

August 7, 1964

To the Graduate Council:

I am submitting herewith a thesis written by Willie F. Felder entitled "Health Insurance Status of Selected Rural Families in Sevier County, Tennessee." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Home Management.

Phyllis Stett
Major Professor

We have read this thesis and
recommend its acceptance:

Lorna G. Garrett
Claire Gilbert

Accepted for the Council:

Hilton A. Smith
Dean of the Graduate School

HEALTH INSURANCE STATUS OF SELECTED RURAL
FAMILIES IN SEVIER COUNTY, TENNESSEE

A Thesis
Presented to
the Graduate Council of
The University of Tennessee

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

by
Willie F. Felder
August 1964

ACKNOWLEDGMENT

The writer wishes to express deepest appreciation to Miss Phyllis Ilett, Associate Professor of Home Management, Equipment and Family Economics for her guidance, encouragement, understanding, and untiring assistance throughout this study. Grateful appreciation is also extended to Dr. Claire Gilbert, Professor of Home Demonstration Methods and to Dr. Lorna J. Gassett, Professor of Home Management, Equipment and Family Economics for their interest and helpfulness.

To the respondents who gave of their time and information the writer is indeed grateful.

W. F. F.

TABLE OF CONTENTS

CHAPTER	PAGE
I. THE PROBLEM AND DEFINITIONS OF TERMS USED.	1
The Problem	1
Importance of the Study	2
Definitions of Terms Used	3
II. REVIEW OF RELATED LITERATURE	5
Studies Reviewed.	5
Pertinent Findings in Studies Reviewed.	7
Health Insurance Participation and Types of Coverage .	8
Benefits	10
Place of Residence	11
Age.	11
Education.	12
Income	12
View of State of Health.	13
Comprehension of Policy Provisions	13
III. METHODOLOGY.	15
Source of Data.	15
The Sample.	15
The Interview Schedule.	15
Method of Analysis.	16

CHAPTER	PAGE
IV. FINDINGS	21
Description of Families	21
Health Insurance Status, Types of Coverage and Hospital Room Allowance	23
Health Insurance Status in Relation to Selected Factors .	29
Place of Residence	31
Age of Husband	35
Education.	35
Family Cash Income	44
View of State of Health.	47
Comprehension of Policy Provisions.	47
Planning for Later Years.	52
Families Without Health Insurance Protection, ...	55
V. SUMMARY AND CONCLUSIONS.	58
BIBLIOGRAPHY.	63
APPENDIX.	67

LIST OF TABLES

TABLE	PAGE
I. Socio-economic Characteristics of Sixty Selected Rural Families, Sevier County, Tennessee, May, 1964.	22
II. Health Insurance Status of Husbands and Wives in Sixty Selected Rural Families, Sevier County, Tennessee, May, 1964.	24
III. Types of Health Insurance Coverage of Husbands in Sixty Selected Rural Families, Sevier County, Tennessee, May, 1964.	26
IV. Types of Health Insurance Coverage of Wives in Sixty Selected Rural Families, Sevier County, Tennessee, May, 1964.	27
V. Health Insurance Status of Husbands and Wives in Sixty Selected Rural Families, Sevier County, Tennessee, By Types and Numbers of Coverages Carried, May, 1964	28
VI. Maximum Daily Hospital Room Allowances Available to Insured Husbands and Wives in Sixty Selected Rural Families, Sevier County, Tennessee, May, 1964.	30
VII. Health Insurance Status of Husbands in Sixty Selected Rural Families, Sevier County, Tennessee, By Place of Residence, May, 1964.	32

TABLE

PAGE

VIII.	Health Insurance Status of Wives in Sixty Selected Rural Families, Sevier County, Tennessee, By Place of Residence, May, 1964.	33
IX.	Types of Health Insurance Coverage of Husbands in Sixty Selected Rural Families, Sevier County, Tennessee, By Place of Residence, May, 1964.	34
X.	Types of Health Insurance Coverage of Wives in Sixty Selected Rural Families, Sevier County, Tennessee, By Place of Residence, May, 1964	36
XI.	Health Insurance Status of Husbands in Sixty Selected Rural Families, Sevier County, Tennessee, By Age of Husband, May, 1964	37
XII.	Types of Health Insurance Coverage of Husbands in Sixty Selected Rural Families, Sevier County, Tennessee, By Age of Husband, May, 1964.	38
XIII.	Health Insurance Status of Husbands in Sixty Selected Rural Families, Sevier County, Tennessee, By Education of Husband, May, 1964.	39
XIV.	Health Insurance Status of Wives in Sixty Selected Rural Families, Sevier County, Tennessee, By Education of Wife, May, 1964.	41
XV.	Types of Health Insurance Coverage of Husbands in Sixty Selected Rural Families, Sevier County, Tennessee, By Education of Husband, May, 1964.	42

TABLE

PAGE

XVI.	Types of Health Insurance Coverage of Wives in Sixty Selected Rural Families, Sevier County, Tennessee, By Education of Wife, May, 1964	43
XVII.	Health Insurance Status of Husbands in Sixty Selected Rural Families, Sevier County, Tennessee, By Family Cash Income, May, 1964	45
XVIII.	Health Insurance Status of Wives in Sixty Selected Rural Families, Sevier County, Tennessee, By Family Cash Income, May, 1964.	46
XIX.	Types of Health Insurance Coverage of Husbands in Sixty Selected Rural Families, Sevier County, Tennessee, By Family Cash Income, May, 1964.	48
XX.	Types of Health Insurance Coverage of Wives in Sixty Selected Rural Families, Sevier County, Tennessee, By Family Cash Income, May, 1964.	49
XXI.	Health Insurance Status of Husbands in Sixty Selected Rural Families, Sevier County, Tennessee, By View of State of Health, May, 1964.	50
XXII.	Health Insurance Status of Wives in Sixty Selected Rural Families, Sevier County, Tennessee, By View of Status of Health, May, 1964	51
XXIII.	Degree of Comprehension of Policy Provisions of Insured Respondents in Sixty Selected Rural Families, Sevier County, Tennessee, May, 1964	53

TABLE

PAGE

XXIV.	Health Insurance Plans for After Age 65 in Sixty Selected Rural Families, Sevier County, Tennessee, May, 1964. . .	54
XXV.	Health Insurance Plans for After Age 65 in Sixty Selected Rural Families, Sevier County, Tennessee, By Current Status of Health Insurance Coverage, May, 1964	56

CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

I. THE PROBLEM

The purposes of this study were (1) to provide information concerning the participation in health insurance of the husbands and wives in a selected group of rural Tennessee families in the preretirement stage of life; and (2) to determine the relationship between such participation, or the lack of it, and certain socio-economic factors and respondents' view of the state of health of husband and wife.

Information was obtained regarding: (1) persons having health insurance; (2) types of coverage; (3) benefits; (4) amounts and frequency of premium payments; (5) comprehension of policy provisions; (6) view of state of health; (7) plans for carrying health insurance in later years (65 and over); (8) for those not participating in a health insurance program, reasons for not doing so, and plans for meeting possible medical expenses; and (9) the following socio-economic facts: place of residence, age of husband, educational level of husband and of wife, and family cash income.

It was hypothesized that:

1. More husbands and wives in rural nonfarm than in rural farm families have some type or types of health insurance coverage.

2. More husbands in the 45-54 year age group than in the 55-64 age group are enrolled in some health insurance program.

3. There is an association between the level of education of the husband and his having health insurance; also, there is a like association for the wife.

4. There is a positive relationship between family cash income and participation of husbands and wives in health insurance programs.

5. More wives and husbands whose state of health is viewed by respondents as "good" have health insurance coverage than is true of those whose state of health is deemed to be "fair or poor."

II. IMPORTANCE OF THE STUDY

Expenses incurred as a result of illness or accident can be an insurmountable threat to the economic security of many families. While it is known that in Tennessee over 2,500,000 persons had some form of health insurance protection in 1962 (19, p. 27), no data are available, so far as the writer was able to ascertain, on how rural families in the state have attempted to make provision against the risk of extensive health costs.

Enrollment of selected groups of rural families in health insurance programs has been reported in a number of studies made in various sections of the country. However, in few of these has there been any information about types of coverage carried and benefits, and practically no information is available on the comprehension of policy provisions by subscribers.

Knowledge of socio-economic factors which may be associated with efforts of rural families to make financial provision for the risk of

unforeseeable health expenses is sparse. Information on why people do not carry health insurance appears to be nonexistent. Little is known about rural people's preparedness for later years. As health insurance may well be a portion of security for those years, it is of importance to obtain facts on family planning during preretirement years.

It is hoped that the information on various aspects of health insurance participation provided in this study will be of value not only to home economists, agriculturalists and welfare workers but also to other educators interested in and working with rural families.

