

# MEDICAL PRACTICE

## *General Practice Observed*

### Casual Attendances at an Accident Department and a Health Centre

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#### Summary

In six months patients from a defined population of 11,417 provided 826 casual attendances for minor conditions at a hospital accident department and 1,430 similar attendances at a health centre treatment room. Attendances at the accident department reached a peak during the early evening, and included relatively more males, more adults, more patients with injuries than with symptoms, and more residents from the area immediately adjoining the hospital.

Care of most of the casual attenders with minor conditions at the health centre treatment room would require additional nursing staff and some reorganization of primary care to enable a doctor to be available at most times. Attendances at night and at week-ends were insufficient to justify a 24-hour service at the health centre.

#### Introduction

Studies of patients attending hospital accident and emergency departments have shown that up to 60% suffer from injuries or symptoms which could appropriately be managed by a general practice.<sup>1-4</sup> It has been suggested that to treat such patients in hospital departments leads to difficulties in staffing, is an uneconomic use of resources, and may well hinder the care of those with more serious conditions. One possible alternative is to provide a 24-hour emergency service in health centres.<sup>4</sup>

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Each of Bristol's six health centres includes a treatment room which is staffed for up to 12 hours a day by State-registered nurses. Though the primary purpose of these treatment rooms is to provide accommodation for practical nursing tasks carried out for family doctors they are also a source of primary care to casual attenders.<sup>5</sup>

This study made use of the opportunity afforded by the opening of a new health centre near to a hospital with a busy accident and emergency department to compare and contrast the demand during a period of six months by a defined population on the two sources of casual primary care.

#### Patients and Methods

Southmead Hospital is situated in the north of Bristol on the edge of a large corporation housing estate. In August 1969 a new health centre was opened near the centre of the housing estate about 1,200 yards (1.1 km) from the hospital. It provides care for 11,417 patients, who form the population at risk in this study (Table I). About 90% live on the Southmead estate.

For 26 weeks from 6 April 1970 the nurse or clerk in the health centre treatment room completed a specially designed and partly precoded record card for certain patients who attended with a new complaint and who were registered with

TABLE I—Population at Risk at Southmead Health Centre on 30 June 1970

Age Group (Years)	Male	Female	Total	
			No.	%
0-14 .. ..	1,655	1,614	3,269	28.6
15-64 .. ..	3,617	3,738	7,355	64.4
65 and over	316	477	793	6.9
All ages	5,588	5,829	11,417	

the health centre doctors. Included among the patients for whom record cards were initiated were all casual attenders, defined as those who were not referred to the treatment room by any person with medical or nursing qualifications. There were 1,487 casual attendances during the period of the study, and of these 1,430 were managed entirely by the treatment room nurse or were referred to the family doctor.

During the same 26-week period the reception staff at Southmead Hospital accident department recorded the case numbers of all patients attending with new complaints who said they were registered with any of the health centre doctors. The name, age, sex, and address of each of these patients were extracted from the accident department records and checked against the health centre age and sex register to eliminate those who were not members of our defined population at risk. In order to guard against accidental omissions by the receptionists the names of all other new patients who gave Southmead addresses were similarly compared with the age and sex register.

By these methods, out of a total of 14,226 new attendances at the accident department during the defined period 1,288 (9%) were identified as being by members of the health centre population. We traced the casualty record card for each of these patients and extracted the required information. Of these 1,288 new attendances 1,108 (86%) were casual attenders who had not been referred to the accident department by any person with medical or nursing qualifications. From this group were excluded 272 patients who arrived by ambulance or who were suffering from conditions which could probably not have been managed at the health centre, in that they had a radiological examination performed or a plaster cast applied, or were admitted to hospital or referred to the outpatient department or to some other person or place apart from the health centre or the family doctor. The remaining 836 casual attenders with relatively minor conditions are compared in this report with the 1,430 casual patients who attended the health centre treatment room during the same 26-week period and who were not referred to any person or place other than the family doctor.

