Chief Complaints in a Free Walk-In Clinic

A study of 3,009 consecutive patient visits

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THE WALK-IN CLINIC, an outpatient facility in which no appointment is required, is intended as a screening unit for patients with long-term conditions and as a definitive treatment center for patients with short-term illnesses. It is usually associated with other outpatient clinics to which patients with chronic or special illnesses are referred. Thus, the walk-in clinic is the initial point of contact between a patient and the medical care system.

In prepaid group practices, the walk-in clinic provides a sensitive assay of why people go to a physician—just as a general practitioner's practice would in more traditional systems. The Navy has long used a walk-in clinic as the central unit in an outpatient facility. My experience over a 9-month period in a Navy walk-in clinic prompted me to seek the answers to the following questions:

1. To what extent are complaints "minor" or "insignificant" in a free medical care system such as the Navy's?
2. Is practice in this clinic comparable to practice in internal medicine?
3. Do women use a free clinic more than men?
4. Do people over 40 years old use this kind of clinic more than those under 40?

Background

The Naval Regional Medical Clinic in Washington, D.C., has an active list of about 15,000 patients. It has an X-ray facility that performs contrast studies, a laboratory for bacteriology, urinalysis, and hematology, and a well-stocked pharmacy. Through a regional hospital it has access to most other chemistry and physiological testing. Medical coverage at the clinic includes a physical examination unit and the services of specialists in internal medicine, obstetrics and gynecology, ophthalmology, pediatrics, and podiatry. Referral services to other specialty clinics at the Naval Hospital in Bethesda, Md., are available. Finally, it has a walk-in unit that is used for emer-

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gencies, for minor illnesses, and for screening. In general, all patients over age 12 must be seen in this unit before they can be referred to specialty clinics, except for women who suspect that they have gynecologic conditions; for example, those who have menstrual disorders.

The majority of the walk-in unit's patients are dependent wives, children (patients over age 12) of active duty personnel, and retired service personnel. Only 5 percent of its patients are active-duty personnel, because other facilities in the area exist solely for their care. Thus, the clinic primarily provides free medical care to a diverse group of civilian adults.

Three physicians serve in the walk-in clinic. They see from 60 to 120 patients a day in random assignment, except for followup patients. Every attempt is made to have a patient see the same physician in followup that he saw initially.

Analysis of Data

The data presented here were drawn from a log of all patients seen by me from July 19, 1972, to April 30, 1973. The clinic hours were 7:30 am to 4 pm, 5 days a week.

Over the span of 165 working days, I saw a total of 3,009 patients. The usual workday was 8 hours; however, on some days other commitments reduced the time in clinic work. On the average, I saw 91 patients per 35-hour week.

Followup care. Visits were initially divided into "new" or "followup" categories, depending on whether a return appointment was made at the time of the first visit. On the average, 18 percent of the visits were for followup of previously treated conditions. The numbers and percentages of the total number of patients seen in a given month for followup were:

Month	*Total patients*	*Followup patients*	
		Number	*Percent*
July-August	398	57	14.3
September	418	102	24.4
October	397	94	23.6
November	332	55	16.5
December	308	53	17.2
January	288	48	16.6
February	333	49	14.7
March	237	33	13.9
April	298	42	14.1

A total of 533 visits were followup appointments. Of these visits, 241 were made by patients who required treatment for 3 months or more; these patients were treated in the walk-in clinic because of patient's or physician's preference. A total of 2,466 patients made only one visit for a given complaint.

The following distribution of the long-term followup patients, according to conditions treated, excludes those who were followed up by telephone or referred to specialty clinics.

Condition	*Number of patients*	*Number of visits*	*Mean visits per patient*
Hypertension	9	63	7
Depression	10	58	6
Anxiety	6	35	6
Other [1]	14	85	6
Total	39	241	..

[1] Ill-defined abdominal complaints, 5; viral hepatitis, 2; obesity, 1; cystitis, 1; alcoholism, 1; hypothyroidism, 1; acne, 1; atrial fibrillation, 1; and recurrent furuncles, 1.

