METHODOLOGICAL CONSIDERATIONS IN STUDYING PATTERNS OF MEDICAL CARE RELATED TO MENTAL ILLNESS

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In spite of the increasing number of studies of mental illness reported in recent years, little work has appeared on how the family physician deals with mental or emotional problems in a non-institutionalized population. This paper examines a number of methodological questions involved in studying the family physician's role in providing medical care for patients who, in his judgment, have a mental, emotional or psychological condition. Some of the problems encountered in a recently completed pilot study on this issue are described, and procedures for dealing with them are presented.

The beginnings of research in this area have been seen in England. Kessel, Shepard, Stein and Fisher[1, 2] have reported approaches taken by them and examined the effects of varying criteria on measurement of psychiatric morbidity in a surburban practice in London. Findings of sufficient interest to continue this type of investigation have also been presented.

Some clues to the role of the family physician in this country in the treatment of mental illness have been provided by a number of extensive studies of mental health. Hollingshead and Redlich,[3] for example, in their New Haven study of social class characteristics of patients receiving psychiatric care report that, among those classified as "neurotics," about half of the upper and middle social class patients were first referred for psychiatric care by a non-psychiatric physician. Presumably many of these were family physicians. Gurin, Veroff and Feld[4] in their book, AMERICANS VIEW THEIR MENTAL HEALTH, revealed that nearly a third of those who have sought help for their emotional problems have turned to physicians.

It is the purpose of the current investigation to examine more closely the function of the family physician in treating mental and emotional problems, largely through the use of direct interviews with both physicians and their patients. Although the study is predominantly methodological, information will also be presented to illustrate the kinds of substantive data that can be gathered through this approach to the study of mental health.

It should be observed that, as used here, the term "family physician" will refer to internists, family physicians and pediatricians. To a great extent those internists and pediatricians included in the study do actually perform in much the same manner as those designated as "family physicians".

METHODOLOGY

Study Setting. This pilot study is being conducted by the Division of Research and Statistics of the Health Insurance Plan of Greater New York. H.I.P. is a prepaid group practice medical care program in the New York City area with about 630,000 members at the time of the study. The plan provides its members with almost the entire range of diagnostic and

therapeutic services. Medical care is received from family physicians, internists and other specialists in the medical group center or doctor's office, the patient's home, and in a hospital. Although H.I.P. coverage does not include psychiatric treatment, at each of the 32 medical group centers a psychiatrist is available to whom patients may be referred for consultative or diagnostic purposes.

Employee groups have been the primary source of enrollment, with about 3 in 5 of the members coming into the program through contracts with the official agencies of New York City, including such departments as the Board of Education, Police, Fire and Transit Authority. The largest sources of enrollment next to this group are union health and welfare funds.

Three medical groups were selected for the pilot study. They have a combined enrollment of about 45,000 and cover a wide range of occupational pursuits, educational and income groups. High, average and low utilization of neuro-psychiatric and other physician services are represented by the medical groups in the pilot study.

Study Objectives and Restrictions. Although designed basically to answer questions related to feasibility and methodology, the study is also aimed at obtaining preliminary information on certain aspects of medical care related to mental illness. These concern such questions as, what is the relative frequency with which, in the judgment of the family physician, mental, emotional or personality disorders are presented by patients seen during the regular course of providing medical care? To what extent are these conditions judged to be transient in nature, and to what extent do they represent more deep-seated disorders? What does the physician consider as the probable future course of his patient's emotional problems, either with or without medical treatment?

Of particular interest were several questions related to patterns of medical care given by family physicians to patients whom they have diagnosed as having some kind of emotional

problem. Interest was in a wide range of possible approaches including referrals to psychiatrists and community agencies, prescription of drugs, and discussions with the patient regarding his problem.

It was planned to seek the answers from information available on H.I.P.'s medical records and through interviews with H.I.P. physicians. Other information, significantly related to the study, could best be obtained from the patients themselves. For this purpose the study included interviews with a sample of patients seen by their family physicians. From the patient's point of view we wished to learn the following:

First, in what terms does the patient describe the condition for which he has seen the doctor? From the point of view of medical care and treatment, what does the patient see as having been done for his emotional problems by his family physician? To what extent does the patient follow the physician's suggestions for treatment of his emotional problems? Also, to what extent does the patient turn to non-medical sources for help or advice?

There are other subjects on which it was obvious that the patient would be best informed. Among these was the degree to which the patient felt that the care provided had succeeded in relieving him of his anxieties and the degree to which his emotional problems had interfered with his life activities in the home, on the job, and elsewhere.

The methodology and aims of the pilot study are subject to important limitations. The study, for example, was not directed at validating family physicians' diagnoses of mental or emotional disorders. Rather it was intended to examine the nature and context of these diagnoses. Neither was this a study of physician characteristics as these might relate to a tendency to ascribe to patients a variety of emotional problems. Lastly, we did not seek to examine emotional problems as they occur in the general population, but only as they have come to the attention of the family physician.

The study population imposes additional limitations on this

pilot study. The population was limited to patients in three of H.I.P.'s 32 medical groups who were seen by a family physician during the three month period from December 1, 1961 through February 28, 1962. Two other restrictions were placed on the sample of patients to be included in the interview study. They had to be at least 12 years of age, and at the time when they saw their family physician during the three-month period, they had to have been in H.I.P. for at least two years. The latter was designed to increase the likelihood that the patient was known to the physician for a reasonable period of time.

