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ABSTRACT

North Carolinians' perceptions of the seriousness of the health care problem and their willingness to allocate additional tax money for health and medical care were examined. The analysis consisted of: (1) What is the health manpower facilities situation in different parts of North Carolina? (2) Does the people's perception of the situation's seriousness correspond with the availability of medical manpower and facilities? (3) Who is most concerned about medical manpower and facilities? and (4) How do these relate to people's willingness to allocate additional tax money for health and medical care? Data were gathered in a Statewide survey during April and May 1973 from 3,115 household heads out of 4,470 potential respondents. Health manpower and facilities were measured by the number of people per physician and per hospital bed. Some findings were: (1) people in rural areas were more concerned about the availability of medical facilities and staff than people in more urban areas; and (2) people in rural areas did not express a greater willingness than urban people for allocating additional tax money for health and medical care programs. The definition of health, the national situation, and a comparison of the national situation with that in North Carolina are briefly discussed. (NQ)

# LOOK THROUGH OUR EYES

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rural-urban health care in north carolina



## HIGHLIGHTS

People in rural areas of North Carolina are much more concerned about the availability of medical facilities and staff than people in more urban areas.

However, people in more rural areas do not express a greater willingness than urban people for allocating additional tax dollars for health and medical care programs.

Over half of the people throughout the State want more money allocated for health and medical care and even most of the people who do not perceive the adequacy of health facilities and staff as a local problem want more money allocated for health care.

by

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## RURAL-URBAN HEALTH CARE IN NORTH CAROLINA