## Results

Total attendances by patients in different age and sex groups are shown in Table II, and the corresponding rates are given in Table III. The total attendance rates for males and females

TABLE II—Number of New Casual Attendances for Minor Conditions during 26 Weeks from 6 April 1970

Age Group (Years)	Treatment Room		Accident Department		Total	
	Male	Female	Male	Female	Male	Female
0-14 .. ..	440	519	224	130	664	649
15-64 .. ..	85	277	289	171	456	448
65 and over ..	2	25	7	14	9	39
All ages ..	527	821	521*	315	1,130*	1,136

\*The age of one patient was not stated.

TABLE III—Annual Rates per 1,000 Patients per Year of New Casual Attendances for Minor Conditions, based on Attendances over 26 Weeks from 6 April 1970

Age Group (Years)	Treatment Room		Accident Department		Total	
	Male	Female	Male	Female	Male	Female
0-14 .. ..	532	643	271	161	802	804
15-64 .. ..	92	148	159	91	252	240
65 and over ..	(13)	105	(44)	(59)	(57)	164
All ages ..	218	282	186	129	404	390

Rates in parentheses are based on fewer than 20 attendances.

were very similar. Children of both sexes had higher attendance rates than adults, particularly at the treatment room, and there was a pronounced trend even in childhood for males to attend the accident department and females the treatment room. This trend was greater when the predominant reason for attendance was an injury than when it was a symptom, but even for symptoms the male attendance rate at the accident department exceeded that for females.

The attendance rates per hour from 8 a.m. to 8 p.m. on weekdays and from 8 a.m. to 12 noon on Saturdays, when both the treatment room and the accident department were open, are shown in Table IV. The highest attendance rate at the health centre occurred during the morning, when a number of patients who could not be given consultation appointments at short notice took their problems to the nurses in the treatment room. The rate of attendance at the accident department reached a peak between 5 p.m. and 8 p.m., but the ratio of male to female attendances was no greater at that time than during the preceding eight hours. Attendances at the accident department during the hours when the health centre was closed are shown in Table V.

TABLE IV—Attendances while the Health Centre was Open

	Treatment Room		Accident Department		Total Attendances
	Attendances	Rate/Hour	Attendances	Rate/Hour	
8 a.m.-noon	771	1.2	141	0.2	912
Noon-5 p.m.	393	0.6	166	0.3	559
5 p.m.-8 p.m.	265	0.7	162	0.4	427
Total	1,429*		469		1,898

\*The time of attendance of one patient was not stated.

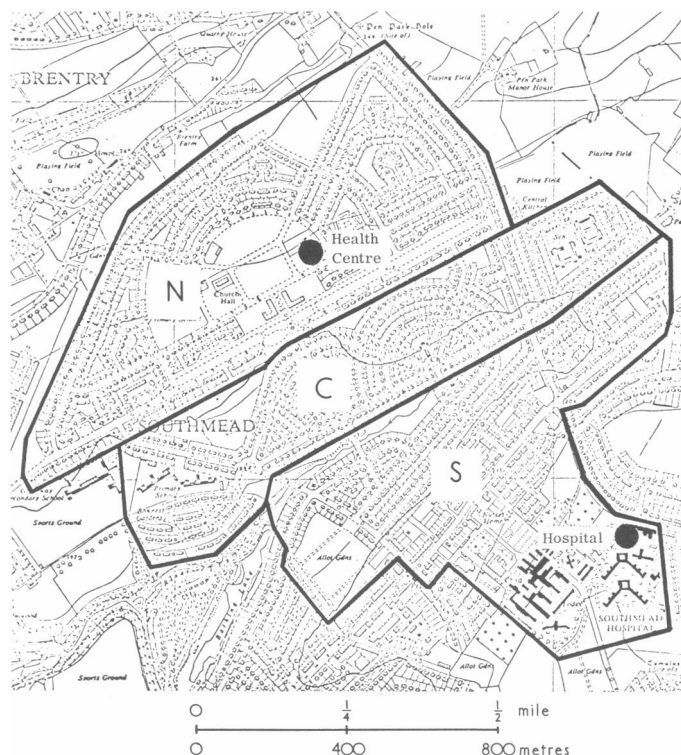
TABLE V—New Casual Attendances with Minor Conditions at the Accident Department during the Hours when the Health Centre was Closed

