Survey of general-practitioner hospital appointments in Scotland

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THE relationship between general practice and the hospital service has been the subject of widespread debate and discussion for years. Although there is general agreement on the need for a closer association between hospitals and general practitioners there is considerable uncertainty on what the exact nature of this association should be (Evans, 1969). The main objectives of the present study were therefore to identify the range of part-time hospital work being done in Scotland by general practitioners, and to seek their views on various aspects of this work. By so doing it was hoped to obtain information on what constitutes a satisfying part-time hospital appointment from the general practitioner's point of view.

Methods

There are two principal types of appointment held by general practitioners in the hospital service. One is an appointment to cottage hospitals, or other general-practitioner hospital units, where they can admit and treat patients from their own practices. The other is an appointment as a part-time medical officer, usually in a specific specialty, working under the general supervision of a hospital consultant. In addition there are a handful of part-time consultant and medical assistant posts which are also held by general practitioners.

The numbers of doctors holding these appointments are published in the Scottish Home and Health Department's staffing statistics. However, not all the doctors indicated in these lists are, in fact, practising general practitioners. Because of this and other uncertainties it was decided to use the National Health Service superannuation records to identify the general practitioners to be included in the survey. A computer listing of all general practitioners holding part-time hospital appointments in Scotland on the 30 September, 1969 was obtained. This showed a total of 625 such doctors representing 23.9 per cent of all general practitioners practising in Scotland on that date.

The survey was conducted using a postal questionnaire containing precoded closed-ended questions, but which also invited some open-ended replies. A pilot survey was carried out using a one in six systematic sample of the names appearing on the superannuation computer list, and the questionnaire modified in the light of this experience. The survey proper commenced on 2 November, 1970, and, after two follow-up letters at approximately two, fortnightly intervals, a response rate of 84.5 per cent was obtained.

Additional data on the practices of the doctors in the survey were obtained from the Scottish Home and Health Department. This with the information from the questionnaire was coded on to 80-column punch cards and the subsequent analysis carried out using a mechanical card sorter.

Population surveyed

By the time the questionnaires were sent out (November, 1970), some doctors who were included in the list of general practitioners holding part-time hospital appointments on 30 September, 1969, had resigned their appointments, retired from practice, or had died.

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It was possible to identify 18 such doctors before the survey started and, as a result, only 607 questionnaires were sent out. Of those, 513 were returned including 53 from doctors who, for one reason or another, no longer held hospital appointments.

Among the remaining 460 questionnaires were 131 from doctors who held more than one type of appointment. As this made interpretation of their answers somewhat ambiguous they were excluded from the survey. This left a final total of 329 questionnaires available for the main analysis. Table 1 illustrates the distribution of the numbers of doctors who returned these questionnaires by the type of hospital appointments which they held.

TABLE 1

TYPE OF HOSPITAL APPOINTMENT

Appointments	*Number of doctors*
Appointments in medical specialties	35
Appointments in surgical specialties (including accident and emergency)	24
Appointments in geriatrics	54
Appointments in 'minor' specialties (i.e. VD, ENT, dermatology, ophthalmology)	15
Appointments in psychiatry	10
Appointments in anaesthetics	22
Appointments in other specialties (including paediatrics, radiology, obstetrics/gynaecology, laboratory medicine)	13
*Miscellaneous (e.g. Staff medical officer, administration)	11
Total specialty appointments	184
Appointments in general-practitioner hospital units (i.e. general-practitioner hospital appointments).	145
Total all appointments	329

*This group of doctors have been excluded from some of the later analyses as their appointments did not appear to embrace 'hospital' work in its traditional sense.

The doctors in the two main types of appointments, specialty appointments and general-practitioner hospital appointments, were compared by age, qualifications, full-time hospital experience, and practice characteristics. Table 2 illustrates the results.

In relation to the differences in proportion of doctors with higher qualifications, it should perhaps be pointed out that only 31(16·9 per cent) of the doctors in the specialty group had higher qualifications which were relevant to their part-time hospital work. Similarly, although there is no difference in the extent of the full-time hospital experience of the two groups, the fact that four fifths of the doctors in the specialty group had spent one year or more in full-time hospital work is slightly.misleading, in that only just over a third had had any experience in the specialty in which they were now working part-time. This applied to all the specialty appointments with the exception of those in medicine and surgery where a much higher proportion of doctors had had relevant experience (80·C per cent and 91·6 per cent respectively).

