

# Prepaid Medical Care at Trinity Hospital, Little Rock, Arkansas, 1941 and 1942

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*An earlier Bulletin article outlined the various medical services provided in 1941 under one of the older voluntary prepayment medical care plans in this country. The present article, which continues the analysis by comparing the plan's experience during 2 successive years, indicates the extent to which persons receiving physicians' and hospital services under the plan in 1941 also received those services during 1942. As in all Bulletin articles, the opinions expressed are those of the author and do not necessarily reflect official views of the Social Security Administration.*

IMPROVING the Nation's health means not only solving such recognized basic problems as expansion and adequate distribution of medical facilities and personnel resources but developing improved methods of paying for services. Almost all proposals for better medical care now rely to some extent on the principle of prepayment, and health insurance is now a subject of Nationwide discussion.

There is a fundamental question whether voluntary or compulsory prepayment would involve a relatively large amount of service if unrestricted physicians' services in office, home, and hospital were provided. For this reason, the experience of prepayment plans in providing relatively complete medical service has assumed particular importance at this time.

Over a period of years the Division of Research and Statistics of the Office of the Commissioner has been making an intensive study of the comprehensive medical care provided on a prepayment basis by Trinity Hospital, in Little Rock, Arkansas, one of the older voluntary prepayment medical care plans in the United States. Several publications relating to this study have already been released.<sup>1</sup>

\*Division of Research and Statistics, Office of Commissioner, Social Security Administration. This paper is based on one presented by Miss Klem before the Subcommittee on Medical Care, American Public Health Association, at Boston, November 9, 1948.

<sup>1</sup>Barkev S. Sanders and Margaret C. Klem, "Services and Costs in a Prepay-

The present article continues the analysis by comparing the hospital's experience during 2 successive years. In the first year, office visits were provided without charge; in the second year a 50-cent charge was made for each office visit in addition to the regular contract fee. This regulation was adopted during the early part of World War II, when lack of personnel made it necessary to discourage requests for office visits.

## Trinity Hospital Plan

Trinity Hospital, which is a combined group-practice clinic and hospital, was established in 1920 and has provided services for both fee-for-service and contract patients since 1931. Before the war the hospital staff numbered 75 persons, including 10 physicians, a hospital superintendent, 27 graduate nurses, and two laboratory and two X-ray technicians. All patients have free choice among the staff physicians and may consult staff specialists at any time without referral by one of the general practitioners.

Several different types of prepayment contracts are offered by Trinity

ment Medical Care Plan," *Medical Care*, July 1942; Margaret C. Klem, "Medical Services Provided Under Prepayment Arrangements at Trinity Hospital, Little Rock, Arkansas, 1941," *Social Security Bulletin*, May 1947; and Margaret C. Klem, Helen Hollingsworth, and Zelma A. Miser, *Medical and Hospital Services Provided Under Prepayment Arrangements, Trinity Hospital, Little Rock, Arkansas, 1941-42* (Bureau of Research and Statistics Memorandum No. 69), June 1948.

Hospital; this report, however, deals only with services provided to persons who were eligible on a prepayment basis for hospital care and for physicians' care in the home, office, and hospital in each of the two study years, 1941 and 1942. The first study year covers March 1941 through February 1942; the second, March 1942 through February 1943. The dividing point between the two study years is March 1, 1942, when the organization began making a charge of 50 cents per clinic visit.

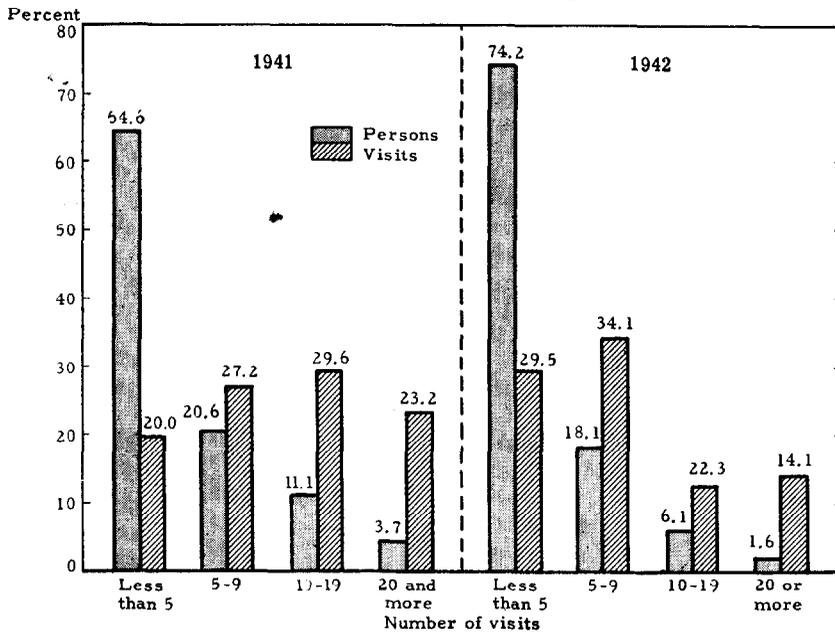
Group, individual, or family enrollment is possible. Dependents covered under the family contracts must be totally dependent on the subscriber for support, related to him, and residing with him. On attaining age 21, children must purchase separate contracts if they wish to continue their membership. Unlike most other prepayment organizations, however, Trinity Hospital does not require a physical examination, or enrollment of a specified percentage of a group. There are no income restrictions and no age restrictions. Over half the membership had been enrolled for 5 years or more at the time the study was started.