III. DEFINITIONS OF TERMS USED

Types of insurance refer in the present study to five forms of insurance coverage or protection: (1) hospital, (2) surgical, (3) medical, (4) major medical, and (5) loss of income.

Hospital coverage includes benefits provided to help meet part or all of hospital expenses of hospital room and board and other hospital treatment charges such as laboratory fees and X-rays.

Surgical coverage refers to benefits provided toward the cost of operations, generally made according to a listed schedule of surgical procedures along with an amount stated for each type of operation.

Medical coverage is used in reference to benefits toward payment of personal physicians' fees for non-surgical care given in the hospital, home or the doctor's office. It may also include benefits for diagnostic X-ray and laboratory expenses.

Major medical coverage provides benefits toward payment of virtually all kinds of health care expenses prescribed by a physician. It is designed largely for protection against the extremely large expenses incurred by prolonged illnesses or accidents. It usually carries a deductible clause--the subscriber paying a stated amount before the insurance company begins payments.

Loss of income coverage provides for benefits to be paid the individual for days when he is unable to work due to illness or accident.

In determining farm-nonfarm residence in this study, the basis used by the United States Bureau of the Census in the 1960 Census of Population was followed. Persons living in rural areas on property of ten or more acres from which the sale of farm products amounted to \$50 or more the previous year or on property of less than ten acres from which the sale of farm products amounted to \$250 or more were classified as residing on rural farms. Those living on property from which the sale of farm products, if any, did not meet the above criteria were classified as rural nonfarm residents (21, p. viii).

CHAPTER II

REVIEW OF RELATED LITERATURE

I. STUDIES REVIEWED

There have been a number of studies made in the past two decades which provided information regarding various aspects of health insurance participation of rural families in the United States. One of the earlier ones was made by L. F. Miller and L. V. Rubright. The data for it were obtained in 1947 from 399 Pennsylvania farmers (17). Another of the earlier studies, that conducted by Marion T. Lofton and Robert E. Gallo-way in 1949-1950, provided information on the use of health services by 909 rural families in four Mississippi counties (14).

In the following year, 1951, Sewell, Ramsey and Ducoff surveyed the conceptions and plans for old age of 658 farm operators living in two contrasting economic areas in Wisconsin (18). Two years later Odin W. Anderson and Jacob J. Feldman made a nationwide study which included information on health insurance coverage of 572 rural nonfarm families and 434 rural farm families (1).

A study concerning health insurance protection and medical care expenditures based on the findings from three family surveys was made by Agnes W. Brewster and Simon Dinitz. This 1953-1954 study included a total of 473 families in Ohio, Connecticut and Vermont (5). In 1955 and 1956, Sheldon G. Lowry and Donald G. Hay conducted separate but similar investigations in four North Carolina counties of the use of health care

services and enrollment in health insurance of approximately 1,200 families (12, 13, 15, 16).

In 1956, Hassinger and McNamara surveyed 152 open-country households in their study of health service charges in a Missouri county (11). During this same year Ellenbogen, Ramsey, and Danley studied health insurance protection of 150 farm operators in a New York county (9). Other studies of health insurance enrollment were made in 1956 and 1957 in three Georgia counties. These were conducted by John C. Belcher and Donald G. Hay and involved approximately 1,000 families (2, 3, 4).

Ellenbogen, Hay and Larson compared the availability and use of health services in two New York counties in the years 1949 and 1957 (8). These same investigators, assisted by Danley, made a similar study in two other counties in New York for the years 1950 and 1958 (7). The former study included approximately 500 rural households in 1949 and 600 in 1957; the latter included about 500 rural households in 1950 and 700 in 1958.

In 1961, Hassinger made a survey of the health insurance coverage of the 183 households in a small Missouri town (10). In 1962, Stojanovic and Windham reported on a study of factors associated with carrying health insurance in three Mississippi counties but did not indicate when the data were collected. Their findings were based on a sample of approximately 270 families in which one or more persons had been hospital patients at some time (20).

Collins and Hayward made a study in Payne County, Oklahoma of insurance carried by fifty-two farmers. It was published in 1963; however,

the date when the data were collected was not given (6).

In some of the studies only a limited amount of information which was pertinent to the present study was given as they included other kinds of insurance or other aspects of health or health services..

Little was found in the literature regarding types of coverage. In some studies the only delineation made was between health and accident insurance. Few reports contained information concerning the knowledge of families with respect to the benefits contained in their policies. In no study reviewed was there reference to plans for health insurance of husband and wife or alternative ways of paying health costs after they reached age 65.

Several studies contained analyses of health insurance participation in relation to age and educational level of the head of the household and family income. Two reported on health insurance enrollment as related to place of residence. In only one study was there reference to "the view of state of health" in relation to insurance coverage.

II. PERTINENT FINDINGS IN STUDIES REVIEWED

Findings in the literature reviewed which were considered pertinent to the present study are presented under the following topics: health insurance participation and types of coverage, benefits, place of residence, age, education, income, view of state of health and comprehension of policy provisions.

Health Insurance Participation and Types of Coverage

The proportion of families found to be participating in health insurance programs varied greatly in the studies. In general, hospital and surgical coverages were found to be far more common than were medical and loss of income or disability.

Miller and Rubright reported that 26 per cent of the Pennsylvania farm families they surveyed in 1947 had some health insurance protection (17, pp. 3, 20). Lofton and Galloway reported in their study of Mississippi families that approximately one-third of them had one or more members covered by health insurance (14, p. 96).

In the Sewell, Ramsey, and Ducoff study of Wisconsin farm operators it was found that less than one-half had accident insurance and about one-third had health insurance (18, pp. 7-8).

Anderson and Feldman reported that 57 per cent of the rural non-farm and 45 per cent of the rural farm families included in their 1953 nationwide survey had some type of health insurance coverage (1, pp. 15-16).

Hassinger and McNamara reported that only one in three of the families they surveyed in Missouri in 1956 had any health insurance coverage (11, p. 19). In the same year, Ellenbogen, Ramsey and Danley found that one-half of the farmers they interviewed in New York had some protection and about 70 per cent of the insured farmers' wives were covered (9, pp. 3-4).

In each of the four New York counties in which Ellenbogen, et al. studied how the proportion of families carrying health insurance had

changed over an eight-year period, they found a considerable increase in enrollment. The largest increase was from a low of 20 per cent to a high of 53 per cent; the smallest was from a low of 46 per cent to a high of 60 per cent. In 1957-1958, the proportion of families with all members having health insurance ranged in the four counties from 53 to 65 per cent (7, p. 24; 8, pp. 37-38).

In the foregoing studies the information regarding health insurance participation was in terms of enrollment in some health insurance program. The studies cited below also contained information on types of coverage carried.

Brewster and Dinitz found in their study that 72 per cent of the families were carrying some type of health insurance. Almost half of them had both hospital and surgical coverage while slightly less than one-tenth had medical protection (other than polio) in addition to hospital and surgical coverage (5, pp. 4-5).

Lowery and Hay found in the four North Carolina studies that the proportion of households with some health insurance protection for one or more members ranged from 40 to 73 per cent. By far the most commonly reported types of coverages were hospital and surgical. Disability or loss of income was found with considerably less frequency, and medical coverage was found to be the least common type (12, p. 5; 13, p. 9; 15, p. 4; 16, p. 12).

Belcher and Hay reported that the proportion of households having one or more members covered by some type of health insurance protection ranged from 60 to 80 per cent in the three Georgia counties they surveyed.

Disability was the most common type of coverage in two of the counties, followed by hospital and then surgical. This departure from the usual order of popularity of types of coverage was doubtlessly due to the low cost and hence meager benefits of disability coverage the families had. A typical policy of this type was one paying \$3.00 a week for disability through sickness or accident (2, pp. 19-20; 3, p. 17; 4, pp. 19-21).

Hassinger reported two-thirds of the households in the small Missouri town he surveyed had one or more members with some health insurance. All of these had hospital coverage and over 90 per cent had surgical coverage; about one-fourth had medical coverage (10, p. 5).

The Oklahoma study by Collins and Haywood showed that 44 per cent of the farm operators or family members had some type of medical expense insurance. All but two of the policies carried covered illness and accident expenses. Approximately 10 per cent of the farmers had some disability insurance (6, p. 11).

Benefits

The three Georgia studies by Belcher and Hay gave information pertaining to hospital insurance benefits in terms of the maximum daily room allowances. The most commonly reported allowance was \$8-\$10 per day. Next came \$5-\$7 a day, found somewhat less frequently, followed by \$11 or more per day, reported by only a small proportion of families (2, pp. 19-20; 3, p. 17; 4, pp. 19-21).

As has already been indicated, Belcher and Hay found that a typical disability benefit for sickness and accident in the Georgia studies

was \$3.00 a week (4, p. 21). The only other reference to disability benefits was by Collins and Haywood in their Oklahoma study. They found that such benefits ranged from \$12.50 per month to \$150.00 per month (6, p. 11).

