

# Undergraduate teaching in the community: Can general practice deliver?

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## SUMMARY

**Background.** All UK medical schools are revising their curricula following the General Medical Council recommendations to increase general practice involvement in undergraduate education. However, workload in general practice has increased in recent years, raising questions about its ability to maintain, let alone extend, its educational activities.

**Aim.** The aim of this study was examine whether recent changes in general practice have affected delivery of practice-based undergraduate education and to assess the extent to which practices will be able to increase their involvement in teaching.

**Method.** A postal questionnaire survey was conducted of the lead clinical teachers and their partners in the practices to which students from Leicester Medical School had been attached in the last 2 years.

**Results.** The questionnaire was completed by 32 out of the 39 lead teachers and 134 of the 150 partners, an overall response rate of 88%. There was widespread support for departmental teaching requirements, but only 17 lead teachers (44%) felt that the suggested reduction by 25% of patients seen per session while teaching was feasible. A total of 14 lead teachers (47%) felt that the ability of their practice to deliver high-quality teaching had declined since 1990. Altogether, 113 (87%) of all doctors in teaching practices felt that time pressures had increased during this period, and 139 (88%) felt that present levels of remuneration were inadequate. The majority of these doctors felt that general practice was the preferred location for learning generic clinical skills and were interested in participating. Nevertheless, most were not prepared to increase their involvement in teaching under present arrangements.

**Conclusion.** Practice-based teachers appreciate the need for quality teaching, remain enthusiastic about teaching and are, in principle, willing to take an increased teaching load. However, recent changes have made delivery of teaching more difficult, and if an expansion in practice-based teaching is to occur, more realistic levels of funding and support are a prerequisite.

**Keywords:** undergraduate education; workload; curriculum development.

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## Introduction

ALL UK medical schools are fundamentally reshaping their undergraduate curricula following recommendations from the General Medical Council.<sup>1</sup> These include an increased emphasis on teaching in the setting of general practice,<sup>2</sup> with several schools planning a two- or threefold increase in the proportion of clinical teaching in the context of general practice.<sup>3</sup> *SIFT into the Future* proposed substantial changes in funding mechanisms to facilitate this shift.<sup>3</sup> The service increment for teaching (SIFT) is paid to cover the extra costs associated with teaching. Previously only available to hospitals, it has been available to general practice from April 1996. Although this principle has been accepted by the government, it is the responsibility of regional managers and medical school deans to engage in detailed local negotiation. Similar changes have been proposed for Scotland and Northern Ireland. Although historically general practice teaching has been delivered mainly on the basis of enthusiasm and goodwill,<sup>4,5</sup> the 1990 general practitioner Contract introduced a national rate of NHS fees to offset the costs of teaching while delivering clinical care, at the time of this study set at £12 per 3-h session.<sup>6</sup> Nevertheless, the workload of general practice has increased significantly since 1990 with the requirements of the contract itself, the NHS reforms, shifting patterns of care and increasing patient need and demand.<sup>7,8</sup>

In the light of these competing commitments, practices involved in undergraduate medical education are being forced to consider whether they can maintain, let alone extend, their involvement in teaching.<sup>9</sup> All departments of general practice will have a key role in recruiting and supporting practices for this extended task.<sup>4</sup>

As the UK's newest medical school, Leicester University's curriculum has always contained a strong general practice element,<sup>10</sup> and since 1978, we have built up a network of some 40 teaching practices. These practices are each offered up to five students per year on 5-week full-time attachments. The department currently makes several demands on practices when teaching students. These include a maximum of three partners to teach any one student, a maximum of one session per week with a non-medical team member and a reduction in consultation rate of at least 25% when a student is present. Clinical teachers are also asked to observe and provide feedback to students on their consultations and to video record a sample of these for later analysis. Teaching is focused on generic consultation skills and synchronized with departmental teaching. Recently, it has become increasingly difficult to recruit new practices, and several established practices have chosen to reduce or withdraw from their teaching commitments — a situation repeated in many other medical schools.