According to the late medical director, Dr. M. D. Ogden, persons eligible for care under prepayment contracts represented a true cross section of the population of Little Rock. The age distribution of the membership was, in general, similar to that of the white population of the city.

The services provided under the prepayment contracts at Trinity Hospital are more inclusive than under most prepayment contracts.<sup>2</sup> Physicians' care in the office, home, and hospital is unlimited, but the patients pay an additional charge for home visits—\$2 for a day call and \$4 for a night call. Hospitalization is

<sup>2</sup>Margaret C. Klem, *Prepayment Medical Care Organizations*. (Bureau of Research and Statistics Memorandum No. 55, 3d. ed.), June 1945.

Chart 1.—Percentage distribution of persons eligible for care and of physicians' office visits, by number of visits, at Trinity Hospital, 1941 and 1942



provided in a semiprivate room and is limited to 42 days in any 1 year for each person. All surgical procedures except brain surgery are included, as well as laboratory tests, X-ray examinations, and X-ray treatments. As is customary in medical prepayment plans, patients are ineligible for care after diagnosis of mental or nervous disorders, pulmonary tuberculosis, or drug addiction. Eligibility for maternity care requires 10 months' membership of husband and wife. Benefits do not include drugs and medicines or orthopedic appliances. Refractions and glasses are furnished at reduced fees.

Families who enrolled under inclusive contracts before 1939 continue to pay \$5 a month, regardless of the size of the family. Families enrolling for this type of service during and after 1939 pay the following rates: two persons, \$5 a month; three-person families, \$7 a month; and families of four or more, \$8.50 a month. Individual contracts, regardless of the date of initial enrollment, cost \$2.50 a month. Group enrollment for either individual or family membership reduces these rates by 50 cents a month. To be eligible for the reduction in dues allowed because of group collection, a group must have at least five members.

Dues are increased by 50 percent at age 60 for nongroup subscribers who enrolled at age 57 or over.

Data in this paper exclude persons eligible during only part of either study year and persons eligible only for restricted physicians' services, but the experience of dependents eligible for hospital service only (in families in which the subscriber is eligible for physicians' service and hospitalization) is included in the tables on hospital care. For each study year, infants born into families eligible for care during the entire study year and

persons who died during the year have been included as full-time members. To facilitate comparisons with other population groups, data for subscribers and dependents have been combined.<sup>3</sup>

### Number of Persons Receiving Service

Most of the people who were eligible for service on a prepayment basis took advantage of their membership privileges and received some type of medical care during each study year (table 1). However, fewer people received each type of service during the second year even though the extra 50-cent charge that had been imposed applied only to calls at the clinic. Several other factors influenced the reduction. The second study year was the first year of the war, and many housewives and persons who had previously considered themselves partially or wholly disabled took jobs and were less free to visit a physician. Because of the reduced staff at Trinity Hospital, appointments were made further in advance, tending to discourage patients from returning as frequently as before. There was a desire on the part of the membership to conserve the time of the physicians and other staff members. With a reduction in physician visits and in diagnostic X-ray and laboratory tests, fewer conditions needing additional care were discovered and treated.

<sup>3</sup> Separate data for subscribers and dependents appear in Bureau Memorandum No. 69, op. cit.

Table 1.—Percent of eligible persons receiving specified services and number of services received per 1,000 persons eligible for care at Trinity Hospital, during each entire study year, 1941 and 1942

Type of service	Percent of eligible persons receiving specified service		Number of services received per 1,000 persons eligible for care	
	1941	1942	1941	1942
Physicians' visits:				
Office.....	79.6	72.8	4,982	3,423
Home, day.....	11.4	9.7	174	147
Home, night.....	.9	.3	10	3
Office visits <sup>1</sup> to nurse or technician.....	34.4	28.9	1,544	1,117
Other services at office and hospital:				
Diagnostic X-ray.....	19.3	12.8	298	170
Laboratory.....	47.1	40.5	1,789	1,400
Hospitalization:				
Cases <sup>2</sup> .....	12.9	9.8	154	117
Days of care.....			862	641

<sup>1</sup> Visits at which only a nurse or technician gave service.

<sup>2</sup> Number of hospital admissions; a person hospitalized 2 or more times during the year was counted as 2 or more cases.

