

# The After-Hours Call in Family Practice

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Patient care after hours continues to be an important part of the work of family physicians, in spite of the trend towards increasing Emergency Room utilization. In this paper the literature concerning after-hours care in family practice is reviewed in terms of definition, demography, utilization, morbidity, and patient stereotypes. In the Family Practice Residency Program of the University of North Carolina, 4,760 after-hours calls were recorded over two years by residents and faculty physicians. Seventy-two percent of the calls were handled purely on the telephone with little variation for patient age groups. The overall call rate was 474 calls per 1,000 patients per year. Fever and skin wounds were the most frequent symptoms recorded and respiratory tract infections, minor trauma, and anxiety were the commonest diagnoses. Thirteen percent of the contacts engendered anger or frustration in the physician. A survey of patients calling after hours demonstrated a lack of congruence between physician and patient concerning the main reason for the call in over 30 percent of contacts.

In recent years there has been a marked increase in the use of hospital Emergency Rooms by patients with minor medical problems, particularly in urban areas.<sup>1,2</sup> However, approximately 60 percent of emergency visits are regarded as more suited to the setting of the physician's office; and in a significant proportion, the severity of the patient's complaints appears to be unrelated to the decision to seek medical care.<sup>3</sup> One hypothesis that has been suggested to explain the changing utilization pattern in this particular sector of health care services is the reduced availability of private physicians, especially after regular office hours. There is some evidence that this premise is correct although other factors such as convenience, geographic location, and the availability of medical

technology also enhance Emergency Room utilization.<sup>4,5</sup>

In spite of this trend, primary care physicians continue to provide considerable "after-hours" services to their patients. This commitment to care is underscored by the fact that all the family practice residency programs in the country presently provide some form of medical care after hours as a training model.<sup>6</sup> The extent of the workload involved and the factors contributing to it have not been intensively studied in North America.

The definition of the late call, night call, or out of hours call has varied considerably in different countries.<sup>7-15</sup> More recent investigators have preferred the term "After-Hours Call" defining it as: "a patient request for care not occurring during office hours."<sup>16-21</sup>

The relative neglect of this important dimension of primary care is surprising for several reasons:

The after-hours call embodies one of the most ancient of physician ideals—to be available in times of distress. This is an aspect of continuing

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Cllr. _____	Rel. _____	Date _____	Time _____
Pt. _____	Race: B W O	Age _____	Fam. DR. _____
Phone # _____	Sex: M F	Pt. ID# _____	
<b>PROBLEM(S):</b>	<b>Context</b>	<b>Follow-up</b>	<b>Pt. Motives</b>
	<input type="checkbox"/> Phone only	<input type="checkbox"/> Pt. to Call	1 - 2 Physical Problem
	<input type="checkbox"/> Phone/Clinic (v)	<input type="checkbox"/> DR. to Call	1 - 2 Emotional Reaction
	<input type="checkbox"/> Clinic (v) only	<input type="checkbox"/> Clinic	to Physical Problem
	<input type="checkbox"/> E.R. (v)	<input type="checkbox"/> Refer/Admit.	1 - 2 Physical Reaction to
	<input type="checkbox"/> M.D. Home (v)	<input type="checkbox"/> None	Emotional Problem
	<input type="checkbox"/> Pt. Home (v)	<input type="checkbox"/> _____	1 - 2 Emotional Problem
	<input type="checkbox"/> _____		1 - 2 Hidden Agenda
			1 - 2 Administrative
			1 - 2 Other _____
			1 - 2 Can't Tell
			<b>Active Pt.</b>
			<input type="checkbox"/> Yes
			<input type="checkbox"/> No
			<b>DR. Reaction</b>
			1 - 2 Anger
			1 - 2 Frustration
			1 - 2 Indifference
			1 - 2 Interest
			1 - 2 Satisfaction
			<b>Soc. Prob.</b>
			<input type="checkbox"/> None
			<input type="checkbox"/> Minor
			<input type="checkbox"/> Major
			<b>Validity</b>
			<input type="checkbox"/> Necessary
			<input type="checkbox"/> Reasonable
			<input type="checkbox"/> Unnecessary
			<b>Reassurance Offered</b>
			None Special NA
			1 2 3 4 5 6
			DR. R.N. P.A. F.N.P. O.
Dx: _____			UNC/CH/AH ©