Sample Selection. In selecting the sample of respondents for interview, it was possible to rely upon some of the special advantages offered by H.I.P.'s routine procedure of obtaining doctor reports on patient visits. For each patient visit, the H.I.P. physician fills a line on a routine report form. The patient is identified by name, age and sex. Information is also provided on the patient visit itself. This includes where the visit took place—that is, in the home, office or hospital; the type of service given—whether an operation, examination, or treatment; and the tentative or final diagnosis.

For the purposes of this study, an additional column was provided on the routine report form. He was instructed to enter a check mark in this column if, in his opinion, "a mental, emotional, psychological or personality disorder or disturbance plays a part in the patient's condition,"—and to indicate whether or not he had already entered this as part of his diagnosis.

Three random samples, each of approximately 150 patients, were selected from the medical groups in the study. The first of these was a sample of those patients qualified for the study who were diagnosed by family physicians as having a mental, psychoneurotic or personality disorder. The classification of the diagnosis was based on the W.H.O. International Classification of Diseases. Respondents whose diagnosis was classified under Section V of this coding scheme were included in this

first sample. This will be referred to as the neuro-psychiatric or "*N-P* diagnosis" sample.

The second sample was taken from among patients not classified under a Section V diagnosis, but for whom the physician indicated there was an emotional problem associated with the condition for which they had seen him. This group was obtained from the routine report form entries with a check mark in the special column. It is referred to as the "*N-P* associated" sample.

The third sample was taken from among all other patients 12 years of age and over (with at least 2 years of coverage), who saw their family physician in one of the three medical groups during the three month study period.[5] For these respondents there had not been indicated any emotional or neuro-psychiatric problem either through a diagnosis or through a check in the appropriate column. Physicians were further questioned about these patients to determine whether or not some of them had, in fact, exhibited emotional problems either during or before the study period.

Each of the three sample groups of "*NP*" patients could be viewed as implying a different definition of an *N-P* case as arrived at by the family physician. But this was not necessarily the case, and it was indeed one of the purposes of this study to determine how the inclusion or exclusion of one or another group affects study findings.

Interviews with Physicians. When the sample of patients had been drawn, arrangements were made to interview family physicians about each of the patients included in the sample. The interview with a physician was generally conducted between one and two months after the visit made by the patient, which was optimum considering the lag in gaining access to the the report forms. To maximize the accuracy of the physicians' reports, each was notified in advance of the interview and told the names of the patients about whom questions would be asked. It was requested that the physician have available

during the interview the patient's medical chart for easy reference. In nearly every case the physician complied with this request.

Information from the physician about the patient's visit during the study period was obtained on two forms. The first of these, the *Physician's Preliminary Questionnaire* had a two-fold purpose. For the *N-P* diagnosis and the *N-P* associated groups it served to obtain additional information on the nature of the emotional problem indicated for the patient. For the control group, the *Preliminary Questionnaire* was used to identify those patients whom the physician might consider to have an emotional problem, but for whom this had not been reported on the Med 10 reporting forms during the three month study period. The bulk of the information from the physician interview was obtained on the *Main Physician Questionnaire* which inquired into the nature of the *N-P* condition, medical care given, an assessment of its effectivness, etc.

Interviews with Patients. Interviewing of patients in the sample was planned to take place from sixty to ninety days after the patient's study visit to the family physician. Interviews were conducted by personnel who had not had contact with the physicians, and who could not distinguish between *N-P* patients and control patients. For those patients identified as having an emotional problem (further discussed later) the questionnaire then paralleled in content the one used in the physician interview. Social background questions and a number of other questions were asked of all patients.

Findings Related to Methodology

One of the central purposes of the pilot study was to provide an opportunity to examine closely a number of methodological issues that bear on the design of a full-scale study. In this sec-

tion, findings related to several of these issues are presented along with an analysis of their significance.

Time Period. The pilot study was restricted to a three month period (December, 1961–February, 1962) primarily because of operational circumstances. While this approach proved satisfactory for the purposes in hand, it imposes restrictions on the ability to generalize from the figures derived for the study period as to what would be found if a full year were covered. This limitation stems in part from the fact that seasonality exerts an influence on the volume of patients seen and on the reasons for patient visits to physicians. Potentially of even greater significance is the fact that doctor visits are not evenly distributed among patients. Since the probability that a patient seen in any time interval is proportionate to the number of months during the year he visits the physician, the shorter the time period under observation, the more heavily loaded is the patient group with comparatively high utilizers.

This issue has been examined on the basis of distributions of patients by number of months during the year in which they are seen and reported by physicians to have an *N-P* or *N-P* associated condition. The results suggest that a three-month period contains a moderate bias of the type mentioned. Leaving aside the effects of seasonality, the pilot study might therefore be expected to provide somewhat higher estimates than a full-year study of the proportions of patients with *N-P* conditions that interfere with certain life activities, the volume and types of medical care obtained for the condition, and other measures related to seriousness of the condition.