Place of Residence

Only two studies included an analysis of rural health insurance participation as related to place of residence. As previously stated, Anderson and Feldman found health insurance protection more prevalent among rural nonfarm than rural farm families.

The Lofton and Galloway study of rural people in Mississippi showed that 47 per cent of the nonfarm families had one or more members with some health coverage, whereas only 23 per cent of the farm families had health insurance protection (14, pp. 96-97).

Age

In several studies, health insurance participation was analyzed in relation to age. However, few of them compared the two age groups, 45-54 and 55-64, considered in the present study.

In general, where such comparison were made, little difference was noted in the proportions of persons in the two groups having health (or accident) insurance protection.

Sewell, Ramsey and Ducoff found in their study of farmers that of the 45-54 year age group, 35 per cent had accident insurance and 43 per cent had health insurance, while in the 55-64 age group 36 per cent had accident and 26 per cent had health insurance (18, pp. 8-9).

In one of the four North Carolina counties surveyed by Lowry and Hay, the proportion of individuals enrolled in health insurance was 34 per cent for the 45-54 year old group and 29 per cent for the 55-64 year old group. In the only other county in which they compared these two age groups the figures were 48 per cent for the younger and 49 per cent for the older (12, p. 6; 15, p. 7).

In the small Missouri town study by Hassinger it was shown that of families with the heads of household from 45-54 years of age, 81 per cent had health insurance, whereas in those with heads of households 55-64 years of age, 76 per cent had some protection (10, p. 5).

Education

Health insurance coverage as related to educational level of the husband was investigated in several of the studies reviewed. Only in the four conducted in North Carolina was enrollment in health insurance analyzed in relation to the education of the wife.

In all of the studies in which this factor was considered for husband and/or wife, it was found that those who had limited education (usually 8 grades or less) had health insurance protection less frequently than those who had more education (9, p. 14; 10, p. 5; 11, p. 26; 12, p. 8; 13, p. 12; 15, p. 9; 16, p. 15; 20, p. 473-475).

Income

Hassinger and McNamara reported that as the income of Missouri open-country families increased, so did their health insurance enrollment (11, p. 26). When Hassinger conducted a survey in a small Missouri

town he found the same situation (10, p. 5).

Hay and Lowry reported that in each of the four North Carolina counties they surveyed, the proportion of families having health insurance protection increased as income increased (12, p. 9; 13, p. 12; 15, p. 9; 16, p. 15). Similar results were reported by Ellenbogen, Ramsey and Danley in their study of New York farm operators (9, p. 23). However, Stojanovic and Windham did not find this pattern to be true of the Mississippi families they studied (20, pp. 473-475).

View of State of Health

Only one study, that done by Stojanovic and Windham, gave findings on participation in health insurance in relation to view of state of health. They reported that the proportion of persons having health insurance protection was significantly higher in the group whose health was regarded as excellent or good than in the group whose state of health was considered to be fair or poor (20, pp. 473-475).

Comprehension of Policy Provisions

In only two of the studies reviewed was there reference to comprehension of policy provisions. Hassinger and McNamara found that about one-half of the respondents in households having insurance reported they did not know what payments were made for hospitalization. About 80 per cent did not know about payments for physicians' services (11, p. 21).

In the Hancock County study, Belcher and Hay stated that much of the health insurance purchased was because of personal regard for the agent. They found that:

A number of the respondents did not know the name of the company insuring them nor details of benefits payable. Yet many were paying 10 per cent or more of total incomes for such health insurance. (4, p. 20)

CHAPTER III

METHODOLOGY

I. SOURCE OF DATA

The data for this study were obtained from a survey of rural families residing in Sevier County, Tennessee. The writer conducted personal interviews in the respondents' homes during May, 1964.

II. THE SAMPLE

The sample consisted of sixty families that contained both husband and wife who had been married prior to January 1, 1963. A further qualification was the limitation to families headed by a husband in the 45-64 year age group.

A county highway map with residences located on it was used in the selection of the households to be visited. All of the roads shown on the northern portion of the map were traveled with the interviewer stopping at random households. Stops were made at 170 homes. Of these, 61 contained families meeting the eligibility requirements, with one refusing to be interviewed due to pressure of time; 81 were occupied by families that were ineligible; and in 28 cases no one was at home.

III. THE INTERVIEW SCHEDULE

A schedule of questions was developed and pretested on several subjects. The questions that were not clear to respondents were then

revised. The five sections of the schedule included:

1. Identification of the respondents and designation of the eligibility of the family.

2. Number of persons in the family, age of husband, and educational level and type of employment of both husband and wife. The last mentioned was included only as an aid in ascertaining income.

3. Questions on the respondent's view of the state of health of the husband and wife; insurance participation including types of coverage, premium payments and benefits of policies; and plans for age 65 and over with regard to health insurance. Where a family had no health insurance, reasons for not having any and methods they used for paying medical expenses were also included.

4. Place of residence questions.

5. Questions relating to the amount and sources of cash income of the family in 1963.

IV. METHOD OF ANALYSIS

Data from the schedules were transferred to McBee Keysort cards and then to summary sheets and analysis tables.

Participation in health insurance programs was studied in terms of enrollment and types of coverage carried: hospital, surgical, medical, major medical, and loss of income.

Benefits of hospital insurance were totaled as to the maximum daily room allowance in three groups: \$5-\$7, \$8-\$10, and \$11-\$20.

Wherever a person had two or more policies providing coverage for

hospital room and board, the amounts per day allowed under all policies were totaled to determine the maximum daily allowance available to the insured.

Enrollment in health insurance programs and types of coverage carried by the subjects were analyzed according to the socio-economic factors below:

1. Place of residence--rural farm or rural nonfarm.
2. Age of husband--divided into two groups: 45-54 and 55-64 years of age.
3. Educational level of husband and of wife--determined by the number of grades completed in school. The three classifications were: 7 or less, 8-9, and 10 or more.
4. Cash income of family in 1963--classified as follows: under \$3,000 and \$3,000 and over. This division was decided upon since family income of less than \$3,000 has recently been designated as the poverty level.

Enrollment in health insurance programs was also analyzed in relation to the respondent's view as to whether the state of health of the husband and of the wife was considered "good" or "fair or poor."

Respondents in families having health coverage were rated as to their degree of comprehension of selected provisions contained in the policies carried by their families.

The method devised for determining degree of respondent's comprehension was as follows:

For each policy carried, a value of one point was assigned to each of the twenty-one items listed on pages 18 and 19 when it was applicable. Thus the possible scores varied, depending on the number of policies a family had and the types of coverage contained in each policy. For example, if a family had two policies containing hospital coverage only, the maximum comprehension score attainable would be 24, the sum of two times the five points regarding general information and two times the seven pertaining specifically to hospital coverage. If the respondent could give only twelve answers regarding the two policies, the degree of comprehension was 50 per cent--the ratio of respondent's actual score to his or her possible score.

The categories of degrees of comprehension were: under 25 per cent; 25-49 per cent; 50-74 per cent and 75-100 per cent.

Comprehension Score (one point for each item):

General Information:

1. Name of insurance company
2. Types of coverage contained in policy
3. Frequency of premium payments
4. Amount of premium payments
5. Who pays premiums--individual and/or employee

Hospital Benefits:

1. Maximum daily room allowance
2. Maximum days allowed for each illness or accident
3. Time between stays before they are considered separate stays
4. Whether amount is stated for miscellaneous hospital expenses

5. Whether policy is noncancellable
6. Whether renewability of policy is guaranteed to age 65
7. Possibility of continuing policy after 65

Surgical Benefits

1. Whether amounts paid for surgery are listed

Medical Benefits:

1. Whether policy payments cover visits to doctor's office, or doctor's visits to home or to hospital for illness not involving surgery

Major Medical Benefits

1. Amount of major medical insurance
2. Whether policy contains deductible clause
3. Whether company pays full amount after deductible
4. Whether policy pays for special nursing care in home

Loss of Income Benefits

1. Time off from work before payments begin
2. Amount receivable during disability
3. Total amount or length of time company will pay

The reasons respondents gave for their families not having health insurance coverage were summarized as were responses concerning plans for health insurance protection for the subjects after they reach age 65.

Appropriate descriptive statistics such as means and frequency distribution were computed to lend more meaning to the study. The chi-square test was used to determine whether there were any significant relationships between health insurance participation and these selected

factors: place of residence, age of husband, education of husband and of wife, family cash income, and respondent's view of state of health of husband and wife.

