

Discontinuity of Care: Urgent Care Utilization Within a Health Maintenance Organization

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Abstract

Objective: To determine the demographic characteristics, attitudes, and perceived barriers to primary care reported by patients seen in the urgent care department of a health maintenance organization (HMO) health center.

Study Design: Cross-sectional survey.

Patients and Methods: Patients aged 18 years or older who sought care at the urgent care department of a large, urban health center of a staff-model HMO were eligible for the study. Patients were handed a survey as they registered in the urgent care department. Demographic and visit diagnoses data were obtained through review of the computerized medical record.

Results: Patients seeking treatment at the urgent care department were significantly younger than those seen at a primary care physician's office (mean age, 40 years versus 46 years; $P \leq 0.0001$) but otherwise had similar demographic characteristics. Nearly 90% of 421 patients seen in the urgent care department reported having a primary care physician. When asked to list the reasons why they came to the urgent care department instead of the primary care offices, 64% said they needed to be seen immediately, 47% came because the primary care offices were closed, 27% cited the constraints of work or childcare, and 25% said they were unable to get an appointment with their primary care physician. Almost half of patients (47%) said they would have preferred to see their primary care physician within a day or two rather than seeking care at the urgent care department.

Conclusions: Patients treated in the urgent care department reported various barriers to seeing their primary care physician. Improving same-day access to primary care providers will help alleviate this problem and may increase patient satisfaction.

(*Am J Managed Care* 1998;4:1531-1537)

Primary care is the cornerstone of medical practice in managed care systems.¹ Yet despite the emphasis on primary care, unscheduled patient visits to ambulatory urgent care centers are common in many managed care settings.² Although some visits occur after regular office hours, others occur at the same time primary care physicians are seeing patients in their offices.

Little research has been published in this area; however, clinicians and administrators have entertained many hypotheses about "urgent care" patients. These hypotheses are often based on characterizations of fee-for-service patients seen in emergency departments. A review of recent studies of emergency department use by ambulatory patients reveals that young adults, minorities, patients with lower socioeconomic status, and those without a primary physician are overrepresented.³⁻⁵ Even though some of these demographic differences reflect access to health insurance, even after utilization rates have been adjusted for insurance status, these demographic differences persist.^{6,7} Patients seen in emergency departments and other "walk-in" clinical settings appear to value immediate access to care more highly than continuity of care.⁸⁻¹⁰ They may also encounter institutional barriers to receiving primary care, such as limited office hours and transportation problems.¹¹

Whether the results of emergency department research apply to patients seen in the urgent care departments of managed care organizations is unclear. Are urgent care patients similar to other managed care

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This work was supported in part by a grant from the Harvard Pilgrim Health Care Foundation, Boston, MA. Dr. Anna Plauth's work is supported by an Institutional National Research Service Award from the Agency for Health Care Policy and Research.

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members or do they represent a distinct subgroup of patients? Do these patients prefer urgent care departments or are there institutional or systems barriers that preclude their receiving care in a primary care office? How do patients who receive care in urgent care settings feel about primary care? Learning more about these patients and their experiences when seeking care may help integrated healthcare delivery systems establish more effective strategies to improve patient care and satisfaction.

The purpose of our study was to ascertain the barriers that patients faced to being treated in primary care for an acute illness. In addition, we wanted to explore urgent care patients' attitudes towards primary care and to compare their demographic characteristics to those of patients treated in a primary care office.

... METHODS ...

We conducted this study in one health center of a staff-model health maintenance organization (HMO), Harvard Pilgrim Health Care in urban Boston, Massachusetts. The health center serves approximately 31,000 adult patients and provides a full range of primary care and specialty services. At the time of this study, the urgent care department of the health center was open from 7:30 AM to 9 PM 7 days a week, while the primary care offices scheduled patient appointments from 9 AM to 5 PM Monday through Friday. Health center members can be seen in the urgent care departments of the HMO's other health centers. Patients requiring emergency care may seek care at or be sent to the emergency department of a local hospital at any time.

The urgent care department is staffed by a combination of physicians who work exclusively in the urgent care department, rotating primary care clinicians, and a paid group of moonlighting physicians. The department is located in a separate suite from the primary care offices. Patients are seen on a "walk-in" basis, but those who call the urgent care department before their arrival are triaged into appointment times to smooth the flow of patients through the department. These appointments can be scheduled only on the same day as the visit. Members can call either their primary physician's office or the urgent care department for an appointment. However, if a patient with a primary care provider calls the urgent care department before 5 PM on a weekday, an appointment time is first sought with the primary physician or other clinician in that office. If the physicians' schedules are full, the patient is given an appointment in the urgent care department.