Physician Classification of Patients. While the time period of the pilot study is restrictive, the manner in which *N-P* cases were identified is expansive. The three procedures used for identifying patients judged by their family physicians as having an *N-P* problem were intended to provide for study samples of patients with a wide range of emotional problems. For about

4 per cent of all patients seen, the physician indicated on the routine report form an *N-P* diagnosis. For another 4 per cent the physician indicated that the condition was associated with an *N-P* condition. And finally, for 26 per cent of the patients in the control group, the physician reported an *N-P* problem during the interview.

The last two groups served to broaden the base of *N-P* patients, and in so doing may have "softened" the definition of the *N-P* group. In the case of patients with an *N-P* associated condition, we were able to add to the *N-P* cases those patients for whom the physician may have shown some reluctance to classify as having a problem which was predominatly emotional, but for whom he could at least feel that there was some emotional aspect to the patient's complaint. So too was the case with patients in the control group later reported by the physician as having an emotional problem. For these patients, the physician could have indicated an emotional problem manifested either during the study visit, or at *any other* time previous to that visit. And, in fact, in half the cases he said the conditions were presented at a visit prior to the three month study period. (See Appendix for question wording).[6] This "softer" approach to an *N-P* diagnosis may thus have included some patients for whom the *N-P* problem was no longer salient.

Patient Response Rates. In every case the interview with the family physician regarding a patient preceded the patient interview. At that time the physician was asked to indicate which patients he did not wish interviewed. The number of such patients totaled 5 per cent of the *N-P* diagnosis sample and 2 per cent or less of the other two samples. In most of these instances the physician expressed the belief that an interview might seriously upset the patient, or might create problems in the future between the physician and the patient. But emotional problems were not the only reasons given for not interviewing patients. Some were too ill from other causes to be interviewed.

TABLE 1. PATIENT RESPONSE RATES AND REASONS FOR NON-INTERVIEWS BY PHYSICIAN *N-P* AND CONTROL GROUPS.

	Physician Reports		
	N-P[1] *Diagnosis*	*N-P*[2] *Associated*	[3] *Control*
Sample Size—(Unweighted)—Number	167	133	159
Per Cent	100	100	100
Interviewed	82	90	92
Not Interviewed—	18	10	8
At Physician's Suggestion	5	2	1
Patient Refusal	5	2	2
Couldn't Locate or Contact	5	4	3
Death, Patient Ill, Other	2	1	2

[1] Sample of patients for whom a diagnostic entry on physician's routine report of medical services was classified as a mental, psychoneurotic, or personality disorder (International Classification of Diseases, rubrics 300–326).
[2] Sample of patients for whom the physician's routine report of medical services indicated the presence of a mental, psychoneurotic or personality disorder associated with some other condition.
[3] Sample of patients seen who did not fall in categories defined in other two columns.

TABLE 2. *N-P* STATUS BASED ON PHYSICIAN AND PATIENT REPORTS

	Physician Reports			
	N-P[1] *Diagnosis*	*N-P*[2] *Associated*	*Control N-P*[3]	*Control Non-N-P*
Patient Reports				
Sample Size—(Unweighted)	(138)	(121)	(41)	(106)
Weighted[4]—Number	290	265	55	158
Per Cent	100	100	100	100
N-P Condition Discussed with Physician—				
On Study Visit	55	34	14	11
On Previous Visit	18	32	44	20
No *N-P* Condition Discussed	27	34	42	69

[1] and [2] See Table 1.
[3] Patients in sample of control cases for whom the physician at time of interview indicated presence of a "psychological, mental, emotional or personality disorder or condition."
[4] *N-P* diagnosis and *N-P* associated groups are weighted to the total number of cases located in the study period through screening of physician routine reports. The weighted control group is a three per cent sample of patients who do not fall in the other two categories.

The refusal rate among respondents was unusually low. Of the 463 patients in the three original unweighted samples, only 14 or three per cent refused to speak to our interviewers. Here again there were some differences among the three sample groups. Among those with an *N-P* diagnosis, the refusal rate was almost five per cent, while among the *N-P* associated group and the control group, the refusal rates were about two per cent for each. Practically none of the refusals came once the interview was begun, in spite of the sensitive nature of the questions asked the patients. (Table 1)

In addition to the reasons cited for not having interviewed patients, there were the usual circumstances of inability to locate because of address change, illness, etc. These accounted for about 4 per cent of each of the study groups. In all, 87 per cent of those patients included in the original sample were interviewed. The figures for the three sample groups were: 82 per cent for the *N-P* diagnosis group, 90 per cent for the *N-P* associated group and 92 per cent for the control group.

This is viewed as a highly successful field operation. In New York City it is estimated by many researchers that a total loss of at least twenty per cent and a refusal rate in excess of ten per cent should be expected. It is undoubtedly true that by identifying themselves with H.I.P., interviewers reduced much of the resistance frequently encountered among potential respondents. At the same time, however, it should be remembered that about two-thirds of the patients in the sample had been identified by their family physicians as having some kind of emotional problem. That the refusal rate was low even among these patients should be a source of comfort to others interested in the study of mental health.

Patient Reports on N-P Condition. Now what of the patients themselves—what did they have to say about the presence or absence of emotional problems that they might have discussed with their family physician? It should be pointed out that a major objective in the patient interview was to

increase the likelihood of having an emotional problem identified by patients for whom the physicians had reported on *N-P* or *N-P* associated condition. This was essential since part of the study was expected to focus eventually on such patients, and unless they acknowledged having discussed an emotional problem with the physician, none of the questions related to medical care, assessment of its value, etc., could be asked of them.

