. Health delivery issues centered around services for the elderly, such as transportation, and the impersonal, sometimes hostile care given by health providers.

Absence of educational programs on health care and lack of information about services were unusual concerns of all four groups.

Providers were asked the question in a different form: "What areas of medical care do you consider most in need of improvement in North and South Omaha?" All the respondents for these questions were either medical or administrative personnel or both. Table 35 shows the responses coded into categories.

TABLE 35

PERCEPTION OF THE MOST PRESSING HEALTH NEEDS
PERCEIVED BY KEY INFORMANTS

	North Omaha Leaders N=19 (Percent)	South Omaha Hispanics N=14 (Percent)	South Omaha Ethnic N=16 (Percent)	Providers N=24 (Percent)
Service				
Prevention related	63	7	6	29
Elderly/adult	11	43	44	8
Child/prenatal	47	7	0	4
Delivery				
Number of services, hours open, location cultural sensitivity	21	64	13	13
Cost Factor	16	0	19	50
Information/Education				
To increase utilization of existing services, coordinate services, etc.	0	0	0	63

When the response categories were ranked from most to least number of responses in each category, little consensus occurred among key informants. Perhaps the need by each sub-community was not similar, indicating that services must be more tailored to a specific sub-population in need. When providers plan services, both community leaders and potential clients should be involved.

Survey respondents also were asked for areas in which improvement was needed. The question asked was: "If you could name health care services that you needed more of or wanted improved or changed in some way, what would they be?" Two responses were coded where necessary. Table 36 shows the data.

The most frequently mentioned improvement was increase in services. More doctors of a particular specialty, better care for specific problems, and dental services were most often mentioned. Dental services were relatively frequently mentioned by the North elderly and low income populations and better care for specific ailments by the North general population.

Cost factors were the single most frequently mentioned improvement needed especially in South populations. Fourteen percent (14%) of the North and 20% of the South general populations, 8% of the North and 13% of the South elderly populations, and 2% of the North and 9% of the South low income populations mentioned cost factors as needing improvement.

Some of the specific remarks regarding cost factors needing improvement were: aid to help pay doctor bills, programs for people who do not have insurance, free clinics, lower hospital and medicine costs, free parking, elimination of the insurance deductible for older people on fixed incomes, and insurance to pay for annual physicals.

Two service delivery factors were mentioned with great frequency by respondents--faster, more efficient service and better communication between doctors and patients. Twelve percent (12%) of both general populations, 9% of both low income populations, and 3% of the North and 7% of the South elderly populations would like less waiting time. From 6% to 8% of the North populations mentioned better patient relations with slightly fewer South respondents mentioning this category.

TABLE 36

NEEDED IMPROVEMENTS IN OMAHA HEALTH CARE: (FIRST RESPONSE)
(Responsents)

	North Omaha			South Omaha		
	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)	General Population (Percent)	Elderly High Rise (Percent)	Low Income Public Housing (Percent)
More Services						
More doctors and of a particular speciality	4	0	6	3	2	9
Better care for specific ailment/ problem	6	0	0	1	5	0
Dental services	2	5	8	1	2	0
Additional services miscellaneous	4	1	2	7	5	6
Cost Improvements	14	8	2	20	13	9
Delivery						
Better communication with patients	7	6	8	4	7	3
Faster service	12	3	9	12	7	9
More convenient facilities - (geographical access)	6	3	5	4	2	0
Other	4	8	0	1	5	0

NOTE: See Table 15 for note about sample sizes (N).

More convenient facilities were mentioned by 6% of the North and 4% of the South general populations, 3% of the North and 2% of the South elderly, and 5% of the North but none of the South low income.

When individual items were ranked by frequency, cost was first, faster service second, and doctor-patient relationships third.

Respondents were also asked about improvements they felt were important using the items listed in Table 37. They were asked how important the improvements would be to their health care. A problem with this type of question was that respondents tended to get into a "response set" and indicate that everything was important. However, some of the differences between populations might be of importance to service providers. For example, the elderly high rise samples were less likely to view as important such improvements as reduced waiting time, extended hours for service, or housing all services at one location. Similarly, respondents in the low-income public housing samples were more concerned than other respondents that health facilities be near their homes.

Reasons for Under-utilization of Health Services

All key informants were asked their perceptions of why health care services are frequently under-utilized. The reasons can be classified in five categories: economic factors, educational/informational factors, access factors, delivery system factors, and cultural factors. Table 38 shows the distribution.

The most frequent and intense responses for all groups were 1) cost of services, 2) lack of information/understanding of services, 3) geographical access, and 4) lack of knowledge about Medicaid eligibility. Hispanic leaders also felt strongly that cultural factors were barriers to utilization.

Information Barriers as a Cause of Under-utilization

The causes for under-utilization perceived by key informants were similar to the categories mentioned by respondents. Two additional factors mentioned frequently by key informants were information and cultural factors. In order to determine whether lack of knowledge about services might be a factor in under-utilization, the respondents were asked a series of questions to determine whether they had heard of each facility and if they had used it.

TABLE 37

IMPROVEMENTS IMPORTANT IN HEALTH CARE
(Respondents)

	Percent Saying Important					
	North Omaha			South Omaha		
	General Population	Elderly High Rise	Low Income Public Housing	General Population	Elderly High Rise	Low Income Public Housing
Service Improvements						
Whole family/same doctor	51	50	68	51	33	67
mental health: Alcohol treatment	42	39	77	49	30	62
mental health: Help with Family Problems	60	58	79	51	35	81
mental health: Mental health services	53	58	82	42	35	79
help to get services: Write ill home care directions	76	76	86	73	70	81
help to get services: Help fill forms	64	63	80	63	54	79
help to get services: Referred	67	63	81	61	54	81
Information/Education Factor						
Information about service available	59	55	72	56	39	77
Phone number for help	77	76	93	75	61	86
Cost Improvements						
Fee schedule	73	66	72	73	44	84
Information on what Medicaid/ Medicare covers	69	74	75	65	67	91
Less for physical exam	82	71	85	77	72	81
Doctor's helper	66	76	78	66	65	77
Delivery System Factor						
Open nights/weekends	72	42	83	62	43	81
Waiting time less	78	61	82	61	46	86
Same place for all services	59	47	75	55	39	74
Access factor						
Near home	65	58	85	48	35	91

NOTE: See Table 15 for note about sample sizes (N).

TABLE 38

REASONS PERCEIVED BY KEY INFORMANTS FOR
UTILIZATION OF HEALTH SERVICES BY THE TARGET POPULATION

	Total Number	North Omaha (Percent)	South Omaha (Hispanics) (Percent)	South Omaha (Other) (Percent)	Providers (Percent)
		N=19	N=14	N=16	N=16
Economic Factors					
Costs too much	45	68*	86*	63*	63*
Lack of knowledge about Medicaid eligibility	41	79*	86*	31	56*
Loss of income while receiving services	34	68*	57*	38	44
Educational/Informational Factors					
Lack of information about the services	46	95*	86*	44	56*
Lack of understanding of rational approach to disease and prevention	25	53	36	13	50
Geographical Access					
Too far from home	44	68*	79*	63*	63
No transportation	49	79*	79*	63*	81*
Delivery System Factors					
Waiting time at clinics too long	40	79*	71*	63*	31*
Too much red tape	34	68*	71*	38	31
Medical personnel impersonal and not helpful	20	47	50	6	19
Inconvenient office hours	31	42*	57*	56*	38*
No child care available while receiving services	25	47*	57	44	6
Lack of privacy at the doctor's office or clinic	7	26	14	0	0
Cultural Factors					
Language barriers	25	11	86*	44	25
Not a U.S. citizen	11	0	57	6	13
Personal modesty about the body	16	21	64*	13	6
Distrust of non-minority medical personnel	5	21*	7	0	0

*These items were stressed by many respondents.

Tables 39 and 40 show the responses to the items. In both North and South Omaha, except for the old St. Joseph Hospital, the least well-known facilities were the area clinics and health maintenance sites located within the target areas. Hospital outpatient facilities were less known than the emergency rooms.

The larger the percentage of persons who had heard of the facility, the larger the percentage of those who had used it, and facilities with the greatest "familiarity" percentages were more frequently reported as the usual source of care.

These facts lend credence to the assumption that one cause of (or at least a contributer to) under-utilization of specific facilities is the lack of information about those facilities.

Cultural Factors as a Cause of Under-utilization

The survey data do not lend themselves well to answering this question directly. However, a look at the utilization variables of minority respondents does indicate that cultural factors may affect utilization.

As discussed before, a larger proportion of minorities than non-minorities used hospital and outpatient clinics as the primary source of care. Also, as reported earlier, Blacks were less satisfied with many aspects of their health care. They also reported more travel time, less travel by car, and, along with Mexican Americans and Native Americans, more waiting time where services took place.

Whether or not these factors are caused by insensitivity cannot be determined, but a large percentage of minorities apparently receive their care in facilities that are the most problematic in human interaction and apparent caring for the individual.

Ways to Increase Utilization

Key informants were asked ways that providers could increase utilization. A list of innovative programs that have been successfully used elsewhere was mentioned for their comment. Table 41 shows the responses of community leaders to the desirability of these improvements and the response of providers as to how feasible the changes would be.

More North Omaha and South Omaha Hispanic community leaders appeared to think that some innovative services would increase utilization, such as use of

TABLE 39

KNOWLEDGE AND USE OF PRIMARY HEALTH CARE FACILITIES
IN NORTH OMAHA
(North Omaha Respondents)

	Percent Heard Of	Percent Used
Clark Street Clinic	58	
Immunization		19
VD		2
Community Plaza	43	
Adult clinic		5
Dental clinic		1
C/Y Clinic		3
Maternal/infant		1
Creighton Family Practice	53	14
University Hospital Emergency Room	86	36
UNMC Outpatient	77	30
St. Joseph Emergency Room	92	45
Lutheran Emergency Room	71	15
Immanuel Emergency Room	72	19
Immanuel Outpatient	57	8
Clarkson Emergency Room	62	9
VNA HMS	35	6
VNA Home Health Care	49	15

NOTE: N varies from 387 to 401 depending on the number answering the specific question.

TABLE 40

KNOWLEDGE AND USE OF PRIMARY HEALTH CARE FACILITIES
IN SOUTH OMAHA
(South Omaha Respondents)

Facility	Percent Heard Of	Percent Used
SONA	33	
Family Practice Clinic		8
Maternal/Infant Care Clinic		1
Family Planning Clinic		2
Children/Youth Clinic		3
WIC Program		1
Douglas County Health Clinics	57	
Pediatric Clinic		3
Immunization Clinic		6
Central Clinic		3
Indian Chicano Health Clinic	36	3
Creighton Family Practice Clinic	43	10
University Hospital Emergency Room	80	23
UNMC Outpatient Clinic	64	17
St. Joseph Emergency Room	78	27
Old St. Joseph Outpatient Clinic	7	3
Old St. Joseph Emergency Room	83	44
Lutheran Hospital Emergency Room	68	19
Prairie Clinic	69	30
Clarkson Hospital Emergency Room	61	11
VNA Health Maintenance Sites	48	8
VNA Home Health Care	51	14

NOTE: N varies from 398 to 419 depending on the number answering the specific questions.

TABLE 41

THE EFFECT OF SELECTED CHANGES IN THE HEALTH DELIVERY SYSTEM ON UTILIZATION OF HEALTH CARE FACILITIES

	Percent Saying Desired			Percent of Providers Saying Feasible
	North Omaha	South Omaha (Hispanics)	South Omaha (Other)	
	N=19	N=14	N=16	N=16
H.M.O. (Pre-paid health maintenance)	63	86	38	53
Health screening in the local neighborhood by a nurse practitioner, physicians' assistant, etc.	84	93	25	87
A local facility that would refer to proper specialist or hospital and follow-up to assure good services	63	71	69	36
Facilities open nights/weekends	63	71	56	80
Reduce waiting time	84	93	69	36
Have mobile facilities and a regular schedule in the neighborhood	63	71	38	64

a mobile van or a physicians' assistant/nurse practitioner for neighborhood screening or having facilities open evenings and weekends. Fewer of the other South Omaha community leaders felt that innovative services would increase utilization reflecting the more conservative nature of the South population.

Providers felt that a number of innovative practices were feasible. Fewer felt that the comprehensive follow-up service or a reduction in waiting time would be feasible, primarily because it would increase cost. About half (53%) agreed that pre-paid health maintenance would be feasible. Almost two-thirds (64%) said it would be feasible to have mobile facilities visit the neighborhoods, 80% said extended hours would be feasible, and 87% said health screening in neighborhoods by nurse practitioners or physicians' assistants was a feasible improvement.

VI

SUMMARY AND IMPLICATIONS

In this section the findings of the study will be summarized, and their implications for health care providers will be indicated. Some recommendations will be made about the kinds of programs that health providers elsewhere have tried when faced with the same implications.

Summary of Findings

The socio-economic characteristics of the sample were similar to that of the census tracts from which the sample was drawn. This suggests that the sample was, indeed, representative and that what was true of the sample was true of the total population of this area. A majority of the North Omaha population were Black, primarily unskilled, in service and labor occupations, and were Protestant, primarily Baptist. A majority of the South general population were White with 20% identifying themselves as Polish, Czech, or Italian. A large minority of Mexican Americans and Blacks lived in one area. The South sample had more professional, sales, and skilled occupations than the North sample. Both samples were older than the general Omaha population or the Nebraska population with South older than North. A large majority lived in single-family houses with fewer in the North general population sample than in the South owning their homes.

The incomes of both North and South were lower than Nebraska with North lower than South. A relatively large proportion of the respondents in the general population samples said their major source of income was from Social Security (17% North and 32% South), reflecting the age of the population. The populations in the elderly high rises and the low income public housing had lower incomes, more from Social Security and AFDC. Residents of the South Omaha low income housing were more similar to the North Omaha population than to the South Omaha population.

For almost half (47%) of the North general population sample, the major source of payment for health care was health insurance. Medicaid/Medicare was the predominant source for 34% and out-of-pocket for 15%. In the South, these proportions were 63% health insurance, 20% Medicare/Medicaid,

and 9% out-of-pocket. The proportion of the population with health insurance was much less in both samples than in the Nebraska population, where 84% paid for most of their health care through health insurance.