TABLE 2

COMPARISON BETWEEN DOCTORS IN SPECIALTY APPOINTMENTS AND GENERAL-PRACTITIONER HOSPITAL APPOINTMENTS

(Figures in brackets indicate numbers of doctors involved)

Doctors	*Specialty appointments*	*General-practitioner hospital appointments*
Mean age (years)	43·6	45·2
*Percentage with higher qualifications	*47·9%* (N=88)	*34·5%* (50)
Proportion with more than 12 months full-time hospital experience.	*80·9%* (N=148)	*81·1%* (117)
Mean list size (patients per doctor)	1978	1716
*Percentage with urban practices	*66·1%* (N=119)	*22·8%* (33)
Percentage with more than one partner	*54·6%* (N=101)	*60·1%* (87)

* Differences are statistically significant (P<0·05).

Results

Hospital of appointment

The appointments were held in a wide variety of hospitals. As expected the majority (56·5 per cent) of doctors with appointments in general-practitioner units worked in small acute hospitals of less than 50 beds. About a quarter worked in what are administratively described as mainly acute, or partly acute (including convalescent) hospitals. However, 15 (ten per cent) worked in acute hospitals with more than 50 beds although none were in teaching hospitals.

In contrast, those doctors holding specialty appointments appeared to work in a wider variety of hospitals; 49 (28·4 per cent) worked in teaching hospitals; 39 (22·7 per cent) worked in large acute hospitals with more than 50 beds; 36 (21·0 per cent) worked in mainly long-stay or long-stay hospitals (almost exclusively in the specialty of geriatrics); 22 (12·8 per cent) worked in mainly or partly acute (including convalescent) hospitals; ten (six per cent) worked in psychiatric hospitals, while the remaining 17 (ten per cent) worked in the smaller acute hospitals or in specialist hospitals.

Time spent on appointments

Each doctor was asked to estimate approximately the amount of time he spent on his hospital work per week.

The doctors appointed to general-practitioner units spent on average an estimated 6·5 hours per week on their hospital work (median value 6·0 hours). The average of the estimates by those in specialty appointments was 8·1 hours per week (median value 7·3 hours). Within the latter group most time seems to have been spent by the doctors working in psychiatry. The mean value of their estimates was 10·0 hours (median value 9·0 hours).

Emergency work

Most of the doctors (89·9 per cent) working in general-practitioner units stated that they undertook 'on call' emergency duties as part of their hospital work. This compares with just under two thirds (62·0 per cent) of those holding specialty appointments. Almost all of the former (98·5 per cent) shared these duties with other general practitioners as did nearly three quarters of the latter (72·3 per cent). In fact among the specialty appointments, only in general medicine and in anaesthetics did a significant proportion of doctors share such duties with hospital staff (20·0 per cent and 28·6 per cent respectively).

Nature of hospital work undertaken

Table 3 illustrates the kind of hospital work undertaken by the doctors in the main types of appointments.

TABLE 3

NATURE OF WORK UNDERTAKEN

(Figures in brackets indicate numbers of doctors involved)

Activities	*Specialty appointments (% of doctors)*	*Cottage hospital appointments (% of doctors)*
Formal ward rounds and case conferences	*67·0* (N=116)	*69·0* (N=100)
Clinical work on wards	*63·0* (N=109)	*69·0* (N=100)
Clinical work in operating theatres	*26·0* (N=45)	*25·5* (N=37)
Clinical work in casualty departments	*17·9* (N=31)	*64·8* (N=94)
Clinical work in outpatient departments	*26·0* (N=45)	*16·8* (N=22)
Laboratory work	*11·2* (N=19)	*11·1* (N=16)
Administrative work (e.g. writing up case records)	*55·5* (N=96)	*45·6* (N=64)
Teaching	*18·3* (N=35)	*1·4* (N=2)
Total number of doctors	*100·0* (N=173)	*100·0* (N=145)

While practically all the doctors working in general-practitioner units were looking after patients from their own practices, only 15 (8·2 per cent) of those in specialty appointments were doing this to any extent. Similarly only 24 (12·0 per cent) of the latter saw significant numbers of their own patients either in casualty or in other outpatient departments.