A thorough analysis of the decline in volume of service received requires study of data for each age and sex group on the types of illness receiving care in each year; the amount of service provided for each type of illness; the reduction, if any, in the amount of preventive service provided; and the effect of services received in previous years of membership. So far, this has not been possible.

Most studies of the services provided by physicians in individual private practice count a visit to the physician's office as a physician visit whether the physician himself, a nurse, or a technician gives the service. Since visits to physicians frequently result in orders for care to be given at a return visit by some other member of the staff—a nurse or technician—and because Trinity Hospital had many such return visits, it seemed wise in this study to distinguish between visits to a physician and visits to a nurse or technician. If supplementary service was given by a nurse or technician during a visit in a clinic

physician's office, it was not counted as a separate service. If a return visit was solely to a nurse or technician, however, that service was counted as a visit to a nurse or technician. If a visit to staff members other than physicians required the attention of various persons and more than one service, it was counted as only one visit. If, on the other hand, on a single visit the patient saw more than one physician, a separate visit was recorded for each physician seen at the time.

About 80 percent of the persons eligible visited a physician in his office during the first study year, as compared with 73 percent in the second study year. In the first study year, more than one-third made office visits to receive the services of a nurse or technician, while this proportion decreased slightly during the second year.

In the period 1928-31 under fee-for-service practice, home calls represented from 36 to 54 percent of physician home and office calls; the ratio

varied according to family income.<sup>4</sup> At Trinity Hospital, home calls represented 3.5 percent of all physician calls in the first year, 4.2 percent in the second. The infrequent use of home calls is thought to result from two factors: the extra charge for home calls, and recognition by the members that the physician can render more adequate care in the office than in the home.

### Average Services Received

The volume of service received in 1941 is roughly comparable to that received in the period 1928-31 under fee-for-service practice by persons in families with incomes of \$5,000 or over.<sup>5</sup> There was a substantial decrease in the volume of service dur-

<sup>4</sup> I. S. Falk, Margaret C. Klem, and Nathan Sinal, *The Incidence of Illness and the Receipt and Costs of Medical Care Among Representative Families* (Committee on the Costs of Medical Care, Publication No. 26), 1933.

<sup>5</sup> *Ibid.*

Table 2.—Number of eligible persons, percent receiving physicians' visits and nurse or technician visits, and number of visits per 1,000 persons eligible for care, by age group, at Trinity Hospital, during each entire study year, 1941 and 1942

Age group <sup>1</sup>	Number of persons eligible for care	Percent of eligible persons receiving—			Number of specified services per 1,000 persons			
		Physicians' visits		Office visits to nurse or technician <sup>2</sup>	Total	Physicians' visits		Office visits to nurse or technician <sup>2</sup>
		Office	Home			Office	Home	
1941								
All ages <sup>3</sup> .....	4,517	79.6	11.8	34.4	6,709	4,982	183	1,544
Infants born during year.....	54	79.6	13.0	3.7	3,426	3,259	130	37
Under 5 <sup>4</sup> .....	326	84.4	30.4	32.8	4,999	3,794	457	748
5-9.....	290	84.1	26.2	43.4	6,500	4,524	410	1,566
10-14.....	338	77.5	14.2	36.4	5,637	3,740	228	1,669
15-19.....	362	75.4	5.8	28.7	5,141	3,920	94	1,127
20-24.....	215	81.4	8.8	38.6	6,707	5,451	112	1,144
25-34.....	898	78.6	8.2	32.2	6,464	5,149	107	1,208
35-44.....	986	79.5	7.6	35.1	7,442	5,189	107	2,146
45-64.....	954	80.1	10.2	36.6	7,879	5,909	171	1,799
65 and over.....	94	74.5	20.2	27.7	7,841	5,808	575	1,458
1942								
All ages <sup>5</sup> .....	4,131	72.8	9.9	28.9	4,690	3,423	150	1,117
Infants born during second year.....	54	85.2	18.5	1.9	3,908	3,611	278	19
Infants born during first year.....	40	95.0	17.5	32.5	6,600	5,850	200	550
Under 5 <sup>6</sup> .....	289	79.6	22.8	33.6	4,124	3,055	339	730
5-9.....	267	72.3	21.0	35.2	4,165	2,573	360	1,232
10-14.....	319	71.8	8.8	28.5	3,818	2,514	97	1,207
15-19.....	292	69.2	5.1	29.5	3,531	2,507	72	952
20-24.....	160	78.1	5.0	32.5	5,536	4,074	56	1,406
25-34.....	767	72.2	7.2	30.4	5,160	3,842	92	1,226
35-44.....	930	70.5	6.7	27.0	4,592	3,277	99	1,216
45-64.....	922	72.8	9.2	27.4	5,099	3,843	151	1,105
65 and over.....	91	70.3	18.7	24.2	5,836	4,605	440	791

<sup>1</sup> Except for infants, represents age at the beginning of the first study year.

