THE WORK OF A GROUP OF DOCTORS IN SASKATCHEWAN

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SETTING AND PURPOSES

The Saskatoon Community Health Services Medical Clinic, the subject of this study, is one of a small number of similar clinics in Saskatchewan. These were founded in 1962 by consumer groups and physicians in response to the much publicized doctors' withdrawal of normal medical services that greeted the inception of North America's first major experiment in government-sponsored insurance to cover the costs of doctors' bills for the entire population. Saskatchewan has been witnessing a transition from private to public financing of medical care, and it is important to begin evaluation and critical assessment of programs at the time of inception.

The cost and the quality of any system of medical care depend to a great extent on what doctors do. In this study a detailed analysis was carried out of the work done by the doctors of the Saskatoon consumer-sponsored clinic throughout 1964. The clinic has no insurance function and the doctors studied submit their bills to the government agency on a fee-for-service basis. Incomes are pooled and earnings are based on a point system largely related to training and experience.

The medical care plan operation in Saskatchewan excludes certain services covered by other public programs (cancer services, workmen's compensation, old age, blind and public assistance persons, Indians residing on reserves) and services at the request of third parties. During the study year 11.1 per cent of the medical group's income was derived from such services and from private sources; 88.9 per cent of income was derived from the government paying agency.

The purposes of this report are:

1. To describe the work done by a group of doctors, and specifically, to analyze the patterns of visits to the group of doctors by their patients.
2. To place the study into the context of other studies, especially of general practice, based on a partial review of the literature on this subject.

Through analysis of a study of visits, the work done by six general practitioners, a psychiatrist and a surgeon in a group practice during the calendar year 1964 will be described. This report is a preliminary one, and more detailed analyses will be included in a book now being prepared.

REVIEW OF THE LITERATURE

Approximately 100 studies of general practice and other relevant studies have been reviewed, concentrating particularly on those relating to the content of the general practitioner's job. Detailed reviews were made of the two key studies of the quality of care in general practice—Peterson, *et al.,* in North Carolina, and Clute in Ontario and Nova Scotia.

Most of the important published studies on the content of practice have come from the United Kingdom (see Appendix). The review of literature has included study of morbidity patterns, but not of the natural history of disease.

The age-sex registers, disease indices, day books and simple punch cards used by many general practitioners in Britain have built up a

body of knowledge about the content of practice over the years. The so-called E-book, pioneered by Teviot Eimerl, and first reported in his papers entitled "Organized Curiosity," provide a practical way for record keeping for research in clinical practice. It requires a particular doctor to keep his own detailed records about the content of his practice.

That method of collecting data, however, was not suitable for the purposes of this study. What was needed was a collection of a wider variety of information in which much of the work could be done by a research assistant, and in which those doctors who were not particularly interested in research could expend very little effort to provide the information to complete the research record forms.

It was also decided not to use the methods developed by Silver in his study of family medical care in New York, which took eight years to complete and dealt with a well-established closed practice with a clearly definable population. When the present study began it was not known who the patients were likely to be or for how long they would be under the study group's care.

METHOD AND LIMITATIONS

Information was collected for every face-to-face contact with patients by all doctors of the group for the calendar year 1964. It was entered on a pre-tested research record form.[1] Pre-testing was carried out over a period of two and one-half years and involved three rural general practitioners and, subsequently, the doctors of the group under study. The form finally used had been pre-tested and revised on five different occasions.

The information that was collected included date of service, doctor seen, family and patient identification, social characteristics of the patient and his family, kind of disorder, fee, length of visit, primary diagnosis and, if applicable, whether the visit was for a preventive service or resulted in a referral. A separate form was completed for each clinic visit, house call and hospital admission.

The collection of these data on many thousands of visits extending over an entire year, required the cooperation of a number of

persons including the clinic staff of physicians. As a result, the control of the accuracy of the recorded information was not as close as it should have been and review of the records after data collection was completed indicated errors in about six per cent of the visit forms. These errors were primarily in patient identification and in the recording of social and demographic characteristics. Corrections were made and this report is based on what is believed to be an acceptably reliable set of records.

Recording the length of face-to-face contact with the patient presented problems of accuracy in the time estimate in minutes made by the doctor for each office visit. Reliability checks were therefore conducted for a series of visits. The doctor's nurse recorded the time the doctor spent with each patient and this was compared with the estimate of the physician. The doctor invariably underestimated the time spent with the patient, but, nevertheless, these are the estimates used in analyzing this variable. With the exception of surgical procedures, the time spent with patients in hospital was not estimated. For time spent in performing surgical procedures including associated time spent with such patients while they were in hospital, the formulae used by leRiche and Stiver in Ontario[2] were used.

A special six-week study of house calls was undertaken by Spasoff in the summer of 1964,[3] and during this period the time spent per call, including travel, was recorded by the doctor. Although time spent during this period may not be typical of the time spent during house calls for the entire year, estimates for the entire year are based on the shorter study.

How reliable were the *diagnostic categorizations?* The 1955 Revision of the International Statistical Classification three-digit code was condensed to a two-digit code to include those conditions that were likely to be most common, based on morbidity patterns in Saskatchewan. For purposes of analysis, the two-digit code was condensed to 44 categories, falling within the major rubrics of the international classification. A number of studies have shown that forcing a particular visit into a diagnostic category often represents an oversimplification and produces inaccuracies.[4] Nevertheless, the

Saskatchewan medical care plan—and most fee-for-service plans—requires physicians to provide a diagnosis when they submit a particular claim. The system used in the study, therefore, accorded with the pattern used by and required of all practicing doctors.

Certain safeguards may have contributed to the accuracy of diagnostic categorizations. A unit record chart for each patient contains special forms for recording all pertinent information including identification data, history, physical findings, reports of various investigations, consultations, findings on house calls and so on. An on-going review surveys a random sample of all patients' charts, and all the doctors regularly take their turns at chart review. Occasional clinical meetings are held for purposes of random chart review, and for discussion of "boners" or missed diagnoses.

FINDINGS

Utilization

During the calendar year 1964, 7,164 individual patients made one or more visits to the equivalent of six full-time general practitioners, and to the psychiatrist and surgeon of the group practice. Of this number, 260 patients saw only the specialists and were presumably referred to the specialists by physicians outside the clinic or by the clinic physicians during the previous year. Thus 6,904 patients saw the general practitioners. During the year, 26,613 home and office visits were made, and 527 individual or composite fee services were provided to hospital inpatients. Of the 21,258 office visits to the general practitioners, 27.7 per cent were for new disorders, 60.1 per cent old disorders, and 12.2 per cent no disorders (patient healthy, post-operative check, sutures removed, etc.). Of the 2,089 home visits by the general practitioners, 55.2 per cent were for new disorders, 43.4 per cent old disorders, and 1.4 per cent no disorders. Chronic disorders and acute exacerbations of chronic disorders comprised 36.4 per cent of home visits and 52.9 per cent of office visits. It is noteworthy that 26.7 per cent of home visits were for chronic disorders and hence many were presumably elective visits.

Morbidity

The morbidity experience of patients attending or visited by general practitioners during 1964 is listed in Table 1. In order of frequency, the first five major diagnostic rubrics for office visits were special conditions and examinations without illness, psychological illness, respiratory diseases, circulatory diseases and allergic, endocrine, metabolic and nutritional disorders. For home and outpatient visits, the first five categories were respiratory diseases, diseases of the digestive system, diseases of the nervous system and sense organs, accidents and pychological illness.

