The consultation process and physician satisfaction: review of referral patterns in three urban family practice units

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To improve communication in the referral process a standard referral form was composed that seeks to involve the patient in the referral process. It has been well received by the consulted physicians, the family practitioners who use it in everyday office practice and the patients.

A review of referral patterns in general practice showed many similarities from practice to practice and from country to country. Ophthalmologists were the most frequently consulted, followed by obstetricians and gynecologists, general surgeons, otolaryngologists and orthopedic surgeons.

A follow-up assessment of referral outcome revealed a poor response from the teaching clinics of one tertiary-care hospital to the referring physicians. This resulted in a substantial decrease in the proportion of patients referred from one family practice unit to the hospital over a 3-year period.

Dans le but d'améliorer les communications dans le processus de renvoi pour consultation, on a élaboré un formulaire standard de consultation qui tente d'impliquer le patient dans ce processus. Il a été bien accueilli par les médecins consultés, les médecins de famille qui l'utilisent dans leur pratique quotidienne et les patients.

Une étude des modalités de renvoi pour consultations utilisées en pratique générale a montré plusieurs ressemblances d'une pratique à l'autre et d'un pays à l'autre. Les ophtalmologistes ont été les plus fréquemment consultés, suivis des obstétriciens et gynécologistes, des chirurgiens généraux, des otolaryngologistes et des chirurgiens orthopédiques.

Une évaluation subséquente du

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résultat des consultations a révélé une faible réponse des cliniques d'enseignement d'un hôpital général aux médecins traitants. Sur une période de 3 ans ceci a entraîné une baisse substantielle du rapport de patients dirigés pour consultation d'une unité de pratique familiale vers cet hôpital.

Consultation between physicians during patient care is as old as medicine itself. Only recently have the methods used and the satisfaction of the individuals involved come under scrutiny.

A common deficiency on the side of the referring physician was illustrated in the 1971 report of Morrell, Gage and Robinson, who found that one third of referral letters from general practitioners to a large teaching hospital did not supply a relevant history of the problem necessitating referral. Often the consultation process is initiated by a hastily scribbled note or a hurried phone conversation, which results in inadequate communication of data.

That deficiencies also exist on the consultant's side was documented in the 1974 report of Metcalfe and Sischy.2 In 41.2% of all referrals the family physician received no report from the consultant within 24 days of initiation of the referral. This length of time was chosen by the researchers as a reasonable period for the referral process to be completed. Follow-up study revealed that the delay was rarely due to failure of the patient to contact the consultant but was more frequently due to inability to obtain an appointment within the 3-week period.

The purposes of the study reported below were (a) to document referral patterns over a 1-year period in three urban family practice units associated with a large teaching hospital, (b) to ascertain if the referral process was being completed to the referring physician's satisfaction and (c) to test the value of a standard referral form that provides a consistent data base to the consultant and involves the patient in the completion of the referral process.

Research settings and procedures

Practice settings

The study was carried out for 1 year (in 1975-76, the starting date varying) in three family practice units associated with Toronto General Hospital, a large tertiary-care teaching hospital in downtown Toronto. All the family physicians involved were members of the active staff of the hospital, with admitting privileges for general medical wards and the obstetric unit. All were also on the academic staff of the department of family and community medicine of the University of Toronto and were doing undergraduate and postgraduate teaching.

Family practice service 1 (FPS1) is on the main floor of the threestorey university clinics building attached to the hospital, which also houses most of the subspecialty clinics. Three full-time and 10 part-time physicians provide care and teach first-year family practice residents. The practice consists of patients with medical problems that are more complex than average because many of the patients are initially seen in one of the subspecialty clinics and then referred to the family practice service for ongoing care. The pediatric and obstetric caseload is light; the Hospital for Sick Children, with its extensive ambulatory-care facilities, is just across the road.

Family practice service 2 (FPS2) is located on the second floor of the same building. Two full-time and six part-time physicians are in attendance. Their caseload is similar to that of the physicians at FPS1. At FPS2 the major teaching responsibility is to final-year medical students and several second-year family practice residents.