<sup>2</sup> Visits at which only a nurse or technician gave service.

<sup>3</sup> Includes infants born during the first study year.

<sup>4</sup> Excludes infants born during the first study year.

<sup>5</sup> Includes infants born during the first and second study years.

<sup>6</sup> Excludes infants born during the first and second study years.

ing the second study year, as shown in table 1, which compares the number of services of each type received per 1,000 eligible persons in each of the 2 study years.

Visits to the physician's office dropped from almost 5 per person in the first year to approximately 3.5 in the second year. Home day and night calls and visits to a nurse or technician also decreased. Likewise there were fewer diagnostic X-ray and laboratory services per person at the clinic and the hospital. The decline in number of cases hospitalized per 1,000 eligible amounted to 24 percent and, in the average number of days of hospital care, to 26 percent. The extra charge made for home calls remained the same in the two periods, and no change occurred in the provisions for hospital care.

### Service in Relation to Age

Age is an important factor influencing the amount of medical service requested. In this study, age refers to that at the beginning of the first study year; therefore, in the second year the age groups represent persons 1 year older than indicated. While a large proportion in each age group visited

**Table 3.—Number of persons eligible for hospital care, and number of hospital cases and days of care received per 1,000 persons eligible for hospital care, by age group, at Trinity Hospital, during each entire study year, 1941 and 1942**

Age group <sup>1</sup>	Number of persons eligible for hospital care		Hospital care per 1,000 persons			
			Cases <sup>2</sup>		Days of care	
	1941	1942	1941	1942	1941	1942
All ages.....	4,614	4,294	154	117	862	641
Infants born during second year.....		63		32		270
Infants born during first year.....	62	48	81	62	1,774	229
Under 5 <sup>3</sup> .....	337	310	160	152	409	290
5-9.....	298	289	154	93	359	190
10-14.....	352	335	99	72	344	221
15-19.....	373	307	97	82	386	369
20-24.....	219	169	233	262	1,446	2,015
25-34.....	916	791	204	170	1,329	1,109
35-44.....	994	950	136	94	641	542
45-64.....	960	930	145	99	945	548
65 and over.....	103	102	223	167	2,718	1,490

<sup>1</sup> Except for infants, represents age at the beginning of the first study year.

<sup>2</sup> Number of hospital admissions; a person hospitalized 2 or more times during the year was counted as 2 or more cases.

<sup>3</sup> For 1941, excludes infants born during first study year; for 1942, excludes infants born during the first and second study years.

a physician's office during each study year, relatively few persons—with the exception of those in the youngest and oldest age groups—had home calls. About one-third made office visits during which only a nurse or technician provided the service. In the middle age groups the relative infrequency of physician home calls as compared with physician office visits is striking. The variation in the percentage of

persons receiving office and home care and in the number of visits per 1,000 eligible persons among the different age groups in each study year is shown in table 2.

**Physicians' office visits.**—During the first year, office visits to physicians ranged from 3.7 per person in the group aged 10-14 to nearly 6 for those aged 45 and over.<sup>6</sup> In the second year the range was from 2.5 visits for those aged 10-14 and 15-19 to 5.8 visits for infants born during the first study year. The older age groups continued to have a large number of calls.

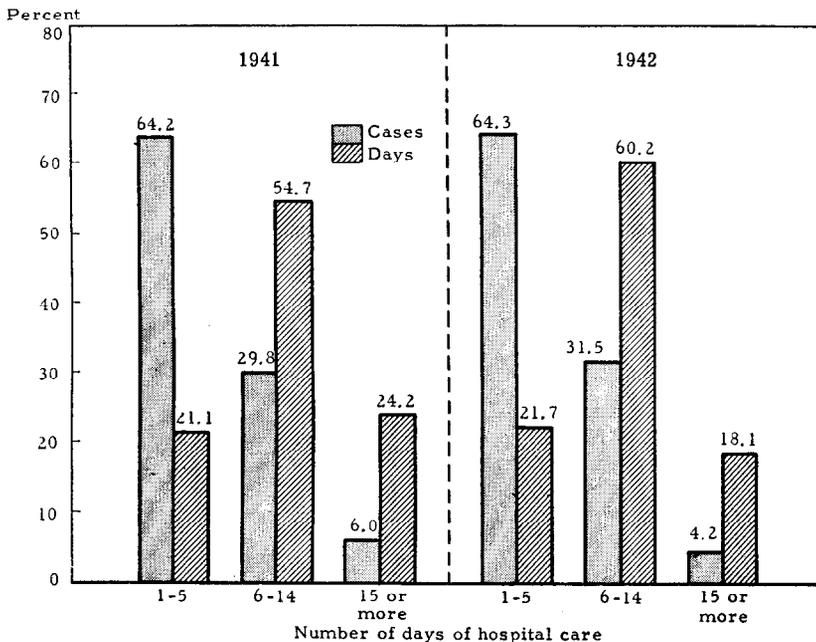
**Home calls.**—Home calls in both study years were received principally by children under 10 years and persons aged 65 and over.