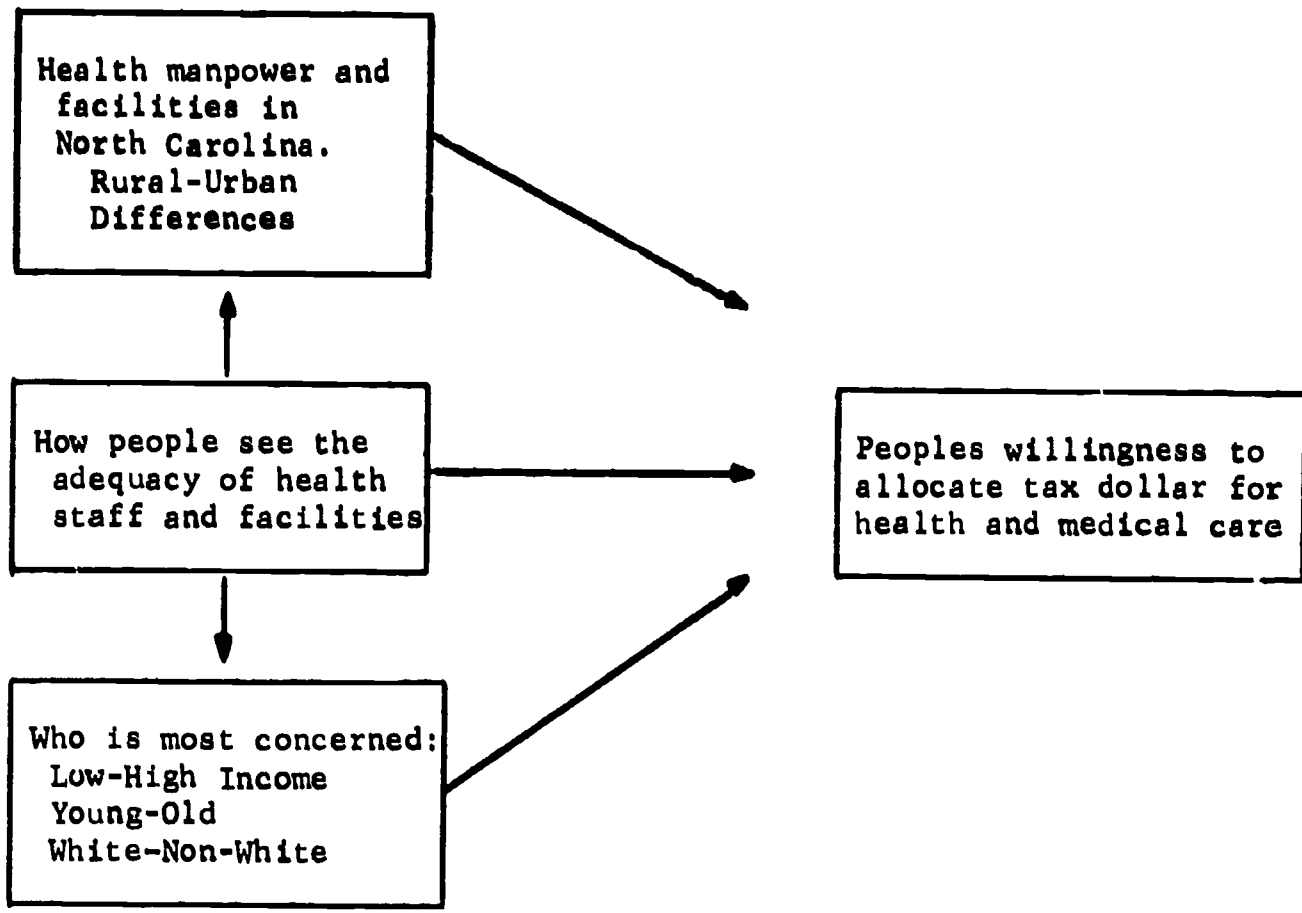
### Introduction

Is a health care crisis occurring? People disagree upon the seriousness of the health care problem in the United States. Considerable divergence of viewpoint could be easily observed at the 1971 Investigatory Hearings before the United States Senate Subcommittee on Health. The question is not whether health care is a problem, but how serious is the problem. In the 1971 hearings, two key aspects of the health care problem were highlighted. The first focused on the shortage of medical facilities. The second focused on the distribution of medical manpower, particularly in more rural areas.

This bulletin is primarily interested in assessing how the people of North Carolina view the seriousness of the health care problem and their willingness to allocate additional tax dollars for health and medical care. Four questions are raised and analyzed: (1) What is the health manpower facilities situation in different parts of North Carolina; (2) Does the peoples perception of the seriousness of the situation correspond with the availability of medical manpower and facilities; (3) Who is most concerned about medical manpower and facilities; and (4) How do these three questions relate to peoples willingness to allocate additional tax dollars for health and medical care? Figure 1 diagrams the questions to be studied. However, before proceeding with this analysis, a brief discussion is provided concerning the definition of health, the national situation, and a comparison of the national situation with that in North Carolina.

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Figure 1: Aspect of health care analyzed in this study.



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What is Health?

Most people agree that being healthy is more than being free of disease. Indeed, many Americans now consider sound health as the foremost ingredient in the "quality of life." The American public is more health conscious today than ever before and many feel that access to health care is one of their inherent rights. The highly publicized concerns of environmentalists in regards to health hazards have both broadened the public's concept of health and created a more health conscious public. This broad concept is reflected in the classical definition of health contained in the Constitution of the

## World Health Organization:

Health is a state of complete physical, mental and social well-being, and not merely the absence of disease and infirmity.

The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.<sup>1</sup>

### Health Care: A National Concern

In general the health of Americans has been improving steadily. Since 1950, life expectancy has increased 3.4%, the infant death rate has gone down by 66% and the neonatal death rate has fallen by 19.5%.<sup>2</sup> While these statistics are representative of the Nation as a whole, they can be misleading. Many areas, particularly rural ones, are lacking in medical manpower and facilities resulting in less than average health care for its citizens.

The growing recognition for more and better distributed health care in America has been labeled as a "national crisis in health care" by some authorities.<sup>3</sup> In his health message to the Congress on March 2, 1972, President Nixon stated that the "U. S. now spends \$75 billion annually on health care....and for most people, relatively good services results. Yet

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<sup>1</sup>Chronicle of World Health Organization. Constitution of the World Health Organization, Vol. 1, No. 1-2, 1947, p. 29.

<sup>2</sup>Health Services in Rural America. U. S. Department of Agriculture Rural Development Service, Agricultural Information Bulletin No. 362, 1973, p. 1.

<sup>3</sup>A Professional's Approach Using Cooperative Extension Programs for Health Education on State-wide and National Level. A testimony presented before the Pittsburgh Regional Hearings of the President's Commission on Health Education, Pittsburgh, Pa., 1972.

despite this large annual national outlay, millions of citizens do not have adequate access to health care."<sup>4</sup>

A keynote speaker at the 1974 American Medical Association's Rural Health Conference noted that our National Health Policy should provide an adequate health care system accessible to every American regardless of their socio-economic status. He felt that our present system does not provide this access at a desirable level.<sup>5</sup>

Concerns such as this about accessible health care for all Americans have been and continue to be reflected in the Congress of the United States. Legislation has created health maintenance organizations, emergency medical services and most health leaders feel that a national health insurance policy is imminent.

#### Health Care: North Carolina

The concern for adequate health care in North Carolina has manifested itself strongly in recent years. Political, medical, educational and community leaders have initiated many programs to understand and improve health care in the state and in local communities. Former Governor Scott's concern over the growing problem of physician shortage in rural areas led to the appointment of a special committee on Community Health Assistance to provide assistance to communities with acute health manpower shortages. The need

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<sup>4</sup>The White House: The President's Message to Congress, Special on Health, 1972.

