

Hospital Use

A survey of patient and physician decisions

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FOREWORD

Patterns of how physicians use hospitals emerge from this study of a sample of admissions in the State of Massachusetts. The sponsors of Health Information Foundation, companies in the pharmaceutical industry representing manufacturing, wholesaling, and retailing, supported this study among others as their contribution to helping solve problems in the delivery of medical care. Health Information Foundation, established by that industry in 1949, continued as an independent agency until affiliation with the University of Chicago in 1962. This study was structured beginning in 1959.

The increased rate of hospital admissions within our population has been questioned by many who believe that a substantial portion is unnecessary. Increased expenditures for medical care have generated increased demand that unnecessary admissions be eliminated. Increased expenditures for hospital care reflect higher unit costs as well as more use of services; indeed, of the two, use has been the less consequential. Nevertheless, large purchasers of hospital care including industry, labor, and government, stimulated by increasing expenditures, have focused attention on whether present levels of use could be justified.

Use of hospital services on a per capita basis in national statistics shows wide variation by area. This led critics to consider that one level of use or another may be optimum. Since money is at stake, it is not unexpected that critics tend to equate "correct" with "low" admission rates. A number of studies of hospital admissions were initiated, one such being the Massachusetts study reported here.

The Massachusetts study then was initiated in a climate of criticism of hospitals and physicians for overuse of services. The Director of Research for the Health Information Foundation consulted with the staff of the National Opinion Research Center to determine whether research could be structured which might yield precise information on how patients and physicians use hospitals. The research design which emerged pushed survey

research methodology to new accomplishments. Indeed, useful results were possible only because of the resourcefulness of the staff of NORC and of the Foundation, particularly the authors of this report.

Social research in medical care in many institutions requires access to physicians, other health personnel, medical records, and patients. Because of the confidential character of the patient-physician relationship, such access is not easily granted. The mounting of this study of admissions in Massachusetts was time consuming. Repeated conferences with officials of the Massachusetts Hospital Association, Massachusetts Medical Association, and Blue Cross and Blue Shield Plans in that state were successful in securing the permission needed. The study was only possible through the generous cooperation received. The Massachusetts Medical Society was particularly helpful through endorsement of the study. Individual members of the profession in large numbers were interviewed at length about their patients.

The principal finding of this study was the identification and, to some degree, measurement of the discretionary range of physicians' judgment on who should be admitted to a hospital. However, both patients and physicians seem firmly persuaded that, almost universally, admission to the hospital was the prescription of choice. It should, at this point, be emphasized that the study method gave little incentive for either patient or physician to color the reasons given for admission.

A weakness of the study is that the sample, of necessity, had to be drawn from the records of patients admitted so that there was no opportunity to study the list of patients who might have been recommended for admission but who never reached the hospital. This would undoubtedly be a small percentage but might in whole or part balance the small number of patients admitted to the hospital who could have been cared for in some other manner.

The conclusion which arises from the data presented is that no single set of standards could be established with ease. Admissions in Massachusetts support the opinion that the medical profession there is judicious in the use of hospital services within the present framework of medical practice.

GEORGE BUGBEE, *Director*
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A survey of this magnitude requires the services and skills of a large number of people for planning and execution. The following people were involved as consultants: Jacob J. Feldman (then NORC and now School of Public Health, Harvard University) and Sol Levine (then School of Public Health, Harvard University and now School of Hygiene, Johns Hopkins University) provided professional consultation in the overall design of the study. Sam Shapiro, Health Insurance Plan of Greater New York, was a resource for continued consultation throughout—on design, sampling, coding and data processing. William J. Cobb was responsible for the execution of the sample.

National Opinion Research Center staff included Elizabeth Lyman, assistant study director; Pearl Zinner, field director; Mrs. Michael McGarry, secretary to Paul Sheatsley, who prepared all materials; Katherine Hardy and Patrick Laviola who maintained field controls; Harold Levy and James Daniels who handled the data processing; Carol Bowman who was of great assistance in the analysis and presentation of the data; Irene Edwards who maintained files; Mrs. Sandra K. Young who administered the Boston office through which interviewing assignments were channeled; and Mildred Raeder and Helen Tuttle, Massachusetts field supervisors, who recruited and trained the interviewing staff, and the 69 interviewers who collected the data.

Special mention should be made of the fifty hospital administrators who made the research staff welcome and the fifty librarians who worked to give us the necessary data for sampling and validation purposes.

This study could not have been launched without the interest, cooperation, and strong support of the following organizations and individuals: Massachusetts Hospital Association, especially Henry G. Brickman, executive director; Ashton Smith, then president; and R. D. Lowry, then president-elect; The Massachusetts Medical Society, especially Dr. Robert W. Buck, secretary; and Drs. Lawrence R. Dame and Carl Bearse, successive

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Lastly, in the office of the Center for Health Administration Studies, University of Chicago, thanks are due Miss Elaine Meetze, secretary, and Mrs. Joanna Kravits, assistant to the associate director, for their yeoman work in typing and editing the manuscript.

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PART I
BACKGROUND AND SETTING

I. INTRODUCTION¹

A. *The Problem*

Fundamental research in the economic and social aspects of personal health services in the United States can be dated from the extensive studies of the Committee on the Costs of Medical Care from 1928 to 1931. These studies laid the factual basis for the formulation of public policy and provided a point of reference for subsequent research in this field. Today there is a great deal of concern with the level of use of and expenditures for hospital care. During the early Thirties, there was equal concern with the same problem, as expressed by Davis and Rorem in their book in 1932 still aptly titled, *The Crisis in Hospital Costs* [1]. There was a crisis then because of decreasing use of hospitals and therefore loss of income to the hospitals. At present we are in a crisis for exactly the opposite reason, i.e., increased purchasing power and increased use of hospitals. The juxtaposition of these two periods should give us cause to place the problem of hospital use and expenditures in perspective. What we appear to long for is some sort of stable equilibrium during which hospital use and costs remain static as, say, between 1938 and 1942, before insurance and greater purchasing power appeared. We welcome growth and expansion in most areas of the economy, but in the medical care field such growth and expansion are viewed with alarm. Consequently, the central problem for research in hospitals is to find out how hospitals are used and then determine whether or not such level of use is medically and socially sound by whatever objective criteria can be developed.

We have witnessed the "growing pains" of research in hospital care as to method of research and choice of problems. One of the banes of research in hospital care, however, has been the narrow problem-solving context in which much of it has been conducted, in the hope that the hospital will, as a result of research, become more "efficient" and less expensive. Research should be directed to the increased comprehension of a problem instead of

¹ An adaptation from Odin W. Anderson, "Research in hospital use and expenditures," *Journal of Chronic Disease*, 17:727-733, 1964.

specific and narrow solutions. If we can acquire greater comprehension, solutions, if possible, can follow. We are then in a position to assess alternatives.

The central problem in hospital care—a problem to which all other approaches to research are subsidiary—is the one of variations in patterns of use of hospitals in both time and place. If we can understand to some extent why hospitals are used the way they are in different contexts, we will then be able to relate use to concrete situations. As a beginning to this endeavor, we have assembled and reviewed all the published statistics on hospital use. The resulting array of data is startling and, to say the least, chaotic. The present patterns of use of hospital care in North America and Europe make no sense, i.e., they show no associations with any given set of known circumstances. The obvious conclusion is that the volume of “proper” hospital care is highly elastic, so elastic that the generalization can be made that there is no “proper” level of use of hospital care; there is no generally accepted standard. To hospital administrators, medical care planners, and others, this is a distressing conclusion because it means that there may be no clear benchmark for determining what a “good” hospital system should be.

To illustrate: In North America, Great Britain, and Sweden, there are rates of admissions to general hospitals ranging from 85 to 200 per 1,000 population per year and average lengths of stay of 8–15 days. In the United States as a whole, the admission rate is around 130, with a length of stay of 8 days; in Great Britain, the admission rate is 85, length of stay 15 days; in Sweden, the admission rate is 130 and the length of stay 15 days. In the United States, the prevailing medical staffing pattern for hospitals is that physicians with “privileges” admit patients to hospitals and treat them within the range of their competence. In Great Britain and Sweden, specialists are salaried employees of the hospital and control admissions and length of stay. Still, the hospital use statistics are very different. Nevertheless, in all three countries there is great concern with the rising cost of hospital care.²

We then went on to review all the studies that deal more or less directly with the use of hospital services. So far they are only a handful, but they point to future directions for research in this area so vital to public policy. First, however, one of the main tasks is to set forth the dimensions of the problem, the first requisite to translating it into researchable projects.

Since the volume of hospital care is highly elastic, it would then follow

² Fuller information on the great variations in patterns of use of hospital care is available [2–6]. Professional Activities Service in Ann Arbor is documenting great variations among many hospitals all over the country as to therapy procedures and other medical matters in these hospitals.

that there is no “proper” level of use of hospitals. Generally, we carry an implicit assumption that there is a Holy Grail of hospital use, if we can only find a Sir Galahad to discover it. But “proper” level depends on “proper” for what set of circumstances and purposes. The range of “proper” use is very great, from admissions for saving life to admissions for reasons of comfort and convenience, or “to make sure.” An editorial in a British hospital journal [7] illustrates this search for the “proper” level of use:

Medical expenditure may be increased by many things, such as luxury hotel standards in hospitals . . . by a whole series of consultations with the most fashionable doctors, by occasional unnecessary operations and so on. Yet, when all qualifications have been made, basically, in an advanced society at a given stage of medical knowledge, there is a proper standard of medical care; anything below it is inadequate and anything above it, however expensive, is merely frills. This is quite unlike food, clothing, and housing, where a whole range of subjective standards is possible.

This editorial says that medical care standards are part and parcel of a general standard of living, i.e., “proper” standard. It does not seem to recognize, however, that so-called “proper” standards of medical care can be as subjective as proper standards for food, clothing, and shelter. The specifiable aspects of medical care in a professional and scientific sense are in essence only a portion of proper standards.

Given our assumption that there is really no “proper” standard of use of hospitals, how can research help in this situation? Research may tell us how a community actually uses hospitals and how it wants to use hospitals, how convenient or inconvenient hospitalization should be, and the degree to which controls of various kinds can be placed on the medical profession and the public. This is aside from quality standards, however determined, because there can be high quality and great use of hospitals, as well as low use of hospitals. Indeed, it seems that sometimes low use of hospital care is equated with “efficient” use and high quality. This was expressed, possibly unintentionally, by Dr. Jack Haldeman [8] and illustrates the pervasiveness of this kind of “conventional wisdom.” Dr. Haldeman writes:

A hospital use study has shown that persons with comprehensive coverage (i.e., home and office calls and outpatient diagnostic services) use hospitals less than persons having hospital coverage only. Comprehensive coverage apparently encourages more *efficient* use of hospital facilities. (*Italics ours*)

In the study to which he refers, it is not known whether the hospital was used more efficiently or not; what is known is that there was an important difference in volume of use, and nothing more.

The chief concern with volume of use of hospital care is money. We are more concerned with economic and social "waste" in this area than in other sectors of our economy—housing, automobiles, appliances, and so on. It would seem to be possible through research to indicate how much it would cost the community to use hospitals generously or abstemiously. The latter would involve waiting lists for admission, greater controls on physicians, and so on.

B. The Literature

There are various approaches to research in use of general hospitals, depending on objectives, time, money, and research methods. As described earlier, we know that the use of hospitals varies considerably in different places and contexts, but we know nothing about why this use varies so widely. This is our research problem.

We will list the research approaches taken so far and describe what they entail in time, expense, method, and personnel.

1. Retrospective studies of hospital records to reveal changes in composition of hospital patients by age, sex, diagnosis, and therapy.

a) This type of study requires excellent hospital records over time, sampling of records, their tedious transcribing, tabulations and so on, and takes two to three years.

b) Personnel required are medical record librarian, statistician with a biological bent, and medical consultation by physician who can combine clinical and statistical skills.

c) Relatively inexpensive research.

*Examples:*³ Sinai and Paton [9]; Health Information Foundation [10–12];⁴ Minnesota Department of Health [13]; Hospital Planning Council for Metropolitan Chicago [14].

2. Point of time comparisons of "high" and "low" use to see if there are differences in age, sex, and diagnostic patterns.

a) There are now several areas with hospital plans which keep sufficiently good records on tape or cards which can be tabulated quite rapidly.

b) Relatively inexpensive.

Examples: Lerner [15]; Blue Cross Association [16].

3. Medical committee review of hospital records or of patients. The committee usually imposes its own judgment of criteria and does not spell them out.

³ All examples in this paper, we believe, exhaust the studies in the field.

⁴ The reports of the Health Information Foundation were based on data produced under the supervision of Cecil G. Sheps from the records of the Beth Israel Hospital, Boston, 1932 and 1952.

a) This method has the advantage of simplicity and is useful as an extremely rough picture of hospitalization, which should lead immediately to more refined research.

b) No clues are given to physicians how to use hospitals differently, except to be more "careful" and so on.

c) The method has limited value since it does not consider the patients' and physicians' total situation.

d) Relatively expensive for the yield.

Examples: New York State [17]; Forsyth and Logan [18]; Mackintosh, McKeown and Garratt [19]; Becker [20]; Trussell, Ehrlich and Morehead [21]; Ferguson and MacPhail [22].

4. Systematic comparisons of use of hospitals between two or several areas with known bed and physician resources.

a) This approach begins to set the framework in which hospitals are used. The presence in various numbers of hospitals and physicians is assumed to have an influence on use irrespective of other factors such as level of morbidity.

b) This approach is designed to test the assumption that the chief control of use is the number of hospital beds, with appropriate administrative controls within these limits.

c) The approach is quite involved, can be expensive, and requires sophisticated research methodologists.

Examples: Roemer [23, 24].

5. Comparisons of use of hospitals between two types of medical practice: group practice with prepayment, or fee-for-service with prepayment.⁵

a) This type of study is badly needed in much greater depth than has been attempted so far. All we know is that there are differences in use of hospitals in the two contrasting situations.

b) An elaborate research operation is needed, and it is expensive. Nevertheless, only by so doing can fundamental problems be examined.

Examples: Shipman, Lampman and Miyamoto [26]; Anderson and Sheatsley [27]; Health Insurance Plan of Greater New York [28]; Densen, Balamuth and Shapiro [29]; United Steel Workers of America [30]; Darsky, Sinai and Axelrod [31]; Densen *et al.* [32, 33]; Columbia University School of Public Health [34].

6. Analysis of hospital use in accordance with criteria established *a priori* by medical committees from various specialties and application of these to actual hospital cases as revealed in the hospital medical records.

a) This type of study applies the criteria worked up by the various medical specialties.

⁵ Herbert E. Klarman has published an excellent paper on this aspect [25].

- b) An expensive type of study requiring an elaborate research operation.
- c) Very fundamental and necessary to obtain some depth for comprehension of medical practice and hospital use.

Examples: Fitzpatrick, Riedel, and Payne [35]; Browning and Crump [36].

7. Study of patterns of use and decisions by interviewing patients and physicians.

- a) This type of study attempts to look at the hospital as a community resource interrelating medical and social factors.
- b) The emphasis is on reviewing people with diseases as was done by Forsyth and Logan and by Becker referred to above.
- c) This type of study requires an elaborate social research operation and is expensive. In no other way, however, can the hospital be placed in a definable context.

Example: Cartwright [37]; Altman [38].

These studies and activities show that there is ferment in the hospital field regarding the problem of use of hospitals. A beginning has been made. From now on, we hope that there will be no unnecessary repetition of research, simply showing that there is an X hospital admission rate in one area after another. We now know that there is, and we have ahead of us the task of determining why such variations exist in different contexts and what they imply for medical care. We believe it is now possible—given time and funds—to spell out in sufficient detail for policy-making purposes what is entailed in beds and personnel and price for a health service ranging from inconvenient to convenient, from abstemious to generous. There is no such thing as a “pure” medical decision to hospitalize or a “pure” social decision. If the decision were based on purely medical reasons, the physician would be hospitalizing a disease and not a person with a disease. If the decision were purely social, i.e., for the physician’s and patient’s convenience only, the patient might then just as well be placed in a good hotel near the physician’s office. So, both medical and social factors need to be taken into account in understanding use of the hospital in different contexts.

We then feel that in order to understand how and why the general hospital is used today it is necessary to conduct a social survey of patients and physicians who have been involved in admissions and discharges. It is necessary to trace and interrelate the chain of events and decisions that led to admission and discharge, learning these from both patients and their physicians at firsthand, the hospital and related routine records being chiefly the basis for the sampling universe and the source of simple use and

expenditure data. Such an approach will be reported in detail in this monograph. Overall, this study is very close conceptually to the one by Cartwright in England and Wales referred to in item 37 above because both physicians and patients were interviewed and sequences and patterns of admissions were noted. In a narrower sense, but nevertheless important as far as it goes, this study is also conceptually close to the exploratory study by Altman reported in item 38 and to the study of “effectiveness of hospital use” referred to in item 35 above by Fitzpatrick, Riedel, and Payne. Altman and Fitzpatrick and his colleagues limited themselves to physicians’ observations and decision making.

II. THE SETTING

A. Precipitating Factors

The late Fifties witnessed the beginning of great concern with the rising expenditures for hospital services, reflecting the increases in use and price since 1940. As the hospitals were receiving a larger and larger portion of their operating income from insurance agencies—third party payors—the rising per diem rates were translated into requests for higher premiums. Big buyers of hospital insurance among labor groups and industry, along with state insurance commissioners, began to question the legitimacy of this seemingly endless process. The usual allegations were “waste” and “abuse” of hospital facilities. In large part the studies listed in the foregoing chapter were inspired by this public policy problem. Policy makers needed some firm evidence to buttress the prevalent attitude that tighter controls on the physician and patient were necessary. The freewheeling and expansive use of health services needed very critical examination. Usually, the criticism was directed to levels of use of hospitals rather than to the price of hospital care. Studies too were usually directed to use, presumably because hospitals and medical staffs could control use more readily than they could price.

In this context of concern and ferment Health Information Foundation (then in New York City) proposed a survey of a large area involving both patients and their physicians. Through a fortunate combination of circumstances, hospital and medical organizations in the State of Massachusetts looked favorably on a study of this nature in anticipation of a possible public scrutiny of the problem of hospital costs in the state on the part of state government. Good working relationships had already been established by the authors of this report and the National Opinion Research Center through a small study conducted for the Massachusetts Hospital Service (Blue Cross) and the Massachusetts Hospital Association on the average per diem charges for Blue Cross patients compared with other patients. The earlier “service” study led directly to the survey under discussion.

B. Methodology

The launching of the survey was made possible by the willingness of the following groups to sanction it and cooperate with the survey staff: The Massachusetts Medical Association, the Massachusetts Dental Association, the Massachusetts Hospital Association, and the Blue Cross and Blue Shield plans in that state.

Briefly, this study is a survey of a random sample of discharged patients from 50 of the 140 general and short-stay hospitals in the state of Massachusetts during the twelve-month period, June 1, 1960—May 31, 1961. Because it was felt that admission of maternity patients was not an issue—medical and public consensus has it they should be in the hospital—the survey was limited to non-obstetrical cases, where the greatest possibility for discretion as to admission and discharge would exist.⁷

Cases were drawn from the fifty hospitals over a twelve-month period to remove seasonal variations. Each hospital was visited twice, at six-month intervals, and a random sample of patients selected from the discharge records of the preceding calendar month. Patients were interviewed in their homes within a few weeks after discharge. Patients eighteen years of age and over were interviewed personally.⁸ For those under eighteen an adult member of the household—almost always the mother—was interviewed on their behalf.

The interviewer asked each patient for the name of the physician who first recommended hospitalization and the physician who was mainly responsible for his care in the hospital. These physicians were interviewed as well. Total patient records drawn from the hospital discharge files were 2,355. Total patients interviewed were 2,046, or 87 per cent of all records drawn. The physicians interviewed were those recommending the admission of 1,628 patients to the hospital (80 per cent of the patients interviewed), whom we call “recommending” physicians, and an additional 505 to whom patients were referred and who attended them in hospitals, a total of 2,133 physician interviews. These interviews were conducted with 1,339 individual physicians. The remaining 794 physician interviews were repeat interviews with doctors who had been interviewed before about one or more other patients.⁹ It is evident, too, that most of the “recommend-

⁶ A detailed description of the methodology and exhibits of the questionnaires used are to be found in the appendix.

⁷ The terms discretion and discretionary judgments will be used a great deal in this report and it is well to draw on Webster immediately. Discretion is defined as “liberty or power of deciding or acting without other control than one’s own judgment.”

⁸ If patient was deceased or mentally or physically incompetent to answer, the interview was sought, and usually obtained, from the nearest relative or friend.

⁹ In smaller communities, one or two physicians may perform most of the surgical procedures for the population. Where such hospitals fell into our sample, the same doctor might be interviewed about as many as eight or ten different patients.

ing” physicians were also “attending” physicians for the same patients. Among the 1,628 patients for whom we have interviews with the “recommending physician,” 1,178 (or 72 per cent) were attended in the hospital by the same doctor.

For the year ending September, 1960, there were 595,813 surgical and medical admissions (non-obstetrical) to all 140 short-stay hospitals in Massachusetts. When this figure is divided by 2,355 (number of cases originally drawn for the survey sample), the sampling ratio is seen to be 1:253. The number of cases in each of the sample’s age-sex cells was then multiplied by 253 to obtain an estimate of total admissions for the cell. This estimate was applied against the 1960 U.S. Census population data for Massachusetts. The resulting admission rate per 1,000 population for a year for surgical and medical patients is 116. If maternity admissions are included, based on the birth rate in the state and on the assumption that all deliveries are in the hospital, the admission rate is then increased to 138. This admission rate is generally higher than national estimates, which vary from 115 to 136 depending on methods of collecting data and definitions, but it does not appear unusual. It is important to bear in mind that the patterns of hospital care described in Massachusetts emerge in a context of relatively high use compared with national averages.

PART II

THE PATIENT

III. PROFILE OF ADMISSIONS

The general characteristics of patients in Massachusetts as to admission rate by age and sex, length of stay, types of accommodations and similar routinely reported data in the hospital care field show the usual patterns one might expect anywhere in the United States. One anticipates finding a U-shaped curve of admission rates by age and higher average admission rate for females than for males, even when excluding admissions for deliveries. Likewise, one would normally expect the distribution by age of all patients in the hospital in a year to be as seen in Table 1. The proportions of admissions by age group relate to the same age-groups in the population in the expected manner. Given the U-shaped admission curve, those under five approximate the same proportion for that age-group in the general population. Somewhere in the middle age group the proportion admitted to hospital in a year will exceed the parallel proportion in the general population. Persons aged 65-74 account for 11 per cent of the hospital admissions although they comprise only 7 per cent of the population. For the age-group 75 and over the disparity widens considerably. Although it comprises only 4 per cent of the population, this oldest group accounts for 8 per cent of the hospital admissions.

The mean length of stay as shown by this survey is a little longer than the usual mean because of the exclusion of maternity patients. With their exclusion, the mean of 9.4 days is to be expected. If they had been included, the length of stay would have been 7-8 days since maternity patients normally remain in the hospital only 4-6 days. The mean length of stay varies by age groups and is shown in Table 2. The mean length of stay by age is as expected, showing the youngest age-group with a length of stay slightly longer than for the one immediately older, but thereafter the mean length of stay increases, and dramatically so for the older age-groups.

In the next table (Table 3) and thereafter we will be dealing with increasingly detailed and complex data. It is seen that hospital use is measured by gross admission rate, admission rates by age and sex, mean length of stay by age and sex, and other pertinent factors. Later there will be introduced

TABLE 1
DISTRIBUTION OF PATIENTS IN RELATION TO TOTAL
POPULATION BY AGE GROUPS AND SEX, MASSA-
CHUSETTS, 12 MONTHS, 1960-1961

Age	Admissions (N = 2,046)	Population of Massachusetts ^a
Under 5.....	9% } 21	11% } 28
5-14.....	12	17
15-24.....	9	13
25-34.....	10	12
35-44.....	13	14
45-54.....	15	12
55-64.....	13	10
65-74.....	11 } 19	7 } 11
75 and over.....	8	4
Sex:	100%	100%
Male.....	48%
Female.....	52%
	100%

^a Source: U S Census of Population, 1960. Final Report
PC (1)-23C Table 37, pp. 23-124.

TABLE 2
MEAN LENGTH OF HOSPITAL STAY BY AGE AND SEX,
MASSACHUSETTS, 12 MONTHS, 1960-1961

Age and Sex	N	Mean Length of Stay
Total.....	2,046	9.4
Age:		
Under 5.....	195	6.5
5-14.....	254	4.7
15-24.....	180	6.0
25-34.....	199	6.1
35-44.....	259	8.4
45-54.....	311	10.9
55-64.....	260	11.7
65-74.....	227	15.6
75 and over.....	161	14.1
Sex:		
Male.....	972	9.2
Female.....	1,074	9.5

diagnostic patterns, type of service (surgical, medical, diagnostic) and related factors of relevance to an understanding of hospital use. There is nothing unusual about this distribution, but what is of interest (if for no other reason than it is a new datum) is the proportion of admissions which were admitted and discharged the same day.¹ This indicates a use of the modern hospital which will be examined in more detail later. When we apply the 2 per cent of patients admitted and discharged the same day to the total surgical and medical admissions for the year corresponding closely to the survey period of this study (595,813) we can estimate that close to 12,000 patients were so handled in one year in Massachusetts. Further, it would appear to be significant that 8 per cent of the admissions stayed only one day, i.e., at least one night. Thus it is seen that 10 per cent of the

TABLE 3
DISTRIBUTION OF LENGTH OF HOSPITAL STAY,
MASSACHUSETTS, 12 MONTHS, 1960-1961

Length of Stay	Per Cent
Same day.....	2%
1 day.....	8
2-3 days.....	22
4-5 days.....	14
6-7 days.....	13
8-14 days.....	23
15-21 days.....	8
22-30 days.....	5
31 days or more.....	5

admissions stayed one night or less, or close to 60,000 patients in Massachusetts in one year. It should also be noted that 22 per cent of the patients stayed 2-3 days. Add this percentage to those who stayed a shorter time and the result is that 32 per cent of the patients stay in the hospital three days or less. We do not point out these very short stay figures to cause alarm, but as significant figures revealing how hospitals have come to be used in modern society. Although there may have been relatively many 2-3 day admissions 30 years ago, it seems reasonable to assume that there were very few

¹ The National Health Survey excludes same day admissions. The agency was interested in how many admissions might be missed by such exclusion, and drew on data from the Indiana Experimental Hospital Morbidity Study for 1960, conducted by the State Board of Health of Indiana. In this study it was found that 2.7 per cent were discharged on the same day they were admitted. U.S. National Health Survey, *Hospital Discharges and Length of Stay: Short-Stay Hospitals; United States 1958-1960*. Health Statistics Series B—No. 32, April 1962. Note: presumably the figure of 2.7 per cent from the Indiana study is a percentage of all discharges, including obstetrical cases, whereas our figure of 2 per cent excludes such admissions. We are not assuming strict comparability in any case, but we feel it is of interest to obtain even approximate corroboration. Later, this was supported by the Minnesota study (Number 13 in the references).

TABLE 4

PERCENTAGE DISTRIBUTION WITHIN AGE GROUP BY LENGTH OF STAY AND BY SEX, MASSACHUSETTS, 12 MONTHS, 1960-1961

AGE AND SEX	N	NUMBER OF DAYS IN HOSPITAL STAY							
		0-1	2-3	4-5	6-7	8-14	15-21	22-30	31-up
Sex:									
Male.....	972	11%	22	13	13	22	8	6	5
Female.....	1074	8	23	14	13	25	8	4	5
Age:									
Under 5.....	195	17	27	12	18	18	4	1	3
5-14.....	254	32	29	11	10	13	2	1	2
15-24.....	180	4	35	23	15	19	1	2	1
25-34.....	198	10	34	16	12	19	6	3	*
35-44.....	260	3	24	18	17	26	7	2	3
45-54.....	311	4	18	13	12	30	12	5	6
55-64.....	260	3	18	11	10	30	12	9	7
65-74.....	227	6	9	8	14	31	11	11	10
75-up.....	161	7	9	12	12	24	13	10	13

* Less than one-half of one per cent.

same day admissions. On the other end of the range of distribution of length of stay it may be noted that 10 per cent of the patients stayed 22 days or longer, 5 per cent 31 days or longer. The latter can be regarded as long-term patients. Thus it is seen that the modern hospital has an extremely variable patient mix from short-term to long-term. Usually, the short-term patients are regarded as acute and the long-term as chronic, but these terms contain some ambiguity; hence we simply show distributions by length of stay and associated factors.

A refinement in the analysis of length of stay is found in Table 4 showing length of stay by age. It is seen that younger age groups typically have

TABLE 5

AGE COMPOSITION OF PATIENTS BY LENGTH OF STAY, MASSACHUSETTS, 12 MONTHS, 1960-1961

AGE	LENGTH OF STAY							
	0-1 Days (N = 194)	2-3 Days (N = 458)	4-5 Days (N = 279)	6-7 Days (N = 273)	8-14 Days (N = 484)	15-21 Days (N = 157)	22-30 Days (N = 100)	31+ Days (N = 101)
Age:								
Under 5.....	17%	12%	9%	13%	7%	5%	2%	6%
5-14.....	42	16	10	9	7	3	3	4
15-24.....	4	14	15	10	7	1	3	2
25-34.....	11	15	11	9	8	7	5	1
35-44.....	4	14	17	16	14	12	6	8
45-54.....	6	12	14	14	19	23	17	19
55-64.....	4	10	11	10	16	20	24	17
65-74.....	7	4	6	12	14	16	24	23
75+.....	5	3	7	7	8	13	16	20
	100%	100%	100%	100%	100%	100%	100%	100%

short hospital stays, while the older age groups are much more likely to incur stays of 15 or more days. For example, of all patients under age five years, 44 per cent stayed three days or less, and only 4 per cent stayed 22 days or more. At the other end of the life cycle it is seen that among patients 75 years of age and over only 16 per cent stayed three days or less and 23 per cent of them stayed 22 days or more. Actually 13 per cent of this age group stayed 31 days or more.

The age differentials are even more dramatically brought out in Table 5 which shows the patient's age distribution for each of the varying lengths of stay.

In Table 5 it is seen that among patients who stayed one day or less, those under 15 years of age comprised 59 per cent of the total, whereas the

patients 65 years of age and over comprised only 12 per cent of all patients staying that length of time. On the other end of the range of length of stay it is seen that, among patients staying 31 days or more, only 10 per cent were under age 15, whereas 43 per cent were 65 years of age and over, and 20 per cent were 75 and over.

According to the hospital records, the patients were distributed by type of admission and accommodations occupied, as shown in Table 6. The distributions continue to be largely what might be expected from national data or other local areas. The surgical and medical admissions and types

TABLE 6

TYPE OF ADMISSION, HOSPITAL ACCOMMODATIONS, MASSACHUSETTS, 12 MONTHS, 1960-1961^a

Type of Admission and Accommodations	Per Cent
<i>Type of Admission:</i>	
Surgical.....	55%
Medical.....	42
Other.....	3
<i>Hospital Accommodations:</i> ^b	
Private.....	17%
Semi-private.....	40
Ward.....	37
Not ascertainable.....	6

^a These data based on information provided by hospitals for interviewed sample only (N=2,046). There is no "NA" group in "Type of Admission" because, in the absence of hospital data we could fall back on the reports of patient and/or doctor.

^b In 6 per cent of the cases, patient moved from one type of accommodation to another. These were classified according to the type first occupied.

of hospital accommodations are in the expected approximate proportions or rank order. It will be recalled that obstetrical admissions were excluded from this survey.

A new classification by type of hospital admission made possible in this survey is the division of admissions into surgery, medical treatment, and tests and X-rays. The patients were asked: "What was the main reason the doctor wanted you to go into the hospital—that is, was it for an operation of some kind, for *treatment* without an operation, or was it mainly for tests or X-rays, or what was it?" The data in Table 7 were obtained from patients (or a member of the family on their behalf) and not verified by the hospital record. Discrepancies between the information given by the

patient and by the recommending physicians are to be expected, but they are not great if we compare operations and all other types of admissions. It is when the patient tries to differentiate between admissions mainly for medical treatment and admissions mainly for tests and X-rays that we obtain rather wide discrepancies. (As will be elaborated on later, physicians reported the following classifications of types of admissions in response to an identically worded question: operations, 49 per cent; medical treatment, 35; diagnostic tests, 14; and all other, 2.) It would seem reasonable to assume that patients would have difficulty in differentiating between reasons for admissions in the non-surgical category. Therefore, when we engage in detailed analysis of the patients who were admitted for tests and X-rays we will rely mainly on the physicians' responses. We will also as-

TABLE 7

PER CENT OF HOSPITAL ADMISSIONS BY REASONS FOR ADMISSION ACCORDING TO THE PATIENT AND PHYSICIAN, MASSACHUSETTS, 12 MONTHS, 1960-1961

Reason for Admission	Patient's Per Cent (N = 2,046)	Physician's Per Cent (N = 1,745)
Operation.....	44%	49%
Medical treatment...	27	35
Tests, X-rays.....	25	14
Other.....	2	2
Don't know.....	2
	100%	100%

sume that the proportion of patients admitted for tests and X-rays according to the physician represents the actual proportion of all admissions, i.e., 14 per cent.²

The distribution by length of stay of surgical and non-surgical admissions (as classified by hospital records) reveals quite wide differences in Table 8. Surgical admissions are characterized by a greater concentration of short stays than non-surgical admissions. In fact 39 per cent of the surgical admissions stay three days or less compared with 24 per cent of the non-surgical admissions. After 15 or more days of stay, the proportions differ very little, however.

The age composition of surgical and non-surgical admissions varies appreciably, particularly beyond age 65. In Table 9 it is seen that 35 per cent

² Those who believe that physicians would be reluctant to state this as a reason for admission will have to assume that 14 per cent is a *minimum* figure.

of the surgical admissions are under 25 years of age compared with 26 per cent of the non-surgical cases. Further, only 13 per cent of the surgical admissions are 65 years of age and over compared with 26 per cent among the non-surgical admissions.

Another way to classify hospital admissions is by illnesses and accidents. One reason for isolating accidents is the implication they have for the hos-

TABLE 8
LENGTH OF STAY OF SURGICAL AND NON-SURGICAL
ADMISSIONS, MASSACHUSETTS, 12 MONTHS,
1960-1961

Length of Stay	Surgical (N=1,126)	Non-Surgical (N=919)
0 days	2%	2%
1 day	10	5
2-3 days	27	17
4-5 days	10	18
6-7 days	12	15
8-14 days	22	25
15-21 days	8	7
22-30 days	4	6
31 or more days	5	5
	100%	100%

TABLE 9
AGE AND SEX DISTRIBUTION OF SURGICAL AND NON-
SURGICAL ADMISSIONS, MASSACHUSETTS,
12 MONTHS, 1960-1961

Age	Surgical (N=1,126)	Non-Surgical (N=919)
Under 5	8%	12%
5-14	16	8
15-24	11	6
25-34	12	7
35-44	14	10
45-54	15	16
55-64	11	15
65-74	9	14
75 and over	4	12
	100%	100%
Sex:		
Male	46%	50%
Female	54	50
	100%	100%

pital as a standby facility ready to handle crises routinely. It was found that 89 per cent of the admissions were for illness and 11 per cent for accidents. Among the admissions for accidents, 25 per cent occurred in connection with motor vehicles, 18 per cent at work, 29 per cent at home, and 28 per cent elsewhere in a public place. Considering the great public concern with motor vehicle accidents, it is of interest to note that they account for 2.4 per cent of the non-obstetrical admissions in Massachusetts.

Since the general hospital is a facility functioning seven days a week, it is of interest to show the variations in admission and discharge patterns by the days of the week. In Table 10 it is seen that more admissions take

TABLE 10
PER CENT OF ADMISSIONS AND DISCHARGES BY DAY
OF THE WEEK, MASSACHUSETTS, 12 MONTHS,
1960-1961

Day of Week	Per Cent of Total Admissions Dur- ing Week (Mean = 14%)	Per Cent of Total Discharges Dur- ing Week (Mean = 14%)
Monday	18% (+4) ^a	9% (-5)
Tuesday	16 (+2)	15 (+1)
Wednesday	15 (+1)	16 (+2)
Thursday	16 (+2)	13 (-1)
Friday	12 (-2)	16 (+2)
Saturday	8 (-6)	20 (+6)
Sunday	15 (+1)	11 (-3)

^a NOTE: Numbers in parentheses show the extent to which admissions and discharges for each day of the week exceed or fall short of the mean.

place on Monday than any other day of the week. They hold slightly below this level during the middle of the week, drop sharply on Friday, and even more sharply on Saturday—which is the least popular day for entering a hospital. Sunday shows a great increase in admissions again. Naturally, discharges show the opposite pattern; Monday is shown as the lowest discharge day and Saturday as the highest. If it were desired that the hospitals have a steady intake and outgo of patients, it is obvious which days of the week would have to be squeezed and which days expanded.

Many questions are raised not only regarding the hospital admission rate, but also the length of stay. Assumptions are made that many patients are admitted on Friday and Saturday whose stays will be delayed because of the weekend lull in patient workups. There may be something to these assumptions because in Table 11 it will be noted that whereas the mean length of stay for all patients is 9.4, the patients admitted on Fridays stay

an average of 11.4 days and those admitted on Saturday, 10.4 days. If it is assumed that the patients admitted on Friday therefore stay on an average 2.0 days longer than they should, and that patients admitted on Saturday stay 1.0 days too long as compared with the average of 9.4 days, this excess would be 3.51 per cent of the total number of days.³ If one prefers absolute numbers, this percentage represents 196,583 days out of a total of 5,600,642 days in Massachusetts for one year for surgical and medical patients. Similar calculations can be made on per diem charges. We feel, however, that an absolute figure is quite meaningless unless it is related to the whole and thereby placed in perspective.

TABLE 11
MEAN LENGTH OF STAY BY DAY OF WEEK OF ADMISSION
AND DISCHARGE, MASSACHUSETTS, 12 MONTHS,
1960-1961

DAY OF WEEK	MEAN LENGTH OF STAY	
	Admission (N = 2,046) ^a	Discharge (N = 2,046) ^a
Monday	9.0 days	10.2 days
Tuesday	8.3	9.4
Wednesday	9.2	9.7
Thursday	9.5	8.6
Friday	11.4	8.6
Saturday	10.4	10.0
Sunday	8.8	9.1

^a Mean = 9.4 days.

Further background information on the patient population may be of general value, although in most instances there will not be systematic attempts to relate it to admission patterns. These data flow from a representative sample of hospital admissions in Massachusetts during a year and therefore are not representative of the characteristics of the general population. It would seem of significance for hospital admissions and discharges that 11 per cent of the patients were living in a one-person household, i.e., alone, suggesting that there might be particular difficulty in sending these patients home quickly. On the other hand, 18 per cent of the patients lived in households of six people or more, suggesting also that these might not

³ Calculated: Total N = 2,046 × 9.4 = 19,232.4 days. 254 patients × 11.4 were admitted on Friday staying a total of 2,895.6 days. 168 patients × 10.4 were admitted on Saturday staying a total of 1,747.2. The Friday patients stayed 508 days in excess of the average, and the Saturday patients 168, a total of 676 days. As a percentage of 19,232.4, 676 days equals 3.51 per cent.

be sent home too soon because of an already overburdened household ill-equipped to care for a convalescing patient.

