

Medical Services Provided Under Prepayment Arrangements at Trinity Hospital, Little Rock, Arkansas, 1941

By Margaret C. Klem*

This article is the first report on a study of medical and hospital services provided under prepayment arrangements at Trinity Hospital, Little Rock, Arkansas. The study will provide one of the largest bodies of detailed information collected in this country on the amount of medical care people request when the medical bill has been paid for in advance. 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.

THE LACK OF ADEQUATE PROTECTION against the unpredictable costs of medical care and against wage loss due to sickness and disability represents the most serious gap in this country's social security program. In line with the Social Security Administration's statutory responsibility for studying methods of providing economic security through social insurance, the Division of Health and Disability Studies of the Bureau of Research and Statistics has undertaken a study of voluntary plans that have been developed in the United States and that provide some protection against the risks of sickness and disability. The analysis of various aspects of voluntary prepayment medical care organizations—their scope, administration, operation, charges, and service provisions—has consequently been a major project of the Division in the past several years. As a part of this analysis, a detailed study has been under way of medical services provided at Trinity Hospital, Little Rock, Arkansas, under a group-practice plan that has provided medical and hospital services on a prepayment contract basis for more than 15 years. In addition to furnishing data on the amount of medical services

provided under this voluntary prepayment organization, the study will give detailed information useful in estimating the volume of service likely to be requested under a comprehensive voluntary or compulsory health insurance program.

Trinity Hospital was originally established in 1920 for the purpose of making available to private patients in the community the most modern methods and facilities for diagnosis and treatment. In 1931 the organization began to offer medical and hospital service on a prepayment basis to persons in the community who joined on an individual or group basis. Since then, it has continued to provide services on both a prepayment and a fee-for-service basis.

The hospital is privately owned and operated by a group of physicians who are all on a salary basis but who also receive a proportionate share of the organization's total net income. In providing services, group-practice techniques are used, and a consolidated medical record of each patient is maintained. The patient has free choice among the physicians on the staff and may see any staff specialist; referral by a general practitioner is not required. Before the war the total staff numbered about 75 persons—10 physicians, a hospital superintendent, 27 graduate nurses, 2 laboratory and 2 X-ray technicians, a business manager, an accountant, a pharmacist, a dietitian, a housekeeper, and business and maintenance personnel.

The organization is housed in a modern, well-designed building. On the first floor are the physicians' offices, the laboratory, the X-ray de-

partment, the pharmacy, and other facilities. Each physician has a suite of two examining rooms, a dressing cubicle, a nurse's room, and a consultation room. A 47-bed hospital occupies the second floor. Most of the rooms are designed for 2 beds, but a few private rooms are available.

At the time this study was started, a substantial proportion of the membership in the prepayment plan had been enrolled for 5 years or more, and it seemed reasonable to assume that most members were well accustomed to receiving care on a prepayment basis. Services at Trinity can therefore be considered as indicative of the care provided to a group in which the majority of the members were fully acquainted with the type of services available and were well past the first stage of membership, when the novelty of requesting services because they were already paid for could have resulted in an abnormally heavy service load.

The list of subscribers at Trinity was once described by Dr. M. D. Ogden, the medical director, as a true cross section of the entire community, with every gradation of income and social status, including bank presidents, many of the wealthier people of the town, and factory girls. The member families ranged in size from 1 to 9 persons, with an average size of 2.3 persons.

The study covers the 2 years from March 1941 through February 1943. The first year was a period not seriously affected by the withdrawal of physicians from civilian practice to serve with the armed forces. In the second year, however, the shortage of physicians began to be acute. The first study year ends at the date when the hospital, because of reduced staff, took steps to reduce services to the less serious cases.

During both years of the study the same type of detailed information was collected on the services provided and on the characteristics of persons eligible for care under the prepayment contracts. The plans for the study, the schedules, and the instructions for their use were prepared after consultation with the hospital staff. Separate office and home or hospital service schedules were prepared for each person having office, home, or hos-

*Chief, Medical Economics Section, Division of Health and Disability Studies, Bureau of Research and Statistics. Margaret F. McKiever and Zelma A. Miser assisted in the preparation of the article. In publishing this article the author and the Bureau of Research and Statistics wish to thank Dr. M. D. Ogden, Medical Director of Trinity Hospital, and his staff for their interest and cooperation, without which this study would not have been possible.

pital care during each month of the study years. Each type of care received was listed on the schedules, with the date of each service, the code number for any doctor who saw the patient, the type of hospital accommodation used, and the laboratory or X-ray service provided. Information on the composition of the families who had made new contracts or canceled contracts during the month was also prepared, and all schedules and lists were mailed to Washington each month for processing.