The formula used to determine whether there were significant differences in the six-cell tables was:

$$\chi^2 = \sum \frac{(f_o - f_t)^2}{f_t}$$

In fourfold tables where there is but one degree of freedom involved, it is regarded as good practice to apply a correction factor in computing χ^2 . Therefore, in determining whether there were significant differences in the four-cell tables in the present study the following formula was used:

$$\chi^2 = \frac{\left(|ad - bc| - \frac{n}{2} \right)^2 n}{(a+b)(a+c)(b+d)(c+d)}$$

CHAPTER IV

FINDINGS

A study of health insurance protection of husbands and wives in sixty selected rural families in Sevier County, Tennessee, was made in May, 1964. It included an analysis of the relationship of participation in health insurance programs to such factors as place of residence, age of husband, education of husband and wife, family cash income and view of health status. Information was also included as to comprehension of policy provisions, the family's plans for the later years, age 65 and over, with regard to health insurance protection and reason for no current insurance protection. Discussion of the findings is presented in this chapter.

I. DESCRIPTION OF FAMILIES

Of the sixty families included in the study, one-half lived on farms; the other half were rural-nonfarm residents as indicated in Table I. Fifty-two per cent of the families were composed of two members and the other families contained from three to eight members. The average family size was 2.85 persons, smaller than the so-called "typical" family, which one would expect in a study limited to families headed by husbands in the 45-64 age group.

TABLE I

SOCIO-ECONOMIC CHARACTERISTICS OF SIXTY SELECTED RURAL
FAMILIES, SEVIER COUNTY, TENNESSEE,
MAY, 1964

<u>Socio-economic Characteristics</u>	<u>Families</u>	
	<u>Number</u>	<u>Per Cent</u>
<u>Residence Status</u>		
Farm	30	50
Nonfarm	30	50
<u>Family Size (number of members)</u>		
2	31	52
3 or more	29	48
<u>Age of Husband (years)</u>		
45-54	29	48
55-64	31	52
<u>Education of Husband (grades completed)</u>		
7 or less	20	33
8-9	19	32
10 or more	19	32
Unknown	2	3
<u>Education of Wife (grades completed)</u>		
7 or less	14	23
8-9	24	40
10 or more	22	37
<u>1963 Family Cash Income</u>		
Under \$3,000	31	52
\$3,000 or over	29	48

Slightly under 50 per cent of the husbands were in the 45-54 year age group; slightly over half were in the 55-64 year age bracket. The average (mean) age of the husbands was 55 years.

There were more husbands than wives whose educational training consisted of 7 or less grades completed in school. Thirty-three per cent of the husbands were in this group as opposed to 23 per cent of the wives. In the 8 and 9 grades group, there were 32 per cent of the husbands and 40 per cent of the wives while in the 10 grades or more group there were 32 per cent of the husbands and 37 per cent of the wives. The educational level of two husbands was not known. There was a wide range in the husbands' and wives' education--from the completion of two years of schooling to the Ph. D. level for the former and from completion of three years to the Bachelor's level for the latter.

Fifty-two per cent of the families had cash incomes under \$3,000; 48 per cent had \$3,000 and over. Family cash income ranged from none to between \$8,000 and \$9,000. The most commonly reported income was between \$1,000 and \$2,000.

II. HEALTH INSURANCE STATUS, TYPES OF COVERAGE AND HOSPITAL ROOM ALLOWANCE

Of the sixty families included in the study, forty-six of them were found to have some type of health insurance protection on both the wife and the husband; one had insurance on the husband only; and thirteen had no health insurance coverage. As shown in Table II, 78 per cent of

TABLE II

HEALTH INSURANCE STATUS OF HUSBANDS AND WIVES IN SIXTY
SELECTED RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
MAY, 1964

Health Insurance Status	Husbands		Wives	
	Number	Per Cent	Number	Per Cent
Insured	47	78	46	77
Not Insured	13	22	14	23
Total	60	100	60	100

the husbands and 77 per cent of the wives were enrolled in health insurance programs, whereas 22 per cent of the former and 23 per cent of the latter were not.

Analysis of the types of health insurance coverage the husbands and wives carried revealed hospital to be the most common form and surgical only slightly less popular. As indicated in Tables III and IV, 75 per cent of the husbands and 73 per cent of the wives had the former type of protection; 68 per cent of the husbands and 66 per cent of the wives had the latter type. Medical, major medical, and loss of income coverages were found with considerably less frequency. Medical expense coverage was reported for 18 per cent of the husbands and 17 per cent of the wives; major medical was reported for 13 per cent of each group of subjects. Loss of income protection was reported for 28 per cent of the husbands but only 5 per cent of the wives. As the above figures show, there was marked similarity in the numbers of husbands and wives having each type of coverage except loss of income. The variation with respect to indemnity against loss of income was to be expected since the husband was the main money income earner in the majority of the families interviewed.

Table V shows the combinations of types and numbers of coverages the husbands and the wives in the study had at the time of interview. The range was from one hospital coverage only, carried by four husbands and by four wives, to a maximum of three hospital coverages, three surgical coverages and three medical coverages carried by one husband and by one wife.

TABLE III

TYPES OF HEALTH INSURANCE COVERAGE OF HUSBANDS IN SIXTY
SELECTED RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
MAY, 1964

Types of Coverage	Number of Husbands	Husbands with Coverage	
		Number	Per Cent
Hospital	60	45	75
Surgical	60	41	68
Medical	60	11	18
Major Medical	60	8	13
Loss of Income	60	17	28

over all statement of
comparisons

TABLE IV

TYPES OF HEALTH INSURANCE COVERAGE OF WIVES IN SIXTY SELECTED
RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
MAY, 1964

Types of Coverage	Number of Wives	Wives with Coverage	
		Number	Per Cent
Hospital	60	44	73
Surgical	60	40	66
Medical	60	10	17
Major Medical	60	8	13
Loss of Income	60	3	5

TABLE V

HEALTH INSURANCE STATUS OF HUSBANDS AND WIVES IN SIXTY SELECTED
RURAL FAMILIES, SEVIER COUNTY, TENNESSEE, BY TYPES
AND NUMBERS OF COVERAGES CARRIED,
MAY, 1964

Types and Numbers of Health Insurance Coverages*	Number Husbands Enrolled	Number Wives Enrolled
None	13	14
1 Hosp.	4	4
1 Med.	2	2
1 Hosp. 1 Surg.	15	22
2 Hosp. 1 Surg.	1	1
1 Hosp. 1 Surg. 1 Med.	4	3
1 Hosp. 1 Surg. 1 Med.	2	6
1 Hosp. 1 Surg. 1 L. I.	7	1
1 Hosp. 1 Surg. 1 Med. 1 L. I.	0	1
1 Hosp. 1 Surg. 1 M. M. 1 L. I.	4	0
2 Hosp. 1 Surg. 1 Med.	0	1
2 Hosp. 1 Surg. 1 M. M.	0	1
1 Hosp. 1 Surg. 2 L. I.	1	0
2 Hosp. 2 Surg. 1 Med.	1	0
2 Hosp. 2 Surg. 1 M. M.	0	1
2 Hosp. 1 Surg. 1 Med. 1 L. I.	2	1
1 Hosp. 1 Surg. 1 M. M. 2 L. I.	1	0
2 Hosp. 2 Surg. 2 Med.	0	1
2 Hosp. 2 Surg. 1 M. M. 2 L. I.	1	0
2 Hosp. 2 Surg. 2 Med. 2 L. I.	1	0
3 Hosp. 3 Surg. 3 Med.	1	1
Total	60	60

*Types of Health Insurance Coverage: Hospital, Hosp.; Surgical, Surg.; Medical, Med.; Major Medical, M. M.; Loss of Income, L. I.

Information as to the maximum amount of hospital room and board coverage that 12 of the husbands and 12 of the wives had could not be ascertained. Therefore, the analysis of daily hospital room allowance was based on the 33 husbands and 32 wives about whom such information was obtained.

As shown in Table VI, over half of the husbands and half of the wives (52 per cent of the former and 56 per cent of the latter) had hospital insurance providing from \$11 to \$20 a day for hospital room charges. Forty-two per cent of the husbands and a slightly smaller proportion of the wives (38 per cent) had policies paying a maximum of \$8 to \$10. Few of the wives and of the husbands (6 per cent of each) had insurance providing only \$5 to \$7 a day.

III. HEALTH INSURANCE STATUS IN RELATION TO SELECTED FACTORS

Participation in health insurance programs may be related to a variety of socio-economic factors. In the present study interest was centered on the possible influence of four: (1) place of residence, (2) age of husband, (3) educational level of husband and wife, and (4) family cash income.

Because it was felt that the respondent's view of state of health could be an important factor in the husbands' and wives' insurance status, it, too, was considered.