**Office visits to nurses or technicians.**—The extra charge of 50 cents per clinic visit in the second study year was also applicable to visits at which only a nurse or technician gave care. These visits were reduced by more than 48 percent during the second study year. In both years, children under 5 years of age made the least use of this service.

**Hospital care.**—The prepayment contracts at Trinity Hospital provide for a maximum of 42 days of hospital care per person per year; patients pay at the regular per diem rates for additional days of care. The data in this

<sup>6</sup> Infants born during the first year averaged 6½ months of coverage and 3.3 visits to physicians.

**Chart 2.—Percentage distribution of hospital cases and of days of hospital care received, by number of days of hospital care, at Trinity Hospital, 1941 and 1942**



paper include all days of care—those provided under the contract and extra days.<sup>7</sup> Although there were no changes in the conditions under which hospital care was provided or in the number of days of care to which patients were entitled, the volume of this service, as well as of all others, declined in the second study year.

The rate of hospitalization in 1941 was 154 cases per 1,000 persons of all ages eligible for care (table 3).<sup>8</sup> In 1942 the rate of hospitalization declined by 24 percent.

During both study years, wide differences occurred also in the number of days of hospital care received by different age groups. During the first year, persons aged 65 and over had more than three times as many days of hospital care as the average for the total group of eligible persons, whereas persons under age 20 (excluding infants)<sup>9</sup> had less than half the average of the total group. Only the age group 20-24 had more days of care in the second year than in the first—an increase from 1,446 to 2,015 days per 1,000 eligible persons, or 39 percent. In the group aged 5-9 and that aged 65 and over, the number of days of hospital care received in the second year declined about 50 percent.

<sup>7</sup> Hospitalization incidental to delivery is not counted in recording cases and days of care for infants born during the year. Care provided for the infant after the mother left the hospital is counted, and so is hospitalization of infants readmitted later in the year.

<sup>8</sup> Blue Cross reports are comparable for cases admitted but not for days of care because they exclude a count of those days not covered by the plan for which the patients pay the cost. For 1941 they reported 0.107 admissions and 0.81 days of care per participant; for 1942 they reported 0.108 admissions and 0.83 days of care. (Louis S. Reed, *Blue Cross and Medical Service Plans*, U. S. Public Health Service, Oct. 1947, p. 113.)

<sup>9</sup> Five of the 62 infants born during the first year were hospitalized. They received more than twice the average number of days of care, mainly because of two cases of long duration. The rate would have been 400 days per 1,000 if those two cases had not been included. The largest relative decrease in number of days was among infants born in the second year as contrasted with those born in the first study year, but again this difference reflects the effect of the two unusually long cases.

### Distribution of Office Visits to Physicians

Several earlier studies have indicated that most of the persons receiving care under fee-for-service payments visit the physician only a few times during the year and that the service they receive represents only a small part of the total service rendered by the physicians. The experience of persons eligible for service under prepayment arrangements at Trinity Hospital was similar.

About 65 percent of the people eligible for service during the first study year made no visits or fewer than five visits to a physician, whereas about 4 percent visited a physician's office 20 times or more during the period (chart 1). Persons who visited the physician's office less than five times accounted for only 20 percent of the total office visits, whereas 23 percent of all the physician office visits were made by the 4 percent of the people who had 20 or more calls. As would be expected, there was a change in this relationship during the second study year. The proportion of persons making no visits or fewer than five visits increased, and the proportion in each of the groups having five or more visits decreased. The physician's time

at the office also was redistributed. More of his time was given to patients who made few calls and less to those making 10 or more calls.

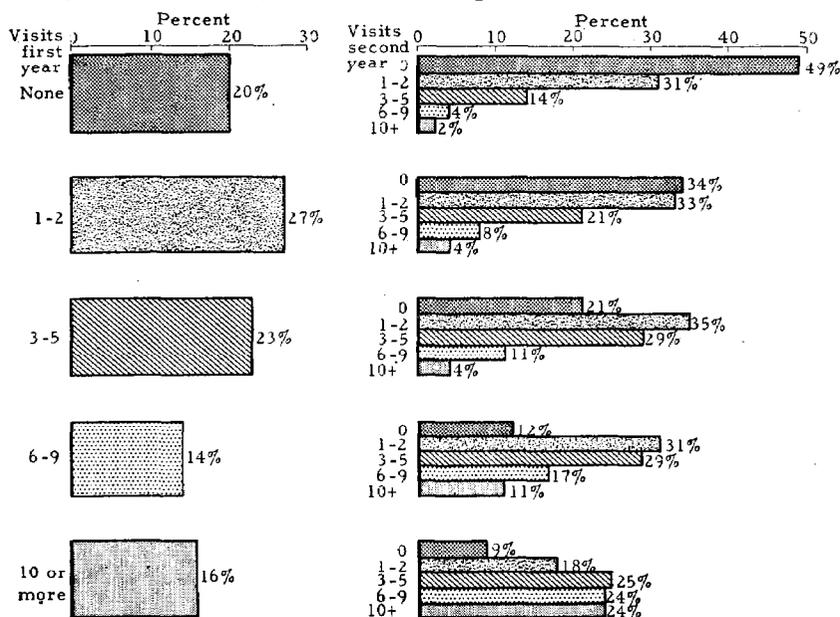
### Distribution of Hospital Cases and Days

