fitness. The arrangements described in this paper have merely regularized what is actually happening and also reduced the burden on the general practitioner. There may even be a case for extending these arrangements up to a week, but this would require a change in the regulations covering payment of State benefit.

The tendency to start a period of certified sickness absence on a Monday has been described before (Hill, 1929; Wyatt *et al.*, 1943; Gordon *et al.*, 1959) and at the days of shift change (Taylor, 1967). The peaks of duration of certified absence at 7, 14, and 21 days have also been described (Raffle, 1966). It is of interest that a different pattern occurs with self-certified absence, particularly in men over 40 years. The lowest rate among manual workers was found on a Thursday, which is pay day, but medically certified absence is lowest on Fridays. Both weekly patterns are more sociological than medical in nature, as is the return to work on a Monday, but with certification regulations this behaviour places a heavy load on the medical profession.

A "make-up" type of sick pay in which deductions are made for sick benefit entitlement unfortunately tends to send employees to their family doctor, since the waiting days and 13 weeks of benefit period must be recorded. It has been estimated that payment of benefit on the first day of sickness without waiting days would cost the State half as much again. However, waiting days are unusual in industrial sick-pay schemes. The suggestion that firms with such schemes could administer National Insurance benefit for their own employees would remove this anomaly, but this would involve a change in the law.

The low rate of self-certified absences among shift workers confirms the findings already reported that these men have less certified absence than day workers (Taylor, 1967). It would appear that these two groups behave in an entirely different way and that any physiological disadvantages of changing circadian rhythms are far outweighed by the advantages of higher morale and job identification found on continuous shift.

Finally, it is necessary to point out that these results relate to a company with a full-time occupational medical service, and the employees know that their sickness statements may be scrutinized by a doctor. This could be a disincentive to frivolous or unjustified declarations of sickness, and these arrangements may not be so acceptable in places without a medical service. This does not affect the suggestion that employers should treat manual workers as responsible adults.

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Sick Absence Certification. Analysis of one Group Practice in 1967

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Summary: Certificates of inability or fitness to work were issued on 6,161 occasions in one year in one group practice. Half the episodes of illness lasted for seven days or less, and two thirds of the episodes ended on a Sunday. Clearly in most cases the doctor does no more than countersign the patient's declaration of his fitness or not to work. Abolition of short-term medical certification would probably have little effect on absenteeism or the sums paid out as sick benefit.

Introduction

To the nation's industry sick absence certification is a major factor in loss of production. Most such certificates are issued by general practitioners, though the actual proportion is not known. The terms of service of a G.P. in the National Health Service include the duty of issuing certificates for National Insurance (N.I.) purposes to patients who need them.

Ashworth (1961, 1965) analysed the issuing of N.I. certificates in his Manchester practice for 12 months in 1955-6, and Grossmark and Sharer (1967) carried out a smaller survey over three months in 1966 in their North-west London practice. Handfield-Jones (1964) kept records in a rural practice for six weeks in 1964.

Taylor (1967a, 1967b, 1968) and Raffle (1965), representing the industrial health service, made extensive studies of sick absence in relation to the type of worker claiming benefit. Morris (1965) considered the problem from an epidemiological point of view. From time to time various Government departments publish reports, and Alderson (1967) has commented on these. The Office of Health Economics (1965) also synthesized this information to show various trends.

In 1964-5, as part of a more extensive study (Carne, 1969), it was shown that certificates were issued at 17.4% of all consultations (and at 26.2% of the consultations for patients aged 15-64). Because they constitute an important part of the day's work of a general practitioner, a further study was carried out for the whole of the year 1967 in an N.H.S. practice in West London.

The practice itself (Carne, 1961) is very mixed, 41% of its patients being immigrants. All patients are seen by appointment (Carne, 1967). There are three G.P. principals with average-size lists, and some of the patients are also seen by a trainee assistant.

During the year studied records of all sick absence certificates issued by the doctors in the practice were kept on specially designed record sheets. In this report information is presented about patients aged 15 to 64. At mid-year 1967 there were 4,397 patients in this age group on the practice register (2,276 males, 2,121 females).

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All certificates for sick absence were recorded, both official N.I. certificates and so-called private certificates. The N.I. certificates in that year were all on the new form Med. 3,¹ but for convenience we referred to them in our recording as though they were of the older type: "first," indicating N.I. certificates issued at the beginning of an episode; "intermediate," an open-ended N.I. certificate not issued at the beginning of an episode; and "final," an N.I. certificate issued at the end of an episode. "Private" certificates were supplied where needed and requested for the use of the employer; they were also supplied for a union or for private insurance.