It was found that 38 per cent of the patients were employed, implying that this proportion had to take time off from work. Twenty-five per cent of the patients kept house, indicating that readjustments had to be made to keep the home functioning. Fifteen per cent of all patients were of school age, suggesting that they must take time off from school unless they were in the hospital during vacations, an uncomfortable thought. Twenty-two per cent were not employed, keeping house, or going to school, as follows: pre-school, 10 per cent; retired, 9 per cent; and unemployed, 3 per cent. Presumably this percentage had no circumstances which put pressure on them to get back into the mainstream of daily living.

Reflecting the geographical distribution of Massachusetts, only 14 per cent of the patients lived outside any metropolitan area, and 47 per cent came from the Boston metropolitan area alone. The next largest metropolitan areas, 10 per cent each, were Worcester and Springfield-Chicopee-Holyoke. Only 20 per cent of the patients lived in towns of less than 10,000 population, and 25 per cent lived in towns of 100,000 or more.

The last group of data to be dealt with in this chapter on profile of patients will be admissions by diagnosis, ranked by frequency and by number of days so that we can obtain a general picture of the relative importance of selected diagnostic categories in hospital use. It may be seen that the top three diagnostic groupings comprise 25 per cent of the admissions and 32 per cent of the days. These groupings are also the three leading causes of death in the United States. They would indicate that one-third of the hospital beds (assuming 100 per cent occupancy and, therefore, this proportion should really be higher) are used for the three leading causes of death. Hypertrophy of tonsils and adenoids, although the fourth leading reason for hospital admissions, 6.2 per cent of all admissions, accounted for only 1.1 per cent of all the days. As for various neoplasms and heart disease, which accounted for 16 per cent of the admissions and 21 per cent of the days, it is to be expected that there was a very high concentration of patients in the upper age groups and that they had durations of stay much longer than the overall average of 9.4 days.

This chapter, then, provides the background patterns of hospital use in Massachusetts preliminary to a detailed presentation of time sequences, from the moment the patient recognized his illness and saw his physician about it, and from the moment the physician saw the patient until he decided to recommend and admit the patient to the hospital. The foregoing data reveal that the patterns of hospital use in Massachusetts are generally similar to those shown nationally and locally, based on the kind of data

usually available. It is, of course, the intention of this study to go much more deeply into patterns of hospital use, beyond the usual routine reporting, by using the survey method described. This method enables the collection of a great deal of original data rarely gathered routinely for adminis-

TABLE 12
TEN MOST COMMON ADMISSION DIAGNOSES, MASSACHUSETTS,
12 MONTHS, 1960-1961

Selected Diagnostic Categories	Per Cent of Admissions	Per Cent of Days
1. Malignant, benign and unspecified neoplasms.....	9.0	10.8
2. Fractures, dislocations, and other injuries (accidents).....	8.7	10.7
3. Arteriosclerotic heart disease including coronary, and other heart disease.....	7.2	10.6
4. Hypertrophy of tonsils and adenoids.....	6.2	1.1
5. Pneumonia, bronchitis, and other respiratory conditions.....	5.7	6.0
6. Diseases of breast, ovary, Fallopian tube and parametrium and other female disorders.....	4.8	3.2
7. Hernia.....	4.2	4.2
8. Dental caries, other diseases of teeth and supporting structures.....	3.9	.8
9. Other circulatory diseases.....	2.8	4.5
10. Appendicitis.....	2.6	2.4
	55.1	54.3

trative purposes. In view of the fact that Massachusetts reveals generally similar patterns of hospital use when comparing routine statistics on hospital use with other areas, it seems reasonable to assume that the new data brought forth in this survey can be generalized within broad limits to other areas. This should certainly be true for states that have most of the social and economic characteristics that are dominant in Massachusetts.

IV. PROFILE OF SEQUENCE OF EVENTS

A. Inception of Condition and Amount of Delay in Seeking Care

The probability sample of 2,046 discharged Massachusetts hospital patients (or their proxy respondents) were asked: "What was the condition which caused you to go to the hospital on (*date of admission*)?" If the condition was obviously due to accident or injury, the respondent was asked: "When did the (accident, injury) happen?" Otherwise, he was asked: "Thinking back to the beginning, before the time you really knew what was the matter—when was it that you had the very first signs of this condition?" and then: "Was there any trouble *before that* which might have been related to this condition? When did you first have that trouble?" Responses to these questions enabled us to date the genesis of each of the 2,046 main conditions which brought about our sample of hospital stays. The distribution is shown in Table 13.

It is seen that many of the conditions for which these patients were hospitalized in 1960-1961 were of long-standing duration. Nine per cent of the patients reported the first signs of their conditions as dating from 1949 or earlier, at least a decade before this hospitalization. An additional 10 per cent reported a date of between 1950 and 1955, and 21 per cent more said their condition first manifested itself between 1956 and 1959. Of the total sample, therefore, only 60 per cent of the patients were hospitalized for conditions which were first noticed during the year they were hospitalized. The remaining 40 per cent were hospitalized for long-standing conditions.

Thirteen per cent of the patients may be characterized as emergency admissions, in that they were hospitalized on the very same day that the condition first manifested itself. The remainder of the sample, the non-emergency patients, were asked: "(Back when you had the first signs) did you see a doctor about it right away, or did you wait awhile before seeing a doctor?" Roughly one-half of the group, as shown in Table 14, said they saw a physician "right away"; the other one-half "waited awhile." Table 15 shows, for all cases in the sample, and again with emergency cases excluded, the number of days, if any, which elapsed between the first signs of

the illness or condition and the date when a doctor was first consulted about it. While approximately half the total sample called a doctor on the same day and two-thirds called one within the week, it is apparent that one of these patients in three waited more than a week before consulting a physician, one in four waited more than a month, and almost one in ten waited more than a year before deciding to seek professional attention. If emergency cases are excluded, thus providing a better measure of patient discretion, it is seen that 44 per cent sought medical care on the same day they first noticed the condition but that almost 40 per cent delayed more than a week.

As shown in Table 16, there are some differences among patients admitted for surgery, medical treatment, and diagnostic tests in the prompt-

TABLE 13

DATE OF FIRST SIGNS OF ILLNESS OR ACCIDENT LEADING
TO ADMISSION TO THE HOSPITAL REPORTED BY PA-
TIENTS, MASSACHUSETTS, 12 MONTHS, 1960-1961

Date of First Signs	N = 2,046	Per Cent
1939 or earlier.....	61	3%
1940-1944.....	55	3
1945-1949.....	67	3
1950-1954.....	143	7
1955.....	62	3
1956.....	56	3
1957.....	74	4
1958.....	113	5
1959.....	187	9
1960.....	905	44
1961.....	323	16
Total.....	2,046	100%

TABLE 14

PER CENT OF PATIENTS WHO SAW THE DOCTOR RIGHT AWAY VS LATER
AFTER FIRST SIGNS OF ILLNESS OR ACCIDENT, MASSACHUSETTS,
12 MONTHS, 1960-1961

Length of Time Elapsed	N	Per Cent
Saw doctor right away.....	839	47
Waited a while.....	870	49
Don't know.....	29	2
Signs were discovered or first occurred while seeing doctor or in hospital.....	37	2
No answer.....	2
Total excluding same-day emergencies..	1,777	100%

TABLE 15

LENGTH OF TIME ELAPSED BETWEEN FIRST SIGNS OF ILL-
NESS OR DATE ACCIDENT HAPPENED AND DATE FIRST
SAW THE DOCTOR ABOUT IT, MASSACHUSETTS, 12
MONTHS, 1960-1961

Number of Days Elapsed	Total Sample (N = 2,046)	Excluding Same Day Emergencies (N = 1,777)
0 days, same day.....	51%	44%
1-2 days.....	8	9
3-7 days.....	7	8
8-14 days.....	5	6
15-30 days.....	4	5
31-90 days.....	8	9
91-180 days.....	4	4
181-365 days.....	4	5
366 days or more.....	9	10
	100%	100%

TABLE 16

LENGTH OF TIME ELAPSED BETWEEN FIRST SIGNS OF ILLNESS OR DATE
ACCIDENT HAPPENED AND DATE FIRST SAW THE DOCTOR ABOUT IT,
BY STATED REASON FOR HOSPITAL ADMISSION, MASSACHUSETTS, 12
MONTHS, 1960-1961

NUMBER OF DAYS ELAPSED	STATED REASON FOR ADMISSION ^a (N = 1,975)		
	Operation (900)	Medical Treatment (557)	Tests X-rays (518)
0 days, same day.....	50%	55%	50%
1-2 days.....	6	12	9
3-7 days.....	5	10	9
8-14 days.....	5	5	4
15-30 days.....	3	4	5
31-90 days.....	8	7	8
91-180 days.....	5	1	4
181-365 days.....	5	1	5
366 days or more.....	13	5	6
	100%	100%	100%

^a Not shown, because of too few cases, are the groups who say they were hospitalized for "other" reasons and for tests involving surgery.

ness with which they sought medical care after noting the first signs of their illness. Although approximately half of all groups called a doctor on the same day, 31 per cent of the surgical patients, 23 per cent of those admitted mainly for tests and X-rays, but only 14 per cent of the patients admitted for treatment, delayed more than a month before seeking professional care. While we have not analyzed these data further, it may be reasonably assumed that many of the conditions requiring surgery (such as T & A's, hernia, etc.) are non-emergency, that conditions requiring admission for diagnostic tests often manifest themselves slowly, while conditions requiring hospitalization for medical treatment are more often accompanied by obvious symptoms and pain which would increase the likelihood of a prompt doctor visit.

B. *The "Starting Date"*

It should be clear from Table 13 that a large proportion of the patients under study in this survey were hospitalized for a long-standing condition the history of which may often have dated back a decade or more. Since our focus was on the chain of events and decisions which led to the particular hospital admissions included in our sample, it was early apparent that some way must be devised for fixing upon a "starting date" with which we could begin our detailed line of questioning. The tables in the foregoing section of this chapter have shown, for example, the amount of time which elapsed between notice of the first signs of the illness and the first doctor visit. For many of these cases, however, the first signs, and the first doctor visit, occurred many years ago; indeed, many of these patients had been hospitalized several times before for the same condition, and the admission which fell into our sample was but the latest in a long series. Our interest in the earlier history of the illness was superficial; our main concern was with the circumstances of this particular episode.

Accordingly, interviewers were asked to treat any condition which was first noticed by the patient more than one year before this hospital admission as a "long-term" condition. Such respondents were then asked for the date that "this recent trouble started—that brought you to the hospital this time." Some people denied any "recent trouble." They simply had a long-standing condition, such as hernia, which they finally decided to have corrected. These respondents were then asked for the date "when you decided to do something about the condition." Patients hospitalized for "long-term" conditions were next asked when they first saw a doctor following the "recent trouble" or after their decision "to do something about it," and this date became the Starting Date for the hospitalization which fell into our sample.

But there was yet one other set of circumstances which affected the Starting Date. A few of the short-term cases had experienced other hospitalizations since the condition first presented itself within the year, and a few of the long-term cases had experienced prior hospitalizations since the start of their most "recent trouble." For such cases, it was necessary to move the Starting Date forward in order to get detailed information only about the admission which fell into our sample. After the tentative Starting Date had been ascertained, therefore, all respondents were asked whether there were any intervening hospital episodes between that date and the date of the admission we were concerned with. If so, a later Starting Date was obtained by asking for the date on which the patient first saw a doctor about the condition following his previous hospital discharge.

The Starting Date for each of the hospital admissions in our sample was derived then in three different ways, depending upon the nature of the case. For short-term conditions (first doctor visit less than a year before admission), which accounted for the majority of cases, it is the date the patient first saw a doctor. For long-term conditions (first doctor visit a year or more ago), it is the date the patient first saw a doctor after the attack or flare-up which led to this hospitalization, or after he decided to "do something" about his long-standing condition. In a relatively few cases it is the date the patient first saw a doctor after discharge from a prior hospitalization. The concept of a Starting Date is essential to screen out earlier hospital admissions and long histories of chronic illness in order to focus on the circumstances which precipitated the particular hospital admission under study.

C. *Patients With "Long-Term" Conditions*

Before proceeding to a descriptive analysis of the 2,046 hospital episodes in our sample, from Starting Date until one month after discharge, it will be instructive to look very briefly at the prior history of the long-term cases. One-third of our sample were admitted for long-term conditions according to our definition; that is, they were admitted one year or more after they had first seen a doctor about the condition. Of these long-term cases, about one-fourth had first seen a doctor about it more than ten years ago; half had first seen a doctor between two and ten years ago, and about one-fourth had first seen a doctor less than two years before the Starting Date for this admission. Forty-five per cent of these patients with long-term conditions had been hospitalized at least once before for the same condition; 15 per cent of the group had experienced three or more prior hospitalizations. One out of six of these cases had experienced 61 days or more of hospitalization for the same condition, and a third of them had been hospi-

talized for more than 30 days. Of the patients who had *not* previously been hospitalized for their long-term condition, 23 per cent, or approximately one in four, confessed that a doctor had earlier recommended hospitalization but they did not go. It is apparent that this one-third of all hospital admissions representing long-term cases had already received a large amount of prior hospital care and, indeed, if we can trust their testimony about earlier doctor recommendations, should have used more.

TABLE 17
LENGTH OF TIME ELAPSED BETWEEN "STARTING
DATE"^a AND ADMISSION DATE, MASSACHU-
SETTS, 12 MONTHS, 1960-1961

Time Elapsed	Total Sample (N = 2,046)
0 days, same day.....	32%
1-2 days.....	10
3-7 days.....	13
8-14 days.....	7
15-30 days.....	11
31-60 days.....	9
2 to 6 months.....	12
Over 6 months.....	6
	100%

^a The "starting date" is (1) the date the patient first talked with a physician about his condition or (2) if a long-term condition, the date he first talked with a physician after his "most recent trouble," or the date he "decided to do something" about the condition—*unless* another hospitalization intervened between that date and the admission date. In such a case, the "starting date" is the date the patient first talked with a physician about his condition *after* discharge from the intervening hospitalization.

D. Emergency Cases

It was noticed earlier that 13 per cent of the total sample were hospitalized on the same day their first signs of illness appeared or the same day the accident happened. This figure, however, grossly understates the proportion of current hospitalizations which may be characterized as "emergency," since it ignores the starting date for the current episode of a long-term illness. Table 17, which shows the length of time elapsed between the Starting Date for each case and the date of admission to the hospital, reveals that 32 per cent of the sample admissions were hospitalized under emergency conditions—that is, on the same day the accident happened, the first signs of illness appeared or, in the case of long-standing conditions, the same day that "the most recent trouble" began.

One-third of these non-obstetrical admissions, then, required round-the-clock standby facilities and personnel for handling emergencies of varying degrees of severity. If maternity admissions were added, the proportion of admissions requiring immediate attention in the hospital would increase to approximately 40 per cent. Even this is a minimum estimate, since a certain proportion of the cases admitted some time after their "starting dates" were also admitted under emergency conditions; e.g., their illness took a sudden turn for the worse. As will be shown later, 43 per cent of our sample cases were admitted to the hospital on the same day the physician *first* recommended hospitalization.

Of the same-day emergency admissions, just about half were first examined in the hospital itself, most often in the emergency room. One-third of these cases were first examined in the patient's home, to which the doctor had been summoned in the emergency. Almost all of the remainder, about one emergency case in six, were taken or managed to get to a doctor's office and were first examined there. One-fifth of the emergency cases were either unconscious or, in the wording of the question, "really too sick to pay much attention." Four-fifths described themselves as "pretty well aware of what was going on." The majority of same-day emergency cases, however, were either unconscious, "too sick to care," or suffering "a great deal" of pain or discomfort. Another one-fourth said they were in "quite a bit" of pain or discomfort. Only one emergency case in four had little or no pain or discomfort. Furthermore, almost half of these cases were judged at that time by the patient or his proxy respondent as "very serious." Only one in five felt the emergency was "not really serious." Finally, only one emergency patient in four was at all surprised to be admitted as a bed patient and only one in eight was greatly surprised. The majority, if they were aware of their surroundings at all, expected to be hospitalized.

Table 18 shows the time elapsed between Starting Date and Admission Date by type of admission—surgical, medical, and diagnostic. Most striking is the fact that same-day emergencies account for only 15 per cent of the surgical cases, as compared with 51 per cent of those admitted for medical treatment and 42 per cent of those hospitalized for diagnostic reasons. In 40 per cent of the surgical cases more than a month elapsed between the first doctor visit and admission to the hospital. The finding is consistent with the greater delay shown by surgical patients in first seeking medical care (Table 16). While operating rooms need to be available at all times for emergency surgery, it seems clear that both patients and physicians have a greater amount of discretion in the scheduling of surgery than in the scheduling of other types of hospital admissions.

Five diagnostic categories account for almost one-half (44 per cent) of

TABLE 18

LENGTH OF TIME ELAPSED BETWEEN "STARTING DATE" AND ADMISSION DATE BY STATED REASON FOR HOSPITALIZATION, MASSACHUSETTS, 12 MONTHS, 1960-1961

TIME ELAPSED	STATED REASON FOR ADMISSION* (N = 1,975)		
	Operation (900)	Medical Treatment (557)	Tests, X-rays (518)
0 days, same day.....	15%	51%	42%
1-2 days.....	6	14	12
3-7 days.....	14	12	13
8-14 days.....	10	5	5
15-30 days.....	15	5	8
31-60 days.....	12	5	9
2 to 6 months.....	19	6	7
Over 6 months.....	9	2	4
	100%	100%	100%

* Not shown, because of too few cases, are the groups who say they were hospitalized for "other" reasons and for tests involving surgery.

TABLE 19

LENGTH OF TIME ELAPSED BETWEEN "STARTING DATE" AND ADMISSION DATE, BY LENGTH OF STAY, MASSACHUSETTS, 12 MONTHS, 1960-1961

ELAPSED TIME	TOTAL SAMPLE (N = 2,046)	LENGTH OF STAY							
		0-1 Days (N = 194)	2-3 Days (N = 458)	4-5 Days (N = 279)	6-7 Days (N = 273)	8-14 Days (N = 484)	15-21 Days (N = 157)	22-30 Days (N = 100)	31+ Days (N = 101)
0 days, same day..	32%	28%	24%	29%	34%	33%	46%	48%	44%
1-2 days..	10	5	6	12	14	11	8	6	17
3-7 days..	13	5	13	18	15	14	16	10	9
8-14 days..	7	10	9	5	7	8	4	6	3
15-30 days..	11	13	14	13	6	9	6	12	5
31-60 days..	9	9	12	6	9	9	10	6	12
2 to 6 months...	12	20	15	12	9	11	7	5	8
Over 6 months...	6	10	7	5	6	5	3	7	2
	100%	100%	100%	100%	100%	100%	100%	100%	100%

the same-day emergency admissions: arteriosclerotic heart disease including coronary disease, appendicitis, fractures and dislocations, other injuries, and pneumonia. This fact helps explain the finding shown in Table 19 that the longer the stay, the higher is the proportion of same-day emergency admissions. Only about a fourth of the patients staying three days or less but almost half of those staying 15 days or longer were admitted on the same day their accident occurred or illness began. Conversely, the shorter the stay, the more time elapsed between the Starting Date of the illness or illness episode and the date of admission to the hospital. Only 10 per cent of the long-stay patients, but 30 per cent of the shortest-stay patients, did not enter the hospital until two months or more after the Starting Date of their illness.

E. Recommending Date

At some point in the history of a condition for which a patient is hospitalized, there comes a time when the patient is told by his physician that hospitalization is recommended. This date we refer to as the Recommending Date—the date, according to the patient, when a physician first told him that he "probably ought to go into the hospital because of this condition." In the case of same-day emergency admissions, the accident or illness strikes, a doctor is consulted, the patient is referred to the hospital, and admitted. In such cases, the Starting Date, Recommending Date, and Admission Date all coincide. In non-emergency cases, however, there may or may not be an interval between the Starting Date, when the patient first consults the physician, and the Recommending Date, when the physician first recommends hospitalization. The physician may determine very quickly that hospitalization is required, for surgery, medical treatment, or diagnostic tests, even though no urgency is present. Or the physician may attempt to treat or may wish to observe the condition outside the hospital for a time, recommending admission only when he is convinced that there is no other recourse.

The first column of Table 20 shows, for all cases, the number of days which elapsed between the Starting Date and the Recommending Date, and it is apparent that for relatively few did the physician long delay in recommending hospitalization. More than two-thirds of all the patients (70 per cent) said the doctor recommended admission on the same day they first saw him about their condition, or about this particular illness episode if their condition was a long-standing one; and four out of five (80 per cent) were recommended to the hospital within a week of their first consultation with a physician. It should be recalled, of course, that almost half of those recommended on the Starting Date (32 of the 70 per cent) were same-day

emergency patients who were actually admitted on that date. The second column of Table 20 excludes these emergency cases from the percentage base. Of the remaining non-emergency cases, it is seen that the majority (56 per cent) were still recommended to the hospital on the occasion of their first doctor visit, and 71 per cent were recommended within a week.

Patients for whom hospitalization was not recommended on their first doctor visit were asked: "What did (the doctor) say you should do about (the condition)?" Just about half of these cases say he prescribed or gave them some kind of pills or medicine. Other frequent prescriptions or recommendations were some form of medical treatment, such as injections, tests, X-rays, or a general checkup, a special diet, home remedies or treatment, a

TABLE 20
LENGTH OF TIME ELAPSED BETWEEN "STARTING DATE"^a
AND "RECOMMENDING DATE,"^b MASSACHUSETTS,
12 MONTHS, 1960-1961

Time Elapsed	Total Sample (N = 2,046)	Excluding Same- Day Emergencies (1,385)
0 days, same day.....	70%	56%
1-7 days.....	10	15
8-30 days.....	7	10
1 to 3 months.....	6	9
Over 3 months.....	7	10
	100%	100%

^a The "starting date" is (1) the date the patient first talked with a physician about his condition or (2) if a long-term condition, the date he first talked with a physician after his "most recent trouble," or the date he "decided to do something" about the condition—*unless* another hospitalization intervened between that date and the admission date. In such a case, the "starting date" is the date the patient first talked with a physician about his condition *after* discharge from the intervening hospitalization.

^b The "recommending date" is the date, according to the patient, when a physician first told him that he "probably ought to go into the hospital because of this condition."

change of regimen, or bed rest. About one of these patients in seven was referred to another doctor, usually a specialist. About one in twelve was advised to do nothing for the time being, but to report back if the condition worsened or failed to improve.

Four out of five of these non-emergency patients saw no other doctor between their first visit and the time hospitalization was recommended for them, and of those who did see one or more other doctors, less than 3 per cent did so because they were dissatisfied with the first doctor seen. In all

other cases the other doctors were seen on referral, because the first doctor was not available, or for other reasons not related to patient dissatisfaction or "shopping around." Almost three-fourths of the non-emergency patients for whom hospitalization was not immediately recommended were taking some sort of prescribed medicine or receiving some kind of medical treatment during this period, and about one-fourth said they received special tests, X-rays, or both before the doctor advised hospital admission.

F. Admission Date

Table 21 shows the number of days which elapsed between the Recommending Date and the Admission Date. Again, we must remember that 32 of the 43 per cent who were admitted on the same day hospitalization was

TABLE 21
LENGTH OF TIME ELAPSED BETWEEN "RECOMMENDING
DATE" AND DATE OF ADMISSION, MASSACHUSETTS,
12 MONTHS, 1960-1961

Time Elapsed	Total Sample (N = 2,046)
0 days, same day.....	43%
1-2 days.....	12
3-7 days.....	14
8-14 days.....	8
15-30 days.....	9
1 to 3 months.....	8
Over 3 months.....	6
	100%

recommended were same-day emergencies for whom this date was also the Starting Date of their illness. The remaining 11 per cent in this group were admitted on the same day the recommendation was first made, but they had first seen a doctor about their condition some time earlier and, as we have just seen, the majority were under professional care or treatment. It is probable that a large preponderance of these 11 per cent were also emergency admissions, in the sense that there was a sudden worsening of their condition which dictated immediate hospitalization. In other cases, however, the physician may have recommended hospitalization, found that he could obtain immediate admission, and obtained the patient's consent to go in on that same day, even though there was no emergency.

Patients for whom four or more days elapsed between the Recommending Date and their admission to the hospital were asked to explain the delay. The preponderant reasons, given by more than two-thirds of the group,

were the need to wait for a hospital bed, deliberate delay for health or medical reasons (such as waiting for cooler weather or to get rid of a cold or to gain weight), and the doctor's unavailability at the time. About one patient in five resisted immediate hospitalization for reasons of convenience: they didn't want to lose time at school or at work; they had to make arrangements for the care of their family or business; or they had other plans which an immediate hospitalization would interfere with. Two per cent of the group said they delayed admission in order to consult another physi-

TABLE 22

LENGTH OF PRIOR NOTICE OF DISCHARGE FROM HOSPITAL GIVEN PATIENTS BY ATTENDING PHYSICIANS, ACCORDING TO PATIENTS OR THEIR PROXIES, MASSACHUSETTS, 12 MONTHS, 1960-1961

Length of Prior Notice	Total Sample
	N = 1976 ^a
The same day, day of discharge....	25%
The day before, night before, 24 hours.....	42
Two days before.....	16
More than two days before.....	13
Doctor didn't say, left it to patient, or patient left on his own..	2
Don't know, vague or irrelevant..	2
	100%

^a Excluding 70 patients who died in the hospital.

cian, presumably in hopes of getting another opinion. Seven per cent said they delayed because of fear or unwillingness to go. Four per cent said they delayed for financial reasons.

G. Discharge and After

The patients or their proxies were asked how much notice the attending physician gave them regarding their discharge from the hospital and Table 22 shows the distribution of replies. It is seen that the overwhelming majority (71 per cent) were given at least overnight notice although one patient in four (25 per cent) said he was notified of discharge only on the same day he actually left the hospital. An interesting datum is the 2 per cent of patients who said the decision to leave the hospital was left pretty much up to them or that they left on their own initiative. It cannot be assumed out-of-hand that such discretion left to the patient meant that the physician was

necessarily avoiding responsibility. It would more likely indicate that in the case of the physician-patient relationship where the physician is accorded ultimate judgment, there are, as in all human relationships, areas which shade into each other, permitting some play in the adjustment of physician and patient roles.

After discharge, where did the patients go? Recall that these patients were discharged from general hospitals designed mainly to care for short-term patients and normally excluding mental patients and tuberculosis patients. It would appear that Massachusetts is not greatly different in its range and distribution of health service facilities and personnel from other more or less similar areas in this country. Therefore, the destinations of the

TABLE 23

WHERE PATIENT WENT AFTER DISCHARGE FROM THE HOSPITAL, MASSACHUSETTS, 12 MONTHS, 1960-1961

Destination on Discharge	Total Sample (N = 1,976) ^a
Home, back to same address	91%
To a relative's home.....	4
To a nursing home.....	2
To another hospital.....	2
To some other place.....	1
	100%

^a Excluding 70 who died in hospital.

patients are a result of a health services structure which exists in the country generally. When and if there is a great proliferation of nursing home facilities, home care services, and so on, presumably the patients' destinations will be different from those that were revealed by this survey.

In Table 23 it is seen that over 90 per cent of the patients returned to the same address as of the time of admission, presumably to their homes. Significantly, 4 per cent were taken in by relatives and, also significantly, 2 per cent were sent to a nursing home. Further, 2 per cent were transferred to another hospital, a destination one is prone to overlook.

The patients who did not return home (N = 164) were asked why this was so. Over one-half of them (54 per cent) answered that adequate care and attention were not available at home and 19 per cent said they required further medical care and treatment. The remainder had miscellaneous reasons, did not know, or were vague. It would be rash to conclude that if home conditions had been appropriate, one-half of the patients who did not go

home could have been cared for at home. It is probably reasonable to conclude, however, that an appreciable minority could be cared for at home if appropriate arrangements were made.

More specifically, 4 per cent of the patients were discharged to nursing homes and other hospitals. The presumption would be that the hospitals are long-term institutions. Some detail on this group is indicated even though the number is small, because of the current concern with long-term care. Table 25 shows that 10 per cent of these patients expected to stay two months to a year and 15 per cent indefinitely. Undoubtedly, the 17 per cent who did not know, etc., were also prospective long-stay patients, indicating

TABLE 24

LENGTH OF TIME PATIENTS DISCHARGED TO NURSING HOMES OR OTHER HOSPITALS EXPECTED TO STAY THERE, MASSACHUSETTS, 12 MONTHS, 1960-1961

Length of Time	Total Discharged to Nursing Homes and Other Hospitals (N = 66)
One week or less.....	15%
More than 1 week to 2 weeks....	15
More than 2 weeks to 1 month....	14
More than 1 month to 2 months....	14
More than 2 months to a year....	10
Indefinitely, always.....	15
Don't know, vague or irrelevant...	17
	100%

that over 30 per cent of this group of patients (or their proxies) feel they will remain in the institution a very long time.

Two per cent of the patients (N = 36) were discharged to nursing homes. A simple count reveals that all but eight of them are 65 years of age and over and 19, or over half the group, are 75 years of age and over. Three of these patients had malignant neoplasms, three had arteriosclerotic heart disease, including coronary, five had diabetes mellitus, five others had intracranial lesions, four had fractures and dislocations, and others suffered from diseases of the intestines and peritoneum, ulcerative colitis, ulcer of the stomach and duodenum, indicating the usual melancholy pattern of long-term conditions.

Returning to the total patients (excluding those who died in the hospital or were discharged to nursing homes or other hospitals) the patients were

asked: "When you first got out of the hospital, did you have to stay in bed most of the time, or did you just have to cut down on some of your activities, or were you able to get around normally?" In Table 25 it is seen that almost one-quarter (23 per cent) had to stay in bed most of the time, another one-fourth apparently returned to their accustomed activities, and one-half (51 per cent) had to cut down some. If those who were discharged to nursing homes and other hospitals (N = 66) are added to those who had to stay in bed most of the time, it would seem that slightly over one-quarter (26 per cent) still remain in bed most of the time for varying periods after discharge. Further, it can be inferred that one-quarter (23 per cent) are being cared for at home during this period even though they remain in bed most of the time.

TABLE 25

ACTIVITY STATUS OF PATIENT ON DISCHARGE, ACCORDING TO PATIENT, MASSACHUSETTS, 12 MONTHS, 1960-1961

Activity Status	Total Patients (N = 1,910) ^a
Had to stay in bed most of the time.....	23%
Had to cut down some.....	51
Could get around normally.....	26
Don't know.....	^b
	100%

^a Excluding 70 who died in hospital and 66 discharged to hospital or nursing home.

^b Less than one-half of one per cent.

The patients who "had to stay in bed most of the time," or "had to cut down some" were asked: "How long was it (will it be) before you got (get) back to normal?" The answers to this question will give some idea of the length of the convalescence period. It is seen in Table 26 that about one-quarter of these patients (23 per cent) felt they would be back to normal within a week, another 17 per cent within the second week, and still another 17 per cent during the following two-week period. In other words 57 per cent of the group expected to be fully up and about within a month. The remaining patients would seem to have rather long convalescence, among whom 2 per cent would require over six months. Further, a depressing four per cent felt they would never resume a normal life, while 18 per cent were unable to prophesy.

Continuing with the patients who had to stay in bed or cut down some

TABLE 26

LENGTH OF TIME BEFORE PATIENT GETS BACK TO NORMAL, ACCORDING TO PATIENT, AND AMONG PATIENTS WHO HAD TO STAY IN BED OR CUT DOWN SOME, MASSACHUSETTS, 12 MONTHS, 1960-1961

Length of Time	Patients (N = 1,426)
1 to 3 days.....	5%
4 to 7 days.....	18
8 to 15 days.....	17
16 to 31 days.....	17
1 to 2 months.....	11
2 to 3 months.....	4
3 to 6 months.....	4
Over 6 months.....	2
Never.....	4
Don't know, vague, or irrelevant..	18
	100%

TABLE 27

RELATIONSHIP TO PATIENT OF PERSON WHO CARED FOR PATIENT AFTER DISCHARGE, ACCORDING TO PATIENT, FOR PATIENTS WHO HAD TO STAY IN BED OR CUT DOWN SOME, MASSACHUSETTS, 12 MONTHS, 1960-1961

Person	Patients (N = 1,426)
No one, needed no care or took care of self.....	20%
Spouse.....	31
Parents in patient's household.....	27
Parents outside patient's household.....	5
Children in patient's household.....	8
Children outside patient's household.....	5
Brothers or sisters in patient's household.....	1
Brothers or sisters outside patient's household.....	4
Others in patient's household.....	2
Others outside patient's household.....	7
Don't know, vague or irrelevant.....	*
Multiple answers permitted.....	110%

* Less than one-half of one per cent.

after discharge, this group was asked: "Who took care of you when you first got out of the hospital?" What is, of course, of great interest here is that fully four-fifths (81 per cent) of these convalescing patients were cared for by relatives, the overwhelming majority by spouses, parents, or sons or daughters. It is of interest to note that 14 per cent of these patients were cared for by relatives who were not members of the patient's household. These data indicate that it is of significance to delineate the helping patterns already in operation before home care is established on any extensive basis.

TABLE 28

NUMBER OF PATIENT VISITS TO PHYSICIANS DURING FIRST TWO WEEKS AFTER DISCHARGE, ACCORDING TO PATIENTS, MASSACHUSETTS, 12 MONTHS, 1960-1961

Number of Visits After Discharge	Total Patients (N = 1,976) ^a
None.....	30%
1.....	36
2.....	20
3.....	5
4.....	4
5 to 9.....	3
10 or more.....	2
Don't know.....	^b

^a Excluding 70 who died in hospital.

^b Less than one-half of one per cent.

It was possible to ascertain the number and to some extent the nature of the visits the patients had with physicians within two weeks after discharge. In Table 28 it is seen that 30 per cent of these patients were not seen by physicians during this period, the presumption being that not only had the hospital stay terminated but also the illness episode as far as the physician was concerned. Another third or so of the patients saw a physician just once during the two weeks after discharge. At the other end of the range 5 per cent of the patients saw a physician five or more times within two weeks after discharge, and 2 per cent saw a physician 10 or more times.

V. THE PATIENT AS A PERSON

In previous chapters the patient has been treated as a statistical unit passing through a sequence of events. This chapter will attempt to show how the patient felt, thought, and perceived the experiences of recognizing an illness or condition, eventually seeing the physician about it, and thence being referred to the hospital, and his sojourn there. The patients' attitudes, perceptions, and feelings are, of course, based on retrospection which may be colored or dulled by the lapse of time since discharge. It will be recalled, however, that interviews were normally conducted within a few weeks after discharge in order to assure as vivid a recall as possible. Recall of objective events can be validated by records and other means of cross-checking. Recall of feeling states cannot be so validated, but the ensuing data will reveal patterns which would appear to be reasonable and conforming to common sense. In essence they reveal that the members of the general public who are hospitalized have not sought physicians' services casually. They have been generally inclined to follow the physicians' recommendations to be hospitalized and discharged. They have undergone surgery and treatment in the hospital with only a small amount of fear, and mostly with a sense of prudence and gratitude. In short, the hospital and physicians' services are part of the accepted offerings of goods and services in today's standard of living, to be used as a matter of routine as well as in times of dire medical emergencies. It would seem reasonable to assume that a similar survey 50 years ago would have revealed quite an opposite picture.

A. Before Admission to the Hospital

As shown in the previous chapter, approximately one-half of the non-emergency patients (47 per cent) saw a physician right away when they noticed the first signs of their condition, and another one-half (49 per cent) waited a while. (Total patients excluding the 269 same-day emergencies is $N = 1,777$) Emergencies are excluded from these calculations because it is assumed that patients exercise a minimum of discretion in seeing a physician in such instances.

Among the patients who waited a while before seeing a physician, 44 per cent (Table 29) thought their condition would go away or get better by itself or with self-treatment. Another 35 per cent explained that they did not at that time feel their condition was serious or important, they had little or no pain, felt no urgency and so on. It can thus be said that fully four-fifths of those patients who delayed seeing a doctor did so because they perceived no sense of urgency. The remaining reasons for delay are in rather small proportions but perhaps the four per cent who mentioned they were too busy, and the three per cent who gave financial reasons are of interest.

TABLE 29
REASONS GIVEN BY PATIENTS FOR WAITING A WHILE BEFORE SEEING
A PHYSICIAN AFTER NOTICING FIRST SIGNS OF ILLNESS,
MASSACHUSETTS, 12 MONTHS, 1960-1961

Reasons for Waiting a While	Patients
	N = 870
Thought it would go away, get better by itself or with self-treatment.	44%
Didn't think it was serious, important, didn't realize what it was, had little or no pain, there was no urgency (not double-coded with above).	35
Too busy, no time, responsibilities	4
Fear or wish to avoid diagnosis or treatment.	4
Don't know, just didn't go, vague or irrelevant answers.	4
Financial reasons: couldn't afford it, didn't want to spend the money.	3
General dislike or distrust of physicians, try to avoid them (not coded if more specific reason given).	3
Didn't think physician could help, nothing he could do about it	1
Miscellaneous reasons not codable elsewhere.	4
Multiple answers permitted	102%

Further, only a small minority of these patients feared or disliked physicians sufficiently to give these reasons as grounds for not seeing a physician immediately.

If the same-day emergencies are added to the category "saw doctor right away" the proportion of patients in this group rises to 54 per cent rather than 47 per cent, and the "waited a while" category falls from 49 per cent to 43 per cent. Examination of the total sample by diagnostic groups indicates a rank order generally conforming to the degree of trauma implied by the condition. Thus, 94 per cent of the patients with fractures and dislocations saw a physician right away, while only 25 per cent of those with varicose veins did so. Other selected diagnoses reveal that the general public has a

common sense awareness of the severity and traumatic nature of the conditions that makes them decide to see physicians immediately: intracranial lesions, 79 per cent; arteriosclerotic heart disease including coronary, 64 per cent; mental and personality disorders, 58 per cent; appendicitis, 52 per cent; malignant neoplasms, 50 per cent; diseases of the skin, 46 per cent; hemorrhoids, 40 per cent; and ulcer of stomach and duodenum, 31 per cent.

To obtain some measure of the degree of pain and discomfort patients experienced at the time of their first doctor visit on the Starting Date of this hospital episode, they were asked: "How much pain or discomfort did you have at that time, just before you saw the doctor—a great deal, quite a

TABLE 30

EXTENT OF PAIN OR DISCOMFORT REPORTED BY PATIENTS OR PROXIES AT TIME OF SEEING PHYSICIAN ON STARTING DATE OF HOSPITAL EPISODE, MASSACHUSETTS, 12 MONTHS, 1960-1961

Extent of Pain or Discomfort	Patients Excluding Same Day Emergencies	Same Day Emergencies	Total Sample
	N = 1,385	N = 661	N = 2,046
Not conscious.....		22%	7%
Great deal of pain.....	26%	30	27
Quite a bit.....	27	23	26
A little.....	22	14	19
None.....	24	11	20
Don't know.....	1	*	1
	100%	100%	100%

* Less than one-half of one per cent.

bit, a little, or none?" In Table 30 it is seen that a total of 60 per cent of all patients, and 75 per cent of the emergency patients, were experiencing a great deal or quite a bit of pain, or were actually unconscious. Looking only at the non-emergency cases, however, who presumably had some discretion in deciding whether and when to consult a doctor, it is clear that almost half (46 per cent) had little or no pain or discomfort. The usual assumption is that pain and discomfort are almost always the immediate reasons for seeing a physician, but it would seem that only a little over half of these ultimate hospital patients were so motivated. The other half presumably saw a physician for other reasons based on other evidence of need for medical care.

