

# General practice workload during normal working hours in training and non-training practices

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**SUMMARY.** *The aim of this study was to design and test a form to review workload in training and non-training practices. The study was conducted in the Oxford, Reading and Milton Keynes districts over a period of one week and involved 31 training and 21 non-training practices consisting of 156 and 66 doctors, respectively. Doctors in training practices (excluding trainees) spent a mean of one hour less per week in contact with their patients than doctors in non-training practices. Doctors in training practices spent approximately the same time per week on administration as those in non-training practices, one hour more in both meetings and non-practice work and almost two hours more in training and studying. The mean total practice workload per doctor in training practices was two hours more than in non-training practices and, when non-practice work was included, the difference increased to three hours. Compared with other doctors, trainees saw fewer patients in the surgery, in clinics and on visits, but spent more time on studying and training. This study produced broadly similar results to previous surveys, although doctors in the present study saw fewer patients each week and spent more time with each patient than in other studies.*

**Keywords:** *workload; patterns of work; training practices; non-training practices.*

## Introduction

THE complexity of general practice, the considerable variations in style, content and organization of individual practices, and the independent contractor status with its lack of structure and guidelines, conspire to make measurement of workload in this field particularly difficult. A number of studies have been done in recent years, ranging from audit in individual practices to the two national surveys of 1985–86<sup>1</sup> and 1989–90.<sup>2</sup> The national surveys form the basis for a consensus on the method of recording workload, but many smaller studies have used different methods, causing difficulties in comparing results. The recent changes in the National Health Service have, furthermore, focused attention on workload and exposed our inadequate knowledge of it.

The new contract for general practitioners, introduced in April 1990, with its greater emphasis on disease prevention may

increase workload and result in general practitioners sharing more of their work with nurses and practice managers. It is important, therefore, that family doctors have a reliable means of measuring their workload so that they can monitor these changes, establish priorities in patient care and be accountable to their patients and the public.

A study was therefore undertaken of workload, with the following objectives: to design a form to record workload which was simple to use, applicable to any practice and easy to analyse, either manually or by computer; to test the form by comparing workload in training and non-training practices; and to compare the results with those of previous workload studies.

## Method

The aim was to examine the whole of a general practitioner's workload in patient care, administration, management, teaching and study during normal working hours — 08.00 hrs to 18.00 hrs — in the course of one working week, Monday to Friday. Fifty eight practices, both training and non-training, were approached in the Oxford, Reading and Milton Keynes districts of the Oxford Regional Health Authority and invited to participate in the study. There were so many variations between different practices that a controlled study would have been inappropriate.

Initial contact was made by telephone followed by a letter detailing the rationale and method of the study which was to be held during a week in February 1989 when few doctors were likely to be on holiday. Trainees were given additional briefing at day release courses

A daily workload record form was designed for use with a set of instructions developed after a pilot run. The form enabled each participant to record aspects of patient care (surgeries, clinics and home visits), administration (both clinical and practice administration), meetings, training/study and telephone calls, medicals and non-practice medical work, at 15 minute intervals during the normal working day and out of hours. The quality of out of hours recordings did not match that of records made during the working day and it was therefore decided to exclude them from the results. However, when administration, meetings, training and studying were carried out in the evening, these recordings were included. Doctors were advised to practise using the form for two days before the study began. At the end of the study week forms were returned to the authors and the data were entered into a personal computer for analysis. The shading or highlighting of a time period and overwriting the number of patients seen allowed for easy assessment and calculation.

## Results

### Practices

Of the 58 practices approached, only one teaching and one non-teaching practice refused to participate although four others failed to make valid returns. Eventually, 222 doctors including 22 trainees in 52 practices — 31 training and 21 non-training — participated (Table 1). There were more than twice as many doctors from training practices as from non-training practices, which partly reflects the larger list sizes and the greater numbers of the training practices recruited into the study. Of the training prac-

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**Table 1.** Profile of training and non-training practices participating in study.

	Training practices (n = 31)	Non-training practices (n = 21)
No. of participating GPs (% of GPs in practices)	156 (83.9)	66 (85.7)
No. of participating WTE GPs	146.5	64.0
Mean no. of patients in practice	11 642	7815
Mean no. of patients for WTE GPs	2151	2088

n = number of practices in group. WTE = whole time equivalent.

tices, 74% had 9000 patients or more compared with only 38% of the non-training practices which were much closer to the national average in list size of 5476 patients (NHS Management Executive statistics branch, verbal communication, 1993).

Fifteen of the training practices (48%) had more than 75% of their patients in a city or town compared with 12 non-training practices (57%). In the remaining practices patients were more evenly distributed between town and country.

Of the 32 trainees in the participating practices, 22 took part — three were not in post at the time, three were on holiday, three chose not to take part, and one misunderstood the date of starting.