Figure 1. After-hours sticker

and comprehensive care which is fundamental to primary care and particularly family medicine.<sup>22</sup> It has always been a recognized form of patient-physician interaction, and through the introduction of the telephone, has grown in importance. Up to 20 percent of primary medical care is provided on the telephone.<sup>23-25</sup>

The after-hours call is often a method of access for patients with "hidden agendas." The latter might be family or environmental problems; or perhaps some very personal item that the patient may be reluctant to disclose immediately. This way of approaching the physician has been described by Stewart et al<sup>26</sup> as signal behavior: a patient presenting a medically acceptable symptom, in order to offer the physician the opportunity of uncovering a more important "problem of living."<sup>26</sup> This type of encounter presents a persistent problem to the physician who frequently responds negatively to the interruption of his non-professional time by "unnecessary" calls.<sup>27</sup>

A long-term study at the Family Practice Center of the University of North Carolina was initiated, in 1976, to investigate the nature of the after-hours call and the communication process between physician and patient.

### Materials and Methods

Following a two-month feasibility study, a special adhesive "on-call sticker" was designed to be

completed by the responding physician after each patient contact out of hours (Figure 1). The on-call sticker allowed the patient's age, sex, date, and time of call, location of the encounter, problem presented, diagnosis, therapy, and follow-up disposition of the call to be recorded. Physician assessments included the type of encounter, major factors motivating the patient to call, the validity of the call, and the diagnostic mix of the patient's problems. The sticker was subsequently adapted to include the amount of reassurance offered to the patient and the physician's emotional reaction to the call.\*

The completed sticker thus reflected the physician's assessment of the call. To obtain the patient's perspectives on the same encounters, a questionnaire was developed for a 20-minute telephone interview to be administered to a sample of patients who were callers after hours. It was feasible to obtain only an eight-percent sample over the two-year period. This questionnaire, the results of which will be reported in detail elsewhere, was directed towards the patient's view of the call and included a number of demographic and attitudinal variables.

The study involved the cooperation of 18 family practice residents and 6 faculty physicians serving

\*Derived from Hogg's taxonomy. Hogg W: The Doctor After Hours, unpublished report. Wakefield, Quebec, Gatineau Memorial Hospital, 1976

Table 1. After Hours Call: Distribution of Selected Characteristics

Age Group (years)	Male Contacts		Female Contacts		Total Contacts		
	N	%	N	%	N	%	
0-4	384	8	438	9	822	17	
5-14	367	8	289	6	656	14	
15-24	161	3	522	11	683	14	
25-44	576	12	1,151	25	1,727	37	
45-64	145	3	324	6	469	9	
65+	88	2	110	3	198	5	
Age Unknown	41	1	88	2	129	3	
Sex Unknown	0	0	0	0	76	1	
	1,762	37	2,922	62	4,760	100	
<b>Type of Contact</b>		<b>Number</b>	<b>%</b>	<b>Day of Week</b>		<b>Number</b>	<b>%</b>
Telephone Only		3,443	72	Weekdays		2,388	50
Family Practice Center Visit		760	16	Weekends		2,349	49
Emergency Room Visit		402	8	Day Unknown		23	1
Other*		41	1	<b>Total</b>		4,760	100
Contact Unknown		114	3				
<b>Total</b>		4,760	100				

\*Includes home visits, nursing home visits, etc

an active population of 5,000 patients from the Family Practice Center of the University of North Carolina of Chapel Hill. Coverage was undertaken on a rotating basis mainly by third year residents between 1700 and 0800 hours on weekdays and all day and all night on weekends over a period of two years; 4,760 contacts were recorded, and 375 patients who called were interviewed using a time sampling design.