Therefore, a survey of teaching practices was undertaken to discover (1) the extent to which recent changes in general practice had affected the ability of practices to deliver their teaching and (2) their response to requests for more teaching in a general practice setting. Although based on one medical school, all others are facing identical problems. Consequently, we believe that what can be learned from this study is likely to be of national relevance.

## Method

Two separate questionnaires were sent to the 39 practices which had participated in practice-based clinical teaching of medical students organized by our department within the previous 2 years. The main questionnaire was sent to the lead clinical teacher in every practice. This included questions about the current organization of teaching, the perceived view of the practice as a whole to teaching and how these had changed since the introduction of the 1990 general practitioner contract. A subset of the questionnaire was sent to all remaining principals ( $n=150$ ) to seek their individual views on their current and future involvement and interest in teaching, and to identify the factors which encourage them to extend their support of practice-based teaching. Non-respondents were reminded first by post and secondly by telephone.

## Results

All percentages have been rounded to the nearest whole number. The questionnaires were completed by 32 out of the 39 lead teachers and by 134 of the 150 partners, giving response rates of 82 and 89%, respectively. There was an overall response rate of 88% as 166 out of the 189 principals in the teaching practices responded.

### Profile of teaching practices

The median number of whole-time equivalent partners was 4.5, with a median practice list size of 9100 and an average of 1935 patients per principal. Eight practices (25%) described their location as urban, 11 (34%) as suburban, seven (22%) as market town and six (19%) as rural. Nineteen (59%) were also vocational training practices and 18 (56%) were fundholding practices. Nine (28%) had taken students since the start of clinical teaching in the medical school in 1978. The median number of years experience of undergraduate teaching was 10.

### Current teaching activities

Most teaching practices chose to take four (eight practices, 25%) or five students per year (16 practices, 50%). Lead clinical teachers were asked about the desirability and feasibility of departmental teaching requirements. The results are shown in Table 1. All departmental requirements were thought desirable by three-quarters or more respondents. For most requirements, a lower

**Table 1.** View of lead teachers on the desirability and feasibility of departmental requirements ( $n = 32$ ).

Departmental requirement	Desirable	Feasible
Maximum of three partners teaching any one student	24 (75%)	22 (68%)
Maximum of one session per week with non-medical team member	26 (81%)	30 (94%)
Reduction of patients per session by 25%	28 (88%)	17 (44%)
Video recording of student consultations	25 (78%)	22 (69%)
Direct observation of student consultations	24 (75%)	24 (75%)
Synchronization of practice and departmental teaching	27 (84%)	21 (66%)
Teaching should focus on clinical method	28 (88%)	28 (88%)

proportion of respondents agreed they were feasible. The largest discrepancy between what was seen as desirable (88%) or feasible (44%) was in the reduction of consultation rate while teaching. Nevertheless, the median number of patients seen during a teaching session was 12, at a median booking interval of 10 min compared with medians of 18 patients and 8 min when not teaching. Out of the 28 practices with appointment systems, 24 (86%) increased appointment length during teaching sessions.

### Changes since 1990

Lead clinical teachers were asked how the organization of teaching had changed since 1990. The number of patients seen during a teaching session had increased in eight practices (29%) and decreased in six (21%). As shown in Table 2, however, almost half the lead teachers felt that the quality of teaching had deteriorated since 1990, with 80% stating that it had become more stressful and 40% reporting less enthusiasm. Table 3 shows the views of all doctors in teaching practices. These results demonstrate that increased time pressures were felt by 87%, resulting in less time for teaching reported by 55%. None of these results differed significantly when analysed by location or fundholding status.

