



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Health
September, 1954

FOUNDATION OF
GIANNINI FOUNDATION OF
AGRICULTURAL ECONOMICS
LIBRARY

Progress Report Rs-23

ENROLLMENT IN VOLUNTARY HEALTH INSURANCE
IN NORTH CAROLINA, 1953

By

Donald G. Hay and C. Horace Hamilton

Department of Rural Sociology
Agricultural Experiment Station
North Carolina State College

in cooperation with

Agricultural Marketing Service
U. S. Department of Agriculture
Raleigh, North Carolina

R. W. Cummings, Director of Research

ENROLLMENT IN VOLUNTARY HEALTH INSURANCE IN NORTH CAROLINA, 1953

By

Donald G. Hay* and C. Horace Hamilton**

Summary of the Facts

As of the end of 1952, it is estimated^{1/} that about two-fifths of the total population of North Carolina carried voluntary health insurance for some or all hospital care,^{2/} over one-third for surgical care,^{3/} and about 1 of every 20 had such insurance for other medical expenses.^{4/}

For the United States as a whole, about three-fifths of the population was enrolled in voluntary health insurance for hospital care, nearly one-half for surgical care, and almost one-fourth for other medical expenses.

*Agricultural Marketing Service, U. S. Department of Agriculture

**Department of Rural Sociology, North Carolina State College

^{1/} Accident and Health Coverage in the United States as of December 31, 1952, Annual Survey. The Health Insurance Council, New York City, N. Y. Sept. 1953.

^{2/} Most hospital insurance provides specified benefits for some or all of the costs of room and board as well as specified benefits for some other hospital charges such as those for the operating room, X-ray, laboratory tests, anesthesia, drugs, etc.

^{3/} "Surgical care" insurance as used in this report provides benefits for some or all of the costs of professional services for specified major and minor operative procedures and/or benefits for some or all obstetrical procedures. (See p. 17, Voluntary Prepayment Medical Benefit Plans, 1953. Council on Medical Service, American Medical Association, Chicago, Ill.)

^{4/} "Other medical expense" insurance provides specified benefits for some or all of the costs of physicians' services for other than surgical care.

Among the States, North Carolina ranked 38th in percentage of population enrolled in such insurance towards hospital care, was in 32nd place as to surgical care, and was lowest of the States in proportion of population having voluntary health insurance for medical expenses other than surgical care.

Increased awareness and appreciation of the voluntary prepayment programs and of their potential development in North Carolina is in keeping with the major recommendations of the report of the North Carolina Hospital and Medical Care Commission, 1944-45: "More Doctors, More Hospitals, More Insurance."

What Is Voluntary Health Insurance?

Voluntary health insurance as discussed in this report embraces all forms of prepaid health care, including insurance for hospital, surgical limited medical, and comprehensive health care. Individuals having such insurance are provided with either services, cash benefits (cash indemnities), or a combination of both. Most service plans (such as Blue Cross and Blue Shield) provide their members with protection against the entire cost of specified health care services which are usually made available through contractual arrangements of some kind with the participating physicians, hospitals, and others. Cash indemnity plans indemnify the subscriber with stipulated financial payments to be applied against the costs of specified services.

Other provisions for financing part or all of health costs are not included in this report, such as disability insurance (payments for wage loss during sickness), workmen's compensation, incidental medical care riders on other kinds of insurance policies, or industrial health facilities.

Voluntary Health Insurance Programs

Voluntary health insurance is provided in North Carolina under several auspices, including (1) nonprofit agencies, (2) insurance companies, and (3) "independent plans."

1. Nonprofit agencies

There are three "nonprofit agencies" operating in North Carolina: Hospital Saving Association (headquartered in Chapel Hill), Hospital Care Association (headquartered in Durham), and State Hospital Association (headquartered in Tarboro). All three of these nonprofit agencies offer hospital insurance. Hospital Saving Association and Hospital Care Association have the two Blue Cross^{5/} plans operating in North Carolina.

The three nonprofit agencies in North Carolina offer insurance for surgical care. Hospital Saving Association and Hospital Care Association each write coverages for some in-hospital medical expenses other than surgical care. Hospital Saving Association has the Blue Shield^{6/} program in the State.

All three nonprofit agencies in North Carolina have group and also nongroup or individual enrollment in their programs. The nongroup program is particularly useful to self-employed persons, including farmers.

2. Insurance companies

The "insurance companies" are corporate business organizations, mutual or stock, which write insurance for health care and usually carry other types of insurance as well. The insurance companies carrying health care offer policies toward hospital, surgical, or limited medical insurance, or a combination of these coverages.