Populations of the elderly high rise and low income public housing in both the North and South reported poorer general health status. More reported their health as poor or fair, had more worry about health, and more pain than the general population samples.

Both North and South Omaha reported poorer health conditions than the population of Nebraska. They reported more permanent physical limitations and more chronic illnesses than either a Nebraska or national sample, and health indicator data showed higher mortality rates among young people and proportionately more deaths from cirrhosis, pneumonia, and diabetes.

The general value of prevention was shared by both North and South Omaha populations. However, their attitudes about preventive care and self-care and their faith in scientific medicine were relatd to income, age, and source of payment for health care. In general, older people, those with low incomes, and those who paid for all medical care out-of-pocket agreed more with medical self-help attitudes and less with prevention attitudes. Older persons and those with strong ethnic identification agreed more with the family related items. Older people and those who paid for medical care out-of-pocket agreed that a lot of pain is to be expected in life.

Even though they reported more physical limitations, more chronic illnesses, and poorer health than Nebraska adults, residents of both North and South Omaha were not more likely to report a doctor visit in the last year than the Nebraska population. The elderly and low income residents were more likely to report a visit in the previous three months or year than either of the general populations. Far fewer residents in the target areas reported dental visits in the last year. A majority of residents in the target areas followed the advice of their doctors for home care, did not telephone for advice, and did not try to see the doctor evenings or weekends. People with more education and higher incomes were more likely to telephone the doctor and seek care evenings and weekends.

The usual source of care of respondents was similar to that found elsewhere. A larger proportion of low income residents than other residents relied on hospital outpatient and other clinics.

A majority of people had been using their usual source of care for over five years. The reason for the choice of care was predominantly the influence of family and friends for users of private primary care physicians. Outpatient and other public clinics were chosen more often because they were nearby or had been recommended by a social worker. Proximity was given as the reason by 41% of the South Omaha low income public housing sample. Only about 10% of any group mentioned media or advertising as a reason for their choices.

Means of travel to health care varied directly with income--the higher the income, the larger the proportion using cars. Many old people used the bus, and many of the South low income public housing residents walked. Travel time and waiting time at the usual source of care also varied directly with income.

Satisfaction with overall medical care was expressed by most respondents, but fewer were satisfied with the cost and convenience of the care. People who used private physicians were more satisfied with most aspects of care. Those who used hospital outpatient clinics were least satisfied. People who paid for medical care out-of-pocket and the "near poor," those with incomes from $5,000 to $14,999, were also least satisfied.

The usual Omaha providers for a majority of North general residents were the UNMC Outpatient Clinic (15%), St. Joseph Outpatient Clinic (11%), and the primary care physicians in the area downtown and around UNMC. In South Omaha, only 8% of the general population used the two outpatient clinics; 22% used the private physicians in the area. Other North Omaha residents tended to go northwest toward the Immanuel Hospital Outpatient Clinic, its surrounding private physicians, or to physicians in the downtown area, around UNMC, and in Benson. South Omaha residents tended to go south to Papillion, Bellevue, and Ralston, or southwest on Center.

In the North, 42% of the residents from the elderly high rises and 63% of the low income housing residents used the two outpatient clinics and the health clinics in the area, including Immanuel Hospital. In the South, 20% of the elderly high rise residents and 49% of the low income housing residents used the outpatient and health clinics. The remainder used private physicians in the same pattern as the general population.

Far fewer private and public health care facilities were found in North Omaha than South Omaha. Furthermore, in both areas a majority of the resi-

dents had never heard of some of the public facilities, especially the health clinics located in the area. In the past two years, several health clinics have closed because they were under-utilized. The data supported the assumption that residents prefer to use local facilities. For instance, more South Omaha residents used facilities within the South area. About 22% of the South general population and 26% of South elderly used private physicians within the area compared with 7% of North's general and 6% of the elderly populations. The pattern was even more striking among residents of the low income housing with 51% of South's but only 12% of North's low income housing residents using health clinics within the area. As a result, travel time to source of care was longer for North Omaha residents, thereby increasing the amount of difficulty involved with obtaining health care.

When respondents were asked what improvements were most needed in their medical care services, the most frequently mentioned other than reduced cost were less waiting time, better doctor-patient relationships, and more doctors for chronic disorders among adults.

Implications

The findings of this research can be used to answer three questions: 1) How do low income, minority, and elderly residents in North and South Omaha use medical services?, 2) What factors affect utilization?, and 3) What can be done to encourage utilization of preventive services by these "at risk" populations?

Patterns of Use

The research results tend to support Dutton (1978) who said that there were two distinct patterns of medical care utilization, one for the poor who used public clinics and the other for the non-poor who used private physicians. While this is not a closed causal system and the patterns do not fit everyone, the trends can be seen in the previous summary of the data. Table 42 shows the proportion of persons using private physicians, health clinics, hospital outpatient clinics, and emergency rooms as their primary sources of care. The differences between Blacks and non-Black persons, between the poor/near poor and the non-poor, between married or widowed persons and divorced, separated, and never married, between persons on salary or pension or those on AFDC, and between those who paid for

TABLE 42

USUAL SOURCE OF CARE AND SOCIO-CULTURAL FACTORS
(Respondents)

	Private Physician	Health Clinic	Outpatient Clinic	Emergency Room	Total Percent
Ethnic Identification (N)					
Black (316)	49	13	37	1	100
Native American (11)	55	27	18	0	100
Mexican American (20)	75	25	0	0	100
Ethnic (74)	81	11	7	1	100
Other Caucasian (323)	75	10	15	1	101
Marital Status (N)					
Married (313)	73	10	16	1	99
Widowed (187)	70	12	16	2	100
Divorced (113)	57	11	32	1	101
Separated (37)	41	22	35	3	101
Never married (119)	43	13	42	2	100
Income (N)					
Under $5,000 (309)	50	16	33	2	101
5,000-9,999 (152)	65	13	21	1	100
10,000-14,999 (107)	68	11	19	2	100
15,000-19,999 (57)	75	7	18	0	100
20,000-24,999 (40)	90	3	8	0	101
Over 25,000 (38)	95	5	0	0	100
Source of Income (N)					
Salary (324)	70	10	19	1	100
Pension (32)	81	13	6	0	100
Social Security and SSI (257)	68	11	19	2	100
AFDC (113)	36	13	49	2	100
Method of Payment (N)					
Out of pocket only (76)	51	13	34	1	99
Medicaid/Medicare (152)	38	16	43	3	100
Medicare only (54)	63	11	26	0	100
Medicare/out of pocket (74)	76	8	15	1	100
Insurance only (101)	71	8	19	2	100
Insurance/out of pocket (156)	84	13	3	0	100

health care out-of-pocket only or by Medicare/Medicaid and those with insurance are both statistically significant and indisputable. Table 43 indicates what these differences mean in utilization of preventive medical care. People who used private physicians made more preventive doctor visits, telephoned the doctor more for advice, and called the doctor when care was needed evenings and weekends. People with private physicians traveled by car and traveled and waited less time than most of those who used the other sources of care. More people with private physicians agreed less with anti-preventive health care statements and were more satisfied with their over-all medical care and the concern of the doctor for their over-all health. Table 43 and Appendix Table XI show the relationships.

If the trend toward the two disparate patterns is present, then the next question is to determine factors that affect the differential use.

What Factors Affect the Use of Health Care Facilities?

In Chapter I, several factors that affected utilization were discussed. The degree to which each of those factors was present in Omaha can now be described.

Economic Factors. Economic factors, especially income, are a major determinant of utilization style, especially preventive use. Table 43 shows that while fewer people with high incomes had visited a doctor in the last year, persons with higher incomes reported more doctor visits for preventive reasons, telephoned the doctor more for advice and for evening and weekend care, and were more satisfied with the quality of their medical care. People with low incomes, but not so low as to be on public assistance, were particularly affected. Those with family incomes $10,000 to $15,000 were least least likely to have visited the doctor in the last year and were least satisfied with their medical care.

One other economic factor affecting utilization is how medical care is paid paid for. Table 43 shows the differences between those paying all costs out-of-pocket, those relying on Medicare or Medicaid, and those utilizing health insurance. Those paying all costs out-of-pocket were less likely to have used a doctor in the previous year, while those relying on Medicare or Medicaid were most likely to have done so. Those paying out-of-pocket were more likely than the others to have reported preventive practices but

TABLE 43

HEALTH CONDITIONS, UTILIZATION OF SERVICES AND USUAL SOURCE OF CARE OF RESPONDENTS

	Income			Payment Source			Ethnic Identification				Age		Source of Care			Clinics	
	Under 10,000	10,000-14,999	15,000+	Pocket Only	Medicaid/ Medicare[a]	Insurance[a]	Black	Mexican American	Other Ethnic[b]	Caucasian	20-64	65+	Private Physician	Health Clinic	Hospital Outpatient	CFPC	SONA
N [c]	494	113	144	93	309	357	329	22	84	349	529	245	496	84	183	28	24
Health Factors																	
Health status fair or poor	38	14	11	23	42	18	33	9	23	26	23	44	27	34	31	30	21
Had physical limitation	18	6	6	8	14	9	12	10	10	11	8	19	10	11	14	4	5
Had a chronic condition	40	25	19	22	43	29	32	29	35	36	22	63	37	33	28	28	17
Five or fewer days confined becuase of illness last year	76	86	87	82	75	85	79	77	78	83	83	73	82	75	80	82	79
Utilization Factors																	
Doctor visit in the last year	82	65	74	61	88	75	79	91	81	75	77	85	81	86	78	93	83
Last doctor visit for preventive reasons	37	43	46	37	34	27	40	27	39	39	40	37	43	30	31	33	21
Doctor visit since first of year for check-up or immunization	38	38	39	45	33	43	36	20	50	39	38	38	40	35	34	40	8
Consulted with family before seeking medical care	45	43	42	53	47	38	47	60	47	40	47	38	45	39	46	41	65
Agreed that going to the doctor for an annual check-up is more trouble than it's worth	37	41	28	49	38	28	43	30	33	28	35	31	28	34	51	37	43
Agreed that pain must be expected in a lifetime	65	50	36	57	63	52	61	40	64	53	51	71	55	62	60	59	52
Agreed that a severe headache calls for doctor visit only after a couple of weeks	48	42	35	48	47	45	46	50	47	45	44	45	41	49	54	52	35
Agreed that if you wait long enough you'll get over most any illness without medical aid	15	15	10	23	17	10	14	25	18	15	12	19	14	8	15	4	22
Telephoned doctor for advice	20	19	36	10	17	25	11	27	26	25	20	17	22	11	18	21	26
Waited if care needed evening/ weekend	19	20	10	14	17	10	13	0	0	11	13	31	14	0	10	13	25
Called physician if care needed evening/weekend	17	40	48	14	17	41	17	100	38	35	26	23	35	29	15	13	0
Used emergency room if care needed evening/weekend	55	30	38	43	60	41	63	0	38	46	51	31	45	43	70	75	75
Provider Factors																	
Used because of proximity	23	30	15	29	19	22	27	25	13	21	23	20	18	40	27	48	75
Used because of family tradition	38	36	38	32	40	39	36	35	51	35	36	41	22	24	25	28	13
Used car to usual source of care	34	83	90	55	27	73	41	68	58	62	63	30	58	37	45	34	21
Used bus to usual source of care	24	9	4	21	25	11	25	5	18	11	15	23	14	23	23	17	0
Walked to usual source of care	7	3	1	5	8	3	3	9	10	4	4	7	5	8	3	10	50
Traveled more than 20 minutes	29	18	10	22	32	16	32	10	15	17	21	27	21	17	33	17	0

TABLE 43
(Continued)

HEALTH CONDITIONS, UTILIZATION OF SERVICES AND USUAL SOURCE OF CARE OF RESPONDENTS

	Income			Payment Source			Ethnic Identification				Age		Source of Care			Clinics	
	Under 10,000	10,000-14,999	15,000+	Pocket Only	Medicaid/ Medicare[a/]	Insurance[a/]	Black	Mexican American	Other Ethnic[b/]	Caucasian	20-64	65+	Private Physician	Health Clinic	Hospital Outpatient	CFPC	SONA
Waited more than 30 minutes in office	43	45	26	47	48	38	44	43	38	36	39	44	37	44	50	36	5
Satisfied wih doctor's concern with overall health	86	77	90	75	84	87	82	95	89	87	85	86	88	88	81	93	88
Satisfied with quality of medical care	89	77	92	86	87	90	85	91	93	90	89	87	91	88	83	89	92
Satisfied with quality of doctors	89	78	94	82	87	92	86	91	93	91	88	90	91	91	84	96	96
Satisfied with out-of-pocket costs	60	53	58	47	61	62	54	45	66	63	58	60	59	65	55	67	75
Satisfied with waiting time at doctor's office	62	53	61	59	60	63	53	50	75	65	58	70	63	66	56	63	83
Satisfied with ease of travel to the doctor	83	82	89	75	84	87	81	91	78	88	84	85	85	85	86	89	100

[a/] Respondents reporting a combination of Medicare or Medicaid with health insurance categorized only in Insurance.

[b/] Polish, Czech, Italian.

[c/] N varies slightly with number answering specific questions.

more likely to hold anti-preventive attitudes. They were more likely to have had their last doctor visit be for preventive reasons or have made a visit since the first of the year for a check-up or immunization but more likely to have agreed that going to a doctor for an annual check-up was more trouble than it was worth or that if one waited long enough one will get over almost any illness. Respondents using insurance were most likely to be satisfied with their care, and those paying out-of-pocket were least likely to be satisfied. Respondents relying on Medicare or Medicaid were most likely to use a hospital emergency room if care was needed on a weekend or at night.

Geographic Access. Geographic proximity appeared to increase utilization of health services, especially among low income persons. As shown in Table 43, the nearness of a health facility was the reason for its use by 27% of the outpatient users and 40% of the health clinic users. Furthermore, South Omaha residents used physicians within the area more than North Omaha residents, primarily because more physicians practice in the South area.

Two area health clinics served to emphasize this finding. The SONA facilities and the combination of all Creighton Family Practice Clinics had enough respondents designating them as their usual sources of care to include them in a separate analysis. These data are presented in Table 43. Users of these two clinics were more likely to have visited a doctor in the last year than were other groups of respondents.

