Consultation and Referral in a Vermont Family Practice: A Study of Utilization, Specialty Distribution, and Outcome

Thomas J. Ruane, MD
Burlington, Vermont

Referral patterns and outcome were studied in an ambulatory family practice facility. One hundred eight referrals were initiated and studied during a period when 7,220 patients were seen—a 1.5 percent referral rate. Satisfactory outcomes occurred in 67 of the cases.

Changing patterns of health care delivery may require new definitions of the consultation-referral process.

Much has been written about consultation and referral from the point of view of the accepting specialist, particularly mental health agencies, but few quantitative studies of this process from the point of view of the referring physician have been published. Only three such studies[1-3] could be identified in the literature of the past 20 years. In these studies a crude referral rate of from 0.6 to 3.8 percent of all patient visits was noted.

The specialty distribution of physicians consulted was similar in all studies where reported. General surgery and orthopedic surgery accounted for over 30 percent of all referrals. Obstetrics/gynecology, ophthalmology, urology, neurology, and otolaryngology accounted for an additional 40 percent, with the remainder widely distributed among other medical specialties and subspecialties, and various nonmedical agencies.

Only two published reports[1,4] deal in a quantitative way with the immediate outcome of the referral process. These indicate a "no response from the consultant" rate of 42 percent and 25 percent, respectively.

Metcalfe and Sischy[1] investigated their "no-show" rate and discovered that 28 percent (28/102) of their referred patients failed to keep their appointments, and that 18 percent of those seen by the consultant were not reported on to the referring physician. Cummins and Smith[4] note a substantial difference in follow-up rate between private and university affiliated consultants (90 percent vs 65 percent).

This study was undertaken to define the rate of consultation and referral, the specialty distribution of physicians consulted, and the satisfaction of the referring physician with the referral process, both from the point of view of patient care and for the education of the primary physician.

Methods

The Practice

The practice is a freestanding model family practice unit of a university based family practice residency program. It is located in a town of about 6,000, approximately 17 miles from the University Medical Center. It serves a patient shed area of

From the Department of Family Practice, University of Vermont College of Medicine, Burlington, Vermont. Requests for reprints should be addressed to Dr. Thomas J. Ruane, Department of Family Practice, 104 Rowell Building, University of Vermont College of Medicine, Burlington, VT 05401.

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approximately 10,000. During the study period an average of approximately 1,000 patient visits per month occurred.

The Referral Process

Referrals were made by the attending physicians as deemed appropriate. The residents were required to present cases to an attending physician before initiating a referral. Referral having been decided upon, a call was made from the office to schedule an appointment. A card with the time, date, and location of the specialist was given to the patient (except for occasional patients going directly from the office to the consultant). Consultation request letters were written at the discretion of the referring physician.

The Study

One hundred eight consecutive referrals were compiled in the study period of approximately seven months. At the time the referral was initiated, the person making the appointment (usually the receptionist) initiated a study form indicating the referring physician, the consultant, the problem, and the time and date of the arranged appointment. These forms were then circulated periodically to the referring physician with the patient's chart until the referral process was complete (ie, a consultation reply had been received by letter or telephone). When a reply was received, the referring physician indicated his satisfaction or dissatisfaction with the consultation, both from the point of view of patient care and for his own information and education.

All incomplete and unsatisfactory consultations were reviewed by the author three months after the completion of the study.

If it could not be ascertained from the record that the patient had been seen by the consultant, the author contacted the consultant's office to determine if the patient had been seen.

For the purposes of this study, the University Hospital Emergency Department was included as a referral service as patients were often sent there for emergency consultation and evaluation for admission to the hospital. Each telephone contact with the Emergency Department included the request that the referring physician be called back and notified as to the disposition of the patient.

Referrals for routine obstetric care (not done at the practice site at the time of this study), for dental care, and for optometric examination were not included in this study.

Results

One hundred eight consecutive referrals were studied over seven months. During that time, 7,220 patient visits occurred at the facility yielding a gross referral rate of 1.5 percent of all office visits. Two patients (one referred for abortion and one for vasectomy) were excluded from the study when no response was received, as this might have been justified for reasons of preserving confidentiality. The office was notified by consultants because of the failure of four patients to keep their scheduled appointments, and these were also removed from the study.