<sup>5</sup>William A. Lybrand, Acting Associate for Scientific Affairs, Health Resources Administration, Department of Health, Education and Welfare (HEW). Speaking before the American Medical Association Rural Health Conference, Detroit, Michigan. April, 1974.

for this committee was recognized by a special task force of the Governor's Advisory Council on Comprehensive Health Planning after an in-depth study of problems related to the availability of basic health care services.<sup>6</sup>

The 1973 Legislature at the recommendation of Governor Holshouser, approved a bill which created the Rural Health Services Program to assure that quality medical care is available to all people of North Carolina.<sup>7</sup> The 1974 Legislative session was most productive in regards to Health Legislation. A large number of important bills were enacted including expansion of the Rural Health Services begun in 1973, expansion of the East Carolina Medical School, and expansion of the Area Health Education Centers. This action of the legislators is a reflection of the concerns of the citizens of the State.

One of the major health care problems in North Carolina is a shortage of health manpower particularly medical doctors. While there are some differences in opinions as to the extent of doctor shortage, almost everyone agrees that certain areas, especially rural ones, have a shortage of doctors. Eighty two of the 100 counties in North Carolina have fewer family doctors per capita than they did 10 years ago and 60 counties have fewer total medical doctors per capita than they had 10 years ago.<sup>8</sup>

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<sup>6</sup>Medical Care for Small Communities. Governor's Committee on Community Health Assistance. Office of Comprehensive Planning. Division of State Planning Department of Administration, State of North Carolina. July, 1972, p. 1.

<sup>7</sup>Rural Health Service Program Interim Guide for Applicant Communities, Rural Health Service Section, Division of Facility Services, Department of Human Resources, Raleigh, North Carolina. 1973.

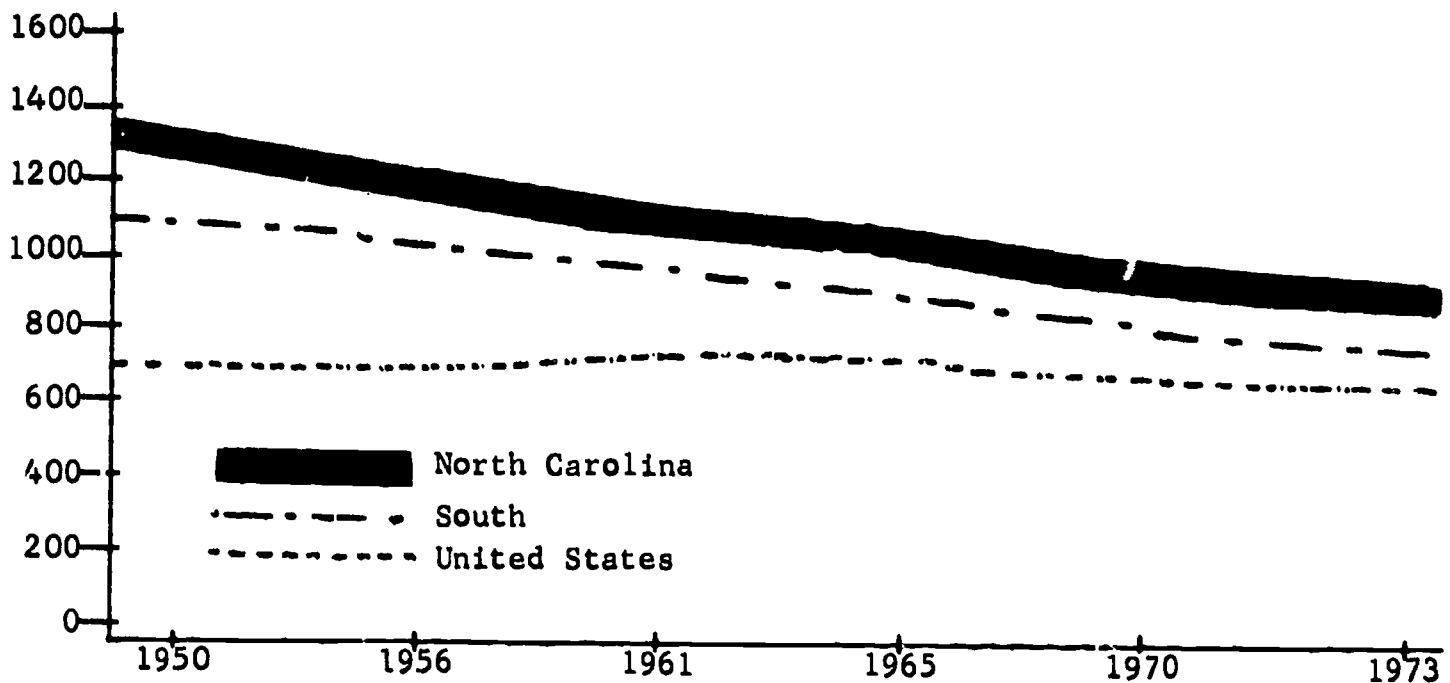
<sup>8</sup>"The Possible Dream." Edwin Monroe, MD. The New East, Eden Press, Inc. Edenton, North Carolina. November-December, 1973, pp. 7-10.