The problem was to provide proper means for the patient to make this acknowledgment. It was clearly not possible to inform the patient that he had been described by his physician as having an emotional problem. Instead it was necessary for the patient to provide the information about an emotional problem that would permit further questioning about that problem, and about the care that might have been provided by the physician in question. For this the patient was provided with what was hoped to be ample opportunity and encouragement to report on the discussion of emotional problems with the physician. (See Appendix.)

The first opportunity was provided in a series of questions asking details about the patient's visit to the physician during the study period. If the patient reported in these free-response questions that he went to the physician for an emotional problem, or that the pyhsician told him of or treated him for an emotional problem, he was then skipped to the main part of the questionnaire.

All other patients were asked directly whether the condition for which they visited the physician was "affected by worries, nervousness or tensions". Those who believed there was such a connection were asked if their "worries or nervousness" were discussed with the physician either at the time of the study visit or at some previous visit. A positive reply brought the patient to the main part of the questionnaire to be asked further about the emotional condition.

Finally, those patients who saw no connection between the study visit or the condition for which they had seen the doctor

and an emotional problem, were asked two additional questions. The first of these inquired whether or not they had *ever* discussed with the doctor being "worried, upset or nervous" about their health. The second asked about any other worries they might have discussed with the doctor. Again, an affirmative reply brought the patient to the main part of the questionnaire.

The results of this approach were as follows:

First, with regard to those patients who had been diagnosed by their physicians as having an *N-P* problem during the study period (Table 2). Among these patients, 55 per cent reported having discussed their emotional problem during the same visit in which they had received an *N-P* diagnosis from the physician. Another 18 per cent reported that they had discussed an emotional problem with the physician during a visit previous to the study visit. On the other hand, 27 per cent of the physician-designated *N-P* group did not report ever having discussed with their physician this kind of problem or being "nervous" about their health.

Lest it be thought that all of the 27 per cent not reporting an *N-P* condition were concealing this information from the interviewer, it should be pointed out that not all of the patients were necessarily aware that their condition had been diagnosed as one that was primarily emotional. In fact, among the *N-P* diagnosed group, 26 per cent were reported by their physicians as *not* being aware of their emotional problem. About half of these reported no discussion of an emotional problem with their physician.

Next to be considered are those identified on the routine report forms as having an *N-P* associated condition and their reports of whether or not the condition had been discussed with their physician. Among these, about one-third reported having discussed an emotional problem or "nervousness about their health" with their physician at the time of the study visit, while another third said they had had such a discussion during some previous visit. The final third responded in the negative to all

TABLE 3. *N-P* STATUS OF CONTROL GROUP BASED ON PHYSICIAN AND PATIENT REPORTS.

Sample Size—(Unweighted)	(147)	
Weighted—Number	213	
Per Cent	100	
Physician Reports *N-P* Condition	26	
Patient Reports *N-P* Condition Discussed[1]		15
Patient Reports no *N-P* Condition Discussed		11
Physician Reports No *N-P* Condition	74	
Patient Reports *N-P* Condition Discussed[1]		23
Patient Reports No *N-P* Condition Discussed		51

Note: Table refers to patients in control group interviewed. See footnotes—Tables 1 and 2 for other definitions.

[1] Includes patients who during the interview indicated that they discussed at some time with the physician "worries (in general), nervousness or tensions" or a worry about health, or a specific emotional or psychological condition.

TABLE 4. PATIENT REPORT OF NATURE OF EMOTIONAL PROBLEMS DISCUSSED WITH FAMILY PHYSICIAN.

	Physician Reports[1]			
	N-P Diagnosis	*N-P Associated*	*Control N-P*	*Control Non-N-P*
Patient Reports				
Sample Size—				
(Unweighted)	(102)	(85)	(23)	(34)
Weighted—Number	211	175	32	49
Total (per cent)	100	100	100	100
Discussed "Nervousness" about Health	18	33	37	49
Discussed other Emotional Problem	82	67	63	51

[1] Includes only patients interviewed who stated they had discussed an emotional problem or health worry with their physician. Patients are retained in the particular *N-P* group in which they were classified on the basis of routine reports and interviews of physicians.

inquiries on this issue.

Of perhaps equal interest is what occurred among the control group when they were asked about any discussions they might have had with their family physicians concerning an emotional problem or "nervousnes about their health". It has already been observed that for about one-fourth of the control group, further questioning of the family physician revealed that a previously unreported psychological or emotional problem was manifested at some time by the patient either during or previous to the study visit. Three out of five of these patients (58 per cent) stated that there had been a discussion of emotional problems or "nervousness about health" (14 per cent at the doctor visit during the study period, 44 per cent at an earlier visit).

The picture of the patients' reports is rounded out when the situation is examined for that segment of the control group for which no emotional problem was reported by the physician. Among these patients, 31 per cent indicated that they had discussed with the physician an emotional problem or "nervousness about health" (11 per cent at the doctor visit during the study period, 20 per cent at an eariler visit). Sixty-nine per cent agreed with the physician that there had never been a discussion about this class of problems. (See Table 3 for data regarding both segments of the control group combined.)