TABLE I. OFFICE VISITS AND HOME CALLS OF GENERAL PRACTITIONERS BY DIAGNOSIS

Rubric	*Diagnosis*	*ISC Number*	*Home Calls**		*Office Visits*	
			Number	*Per Cent*	*Number*	*Per Cent*
I	Infective and parasitic diseases	001–138	135	6.5	367	1.7
II	Neoplasms	140–239	25	1.2	258	1.2
III	Allergic, endocrine system, metabolic and nutritional diseases	240–289	144	6.9	1,877	8.8
IV	Diseases of the blood and blood-forming organs	290–299	2	0.1	333	1.6
V	Mental, psychoneurotic and personality disorders	300–326	165	7.9	2,346	11.0
VI	Diseases of the nervous system and sense organs	330–398	176	8.4	1,143	5.4
VII	Diseases of the circulatory system	400–468	157	7.5	1,928	9.1
VIII	Diseases of the respiratory system	470–527	478	22.9	2,282	10.7
IX	Diseases of the digestive system	530–587	242	11.6	1,526	7.2
X	Diseases of the genitourinary system	590–637	89	4.3	1,658	7.8
XI	Complications of pregnancy, childbirth and the puerperium**	640–652, 680–689	15	0.7	58	0.3
XII	Diseases of the skin and cellular tissue	690–716	73	3.5	1,274	6.0
XIII	Diseases of bones and organs of movement	720–749	64	3.1	1,410	6.6
XIV	Congenital malformation	750–759	0	0	44	0.2
XV	Certain diseases of early infancy	760–776	0	0	8	—
XVI	Symptoms, senility, and ill-defined conditions	780–795	120	5.7	925	4.4
XVII	Accidents, poisonings, and violence	N800–N999	172	8.2	1,233	5.8
XVIII	Special conditions and examinations without illness	Y00–Y09	24	1.1	2,585	12.2
	Unknown		8	0.4	3	—
	Total		2,089	100.0	21,258	100.0

* Includes all visits other than to office or to hospital in-patients.

** Excludes obstetrical confinement, but includes abortions.

TABLE 2. OFFICE VISITS TO GENERAL PRACTITIONERS FOR PREVENTIVE SERVICES

Type of Service	*Number*	*Per Cent*
All office visits	21,258	100.0
Pre- and postnatal care	883	4.2
Well-baby care*	120	0.5
Check-up	3,202	15.1
All other	17,053	80.2

* Immunizations were usually done by nurses and were not recorded for research purposes. Th applied also to many well-baby visits

Preventive Services, Including "Check-ups"

Table 2 summarizes the extent to which certain preventive services contributed to the volume of office visits to the general practitioners. These comprised 19.8 of every 100 office visits, and included check-ups, which were carried out on 15.1 of every 100 office visits.

Check-ups require the doctor to apply his ABC's of clinical acumen on a regular basis, and questions about the yield of findings, time consumed in doing the examination and fees paid for them, are of importance to the public, health planners and agencies that pay doctors' bills. A special attempt was made to assess the yield of findings on check-ups, to evaluate the significance of these findings, time spent, fees derived and differences between the doctors in their yield of findings.

Each of the six general practitioners spent the equivalent of slightly more than five forty-hour work weeks in carrying out check-ups, or about 24 per cent of their total time in the clinic. Of the examinations, 62.9 per cent took between 21 and 30 minutes to do, 27 per cent took between 11 and 20 minutes, 6.7 per cent took between 31 and 45 minutes, 2.4 per cent took 46 minutes or longer and 0.2 per cent took ten minutes or less. The average time per check-up was 23.8 minutes, a figure far lower than the doctors' prior subjective impressions.

The proportion of check-ups on which a decision was made by the doctor that a new significant finding was present is shown in Table 3. Such a finding, by the definitions used in this study,

TABLE 3. OUTCOME OF CHECK-UPS BY GENERAL PRACTITIONERS

Prior Indication of Advisability of Check-up	*Number*	*Number with Significant Findings*	*Significant Findings per 100 Check-ups*
Total	3,202*	865	27.0
Indicated	1,915	726	37.9
Not indicated	1,266	139	11.0

* Includes 21 check-ups with indication unknown.

meant a medical or psychological condition not previously known to any doctor or the patient or not previously recognized, and having the potential for causing subsequent adverse effects on the patient's bodily, social or emotional functions.

New significant findings were detected on 27 per cent of all check-ups, but for cases in which some prior indication was found of the advisability of a check-up the rate was 37.9 per cent. The diagnostic rubrics most frequently associated with a new finding were diseases of the circulatory system, with a rate of 6.8 new findings per 100 indicated check-ups, diseases of the genitourinary system, with a rate of 6.6, and allergic, endocrine, metabolic and nutritional diseases, with a rate of 4.0.

The yield of new significant pathology, both organic and sociopsychological, is considerable, even with laboratory screening, which is imperfect because some doctors occasionally forget to order basic tests. As well, a more detailed study was made of the first 300 consecutive check-ups carried out in 1966. As a result of both of these studies, the conclusion was reached that a patient, who plans to use a new doctor for his usual medical needs, should have a systematic base-line evaluation of his health status.

House Calls

During 1964, the general practitioners made 2,089 house calls and outpatient visits, comprising 8.9 per cent of all visits, other than those to hospital inpatients. Fewer house calls were made during the spring and summer than during the winter and fall.

More patients with new than old disorders were seen on house

calls, with proportionately more acute conditions, and acute exacerbations of chronic conditions.

An earlier unpublished study of family attitudes by Spasoff in 1963,[5] showed that 40 per cent of families interviewed rated as most important the availability of a "family doctor" for house calls. In 1964, Spasoff studied all visits other than to the doctors' offices and to hospital inpatients. During the six-week period of the study, the general practitioners averaged only one house call per day. Only 2.7 percent of these were made between midnight and 6 a.m.; 21.5 per cent were made to patients who had never previously used the clinic's services; one-third of these were seen subsequently within a month after the study's completion. Children and persons 65 years of age and older were much more likely to receive house calls than were young or middle-aged adults. Hospital admissions resulted from 5.1 per cent of house calls, and at the other end of the spectrum no treatment was required in 13 per cent. Some follow-up (including phone calls) was indicated in 67.2 per cent of these calls.

Were the calls justified? In the opinion of the physicians making the calls, 12.3 per cent of calls could have waited or were not justified; 26.7 per cent were elective; 10.8 per cent represented emergencies; 17.4 per cent represented urgent conditions and 32.8 per cent were categorized by the doctor as "fair enough." Poor telephone communication may have led to some house calls, and to avoidance of others.

The length of time spent per house call by the general practitioners (including travel time) for the shorter study averaged 34 minutes. Only 22.8 per cent of all house calls took less than 30 minutes, in contrast to the average clinic visit to the general practitioner of 15.5 minutes. If the average time per house call for the special six-week study period is projected for the entire year (and it would clearly be an underestimate for Saskatchewan's cold months, when warming the car, changing into snow boots and so on, would consume more time), the 2,089 house calls by the six general practitioners took 1,184 hours of time, or 29.6 forty-hour weeks. Each of the six general practitioners would have spent just

under five forty-hour weeks in making house calls. The question of fees on house calls will be discussed in a later section.