### Into the future

Lead teachers were asked whether, under present arrangements, their practice could increase teaching commitments. Out of the 19 practices not taking a student in each cohort, five (26%) were willing to increase, but 14 (74%) were not. Four practices (13%) were willing to increase the number of students taken per cohort,

**Table 2.** Views of lead teachers on changes in the delivery of teaching since 1990 ( $n = 32$ ).

Views	More	Same	Less	Number of responses (100%)
Ability to provide high-quality teaching	5 (17%)	11 (37%)	14 (47%)	30
Enthusiasm for teaching	4 (13%)	14 (47%)	12 (40%)	30
Stress of teaching	24 (80%)	6 (20%)	0	30
Resistance from partners	12 (39%)	15 (48%)	4 (13%)	31

**Table 3.** Views of all doctors in teaching practices on the delivery of teaching since 1990 ( $n = 166$ ).

Views	More	Same	Less	Number of responses (100%)
Time available for teaching during a consulting session	13 (9%)	52 (36%)	78 (55%)	143
Enjoyment of teaching	27 (21%)	75 (57%)	30 (23%)	132
Time pressures	113 (87%)	15 (12%)	2 (2%)	130

but 27 (87%) were not (one missing value). These results did not differ significantly when analysed by location or fundholding status.

All 166 doctors were asked whether the present level of remuneration, set at £12 per 3-h session, was adequate. Out of the 158 who answered, 139 (88%) thought it was inadequate. The median amount suggested was £44, with an interquartile range from £30 to £50.

The 166 partners were asked about their preferred location for aspects of undergraduate teaching, and whether they would like to be involved in teaching these topics. General practice was selected more frequently than hospital for all topics except teaching physical examination skills. The topics for personal involvement in teaching which gained most support were communication skills (95%), patient management (87%) and problem solving (84%). Detailed results are shown in Table 4.

### Discussion

Although this study was carried out in the teaching practices associated with a single medical school, it is likely that perceptions of problems and opportunities faced would be similar in the teaching practices of most UK medical schools. This is supported by a recent survey which reported that, although not all departments of general practice were facing recruitment difficulties, several foresaw difficulties in expanding general practice-based teaching.<sup>5</sup> Our respondents come from practices committed to and experienced in education and teaching, which are the very practices which medical schools would expect to form the core contributors to the planned expansion of undergraduate teaching. Furthermore, the very high response rate (88% overall) makes it likely that our results not only truly reflect the views of experienced practice-based teachers but also demonstrate the importance which respondents attach to the topic.

The survey provides clear messages concerning the strengths and weaknesses of general practice as a resource for undergraduate medical education. On the positive side, practice-based teachers are likely to be highly supportive of their academic departments setting explicit educational requirements. Three-quarters of all principals of teaching practices enjoy their teaching duties,

and general practice is seen as the preferred location for teaching and acquiring a wide range of generic clinical competencies. Furthermore, the vast majority of practice-based teachers expressed interest in being involved in the teaching of almost all of them. Thus, most practice-based teachers retain an enthusiasm for being involved in high-quality teaching.

On the other hand, the capacity of practices to deliver high-quality teaching has clearly declined since the 1990 general practitioner Contract. It is a matter of concern that more than four-fifths of practice-based teachers believe that teaching has become more stressful and that time pressures on teaching have increased. These pressures are reflected in the view that reducing consulting rates by 25% per teaching session, although desirable, is not always feasible. A substantial minority (40%) of lead teachers feel that they have less enthusiasm for teaching and have encountered more resistance from their partners. Almost half believe the quality of teaching has deteriorated.

There is evidence on a national scale that 'general practice is not only becoming busier but the people seen are more severely ill than a decade ago'.<sup>7,11</sup> It is clear that several teaching practices have experienced great difficulty in accommodating such an increase in clinical service load, while at the same time maintaining the quality of undergraduate clinical teaching. Understandably, many practices have opted to maintain the level of clinical services at the expense of student teaching, whereas others have struggled under increasing pressures to deliver both. In the face of this expanding workload and our finding that 88% of respondents feel that remuneration for teaching is inadequate, it is not surprising that there is a reluctance to expand teaching activities at current levels of support.