In reviewing the correspondence between physician and patient reports of whether or not there was a discussion between them about an emotional problem, the importance of the question on "nervousness" about health can be plainly seen. Correspondence was increased for the groups identified by the physicians on the report forms as having an *N-P* or *N-P* associated condition through the addition of the "nervousness about health" series of questions. Here 18 per cent of the *N-P* cases and 33 per cent of the *N-P* associated cases would have been missed on the patient screening without these questions. In the control group identified by physicians on interview as having an *N-P* condition, 37 per cent of these cases would have been

missed (Table 4).

On the other hand, as a result of including questions on "nervousness about health", there was a significant decrease in correspondence between physician and patient reports among patients for whom the physician did not indicate an *N-P* condition. Half of these patients who stated that they had discussed an emotional problem with their physician, identified "nervousness about health" as the problem.

It remains a problem for future analysis to determine the nature of differences between those who have identified "nervousness about health" as their problem source and those who identified other problems.

General Findings

The discussion of study findings has until now been concerned primarily with methodological considerations. Although it is frequently difficult to draw a distinction between findings that are "methodological" and those that are "substantive" the balance of the paper focuses on study results which might be considered substantive in character. That the two cannot be completely divorced from each other will be clear as attention is called occasionally to differences among the differently defined *N-P* groups. The data presented are examples of what is being derived in this study from H.I.P. records, and physician and patient interviews, and are descriptive in nature.

Information obtained from physicians and patients about the patients' emotional problems are shown side by side. Data derived from the physician interviews refer to all of the patients who were considered by them to have an *N-P* or *N-P* associated condition. Data obtained from patient interviews refer to patients who were interviewed and who stated that they had an emotional problem or were "nervous" about their health, without regard to the physician information. Thus data presented

at this time involve samples of patients that overlap to varying degrees. As discussed earlier, the overlap is considerable among patients screened on the basis of an *N-P* entry on the physicians' routine report forms. The overlap is only moderate for the control group patients. Later there will be available data on the concurrence between physician and patient reports on the variables examined here.

Seriousness of the Problem. Both physician and patient were asked a number of questions intended to determine the seriousness with which they regard the patients' emotional problems. One of these asked directly, "On the whole, how do you consider these worries (nervousness and tensions)—not so important or rather important?" Physician and patient were also asked questions about the extent to which the patient's problems or "nervousness about health" interfered with his work (or a housewife's work at home), home life, ability to get along with other people, or other activities. Finally, physicians and patients were asked two questions about the course the emotional problem might take in the future—without medical care and with medical care.

Physicians report that they consider as important the emotional problems among half the patients in each of the three *N-P* groups. They also report that for from half to two-thirds of their patients in the *N-P* groups some interference in daily activities was caused by the emotional problems. The degree of interference was judged to be "a great deal" in from a fourth to about a third of the cases seen. (Tables 5, 6 and 7.)

Physicians' prognosis of the future course of the emotional problems with and without medical care tended to vary according to the *N-P* group into which the patient had been classified. For example, physicians thought there would be no improvement with or without medical care, for more than half the *N-P* associated group as compared with a third of the *N-P* diagnosis group. The proportion of patients they thought would improve without any kind of medical care was between 10 and 20 per

TABLE 5. IMPORTANCE OF PATIENTS' EMOTIONAL PROBLEMS: RESPONSES OF PHYSICIANS AND PATIENTS BY *N-P* GROUPS.

	Physician			*Patient*		
	N-P Diagnosis	*N-P Associated*	*Control N-P*	*N-P Diagnosis*	*N-P Associated*	*Control N-P*
Sample Size (Unweighted)	(167)	(133)	(44)	(102)	(85)	(57)
Weighted—Number	343	300	60	211	175	81
Per Cent	100[1]	100[1]	100	100	100	100
N-P Condition Not So Important	46	53	58	16	19	20
N-P Condition Rather Important	53	46	42	84	81	80

Note: See previous tables for description of groups.
[1] Includes "No Answers."

TABLE 6. NUMBER OF PATIENTS' LIFE ACTIVITIES WITH WHICH EMOTIONAL PROBLEMS INTERFERE: RESPONSES OF PHYSICIANS AND PATIENTS BY *N-P* GROUPS.

	Physician			*Patient*		
	N-P Diagnosis	*N-P Associated*	*Control N-P*	*N-P Diagnosis*	*N-P Associated*	*Control N-P*
Sample Size (Unweighted)	(167)	(133)	(44)	(102)	(85)	(57)
Weighted—Number	343	300	60	211	175	81
Per Cent	100	100	100	100	100	100
No. of Activities[1] Interfered with:						
None	33	29	45	41	55	61
One	26	33	23	19	30	19
Two	22	21	22	22	9	14
Three or Four	19	17	10	18	6	6

Note: See previous tables for descriptions of groups.
[1] The four activities are work on the job (or work around the house), family life, getting along with others and a general category for "other" activities.

cent, depending on the *N-P* group (Table 8).