Referrals

During the year 1964, the six general practitioners saw 6,904 patients and made 925 referrals to specialists. The referral rate was therefore 13.4 per 100 patients seen. According to the *Annual Report of the Saskatchewan Medical Care Insurance Commission,* the consultation rate per 100 beneficiaries for 1964 was 5.6.[6] Although the latter rate is based on all beneficiaries and the former on patients seen, the clinic group's referral rate is probably higher. This may be accounted for by the ready availability of certain specialty services and by the fact that the referrals included cancer, public assistance and workmen's compensation cases (which are not included in the medicare plan statistics).

The Content of Practice, and Time and Money

The average length for an office visit to a general practitioner was 15.5 minutes. Visits for psychological illness comprised 11 per cent of all office visits, took up 14.3 per cent of all time spent in the office, and earned the general practitioners 14.5 per cent of their office income. The mean duration of face-to-face contact with the patient for these visits was 20.2 minutes. Visits for only one other diagnostic category, genitourinary conditions, averaged more than 17 minutes per office visit, probably because of the need for pelvic or rectal examinations with consequent increased time expenditure. The shortest average times for office visits (under 14 minutes) included those for blood diseases, infective and parasitic diseases, accidents (presumably suture removal, bruises, sprains and the like) and skin diseases.

Visits to the surgeon averaged 14.1 minutes per office visit, and this span included the time used by consultations and referrals. For the psychiatrist this figure was 42.3 minutes, three times as long as that for the surgeon.

These differences can be readily illustrated by two examples: the general practitioner performs a physical examination, suspects

gall stones, confirms this by x-ray and refers the patient for surgery. The surgeon looks at the films, at the complete history and examination carried out by the general practitioner, explains what must be done and arranges for the surgical procedure. The same type of transaction would take place if the general practitioner felt a breast lump and referred the patient to the surgeon. But the psychiatrist would almost invariably have to start off with a long-standing story of sociopsychological pathology that would require systematic unravelling before arriving at a diagnosis and a plan of therapy.

The mean hourly *gross* income from all office visits for general practitioners was $17.10. For specific diagnostic rubrics this ranged between $13.86 for special conditions, and examinations without illness (which included most no-fee visits) and $21.26 for skin and cellular tissue diseases. The surgeon's *gross* income per hour of office work averaged $42.25, ranging from $3.41 for special conditions, and examinations without illness—which included a great many visits for which no fees were charged for services chargeable under composite fee items—to $61.21 for neoplasms, both benign and malignant (a minor surgery suite is available in the clinic). The psychiatrist averaged $21.62 *gross* per hour in the office.

In his study of general practice in Ontario and Nova Scotia in 1963, Clute emphasized the "need for studies to determine how much work a physician practicing good medicine can accomplish in a given amount of time and that these studies should include an examination of the income accruing to physicians per unit of time from the various types of work undertaken by them."[7] Data for the present study were collected in a manner designed to explore Clute's suggestion.

Comparison of earnings for the general practitioner, psychiatrist and surgeon, by time and place, is given in Table 4. For each length of visit group, the surgeon's average fee in the office is considerably in excess of the psychiatrist's, and the latter's is somewhat in excess of the general practitioners'. Although the fees per office visit for the psychiatrist were higher on the average than those for the surgeon, this was a reflection of the great difference in average length of visit to the two specialists. With whatever measure used—either

TABLE 4. COMPARISONS BETWEEN GENERAL PRACTITIONERS, PSYCHIATRIST AND SURGEON FOR TIME AND FEES

*Time and Visits**	*General Practitioners*	*Psychiatrist*	*Surgeon*
Average daily time with patients in office (hours)	4.0	4.9	1.6
Average length of office visit (minutes)	15.5	42.3	14.1
Average daily number of office visits	15.5	7.0	6.7
Average Gross Fees ($)			
All office visits	4.43	15.24	9.91
All office fee** visits	4.65	15.24	12.97
Office fee visits			
under 10 minutes	3.55	†	8.89
11–20 minutes	4.25	10.91	13.12
21–30 "	7.57	10.46	22.68
31–45 "	9.41	15.17	29.84
46 minutes or more	9.47	18.25	†
House calls or outpatient emergency calls	6.78	15.17	20.16
Hospital cases	40.75	66.25	124.06
Hourly fee in office from all visits	17.10	21.62	42.25
Hourly fee in office from fee visits	17.75	21.62	52.56
Source of Income (%)			
Hospital fees	11.4	3.0	56.9
House call fees	11.5	4.9	1.4
Office fees	77.1	92.1	41.7
Total	100.0	100.0	100.0

* Based on estimate of 230 days of office practice for each of the six general practitioners.

** Visits without a fee comprised 4.7 per cent of visits to general practitioners, 23.6 per cent of visits to the surgeon and none of those to the psychiatrist. Most of these represented services for which composite fees were chargeable.

† Less than 10 visits.

TABLE 5. THE GENERAL PRACTITIONER'S WORK WEEK

Activity	*Time (Hours)*	
Face-to-face contact with patients in office	20.0	
House calls during work week	2.2	
In-hospital obstetrical work	1.9	
Clinical meetings (group or hospitals)	4.0	
Other in-hospital work*	5.0	
Telephone calls*	5.0	
Correspondence*	1.6	
Interval between patients, and chart completion*	2.0	
Total	41.7	
Active stand-by		
week nights	14.0	
weekends and holidays	13.8	
Total		27.8
Total—all activity		69.5

* Based on short-term observation of activity by one or more of the clinic general practitioners.

mean office visit fee, mean house call, outpatient or emergency call fee, mean hospital case charges, or average return per hour in office —the fee for the surgeon was three times that of the general practitioners.

For operating room work, and associated time spent in waiting, the surgeon averaged $43 per hour, and the general practitioners, as assistants, averaged $16.72 per hour.

To assess the amount of time spent by the doctors in obstetrical deliveries techniques derived from the work of leRiche and Stiver were used.[8] These researchers estimated that the doctor spent six hours for each delivery, an estimate believed to include all pre- and post-delivery hospital visits. Since the gross composite fee for confinement by a general practitioner was $80, the hourly fee for in-patient hospital obstetrical care was estimated at $13.33. The minimum of six and maximum of 12 pre- and postnatal visits, with no fees, have been calculated in the doctor's office work week. For 1964, for each general practitioner of the group who did obstetrical work, 178 hours were devoted to in-hospital confinements, or 3.8 hours for each of the 47 work weeks.

From the analysis a composite of the general practitioner's work week has been constructed (Table 5). This profile is based on the work of six general practitioners in a new group practice in a competitive fee-for-service environment who were studied for a full year beginning 18 months after the group was established. The findings do not include the amount of time spent by the doctor in reading professional literature, his week of postgraduate refresher work or time possibly spent in research, of which this study is an example. On the average, the general practitioners spent 41.7 hours per week in work directly relating to patient care, and were on active stand-by for an additional 27.8 hours. The mean number of patients seen by each during the year was 1,151. Both patient load and clinic staff were increasing in numbers at the time of, and since the study.

For 1964, the 224 physicians in general practice in the urban areas of Saskatchewan saw an average of 1,531 patients one or more times, and the 304 general practitioners in "associate" practice saw an average of 1,541 patients. More comparable with the study

group's doctors were those Saskatchewan general practitioners in "associate" practice for less than two years who saw an average of 1,036 patients, according to the 1964 Annual Report of the medical care plan.[9]

Table 6 indicates the gross and net earnings per hour based on the fee schedule of the medical profession, which was adopted by the Saskatchewan government's paying agency in 1962, but has not been revised since. The general practitioner's net income per hour seeing patients in the office was $8.51. He netted $5.98 per hour on house calls, and his income per hour tended to decrease as the length of the individual visit increased. He earned nil for 12.6 of his work week hours.