Both facilities reported more users because of proximity, especially the SONA users. SONA services are directly adjacent to the low income housing in South Omaha. Three-fourths (75%) of the users reported proximity as the reason for their choice. No users reported having to spend more than 20 minutes to get there, and 50% walked.

Socio-Cultural Factors. The measurement of socio-cultural factors was a minor emphasis in this research. They affect utilization in a less direct and less easily measured way. Two factors included in this study were the relationship between ethnic identification and utilization patterns and the effect of family on health care decisions.

Table 43 shows that more people who identified themselves as Italian Americans, Polish Americans, or Czech Americans agreed that pain is to be expected in a lifetime, but the rest of their attitudes and preven-

tive practices were similar to the norm. They were, however, more satisfied with their health care than any other group.

Mexican Americans and Native Americans had too few respondents for reliable analysis. However, the trends in their responses are worth noting. Both groups reported more health problems, were less likely to have seen a doctor in the last year, but were less likely to have seen a doctor for preventive reasons than any other group.

The total Black group's status and preventive doctor visits in the last year were similar to the norm. However, they agreed more than the average that they consulted family before seeking medical care and that going to the doctor for an annual check-up is not worth the trouble. Far fewer telephoned the doctor for advice, and far more used the emergency room evenings and weekends. These results may be more closely related to income than to ethnic status. Blacks were less satisfied with nearly all aspects of their health care than any other group except persons with income between $10,000 and $14,999.

In Chapter IV health utilization in the ethnic sub-culture was shown to be very stable with a majority using their same sources of care for more than five years. Table 43 also shows that persons identified as ethnic were more dependent on family for key medical care decisions. Fifty-one percent (51%) of the ethnic group chose their sources of care because of family tradition, and 60% of the Mexican Americans agreed that they consulted with family before seeking medical care.

These data indicate that ethnic populations primarily used private physicians because of family tradition. Much planning with members of these ethnic communities will be necessary if they are to accept new medical services.

Patterns of health service utilization were different among the Black populations, but this may be more economic than culture related. Blacks, more than any non-ethnic Caucasians, used clinics for their sources of care and chose them because of nearness. New services aimed at this target population should be planned with cost and geographic access in mind.

Organizational Factors. Health care systems appear to be organized to discourage their use for other than acute or chronic health problems. These factors act for all populations but especially low income popula-

tions. The organizational effect is indicated in three ways. First, the out-of-pocket cost of health prevention prohibits all but essential use. Only 47% of respondents who had health insurance reported that it paid for physical examinations so preventive health examinations were out-of-pocket for nearly all but the Medicaid and Medicare assisted patients. The households in North and South Omaha who paid for all medical care out-of-pocket--5%-10% in the South Omaha samples and 13%-15% in the North Omaha samples--had to pay a high percentage of their income for all health care so preventive care would be a low priority. Two-thirds (66%) of these people earned less than $10,000 per year. Nearly half (45%) used health clinics or hospital outpatient clinics. Fees charged in hospital outpatient clinics at this point are not cost effective for non-serious medical care because of the percentage of overhead included in the fee schedule. Much simple medical care and preventive medicine, once performed by the general practitioner in an office without expensive equipment, would still be more efficiently performed outside of the expensive hospital complexes.

Second, most hospital outpatient clinics and doctors' offices are closed evenings and weekends when hourly workers could make preventive visits without a loss of pay.

An office visit to put a few stitches in a cut or a telephone call to answer a question about the baby's high temperature would be far less expensive than emergency room care for those who now use these facilities for evening and weekend care or for those who wait until regular office hours, perhaps exacerbating a problem.

Third, the structure of care, with its long, inconvenient wait, even at the offices of private physicians, discourages use except when absolutely necessary. Only if people are strongly committed to preventive medicine do they go through the inconvenience of obtaining preventive medical services.

The exception to these organizational effects seems to be maternal and infant care clinics and the VNA health maintenance sites (which are organized around prevention), some public health programs, and some of the area health clinics. None of these health services is in the mainstream of organized health delivery systems. This is the source of both their advantages and disadvantages. The SONA services and the Creighton Family Practice Clinics are staffed by medical school physicians and students and primarily funded by government grants. The granting

bodies value the development of innovative care systems for minority and low-income populations. However, if services are not institutionalized locally, when outside funding ceases these programs will also cease.

What Can Be Done to Encourage Utilization?

With some trepidation this report concludes with recommendations to the health care systems. However, the feeling of obligation to the respondents of this survey, who agreed to be interviewed, is greater than this hesitancy. The recommendations are based on three assumptions:

First, the non-profit medical care providers in Omaha must make a conscious decision about whether low income people should have good medical care, especially preventive care. This decision is even more urgent if Medicaid and federal aid to medical schools and hospitals are cut as anticipated in the near future.

Second, the taxpayers of Douglas County and Nebraska must make a similar decision; if the federal government cuts aid, should low income people have good medical care and an equal chance of a long and healthy life?

Third, if the answer to the above questions is yes as it is assumed to be, then taxpayers will most likely demand that services must be delivered by the most cost-efficient method. The most cost-efficient way to deliver most preventive and many episodic services is in the local area, using already established service systems, organizations, or other resources.

With this perspective, the major recommendation of this study is for comprehensive planning to meet specific health goals for specific target populations at risk.

A major problem encountered by the research team was the difficulty in locating the medical services purported to be in the area. Within the past eight months, two clinics opened, three closed or moved, and now one of those closed has reopened at the same location. Decisions on the nature and location of health services in the area apparently were based on the availability of outside funds rather than on the location and needs of the target populations. Once the facilities were located, considerable difficulty was encountered in determining the number of patients served and their geographic origin, the source of funds, the source of medical personnel, the fees charged, etc. The general recommendation of this research is

that a long term, coordinated plan be developed specific to each geographic area and targeted to the needs of underserved populations.

The following general suggestions are made:

1. Develop a community based planning body with medical providers, community leaders, other service providers, and consumers.

Personnel from the relevant departments of the two medical schools, the major hospitals serving the area, the Douglas County and Nebraska Health Departments, the VNA, and the regional representatives of any remaining regular sources of federal funding should form the core of a North Omaha and a South Omaha planning committee. Also on the committee should be representatives of other human service providers in the area, such as the Omaha Housing Authority, the Douglas County Department of Public Welfare, the Omaha Public School District, the non-profit organizations such as the Boys Club and the Girls Club, the churches, lodges, community and neighborhood organizations, and a few vocal consumers.

The manner in which people choose medical services and how long they use them suggests that new services can best be planned and established within the existing community structures. Some of these organizations have been involved in preventive, cost-efficient care. Examples of successful use of community structures include the school immunization program, the VNA health screening at nutrition sites (primarily in churches and Omaha Housing Authority facilities), and the Boys Club health examinations for participants in their programs.

2. Develop concrete goals for a five year period.

The planning committees should develop concrete goals for a five-year period for specific target populations. Some goals might include the following:

a. Provide preventive cost-efficient clinics within a 20-minute bus ride or walk for those populations with family incomes under $15,000, to be delivered with a sliding scale of costs subsidized with public or non-profit resources.

b. Provide easily accessible maternal/infant and pediatric care in areas with a high proportion of women 15 to 35 years old at the rate of one clinic per 20,000 population, assuring approximately 1,200 pregnant patients and 1,200 to 4,800 infants and children to be served per year.

c. Provide alcohol treatment and counseling services along with health services for adults in areas with much alcohol abuse, illness, and family disturbance.

3. Encourage existing providers to eliminate barriers to utilization by the target populations.

This is a major goal in itself. For instance, private physicians should be 1) encouraged to support and practice in the new low-cost programs; 2) encouraged to supervise nurse-practitioners and physicians' assistants in non-critical and preventive care; and 3) made aware of the effect of office personnel and procedures on health attitudes and practices.

Hospitals should be encouraged to 1) participate in providing some primary care and non-serious service in a more cost-efficient way; 2) monitor or evaluate the procedures of emergency rooms and outpatient clinics and the behavior of personnel in interaction with low income ethnic minorities; and 3) provide training to medical and non-medical personnel in the legitimacy of minority cultures and the extent to which anti-medical care attitudes spring from the experiences of these persons in the current care systems.

The mobile health van is one example of the provision for cost-efficient primary care and non-serious service. Another is Tel-Med, a national phone system that gives advice 24 hours a day. Another example is a recent trend to drive-in, low cost, no wait, non-critical health services. About 150 of these units situated in shopping centers and on heavily traveled streets are currently operating throughout the country.

The cultural and economic situations of potential users should be considered when providing new services. Services should be open evenings and weekends where indicated by the community. Personnel attitudes and practices towards minorities, their language, their personal feelings, their dress, etc., should be actively monitored. Some workshops or other training of personnel with community leaders might encourage a beneficial dialogue.

4. Consider geographic access in planning new services.

A major consideration in the placement of new preventive and non-serious services is easy access. Barriers to easy access include railroad

tracks, stockyards, the North Freeway, the Kennedy Freeway Extension, the Interstate, and busy thoroughfares such as Q Street or North 30th Street. Easy bus or walking access for people without cars and easy parking for those who have them should be included.

5. Develop a funding plan for at least five years.

A five-year plan for funding assures the continuation of the service while it is becoming established and utilized in an area. The county and state, along with the medical schools and hospitals, must be persuaded to share the burden of medical services to low income groups. Medical schools may have to commit themselves even if federal funding ceases. The community must become involved with the search for funding, either directly or by using political pressure.

6. Develop a fee schedule.

A schedule of costs of medical services should be developed. Charges should be less for simple preventive screening, immunizations, etc. The exact cost of laboratory tests should be known before they are undertaken.

7. Address the needs of rapidly changing areas and populations.

The plan should address the needs of rapidly changing areas and populations in Omaha. For instance, six Asian familes were included in this survey for which translators had to be located by survey personnel. New services in changing areas should provide bilingual personnel or at least know where to reach such people should it be necessary.

The ethnic areas are changing too. As the older populations die and their homes are sold to low income families, pockets of new health care needs will likely develop. The earlier such needs are addressed, the less alienation the new residents will feel and the better the community will be.

8. Address the need for outreach to under-utilizing populations.

The plan should address the need for outreach to under-utilizing populations. Other community organizations in the planning committee might wish to commit themselves to a plan for providing regular outreach. Any plan for outreach should remain sensitive to the need to motivate and assist traditional under-utilizers to seek medical care.

Conclusion

A planning committee may find that sufficient services to meet the health care needs of a population already exist in a certain area but that those services are under-utilized. Perhaps concerned professionals and community leaders can work together to remove the barriers to utilization and develop outreach targeted to under-utilizers and other at risk populations.

A final recommendation is the continuation of concerted efforts to socialize children and young adults into better health and preventive health practices. This could be done through the public schools, the current medical services, and through the community structure. The public health services and the schools do some education, but neither is comprehensive enough to overcome family practices and attitudes. Furthermore, trying to change utilization patterns is probably futile if the cost is prohibitive, if providers are unable and/or unwilling to meet new demands for services, or if people's experiences in getting health care continue to reinforce current attitudes and practices.

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APPENDICES

APPENDIX A

TABLES

TABLE I

SELECTED POPULATION AND HEALTH CHARACTERISTICS, NORTH OMAHA CENSUS TRACTS

	2	4	5	62.01	62.02	Total	7	8	9	10	11	12	13.01	13.02	14	15	Total
Population 1980 Census	4,814	2,513	678	524	5,133	13,662	1,697	2,354	1,165	1,555	1,238	1,424	593	589	363	523	11,505
Black	252	73	11	8	699	1,043	1,498	2,039	1,030	1,476	1,176	1,326	374	204	190	396	9,709
Spanish origin	52	67	2	7	54	182	19	53	17	19	5	4	6	7	12	4	150
American Indian	4	20	9	4	34	71	25	22	23	28	5	23	18	23	28	19	214
Population 1980 ICES	5,198	3,117	633	553	5,743	15,244	2,030	2,422	1,263	1,624	1,521	1,492	587	629	436	619	12,623
65 and over	899	332	438	102	692	2,463	307	218	150	256	298	185	107	77	28	100	1,726
Minority Population–1980																	
Total households	1,659	1,099	201	212	1,714	4,885	742	723	403	554	540	518	212	230	176	201	4,299
Total housing	10,683	1,102	249	221	1,725	13,980	889	952	510	636	608	583	323	286	222	228	5,237
Single family housing	1,065	653	249	140	1,653	3,760	545	714	287	388	409	195	173	179	33	192	3,115
Multi-family housing	78	31	0	81	72	262	344	238	223	248	199	388	150	107	189	36	2,122
Owner occupied	1,461	891	196	125	1,461	4,134	361	533	244	292	282	158	177	139	29	118	2,333
Vacant housing	24	3	48	9	11	95	147	229	107	82	68	205	111	56	46	27	1,078
Mean housing value	28,032	22,835	14,325	27,993	24,618	–	7,892	8,471	6,227	7,011	3,180	6,033	3,833	5,192	2,500	11,000	–
Public housing units	0	0	0	0	0	0	118	0	0	175	143	334	0	0	53	0	823
Labor force	2,966	1,941	1,247	313	3,210	9,677	1,672	2,229	1,131	1,017	1,141	959	642	425	121	621	9,958
Number of unemployed	129	69	91	10	102	401	180	220	203	76	151	156	109	13	9	18	1,135
Public assistance	248	215	94	14	304	875	556	590	394	633	557	681	263	170	190	162	4,196
Median income	14,200	12,100	17,000	11,600	14,800	–	9,300	13,200	9,600	5,900	6,000	6,200	8,100	8,000	3,300	4,300	–
Births 1977	83	46	16	8	94	247	46	51	32	49	36	34	22	18	7	18	313
Mothers under 17	4	3	2	0	10	19	9	9	8	5	3	7	4	1	1	1	48
Births 1978	78	40	11	5	90	224	32	59	29	28	40	36	18	13	15	14	284
Non-white births 1978	10	1	1	1	10	28	27	52	23	27	39	33	15	10	8	11	245
Low weight births 1978	6	8	0	1	9	24	2	6	6	5	9	4	0	3	1	0	36
Births 1979	80	37	12	3	79	211	21	52	27	38	27	31	18	16	8	16	254
Non-white births 1979	6	3	2	–	15	26	19	42	25	36	26	30	15	9	5	15	222
Infant/fetal deaths 1979	4	0	0	0	3	7	1	1	0	2	3	3	1	0	0	0	11
Infant deaths 1979	2	0	0	0	0	2	0	0	0	1	2	2	1	0	0	0	6
Non-white infant deaths 1979	0	0	0	0	0	0	0	0	0	1	2	2	0	0	0	0	5