The patients took a somewhat different view of the seriousness of their emotional problems. About 80 per cent of the patients in each of the three *N-P* groups regarded their emotional problem as being somewhat important. On the other hand, only among patients in the *N-P* diagnosis group did as many as half the patients report that their emotional condition interferes with even one of their daily activities. Once again, we find about a fourth to a third who thought that the emotional condition caused "a great deal" of interference in one or more daily activities.

Although four out of five patients thought their emotional condition important they were for the most part optimistic about the prognosis for the condition. In each of the three patient sample groups, about 60 per cent of the patients replied that their condition had either already improved, or that it was likely to improve without any kind of medical care. Less than 20 per cent of the patients in each group thought that future medical care was required for any improvement of their problem, and only about ten per cent thought they might not improve even with medical care.

Physician Reports of Medical Care provided. For the present discussion, there will be considered only three of the possible courses of action that might be taken by the physician for his patient's emotional problem. First, the physician might prescribe drugs for the patient. Secondly, the patient might be referred to an H.I.P. psychiatrist for diagnostic purposes. Finally, the patient might secure treatment by a psychiatrist outside of H.I.P. In the discussion which follows we shall look at the information on these three procedures as they were obtained from the family physician. Doctor-patient discussions, among the most general approaches taken in handling patients' emotional problems, will be taken up in another section.

In comparing the three *N-P* groups it is found that those patients in the *N-P* diagnosis category were more likely than other

TABLE 7. MAXIMUM DEGREE OF INTERFERENCE OF EMOTIONAL CONDITION WITH ONE OR MORE LIFE ACTIVITIES: RESPONSES OF PHYSICIANS AND PATIENTS BY *N-P* GROUPS.

	Physician			*Patient*		
	N-P Diagnosis	*N-P Associated*	*Control N-P*	*N-P Diagnosis*	*N-P Associated*	*Control N-P*
Sample Size (Unweighted)	(167)	(133)	(44)	(102)	(85)	(57)
Weighted—Number	343	300	60	211	175	81
Per Cent	100	100	100	100	100	100
Degree of Interference[1]						
A Great Deal	31	25	22	37	26	35
Somewhat	23	27	17	22	21	13
Very Little	13	13	17	10	6	8
Not At All	33	35	45	31	47	45

Note: See previous tables for descriptions of groups.
[1] Rating was obtained from replies to questions on the following activities: work on the job (or, work around the house); family life; and getting along with others.

TABLE 8. PROGNOSIS FOR FUTURE COURSE OF EMOTIONAL PROBLEMS WITH AND WITHOUT MEDICAL CARE: RESPONSES OF PHYSICIANS AND PATIENTS BY *N-P* GROUPS.

	Physician			*Patient*		
	N-P Diagnosis	*N-P Associated*	*Control N-P*	*N-P Diagnosis*	*N-P Associated*	*Control N-P*
Sample Size (Unweighted)	(167)	(133)	(44)	(102)	(85)	(57)
Weighted—Number	343	300	60	211	175	81
Per Cent	100	100	100	100	100	100
Has Already Improved	—	—	—	30	41	49
Will Improve without Medical Care	16	10	22	29	13	11
Would Improve with Medical Care	35	28	25	18	14	16
Will Not Improve with or without Medical Care	32	53	42	11	14	8
Don't Know Whether Will Improve with Medical Care; Other Qualified Comments	17	9	11	12	17	16

Note: See previous tables for descriptions of groups.

patients either to have drugs prescribed or to see an H.I.P. or some other psychiatrist (Table 9). Eighty-five per cent of those with an *N-P* diagnosis received either or both kinds of care, compared with 71 per cent of the patients in the *N-P* associated group, and 60 per cent of those *N-P* patients from the control group. Looking more closely at what was done for the patients, we find that the prescribing of drugs was the most commonly followed procedure. About half of the *N-P* diagnosis and *N-P* associated patients received drug prescriptions without any additional referral to or treatment by a psychiatrist. For some patients, referral to or treatment by a psychiatrist accompanied the prescribing of drugs by the family physician. Drugs for their emotional problem and psychiatric care were provided for 22 per cent of the *N-P* diagnosis group, 12 per cent of the *N-P* associated group, and 10 per cent of the *N-P* patients from the control group. Altogether, between twenty and thirty per cent of the patients in each of the three groups were referred to an H.I.P. or non-H.I.P. psychiatrist.

Drugs and referrals to a psychiatrist are not the only courses of action available to a family physician in treating patients. There are non-medical professionals to whom patients may be sent, and in fact 15 per cent of the *N-P* diagnosis and *N-P* associated groups, and 5 per cent of the *N-P* control groups were referred to an H.I.P. social worker or to some social agency.

Helpfulness of Drugs and Discussions. As a final example of the type of information available from this pilot study of physicians and patients, an examination will be made of how two medical procedures were viewed with regard to their effectiveness in treating patients for their emotional problems. Both physicians and patients were asked to rate on a four point scale ranging from "very helpful" through "not at all helpful", the use of drugs for their emotional problems (where these had been prescribed) and the value of discussions between physician and patient (Tables 10 and 11).

In rating drugs in the treatment of patients with emotional

TABLE 9. MEDICAL CARE GIVEN FOR PATIENTS' EMOTIONAL PROBLEMS: RESPONSES OF PHYSICIANS BY *N-P* GROUPS.