This article gives in summary form the major findings for the first year. More detailed data on the study for that year, as well as data for the second year, will appear in a monograph to be published in the near future.

Membership Restrictions

Persons wanting to join the prepayment plan at Trinity Hospital must meet fewer membership requirements than are imposed by many such organizations.¹ People in all income classes are eligible, for example, and no entrance physical examinations are required. There are no age restrictions, but the charges for any nongroup subscriber 57 years of age or over at the time of enrollment are increased by 50 percent when he becomes 60 years of age.

Under family contracts, membership is limited to the subscriber, spouse, and minor dependents. A dependent is defined as an individual who is totally dependent on the subscriber for support, occupies the same residence, and is related to the subscriber by blood or marriage.

A group must have at least five subscribers to be eligible for a 50 cent reduction in dues allowed because of group collections, but, unlike many other prepayment medical care organizations, Trinity does not require a certain percentage of the entire group to enroll.

¹ Margaret C. Klem, "Voluntary Medical Insurance Plans, Their Extent and Limitations," *Medical Care*, November 1944, pp. 263-276. For a description of restrictions in individual plans see Margaret C. Klem, *Prepayment Medical Care Organizations*, 3d ed., June 1945. (U. S. Social Security Board, Bureau of Research and Statistics Memorandum No. 55.)

Benefits and Charges Under Trinity Prepayment Contracts

Under the most inclusive of the several contracts offered at Trinity, both subscribers and their dependents are eligible for physicians' care in the office and hospital, for home visits on payment of an extra fee, and for hospitalization. The additional charges for home visits are \$2 for a day call and \$4 for a night call within the corporate limits of Little Rock. Hospitalization is provided in a two-bed room and covers a period not exceeding 6 weeks in any 1 year to any one individual. Persons wishing private rooms pay an additional charge.

Before 1939 these inclusive benefits were offered on a nongroup basis to individual subscribers at \$2.50 per month and to families at \$5. The hospital stopped offering the contract at these prices in 1939, but persons with such contracts are allowed to continue at the same rate. The majority of the subscribers enrolling after 1939 chose the same inclusive contract at the following cost to nongroup members: individual subscribers, \$2.50 per month; two persons in family, \$5; three persons, \$7; four or more persons in family, including all minor dependents, \$8.50. The practice of reducing these charges by 50 cents for group members continued.

Although most of the Trinity members were enrolled under this inclusive contract, subscribers had a choice of several other contracts that provide the same services to subscribers but less to dependents or that provide limited service to both subscribers and dependents.² In all contracts the charges to group members were 50 cents less per month than to nongroup members.

The fields of medicine covered by the contract include, among others,

² Under nongroup contracts offering inclusive coverage for subscribers, hospitalization for dependents on a prepayment basis, and medical services for dependents at reduced fees, the monthly charges are: subscribers, \$2.50; 2 persons in family, \$3.75; 3 persons, \$4.50; 4 or more persons, \$5. Under nongroup contracts offering inclusive services for subscribers and all services at reduced fees for dependents, the monthly charges are: subscriber, \$2.50; all dependents, regardless of number, 50 cents. Other contracts provide limited service to employees only in certain industrial establishments.

internal medicine, surgery, obstetrics, pediatrics, eye, ear, nose, and throat. All surgical procedures (except brain surgery), laboratory tests, X-ray examinations and treatments, and physiotherapy are also included. Benefits do not include drugs and medicine or orthopedic appliances. Refractions and glasses are provided at reduced fees.

Except for acute conditions needing immediate attention, no hospitalization or medical or surgical services are furnished, during the first year that the agreement is in effect, for diseases or conditions existing at the time the contract is made. Maternity care is provided after 10 months of membership of husband and wife. Care is not provided for cases of pulmonary tuberculosis, mental or nervous disorders, or drug addiction, after diagnosis as such. Diseases quarantinable by the city or State authorities are not accepted for hospitalization.