The doctor's most remunerative hours in the office were those during which he saw a number of patients quickly. The data confirmed that the fee-for-service schedule places an overwhelming emphasis on both minor and major *procedural* items, and downgrades virtually all *visit* items. For example, a complete examination

TABLE 6. AVERAGE HOURLY EARNINGS BY GENERAL PRACTITIONERS

Activity	*Hourly Earnings ($)* Gross	Net*
Office visits	17.10	8.51
House calls	12.00	5.98
Assisting at surgery	16.72	8.33
Office visits		
1–10 minutes	21.30	10.61
11–20 "	17.00	8.47
21–30 "	18.17	9.05
31–45 "	15.06	7.50
46 minutes or more	9.47	4.72
Office visits		
patients with digestive diseases	16.55	8.24
patients with psychological illness	17.36	8.65
patients with skin diseases	21.26	10.59
Waiting and completing charts	0	0
Telephoning	0	0
Correspondence	0	0
Clinical meetings	0	0
Active stand-by	0**	0

* The doctors were paid by the Medical Care plan at 85 per cent of the gross fee minus two per cent discounts. Operating costs in 1964 were 40 per cent of gross. The net figures are, thus, 60 per cent of 83 per cent or 49.8 per cent of gross.

** Except for house calls included under that activity.

TABLE 7. ASPECTS OF THE GENERAL PRACTITIONER'S WORK IN 1964

Number of patients seen	1,151
Number of visits, home and office	3,891
Number of contacts per patient seen	3.4
Average length of office visit	15.5 minutes
Average length of check-up visit	23.8 minutes
Average length of house call	34 minutes
Of every 100 house calls	2.7 were between midnight and 6 a.m.
	23.9 were between 6 a.m. and noon
	27.4 were between noon and 6 p.m.
	46.0 were between 6 p.m. and midnight
Of every 100 office visits	19.8 were for preventive services
	15.1 had a check-up carried out
Of every 100 indicated check-ups	37.9 had new significant findings
	55.4 had pre-existent conditions of varying significance
	6.7 had examinations without illness
Of every 100 non-indicated check-ups	11.0 had new significant findings
	30.5 had pre-existent conditions of varying significance
	58.5 had examinations without illness
Each general practitioner doing obstetrics delivered	29 babies

TABLE 8. FIVE LEADING DIAGNOSTIC RUBRICS ASSOCIATED WITH ACTIVITIES OF GENERAL PRACTITIONERS

Rank	*Diagnosis*	*Per Cent of Total*
Office Visits		
1.	Special conditions or examinations without illness	12.3
2.	Psychological illness	11.0
3.	Respiratory diseases	10.7
4.	Circulatory diseases	9.1
5.	Allergic, endocrine, metabolic or nutritional diseases	8.9
House, Outpatient or Emergency Calls		
1.	Respiratory diseases	22.9
2.	Digestive diseases	11.5
3.	Diseases of the nervous system or sense organs	8.5
4.	Accidents	8.2
5.	Psychological illness	7.9
Hospital Cases		
1.	Digestive diseases	27.8
2.	Obstetrical confinement	23.8
3.	Genitourinary diseases	8.2
4.	Circulatory diseases	7.8
5.	Neoplasms	6.7
Time in Office		
1.	Psychological illness	14.3
2.	Special conditions and examinations without illness	12.1
3.	Respiratory diseases	9.6
4.	Circulatory diseases	9.3
5.	Allergic, endocrine, metabolic or nutritional diseases	9.0

on an ill, middle-aged woman pays the general practitioner $6.35 (or $3.81 if his net income is 60 per cent of gross), but if he removes a mole from her face he grosses $12.17, and if he removes a wart (and it is said that the average person has several moles or warts) he grosses $7.42. General practitioners, most of whom are not trained to perform major abdominal or gynecological surgery, received almost as much income in 1964 from the Saskatchewan Medical Care Insurance Commission for performing 6,347 such operations as they did for carrying out 110,166 complete physical examinations on patients who were new to them.[10]

When calculated by means of the leRiche and Stiver procedural item time estimates, Saskatchewan general practitioners earned about two and one-half times as much for each hour spent in doing major surgery as they did per hour in their offices, and about one and one-half times more in removing tonsils than they earned per hour in their offices.[11,12] The fee schedule may be a relic of the days when surgical procedures represented heroism for both patients and doctors, and seems to pay the general practitioner too well for doing procedures that other doctors can do better, and pays him very poorly indeed for just those services at which he should excel.

Tables 7 and 8 summarize principal features of the content of the general practitioners' work in the Saskatoon Community Health Services Medical Clinic.

COMPARISON OF FINDINGS WITH OTHER STUDIES

Relevant comparisons that are contained in Table 9 were made with the Report of the Working Party of the British College of General Practitioners, entitled *Present State and Future Needs,* and with Peterson's and Clute's data.

IMPLICATIONS

Clute showed that no correlation exists between the quality of practice and the practitioner's annual income.[13] The data presented here demonstrate that doctors with equal lengths of training earn

extraordinarily unequal amounts of gross income (Three of the general practitioners had at least the same length of training as the group's surgeon), that visit items are poorly rewarded and procedural items are handsomely rewarded. Clute's propositions concerning fees are worth restating here: "Doctors depend for their livelihood on selling their time and skill; there is positive argument in favour of the same remuneration for medical work and for surgical work requiring the same amounts of time; non-surgical specialists in general should be paid the same as surgical specialists per hour of time spent; and finally, extended training should be rewarded differentially."[14] In Saskatchewan, in 1964, average *gross* incomes were $29,298 for general practitioners, and $37,163 for specialists, from medical care sources alone,[15] and, as previously indicated, for the group under study, these sources comprised just 88.9 percent of the practice income. Are governments or insurance-paying agencies likely to approve increases in fees until the medical profession sets its own house in order?

The group's surgeon grossed not far from $40,000 for the year under study—even though he had been in the group for just six months when the study year began and estimated that he could have handled three times as much work as he actually carried out. Since the group's general surgeon grossed just about the average for all of Saskatchewan's sixty-three general surgeons[16] in 1964, does this mean that the great majority of general surgeons in Saskatchewan were grossly underemployed? And is this true for other geographic locations and for other highly trained specialists?

Ideas about health manpower must be re-examined. An average practice of 1,151 patients generated 41.7 hours of work per week for each general practitioner, plus 27.8 hours of active stand-by on call. Could the average general practitioner care for many more patients than at present, without lowering standards, if certain steps were taken?