Another criterion for seeing a physician is the degree of seriousness the

patient attaches to his condition. The patients were asked: "Before you talked with the doctor, how serious did you think your condition was—very serious, somewhat serious, or not really serious?" Again, as with degree of pain and discomfort, about 60 per cent of all patients and three-fourths of the emergency patients (Table 31) felt that their condition was very or somewhat serious. But again, among the discretionary non-emergency cases, a large fraction (42 per cent) thought their condition was "not really serious." It cannot necessarily be assumed that the ones who experienced the most pain and discomfort also felt they had the most serious conditions. What this table reveals, mainly, is that close to one-half of the

TABLE 31

DEGREE OF SERIOUSNESS OF CONDITION BEFORE TALKING WITH PHYSICIAN REPORTED BY PATIENTS OR PROXIES, MASSACHUSETTS, 12 MONTHS, 1960-1961

Degree of Seriousness	Patients Excluding Same-Day Emergencies	Same-Day Emergencies	Total Sample
	N = 1,385	N = 661	N = 2,046
Very serious.....	19%	45%	28%
Somewhat serious.....	32	29	31
Not really serious.....	42	19	34
Don't know.....	7	7	7
	100%	100%	100%

non-emergency patients saw a physician even though they felt their condition was not serious. It would seem that this figure indicates a rather high level of appreciation for physicians' services on the part of the public.

As was noted briefly in the preceding chapter, the great majority of emergency patients (or their proxies) were not surprised but rather expected that they would be admitted to the hospital at the time they first saw a doctor. Table 32 shows, however, that this was not the case among non-emergency cases. When asked, "Before you talked with the doctor then, were you *pretty sure* he would want you to go to the hospital, or did you think he *might* want you to go, or did you have no idea of going to the hospital at that time?" the majority of these ultimate hospital patients confessed that, when they first saw the doctor about the condition for which they were hospitalized, they "had no idea" of their eventual admission. Fewer than one in four (23 per cent) felt "pretty sure" that they would be recommended for hospitalization. This finding, too, seems to conflict with common assump-

tions that people tend to delay seeking medical care until they can no longer put it off or, alternatively, that they actively seek hospitalization for unnecessary reasons.

Either on the occasion of this first visit to the doctor or after some interim period of medical treatment or observation, there came the moment when the doctor recommended that the patient be hospitalized. How did the patient then respond to this decision on the part of the physician?

Patients who were admitted for surgery or their proxies were asked: "Was there any doubt in your own mind that you should have this operation, or did it seem to you to be absolutely necessary?" An extremely small minority expressed any doubt whatsoever (Table 33), indicating the great trust put in physician judgments and the overall acceptance of surgery in general.

The 93 per cent who said that it was absolutely necessary for them to

TABLE 32
EXPECTATIONS OF HOSPITALIZATION AT TIME OF
FIRST DOCTOR VISIT MASSACHUSETTS,
12 MONTHS, 1960-1961

Expectations	Non-Emergency Patients (N = 1,385)
Felt pretty sure would be hospitalized	23%
Thought might be hospitalized	19
Had no idea would be hospitalized . . .	56
Don't know, don't remember	2
	100%

TABLE 33
ATTITUDE OF PATIENTS TOWARD NEED FOR SUR-
GERY AFTER PHYSICIAN MADE DECISION TO
HOSPITALIZE, MASSACHUSETTS, 12 MONTHS,
1960-1961

Attitude toward Need for Surgery	Total Surgical Patients (N = 920)
Some doubt	6%
Absolutely necessary	93
Don't know	1
	100%

have the surgery were queried as to why they thought so. Answers were recorded verbatim and subsequently coded. The replies further bear out the public's present-day acceptance of surgery as an almost routine course of action (Table 34). Five out of six of the group explained that an operation was the only means of relieving, improving, curing or repairing the condition which had brought them to the doctor, or of preventing more serious trouble, or of finding out the basic cause of their condition. It will be noted that only a very small minority, 3 per cent, said that surgery was necessary in order to save their lives. It is within living memory that people would undergo surgery almost solely to save their lives.

TABLE 34
REASONS GIVEN BY PATIENTS WHO FELT THEIR SUR-
GERY WAS "ABSOLUTELY NECESSARY," MAS-
SACHUSETTS, 12 MONTHS, 1960-1961

Reasons	Patients Answering (N = 833)
To save life, might have died other- wise	3%
To prevent more serious trouble or worsening of condition	16
To get at cause, find out what was wrong	3
To relieve, improve, cure, correct, repair the condition	64
Doctor said so, took his word for it	13
Miscellaneous reasons	^a
Don't know, vague or irrelevant . .	1
	100%

^a Less than one-half of one per cent.

It is realized, of course, that patients are heavily influenced by their physician's decisions, but patients admitted for surgery were asked: "Was this the kind of operation that might have been done in the doctor's office or clinic, or was it absolutely necessary that they do it in the hospital?" (Table 35). Only 6 per cent of the patients felt that the operation might have been performed in the physician's office or clinic. Comparisons to be made later with physicians' responses reveal that the doctors express a greater latitude. It would seem reasonable to believe that the general public would be more cautious in this respect than the physicians. In the public mind, surgery would seem to be quite naturally a hospital-based procedure, as indicated in Table 35.

Patients admitted for medical treatment or for tests or X-rays were a

little more doubtful of the absolute need for hospital care, although again the overwhelming majority (84 per cent) felt that their admission was absolutely necessary. The question was, "Could you have been treated for this condition (or could these tests or X-rays have been done) outside the hospital—in your home, perhaps, or at the doctor's office or clinic—or was it absolutely necessary that you go into (or have them done) in the hospital?" It will be noted that, while only 3 per cent of the surgical patients had no opinion on this question, 8 per cent of the non-surgical cases answered "Don't know." The combination of the proportion of patients who felt that they could have been treated or their tests made outside of the hospital and those who did not know indicates that about one non-surgical patient in six was not convinced that his admission was absolutely necessary.

In addition to what may be regarded as the independent judgments of the patients as presented in the foregoing, the patients or their proxies were

TABLE 35

EXTENT TO WHICH PATIENTS FELT THEIR OPERATIONS MIGHT HAVE BEEN DONE IN PHYSICIAN'S OFFICE OR ABSOLUTELY NECESSARY THEY BE DONE IN THE HOSPITAL, MASSACHUSETTS, 12 MONTHS, 1960-1961

Place of Operation	Patients Answering (N = 920)
Might have been done in office . .	6%
Hospital absolutely necessary . . .	91
Don't know	3
	100%

TABLE 36

EXTENT TO WHICH NON-SURGICAL PATIENTS FELT THEY COULD HAVE BEEN TREATED OR EXAMINED OUTSIDE OR INSIDE THE HOSPITAL, MASSACHUSETTS, 12 MONTHS, 1960-1961

Place of Treatment or Examination	Non-Surgical Patients Answering (N = 1,037)
Could have been treated outside	8%
Hospital absolutely necessary . . .	84
Don't know	8
	100%

also asked about their perceptions of the feelings of the physician who recommended their admission to the hospital. The question was: "How strongly did the doctor feel about it—did he feel it was *absolutely necessary* for you to go into the hospital (have the operation), or did he think you would be *much better off* going (having it), or did he just feel it might be a good idea?" Table 37 reveals that about four-fifths of the patients or their proxies believed that the physician felt their hospitalization was absolutely necessary.

In further probing of patients' and their proxies' perceptions of the feelings of their physicians, *necessity* for hospital care, as presented in the previous table, was differentiated from *urgency* of hospital care. *Necessity* has a condition dimension, and *urgency* has a time dimension. The patients and their proxies were asked: "And how urgent did he say it was—that is,

TABLE 37

PERCEPTION OF PATIENT REGARDING PHYSICIAN'S FEELING OF NECESSITY FOR HOSPITALIZATION, MASSACHUSETTS, 12 MONTHS, 1960-1961

Degree of Necessity	Total Sample (N = 2,046)
Absolutely necessary	79%
Much better off	14
Might be good idea	5
Don't know	2
	100%

did he want you to go into the hospital (have the operation) right away, or did he say you could put it off for a few weeks or months, or did he just say you ought to go into the hospital (have the operation) eventually?"

Table 38 reveals that approximately three-fourths of the patients (77 per cent) said their physician wanted them to be hospitalized immediately, but almost all of the remainder could be postponed for weeks or months or indefinitely.

Shifting from necessity and urgency to the *willingness* of the patient to go into the hospital, we asked: "How did you yourself feel about it—were you *glad* to go into the hospital (have the operation), or were you *willing* to go (have it), or were you *somewhat against* the idea, or were you *definitely opposed* to going into the hospital (having the operation)?" Proxies were asked a slightly different question.⁴

⁴ The proxies were asked: "How did you yourself feel about it—were you very much *in favor* of (patient's) going into the hospital (having the operation), or did you just *accept* it, or were you somewhat *against* the idea, or were you *definitely opposed* to (his, her) going into the hospital (having the operation)?"

A reasonable interpretation of the pattern of responses in Tables 39 and 40 is that the American public has a remarkably great trust in hospitals and physicians. Only a very small minority were "somewhat against" or "definitely opposed" whereas over 90 per cent showed various degrees of acceptance and willingness. A review of the patients' and proxies' perceptions of how members of their immediate families felt about their going into the hospital indicates a high degree of concurrence with the decisions of the physicians and patients. The proxy respondents answering for family members (N = 731) overwhelmingly reported that 88 per cent of the admissions were "absolutely necessary." This is not a perfectly accurate measure of

TABLE 38

PERCEPTION OF PATIENT REGARDING PHYSICIAN'S
FEELING OF URGENCY FOR HOSPITALIZATION,
MASSACHUSETTS, 12 MONTHS, 1960-1961

Degree of Urgency	Total Sample
Total sample, excluding "not conscious".....	N = 1,227
Right away.....	77%
Few weeks or months.....	17
Eventually.....	4
Don't know.....	2
	100%

TABLE 39

DEGREE OF WILLINGNESS OF PATIENT AND PROXY'S WILL-
INGNESS FOR PATIENT TO GO INTO THE HOSPITAL AS
REPORTED BY PATIENTS AND PROXIES, MASSACHUSETTS,
12 MONTHS, 1960-1961

Degree of Willingness	Patients	Proxy Patients
Total patients answer- ing, excluding "not conscious".....	N = 1,227	N = 731
Very much in favor.....	28 } 91%	58 } 97%
Accepted it.....	63 }	39 }
Somewhat against.....	6 }	2 }
Definitely opposed.....	2 }	* }
Don't know.....	1 }	1 }
	100%	100%

* Less than one-half of one per cent.

public response to admission to the hospital, because those who were recommended for admission and did not go were not a part of this survey. Estimates from another study, however, indicate that this group is small.⁵

There are many allegations from physicians, hospital administrators, and insurance agencies that patients occasionally take the initiative in going into the hospital against the physician's judgment. A careful interpretation of responses to a group of questions bearing on this phenomenon would indicate, however, that for only a very small proportion of all patients, 1.4 per cent, could it be generalized that there was patient initiative.⁶

B. Worries About Entering The Hospital

The survey data further show that the majority of patients were not so entirely trusting of the medical establishment, or so casual about making use of hospital services, that they accepted the prospect of hospitalization without fear or worry. Patients who were interviewed were asked, "At the time (the doctor) told you, what one thing worried you most about going into the hospital?" Proxy respondents for children or for adults for whom they arranged hospitalization were asked, "What one thing worried you most about (*patient's*) going into the hospital?" Answers were recorded verbatim and coded into the categories shown in Table 40.

The differences in responses between patients and proxies reflect the fact that the proxy respondents were most often mothers of young children or relatives of very sick or aged patients who were entering the hospital. Thus, only 19 per cent of the proxies, as opposed to 33 per cent of the patients themselves, denied having any worries about the impending hospitalization. Proxies were more likely to worry about the patient's condition and response to treatment and, since the patients they were answering for were

⁵ In a survey conducted by Health Information Foundation and National Opinion Research Center in 1955 on attitudes of adults toward health and health services, this question was asked: "Did a doctor ever advise you to go to a hospital, but you decided not to go?" Eight per cent of a nationwide sample of adults (N = 2,375) answered "Yes." NORC Survey 367, Question 72.

⁶ A whole section of the questionnaire dealt with the period from the patient's first doctor visit till the time he was recommended to the hospital. Among the questions in this section were: "What did the doctor say the trouble was, when you first talked with him? Did he say then that you probably ought to go into the hospital? What did he say you should do about it? Did you talk to any other doctors about this condition? Why did you talk with (each)?"

Because evidence of patient initiative in seeking hospitalization might turn up on any of these questions, and possibly in the form of volunteered comments which would not be transferred to IBM cards, coders were instructed to scan this entire section for any evidence whatsoever that "Patient took initiative in hospitalization, doctor opposed it or merely went along with patient's wishes." Only 28 cases were so identified.

The 1.4 per cent is obviously a minimum figure, since other respondents could have taken the initiative without revealing it during the interview. The likelihood of this seems small, however, in view of the detailed nature of the questioning and the overall frankness of response.

generally children or non-employed adults, they were less likely to express worries about economic matters such as loss of pay. About one patient in six said he worried about how his or her spouse and children would make out at home; hardly any worried about their own loneliness or separation in the hospital. Over one-fourth of the proxies, on the other hand, worried about the patient's feelings of loneliness and separation; scarcely any were concerned about how they themselves would get along at home. For both groups, however, the general order of concerns was much the same: first, the patient's condition and response to treatment and second, the separation from family.

TABLE 40

PATIENT AND PROXY WORRIES ABOUT IMPENDING HOSPITALIZATION
MASSACHUSETTS, 12 MONTHS, 1960-1961

Type of Worry	Patients (N = 1,227)	Proxies (N = 559)
Fear of death, worried might not survive...	3%	8%
Fear, worry might have cancer.....	5	1
Fear, worry about other serious illness...	3	6
Fear, worry about what they might find..	4	3
Fear, worry about response to treatment..	7	15
Fear, worry about operation, surgery....	6	7
Fear, worry about pain, what they might do.....	4	1
Total mentions of medical fears.....	32%	41%
Worry about cost of doctor, hospital bills	7	2
Worry about loss of job, loss of pay.....	4	•
Worry about job, work, business generally.....	4	•
Total mentions of economic worries...	15%	2%
Worry about family at home.....	17	•
Worry about loneliness, away from family.....	•	28
Total mentions of family separation..	17%	28%
Worry about quality of hospital care, attention.....	•	6
Worry about missing social affairs, school..	2	1
Worry about length of hospital stay.....	1	•
Worry about miscellaneous things.....	2	4
Total mentions of other worries.....	5%	11%
Nothing, no worries, nothing special.....	33%	19%
Grand total (multiple answers permitted).....	102%	101%

• Less than one-half of one per cent.

The data shown in Table 40 were elicited by open-ended questioning which asked for the "one thing" the respondent worried about most. Since any additional worries were not likely to be mentioned in response to this question, and since the respondent may have overlooked certain worries unless he was reminded of them, interviewers next asked all respondents how much they worried about certain specific areas of concern. Patients and proxies for children or very sick adults were asked: "How much did you worry about (e.g., the cost of the hospital) at that time—a great deal, or a little, or not at all?" Proxy respondents for other adults were asked: "How much did the patient worry about the cost of the hospital at that time—a great deal, or a little, or not at all?"

In Table 41 it is seen that 14 per cent of the patients answering for themselves said they worried a great deal about the hospital costs at the time

TABLE 41

EXTENT TO WHICH PATIENT OR PROXY WORRIED ABOUT THE COST
OF THE HOSPITAL BEFORE ADMISSION, MASSACHUSETTS,
12 MONTHS, 1960-1961

Extent of Worry	Patients N = 1,227	Proxies N = 731
Great deal.....	14%	10%
A little.....	18	15
Not at all.....	68	73
Don't know.....	•	2
	100%	100%

• Less than one-half of one per cent.

they were first advised to enter the hospital, and a total of about one-third confessed some worry on this score. In response to further questioning, two-thirds of this one-third explained that they had no hospital insurance, or their insurance was inadequate, or they did not have the money for the hospitalization. Of the two-thirds who expressed no worry about hospital costs, three-fourths said their insurance would cover it. Proxy respondents were less likely to be worried about hospital costs. More of them explained that they were more worried about the patient and didn't think of money then. Table 42 shows the results of an identical question asked about "the cost of the doctor." Here only about one-fourth of both categories of respondent expressed any worry at all, their reasons for lack of concern paralleling those given for hospital costs.

Going to the hospital breaks the daily and weekly routine to which people are accustomed. Provisions have to be made regarding affairs at

home, on the job, at school, and so on. Still, only 16 per cent of the adult patients (again excluding those who were unconscious or "too sick to care") expressed a "great deal" of worry about "how things would go at home without you," and only 38 per cent said they worried at all about this. Most of the non-worriers explained that they were not really needed at home, their family was in good hands or perfectly capable of getting along without them for a brief period. About one in five of the group said they lived alone and there was no one to be concerned about, and about one in ten said they had made special arrangements for the care of the family and home. As shown in Table 43, women tended to worry more than men about "how things would go at home" and the nature of their worries also differed from those of men. Almost half of the female worriers

TABLE 42

EXTENT TO WHICH PATIENT OR PROXY WORRIED ABOUT
THE COST OF THE PHYSICIAN, MASSACHUSETTS,
12 MONTHS, 1960-1961

Extent of Worry	Patients	Proxies
	N = 1,227	N = 731
Great deal.....	9%	7%
A little.....	16	16
Not at all.....	75	75
Don't know.....	a	2
	100%	100%

a Less than one-half of one per cent.

on this score were concerned about how their children would get along in their absence. Men were more likely to worry about the financial affairs of the household.

Among those patients who were employed at the time, 12 per cent said they worried a great deal about their job when they had to go into the hospital, and 12 per cent more expressed some worry. The fact that three-fourths of the employed patients worried not at all about their jobs is explained by the apparent security they felt. Three out of four of the non-worriers said that their job would be kept open or they had sick leave or their employer was sympathetic. Of the remainder, some were self-employed or had their own business, some expected to be out only a short time, while still others said they could always find another job or were not dependent upon their job. Of those who did worry about their jobs, only half were concerned about loss of pay or employment. Most of the others

worried about what would happen while they were gone and about work piling up at their place of employment.

One-third of the patients who answered for themselves confessed to at least some worry about "what they might do to you" in the hospital, but the other two-thirds said they had no worries at all on that account. The unworried patients said they had full confidence in the physician and/or the hospital, that they had been through it before and knew what to expect, that their condition was a minor one and no cause for concern or, on the

TABLE 43

EXTENT TO WHICH ADULT PATIENTS WORRIED ABOUT HOW THINGS
WOULD GO AT HOME WITHOUT THEM, MASSACHUSETTS,
12 MONTHS, 1960-1961

EXTENT OF WORRY	PATIENTS		
	All	Male ^a	Female ^a
Total sample of patients answering, excluding "not conscious".....	N = 1,373	599	773
Great deal.....	16%	13%	19%
A little.....	22	21	22
Not at all.....	61	65	58
Don't know.....	1	1	1
	100%	100%	100%
Among all those who worried:			
Worried about children.....		17%	49%
Worried about household financial matters.....		19	3

^a NOTE: Includes 74 males and 98 females for whom proxy respondents answered (1,227 + 172 = 1,399). Excludes 12 males and 14 females who lived in institutions and for whom question was not applicable (1,399 - 26 = 1,373). Sex of one patient not known.

other hand, that they were so anxious for diagnosis or relief of their condition that they welcomed anything the hospital would do. The most common cause of worry was the prospect or possibility of surgery, but the next most frequent reason was sheer uncertainty or ignorance of what to expect. Others worried about their diagnosis or "what they might find," about the pain or discomfort of tests or treatment they would or might have to undergo, and about the prospects for their ultimate recovery.

C. Attitudes Toward the Hospital and Hospital Stay

Previous surveys of the feelings of patients toward the hospital, physicians, and nurses have been overwhelmingly favorable, although the dissi-

dent minority is large enough to be quite visible.⁷ Similar favorable attitudes were found in this survey. For general background the total sample of patients answering (N = 1,315) was asked: "Taking everything into consideration, what were some of the things you liked *most* about the care and treatment you got in the hospital?" To this question 89 per cent gave specific positive answers. To elicit unfavorable attitudes, the same sample was asked: "And what were some of the things you liked *least* about the care and treatment you got in the hospital?" Forty-nine per cent mentioned specific dislikes in answering this question. Clearly, favorable feelings are far more prevalent than unfavorable ones.

The total sample of patients answering (N = 1,315) was then asked to rate selected items in hospital care, such as food, room, personnel, service, and so on, as presented in Table 44. It is of interest that all attending personnel received approximately the same high rating. If we combine "excellent" and "good," all personnel received a favorable rating exceeding 90 per cent. The high proportion receiving the rating of "excellent," 67 to 70 per cent, would seem to be outstanding. The food and accommodation aspects of hospital care received an appreciably lower rating than personnel, but the combinations of "excellent" and "good" total from 72 per cent to 87 per cent depending on the item. Just what proportion of patients rating the hospital "just fair" or "poor" can be regarded as administratively tolerable and inherent in the situation is difficult to say. It would seem to be significant, however, from the standpoint of medical care that physicians, nurses and other personnel, and service given, in general rate higher than does the hospital's food or level of quiet. It would seem strange if the non-medical aspects of hospital care were more highly regarded than the professional services performed.

In this study there was an attempt to get the patient's perception of the appropriateness of his length of stay. Among the total sample of patients answering (N = 1,315), 12 per cent said they "could have left the hospital sooner" than they did, and 9 per cent said they "should have stayed longer." Among the proxy respondents, 4 per cent felt the patient should have left the hospital sooner, and 10 per cent that he should have stayed longer. All respondents were asked further: "How did the doctor feel about it—Did he think you should have left sooner or stayed longer than you did?" The significance of Table 45 is that an appreciable proportion of patients disagreed with their physicians as to leaving the hospital sooner. Although 12 per cent of the patients answering felt that they could have left the hospital sooner, only one per cent felt that their physicians thought so as

⁷ Eliot Freidson and Jacob J. Feldman, "The Public Looks at Hospitals," Health Information Foundation, Research Series Number 4.

TABLE 44
PATIENTS' RATINGS OF HOSPITALS ON SELECTED ITEMS, MASSACHUSETTS, 12 MONTHS, 1960-1961
Total sample of patients answering (N = 1315)

Patients' Ratings	Food	Room	Quiet	Quality of Doctors	Attitude of Doctors	Attitude of Other Personnel, Nurses and So on	Service Given
Excellent.....	33%	44%	39%	70%	70%	67%	61%
Good.....	39	43	43	21	21	27	27
Just fair.....	16	9	11	1	2	4	6
Poor.....	7	4	7	1	1	1	5
Don't know.....	5	*	*	7	6	1	1
	100%	100%	100%	100%	100%	100%	100%

* Less than one-half of one per cent.

well. Among the proxies there were also more who felt the patient could have left the hospital sooner than the physician wished. In any case, these areas of perceived disagreement between doctor and patient over length of stay might be regarded as the gray areas or leeways surrounding hospital administration. Relatively, these "gray areas" are usually small, but they provide rough approximations of how tightly or loosely the hospital admission and discharge systems are operating as seen by patients.

Common sense has it, backed by some evidence of differential admission rates, that the presence or absence of health insurance influences the use of the hospital. In the total sample of patients (N = 2,046) 77 per

TABLE 45

EXTENT TO WHICH PATIENTS FELT THEY SHOULD HAVE LEFT HOSPITAL SOONER OR STAYED LONGER, AND THEIR PERCEPTIONS OF THEIR DOCTOR'S FEELING, MASSACHUSETTS, 12 MONTHS, 1960-1961

APPROPRIATENESS OF LENGTH OF STAY	PATIENT'S FEELING		PATIENT'S VIEW OF DOCTOR'S FEELING	
	Patients Answering (N = 1,315)	Proxies (N = 661)	Patients Answering (N = 1,315)	Proxies (N = 661)
Yes, should have left sooner.....	12%	4%	1%	2%
Yes, should have stayed longer.....	9	10	8	2
No, neither.....	77	84	86	92
Don't know.....	2	2	5	4
	100%	100%	100%	100%

NOTE: Excludes 70 patients who died in the hospital.

cent had some kind of health insurance which covered all or part of their hospital bill. The total sample of patients and their proxies with hospital insurance (N = 1,573) were asked a series of questions regarding how the fact of having insurance might have influenced their use of the hospital, as seen in Table 46.

Small minorities, on the order of 5 per cent, felt they would not have gone to the hospital, would not have had so many tests, and would have left the hospital sooner if they had not had insurance. About the same proportions also said they did not know. The holding of hospital insurance appeared to have the greatest influence on the type of room accommodation. Some 20 per cent of the patients said they would have had a less expensive room had it not been for insurance. This figure is of significance in hospital care because it appears that the greatest impact of insurance as

seen by patients is on the accommodation aspects of the hospital. It is also, of course, conceivable that the patients believed that they might receive better professional service from physicians and nurses if doctors knew they were insured. Still, only 3 per cent of the patients with doctor bills and insurance believed that having insurance made any difference one way or the other in the amount or kind of physician's care they received (4 per cent did not know, and 93 per cent said no).

It will be recalled that 79 per cent of the patients (or their proxies) (Table 37) believed that their hospital admission was absolutely necessary. A common characteristic of human behavior is to attribute more justification to one's own behavior than to others. All respondents (N = 2,046) were asked: "Do you have any feeling that people often go to the hospital when it is

TABLE 46

EXTENT TO WHICH PATIENTS BELIEVED HAVING INSURANCE INFLUENCED USE OF THE HOSPITAL, MASSACHUSETTS, 12 MONTHS, 1960-1961

PATIENT BELIEF	TOTAL WITH HOSPITAL INSURANCE (N = 1,573)			
	Would Not Have Gone if No Insurance	Would Have Had Less Expensive Room	Would Not Have Had So Many Tests	Would Have Left Hospital Sooner
True.....	6%	20%	4%	6%
No, not true.....	91	75	88	89
Don't know.....	3	5	8	5
	100%	100%	100%	100%

not really necessary?" and "Do you have any feeling that people often do not go to the hospital when they really should?" Thirty-five per cent of the patients and their proxies felt that people often go to the hospital when it is not really necessary, but on the other hand 79 per cent believed that often people do not go when they really should. As a summary question, all patients and their proxies (N = 2,046) were asked: "Taking everything into consideration, would you say that people use hospitals *more* than they really should, or *less* than they really should?" Fourteen per cent felt that people use hospitals more than they should and 31 per cent less than they should; 41 per cent said: "about right" and 14 per cent did not know. It would seem that the weight of opinion is clearly in the direction of hospital care being justified.

A similar question was asked regarding surgery: "How about surgery—Do you have any feeling that people often get operations which are not

really necessary?" and "Do you have any feeling that people often do *not* get operations when they really should?" In Table 48 it is seen that an appreciably larger minority felt that other people often had surgery that was not really necessary, 14 per cent. And then in contrast, 60 per cent of the sample felt that people often do not get operations that are really necessary.

The patients' perceptions of the extent of unnecessary surgery were probed further by the question: "Taking everything into consideration, would you say there are too many operations performed today, or not enough?" In Table 49 a minority of 8 per cent of the patients and their

TABLE 47

PER CENT OF RESPONDENTS WHO FELT THAT PEOPLE OFTEN GO TO THE HOSPITAL WHEN IT IS NOT REALLY NECESSARY OR OFTEN DO NOT GO WHEN THEY REALLY SHOULD, MASSACHUSETTS, 12 MONTHS, 1960-1961

Patient Belief	People Often Go When Not Really Necessary	People Often Do Not Go When Really Should
Yes.....	35%	79%
No.....	56	16
Don't know.....	9	5
	100%	100%

TABLE 48

EXTENT TO WHICH PATIENTS (OR THEIR PROXIES) FELT THAT PEOPLE OFTEN GET OPERATIONS WHICH ARE NOT REALLY NECESSARY OR OFTEN DO NOT GET OPERATIONS WHEN THEY REALLY SHOULD, MASSACHUSETTS, 12 MONTHS, 1960-1961

Patient Opinion	Not Really Necessary	Not Get When Really Should
Total sample...	N = 2,046	N = 2,046
Yes.....	14%	60%
No.....	73	29
Don't know.....	13	11
	100%	100%

proxies felt that there are too many operations performed today, and fully one-fourth felt they could not answer this question.

TABLE 49

EXTENT TO WHICH RESPONDENTS FELT THAT THERE ARE TOO MANY OPERATIONS PERFORMED TODAY, MASSACHUSETTS, 12 MONTHS, 1960-1961

Patient Opinion	Patients
Too many.....	8%
About right.....	48
Not enough.....	19
Don't know.....	25
	100%

These then are the data by which attempts are made to add the dimension of the "patient as a person" to the usually stark statistical units used to measure hospital and physicians' services. The responses of patients are those found in a modern health services system such as in Massachusetts where hospital beds and physicians are not regarded as in critically short supply.

PART III
THE PHYSICIAN

VI. THE CHARACTERISTICS OF THE PHYSICIANS

All patients ($N = 2,046$) were queried as to their referring and attending physicians and these physicians were in turn interviewed. The physicians interviewed and reported here were those recommending the admission of 1,628 patients to the hospital (80 per cent of the patients interviewed) and an additional 505 to whom patients were referred in the hospital for a total of 2,133 interviews conducted. Because some physicians were interviewed about more than one patient, 1,339 individual physicians were involved, or 1.5 patients per physician. Among recommending physicians ($N = 1,628$) 72 per cent of the patients had the same recommending and attending physicians, and 28 per cent were referred to attending physicians only. The patients themselves ($N = 2,046$) reported proportions of 70 and 30 per cent, indicating close agreement between the patients and recommending physicians.

The gatekeepers to admission to the hospital are the recommending physicians and Table 50 shows the type of practice through which patients eventually admitted to the hospital are channeled in the course of the admission process by the two major types of admission.

Again, it is seen that the categories of individual practice, individual practice with pooled facilities, and partnership not entailing group practice account for the great majority of hospital admissions: 86 per cent of surgical admissions and 88 per cent of medical admissions. In general it is seen that the distribution by type of practice is practically the same for both surgical and medical admissions. It is of interest that the resident physician and intern in the hospital are involved in the recommendation for admission at all; most of their recommendations were for emergency cases.¹

The type of admission by the specialty of the recommending physician is also of interest to determine the relative importance of the various special-

¹ In pretest it was found that many of the admitting physicians in these instances were so in name only and had no personal knowledge of the case. They merely signed the case in or lent the use of their names. Thus, a resident or intern in the emergency room may examine an accident case and arrange for his admission and he becomes the "recommending" physician.

ties in referrals to the hospital. Table 51 shows that among recommendations for surgical admissions, general practice and surgical specialists account for 52 per cent of the recommendations. For medical admissions, general practice and internal medicine accounted for 70 per cent of the recommendations for admission.

In view of the current concern with admissions to hospitals primarily for diagnostic tests, it is of interest to reveal admissions for this purpose by the specialty of the recommending physician. Fourteen per cent of all admissions in this survey were for diagnostic tests according to the recommending physicians themselves.

As seen in Table 52 by far the greatest proportion of recommendations for diagnostic admissions came from general practitioners, 36 per cent. The general practitioners, however, do not recommend such admissions out of proportion to all their admissions, i.e., 33 per cent (Table 4). Overrepresentation was expected, because of the belief that general practitioners are

prone to refer patients for diagnostic procedures easily. Internal medicine bore out expectations when it is seen that this specialty group accounted for 22 per cent of all diagnostic admissions compared with 16 per cent of all admissions. Even so the difference is not great. In any case, 77 per cent of the diagnostic admissions are attributed to three specialty groups, and 58 per cent are attributed to general practice and internal medicine.

Of the total of 2,133 physician interviews obtained, the majority of respondents (55 per cent) both recommended the patient's admission and attended him in the hospital. About one-fifth (21 per cent) of the physician respondents recommended the patient's admission, but someone else was mainly in charge of his in-hospital care. About one-fourth (24 per cent) attended the patient in the hospital but were not responsible for his admis-

TABLE 50
TYPE OF ADMISSION BY RECOMMENDING PHYSICIAN'S
TYPE OF PRACTICE, MASSACHUSETTS,
12 MONTHS, 1960-1961^a

TYPE OF PRACTICE	TYPE OF ADMISSION ^b	
	Surgical (N=927)	Medical (N=656)
Individual practice	79%	81%
Individual practice, pooled facilities	6	7
Partnership, not group practice	1	—
Group practice in a part- nership	7	7
Salaried practice for a non-medical institution or industry	°	°
Fulltime salaried physi- cian in hospital	2	1
Resident physician in hos- pital	3	3
Intern in hospital	1	°
Other	1	1
	100%	100%

^a Based on 1,628 interviews with recommending physicians involving this number of patients. Some physicians were interviewed more than once.

^b Forty-five interviews were regarding patients who could not be classified as either surgical or medical.

^c Less than one-half of one per cent.

TABLE 51
TYPE OF ADMISSION BY RECOMMENDING PHYSICIAN'S
SPECIALTY, MASSACHUSETTS, 12 MONTHS,
1960-1961^a

SPECIALTY	TYPE OF ADMISSION ^b		
	Surgical (N=927)	Medical (N=656)	Total (N=1,583)
General practice	25%	43%	33%
Surgery	27	13	21
Internal medicine	9	27	16
Obstetrics, gynecology	6	3	5
Pediatrics	5	7	6
Urology	4	1	3
Otolaryngology	7	°	4
Ophthalmology	5	°	3
Orthopedics	5	2	3
Dentistry	8	—	5
Anesthesiology	1	2	1
Neurosurgery	1	1	1
Miscellaneous special- ties	1	3	2
	104%	102%	103% ^d

^a Based on 1,628 interviews with recommending physicians involving this number of patients. Some physicians were interviewed more than once.

^b Forty-five interviews were regarding patients who could not be classified as either surgical or medical.

^c Less than one-half of one per cent.

^d Some physicians reported more than one specialty.

NOTE: Definition of surgical or medical admission depends on whether the patient actually underwent a surgical procedure or not depending on hospital data. If surgery was performed, it is a surgical case. If no surgery was performed, it is medical.

sion. Table 53 shows the proportion of each specialty group falling into the three classifications and reveals great differences in how the various specialties relate themselves to the hospital. It is seen that urologists were most likely to be both the recommending and attending physician and pediatricians the least likely. (Because of the anomalous situation of the anesthesiologists, explained in the footnote in Table 53, they are excluded from consideration here.) It is to be expected that general practice, pediatrics, and

TABLE 52
ADMISSIONS FOR DIAGNOSTIC TESTS BY
RECOMMENDING PHYSICIAN'S SPECIALTY,
MASSACHUSETTS, 12 MONTHS,
1960-1961

Specialty	Diagnostic Tests (N = 225)
General practice.....	36%
Surgery.....	19
Internal medicine.....	22
Obstetrics, gynecology...	6
Pediatrics.....	6
Urology.....	4
Otolaryngology.....	1
Ophthalmology.....	1
Orthopedics.....	2
Dentistry.....	—
Anesthesiology.....	1
Neurosurgery.....	3
Other.....	2
	102% ^b

NOTE: The classification, diagnostic tests, has nothing to do with whether surgery was performed in the hospital. Thus, the cases in this table are included in the preceding table under either surgical or medical.

^a Less than one-half of one per cent.

^b Some physicians reported more than one specialty.

internal medicine would have a relatively high proportion of recommending physicians whose patients would be attended by someone else in the hospital. Further, it is to be expected that ophthalmology, otolaryngology, and surgery would have relatively high proportions of attending physicians whose patients would have been referred to the hospital by other doctors.

The foregoing data provide for the first time some idea of the differential impact of various specialties on the hospital. In view of the great current

interest in utilization review committees in hospitals, it would seem that the foregoing data provide useful information for the statistical weighting of reviews by specialty and differences in proportion of admissions, length of stay, and procedures.

The physicians interviewed in this survey would appear to carry exceedingly heavy patient loads according to estimates given by the physicians themselves. Twenty-one per cent of the patients were associated with physicians who reported that they saw less than 50 patients in office, home, and hospital during an average week, another 21 per cent were associated with

TABLE 53
RANK ORDER OF PROPORTION OF PHYSICIANS BY SPECIALTY WHO WERE BOTH
RECOMMENDING AND ATTENDING PHYSICIANS, AND ALSO RECOMMENDING
AND ATTENDING ONLY, MASSACHUSETTS, 12 MONTHS, 1960-1961

Specialty	N	Recommend- ing and Attending	Recommend- ing Only	Attending Only
Total.....	2,133 ^a	55%	21%	24% = 100%
Urology.....	59	68	3	29
Orthopedics.....	75	64	7	29
Obstetrics & gynecology...	94	63	17	20
Dentistry.....	89	63	18	19
General practice.....	569	59	32	9
Ophthalmology.....	87	55	5	40
Surgery.....	524	54	10	36
Otolaryngology.....	123	50	5	45
Neurosurgery.....	31	49	19	32
Internal medicine.....	341	48	28	24
Pediatrics.....	135	45	28	27
Anesthesiology ^b	23	44	56	—
Other.....	46	50	26	24

^a In some instances doctors claimed more than one specialty but are counted only once in the total.

^b The data for this specialty seem anomalous because common sense would have it that anesthesiologists would be primarily attending physicians. Apparently, these anesthesiologists engage in other aspects of medicine in addition to anesthesiology.

physicians who saw 50 to 74 patients a week, 14 per cent were handled by physicians who saw 75 to 99 patients a week, 20 per cent 100 to 124 patients a week, 15 per cent 125 to 199 patients a week, and 9 per cent 200 or more patients a week. On the high side, then, 24 per cent of the patients were associated with physicians who estimated they saw 125 patients and over in the office, home, and hospital.

The physicians were also asked to estimate the number of patients they hospitalized during the last year. Equally heavy patient loads were revealed here. Over one-half of the patients (51 per cent) were associated with physicians who hospitalized 200 or more patients during the last year. Seventeen

per cent hospitalized from 250 to 299 patients, and 10 per cent 500 patients or more. Only 17 per cent of the patients were associated with physicians who hospitalized less than 75 patients.

Other data were obtained on age, and date of graduation from medical school. The vast majority of patients, 79 per cent, were associated with physicians between 35 and 60 years of age. Nine per cent of the patients were seen by physicians 60 years of age and over, and 3 per cent by physicians 65 and over.