In order to get an overall perspective of the situation in North Carolina, the South, and the Nation as a whole, the ratio of people per physician was traced over the last twenty years (Figure 2).

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Figure 2: Population per physician for the United States, the South, and North Carolina projected to 1973.\*



\*Chart used with the permission of Social Research Section, Division of Health Affairs, Research and Evaluation Division, North Carolina Regional Medical Program, Data and Procedures First Biennial Report, 1968, page 224.

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While all three trends show a decrease in the population per physician ratio, it still shows that North Carolina lags considerably behind the South and particularly behind the United States. The data in Figure 2 beyond 1968 are based on predictions but the trends are supported by current data.

These data indicate that North Carolina has made some progress toward improving its population per physician ratio relative to both the United

States and the South. Even if this trend should continue the State will likely experience a higher than desirable population to physician ratio for a number of years in the future. The situation is complicated by the maldistribution of physicians in rural and urban areas of North Carolina.

Much of the literature today concerned with health care discusses it from a rural-urban dichotomy. One of the major reasons for this is that health services traditionally follow concentrations of people. Two-thirds of the people in the United States are currently reported to live on only 10 percent of the land. The other third are widely dispersed over the remaining 90 percent. The rural population tends to be less concentrated, less visible, less organized, but, in many areas, no less in need of health care than the urban population. Many of the health problems in North Carolina are associated with the rural characteristics of the State. Approximately 55 percent of the people are classified as rural residents by the 1970 Census.

In an effort to focus attention on the rural sector, a State Task Force on Rural Health was organized in 1973. The Task Force membership includes representatives from organized medicine, private medical practice, state health agencies, United States Department of Agriculture agencies including the Agricultural Extension Service, rural educational agencies, medical schools, and citizens' groups. One of the first projects of the Task Force was to conduct a study of the rural health problems as viewed by members of the 99 County Rural Development Panels and members of the Multi-County Planning Regions. The major rural health problems identified in this study are shown in Table 1.

**Table 1: A listing of the principle rural health problems in 94 North Carolina counties as perceived by Rural Development Panels.\***

	<u>NUMBER OF COUNTIES REPORTING</u>
<b>1. SHORTAGE OF HEALTH MANPOWER:</b>	
Need Doctors	47
Need Dentists	20
Need a combination of Health Manpower**	17
Need Technicians***	12
Need Nurses	7
Need Public Health Personnel	5
Need Health Educators	1
<b>2. SHORTAGE OF FACILITIES AND SERVICES:</b>	
Transportation	43
Health Education (prevention and motivation)	42
Facilities and Services in general	39
Nutrition	35
Family Planning	24
Dental Care	22
Mental Health Care	22
Medical Care (primarily children and near poor)	21
Care for Elderly	18
Lack of Emergency Care	18
Nursing and Rest Homes	18
Lack of or Inadequate Hospitals	14
a. Distance from Hospitals	9
Home Nursing and Home Health Services	11
Out Patient Clinics	9
Pre/Post Natal Care	8
Immunization	7
Day Care for Children	4
Vocational Rehabilitation	2

\*An analysis of North Carolina's Rural Health Problems as Perceived by County Rural Development Panels. Edited by Vance E. Hamilton, North Carolina Agricultural Extension Service Community Development Specialist. North Carolina Agricultural Extension Publication. Raleigh, N. C. 1973. The original study included additional problem areas. Only those related to health manpower and facilities are shown here.

\*\*More than one type of Health Manpower need identified; usually included Doctors, Dentists, and other needs.

\*\*\*Technicians include paramedics, nurses aides, and other needs used to denote manpower not included in traditional medical professions.

## Health Manpower and Facilities

Health manpower and facilities entails many considerations as was demonstrated in Table 1. In the following report only two measures will be utilized as objective indicators of health manpower and facilities in North Carolina. The measure of health manpower will focus on the number of people for each physician (people/physician). The measure of health facilities will focus on the number of people for each hospital bed (people/bed). While these two measures in no way assess the total situation of health manpower and facilities in North Carolina, they do provide two easily understood indicators of health care.