Is the general practitioner in his present role an anachronism? Is it any longer possible for a doctor to care for a family when the family itself has become a smaller and much more mobile unit? Can an expert in community medical care be produced, even with

TABLE 9. COMPARISON OF STUDIES OF WORK OF THE GENERAL PRACTITIONER*

Characteristic	*Present Study*	*British*[88]	*Ontario*[3] *Nova Scotia*	*Other*
Number of patients per general practitioner	1,151 (actually seen: number at risk not known)	2,328 Eng./Wales 1,958 Scot.		1,430 to 10,000 Various[85, 98, 99]
All home, office visits/ patient seen	3.4	5.7		
Home, office visits/day (five-day week basis)	16.5	30	Ont. 16.7 N.S. 17	18 Canada[98]
Ratio office to home visits	91.1/8.9	67.5/32.5		90/10 Canada[98]
Night Home Calls as per cent of all home calls	2.7	4.1		
Time per office visit (minutes)	15.5	6.6		15 Ontario[5] 16 Canada[98]
Time per house call (minutes)	34	17.7		30 Ontario[5] 30 Day 42 Night Canada[98]
Time on house calls per week (hours)	4.2	14.7–18		
Length of work week (hours)	41.7	39–42	Ont. 52.5 N.S. 60.2	52 Canada[98]
Time in office with patients/week (hours)	20	17.5–20.5		
Time hospital and other work re: patients per week (hours)	17.3	7.0		
Time on active stand-by on call (hours/week)	27.8	22–32 for groups of 4 or more 43–129 for solo or 2–3 man set-ups		
First 5 reasons for seeing general practitioner (not entirely comparable)			Ont. N.S.	
I.	No illness	Respiratory[54]	No ill. No ill.	Respiratory
II.	Psychological	Digestive	Resp. Resp.	Nervous—eye —ear
III.	Respiratory	Skin	Symptoms "Flu"	Skin
IV.	Circulatory	Psychological	Skin Symptoms	Bone
V.	Allergic Metabolic-Endocrine	Bone	Psych. High B.P.	Digestive New York[95]

TABLE 9. (CONTINUED)

Characteristic	*Present Study*	*British*[88]	*Ontario*[3] *Nova Scotia*	*Other*
Length of postgraduate training per general practitioner (average)	24+ mos.		24 mos. or less Ont. 54.6% N.S. 66.7%	20 mos. or less 62 of 88 U.S.A.[12]
Per cent attending postgraduate courses in year	All	22%	Ont. 18 of 44 N.S. 16 of 42	19 hrs. or less 30 of 93 U.S.A.[19]
Holidays in year (weeks)	4	more than 4 57% 2–4 35% 0–2 8%	3 or more Ont. 49.9% N.S. 33.3%	
Weekends on call	1 in 5	less than 1 in 4 14%	1 in 3 or more often Ont. 79.4% N.S. 81.0%	
Nights off duty per week (Mon.–Fri.)	4	0–2 41% 3 or more 59%	never to 3 days/mo. Ont. 58.2% N.S. 73.0%	

* References listed in Appendix.

longer periods of training, given the status and prestige hierarchies that exist within the medical profession, the compartmentalized structure of the medical school and modern hospital, and the changing expectations of patients?

Is the present general practitioner a superficial doctor, seeing many patients on a very cursory basis? Could the use of nurses, nursing assistants, physiotherapists, midwives and social workers and social worker aides shift much of the work load presently carried by doctors to persons who require much shorter periods of training?

And how efficiently do doctors work? Between how many hospitals and offices do they commute? And how effectively do they work? Efficiency, essentially an economic idea, refers to the weighing of costs in relation to returns gained. Effectiveness of health services may be gauged by the extent to which specified conditions are treated or controlled and the degree to which desired changes are effected. As well, to what extent can organizational reform—for example, comprehensive group practice with wider use of other professional and ancillary workers—improve both efficiency and effectiveness, without loss of personalized and humanitarian care?

These are difficult questions, especially for those who have become accustomed to working in a highly individualistic profession. But might not altered organizational arrangements increase rather than decrease the flow of doctors into a new specialty of community medical care? Might not such changes make it easier for various specialists to work as consultants rather than as general practitioners to specific age or disease groups for economic reasons?

SUMMARY

In this study a detailed job description and analysis of the work of a small group of doctors has been presented with special emphasis on the work of the general practitioners.

More detailed studies will examine the patterns of utilization of the patients and families who used the services of the medical group, and will carry out a sociological analysis based on the content of the practice and the organization of the group that was studied. In particular, the doctor-patient relationship in general practice will be explored, along with ideas of medical manpower and allocation of health resources, and the changing idea of the family doctor—a term avoided here. Out of this analysis it is hoped that a clearer picture of the notion of primary medical care will emerge, and of the job definitions of those who provide it.

REFERENCES

[1] Copies of the form, definitions and data relating to other aspects of the study are available from the authors. More detailed discussion of the method of the study, reliability and validity checks and limitations will be included in the book now being prepared.

[2] leRiche, Harding and Stiver, William B., The Work of Specialists and General Practitioners in Ontario, *Canadian Medical Association Journal,* 81, 37–42, July 1, 1959.

[3] Spasoff, Robert A., unpublished study conducted in 1964.

[4] *See,* for example, Crombie, Donald L., Diagnostic Process, *Journal of the College of General Practitioners,* 6, 579–589, 1963.

[5] Spasoff, Robert A., unpublished study conducted in 1963.

[6] Saskatchewan Medical Care Insurance Commission, *Annual Report,* 1964 and 1965, Regina. *See also* the *Statistical Tables* supplementing the Annual Report of the Saskatchewan Hospital Services Plan, 1965, and the Annual Report of the Saskatchewan Medical Care Insurance Commission, 1965, Regina, the Queen's Printer, 1966.

[7] Clute, Kenneth F., THE GENERAL PRACTITIONER, Toronto, University of Toronto Press, 1963.

[8] leRiche and Stiver, *op. cit.*

[9] Saskatchewan Medical Care Insurance Commission, *op. cit.*

[10] *Ibid.*

[11] leRiche and Stiver, *op. cit.*

[12] Saskatchewan Medical Care Insurance Commission, *op. cit.*

[13] Clute, *op. cit.,* pp. 207–209.

[14] *Ibid.,* pp. 476–477.

[15] Votes and Proceedings of the Legislative Assembly, Province of Saskatchewan, First Session, Fifteenth Legislature, 1965, and Sessional Paper 157, April 6, 1965.

[16] Spasoff, Robert A. and Wolfe, Samuel, Trends in the Supply and Distribution of Physicians in Saskatchewan: January 1962 to June 1964, *Canadian Medical Association Journal,* 92, 523–528, March 6, 1965.

APPENDIX

This list of references to selected studies of general practice and other relevant studies and reports, to early 1967, is not all inclusive.

CANADA

[1] Badgley, Robin F. and Hetherington, R. W., Medical Care in Wheatville, *Canadian Journal of Public Health,* 52, 512–517, December, 1961; *see also* Badgley, Robin F. and Hetherington, R. W., Medical Care and Social Class in Wheatville, *Canadian Journal of Public Health,* 53, 425–431, October, 1962.

[2] Badgley, Robin F., Hetherington, R. W., Matthews, V. L. and Schulte, Marjorie, The Impact of Medicare in Wheatville, Saskatchewan, 1960–65, *Canadian Journal of Public Health,* 58, 101–108, March, 1967.

[3] Clute, Kenneth F., THE GENERAL PRACTITIONER, Toronto, University of Toronto Press, 1963. For a detailed review, *see* Wolfe, Samuel, Book Review, *Milbank Memorial Fund Quarterly,* 42, 93–104, October, 1964.

[4] Greenhill, S. and Kolotyluk, K., The Hospital Bed and the General Practitioner, *Canadian Medical Association Journal,* 93, 67–72, July 10, 1965.

[5] leRiche, Harding and Stiver, William B., the Work of Specialists and General Practitioners in Ontario, *Canadian Medical Association Journal,* 81, 37–42, July 1, 1959.

[6] Sellers, E. M., The Influences of Group and Independent General Practice on Patient Care, *Canadian Medical Association Journal,* 93, 147–157, July 24, 1965.