## Results

### Utilization

Over the two-year period, after-hours contacts comprised 16 percent of all medical contacts in the Family Practice Center. This is equivalent to a call rate of 474 contacts (both face to face and on the telephone only) per 1,000 active patients per year.

Table 1 shows that half the contacts occurred on weekends and 60 percent of these were made during the daytime (0800 to 1700 hours). It was noted that 22 percent of calls were made between 0930 and 1130 hours and another 22 percent between 1330 and 1730 hours. The pattern on Satur-

days was almost identical to that of Sundays. On average, 23 patients made contact with the practice per weekend during the study period.

On weeknights 32 percent of the after-hours calls were made between 1730 and 1930 hours, and 40 percent between 1930 and 2330 hours. Only 14 percent of the calls came in through the night between 2330 and 0730 hours. The call rate showed little seasonal variation and the percentage of calls per month was relatively constant throughout the year, ranging from seven to ten percent of the total for each month.

Of the patients who called, 62 percent were female and 37 percent male, a sex ratio similar to that of the practice population. In the pediatric age group, however, a utilization pattern emerged which was distinct from the general age-sex distribution. Patients 14 years of age and under were responsible for 32 percent of all contacts; in this group 51 percent involved male children while 49 percent involved female children. In contrast, females accounted for 76 percent of the after hours calls among patients 15 to 24 years of age and for 67 percent of the contacts in patients over 24 years of age. There appeared to be a tendency toward

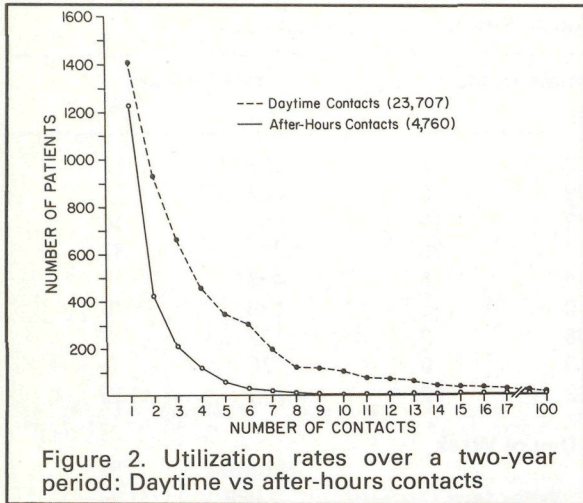


Figure 2. Utilization rates over a two-year period: Daytime vs after-hours contacts

greater utilization by younger patients after hours, with a relative lack of demand by the older adult population, and those under the age of 24 years were responsible for 45 percent of all contacts. The differences of utilization in the age groups were not significant statistically from the age distribution of the total active practice population.\*

The physicians handled 72 percent of the 4,760 contacts using telephone consultation alone. The remaining 28 percent were seen either in the Family Practice Center (16 percent), in the Emergency Room (8 percent), or sometimes in other settings (4 percent). The percentage of calls handled strictly on the telephone varied only moderately between patient age groups; from 67 percent of calls in the 15 to 24 years age category to 75 percent in the 0 to 4 years age category. There was, however, considerable variation between physicians in the extent to which calls were handled exclusively by telephone. The percentage of calls handled by "telephone care" ranged from 60 percent to 93 percent for individual physicians.

The utilization pattern of after-hours callers is shown graphically in Figure 2. Close to 30 percent of these patients made only one call during the two-year study, 19 percent made contact twice, and 12 percent made three calls. Approximately one percent of the callers (37 patients) made contact on more than ten occasions. The utilization curve derived from both the after-hours population and daytime office encounters generally approximates the negative binomial curve hypothesized by Kilpatrick to represent standard or re-

producible utilization patterns of patients in primary care settings in routine office hours.<sup>28</sup> Some variations were noted showing relatively higher proportions of both low and high after-hours visit rates than would normally be expected of the negative binomial curve.