	N-P Diagnosis	*N-P Associated*	*Control N-P*
Sample Size—(Unweighted)	(167)	(133)	(44)
Weighted—Number	343	300	60
Per Cent	100	100	100
Neither Drugs nor Psychiatrist	14	29	40
Patient Received Drugs	77	63	40
Received Drugs only	55	51	30
Drugs and H.I.P. Psychiatrist	12	7	3
Drugs; H.I.P. and Non-H.I.P. Psychiatrist	7	3	7
Drugs and Non-H.I.P. Psychiatrist	3	2	—
Patient Referred Only to Psychiatrist	8	8	20
Referred to H.I.P. Psychiatrist	5	4	13
Referred to H.I.P. and Non-H.I.P. Psychiatrist	3	3	—
Referred to Non-H.I.P. Psychiatrist	—	1	7

Note: See previous tables for descriptions of groups.

TABLE 10. HELPFULNESS OF DRUGS IN TREATING PATIENTS' EMOTIONAL PROBLEMS: RESPONSES OF PHYSICIANS AND PATIENTS BY *N-P* GROUPS.

	Physician			*Patient*		
	N-P Diagnosis	*N-P Associated*	*Control N-P*	*N-P Diagnosis*	*N-P Associated*	*Control N-P*
Sample size (Unweighted)	(91)	(80)	(18)	(80)	(56)	(26)
Weighted—Number	265	189	24	161	109	40
Per Cent	100[1]	100[1]	100[1]	100[2]	100[2]	100[2]
Drugs "Very Helpful"	23	11	4	39	54	48
Drugs "Somewhat Helpful"	32	53	63	24	29	35
Drugs "Very Little" or "Not At All Helpful"	26	31	29	33	14	15
Don't Know	19	5	4	—	—	—

[1] Includes physician reports for patients who were prescribed drugs for their emotional problem.
[2] Includes patients who report having received drugs for their emotional condition. Total includes "No Answers."
Note: See previous tables for descriptions of groups.

TABLE 11. HELPFULNESS OF DOCTOR–PATIENT DISCUSSION IN TREATING PATIENTS' EMOTIONAL PROBLEMS: RESPONSES OF PHYSICIANS AND PATIENTS BY *N-P* GROUPS.

	Physician			*Patient*		
	N-P Diagnosis	*N-P Associated*	*Control N-P*	*N-P Diagnosis*	*N-P Associated*	*Control N-P*
Sample size (Unweighted)	(167)	(133)	(44)	(102)	(85)	(57)
Weighted—Number	343	300	60	211	175	81
Per Cent	100[1]	100[1]	100[1]	100	100	100
Discussions "Very Helpful"	18	17	22	60	61	55
Discussions "Somewhat Helpful"	36	47	47	25	24	23
Discussion "Very Little" or "Not At All Helpful"	40	30	15	15	14	22
Don't Know	2	2	7	—	—	—

[1] Includes "No Answers."
Note: See previous tables for descriptions of groups.

problems, physicians found them "very helpful" for about a fourth of the patients in the *N-P* diagnosis goup to whom they had prescribed them, and for a far smaller proportion of patients in the other *N-P* groups. They found talking to the patients "very helpful" in about one in five cases in each of the *N-P* groups.

A sizable proportion of patients, on the other hand, held both the value of drugs and their talks with the physicians in high regard. At least four in ten patients in each of the three *N-P* groups described the drugs they had received as "very helpful." And in contrast to the physicians' views of the effectiveness of doctor-patient discussions, about six patients in ten in each of the three *N-P* groups regarded these talks as "very helpful." It should be noted that some of the differences observed between physcians and patients in the "very helpful" categories may be due to differences in manner of responding. Some studies have observed a tendency for well-educated respondents, as represented here by physicians, to choose less extreme response cate-

gories than others who are less well-educated.

The findings just presented are clearly but the beginnings of the analyses possible from the data available in this pilot study. As observed earlier, direct comparisons between physician and patient responses to the same questions have yet to be made; there is available a battery of items used in other studies of mental health against which physicians' judgments will be compared with regard to patients' emotional problems; and cross-analyses among important variables have just begun. Also, a wide range of open-end questions have provided numerous statements from physicians and patients from which hitherto unexamined variables will be examined, and from which it is likely that new hypotheses will be forthcoming.

Summary and Conclusions

A pilot study of "Patterns of Medical Care Related to Mental Illness" has been carried out in three medical groups associated with H.I.P., a prepaid, comprehensive medical care program in the New York City area. This paper describes the procedures used, some of the reasoning behind their use, and a number of findings both methodological and substantive.

Three groups of patients seen by the family physicians during the period December, 1961–February, 1962 were studied. Two of these groups were designated as "*N-P* diagnosis" and "*N-P* associated", based on information that appeared on the physicians' routine reports of services rendered. The third group, consisting of a sample of the other patients was designated as the control.

Interviews were held with the family physicians to obtain more information for the first two groups about the mental or emotional problem and medical care prescribed. In the case of the control group, the interview was designed to locate additional patients with emotional problems, and for these the main line of inquiry was pursued. Parallel interviews were conducted

with patients in the three study groups.