Total Services Provided

In studies of the services provided by physicians in individual private practice, a call at the physician's office usually has been counted as a visit whether the physician himself or a nurse or technician gave the service. In the Trinity Hospital study, a somewhat different method has been used. For example, visits to physicians frequently resulted in orders for care to be given by some other member of the Trinity staff—a nurse or a laboratory or X-ray technician. When such service was received during calls made to see a physician, it was not counted separately. In instances when patients saw only a nurse and/or a technician the call was counted not as a visit to a physician but as a visit to "other staff members." A call to receive care from other staff members was counted as only one visit, regardless of how many different staff members were seen or how many services were received during the call. When a patient visited two or more physicians during the same call at the hospital building, however, the visit to each physician was counted separately.

During the first study year, more than 31,000 office visits to physicians were made at Trinity—about 85 percent of them by persons eligible for care under all types of prepayment

contracts and the balance by fee patients. In addition, about 8,600 visits were made at which staff members other than physicians gave service. Of these, 7,914 or about 92 percent were made by prepayment patients.

Physicians made very few home visits to either prepayment or fee patients—only 1,130 day visits and 70 night visits for the combined groups. The practice of charging prepayment patients an additional \$2 for a day and \$4 for a night call undoubtedly discouraged requests for home services; moreover, because of the better diagnostic facilities available at the hospital, the physicians have always encouraged patients to come to the office whenever their condition permits.

Of the 1,072 cases³ hospitalized, 862 were admissions of prepayment patients and 210 were admissions of fee-for-service patients. Prepayment patients received 4,796 days of care, or an average of about 5½ days per case; fee patients received 1,313 days of care, or about 6 days per case.

Services Provided to Persons Eligible During Entire Study Year

Information on the total amount of services provided during the year is of interest in considering the aggregate work of the Trinity staff. The analysis in this article, however, has been restricted to services received by persons eligible for office and hospital care under prepayment contracts during the entire 1941 study year.⁴ Services to fee patients and to prepayment patients eligible for limited services or for care for less than a full year will be analyzed in the monograph.

³The term "case" as used in the study represents the number of hospital admissions; thus a person who was hospitalized two or more times during the year represented two or more cases.

⁴Excluded from this report, in addition to fee-for-service and reduced-fee patients, are (a) subscribers to two industrial contracts which are dissimilar to all other Trinity contracts, and (b) persons eligible for care only during a part of the study year (except infants born into families eligible during the entire study year and members of such families who died during the study year). When contracts provided care on a prepayment basis for subscribers and services at reduced fees to dependents, the subscribers only were included; when dependents were eligible for hospital care on a prepayment basis, they were included only in the analysis of hospital services.

Number of persons per contract and duration of contracts.—Study of the 2,097 contracts through which subscribers were eligible for care throughout the entire first year of the study showed that 41 percent of the contracts covered one-person families, 53 percent covered families ranging in size from two to four persons, inclusive, and 6 percent covered families with five or more members.⁵ About 17 percent of the contracts had been in force since 1931–32, when the prepayment plan was first put into operation and 10 years before the study year, and 54 percent had been entered into before 1937, 5 years before the study year.

Percent of eligible persons receiving services.—That the persons eligible for care on a prepayment basis made use of their privileges is evident from the fact that approximately four-fifths of them visited Trinity physicians during the year. About one-third of the total also came to the office to receive service from other staff members without seeing a physician at the same time (table 1).

The percentage of dependents making either type of visit was slightly

⁵Dependents covered under 65 contracts were eligible for clinic and hospital care on a reduced-fee basis; under 41 contracts they were eligible for hospital care on a prepayment basis and for clinic care on a reduced-fee basis. When only persons eligible for complete care on a prepayment basis are considered, the distribution of the 2,097 contracts is as follows: 46 percent were one-person families; 49 percent, families of two to four members; and 5 percent, families of five or more members.

higher than the percentage of subscribers. Only 8 percent of the subscribers and 14 percent of the dependents received day calls at home, and approximately 1 percent of each received night calls. About one-eighth of the persons eligible for hospital care were hospitalized, and, as for most of the other services, a slightly higher percentage of dependents than of subscribers received this type of care. Almost half of those eligible for care received some form of laboratory service; 24 percent of the subscribers and 15 percent of the dependents received diagnostic X-ray services.

Number of services received.—Although, in general, dependents received more service than subscribers, subscribers averaged more visits to physicians—5.4 as against an average of 4.6 for dependents. Studies of services provided by other prepayment organizations have indicated that subscribers, in general, receive considerably less care than dependents. This is not the case at Trinity because, unlike most other prepayment groups, a large proportion of the subscribers are women, and they received substantially more care than the men who were subscribers. Information on the amount of service received by these two groups of subscribers will be given in the monograph.