TABLE I
(Continued)

SELECTED POPULATION AND HEALTH CHARACTERISTICS, NORTH OMAHA CENSUS TRACTS

	49	3	6	51	52	53	54	59.01	59.02	60	61.02	Total	Total Omaha
Population 1980 Census	4,858	2,727	2,232	3,066	2,826	2,314	3,836	2,997	3,043	4,439	3,051	30,531	397,884
Black	354	1,211	1,220	1,101	2,470	1,464	1,669	2,146	2,600	1,891	1,588	8,225	29,831
Spanish origin	97	41	32	90	40	42	95	32	36	111	84	603	8,240
American Indian	27	39	48	62	23	39	30	19	34	42	26	362	1,947
Population 1980 ICES	5,273	3,003	2,748	2,940	3,000	2,810	4,417	3,369	3,552	5,006	3,276	34,121	393,506
65 and over	716	313	757	297	152	224	343	244	263	602	371	3,566	41,619
Minority Population – 1980													
Total households	2,337	821	891	1,093	987	821	1,322	994	1,083	1,525	1,587	11,124	135,382
Total housing	2,363	991	940	1,420	1,062	890	1,351	1,030	1,180	1,610	1,612	12,086	144,358
Single family housing	843	848	643	579	470	843	1,102	961	1,105	1,508	1,539	9,598	97,843
Multi-family housing	1,520	143	297	841	592	47	249	69	75	102	162	2,577	44,825
Owner occupied	748	657	461	427	307	543	806	684	744	1,161	1,349	7,139	89,536
Vacant housing	26	170	49	227	75	69	29	36	97	85	11	848	8,976
Mean housing value	26,438	14,624	9,647	16,062	7,841	9,824	15,883	16,500	9,295	12,697	19,968	–	–
Public housing units	0	0	107	0	382	0	0	0	0	0	0	489	2,868
Labor force	3,892	1,650	1,674	2,454	1,296	1,606	2,217	1,829	2,165	3,084	3,407	21,382	148,193
Number of unemployed	98	73	129	127	114	174	85	122	171	196	67	1,258	7,218
Public assistance	300	601	682	487	1,388	607	666	644	745	694	465	6,979	22,717
Median income	10,100	13,000	11,400	10,700	6,800	9,900	11,800	12,600	12,600	11,000	13,900	–	–
Births 1977	80	49	73	68	85	46	85	64	55	107	87	719	6,614
Mothers under 17	4	7	10	8	22	4	10	8	8	13	9	99	361
Births 1978	84	52	69	63	103	67	76	64	72	101	106	773	6,663
Non-white births 1978	17	29	56	36	94	47	32	49	65	57	43	508	1,303
Low weight births 1978	8	8	15	3	11	8	7	8	14	10	6	90	467
Births 1979	101	49	73	68	85	46	85	64	55	107	87	719	7,020
Non-white births 1979	12	34	35	30	87	40	53	55	69	55	39	497	1,121
Infant/fetal deaths 1979	2	1	1	0	6	5	3	2	5	3	3	29	160
Infant deaths 1979	2	0	0	0	4	3	2	1	4	2	0	16	160
Non-white infant deaths 1979	0	0	0	0	4	1	0	1	4	1	0	11	27

TABLE II

SELECTED POPULATION AND HEALTH CHARACTERISTICS, SOUTH OMAHA CENSUS TRACTS

	20	21	22	23	24	25	26	27	28	30	31	32	33	Total	29	34.01	34.02	38	Total	Total Omaha
Population 1980 Census	2,675	2,213	1,815	2,211	3,154	2,431	1,992	2,007	2,882	6,212	3,397	1,970	2,200	35,159	4,331	3,449	2,642	4,480	10,571	397,884
Black	5	13	20	22	4	4	14	5	47	63	20	20	23	260	1,266	38	1	53	92	39,831
Spanish origin	219	233	176	124	238	161	255	425	363	294	156	219	140	3,003	601	69	49	106	223	8,240
American Indian	40	29	13	16	37	11	16	24	9	16	17	13	64	305	91	7	10	30	47	1,947
Population 1980 ICES	2,901	2,505	1,667	2,157	3,265	2,694	2,051	2,073	3,201	6,597	3,610	1,973	2,343	37,037	4,736	3,853	2,761	4,250	10,864	393,506
65 and over	522	529	211	273	618	484	267	353	506	1,054	567	464	272	6,120	442	626	433	641	1,700	41,619
Minority Population – 1980																				
Total households	1,046	1,034	514	817	1,196	932	686	724	1,167	2,270	1,261	864	786	13,297	1,513	1,465	945	1,697	4,107	135,382
Total housing	1,100	1,129	529	836	1,259	962	722	754	1,171	2,298	1,293	981	820	13,854	1,602	1,559	982	1,865	4,406	144,358
Single family housing	860	605	352	553	926	863	575	658	1,004	2,256	1,131	435	602	10,820	1,024	1,119	858	722	2,699	97,843
Multi-family housing	240	524	177	283	333	99	147	96	167	42	162	546	218	3,034	575	440	124	1,143	1,707	44,825
Owner occupied	701	467	284	475	786	741	504	526	884	2,075	1,038	368	513	9,362	877	1,001	818	736	2,555	89,536
Vacant housing	54	95	15	19	63	30	36	30	4	28	32	117	34	593	89	94	37	168	299	8,976
Mean housing value	17,666	21,184	18,142	17,917	19,283	23,274	20,565	18,194	22,167	28,882	22,930	23,514	18,488	–	19,499	28,827	20,229	36,400	–	–
Public housing units	0	144	0	0	0	0	0	0	0	0	0	225	0	369	386	0	0	223	223	2,868
Labor force	1,896	1,468	1,543	1,830	1,811	1,600	1,226	1,367	1,926	4,188	2,398	1,503	1,738	24,494	2,208	2,540	1,480	2,867	6,887	148,193
Number of unemployed	107	107	69	93	18	98	60	104	187	151	176	113	118	1,301	183	67	55	145	267	7,218
Public assistance	247	229	137	71	193	96	131	122	127	153	153	184	201	2,044	1,070	178	25	363	566	22,717
Median income	11,600	10,400	11,900	12,000	11,100	11,100	12,100	11,500	11,700	13,500	13,600	13,600	11,500	–	9,600	14,100	14,100	12,300	–	–
Births 1977	30	47	29	63	49	38	29	30	50	83	53	39	50	597	71	52	31	79	162	6,614
Mothers under 17	2	3	4	4	5	4	3	6	2	4	2	3	5	47	7	1	3	7	11	361
Births 1978	61	45	39	61	49	34	37	49	58	94	40	31	30	628	93	57	41	77	175	6,653
Non-white births 1978	13	8	12	2	7	3	7	14	17	14	2	11	6	116	48	7	2	6	15	1,303
Low weight births 1978	4	1	0	0	2	1	2	3	3	10	2	1	1	30	14	3	2	6	11	467
Births 1979	62	38	36	59	82	42	45	37	60	97	63	31	37	689	117	56	45	70	171	7,020
Non-white births 1979	1	0	0	1	3	3	0	1	3	1	0	0	6	19	37	1	0	2	3	1,121
Infant/fetal deaths 1979	0	0	2	1	4	1	2	0	1	3	0	1	1	17	2	1	0	1	2	160
Infant deaths 1979	0	0	1	1	3	0	1	0	1	3	0	0	0	10	1	1	0	1	2	160
Non-white infant deaths 1979	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	27

TABLE III

SOCIO-ECONOMIC FACTORS AND HEALTH STATUS
(All Household Members)

	Payment Source							Ethnic Identification					Income			Age		
	Pocket Only	Medicaid/ Pocket	Medicaid/ Medicare	Medicare Only	Medicare/ Pocket	Insurance Only	Insurance/ Pocket	Black	Mexican American	Native American	Ethnic[a]	Other Caucasian	Under 5,000	5,000-19,999	20,000+	15-19	20-44	45+
N [b]	222	65	428	102	110	334	482	870	72	36	195	818	649	935	285	212	602	632
General Health Status																		
Excellent	34	28	25	16	14	38	47	29	39	17	38	36	24	37	46	43	39	17
Good	51	52	56	47	44	54	44	53	53	58	44	48	49	49	45	53	49	45
Fair	13	11	13	28	29	6	8	13	7	14	13	13	19	11	8	3	9	28
Poor	3	10	6	9	14	2	1	5	1	11	5	4	7	3	1	1	3	11
Total	101	101	100	100	101	100	100	100	100	100	100	101	99	100	100	100	100	101
Worry About Health																		
A great deal	7	9	8	9	10	3	4	6	3	8	12	5	8	6	5	1	6	11
Some	17	22	19	30	29	15	18	19	15	22	22	19	25	18	14	13	19	29
Hardly any	17	20	27	12	27	32	24	25	17	31	20	27	25	24	28	20	27	26
None at all	60	49	46	49	35	50	53	50	65	39	45	49	42	53	53	66	49	35
Total	101	100	100	100	101	100	99	100	100	100	99	100	100	101	100	100	101	101
Incidence of Pain																		
Very often	7	9	8	10	24	2	5	6	8	13	11	7	10	6	5	2	6	16
Fairly often	6	12	6	13	7	4	7	7	5	10	8	7	8	7	5	5	8	12
Occasionally	32	31	30	35	50	41	36	33	47	16	32	41	35	38	37	33	39	44
Not at all	55	48	57	42	19	53	52	54	41	61	49	45	46	49	54	61	47	29
Total	100	100	101	100	100	100	100	100	101	100	100	100	99	100	101	101	100	101
Days Family Member Confined Indoors Last Year																		
None	72	72	72	72	61	63	72	72	54	53	64	68	68	68	66	77	64	63
1-5	14	14	15	11	15	26	17	14	33	33	17	20	14	19	23	13	24	13
6-10	5	2	6	8	5	7	5	7	6	3	4	6	8	5	7	6	6	8
11-30	4	12	4	5	8	3	4	5	0	6	5	4	6	4	4	2	5	8
31-98	6	0	4	4	12	1	2	3	7	6	10	2	5	4	1	1	2	8
Total	101	100	101	100	101	100	100	101	100	101	100	100	101	100	101	99	101	100

[a] Polish, Czech, Italian

[b] N varies slightly with number answering specific questions.

TABLE IV

SOCIO-ECONOMIC FACTORS AND HEALTH CONDITION
(All Household Members)

	Payment Source							Ethnic Identification					Income			Age		
	Pocket Only	Medicaid/ Pocket	Medicaid/ Medicare	Medicare Only	Medicare/ Pocket	Insurance Only	Insurance/ Pocket	Black	Mexican American	Native American	Ethnic[a]	Other Caucasian	Under 5,000	5,000-19,999	20,000+	1-19	20-44	45+
N[b]	222	65	428	102	110	334	482	870	72	36	195	818	649	935	285	807	602	632
Physical Limitations																		
Yes	4	3	10	16	13	1	4	8	3	9	5	6	12	5	3	1	3	16
No	96	97	90	84	87	99	96	92	97	91	95	94	88	95	97	99	97	84
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Transportation Limitations																		
Yes	2	3	5	13	11	1	2	4	0	6	5	5	7	3	1	1	1	12
No	98	97	95	87	89	99	98	96	100	94	95	95	93	97	99	99	99	88
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Mechanical Aid Needed																		
Yes[c]	1	1	2	11	11	1	1	3	2	3	3	3	5	2	1	1	0	9
No	99	99	98	89	89	99	99	97	98	97	97	97	95	98	99	99	100	91
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Chronic Illness																		
Yes	13	22	15	38	53	10	16	17	16	19	23	22	28	16	13	4	10	48
No	87	79	85	62	47	90	84	83	84	81	77	78	72	84	87	96	90	52
Total	100	101	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Pregnant Last 12 Months																		
Yes	4	8	8	4	0	4	3	4	4	6	2	3	5	5	1	2	10	0
No	96	92	92	96	100	96	97	96	96	94	98	97	95	96	99	98	90	100
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	101	100	100	100	100

[a] Polish, Czech, Italian

[b] N varies slightly with number answering specific questions.

[c] Bed, wheel chair, cane, or crutch

TABLE V

SOCIO-ECONOMIC FACTORS AND HEALTH ATTITUDES/VALUES: PERCENT AGREEING
(Respondents Only)

	Payment Source							Ethnic Identification				Income			Age	
	Pocket Only	Medicaid/ Pocket	Medicaid/ Medicare	Medicare Only	Medicare/ Pocket	Insurance Only	Insurance/ Pocket	Black	Mexican American	Ethnic[a]	Other Caucasian	Under 5,000-	5,000- 19,999	20,000+	20-44	45+
N [b]	94	19	153	63	75	108	170	332	22	84	351	330	344	84	347	434
A person must expect a good deal of pain in life.	57	63	61	71	60	39	51	61	40	64	54	68	52	35	47	65
I seek advice from family when ill.	53	38	53	43	41	30	45	47	60	47	40	47	42	42	53	37
Belief in Effectiveness of Medical Science																
If you wait long enough you can get over almost any illness without any aid.	23	19	14	25	16	7	10	14	25	18	15	17	12	11	12	17
Modern medicine can cure most any illness.	41	38	39	42	44	32	40	36	45	47	41	39	37	48	40	40
Self-Treatment																
A person understands his/her own overall physical health better than doctors.	52	69	49	61	48	38	39	52	55	54	41	52	48	35	47	49
I usually try several treatments before going to the doctor.	65	44	47	61	49	61	55	58	50	58	51	51	59	54	56	53
I usually forget the doctor's instructions by the time I get home.	22	19	16	17	12	6	9	14	10	12	13	14	13	11	13	13
Prevention																
Going to doctor for an annual check up usually takes more time than it's worth.	50	38	42	37	29	35	23	44	30	33	28	37	36	29	39	29
A severe headache calls for medical care only if it's still there after a couple of weeks.	48	63	53	41	37	46	41	46	50	47	45	48	44	37	47	42
I only go to the dentist when I have a toothache or other dental problem.	60	44	62	71	68	46	43	62	60	59	50	66	54	27	50	60
Family Health Care Pattern																
Father seldom went to the doctor.	53	53	52	62	71	49	68	43	85	73	70	56	63	60	54	68
Mother went to doctor only when she had a severe illness or a baby.	54	50	65	59	77	47	68	51	70	76	70	66	63	57	58	69

[a] Polish, Czech, Italian

[b] N varies slightly with number answering specific questions.