For methodological purposes, the most significant findings thus far concern the various definitions of "emotional" problems used in screening procedures. The group identified in the physicians' routine reports of services as having a mental or emotional problem is comparatively small (4 per cent of all patients seen). This number is doubled when the report form is the means for identifying an *N-P* associated condition, and is greatly augmented to reach possibly 30 to 35 per cent when the report form is supplemented by an interview which covers mental and emotional problems present at a physician visit during the study period or at any previous visit. This escalation is even more marked in the interviews with patients. To an important extent, this is due to the inclusion of questions regarding worries or nervousness about their health.

Patients identified by their family physicians through different means as having mental or emotional problems were dissimilar in several respects; e.g., in their availability for interviewing, in the physician's view of the future course of the emotional problem, and in the medical care offered by the physician for the problem. At the same time, certain similarities were found among patients with emotional problems located in a different way; e.g., in the physician's view of the importance of the problem, and in the degree of interference caused by the emotional problems in the patient's major life activities.

Differences between patient and physician replies to parallel questions about patients' emotional problems demonstrated the need to interview both groups. There was, for example, a marked difference between them in the assessment of the seriousness of patients' emotional problems and in the prognosis of the future course of these problems.

At this time, it is clear that, with certain modifications, the methodology of the pilot study and the instruments used are suitable for developing a wide range of presently unavailable information on practices of family physicians in handling mental and emotional problems as they meet them.

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[5] Each of the three samples was stratified by month, by medical group, and by physician. Differential sampling ratios were used to distribute the interview load over time and place. Close to half of the patients with an *N-P* diagnosis, about half of those with an *N-P* check, and 3 in 100 of all the other patients eligible for selection fell in the three samples.

[6] A detailed examination of the physicians' routine report forms for a full year reveals that 13 per cent of all control group patients had an *N-P* diagnosis or *N-P* associated condition recorded at some time during the nine months preceding the three month study period. Half of these patients were reported by the physicians as having had an emotional problem at the time of the interview; the other half were not so reported.

Appendix

Screening Questions Used in Physician and Patient Questionnaires to Determine N-P Status

Physician Questionnaire. The following screening questions were asked physicians about patients in the control group. (The term "condition" refers to the medical condition reported for the patient by the physician on the routine reporting form used by all H.I.P. physicians. "This visit" refers to the study visit during the period from December, 1961–February, 1962.)

A. Is this condition connected in any way with a psychological, mental, emotional, or personality disorder or condition?

.....Yes*
.....No (Skip to B)

B. Did the patient at this visit, present a psychological, mental, emotional or personality disorder or condition not connected with ..... (condition)?

.....Yes*
.....No (Skip to C)

C. Has this patient ever presented a mental or emotional condition at any other visit to you?

.....Yes*
.....No (End interview)

Only questions B and C were asked if the physician's routine report form indicated that the patient was seen for a check-up.

NOTE: Patients for whom the physician answered in one of the categories marked with an asterisk (*) were classified as *N-P*. Further questions were asked the physician about these patients' emotional or psychological problems. The interviews were terminated at the points indicated for all other patients.

Patient Questionnaire. The following screeing questions were asked all patients:

2B. What did you see Dr. ..... about? (Would you describe the symptoms to me?)

If reason for visit is "check-up", ask:

(1) Was the check-up for a condition already under medical care?

.....Yes (Skip to C)
.....No (Continue)

(2) Did the doctor find something wrong with you through this check-up?

.....Yes
.....No (Skip to Question 5)

C. What did the doctor say it was? (What did he call it? What medical terms did he use,)

F. What has the doctor recommended or said should be done about it?

(If respondent has mentioned an emotional or psychological condition, skip to question 6; (N–P Questions) otherwise continue)

3. Very often conditions for which people see doctors are aggravated or even caused by worries, nervousness, or tensions they have. Now in connection with the (condition) for which you saw Dr. ....., how much do you think this condition was affected by worries, nervousness or tension—very much, somewhat, or very little affected?

.....Very much affected) Continue with question 4
.....Somewhat affected) " " " "
.....Very little affected) Skip to question 5
.....Not at all affected) " " " "

4B. Did you discuss your worries, nervousness or tensions at all with Dr. ..... at that visit in .....?
(month)

.....Yes*
.....No

4C. What about the times you saw Dr. ..... before .....;
(month)
did you ever discuss with him your being worried or tense?

.....Never saw him before
.....Yes*
.....No (If also "no" to B, skip to Question 27)

5. *For respondents who checked "No" in Question 2B(2), or "Very Little Affected" or "Not at all Affected" in Question 3:*

A. Did you ever discuss being worried, upset or nervous about your health with Dr. .....?

.....Yes* (Skip to Question 5D)
.....No

B. Did you ever discuss being worried, upset or nervous about something besides your health with Dr. .....?

.....Yes*
.....No (If "No" to *both* 5A and 5B, skip to Question 27)

NOTE: Respondents who replied in answer to Questions 2B, 2C or 2F that they

had discussed an emotional or psychological condition with their family physician at the time of the study visit were classified *"N-P."* Those who replied otherwise, but whose answers were classified in one of the categories marked with an asterisk (*) were also classified *"N-P."* Respondents classified *"N-P"* were asked additional questions related to the *"N-P"* condition discussed with the physician. All others were skipped to a later part of the questionnaire to be asked all patients, *"N-P"* and "non-*N-P.*"

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