Subscribers had fewer hospitalized cases than did dependents and received slightly less hospital care—837 days per 1,000 subscribers in comparison with 883 days per 1,000 dependents. All members, both subscribers

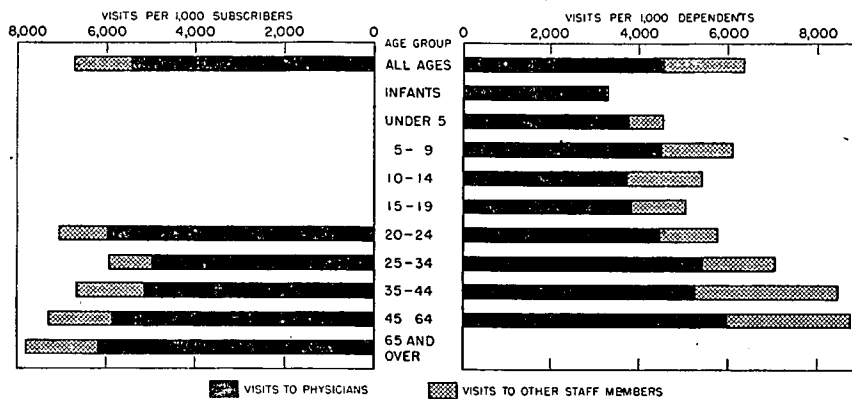
Table 1.—Trinity Hospital: Percent of membership receiving specified type of service and number of services received per 1,000 persons eligible for care, 1941¹

Type of service	Percent of eligible persons receiving specified service			Number of services received per 1,000 persons eligible for care		
	All	Subscribers	Dependents	All	Subscribers	Dependents
Physicians' visits:						
Office.....	79.6	78.4	80.7	4,982	5,437	4,587
Home, day.....	11.4	8.3	14.0	174	136	206
Home, night.....	9	7	1.0	10	8	11
Other office visits.....	34.4	32.3	36.3	1,544	1,292	1,762
Hospitalization: ²						
Cases.....	12.9	12.0	13.6	154	144	163
Days.....				862	837	883
Other services at office and hospital:						
Diagnostic X-ray.....	19.3	24.0	15.3	298	376	231
Laboratory.....	47.1	48.8	45.7	1,789	1,885	1,707

¹Based on 2,097 subscribers and 2,420 dependents eligible during entire study year for care under the most inclusive contracts.

²Includes an additional 97 dependents eligible for hospital care on a prepayment basis but receiving physicians' care on a reduced fee-for-service basis.

Chart 1.—Trinity Hospital: Number of office visits per 1,000 subscribers and per 1,000 dependents eligible for office care during entire study year, by age group, 1941



and dependents, averaged about 1.8 laboratory services each and about 1.5 visits to staff members other than a physician.

Care Received in Relation to Age

Physicians' office visits.—Visits to physicians made during the year varied according to age group, ranging from 3.3 visits per infant to 6.2 visits per subscriber 65 years of age and over (chart 1). Infants born during the year were included in the study for 6½ months, on the average. Infants who were born early in the study year—those eligible for care for 10 months or more—averaged 5.5 visits to the physician's office. Children in all age groups under 20, except the group aged 5-9, averaged less than 4 visits. Subscribers 20-24 years of age and those aged 65 and over and both dependents and subscribers aged 45-64 averaged approximately 6 visits per year. For all other groups the average ranged from 4.5 to 5.4 visits. In most age groups, subscribers and dependents received approximately the same amount of care; only in the age group 20-24 did the subscribers make more visits than the dependents.

Visits to staff members other than physicians.—Although there was considerable variation among the several age groups in the number of office visits made to staff members other than physicians, most of the groups averaged from 1 to 1.5 visits per person. Dependents in the age groups 35-44 and 45-64 had by far the highest rates for such services.

Home calls.—The aged and children under 10 had the highest rates for

home calls. As pointed out earlier, the small number of home calls in comparison with office visits might be explained by the practice of making additional charges for home visits and by the patients' response to the organization's policy of encouraging office calls whenever possible. The latter explanation is supported by the fact that patients frequently pay in taxi fares to and from the office about what a home call would cost, because of their desire to make use of the office facilities.