### Morbidity

The rank order of frequency of symptoms and diagnostic problems is shown in Table 2. The 20 most frequent symptoms accounted for 83 percent of all symptoms and the 20 most frequent diagnoses accounted for 52 percent of all diagnoses made during this period. In 85 percent of the contacts, only one symptom was recorded by the physician and on the average only one diagnostic problem was recorded for each after-hours contact. Fever was the most common symptom. No specific diagnoses were made in six percent of all the calls. Acute respiratory tract infections and minor trauma accounted for 32 percent of all the diagnoses. Asthma appeared to be the most important medical condition presenting relatively frequently after hours. Behavioral and psychiatric problems were identified in six percent of all the contacts.

### Assessment by Physicians

When the physicians rated the necessity of the after-hours call, 20 percent were regarded as necessary (a valid emergency), 60 percent as reasonable (an acceptable disturbance), and 20 percent as unnecessary (inappropriate by either content or time). The time of the call did not appear to have any influence on the physician's assessment of the necessity of the call. When physicians evaluated the main reason for the call being made, pain or discomfort was the main reason in 48 percent, anxiety about a problem in 40 percent, administrative reasons in eight percent, and "hidden agendas" in three percent of the calls.

In a review of the physician's emotional reactions to 1,995 calls recorded over a one-year period (Table 3), 72 percent of the contacts engendered satisfaction and interest while 28 percent produced indifference, frustration, or anger. Those calls producing indifference, frustration, and anger in the physician had a greater likelihood of being handled either strictly by telephone or of being seen in the Emergency Room than did the

\*.20 < P < .10

**Table 2. Morbidity Profile of After-Hours Contacts  
(Rank Order of Frequency)**

Symptom	Percent of Total	Problem	Percent of Total
Fever	12.0	Acute URI	10.2
Skin wounds	6.1	No diagnosis made	5.8
Pain, swelling, injury of leg	6.0	Viral infection	4.3
Sore throat	5.8	Laceration/wound	3.3
Nausea and vomiting	5.7	Intestinal infection	3.3
Abdominal pain	5.5	Anxiety neurosis	3.2
Cough	4.4	Acute otitis media	3.0
Earache	4.1	Bruise/contusion	2.6
Cold	4.0	Asthma	2.2
Headache	4.0	Cystitis/UTI	2.2
Pain, swelling, injury of arm	3.8	Influenza	1.9
Allergic skin reaction	3.6	Abdominal pain	1.9
Entry of "None"	3.4	Advice and health instruction	1.6
Diarrhea	3.0	Adverse effects of drugs	1.3
Back pain	2.9	Strep throat	1.2
Medication	2.9	Insect bites and stings	1.2
Other respiratory problem	2.7	Fever, cause unknown	1.1
Chest pain	2.7	Prescription problem	1.1
Pain, swelling, injury of face	2.3	Low back pain	1.1
Nasal congestion	2.1	Depression	1.0
Total number of symptoms recorded: 5,608; 1.3 symptom per contact		Total number of problems recorded: 4,700; 1 problem per contact	

calls engendering a positive reaction from the physician.

### *After-Hours Telephone Survey*

Of the 375 patients surveyed by telephone questionnaire within one week after contact with the physician, 78 percent called from home, four percent from work, and four percent from the home of friends and neighbors. The majority of patients were with someone at the time of the call; usually family members (62 percent). When the patients or their representatives called to the Family Practice Center, 58 percent had received approval from others to do so, no advice was given in 40 percent, and advice not to call physicians was given in only 0.3 percent of the sample.