Over three-quarters of the patients saw physicians who received their medical degrees between 1930 and 1950. Almost one-fourth of the patients saw physicians who had received their degrees between 1940 and 1945. Over 30 per cent of the physicians had received their degrees since 1945. This would indicate that the physicians taking care of hospitalized patients were overwhelmingly products of modern and scientific medical education.

VII. PROFILE OF PHYSICIAN VISITS

A combination of circumstances made it inevitable that several months would elapse between the patient's discharge and the date of the interview with his physician. Patients' names were drawn monthly from a sample of the prior month's discharges, so that even when no delay was encountered in finding and interviewing the patient, he was likely to be out of the hospital for a month. Assignments of doctors to interview were also made once a month, from the names appearing on the previous month's completed interviews with patients. Again, assuming no delay in obtaining an appointment with the physician, approximately two months would have elapsed since the patient's discharge from the hospital. Where there was delay in interviewing either the patient or the physician, the time lapse was, of course, longer; and for recommending physicians, whose recommendation to the patient to enter the hospital may have been given six months or more before his actual admission, the interview with the doctor may have concerned events which occurred as long as twelve months ago. As seen in the previous chapter, these physicians have large patient loads, and their ability to remember the details about the patients surveyed may well be pondered. In this connection all recommending physicians were asked: "How well acquainted were you with the patient *before* (he, she) *first* came to you with this condition—very well acquainted, fairly well, or hardly at all?"

In Table 54 it is shown that the recommending physicians were acquainted with approximately one-half of the patients eventually admitted to the hospital and the other half of the patients were not known to the physicians. This is the first time there is some evidence of how well physicians were acquainted with patients who were eventually hospitalized and before the first visit leading to hospitalization. Considering the value attached to having a regular and personal physician, the fact that recommending physicians were acquainted with only one-half of the patients they sent to the hospital before the first visit would indicate that a large proportion of people are not known by the physician prior to dire need for care. This observation is mitigated by the fact that a third of the patients in this

survey were emergency cases seen by the nearest physician or in emergency rooms and that many others were referred by their own physicians to specialists who hospitalized them. Further, other surveys have shown that most people mention a regular physician.²

After the patient was discharged, a very high proportion, over 90 per cent, of recommending physicians (the great majority of whom also attended) remembered the patient fairly well or very well. Only 8 per cent of the patients were remembered "not well at all."

TABLE 54

EXTENT TO WHICH RECOMMENDING PHYSICIAN WAS
ACQUAINTED WITH THE PATIENT BEFORE THE FIRST
VISIT, MASSACHUSETTS, 12 MONTHS, 1960-1961

Extent of Acquaintance	Per Cent (N = 1,628)
Very well.....	35%
Fairly well.....	15
Hardly at all.....	6
Not at all.....	44
	100%

TABLE 55

EXTENT TO WHICH RECOMMENDING PHYSICIAN
REMEMBERED THE PATIENT, MASSACHU-
SETTS, 12 MONTHS, 1960-1961

Extent of Memory	Per Cent (N = 1,628)
Very well.....	69%
Fairly well.....	23
Not well at all.....	8
	100%

It is of interest and understandable that the physician who only attended the patient did not remember the patient as well as the recommending physician. Presumably, the recommending physician has a relationship which is more likely to be continuous prior to admission and after discharge. It is seen in Table 56 that the physician who attended only was less likely to remember the patient "very well" and more likely to remember the

² Jacob J. Feldman. *The Dissemination of Health Information, A Case Study in Adult Learning*, Aldine Publishing Company, Chicago, 1966.

patient "fairly well" and "not well at all" compared with the recommending physician. Also, doctors were encouraged to consult their records. The foregoing data on the extent to which the physicians remember their patients after some time lapse do indicate a rather high level of recall, particularly when buttressed by the information on the patient the interviewer can share with the physician being interviewed.

Henceforth in this chapter an attempt will be made to reveal the patterns of contact between the physicians and patients prior to admission to the hospital and what the physician said he did for the patient. These patterns cannot be presented simply, but it is hoped that they can nonetheless be presented in an orderly enough manner to give some idea of the relationship

TABLE 56

EXTENT TO WHICH PHYSICIAN WHO ATTENDED ONLY
REMEMBERED PATIENT, MASSACHUSETTS,
12 MONTHS, 1960-1961

Extent of Memory	Per Cent
Total who attended only.....	N = 505
Very well.....	45%
Fairly well.....	31
Not well at all.....	24
	100%

of the physicians and patients to the general hospital. There are patterns of physicians' decisions which reveal the weighing of alternative sites of treatment.

The recommending physicians reported that 30 per cent of all patients eventually sent to the hospital were admitted on the same day that the doctor first observed the signs of the condition (Table 57). For 49 per cent of the patients, this hospitalization occurred less than a year after the first visit, and for 21 per cent a year or more had elapsed since the signs of the condition were first observed.

As in the interview with patients, for this latter group of "long-term" cases it was necessary to establish a "Starting Date" for this particular hospitalization. Therefore, when the physician said he had observed the first signs of the patient's condition one year or more before the Admission Date, he was asked: "On what date did you first see (patient) in connection with this recent episode, which brought about this hospitalization?"³ Ques-

³ If the doctor denied any recent episode and said he had been seeing the patient right along, he was asked, "About when was it that you first started thinking that this hospitalization might be necessary?"

tioning about the intervening time period revealed that in exactly half of these long-term cases the physician had recommended hospitalization for the condition at least once before the start of the most recent episode and that, of those for whom hospitalization had been recommended, 69 per cent obeyed all recommendations, 28 per cent refused to, and 3 per cent followed the recommendation on one occasion but declined on another. For one-fourth of the long-term cases, the Starting Date as given by the physician coincides with the Admission Date, indicating a sudden and serious flare-up of the long-standing condition which resulted in immediate admission.

TABLE 57

TIME INTERVALS BETWEEN DATE PHYSICIAN FIRST OBSERVED SIGNS OF CONDITION AND DATE OF ADMISSION, MASSACHUSETTS, 12 MONTHS, 1960-1961

Time Interval	Per Cent
	N = 1,628
Date physician first observed signs of condition was same as the date of admission.....	30%
Date physician first observed signs of condition was less than a year before admission.....	49
Date physician first observed signs of condition was a year or more before admission.....	21
	100%

The addition of this latter group to the "same-day emergency" classification increases the proportion of patients in this group from the 30 per cent shown in Table 57 who were hospitalized the same day the first signs of their condition were observed, to the 36 per cent shown in Table 58—this latter figure including also those patients with long-term conditions which suddenly became acute. The remainder, representing 64 per cent of the total sample, were non-emergency and, for these, physicians were asked: "Now when you saw (patient) on (starting date), did you recommend hospitalization?" As seen in Table 58, in almost two-thirds of these non-emergency cases (64 per cent), the physician advised hospitalization the first time he examined the patient or, if a long-term condition, the first time he saw him in connection with this most recent episode. In a little over one-third of the non-emergency cases (representing 23 per cent of the total

sample) the physician did *not* recommend hospitalization on this first visit, but gave other advice.

The nature of this advice is shown in Table 59 which reveals that a wide variety of recommendations were made. The recommendation that may be of most interest is for the 15 per cent of patients (with some possible overlap from other recommendations) who were advised to have tests or X-rays or get a check up without going to the hospital.

TABLE 58

EXTENT TO WHICH RECOMMENDING PHYSICIAN RECOMMENDED HOSPITALIZATION ON FIRST VISIT, MASSACHUSETTS, 12 MONTHS, 1960-1961

Recommendation	All	Non-Emergency
	N = 1,628	N = 1,042
Yes.....	41%	64%
No.....	23	36
Same-day emergency.....	36	—
	100%	100%

TABLE 59

WHAT PHYSICIANS RECOMMENDED ON FIRST VISIT FOR PATIENTS NOT RECOMMENDED FOR ADMISSION AT THAT TIME, MASSACHUSETTS, 12 MONTHS, 1960-1961

Recommendation	Per Cent
	N = 371
Have tests or X-rays, get a checkup..	15%
See another physician.....	3
Prescribed or gave medical treatment.....	20
Prescribed or gave medicine, pills...	50
Prescribed special diet.....	6
Advised home remedies or treatment	4
Rest, quiet, stay at home, stay in bed.	16
Advised change of regimen.....	2
Wait and see, keep an eye on it....	9
Miscellaneous.....	2
Don't know, don't remember, vague answer.....	3
Multiple answers.....	130%

Since there is rather intense interest in the extent to which diagnostic services are used in and out of the hospital, the physicians were queried regarding the use of such services for patients for whom hospitalization was not recommended on the first visit. It can be seen in Table 60 that 30 per cent of the patients had tests or X-rays or both out of the hospital indicating that there is an appreciable amount of such work done outside of the hospital and before hospital admission.

Further, there was quite a bit of contact between those patients who were not recommended for hospital care on the first visit and their physicians. Table 61 shows that for two-thirds of the patients not immediately recommended for hospitalization, the physician did not even *consider* hos-

TABLE 60
EXTENT TO WHICH PATIENT RECEIVED DIAGNOSTIC
TESTS OR X-RAYS BETWEEN FIRST VISIT AND DATE
RECOMMENDED FOR HOSPITALIZATION, MASSACHU-
SETTS, 12 MONTHS, 1960-1961

Tests and X-Rays	Per Cent
	N = 371
Yes, received tests but no X-rays . . .	14%
Yes, received X-rays but no tests . . .	12
Yes, received both tests and X-rays .	4
No, didn't receive either tests or X- rays	68
Don't know	2
	100%

pitalization before he finally got around to recommending it. And that, of those who did consider it, the reasons for postponing the recommendation were overwhelmingly medical rather than non-medical.

To obtain some idea of the pressure on hospital facilities and the possibility of waiting lists, the physicians were queried about the interval of time between the date a bed was reserved at the hospital and the patient's admission to the hospital. Judging by the distribution in Table 62, it would seem that there is relatively little waiting for hospital beds in Massachusetts. If we exclude from the percentage base those physicians who could not remember or who did not themselves make the reservation, it is seen that the majority of the non-emergency patients (52 per cent) were admitted within four days after the reservation for a bed. In fact, 30 per cent were admitted within one day after the reservation. At the other extreme 14 per cent of the

TABLE 61
NUMBER OF TIMES PHYSICIAN TALKED WITH PATIENT
OR HIS PROXY BETWEEN FIRST VISIT AND THE TIME
PHYSICIAN FIRST RECOMMENDED HOSPITALIZA-
TION, MASSACHUSETTS, 12 MONTHS, 1960-1961

Number of Times	Per Cent
	N = 371
Number of Times	
None	21%
Once	16
Twice	17
Three	14
Four	13
Five or six	8
Seven or more	11
	100%

TABLE 62
INTERVAL BETWEEN MAKING A RESERVATION FOR A HOSPITAL BED AND
DATE OF ADMISSION, EXCLUDING SAME-DAY EMERGENCY PATIENTS
MASSACHUSETTS, 12 MONTHS, 1960-1961

Length of Waiting Time for Hospital Admission	All* (N = 881)	Definite Interval Given (N = 670)
Same as date of admission	10%	13%
One day before admission	13	17
Two days before admission	9	11
Three or four days before admission	8	11
Five, six or seven days before admission	15	20
Eight to fourteen days before admission	10	14
Fifteen to twenty-one days before admis- sion	5	6
Twenty-two to thirty days before admis- sion	2	3
More than thirty days before admission	4	5
Didn't make arrangements, some other physician did	12	—
Don't know, don't remember	12	—
	100%	100%

* Excluding 747 same day emergency cases.

patients waited fifteen days or more after the reservation was made. At any rate, whether immediately or only after intervening visits and therapy, the physician did recommend that the patient be hospitalized. Excluding same-day admissions, 25 per cent were admitted one to three days after the recommendation, but 75 per cent delayed admission four or more days. Their reasons are given in Table 63.

The recommending physicians were queried about the main reason for delays in admission beyond four days between the recommendation for a bed and the admission date. It will be recalled that 40 per cent of the patients (excluding same-day emergency) were admitted within four days after the reservation for a bed had been made. It was felt that a three-day interval was hardly a delay considering the personal and professional arrangements that needed to be made in preparing for hospital admission, and that reasons for delay beyond three days would have some meaning. It is seen in Table 63 that there were a variety of overlapping personal and professional reasons for delay. This table would seem to give the impression that there are few delays because of unavailability of beds for elective admissions although for 37 per cent of the patients it was reported that they "had to wait for a bed, took time for hospital arrangements." These are probably procedural reasons rather than the actual unavailability of a bed. There were also delays on the part of the patient in rearranging his affairs. For 13 per cent of the patients there were delays because they "had to arrange care of home, family, or business" and 11 per cent of the patients waited for "more convenient time." It is also of interest that 19 per cent of the patients were "delayed for health or medical reasons" indicating that there are medical reasons for *delaying* hospital care as well as for hastening admission.

Again the recommending physicians were queried regarding the use of diagnostic services between the date hospitalization was recommended and the actual date of admission. Of those whose admission was delayed four or more days, it was found that 18 per cent had received tests or X-rays during this interim indicating that there is an appreciable amount of diagnostic workup outside of the hospital even though the patient is eventually hospitalized. Up to now we have been describing the actions of the recommending physicians. Now, with the patient admitted to the hospital, the focus shifts to the attending physicians—those mainly responsible for the patient's care in the hospital. Interviews were obtained with 1,683 such physicians, most of whom were the same as the recommending physicians.

Presumably physicians establish rule of thumb criteria for length of hospital stay by diagnosis, surgical and medical admissions, age and so on and thereupon give the patients some idea of how long they might expect to

stay in the hospital. All *attending* physicians (since their decisions were necessary for discharge of the patient) were asked: "At the time the patient was admitted to the hospital, about how many days did you expect (he, she) would stay, given (his, her) age and diagnosis? That is, what is your usual experience with such cases?" When compared with actual length of stay, it was found that 16 per cent stayed more than two days longer than expected, and 13 per cent of the patients stayed more than two days less than expected. In 71 per cent of the cases the actual length of stay was within two days of the physician's expectation at time of admission.

TABLE 63
MAIN REASON ACCORDING TO RECOMMENDING PHYSICIAN FOR DELAY
IN PATIENT'S ADMISSION TO THE HOSPITAL, MASSACHUSETTS, 12 MONTHS, 1960-1961

Reasons	Per Cent
	N = 659
Awaited physician's convenience or availability.....	8%
Had to wait for a bed, took time for hospital arrangements.....	37
Delayed for health or medical reasons.....	19
Wanted to avoid losing time at work or at school.....	5
Had to arrange care of house, family or business.....	13
Waited for more convenient time.....	11
Physician wanted other medical opinion first.....	3
Patient afraid, reluctant, kept putting it off.....	7
Financial reasons.....	3
Miscellaneous reasons for delay.....	4
Don't know, vague or irrelevant answers.....	12
Multiple answers.....	122%

The attending physicians were queried about how much notice was given the patients regarding their day of discharge. In Table 64 it is seen that 63 per cent of the patients were given a day or less notice, 18 per cent were given two days, and another 18 per cent more than two days' notice before discharge.

The attending physicians were asked if they felt the patient could have left the hospital sooner or should have stayed longer. The physicians reported that in their judgment 4 per cent of the cases could have left sooner, and 6 per cent should have stayed longer. (Eighty-nine per cent were judged to have stayed the right length of time, and for 1 per cent the doctor had no opinion.) It can be seen that the first two percentages practically cancel each other out.

Some impression was desired as to the extent to which attending physicians felt home conditions had an effect on the patient's length of stay.

The physicians were asked: "Do you think (he, she) might have gone home sooner, or stayed longer, if the home situation had been different?" Table 65 shows that for the great majority of patients, 79 per cent, their home situation was felt by the physicians to have no bearing on the length of stay. According to the doctors, 7 per cent of the patients might have gone home sooner if their home situation had been appropriate and 6 per cent might have stayed longer if their home situation had not been appropriate.

One hears frequently that faulty scheduling of services in hospitals causes many patients to stay in the hospital longer than necessary. The attending physicians were asked about this: "And how about the scheduling in the hospital—Were there any delays in carrying out the study or

TABLE 64

HOW MUCH NOTICE PHYSICIAN GAVE PATIENT
BEFORE DISCHARGE, MASSACHUSETTS,
12 MONTHS, 1960-1961

Notice of Discharge	Per Cent
	N = 1,630 ^a
The same day, day of discharge . . .	17%
The day before, night before	46
Two days before, a day or two	18
More than two days before discharge	18
Didn't say, left it to patient	1
	100%

^a Excludes deaths.

TABLE 65

EXTENT TO WHICH ATTENDING PHYSICIAN FELT
PATIENT'S HOME SITUATION AFFECTED THE LENGTH
OF STAY, MASSACHUSETTS, 12 MONTHS, 1960-1961

Effect of Home Situation	Per Cent
	N = 1,607 ^a
Yes, might have gone home sooner . .	7%
Yes, might have stayed longer	6
No, home situation made no differ- ence	79
Don't know	8
	100%

^a Excludes deaths and transfers.

treatment of this patient in the hospital which might have delayed the date of discharge? (If yes) What was that? In what way?"

According to the attending physicians' impressions, there were no delays in the hospital for 97 per cent of the patients (Table 66). Of the remainder for which delays were reported, 1 per cent were attributed to delays in lab work, tests, and X-rays, 1 per cent to delays because of the patient's condition, and 1 per cent to delays caused by a holiday or weekend.

TABLE 66

EXTENT TO WHICH SCHEDULING IN THE HOSPITAL
AFFECTED PATIENT'S LENGTH OF STAY ACCORDING
TO ATTENDING PHYSICIANS, MASSACHUSETTS, 12
MONTHS, 1960-1961

Reasons for Delay	Per Cent
	N = 1,607 ^a
No, none, no delays at hospital.	97%
Delays at hospital owing to patient's condition	1
Delays because physician was not im- mediately available	*
Delays in lab work, tests, X-rays . . .	1
Delays because of holiday or week- end	1
Miscellaneous reasons for delay at hospital	^b
	100%

^a Excludes deaths and transfers.

^b Less than one-half of one per cent.

If the physicians' impressions are correct, it is clear that a very small fraction of the average length of stay can be attributed to delays in hospital scheduling, given this type of hospital service structure and staffing.

VIII. PHYSICIAN'S JUDGMENT AND DISCRETION

The patient exercises judgment and discretion whether or not to seek physician's services, and these patterns of judgment and discretion were presented in the section on the patient. Once the patient has sought physician's services, the patient's judgment and discretion are greatly reduced and the patient then begins to follow the physician's judgment and discretion. The clear impression from the evidence in this survey is that patients overwhelmingly tend to follow physicians' recommendations regarding hospital related physicians' services, as reported by both patients and physicians.

In this chapter will be presented the recommending physicians' judgments regarding the degrees of necessity and urgency of admitting surgical and medical patients to the hospital. It will be seen how the physician behaves within the context of alternatives, relatively adequate volume of hospital facilities, level of medical care and standard of living in a state like Massachusetts. It will be seen what proportion of admissions were regarded by the physicians as unequivocal and what proportions were regarded as quite discretionary. For the first time, then, there will be presented data on patterns of judgment and discretion as perceived by physicians of their own patients after the decisions had been made.

Historically, the general hospital was designed for surgical patients; later there was a great expansion in the admission of medical and obstetrical cases; still later, as medical diagnostic technology developed, more patients were admitted mainly for diagnostic purposes. The approximate dates for this classification can be: surgical patients after 1890; medical patients after 1920; obstetrical patients after 1930; and diagnostic admissions after 1945. It is self-evident that each classification of patients entails different equipment, types of medical specialties, and organizational structure of the hospital. Further, the diagnostic and age-sex composition vary considerably among the classifications.

In Massachusetts during the 12-month survey period 1960-1961, excluding obstetrical cases for the reasons mentioned earlier, surgical ad-

missions accounted for almost one-half of the patients (49 per cent), medical treatment for 35 per cent and diagnostic tests for 14 per cent (Table 67). These proportions are based on the recommending physicians' statements of the main purpose of the admissions. The new datum is the proportion of patients who were admitted mainly for diagnostic purposes. These groups will be examined in detail later.

TABLE 67
TYPE OF ADMISSION TO THE HOSPITAL AS REPORTED
BY THE RECOMMENDING PHYSICIAN, MASSACHU-
SETTS, 12 MONTHS, 1960-1961

Type of Admission	Per Cent
	N=1,628
Surgery.....	49%
Medical treatment.....	35
Diagnostic tests.....	14
Other.....	2
Tests involving a surgical procedure.....	^a
	100%

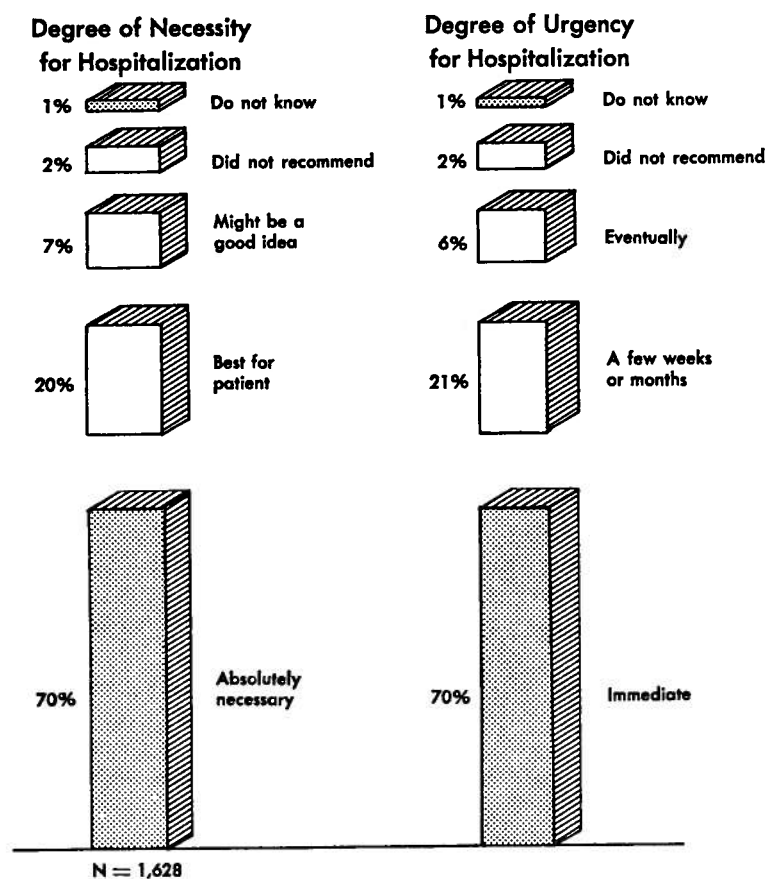
^a Less than one-half of one per cent.

A. All Patients

For all patients the recommending physicians were asked: "How *strongly* did you recommend hospitalization (or surgery) then—that is, did you advise that it was *absolutely necessary*, or did you say (he, she) would be *much better off* going to the hospital (having the operation), or did you just suggest that it might be a good idea?" The answers are shown in the first bar in Chart I.

It is of interest that the physicians felt that 70 per cent of all the admissions were "absolutely necessary," and that in another 20 per cent of the cases the patient would be "much better off" in the hospital. For another 7 per cent of the patients the physicians felt "it might be a good idea" to be in the hospital. The 2 per cent whom the physicians did not recommend (36 patients and 2.2 per cent of the total) were largely of three types: (1) the physician said he did not recommend hospitalization; he just went along with the patient's desire to be hospitalized; (2) the physician said he merely referred the patient, usually to a specialist (and the patient considered that a hospital recommendation since that is where the specialist put him);

Chart I
Attitudes of Recommending Physicians toward
Degree of Necessity and Urgency for Hospitalization
Massachusetts, 12 Months, 1960-1961



and (3) the physician said someone else recommended hospitalization and the patient was merely referred to him (but the patient considered him the one who recommended hospitalization.)

Regarding those patients (30 per cent of the total) whom it was *not* deemed "absolutely necessary" to hospitalize, the physicians were queried as to what the alternatives might be. A review of their answers (Table 68) indicates the physician would continue to treat or prescribe for about half of these patients at home, in the office, or in the out-patient department. For something like another 40 per cent, the physicians felt they could do nothing unless the patients were hospitalized, although it might be inferred that these cases were not urgent medically.

TABLE 68
ALTERNATIVES TO HOSPITALIZATION FOR PATIENTS WHOSE ADMISSION
WAS NOT ABSOLUTELY NECESSARY ACCORDING TO RECOMMEND-
ING PHYSICIAN, MASSACHUSETTS, 12 MONTHS, 1960-1961

Alternatives to Hospitalization	Per Cent
N = 482	
Medication or some form of medical treatment.....	13%
Use of some medical appliance or contrivance.....	5
Care or treatment at home instead.....	19
Care or treatment in office or out-patient department instead.....	18
Do nothing: take chances.....	5
Do nothing: put up with pain, discomfort.....	11
Do nothing: remain impaired.....	8
None, no alternative, or temporary postponement.....	17
Miscellaneous alternatives.....	1
Vague or irrelevant answers.....	6
Multiple answers.....	103%

The question of "necessity" was also tabulated by length of stay in the hospital. It is seen in Table 69 that generally the longer the length of stay the more likely was the physician to express the judgment that the hospital admission was absolutely necessary. It would then appear that the relatively short-stay cases imply much greater range of professional discretion as to necessity than long-stay patients. It follows that in the event of tightening controls on hospital admissions and length of stay, the emphasis should be on short-stay admissions rather than long-stay admissions.

In addition to length of stay another dimension in relation to degree of necessity for hospital admission was the age of the patient. Hospital admissions for the very young and the old were more likely to be regarded as "absolutely necessary" than for the age groups in between (Table 70).

Again, if admission controls were applied with reference to the physicians' judgments in this survey, the hospital population would include more of them and the average length of stay would be longer than today.

In addition to necessity, the physicians were also queried regarding urgency, a criterion relating seriousness to immediate or later need for hospitalization. They were asked: "And how *urgent* did you say it was—Did you advise (him, her) to go to the hospital, (have the operation) right

TABLE 69

LENGTH OF STAY BY DEGREE OF NECESSITY FOR HOSPITALIZATION ACCORDING TO RECOMMENDING PHYSICIAN, MASSACHUSETTS, 12 MONTHS, 1960-1961

LENGTH OF STAY	N	PHYSICIAN SAID				
		Hospital Absolutely Necessary	Patient Much Better Off in Hospital	Hospital Might Be Good Idea	Did Not Recommend At All	Don't Know
0-1 days.....	149	65%	26	4	4	1 = 100%
2-3 days.....	362	59	26	10	4	1
4-5 days.....	222	62	24	9	3	2
6-7 days.....	218	76	17	6	1	—
8-14 days.....	393	75	19	4	1	1
15-21 days.....	120	79	14	5	2	—
22-30 days.....	77	83	10	4	3	—
31 or more days....	80	89	5	2	2	2

TABLE 70

DEGREE OF NECESSITY FOR HOSPITALIZATION REPORTED BY RECOMMENDING PHYSICIANS BY AGE OF PATIENT, MASSACHUSETTS, 12 MONTHS, 1960-1961

Physician Said	Under 5 (N=154)	5-14 (N=203)	15-24 (N=145)	25-34 (N=158)	35-44 (N=205)	45-54 (N=246)	55-64 (N=203)	65-74 (N=183)	75-up (N=125)
Absolutely necessary	75%	64%	71%	67%	66%	67%	69%	79%	82%
Much better off...	22	25	18	21	23	21	22	15	10
Might be good idea.....	2	7	7	8	7	8	7	4	6
Did not recommend	1	4	3	3	2	3	1	1	2
Don't remember.	—	—	1	1	2	1	1	1	—
	100%	100%	100%	100%	100%	100%	100%	100%	100%

away, or did you say (he, she) could put it off for a few weeks or months, or did you just say that (he, she) ought to go (have it) eventually?"

Reference again to Chart I, second bar graph, shows that 70 per cent of the patients were regarded by the physicians as needing to be admitted to the hospital immediately, and 21 per cent could wait for a few weeks or months, and 6 per cent should be sent to the hospital eventually. The patterns of physician judgments emerging from the criteria of "absolute necessity" and "urgency" reveal the options that physicians work with in the context of the contemporary health services structure.

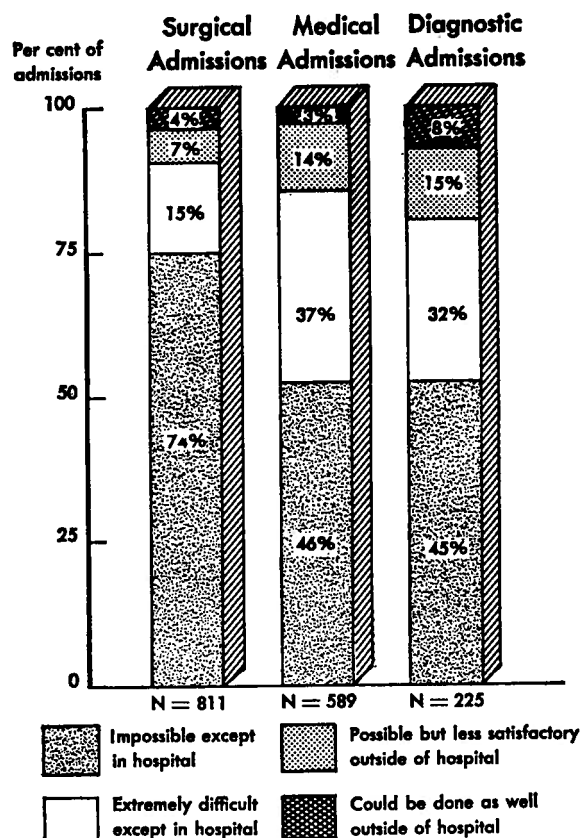
B. Surgical Patients

The physicians who recommended patients for surgery (N = 811) were queried regarding the possibility of having had the operation performed other than in the hospital. The question was directed to the place where surgery would take place, and not regarding the need for the surgery itself. In Chart II, first bar graph, it is seen that for 74 per cent of the patients who had surgery the physicians felt that it was impossible to perform the surgery except in the hospital, for another 15 per cent of these patients the physician felt it was possible outside of the hospital, but extremely difficult, and for the remaining 11 per cent of the surgical patients it would seem that the surgery could have been done outside of the hospital, certainly for 4 per cent of the patients. It can then be inferred that 74 per cent of the surgical patients comprised the hard core who needed unequivocally to be in the hospital. There remains a gray area of 15 per cent of the surgical patients whom the physician would much prefer to hospitalize. It would then appear that 11 per cent of the patients comprise a gray-white to white area where the patient could have had the surgery performed outside of the hospital, but in the context of alternatives the physician decided to use the hospital anyway.

The physicians were asked for reasons for preferring admissions to general hospitals when alternative treatment sites might have been used. Twenty-six per cent of the surgical patients were in this category. In Table 71, first column, it is seen that for 80 per cent of these surgical patients, the hospital was preferred by the physicians for medical reasons such as better facilities for treating the condition. For 22 per cent of these patients the hospital was preferred because of the personal characteristics of the patient in combination with the condition, and for 8 per cent of the patients the hospital was preferred because of situational factors external to the patient.

The physicians' estimates of the possibility of performing the surgery outside the hospital were tabulated by age of the surgical patient. Generally it is seen, as in Table 72, that the older the surgical patient the more

Chart II
Classification of Hospital Admissions
by Possibility of Outside Treatment
Massachusetts, 12 Months, 1960-1961



likely the physician felt that it was "impossible to perform this surgery except in the hospital." It can be reasonably inferred that if admission controls were established for surgical patients, the hospitalized surgical patients would become older.

In addition to querying the recommending physicians regarding the degree of necessity in using the hospital instead of some other site for the surgical operation, the physicians were also asked about their usual handling of the kind of case they were being questioned about. The physicians were in effect asked to generalize from their experiences. In Table 73 it is seen that for three-fifths of the surgical patients, the physicians "always insist on surgery in this kind of case." For 22 per cent of the surgical pa-

TABLE 71
REASONS GIVEN BY PHYSICIANS FOR ADMISSIONS TO GENERAL HOSPITALS
WHEN ALTERNATIVE TREATMENT SITES MIGHT HAVE BEEN
USED, MASSACHUSETTS, 12 MONTHS, 1960-1961

Reason	Surgical Admissions (N = 210)	Medical Admissions (N = 589)	Diagnostic Admissions (N = 121)
Hospital preferred for medical reasons, offered better facilities for treating this condition.....	80%	83%	76%
Hospital preferred because of personal characteristics of this patient: age, physical condition, personality, emotional and psychological factors.....	22	15	17
Hospital preferred because of situational factors: financial reasons, home situation, etc.....	8	20	20
Other.....	—	2	4
Totals, multiple reasons.....	110%	120%	117%

tients the physicians expressed the opinion that surgery would usually be insisted on, but there are exceptions. For 14 per cent of the surgical patients it would appear that physicians are completely discretionary as to what they might recommend.

C. Medical and "Other" Patients

The category of patients who were recommended to the hospital for medical treatment presents quite different patterns of physician perceptions from surgical patients. It is seen in Chart II, second bar graph, that physicians exercise much greater discretion in the hospitalization of medical patients than of surgical patients. It is noted that physicians felt that for 46

TABLE 72

SURGICAL ADMISSIONS BY POSSIBILITY OF SURGERY OUTSIDE THE HOSPITAL BY AGE OF PATIENTS
ACCORDING TO RECOMMENDING PHYSICIANS, MASSACHUSETTS, 12 MONTHS, 1960-1961

ALTERNATIVE SITES	ALL PATIENTS PER CENT	AGE								
		Under 5	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-up
Total surgical cases.....	N=811	65	140	94	99	113	116	86	65	29
Impossible to perform this surgery except in hospital.....	74%	66%	69%	71%	66%	75%	79%	78%	92%	80%
Possible, but extremely difficult except in hospital.....	15	18	22	13	23	16	9	8	5	10
Could have been done outside, but less satisfactory.....	7	14	5	12	7	5	7	7	3	10
Could just as well have been done outside.....	4	2	3	4	3	4	5	7	—	—
Don't know.....	a	—	1	—	1	—	*	—	—	—
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Less than one-half of one per cent.

per cent of the medical patients it was impossible to treat them outside of the hospital (compared with 74 per cent of the surgical patients) and for 37 per cent of the medical patients it was "possible, but extremely difficult except in the hospital" (compared with 15 per cent of the surgical patients). Finally, the physicians felt that 14 per cent of the medical patients could have been treated outside of the hospital, but it would have been less satisfactory to do so.

Referring back to Table 71, it is seen that for medical patients who could conceivably have been treated outside the hospital, the physicians felt that 83 per cent were admitted because the hospital was the preferred

TABLE 73
SURGICAL ADMISSION BY USUAL HANDLING OF THIS
KIND OF PATIENT ACCORDING TO RECOMMENDING
PHYSICIANS, MASSACHUSETTS, 12 MONTHS, 1960-
1961

Usual Handling	Per Cent
	N=811
Always insist on surgery in this kind of case.....	60%
Almost always insist, but might be exceptions.....	22
Sometimes do, sometimes don't, it depends.....	14
Normally don't recommend surgery, but exceptions.....	2
Don't know.....	2
	100%

place for *medical reasons*, offering better facilities for treating the condition. Fifteen per cent of this group of patients were hospitalized because of the personal characteristics of the patient, and 20 per cent because of situational factors external to the patient. The latter percentage is appreciably higher than the corresponding percentage of eight for surgical patients.

Physician estimates of the feasibility of treating the medical patients outside the hospital were tabulated by age of the patient. As seen in Table 74, the proportion of cases in which physicians felt it was "impossible to treat patients outside the hospital" reveals a shallow U-shaped curve, ranging from 47 per cent of the youngest age group to 29 per cent of the group aged 25-34 and back to 56 per cent of the group 75 years of age and over. The proportions in the category "possible, but extremely difficult except in the hospital" would appear to be quite large, revealing a gray area of relatively discretionary decisions. And in the age-groups 5-14 and 25-34, for

TABLE 74

MEDICAL AND "OTHER" ADMISSIONS BY POSSIBILITY OF OUTSIDE TREATMENT AND BY AGE OF PATIENT
ACCORDING TO RECOMMENDING PHYSICIANS, MASSACHUSETTS, 12 MONTHS, 1960-1961

POSSIBILITY OF OUTSIDE TREATMENT	ALL PATIENTS PER CENT	AGE								
		Under 5	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-up
	N=589	75	46	35	38	55	87	85	88	79
Impossible to treat patient outside the hospital.....	46%	47%	37%	37%	29%	49%	45%	52%	48%	56%
Possible, but extremely difficult except in hospital.....	37	40	33	43	37	31	40	34	41	32
Could have treated outside, but less satisfactorily.....	14	13	17	17	26	15	13	14	8	11
Could just as well have treated patient outside.....	3	—	11	—	8	5	2	—	2	1
Don't know.....	*	—	2	3	—	—	—	—	1	—
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

* Less than one-half of one per cent.

example, the physicians felt that 28 and 34 per cent of the patients respectively "could have been treated outside but less satisfactorily" or "could just as well have treated patient outside." In the older age-groups such areas of discretion narrowed considerably, indicating greater severity in the conditions among the older age-groups than among those younger.

The physicians' generalizations regarding their usual handling of medical patients continue to reveal a relatively great amount of discretion. In drawing on their experiences, physicians treating medical patients and physicians treating surgical patients are quite similar. In Table 75 it is seen that for 56

TABLE 75
MEDICAL AND "OTHER" ADMISSIONS BY USUAL
HANDLING OF THIS KIND OF PATIENT ACCORDING
TO RECOMMENDING PHYSICIANS, MASSACHUSETTS,
12 MONTHS, 1960-1961

Usual Handling	Per Cent
	N = 589
Always insist on hospitalizing this kind of patient.....	56%
Almost always insist, but might be exceptions.....	20
Sometimes do, sometimes don't, it depends.....	18
Normally don't, but there are exceptions.....	5
Don't know.....	1
	100%

per cent of the medical patients recommending physicians "always insist on hospitalizing this kind of patient." The remaining proportions are accorded varying degrees of discretion, but it would seem that it is quite unpredictable for around 18 per cent of the medical patients whether they will be recommended for admission to the hospital or not.

D. Patients Admitted for Diagnosis

The prevailing assumption in the health field is that admissions for diagnosis are, and possibly even should be, rarely indicated. The presumption is that diagnostic procedures can usually be carried out on an out-patient basis. In this survey the recommending physicians said that 14 per cent of the patients were hospitalized mainly for the purpose of carrying out diagnostic procedures. For 45 per cent of these admissions (refer back to Chart II, third bar graph) the physicians felt that it was "impossible to

make these tests outside the hospital," for another 32 per cent it would be "possible but extremely difficult except in the hospital," and for the remainder (23 per cent) the site was very much open to the physician's discretion.

The age distribution for the same range of judgments (Table 76) does not reveal a considerable range except for the age-group 65 and over. Caution in interpretation is necessary because of the small number of cases involved, but it would seem that for those under 15 years of age or over 65, a smaller proportion of patients are judged as belonging in the category of "could have been done outside, but less satisfactorily" and "could just as well have been done on out-patient basis."

