

Outpatient Consultations From A Family Practice Residency Program: Nine Years' Experience

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Abstract: Previous reports of consultation rates from family practice physicians have included small sample sizes and have suggested higher rates in residency training programs. This report summarizes 9 years of data involving 161 family practice physicians in a residency training program and shows an overall

rate of 1.4 percent for outpatient consultations. Otolaryngology, orthopedics, obstetrics/gynecology, and general surgery were the most frequent disciplines consulted. These data are helpful in designing health care systems that include family practice residency programs. (J Am Bd Fam Pract 1988; 1:164-6.)

The rates of consultation and referral from family practice physicians to specialists have been an important concern since the founding of the American Board of Family Practice in 1969. Early concerns that the family practice physician performed a primary triage function yielded to the finding that 95-98 percent of all patient visits to family practice physicians did not result in consultation or referral.¹⁻⁹ There have been some suggestions that physicians practicing in teaching environments may be more likely to obtain consultation than private practitioners.^{8,9}

American reports to date have summarized 1 to 12 months of data, with total visits of 4,000 to 9,000 used as a denominator for calculation of rates. Only two studies reported data from a family practice residency program,^{6,8} and one reported a high 4.4 percent rate in the residency population. The purpose of this study is to describe the outpatient consultations from a family practice residency program for an extended time period.

Methods

For each month from January 1977 through December 1985, a log of outpatient consultations was maintained for all patients seen by family practice residents or faculty in the family practice center of the University of Alabama in Huntsville

School of Primary Medical Care. The patients were seen in a fee-for-service model in a city of 200,000 with a patient population of approximately 26 percent Medicaid and 17 percent Medicare. The ambulatory care center included clinics for internal medicine, pediatrics, obstetrics/gynecology, and psychiatry, as well as the family practice center. Only consultations requested from the family practice center were included in this study.

Outpatient consultation was defined as any formal request from a family practice physician that a nonhospitalized patient be seen by a specialist. Each consultation request was registered either by verbal order from the physician to the receptionist or by written communication on the encounter form. The receptionist then entered the pertinent information on the monthly report sheet, which was summarized and distributed monthly to all faculty physicians. Completeness and reliability were monitored by both receptionists and physicians. The logs did not include any patient self-referral to a specialist. During the time period of study, 177,838 patient visits were recorded by 18 faculty and 143 residents.

Results

During the 9 years of study, 2,513 outpatient consultations were requested for an overall rate of 1.4 percent. As shown in Figure 1, the annual variation of this rate was remarkably low with a range of 1.1 percent in 1977 to 1.6 percent in 1983 and 1985.

Table 1 lists the consultant specialties involved and compares them with previous reports. Oto-

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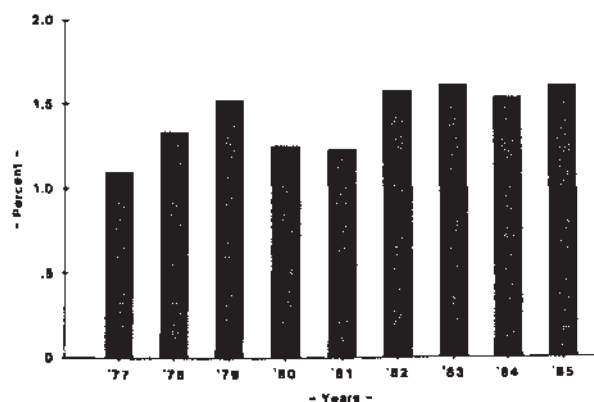


Figure 1. Total number of outpatient consultations expressed as percent of total visits.

laryngology, orthopedics, obstetrics/gynecology, and general surgery were the most frequent disciplines consulted in our study. There was some variation in individual specialties, as shown with the example of otolaryngology, which had a range of 0.08 to 0.26 percent (Figure 2).

Discussion

This large series of outpatient consultations represents the lowest overall rate of consultation reported to date. Our data could be limited by an underreporting bias, but the concurrent review should have kept this to a minimum. The National Ambulatory Medical Care Survey field test data from 1971 showed a 2.7 percent rate among

2,592 visits to general and family practice physicians.¹ A population similar to ours was reported by Ruane, who summarized 7 months of consultations from a residency-based model clinic in Vermont, where the overall rate was 1.5 percent.⁶ Despite the fact that his report was from a town with a population of 6,000, there are many similarities to our data (Table 1). The disparity in obstetrics/gynecology (OB/GYN) is partially explained by his exclusion of routine prenatal care at the study site, decreasing the population most likely to need OB/GYN consultation.