In about two-thirds of the cases hospitalized in 1941, the patient stayed less than 6 days. These cases, though relatively numerous, accounted for only about one-fifth of all days of hospital care furnished to persons eligible for care under prepayment contracts (chart 2). Extended hospital stays, those of 15 days or more, though relatively few in number (6 percent of all cases) accounted for nearly one-fourth of all days of hospital care provided under the prepayment contracts. In 1942 there was practically no change in the proportion of cases hospitalized for less than 6 days. Fewer cases were hospitalized for 15 days or more, however, and there was a corresponding increase in the number of cases and days for the 6-14 day stays.

### Receipt of Service During Both Study Years

Since the publication of earlier Trinity Hospital reports, the data

Chart 3.—Distribution of persons eligible for physicians' care during 24-month period by number of physician office visits in second year for groups receiving specified visits in first year, at Trinity Hospital, 1941 and 1942



**Table 4.—Number of persons eligible for physicians' care and percentage distribution of persons eligible by number of office visits to a physician, at Trinity Hospital, during specified periods of the study years, 1941 and 1942**

Period of eligibility	Number eligible for physicians' care	Percentage distribution of persons by number of office visits to a physician								
		Total	None	1-2	3-5	6-9	10-14	15-19	20-29	30 or more
Entire 24 months <sup>1</sup> .....	2,959	100.0	9.8	18.4	21.9	20.8	12.0	7.2	5.7	4.2
First 12 months.....	2,959	100.0	20.1	26.9	23.2	14.1	8.1	3.5	2.2	1.9
Second 12 months.....	2,959	100.0	27.0	30.3	23.2	11.8	4.7	1.4	1.0	0.6
First study year <sup>2</sup> .....	4,517	100.0	20.4	26.4	23.7	14.7	7.8	3.3	2.2	1.5
Second study year <sup>3</sup> .....	4,131	100.0	27.2	29.8	23.0	12.3	4.7	1.3	1.1	0.6

<sup>1</sup> Persons in families with no change in family composition during 24-month period.

<sup>2</sup> Persons eligible for care during entire first study year and eligible during all or part of the second study year, without regard to change in family composition

<sup>3</sup> Persons eligible for care during entire second study year and eligible during all or part of the first study year, without regard to change in family composition.

have been analyzed to determine the services provided during the 2 study years to those persons who were continuously eligible for prepaid care during the 24-month period. There were about 4,500 persons eligible for medical care and about 4,600 persons eligible for hospital care throughout the first study year; and about 4,100 and 4,300 in the second year. But only 2,959 persons were continuously covered for both medical and hospital care throughout the 24-month study period. This smaller group offers an opportunity to measure, for an identical group of people, the amount of care received 1 year with that received the preceding or following year.

Although the differences in service received in the 2 study years must be interpreted in the light of the extra 50-cent clinic charge in the second study year and the apparent decrease in illness rates during the war years, the figures indicate the extent to which people who received a large volume of service in the first study year had a similar experience during the second. These data give at least a partial answer to the questions: To what extent is the time of the physician and hospital given to new patients each year, and to what extent is it given to the care of persons who received a large volume of service in successive years?

Persons in families with births or deaths or other events resulting in changes in composition during the 2-year period were excluded from the group of 2,959 persons eligible for service in both years. Some question may therefore arise as to whether the

group was fully representative of the entire membership. However, there was a striking similarity in the amounts of physician, nurse, and hospital service received in each study year by the total membership eligible for care in each such year, and by that part of each group eligible throughout the entire 24 months.

In each study year the proportions of persons (whether eligible in the single study years or for the entire 24 months) making each specified number of visits to the physician's office are similar. For example, 14.7 percent of the 4,517 persons eligible for care during the entire first study year made 6-9 office visits to a physician, while among the group of 2,959 eligible during the entire 24-month period, 14.1 percent made 6-9 office visits to a physician during the first study year (table 4). The differences were smaller in each of the other age groups. The findings are much

the same for the second study year.