TABLE VI

SOCIO-ECONOMIC FACTORS AND UTILIZATION
(All Household Members)

	Payment Source							Ethnic Identification					Income			Age					
	Pocket Only	Medicaid/ Pocket	Medicaid/ Medicare	Medicare/ Only	Medicare Pocket	Insurance Only	Insurance/ Pocket	Black	Mexican American	Native American	Ethnic[a]	Other Caucasian	Under 5,000	5,000-19,999	20,000+	1-4	5-9	10-14	15-19	20-44	45+
N[b]	222	65	428	102	110	334	482	870	72	36	195	818	649	935	285	227	193	179	208	602	632
Last Doctor Visit																					
Last 3 months	29	39	42	52	55	27	35	38	35	37	44	37	44	33	35	55	28	28	28	34	46
3-6 months	12	14	20	10	15	16	13	14	22	6	12	15	16	13	14	18	16	16	13	15	14
6 months-1 year	24	28	27	18	17	28	24	28	35	43	20	19	24	27	19	19	40	34	28	22	18
1-2 years	21	17	8	12	5	19	16	15	7	9	15	15	10	17	18	5	14	18	22	17	12
2-5 years	9	2	2	4	3	5	9	3	0	6	6	8	4	5	10	1	2	2	7	8	6
More than 5 years	4	0	*[c]	4	5	4	4	2	0	0	4	5	2	4	5	0	1	2	2	4	5
Never	1	0	*[c]	1	0	*[c]	*[c]	0	1	0	0	0	*[c]	1	0	2	0	0	0	1	0
Total	101	100	100	101	99	99	101	100	100	101	101	99	100	100	101	100	101	100	100	101	101
Reason for Last Doctor Visit																					
Not feeling good	31	38	28	36	41	31	32	32	28	33	30	32	32	31	31	25	23	25	21	37	37
Required	21	24	17	24	18	18	18	16	28	36	20	22	21	19	18	14	17	17	20	15	26
Time for an examination	44	33	48	36	42	48	48	49	37	28	48	44	44	47	51	60	60	56	53	41	37
Pregnant	4	5	6	3	0	3	2	3	6	3	2	2	4	3	1	1	0	1	6	8	0
Total	100	100	99	99	101	100	100	100	99	100	100	100	101	100	101	100	100	99	100	101	100
Last Dentist Visit																					
Last 3 months	14	13	11	14	13	16	20	12	15	21	23	15	13	12	24	10	15	18	19	16	15
3-6 months	13	19	13	5	7	17	16	11	4	6	15	16	11	12	21	7	28	19	15	16	8
6 months-1 year	23	13	21	16	15	19	22	23	26	15	22	16	19	21	19	6	32	26	20	22	16
1-2 years	15	19	17	14	13	27	16	20	21	26	13	16	15	20	17	6	12	22	28	23	12
2-5 years	12	10	9	22	14	8	11	11	15	15	8	12	11	14	7	1	5	7	12	13	16
More than 5 years	14	15	12	22	37	6	7	12	7	9	16	16	18	13	6	0	1	1	5	8	32
Never	10	11	17	7	2	7	9	12	11	9	5	9	13	9	6	70	7	7	2	2	2
Total	101	100	100	100	101	100	101	101	99	101	102	100	100	101	100	100	100	100	101	100	101
Reason for Last Dentist Visit																					
Toothache/problem	62	64	36	48	36	39	36	44	36	45	34	44	51	42	30	21	17	22	40	47	60
Regular check up	29	25	55	41	38	58	59	44	58	52	59	50	40	49	66	67	81	76	59	46	29
Don't know	9	11	9	11	27	3	6	12	5	3	7	6	8	9	4	12	2	2	2	7	11
Total	100	100	100	100	101	100	101	100	99	100	100	100	99	100	100	100	100	100	101	100	100

[a] Polish, Czech, Italian

[b] N varies slightly with number answering specific questions.

[c] * = less than .5%

TABLE VII

SOCIO-ECONOMIC FACTORS AND OTHER UTILIZATION
(Respondents Only)

	Payment Source							Ethnic Identification				Income			Age	
	Pocket Only	Medicaid/ Pocket	Medicaid/ Medicare	Medicare Only	Medicare/ Pocket	Insurance Only	Insurance/ Pocket	Black	Mexican American	Ethnic[a]	Other Caucasian	Under 5,000-	5,000- 19,999	20,000+	20-44	45+
N[b]	94	19	153	63	75	108	170	332	22	84	351	330	344	84	347	434
Explanation of Drug Given																
Yes	81	100	92	82	89	89	82	92	69	86	87	85	90	78	84	88
No	19	0	8	18	11	11	18	8	31	14	13	15	10	22	16	12
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Advice for Home Care Given																
Yes	81	92	97	97	97	96	92	98	92	89	90	92	91	94	91	93
No	19	8	3	3	3	4	8	2	8	11	10	8	9	6	9	7
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Advice for Home Care Followed																
Yes	74	92	88	92	75	68	72	80	83	87	69	83	82	71	70	85
No	26	8	12	8	25	32	28	20	17	13	21	17	18	29	30	15
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Doctor Telephoned for Advice																
Yes	10	16	18	18	16	22	19	11	27	26	25	16	19	36	22	17
No	90	84	82	82	84	78	71	89	73	74	75	84	81	64	78	83
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Need for Weekend/Evening Care																
Yes	5	21	14	13	4	12	14	10	14	9	10	9	10	9	15	7
No	95	79	86	87	96	88	86	90	86	91	90	91	90	91	85	93
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
How Weekend/Evening Care Obtained																
Waited	[c]	[c]	15	[c]	[c]	17	0	13	[c]	[c]	11	19	16	11	8	30
Called regular doctor	[c]	[c]	20	[c]	[c]	33	46	17	[c]	[c]	35	22	31	44	25	27
Emergency room	[c]	[c]	60	[c]	[c]	42	50	63	[c]	[c]	46	53	41	44	57	33
Other	[c]	[c]	5	[c]	[c]	8	4	7	[c]	[c]	8	6	13	0	10	10
Total			100			100	100	100			100	100	101	99	100	100

[a] Polish, Czech, Italian

[b] N varies slightly with number answering specific questions.

[c] N too small for analysis

TABLE VIII

SOCIO-ECONOMIC FACTORS AND USUAL SOURCE OF CARE
(Respondents Only)

	Payment Source							Ethnic Identification					Income						Age	
	Pocket Only	Medicaid/ Pocket	Medicaid/ Medicare	Medicare Only	Medicaid/ Pocket	Insurance Only	Insurance/ Pocket	Black	Mexican American	Native American	Ethnic[a]	Other Caucasian	Under 5,000	5,000- 9,999	10,000- 14,999	15,000- 19,999	20,000- 25,000	Over 25,000	20-44	45+
N[b]	94	19	153	63	75	108	170	332	22	12	84	351	330	171	113	60	44	40	347	434
Type of Care																				
Private doctor	51	50	38	63	76	71	84	49	75	55	81	75	50	65	68	75	90	95	56	71
Outpatient clinic	34	39	43	26	15	19	3	37	0	18	7	15	33	21	19	18	8	0	30	16
Hospital emergency room	1	0	3	0	1	2	0	1	0	0	1	1	2	1	2	0	0	0	0	2
Other public clinic/facility	11	11	16	11	5	6	13	12	20	27	9	9	14	10	10	7	3	5	13	10
Other	3	0	0	0	3	2	0	1	5	0	1	1	1	3	1	0	0	0	1	2
Total	100	100	100	100	100	100	100	100	100	100	99	101	100	100	100	100	101	100	100	101
Reason for Choice																				
Nearby	29	29	24	14	24	25	24	27	25	36	13	21	23	22	30	18	10	16	21	22
Family always went there	22	29	27	23	23	20	25	24	25	27	19	22	21	26	22	29	24	16	25	21
Recommended by family	10	6	14	16	18	20	17	13	10	9	33	13	16	15	14	16	17	11	14	16
Recommended by friend	15	12	13	23	8	12	16	10	15	0	8	17	13	15	10	9	31	13	17	12
Referred by other doctor	12	6	7	7	15	15	9	11	5	0	16	13	12	8	11	16	7	34	6	17
Referred by social agency	0	18	8	4	3	0	0	5	10	9	1	1	5	3	2	2	0	0	5	1
Newspaper/media	12	0	8	13	8	10	8	10	10	18	11	13	11	11	12	11	12	11	11	10
Total	100	100	101	100	99	102	99	100	100	99	101	100	101	100	101	101	101	101	99	99
Years Using Source																				
Under one year	16	6	13	17	11	13	8	9	10	25	6	11	13	12	12	9	0	5	13	9
1-2 years	7	0	7	20	9	10	8	10	0	0	7	11	9	12	13	2	2	5	12	8
3-4 years	17	17	17	17	19	13	15	17	30	8	10	15	17	14	10	23	17	11	19	13
5-9 years	17	22	26	13	10	27	22	25	15	25	20	19	20	19	26	26	19	32	23	18
10-14 years	22	6	15	15	14	15	19	17	5	8	23	15	14	14	18	11	31	24	15	18
15-19 years	4	11	6	6	9	14	11	7	10	8	10	9	7	7	4	9	17	13	6	9
20-24 years	5	17	8	9	13	6	7	6	5	0	9	10	8	10	9	9	10	5	8	9
25+ years	11	22	8	4	16	2	11	8	25	25	15	11	11	12	9	9	5	5	5	16
Total	99	101	100	101	101	100	101	99	100	99	100	101	99	100	101	98	101	100	101	100

[a] Polish, Czech, Italian

[b] N varies slightly with number answering specific questions.

TABLE IX

SOCIO-ECONOMIC FACTORS AND TRAVEL/WAITING TIME
(Respondents Only)

	Payment Source							Ethnic Identification					Income						Age	
	Pocket Only	Medicaid/ Pocket	Medicaid/ Medicare	Medicare Only	Medicaid/ Pocket	Insurance Only	Insurance/ Pocket	Black	Mexican American	Native American	Ethnic[a]	Other Caucasian	Under 5,000	5,000-4,999	10,000-14,999	15,000-19,999	20,000-25,000	Over 25,000	20-44	45 and Over
N[b]	94	19	153	63	75	108	170	332	22	12	84	351	330	171	113	60	44	40	347	434
Transportation Method																				
Own car	55	78	20	28	28	89	76	41	68	50	58	62	26	49	83	90	88	93	64	43
Other car	17	6	25	26	28	3	6	19	9	8	12	15	24	21	4	2	8	5	8	22
Taxi	3	11	17	12	4	2	1	10	0	17	3	5	13	4	1	0	0	0	4	9
Bus	21	6	28	21	26	4	13	25	5	17	18	11	27	18	9	5	5	3	17	18
Walk	5	0	8	7	11	0	4	3	9	0	10	4	7	6	3	2	0	0	5	5
Other	0	0	3	5	3	2	1	1	9	8	0	3	4	2	1	2	0	0	1	3
Total	101	101	101	99	100	100	101	99	100	100	101	100	101	100	101	101	101	101	99	100
Travel Time to Regular Source of Care																				
1-10 minutes	29	31	30	25	34	39	34	25	30	36	36	38	29	29	35	40	41	40	33	32
11-15 minutes	26	31	17	30	23	27	23	24	35	36	26	26	22	29	29	30	22	29	25	27
16-20 minutes	22	0	17	17	20	21	20	18	25	18	22	20	19	15	17	21	24	26	19	18
21-30 minutes	13	25	20	17	11	9	11	17	5	0	10	11	16	15	13	6	11	3	12	14
Over 30 minutes	10	13	17	11	12	4	12	16	5	9	6	6	15	12	5	4	3	3	11	9
Total	100	100	101	100	100	100	100	100	100	99	100	101	101	100	99	101	101	101	100	100
Length of Time to Wait																				
Under 15 minutes	21	7	16	16	17	26	25	16	19	10	28	22	17	25	19	28	16	28	17	23
15-30 minutes	32	50	41	39	34	39	36	39	38	20	34	42	39	35	36	40	55	45	42	37
30-60 minutes	31	29	29	28	31	26	24	31	19	50	28	23	29	29	30	22	16	24	27	26
Over 1 hour	16	14	15	18	17	9	15	14	24	20	9	14	16	11	16	10	13	3	13	14
Total	100	100	101	101	99	100	100	100	100	100	99	101	101	100	101	100	100	100	99	100

[a] Polish, Czech, Italian

[b] N varies slightly with number answering specific questions.