Referring back to Table 71, it is seen that for patients who might have used diagnostic facilities on an out-patient basis, but were admitted to the hospital for the purpose, the physicians felt that for three-fourths of them (76 per cent) it was preferable that they be in the hospital for medical reasons. For 17 per cent of the patients the hospital was preferred because of the personal characteristics of the patients, and for 20 per cent because of situational factors external to the patient. Some patients were placed in more than one category.

As with the surgical and medical patients the physicians recommending the patients admitted for diagnosis were asked about their usual practice in such cases (Table 77). It is of interest that for 46 per cent of the patients the physicians "always insist on hospitalization for these tests" and for another 19 per cent "almost always insist, but might be exceptions." The remainder, 8 per cent, were regarded as being very discretionary as to hospital admission or not in carrying out the diagnostic procedures.

As an overview of physicians' perceptions of medical practice in general, all physicians were asked if there was "too much," "about right," or "not enough" of selected medical activities as brought out in Table 78. Probing physicians on their perceptions of the prevalence of certain medical practices will give some idea of how they view decisions regarding their own patients compared with their perceptions of medical practice in general. Direct comparisons cannot be made between previous data shown in Charts I and II and Table 78 below, but for surgery and hospitalization it would seem that physicians are likely to feel that other physicians hospitalize patients "too much" and perform "too much" surgery than they as individuals do. This seems to be a common human propensity. It points to the necessity for comparing actual behavior with perceived behavior. Reliance solely on how physicians view the practice habits of other physicians would lead to the conclusion that there is a great deal of selective perception. When brought into perspective by actual behavior of the physicians, a very different picture emerges, one that would seem to be more realistic for

TABLE 76
DIAGNOSTIC ADMISSIONS BY POSSIBLE ALTERNATIVE SITES FOR TESTS BY AGE OF PATIENT
ACCORDING TO RECOMMENDING PHYSICIANS, MASSACHUSETTS, 12 MONTHS, 1960-1961

USUAL HANDLING	ALL PATIENTS	AGE					
		Under 15	15-34	35-44	45-54	55-64	Over 65
	N = 225	29	36	35	43	32	47
Impossible to make these tests outside hospital.....	45%	45%	42%	40%	44%	37%	60%
Possible, but extremely difficult except in hospital...	32	42	30	38	21	41	25
Could have been done outside, but less satisfactorily.	15	10	19	11	23	16	9
Could just as well have done on out-patient basis..	8	3	6	11	12	6	6
Don't know.....	a	—	3	—	—	—	—
	100%	100%	100%	100%	100%	100%	100%

a Less than one-half of one per cent.

understanding the dynamics of medical practice and for planning purposes.

Of possibly greater interest within the limits of the data in Table 78 is the comparison of physicians' perceptions by type of service or medical activity. Clearly, physicians feel that hospitals are used "too much" compared with surgery, referrals to specialists, and writing prescriptions. They perceive a relatively greater "wastage" in hospital use and writing of prescriptions. It would seem that the physicians feel that there should be more referral to specialists than there is, an interesting observation considering the strong trend toward specialist's service that has been in motion for some time. Finally, surgery comes off relatively well considering its incidence, expense and medical importance.

TABLE 77

DIAGNOSTIC ADMISSIONS BY USUAL PROCEDURE
ACCORDING TO RECOMMENDING PHYSICIANS,
MASSACHUSETTS, 12 MONTHS, 1960-1961

Usual Handling	Per Cent
Total hospitalized for tests	N = 225
Always insist on hospitalizing for these tests	46%
Almost always insist, but might be exceptions	19
Sometimes do, sometimes don't, it depends	26
Normally do on out-patient basis, but exceptions	8
Don't know	1
	100%

TABLE 78

COMBINED RECOMMENDING AND ATTENDING PHYSICIANS' RESPONSES
TO PREVALENCE OF SELECTED PRACTICES TODAY,
MASSACHUSETTS, 12 MONTHS, 1960-1961
(Combined N=3,311)

Present Situation	Surgery	Hospitaliza- tion	Referrals to Specialists	Writing of Prescriptions
Too much	19%	52%	11%	29%
About right	70	40	61	57
Not enough	3	5	24	2
Don't know	8	3	4	12
	100%	100%	100%	100%

IX. PHYSICIANS' VIEWS OF THE PATIENTS AND SITUATIONAL FACTORS

Many factors other than the pure "medical" condition enter into a physician's decision to hospitalize the patient. Other considerations, which are difficult to evaluate, are so-called "patient initiative" and the presence or absence of insurance. With regard to patient initiative there are many observers and commentators who feel that the physicians are under great pressure from the patients to be admitted to the hospital. A battery of questions was formulated to explore if there were such pressure. In summarizing evidence of "patient initiative" the responses of all recommending physicians in the survey to the question, "About how often do you experience pressure on the part of the patient to be hospitalized (to have some kind of operation) when you yourself do not believe it is absolutely necessary?" are presented in Table 79.

More than one-half of the physicians report that this occurs "hardly ever" or "never" and less than 10 per cent that it occurs "fairly often" or "very often." Data on the admissions included in this survey bear this out. In less than 2 per cent of the 1,628 admissions is there evidence of "patient initiative." Additional pertinent data presented in Chapter V are that patients in overwhelming proportions follow physicians' recommendations regarding admission to the hospital.

In addition to the patients' attitudes, the feelings that physicians had regarding patients' attitudes toward being sent to the hospital and discharged from the hospital were obtained from the recommending and attending physicians. The recommending physician was asked: "What was the patient's attitude toward (going to the hospital, having operation) at that time—Was (he, she) very much in favor of the idea, or did (he, she) just accept it, or was (he, she) somewhat against the idea, or was (he, she) definitely opposed?" As seen in Table 80, 87 per cent of the patients with whom the physicians talked were either "very much in favor" or "accepted it." Only 7 per cent of the patients were "somewhat against," and 4 per cent definitely opposed. It should be recalled that all of the latter two

groups of patients were eventually hospitalized despite their reluctance and opposition.

In further probing of patients' attitudes toward the hospital as seen by the physician, the attending physicians were asked: "How would you describe the patient's (or responsible person's) *attitude* toward leaving the hospital—that is, was (he, she) *very* eager to get out of the hospital, or just normally eager to get out, or was (he, she) somewhat reluctant to leave, or was (he, she) definitely opposed to leaving the hospital?" Upon discharge it is evident in Table 81 that patients are overwhelmingly eager to leave the hospital. Only 5 per cent are "somewhat reluctant to leave" and such reluctance may be for quite "rational" reasons such as home conditions and

transfer to a nursing home. Judging from these data, "patient initiative" would not appear to be as important as is commonly believed.

The extent to which recommending physicians felt "hospital care was absolutely necessary" was tabulated by major sources of payment (Table 82). It is often assumed that the absence or presence of insurance would have an effect on physicians' decisions to admit a patient to the hospital. If this assumption could be proven, then it would be predicted that patients without insurance or another third-party payor would be more likely to be classified as "hospital absolutely necessary" than patients with a third-party payor. In Table 82 the data would suggest that source of payment has some effect, but certainly not a marked one. Because of the relatively high aver-

TABLE 79
FREQUENCY OF "PATIENT INITIATIVE" FOR HOSPITALIZATION REPORTED BY RECOMMENDING PHYSICIANS, MASSACHUSETTS, 12 MONTHS, 1960-1961

Patient Initiative	Per Cent (N = 1,628)
Very often.....	2%
Fairly often.....	7
Occasionally.....	36
Hardly ever.....	39
Never.....	16
Don't know or no answer.....	^a
	100%

^a Less than one-half of one per cent.

TABLE 80
PATIENTS' ATTITUDES TOWARD GOING INTO THE HOSPITAL ACCORDING TO THE RECOMMENDING PHYSICIAN, MASSACHUSETTS, 12 MONTHS, 1960-1961

Patients' Attitudes	Per Cent N = 1,179
Very much in favor.....	34%
Accepted it.....	53
Somewhat against.....	7
Definitely opposed.....	4
Don't know.....	2
	100%

TABLE 81
EXTENT OF DESIRE OF PATIENT TO LEAVE THE HOSPITAL ACCORDING TO THE ATTENDING PHYSICIAN, MASSACHUSETTS, 12 MONTHS, 1960-1961

Attitude Toward Leaving Hospital	Per Cent N = 1,630
Very eager to leave the hospital....	19%
Normally eager to leave.....	70
Somewhat reluctant to leave.....	5
Definitely opposed.....	^a
Don't know.....	6
	100%

^a Less than one-half of one per cent.

age age of welfare recipients and possibly the greater likelihood of being admitted for more serious conditions than the other segments of the population, the highest proportion of patients classified as "absolutely necessary" is to be expected. For patients classified as "absolutely necessary," one might expect a greater difference between patients who paid their own bills themselves and those paid by Blue Cross and private insurance companies. The data show that hospitalization was "absolutely necessary" for self-pay patients 73 per cent of the time compared with 72 per cent for private insurance patients and 68 per cent for Blue Cross patients. Certainly, however, the direction indicates that "self-pay" and "private insurance" are virtually the same, and that Blue Cross patients are admitted with slightly more flexible criteria.

Another criterion by source of payment that may be revealing is length of stay. It might be assumed that patients who pay their own bills without

a third-party payor might have a different distribution of length of stay from patients with other methods of paying for hospital care; one might assume a lower proportion of short-stay and long-stay episodes. With the expected exception of welfare patients again, the differences in length of stay among Blue Cross, private insurance and self-pay patients are not obvious (Table 83).

Finally, a third criterion that can be used in this survey is type of admission with particular reference to admissions for diagnostic tests. There is a prevailing assumption amounting to an axiom that insurance induces admissions for diagnostic purposes when such services are not covered by

TABLE 82

MAIN SOURCE OF PAYMENT FOR HOSPITAL CARE AND DEGREE OF NECESSITY FOR HOSPITALIZATION ACCORDING TO RECOMMENDING PHYSICIANS, MASSACHUSETTS, 12 MONTHS, 1960-1961

MAIN SOURCE OF PAYMENT	N	PHYSICIAN SAID				
		Hospital Absolutely Necessary	Patient Much Better Off In Hospital	Hospital Might Be Good Idea	Did Not Recommend At All	Don't Know
Blue Cross	853	68%	23	6	2	1
Private insurance	310	72	16	8	3	1
Welfare, OAA...	64	77	17	3	3	—
Self-pay...	290	73	17	7	2	1

TABLE 83

MAIN SOURCE OF PAYMENT FOR HOSPITAL CARE BY LENGTH OF STAY, MASSACHUSETTS, 12 MONTHS, 1960-1961

LENGTH OF STAY	SOURCE OF PAYMENT			
	Blue Cross (N=1,065)	Private Insurance (N=380)	Welfare (N=96)	Self-pay (N=361)
0-1 days.....	8%	10%	7%	10%
2-3 days.....	24	24	11	22
4-5 days.....	14	15	14	11
6-7 days.....	14	14	14	14
8-14 days.....	24	22	22	24
15-21 days.....	7	8	11	7
22-30 days.....	5	4	7	6
31 days or more.....	4	3	14	6
	100%	100%	100%	100%

insurance on an out-patient basis, as is the case in Massachusetts. Table 84 reveals that the differences among sources of payment (welfare excepted) are minor. If anything, it would seem that patients who paid their own bills were more likely to be hospitalized for diagnostic tests than patients with other methods of payment. In summary, then, the data in this section would indicate that physicians in the prevailing structure of practice make decisions to hospitalize quite independently of how the hospital bill is paid. If the methods of delivering physicians' services were reorganized (e.g., salaried group practice), another factor would then enter in which does not obtain in this survey.

TABLE 84

MAIN SOURCE OF PAYMENT OF HOSPITAL CARE BY PURPOSE OF HOSPITALIZATION ACCORDING TO RECOMMENDING PHYSICIAN, MASSACHUSETTS, 12 MONTHS, 1960-1961

MAIN SOURCE OF PAYMENT	N	PURPOSE OF ADMISSION			
		Surgery*	Medical Treatment	Diagnostic Tests	Other
Blue Cross.....	854	52%	34%	13%	1%
Private insurance.....	312	53	30	14	3
Welfare, OAA.....	64	39	44	12	5
Patient paid.....	291	45	38	15	2

* Includes 10 cases of diagnostic tests which involved surgery.

The great majority of patients admitted to the hospital carried some type of health insurance. There is a great deal of speculation regarding the influence of insurance on physicians' decisions regarding the handling of the patient. Some of this has been presented in previous tables in this chapter. It is of interest how small an impact physicians feel that insurance has on their decisions, with one exception—the type of accommodation. Recommendation to be admitted to the hospital, orders for tests and X-rays, and length of stay are matters of professional judgment, while type of accommodation is presumably a matter of patients' tastes and circumstances. For only 6 per cent of the patients did the physicians feel hospital insurance had an influence in admission, and for only 2 per cent of the patients did it influence the use of tests and X-rays. Only 5 per cent of the patients would have left the hospital sooner, according to the physicians (Table 85). It should be noted that these alternatives (no admission, fewer tests, leaving sooner) are not necessarily desirable and might even have been harmful.

TABLE 85

INFLUENCE OF INSURANCE ON HANDLING OF THE PATIENT ACCORDING TO
PHYSICIANS, MASSACHUSETTS, 12 MONTHS, 1960-1961

(Total with insurance N=1,216)

INFLUENCE OF INSURANCE	IF THE PATIENT HAD NOT HAD INSURANCE			
	Would Not Have Gone to Hospital	Less Expensive Room or Ward Service	Would Have Had Fewer Tests or X-rays	Would Have Left the Hospital Sooner
True.....	6%	20%	2%	5%
Not true.....	87	70	93	89
Don't know or no answer.....	7	10	5	6
	100%	100%	100%	100%

NOTE: Physicians were also asked—Can you think of any *other* ways in which this patient's case might have been handled differently if the patient had *not* been covered by insurance? (IF YES) In what ways?

Influence of Insurance	Per Cent
Total with insurance.....	N=1,216
Would have gone to other hospital for free or low-cost care.....	1%
Would have postponed hospitalization.....	1
Would have had tests on out-patient basis.....	1
Misc. ways might have been handled differently.....	97
No, don't know.....	100%

* Less than one-half of one per cent.

TABLE 86

EXTENT TO WHICH RECOMMENDING PHYSICIANS TAKE INTO ACCOUNT SELECTED
NON-MEDICAL FACTORS IN DECIDING WHETHER OR NOT TO HOSPITALIZE
A PATIENT, MASSACHUSETTS, 12 MONTHS, 1960-1961

Factors Taken into Account	Home Environment, Conditions in the Home	Ability to Afford Hospital Costs	Availability of Hospital Space	Physicians' Own Schedule
Very often.....	21%	25%	27%	6%
Sometimes.....	44	36	28	12
Very rarely.....	23	24	26	26
Never.....	10	14	18	51
Don't know.....	1	*	—	1
Does not apply.....	1	1	1	4
	100%	100%	100%	100%

Finally, a set of situational factors other than insurance was probed. The physicians were asked about the extent to which they generally take into account some non-medical factors in deciding whether or not to hospitalize a patient. Clearly, the physicians express awareness of non-medical factors as seen in Table 86. Only a minority rarely or never consider the first three of these non-medical factors. Twenty-two per cent take the home environment into account "very often"; 25 per cent, the patient's ability to afford hospital space. The physicians' least concern was with their own schedule, indicating they feel they are quite accessible to their patients as far as scheduling admission to the hospital is concerned.

The patterns of practice, decisions, and perceptions shown somewhat fragmentarily in this chapter can hardly be regarded as definitive. It would seem, however, they provide a glimmer of the dynamics of medical practice and hospital care which can assist in guiding further probing. Certainly, medical practice is a very complex affair, and the basis for this complexity is the need for an acceptance of professional judgment and discretion.

PART IV
OBSERVATIONS AND CONCLUSIONS

X. OBSERVATIONS AND CONCLUSIONS

Utilization review committees have been made mandatory by the recently enacted PL 89-97 (Medicare) in all hospitals agreeing to provide care to the older citizens under the Act. Interest in utilization review committees arose during the late Fifties in direct response to the concern with rising hospital costs and increasing use. Insurance Commissioners in various states—notably in Pennsylvania and Michigan—believed that hospitals were used too generously. Greater control of this use would result in substantial savings and in turn lower insurance premiums. The feeling was that hospital patient records should be scrutinized by medical committees in order to eliminate “unnecessary” care, particularly as to length of stay.

These recommendations were unprecedented in American medicine. However, concern with increasing cost continued so that, eventually, mechanisms of use controls were read directly into the law, rather than made implicit as part of the rules and regulations that tend to flow from the implementation of any piece of legislation. Presumably the advisors to the legislators and the legislators themselves believed that enough experience had already been obtained from the operation of the numerous utilization review committees that had been established in Western Pennsylvania and other eastern areas of the country, or it may have been a move to counter criticism by physicians that such legislation would lead to overuse.

In 1960 the Board of Trustees of the American Medical Association and the American Hospital Association adopted the principle of utilization review committees, and in August, 1963, this principle was also adopted by the Joint Commission on Accreditation of Hospitals.¹ The latter agency gave the principle official status. In its “Handbook for the Medical Staff,” the A.M.A. in effect adopted in its entirety the operating procedure that had been proposed by the Western Pennsylvania group comprising the Pennsylvania Medical Society and the Hospital Council of Western Pennsylvania. In its justification for the establishment of utilization review committees in hospitals, the A.M.A. handbook reads:

¹ American Medical Association. Council on Medical Service. Utilization Review; A Handbook for the Medical Staff, Chicago, A.M.A., 1963.

An efficiently functioning Utilization Review Program can reduce these pressures (on hospitals) by such methods as securing physician cooperation in admitting only those patients whose needs cannot be adequately served on an outpatient basis or in a more suitable facility, and encouraging better management of total patient care with shorter preoperative days, early scheduling of diagnostic tests and the elimination of delays between scheduling, performance, and reporting of such tests.²

As an ideal this statement is self-evident and beyond dispute, but the statement continues in a self-contradictory vein characteristic of much of the thinking in this area:

Such efficiencies introduced in the management of patient care free hospital beds for additional admissions and provide earlier availability of care for elective procedures.

It would seem that this operating philosophy would actually increase the admissions, or simply change patient composition, if it were made easier for elective surgery patients to be admitted. There may be several implicit objectives for the establishment of utilization review committees: (1) to reduce use and costs by eliminating "unnecessary use"; (2) to improve the quality of patient care by review of medical procedures which in themselves may result in higher costs; (3) to increase turnover in order to serve more patients who need care which results in higher use as measured by admissions. It would seem, however, that the primary objective is to reduce overall community cost; hence the last quotation from the A.M.A. handbook would run counter to the usual justification for utilization review committees.

Another aspect of significance is the concept that somehow there is an optimum quality of medical practice and hospital use regardless of time, place and circumstance. Among the statements adopted by the Western Pennsylvania groups is the following:

Hospitals with a high occupancy and a long waiting list have a particularly strong incentive for an active Utilization Committee. Tying Committee activities to the bed situation, however, can be self-defeating, for in periods of low occupancy, the incentive is notably diminished. A Committee that functions continuously—irrespective of a waiting list—can help reduce pressures for new bed construction and make possible a more accurate picture of actual bed needs.³

One viewpoint of social organization would have it that all actions take place in a context of alternatives and standards; therefore, standards divorced from their circumstances which are considered possible of fulfillment are unrealistic and meaningless. On the other hand, the viewpoint

² *Ibid.*, pp. 1-2.

³ *Ibid.*, p. 19.

implicit in the quotation above and representative of the thinking in the field is that a certain criterion of behavior is both ideal and possible regardless of time, place, and circumstance. Utilization review committees should function in a vacuum, as it were, with a set of built-in standards which are a result of professional consensus apart from time, place, and circumstance. Two major studies reflect each of these two viewpoints; the present study looks at the behavior of patients and physicians in a relatively definable context, and the study done by Fitzpatrick, Riedel, and Payne in Michigan (and several others described in the first chapter of this report) is an example of the professional consensus approach as an independent variable in which time, place, and circumstance are quite irrelevant.⁴

In the Massachusetts survey it was determined what the physicians of a representative sample of discharged patients in the state actually did and their evaluation of this behavior after they had done it. In the study in Michigan by Fitzpatrick, Riedel, and Payne, they found out what a selected elite of physicians believed should have been done after other physicians had done it. There was no measure of what this elite would actually have done in the same circumstances they evaluated.

A detailed, although brief, description of the methodology in the Michigan study is necessary in order to show as clearly as possible the opposite approaches taken by the Massachusetts and the Michigan studies. Both studies dealt with a representative sample of discharges from general hospitals in well-defined geographic areas, and within the prevailing hospital and physicians' services structure. The differences in the patient population selected for study were of degree rather than kind and, therefore, do not vitiate a fruitful discussion of the two approaches.

The Massachusetts study included all surgical and medical patients, and excluded the maternity cases. The Michigan study selected 18 diagnoses (including maternity cases) which were relatively clear-cut disease entities and for which it was quite easy to arrive at a consensus of indications for hospital admission and discharge and for proper procedures for the patient during the course of the illness. These 18 diagnoses comprised 46 per cent of all general hospital admissions but can hardly be generalized to all admissions. As a study of methodology, however, this research was a contribution in itself, and the results for the 18 diagnoses alone are of extremely great interest for utilization review committees.

For the 18 diagnoses the Michigan study applied criteria established *a priori* by appropriate board certified specialists in private practice and

⁴ Thomas B. Fitzpatrick, Donald C. Riedel, and Beverly C. Payne, M.D., "Character and Effectiveness of Hospital Use" in: Walter J. McNerney and Study Staff, *Hospital and Medical Economics; A Study of Population, Services, Costs, Methods of Payment, and Controls*. Chicago, Hospital Research and Educational Trust, 1962. Vol. I, pp. 361-591.

in medical schools. Over 5,000 records of discharged hospital patients were reviewed by the medical review committees, three in a committee, applying the criteria established. Where there appeared to be deviations from the criteria set by those committees, the attending physicians were interviewed (not the patients) to determine what "extra medical" factors were present to account for the apparent deviation from "medical" factors.

The concepts of "medical" and "extra medical" are of great significance. They are central to the comprehension of use of hospital care. The authors are well aware of this since they write:

The definitions of and distinctions between medical and extra medical factors are bound to be debatable.

Thus, a physician's decision to discharge a diabetic patient because of her anxiety about conditions at home will be considered extra medical if the patient's diabetes alone, her original reason for admission, would have kept her in the hospital. Yet anxiety is certainly a medical factor—indeed, it can be a diagnosis.⁵

To emphasize further that the authors believed that "medical" and "extra medical" factors are interrelated, they write:

The use of the term "extra medical" in no sense indicates that the factor does not adequately explain the hospital use in question, nor is it equated with any judgment that use was "unjustified." This judgment was not attempted. To divide all factors influencing use of the hospital into "justified" and "not justified" and to further class all "justified" factors as "medical," *as is the tendency* (Italics added) would completely obscure the causative factors relating to the use of the hospital.⁶

The assumption behind the Massachusetts study on the other hand is that "medical" and "extra medical" factors are exceedingly difficult and possibly impossible to disentangle, although physicians in Massachusetts were asked to report on personal and situational factors of patients which influenced physicians' decisions. It is the contention that even in "urgent" or "absolutely necessary" instances there is a personal and situational component which would influence the proportion of such instances in different times and places. The decision to see a physician, and the decision of a physician to use or not to use the facilities of a hospital are related to time, place, and circumstance which embrace both medical and extra medical factors in various proportions. The great range of utilization patterns in developed areas medically and economically supports these observations. An excellent and extreme example of this is found in Great Britain when that country was preparing its hospital services in 1939 for the anticipated war casualties. The Ministry of Health issued an order as follows:

⁵ Fitzpatrick, Riedel, and Payne, p. 468.

⁶ *Ibid.*

On the outbreak of war, all hospitals and institutions in the emergency scheme were instructed to restrict new admissions among the civilian sick to acute cases, to transfer patients from certain hospitals in vulnerable areas to base hospitals, and to send other patients home, not on a peacetime standard of fitness for discharge, but on the assumption that *only those should be retained for whom institutional treatment is essential.* (Italics added)⁷

This difficult criterion was stated at a time when there were estimates that there were 200,000 patients on the waiting lists of hospitals in England and Wales. Titmuss reports that the Ministry of Health recommended the emptying of 100,000 beds in order to accommodate the anticipated casualties. In reality, the hospital medical staff discharged 140,000 patients, or an estimated 40 to 50 per cent of the patients in hospitals at that time. These startling figures are given simply to show what can be done if it is accepted as a desirable public policy. The concept of necessary hospital care can indeed be very flexible.

Returning to the Michigan study and the application of the professional consensus of a medical elite, the authors write:

The development of the criteria abstractly and in advance would . . . seem preferable to their development after review of cases. The key to the increased objectivity achieved by using criteria is that they are formed independently of the case material. *Post facto* development of criteria essentially reduces itself to establishing the averages of existing practice.⁸

Apparently what is desired is an average of medically elite judgments which may or may not be related to real life situations.

In another and later article, the medical member of the study team, Dr. Beverly C. Payne, an internist, elaborates on this concept of criteria further:

All (current admission studies) show the bias of the individual judgment of the physician evaluation. There is not only obvious difference in evaluation of care or length of stay or indications for admissions between physicians, but *there is a distressingly difficult difference in evaluation on two occasions by the same physician.* (Italics added) The only satisfactory solution yet proposed for such a problem in evaluation is to develop a measuring stick of sufficient subtlety to measure variations in hospital use *regardless of such individual shortcomings.* (Italics added) A system of criteria for medical and surgical care created for each diagnosis, prepared by physicians in advance of the actual study of the hospital chart, is such a yardstick.⁹

⁷ Quoted in Richard M. Titmuss, *Problems of Social Policy*. London, H.M.S. Office and Longmans, Green, 1950, p. 193.

⁸ *Op. cit.*, p. 455.

⁹ Beverly C. Payne, M.D., "Use of the criteria approach to measurement of effectiveness of hospital utilization." In: American Medical Association, *Utilization Review, A Handbook*, p. 85.

Here would seem to be the fundamental difference of approach between the Massachusetts and Michigan studies. Perhaps a fusion of the Massachusetts and Michigan approaches would be the most valid study method, i.e., the measurement of the variation between actual practice and perceptions and predetermined criteria established by a medical elite. Another dimension that would have to be added, however, and exceedingly difficult methodologically, is some assessment of the feasibility of carrying out the criteria of the elite in real life practice situations. The medical elite made evaluations of medical practice removed from the subtleties and nuances of decision making on the spot within the situational constraints in which immediate decision making must take place. It would seem that only fairly gross "inappropriate" (the Michigan Study term) admissions and lengths of stay could then be detected. Considering the rather small proportions of "inappropriate" admissions and lengths of stay that resulted from the application of the criteria of the medical elite committees, it would seem that this is actually what was revealed in the Michigan study.

For the purpose here it is sufficient to summarize that in the 18 diagnoses comprising 46 per cent of the admissions studied, "overuse" represents 2.3 per cent¹⁰ of the admissions and 6.8 per cent of the days.¹¹

There were considerable variations by diagnosis and size of hospital from these averages. The study team ventured the belief that if *all* diagnostic categories had been reviewed (as was done in Massachusetts) there would have been a higher proportion of inappropriate admissions than that estimated for the combined 18 diagnoses. They mention upper respiratory conditions and communicable diseases among those outside of the 18 diagnoses which are by some authorities presumed by definition not to warrant hospital care. It would also seem, however, that since the 18 diagnoses were selected in part because of their specifiability, diagnoses which are more difficult to specify might yield a higher margin of inappropriateness or disagreements among the evaluators.

Although the Michigan and Massachusetts findings are not comparable, it may be reasonable to assume that "inappropriateness" in the Michigan study compares roughly with the category "could be done as well outside of hospital" for surgical, medical, and diagnostic admissions. As brought out in Chapter VIII, Chart II, the recommending physicians felt that for 4 per cent of the patients admitted for surgery, 3 per cent of the medical admissions, and 8 per cent of the diagnostic admissions the surgery and other

¹⁰ Fitzpatrick, *et al.*, p. 472 and p. 516.

¹¹ The Michigan Study group also measured "underuse" in length of stay which reduced "inappropriate use" to 4.5 per cent of the days. The concept of "underuse" represents increasing sophistication in measuring use.

procedures could just as well have been carried out outside of the hospital. The average of all these admissions would be between 3 and 4 per cent, not far from the 2.3 per cent inappropriate admissions estimated in the Michigan study.¹²

It would seem that two of the authors in the Michigan study had refined their thinking on criteria further in a later article:

The chief importance of the criteria lies in the fact that since they define appropriateness of care for a given condition, the inappropriate elements can be identified and measured.

Variations in overall quantity of appropriate (or inappropriate) use when associated with other variables is a great deal more explanatory than variables in use alone. Assuming perfect application of perfect criteria, *all* variations due to the medical condition of the patients would be contained within the definition of appropriate care, regardless of actual or average length of stay. This would leave *all* variation due to causes other than the patient's medical condition identified and quantified; reasons for the variation can then be sought.¹³

The observations of these authors reveal a greater faith than can be mustered by the present authors that physicians can in fact differentiate between "medical" and "extra-medical" conditions when making a decision regarding patient care. This is likely theoretically possible for patients in extreme pain or in a coma, but a very high proportion of patients are not in such extreme conditions when they see physicians and it is at this point where the question arises. An added difficulty, and one observed by the authors of the Michigan study, is the problem of improving the hospital case record sufficiently to incorporate preadmission and postdischarge data on a routine basis. The field teams which reviewed the hospital case records reported that "admission histories and discharge notes are the weakest elements of the medical records."¹⁴ And, it is the hospital case record which is to be the main source of evaluation by medical review committees.

It may be that the main function of utilization review committees is as suggested by Fitzpatrick and Riedel:

Perhaps a large amount of the emotion inherent in the controversy concerning the concept of appropriate use would be eliminated if the construction of criteria

¹² A pilot study in Nassau County, New York, conducted in five hospitals and including seven diagnoses using the same method as in the Michigan study and with the consultation of its research personnel, estimated that 3.9 per cent of the admissions were "inappropriate." Although the patient records evaluated were not assumed to be a representative sample, this figure is of interest. Nassau County Medical Society, Voluntary Health Insurance Committee. *Pilot Study of Hospital Use in Nassau County*. The Society, November, 1965.

¹³ Thomas B. Fitzpatrick and Donald C. Riedel, "Some General Comments on Methods of Studying Hospital Use," *Inquiry: A Review of Current Research in Hospital and Medical Economics*. (Blue Cross Association) 1:65, January, 1965.

¹⁴ Fitzpatrick, *et al.*, p. 496.

of appropriateness, and their application, were primarily viewed as an educational device or technique for routine and periodic appraisal of performance, that is, discovering and removing defects in the medical care system.¹⁵

It will require a great deal of administrative, medical, and social statesmanship to view utilization review committees primarily as an educational device rather than a cost control device to tighten up the hospital care system as an end in itself. It would seem to be a reasonable observation that as long as the budget remains flush, the utilization review committees will be operating in a loosely structured administrative atmosphere for both patients and physicians. Utilization will reflect what the economy will bear in relation to public and medical expectations rather than to some abstract criterion of appropriate use. The very existence of utilization review committees will serve the purpose of showing that the hospitals and physicians actually have an operating mechanism to assure that hospitals are being used appropriately. It may also be that its very existence will have a pervasive effect difficult to evaluate, but nevertheless salutary. It does not seem likely that these committees can really cut back use appreciably unless the hospital budgets are reduced quite arbitrarily. And then there is no assurance that the criteria applied are equitable.

The Massachusetts data do reveal that there is an appreciable proportion of hospital use that can be reduced if circumstances really demand it, but the function of hospitals is far beyond life saving, and it would seem that hospital care now adds comfort, safety, and convenience. A recent publication of the Department of Health, Education, and Welfare gives some hint of the unlikelihood of an appreciable cutback in hospital use in its report on conditions of participation for hospitals in Medicare:

Because there are significant divergences in opinion among individual physicians in respect to evaluation of medical necessity for inpatient hospital services, the judgment of the attending physician in an extended stay case is given great weight, and is not rejected except under unusual circumstances.¹⁶

It would appear from both the Massachusetts and Michigan studies that there are not enough "unusual circumstances" to result in demonstrable savings if eliminated, although naturally a good purpose would be served if gross practices were reduced.

¹⁵ Fitzpatrick and Riedel, p. 68.

¹⁶ U.S. Department of Health, Education, and Welfare. Social Security Administration. HIM-1(2-66) Health Insurance for the Aged; Conditions of Participation for Hospitals, p. 40.

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APPENDIX A
METHODOLOGY OF THE MASSACHUSETTS
HOSPITAL SURVEY

THE SAMPLE

A total sample of approximately 2,000 cases was deemed adequate to describe the conditions and circumstances surrounding hospital utilization in the state of Massachusetts. To obtain a minimum of 2,000 cases, it was decided to draw an original sample of approximately 2,400 to allow for losses due to moves out of the state, failure to locate, refusals to be interviewed, and other causes. The universe from which this sample was drawn constituted the total non-maternity patient population in the 140 general and special short-stay hospitals in Massachusetts during the twelve months starting June 1, 1960. Excluded from the universe were patients in mental hospitals, in long-stay hospitals for the treatment of chronic diseases such as tuberculosis, in maternity hospitals, and, in school and college infirmaries. The sample was a two-stage probability sample; first, of hospitals, with probability proportionate to size, and, second, of non-obstetrical discharges from the selected hospitals during each of two months spaced six months apart during the twelve-month period.

While it would have been desirable to sample all 140 hospitals which met our criteria, this would have posed formidable administrative problems and created an inefficient scattering of the interview load. On the other hand, a sample of only ten or fifteen different hospitals would not adequately represent the diverse conditions and circumstances of hospital use within institutions of varying size and ownership in different parts of the state. Careful study of the various factors involved suggested that a sample of 50 of the 140 hospitals would provide the most efficient frame for selection of the 2,400 patient cases. The six largest hospitals in the state, which accounted for 17.6 per cent of all non-maternity admissions in 1957-58,

were included automatically and represent themselves. The other 134 hospitals were stratified by region (six geographical areas), size (total annual non-maternity admissions), turnover rate (as measured by the ratio of estimated annual non-maternity admissions to average daily occupied non-maternity beds), and type of ownership (voluntary non-profit, city, county, state, proprietary). From this array, 44 hospitals were drawn with probability of selection proportionate to their size. The resulting sample of 50 hospitals, when compared with the universe, was found to provide a very close match with respect to each of the stratification characteristics, as well as to such uncontrolled variables as occupancy rate and distribution by size of community.¹

Theoretically, one might have sampled each of the 50 hospitals monthly over the twelve-month period; but this would have been inefficient as well as an imposition on the hospital's record-keeping personnel. On the other hand, selection of all of each hospital's sample cases during a particular month might well introduce distortion as a result of seasonal factors. Again, the most efficient design appeared to be that of sampling each hospital twice during the survey year, with the visits spaced six months apart. A rotation scheme was then worked out, so that one group of hospitals was sampled in January and July, another group in February and August, and so on. While only eight or nine hospitals were sampled each month, providing an interviewer case-load of approximately 200, a representative half of the 50 were sampled in each quarter, thus controlling for seasonal variations in number and type of admissions.

The number of sample cases to be drawn from the six largest hospitals was in proportion to the hospital's share of total admissions for the state. For these six, a constant sampling interval of every thirty-seventh case was prescribed, yielding an expected "take" ranging from approximately 120 for the largest to 50 for the smallest of the six. Since the other 44 hospitals were selected with probability proportionate to size, the expected "take" was the same for each, regardless of size, and the sampling ratio ranged from every thirty-fourth case in the seventh largest hospital down to every third case in the smallest. The sample was thus self-weighting, in that a larger or smaller number of cases than expected would actually be drawn, depending upon seasonal fluctuations, increases or decreases in capacity, and similar factors.

The eight or nine hospitals to be sampled each month were visited during the first week of the month by a team of two research workers. The aim was

¹ Supporting data and a somewhat fuller description of the sampling method are provided in "Description of Sample Design and Procedure for Study of Hospital Use," NORC working paper, September, 1959.

to conduct the sampling as soon as possible after the complete record of the preceding month's discharges became available, so that interviewers could take the field while circumstances of the hospitalization were still fresh in the patient's mind. The persons responsible for the sampling asked to see the hospital's discharge log for the preceding calendar month. From a pre-assigned random starting point, they applied the designated sampling interval and transcribed pertinent information about each selected case onto a "Sample Case Card." Obstetrical cases and newborns, if included in the roster and falling on a sample line, were simply discarded and the count resumed from that point. Similarly, out-of-state patients were excluded. All other cases falling on a sample line became part of the designated sample.

For each sample case, the research workers recorded the patient's name, address, case number in the hospital files, date of admission and date of discharge. The patient's age was recorded so that children could be identified and marital status so that the introductory letter to female patients could be properly addressed. The patient's home telephone number was recorded, where given, for possible future use, as were the name, address and relationship of his closest relative, as recorded in the hospital files. Name of the attending physician (or physicians) was recorded and, finally, a box was provided to indicate those cases in which the patient had died in the hospital. Each designated case was then assigned a four-digit case number, the first two digits of which identified the particular hospital.

THE QUESTIONNAIRES

Development of the basic interview schedule to be administered to patients began in the Fall of 1959 with a series of unstructured, informal interviews with recent hospital patients known to the survey staff. It soon became apparent that a major difficulty would be the design of a standardized questionnaire which would be appropriate for the wide variety of hospital experiences to be found. Two particular types of cases seemed especially troublesome. One was emergency admissions, in which there was no "chain of decisions" to investigate and for which a lengthy series of questions about social and psychological factors affecting the admission were quite inappropriate. This problem was solved by a complicated series of skip directions which took the interviewer to a special section of the questionnaire once the case was seen to meet the survey's definition of an emergency admission.

A second difficulty lay in long-term cases, where there might be a 20-year history of the condition and many previous hospitalizations for the same ailment. The problem here was to establish a suitable starting date for the

detailed questioning about the particular hospitalization which fell into our sample. This starting date was ultimately established by asking the patient when "this most recent trouble started that brought you to the hospital this time" or, if there was no "recent trouble"—as in the case of a long-standing condition such as hernia, which the patient finally decided to have corrected—"When did you decide to do something about the condition (this time)?" In such cases, the interviewer touched only superficially on the prior history of the condition before the starting date and began the main line of questioning with the events of the date mentioned.

There were, of course, other problems. For example, some patients were not even conscious at the time hospitalization was decided upon or were too ill to take any part in the decision. A special line of questioning had to be devised for this group. And, of course, an alternative form of the questionnaire had to be developed for proxy respondents, such as parents answering for their children or younger adults answering for old people.

To make the questionnaire fit the wide variety of cases encountered, it was most convenient to organize the questioning around certain key dates in the history. These key dates were as follows:

1. The date of the first signs of the illness or condition.
2. The date on which a doctor was first consulted.
3. The date on which a doctor first advised this hospitalization.
4. The date of admission.
5. The date of discharge.
6. The date one month after discharge.