St. George Health Centre (SGHC) is 1.6 km north of Toronto General Hospital, in a mixed business and residential district on the edge of the University of Toronto campus. Consequently the patients are, on the average, younger than those at the other two units and there is a larger

pediatric and obstetric practice. Involved in patient care are five staff physicians, four full-time and one part-time, two nurse practitioners and six second-year family practice residents, who work at the centre an average of 1 day a week. The staff physicians also teach final-year medical students in the family medicine rotation. Because of the closeness of a large medical arts building many of the referrals from SGHC are made to consultants from the Toronto General Hospital who have their private offices there.

Referral form

A standard referral form (Fig. 1) was used at all three centres. This form provides significant data to the consultant and outlines clearly the referring physician's expectation of the extent of patient care to be provided. Included with the form are photocopies of reports from previous consultations, laboratory reports and roentgenograms that might prove useful in the consultation process. The patient receives one copy, the unit retains one copy for the patient's file and one copy was kept for this study. The consultant's name and phone number are provided at the top of the sheet. At SGHC the patient makes his own appointment, while at FPS1 and FPS2 the unit secretary usually does this. At all three units the patient is given the form in an unsealed envelope to deliver to the consultant and is encouraged to read the contents. At times the situation as seen by the physician may be quite different from that seen by the patient; usually the problem is then explained further to the patient and possibly redefined.

Collection of data

At all three centres the total number of office visits (including visits to nurse practitioners, residents and staff physicians) and the total number of referrals (with distribution according to subspecialty and destination, whether office of a consultant in private practice, Toronto General Hospital clinic or other institution such as the Addiction Research Foundation or the Clarke Institute of Psychiatry) during the year were obtained. This information was also collected at SGHC for 4 months in 1972; the data are included in this

paper for comparison.

At SGHC an in-depth study was carried out that involved the following:

- 1. Determination of the age and sex composition of the practice at the end of the study year.
- 2. The recording in a log book of the date of referral, the patient's name, and name and subspecialty of the consulted physician. A column for the date a response was received from the consulted physician was filled as reports were received.
- 3. Follow-up, by the nurse responsible for collating the results, of all referrals for which no information had been received. The patient's chart was checked for evidence that the consultant had been seen, and if necessary the physician's office or the clinic was contacted. This in-

formation was collated with previously received data and the patients were grouped as follows:

- Seen by consultant and letter received.
- Seen by consultant and other information received (e.g., pathology report or discharge summary).
- Seen by consultant and no information received.
- Not seen because failed to make an appointment or to appear for the appointment.

Results and discussion

Referral practices at the three units

The overall referral rates at each of the three units are compared with the referral rate at SGHC 3 years prior to this study in Table I. The higher rates at FPS1 and FPS2 could

	Date
To:	
Our patient Mr./Mrs./Miss	Date of Birth
Address: _	OHIP No.
_	Phone No.
The problem as seen by the	
, , , , , , , , , , , , , , , , , , , ,	·
The each law as seen by our	
The problem as seen by our	starr:
The following investigation	has already been done:
Previous consultation:	
The following medications a	re currently prescribed:
These have been tried and f	ound not helpful:
Is referred to you for: (a) Consultation for diagnosis/assessment only
(Ь	, , , , , , , , , , , , , , , , , , , ,
(c	<pre>programme) Consultation and treatment on a continuing basis</pre>
(d	
	improving and referral back to the unit.
	Thank you for your care and attention,
	Yours truly.
Our phone no. is 962-1270	Staff M.D.'s OHIP no.

reflect the greater prevalence of chronic problems necessitating close specialist supervision rather than differences in the basic approach to the consultation process by the physicians.

A review of the literature revealed referral rates in family practice to be highest in this study (5.3%) and lowest in Great Britain (1.3% and 2.4%). Factors that may contribute to the higher rate in Toronto include:

1. The proximity of teaching hospitals to the practice units and the availability of consultants.

- 2. A government insurance program that requires patients to be referred by a primary care physician before a consultant fee can be charged.
- 3. A teaching milieu that may attract a higher proportion of patients with serious problems.
- 4. The higher average age of the patients in the FPS units than in a community-based practice.