The Regional approach to planning and delivering health care has been emphasized in North Carolina. Table 2 presents a comparison of people per physician and people per hospital bed for the 17 Multi-County Planning Regions in North Carolina and for the State as a whole. It should be noted that analysis of regional differences has its drawbacks. In some regions (for example G) a respondent may be located in a fringe county many miles from the nearest medical facility. This respondent will perceive the situation as perhaps more serious even though his region may have better than average medical manpower and facilities.

Along with these two objective measures of health care, an assessment was made of how the people in these regions perceive the adequacy of health manpower and facilities in their communities. This was a statewide survey and should not be confused with the survey of County Rural Development Panels referred to previously. This statewide survey is based upon a random sample of 4,470 heads of households throughout North Carolina. Approximately 3,115 returned usable questionnaires for a response rate of 70 percent. The study

**Table 2: The distribution of medical manpower and facilities in North Carolina by Multi-County Planning Regions, and how the people perceive the adequacy of health manpower and facilities in their communities.**

<u>REGION</u>	<u>People/Physician*</u>	<u>People/Beds**</u>	<u>Percent said Moderate or Serious Community Problem***</u>
A	1493	287	71%
B	763	236	53%
C	2768	417	55%
D	2247	248	71%
E	1284	271	50%
F	1121	250	50%
G	1019	246	54%
H	1601	222	52%
J	395	196	46%
K	1576	283	72%
L	1505	270	51%
M	1793	395	65%
N	1863	337	57%
O	1266	235	54%
P	1657	362	62%
Q	1333	276	62%
R	1985	354	74%
STATE AVERAGE	1019	257	55%

\*Data obtained from the "Roster of Registered Physicians in the State of North Carolina" as issued by the Board of Medical Examiners State of North Carolina, 1970.

\*\*A complete listing of North Carolina Hospitals (Non-Federal) for 1973-74. Division of Facility Services, Raleigh, North Carolina, 1974.

\*\*\*Through Our Eyes Volume 2: "Peoples Goals and Needs in North Carolina - Summary" by James A. Christenson, North Carolina Agricultural Extension Service Miscellaneous Publication 107 (December), 1973, p. 19.

titled "Through Our Eyes" was conducted in April and May of 1973.<sup>9</sup> For the State as a whole 43 percent of the respondents felt that the adequacy of medical facilities and staff was not a problem in their community or only a slight problem in their community. Twenty nine percent felt it was a moderate problem and 28 percent (over one-fourth) of the respondents felt it was a serious community problem. The findings for the 17 Multi-County Planning Regions are presented in Table 2, column 3. In the statewide survey of community problems the item concerning the adequacy of medical facilities and staff ranked fourth out of 39 items.

Comparing the two objective measures of health care (people/physician and people/bed) with the peoples view of the adequacy of health manpower and facilities in their community shows general consistency. In four regions (A, D, K, and R) over 70 percent of the respondents see the adequacy of health facilities and staff as a moderate or serious community problem. These are four of the more rural regions of North Carolina. In three of the four regions, the number of people per physician and the number of people per hospital bed is well above the State average. In contrast, only 46 percent of the respondents in Region J felt that they had a moderate or serious health problem. This is to be expected since Region J had less people per physician and people per hospital bed than any other Region in the State.

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<sup>9</sup>Through Our Eyes is a series of 8 reports focusing on State needs and goals, community problems and concerns, and North Carolinians' values and aspirations. Volume 1: "Peoples Goals and Needs in North Carolina" encompasses a 115 page technical report of goals and needs for the State as a whole and for seventeen regions throughout the State. Detailed information of how the study was conducted is available in this report. Volume 2 is a 24 page popular version of the longer 115 page report. Additional information or questions concerning this or earlier reports can be made to Dr. James A. Christenson.

Another way to look at this is to classify counties according to the number of people per square mile. In order to determine where a given county fits into the analysis, the following is a list of counties according to population density:

COUNTIES WITH LESS THAN 50 PEOPLE/SQUARE MILE

Alleghany, Anson, Ashe, Beaufort, Bertie, Bladen, Brunswick, Camden, Caswell, Chatham, Cherokee, Clay, Columbus, Currituck, Dare, Duplin, Gates, Graham, Hoke, Hyde, Jackson, Jones, Macon, Madison, Montgomery, Northampton, Pamlico, Pender, Perquimans, Polk, Sampson, Swain, Tyrrell, Warren, Washington, Yancey.

COUNTIES WITH 50 TO 99 PEOPLE/SQUARE MILE

Alexander, Avery, Carteret, Chowan, Craven, Davie, Franklin, Granville, Greene, Halifax, Harnett, Haywood, Hertford, Johnston, McDowell, Martin, Mitchell, Moore, Person, Randolph, Richmond, Robeson, Rutherford, Scotland, Stokes, Surry, Transylvania, Union, Watauga, Wilkes, Wilson, Yadkin.