In general, the questionnaire sought to find out what happened on each of the first three dates and what happened during the period intervening between each of them. In some cases, two or more of the dates coincide. For example, the patient will be advised to enter the hospital the first time he consults a doctor. In the case of a same-day emergency admission, all of the first four dates will coincide: the accident or illness occurs, a doctor is consulted, hospitalization is advised, and the patient is admitted all on the same day. In any such case in which two or more of the dates were the same, the section of the questionnaire dealing with the intervening lapse of time was omitted.

The content of the questionnaire may be briefly summarized. After the usual household enumeration, the patient (or responsible relative) was asked to describe the onset and circumstances of the illness or injury and the date of the first doctor visit. If this date were more than a year before the hospital admission, a more recent starting date was obtained; and the past history of the illness was covered very briefly with special emphasis on

any earlier hospitalizations or recommendations for hospitalization. The circumstances of the first doctor visit were then explored: the patient's condition at the time, his expectations, what the doctor said, how the patient reacted, etc. If hospitalization were not recommended then, the respondent was asked for the date on which it was recommended and the amount and kinds of medical care received during the interim. With respect to the recommendation, detailed questions were asked about the reasons given by the doctor, the strength and urgency of his recommendation, whether the patient felt any doubts about the need or that he could have been treated at home or on an out-patient basis, and his attitudes, worries and expectations concerning the hospital. Attitudes of other family members toward the hospitalization were also ascertained.

If there were delay in entering the hospital after the first recommendation, the reasons for this were inquired about, and information on the amount and kinds of medical care received during the interim was obtained. The questionnaire asked only superficially about services received in the hospital, but many questions related to the length of stay: whether it conformed to expectations before admission, and if not, why not; whether the patient or doctor felt he should have stayed in the hospital longer or left sooner. We asked about the patient's condition when he was discharged, and the nature of any difficulties he may have encountered in returning to his home environment. There followed a series of questions about the patient's health insurance coverage and the possible effects which such insurance may have had on his attitudes and behavior. The interview concluded with a number of questions about the respondent's attitudes toward health and medical care generally, and toward the use of hospitals and surgery among the general public today.

In the course of all this questioning, the interviewer obtained the name and address of each physician consulted by the patient and interviews were then sought with the doctor who first recommended the patient's hospitalization and with the doctor mainly in charge of the patient's care while he was in the hospital. In the majority of cases, these represented the same individual and only one interview was required. In somewhat over one-fourth of the cases, however, the two represented different physicians and interviews were obtained with each—one on the factors affecting the patient's admission, the other on factors affecting his length of stay.

A problem in designing the doctor questionnaires was to take the physician off the spot, to avoid making him feel defensive about his handling of the case. Early pretesting revealed that physicians would speak quite frankly, and sometimes vehemently, about overuse of hospitals in general, or in certain kinds of cases, but would unanimously assert that hospitaliza-

without some sort of release or authorization from the patient. Accordingly, at the close of the interview with the patient or his proxy, the respondent was asked to sign a Hospital Authorization Form, giving the hospital permission to release medical and cost data for purposes of the survey, and a Doctor Permission Form for each physician mentioned in the interview, authorizing the physician to discuss the circumstances of hospitalization with the interviewer and assuring the respondent that none of his own answers would be made known to the doctor. In deference to the well known reluctance of some persons to sign any paper presented to them in the course of an interview, any respondents who refused to sign were asked: "Would you have any objection to our asking the hospital for this information, assuming that they don't mind looking it up for us?" or "... to our talking with the doctor about your case, assuming that he wants to be interviewed?" Eighty-seven per cent of both patient and proxy respondents signed the doctor permission forms and only 4 per cent objected to interviews with their doctors. Ninety per cent signed the hospital authorization form and only 2.6 per cent objected to releasing information from the hospital. In any case in which the patient or his proxy did express objection, no attempt was made to interview the physician or to obtain record data from the hospital.

FIELD SUPERVISION

Since the Boston metropolitan area is one of NORC's national sample points, we started with the nucleus of an interviewing staff there, including two extremely capable and experienced field supervisors who deserve mention by name: Mrs. Mildred Raeder and Mrs. Helen Tuttle. To meet the demands of this study, it was determined to hire a total of fifty interviewers from six geographical areas in the state. One of these areas was Boston; the others were Lowell-Lawrence, Fall River-New Bedford, Worcester, Springfield-Holyoke, and Pittsfield. Applications were solicited through ads placed in local newspapers and telephone calls and letters to officials of community organizations. During the early months of 1960, Mrs. Raeder and Mrs. Tuttle screened hundreds of applicants in the six areas of the state and by May of that year had given NORC's basic interviewer training to 60 of the most promising. These were then convened in a series of all-day briefing sessions during which the study directors described the methodology of the survey and went through the interview schedules question-by-question. Finally, each interviewer received a 136-page manual of specifications which covered almost any contingency likely to arise and which was available for permanent reference.

The interviewers were predominantly middle class housewives, though

in each of the geographical areas one or two men were included in the group. The male interviewers were used to interview male respondents in low income areas and to "trouble-shoot" on cases in which a female interviewer suggested that a male might have better luck. Careful attention was given in the pretest to the experience of the women interviewers with male respondents, since it was felt that in some cases the men would be reluctant to discuss their hospitalization with a member of the opposite sex. It was unanimously agreed, however, that these fears were unjustified and that in the context of the study, men did not at all mind talking about such things as a prostate operation in the presence of an interviewer who happened to be female.

There are always some who doubt that non-professional interviewers can successfully interview professionals concerning their specialties and who believe that only another physician, or perhaps a medical student or nurse, can interview a physician. Yet NORC "housewife" interviewers have successfully interviewed physicians on at least twelve studies over the last twelve years, and have also interviewed samples of city officials, heads of large corporations, hospital administrators, newspaper editors, and other types of elite groups about their work. The interviewer needs no special knowledge of the skills and lore of the physician in order to interview him; she needs only interviewing skills. In the case of this study particularly, it is probable that the physician interviewed would have been much more defensive about the decisions he made in these hospital cases, the reasons he made them, and what his attitudes are about such matters, had he been talking to another member of the profession rather than to the lay interviewer who had no stake in professional matters and to whom he could talk off the record.

Through the cooperation and courtesy of Massachusetts Blue Cross, office space and facilities were provided to the study for the duration of the project in their building on Federal Street in Boston. This office was staffed by a full-time field director and a clerk-typist who handled administration of the field work, while Mrs. Raeder and Mrs. Tuttle used the space on a part-time basis to counsel with local interviewers, correspond with or telephone those outside the Boston area, and review their completed work.

Each month the study directors would return from sampling eight or ten hospitals throughout the state with approximately 200 Sample Case Cards designating patients selected for interview. The field director and her assistant would then type Face Sheets for each case; address letters to the patient if adult, to the parent if the patient was under 18, or to the closest relative if the patient was deceased; divide the cases among the various interviewers in the most efficient manner, and assemble materials for mailing to them.

Interviewers returned weekly progress reports, detailing the status of each case assigned to them: interview completed, appointment made, not at home, etc. Respondents who refused the interview received personal letters or telephone calls seeking to answer their objections, and these were followed up by a personal visit from one of the supervisors. It was the job of the Boston office to keep track of every case until it was completed or otherwise finally disposed of, to edit the completed interviews, to evaluate the quality of the interviewers' work and communicate their ratings to members of the interviewing staff, to answer interviewers' problems and questions, and to forward completed materials to the study directors in NORC's New York office. When the physician interviewing began in the Fall of 1960, supervision of the three western areas of the state was transferred to New York in order to reduce the workload of the Boston field director.

Monthly samples of hospital discharges were drawn from June, 1960, through May, 1961. Final interviewing of physicians named by patients selected in the later months was not concluded until January, 1962.

COMPLETION RATES

Of the total of 2,355 names drawn from the sample of 50 hospitals, completed interviews were obtained from either the patient or proxy in 2,046 cases. This represents a completion rate of 87 per cent. Nine per cent of the total cases resulted in refusal to be interviewed, either by the patient himself or by a protective relative. Strenuous efforts were made to overcome all refusals, including personal letters and telephone calls directed to the specific objection made by the respondent and reassignment of the case to another interviewer. About one original refuser in four was converted by these means. The most frequent reason for final refusal was a simple lack of interest ("Too busy," "Can't be bothered"). Thirty-four persons (1.4 per cent of the original sample) refused because of reluctance to discuss their illness; they considered it "too personal" or it was upsetting for them to recall or talk about the episode. Besides the nine per cent who refused, there were an additional 4 per cent of the total sample who could not be interviewed for other reasons. The majority of these could not be located, in spite of every effort; the listed address was incorrect, or the person was not known there, or he had moved away and could not be traced. In the remaining cases the respondent was located but could not be interviewed for other reasons: he had moved to another part of the country or was on extended absence, he was too ill to answer and no proxy was available, etc.

It is possible to compare the characteristics of patients interviewed with those not interviewed on certain items which were copied from hospital

records at the time the sample was drawn, and Table A-1 shows these comparisons. As may be seen by inspection of the second and third columns of the table, the non-interviewed group is more likely to be older, and to reside in Boston; it has a slight preponderance of females. It is also known from the reports turned in by interviewers that the non-interviewed group is of generally lower socio-economic status. While we do not have the diagnoses of the patients who were not interviewed, the table shows that there are no significant differences in their length of stay in the hospital. Comparison of the second column of the table with the first indicates that the slight deficiency in older persons and in Boston residents does not detract from the representativeness of the interviewed sample.

Estimates of the completion rate for the physician sample are complicated by the fact that the same doctor sometimes treated two or more patients, while the same patient was sometimes attended in the hospital by a different physician from the one who hospitalized him. Perhaps the simplest statistic is that of the 2,046 patient cases interviewed, the recommending physician was interviewed in 1,628 (80 per cent) and the attending physician was interviewed in 1,683 (82 per cent). Put another way, 2,677 physician interviews were assigned for the 2,046 patients, and 2,133 of these (80 per cent) were completed. Of those doctors not interviewed, the most frequent reason was refusal (8 per cent of the total assigned). It will be recalled that two samples were drawn from each hospital at six-month intervals. A consequence of this procedure was that a physician would be interviewed about any of his patients who fell into the first sample and then, approximately six months later, he would in a high proportion of cases be approached for another interview about his patients in the second sample. Physician refusal rates were of the order of 5 per cent during the first six months of the study, then more than doubled during the second six months. From this it may be inferred that many of these busy doctors, cooperative in granting the interviewer an appointment the first time around, felt they had discharged their obligation to the survey and were of no mind to continue with what may have seemed an endless series of interviews.

Four per cent of the designated physician interviews could not be completed because the patient refused his permission to contact the doctor. In 2 per cent of the cases, the recommending or attending physician could not be identified. The patient did not know or could not remember, and the hospital records might show only the name of the house officer and not the name of the resident or intern who actually examined the patient in the emergency room and ordered a bed or who actually attended him in the hospital. In 3 per cent of the cases the doctor could not be located because he had moved. This reflected the fact that some of the physicians were in-

TABLE A-1

COMPARISON OF OBTAINED SAMPLE WITH TOTAL SAMPLE ORIGINALLY DRAWN, WITH
RESPECT TO SEX, AGE, REGION, SIZE OF TOWN, AND LENGTH OF STAY

Sample Characteristics	Total Cases Drawn N = 2355	Interviewed Sample N = 2046	Not Inter- viewed N = 309
<i>Sex:</i>			
Male.....	47%	48%	45%
Female.....	53	52	55
<i>Age:</i>			
Under 5.....	9%	9%	3%
5-14.....	12	12	6
15-24.....	8	9	7
25-34.....	10	10	10
35-44.....	13	13	12
45-54.....	15	15	14
55-64.....	13	13	19
65-74.....	12	11	19
75-up.....	8	8	10
<i>Geographical Area:</i>			
Boston Metropolitan Area.....	48%	47%	60%
Brockton Metropolitan Area.....	2	2	2
Fall River Metropolitan Area.....	4	4	3
Fitchburg-Leominster Met. Area.....	2	2	1
Lawrence-Haverhill Met. Area.....	5	5	4
Lowell Metropolitan Area.....	4	3	4
New Bedford Metropolitan Area.....	2	2	3
Pittsfield Metropolitan Area.....	*	*	—
Providence (R.I.) Metropolitan Area.....	1	1	*
Springfield-Chicopee-Holyoke M.A....	10	10	9
Worcester Metropolitan Area.....	9	10	5
Outside any metropolitan area.....	13	14	9
<i>Size of Town where Patient Resides:</i>			
Under 1,000.....	4%	4%	3%
1,000-2,499.....	6	7	3
2,500-4,999.....	4	4	4
5,000-9,999.....	5	5	3
10,000-24,999.....	13	13	11
25,000-49,999.....	20	21	19
50,000-99,999.....	22	21	25
100,000-199,999.....	13	13	11
200,000 or more.....	13	12	21
<i>Length of Stay:</i>			
Same day.....	2%	2%	4%
1-day.....	7	8	6
2-3 days.....	22	22	19
4-5 days.....	14	14	15
6-7 days.....	13	13	12
8-14 days.....	24	23	23
15-21 days.....	8	8	10
22-30 days.....	5	5	5
31 days or more.....	5	5	6

* Less than one half of 1 per cent.

terns and residents and the further fact that the majority of the doctor interviews were not obtained until about six months after provision of the care. Much of this delay was occasioned by a policy of waiting until all interviews had been completed with patients from a particular hospital sampling before approaching any of the physicians, in order to reduce the chances of having to go back to the same physician and make another appointment with him to talk about another case. Finally, 3 per cent of the doctors could not be interviewed for other reasons: a few had died, a few were ill or out of the country, a few lacked all knowledge of the case or denied they had treated the patient.

In a sense, one could argue that an 80 per cent completion rate among doctors of patients, only 87 per cent of whom it was possible to interview, means an over-all completion rate which is below acceptable standards; and it is true that of the 2,355 patient cases originally designated for interviews, complete interviews with the patient (or proxy) and both the recommending and attending physicians were obtained in only 80×87 , or 69.6 per cent. This standard of judgment seems unduly harsh, though, since Table A-1 shows that the patients who were interviewed are entirely representative of the total, as far as we can tell from available demographic characteristics and length of stay. We do not know how the physicians who were not interviewed compare with those who were, in terms of their attitudes and practices with respect to hospitalization; but since we interviewed 80 per cent of those designated, the one in five who were not interviewed would have to be strikingly dissimilar to the majority to affect materially any of the data or conclusions reported. There is no evidence that such is the case.

VALIDITY OF RECALL

Most patients were interviewed within two months after their discharge from the hospital, though in some cases in which the patient was hard to locate or hard to pin down to an appointment, the interval may have been as long as four months. But since the questionnaire sought information on the decision to hospitalize and on medical care received for the condition before hospitalization, the period of recall extended for some respondents over a period of years. What assurance do we have, if any, that the recall was approximately accurate? We must distinguish first between factual data, such as dates, costs, and number of doctor visits, and attitudinal data, such as feelings and worries.

Much of the most essential factual data was based on hospital records rather than patient recall. Thus, the dates of admission and discharge, whether the admission was surgical or medical, the final diagnosis and nature of any surgery performed, the type of hospital accommodations used,

and the costs of the hospitalization were all obtained from records. Other factual data, such as certain key dates and the nature of care received before hospitalization, are of a less hard nature. But there are three factors which tend to give us confidence in the data. First, the patients (except for the proxies, who were normally parents reporting for children) were reporting about their own behavior in an area of considerable concern to them; e.g., their health. Misreporting most commonly occurs when respondents report on the behavior of others or on their own behavior in areas less crucial to them. Secondly, except for the brief questions about the early history of long-term conditions, the period of recall was only rarely more than a year—starting with a specific incident, the onset of illness or physician visit—and in most cases less than that.

Lastly, and probably most important, interviewers were trained to distinguish between opinion questions and factual questions, and on the latter to make every effort to obtain the most accurate possible information. These efforts included such things as showing the respondent a small calendar covering the period in question, encouraging him to consult other family members to refresh his memory, and encouraging him to look up old records, such as check stubs, bills, diaries, and old calendars on which dates had been marked. No provision was made for a "Don't know" response, and if all else failed the respondent was pressed for his best estimate or guess. In addition, both interviewers and office editors were alerted to watch for possible inconsistencies or apparent inaccuracies in the answers to factual questions and in some cases a second visit was made to the respondent to reconcile what seemed to be a misreport. It is known that some respondents had little or no information on these matters and that their "best guesses" may have been quite inaccurate; it is further known that interviewers suspected a few respondents of outright falsification. But such respondents represent no more than 1 or 2 per cent of the total. It would be presumptuous to assume that there is no error in respondent recall of the facts, but it seems equally inappropriate to assume that small errors in dates, costs, number of doctor visits, etc., could substantially affect the study's overall findings.

Questions about the respondent's feelings at a particular time are somewhat different, since there is no independent record which can be consulted to establish the fact. The recall of feelings can be distorted either because the respondent doesn't remember how he felt or because he recalls inaccurately. For example, he might have worried about his job when he had to go to the hospital, but now that he is out of the hospital and it is six months later, he says he did not worry about that. It may be pointed out again that people were being asked to report on their own feelings regarding an un-

usual event in their lives and one which occurred in the relatively recent past. Unlike the factual questions, "Don't know" responses were permitted on the opinion questions, but few patients took advantage of that category. On most questions about their feelings and worries about going into the hospital, the amount of pain they were feeling, etc., the proportion rarely exceeds 2 per cent and is often less. This suggests that respondents were quite able to recall their feelings at the time and that their replies reflect those feelings quite accurately.

The validity of the doctor recall is subject to the same considerations as those that have just been enumerated, but with the additional fact that the doctor in most cases had records he could consult. It should further be recalled that 92 per cent of the recommending physicians, the great majority of whom also attended the patient in the hospital, said they remembered him very well or fairly well. The recall of those physicians who only attended the patient in the hospital was less satisfactory; about one-fourth of these remembered the case "not well at all."

CODING AND TABULATION

Due to its protracted duration in the early Sixties, during a time of revolutionary changes in the field, the Massachusetts Hospital Survey provides almost a small history of data processing. The original pretest interviews were tabulated by hand. Most marginal tabulations of the actual study came off an IBM 101. Many cross-tabulations were done on a counter-sorter. As NORC obtained first an IBM 1620 and then a 1401 computer, additional tables were produced by this equipment. Finally, differences between the key dates of the patient's experience (onset of illness or injury, first doctor visit, date recommended to hospital, date of admission, etc.) were programmed on the University of Chicago's 7090 computer.

The process of building codes for the many open-ended questions in the interviews began in the Fall of 1960, after an appreciable number of patient interviews had been collected. Samples of these responses were written or typed on 3 × 5 slips of paper, reviewed by the study directors, and grouped into appropriate categories. Actual coding began in March, 1961, with a staff of six coders. The study directors briefed this staff on the meaning of the codes and the differences between them. All the work of each coder was checked by another and any differences were resolved by the supervisor. It developed that the six coders could perform their duties more quickly than the study directors could build new codes for the following questions in the interviews, so that by the Fall of 1961 only three coders were retained and this number was ultimately reduced to two.

Combined with the coding operation was the process of editing each

completed interview. Coders were instructed to check for interviewer error or confusion, as evidenced by omissions, inconsistencies of response, failure to follow skip directions, etc. In a few cases the interview was returned to the field for clarification. Most of the data were coded directly onto the questionnaires, which had already been pre-columned and pre-coded where possible. Certain summary data, however, were coded onto separate code sheets. Thus, there was a summary deck showing all the household enumeration data, plus the basic facts of the case as obtained from hospital records. Information on the costs of hospitalization and doctor care was also coded into a separate deck. A third separate deck included information on those patients who could not be interviewed: their characteristics and length of stay as obtained from hospital records, the reason they could not be interviewed, etc.

Coding of the patient interviews was largely completed by early 1962 and attention was then turned to the doctor interviews. The same process of studying responses to free-answer questions, building codes, training the coders and checking their work, was repeated for this part of the study. Coding of the interviews with physicians began in February, 1962, and was completed by the end of that year.

The coding of diagnoses and surgical procedures was based on the hospital data provided on the Authorization Forms and was performed by a single individual—Miss Eve Balamuth, of the Health Insurance Plan of Greater New York—who was thoroughly familiar with the three-digit code from the “International Classification of Diseases, Adapted for Indexing of Hospital Records and Operation Classification” (Public Health Service Publication No. 719, December, 1959).

Cleaning of the data was a time-consuming operation which was not completed until mid-1964. Major sources of the difficulty lay in the large number of decks involved and the lack of any inter-deck cleaning programs at NORC at the time. Discrepancies within any doctor or patient interview were reconciled, and the data were made to conform when necessary to the factual record, as obtained from the hospital, with respect to such matters as dates of admission and discharge. There was, however, no attempt made to reconcile any discrepancies between the patient’s (or proxy’s) account of the hospital episode and that of the physician.

IN CONCLUSION

The main weakness of the present study is the lack of a control group of ill or impaired individuals who were *not* hospitalized. There are, presumably, numerous individuals with the same conditions as some of those in our study who for any of a number of reasons have not consulted a doc-

not followed their physician’s advice. Obviously, in any attempt to understand “how hospitals are used today,” some sort of count should be made of these individuals, and their attitudes, experiences and circumstances should be examined. Various attempts were made to incorporate such a control group in the survey design—ranging from samples drawn from physicians’ files to the periodic screening by telephone of large-scale samples of the general public—but all were rejected as either unsound or uneconomical. A proposed sample survey of the Massachusetts general public, aimed at measuring their beliefs, attitudes and experience concerning hospitals and hospitalization, which would have provided some point of comparison for our obtained sample of discharged patients, had to be abandoned for reasons of time and cost.

The data obtained, however, from the sample of discharged patients and their physicians are accurately descriptive of the complete range of non-obstetrical hospital admissions in the state of Massachusetts during the twelve months covered. The sampling, interviewing and code classifications were rigorously specified and controlled, and we hope that the resultant data will be useful to other students and researchers over the years to come.

NATIONAL OPINION RESEARCH CENTER
University of Chicago

MASSACHUSETTS HOSPITAL STUDY

ENTER
CASE NO.

APPENDIX B

Enter Dates of Admission and Discharge
on Work Sheet (Items 1 & 2)

INTRODUCTION

I am (your name), of the National Opinion Research Center.

We're making a study of people's use of hospitals, and I believe (patient's name) got a letter recently, saying that we would like to interview (him,her).

Is (patient) at home now?

IF YES, CONTINUE INTERVIEW WITH PATIENT.

IF NO, FIND OUT BEST TIME TO SEE PATIENT
AND SAY YOU WILL CALL BACK THEN.

IF PATIENT NOW RESIDES IN AN INSTITUTION,
MARK "X" IN BOX TO RIGHT, AND SKIP TO P.3

☐

First, I want to make sure -- Were you living in this household just before you went to the hospital on (date of admission)? (Circle YES or NO)

IF YES, CONTINUE WITH HOUSEHOLD ENUMERATION. IF NO, USE OPPOSITE PAGE.

YES
NO

Now I'd like to list all the persons who were living here in this household at the time you went to the hospital.

A-1. Your name is. . . Is that right? (Enter patient's name on first line below)

2. What other members of your immediate family were living here then? (Enter names of spouse, children, and any other family members on succeeding lines)

3. Were there any other persons living here in this household when you went to the hospital? (If yes, enter names)

4. Have we missed any children or babies -- or anyone else who was living here but was away traveling, or in a hospital, or on vacation, or away at school or business? (If yes, enter names)

(A) NAMES OF HOUSEHOLD MEMBERS (Please print)	(B) RELATION TO PATIENT	(C) SEX	(D) AGE	(E) MAR- ITAL	(F) WORK STATUS
	Patient				

RECORD FOLLOWING INFORMATION FOR EACH PERSON LISTED

B. What is (each person's) relationship to you? (Enter under "B" above)

C. Enter sex of each person under "C"

D. How old is (each person)? (Enter age at last birthday; if infant, enter 0)

E. Is (each person) married or single? (Enter M, S, W or D for each)

F. Before you went to the hospital, were you (was each person) working (W), keeping house (H), going to school (S), or doing something else (specify)? (Enter letter or specify for each)

LIST RELATIONSHIP OF OTHER FAMILY MEMBERS AGED 21 OR OVER ON WORK SHEET ITEM 3, THEN ASK:

G. And before you went to the hospital, how long had you been living at this address? _____

NOW SKIP TO PAGE 4

USE THIS PAGE ONLY IF. . .

PATIENT NOW RESIDES IN AN INSTITUTION, OR
PATIENT LIVED IN SOME OTHER HOUSEHOLD JUST BEFORE ADMISSION TO HOSPITAL

H. Where were you living just before you went to the hospital on (date of admission)?

An institution.
Some other household. . .

1*
2**

*IF INSTITUTION, ASK "I", THEN SKIP TO "P" AT BOTTOM OF PAGE

I. What institution is that? _____
(name)

(street address) (city & state)

IF OUTSIDE MASSACHUSETTS, DISCONTINUE INTERVIEW

**IF SOME OTHER HOUSEHOLD, ASK J-0

J. Where was that?

(street address) (city & state)

IF OUTSIDE MASSACHUSETTS, DISCONTINUE INTERVIEW

K-1. Now your name is. . . Is that right? (Enter patient's name on first line below)

K-2. Did any other members of your immediate family live there with you? (IF YES) Who? Anyone else? (Enter names on succeeding lines below)

K-3. Were there any other persons who lived there with you just before you went to the hospital? (IF YES) Who? Anyone else? (Enter names)

(K) NAMES OF HOUSEHOLD MEMBERS (Please print)	(L) RELATION TO PATIENT	(M) SEX	(N) AGE	(O) MAR- ITAL	(P) WORK STATUS
	Patient				

L. What is (each person's) relationship to you? (Enter under "L" above)

M. ASCERTAIN AND RECORD UNDER "M" ABOVE" SEX, AGE AND MARITAL STATUS OF EACH PERSON LISTED

N. ASCERTAIN AND RECORD UNDER "N" WHETHER EACH PERSON, BEFORE PATIENT WENT TO HOSPITAL, WAS WORKING (W), KEEPING HOUSE (H), GOING TO SCHOOL (S), OR DOING SOMETHING ELSE (Specify)

LIST RELATIONSHIP OF OTHER ADULT FAMILY MEMBERS ON WORK SHEET (ITEM 3), THEN ASK:

O. How is it you did not go back to (above address) when you left the hospital?

P. ASK ALL: Before you went to the hospital, how long had you been living there? _____

1. What was the condition which caused you to go to the hospital on (date of admission)? (IF more than one mentioned) What was the main condition?

5-1

6-

2. IF ILLNESS REFERRED TO IN Q.1, ASK A-D

A. Thinking back to the beginning, before the time you really knew what was the matter -- when was it that you had the very first signs of this condition?

Mo.	Day	Yr.
-----	-----	-----

7-

B. Was there any trouble before that which might have been related to this condition? (IF YES) When did you first have that trouble? (Circle Code Z or enter date)

No. Z

Mo.	Day	Yr.
-----	-----	-----

9-

C. What were the first signs you noticed in (earliest date above)?

12-

D. And what did you first think was the cause? (-- that is, before you talked with any doctor about it.)

13-

IF ACCIDENT REFERRED TO IN Q.1, ASK E-F

E. When did the (accident, injury) happen?

Mo.	Day	Yr.
-----	-----	-----

14-

F. How did it happen?

15-

IF EARLIEST DATE IN 2-A or 2-B OR DATE IN 2-E IS SAME AS DATE OF ADMISSION, MARK "X" IN BOX AND SKIP TO Q.40 ON PAGE 17

--

16-

3. (Back when you had the first signs in earliest date in Q.2) Did you see a doctor about it right away, or did you wait a while before seeing a doctor?

Right away.
Waited a while.
Don't know.

17-1

2*

3

*A. IF "WAITED": Why did you wait a while before seeing a doctor?

18-

4. When did you first talk with a doctor about this condition? (Enter date here and also as Work Sheet Item 4)

Mo.	Day	Yr.
-----	-----	-----

19-

20-

21-

22-

23-

MARK "X" IN ONE OF THE THREE BOXES TO INDICATE WHETHER DATE IN Q.4 IS:

SAME AS DATE OF ADMISSION. ☐ SKIP TO Q. 40 ON P. 17
LESS THAN A YEAR BEFORE ADMISSION. . . . ☐ SKIP TO Q. 14 ON P. 10
A YEAR OR MORE BEFORE ADMISSION. ☐ CONTINUE WITH Q.5 BELOW

24-1

2

3

25-

5. And when did this recent trouble start -- that brought you to the hospital this time? (Enter date here and also as Work Sheet Item 5, or circle Code Z)

Mo.	Day	Yr.
-----	-----	-----

*

26-

No recent trouble,
Can't answer. Z**

27-

28-

*IF DATE GIVEN, ASK "A"

A. What happened then? (What was the nature of this trouble?)

29-

30-

**IF NO DATE GIVEN (CODE Z CIRCLED), ASK "B" & "C"

31-

B. When did you decide to do something about it (this time)? (Enter date here and also as Work Sheet Item 5)

Mo.	Day	Yr.
-----	-----	-----

C. What made you decide to do something about it then?

32-

6. Now between (date in Item 4, when you first saw a doctor about it) and (date in Item 5, when the recent trouble started or you decided to do something about it), had you ever had to spend as much as one night in a hospital in connection with this condition?

Yes Z*
No (SKIP TO Q. 9 BELOW) 0

*IF "YES", ASK "A" & "B"

A. When was that? (Record month and year at top of first column on opposite page)

B. Any other times before (date in Item 5) that you had to spend as much as one night in a hospital because of this condition?

IF YES: When was that? (Record month and year at top of next column on opposite page, and repeat "B" until all prior hospitalizations are covered. Then circle "No other" code below)

IF NO: Circle "No other" code

No other. Z

7. FOR EACH HOSPITALIZATION LISTED ON OPPOSITE PAGE, ASK FOLLOWING SERIES AND RECORD ANSWERS IN APPROPRIATE COLUMN

A. Now when you went to the hospital because of this condition in (date), what was the main purpose of that hospitalization -- that is, was it for an operation of some kind, for treatment without an operation, or was it mainly for tests or X-rays, or what?

B. How did you feel about going to the hospital then -- Were you glad to go, or were you willing to go, or were you somewhat against the idea, or were you definitely opposed?

*C. IF GLAD, SOMEWHAT AGAINST OR OPPOSED: Why were you (glad, somewhat against, opposed)?

D. How long did you stay in the hospital that time?

REPEAT UNTIL ALL LISTED HOSPITALIZATIONS ARE COVERED, THEN ASK Q. 8

8. Now between (date in Item 4) and (date in Item 5), were there any other times when a doctor said you probably ought to go to a hospital because of this condition, but you didn't go?

Yes (ASK Q.10 NEXT PAGE) 1
No(SKIP TO Q.12 PAGE 10) X

9. IF "NO" TO Q.6 (NO PRIOR HOSPITALIZATION LISTED ON OPPOSITE PAGE)

During this period (between date in Item 4 and date in Item 5), did any doctor ever say you probably ought to go to a hospital because of this condition?

Yes (ASK Q.10 NEXT PAGE) 1
No(SKIP TO Q.12 PAGE 10) X

Q. 6	DATE OF HOSPITALIZATION		DATE OF HOSPITALIZATION		DATE OF HOSPITALIZATION	
	Mo.	Yr.	Mo.	Yr.	Mo.	Yr.
Q. 7-A	Operation 1		Operation 1		Operation 1	
	Medical treatment . . . 2		Medical treatment . . . 2		Medical treatment . . . 2	
	Tests, X-rays 3		Tests, X-rays 3		Tests, X-rays 3	
	Other (specify) X		Other (specify) X		Other (specify) X	
Q. 7-B	Glad to go. 4*		Glad to go. 4*		Glad to go. 4*	
	Willing to go 5		Willing to go 5		Willing to go 5	
	Somewhat against. . . 6*		Somewhat against. . . 6*		Somewhat against. . . 6*	
	Definitely opposed. . 7*		Definitely opposed. . 7*		Definitely opposed. . 7*	
Q. 7-C	Don't know. 8		Don't know. 8		Don't know. 8	
Q. 7-D	days		days		days	

33-	34-	35-	36-	37-	38-	39-	40-	41-	42-
43-	44-	45-	46-	47-	48-	49-	50-	51-	52-

USE THIS AND OPPOSITE PAGE ONLY
IF HOSPITALIZATION EVER SUGGESTED BUT NOT CARRIED OUT ("YES" TO Q.8 OR 9)

10. A. When was that? (Record month and year at top of first column on opposite page)

B. Any other times before (date in Item 5) when a doctor said you probably ought to go to a hospital because of this condition, but you didn't go?

IF YES: When was that? (Record month and year at top of next column on opposite page, and repeat "B" until all such occasions are listed. Then circle "No other" code below)

IF NO: Circle "No other" code

No other. Z

11. FOR EACH TIME HOSPITALIZATION WAS SUGGESTED BUT NOT CARRIED OUT, ASK FOLLOWING SERIES AND RECORD ANSWERS IN APPROPRIATE COLUMN OPPOSITE

A. Now in (first date listed on P. 9), what was the main reason the doctor thought you probably ought to go to the hospital -- that is, was it for an operation of some kind, for treatment without an operation, or was it mainly for tests or X-rays, or what?

B. How strongly did he feel about this -- Did he feel it was absolutely necessary for you to go (have the operation), or did he think you would be much better off going (having it), or did he just feel it might be a good idea?

C. And how urgent did he say it was -- that is, did he want you to go to the hospital (have the operation) right away, or did he say you could put it off for a few weeks or months, or did he just say that you ought to go to the hospital (have the operation) eventually?

D. How did you feel about going to the hospital (having the operation) at that time -- Did you want to go but you couldn't, or did you just decide to put it off for a while, or were you entirely against the idea?

*E. IF WANTED TO GO BUT COULDN'T: Why couldn't you go (have the operation) then?

**F. IF PUT IT OFF OR ENTIRELY AGAINST: What was the main reason you (decided to put it off)(were against the idea)? Any other reasons?

REPEAT UNTIL ALL OCCASIONS LISTED OPPOSITE ARE COVERED, THEN GO ON TO Q. 12

HOSPITALIZATION SUGGESTED BUT NOT CARRIED OUT

	DATE: (Month and Year)	DATE: (Month and Year)	DATE: (Month and Year)
Q. 10			
Q. 11-A	Operation 1 Medical treatment . . 2 Tests, X-rays 3 Other (specify) . . . X	Operation 1 Medical treatment . . 2 Tests, X-rays 3 Other (specify) . . . X	Operation 1 Medical treatment . . 2 Tests, X-rays 3 Other (specify) . . . X
B.	Absolutely necessary. 4 Much better off . . . 5 Might be good idea. . 6 Don't know. 7	Absolutely necessary. 4 Much better off . . . 5 Might be good idea. . 6 Don't know. 7	Absolutely necessary. 4 Much better off . . . 5 Might be good idea. . 6 Don't know. 7
C.	Right away. 1 Few weeks or months . 2 Eventually. 3 Don't know. X	Right away. 1 Few weeks or months . 2 Eventually. 3 Don't know. X	Right away. 1 Few weeks or months . 2 Eventually. 3 Don't know. X
D.	Want to but couldn't. 4* Decide to put off . . 5** Against the idea. . . 6**	Want to but couldn't. 4* Decide to put off . . 5** Against the idea. . . 6**	Want to but couldn't. 4* Decide to put off . . 5** Against the idea. . . 6**
E.			
or			
F.			

53-	54-	55-	56-	57-	58-
	59-	60-	61-	62-	63-

12. Now you said this most recent trouble started (or you decided to do something about condition) on (date in Item 5). Did you talk with a doctor about it that same day, or did you wait a while before seeing a doctor?

Same day.
Waited a while.

64-1*
2**

*IF "SAME DAY", ENTER ITEM 5 DATE IN "B" BELOW

**IF "WAITED", ASK BOTH "A" & "B"

A. Why did you wait a while before seeing a doctor?

B. When did you first talk with a doctor about it?

Mo.	Day	Yr.
-----	-----	-----

IF DATE IN Q.12-B IS SAME AS DATE OF ADMISSION, SKIP TO Q.40 ON PAGE 17.

13. Between (date in Q.12-B) and (date of admission), did you ever have to spend as much as one night in a hospital because of this condition?

Yes Z*
No 0**

*IF "YES": How many different times did you have to spend as much as one night in a hospital because of this condition between (date in Q.12-B) and (date of admission)?

SKIP TO Q.15 ON NEXT PAGE.

**IF "NO": ENTER DATE IN Q.12-B AS "STARTING DATE" IN WORK SHEET ITEM 6, THEN SKIP TO Q.16 ON PAGE 12.

14. Between (date in Item 4) and (date of admission), did you ever have to spend as much as one night in a hospital because of this condition?

Yes Z*
No 0**

*IF "YES": How many different times did you have to spend as much as one night in a hospital because of this condition between (date in Item 4) and (date of admission)?

ASK Q. 15 ON NEXT PAGE.

**IF "NO": ENTER DATE IN ITEM 4 AS "STARTING DATE" IN WORK SHEET ITEM 6, THEN SKIP TO Q.16 ON PAGE 12.

USE THIS PAGE ONLY IF "YES" TO Q.13 OR Q.14

15. IF MORE THAN ONE HOSPITALIZATION BETWEEN DATES SPECIFIED IN Qs. 13-14, REPEAT FOLLOWING QUESTIONS FOR EACH TIME

A. On what date were you admitted to the hospital then?

B. And on what date were you discharged from the hospital then?

C. What was the main purpose of that hospitalization -- that is, was it for an operation of some kind, or for treatment without an operation, or was it mainly for tests or X-rays, or what?

Operation
Medical treatment
Tests, X-rays
Other (specify)

D. How did you feel about going to the hospital then -- Were you glad to go, or were you willing to go, or were you somewhat against the idea, or were you definitely opposed?

Glad to go.
Willing to go
Somewhat against.
Definitely opposed.
Don't know.

*E. IF GLAD, SOMEWHAT AGAINST OR OPPOSED: Why were you (glad to go, somewhat against the idea, definitely opposed)?

F. When you went to the hospital that time, did you expect then that you would be going back to the hospital later for this same condition?

Yes
No.
Don't know.

G. And when did you first talk with a doctor about this condition after you left the hospital that time?

Mo.	Day	Yr.
-----	-----	-----

ENTER DATE IN "G" AS "STARTING DATE" IN WORK SHEET ITEM 6.

IF DATE IS THE SAME AS DATE OF ADMISSION, SKIP TO Q.40 ON PAGE 17.

OTHERWISE CONTINUE WITH Q.16.