Survey Method

We gathered data using a survey distributed on 7 separate days, one day of each day of the week, during the last 2 weeks of March 1996. On these 7 study days, we asked all adult patients (those aged 18 or older) registered in the urgent care department to complete our survey while they waited to be seen. The questionnaire was available in English, Spanish, and Russian, the three most commonly used languages in our patient population. We attached a cover letter to the questionnaire explaining the purpose of the study and requesting the patient's informed consent.

Survey Instrument

The patient survey included questions on demographic characteristics, self-described health status (rated on a 5-point Likert scale, from excellent to poor), and selection of a primary care physician. Patients were also asked why they came to the urgent care department and whether there were barriers to their using a primary care physician for their current episode of illness. If the patient listed more than one reason for using the urgent care department, all the reasons were recorded. Patients were also asked to rate (using a 5-point Likert scale, from strongly agree to strongly disagree) seven attitudinal statements about primary care and access to care.

We developed the survey items by reviewing the literature on emergency department utilization and consulting with clinicians practicing in the urgent care department. We reviewed preliminary instruments with other researchers to improve item clarity and assess content validity. An initial survey instrument was piloted in the urgent care department with 20 HMO members. Their comments on clarity and content were incorporated into the design of the final survey instrument.

Primary Care Comparison Group

We selected a comparison group of HMO members who were seen in a primary care setting for visits other than a routine checkup to determine whether urgent care patients had distinct demographic characteristics. For this purpose, we used a computer to provide a random sample of 1000 patients seen during the study period in the adult primary care offices of the health center. We obtained demographic and visit diagnosis information for the comparison group through a computerized medical record review.

Demographic Information

The HMO has a computerized medical record and demographic information system. We performed a

computerized record review to collect demographic and membership data on all urgent care patients and the primary care comparison group. We also compiled the visit diagnoses for those urgent care patients who consented to this review. Postal zip codes were used to link demographic information to census tract data to collect information on average per capita income. Racial information was extracted both from the HMO's computerized medical record system and the urgent care surveys. The computerized medical record system's data regarding race are entered by clinicians and often are not available.

Statistical Analyses

We analyzed our data using SAS computer software (Cary, NC). Responses initially formatted on a 5-point Likert scale were dichotomized into strongly agree/agree versus unsure/disagree/strongly disagree for univariate analyses. Only the responses of patients who reported having a primary care physician were included in the analyses of the barriers to primary care questions and attitudinal statements. If a patient was seen in the urgent care department more than once during the study period, only data from the first visit were analyzed.

We tested our hypotheses using chi-square tests for dichotomous variables and Student's *t* test for continuous variables. Logistic regression was used for multivariate analysis of demographic characteristics associated with urgent care department use. A forward selection process was used, and only those variables that were statistically significant ($P \leq 0.05$) on bivariate analyses were entered into the multivariate model.

... RESULTS ...

During the 7 study days, 551 patients were seen in the urgent care department. Of these, 211 patients (38%) sought care on a weekday between 9 AM and 5 PM, when the primary care offices were open. Five hundred twenty-eight of the 551 urgent care patients (96%) were asked to complete the survey. Twenty-three patients did not receive a survey because of human

error. Four hundred twenty-one of the 551 eligible patients (76%) completed at least part of the survey.

Demographic Characteristics

The demographic characteristics of urgent care patients and patients seen in the primary care offices are shown in Table 1. Urgent care patients were significantly younger than those seen in primary care (mean age, 40 years versus 46 years; $P \leq 0.0001$), but there was no significant difference in the percentage of female patients in each group (65% versus 63%). Among the 78% of patients for whom racial data were available (1212/1551), the percentage of white patients was significantly lower in the urgent care group than in the primary care group (41% versus 48%; $P = 0.02$). Per capita income was comparable between the two groups (\$16,043 versus \$16,419). Compared with the primary care group, significantly fewer urgent care patients had been members of the HMO for more than 2 years (73% versus 78%; $P = 0.03$). Among patients who had been members for more than 2 years, those seen in the urgent care department were less likely to have had a regular checkup within the previous 2 years (68% versus 74%; $P = 0.03$).