[7] Wolfe, Samuel, Talking with Doctors in Urbanville: An Exploratory Study of Canadian General Practitioners, *American Journal of Public Health,* 53, 631–644, April, 1963.

[8] Wolfe, Samuel, Talks with Doctors: I. University of Saskatchewan, 1961, mimeographed.

UNITED STATES

[9] Cahal, M. F., The Academy's Professional Practice Study (1956), *GP,* 155–158, April, 1958.

[10] Clark, D. M. and Collings, J. S., General Practice, Today and Tomorrow, *GP,* 7, 91–110, 1953.

[11] Health Information Foundation, A View of Our Family Physicians, 7, June, 1958.

[12] Peterson, O. L., *et al.,* An Analytical Study of North Carolina General Practice, 1953–1954, *Journal of Medical Education,* 31, 1956, Part 2.

[13] Rising, J. D., *et al.,* General Practice in Kansas, *Journal of the Kansas Medical Society,* 60–65, February, 1959.

[14] Rittelmeyer, L. F., Comments on a Survey of General Practice, *GP,* 15, 133–138, 1957. This is a critique of Osler Peterson's study of quality.

[15] *General Practice in the United States, A Research Proposal,* National Opinion Research Center, University of Chicago, 1956. This proposal never came to fruition, but remains the best and most detailed proposal to describe systematically and quantitatively the patterns of practice of a national sampling of physicians in the United States, to find out what they do, and what they think about what they do.

UNITED KINGDOM

[16] Backett, E. M., *et al.,* Studies of a General Practice, the Doctor's Job in an Urban Area, *British Medical Journal,* 1, 109–115, January 16, 1954.

[17] Baldwin, J. T., Items of Service in General Practice, *British Medical Journal,* 1, 77, March 7, 1959.

[18] Brotherston, J. H. F., *et al.,* Night Calls: Their Frequency and Nature in One General Practice, *British Medical Journal,* 2, 1169–1172, November 28, 1959.

[19] Brotherston, J. H. F. and Chave, S. P. W., General Practice on a New Housing Estate, *British Journal of Preventive and Social Medicine,* 10, 200–207, 1956.

[20] Cartwright, A. and Marshall, R., General Practice in 1963: Its Conditions, Contents and Satisfactions, *Medical Care,* 3, 69–87, 1965.

[21] Crawford, J. C. C., A Study of Two Years' Work in a Northern Ireland General Practice, *British Journal of Preventive and Social Medicine,* 8, 81–90, 1954.

[22] Crombie, D. L., The Beliefs and Attitudes of General Practice, *Medical Care,* 1, 92–94, 1963.

[23] ———, The Use of a General Practitioner's Time, *British Journal of Preventive and Social Medicine,* 10, 3, 1956.

[24] ———, Serious Illness in Hospital and at Home, *The Medical Press,* 242, October 14 and October 21, 1959.

[25] ———, The Care of Seriously Ill Patients in Hospital and General Practice, *Journal of College of General Practitioners,* 4, 270, 1961.

[26] ———, The Procrustean Bed of Medical Nomenclature, *The Lancet,* 354–356, August 15, 1964.

[27] ———, The Unity of Biological Phenomena, Presidential Address, Royal Society of Medicine, October 21, 1964, mimeographed, p. 29.

[28] ———, The Relationship of Hospital and Domiciliary Care, *Medical Care,* 1, 245–250, 1963.

[29] ———, A Career Structure for General Practitioners, *The Lancet,* 368–370, February 13, 1956.

[30] ———, The Future Pattern of General Practice, *The Lancet,* 257–258, August 11, 1962.

[31] ———, The Defects of General Practice, *The Lancet,* 209–211, January 26, 1963; and, General Practice in a Town, *Queen's Medical Journal,* May, 1957.

[32] Crombie, D. L. and Cross, K. W., The Work-Load in General Practice, *The Lancet,* 354–356, August 15, 1964.

[33] ———, The Contribution of the Nurse in General Practice, *British Journal of Preventive and Social Medicine,* 11, 41–44, 1957.

[34] Eimerl, T. S., Organized Curiosity: A Practical Approach to the Problem of Keeping Records for Research Purposes in General Practice, *Journal of College of General Practitioners,* 3, 246–252, 1960.

[35] ———, Organized Curiosity: An Outline of the Principles Underlying the Technique of Research in General Practice, *Journal of College of General Practitioners,* 4, 628–636, 1964; describes uses of the E-Book.

[36] ———, Direct-Access Diagnostic Facilities in General Practice, *The Lancet,* 851–852, April 21, 1962.

[37] ———, The Pattern of Prescribing, *Journal of College of General Practitioners,* 5, 460–479, 1962.

[38] ———, The Pattern of Migration (Ecological Factors Affecting a General Practice), *Journal of College of General Practitioners,* 7, 342–358, 1964.

[39] ———, The Pattern of Consultation, *Journal of College of General Practioners,* 10, 133–140, 1965.

[40] ———, The Family Doctor and Research, (source unlisted and undated).

[41] Eimerl, T. S. and Pinsent, R. J. F. H., A Design for General Practice, *The Lancet,* 775–776, October 12, 1963 and 822–824, October 19, 1963.

[42] *The Field of Work of the Family Doctor,* Report of the Subcommittee, London, Her Majesty's Stationery Office, 1963.

[43] Forsyth G. and Logan, R. F. L., *The Demand for Medical Care,* A Study of the Case-Load in the Barrow and Furness Group of Hospitals, published for the Nuffield Provincial Hospitals Trust by the Oxford University Press, London, 1960.

[44] Fry, J., A Year in General Practice: A Study in Morbidity, *British Medical Journal,* 2, 249, 1959.

[45] ———, Operations Research in General Clinical Practice, *Journal of Chronic Diseases,* 17, 803–813, 1964.

[46] ———, General Practice Tomorrow, *British Medical Journal,* 2, 1064–1067, October 24, 1964.

[47] ———, The Outpatient Department and the General Practitioner, *Royal Society of Health,* 78, 460–464, 1958.

[48] ———, Care of the Elderly in General Practice, *British Medical Journal,* 2, 666–670, September 21, 1957.

[49] ———, General Practice: A Closer Look, *Journal of Royal Army Medical Corps,* 110, 1–6, 1964.

[50] Fry, J., *et al.,* Diagnostic Facilities for GPs: A Closer Look, *Medical World,* July, 1964.

[51] Fry, J., *et al.,* Appointments in General Practice: Doctors' and Patients' Views, *The Lancet,* 397–398, August 24, 1963.

[52] Fry, J., *et al.,* The Evolution of a Health Team: A successful General Practitioner-Health Visitor Association, *British Medical Journal,* 1, 181–183, January 16, 1965.

[53] Fry, J., *et al.,* Towards Better General Practice: A Preliminary Survey and Some Suggestions, *British Medical Journal,* 2, 1311–1315, November 17, 1962.

[54] Fry, J. and Dillane, J. B., The General Practitioner and His Practice, *The Practitioner,* 190, 150–155, 1963; and, Too Much Work? Proposals Based on a Review of Fifteen Years' Work in Practice, *The Lancet* 632–634, September 19, 1964.

[55] Hadfield, S. J., A Field Survey of General Practice, *British Medical Journal,* 2, 683–706, September 26, 1953.

[56] Hill, B., The Doctor's Day and Pay, *Journal of the Royal Statistical Society,* 114, 1–34, Series A, 1951. This is a key study with excellent statistical methods, using pre-World War II data. It is still of value as an example of excellent methodology.