Hospitalization: frequency and duration.—There was great variation in the amount of hospital care received by patients of different age groups at Trinity. Subscribers averaged 144, and dependents 163, hospitalized cases per 1,000 persons eligible for hospital care. Dependents in the age group 20-24 had 366 cases per

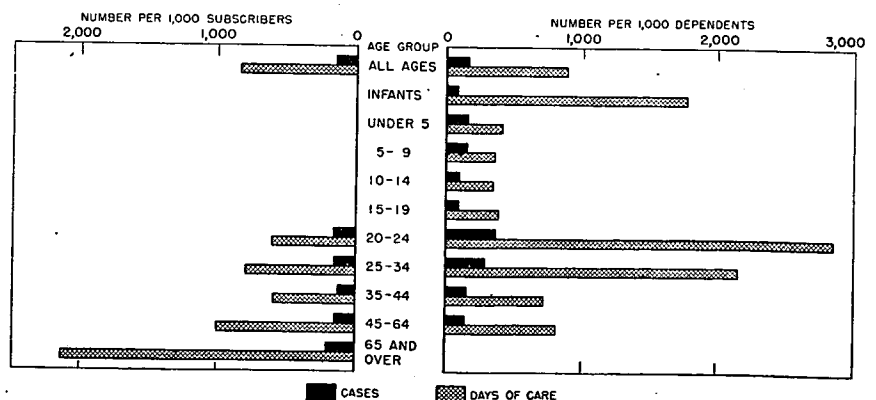
1,000 persons—or more than twice the number reported for most age groups—and those aged 25-34 ranked second, with 288 cases per 1,000 persons. Elderly subscribers (aged 65 and over) had slightly more than 200 cases per 1,000 persons. Infants, children aged 10-14, and dependents 15-19 years of age had less than 100 hospitalized cases per 1,000 persons eligible for care.

Four groups were outstanding in the number of days of hospital care received. Dependents aged 20-24 and 25-34 ranked first and second, respectively, in the number of days of hospital care received as well as in the number of cases—2.9 days per eligible person for the first group and 2.2 days for the latter. Much of the hospital care received by dependents in these two age groups was for maternity cases. Elderly subscribers, a group having a large number of cases, also received a relatively large amount of care; infants born during the year, the group with the lowest number of cases, received a large volume of care. The cases and days of hospital care counted for infants born during the year do not include hospitalization incidental to being born; the data for infants were restricted to care provided infants after the mother left the hospital and to infants who were readmitted to the hospital for post-natal reasons.

Variation in Amount of Care Received

It has been said earlier that about four-fifths of the persons eligible for care at Trinity used their contract

Chart 2.—Trinity Hospital: Number of hospitalized cases per 1,000 subscribers and per 1,000 dependents eligible for hospital care during entire study year, by age group, 1941



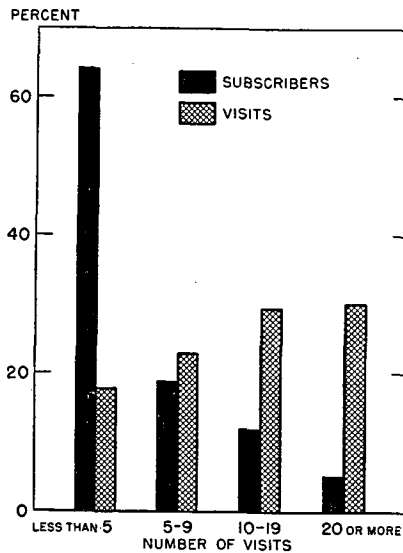
privileges to see a physician at some time during the study year. Other studies have shown that, of the persons who receive care under fee-for-service practice, many visit the physician only a few times during the year, and the service received by this group represents a relatively small fraction of the total services rendered by the physician. On the other hand, it has been found that a small proportion of those getting care receive a large number of services, and that the care received by this small group represents a large share of the physicians' total services. Is this also the case under a prepayment service? What proportion of those eligible for prepaid services received no care or only a small amount of care from physicians; how many received an unusually large number of services, and how heavy a load were they for the organization's staff and medical facilities?

The experience with members of the prepayment plan at Trinity was similar to that under the usual fee-for-service practice; in the course of the year most of the care went to a small number of persons who had either long-continued illness or a series of illnesses. Most of the Trinity members received a small amount of service, even though the care was paid for in advance.

Charts 3 and 4 show the relationship between the proportion of subscribers receiving a specified number of services and the proportion of all services received by each specified group. The data represent all office visits made to physicians by subscribers and all their hospitalized cases and days of hospital care.