The proportions of referrals to physicians in private practice, teaching clinics at Toronto General Hospital staffed by resident physicians and physicians at other institutions are shown in Table II. FPS1 and FPS2 directed most of the referrals (81% and 85% respectively) to clinics in the same building. In contrast, SGHC directed only 6% of referrals to Toronto General Hospital clinics and 90% to physicians in private practice. Reasons for this difference may include proximity of the FPS units to the clinics and of SGHC to the consultants' private offices. The same chart for each patient is used in the entire clinic complex, so that it is unnecessary for the patient to reregister with the consultant.

The percentage of patients referred to the Toronto General Hospital clinics by SGHC decreased from 18% in 1972 to 6% in 1975-76. The main reason for this change is apparent from the results of the follow-up study, which are discussed below.

The patterns of referral according to specialty documented in several recent reports are summarized in Table III. In all the studies surgeons were the most frequently consulted specialists. This suggests that the most common reason for referral in family practice is the need to obtain for the patient skills and resources of therapy not possessed by the family physician. In all the studies reviewed except ours the internal medicine subspecialists were consulted only half as frequently as the surgical subspecialists. Ophthalmologists, obstetricians and gynecologists, and otolaryngologists each accounted for about 10% of the total number of referrals. Some studies have indicated that as many as 50% of patients presenting to a family physician's office have psychologic problems. The consistently low rate of referral to psychiatrists suggests that these problems are being overlooked or missed, being dealt with by the family physician, or not being considered significant enough for referral.

The distribution of referrals from the three units according to subspecialty is set forth in Table IV; the three units had similar patterns of referral to the medical and surgical specialists. Among the surgical specialists, general and orthopedic surgeons and urologists were the most frequently consulted, accounting for 20% to 40% of all surgical referrals.

Unit	Period of study	Total no. of patient visits	No. of referrals	Referral rate (%)
Family practice service 1 (FPS1)	Apr. 1, 1975 to Mar. 31, 1976	15 080	784	5.2
Family practice service 2 (FPS2)	Jan. 1, 1975 to Dec. 31, 1975	9 508	561	5.9
St. George Health Centre (SGHC)	July 1, 1972 to Oct. 1, 1972	3 455	150	4.3
	Mar. 10, 1975 to Mar. 9, 1976	10 943	538	4.9
Total for 1975-76 study		35 531	1 883	5.3

Unit		% of referrals to			
	Total no. of referrals	Consultant in private practice	Toronto General Hospital clinic	Other institution	
FPS1	784	18	81	1	
FPS2 SGHC	561	14	85	1	
1972 study	150	78	18	4	
1975-76 study	538	91	6	3	

		/0	referrals	
Great Britain		United States		Canada
1 = 6733	n = 178 ²	n = 1264	$n = 102^2$	n = 1883 (this study)
40.9	38.8	44.4	46.1	28.2
14.1	8.4	19.8	15.6	24.9
4.1	13.5	11.1	5.9	12.1
7.0	12.3	11.9	10.8	10.9
12.1	15.2	2.4	9.8	9.2
4.4	4.5	0	6.9	6.1
7.8	1.1	5.6	3.9	3.0
1.0	1.7	0	1.0	1.1
8.6	4.5	4.8	0	4.5
	40.9 14.1 4.1 7.0 12.1 4.4 7.8 1.0	40.9 38.8 14.1 8.4 4.1 13.5 7.0 12.3 12.1 15.2 4.4 4.5 7.8 1.1 1.0 1.7	40.9 38.8 44.4 14.1 8.4 19.8 4.1 13.5 11.1 7.0 12.3 11.9 12.1 15.2 2.4 4.4 4.5 0 7.8 1.1 5.6 1.0 1.7 0	14.1 8.4 19.8 15.6 4.1 13.5 11.1 5.9 7.0 12.3 11.9 10.8 12.1 15.2 2.4 9.8 4.4 4.5 0 6.9 7.8 1.1 5.6 3.9 1.0 1.7 0 1.0

This pattern correlates closely with that of other studies.