In multivariate analyses, patient age was the only significant independent correlate of urgent care use. Patients aged 40 and younger were more likely than

Table 1. Demographic Characteristics

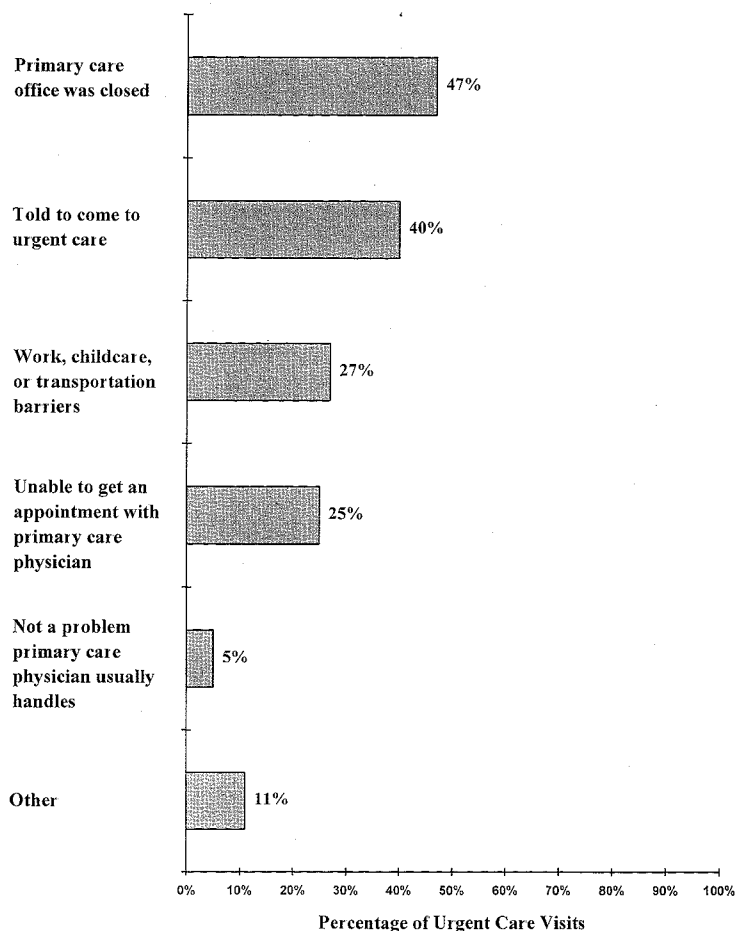
	Patients Seen in Urgent Care (n = 551)	Patients Seen in Primary Care Offices (n = 1000)	P Value
Age (y)			
Mean \pm SD	40 \pm 14	46 \pm 16	0.0001
Sex			
Female	356/551 (65%)	625/1000 (63%)	0.41
Race			
White	200/488 (41%)	345/724 (48%)	0.02
Non-white	288/488 (59%)	379/724 (52%)	
Per capita income			
Mean \pm SD	\$16,043 \pm 7743	\$16,419 \pm 7510	0.36
Membership duration			
Member for more than 2 years	401/548 (73%)	771/986 (78%)	0.03
Checkup			
Member for more than 2 years with checkup within the past 2 years	273/401 (68%)	572/771 (74%)	0.03

SD = standard deviation

Table 2. Most Common Discharge Diagnoses

Visits to Urgent Care (n = 421)		Visits to Primary Care Offices (n = 1000)	
	No. (%)		No. (%)
Upper respiratory tract infections	61 (15)	Musculoskeletal and back pain	140 (14)
Musculoskeletal and back pain	52 (12)	Upper respiratory tract infections	85 (9)
Minor trauma	38 (9)	Hypertension	83 (8)
Asthma or bronchitis	27 (6)	Asthma or bronchitis	50 (5)
Skin complaints	24 (6)	Skin complaints	44 (4)
Urinary tract infection	19 (5)	Minor trauma	41 (4)
Abdominal pain	16 (4)	Abdominal pain	36 (4)
Ophthalmologic complaint	15 (4)	Diabetes mellitus	26 (3)
Otitis media	14 (3)	Immunizations	23 (2)
Vaginitis	11 (3)	Headache	17 (2)
Other	144 (34)	Other	455 (46)

Figure 1. Barriers to Seeing a Primary Care Physician



those older than age 40 to receive care in the urgent care department (odds ratio, 2.1; 95% confidence interval, 1.7, 2.7). In the age-adjusted model, neither duration of membership nor race were statistically significant predictors of urgent care use.