^{5/} Blue Cross plans offer hospital insurance including either service benefits or a combination of indemnity toward the cost of hospital room and board and service benefits for some special hospital services. Blue Cross is a nonprofit agency incorporated under the laws of the States in which it operates and is affiliated with the national Blue Cross Commission.

^{6/} Blue Shield plans provide surgical care insurance and in some cases limited other medical insurance. Most Blue Shield plans in the United States offer a combination of service benefits for subscribers earning less than a stated income and a cash indemnity for those earning above that income. Blue Shield plans are sponsored by State or county medical associations and are affiliated with the national Blue Shield Commission.

Cash indemnities toward the cost of health care services is the prevalent type of benefit offered policyholders. Many insurance companies in North Carolina write both group insurance and individual insurance, some write only on an individual basis, and a few write only on a group basis.

As of the beginning of 1954, there were 202 insurance companies^{7/} offering health insurance which were licensed to operate in North Carolina. With about 8 companies licensed for the first time during 1953, the continued growth of programs is indicated. It should be noted that only about one-half of the insurance companies with health coverages licensed to operate^{7/} in North Carolina were actively operating in the voluntary health insurance field during 1953 in the State.

3. "Independent plans"

"Independent plans" include private prepayment organizations which are not affiliated with either Blue Cross, Blue Shield, or the insurance companies. This classification includes industrial plans which may be sponsored by employees, unions, employers, or a combination of these; consumer cooperatives; and plans sponsored by fraternal organizations, community organizations, and others.

There are a few voluntary health insurance programs in North Carolina which offer coverage benefits for hospitalization and for several professional health personnel services, including dental care. All of these comprehensive care plans now available in voluntary health insurance programs are offered by the independent plans. Some independent plans offer limited benefits such as payments on hospital expenses or limited medical services.

As of 1949, there were eight independent health care organizations reported in North Carolina.^{8/} Other "independent plans" as of 1954 included three fraternal organizations^{9/} offering health insurance.

^{7/} Data from Insurance Commissioner, State of North Carolina.

^{8/} Independent Plans Providing Medical Care and Hospital Insurance in 1949 in the U. S., 1950 Survey. Bureau Memorandum No. 72, U. S. Social Security Administration.

^{9/} Data from Insurance Commissioner, State of North Carolina.

Enrollment in Voluntary Health Insurance

At the end of 1952, an estimated 1,625,000 individuals^{10/} in North Carolina carried voluntary health insurance toward the costs of hospital care. An estimated 1,516,000 had some degree of protection for costs of physicians' services for surgery. Other medical coverage, which often provides specified benefits for the costs of physicians' services in hospitals other than for surgery, was held by an estimated 213,000 North Carolinians at the end of 1952. The latter figure includes those having "comprehensive health care" coverages. Of the estimated 1,625,000 persons carrying hospitalization insurance, about 42 percent were enrolled in the Blue Cross programs.

The estimated number of persons having hospital insurance may be taken as the inclusive figure for all persons having any kind of health insurance in North Carolina as of December 31, 1952. Generally speaking, all individuals with surgical insurance have hospital insurance, and most persons having other medical coverages also have surgical and hospital insurance. On the above basis, the estimated number of persons in North Carolina in 1952 having any voluntary health insurance was 1,625,000 persons or about two-fifths of the total population. By comparison, the estimated number of persons in the United States having such insurance was 91,667,000, or three-fifths of the population.

Enrollment in Blue Cross

Since actual enrollment data^{11/} were available for Blue Cross programs in North Carolina, detailed examination was made of enrollment in this nonprofit

^{10/} Accident and Health Coverage in the United States as of December 31, 1952. Annual Survey. The Health Insurance Council, New York City, Sept. 1953.

^{11/} Enrollment data for Blue Cross were provided by Hospital Care Association and by Hospital Saving Association. Enrollment data for the 22,829 members of the State Hospital Association (Tarboro) were not available by counties.

agency for hospital care on a State-wide basis and by counties. This analysis of enrollment in Blue Cross represents only part (41.7 percent in 1952) of the total enrollment in voluntary health insurance in the State.

As of the end of 1953, there were 715,785 North Carolinians enrolled in Blue Cross programs. This was 18 percent of the estimated total population.^{12/}

Trends in Blue Cross enrollment for 1947 through 1953 in North Carolina were as follows:

Year	Blue Cross enrollment	Increase over preceding year	
		No.	Percent
1947	512,325	---	---
1948	555,301	42,976	8.4
1949	595,191	39,890	7.2
1950	653,358	58,167	9.8
1951	654,508	1,150	0.2
1952	676,977	22,469	3.4
1953	715,785	38,808	5.7

Each county of North Carolina was represented in Blue Cross enrollment (Figure 1). However, there were differentials in percent of total population enrolled in Blue Cross by socioeconomic characteristics of counties.