TABLE X

SOCIO-ECONOMIC FACTORS AND SATISFACTION WITH USUAL SOURCE OF CARE: PERCENT SATISFIED

(Respondents Only)

	Payment Source							Ethnic Identification				Income			Age	
	Pocket Only	Medicaid/ Pocket	Medicaid/ Medicare	Medicare Only	Medicare/ Pocket	Insurance Only	Insurance/ Pocket	Black	Mexican American	Ethnic[a]	Other Caucasian	Under 5,000-	5,000- 19,999	20,000+	20-44	45+
N[b]	94	19	153	63	75	108	170	332	22	84	351	330	344	84	347	434
Satisfaction with Service																
Overall quality of medical care	86	89	89	84	87	82	94	85	91	93	90	87	87	95	87	89
Overall quality of doctors	82	89	89	85	85	88	92	86	91	93	91	89	86	98	87	90
Follow-up care after first treatment	78	89	92	82	79	87	89	86	96	94	88	89	87	86	88	88
Concern of doctors about overall health	75	94	88	80	77	84	87	82	96	89	87	87	82	91	84	87
Satisfaction with Cost																
Out-of-pocket costs	47	47	66	57	56	63	57	54	46	65	63	61	56	60	58	59
Availability/cost of parking	49	53	67	50	43	69	76	59	68	63	67	57	63	86	71	57
Satisfaction with Convenience/ Availability of Care																
Waiting time in doctor's office	59	63	58	61	62	64	59	53	50	75	65	62	58	66	57	66
Availability of care evenings/ weekends	51	58	68	50	48	61	62	57	55	65	58	58	55	64	64	54
Ease of travel to doctor's location	75	79	86	77	87	89	84	81	91	78	88	84	84	88	82	86
Satisfaction with Information/ Communication																
Information about where to find special kind of medical, mental health, dental care	58	58	82	65	61	73	65	71	82	69	68	74	68	69	71	70
Information given about what was wrong	76	84	86	80	81	84	86	82	73	94	86	86	84	88	83	87
Information given about how to take care of self at home	85	95	92	84	85	91	90	91	81	90	90	90	88	90	91	90
Information about medication	83	95	93	85	85	90	87	87	91	95	88	89	88	89	89	89

[a] Polish, Czech, Italian

[b] N varies slightly with number answering specific questions.

APPENDIX B

SURVEY INSTRUMENT

BEGIN INTERVIEW

a) If the door is opened by a child, ask if his/her mother, father, or other adult is at home. If neither is at home, ask who lives in the house, and their ages and fill in across the columns. Ask when a parent or other adult will be at home.

b) Young adult (19 and over) ask if they would be able to answer questions about the family health care and when they have been to the doctor. If they say yes, continue the interview; if no, ask when a parent or knowledgeable person will be there.

c) An adult–ask if the woman of the house is home; if not ask for the man of the house. If neither is home and the answering adult lives in house, continue the interview. If the answering adult does not live in the house, ask when a resident adult will be home. Make appointment if possible.

Hello, I'm _____ from the Center for Applied Urban Research at the University of Nebraska. We are doing a survey to find out about what medical services and doctors you usually use and what you think about them, and what you would like different, if anything.

Here is a letter that tells about the purpose of the survey and mentions some people in this community who are interested in the results.

Give letter with names of community people whom we have talked to. This letter will also have a number to call for verification.

I'm going to first ask about who lives in this house since I will be asking about everyone's health care.

1. What is your first name?

   Put this person's name in the top of the first column.

2. Now I'm going to ask the first names of all other people who live in this household, their age, and their relationship to you.

   Fill in the names, ages, and relationships across the top of the page and circle person's sex.

END INTERVIEW

Say

Thank you very much for your time. Just a minute more—would you give me your telephone number? My supervisor may want to call you to make sure I was here and interviewed you. _____

Don't press this if refused.

When I turn this interview in, the top sheet with your address will be taken off so that your answers will be completely confidential. Do you want me to erase your name from the page?

If so erase names.

To Coders:

This top sheet to be detached upon completion of interview.

I'm going to ask some questions about your family's general health.

Ask each question for all in the household and then go to the next question.

Question	Person 1	Person 2	Person 3	Person 4
3. How long ago did (PERSON) have an examination or check up or was seen by a doctor? *Read responses.*	1 Within last 3 months 2 3 to 6 months *Circle DV at top* 3 6 months to 1 year 4 1 to 2 years 5 2 to 5 years 6 More than 5 years 7 Never	1 Within last 3 months 2 3 to 6 months *Circle DV at top* 3 6 months to 1 year 4 1 to 2 years 5 2 to 5 years 6 More than 5 years 7 Never	1 Within last 3 months 2 3 to 6 months *Circle DV at top* 3 6 months to 1 year 4 1 to 2 years 5 2 to 5 years 6 More than 5 years 7 Never	1 Within last 3 months 2 3 to 6 months *Circle DV at top* 3 6 months to 1 year 4 1 to 2 years 5 2 to 5 years 6 More than 5 years 7 Never
4. Why did (PERSON) have that doctor's visit? *Read responses*	1 Not feeling good 2 Required 3 Time for examination 4 Pregnancy *Circle P at top of column*	1 Not feeling good 2 Required 3 Time for examination 4 Pregnancy *Circle P at top of column*	1 Not feeling good 2 Required 3 Time for examination 4 Pregnancy *Circle P at top of column*	1 Not feeling good 2 Required 3 Time for examination 4 Pregnancy *Circle P at top of column*
5. Would you say (PERSON)'s health, in general, is excellent, good, fair, or poor?	1 Excellent 2 Good 3 Fair 4 Poor	1 Excellent 2 Good 3 Fair 4 Poor	1 Excellent 2 Good 3 Fair 4 Poor	1 Excellent 2 Good 3 Fair 4 Poor
6. Over the past year has (PERSON)'s health caused you a great deal of worry, some worry, hardly any worry, or no worry at all?	1 A great deal 2 Some 3 Hardly any 4 None at all	1 A great deal 2 Some 3 Hardly any 4 None at all	1 A great deal 2 Some 3 Hardly any 4 None at all	1 A great deal 2 Some 3 Hardly any 4 None at all
7. In the past year would you say (PERSON) has experienced pain very often, fairly often, occasionally, or not at all?	1 Very often 2 Fairly often 3 Occasionally 4 Not at all 5 Don't know	1 Very often 2 Fairly often 3 Occasionally 4 Not at all 5 Don't know	1 Very often 2 Fairly often 3 Occasionally 4 Not at all 5 Don't know	1 Very often 2 Fairly often 3 Occasionally 4 Not at all 5 Don't know
8. As a result of illness or injury, approximately how many days in 1981 has (PERSON) stayed in bed, indoors, or away from usual activities?	________ days	________ days	________ days	________ days
9. When was the last time (PERSON) was seen by a dentist? *Read responses*	1 Within last 3 months 2 3 to 6 months 3 6 months up to 1 year 4 1 to 2 years 5 2 to 5 years 6 More than 5 years 7 Never	1 Within last 3 months 2 3 to 6 months 3 6 months up to 1 year 4 1 to 2 years 5 2 to 5 years 6 More than 5 years 7 Never	1 Within last 3 months 2 3 to 6 months 3 6 months up to 1 year 4 1 to 2 years 5 2 to 5 years 6 More than 5 years 7 Never	1 Within last 3 months 2 3 to 6 months 3 6 months up to 1 year 4 1 to 2 years 5 2 to 5 years 6 More than 5 years 7 Never
10. Why did (PERSON) visit the dentist that time?	1 Had a toothache/ dental problem 2 Time for a regular checkup 3 Don't know	1 Had a toothache/ dental problem 2 Time for a regular checkup 3 Don't know	1 Had a toothache/ dental problem 2 Time for a regular checkup 3 Don't know	1 Had a toothache/ dental problem 2 Time for a regular checkup 3 Don't know

I'm going to ask you about your usual source of medical care.

If some in HH have same doctor/place as other persons, circle 3, add person's name, and go to next person.

11. Is there a particular clinic, health center, doctor's office or other place that (PERSON) usually goes to if sick or needs advice about health?

If YES — *Ask questions 12 and 13 for each person before going to next person.*

If 2 regular doctors or places, ask about most frequently used for primary care.

If NO

1 Yes, 1 doctor or place 2 Yes, 2 doctors or places	1 Yes, 1 doctor or place 2 Yes, 2 doctors or places 3 Same as _____	1 Yes, 1 doctor or place 2 Yes, 2 doctors or places 3 Same as _____	1 Yes, 1 doctor or place 2 Yes, 2 doctors or places 3 Same as _____
	Circle S at the top of column with same usual source of care	*Circle S at the top of column with same usual source of care*	*Circle S at the top of column with same usual source of care*
4 No — *Go to 13A*	4 No	4 No	4 No

12. What kind of place is it—a clinic, a health center, a hospital, a doctor's office, or some other place?

1 Private doctor's office, group practice, or clinic 2 Hospital outpatient clinic 3 Hospital emergency room 4 Company or industry clinic 5 Health clinic/center 6 Other (specify) _____	1 Private doctor's office, group practice, or clinic 2 Hospital outpatient clinic 3 Hospital emergency room 4 Company or industry clinic 5 Health clinic/center 6 Other (specify) _____	1 Private doctor's office, group practice, or clinic 2 Hospital outpatient clinic 3 Hospital emergency room 4 Company or industry clinic 5 Health clinic/center 6 Other (specify) _____	1 Private doctor's office, group practice, or clinic 2 Hospital outpatient clinic 3 Hospital emergency room 4 Company or industry clinic 5 Health clinic/center 6 Other (specify) _____

13. Where is it located? *Write in* _____

Go to next person on next page.	*Go to next person on next page.*	*Go to next person on next page.*	*Go to next person on next page.*

If no — *Give card A and read responses*

A. Many people do not have a particular place they usually go when they are sick or need advice about their health. Could you please give me the number of the statement which is the MAIN reason (PERSON) does not have a particular place he/she usually goes?

1. Haven't needed a doctor.
2. Previous doctor no longer available.
3. Haven't been able to find the right doctor.
4. Recently moved to area.
5. Other reason—please specify.

1 2 3 4 5 _____	1 2 3 4 5 _____	1 2 3 4 5 _____	1 2 3 4 5 _____

B. Where did (PERSON) go the last time you needed medical care?

Write in _____

Go to next person or Question 21	*Go to next person or Question 21*	*Go to next person or Question 21*	*Go to next person or Question 21*

14. How does (PERSON) usually get to their regular doctor or place of care? *Code the method of transportation used most often.* A. How long does it usually take to get there from your home? *Ask questions 15, 16, 17 together for each doctor or place mentioned.*	1 Own car 2 Someone else's car 3 Taxi 4 Bus 5 Walks 6 Other _____	1 Own car 2 Someone else's car 3 Taxi 4 Bus 5 Walks 6 Other _____	1 Own car 2 Someone else's car 3 Taxi 4 Bus 5 Walks 6 Other _____
15. Does (PERSON) usually have an appointment ahead of time when (he/she) goes to (PLACE) or does (he/she) just walk in?	1 Has an appointment *Ask 16* 2 Walks in *Ask 17*	1 Has an appointment *Ask 16* 2 Walks in *Ask 17*	1 Has an appointment *Ask 16* 2 Walks in *Ask 17*
16. Except for emergencies, how long does (PERSON) usually have to wait to get an appointment with the doctor? *Read responses*	1 Same day 2 1 to 2 days 3 3 to 4 days 4 5 days to 1 week 5 1 to 2 weeks 6 2 weeks to 1 month 7 More than 1 month	1 Same day 2 1 to 2 days 3 3 to 4 days 4 5 days to 1 week 5 1 to 2 weeks 6 2 weeks to 1 month 7 More than 1 month	1 Same day 2 1 to 2 days 3 3 to 4 days 4 5 days to 1 week 5 1 to 2 weeks 6 2 weeks to 1 month 7 More than 1 month
17. How long does (PERSON) usually have to wait to see the doctor, once (he/she) gets there? *Read responses*	1 Under 15 min. 2 15 - 30 min. 3 30 min. to 1 hr. 4 More than 1 hr.	1 Under 15 min. 2 15 - 30 min. 3 30 min. to 1 hr. 4 More than 1 hr.	1 Under 15 min. 2 15 - 30 min. 3 30 min. to 1 hr. 4 More than 1 hr.
18. Why did (PERSON) choose that particular doctor/place? *Do not read responses*	1 It's nearby 2 Family always went to that doctor/place 3 Recommended by family member 4 Recommended by friend 5 Referred by other doctor 6 Referred by social worker, minister, etc. 7 Newspaper, radio, T.V., etc. 8 Other _____ (specify)	1 It's nearby 2 always went to that doctor/place 3 Recommended by family member 4 Recommended by friend 5 Referred by other doctor 6 Referred by social worker, minister, etc. 7 Newspaper, radio, T.V., etc. 8 Other _____ (specify)	1 It's nearby 2 Family always went to that doctor/place 3 Recommended by family member 4 Recommended by friend 5 Referred by other doctor 6 Referred by social worker, minister, etc. 7 Newspaper, radio, T.V., etc. 8 Other _____ (specify)
19 How long has (PERSON) been using that doctor place?	_____ years	_____ years	_____ years
20. The last time (PERSON) was sick did (you he she) go to the same place? A. Where did person go? *Write in*	1 Yes 2 No *Ask A* _____ 3 Don't know	1 yes 2 No *Ask A* _____ 3 Don't know	1 yes 2 No *Ask A* _____ 3 Don't know

21. Here are some ways health care is paid for. Which ones apply to (PERSON)? *Give card B and read list, and circle as many as apply.*	1 Out of pocket 2 Medicaid 3 Medicare 4 VA hospital/member armed services 5 Workmen's compensation 6 Health insurance 7 Other_____ *Write in*	1 Out of pocket 2 Medicaid 3 Medicare 4 VA hospital/member armed services 5 Workmen's compensation 6 Health insurance 7 Other_____ *Write in*	1 Out of pocket 2 Medicaid 3 Medicare 4 VA hospital/member armed services 5 Workmen's compensation 6 Health insurance 7 Other_____ *Write in*
A. Does anyone in the family get a reduced fee for medical care or pay on a sliding scale? *If no one is covered by health insurance turn page.*	1 Yes 2 No	1 Yes 2 No	1 Yes 2 No
22. You said that some in the household are covered by health insurance. Is everyone covered by the same plan?	1 Yes 2 No *Ask A & B*	1 Yes 2 No *Ask A & B*	1 Yes 2 No *Ask A & B*
A. How many different plans?	3 2 plans 4 3 plans 5 4 plans	3 2 plans 4 3 plans 5 4 plans	3 2 plans 4 3 plans 5 4 plans
B. Who is covered by the different plans?	1 First plan 2 Second plan 3 Third plan 4 Fourth plan	1 First plan 2 Second plan 3 Third plan 4 Fourth plan	1 First plan 2 Second plan 3 Third plan 4 Fourth plan
Ask questions DOWN for each different insurance plan.			
23. Was insurance obtained through work, school, a union, or other?	1 Work 2 Union 3 School 4 Other	1 Work 2 Union 3 School 4 Other	1 Work 2 Union 3 School 4 Other
24. Does it pay for a doctor visit for illness?	1 Yes 2 Yes, some (or part) 3 No 4 Don't know	1 Yes 2 Yes, some (or part) 3 No 4 Don't know	1 Yes 2 Yes, some (or part) 3 No 4 Don't know
25. Do you pay the first $100 or some other sum for doctor visits?	1 Yes 2 No 3 Don't know	1 Yes 2 No 3 Don't know	1 Yes 2 No 3 Don't know
26. Does it pay for annual physical check-ups?	1 Yes 2 Yes, some (or part) 3 No 4 Don't know	1 Yes 2 Yes, some (or part) 3 No 4 Don't know	1 Yes 2 Yes, some (or part) 3 No 4 Don't know
27. Does it pay 100% for hospital costs?	1 Yes 2 No 3 Don't know	1 Yes 2 No 3 Don't know	1 Yes 2 No 3 Don't know

Ask the following question about ANY last visit not just primary care.