Only certificates issued by doctors in the practice were recorded. In cases, for example, where patients began a sick absence with an attendance at hospital casualty department and later visited the G.P. for an intermediate or final certificate, the episode will have been recorded, but not the first certificate.

During the year certificates were issued for 1,623 episodes of sick absence (937 for males, 686 for females) to patients aged 15–64 (Table I). This is equivalent to 41.2 episodes per 100 males at risk and 32.3 per 100 females. Altogether 6,161 certificates of one sort or another were issued during the year—that is, almost 1.5 certificates per patient at risk. The women received fewer certificates than their menfolk; slightly more (1,291) were private than N.I. (1,120). The men received an exactly equal number (1,875) of N.I. and private certificates. Some of the 1,627 episodes began in 1966 (or even earlier); for them no first certificate was recorded in this study. Similarly, some episodes continued into 1968; for them also no final certificate appears here. For these reasons the number of first certificates does not correspond to the number of complete episodes.

TABLE I.—Number of Certificates Issued for 1,627 Episodes of Absence in a Population Aged 15–64

	National Insurance				Private			Total
	First	Int.	Final	Total	Total	With N.I.	Without N.I.	
Male ..	615	620	640	1,875	1,875	1,233	642	3,750
Female ..	358	389	373	1,120	1,291	929	362	2,411
Total	973	1,009	1,013	2,995	3,166	2,162	1,004	6,161

The number of patients who collected certificates was 1,191 (682 males, 509 females); this is equal to 30% of men and 24% of women surveyed. Of these, 273 (159 males, 114 females) had two or more episodes of sick absence (Table II). The distribution shown in Table II is not random but follows the "unequal chance" pattern long known to occur with accidents and more recently shown to apply to sickness (Taylor, 1967a; Froggatt, 1968).

TABLE II.—Numbers of Sick Absence Episodes of Patients Aged 15–64

	No. of Episodes									Total
	0	1	2	3	4	5	6	7		
Male ..	1,594	523	106	31	8	8	5	1		937
Female ..	1,602	395	76	23	7	7	0	1		686

The total number of days of absence from sickness (including weekends and holidays that might have intervened) covered by those certificates was 30,026 (17,265 males, 12,761 female). This is equivalent to 7.6 days per man and 6.0 days per woman at risk during the year (Table III). The average length of each episode was 18.3 days for men and 18.6 for women. Those who had two or more episodes of sickness were, overall, off work longer than those who had only one episode; but the individual episodes were shorter. We also recorded the day of the week on which the certificates were issued and—in the case of first

and final certificates—the day on which the episode actually began or ended (Table IV).

TABLE III.—Average Number of Days Off Work

	Patients at Risk	Each Episode	Patients with One Episode	Patients with Two or More Episodes	
				Total Time Off Work	Individual Episodes
Male ..	7.6	18.3	22.5	41.3	13.1
Female ..	6.0	18.6	20.5	32.8	15.0

TABLE IV.—Days of Week on Which Certificates were Issued and on Which Episodes of Sickness Began and Ended (Expressed as Percentages)

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
First ..	34.2	18.8	17.3	12.4	12.8	4.4
Intermediate ..	23.2	14.3	14.0	19.1	19.8	9.5
Final ..	20.4	13.7	13.6	15.2	22.5	14.7
Private ..	26.2	20.6	14.1	13.5	17.0	8.7
Work ended ..	41.6	15.4	13.6	13.2	11.2	5.0
Work resumed	65.6	10.7	11.4	7.0	3.6	1.8

The variations in the length of individual episodes is shown in Table V. Of the male episodes 51.1% lasted seven days or less, 37.2% lasted one to four weeks, and 11.5% were sick absences of more than one month. Four men had been receiving sick absence N.I. certificates for over two years, but none for more than five years.