26-	27-	28-	29-	30-	31-	32-	33-	34-	35-
36-	37-	38-	39-	40-	41-	42-	43-	44-	45-
								78-0	79-3

THE FOLLOWING QUESTIONS REFER TO THE "STARTING DATE" IN WORK SHEET ITEM 6

DECK 04

16. What doctor was it you talked to then? (Print full name and address and also list as Work Sheet Item 8-A)

NAME: _____

STREET
ADDRESS: _____

CITY: _____

17. And where did you see him then -- in his office, at your home, at a hospital clinic, or somewhere else?

Office. 10-1
Home. 2
Hospital clinic 3
Telephone consultation. 4
Other (specify) 5

18. How did you happen to talk with him instead of to some other doctor?

Regular doctor, always or usually go to him 11-1
Had used him before, but not regular doctor 2
Referred to him by other doctor or prof. source 3
Recommended by friend, relative; heard he was good. 4
No choice, assigned to him, or emergency. 5
Other (specify) 6

19. How much pain or discomfort did you have at that time, just before you saw the doctor -- a great deal, quite a bit, a little, or none?

Great deal. 12-1
Quite a bit 2
A little. 3
None. 4
Don't know. X

20. Were you able to keep up your usual activities at that time, or did you have to cut down on some things, or were you sick in bed?

Could keep up 13-5
Cut down some 6
Sick in bed 7
Don't know. 8

21. Before you talked with the doctor, how serious did you think your condition was -- very serious, somewhat serious, or not really serious?

Very serious. 14-1
Somewhat serious. 2
Not really serious. 3
Don't know. 4

22. Before you talked with the doctor then, were you pretty sure he would want you to go to the hospital, or did you think he might want you to go, or did you have no idea of going to the hospital at that time?

Pretty sure 15-5*
Thought he might. 6*
No idea 7
Don't know. 8

*A. IF "PRETTY SURE" OR "THOUGHT HE MIGHT":

And how did you feel about it -- Before you talked with the doctor that time, were you hoping he would send you to the hospital, or were you simply willing to go if he said to, or were you planning to do all you could to stay out of the hospital?

Hoping he'd send. 16-1
Willing to go 2
Planning to stay out. 3
Don't know. 4

23. What did the doctor say the trouble was, when you first talked to him (on date in Work Sheet Item 6)?

17-

24. Did he say then that you probably ought to go into the hospital because of this condition?

Yes 18-1*
No. 2
Don't know. 3

*IF YES

ENTER WORK SHEET ITEM 6 DATE IN ITEM 7,
ENTER DOCTOR'S NAME AGAIN IN ITEM 8-B, AND
SKIP TO Q. 52 ON PAGE 20.

25. What did he say you should do about it?

19-

26. Was he the doctor who first said you probably ought to go into the hospital?

Yes 20-1*
No. 2

*IF YES

ENTER DOCTOR'S NAME AGAIN IN WORK SHEET ITEM 8-B, AND
SKIP TO Q. 29 ON NEXT PAGE.

27. What doctor was it who first said that you probably ought to go into the hospital? (Print full name and address and also list as Work Sheet Item 8-B)

NAME: _____

STREET _____

ADDRESS: _____

CITY: _____

28. How did you happen to talk with him?

29. On what date was it that he first said you probably ought to go into the hospital? (Enter date here and also as Work Sheet Item 7)

Mo.	Day	Yr.
-----	-----	-----

30. Did you talk with any other doctors between the time you first saw Dr. (in Item 8-A) (on date in Item 6), and the date (in Item 7) when (he or other doctor in Item 8-B) first said you probably ought to go into the hospital?

Yes Z*
No. 0

*IF YES, ASK A-B-C

- A. How many other doctors did you see during that period? _____

- B. GET LAST NAMES OF THESE DOCTORS AND LIST THEM IN WORK SHEET ITEM 8-C

- C. Why did you talk with (each)?

31. A. About how many times altogether did you talk with any doctor between the time you first saw Dr. (in Item 8-A) on (date in Item 6), and the time -- that would be (date in Item 7) -- when (he, or doctor in Item 8-B) first said you probably ought to go into the hospital?

No. of Times

Item 8-A doctor. 30- 3
Item 8-B doctor (if different) 32- 3
Item 8-C doctor(s) 34- 3

- B. During this period (between date in Item 6 and date in Item 7), were you taking any medicines or getting any treatment from the doctor for the condition?

Yes, medicine 36-1
Yes, treatment (specify). 2
No, neither 3
Don't know. 4

- C. And how about special tests or X-rays -- During this period, did you receive any special tests or X-rays in connection with this condition? (IF YES) What?

32. When Dr. (in Item 8-B) first said that you probably ought to go into the hospital on (date in Item 7), where did you see him then -- in his office, at your home, at a hospital clinic, or somewhere else?

Office. 38-1
Home. 2
Hospital clinic 3
Telephone consultation. 4
Other (specify) 5

33. And how was your condition at that time -- Was it considerably worse (than at first visit) or a little bit worse, or just about the same?

Considerably worse. 39-6
Little bit worse. 7*
About the same. 8*

* IF LITTLE BIT WORSE OR ABOUT THE SAME, SKIP TO Q.52 ON PAGE 20

34. What did the doctor say the trouble was then?

35. Were you pretty well aware of what was going on then, or were you really too sick to pay much attention, or were you not even conscious?

Pretty well aware 41-1
Too sick. 2*
Not conscious 3*

* IF TOO SICK OR NOT CONSCIOUS, SKIP TO Q. 72 ON PAGE 26

36. At the time the doctor first said you probably ought to go to the hospital, how much pain or discomfort did you have -- a great deal, quite a bit, a little, or none?

Great deal. 42-4
Quite a bit 5
A little. 6
None. 7
Don't know. 8

37. Were you able to keep up your usual activities at that time, or did you have to cut down on some things, or were you sick in bed?

Could keep up 43-1
Cut down some 2
Sick in bed 3
Don't know. 4

38. At that time, before you saw the doctor on (date in Item 7), how serious did you think your condition was -- very serious, somewhat serious, or not really serious?

Very serious. 44-5
Somewhat serious. 6
Not really serious. . . . 7
Don't know. 8

39. Before you talked with the doctor then, were you pretty sure he would want you to go to the hospital, or did you think he might want you to go, or did you have no idea of going to the hospital at that time?

Pretty sure 45-1*
Thought he might. 2*
No idea 3**
Don't know. 4**

*A. IF PRETTY SURE OR THOUGHT HE MIGHT: And how did you feel about it -- Before you talked with the doctor that time, were you hoping he would send you to the hospital, or were you simply willing to go if he said to, or were you planning to do all you could to stay out of the hospital?

Hoping he'd send. 46-5**
Willing to go 6**
Planning to stay out. . . . 7**
Don't know. 8**

** NOW SKIP TO Q. 52 ON PAGE 20

QUESTIONS 40-51 ARE ASKED ONLY OF SAME-DAY EMERGENCY ADMISSIONS

Patient was admitted same day as first signs of illness or same day accident happened (Q. 2).

Patient admitted same day he first saw doctor about condition (Q. 4).

Patient admitted same day he first talked with doctor about "most recent trouble" or same day he decided to "do something" about it (Q. 12).

Patient admitted same day he first talked with doctor after discharge from prior hospitalization for same condition (Q.15-G).

ENTER WORK SHEET ITEM 1 DATE AGAIN IN ITEMS 6 & 7

40. Where were you first examined by a doctor -- in his office, at your home, at the hospital, or somewhere else?

Office. 47-1
Home. 2
Hospital. 3*
Other (specify) 4

*A. IF HOSPITAL: Was that in the clinic (out-patient department), in the emergency room, or after you were admitted to the hospital and given a bed?

Clinic. 48-5
Emergency room. 6
After admission 7

41. What was the name of the doctor who first examined you? (Print full name and address, and list also as Work Sheet Item 8-A: if name unknown, record identifying data)

NAME: _____ 50-
STREET
ADDRESS: _____ 51-
CITY: _____ 52-

42. How did you happen to go to him instead of to some other doctor?

Regular doctor, always or usually go to him 53-1
Had used him before, but not regular doctor 2
Referred to him by other doctor or prof. source 3
Recommended by friend, relative, heard he was good. . . 4
No choice, assigned to him, emergency 5
Other (specify) 6

43. What did he say was wrong with you?

54-

44. Was he the doctor who arranged for your bed in the hospital?

Yes
No

55-1*
2

* IF YES, ENTER DOCTOR'S NAME AGAIN IN ITEM 8-D OF WORK SHEET, AND
SKIP TO Q. 47 BELOW.

45. What doctor was it who arranged for your bed in the hospital? (Print full
name and address, and list also as Work Sheet Item 8-D; if name unknown,
record identifying data)

NAME: _____

STREET
ADDRESS: _____

CITY: _____

56-

46. How did it happen that Dr. (named in Q.45) was the one who arranged for
your bed?

57-

47. Were any other doctors consulted before you were given a bed in the
hospital?

Yes 2*
No 0

*IF YES, ASK A-B-C

A. How many other doctors were consulted before
you were given a bed in the hospital? _____

58-

B. GET LAST NAMES OF THESE DOCTORS AND LIST THEM AS WORK SHEET ITEM 8-C

C. Why was (each) consulted?

59-

48. When the doctor (in Item 8-D) said you should go into (stay in) the
hospital, what was your condition -- Were you pretty well aware of
what was going on, or were you really too sick to pay much attention,
or were you not even conscious?

Pretty well aware 60-1
Too sick. 2*
Not conscious 3*

* IF TOO SICK OR NOT CONSCIOUS, SKIP TO Q. 72 ON PAGE 26

49. How much pain or discomfort did you have at the time -- a great deal,
quite a bit, a little, or none?

Great deal. 61-4
Quite a bit 5
A little. 6
None. 7
Don't know. 8

50. At that time, how serious did you think your condition was -- very
serious, somewhat serious, or not really serious?

Very serious. 62-1
Somewhat serious. 2
Not really serious. 3
Don't know. 4

51. Were you greatly surprised that he wanted you to go into (stay in) the
hospital, or a little surprised, or was that what you expected him to
say?

Greatly surprised 63-5
A little surprised. 6
Expected it 7
Don't know. 8

64-	65-	66-	67-	68-	69-	70-	71-
72-	73-	74-	75-	76-	77-	78-0	79-4

QUESTIONS 52-71 REFER TO WORK SHEET ITEM 7 -- DATE ON WHICH DOCTOR FIRST SAID PATIENT SHOULD OR "PROBABLY OUGHT TO" GO INTO HOSPITAL.

THEY ARE ASKED OF ALL EXCEPT THOSE WHO WERE "NOT CONSCIOUS" OR "TOO SICK TO CARE" AT THE TIME.

DECK 05

52. What was the main reason the doctor wanted you to go into the hospital -- that is, was it for an operation of some kind, for treatment without an operation, or was it mainly for tests or X-rays, or what? (Circle one code and code also in Work Sheet Item 9)

Operation 6-1*
Treatment, no operation 2**
Tests or X-rays 3**
Other (specify) 4**

*IF OPERATION, ASK Qs, 53-54 BELOW

**IF TREATMENT, TESTS OR OTHER, ASK APPROPRIATE Q.55 ON NEXT PAGE

53. Was there any doubt in your own mind that you should have this operation, or did it seem to you to be absolutely necessary?

Some doubt. 7-5*
Absolutely necessary. 6**
Don't know 7*

*A. IF "SOME DOUBT" OR "DON'T KNOW": Why were you not entirely sure?

**B. IF ABSOLUTELY NECESSARY: Why was it absolutely necessary that you have the operation?

54. Was this the kind of operation that might have been done in the doctor's office or clinic, or was it absolutely necessary that they do it in the hospital?

Might have been done in office. 10-1*
Hospital absolutely necessary 2
Don't know 3

*A. IF MIGHT HAVE BEEN DONE IN OFFICE: Why did you (or the doctor) decide to use the hospital instead?

NOW SKIP TO Q.58 ON PAGE 22

55. IF TREATMENT WITHOUT OPERATION: Could you have been treated for this condition outside the hospital -- in your home, perhaps, or at the doctor's office or clinic -- or was it absolutely necessary that you go into the hospital?

Could have been treated outside . . . (ASK 56) 12-X
Hospital absolutely necessary . . . (ASK 57) 0
Don't know. (ASK 56) 1

IF TESTS OR X-RAYS: Could these tests (or X-rays) have been done outside the hospital -- in your home, perhaps, or at the doctor's office or clinic -- or was it absolutely necessary to have them done in the hospital?

Could have been done outside. . . . (ASK 56) 13-2
Hospital absolutely necessary . . . (ASK 57) 3
Don't know. (ASK 56) 4

IF OTHER: Could this have been done outside the hospital -- in your home, perhaps, or at the doctor's office or clinic -- or was it absolutely necessary to have it done in the hospital?

Could have been done outside. . . . (ASK 56) 14-6
Hospital absolutely necessary . . . (ASK 57) 7
Don't know. (ASK 56) 8

56. IF "COULD HAVE BEEN DONE OUTSIDE" OR "DON'T KNOW":

Why did you (or the doctor) decide to use the hospital?

57. IF "HOSPITAL ABSOLUTELY NECESSARY":

Why could it not have been done outside the hospital?

58. How strongly did the doctor feel about it -- Did he feel it was absolutely necessary for you to go into the hospital (have the operation), or did he think you would be much better off going (having it), or did he just feel it might be a good idea?

Absolutely necessary. . .	19-1
Much better off	2
Might be good idea. . . .	3
Don't know.	4

59. And how urgent did he say it was -- that is, did he want you to go into the hospital (have the operation) right away, or did he say you could put it off for a few weeks or months, or did he just say you ought to go into the hospital (have the operation) eventually?

Right away.	20-5
Few weeks or months . . .	6
Eventually.	7
Don't know.	8

60. How did you yourself feel about it -- Were you glad to go into the hospital (have the operation), or were you willing to go (have it), or were you somewhat against the idea, or were you definitely opposed to going into the hospital (having the operation)?

Glad.	21-1*
Willing	2
Somewhat against.	3*
Definitely opposed. . . .	4*
Don't know.	5

*A. IF GLAD, SOMEWHAT AGAINST OR DEFINITELY OPPOSED: Why?

22-

23-

61. How long did you expect you would have to stay in the hospital, when the doctor first said you probably ought to go? (Enter here and also as Item 10 of Work Sheet)

_____ days

24-

25-

62. At the time he told you, what one thing worried you most about going into the hospital?

26-

27-

63. A. How much did you worry about the cost of the hospital at that time -- a great deal, or a little, or not at all?

Great deal.	28-1*
A little.	2*
Not at all.	3**
Don't know.	4

*B. IF SOME WORRY: Why did you worry about that (a little)?

**B. IF NOT AT ALL: Why did you not worry about that?

29-

30-

64. A. How much did you worry about the cost of the doctor -- a great deal, or a little, or not at all?

Great deal.	31-1*
A little.	2*
Not at all.	3**
Don't know.	4

*B. IF SOME WORRY: Why did you worry about that (a little)?

**B. IF NOT AT ALL: Why did you not worry about that?

32-

33-

65. ASK ONLY IF PATIENT WAS WORKING BEFORE HE WENT TO HOSPITAL

A. How much did you worry about your job when you had to go into the hospital -- a great deal, or a little, or not at all?

Great deal.	34-1*
A little.	2*
Not at all.	3**
Don't know.	4

*B. IF SOME WORRY: Why did you worry about that (a little)?

**B. IF NOT AT ALL: Why did you not worry about that?

35-

36-

QUESTIONS 72-75 ARE ASKED ONLY OF PATIENTS WHO WERE "NOT CONSCIOUS" OR "TOO SICK TO CARE" AT TIME DOCTOR FIRST SAID THEY SHOULD GO TO THE HOSPITAL (Q.35 or 48)

ENTER "NA" IN WORK SHEET ITEM 10.

72. What was the main reason the doctor wanted you to go into the hospital -- that is, was it for an operation of some kind, for treatment without an operation, or was it mainly for tests or X-rays, or what? (Circle one code, and code also Work Sheet Item 9)

Operation 54-1
Medical treatment 2
Tests, X-rays 3
Other (specify) 4

73. As far as you know, did the doctor feel it was absolutely necessary for you to go into the hospital (have the operation), or did he think you would be much better off if you went (had it), or did he just feel it might be a good idea?

Absolutely necessary. 55-5
Much better off 6
Might be good idea. 7
Don't know. 8

74. Who was it who made arrangements with the doctor about your admission to the hospital?

(relationship)

75. ASK ONLY IF SPOUSE OR FAMILY MEMBER MENTIONED IN Q. 74

Did (that person) think it was absolutely necessary for you to be taken to the hospital (have the operation), or did (he,she) feel it was probably a good idea, or was (he,she) somewhat against the idea of your going to the hospital (having the operation)?

Absolutely necessary. 57-3
Probably should 2*
Somewhat against. 1*
Don't know. 4

- *A. IF "PROBABLY SHOULD" OR "SOMEWHAT AGAINST":

Why did (he,she) feel it was not absolutely necessary for you to go to the hospital (have the operation)?

Q. 76 IS ASKED OF ALL EXCEPT SAME-DAY EMERGENCY ADMISSIONS

76. Was Dr. (Work Sheet Item 8-B) the one who arranged for your bed in the hospital?

Yes 60-1*
No. 2**

*IF YES, ENTER DOCTOR'S NAME AGAIN IN ITEM 8-D OF WORK SHEET

**IF NO, ASK "A" & "B"

- A. What doctor was it who arranged for your bed in the hospital? (Print full name and address unless already given, and list also as Work Sheet Item 8-D)

NAME: _____

STREET
ADDRESS: _____

CITY: _____

- B. And how did it happen that he was the one who put you into the hospital?

63-	64-	65-	66-	67-	68-	69-	70-	78-0	79-5
-----	-----	-----	-----	-----	-----	-----	-----	------	------

REFER TO WORK SHEET ITEMS 7 & 1

IF THREE DAYS OR LESS BETWEEN THESE DATES, SKIP TO Q. 82 ON PAGE 29

IF FOUR OR MORE DAYS BETWEEN THESE DATES, ASK Qs. 77-81.

77. Now on (date in Item 7), Dr. (in Item 8-B) first said you probably ought to go into the hospital (have the operation). You actually went into the hospital on (date in Item 1).

Between (date in Item 7) and (date in Item 1), did your condition get any worse, or did it stay about the same?

Got worse. 6-1*
About same 2

- *A. IF GOT WORSE: In what way did your condition get worse?

IF SAME-DAY EMERGENCY ADMISSION (Qs. 40-51 filled out), SKIP TO Q.82 ON PAGE 29

78. A. How was it you didn't go to the hospital (have the operation) sooner?
(that is, right after the doctor first suggested it on (date in Item 7))

B. Any other reasons you didn't go sooner?

79. Now I'm interested in how many times you talked with any doctor between
(date in Item 7) and the time you went to the hospital (Item 1).

A. Did you talk with Dr. (in Item 8-A) again during
this period? (IF YES) How many times? (Circle NO
or enter number of times)

B. IF DIFFERENT DOCTOR LISTED IN ITEM 8-B: How
about Dr. (in Item 8-B) -- Did you talk with
him again before you entered the hospital?
(IF YES) How many times?

C. IF ANY DOCTORS LISTED IN ITEM 8-C: Did you
talk with (all listed in Item 8-C) again
during this period? (IF YES) How many times?

D. IF DIFFERENT DOCTOR LISTED IN ITEM 8-D: How
many times did you talk with Dr. (in Item 8-D)
between (date in Item 7) and (date in Item 1)?

E. Did you talk with any other doctors during this
period, besides those we've mentioned? (IF YES,
LIST NAMES IN WORK SHEET ITEM 8-E AND ASK) How
many times?

80. IF ANY NAMES LISTED IN ITEM 8-E: How did you happen to talk with (each)?

81. A. During this period (between dates in Item 7 and Item 1), were you
taking any medicines or getting any treatment from the doctor for
the condition?

Yes, medicine. 21-1
Yes, treatment (specify) 2
No, neither 3
Don't know. 4

B. And how about special tests or X-rays -- During this period, did you
receive any special tests or X-rays in connection with the condition?
(IF YES) What?

THE FOLLOWING QUESTIONS ARE ASKED OF EVERYBODY

82. Now you went to (name of) hospital. Did you or the doctor ever consider
using a different hospital instead?

Yes 24-1*
No. 2*
Don't know. 3*

*IF YES, ASK "A" & "B"

A. What other hospital was considered?

B. What was the main reason you finally decided on (hospital chosen)?

**IF NO OR DON'T KNOW, ASK "C"

C. Why did you not consider any other hospital?

90. Did you feel that you could have left the hospital any sooner than you did?

Yes	45-1*
No.	2**
Don't know.	3**

*A. IF YES: What was the main reason you stayed longer? (Any other reasons?)

**B. IF NO OR DON'T KNOW: Did you feel that you should have stayed in the hospital longer -- that is, that you were leaving there too soon?

Yes	47-1***
No.	2
Don't know.	3

***C. IF YES TO "B": Why didn't you stay longer? (Any other reasons?)

91. How did the doctor feel about it -- Did he think you should have left sooner, or stayed longer than you did?

Yes, left sooner.	49-1*
Yes, stayed longer.	2*
No, neither	3
Don't know.	4

*IF "LEFT SOONER" OR "STAYED LONGER", ASK "A" & "B"

A. Why did he feel that way?

B. Why did you (stay longer, leave sooner) than he wanted you to?

92. Looking back at it now, did your stay in the hospital turn out better than you expected it to be, or about the same, or was it worse than you expected?

Better.	54-1*
About the same.	2
Worse	3*
Don't know.	4
Not applicable, no expectations	5

*A. IF "BETTER" OR "WORSE": In what way?

93. REFER TO PAGES 7 & 11 FOR ANY PRIOR HOSPITALIZATIONS FOR THIS CONDITION

(Aside from the hospitalizations you told me about earlier in (dates on Pages 7, 11) for this same condition) Had you ever had to spend as much as one night in a hospital, or sanatorium or rest home, before this?

Yes	Z*
No.	Z

*IF YES, ASK "A"-"E"

A. Not counting your recent hospital stay (and any others listed on Pages 7, 11), how many other times in your life have you had to spend as much as one night in a hospital?

B. How many of these were within the last ten years?

C. Did any of these hospital stays (mentioned in "A") last for more than a week? (IF YES) How many?

D. IF ANY MENTIONED IN "C": What was (each) for?

E. IF WOMAN: Were any of these other hospital stays in connection with having a baby? (IF YES) How many?

IF PATIENT NEVER HOSPITALIZED BEFORE ("No" to Q. 93 and no hospitalizations listed on Pages 7, 11), SKIP TO Q. 95.

94. Did your earlier experience with hospitals make you feel better about going this time, or did it make you feel worse about going?

Better.	65-1*
Worse	2*
No difference	3
Don't know, had no feelings.	4

*A. IF "BETTER" OR "WORSE": In what way? (Why was that?)

68-	69-	70-	71-	72-	73-
74-	75-	76-	77-	78-0	79-6

DECK 07

5-1

95. Now when you were first discharged from the hospital this time, where did you go?

Home, back to same address. . (ASK 96) 6-1
To a different address:

A relative's home. . . . (ASK A) 2
A nursing home (ASK A & B) 3
Another hospital (ASK A & B) 4
Other (specify). . . . (ASK A) 5

A. IF DIFFERENT ADDRESS: Why was that?

7-

B. IF NURSING HOME OR HOSPITAL: How long did (will) you have to stay there? _____ *

8-

* NOW SKIP TO Q. 99 ON P. 35

96. When you first got out of the hospital, did you have to stay in bed most of the time, or did you just have to cut down on some of your activities, or were you able to get around normally?

Stay in bed 9-1*
Cut down some 2**
Get around normally 3
Don't know. 4

*IF "STAY IN BED":

A. How long did (will) you have to stay in bed after you got out of the hospital? _____ ** 10-

**IF "STAY IN BED" OR "CUT DOWN SOME":

B. How long was it (will it be) before you got back to normal? _____ 11-

C. Who took care of you when you first got out of the hospital? _____ 12-

D. Did this cause any special difficulty? (IF YES) In what way? _____ 13-

97. Is there anything in particular about your house (apartment, other place of convalescence) that made it rather difficult for you when you first got out of the hospital? (IF YES) What? _____ 14-

98. Were there any other circumstances that made it difficult for you when you first got out of the hospital? (IF YES) What? _____ 15-

99. During the first two weeks after you got out of the hospital, how many times did you see a doctor about this condition? (That would be up to 14 days after date in Work Sheet Item 2) _____ 16-
_____ 17-

IF NONE, SKIP TO Q.100; OTHERWISE ASK ALL SUB-QUESTIONS

A. Were any of these visits to your home? (IF YES) How many? (Circle NO or enter number) _____ NO 18-

B. Which doctor(s) did you see about the condition after you left the hospital? (IF ANY NOT PREVIOUSLY LISTED ON WORK SHEET, ENTER NAMES IN ITEM 8-F) _____

C. Were these visits (was this visit) just for a checkup, or were you receiving some kind of medical treatment? _____

Checkup only. 19-1
Treatment 2*
Other (specify) 3
Don't know. 4

*D. IF "TREATMENT": What sort of treatment? _____ 20-

100. What was the total amount of your hospital bill, including anything paid by insurance?

No charge, Workmen's Compensation . . (SKIP TO 104) 1
No charge, welfare case (SKIP TO 104) 2
No charge, other (specify) (SKIP TO 104) 3
Don't know, can't estimate. (ASK 101) Z

\$ _____ (ASK 101)

101. Did you have any kind of health insurance that covered any part of this hospital bill?

Yes . . . (ASK 102 & 103)
No. . . . (SKIP TO 104)

21-1
X

102. A. What insurance was this? -- that is, what is the name of the company or plan? (Do you have any other insurance that covered any part of this hospital bill? (IF YES) Name of company or plan)

B. I'm going to need the certificate number on your hospital insurance policy(ies). Do you have a copy of your contract here -- or maybe a card which shows this information? (We need it in order to classify people exactly, according to the kinds of health insurance they have.)

Record certificate number for each plan listed in "A", including any prefix or suffix letters. If not Blue Cross, copy exact name or title of plan as it appears on contract.

C. How much did the insurance pay toward the hospital bill?
(If more than one plan mentioned in "A", record separately for each)

\$ _____

D. Ascertain and record below amount paid by patient out-of-pocket, or circle Code X.

Insurance paid all. . X

\$ _____
(patient had to pay)

103. HAND RESPONDENT WHITE CARD: Would you mind reading this card, and telling me if any of those statements are true in your case? For example, "A" -- Would that be true in your case? How about "B"? Etc. (Circle one code on each line below, then ask "E")

	Yes, True	No, Not True	Don't Know
If hadn't had insurance:			
A. Would not have gone to the hospital	22-1	2	3
B. Would have had a less expensive room.	23-6	7	8
C. Wouldn't have had so many tests, X-rays	24-1	2	3
D. Would have left the hospital sooner	25-6	7	8

E. Can you think of any other ways in which your case might have been handled differently, if you had not had the hospital insurance? (IF YES) In what ways?

26-

27-

104. ASK EVERYBODY: Do you have any (other) kind of health insurance that would cover hospital bills -- even though you didn't use it in this case?

*IF "YES", ASK "A"- "D"
Yes
No.

28-1*
2

A. What insurance is that -- that is, what is the name of the company or plan? (Do you have any other kind of health insurance that would cover hospital bills? IF YES: Name of company or plan)

B. Ask to see policy or card, and record certificate number for each plan listed in "A", including any prefix or suffix letters. If not Blue Cross, copy exact name or title of plan as it appears on contract.

C. Why did it not cover any part of this hospital bill? (If "No charge" on Q. 100, write "No bill")

29-

30-

D. Were you surprised that this insurance did not pay part of the hospital bill, or did you know in advance that it wouldn't pay anything?

Surprised	31-1
Knew in advance	2
Don't know.	3
Doesn't apply, no bill.	4

ASK EITHER Q. 105 OR 106 IN EVERY CASE

If patient has hospital insurance, ask Q. 105 -- whether or not insurance was used in this case.

If patient does not have any hospital insurance, ask Q. 106 on opposite page.

105. IF "YES" TO EITHER Q. 101 OR 104 (If more than one plan held, ask A-B-C about each one separately, then ask D-E about all of them in general)

ABBREVIATED NAME OF PLAN			
A. How long have you had this hospital insurance?			
B. Are you enrolled through a group plan, or is it an individual contract where you pay the premiums directly to the company?			
Group	1*	1*	1*
Individual.	2	2	2
*C. IF GROUP: Does the employer pay all of the cost of this insurance, or part of the cost, or do you pay the full cost yourself?			
Employer pays all	1	1	1
Employer pays part. . . .	2	2	2
Respondent pays all . . .	3	3	3
D. Have you or your family ever used this insurance to help pay hospital bills before? (IF YES) On how many occasions, altogether?			
E. Taking everything into consideration, would you say you're entirely satisfied with the hospital insurance you have -- the things it covers and the amounts it pays -- or are there some things about it that you don't like so much?			
Entirely satisfied.			34-X
Something disliked.			2*
Don't know.			3
*F. IF SOMETHING DISLIKED: What don't you like so much about it?			

NOW SKIP TO Q. 107 ON PAGE 40

37-	38-	39-	40-	41-	42-	43-	44-	45-	46-
47-	48-	49-	50-	51-	52-	53-	54-	55-	56-

106. IF "NO" TO BOTH Q. 101 AND Q. 104 -- NO HOSPITAL INSURANCE HELD

A. Did you ever have any insurance to cover hospital bills?

Yes 57-1*
No. 2**
Don't know. 3*

*B. IF "YES" OR "DON'T KNOW" TO "A": Why don't you have this insurance now?

**C. IF "NO" TO "A": How does it happen that you never had any insurance to cover hospital bills?

D. In general, does such insurance seem to you like a good idea, or are you just as well off without it?

Good idea 60-X
As well without it. . . . 0
Don't know. 1

IF "NO CHARGE" ON Q. 100, SKIP TO Q. 107. OTHERWISE, ASK "E" & "F"

E. If you had had insurance to cover your hospital bill this time, do you think you would have gone to the hospital any sooner, or would it have made no difference?

Would have gone sooner. . 61-2
No difference 3
Don't know. 4

F. If you had had insurance to cover your hospital bill this time, do you think you would have stayed in the hospital any longer, or would it have made no difference?

Would have stayed longer. 62-6
No difference 7
Don't know. 8

63-	64-	65-	66-	67-	68-	69-	70-	71-	72-
			73-	74-	75-	76-	77-	78-0	79-7

DECK 08

107. ASK ONLY IF SURGERY WAS PERFORMED IN THE HOSPITAL (Qs. 83-84)

A. Who was the doctor who performed your operation? (Enter as Work Sheet Item 8-G and record full name and address if not given earlier)

5-1

B. How much was his total bill for the operation -- including anything that insurance paid, as well as what you paid?

\$

6-

C. IF NO CHARGE: Why was there no charge?

7-

D. Did you get any other bill from him, for care you received for this condition either before or after you were in the hospital? (IF YES) How much was this bill?

\$

8-

E. And was he the doctor mainly in charge of your care while you were in the hospital?

Yes (SKIP TO 109) Z
No. (ASK 108) Z

9-

108. A. Who was the doctor mainly in charge of your care while you were in the hospital? (Enter as Work Sheet Item 8-H and record full name and address if not given earlier)

10-

B. IF DIFFERENT DOCTOR FROM ONE ENTERED IN ITEM 8-D: How did he happen to attend you?

11-

C. How much did this doctor charge altogether? -- including anything paid by insurance -- and including also any times he saw you at your home or in his office before or after your stay in the hospital?

\$

13-

14-

15-

D. IF NO CHARGE: Why was there no charge?

16-

109. Now I just want to jot down here the names of any other doctors you saw in connection with this condition (since date in Work Sheet Item 6), and find out the amount of their bills.

17-

If no other doctors seen, circle Code X and skip to Q. 110. . X

18-

ENTER BELOW THE LAST NAMES OF ALL OTHER DOCTORS LISTED IN WORK SHEET ITEM 8, THEN ASK FOR EACH:

19-

What was the total amount that Dr. (name) charged -- including anything paid by insurance? (that is, for care received between date in Work Sheet Item 6 and fourteen days after discharge date)

20-

Dr. _____ \$ _____

21-

Dr. _____ \$ _____

22-

Dr. _____ \$ _____

23-

Dr. _____ \$ _____

24-

25-

110. Did you have any other doctor bills in connection with this condition, either from doctors who saw you in the hospital -- like a surgical assistant, or pathologist, or anesthetist -- or for care you received before or after you were in the hospital? (that is, between date in Work Sheet Item 6 and fourteen days after discharge date)

26-

27-

Yes Z*
No. Z

*IF "YES" ASK A-B-C

A. What doctor was that? (Record below, then ask) Any other doctor bills that we haven't already mentioned?

28-

B. What did (each) charge you for?

29-

C. What was the total amount of (each) bill, including anything paid by insurance?

30-

A. Name	B. Nature of Service	C. Amount
Dr. _____	_____	\$ _____
Dr. _____	_____	\$ _____

31-

32-

33-

IF NO DOCTOR BILLS AT ALL RECORDED ON THESE TWO PAGES (Qs. 107-110), SKIP TO 114.

111. RECORD TOTAL OF AMOUNTS IN Qs. 107-D, 108-C, 109 & 110

(Do not count surgeon fee in 107-B)

\$

112. Did you have any kind of insurance that covered any part of these doctor (or surgeon's) bills (in Q.107-B & 111)?

Yes (ASK 113)
No. (SKIP TO 114)

34-1
X

113. A. What insurance was this -- that is, what is the name of the company or plan? (Do you have any other insurance that covered any part of these doctor bills? (IF YES) Name of company or plan)

35-

B. Ask to see policy or card, and record certificate number for each plan listed in "A", including any prefix or suffix letters. If not Blue Shield, copy exact name or title of plan as it appears on contract.

36-
37-
38-

C. IF SURGEON BILL ENTERED IN Q.107-B: Now you said the surgeon charged (amount in 107-B) for the operation. How much of that did you yourself have to pay, or was his bill entirely covered by insurance?

\$ _____
(patient had to pay)

39-
40-
41-

D. Now the total amount of your (other) doctor bills was (amount in 111). How much of that did you yourself have to pay?

\$ _____
(patient had to pay)

42-
43-
44-

E. In general, do you think the fact that you had this insurance made any difference, one way or the other, in the amount of doctor care you received, or in the kind of care the doctor gave you?

Yes
No.
Don't know.

45-1*
2
3

*F. IF "YES" TO "E": In what way did it make a difference?

46-

47-

114. ASK EVERYBODY: Do you have any (other) kind of insurance that would cover doctor or surgeon's bills -- even though you didn't use it in this case?

Yes
No.

48-1*
2

*IF "YES", ASK "A"-"D"

A. What insurance is that -- that is, what is the name of the company or plan? (Do you have any other kind of insurance that would cover doctor or surgeon's bills? (IF YES) Name of company or plan)

B. Ask to see policy or card, and record certificate number for each plan listed in "A", including any prefix or suffix letters. If not Blue Shield, copy exact name or title of plan as it appears on contract.

C. Why did it not cover any part of these doctor bills? (If no doctor bills, write "No bills")

49-

50-

D. Were you surprised that this insurance did not pay part of these doctor bills, or did you know in advance that it wouldn't pay anything?

Surprised
Knew in advance
Don't know.
Doesn't apply, no bills .

51-1
2
3
4

ASK EITHER Q. 115 OR 116 IN EVERY CASE

If patient has insurance to cover doctor bills, ask Q. 115 -- whether or not insurance was used in this case.

If patient does not have any insurance to cover doctor bills, ask Q. 116 on opposite page.

115. IF "YES" TO EITHER Q. 112 OR 114 (If more than one plan held, ask A-B-C about each one separately, then ask D-E about all of them in general)

ABBREVIATED NAME OF PLAN			
A. How long have you had this insurance that helps pay doctor bills?			
B. Are you enrolled through a group plan, or is it an individual contract where you pay the premiums directly to the company?			
Group	1*	1*	1*
Individual.	2	2	2
*C. <u>IF GROUP</u> : Does the employer pay all of the cost of this insurance, or part of the cost, or do you pay the full cost yourself?			
Employer pays all . .	1	1	1
Employer pays part. .	2	2	2
Resp. pays all. . . .	3	3	3

- D. Have you or your family ever used this insurance to help pay doctor bills before? (IF YES) On how many occasions, altogether? 52-
53-

- E. Taking everything into consideration, would you say you're entirely satisfied with this insurance -- the things it covers and the amounts it pays -- or are there some things about it that you don't like so much?
- | | |
|---------------------------|------|
| Entirely satisfied. . . . | 54-1 |
| Something disliked. . . . | 2** |
| Don't know. | 3 |

- **F. IF "SOMETHING DISLIKED": What don't you like so much about it?

NOW SKIP TO Q. 117 OPPOSITE

56-	57-	58-	59-	60-	61-	62-	63-	64-
65-	66-	67-	68-	69-	70-	71-	72-	73-

116. IF "NO" TO BOTH Q. 112 AND Q. 114 -- NO INSURANCE TO COVER DOCTOR BILLS

- A. Did you ever have any insurance to cover doctor bills?

Yes	74-1*
No.	2**
Don't know.	3*

- *B. IF "YES" OR "DON'T KNOW" TO "A": Why don't you have this insurance now?

- **C. IF "NO" TO "A": How does it happen that you never had any insurance to cover doctor bills?

- D. In general, does such insurance seem to you like a good idea, or are you just as well off without it?
- | | |
|-------------------------|------|
| Good idea | 77-1 |
| As well without | 2 |
| Don't know. | 3 |

THE FOLLOWING QUESTIONS ARE ASKED OF EVERYBODY

117. Now here are some ideas about health that people sometimes express. I'd like to know whether you agree or disagree with each one.

	Agree	Disagree	Don't Know	
A. A person understands his own health better than most doctors do.	6-X	0	1	5-1
B. No matter how careful a person is, he has to expect a good deal of illness in his lifetime.	7-2	3	4	
C. Being sick in bed for a week has a lot of advantages.	8-6	7	8	
D. Nobody should go to a hospital unless there's just no other way to take care of him properly.	9-X	0	1	

118. If a person is feeling all right, do you think he should get a general physical examination every year or so anyway, or is it not worth the trouble unless you have some complaint?		
	Get exam anyway	10-2
	Not worth trouble	3
	Don't know.	4
119. Do you have any feeling that people often go to the hospital when it's not really necessary?		
	Yes	11-6*
	No.	7
	Don't know.	8
*IF "YES", ASK BOTH "A" & "B"		
A. What kinds of people are these? (Why do they go when it's not really necessary?)		
		12-
		13-
B. Does this happen very often, or only occasionally?		
	Very often.	14-1
	Fairly often.	2
	Only occasionally	3
	Don't know.	4
120. Do you have any feeling that people often do <u>not</u> go to the hospital when they really should?		
	Yes	15-6*
	No.	7
	Don't know.	8
*IF "YES", ASK BOTH "A" & "B"		
A. What kinds of people are these? (Why don't they go, when they really should?)		
		16-
		17-
B. Does this happen very often, or only occasionally?		
	Very often.	18-1
	Fairly often.	2
	Only occasionally	3
	Don't know.	4
121. Taking everything into consideration, would you say that people use hospitals <u>more</u> than they really should, or <u>less</u> than they really should?		
	More.	19-5
	About right	6
	Less.	7
	Don't know.	8

122. How about surgery -- Do you have any feeling that people often get operations which are not really necessary?		
	Yes	20-1*
	No.	2
	Don't know.	3
*IF "YES", ASK BOTH "A" & "B"		
A. What kinds of people are these? (Why do they get them when it's not really necessary?)		
		21-
		22-
B. Does this happen very often, or only occasionally?		
	Very often.	23-1
	Fairly often.	2
	Only occasionally	3
	Don't know.	4
123. Do you have any feeling that people often do <u>not</u> get operations when they really should?		
	Yes	24-6*
	No.	7
	Don't know.	8
*IF "YES", ASK BOTH "A" & "B"		
A. What kinds of people are these? (Why don't they get them, when they really should?)		
		25-
		26-
B. Does this happen very often, or only occasionally?		
	Very often.	27-1
	Fairly often.	2
	Only occasionally	3
	Don't know.	4
124. Taking everything into consideration, would you say there are too many operations performed today, or not enough?		
	Too many.	28-5
	About right	6
	Not enough.	7
	Don't know.	8

And now a few background questions, and we'll be through.