TABLE VI
 MAXIMUM DAILY HOSPITAL ROOM ALLOWANCES AVAILABLE TO INSURED
 HUSBANDS AND WIVES IN SIXTY SELECTED RURAL FAMILIES,
 SEVIER COUNTY, TENNESSEE,
 MAY, 1964

Maximum Daily Hospital Room Allowance	Insured*			
	Husbands		Wives	
	Number	Per Cent	Number	Per Cent
\$5 - \$7	2	6	2	6
\$8 - \$10	14	42	12	38
\$11 - \$20	17	52	18	56
Total	33	100	32	100

*Includes only those for whom information was obtained. Data were not ascertained for 12 husbands and 12 wives.

Place of Residence

One-half of the rural families were classified as farm and one-half nonfarm. Seventy per cent of the husbands in farm families were enrolled in some health insurance program, while 87 per cent of nonfarm husbands had some protection as shown in Table VII.

The same proportion of wives as husbands in farm families, 70 per cent, had health insurance protection. In nonfarm families the percentage of wives covered by health insurance was 83 per cent, a slightly smaller proportion than was found among nonfarm husbands (Table VIII). No association was found to exist between health insurance status and place of residence for either husbands or wives.

With respect to every type of health insurance coverage included in the present study, the proportion enrolled was greater among nonfarm than farm husbands, although the differences were not marked. Hospital and surgical coverages were found with far greater frequency than were the other types of coverage among husbands living in both farm and nonfarm places of residence. Two-thirds of the husbands in the farm group had hospital coverage; three-fifths had surgical. Of the husbands in the nonfarm group, 83 per cent had hospital and 77 per cent had surgical coverage. Loss of income protection was reported by about one-fourth of the farm group; by one-third of the nonfarm group. Medical coverage, both regular and major, appeared to be of minor significance (Table IX).

The same type of analysis, applied to the types of health insurance protection on the wives, revealed a pattern similar to that of the husbands

TABLE VII
 HEALTH INSURANCE STATUS OF HUSBANDS IN SIXTY SELECTED
 RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
 BY PLACE OF RESIDENCE,
 MAY, 1964

Place of Residence	Number of Husbands	Health Insurance Status			
		Number		Per Cent	
		Insured	Not Insured	Insured	Not Insured
Farm	30	21	9	70	30
Nonfarm	30	26	4	87	13

TABLE VIII
HEALTH INSURANCE STATUS OF WIVES IN SIXTY SELECTED
RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
BY PLACE OF RESIDENCE,
MAY, 1964

Place of Residence	Number of Wives	Health Insurance Status			
		Number		Per Cent	
		Insured	Not Insured	Insured	Not Insured
Farm	30	21	9	70	30
Nonfarm	30	25	5	83	17

TABLE IX

TYPES OF HEALTH INSURANCE COVERAGE OF HUSBANDS IN SIXTY SELECTED
RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
BY PLACE OF RESIDENCE,
MAY, 1964

Place of Residence and Type of Coverage	Number of Husbands	Husbands with Coverage	
		Number	Per Cent
<u>Farm</u>			
Hospital	30	20	67
Surgical	30	18	60
Medical	30	5	17
Major Medical	30	3	10
Loss of Income	30	7	23
<u>Nonfarm</u>			
Hospital	30	25	83
Surgical	30	23	77
Medical	30	6	20
Major Medical	30	5	17
Loss of Income	30	10	33

except for loss of income protection. As shown in Table X, hospital coverage ranked first and surgical next among both farm and nonfarm wives. Loss of income, however, ranked last rather than third. Only 10 per cent of the wives in the farm group and none of those in the nonfarm group had this type of protection.

Age of Husband

The age limitation for the husbands was 45-64 years; this twenty year span was divided into a 45-54 and 55-64 age group. It was hypothesized that more of the families with husbands in the 45-54 age group would have health insurance than those in the 55-64 group; however, no significant difference was found in health insurance enrollment between the two groups.

There were 29 in the younger age group with 79 per cent enrolled in some health insurance as shown in Table XI. Of the 31 in the older age group, 77 per cent were enrolled.

Even though there was a slightly higher percentage of the 45-54 age group enrolled in some type health insurance program, analysis of the proportions having specific types of coverage showed that the 55-64 age group exceeded the younger group in all types of coverage except one (Table XII). Major medical was the one type in which the younger age group had more enrolled than did the older age group.

Education

Analyses were made of education of both husbands and wives in relation to health insurance participation. As shown in Table XIII, 55 per

TABLE X

TYPES OF HEALTH INSURANCE COVERAGE OF WIVES IN SIXTY
SELECTED RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
BY PLACE OF RESIDENCE,
MAY, 1964

Place of Residence and Type of Coverage	Number of Wives	Wives with Coverage	
		Number	Per Cent
<u>Farm</u>			
Hospital	30	20	67
Surgical	30	18	60
Medical	30	5	17
Major Medical	30	3	10
Loss of Income	30	3	10
<u>Nonfarm</u>			
Hospital	30	24	80
Surgical	30	22	73
Medical	30	5	17
Major Medical	30	5	17
Loss of Income	30	0	0

TABLE XI
HEALTH INSURANCE STATUS OF HUSBANDS IN SIXTY SELECTED RURAL
FAMILIES, SEVIER COUNTY, TENNESSEE, BY AGE OF HUSBAND,
MAY, 1964

Age of Husband (Years)	Number	Health Insurance Status			
		Number		Per Cent	
		Insured	Not Insured	Insured	Not Insured
45 - 54	29	23	6	79	21
55 - 64	31	24	7	77	23

TABLE XII

TYPES OF HEALTH INSURANCE COVERAGE OF HUSBANDS IN SIXTY
SELECTED RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
BY AGE OF HUSBAND,
MAY, 1964

Age of Husband (Years) and Type of Coverage	Number of Husbands	Husbands with Coverage	
		Number	Per Cent
<u>45 - 54</u>			
Hospital	29	21	72
Surgical	29	19	66
Medical	29	4	14
Major Medical	29	5	17
Loss of Income	29	6	21
<u>55 - 64</u>			
Hospital	31	24	77
Surgical	31	22	71
Medical	31	7	23
Major Medical	31	3	10
Loss of Income	31	11	35

TABLE XIII

HEALTH INSURANCE STATUS OF HUSBANDS IN SIXTY SELECTED
RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
BY EDUCATION OF HUSBAND,
MAY, 1964

Education of Husband (Grades Completed)	Number	Health Insurance Status			
		Number		Per Cent	
		Insured	Not Insured	Insured	Not Insured
7 or less	20	11	9	55	45
8 - 9	19	16	3	84	16
10 or more	19	18	1	95	5
Unknown	2	2	0	100	0

cent of the husbands with education of 7 grades or less had health insurance while of those who had completed 8-9 grades, 84 per cent had health insurance. Of the group of those having completed 10 grades or more, 95 per cent had health insurance protection. The educational level of two husbands was unknown. Chi-square analysis revealed an association between education of the husband and insurance protection at the .01 level of significance.

An association was also found at the .01 level of significance between the education of the wife and her having health insurance coverage.

As shown in Table XIV only 29 per cent of the wives with less than 7 years of formal education had some health insurance, while at both of the two higher educational levels, over 90 per cent of the wives were reported to be insured.

Table XV shows that the proportion of husbands having hospital coverage rose with increase in education, particularly from the lowest level of education to second level. The same trend was found with respect to surgical and loss of income protection. Only one of the husbands with 7 or less years of education had medical coverage; only two had major medical insurance. These two forms of coverage were found to be only slightly more popular among the husbands with 8 or more years of formal education.

Types of health insurance coverage carried by the wives at different educational levels are shown in Table XVI. Twenty-eight per cent of the wives who had completed 7 or less grades had hospital and surgical

TABLE XIV
 HEALTH INSURANCE STATUS OF WIVES IN SIXTY SELECTED
 RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
 BY EDUCATION OF WIFE,
 MAY, 1964

Education of Wife (Grades Completed)	Number	Health Insurance Status			
		Number		Per Cent	
		Insured	Not Insured	Insured	Not Insured
7 or less	14	4	10	29	71
8 - 9	24	22	2	92	8
10 or more	22	20	2	91	9

TABLE XV
 TYPES OF HEALTH INSURANCE COVERAGE OF HUSBANDS IN SIXTY
 SELECTED RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
 BY EDUCATION OF HUSBAND,
 MAY, 1964

Education of Husband (Grades Completed) and Type of Coverage	Number of Husbands	Husbands with Coverage	
		Number	Per Cent
<u>7 or Less</u>			
Hospital	20	11	55
Surgical	20	10	50
Medical	20	1	5
Major Medical	20	2	10
Loss of Income	20	3	15
<u>8 - 9</u>			
Hospital	19	15	79
Surgical	19	14	74
Medical	19	5	26
Major Medical	19	3	16
Loss of Income	19	6	32
<u>10 or More</u>			
Hospital	19	17	89
Surgical	19	15	79
Medical	19	5	26
Major Medical	19	3	16
Loss of Income	19	7	37
<u>Unknown</u>			
Hospital	2	2	100
Surgical	2	2	100
Medical	2	0	0
Major Medical	2	0	0
Loss of Income	2	1	50