### Workload

Doctors in the non-training practices spent a mean of one hour longer than those in the training practices (trainees excluded) in contact with their patients during the study week in surgeries, clinics and on visits (25.9 hours versus 24.9 hours, respectively) (Table 2). Doctors in training and non-training practices spent approximately the same amount of time on administration while doctors in training practices spent just over one hour more in meetings, 1.7 hours more on training and studying and just over one hour more on non-practice work. The total workload per

**Table 2.** Breakdown of workload per doctor during the study week, by training and non-training practices.

Work area	Mean no. of hours spent during week	
	Doctors in training practices (including trainees) (n = 124.5 (146.5))	Doctors in non-training practices (n = 64.0)
<i>Patient contact</i>		
Surgeries	17.6 (17.1)	18.6
Clinics	1.6 (1.5)	1.7
Visits	5.7 (5.5)	5.6
<i>Practice work</i>		
Administration*	7.2 (6.5)	7.4
Meetings	2.8 (2.8)	1.7
Training/studying	2.5 (3.4)	0.8
Telephone calls	1.0 (1.0)	1.0
<i>Medicals (mainly insurance)</i>	0.9 (0.8)	0.6
<i>Non-practice work</i>	2.0 (1.8)	0.9
<b>Total workload</b>	<b>41.3 (40.4)</b>	<b>38.3</b>

n = number of whole time equivalent doctors in group. \*Clinical and practice administration. Ratio of time spent in patient contact: non-patient contact (excluding trainees, medicals and non-practice work) 67:33.

doctor per week in training practices was three hours greater than in non-training practices when trainee input was excluded.

Within training practices there were three categories of doctors — trainers, trainees and other principals — and their respective workloads are shown in Table 3. Trainees worked 5.4 hours less than other principals, spending a mean of 5.3 hours less in patient contact (19.6 hours versus 24.9 hours, respectively) and 4.4 hours less on administration. Trainees spent a mean of 6.5 hours more studying and training. Trainers spent the same amount of time as other principals in patient contact, but spent almost three hours more in training and studying. Trainers' total workload was approximately three hours longer per week than other principals.

There was a remarkable consistency in the time spent by all doctors on the telephone each week. This varied from 50 to 75 minutes per doctor, but many practices acknowledged that their recording of telephone calls was unreliable. It was decided therefore that a notional allocation of one hour per doctor per week should be made for the time spent on the telephone.

The consultation rates for the different groups of doctors in surgeries, clinics and on visits are shown in Table 4. The mean number of patients seen in an hour in surgeries for doctors other than trainees was highly consistent in training and non-training practices (5.6–6.0) and this consistency was even more marked in clinics and on visits. However, these figures concealed a wide variation both within practices and between practices in each group, such that in many groups consultation rates varied by a factor of more than two and in clinics in non-training practices by a factor of between four and five. Trainers had the narrowest range of variability. Trainees consulted at a considerably slower rate in the surgeries than other doctors (4.6 patients per hour).

Analysis of the mean number of patients seen during the study week confirmed the consistency between doctors other than the trainee in training practices and doctors in non-training practices (Table 5). Compared with other doctors, trainees saw fewer patients in the surgery, clinics and on visits.

### Discussion

The form used in the study bore some similarities to the one used in the general medical practitioners workload surveys.<sup>1,2</sup> In the

**Table 3.** Breakdown of workload during the study week among trainees, trainers and other principals in the training practices.

Work area	Mean no. of hours spent during week		
	Trainees (n = 22.0)	Trainers (n = 32.0)	Other principals (n = 92.5)
<i>Patient contact</i>			
Surgeries	14.3	17.6	17.6
Clinics	0.9	1.5	1.6
Visits	4.4	5.7	5.7
<i>Practice work</i>			
Administration*	2.6	7.6	7.0
Meetings	2.8	3.4	2.6
Training/studying	8.3	4.7	1.8
Telephone calls	1.0	1.0	1.0
<i>Medicals (mainly insurance)</i>	0.1	0.8	1.0
<i>Non-practice work</i>	0.7	1.4	2.2
<b>Total workload</b>	<b>35.1</b>	<b>43.7</b>	<b>40.5</b>

n = number of whole time equivalent doctors in group. \*Clinical and practice administration.

**Table 4.** Mean number of patients seen in an hour by doctors in training and non-training practices.

	Mean number (range) of patients seen in an hour				
	Doctors in non-training practices (n = 64.0)	Training practices			
		All doctors (n = 146.5)	Trainees (n = 22.0)	Other principals (n = 92.5)	Trainers (n = 32.0)
Surgeries	6.0 (4.6–8.6)	5.8 (3.9–7.9)	4.6 (2.8–6.1)	5.9 (3.0–8.0)	5.6 (4.9–5.8)
Clinics	4.4 (1.5–7.0)	4.4 (2.7–7.5)	3.6 (2.0–5.0)	4.5 (3.1–7.6)	4.5 (3.5–4.9)
Visits	2.8 (1.8–3.6)	2.7 (1.8–4.1)	2.2 (1.5–4.0)	2.7 (1.9–6.0)	2.8 (1.8–3.4)

n = number of whole time equivalent doctors in group.