Time of Arrival	Total in Six Months	Daily Average
Noon-8 p.m. Saturdays .. ..	84	3.2
8 a.m.-8 p.m. Sundays .. ..	117	4.5
8 p.m.-midnight .. ..	150	0.8
Midnight-8 a.m. .. ..	16	0.1
Total ..	367	

For the purposes of this investigation the Southmead housing estate, on which about 90% of the population at risk live, was divided into three areas (see Map). Though the distances involved were short the area of residence appeared to influence patients' choice between the health centre and the accident department. Residents from the north area provided 45% of treatment room attendances, compared with 27% of those attending the accident department while the health centre was open. Conversely, only 11% of treatment room attenders lived in the south area, compared with 26% of the attenders at the accident department. These differences are statistically significant ( $P < 0.001$ ).

## Discussion

Between 1966 and 1970 the annual number of new patients attending the accident department at Southmead Hospital increased from 19,000 to 26,000. We agree that the most satisfactory solution to the problems resulting from the overloading of accident departments by casual attenders with minor conditions is that where possible such patients should be seen and treated in health centres or in minor casualty units in peripheral hospitals. Over 90% of one sample of general practitioners considered that, given adequate equipment and enough time, the treatment of minor trauma was



Map of Southmead area. N = North area. C = Central area. S = South area. (Reproduced from Ordnance Survey Map with the sanction of the Controller, H.M. Stationery Office. Crown Copyright reserved.)

within the scope of general practice.<sup>6</sup> The provision of adequate equipment and the saving of doctors' time are included in the objectives of health centre practice.

We have recorded total casual attendances by members of a defined population and have attempted to identify that proportion of these attendances which either was or could have been managed within the health centre setting. A total of 2,266 attendances fell into this category, and in 469 instances the patient elected to attend the accident department during the hours when the health centre was open. If the health centre assumed responsibility for most of these patients on average three or four extra new patients would attend the treatment room each day. Though this is not many it would increase the total of new casual attendances by one-third and would require additional nursing staff. Furthermore, probably many of these extra patients, though included in our category of minor conditions, would have injuries or symptoms requiring the attention of a doctor.

Medical advice and skill should thus be available at all times for the proper management of casual patients. Continuous responsibility of this nature would require some reorganization throughout the whole field of primary medical care. Adequate care of casual patients in the community rather than in hospital departments will therefore not neces-

sarily be associated with any major saving of resources. In any event it will clearly be uneconomic to staff health centres of the size of Southmead for more than about 12 hours a day. Night and week-end care for casual patients must be organized for populations at least 10 times as large.

Attempts to change the knowledge and attitudes of potential casual patients to divert them from accident departments to health centres should not be made lightly or perfunctorily. Division of responsibility must be agreed by staffs of accident departments and health centres and resources obtained or redistributed. A suitable educational campaign should be planned, bearing in mind the patterns of demand shown by this and other studies. For example, it should be made clear, particularly to men, that health centres are appropriate places for the treatment of minor trauma, and the hours during which the treatment room is staffed should be adequately publicized. An effort should be made by the staff of the accident department to divert casual attenders with minor complaints either at the time of the first visit or for follow-up care. In this study only two patients of the 585 who attended the accident department because of minor injury were referred at their first visit to the general practitioner or the health centre.

Traditions may not be easy to break, and so long as near-by residents with minor conditions are accepted and treated change is likely to be slow.<sup>7</sup> The advice of the Department of Health and Social Security<sup>8</sup> that all casual attenders must be seen by a doctor is not helpful. Increasing demand for primary care in this field as in others can be met by the community health services only through the use, with appropriate safeguards, of ancillary workers in sorting patients, in the provision of primary care, and in supportive or follow-up care. If experienced ancillary staff are to be employed in this way in the community it is perhaps reasonable to expect acceptance of the same principle in hospital accident departments.

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## References

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- <sup>2</sup> Nuffield Provincial Hospitals Trust, *Casualty Services and their Setting*. London, Oxford University Press, 1960.
- <sup>3</sup> Blackwell, B., *Lancet*, 1962, 1, 369.
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- <sup>6</sup> Cartwright, A., and Marshall, R., *Medical Care*, 1965, 3, 69.
- <sup>7</sup> Dixon, P. N., *Journal of the Royal College of General Practitioners*, 1971. In press.
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