When the main reason for calling, assessed by the physician, was matched with the patient's assessment of the same call as obtained from the interview with the patient, there was agreement in 65 percent. Of those calls in which congruence

between physician and patient occurred, the main reasons for calling were discomfort (33 percent) and anxiety (28 percent). In 32 percent of the interviews, there was disagreement between the patient and the physician regarding the main reason for calling after hours, even when "fairly loose" criteria were used to determine congruence.\*

### *Physician Experience*

The after-hours experience of a sample of 4 third year resident physicians is shown in Table 4. Each physician dealt with an average of 268 calls over the two-year study period. Twelve tracer

\*In this phase of the study, physicians estimated the major reason or motivation for the patient's call. During the follow-up interviews each patient was given the opportunity to state two reasons for the call. The judgment of congruence was made where the physician's estimate matched either reason given by patients. Hence, incongruence was judged where the physician's estimate matched neither of the reasons stated by the patient.

**Table 3. Physicians' Emotional Reactions to After-Hours Call (1,995 Contacts)**

Type of Reaction	Telephone Consultation Only		Seen in FPC		Seen in ER		Other Sites	
	Number	%	Number	%	Number	%	Number	%
Anger and frustration	204	13	24	8	27	19	9	29
Indifference	255	17	26	9	12	8	4	13
Interest and satisfaction	1,070	70	239	83	107	73	18	58
<b>Total</b>	<b>1,529</b>	<b>100</b>	<b>289</b>	<b>100</b>	<b>146</b>	<b>100</b>	<b>31</b>	<b>100</b>

FPC=Family Practice Center  
ER=Emergency Room  
\*Other sites include nursing homes, patients' homes, etc

diagnoses (selected for prevalence and importance) were used to compare the physicians' activity and were found to be fairly evenly distributed in frequency for all physicians. These diagnoses comprised approximately 50 percent of all the diagnoses occurring after hours. There were wide variations in the physicians' assessments as to the necessity of the calls for the tracer conditions, and the main reason the patient called. The arrangements for follow-up of the tracer conditions also showed marked differences among physicians. For example, two physicians made no follow-up arrangements in over 40 percent of the calls while another planned telephone follow-up contact by either the patient or the physician in nearly 60 percent of his contacts.

## Discussion

It appears from this study that the rate at which patients call is similar to that noted in two other studies undertaken in North America recently: between 450 and 500 calls per 1,000 patients per year.<sup>18\*</sup> However, all these investigations involved primary care training programs and may include biases in relation to the population served by the physicians and the type of medical services provided. Koffman's recent investigation of after-hours calls in a nonacademic, stable rural population in Canada indicates a much lower call rate.<sup>21</sup> In the present study, some minor variation in call rates between age groups was noted, with females presenting higher rates except among pediatric age groups. It is difficult to determine in this stage of the investigation, why this should occur. The relatively equal rate of presentation

among the pediatric age groups suggests however, that, after hours, parents seek care in approximately equal fashion for their younger children, regardless of sex; it is not until late adolescence that significant sex differentials occur in utilization rates.

Peak call rates occurred during the daytime on weekends and in the early evening on weekdays. It is evident that utilization rates in true private practice have yet to be firmly established for a variety of settings in the United States. Although most British studies show that it is unusual for the same family to call more than once in the period of study, Hogg noted that 24 families had called at least four times within the first 14 weeks of his investigation and that one to two percent of the practice population accounted for 25 percent of the after-hours calls.\* In the present study, 13 percent of the practice population were responsible for 25 percent of the calls. The propensity to call would seem, therefore, to be a widespread characteristic of health seeking behavior and not necessarily confined to particular patients or families.