Thus, 102 referrals were studied in detail. Table 1 indicates the specialty distribution and assessed outcomes of these referrals as well as the rate of patients who did not keep their scheduled appointments and about whom the office was not notified. Sixty-seven percent of the consultations were rated as satisfactory and 33 percent as unsatisfactory. If "no-shows" are excluded from the study, the rate of unsatisfactory consultation becomes 26 percent(24/93). Only two replies received in the entire study were deemed inadequate by the referring physician. The remainder of the unsatisfactory consultations are those of patients on whom no reply was ever received. The overall no-show rate was 12 percent (13/106).

There was no significant difference either in the frequency of patients being seen or the satisfactory completion of the consultation between those patients on whom a consultation letter had been written and those without such a letter (chi-square test: $P>0.1$).

Discussion

Several aspects of this study merit further discussion. The first of these is the basic concept and structure of consultation and referral. The former, as defined by the AMA Judicial Council, consists of a physician asking a second physician (the consultant) to see a patient, usually for his/her opinion about a specific problem. The process then requires the two physicians to discuss the case, and

Table 1. Specialty Distribution and Outcome of Consultations/Referrals

Service	Total	Satisfactory	Unsatisfactory	Not Seen
General Surgery	22	16	6	3
Orthopedic Surgery	14	11	3	2
Otolaryngology	13	9	4	1
University Hospital Emergency Department	11	5	6	0
Ophthalmology	9	5	4	0
Dermatology	7	5	2	1
Urology	5	2	3	0
Obstetrics/Gynecology	5	3	2	0
Cardiology	4	3	1	1
Neurology	3	3	0	0
Neurosurgery	2	2	0	0
Allergy	2	2	0	0
Community Hospital Emergency Department	2	2	0	0
Psychiatry	1	1	0	0
Hearing Clinic	1	0	1	0
Oral Surgery	1	0	1	1
Total	102	69	33	9

further action is taken only with the consent of the referring physician. The opinion of the consultant is not even to be discussed with the patient until the referring physician concurs. This process rarely occurs in this form in ambulatory practice. In actuality, the patient is more frequently sent to the consultant with the expectation of both the patient and the referring physician that the appropriate action will be initiated for dealing with the problem at the time that the patient is seen.

The principle reason for the discrepancy between definition and actual practice may be more that the content of the consultation process itself is changing than simply that medical etiquette is deteriorating. Fry,[5] in commenting on the change in the referral process over 20 years in his primary care practice in Great Britain, stated "we have come to view our specialist colleagues more as expert 'technicians' than as consultants." In attempting to verify this impression, all consultations were characterized (subjectively and imperfectly) into three categories.

Of the referrals studied here, 20 percent (22) were in patients with clear-cut diagnoses referred for specific therapy (eg, inguinal hernia, ocular foreign body). An additional 64 percent (69) were referred for consideration of further diagnostic tests or therapies not available to the primary care physician (ie, consideration for knee arthrography, allergy testing, detailed hearing evaluation). Only 16 percent (17) were sent for diagnostic evaluation without the immediate expectation of further procedures for diagnosis or therapy. A new definition of the consultant-referring physician re-

lationship may be necessary to reconcile the AMA definition with current practices and with efficient, continuing, and comprehensive primary care.

Secondly, the study again demonstrates that the well-trained family physician provides definitive care for the vast majority (in this study, 98.5 percent) of patient encounters, contrary to the cherished beliefs of many medical school faculty and non-family practice specialists.

Thirdly, the referring physicians were not difficult to please. In all but two cases the consultants' replies were deemed adequate for both patient care and education of the referring physician. The rate of nonresponse from the specialists for patients seen (24 percent) was consistent with the remaining available US data,[1,4] and is clearly unacceptably high. The number of nonuniversity faculty dealt with in the study was too small to confirm or refute the observation by Cummins and Smith[4] of their superior performance.

Among the worst performing "consultants" was the University Hospital Emergency Department. This was suspected at the initiation of the study and will likely not surprise those primary care physicians dealing with such a facility.

It is the author's hope that the presentation and discussion of these data will lead to further research and dialogue in this important area, and will result eventually in better understanding, communication, and cooperation among all those concerned with the care and welfare of the ambulatory patient.

References

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