TABLE XVI
 TYPES OF HEALTH INSURANCE COVERAGE OF WIVES IN SIXTY
 SELECTED RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
 BY EDUCATION OF WIFE,
 MAY, 1964

Education of Wife (Grades Completed) and Type of Coverage	Number of Wives	Wives with Coverage	
		Number	Per Cent
<u>7 or Less</u>			
Hospital	14	4	28
Surgical	14	4	28
Medical	14	0	0
Major Medical	14	0	0
Loss of Income	14	0	0
<u>8 - 9</u>			
Hospital	24	21	88
Surgical	24	18	75
Medical	24	5	21
Major Medical	24	5	21
Loss of Income	24	1	4
<u>10 or More</u>			
Hospital	22	19	86
Surgical	22	18	82
Medical	22	5	23
Major Medical	22	3	14
Loss of Income	22	2	9

coverage. The proportion of wives having hospital coverage and of those with surgical coverage rose markedly from the lowest to the second level of education to 88 per cent for the former and 75 per cent for the latter. Medical coverage, both regular and major, and loss of income protection were all of minor importance in the health insurance programs of wives who had completed 8-9 and 10 or more grades in school. None of those with less education had any of these coverages.

Family Cash Income

There were 31 families with less than \$3,000 in cash income in 1963, and 29 families with \$3,000 or more. The status of the husbands' health insurance and that of the wives were studied in relation to family income.

Of the husbands in families having less than \$3,000 of cash income, 71 per cent had some health insurance protection while in the \$3,000 and over income group 86 per cent had some coverage, as shown in Table XVII.

Of the wives in families with less than \$3,000 income, 68 per cent had some health insurance while of the higher income group, 86 per cent had some protection (Table XVIII). No association between income and health insurance participation was apparent for either the wives or husbands.

There was a considerable difference between the husbands in the under \$3,000 income group and the \$3,000 and over income group as to types

TABLE XVII

HEALTH INSURANCE STATUS OF HUSBANDS IN SIXTY SELECTED
RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
BY FAMILY CASH INCOME,
MAY, 1964

Family Cash Income	Number of Husbands	Health Insurance Status			
		Number		Per Cent	
		Insured	Not Insured	Insured	Not Insured
Under \$3,000	31	22	9	71	29
\$3,000 and over	29	25	4	86	14

TABLE XVIII

HEALTH INSURANCE STATUS OF WIVES IN SIXTY SELECTED
RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
BY FAMILY CASH INCOME,
MAY, 1964

Family Cash Income	Number of Wives	Health Insurance Status			
		Number		Per Cent	
		Insured	Not Insured	Insured	Not Insured
Under \$3,000	31	21	10	68	32
\$3,000 and over	29	25	4	86	14

of coverage. For each type of protection the proportion of husbands covered was greater in the higher income group than in the lower (Table XIX). The same situation was true of the wives with respect to the various types of coverage (Table XX).

View of State of Health

Consideration was given in the present study to the state of health of the husbands and of the wives, as reviewed by respondents, and their enrollment in health insurance programs. In analyzing the respondents' opinions of their own state of health and that of the spouses, a division was made into those whose health was considered "good" and those whose health was regarded as "fair or poor" by the respondents.

There were 35 husbands whose state of health was reported as "good" and 25 in the "fair or poor" health group. Of the former, 83 per cent had health insurance protection; of the latter, 72 per cent did (Table XXI). There were also 35 wives whose state of health was considered "good" and 25 in the "fair or poor" group, as Table XXII shows. Of the "good" group, 86 per cent had health insurance; of the "fair or poor" group, 64 per cent had some coverage. No association was found to exist between having health insurance protection and state of health as viewed by respondents for either husbands or wives.

IV. COMPREHENSION OF POLICY PROVISIONS

Health insurance participation is of importance; however, this alone is not enough. For insurance participants to be aware of and well

TABLE XIX

TYPES OF HEALTH INSURANCE COVERAGE OF HUSBANDS IN SIXTY
SELECTED RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
BY FAMILY CASH INCOME,
MAY, 1964

Family Cash Income and Types of Coverage	Number of Husbands	Husbands with Coverage	
		Number	Per Cent
<u>Under \$3,000</u>			
Hospital	31	21	68
Surgical	31	19	61
Medical	31	5	16
Major Medical	31	3	10
Loss of Income	31	7	23
<u>\$3,000 and Over</u>			
Hospital	29	24	83
Surgical	29	22	76
Medical	29	6	21
Major Medical	29	5	17
Loss of Income	29	10	34

TABLE XX

TYPES OF HEALTH INSURANCE COVERAGE OF WIVES IN SIXTY
SELECTED RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
BY FAMILY CASH INCOME,
MAY, 1964

Family Cash Income and Types of Coverage	Number of Wives	Wives with Coverage	
		Number	Per Cent
<u>Under \$3,000</u>			
Hospital	31	20	65
Surgical	31	18	58
Medical	31	4	13
Major Medical	31	3	10
Loss of Income	31	1	3
<u>\$3,000 and Over</u>			
Hospital	29	24	83
Surgical	29	22	76
Medical	29	6	21
Major Medical	29	5	17
Loss of Income	29	2	7

TABLE XXI

HEALTH INSURANCE STATUS OF HUSBANDS IN SIXTY SELECTED
RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
BY VIEW OF STATE OF HEALTH,
MAY, 1964

View of State of Health	Number of Husbands	Health Insurance Status			
		Number		Per Cent	
		Insured	Not Insured	Insured	Not Insured
Good	35	29	6	83	17
Fair-poor	25	18	7	72	28

TABLE XXII

HEALTH INSURANCE STATUS OF WIVES IN SIXTY SELECTED
RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
BY VIEW OF STATE OF HEALTH,
MAY, 1964

View of State of Health	Number of Wives	Health Insurance Status			
		Number		Per Cent	
		Insured	Not Insured	Insured	Not Insured
Good	35	30	5	86	14
Fair-poor	25	16	9	64	36

informed as to the provisions contained in policies carried is also of importance.

The method devised for determining degree of comprehension was described in Chapter III. Table XXIII indicates that of the respondents in the forty-seven families carrying health insurance, about one-tenth scored less than 25 per cent with respect to comprehension of policy provisions. The proportion rose to one-fifth at the next level of comprehension, 25-49 per cent, and to one-half where the respondent's score was between 50 and 74 per cent. It then dropped back to one-fifth for the group of respondents that showed the greatest amount of knowledge about policy provisions.

V. PLANNING FOR LATER YEARS

Much attention is being focused on the aging population. This fact was responsible for a portion of this study. To ascertain the status of preparations or plans during preretirement years for age 65 and over with regard to health insurance protection seemed of importance.

Of the 60 families in the study, 62 per cent of the respondents said they and their spouses were planning to carry health insurance after they reached 65 years of age. Twenty-one per cent said they did not know whether they would carry health insurance; 17 per cent said they were not going to carry health insurance (Table XXIV).

Of those who said they did not know about health insurance for later years the vast majority, approximately four-fifths, did have health

TABLE XXIII

DEGREE OF COMPREHENSION OF POLICY PROVISIONS OF INSURED
RESPONDENTS IN SIXTY SELECTED RURAL FAMILIES,
SEVIER COUNTY, TENNESSEE,
MAY, 1964

Degree of Comprehension of Policy Provisions (Per Cent)	Insured Respondents	
	Number	Per Cent
Under 25	4	8
25 - 49	10	21
50 - 74	23	50
75 - 100	10	21
Total	47	100

TABLE XXIV
HEALTH INSURANCE PLANS FOR AFTER AGE 65 IN SIXTY SELECTED
RURAL FAMILIES, SEVIER COUNTY, TENNESSEE,
MAY, 1964

Health Insurance Plans	Families	
	Number	Per Cent
Expect to Carry Insurance	37	62
Do Not Expect to Carry Insurance	10	17
Do Not Know	13	21

insurance coverage currently. Of those respondents who said they and their spouses were not planning to carry health insurance after 65, none had any current coverage. All of the respondents that said that they were planning to have health insurance protection after 65 were insured at the time the study was made (Table XXV).

The 23 respondents who either did not know whether they and their spouses would carry health insurance after age 65, or who were not planning to have insurance protection at that time, were asked how they were planning to take care of their medical expenses. Two said they were saving money for such needs. Ten respondents indicated they would "do like they do their other bills" while eleven did not know.

VI. FAMILIES WITHOUT HEALTH INSURANCE PROTECTION

Reference has been made to the fact that in thirteen families neither the husband nor the wife had health insurance of any type. These families were queried as to the reasons why they had no health insurance coverage.