Physicians' office visits.—Nearly 22 percent of the subscribers eligible for care made no visits to a physician during the year, 26 percent made one or two visits, and 17 percent made three or four visits. Thus, approximately two-thirds of the subscribers eligible for care made four physician visits or less (or none). Visits made by these groups—which made up over 64 percent of all subscribers—represented, in the aggregate, only 18 percent of all visits to physicians made by subscribers. At the other extreme, 5 percent of the subscribers were in the group that received a large amount of care, each making 20

Chart 3.—Trinity Hospital: Percentage distribution of subscribers and of physicians' office visits, by number of visits, 1941



or more visits to physicians, and this small group accounted for 30 percent of all physicians' office visits made by all subscribers. For dependents, comparable figures are as follows:

Number of office visits	Percentage distribution of—	
	Dependents	Office visits
Less than 5.....	64.8	22.5
5-9.....	22.1	31.7
10-19.....	10.5	29.7
20 or more.....	2.6	16.1

Judging by the data collected at Trinity, it would seem that, in general, patients eligible for care under a prepayment contract behave just like patients receiving care on a fee-for-service basis, that is, a large proportion of them receive only a relatively small amount of care in the course of a year and a small proportion receive the major part of the physicians' services. Detailed comparisons of each type of care will be made in the monograph to be published at a later date.

Hospitalization: frequency and duration.—As previously shown, only about one out of eight subscribers was hospitalized during the year. In about two-thirds of the cases, subscribers stayed less than 6 days in the hospital; in about one-third of

the cases, they stayed only 1 day; the average was 5.8 days. The short hospital stays (less than 6 days each), though relatively numerous, accounted for less than one-fourth of all days of hospital care provided to all subscribers. The extended hospital stays (15 days or more), though relatively few in number (8.3 percent), accounted for nearly one-third of all days of hospital care received by all subscribers.

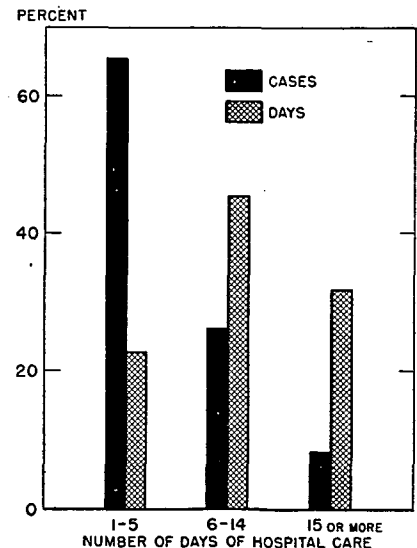
Dependents were hospitalized for a slightly shorter period, an average of 5.4 days per case. About 42 percent of the cases were hospitalized for 1 day only. The figures for hospital care received by dependents are:

Number of days of hospital care	Percentage distribution of—	
	Cases	Days of care
1-5.....	63.0	19.8
6-14.....	32.6	62.0
15 or more.....	4.4	18.2

Comparison of Volume of Service Received Under Prepayment and Fee-for-Service Practice

The influence of prepayment on the amount of care received may be observed more readily when the experi-

Chart 4.—Trinity Hospital: Percentage distribution of hospitalized cases among subscribers and days of hospital care received, by number of days of hospital care, 1941



ence at Trinity is compared with services received by persons in various economic classifications who purchase care on the usual fee-for-service basis.

When the Committee on the Costs of Medical Care made its study of 9,000 families located in 130 urban and rural communities in 1929-31, the results showed that the volume of medical care received by individuals was directly related to family income, and later studies have substantiated this finding. Table 2 shows the number of physicians' services and days of hospitalization received per person per year by members eligible for care under the most inclusive prepayment plan at Trinity and by members of families included in the Committee (CCMC) study residing in cities of 5,000-100,000 population. This is the population group in the CCMC study comparable in size with Little Rock.

Several differences in the data presented in the two studies should be noted. The home calls reported for the prepayment plan are, as has been mentioned, paid for by a reduced fee, not included in the prepayment contract. The number of Trinity office visits represents only those at which a physician was seen and excludes all visits at which only a nurse or laboratory technician gave service. In the CCMC data the count of office visits includes visits to physicians' offices and to free and pay clinics regardless of the person who gave the service. Visits to a physician or clinic for eye refractions and to osteopaths, chiropractors, and non-medical practitioners are also included. The office calls reported in the Trinity study were all made to physicians associated in group practice, where referrals to and consultations with other physicians could be made relatively easily and with no additional charge to the patient. The bulk of the calls reported in the CCMC study were made to physicians in individual practice, where each additional call or consultation meant an additional charge for the patient.