Neurologists and allergists were the most frequently consulted of the internal medicine subspecialists; next most frequently consulted were cardiologists, general internists and endocrinologists. Allergy referrals are often for skin-testing, as this procedure is not performed in the three units. The high rate of referral to neurologists may suggest a need for greater emphasis in this area during family practice residency training.

SGHC had a much higher rate of referral than the other two units to specialists in general medicine, obstetrics and gynecology, physiatry and pediatrics and a lower rate of referral to podiatrists than the other two units; this reflects in part the higher proportion of children and young families attending SGHC. The higher rate of referral to psychiatrists from FPS2 was due to an arrangement with a psychiatrist to see referred patients with the family practitioner and the family practice resident so that patient care was combined with teaching.

The age and sex distributions of

Specialty	No. (and % of referrals		
Surgery			
General	193	(10.2)	
Orthopedic	156	(8.3)	
Urology	125		
Plastic	40	(2.1)	
Cardiovascular	9	(0.5)	
Thoracic	6	(0.3)	
Neurosurgery	2	(0.1)	
Total	531	(28.2)	
Medicine			
Neurology	91	(4.8)	
Allergy	82	(4.4)	
Cardiology	67		
General	49		
Endocrine	48		
Gastroenterology	44	(
Rheumatology Chest	35		
Infectious disease	22 20		
Hematology	11	(1.1)	
Total	469	(24.9)	
Ophthalmology	227	(12.1)	
Obstetrics and gynecology	205	(10.9)	
Otolaryngology Dermatology	174	(9.2)	
Psychiatry Psychiatry	114 56	(6.1)	
Podiatry	44		
Physiatry	27	(2.3) (1.4)	
Pediatrics	21	(1.1)	
Other	15	(0.8)	

the patients referred from SGHC in March 1976 (Fig. 2) follow the pattern recognized often in practice: women are seen more frequently than men at an earlier age and hence are referred more often; men who start seeing physicians at a later age have accumulated problems over the years and hence are referred more often than women in the older groups. That the highest referral rates are in the age groups 45 years and over and that women have a higher referral rate than men were also documented in the Group Health Insurance study by Avnet.5 This pattern is reversed in children, as the studies of Avnet and of Penchansky and Fox⁶ demonstrated. Penchansky and Fox postulated that boys are more susceptible to certain major classes of illness than girls.

Physician satisfaction in the referral process

The response of consulted physicians to the institution of the standard referral form, first at SGHC and then at FPS1 and FPS2, was uniformly positive. Its value in concisely stating the problem as well as the expectation of the extent of the referral process was obvious to them.

An important element in the referring physician's satisfaction is the receipt of a personal communication from the consulted physician within a reasonable period. A 1-year followup of all referrals from SGHC showed that twice as high a percentage of referred patients were actually seen in consultation by the physicians in private practice as by the Toronto General Hospital clinic staff (83% v. 42%). The reasons for this may include the facts that (a) physicians sometimes refer to a hospital clinic patients they think are unlikely to keep their appointment, (b) the clinic has a more flexible appointment system and (c) the problems that result in referral to a hospital clinic may not be as pressing as those encountered by consultants in private practice and therefore the patient may not be as motivated to complete the referral process.

Patients perceive their family physician's awareness of the outcome of recent consultations, including test results, details of hospitalizations, therapy and prognoses, as evidence of their physician's concern. Feedback from the consultant is essential to the referring physician's satisfaction with the process. In the follow-up study of results of referral from SGHC when the patients were seen by the consulted physician, it was found that a written report was re-