Lack of money was the most commonly reported reason, given by six respondents. Two said they had formerly carried health insurance but had dropped their policies because of dissatisfaction with them. Two remarked that they had not had much illness and therefore were not frightened enough to take out insurance. One family could not get health insurance due to previous illness. One respondent said, "If companies can make money, I can too by carrying my own insurance." One said a life insurance agent

TABLE XXV

HEALTH INSURANCE PLANS FOR AFTER AGE 65 IN SIXTY SELECTED
RURAL FAMILIES, SEVIER COUNTY, TENNESSEE, BY CURRENT
STATUS OF HEALTH INSURANCE COVERAGE,
MAY, 1964

Plans for the Years 65 and Over	Current Health Insurance Status			
	Number		Per Cent	
	Insured	Not Insured	Insured	Not Insured
Plan to Carry Health Insurance	37	0	100	0
Do Not Plan to Carry Health Insurance	0	10	0	100
Do Not Know	10	3	77	23

told him, "Money [on health insurance] is wasted if you don't get sick, but in life insurance you or your folks get something for your money."

In response to a query as to how they met medical expenses, eight said they paid them out of current income and two stated they paid them from savings. One replied that they received some help from welfare. One commented, "We are pretty bad about letting them go." Another said, "We use old folks remedies and don't have much expense."

CHAPTER V

SUMMARY AND CONCLUSIONS

The present study was made to provide information concerning the health insurance status and types of health insurance coverage of sixty selected rural husband/wife families in Sevier County, Tennessee. The study was limited to those families in which the husband was in the 45-64 age group.

Health insurance status and types of coverage were studied in relation to the following factors: place of residence, age of the husband, education of the husband and wife, and family cash income. Health insurance status was also studied in relation to respondent's opinion of state of health of husband and wife.

Other segments of the study included information on selected policy provisions; an analysis of the degree of comprehension of policy provisions on the part of the insured respondents; plans for meeting health costs in later years; and where there was no insurance coverage, the reasons for the absence of it together with ways in which medical expenses were met.

Over three-fourths of the families had health insurance. In all cases but one both the husband and wife were insured. Hospital and surgical coverages were by far the most common types of protection found; three-fourths of the husbands and slightly less of the wives had the former with slightly more than two-thirds of the husbands and two-thirds

of the wives having the latter coverage. Medical, major medical and loss of income coverage played minor roles in the families' insurance programs. Less than one-fifth of both husband and wives had medical and major medical protection. Loss of income was carried by slightly more than one-fourth of the husbands. A much smaller proportion (one-twentieth) of the wives had loss of income protection.

Information was obtained as to hospital room and board allowance for 33 husbands and 32 wives. Of these over one-half of both husbands and of the wives had allowances ranging from \$11 to \$20 a day. The others had coverage providing \$5 to \$10 a day.

A number of questions were asked concerning policy provisions. Using a scoring system devised by the writer, it was found that 70 per cent of the respondents had scores of 50 per cent or better on knowledge of provisions.

Because of the widespread concern over medical expenses of the aging, the families were asked their plans for meeting such costs after age 65. Two-thirds were planning to have health insurance protection; all of these had some coverage currently. Over half of those who either were not planning insurance protection for the later years or who were uncertain had no coverage currently.

The most common reason given for not carrying health insurance was lack of funds, although most uninsured families reported they paid health costs out of current income.

Before the study was made, it was hypothesized that more of the nonfarm than farm husbands and wives have health insurance protection. It was found that 87 per cent of the nonfarm husbands and 83 per cent of the nonfarm wives had insurance, and that 70 per cent of the farm husbands and 70 per cent of the farm wives were insured. However, the difference was not statistically significant.

A second hypothesis advanced was that more husbands in the 45-54 year age group than in the 55-64 year age group are protected by health insurance. Statistical analysis revealed no significant differences with respect to this factor. Somewhat over three-fourths of the younger husbands and almost as many of the older ones carried some health coverage.

The third hypothesis was that there is an association between the level of education of the husband and his having health insurance and that there is a like association for the wife. Analysis showed that there was an association in both cases at the .01 level of significance. Fifty-five per cent of the husbands and 29 per cent of the wives with 7 grades or less had some health insurance protection, 84 per cent of husbands and 92 per cent of the wives in the 8-9 grade group had some health insurance protection, and 95 per cent of the husbands and 91 per cent of the wives in the 10 or more years of education group had health insurance.

Two other hypotheses were advanced at the outset of the study. These were that (1) more husbands and wives in higher than in lower income families have health insurance, and (2) more husbands and wives whose

state of health is viewed as "good" by one of the spouses will have health insurance than will be true of those regarded as in "fair or poor" health.

Seventy-one per cent of the husbands and 68 per cent of the wives in lower income families had some health insurance coverage. Eighty-six per cent of the husbands and 86 per cent of the wives in higher income families were thus protected. The differences were not significant; hence no association between the factor income and health insurance protection was found to exist.

Of the husbands whose state of health was viewed as "good" by the respondents, 83 per cent had health insurance while of the wives in the "good" group, 86 per cent were protected. In the "fair or poor" group, 72 per cent of the husbands and 64 per cent of the wives had health insurance protection. No association was found between health insurance participation and the respondent's view of health of the husband and wife.

In conclusion, it is recommended that a similar but more extensive study be made with more emphasis on comprehension of policy provisions by the subscribers and plans for later years in regard to provisions for meeting health costs.

BIBLIOGRAPHY

BIBLIOGRAPHY

1. Anderson, Odin W. and Jacob J. Feldman. Family Medical Costs and Voluntary Health Insurance: A Nationwide Survey. New York: McGraw-Hill Book Company, Inc., 1956.
2. Belcher, John C. and Donald G. Hay. Use of Health Care Services and Enrollment in Voluntary Health Insurance in Greene County, Georgia, 1956. University of Georgia, Agricultural Experiment Station Bulletin 70, March, 1959.
3. _____. Use of Health Care Services and Enrollment in Voluntary Health Insurance in Habersham County, Georgia, 1957. University of Georgia Agricultural Experiment Station Bulletin N. S. 73, June, 1960.
4. _____. Use of Health Care Services and Enrollment in Voluntary Health Insurance in Hancock County, Georgia, 1956. University of Georgia Agricultural Experiment Station Bulletin 72, May, 1960.
5. Brewster, Agnes W. and Simon Dinitz. "Health Insurance Protection and Medical Care Expenditures: Findings from Three Family Surveys," Social Security Bulletin, XIX (November, 1956), 3-10, 31-32.
6. Collins, G. P. and J. W. Hayward. Insurance as Related to Farm Financial Risk in Payne County, Oklahoma. Oklahoma State University Agricultural Experiment Station Bulletin B-609, March, 1963.
7. Ellenbogen, Bert L. and others. Changes in the Availability and Use of Health Resources in Two Western New York Counties: Identical Households, 1950 and 1958, Cornell University Agricultural Experiment Station Bulletin 55, November, 1962.
8. Ellenbogen, Bert L., Donald G. Gay and Olaf F. Larson. Changes in the Availability and Use of Health Resources in Two Central New York Counties, 1949 and 1957. Cornell University Agricultural Experiment Station Bulletin 54, June, 1959.
9. Ellenbogen, Bert L., Charles E. Ramsey and Robert A. Danley. Factors in Farmers' Subscriptions to Health Insurance. Cornell University Agricultural Experiment Station Bulletin 60, December, 1961.

10. Hassinger, Edward. Health Insurance in a Small Missouri Town.
University of Missouri Agricultural Experiment Station Bulletin
18, April, 1962.
11. Hassinger, Edward W. and Robert L. McNamara. Charges for Health
Services in a Northwest Missouri County. University of
Missouri Agricultural Experiment Station Research Bulletin 721,
January, 1960.
12. Hay, Donald G. and Sheldon G. Lowry. Acceptance of Voluntary Health
Insurance in Scotland Neck Community, North Carolina, 1955.
North Carolina State College Agricultural Experiment Station
Progress Report Rs-27, July, 1957.
13. _____. Use of Health Care Services and Enrollment
in Voluntary Health Insurance in Montgomery County, North
Carolina, 1956. North Carolina State College Agricultural
Experiment Station Progress Report Rs-31, March, 1958.
14. Loftin, Marion T. and Robert E. Galloway. The Use of Health Ser-
vices by Rural People in Four Mississippi Counties. Mississippi
State College Agricultural Experiment Station Sociology and
Rural Life Series No. 5, March, 1954.
15. Lowry, Sheldon G. and Donald G. Hay. Acceptance of Voluntary Health
Insurance in Sampson County, North Carolina, 1955. North Carolina
State College Agricultural Experiment Station Progress Report
Rs-28, July 1957.
16. _____. Use of Health Care Services and Enrollment in
Voluntary Health Insurance in Stokes County, North Carolina,
1956. North Carolina State College Agricultural Experiment
Station Progress Report Rs-32, March, 1958.
17. Miller, L. F. and L. V. Rubright. Insurance Carried by Pennsylvania
Farmers. Pennsylvania State College Agricultural Experiment
Station Bulletin 519, November, 1949.
18. Sewell, William H., Charles E. Ramsey and Louis J. Ducoff. Farmers
Conceptions and Plans for Economic Security in Old Age. Univer-
sity of Wisconsin Agricultural Experiment Station Bulletin 182,
September, 1953.
19. Source Book of Health Insurance Data, 1963. New York: Health In-
surance Institute, 1963.