The situation was similar with respect to visits to a nurse or technician and hospital care. Only for persons receiving no hospital care and for those hospitalized 10-14 days was there any significant variation (table 5). Hospital care for 10-14 days was received during the first study year by 3.0 percent of all persons eligible for care during that year and by only 1.7 percent of those eligible during both years. A difference of about the same magnitude appears in comparisons of hospital care of that duration in the second study year. This finding probably results from excluding from the 24-month population the families that had a change in size and composition by reason of a maternity case. Data in tables 4 and 5 seem to indicate that restricting the sample for the study of services received during both study years to persons in families which were covered for the full 2-year period and which had no changes in family composition did not distort the results.

**Hospital care.**—Relatively few people received hospital care in either study year. Of the 2,959 persons concerned, 339 were hospitalized in the first year,<sup>10</sup> and of them only 46 were also hospitalized in the second year (table 6). Of those hospitalized during the first study year, slightly more

<sup>10</sup> Cases were counted as of the month of discharge. Consequently persons who entered the hospital toward the end of the first year and were discharged in the second year are included among cases hospitalized during the second year.

**Table 5.—Number of persons eligible for hospital care and percentage distribution of persons eligible by number of days of hospital care, at Trinity Hospital, during specified periods of the study years, 1941 and 1942**

Period of eligibility	Number eligible for hospital care	Percentage distribution of persons by number of days of hospital care						
		Total	None	1	2-5	6-9	10-14	15 or more
Entire 24 months: <sup>1</sup> .....	2,959	100.0	88.5	4.1	3.7	1.0	1.7	1.0
First 12 months.....	2,959	100.0	92.1	2.9	2.5	0.7	1.2	0.7
Second 12 months.....	2,959	100.0	92.1	2.9	2.5	0.7	1.2	0.7
First study year <sup>2</sup> .....	4,614	100.0	87.1	4.1	3.4	1.3	3.0	1.1
Second study year <sup>3</sup> .....	4,294	100.0	90.1	3.3	2.4	0.8	2.7	0.7

<sup>1</sup> Persons in families with no change in family composition during 24-month period.

<sup>2</sup> Persons eligible for care during entire first study year and eligible during all or part of the second study year, without regard to change in family composition.

<sup>3</sup> Persons eligible for care during entire second study year and eligible during all or part of the first study year, without regard to change in family composition.

than a third—121 persons—received only 1 day of hospital care. Most of this group (109 persons) did not return to the hospital the next year; three persons had one day of care during the second year, two persons had 2 or 3 days, two had from 4 to 9 days, and five persons had 10 or more days during the second year. At the other extreme—of the 80 persons who were hospitalized for 10 days or more during the first study year, 67 did not return during the second year, five returned for 1 day only, and five returned for 10 or more days.

In the second year, 233 people received hospital care. The majority of them (187) had not been hospitalized during the first year. Most of the 55 persons who received 10 or more days of care in the second study year had not been in the hospital during the previous year; five had received 1 day of care each; four had received from 4 to 9 days of care; and five had been hospitalized for 10 or more days during each of the 2 years.

**Office visits to nurses or technicians.**—A relatively small group of people made office visits to a nurse or technician during each of the 2 study years. Of the group that made no such visits during the first year (65 percent), three-fourths also made none the next year. The group receiving care during the second year was almost equally divided between those who did and those who did not have such care during the first year. During the second year about half the repeaters made one or two calls, one-fourth made three to five calls, and one-fourth made six or more calls.

**Physicians' office visits.**—Chart 3 shows the number of physician office visits made in the second study year by persons who made specified numbers of visits to the physician's office during the first year. For example, 20 percent of the persons eligible for care during the 24-month period made no office visits during the first year. Of this group, almost half made no office visits during the second year, and another substantial group made only one or two visits. These two groups make up the 80 percent shown in the chart to have made no visits or made only one or two visits during the second year.

The 27 percent of the total who

**Table 6.—Persons eligible for care during the entire 24-month study period by number of days of hospital care received in the second year for each group of persons receiving specified number of days of hospital care in the first year, at Trinity Hospital, 1941-42**

Days of hospital care received in first study year	Persons receiving specified number of days of care in—						
	First study year	Second study year					
		None	1 or more	1	2-3	4-9	10 or more
Total.....	12,959	2,726	233	87	46	45	55
None.....	2,620	2,433	187	74	34	38	41
1 or more.....	339	293	46	13	12	7	14
1.....	121	109	12	3	2	2	5
2-3.....	73	65	8	4	3	1	0
4-9.....	65	52	13	1	5	3	4
10 or more.....	80	67	13	5	2	1	5

<sup>1</sup> Persons in families with no change in family composition during 24-month period.

made one or two visits during the first year also represents a group that for the most part asked for little or no care during the second year; 67 percent of this group either had no office visits or had only one or two in the second year. Only 4 percent made as many as 10 visits during the second year. At the other extreme is the group comprising 16 percent of the total who made 10 or more visits during the first year. Apparently half of this group is made up of persons who for the most part requested a considerable amount of care throughout the 2-year period; almost one-fourth of them made 10 or more visits and an equal proportion made six to nine in the second year. Only 9 percent of the group made no office visits during the second year.