COUNTIES WITH 100 to 249 PEOPLE/SQUARE MILE

Alamance, Buncombe, Burke, Cabarrus, Caldwell, Catawba, Cleveland, Davidson, Edgecombe, Henderson, Iredell, Lee, Lenoir, Lincoln, Nash, Onslow, Orange, Pasquotank, Pitt, Rockingham, Rowan, Stanly, Vance, Wayne.

COUNTIES WITH 250 to 499 PEOPLE/SQUARE MILE

Cumberland, Durham, Gaston, Guilford, New Hanover, Wake.

COUNTIES WITH 500 or MORE PEOPLE/SQUARE MILE

Forsyth, Mecklenburg.

An analysis of rural-urban differences according to the population density of the county will help to overcome the considerable diversity of population sizes which occur when looking at manpower and facilities from a regional perspective.

When the ratio of the number of people per physician and the number of people per hospital bed are compared with peoples perception of the adequacy of medical facilities and staff, very clear rural-urban differences are apparent (see Table 3). The urban areas have the most desirable ratios and the rural areas the least desirable. The people in the rural areas the

least desirable. The people in the rural areas are the most concerned and the people in the urban areas the least concerned, though approximately half of both groups do express a concern.

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Table 3: Population density and health care.

<u>People per square mile</u>	<u>People/Physician*</u>	<u>People/Bed*</u>	<u>Percent said moderate or serious problem</u>
49 people or less	2413	442	71%
50 to 99 people	1719	297	69%
100 to 249 people	1045	262	53%
250 to 499 people	709	241	49%
500 or more people	659	178	46%

\*Data from same sources as Table 2

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Thus far the analysis has concentrated on how people evaluate health care according to regional and rural-urban differences. At the 1971 Senate Hearings, it was also pointed out that older people, the poor, and non-whites were particularly concerned about the health care situation. This study in North Carolina also found that the poor and non-white are particularly concerned about the adequacy of medical facilities and staff (see Table 4). Twice as many low income non-whites see the adequacy of health facilities and staff as a serious local community problem than do upper income non-whites. The same relationship holds true (to a lesser extent) for lower income whites and upper income whites.

Analysis was also conducted to assess whether younger or older heads of households perceive the problem as more serious. No differences were



Table 4: Concern for health facilities and staff according to family income and race.

	<u>Less than \$6,000</u>		<u>\$6,000 to \$14,999</u>		<u>\$15,000 or more</u>	
	<u>Non- White (154*)</u>	<u>White (473)</u>	<u>Non- White (153)</u>	<u>White (1344)</u>	<u>Non- White (37)</u>	<u>White (654)</u>
Not a problem or slight problem	29%	38%	30%	44%	43%	51%
Moderate problem	29%	29%	32%	30%	35%	25%
Serious problem	42%	33%	38%	25%	22%	24%

\*number of respondents in each category

discovered and thus the data were not included. Differences according to level of education were quite similar to that noted for level of income and this data were not included in this analysis.

#### Public Funds for Health Care

The peoples perception of the seriousness of health problems has been discussed, but who is willing to have additional monies allocated for health and medical care? Increasingly the state and federal government is coming to play a more direct role in health care. For this reason, respondents were asked whether they want the government (federal, state and local) to spend less, the same, or more public funds on health and medical care. The question was placed in a comparative context with 35 other areas competing for the allocation of tax dollars. Health and medical care ranked 7th out of the 35 items closely following items concerning law enforcement, water pollution, special education, and assistance to the old and poor. Overall, 54 percent of the 3,115 respondents sampled wanted more tax dollars allocated

to health and medical care. Only 5 percent want less funds spent, and approximately 40 percent want about the same amount spent as in the past. Thus, over half of the respondents are in favor of spending additional tax dollars for health and medical care.

In the earlier section of this report, it was pointed out that people in more rural counties had fewer medical facilities and staff and thus were much more concerned about the adequacy of medical facilities and staff than those in more heavily populated (urban) counties. Thus, one would expect that the people in more rural counties would have a greater desire for the allocation of their tax dollars for health and medical care. However, the findings did not support this contention.

The findings indicate (see Table 5) that only a very slight difference is apparent between people living in rural counties and people living in urban counties in their willingness to allocate tax dollars to health and medical care. Approximately 56 percent of the people in the least populated counties (like Ashe and Clay) wanted more money allocated while 49 percent

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Table 5: Population density and willingness to allocate tax dollars for health and medical care.