Visit Diagnoses

Patients seen in the urgent care department had a wide variety of complaints. The 10 most common discharge diagnoses accounted for 66% of all visits (Table 2). These diagnoses and their relative frequencies were similar to those of patients treated in the primary care offices. Hypertension and diabetes were the only chronic health concerns included among the 10 most common diagnoses seen in primary care.

Survey Respondents

The demographic characteristics of the 421 survey respondents were similar to those of the 130 non-respondents. The mean age of survey respondents and non-respondents was 39 years and 42 years, respectively ($P = 0.07$). There were no significant differences in the percentage of female patients (65% for respondents versus 62% for nonrespondents), average per capita income (\$16,063 versus \$15,979), or percentage of white patients (42% versus 37%). Only two of the non-respondents indicated that they did not speak English, Spanish, or Russian.

The survey respondents were highly educated, with 55% reporting a college education or higher. They were generally healthy, with 53% rating

their health as excellent or very good. Eighty-five percent of survey respondents listed English as their first language, and 87% (367/421) reported having a primary care physician.

Reasons for Urgent Care Use

The most common reason for coming to the urgent care department instead of a primary care office, cited by 64% of respondents, was the perceived need to be seen immediately. Members seen after regular office hours reported needing to be seen immediately as often as did those seen when primary care offices were open (64% versus 65%). Upper respiratory tract infections, musculoskeletal complaints, and minor trauma were the three most common diagnoses for all visits, regardless of whether or not patients reported that they needed to be seen immediately. Only 20% of patients reported coming to the urgent care department because it was more convenient.

Eighty-three percent of the 367 survey respondents who had a primary care physician reported one or more barriers to seeing their physician that were beyond their personal control (Figure 1). These barriers included needing care when the primary care offices were closed (47%); being told by telephone to come to the urgent care department (40%); facing job, school, childcare, or transportation barriers (27%); and having a problem not usually treated by their primary care physician (5%). Patients who stated that job, school, childcare, or transportation concerns constituted a barrier to their seeing their primary care physician were significantly younger than those for whom these issues were not a concern (mean age, 36 years versus 39 years; $P = 0.04$).

Another important barrier to primary care beyond the patient's control was limited appointment availability. One hundred twenty-two survey respondents sought urgent care on a weekday between 9 AM and 5 PM, when the primary care offices were open. When data from these surveys were analyzed separately, almost half of the patients (57/122) reported they were unable to get a primary care appointment. An additional 31 patients report-

ed that they had been told to come to the urgent care department. Race, age, sex, self-reported health status, and education level were not significantly correlated with an inability to get an appointment in the primary care offices.

Attitudes Toward Healthcare and Continuity of Care

Of the nearly 90% of urgent care patients who reported having a primary care physician, most had positive attitudes toward primary care (Table 3). A high percentage of these patients agreed that it was important to see the same physician over time (88%) and were satisfied with the care they received from their regular physician (86%). Only 43 of 295 patients (15%) stated that they preferred the physicians in the urgent care department to their regular physician for the problem that brought them to the urgent care department.

Problems with access to primary care, noted by many patients with regard to their acute episode of illness, were echoed in patients' general attitudes toward primary care. Only 59% of patients said it was easy to get an appointment with their primary physician when they were sick or needed medical advice.

Most patients agreed that when they had an acute problem, they did not have a preference of which physician they saw. However, when given the option of being seen in the primary care offices, 47% of patients stated they would have preferred seeing

Table 3. Attitudes Toward Healthcare by Patients with a Primary Care Physician

	Percentage that Strongly Agree or Agree (# agreed/# responding to that question)
■ My doctor is available to answer my questions whenever I need him or her.	213/315 = 68%
■ When I have an acute problem, it does not matter to me which doctor I see.	203/317 = 64%
■ I think it is important to see the same doctor over time.	283/321 = 88%
■ I would have preferred seeing my regular doctor today or tomorrow to coming to the urgent care department now.	144/307 = 47%
■ I am satisfied with the care I get from my regular doctor.	271/314 = 86%
■ It is easy to get an appointment to see my doctor when I am sick or need medical advice.	183/310 = 59%
■ I prefer urgent care's doctor to my assigned doctor for this problem	43/295 = 15%

their primary physician that day or the next day to coming to the urgent care department. Patients who agreed with this statement were significantly older (mean age, 41 years versus 37 years; $P = 0.015$), were more likely to have been HMO members for more than 2 years (50% versus 37%; $P = 0.05$), and were less likely to rate their health as excellent or very good (46% versus 58%; $P = 0.03$). There was no relationship between this attitude toward healthcare and race, sex, or level of education.