Brock reported that in 8,616 patient visits in a setting of 100 percent prepaid care in Canada, residency-based family physicians had a consultation rate of 4.3 percent compared with private practitioners who showed a rate of 6.4 percent.⁴ Geyman, et al. reported a small group of family physicians representing rural, suburban, and urban practices in California.³ They measured two separate 1-month periods and found a rate of 1.89 percent and 1.36 percent, respectively, including inpatient consultations. Metcalfe and Sischy found a range of 2.0–2.5 percent among four private practices in and near Rochester, New York, in 1971, showing a stable rate over time.² In 1977, Schmidt reported his data in the third year of small-town practice after finishing graduate training in pediatrics and internal medicine.⁵ This practice did not include obstetrics, and his retrospective audit showed an overall referral rate of 2.5 percent.

Table 1. Outpatient Consultations by Specialty.

Specialty	(n = 2513)		Geyman (n = 126)		Ruane (n = 102)	
	Percent	Rank Order	Percent	Rank Order	Percent	Rank Order
Otolaryngology	13.4	1	2.4	11	12.7	3
Orthopedics	13.3	2	15.9	2	13.7	2
OB/GYN	12.2	3	12.0	3	4.9	8
General surgery	12.1	4	20.6	1	21.6	1
Neurology	8.0	5	6.3	6	2.9	10
Urology	7.3	6	7.9	5	4.9	7
Ophthalmology	6.9	7	11.1	4	8.8	5
Dermatology	6.1	8	0	—	6.9	6
Cardiology	4.7	9	3.2	9.5	3.9	9
Gastroenterology	3.3	10	1.6	13	0	—
Others	12.7					
Total	100.0					

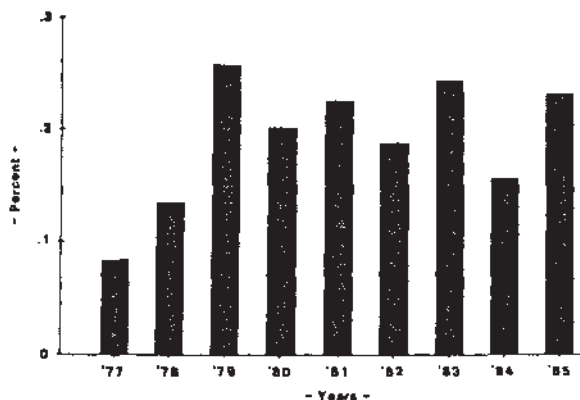


Figure 2. Otolaryngology outpatient consultations expressed as percent of total visits.

White reported almost 9,000 outpatients in six practices and a family practice residency and found a range of 0.82 percent in one practice to 4.4 percent in the residency.⁸ Cummins and colleagues conducted a study at a practice located in the inner London-area Health Authority of Kensington, Chelsea, and Westminster.⁷ The study included five general practitioners over a 5-year period, and the authors suggested that individual physicians had differing "referral thresholds." This personal attitude towards consultation was believed to be due to various factors such as the doctor's education, training, tolerance, or enthusiasm. They concluded that while keeping the patient characteristics constant, overall referral rates differed significantly among general practitioners. During the study, 3,545 outpatient referrals were made from 65,538 patient visits, giving an overall rate of 5.4 percent.⁷

The large series reported here reveals rates similar to those reported from private practice. Even in a teaching institution in a medium-sized town, more than 98 percent of patient visits were managed primarily by the family practitioner. Any generalizations from this data must be limited to similar patient populations in similar situations. However, the remarkable consistency of the referral rate for more than 9 years with 161 physicians involved supports the validity of the data. As increasing emphasis is placed on outpatient care, these rates are useful as estimates of the need for consultants. Ready access to specialties in which a high number of consultations occur is an impor-

tant priority in the design of health care systems. These data are also useful in discussions of a teaching program's involvement with prepaid health care and do not support the contention that outpatient consultation rates are higher in family practice residency programs.

This project would not have been possible without the diligent record-keeping of Ann Simmons, R.N.

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Editorial Comment

This paper represents one of the largest reported series of observations regarding outpatient consultations emanating from a family practice teaching program. The authors' intent is to provide information that could be used in planning health care systems that include family practice residency programs. The data also may help consultants in the teaching setting arrive at a more realistic appreciation for the number of outpatient consultations they can expect from a family practice training program. It has been my experience that consultant faculty often have unrealistically high estimations of the potential demand for outpatient consultations. When these expectations are not realized, the consultant faculty may harbor negative feelings toward the family practice program.

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