<u>People Per Square Mile</u>	<u>People/physician</u>	<u>People/bed</u>	<u>Allocation of Tax Dollars</u>	
			<u>Spend More</u>	<u>Spend Less</u>
49 people or less	2413	442	56%	4%
50 to 99 people	1719	297	56%	5%
100 to 249 people	1045	262	56%	5%
250 to 499 people	709	241	53%	6%
500 or more people	659	178	49%	4%

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of the people in heavily populated counties (like Mecklenburg and Forsyth) wanted more money allocated. Only 4 percent of both types of counties wanted less public funds or no public funds allocated to health and medical care. In short, although people in rural counties perceive the problem as more serious, they are not much more willing to allocate additional tax dollars.

However, when attitudes toward the allocation of tax dollars were assessed for different levels of income and race, some major differences were apparent (Table 6). From 60 to 84 percent of non-whites wanted more funds allocated while from 37 to 66 percent of whites wanted more funds allocated to health and medical care programs. For all income levels, non-whites are more willing to have tax dollars allocated to health and medical care than whites. Earlier in the analysis of peoples perception of health problems it was demonstrated that middle and low income non-whites along with low income whites saw the problem as more serious than their counterparts. Here, in similar fashion, these same groups show a greater willingness for the allocation of tax dollars for health care.

Table 6: Attitude for allocating funds to health and medical care according to family income and race.

Health and medical care	Less than \$6,000		\$6,000 to \$14,999		\$15,000 or more	
	Non- White (160)	White (501)	Non- White (153)	White (1355)	Non- White (35)	White (660)
Spend NO or LESS public funds	2%	4%	2%	6%	6%	11%
Spend SAME	15%	29%	20%	43%	34%	52%
Spend MORE	84%	66%	78%	51%	60%	37%

The implications of these findings can be expanded by studying the relationship between how people perceive the health situation and their willingness to allocate tax dollars. The findings in Table 7 indicate that those who perceive the health situation as a serious problem are slightly more likely to favor spending additional tax dollars.

Table 7: Relation between how people perceive the health situation and their willingness to allocate tax dollars.

<u>Percent spend funds on health</u>	<u>PERCEPTION OF HEALTH SITUATION</u>		
	<u>Not or Slight Problem</u>	<u>Moderate Problem</u>	<u>Serious Problem</u>
Spend NO or LESS funds	8%	4%	6%
Spend SAME	45%	39%	32%
Spend MORE	47%	57%	62%

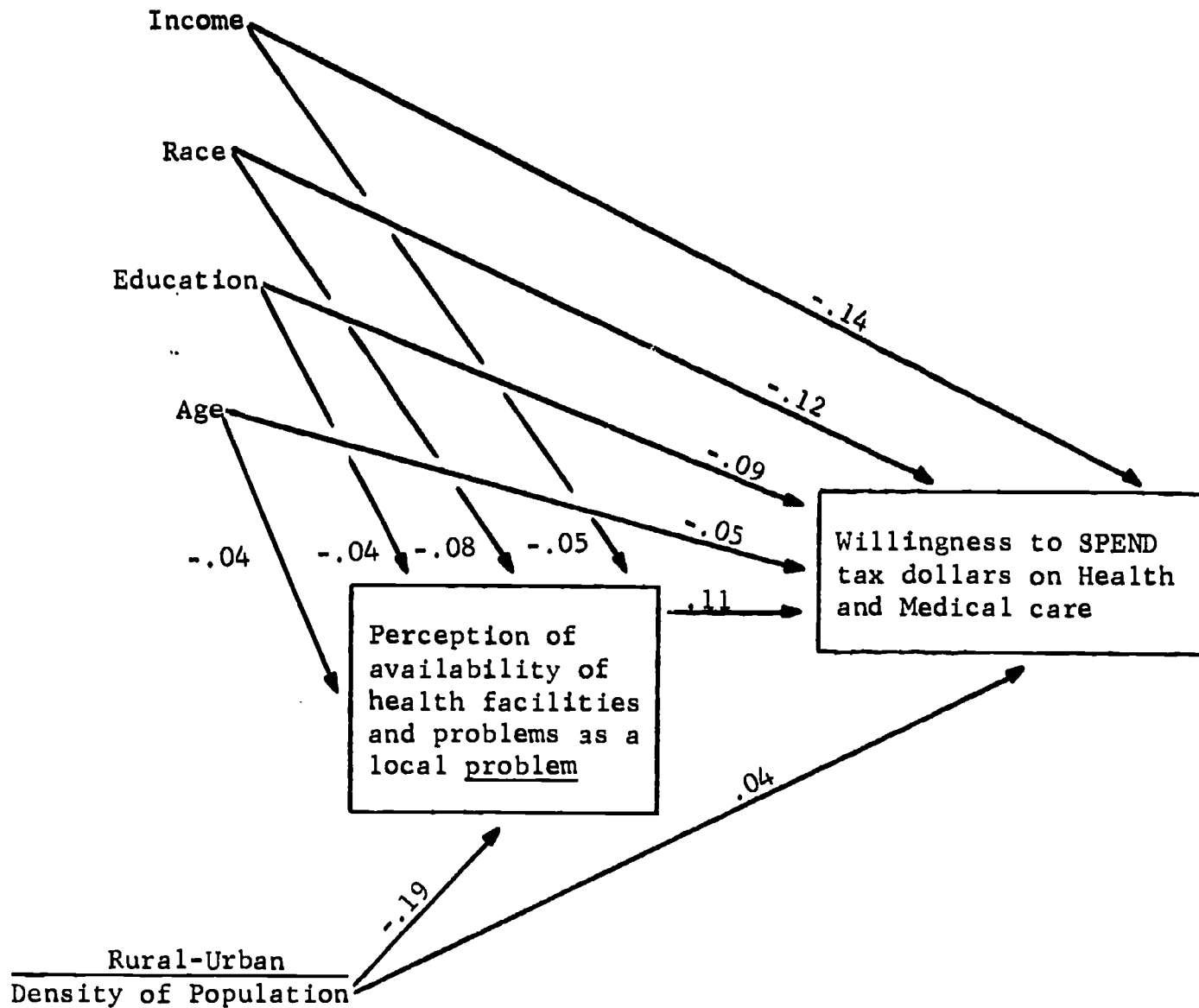
However, the most important finding may be that almost half (47%) of the respondents who did not perceive the adequacy of medical facilities and staff as a problem still wanted more funds allocated for health and medical care. This indicates that most people, even though they may not perceive the problems as serious for themselves, are concerned about health and medical care as expressed through their willingness to allocate additional public funds.