The high call rates in the North American studies require further investigation. Possible explanations may rest with socioeconomic reasons. For instance, young working parents have difficulty attending the physician's office in the daytime and may not be able to consult with each other and make health care decisions until they return home in the evening. In addition, young mobile families may not have experienced older

\*Hogg W: The Doctor After Hours, unpublished report. Wakefield, Quebec, Gatineau Memorial Hospital, 1976

**Table 4. Comparison of 4 Third Year Resident Physicians' After-Hours Call Experience (12 Months)**

Characteristics	Dr. A	Dr. B	Dr. C	Dr. D
<b>Total Contacts Per Physician</b>	291	291	226	266
% 0-14 years	30	25	32	34
% Handled by telephone only	79	74	84	65
<b>Tracer Diagnoses* (12)</b>				
Percent of total contacts	58	47	53	50
Percent of "unnecessary" tracer contacts	19	3	13	28
Percent of tracer contacts telephoning for the following main reason (assessed by physician):				
Discomfort	70	67	45	41
Anxiety	22	28	47	47
Hidden Agenda**	6	4	6	11
Percent of tracer contacts followed up:				
Patient or physician to telephone	32	16	58	23
Clinic appointment arranged	46	38	24	25
No follow-up	20	45	16	49
*Tracer conditions were:				
Alcohol abuse	Cystitis		Social problems	
Anxiety/depression	Diarrhea/gastroenteritis		Trauma	
Asthma	Insect/animal bites		Upper respiratory tract infection	
Back pain	Otitis media		Gynecological problems	
**Hidden Agenda: Physician suspects that the patient has a significant problem not being openly presented				

relatives nearby to turn to for health advice, and perhaps they seek reassurance more readily than might be viewed as reasonable by the medical profession.

In this study, telephone care was given in just over 70 percent of all the contacts. Hogg, in Canada, showed that 56 percent of contacts were managed on the telephone and that this form of care was more likely to occur with adult patients.\*

A study of after-hours care by certain deputizing services in Europe shows that telephone care was provided in 60 percent of contacts in Holland, 65 percent in Denmark, and 77 percent in Sweden.<sup>29</sup> Investigators in Britain have noted figures ranging from 3 to 36 percent. Murray and Barber found that 32 percent of contacts were handled by

telephone alone on week nights and 15 percent on weekends, and also noted that telephone advice was given to 57 percent of patients or callers under 15 years of age; this percentage decreased as the age of the patient increased.<sup>30</sup> Age did not appear to make much difference in telephone consultation rates in the present study. Telephone care seems to be a particular characteristic of the health care system in the United States, comprising 13 percent of all medical contacts.\*\* It is even more characteristic of pediatric practice, occurring in approximately 20 percent of all contacts.<sup>31,32</sup>

From the survey interviews, 49 percent of patients stated that reassurance far outweighed the

\*Hogg W: The Doctor After Hours, unpublished report. Wakefield, Quebec, Gatineau Memorial Hospital, 1976

\*\*National ambulatory medical care survey: 1977 Summary. In National Center for Health Statistics (Hyattsville, Md): Advanced Data from Vital and Health Statistics, No. 48, April 13, 1979. DHEW publication No. (PHS)79-1250. Government Printing Office, 1979

relief of symptoms as the most important element of the after-hours interaction. Medication was an important factor in the relief of symptoms in only 22 percent of the interview sample; six percent of patients stated that they had not been helped at all by the physician. The main reasons for calling after hours were equally due either to discomfort or anxiety about a problem in 80 percent of contacts. Administrative calls involved only eight percent. This contrasts with Greenlick's observation of daytime telephone care in which 47 percent of calls concerned symptoms and 40 percent were administrative in nature.<sup>32</sup>

It is of concern that in almost one third of the patients surveyed the main reason for the call, as assessed by both patient and physician, was not the same. In spite of the difficulty of developing standard definitions of patient's motives for calling, these data suggest an important degree of inadequate communication on the telephone. Similar communication problems have been documented by other workers. Satin, in a study of an Emergency Room patient group, recorded a lack of congruence between patient and physician on problem identification in 56 percent of the encounters.<sup>3</sup>

The lack of communication between patient and physician might account for some of the negative feelings experienced by the physician on after-hours coverage in this study. Negative emotional reactions were found to be more likely to occur when there was only telephone interaction without the benefit of face-to-face nonverbal communication in the early hours of the morning, and when the problem was defined by the physician as psychosocial in nature. High utilizers of the after-hours service, another possible cause of frustration and anger, comprised only one to two percent of all callers in this study.