In general, the Piedmont area ranked first in proportion of population enrolled in Blue Cross, followed by the western mountain area, with the coastal plain area lowest in enrollment.

Differences in proportion of population of counties covered in Blue Cross were indicated as associated with the percent of population which was rural-farm (table 1), per capita State income tax payments (table 2), general hospital beds per population (table 3), and physicians per population (table 4).

^{12/} Based on U. S. Census estimate of total civilian population in North Carolina of 4,097,000 as of July 1, 1953. See Population Estimates, Series P-25, No. 97.

The reader is cautioned against interpreting these indicated associations as being causal relationships. At this point, it can only be interpreted that counties of North Carolina which are relatively high in proportion of population enrolled in Blue Cross as of 1953 were low in rural-farm population and relatively high in per capita State income tax payments and in general hospital beds and physicians per population. Conversely, counties low in Blue Cross enrollment ratio were comparatively high in rural-farm population and were low in per capita income tax, in general hospital beds, and physicians per population. These associations may be viewed as descriptions of situations.

Further analyses of aspects of association of these and of other social and economic characteristics to enrollment in Blue Cross are under way.

Table 1. BLUE CROSS ENROLLMENT OF NORTH CAROLINA COUNTIES BY PERCENT
OF POPULATION WHICH WAS RURAL-FARM

Percent population rural-farm, 1950	Number of Counties	Population 1950	Blue Cross enrollment 1953	Percent population enrolled in Blue Cross
TOTAL	100	4,061,929	709,677	17.5
Under 20%	14	1,293,624	341,140	26.4
20-39%	26	1,098,923	206,887	18.8
40-59%	36	1,175,122	125,019	10.6
60% and over	24	494,260	36,631	7.4

Source: U. S. Census, 1950; Reports of Hospital Care Association, Durham, N. C., and Hospital Saving Association, Chapel Hill, N. C.

Table 2. BLUE CROSS ENROLLMENT OF NORTH CAROLINA COUNTIES BY PER CAPITA
STATE INCOME TAX PAYMENTS

Per capita State income tax payments, 1951	Number of counties	Population 1950	Blue Cross enrollment 1953	Percent population enrolled in Blue Cross
TOTAL	100	4,061,929	709,677	17.5
Under \$3.00	29	512,561	39,980	7.8
\$3.00-\$5.99	35	1,123,265	123,421	11.0
\$6.00-\$8.99	20	913,478	130,336	14.3
\$9.00 and over	16	1,512,625	415,940	27.5

Source: U. S. Census, 1950; Department of Revenue, State of North Carolina; Reports of Hospital Care Association, Durham, N. C., and Hospital Saving Association, Chapel Hill, N. C.

Table 3. BLUE CROSS ENROLLMENT OF NORTH CAROLINA COUNTIES BY NUMBER OF
GENERAL HOSPITAL BEDS PER 1,000 POPULATION

General hospital beds per 1,000 pop. 1953	Number of Counties	Population 1950	Blue Cross enrollment 1953	Percent population enrolled in Blue Cross
TOTAL	100	4,061,929	709,677	17.5
0	18	257,972	17,700	6.9
1.0 - 2.6	36	1,438,555	146,099	10.2
2.7 - 4.4	35	1,548,587	273,198	17.6
4.5 and over	11	816,815	272,680	33.4

Source: U. S. Census, 1950; and Physicians Today and Tomorrow, by Rashi Fein,
University of North Carolina News Letter, Vol. 39, No. 12, (Nov. 11, 1953).

Table 4. BLUE CROSS ENROLLMENT OF NORTH CAROLINA COUNTIES BY NUMBER OF
PHYSICIANS PER 100,000 POPULATION

Physicians per 100,000 population 1952	Number of Counties	Population 1950	Blue Cross enrollment 1953	Percent population enrolled in Blue Cross
TOTAL	100	4,061,929	709,677	17.5
Under 40	30	630,188	54,761	8.7
40 - 49	22	772,001	78,826	10.2
50 - 66	28	1,094,184	141,921	13.0
67 - 99	14	825,442	166,410	20.2
100 and over	6	740,114	267,759	36.2

Source: U. S. Census, 1950, and Physicians Today and Tomorrow, by Rashi Fein,
University of North Carolina News Letter, Vol. 39, No. 12, (Nov. 11, 1953).