#### Summary

In order to show the interrelationships among all the variables discussed in this report, a simplified path model was developed. In Figure 3, each number (standardized regression coefficient) indicates how one variable affects another variable while all the other variables are held constant.

Figure 3: Model of relative influence of variables upon perception of health problems and willingness to allocate funds toward health care.\*

Personal Characteristics



\*The multiple correlation for all the variables studied in relation to the major dependent variable (willingness to spend tax dollars) yields an R of .30, and explains approximately 9 percent of total variation for the allocation of tax dollars. This small amount of explained variance indicates that the findings must be interpreted with proper reserve. The model is provided only to visually portray the interrelationship among the variables studied.

For example, as a rule of thumb, a number of .16 is relatively twice as important as a number of .08. Using this procedure one can see visually the relative importance of the different variables.

One can see that the rural-urban variable which is based upon the density of the population and closely related to the availability of medical manpower and facilities is a better predictor of peoples perception of the adequacy of health facilities and staff in their local communities than any of the personal characteristics studied. People in more rural areas see the health problem as much more serious than do people in urban areas even when holding constant considerations such as race, income, education or age. This is to be expected since there are fewer medical manpower and facilities per person in rural areas.

However, this relationship is not as strong when looking at peoples willingness to allocate additional tax dollars for health and medical care. The rural-urban variable has very little effect on peoples willingness to allocate public funds. Income, race, and education are much more important than rural-urban differences. Those of lower levels of income and educational attainment and non-whites are more willing to have additional funds allocated than their counterparts. It is interesting to note that perception of a health problem in a community does not have any stronger relation to willingness to allocate public funds than income or race. It would be expected that those who perceive the problem as more serious would be much more eager to have funds spent in order to solve some of the problems. This can be partially explained by the fact that most people are willing to have additional funds allocated to health and medical care even though many of them do not see it as a serious community problem.

## Implications

Health and government leaders have been aware of the health needs in North Carolina for sometime. This study indicates that the public is also aware of the health problems in the State and are willing to spend tax dollars to improve the situation. Thus, conditions appear to be such that additional progress can be expected in the future for health care.

This study points out very clearly the plight of the rural counties of the state in regards to medical manpower and facilities. This problem is also being recognized and efforts are beginning to move in this direction. The newly created and expanded Rural Health Service program is one such effort of State government to provide primary health care for rural citizens in communities which cannot attract physicians. This program involves a team or system approach using physician extenders under the direction of a backup physician(s). Many leaders in health care believe that the solution to the rural health manpower problem can best be provided through a regional or systems approach which utilizes varying degrees of manpower training and facilities. The implementation of this will require an understanding and acceptance by health care providers and users.

From the current interest in health care which was evident in this study, one could logically conclude that the "teachable moment" has or is emerging for health education. In the long run a feasible and practical solution to many of the health care problems will be to educate the public toward better preventive health practices. The decade ahead may be recorded as the "Preventive Health Care Era" in America and the education may be provided by a wide range of agencies and organizations who are not now providers of health education.