The skills of "telephone medicine" have recently received increasing attention in the literature and there is good reason to include telephone skills of diagnosis and therapy in the curricula of health care workers involved in ambulatory care.<sup>33,34</sup>

Individual physicians in the present study showed a wide and puzzling range of behaviors in assessment, management, and follow-up of tracer conditions. Greenlick, studying physician responses to telephone calls from patients during office hours in a large prepaid group practice noted

similarly unexplained differences. In suggesting the line of future research he states, "The main problem is to understand the determinants of differential physician behaviors in responding to disease situations. . . ."<sup>32</sup>

Sociological studies suggest that night workers may base decisions less on professional role criteria and more on personal styles, and this hypothesis may explain the different ways in which the physicians under study assessed and managed after-hours calls.<sup>35</sup> These variations did not necessarily indicate poor quality of care, although outcome studies were not undertaken. Differing approaches in the management of such calls must also be the result of an amalgam of factors, including the physician's personality, experience, communication skills, and personal practice style, as well as prior educational conditioning regarding acceptable health seeking behaviors.

It is evident that patients use the lay referral system for advice after hours, mainly from their own families. The majority of problems are not "medically" serious. At least 30 percent primarily produce anxiety, which may be enhanced by fears concerning the night time hours and the unavailability of personal medical care. Prior knowledge of the patient's background provided by continuity of care may allow the physician to offer satisfactory reassurance and prevent recourse to excessive medical investigation in Emergency Rooms.

The analysis of after-hours call activity has important implications in the provision of emergency services, in the planning of health care, and in the growth of personal private practice. Excessive patient follow-up may lead to inflated health costs and clogged waiting rooms, and yet inadequate follow-up may be clinically dangerous. Poor communication and negative emotions exacerbate relationships and may increase the fragmentation of care by forcing the patient to seek help elsewhere, particularly in Emergency Rooms.

Medical care after hours is governed by economic, cultural, and organizational factors which are not easy to define in detail in the United States. This is probably related to the wide variety of primary care providers, the multiplicity of health care organizations, and the depth of socioeconomic differences among patients. The costs of care and the growth of "telephone medicine" are two other factors which also influence and may control the utilization rates. Hall, in his European



study, warns that patient demand, after hours, will increase dramatically in a 24-hour primary care service system, if the costs to the patient are minimal and physicians have no vested interest in controlling that demand. He describes after-hours as ". . . a bizarre situation where physicians, who are, or should be, trained for primary care, are responsible for the patient for about one third of the week, while those trained for other disciplines (ie, Emergency Room staff) take over primary care for the rest."<sup>29</sup> He cites several factors which constitute a threat to patient care after hours: increasing mobility of the population, absence of registration with a specific physician, lack of a unified medical record system, mobility of physicians, misuse of the health care team by patients, and the decreasing rate of home visiting.

There is no doubt that after-hours medical services are highly regarded by patients, but several questions arise from this study. Are after-hours services provided by the personal physician an economic alternative to Emergency Rooms? Could other health care workers undertake this work as effectively and more cheaply? There is conflicting evidence about the ability of nurses to provide after-hours care, but some believe that nurse practitioners may be able to provide as good or better care than physicians.<sup>31,36,37</sup> Should the health care professions really be involved in a "re-assurance" service which deals mainly with self-limiting disease? If the answers to these questions are in the affirmative, then at least some reorientation in medical education and practice is necessary, since the traditional organic approach frequently does not coincide with patients' needs or expectations.

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