20. Stojanovic, Elizabeth J. and Gerald O. Windham. "Some Factors Associated with Carrying Health Insurance," Rural Sociology, XXVII (December, 1962), 473-75.
21. United States Bureau of the Census. United States Census of Population, 1960. General Social and Economic Characteristics. Washington: Government Printing Office, 1961.



APPENDIX

HEALTH INSURANCE STATUS OF SELECTED RURAL FAMILIES,
SEVIER COUNTY, TENNESSEE, 1964

QUESTIONNAIRE

SECTION I

Number _____ Date _____

Location _____

Respondent(s): Wife _____ Husband _____ Both _____

Race: White _____ Negro _____ O _____

Hello! I'm Willie Dee Felder, a graduate student at the University of Tennessee. I'm making a study in my school work and am visiting a few selected families in Sevier County to get some information about health insurance. I would appreciate your help so very much. Of course, this will be strictly confidential. In fact, I use a number instead of a name on the information sheet.

I. Eligibility

1. Does your family include both husband and wife?

Yes _____ No _____

2. Were you and your husband married before January 1, 1963?

Yes _____ No _____

3. Is your husband in age group 45 through 64 years?

Yes _____ No _____

Note: Eligibility--yes to 1, 2 and 3. Is family eligible?

Yes _____ No _____

SECTION II

FAMILY DATA

1. Will you please give me the total number of persons in your family? That is--you, your husband, children, including any that may be away at school, and any other relatives making their home with you. _____

	a. <u>Wife</u>	b. <u>Husband</u>
2. Now, will you please give me your husband's age?	X	
3. What was the highest grade in school you (your husband) completed?		
4. Did you (your husband) work for pay last year?		
5. If yes, what kind of work did you (your husband) do?		
6. Were you (your husband) self-employed last year?		
7. If yes, what type self-employment?		

SECTION III

HEALTH AND HEALTH INSURANCE

Now, I would like to ask a few questions about the health of you and your husband and about health and accident insurance.

8. Do you consider your general health as:

Good____, Fair____, Poor____? DK____, NA____

9. What about your husband, is his health:

Good____, Fair____, Poor____? DK____, NA____

INSURANCE, TYPES AND PREMIUMS:

Note: Z = policy reference

	Insurance Company	a. Wife	b. Husband	c. Family
10. Do you (your husband) have any health and accident insurance on yourself (himself)?	X	Yes _____ No _____ DK _____ NA _____	Yes _____ No _____ DK _____ NA _____	X
11. Do you have any policies that cover the whole family, your husband, children, and yourself?	X	X	X	Yes _____ No _____ DK _____ NA _____
Note: IF NO to Question 10 and 11, turn to page 7.				
12. IF YES, how many policies do you (your husband) (your family) have?	X			
13. What company(s) is your (your husband) (your family) insurance with?	X			
14. *What type(s) of insurance do you (your husband) (your family) have?				
15. **How many times a year do you (your husband) pay the premiums?				

*Type insurance: hospital, H; surgical, S; medical, M; major medical, MM; loss of income, LI.

**Times per year: annually, A; semi-annually, SA; quarterly, Q; monthly, M; semi-monthly, SM; weekly, W.

	Insurance Company	a. Wife	b. Husband	c. Family
16. How much do you (your husband) pay each time?				
17. If employed, does the firm you (your husband) work for, pay part of the insurance premiums?				

Note: DNA = Does not apply

HOSPITAL BENEFITS:

	Insurance Company	a. Wife	b. Husband	c. Family	
				Head	Dependent
18. What is the most your policy pays a day on a hospital room?					
19. How many days are allowed for hospital care for each illness or accident?					
20. How much time does there have to be between hospital stays before they are considered separate stays instead of one?					
21. Does your policy state an amount it will pay for miscellaneous hospital expenses such as x-ray, laboratory services, etc.?					
22. Does the insurance company guarantee that you can continue health insurance to age 65 if you want to do so?					
23. Can the insurance company cancel your policy for reasons other than failing to pay premiums?					
24. Will the insurance company let you continue your policy after age 65 if you want to?					

	Insurance Company	a. Wife	b. Husband	c. Family	
				Head	Dependent
SURGICAL BENEFITS:					
25. Does the policy list amounts paid for various types of surgery?					
MEDICAL CARE BENEFITS:					
26. Does your insurance pay anything when you go to the doctor's office or when he comes to see you at home, or in the hospital for illness but not an operation?					
MAJOR MEDICAL BENEFITS:					
27. How much major medical insurance do you (your husband) (your family) have?					
28. Is there an amount of medical expenses you (your husband) (your family) have to pay before your insurance starts paying? (Deductible)					
29. Will the company pay the full amount other than the deductible?					
30. Does the policy pay for special nursing care in the home?					

	Insurance Company	a. Wife	b. Husband	c. Family	
				Head	Dependent
LOSS OF INCOME BENEFITS:					
31. How long must you (your husband) be off from work before the insurance company will start paying?					
32. What is the amount you (your husband) will receive? Per day					
Per week					
Per month					
33. What is the total amount or number of weeks the company will pay?					

34. Do you (your husband) expect to carry health insurance after you reach age 65?

a. Wife: Yes _____ No _____ DK _____

b. Husband: Yes _____ No _____ DK _____

Note: IF NO or DK to Question 34a. or 34b. ask Question 35.

35. How are you (your husband) planning to take care of medical expenses after 65?

a. Wife _____

b. Husband _____

IF NO HEALTH INSURANCE--

36. Do you pay bills for doctors, medicines and hospital expenses:

Out of current income? _____

Out of savings? _____

Make some other arrangements? _____

IF NOT HAD MEDICAL BILLS--ask Question 37

37. How would you pay for medical bills if you had any?

38. Would you please tell me why you aren't carrying health insurance?

SECTION IV

RESIDENCE DATA

39. How large is this place, that is, how many acres do you have here? _____

40. Do you produce any agricultural products here? _____

IF producing agricultural products at place of residence:

41. (Less than 10 acres)--Did you sell at least \$250 worth of farm produce in 1963?

Yes _____, No _____, DK _____, NA _____

42. IF NO--Do you normally sell at least \$250 worth?

Yes _____, No _____, DK _____, NA _____

43. (More than 10 acres)--Did you sell at least \$50 worth of farm produce in 1963?

Yes _____, No _____, DK _____, NA _____

44. IF NO--Do you normally sell at least \$50 worth?

Yes _____, No _____, DK _____, NA _____.

SECTION V

1963 FAMILY CASH INCOME

BEFORE DEDUCTIONS FOR SOCIAL SECURITY AND INCOME TAXES

	a. Wife		b. Husband		c.
	Amount	*Frequency	Amount	Frequency	Total
IF--wife (husband) employed					
45. How much did you (your husband) earn in 1963?					
IF--wife (husband) operated farm in 1963					
46. What was your farm income in 1963 after subtracting expenses of running the farm?					
IF--wife (husband) had a business in 1963					
47. How much income did you have from your business in 1963 after paying operating expenses?					
48. Did you and your husband have any income in 1963 from other sources such as:					
Social Security _____					
Welfare _____					
Pension _____					
Unemp. Ins. _____					
Veteran's pay. _____					
Rents _____					
Royalties _____					
Stocks _____					
Bonds _____					
Other _____					
49. Total					

Note: Frequency: Annually, A; Monthly, M; Weekly, W.

Note: IF income information is not obtained in Questions 45-48, then ask Question 50.

50. Could you tell me about how much cash income your family had in 1963?
(This is from all sources and before deductions for Social Security and income taxes.)

- (a) None _____
- (b) Under \$1,000 _____
- (c) \$1,000 - \$1,999 _____
- (d) \$2,000 - \$2,999 _____
- (e) \$3,000 - \$3,999 _____
- (f) \$4,000 - \$4,999 _____
- (g) \$5,000 - \$5,999 _____
- (h) \$6,000 - \$6,999 _____
- (i) \$7,000 - \$7,999 _____
- (j) \$8,000 and over _____
- (k) DK _____
- (l) NA _____