[57] Hopkins, P., Referrals in General Practice, *British Medical Journal,* 2, 873–877, October 13, 1956.

[58] Horder, J. and Horder, E., Illness in General Practice, *The Practitioner,* 173, 177–187, 1954.

[59] Last, J. M., The Iceberg; "Completing the Clinical Picture" in General Practice, *The Lancet,* 28–31, July 6, 1963.

[60] ———, Objective Measurement of Quality in General Practice, 1965, mimeographed, p. 37.

[61] Lee, J. A. H., Prescribing and Other Aspects of General Practice in Three Towns, *Proceedings of Royal Society of Medicine,* 57, 1041–1043, 1964.

[62] Lees, D. S. and Cooper, M. H., A Preliminary Analysis of Research into General Practice, *Journal of College of General Practitioners,* 6, 233–241, 1963. This is an attempt to take an objective look at what has been done, facts accumulated and appealed to and conclusions reached, in 37 studies of general practice. The study summarized post-1945 publications directly related to the doctor's work.

[63] Logan, W. P. D., Studies on Medical and Population Subjects, No. 7, 1963.

[64] ———, Studies on Medical and Population Subjects (cont'd), No. 9.

[65] Logan, W. P. D. and Brooke, E. M., Studies of Medical and Population Subjects, No. 12, 1957.

[66] Logan, W. P. D. and Cushion, A. A., Studies of Medical and Population Subjects, No. 14, Volume 1, 1958.

[67] Mair, A. and Mair, G. B., Facts of Some Importance to the Organization of N.H.S. from a Five-Year Study of a General Practice, *British Medical Journal,* 1, 281–284, supplement, June 20, 1959.

[68] McLachlan, Gordon (Editor), TOWARDS A MEASURE OF MEDICAL CARE: OPERATIONAL RESEARCH IN THE HEALTH SERVICES, Published for the Nuffield Provincial Hospitals Trust by Oxford University Press, London, 1962.

[69] Pike, L. A., Group Health Education in General Practice, *Journal of College of General Practitioners,* 10, 317–318, 1959.

[70] ———, Lecture Discussions to Patients II, *Journal of College of General Practitioners,* 2, 270–271, 1959.

[71] ———, Health at Home and at Work, *Journal for Industrial Nurses,* 13, 138–143, 1961. A study of the use of a nurse at home and work.

[72] Pinsent, R. J. F. H., Morbidity in an Immigrant Population, *The Lancet,* 437–438, February 23, 1963.

[73] ———, "Send for the Doctor," *The Lancet,* 464–466, August 24, 1964.

[74] ———, Preventive Medicine in General Practice, *in* ENCYCLOPOEDIA OF GENERAL PRACTICE, London, Butterworth, pp. 42–51.

[75] ———, Advances in General Practice, *The Practitioner,* 191, 523–529, 1963.

[76] ———, Research in General Practice, *The Practitioner,* 192, 266–269, 1964.

[77] ———, The James MacKenzie Lecture: James MacKenzie and Research Tomorrow, *The Practitioner,* 190, 114–126, 1963.

[78] Research Committee of Council of College of General Practitioners, The Research and Statistical Units, *Journal of College of General Practitioners,* 6, 195–224, 1959.

[79] Scott, R., Anderson, J. A. D. and Cartwright, A., Just What the Doctor Ordered: An analysis of Treatment in a General Practice, *British Medical Journal,* 2, 293–299, July 23, 1960.

[80] Scott, R. and McVie, D. H., Doctor in the House, *Journal of College of General Practitioners,* 5, 72–85, 1962.

[81] Stevenson, J. S. K., General Practice in Scotland: Why the Difference?, *British Medical Journal,* 1, 1370–1373, May 23, 1964.

[82] Taylor, S., GOOD GENERAL PRACTICE, Oxford University Press, London, 1954.

[83] Warren, M. D., General Practitioners in Hospital, *The Lancet,* 2, 601–602, September 22, 1962.

[84] Weller, M. A., A Ten-Year Survey of a Country Practice, *British Medical Journal,* 1, 92–93 (supplement), March 23, 1963.

[85] Wood, L. A. C., A Time and Motion Study, *Journal of College of General Practitioners,* 5, 379–381, 1962.

[86] Reports from General Practice: II. Present State and Future Needs, published by the Council of the College of General Practitioners, London, July, 1965. The report points out that in Holland, 42 per cent of general practitioners tend 3,500 patients, and in rural Sweden, general practitioners tend 6,000 to 10,000 patients with the help of eight to ten highly skilled public health nurses.

OTHER

[87] Fry, J., General Practice in Europe; A Journey in Comparisons, *British Medical Journal,* 1, 350–353, February 4, 1961.

[88] Jungfer, C. C. and Last, J. M., Clinical Performance in Australian General Practice, *Medical Care,* 2, 71–83, 1964.

[89] Fry, J., Medical Care in South Africa: Some Lessons for British General Practice, *The Lancet,* August 21, 1965.

GENERAL (OR OF SPECIAL INTEREST)

[90] *Training of the Physician for Family Practice,* World Health Organization Technical Report Series No. 257, Geneva, 1963.

[91] *General Practice,* Report of the World Health Organization Expert Committee, Geneva, World Health Organization, 1964.

[92] White, K. L., *et al.,* The Ecology of Medical Care, *New England Journal of Medicine,* 265, 885–892, 1961.

[93] *The Office Practice of Internists,* Graduate School of Public Health, University of Pittsburgh, reprinted from the *Journal of the American Medical Association,* August 2, August 23, September 13, October 11 and November 1, 1965.

[94] Forsyth, G. and Logan, R. F. L., Medical Technology and the Needs of Chronic Disease, *Journal of Chronic Diseases,* 17, 789–902, 1964.

[95] Densen, P. M., Balamuth, E. and Deardorff, N. R., Medical Care Plans as a Source of Morbidity Data: The Prevalence of Illness and Associated Volume of Service, *Milbank Memorial Fund Quarterly,* 38, 48–101, January, 1960.

[96] Mainland, Donald (Editor), HEALTH SERVICES RESEARCH I, New York, Milbank Memorial Fund, 1966.

[97] Acheson, Roy (Editor), COMPARABILITY IN INTERNATIONAL EPIDEMIOLOGY, New York, Milbank Memorial Fund, 1965.

[98] Judek, S., MEDICAL MANPOWER IN CANADA, Ottawa, Queen's Printer and Controller of Stationery, 1965. Judek uses 1,709 to 1,800 population per Canadian general practitioner for 1961 and 1962.

[99] Hogarth, J., THE PAYMENT OF THE PHYSICIAN, SOME EUROPEAN COMPARISONS, New York, Pergamon Press, 1963. Hogarth estimates the general practitioner: population ratios for Austria 1:1,430, Denmark 1:2,250, France 1: 1,668, New Zealand 1: 1,670 and Russia (in 1958) 1: 4,600.

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BOOK REVIEWS

HEALTH IS A COMMUNITY AFFAIR

NATIONAL COMMISSION ON COMMUNITY HEALTH SERVICES

Cambridge, Harvard University Press, 1967
xvi + 252 pp. $2.25 paperback, $5.00 hardcover

It is not just the fact that ours is a pluralistic society which is at the base of the diversity, the complexity and richness of American life. The constant realignment of the major influences which shape social institutions and the shifting of the relative importance of these forces are of no less significance. The dynamics of social development are to be found in the ever-changing combinations and permutations of these influences.