... DISCUSSION ...

Patients seen in the urgent care department did not represent a unique demographic subgroup within the population of patients seen in this HMO. Although urgent care patients were slightly younger on average than patients seen in the primary care offices, their sex and racial composition, duration of HMO membership, and per capita income were comparable. Unlike ambulatory patients seen in emergency departments in the fee-for-service sector, most urgent care patients had a primary care provider. However, they were less likely than patients seen in the primary care offices to have had a recent physical examination.

Not surprisingly, most urgent care patients reported that they came to the urgent care department in part because they needed to be seen immediately. However, many patients in the urgent care department also reported that they would have preferred to have seen their primary care physician. Continuity of caregiver was valued most by older patients, long-term members of the HMO, and patients with poorer self-reported health. These are populations of patients whom one would expect to have a closer relationship with their primary care provider than would young, healthy, new members.

Patients reported a variety of barriers to receiving care through their primary care physician. Many patients needed care when the primary care offices were closed, were limited by job or childcare constraints, or were unable to get a primary care appointment in a timely fashion. Patients unable to get a primary care appointment were similar demographically to those who did not report this barrier, suggesting that the inability to obtain a primary care appointment is not related to selective barriers against specific minorities. However, the frequency with which this problem occurred indicates that efforts to improve same-day access to primary care are needed.

External barriers to accessing primary care, such as childcare, job, and transportation problems, were more

common among younger patients than older ones. This may partly explain the younger average age of patients seen in the urgent care department. Extending primary care office hours and increasing scheduling flexibility may facilitate care most for these young adults for whom outside concerns limit their ability to obtain care during regular office hours.

Contrary to our initial hypotheses, urgent care patients had positive attitudes toward primary care and their primary care physician. Few patients stated that they came to the urgent care department because their complaint was something that their physician could not treat or that they preferred the physicians in the urgent care department to their primary care physician. Patients agreed that it was important to see the same physician over time and were satisfied with the care they received through their primary care physician.

In interpreting these results, we must consider that some of the patients' answers in favor of primary care may be due to social response bias. In addition, although we attempted to vary the wording of the attitudinal statements so they reflected both positive and negative attitudes toward primary care and continuity of care, five of the seven attitudinal statements reflected positive attitudes toward primary care. This imbalance may have led patients to answer all the questions in a positive fashion. However, that only 15% of patients agreed with the statement "I prefer urgent care's doctor to my assigned doctor for this problem" suggests that response set bias was not an overwhelming issue.

A limitation of this study is that it was performed in a single health center of a staff-model HMO and thus reflects features that are unique to this clinical setting. However, most of the other health centers within our HMO have similarly structured urgent care departments. In addition, many managed care and fee-for-service systems have "walk-in" or urgent care departments designed to provide same-day and after-hours care (Neill F. Piland, MD, personal communication, August 15, 1997). We believe that many of the barriers to primary care seen in our HMO, such as limited same-day appointment availability and job and childcare constraints, are also applicable to these other settings.¹²⁻¹⁴ How different organizational structures for urgent care services influence patients' perceptions of access to primary care is an area for further research.

The fact that 47% of patients seen during office hours reported that they were unable to get an appointment with their primary physician suggests that practice organization and scheduling systems are

significant barriers to primary care within managed care organizations. Although patients had positive attitudes toward being seen in the urgent care department, many were there because they were unable to see their primary care physician. Our HMO has recently implemented scheduling changes, such as holding more appointment slots open for same-day visits, to try to improve same-day access within the primary care offices. How this impacts on the flow of patients and on patient satisfaction is an area for future research.

In conclusion, an active urgent care department has an important role in providing after-hours and acute care. However, because many patients prefer to be seen by their primary care provider, urgent care alone cannot fulfill patients' preferences for same-day care. Although it is unclear whether a lack of short-term continuity of care affects quality of care and outcomes, our research suggests that efforts to provide increased same-day access to primary care physicians may better meet patients' preferences and improve patient satisfaction.

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