TABLE V.—Durations of Sickness Absence Episodes Covered by Certificates Issued in 1967 (Expressed as Percentages)

Length of Episode	Male	Female
1 day ..	5.3	4.0
2–3 days ..	10.1	8.7
4–7 days ..	35.7	35.4
8–14 days ..	22.1	20.3
15–28 days ..	15.1	17.5
29–60 days ..	7.1	8.3
61–90 days ..	1.7	3.7
3–6 months ..	1.0	0.6
7–12 months ..	0.6	0.5
1–2 years ..	0.6	0.5
2–5 years ..	0.5	0.2
5+ years ..	0.0	0.3

Of the female episodes, 48.1% lasted seven days or less, 37.8% lasted one to four weeks, and 14.1% lasted more than a month. Three women had been receiving sick absence certificates for more than two years—one of them has been collecting certificates regularly for 30 years. In 1937 her left kidney was removed for pyelonephrosis. Postoperatively she developed a polyneuritis. At that time the diagnosis of poliomyelitis was made, but in retrospect it is thought that she probably had Guillain-Barré syndrome.

Other studies (Ashworth, 1961, 1965; Office of Health Economics, 1965; Taylor, 1967a) have shown variations in the sickness pattern with age. In our series we found a marked difference in the sickness pattern in the males aged 15–44 and those aged 45–64.

The older men had more absence for sickness: among the 604 men in the practice aged 45–64 the average was 16.3 days in the 12 months, while with the 1,672 younger men the average was only 4.4 days; of the older men 35.1% had one or more episodes of sick absence, against only 28.1% of the younger men.

An even greater difference is seen in the length of the episodes. Of the younger men's sick absences, 61.2% were for seven days or less at a time and 18.4% were for three days or less. Only 7.0% lasted longer than a month. Of the older men's sick absences, 22.6% lasted a month or more and only 30.6% were seven days or less. Less than 10% were for three days or less. On the other hand, of those who took sick leave 26.6% of the younger patients had more than one episode,

¹ Supplementary certificates, Med. 5, though recorded, have not been included in this report.

against 20.8% of the older men. Among the women a similar but less marked difference was found.

Discussion

In addition to the episodes recorded there will no doubt have been many not covered by any certificate. There will also have been some (number unknown) covered entirely by certificates issued at hospital or elsewhere.

In other published studies, where incidence rates relevant to the population at risk have been given, the population at risk has been expressed in terms of male or female *employees*. The term "employees" has presumably been used to indicate (a) those paying N.I. contributions and (b) those drawing sick or unemployment benefit who would otherwise be paying N.I. contributions.

In our practice we have not been able to separate the employed and potentially employed from the non-employed. To that extent our results are not directly comparable with the previous studies. The difference will most likely be found among the women, for the vast majority of our male patients are employed in one capacity or another. In fact, where comparisons are possible—for example, in the number of episodes of sick absence and the proportion of patients with one or more episodes—the rates in our study are very similar to those previously reported (Ashworth, 1961; Office of Health Economics, 1965; Taylor, 1967b).

Comment

Four features are worth emphasizing: (1) In the 12 months of 1967 three G.P. principals with an average-size list of patients issued sick absence certificates covering over 82 years (30,026 days) of such absence by their patients aged 15–64. (2) 51.1% of the episodes among the men and 48.1% among the women lasted seven days or less. (3) Men aged 45 and over had nearly four times as many days' sick leave as those aged 15–44, but the younger men had relatively more short periods off work. (4) Almost two-thirds (65.6%) of the episodes of sick absence ended on Sunday—that is, the patient resumed work on Monday.

It is sometimes assumed that the G.P. is in a position to control sick absence. "The Ministry is concerned to pay benefit to people who are genuinely sick. It has, of course, no control over the incidence of sickness. The claim must be accompanied by a medical certificate, and is thus backed by the opinion of a doctor that the claimant is away from work because he is too ill to be there" (McGinnis, 1968).

How true is this? Handfield-Jones (1964) says: "Examination by the doctor is usually a meaningless formality, since it is the patient who decides when he is fit to work." As often as not the patient reports to his doctor at the end of the episode—and goes to him only because he needs a certificate. The doctor can neither prove nor disprove the story, and is obliged to issue a certificate, which the patient all too often expects to cover him for a full seven days' absence.

Taylor (1969) has shown that industry does not necessarily suffer if employees are allowed to vouch for their own short-term sick absences. In January 1966 an attempt was made to reduce the work-load of the general practitioner by permitting him to issue a final N.I. certificate up to seven days before an episode ended. The evidence presented in this paper indicates that an even greater reduction would be made in the work-load if the Department of Health and Social Security, notwithstanding their need for accountability in the expenditure of public money, also permitted employees to dispense with the counter-signature of a doctor for their claims to short-term sick benefits.

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