The rapid change occurring today in the health field is inextricably related as both product and producer of an essentially new coalition of influence upon the system for the distribution and delivery of health care services. More than a half century ago the initiative for development was to be found primarily in the amalgam of concern represented by professional interests and the educational institutions in this field. Much of the stimulus for innovation came from the private foundations. Subsequently, with a sharply drawn delineation of responsibility between the public and private sectors of the health care system, it was in the buffering between these respective roles that change was most evidently carried. Currently the entire nexus of traditional relationships in this field is being altered. For the first time in history health is emerging as primarily a social concern. This involves much more than the

increasing importance of third-party representation of the consumer public; the new sense of health as a basic right coupled with the mounting technical sophistication of the American population is bringing into being the articulation of points of view that previously were of marginal importance in the decision-making process in this field. This is reflected, in crucial respects, by the initiative and leadership being marshalled at the level of the federal government in the development of the health care system.

The slipstream of these developments is essential in assessing the recent report of the National Commission on Community Health Services. This is an impressive and authoritative document. It is an "action" report built upon a set of recommendations that is organized into 14 major positions, each representing what is identified as "a critical area of concern upon which future health practices must be planned." The positions are grouped together in the final chapter of the report as the requisite elements of community action for the provision of personal and environmental services in the future. The body of the report provides substance to the recommendations that are made within each position area.

The themes are familiar ones. The recurrent notes are the achievement of comprehensiveness in the provision of both personal and environmental health services, the importance of community participation and involvement in the development of the "health enterprise," the need to strengthen partnership relations, particularly between government and voluntary groups, and the necessity for further and fuller planning for health on a coordinated regional basis. Throughout, consideration of the problems relating to organization for the distribution and delivery of health services serves to tie together the more specific recommendations in regard to particular elements of the health care system.

Aimed at those in the community working "for more effective health care services," both professional and volunteer, the report is noteworthy as attractive reading. Recommendations are expressed with vigor and conviction. Although it seems clear that the consensus expressed in this report is that of the least common denominator, the level of agreement is nonetheless striking.

Furthermore, a number of extremely useful and innovative formulations are to be found in the report. An example is the idea of a "community of solution" with its focus upon "environmental health problem-sheds" and "health service marketing areas." The boundaries of communities are to be established, it is urged, not so much in terms of existing political jurisdictions as in regard to the delineation of the base that is necessary to define a problem, to deal with it and ultimately to solve it. One may object that usage of such characterizations as "health service marketing areas" and "health enterprise" may blunt the distinctive features of the provision of health as a social service. The obvious value of a posture of tough mindedness with its cutting edge of business efficiency must not be permitted to erode other, even more basic values in this field.

This report has already received widespread endorsement. With shattering rapidity, the recommendations it made that each state should have a comprehensive health policy and planning body, responsible to the governor, but representative of governmental, private and voluntary groups, were enacted into law with the passage of Public Law 89–749, the Comprehensive Health Planning Act of 1966. This legislative mandate conforms to the proposals of the National Commission on Community Health Services in regard to the collaboration of providers and consumers of health care in the pursuit of comprehensive planning particularly at the regional and community levels.

Perhaps that is why this report, only a little more than a year after its official presentation to President Johnson in the spring of 1966, reads more like an historical document than an action guide. Perhaps changing process as much as rapid change contributes to the sense that the main report of the National Commission on Community Health Services is today of primary significance not as a call to action, but as a milestone on the way to the implementation of comprehensive health planning. The goals visualized are bright and shining, and the major themes articulated in terms of achieving them are all relevant and appropriate, most will agree. What may be lacking is a sharper discussion of the different dimensions of partnership and their relationships, a more complete exploration of

what is involved in developing a genuine partnership between the provider and the consumer of health services at the community level, and a more explicit recasting of planning methods and procedures in light of these considerations.

It is difficult to escape the conclusion that the limitations of this summary report of the deliberations of the National Commission on Community Health Services arose from the way in which its activities were structured. Created in 1962, under the joint sponsorship of the American Public Health Association and the National Health Council, the National Commission represented a mix of professional and lay concern. With financial support from the Public Health Service and private foundations, the Commission organized three projects through which to pursue a national appraisal of community health services and formulate an action guide for the future. First, six national task forces, each of ten to 15 professionals, were formed to consider "national resources, needs, and trends in terms of their community health service potential." The assignment given to these task forces was to determine how, in the decade ahead, community health services could be brought "abreast of rapidly changing knowledge and technology for health." Areas of concern were comprehensive personal health services, environmental health, health manpower, health care facilities, the financing of community health services and facilities and the organization of community health services.

The second component of the activities of the Commission was built around the conduct of 21 community self-studies. Undertaken on a wide range of communities across the nation, these self-studies involved the preparation of inventories of existing health services and resources, the identification of service needs, and the determination of priorities in the development of action plans to improve health services. However, the staff of the Commission exerted great effort to guide these studies beyond fact finding into "an exploration of the dynamics of community health behavior." Through what came to be characterized as the "process analysis" dimension of these community self-studies, investigation was pursued of the ways in which communities arrived at decisions and took action based on them.

It was the intent that the effectiveness of the community self-studies would be tested through this vehicle of process analysis; the combination of the two was seen as "a program of action studies which would identify and analyze the principles and methods necessary for effective community action to improve health services."

A third element of the activities of the Commission, identified as the Communications Project, sought to organize and maintain a "running dialogue" between a variety of key groups and interests. Of major importance in this regard was the development of mechanisms through which the findings of the task forces, on the one hand, and the community action studies, on the other, might be interrelated, validated and molded into a set of final recommendations. Through four forums held in 1965 in San Francisco, Chicago, Atlanta and Philadelphia, and, subsequently, through a national conference, reactions were secured from a cross section of the nation's health leadership about the "feasibility, acceptability, usefulness and vision" of the resulting recommendations.

The work of the Commission correctly identified and forcibly underscored a new type of community involvement and a new sense of partnership as being of prime importance in the future of health affairs in this country. However, the Commission failed to find the key for this because it stayed within the limits of the traditional delineation of roles between the professional and the lay leader, and, as a consequence, it relied by and large upon a weak and unproductive approach to health planning.

This approach rests upon a long-standing notion of "needs" as the primary underpinning of health programming. The idea that health professionals can specify the health needs of society and assess their relative importance has proven more or less workable in the past. It is being undermined today first by the increasingly complex character of many of the health concerns which exercise competitive claims upon limited resources. However acute the practical problems inherent in the notion of health needs, it is the increasing tendency to question its conceptual significance that seems even more threatening. For the idea that something exists that can be specified as a health need, as it is subjected to a more sophisticated

scrutiny, is being divested of the film of objectivity it has acquired through uncritical usage in the past. There are and can be no objective criteria for elucidating health needs; rather, they at present constitute the preferences of professionals, over which must be drawn the value judgments of society as a whole. If the partnership between the purveyor and the consumer of health services is to move beyond rhetoric and be made truly viable, then far more attention will have to be given to the interrelations between the value system of health professionals and those of its various client groups.

This report constitutes an important but incomplete step along the road toward the achievement of comprehensive health planning. It will serve to enhance the readiness of some to participate in this endeavor. Other key elements in such an undertaking are being moved by a variety of complementary forces.

It is important to recognize the new and distinctive character of the current insistence upon health planning; at the same time, care must be exercised not to overlook the many crucial lessons to be learned from past experience. Yet most of all, the time has come for the coalescence of all the elements that are involved in some working demonstrations of comprehensive health planning.

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