If an expansion of undergraduate teaching in general practice is to become a sustainable reality, teaching practices must be able to deliver both high-quality clinical care and teaching, without the levels of stress and time pressures mentioned above. Medical schools can no longer expect teaching practices to undertake their teaching responsibilities on a 'grace and favour' basis. To provide protected time, average list sizes per doctor in teaching practices will have to be reduced. This can only be accomplished by providing secure funding, perhaps on a rolling

**Table 4.** Views of all partners' on choice of location for teaching topics and personal interest in teaching (*n* = 166).

Topic	Preferred location			Interested in teaching	Number of responses (100%)
	GP	Hospital	No preference		
Health promotion	143 (88%)	1 (1%)	19 (12%)	115 (69%)	163
Communication skills	130 (79%)	3 (2%)	31 (19%)	157 (95%)	164
Community aspects of other specialities	118 (72%)	14 (9%)	32 (20%)	74 (45%)	163
Management	115 (71%)	6 (4%)	42 (26%)	145 (87%)	163
Teamwork	104 (64%)	4 (3%)	55 (34%)	117 (71%)	163
Problem solving	103 (63%)	13 (8%)	48 (29%)	140 (84%)	164
History taking	71 (43%)	51 (31%)	42 (26%)	119 (72%)	164
Physical examination	38 (23%)	83 (51%)	43 (26%)	103 (62%)	164

contract, which practices can use either to compensate for reduced list sizes or to buy additional medical and other support time. This is directly analogous to the use of SIFT monies in teaching hospitals.<sup>3</sup> Heads of university departments of general practice have recommended that the rate for service support for teaching in general practice should be set at the target gross income of an NHS general practitioner (Association of University Departments of General Practice, personal communication). This would enable practices to provide protected time without the financial detriment which currently applies.

If appropriate support mechanisms can be put in place and set at the correct level, this would also help to ensure the proposed increase in involvement of general practice in undergraduate medical education.<sup>1,3</sup> In turn, this would also facilitate the further development and implementation of a wide variety of teaching methods in general practice and encourage an ever-broadening variety of learning objectives. Without these changes, the planned expansion will not be possible and the motivation and skills of those who remain involved will inevitably decline.

### References

1. General Medical Council. *Tomorrow's doctors. Recommendations on undergraduate medical education*. London: General Medical Council, 1993.  
Robinson LA, Spencer JA, Jones RH. Contribution of academic departments of general practice to undergraduate teaching, and their plans for curriculum development. *Br J Gen Pract* 1994; **44**: 489-491.
2. Advisory Group on SIFT. *SIFT into the future*. London: Department of Health, 1995.
3. Fraser RC, Preston-Whyte ME. *The contribution of academic general practice to undergraduate medical education*. Occasional Paper 42. London: Royal College of General Practitioners, 1988.
4. Bird DF. Teaching students in the community. *BMJ* 1994; **309**: 1229.
5. Department of Health, National Health Service. *Statement of fees and allowances payable to general medical practitioners in England and Wales*. London: Department of Health, 1994.
6. Royal College of General Practitioners, Office of Population Censuses and Surveys and Department of Health. *Morbidity statistics from general practice. Fourth national study, 1991-1992*. London: HMSO, 1995.
7. Health Departments and BMA. *General Medical Practitioners' Workload Survey 1992-93: Report to the doctors' and dentists' review body*. Leeds: NHS Executive, 1994.
8. Iliffe S. All that is solid melts into air - the implications of community based undergraduate medical education. *Br J Gen Pract* 1992; **42**: 390-393.
9. Fraser RC, McAvoy BR. Teaching medical students at Leicester: the general practice approach. *Med Teach* 1988; **10**: 209-217.
10. Ibrahim S. Changing patterns of consultation in general practice: Fourth National Morbidity Study, 1991-92. *Br J Gen Pract* 1995; **45**: 283-285.

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