28. Since the first of the year, who in the family has gone to the hospital, a clinic, or a doctor's office? *Ask across*

1 No one *Turn page*	2 Yes	2 Yes
2 Yes		

Ask questions DOWN about each visit.

Ask about last visit	*Ask about last visit*	*Ask about last visit*

29. When was this visit, Jan., Feb., March, or April?

1 January 2 February 3 March 4 April	1 January 2 February 3 March 4 April	1 January 2 February 3 March 4 April

30. What was the visit for—illness, injury, pregnancy, regular check-up, immunization, a condition (he/she) had for a long time, or what?

If uncertain, write in.

1 Illness 2 Injury 3 Pregnancy 4 Check-up 5 Immunization 6 Regular medication 7 Chronic—long time 8 Other _____ (specify)	1 Illness 2 Injury 3 Pregnancy 4 Check-up 5 Immunization 6 Regular medication 7 Chronic—long time 8 Other _____ (specify)	1 Illness 2 Injury 3 Pregnancy 4 Check-up 5 Immunization 6 Regular medication 7 Chronic—long time 8 Other _____ (specify)

31. Was (PERSON) told the name of the illness or problem?

1 Knew already 2 Was not told 3 Was told 4 Not applicable	1 Knew already 2 Was not told 3 Was told 4 Not applicable	1 Knew already 2 Was not told 3 Was told 4 Not applicable

32. What was the illness or problem? *Write in*

_____	_____	_____

33. Did the doctor talk to (PERSON) to explain the illness, its causes, the treatment, or (PERSON'S) general condition?

1 No 2 Yes 3 No need	1 No 2 Yes 3 No need	1 No 2 Yes 3 No need

34. Was (PERSON) given drugs or a prescription?

1 Yes *Ask A* 2 No 3 Don't know 4 Not applicable	1 Yes *Ask A* 2 No 3 Don't know 4 Not applicable	1 Yes *Ask A* 2 No 3 Don't know 4 Not applicable

A. Was (PERSON) told what the medicine was and what to expect from it?

1 Yes 2 No 3 Don't know 4 Not applicable	1 Yes 2 No 3 Don't know 4 Not applicable	1 Yes 2 No 3 Don't know 4 Not applicable

35. Was (PERSON) told how to care for self at home to improve condition?

1 Yes 2 No 3 Don't know 4 Not applicable	1 Yes 2 No 3 Don't know 4 Not applicable	1 Yes 2 No 3 Don't know 4 Not applicable

36. Did (PERSON) follow the advice? *Read response*

1 Mostly, yes 2 No, impractical in the situation 3 No, too much trouble 4 No, couldn't afford to 5 No, other_____	1 Mostly, yes 2 No, impractical in the situation 3 No, too much trouble 4 No, couldn't afford to 5 No, other_____	1 Mostly, yes 2 No, impractical in the situation 3 No, too much trouble 4 No, couldn't afford to 5 No, other_____

37. Since the first of the year, has the doctor been telephoned to ask for medical advice for anyone in the family?

1 No
2 Yes [Ask A]

A. The last time that happened were you put on hold and/or told you'd be called back?

1 No
2 Yes, on hold [Ask B]
3 Yes, call back [Ask C]
4 Yes, both [Ask B & C]

B. How long were you on hold?

_____

C. How soon were you called back?

_____

38. Since the first of the year, has anyone in the family needed medical care evenings or weekends?

1 No
2 Yes [Ask A]

39. How was care obtained?

[Read responses]

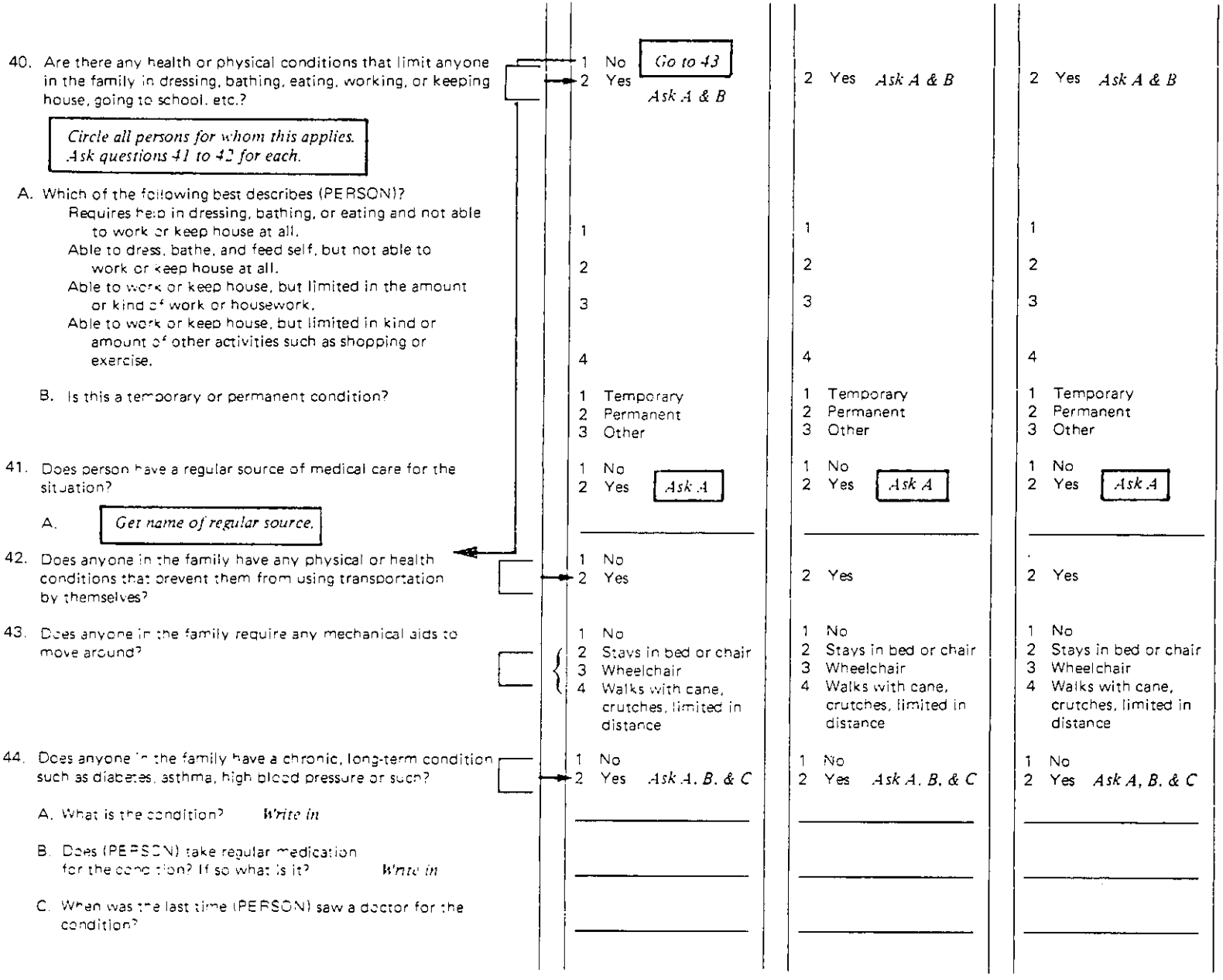
1 Waited until Monday
2 Called regular doctor's office
3 Saw regular doctor or substitute
4 Went to hospital emergency room
5 Other _____ (specify)

2 Yes [Ask A]

1 Waited until Monday
2 Called regular doctor's office
3 Saw regular doctor or substitute
4 Went to hospital emergency room
5 Other _____ (specify)

2 Yes [Ask A]

1 Waited until Monday
2 Called regular doctor's office
3 Saw regular doctor or substitute
4 Went to hospital emergency room
5 Other _____ (specify)


40. Are there any health or physical conditions that limit anyone in the family in dressing, bathing, eating, working, or keeping house, going to school, etc.?
1 No Go to 43
2 Yes Ask A & B
2 Yes Ask A & B
2 Yes Ask A & B
Circle all persons for whom this applies. Ask questions 41 to 42 for each.
A. Which of the following best describes (PERSON)?
Requires help in dressing, bathing, or eating and not able to work or keep house at all.
Able to dress, bathe, and feed self, but not able to work or keep house at all.
Able to work or keep house, but limited in the amount or kind of work or housework.
Able to work or keep house, but limited in kind or amount of other activities such as shopping or exercise.
1
2
3
4
1
2
3
4
1
2
3
4
B. Is this a temporary or permanent condition?
1 Temporary
2 Permanent
3 Other
1 Temporary
2 Permanent
3 Other
1 Temporary
2 Permanent
3 Other
41. Does person have a regular source of medical care for the situation?
1 No
2 Yes Ask A
1 No
2 Yes Ask A
1 No
2 Yes Ask A
A. Get name of regular source.
42. Does anyone in the family have any physical or health conditions that prevent them from using transportation by themselves?
1 No
2 Yes
2 Yes
2 Yes
43. Does anyone in the family require any mechanical aids to move around?
1 No
2 Stays in bed or chair
3 Wheelchair
4 Walks with cane, crutches, limited in distance
1 No
2 Stays in bed or chair
3 Wheelchair
4 Walks with cane, crutches, limited in distance
1 No
2 Stays in bed or chair
3 Wheelchair
4 Walks with cane, crutches, limited in distance
44. Does anyone in the family have a chronic, long-term condition such as diabetes, asthma, high blood pressure or such?
1 No
2 Yes Ask A, B, & C
1 No
2 Yes Ask A, B, & C
1 No
2 Yes Ask A, B, & C
A. What is the condition? Write in
B. Does (PERSON) take regular medication for the condition? If so what is it? Write in
C. When was the last time (PERSON) saw a doctor for the condition?

PREGNANCY

45. Since April last year, has anyone in the family been pregnant?

Circle all persons for whom this applies and ask questions 45A-49

1 No *Go to 50*			
2 Yes *Ask A*	2 Yes *Ask A*	2 Yes *Ask A*	2 Yes *Ask A*

A. Did she give birth? *DO NOT READ choices unless necessary.*

1 Yes	1 Yes	1 Yes	1 Yes
2 No, still pregnant *Ask B*	2 No, still pregnant *Ask B*	2 No, still pregnant *Ask B*	2 No, still pregnant *Ask B*
3 No, miscarriage	3 No, miscarriage	3 No, miscarriage	3 No, miscarriage
4 No, abortion	4 No, abortion	4 No, abortion	4 No, abortion
5 Still birth	5 Still birth	5 Still birth	5 Still birth
6 Other _____	6 Other _____	6 Other _____	6 Other _____

B. What month is she in?

_____ _____ _____ _____

46. Did (PERSON) have a regular source of care while pregnant?

1 Yes *Ask A*	1 Yes *Ask A*	1 Yes *Ask A*	1 Yes *Ask A*
2 No	2 No	2 No	2 No

A. What was that source of care? *Write in*

_____ _____ _____ _____

47. Which reason best describes why (PERSON) went to that service for pregnancy?

Give card C and read.

1 Usual doctor/clinic	1 Usual doctor/clinic	1 Usual doctor/clinic	1 Usual doctor/clinic
2 Referred by regular doctor	2 Referred by regular doctor	2 Referred by regular doctor	2 Referred by regular doctor
3 Referred by other doctor (not regular)	3 Referred by other doctor (not regular)	3 Referred by other doctor (not regular)	3 Referred by other doctor (not regular)
4 Recommended by family/friend	4 Recommended by family/friend	4 Recommended by family/friend	4 Recommended by family/friend
5 Picked by person	5 Picked by person	5 Picked by person	5 Picked by person
6 Other _____	6 Other _____	6 Other _____	6 Other _____

48. Did (PERSON) have one doctor, several doctors, or what?

Read responses

1 Only one doctor	1 Only one doctor	1 Only one doctor	1 Only one doctor
2 Mostly one doctor	2 Mostly one doctor	2 Mostly one doctor	2 Mostly one doctor
3 Several doctors but one primarily responsible	3 Several doctors but one primarily responsible	3 Several doctors but one primarily responsible	3 Several doctors but one primarily responsible
4 Saw whoever was available	4 Saw whoever was available	4 Saw whoever was available	4 Saw whoever was available

49 About how many times did (PERSON) visit a doctor or medical facility while pregnant?

Read responses

1 1 or 2 times	1 1 or 2 times	1 1 or 2 times	1 1 or 2 times
2 3 or 4 times	2 3 or 4 times	2 3 or 4 times	2 3 or 4 times
3 5 - 8 times	3 5 - 8 times	3 5 - 8 times	3 5 - 8 times
4 9 - 12 times	4 9 - 12 times	4 9 - 12 times	4 9 - 12 times
5 More than 13	5 More than 13	5 More than 13	5 More than 13
6 Don't know	6 Don't know	6 Don't know	6 Don't know

50. I am going to read a list of practices that doctors, hospitals and clinics sometimes have. Thinking over the medical care you and your family have received in the past year since April, 1980, have you been satisfied, or dissatisfied with this practice?

If no one in family has had medical care in the last year, ask for general satisfaction dissatisfaction. If more than one doctor or place, ask for general overall feeling.