Analysis by chief complaint. Of the 2,466 patients with new complaints, 194 were excluded from the following table, because they were given prescription refills only, or because they were children under 12 years of age whom I saw when the pediatrician was on leave. Thus, the numbers that follow are based on 2,272 patients treated between July 19, 1972, and April 30, 1973. They are listed in order of frequency, by chief complaint noted at the time of initial interview (only the primary complaint was coded).

Primary complaint	*Number of patients per 1,000*
Sore throat	71
Skin rash	69
Abdominal pain	61
Backache	52
Earache	49
Neck or arm pain or trauma	42
"Cold"	45
Urine burning	44
Cough	43
General malaise	31
Nausea, vomiting	30
Eye problem	29
Chest pain	29
Skin lump	28
Sinus congestion	28
Hand problem	25
Headache	24
Weak	21
Nervous	19
Tired	19
Foot pain	19
Hemorrhoids	18
Breast lump	11
Hypertension	15
Total complaints	822

The 10 leading complaints comprised 51 percent of the chief complaints, and 24 chief complaints comprised 82 percent of all complaints.

Arranged by system, the percentages of chief complaints made by the 2,272 new patients, 12–90 years old, were as follows:

Complaint	*Percent*
Ear, nose, throat	21.9
Sore throat	7.1
Earache	4.9
"Cold"	4.5
Sinus congestion	2.8
Other ear, nose, throat	2.6
Musculoskeletal (trauma or pain)	18.8
Leg, knee, ankle, foot	6.9
Back	5.2
Neck, shoulder, arm	4.2
Hand	2.5
Gastrointestinal	12.5
Pain or cramps	6.1
Nausea, vomiting	3.0
Hemorrhoids or fissure	1.8
Other	1.6
Dermatological	9.7
Rash	6.9
Lump	2.8
General or "total-body" complaints	9.0
Malaise	3.1
Weakness	2.1
Nervousness	1.9
Fatigue or depression	1.9
Cardiopulmonary	8.7
Cough	4.3
Chest pain	2.9
Other	1.5
Genitourinary	7.8
Burning	4.4
Other	3.4
Other systems	11.6

Use of walk-in clinic, by age and sex. Age and sex were analyzed for 1,941 patients seen from October 31, 1972, to May 25, 1973; excluded were followup patients, children under 12, and 55 women and 38 men for whom age was not specified. Patients in the 12–20 age group predominated in this clinic, with a significant decrease in use by patients over 60, as shown in the table. In the under 50 age group there were more women than men, whereas in the over 50 age group, the opposite was true. As I mentioned earlier, few men on active duty are seen in this clinic. Most of the male patients are, therefore, teenage dependents or retired Navy personnel.

Age and sex of 1,941 patients seen in a naval walk-in clinic, October 31, 1972, to May 31, 1973

Age group (years)	*Women*	*Men*	*Total*
12–20	246	217	463
21–30	202	113	315
31–40	216	65	281
41–50	227	187	414
51–60	131	152	283
61–70	47	83	130
71–80	15	20	35
81–90	7	13	20

Discussion

The data presented here provide partial answers to the questions in the introduction. Although these answers apply strictly to our walk-in clinic, they may also be relevant to other free or prepaid systems where the walk-in clinic concept is used—for example, in the health maintenance organizations now being established (*1*).

Insignificance of complaints. Many complaints seemed minor—for example, sore throat, common cold, sinus congestion, and sprains of the foot, arm, or leg. Two points are worth remembering, however. First, for the patient no complaint is minor; even if reassurance is all that is necessary, it is important to the patient to get that reassurance. Second, there is a danger in dismissing an apparently trivial complaint, because it may mask a serious problem.

The relevant question is not how minor or insignificant a complaint is but how it should best be handled. Could it have been avoided by proper education? Could it be handled by simple tests or instructions that do not require the services of a physician? For example, patients with "cold" symptoms, mild cough, or mild diarrhea might be told by newsletter that unless such symptoms persist they do not require a clinic visit. Other problems such as rash and sunburn could be avoided by seasonal advice.

Specimens for culture could be taken from patients with sore throat or dysuria, and the patients could be informed of the results later. Patients with mild sprains whose X-ray readings are negative could be bandaged and given printed instructions. Even these simple measures would cut by approximately half the number of patients who see a physician.