Days of hospital care in both studies exclude care in mental and tuberculosis hospitals and other institutions for the resident care of patients with chronic illnesses. The CCMC data include hospital care for quarantinable diseases, while such

care is not included in the Trinity data since it is not provided under the contract. Dental care is not provided at Trinity, and calls for dental care consequently are excluded from the CCMC data used here.

Physicians' services.—The number of home and office visits for persons in the various income classes in the CCMC study varied with the financial status of the family, from an average of less than three calls per person in the three lowest classes (less than \$3,000) to about five per person in the highest. The persons eligible for care under the prepayment plan received at least as much medical attendance from physicians (at home and in the office) as did persons in families with incomes of \$10,000 or more in the CCMC study. In the CCMC population, nearly half the visits were home calls, while at Trinity most of the services were obtained at the office. As already mentioned, the large volume of office services at Trinity is influenced by the practice of encouraging patients to come to the office for services when possible and by the additional charge made for home services. The difference may also be partly due to the fact that patients are more likely to request service in the early or ambulatory stages of an illness under a prepayment plan than under a fee-for-service arrangement.

Hospital care.—The volume of hospital care received by persons under the prepayment plan was comparable to that received by members of families in the CCMC study with incomes of \$5,000 or more. In the CCMC

study, the families with the lowest incomes—many of whom were eligible for and received free care—reported the largest amount of care, 1.14 days per person; the highest income groups received the next largest amount of care, 0.88 days per person, an amount equal to that received by dependents at Trinity and only slightly higher than that received by subscribers. The hospital care received at Trinity was about equally divided between private and semiprivate care, with the patients in private rooms paying an extra charge for the use of such facilities. The CCMC families used all types of accommodations; in the lowest income group 75 percent received ward care, and almost all the others, semiprivate; in the highest income group the accommodations used were private and semiprivate.

Before Blue Cross hospital plans eased the financial burden of hospitalization for many people throughout the country, an annual average of 60-75 persons received care in a general hospital for each 1,000 in the population, and an average of less than 1 day of care per person per year was found to be typical. Now the number of hospitalized cases has increased, the average number of days of care per case has decreased, and the days of care per 1,000 persons in the general population has increased.

Since Trinity owns its own hospital, generous use of hospital facilities is to be expected, and the fact that the physicians' offices are in the hospital building encourages the staff to hospitalize cases that they wish to

Table 2.—Average number of specified services per person at Trinity Hospital, Little Rock, Arkansas, and per person studied by the Committee on the Costs of Medical Care¹

Group and family income	Number of persons	Physicians' visits			Days of hospitalization
		Home and office	Home	Office	
Trinity Hospital:					
Subscribers.....	2,097	5.6	0.14	5.4	0.84
Dependents.....	2,420	4.8	.22	4.6	.88
Committee on the Costs of Medical Care:					
Less than \$1,200.....	1,253	2.8	.9	1.9	1.14
1,200-1,999.....	2,893	2.5	1.1	1.4	.67
2,000-2,999.....	2,490	2.8	1.2	1.6	.54
3,000-4,999.....	1,304	3.0	1.1	1.9	.55
5,000-9,999.....	1,199	4.1	1.3	2.8	.84
10,000 or more.....	579	4.9	2.2	2.7	.88

¹ Comparison includes subscribers and dependents eligible for care under the most inclusive prepayment contracts at Trinity during the entire year 1941 and members of families included in the CCMC survey who were living in cities of 5,000-100,000 population. CCMC families were surveyed over a 12-month period during 1928-31. CCMC data derived from the study by I. S. Falk, Margaret C. Klem, and Nathan Sinai, *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.

observe closely. The hospital admissions rate per 1,000 eligible persons was 154 at Trinity as compared with a rate in 1941 of 107 Blue Cross admissions⁶ throughout the United States and Canada combined, during the same period. Somewhat more hospital care was received by persons eligible for care at Trinity than by those eligible through Blue Cross—862 days per 1,000, compared with 820 days through Blue Cross.⁷

Comparative Costs

In view of the effect of prepayment on the volume of services received, it is interesting to compare the costs at Trinity with the expenditures made under the fee-for-service system by families in the various income groups.