Chart 4 presents the reverse relationship. The volume of service received in the first year is shown according to the volume of service that the same people received during the second year and indicates the groups in which requests for physicians' office care were reduced. Twenty-seven percent of those eligible for care made no office visits to physicians during the second study year. The majority of this group had received some care of this type in the first year; 52 percent had made from one to five visits, and 11 percent had made six or more. Only 37 percent made no visits during the preceding year. This group seems to represent persons who in the second year made a decided effort to reduce their requests for service, were in bet-

ter health, or were drawn into the war effort.

Half the persons who made only one or two physician office visits in the second year had made the same number or fewer visits during the first year, while 27 percent had made three to five calls, and 23 percent had made six or more visits.

There was less reduction in physicians' office visits among persons who made three or more visits in the second year. Among the group with three to five visits in the second year, for example, 35 percent had made a larger number of visits in the preceding year; among those with six to nine visits in the second year, 32 percent had made more visits in the previous year.

Only 8 percent of the total group made 10 or more physician office visits during the second year, a decrease of 50 percent in the proportion making as many visits during the first year. What had been the experience in the preceding year of this small group which, in spite of the various circumstances that tended generally to reduce requests for service, visited a physician 10 or more times? As might have been expected, the group was made up in large part of persons who had had a considerable amount of care during the first year; in fact, half of the group had made 10 or more physician office visits during the first year. An additional 21 percent had made from six to nine visits in the first year. Only 4 percent had made no physician office visits during the preceding year.

## Summary

The experience at Trinity Hospital indicated that, in general, the distribution of service among those persons eligible for medical service on a prepayment basis followed the pattern found in private fee-for-service practice, the major difference being that a larger proportion had some type of service during a year. Under the group practice arrangements existing at Trinity Hospital there was a greater use of nurse and technician services.

The average amount of service received during the first study year is roughly comparable to that received in a 12-month period during the period 1928-31 under fee-for-service practice by persons in families with incomes of \$5,000 or more. The additional 50-cent charge imposed at the beginning of the second study year—the only contract change made during this period—and the various factors associated with the war period resulted in a substantial decrease in the volume of service during the second study year. There seems to be no consistent pattern with respect to these decreases, although they occurred for each type of service.

As is true in fee-for-service practice,

a large proportion of the physician's office time was given over to the few persons who made a relatively large number of calls, while the majority of the patients, who made a small number of calls, accounted for a relatively small proportion of the physician's office time.

In addition to data on the amount of service received during each of the 2 study years, information was also assembled on the amount of service received by persons eligible for service during the entire 24-month period. It shows, for this group of persons, the extent to which the services of the physicians and the hospital are given in 2 successive years to the same group of people. Relatively few people received hospital care in both study years; of the 339 who were hospitalized in, the first year, only 46 were hospitalized in the second year. Of the 46 persons hospitalized during both years, 26 were in the hospital 4 days or more in the first year, and 21 were there for that period during the second year.

The reduction in the number of physician office visits made during the second study year is of particular significance. The percentage making no visits or one or two visits

increased in the second year as contrasted with the first; the percentage of those making one or two visits increased; the number making three to five visits remained the same; the number making six or more visits decreased. Of the group that made no office visits in the second year, roughly 60 percent had received some such care during the first year. Those who made one or two visits during the second year are equally divided between those who made less than three visits during the first year, and those who made three or more. The small group of persons who made 10 or more visits during the second year received a considerable volume of care during each of the study years. Half of the group had made 10 or more visits during the first year, and another 21 percent made six to nine visits. For the major part this group represents members who, through the occurrence of many illnesses or a single long-continuing illness, did not reduce their request for service.

From the experience of this 2-year period, at least, it seems that the people who see a physician frequently during a year are the ones most likely to see him frequently the next year. Had the study been made at an earlier period not associated with the war and before the extra charge for clinic visits was imposed, the tendency of persons who received a large volume of care in one year to receive an equally large volume in the next year would perhaps have been greater.

The experience at Trinity Hospital does not indicate the demand for service that might be anticipated under either a voluntary or compulsory type of health insurance program in the early years of its operation because half the persons eligible for care had belonged to the prepayment plan for 5 years or more at the time the study was initiated. The results do indicate, however, that after the program was initiated, those eligible for service did not make unreasonable demands for service. It is not possible to distinguish between the restraining effects of the extra 50-cent charge for clinic visits and the various factors associated with the war effort in the second study year, but together they caused a considerable reduction in the request for service.

**Chart 4.—Distribution of persons eligible for physicians' care during 24-month period by number of physician office visits in first year for each group of persons receiving specified number of visits in second year, at Trinity Hospital, 1941 and 1942**