The usefulness of this approach has already been established by such trials as the Burlington nurse-practitioner program in Canada (*2*). It is being used now with good success within the Naval system. Many complaints, therefore, although not necessarily insignificant to a patient, may not need direct physician evaluation and treatment initially.

Internal medicine in the walk-in clinic. In one published study of general practice in New York (*3*), 94 percent of the practitioners claimed that their practice was primarily internal medicine. If "internal medicine" involves material covered in such

texts as "Harrison's Principles of Internal Medicine" (4), this is far less true in the walk-in clinic. Complaints of 41 percent of the patients involved ear, nose, and throat and musculoskeletal systems. Thus, the military walk-in clinic physician must be an orthopedic surgeon and otolaryngologist more often than an internist. Dermatological (9.7 percent) and genitourinary (7.8 percent) complaints added 17.5 percent; these are peripheral to internal medicine. Gastrointestinal (12.5 percent), general (9.0 percent), and cardiopulmonary (8.7 percent) complaints of the kinds discussed in this paper are perhaps entirely within the internist's domain, but they comprise a small portion of the total complaints.

The kinds of complaints of patients in walk-in clinics have implications for both medical and paramedical personnel in such facilities. Personnel who screen patients must be familiar with otolaryngological, orthopedic, skin, and genitourinary problems. These conditions are more frequently diagnosed than are chest pain, cardiac irregularity, or psychiatric problems.

In the traditional medical school curriculum, the ear, nose, and throat, dermatology, urology, and orthopedic rotations may be skimpy. This curriculum will not produce physicians who are capable and efficient in a walk-in clinic setting.

Patients in a walk-in clinic. More women than men used the services of the naval walk-in clinic. Because the navy has more men than women on active duty, and many of these are on ships away from home, this difference is understandable. It is especially true in this clinic that serves few active-duty patients. In the age ranges where this is not the case, that is, from 12 to 20 and from 50 to 70, more men than women, use this facility.

Because of the special setting of the naval clinic in Washington, D.C., it is difficult to comment on the data because of the unknown total potential population. Nevertheless, the data indicate that men may use a walk-in clinic as often as women if they are about equal in the population, as would seem to be the case for patients 12 to 20 and over 50 years. In the ages from 20 to 50, more women than men use this facility, but it is the only center in a large area that dependent wives can use. In the same area, there are three walk-in clinics for active-duty personnel, primarily men. Thus, the ratios presented here may be peculiar to the patient population this clinic serves.

Age of clinic users. My final question concerned whether the clinic was used more by younger or older patients. The table demonstrates that persons 17–40 years old (1,059) outnumbered those over 40 (877). This is true, in part, because active-duty men 20–40 years of age are likely to be treated elsewhere and therefore excluded from this population. It is still notable that equal numbers of teenagers (463) and persons over 50 (468) used this clinic. Although this situation probably reflects relative population densities, it is important to note that young people comprise a significant part of adult medical care. Although the internist may spend a large part of his time in geriatric medicine, it is equally true that in a walk-in clinic a good deal of time is spent with young people.

Summary and Conclusions

Men under 20 and over 50 years of age used a free walk-in clinic of the Navy more than women of the same age. Women 20–50 years old used it more than men in this age group. This appears to be a result of the distribution of Navy health care facilities in the study area. Teenagers used the clinic as much as patients over 50.

Sore throat, skin rash, abdominal pain, earache, and backache were the five most common complaints (302 per 1,000 patients.) These complaints and 19 other problems were responsible for 822 patient visits per 1,000 in a study of 2,272 consecutive new patient visits. Eighteen percent of all visits were return visits for a specific complaint.

An analysis of complaints by body system showed that 21.9 percent were otolaryngological, 18.8 percent musculoskeletal, 12.5 per cent gastrointestinal, 9.7 percent dermatological, 8.7 percent cardiopulmonary, 7.8 percent genitourinary, 9.0 percent general (fatigue, nervousness, malaise, or weakness), and 11.6 percent other system (neurological, hematological, and miscellaneous).

These data indicate that a physician's time might be used more efficiently in a walk-in setting and that training for such a clinic must be different from traditional training for such fields as internal medicine.

References

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