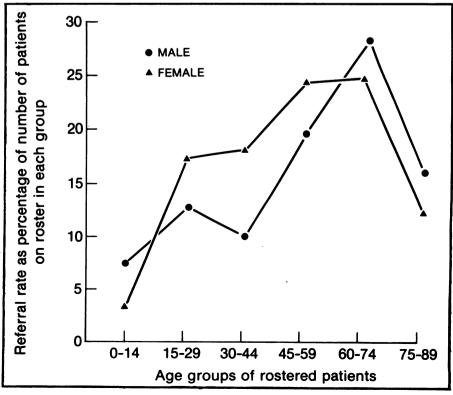


FIG. 2-Age and sex distribution of patients referred from one of the units.

ceived four times as often from privately consulted physicians as from residents in the same specialties (Table V). Although an adequate report to the referring physician was provided by most consultants in private practice, the importance of this report seems to be poorly appreciated by specialists in training. The decrease in the rate of referral from SGHC to the Toronto General Hospital clinics from 18% in 1972 to 6% in 1975-76 is substantial.

Family physicians know that patients are reassured when there is effective communication on their behalf. A look at the outcome of referral to the three categories of subspecialist in private practice with the poorest response showed that no communication was received from 36% of referrals to plastic surgeons, 17% of referrals to ophthalmologists and 14% of referrals to gynecologists. In contrast, the overall noresponse rate was 8% for all referrals to private physicians. This difference may have resulted from the nature of some of the problems often dealt with by these consultants removal of small skin lesions, refractive problems and therapeutic abor-

Value of involving the patient in the referral process

The patient is involved in the completing of the referral form and makes the appointment with the consultant. It has been found valuable to use the referral process to increase the patient's insight into his problem. During the 4 years the form has been used only one negative comment has been received from a patient who read the information taken to her consultant; she had been described in a copy of a letter from another consultant as a "pleasant, plump lady". This study has shown that it is reasonable to include the patient as a member of his own health care team and it has relieved physicians' apprehension about their patients' ability to tolerate knowledge of their health. The form has provided a new and practical approach to initiating greater awareness by patients of their medical conditions and to having them participate in the consultation process.

Conclusions

The referral rate may reflect the physician's awareness of his limitations, willingness to submit his past performance in diagnosis to scrutiny of consultants and desire to make referral a learning process with the consultant's input. It may also reflect the practice situation and depends on the accessibility of appropriate specialists, the age and sex composition of the practice, and the prevailing health care system.

The results of this study have certain implications for family physicians:

- 1. Periodic review of referral patterns may indicate areas in which continuing medical education could be of value.
- 2. A standard form for providing consultants with information in routine referrals helps improve communication
- 3. The discipline of family medicine can make a worthwhile contribution to resident training programs in teaching hospitals.

There are implications for consultant physicians as well:

- 1. The ability of a consultant to see a patient and give a written opinion within a reasonable time is an important expectation of the referring physician. It often determines whether that consultant will continue to receive referrals.
- 2. The poor communication back to family physicians about patients referred to hospital clinics indicates that this area of resident training needs to be emphasized more

strongly.

3. The effect on the patient when the consultant's findings are not available to the family physician needs highlighting.

Patients are asking for more insight into their health problems and desire more responsibility in meeting their health care needs. This is a good trend and should be encouraged. We have found that patients accept the option of increasing their responsibility for improving their health and of participating in their health care decisions.

The referral process is proving to be a practical, helpful and appreciated way of involving patients to a greater degree in their own health care.

We thank Dr. Ruth Sky, director of FPS1, Dr. Cecil Craig, director of FPS2, and the staff of the three units for their cooperation and assistance. Special mention is due Mrs. Gail Henry, RegN for her extensive follow-up study of the SGHC referrals and Dr. Gisele Microys and Dr. Joe Losos for their work in the 1972 SGHC study.

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Table V—Communication received by the referring physicians at SGHC from the consulted physicians

Communication Letter Other None	No. (and %) of referrals to				
	Consultant in private practice	Toronto General Hospital clinic	Other institution	Total	
	361 (89) 14 (3) 31 (8)	3 (23) 6 (46) 4 (31)	5 (83) 0 (0) 1 (17)	369 (87) 20 (5) 36 (8)	
Total	406 (100)	13 (100)	6 (100)	425 (100)	