In 1941 the total annual expenses of the Trinity membership eligible for care during the entire study year under the most inclusive prepayment contracts amounted to an average of \$21.80 per person; this total represents the charge for prepayment services plus the extra charges for home calls and eye care, as well as that part of the hospital care not covered by the contract. The average annual charge made for medical and hospital care as reported in the CCMC study (1928-31) showed a wide variation in the average per capita costs in families with different incomes. In communities of 5,000-100,000 population, the medical charges for services similar in scope to those provided at Trinity ranged from an average of \$7.21 per person in families with annual incomes of less than \$1,200 to \$85.88 per person in families with annual incomes of \$10,000 or more. Disregarding the changes in the cost of services between 1928-31 and 1941, the average expenses per member of the prepayment plan, \$21.80, were \$2.87 higher than the average charge per person in CCMC families with annual incomes of \$3,000-5,000; they were less than one-half the average annual charge per person in families with incomes of \$5,000-10,000, and only about one-

fourth that of families with incomes of \$10,000 or more. Physicians' services received at Trinity and days of hospitalization compared favorably with similar services received by those with incomes of \$10,000 or more.

The average payment of \$21.80 per person eligible for care on the prepayment basis does not conceal wide variations in payment, because substantially all persons paid approximately this amount. In contrast, what is the meaning of "average" charges incurred by persons in the CCMC families living in cities of 5,000-100,000 population? The average charges per person for all incomes and all types of medical services were about \$24. Nearly 40 percent of the individuals, however, had no charges at all; approximately another 40 percent had charges of less than \$20; while about 5 percent had charges of \$100 or more. If the computation of the average were restricted to those who had some charges, the per capita expenditure would be about \$34, and the average would be still higher if persons with only minor charges were eliminated. Moreover, there is no reason to believe that the individuals in the fee-for-service group received all the care they thought or knew they needed; whereas, with minor limitations (that is, home services and refractions), members of the prepayment plan were free to ask for all the care they wanted.

Summary

Information on services provided at Trinity Hospital during the first study year (1941) may be summed up briefly as follows:

1. A large proportion of both subscribers and dependents made some use of their privileges. At some time during the year, approximately four-fifths made physicians' office visits, about one-third also came to the office to receive care from other staff members without seeing a physician at the same time, about one-eighth were hospitalized, and almost half received some form of laboratory service.

2. Visits to physicians made by persons of different age groups varied from 3.3 visits for infants born during the study year to 6.2 for subscribers

65 years of age or over. Subscribers, because of the large number of women included, in general averaged almost 1 visit more to a physician than did dependents; the former averaged 5.4 and the latter 4.6 visits during the study year.

3. Home calls were few in comparison with office visits, showing that the practice of making additional charges for home calls affects the number of these services received. There also are other indications that the patients cooperated with the organization's policy of encouraging office calls. The aged and the children under age 10 were the most frequent recipients of home calls.

4. There were 154 hospital cases per 1,000 persons eligible for care throughout the year, receiving a total of 862 days of hospital care, or an average of 5.6 days per case. Hospital cases and days of hospital care varied greatly among the different age groups. Dependents aged 20-24 had more than twice the number of hospital cases reported for most other age groups. Dependents 25-34 years of age and subscribers 65 and over also averaged a large number of cases. These three groups and infants born during the year received the largest number of days of hospital care.

5. The experience at Trinity was similar to that under the usual fee-for-service practice in that most of the care furnished in the course of a year was received by a relatively small number of persons who had either long-continued or a series of illnesses.

6. Disregarding price changes for service between 1928-31 and 1941, the cost of the prepayment contract plus the extra charges for home calls, eye refractions, and special accommodations during hospitalization at Trinity in 1941 were not much more than the sum paid for services of this type by persons in the \$3,000-5,000 income groups living in medium-sized cities and studied by the Committee on the Costs of Medical Care in 1928-31. The volume of services received by Trinity subscribers and their dependents was comparable with that purchased by persons with annual incomes of \$10,000 or more who paid about four times as much for the services received on a fee-for-service basis.

⁶ "Incidence of Hospitalization," *Blue Cross Statistics*, January 1943, p. 2. (Hospital Service Plan Commission, Special Study No. 36.)

⁷ "Blue Cross Service Is Not Affected by Crowded Hospitals," *Blue Cross Bulletin*, January-February 1946, p. 2.