	Satisfied	Don't Know/ Neutral	Dissatisfied
1. Overall quality of the medical care.	1	2	3
2. Quality of the doctors who treated you.	1	2	3
3. Waiting time in doctor's/clinic office.	1	2	3
4. Availability of medical care at night and on weekends.	1	2	3
5. Cost to you out-of-pocket.	1	2	3
6. Information given to you about what was wrong.	1	2	3
7. Information given to you about how to care for yourself at home.	1	2	3
8. Information about medicine you were to take, how long to take it, etc.	1	2	3
9. Follow-up care after the first treatment.	1	2	3
10. Concern of the doctors for your overall health and not just for the one illness.	1	2	3
11. Ease of travel to your doctor's location.	1	2	3
12. Information about where to find a special kind of medical, mental health, or dental care.	1	2	3
13. Availability and cost of parking.	1	2	3

51. Now I'm going to ask some questions about changing the health care services that you and your family usually use.

If you could name health care services that you needed more of or wanted improved or changed in some way, what would they be?

Wait for response then ask, "Anything else?"

52. Now, I'm going to read a list of changes that have been made at other places. I want you to tell me whether this change would be important or not important in helping you and your family get their health care.

	IMPORTANCE			
	Important	Don't Know Neutral	Not Important	Have Already
1. Have health care facilities nearer your home.	1	2	3	4
2. Have a fee schedule so that you know exactly how much it costs for each medical service.	1	2	3	4
3. Have clinics open until 7:30 at night and on some week-ends.	1	2	3	4
4. Cut down the time you have to spend waiting to see the doctor.	1	2	3	4
5. Have information available to show what insurance or Medicaid or Medicare covers and what will have to be paid in cash.	1	2	3	4
6. Have information in handy places like the grocery stores and in churches on the various services in your area.	1	2	3	4
7. Have someone to help fill out forms at the clinic or hospital.	1	2	3	4
8. Charge less money for services like a physical exam or a shot.	1	2	3	4
9. Have someone at the clinic or doctor's office who can help with family problems.	1	2	3	4
10. Provide services for the whole family at the same place.	1	2	3	4
11. Provide services for the whole family by the same doctor.	1	2	3	4
12. Have mental health facilities nearer your home.	1	2	3	4
13. Have the doctor or nurse write down the name of your illness, what you should do at home to care for yourself and how you should take your medicine.	1	2	3	4
14. If it would cost less, have the doctor's helper or a nurse do some of the work like a physical exam or giving a shot.	1	2	3	4
15. Have someone who will help you make appointments when the doctor refers you to another doctor or to the hospital.	1	2	3	4
16. Have a telephone number where you can get some answers about medical problems when you call without having to wait.	1	2	3	4
17. Provide alcohol treatment in your local area.	1	2	3	4

53. I'm going to read some sentences that explain how people often feel about health care. I want you to tell whether you agree or disagree with them.

	Agree	Don't Know/ Neutral	Disagree
1. If you wait long enough, you can get over almost any illness without getting medical aid.	1	2	3
2. When I was a child, my father seldom went to the doctor.	1	2	3
3. I seek advice from my family when I'm ill.	1	2	3
4. A person has to expect a good deal of pain in his/her lifetime.	1	2	3
5. There are a lot of people in this area who really need some help for their emotional or family problems.	1	2	3
6. All people have a right to good medical care whether they can pay for it or not.	1	2	3
7. Modern medicine can cure almost most any illness.	1	2	3
8. A person must work at staying healthy.	1	2	3
9. A person understands his/her own overall physical health better than his/her doctor does.	1	2	3
10. I usually try several treatments for myself before going to the doctor.	1	2	3
11. My mother went to the doctor only when she had a severe illness or had a baby.	1	2	3
12. Sometimes I feel like I could use some help to take care of my personal and emotional problems.	1	2	3
13. Going to the doctor for an annual check up usually takes more time than it's worth.	1	2	3
14. A severe headache calls for medical care only if it's still there after a couple of weeks.	1	2	3
15. I only go to the dentist when I have a toothache or other dental problem.	1	2	3
16. I usually forget the doctor's instruction by the time I get home.	1	2	3

NORTH OMAHA SERVICES

54. I'm going to mention some health care services in the area. We want to know if you have heard of the service and if you have used it.

Have you heard of _____ facility with letters

If no go to next item; if yes ask A, B, and D

A. Was what you heard favorable or unfavorable?
B. Have you used _____?
C. Were you satisfied or dissatisfied?
D. Do you have other comments on the services?

If no go to next item; if yes circle services used ask C and D

Ask for all services used.

	If Heard Of					If Used						
	Heard of				Neutral/ Don't Know	Used It		Which Service?	Satisfaction			Comments
	No	Yes	Favorable	Unfavorable		No	Yes		Satisfied	Neutral	Dissatisfied	
A. Clark Street Clinic (N. 22nd)	0	1	2	3	4	0	1					
1. Immunization								1	1	2	3	
2. Pediatric Clinic								2	1	2	3	
3. VD Clinic								3	1	2	3	
4. OB/GYN Clinic								4	1	2	3	
B. Community Plaza (36th & Meredith)	0	1	2	3	4	0	1					
1. Adult Clinic								1	1	2	3	
2. Dental Clinic								2	1	2	3	
3. Children and Youth Clinic								3	1	2	3	
4. Family Planning Clinic								4	1	2	3	
5. OB/GYN								5	1	2	3	
6. WIC Program								6	1	2	3	
7. Maternal and Infant Care Clinic								7	1	2	3	
C. Creighton Family Physicians Clinic (28th and Ames)	0	1	2	3	4	0	1		1	2	3	
D. University Hospital Emergency Room	0	1	2	3	4	0	1		1	2	3	
E. University of Nebraska Medical Center Outpatient Clinics	0	1	2	3	4	0	1		1	2	3	
F. Saint Joseph's Hospital Emergency Room (601 North 30th)	0	1	2	3	4	0	1		1	2	3	
G. Lutheran Hospital Emergency Room	0	1	2	3	4	0	1		1	2	3	
H. Immanuel Hospital Emergency Room	0	1	2	3	4	0	1		1	2	3	
I. Immanuel Outpatient Clinic	0	1	2	3	4	0	1		1	2	3	
J. Clarkson Hospital Emergency Room	0	1	2	3	4	0	1		1	2	3	
K. Visiting Nurses Association's Health Maintenance Sites/Van	0	1	2	3	4	0	1					
1. Evans Tower (3600 N. 24th)								1	1	2	3	
2. Florence Towers (5100 Florence)								2	1	2	3	
3. Miller Park Presbyterian Church								3	1	2	3	
4. St. Theresa's (14th & Ogden)								4	1	2	3	
5. St. Benedicts (24th & Grant)								5	1	2	3	
6. Wesley Methodist (N. 34th)								6	1	2	3	
L. Visiting Nurse Home Health Care	0	1	2	3	4	0	1		1	2	3	

SOUTH OMAHA SERVICES

54. I'm going to mention some health care services in the area. We want to know if you have heard of the service and if you have used it.

Have you heard of _____ (facility with letters)

If no go to next item; if yes ask A, B, and D

A. Was what you heard favorable or unfavorable?
B. Have you used _____?
C. Were you satisfied or dissatisfied?
D. Do you have other comments on the services?

If no go to next item; if yes circle services used ask C and D

Ask for all services used.

	If Heard Of					If Used						
	Heard of				Neutral/ Don't Know	Used It		Which Service?	Satisfaction			Comments
	No	Yes	Favorable	Unfavorable		No	Yes		Satisfied	Neutral	Dissatisfied	
A. SONA building (31st & Q)	0	1	2	3	4	0	1					
1. Family Practice Clinic								1	1	2	3	
2. Maternal and Infant Care Clinic								2	1	2	3	
3. Family Planning Clinic								3	1	2	3	
4. Children and Youth Clinic								4	1	2	3	
5. WIC Program								5	1	2	3	
B. Douglas County Health Department Clinic	0	1	2	3	4	0	1					
1. Pediatric Clinic (24th & O)								1	1	2	3	
2. Immunization Clinic (24th & O)								2	1	2	3	
3. Central Clinic (S. 42nd)								3	1	2	3	
C. Indian Chicano Health Clinic (S. 20th)	0	1	2	3	4	0	1		1	2	3	
D. University Hospital Emergency Room	0	1	2	3	4	0	1		1	2	3	
E. University of Nebraska Medical Center Outpatient Clinics	0	1	2	3	4	0	1		1	2	3	
F. Saint Joseph's Hospital Emergency Room (601 North 30th)	0	1	2	3	4	0	1		1	2	3	
G. Old Saint Joseph's Emergency Room (10th and Dorcas)	0	1	2	3	4	0	1		1	2	3	
H. Creighton Family Physicians Clinic (3400 South 13th)	0	1	2	3	4	0	1		1	2	3	
I. Lutheran Hospital Emergency Room	0	1	2	3	4	0	1		1	2	3	
J. Prairie Clinic - 2602 J Street	0	1	2	3	4	0	1		1	2	3	
K. Clarkson Hospital Emergency Room	0	1	2	3	4	0	1		1	2	3	
L. Visiting Nurses Association's Health Maintenance Sites/Van	0	1	2	3	4	0	1					
1. Christ Child (S. 10th)								1	1	2	3	
2. Christ Child West (S. 24th)								2	1	2	3	
3. Christie Heights (36th & P)								3	1	2	3	
4. Our Lady of Guadalupe Van (23rd & O)								4	1	2	3	
5. Highland Towers (25th & B)								5	1	2	3	
6. Kay-Jay Towers (S. 25th)								6	1	2	3	
7. Teller Unit Methodist (15th & Madison Ave.)								7	1	2	3	
M. Visiting Nurse Home Health Care	0	1	2	3	4	0	1		1	2	3	

I'm going to ask some questions that will help us with classifying your answers.

55. Does (PERSON) own home, rent, help with the rent, or live here with friend/relatives at no cost? ☐

1 Own
2 Rent
3 Help with rent
4 No cost

Circle housing type. If unknown, ask A

56. Is housing *Read responses* ☐

1 Single family
2 Mobile home
3 Duplex
4 Townhouse/row house
5 Apartment
6 Other

57. How long has (PERSON) lived in this home? ☐

1 Less than 1 year
2 1 to 5 years
3 More than 5 years

58. How long has (PERSON) lived in Omaha? ☐

1 Less than 1 year
2 1 to 5 years
3 More than 5 years

59. Which number on this card best describes (PERSON)'s current employment situation?

Give card D and read responses. ☐

1 Works full time
2 Works part time
3 Laid off/on strike
4 Unemployed
5 Retired
6 Keeping house
7 Full time student
8 Unable to work

60 What kind of work does (did) (PERSON) do? ☐

---

61 What is your ethnic identity? *Give card E and read responses* ☐

1 Polish-American
2 Italian-American
3 Mexican-American
4 Czech-American
5 American Indian
6 Black-American
7 Asian-American
8 Other Caucasian
9 Other

62. Is everyone in the household the same identity?

If no ask who and ask A

A What is (PERSON)'s ethnic identity?

1 Own
2 Rent
3 Help with rent
4 No cost

1 Single family
2 Mobile home
3 Duplex
4 Townhouse/row house
5 Apartment
6 Other

1 Less than 1 year
2 1 to 5 years
3 More than 5 years

1 Less than 1 year
2 1 to 5 years
3 More than 5 years

1 Works full time
2 Works part time
3 Laid off/on strike
4 Unemployed
5 Retired
6 Keeping house
7 Full time student
8 Unable to work

1 Polish-American
2 Italian-American
3 Mexican-American
4 Czech-American
5 American Indian
6 Black-American
7 Asian-American
8 Other Caucasian
9 Other

	M2	First name	M2	First name	M2	First name
		Relationship to respondent		Relationship to respondent		Relationship to respondent
63. What is the highest grade or year (PERSON) has completed in school? IF NOT SURE OF YEAR, PROBE FOR ESTIMATE OR BEST GUESS. 1 None 2 1-4 years 3 5-6 years 4 7-8 years 5 9-11 years (some high school) 6 12 years (completed high school) 7 13-15 (some college) 8 16+ (completed college or beyond) 9 Don't know *Give card F*		1 2 3 4 5 6 7 8 9		1 2 3 4 5 6 7 8 9		1 2 3 4 5 6 7 8 9
If you already know code without asking.						
64. Is (PERSON) currently married, separated, widowed, divorced, or has (PERSON) never been married?		1 Married 2 Separated 3 Widowed 4 Divorced 5 Never been married		1 Married 2 Separated 3 Widowed 4 Divorced 5 Never been married		1 Married 2 Separated 3 Widowed 4 Divorced 5 Never been married
65. Which religion was (PERSON) raised in? *Read responses*		1 Catholic 2 Baptist 3 Other Protestant 4 Other 5 None		1 Catholic 2 Baptist 3 Other Protestant 4 Other 5 None		1 Catholic 2 Baptist 3 Other Protestant 4 Other 5 None
66. Which income group represents your total combined family income for the past 12 months? Include income from all sources such as wages, salaries, social security or retirement benefits, help from relatives, rent from property, and so forth. *Give card G*		1 Under $5,000 2 $5,000-9,999 3 $10,000-14,999 4 $15,000-19,999 5 $20,000-24,999 6 Over $25,000		1 Under $5,000 2 $5,000-9,999 3 $10,000-14,999 4 $15,000-19,999 5 $20,000-24,999 6 Over $25,000		1 Under $5,000 2 $5,000-9,999 3 $10,000-14,999 4 $15,000-19,999 5 $20,000-24,999 6 Over $25,000
67. What persons in the household have jobs or contribute to the family income? *Ask for each person who contributes.*		1 Contributes 2 Does not contribute		1 Contributes 2 Does not contribute		1 Contributes 2 Does not contribute
68. What is the source of (PERSON)'s contribution? *Give card H and read responses.*		1 Salary 2 ADC 3 Social Security 4 SSI 5 Pension from work 6 Veteran's payments 7 Unemployment 8 Workmen's comp. 9 Investments/savings 10 Child support, alimony		1 Salary 2 ADC 3 Social Security 4 SSI 5 Pension from work 6 Veteran's payments 7 Unemployment 8 Workmen's comp. 9 Investments/savings 10 Child support/ alimony		1 Salary 2 ADC 3 Social Security 4 SSI 5 Pension from work 6 Veteran's payments 7 Unemployment 8 Workmen's comp. 9 Investments/savings 10 Child support/ alimony

RETURN TO COVER SHEET TO END INTERVIEW