125. A. Who is (was) the main earner in the family?

Patient	29-1
Spouse.	2
Other	3

B. What sort of work does the main earner (do you) do?
(OR - What sort of work did the main earner do?)

30-

Occupation:

31-

Industry:

C. CODE WHETHER MAIN EARNER,
AT TIME OF HOSPITALIZATION, WAS

Employed.	32-1
Retired	2
Deceased.	3
Unemployed.	4

D. IF "SPOUSE" OR "OTHER" CODED IN "A" BUT PATIENT WAS ALSO EMPLOYED '
BEFORE HOSPITALIZATION: (Refer Page 2, Col. F or Page 3, Col. N)

What sort of work do (did) you do?

Occupation:

33-

Industry:

34-

126. HAND RESPONDENT BUFF CARD: Would you mind telling me which one of those was
your main source of income at the time you went
to the hospital?

A. Wages, salary	35-1	G. Interest, div., insurance . .	35-7
B. Business, farm, profession. .	2	H. Rent.	8
C. Social Security	3	J. Cash contributions.	9
D. Government pension.	4	K. No money income	0
E. Private pension	5	L. Other (<u>specify</u>)	X
F. Old Age Assistance, welfare .	6		

127. Now I need a rough idea of the family's total income. (HAND RESPONDENT
REVERSE SIDE OF BUFF CARD)

Adding together the whole family income -- including any money you may
have received from pensions, unemployment compensation, investments, or
other sources -- in which one of these groups did your total family
income fall during the last twelve months? -- before taxes, that is.

A. Under \$2,000	36-1
B. \$2,000-\$2,999.	2
C. \$3,000-\$3,999.	3
D. \$4,000-\$4,999.	4
E. \$5,000-\$5,999.	5
F. \$6,000-\$7,499.	6
G. \$7,500-\$9,999.	7
H. \$10,000 or over.	8
Don't know	X

128. How many bedrooms do you have in the house here -- that is, rooms where
people sleep?

37-

Institution,
doesn't apply.....

X

A. IF TWO OR MORE: Are any of them ever empty -- that is, do you have
a spare room?

Yes
No.

38-7
8

129. A. What was the highest grade of school you completed?

B. IF MARRIED: What was the highest grade of school your (spouse)
completed?

	A	B
	Respondent	Spouse

Completed 0-4 years	39-1	40-1
Completed 5-6 years	2	2
Completed 7-8 years	3	3
Completed 9-11 years.	4	4
Completed 12 years.	5	5
Completed 1-3 years college	6	6
Completed 4 or more years college	7	7
Don't know.	8	8

130. A. In what country was your father born?

41-

B. In what country was your mother born?

42-

C. IF EITHER BORN OUTSIDE U.S.:

And in what country were you born?

43-

131. A. What is your religious preference?

Protestant.	44-1*
Catholic.	2
Jewish.	3
Other (<u>specify</u>)	4
None.	5

*B. IF PROTESTANT: What denomination?

45-

132. Well, thank you very much. You were very helpful.

Now the doctors are also interested in this survey, and we'll be interviewing them too. And just so your doctors will know it's all right with you, I'd like you to sign these Permission Forms. (The form just gives your permission for him to talk about the case with us -- on a confidential basis, of course.)

Let's see, that would be (doctors listed in Work Sheet Items 8 A-B-D-G-H). I'll fill in the names, and then you just sign here.

FILL OUT PERMISSION FORMS FOR EACH DOCTOR LISTED IN 8-A-B-D-G-H AND OBTAIN PATIENT'S SIGNATURE ON EACH. 46-

RECORD HERE THE NUMBER OF PERMISSION FORMS SIGNED: 47-

IF PATIENT REFUSED TO SIGN ANY, ASK: Would you have any objection to our talking with the doctor about your case -- assuming that he wants to be interviewed?

Yes, would object 48-1
No objection. 2

133. And finally, we'd like your permission to go to the hospital and get exact information from them about how much they charged you for various things, and so on. So I have one other form for you to sign.

FILL OUT REVERSE SIDE OF HOSPITAL PERMISSION FORM AND OBTAIN SIGNATURE.

Hospital form signed. . . 49-4
Refused to sign 5*

*IF REFUSED: Would you have any objection to our asking the hospital for the information on this form -- assuming that they don't mind looking it up for us?

Yes, would object 50-7
No objection. 8

FILL OUT FOLLOWING INFORMATION IMMEDIATELY AFTER LEAVING RESPONDENT

A. IF INCOME (Q. 127) IS CODED "DK", MAKE YOUR OWN ESTIMATE AND RECORD IT HERE:

C. How long did this interview take?

B. PATIENT'S RACE: White. 1
Negro. 2
Other (specify). 3

D. INTERVIEWER'S SIGNATURE:

E. DATE OF INTERVIEW:

AFTER CHECKING THIS INTERVIEW FOR RECORDING ERRORS OR OMISSIONS

ATTACH FACE SHEET TO FIRST PAGE

51-

52-

53- 54- 55-

56- 57- 58- 59- 60-

61-	62-	63-	64-	65-	66-	67-	68-	69-	70-
71-	72-	73-	74-	75-	76-	77-	78-0	79-9	80-

3. A. On what date did you first observe the signs of this condition?

Mo.	Day	Yr.

B. Did the patient ever come to you about any earlier trouble which might have been related to this condition?

Yes Z*
No X

*C. IF YES: On what date was that?

Mo.	Day	Yr.

4. How well acquainted were you with the patient before (he,she) first came to you with this condition (in earliest date in Q.3-A or C) -- very well acquainted, fairly well, or hardly at all?

Very well 18-1
Fairly well 2
Hardly at all 3*
Not at all 4*

*A. IF "HARDLY" OR "NOT AT ALL": How did the patient happen to come to you at that time?

5. What was your tentative diagnosis when you first examined (patient) on (earliest date in Q. 3-A or C)?

ENTER EARLIEST DATE IN Q.3 AS WORK SHEET ITEM 3.

THEN MARK "X" IN ONE OF THE THREE BOXES TO INDICATE WHETHER DATE IS:

SAME AS DATE OF ADMISSION. ☐ SKIP TO Q.21 ON P.9
LESS THAN A YEAR BEFORE ADMISSION. ☐ SKIP TO Q.11 ON P.6
A YEAR OR MORE BEFORE ADMISSION. ☐ CONTINUE WITH Q. 6

6. And on what date did you first see (patient) in connection with this recent episode, which brought about this hospitalization? (Enter date here and also as Work Sheet Item 4)

Mo.	Day	Yr.

IF NO RECENT EPISODE, HAD BEEN SEEING PATIENT RIGHT ALONG, CHECK BOX AND ASK: Well, about when was it that you first started thinking that this hospitalization might be necessary? (Record date above and enter also as Work Sheet Item 4)

7. Between (date in Work Sheet Item 3) and (date in Item 4), about how many times did you see the patient, all together, in connection with this condition?

ASK EITHER "A" OR "B" IN EVERY CASE

A. IF "NONE" TO Q. 7: On that earlier visit (in date in Item 3), did you suggest to the patient that (he,she) should go into the hospital because of this condition? (Record below under "B")

B. IF ANY OTHER ANSWER TO Q. 7: During this period between (date in Item 3) and (date in Item 4), did you ever suggest to the patient that (he,she) should go into the hospital because of this condition?

Yes . . . (ASK Q.8 ON NEXT PAGE)
No . . . (ASK "C", THEN SKIP TO 9)

*C. IF "NO": Why was hospitalization not suggested then?

NOW SKIP TO Q. 9 ON P. 6

ASK THIS SERIES IF DOCTOR EVER SUGGESTED HOSPITALIZATION DURING PERIOD BETWEEN DATE IN WORK SHEET ITEM 3 AND DATE IN ITEM 4. RECORD ANSWERS ON OPPOSITE PAGE.

8. A. When was that? (Any other times between (date in Item 3 and date in Item 4) when you suggested that (he,she) should go into the hospital because of this condition? (Enter dates at top of opposite page, and ask B-G for each)
- B. For what purpose did you suggest hospitalization then -- that is, was it for surgery, for medical treatment, or mainly for diagnostic tests, or what?
- C. How strongly did you recommend hospitalization (or surgery) then -- that is, did you advise the patient that it was absolutely necessary, or did you say (he,she) would be much better off going to the hospital (having the operation), or did you just suggest that it might be a good idea?
- D. And how urgent did you say it was -- Did you advise (him,her) to go to the hospital (have the operation) right away, or did you say (he,she) could put it off for a few weeks or months, or did you just say that (he,she) ought to go (have it) eventually?
- E. What was the patient's (or parent's) attitude toward going to the hospital (having the operation) at that time -- Was (he,she) very much in favor of the idea, or did (he,she) just accept it, or was (he,she) somewhat against the idea, or was (he,she) definitely opposed?
- #F. IF VERY MUCH IN FAVOR, SOMEWHAT AGAINST OR DEFINITELY OPPOSED: Why?
- G. Did (patient) actually go to the hospital at that time?
- #H. IF NO: Why not? Any other reasons?
- I. IF ALL "YES" TO "G": Were there any other times between (date in Item 3 and date in Item 4) when you suggested to the patient that (he,she) go into the hospital for this condition, but (he,she) didn't go?

Yes . . (REPEAT "A"-"H" ABOVE) Z
No . . . (GO ON TO Q.9 ON P.6) Z

33-	34-	35-	36-	37-	38-	39-
40-	41-	42-	43-	44-	45-	46-

HOSPITALIZATION OR SURGERY SUGGESTED EARLIER

Q.8

A.			
B.	Surgery. 1 Medical treatment. . . 2 Diagnostic tests . . . 3 Other (specify). . . . X	Surgery. 1 Medical treatment. . . 2 Diagnostic tests . . . 3 Other (specify). . . . X	Surgery. 1 Medical treatment. . . 2 Diagnostic tests . . . 3 Other (specify). . . . X
C.	Absolutely necessary . 4 Much better off. . . . 5 Might be good idea . . 6 Don't know 7	Absolutely necessary . 4 Much better off. . . . 5 Might be good idea . . 6 Don't know 7	Absolutely necessary . 4 Much better off. . . . 5 Might be good idea . . 6 Don't know 7
D.	Right away 1 Few weeks or months. . 2 Eventually 3 Don't know X	Right away 1 Few weeks or months. . 2 Eventually 3 Don't know X	Right away 1 Few weeks or months. . 2 Eventually 3 Don't know X
E.	Very much in favor . . 4# Accepted it. 5 Somewhat against . . . 6# Definitely opposed . . 7# Don't know 8	Very much in favor . . 4# Accepted it. 5 Somewhat against . . . 6# Definitely opposed . . 7# Don't know 8	Very much in favor . . 4# Accepted it. 5 Somewhat against . . . 6# Definitely opposed . . 7# Don't know 8
#F.			
G.	Yes. 1 No 2## Don't know 3	Yes. 1 No 2## Don't know 3	Yes. 1 No 2## Don't know 3
#H.			

9. Now you said you first saw the patient in connection with this recent episode (or first started thinking of this hospitalization) on (date in Work Sheet Item 4). What had happened then?

47-

IF DATE IN WORK SHEET ITEM 4 IS SAME AS DATE OF ADMISSION, SKIP TO Q. 21 ON P. 9

48-

10. Between (date in Work Sheet Item 4) and (date of admission), did the patient have to spend as much as one night in a hospital because of this condition?

Yes Z*
No. 0**

*IF YES: How many different times did (he,she) have to spend as much as one night in a hospital because of this condition between (date in Work Sheet Item 4) and (date of admission)?

SKIP TO Q.12, ON P.7

**IF "NO": ENTER DATE IN WORK SHEET ITEM 4 AS "STARTING DATE" IN WORK SHEET ITEM 5, THEN SKIP TO Q. 13 ON P. 8.

49-

11. Between (date in Work Sheet Item 3) and (date of admission), did the patient have to spend as much as one night in a hospital because of this condition?

Yes Z*
No. 0**

*IF "YES": How many different times did (he,she) have to spend as much as one night in a hospital because of this condition between (date in Work Sheet Item 3) and (date of admission)?

ASK Q. 12 ON P.7

**IF "NO": ENTER DATE IN WORK SHEET ITEM 3 AS "STARTING DATE" IN WORK SHEET ITEM 5, THEN SKIP TO Q.13 ON P. 8.

50-	51-	52-	53-	54-	55-	56-	57-	58-	59-
60-	61-	62-	63-	64-	65-	66-	67-	68-	69-
70-	71-	72-	73-	74-	75-	76-	77-	78-2	79-0

USE THIS PAGE ONLY IF "YES" TO Q. 10 OR Q. 11

12. IF MORE THAN ONE HOSPITALIZATION BETWEEN DATES SPECIFIED IN Qs. 10-11, REPEAT FOLLOWING QUESTIONS FOR EACH TIME.

A. On what date was (patient) admitted to the hospital then?

B. And on what date was (he,she) discharged from the hospital then?

C. What was the main purpose of that hospitalization -- that is, was it for surgery, for medical treatment, or mainly for diagnostic tests, or what?

Surgery X
Medical treatment 0
Diagnostic tests. 1
Other (specify) 2

D. IF PATIENT ADULT:

How did (patient) feel about going to the hospital then -- Was (he,she) glad to go, or was (he,she) willing to go, or was (he,she) somewhat against the idea, or was (he,she) definitely opposed?

IF PATIENT CHILD:

How did (parent) feel about (patient's) going to the hospital then -- Was (he,she) very much in favor of it, or did (he,she) just accept it, or was (he,she) somewhat against the idea, or was (he,she) definitely opposed?

Glad or much in favor 4*
Willing or accepted 5
Somewhat against. 6*
Definitely opposed. 7*
Don't know. 8

*E. IF GLAD, SOMEWHAT AGAINST OR DEFINITELY OPPOSED: Why?

F. And when did you first talk with (patient) about this condition after (he,she) left the hospital that time?

Mo.	Day	Yr.

G. What was your tentative diagnosis at that time?

ENTER DATE IN "F" AS "STARTING DATE" IN WORK SHEET ITEM 5

IF DATE IS SAME AS DATE OF ADMISSION, SKIP TO Q. 21 ON P. 9

OTHERWISE GO ON TO Q.13

13. Now when you talked with (patient) on (date in Work Sheet Item 5), did you recommend hospitalization?

Yes
No

5-
10-1*
2

* IF "YES", ENTER WORK SHEET ITEM 5 DATE AGAIN AS ITEM 6, THEN SKIP TO Q.21

14. What did you recommend?

15. And on what date did you first recommend hospitalization? (Enter date here and also as Work Sheet Item 6)

Mo.	Day	Yr.

16. How many times did you talk with the patient(or parent) between (date in Work Sheet Item 5) and the time you first recommended hospitalization?

17. During this period (between date in Item 5 and date in Item 6), was (patient) taking any medicines or getting any treatment for the condition?

Yes, medicine
Yes, treatment(specify)
No, neither
Don't know.

19-1
2
3
4

18. How about diagnostic tests or X-rays -- Between (date in Work Sheet Item 5) and (date in Item 6), did the patient receive any special tests or X-rays in connection with this condition? (IF YES) What?

19. What was your tentative diagnosis at the time you recommended hospitalization on (date in Item 6)?

21-

20. Had you considered hospitalization at all, before that date?

*IF YES, ASK A & B

Yes
No

22-1*
2

A. What factors led you to postpone your recommendation?

B. Any other factors that led you to postpone your recommendation?

21. IF YOU HAVE SKIPPED FROM P. 3, 6 or 7, ENTER DATE OF ADMISSION AS WORK SHEET ITEM 6 BEFORE ASKING Q. 21.

For what purpose did you recommend hospitalization on (date in Work Sheet Item 6) -- that is, was it for surgery, for medical treatment, or mainly for diagnostic tests, or what? (Circle one code only, and code also as Work Sheet Item 7)

Surgery
Medical treatment
Diagnostic tests.
Other (specify)

25-X
0
1
2

22. How strongly did you recommend hospitalization (or surgery) then -- that is, did you advise that it was absolutely necessary, or did you say (he,she) would be much better off going to the hospital (having the operation), or did you just suggest that it might be a good idea?

Absolutely necessary.
Much better off
Might be good idea.
Did not recommend
Don't know.

26-4
5*
6*
7*
8*

*A. IF NOT ABSOLUTELY NECESSARY: What alternatives were there to (hospitalization, surgery) at that time?

23. And how urgent did you say it was -- Did you advise (him,her) to go to the hospital (have the operation) right away, or did you say (he,she) could put it off for a few weeks or months, or did you just say that (he,she) ought to go (have it) eventually?

Right away.
Few weeks or months
Eventually.
Did not recommend it.
Don't know.

29-1
2
3
4
5

24. When you first recommended (hospitalization, surgery) on (date in Work Sheet Item 6), who did you talk with -- the patient or someone else in the family? (Circle both if both apply)

Patient 30-1*
Someone else (specify). 2**

*IF PATIENT, ASK "A"

- A. What was the patient's attitude toward (going to the hospital, having the operation) at that time -- Was (he,she) very much in favor of the idea, or did (he,she) just accept it, or was (he,she) somewhat against the idea, or was (he,she) definitely opposed?

Very much in favor. . . 31-4#
Accepted it 5
Somewhat against. . . 6#
Definitely opposed. . . 7#
Don't know. 8

#B. IF VERY MUCH IN FAVOR, SOMEWHAT AGAINST OR DEFINITELY OPPOSED:

Why was the patient (very much in favor of, somewhat against, definitely opposed to) the idea of (hospitalization, surgery)?

32-

33-

**IF SOMEONE ELSE, ASK "C"

- C. How would you describe (other person's) attitude toward sending (patient) to the hospital -- Was (other person) very much in favor of the idea, or did (he,she) just accept it, or was (he,she) somewhat against the idea, or was (he,she) definitely opposed?

Very much in favor. . . 34-1#
Accepted it 2
Somewhat against. . . 3#
Definitely opposed. . . 4#
Don't know. 5

#D. IF VERY MUCH IN FAVOR, SOMEWHAT AGAINST OR DEFINITELY OPPOSED:

Why was (other person) (very much in favor of, somewhat against, definitely opposed to) the idea of (hospitalization, surgery)?

35-

36-

USE THIS PAGE ONLY IF SURGERY IS CODED IN WORK SHEET ITEM 7

25. HAND RESPONDENT Q. 25 SIDE OF BROWN CARD: Here is a card. I'd like to know which one of those four statements best describes the situation in this particular case.

A. Impossible to perform this surgery except in hospital 37-1
B. Possible, but extremely difficult to perform except in hospital . . 2*
C. Could have been performed outside hospital, but less satisfactory . 3*
D. Could just as well have been performed on out-patient basis . . . 4*
Don't know. 5*

- *A. IF EXTREMELY DIFFICULT: Why would it have been difficult?
IF LESS SATISFACTORY: In what way would it have been less satisfactory?
IF JUST AS WELL: What was the main reason you used the hospital instead?
IF DON'T KNOW: Why is this a hard question for you to answer?

38-

39-

40-

26. HAND RESPONDENT REVERSE SIDE OF BROWN CARD: And which one of those four statements best describes your usual handling of this kind of case?

A. Always insist upon surgery in this kind of case 41-1
B. Almost always insist on surgery, but might be exceptions. 2*
C. Sometimes insist, sometimes don't, depends on circumstances . . . 3*
D. Normally do not recommend surgery, but there are exceptions . . . 4*
Don't know. 5*

- *A. IF ALMOST ALWAYS: What sort of exceptions would there be? Any others?
IF DEPENDS ON CIRCUMSTANCES: What sort of circumstances? Any others?
IF NORMALLY DO NOT: What factors led you to prescribe surgery in this case?
IF DON'T KNOW: Why is this a hard question for you to answer?

42-

43-

44-

NOW SKIP TO TOP OF PAGE 14

USE THIS PAGE ONLY IF MEDICAL TREATMENT OR "OTHER"
IS CODED IN WORK SHEET ITEM 7

27. HAND RESPONDENT Q.27 SIDE OF BLUE CARD: Here is a card. I'd like to know which one of those four statements best describes the situation in this particular case.

- | | |
|--|-------|
| A. Impossible to treat this patient outside of hospital. | 45-1* |
| B. Possible, but extremely difficult to treat outside hospital. . . . | 2* |
| C. Could have been treated outside hospital but not so satisfactory. . | 3* |
| D. Could just as well have been treated at home or as out-patient. . . | 4* |
| Don't know. | 5* |

*A. IF IMPOSSIBLE: Why would it have been impossible in this case?
IF EXTREMELY DIFFICULT: Why would it have been difficult?
IF LESS SATISFACTORY: In what way would it have been less satisfactory?
IF JUST AS WELL: What was the main reason you used the hospital instead?
IF DON'T KNOW: Why is this a hard question for you to answer?

46-

47-

48-

28. HAND RESPONDENT REVERSE SIDE OF BLUE CARD: And which one of those four statements best describes your usual handling of this kind of case?

- | | |
|--|------|
| A. Always insist on hospitalizing this kind of case. | 49-1 |
| B. Almost always insist on hospitalization but might be exceptions . . | 2* |
| C. Sometimes hospitalize, sometimes don't, depends on circumstances. . | 3* |
| D. Normally do not hospitalize but there are exceptions. | 4* |
| Don't know. | 5* |

*A. IF ALMOST ALWAYS: What sort of exceptions would there be? Any others?
IF DEPENDS ON CIRCUMSTANCES: What sort of circumstances? Any others?
IF NORMALLY DO NOT: What factors led you to hospitalize in this case?
IF DON'T KNOW: Why is this a hard question for you to answer?

50-

51-

52-

NOW SKIP TO TOP OF PAGE 14

USE THIS PAGE ONLY IF TESTS IS CODED IN WORK SHEET ITEM 7

29. HAND RESPONDENT Q.29 SIDE OF GREEN CARD: Here is a card. I'd like to know which one of those four statements best describes the situation in this particular case.

- | | |
|---|------|
| A. Impossible to make these tests outside of hospital. | 53-1 |
| B. Possible, but extremely difficult to make outside hospital. . . . | 2* |
| C. Could have been made outside hospital but not so satisfactory. . . | 3* |
| D. Could just as well have made tests on out-patient basis. | 4* |
| Don't know. | 5* |

*A. IF EXTREMELY DIFFICULT: Why would it have been difficult?
IF LESS SATISFACTORY: In what way would it have been less satisfactory?
IF JUST AS WELL: What was the main reason you used the hospital instead?
IF DON'T KNOW: Why is this a hard question for you to answer?

54-

55-

56-

30. HAND RESPONDENT REVERSE SIDE OF GREEN CARD: And which one of those four statements best describes your usual procedure in the case of these tests?

- | | |
|--|------|
| A. Always insist on hospitalizing patient for these tests. | 57-1 |
| B. Almost always insist on hospitalization but might be exceptions . . | 2* |
| C. Sometimes hospitalize, sometimes don't, depends on circumstances. . | 3* |
| D. Normally have tests done on out-patient basis, but exceptions. . . | 4* |
| Don't know. | 5* |

*A. IF ALMOST ALWAYS: What sort of exceptions would there be? Any others?
IF DEPENDS ON CIRCUMSTANCES: What sort of circumstances? Any others?
IF NORMALLY OUT-PATIENT: What factors led you to hospitalize in this case?
IF DON'T KNOW: Why is this a hard question for you to answer?

58-

59-

60-

REFER TO WORK SHEET ITEMS 6 & 1

IF THESE DATES ARE THE SAME, SKIP TO Q.37 or Q.49.
(See instructions at bottom of this page)

IF THREE DAYS OR LESS BETWEEN THESE DATES, SKIP TO Q.35 BELOW.

IF FOUR OR MORE DAYS BETWEEN THESE DATES, ASK Qs. 31-35.

31. Now let's see. You first recommended (hospitalization, surgery) on (date in Item 6). And (patient) was hospitalized on (date in Item 1).

A. What was the main reason for the delay in the patient's admission?

B. Any other reasons?

32. How many times did you talk with the patient (or parent) between (date in Item 6 and date in Item 1)?

33. During this period (between date in Item 6 and date in Item 1), was (patient) taking any medicines or getting any treatment for the condition? (IF YES) What?

Yes, medicine 65-1
Yes, treatment (specify) 2
No, neither 3
Don't know. 4

34. How about diagnostic tests or X-rays -- Between (date in Work Sheet Item 6) and (date in Item 1), did the patient receive any special tests or X-rays in connection with this condition? (IF YES) What?

35. On what date did you make the reservation for a hospital bed?

Qs. 36-48 ARE ASKED ONLY OF ATTENDING PHYSICIANS.
IF RESPONDENT DID NOT ATTEND PATIENT IN HOSPITAL, SKIP TO Q.49 ON P.18.

68-	69-	70-	71-	72-	73-	74-	75-	76-	77-	78-2	79-1
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------

36. DO NOT ASK IF DATES IN WORK SHEET ITEMS 6 & 1 ARE THE SAME

Was there any change in diagnosis between the time you first recommended hospitalization on (date in Work Sheet Item 6) and the date of the patient's admission to the hospital?

Yes 10-1*
No 2
Don't know. 3

*A. IF YES: What was the diagnosis on admission?

37. At the time the patient was admitted to the hospital, about how many days did you expect (he,she) would stay, given (his,her) age and diagnosis? -- that is, what is your usual experience with such cases?

_____ days

38. Did the patient have any kind of operation while (he,she) was in the hospital? Yes 16-1*
No. 2

*A. IF YES: What was the nature of the surgery? (Anything else?)

39. IF SURGERY CODED IN WORK SHEET ITEM 7 AND "NO" TO Q. 38:

I think you said earlier that (patient) was hospitalized for surgery. How was it that the operation was not performed?

IF SURGERY NOT CODED IN WORK SHEET ITEM 7 AND "YES" TO Q. 38:

I think you said earlier that (patient) was hospitalized for some other reason. How did it happen that surgery was performed?

40. What was the final diagnosis of this case, as recorded on the hospital chart?

IF MORE THAN ONE MENTIONED: Which one of those was the primary diagnosis?

IF PATIENT DIED IN HOSPITAL, SKIP TO Q. 49 ON PAGE 18.

41. REFER TO WORK SHEET ITEMS 1 & 2

Now the patient was actually hospitalized (number of) days.

IF MORE THAN TWO DAYS OFF FROM ESTIMATE IN Q. 37, ASK:

How was it that the patient (stayed longer, left sooner) than seemed indicated at first? (Any other reasons?)

28-

29-

42. When did you first tell the patient (or responsible person) the date when (he,she) could leave the hospital? -- that is, how much notice did the patient have of the actual date of (his,her) discharge?

30-

43. How would you describe the patient's (or responsible person's) attitude toward leaving the hospital -- that is, was (he,she) very eager to get out of the hospital, or just normally eager to get out, or was (he,she) somewhat reluctant to leave, or was (he,she) definitely opposed to leaving the hospital?

Very eager.	31-1*
Normally eager.	2
Somewhat reluctant.	3*
Definitely opposed.	4*
Don't know.	5

*A. IF "VERY EAGER", "SOMEWHAT RELUCTANT" OR "DEFINITELY OPPOSED": Why?

32-

33-

44. Did you yourself have any feeling that the patient could have left the hospital sooner, or should have stayed longer?

Yes, left sooner.	34-1*
Yes, stayed longer.	2*
No.	3
Don't know.	4
Transferred to other hospital (SKIP TO Q.49) .	5

*A. IF "LEFT SOONER" OR "STAYED LONGER": Why did the patient not (leave sooner, stay longer) than (he, she) actually did?

35-

36-

45. I'm interested in how the patient's home situation -- the availability of care at home -- might have affected the length of stay. Do you think (he, she) might have gone home sooner, or stayed longer, if the home situation had been different?

Yes, gone home sooner . . .	37-1*
Yes, stayed longer.	2*
No.	3
Don't know.	4

*A. IF "YES": What was there about the home situation that kept (patient) from (going home sooner, staying longer)?

38-

39-

46. Were there any (other) non-medical factors -- that is, personal or financial circumstances -- which affected the length of time this patient stayed in the hospital? (IF YES) What? How did that affect the length of stay?

40-

41-

47. And how about the scheduling in the hospital -- Were there any delays in carrying out the study or treatment of this patient in the hospital which might have delayed the date of discharge? (IF YES) What was that? In what way?

42-

43-

48. When (patient) first left the hospital, did (he,she) have to stay in bed most of the time, or did (he,she) just have to cut down on some of (his, her) activities, or was (he,she) able to get around normally?

Stay in bed (ASK A & B)	44-1
Cut down some (ASK B ONLY)	2
Get around normally	3
Don't know.	4

A. IF "STAY IN BED": About how long would (patient) have to stay in bed after leaving the hospital?

45-

B. IF "STAY IN BED" OR "CUT DOWN": How long would it be before (patient) got back to normal?

46-

49. A. Was this patient covered by any kind of hospital insurance, like Blue Cross, that helped pay for the hospital bill?

B. Was the patient covered by any kind of surgical or medical insurance, that helped pay for (his,her) doctor bills?

	A Hospital Insurance	B Medical Insurance
Yes	47-X*	48-2*
No	0	3
Don't know	1	4

*IF "YES" TO EITHER "A" OR "B", ASK Q.50

50. ASK ONLY IF "YES" TO EITHER PART OF Q.49. OMIT IF "NO" OR "DK" TO BOTH.

HAND RESPONDENT GRAY CARD: Would you mind reading this card, and telling me if any of those statements are true in this case. For example, "A" -- Would that be true in this case? How about "B"? Etc. (Circle one code on each line below, then ask "E")

	Yes, True	No, Not True	Don't Know
If hadn't had insurance:			
A. Would not have gone to the hospital.	49-6	7	8
B. Less expensive room or ward service.	50-X	0	1
C. Would have had fewer tests or X-rays	51-2	3	4
D. Would have left the hospital sooner.	52-6	7	8
E. Can you think of any <u>other</u> ways in which this patient's case might have been handled differently, if the patient had <u>not</u> been covered by insurance? (IF YES) In what ways?			

54-	55-	56-	57-	58-	59-	60-
61-	62-	63-	64-	65-	66-	67-

78-2	79-
------	-----

51. And now a few questions about your own practice.

Would you say your practice is primarily a general practice, or is it concentrated in one of the specialties?	General practice.	10-1
	Specialty	2*
	Both, Can't say	3*

*IF "SPECIALTY" OR "BOTH", ASK "A" & "B"

A. What is your specialty?	_____	11-
B. About what proportion of your practice falls within this specialty?	_____	12-
	(enter percent)	

52. HAND RESPONDENT YELLOW CARD: Please read this card and tell me which one of those best describes your own present practice.

A. Individual practice	13-1
B. Individual practice, pooled facilities.	2
C. Group practice in a partnership arrangement	3
D. Salaried practice for a non-medical institution or industry	4
E. Full-time salaried physician on staff in hospital	5
F. Resident physician in hospital.	6*
G. Interne in hospital	7*
H. Other (specify)	8

*IF RESIDENT OR INTERNE, SKIP TO Q. 54

53. Do you have a staff appointment at any hospital?	Yes	14-1*
	No.	2**

*IF "YES", ASK "A"- "B"- "C"

A. At what hospitals?	15-
B. <u>IF MORE THAN ONE:</u> Which one of those do you regard as your major affiliation?	16- 17- 18-

C. HAND REVERSE SIDE OF YELLOW CARD: And which one of those categories best describes the nature of your appointment there?

A. Director, chief, chairman, department head.	19-1
B. Attending, senior attending, senior staff	2
C. Associate or assistant attending.	3
D. Clinical or acting assistant, out-patient dept.	4
E. Courtesy appointment.	5
F. Other (specify)	6

**IF NO, ASK "D"

D. At what hospitals do you have admitting privileges?

20-

54. A. About how many different patients do you see in an average week? --
at your office, at the hospital, or in their homes?

21-

B. Can you give me a rough estimate of the number of patients you
hospitalized during the last year? -- Just your best guess.

22-

55. A. About how often do you experience pressure on the part of the patient
to be hospitalized (OR IF SURGEON: to have some kind of operation)
when you yourself do not believe it is absolutely necessary -- Does
this happen very often, fairly often, occasionally, or hardly ever?

Very often.	23-1
Fairly often.	2
Occasionally.	3
Hardly ever	4
Never (SKIP TO 56)	5
Don't know.	6

B. What sort of people are these (when it does happen)?

24-

C. Why do they want to (go to the hospital, have an operation)?

25-

56. In general, do you feel that there is too much surgery today, about the
right amount, or not enough?

Too much.	26-1*
About right	2
Not enough.	3*
Don't know.	4

*A. IF "TOO MUCH" OR "NOT ENOUGH": Why is there (too much, not enough)
surgery? (What accounts for this?)

27-

28-

57. How about hospitalization -- Do you feel that in general there is too much
hospitalization, about the right amount, or not enough?

Too much.	29-1*
About right	2
Not enough.	3*
Don't know.	4

*A. IF "TOO MUCH" OR "NOT ENOUGH": Why is there (too much, not enough)
hospitalization? (What accounts for
this?)

30-

31-

58. A. How about referral of patients to specialists? (Is there too much
of that today, about the right amount, or not enough?)

B. And how about writing of prescriptions?

	A Referral	B Prescrip- tions
Too much.	32-1	33-6
About right	2	7
Not enough.	3	8
Don't know.	4	9

59. I have noted down here a group of four non-medical factors that doctors
tell us sometimes present problems, in deciding whether or not to
hospitalize a patient.

First is the patient's home environment, the conditions in his home.

A. Is this a factor that you must very often take into account in
deciding whether or not to hospitalize a patient, or is it something
that you sometimes have to consider, or is it very rarely a problem
in your practice?

Very often.	34-1*
Sometimes	2*
Very rarely	3*
Never	4*
Don't know.	5
Doesn't apply	6

*B. IF "VERY OFTEN" OR "SOMETIMES":

Why is that (very often, sometimes) a factor you must take into
account (in deciding whether or not to hospitalize)?

IF "VERY RARELY" OR "NEVER":

Why is that (rarely, never) a problem in your practice?

35-

36-

60. A. Second is the patient's ability to afford the hospital costs. Is this something that you must very often take into account in deciding whether or not to hospitalize a patient, or is it something that you sometimes have to consider, or is it very rarely a problem in your practice?

Very often. 37-1*
 Sometimes 2*
 Very rarely 3*
 Never 4*
 Don't know. 5
 Doesn't apply 6

*B. IF "OFTEN" OR "SOMETIMES": How do you usually handle this problem?
 IF "VERY RARELY" OR "NEVER": Why is this (rarely, never) a problem in your practice?
 38-
 39-

61. A. Third is the availability of hospital space. Is this something that you must very often take into account in deciding whether or not to hospitalize a patient, or is it something that you sometimes have to consider, or is it very rarely a problem in your practice?

Very often. 40-1*
 Sometimes 2*
 Very rarely 3*
 Never 4*
 Don't know. 5
 Doesn't apply 6

*B. IF "OFTEN" OR "SOMETIMES": How do you usually handle this problem?
 IF "VERY RARELY" OR "NEVER": Why is this (rarely, never) a problem in your practice?
 41-
 42-

62. A. And lastly, there is the doctor's own schedule. Is this something that you must very often take into account in deciding whether or not to hospitalize a patient, or is it something that you sometimes have to consider, or is it very rarely a problem in your practice?

Very often. 43-1*
 Sometimes 2*
 Very rarely 3*
 Never 4*
 Don't know. 5
 Doesn't apply 6

*B. IF "VERY OFTEN" OR "SOMETIMES":
 Why is that (very often, sometimes) a factor you must take into account (in deciding whether or not to hospitalize)?
 IF "VERY RARELY" OR "NEVER":
 Why is that (rarely, never) a problem in your practice?
 44-
 45-

63. And now a few items of background data, and we'll be through. 46-

A. What was your age on your last birthday? 47-

B. In what year did you receive your medical degree? 48-

C. What medical organizations do you belong to?

49-

D. What is your religious preference? Protestant. 50-1*
 Catholic. 2
 Jewish. 3
 Other (specify) 4
 None. 5

*E. IF "PROTESTANT": What denomination? 51-

F. HAND RESPONDENT GRAY CARD: In which one of those groups did your total net income from medical practice fall last year? -- that is, after expenses, but before payment of income taxes.

(1) Under \$5,000. 52-1
 (2) \$5,000-\$7,499 2
 (3) \$7,500-\$9,999 3
 (4) \$10,000-\$12,499 4
 (5) \$12,500-\$14,999 5
 (6) \$15,000-\$19,999 6
 (7) \$20,000-\$29,999 7
 (8) \$30,000 or more 8
 Don't know. 9

G. Would you say you are very well satisfied with the current income from your practice, or fairly well satisfied, or are you disappointed that it isn't higher?

Very well satisfied 53-1
 Fairly well satisfied 2
 Disappointed. 3
 Don't know. 4

FILL IN ITEMS ON REVERSE SIDE IMMEDIATELY AFTER LEAVING RESPONDENT

A. NAME OF DOCTOR:		E. How long did this interview take?	56-
B. IF INCOME (Q.63-F) IS CODED "DON'T KNOW," MAKE YOUR OWN ESTIMATE AND RECORD IT HERE.		F. Did doctor refer to records at all in answering questions about dates, diagnoses, number of visits, etc.?	
		Yes, throughout	57-1
		Yes, occasionally . . .	2
		No, never	3
C. SEX:	Male. 54-X Female. 1	G. Date on which interview was completed:	58- 59- 60- 61- 62- 63- 64- 65-
D. RACE:	White 55-2 Negro 3 Other (specify) 4	H. Interviewer's Signature:	

1) Admission Date: _____

2) Discharge Date: _____

3) Earliest date in Q. 3: _____

4) Q. 6 date: _____

5) STARTING DATE: _____

6) DATE HOSPITAL 1st RECOMMENDED: _____

7) PURPOSE OF HOSP. Surgery 1
 Med. treatment. . . 2
 Tests 3
 Other 4

66-	67-	68-	69-	70-	71-	72-
73-	74-	75-	76-	77-	78-2	79-3

AFTER CHECKING THIS INTERVIEW FOR RECORDING ERRORS OR OMISSIONS

ATTACH FACE SHEET TO FIRST PAGE