**Table 5.** Mean number of patients seen during the study week by doctors in training and non-training practices.

	Mean number of patients seen during week		
	Doctors in non-training practices) n = 64.0	Training practices	
		Trainees (n = 22.0)	Doctors other than trainees (n = 124.5)
Surgeries	106.0	66.3	105.6
Clinics	7.7	4.6	6.6
Visits	16.2	9.4	15.3
Total	129.9	80.3	127.5

n = number of whole time equivalent doctors in group.

search for simplicity some detail and variety of information were sacrificed. For example, there was no record of the practice nurses' work, nor of consultations between nurse and doctor, nor of the substance of telephone calls. The form was easily completed within a few minutes at the end of the day and much of the information could, if necessary, be retrieved from the appointments and visits books. Telephone calls were the only exception in that they had to be recorded at the time they occurred which was easily overlooked by busy doctors.

A major problem with workload studies is persuading doctors to record activities at all and then to do so accurately. The simplicity of this form, however, should encourage its accurate use, especially when the motivation for recording comes from within the practice. We were, however, vulnerable to the criticism that instructions in the technique of recording 'out of hours' work did not take enough account of the difficulties of recording in a less structured setting. There is provision in the design of the form to collect additional information about other aspects of workload such as use of laboratory investigations or referral to hospital.

The findings are discussed with reference to four previous studies: the general medical practitioner workload surveys 1985–86 and 1989–90,<sup>1,2</sup> the workload review undertaken by the Birmingham Research Unit<sup>3</sup> and the paper by Wilkin and Metcalfe.<sup>4</sup>

Recruitment of practices into the study was selective and it cannot therefore be claimed that this workload was representative of that of general practitioners in the Oxford Regional Health Authority area as a whole. There are other factors which make comparison with other studies difficult.

The data in this study apply only to clinical work involving patient contact during 'social' hours, although administration, meetings and study carried out outside social hours were included. This must taken into account when comparing our figures with those of other studies. For example the general medical practitioner workload surveys' figures<sup>1,2</sup> included visits made while on call out of hours, and these were excluded from our

study. Consultations also included telephone consultations and other patient enquiries, for example through a nurse or receptionist, whereas in the present study these were not included. However, looking at comparable figures, it was found that the total number of hours worked per doctor per week (excluding trainees and excluding on call) were similar: 40.3 hours in the present study compared with 38.2 hours in the 1985–86 study and 40.9 hours in the 1989–90 national review study.<sup>1,2</sup> The total number of hours per doctor in surgery consultations (including clinics) in a week was higher in the present study: 19.6 hours compared with 17.1 hours in the 1985–86 workload study and 17.4 hours in the 1989–90 study.<sup>2</sup> However, there were fewer patients seen by doctors other than trainees during those hours in the Oxford region (even allowing for recording differences) — 113 seen in surgery and clinics compared with 151 in the 1985–86 study — and a longer mean time spent with each patient (10.2 minutes in the Oxford region, 8.3 minutes in the 1985–86 study and 9.0 minutes in the 1989–90 study).

In a study in Bromley<sup>5</sup> it was found that a mean of 128 patients per doctor per week were seen in the surgery and in clinic consultations compared with 113 in the present study. The number of home visits per doctor per week (excluding trainees and on call) was similar (16 and 15.6 respectively). In both studies only one week was chosen and this may mean that the figures are not representative of the year as a whole, although Hallam and Metcalfe found that seasonal variations did not have much effect on consultation rates.<sup>6</sup>

As noted earlier, practices were not matched and, therefore, figures comparing training and non-training practices should be interpreted with care. However, in general, the expectation that training practices would devote more time to training and studying and proportionately less to patient contact was borne out in our study. There are no specific comparisons in the literature, although there have been studies which have looked at the workload of trainees and principals.<sup>7,8</sup> In Fleming's study, trainees saw 98 patients per week in surgery consultations and 16 on home visits compared with 66.3 and 9.4, respectively in our study. Principals in Fleming's study saw 150 in the surgery and 25 on home visits compared with 105.7 and 15.6, respectively.

The implementation of the new contract for general practitioners has probably resulted in an increased administrative workload, and it will be interesting to compare time in patient contact (including surgery consultations, home visits and telephone consultations) with non-patient contact time (administration, teaching/studying and meetings). In our study, the ratio of patient contact: non-patient contact time was 67:33. In the workload study in 1985–86 it was 79:21, but these figures are not directly comparable.<sup>1</sup>

In future it will be interesting to observe changes in the ratio of patient contact: non-patient contact time and in the total number of hours worked. However, in order to make meaningful comparisons between studies it will help in the future if the same

criteria are adopted and the same forms used for each study. The Royal College of General Practitioners should have a coordinating role in this respect.

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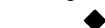
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