Another feature which is not represented in the table is the fact that 51 (70·8 per cent) of the doctors undertaking outpatient duties as part of a specialty appointment were seeing new referrals from other practices. In the case of the minor specialties this proportion rose to 92·0 per cent. Nearly three-quarters of this group were usually the only doctors seen by such patients in the course of their outpatient consultations.

Not surprisingly, there were wide variations in the distribution of activities undertaken between the different specialities. For example, about three-quarters of the doctors holding posts in the medical, geriatric and psychiatric specialties did either ward rounds or clinical work on the wards compared with less than half of those who worked in the surgical or minor specialties. Not surprisingly, only in surgery and anaesthetics did a significant proportion of doctors participate in work in either operating theatres or casualty departments. Most of the doctors (86·7 per cent) in minor specialties were involved only in outpatient work, while about a third in the medical and surgical specialties, and only two in geriatrics, did this. Few undertook any laboratory work. More than half the doctors in anaesthetics, medicine, or surgery stated that they did not do any administrative work such as writing case records. These were the only three specialties however, where significant numbers of doctors appeared to participate in teaching activities.

Value of activities

All the doctors were invited to rate each of their hospital activities according to its interests to them and its usefulness to the work of their practices. A five-point scale was provided for this purpose in the questionnaire. The proportions of doctors rating each activity in the first two places of the scale are shown in table 4.

TABLE 4

INTERESTS AND USEFULNESS OF ACTIVITIES

Activity	*Interest*		*Usefulness*	
	Specialty (% doctors)	*Cottage hospital (% doctors)*	*Specialty (% doctors)*	*Cottage hospital (% doctors)*
Ward rounds and case conferences	*78·0*	*72·0*	*56·5*	*69·6*
Clinical work on wards	*73·4*	*84·0*	*58·6**	*75·0**
Clinical work in operating theatres	*78·0*	*73·0*	*44·4*	*65·0*
Clinical work in casualty department	*63·0*	*65·0*	*53·0*	*64·0*
Clinical work in out-patients	*79·2*	*72·7*	*52·0*	*50·0*
Laboratory work	*42·1*	*16·7*	*26·4*	*43·8*
Administrative work	*18·1*	*15·6*	*22·4*	*42·2*
Teaching	*68·5*	numbers too small for comparison	*34·2*	numbers too small for comparison

* Difference is statistically significant ($P<0·05$).

Table 4 shows that two thirds to three quarters of the doctors in each group found their hospital activities (with the exception of laboratory and administrative work) to be of more than a passing interest to them. There are no striking differences between the two groups in this respect. On turning to the usefulness ratings, however, a higher proportion of the doctors working in the general-practitioner units appear to have found their hospital activities useful to the work of their practices than in the specialty appointments. This probably reflects the fact that the doctors in these units were largely treating patients from their own practices, while the others were dealing with patients from other practices.

There are again differences in the way individual activities were rated among the various specialty appointments. For example, less than half the doctors in surgery or geriatrics who undertook formal ward rounds or case conferences found these particularly useful compared with about two thirds in the other specialties. Clinical work in the ward is considered useful by less than a third of doctors working in psychiatry and the minor specialties. Finally, just over three quarters in the latter group found out-patient work particularly useful compared with only a third of those working in general surgery.

Contact with hospital staff

An attempt was made to obtain information on the amount of contact which the doctors in the different types of appointment had with hospital staff during their part-time hospital work.

Not surprisingly, there was significantly more contact with hospital senior and junior medical staff and significantly less contact with other general practitioners among the doctors working in specialty appointments compared with those in general-practitioner units. In the case of senior staff and junior staff the proportions were 77·5 per cent and 38·2 per cent of the doctors in the former group compared with 40·0 per cent and 0·8 per cent in the latter group. However, only a third of doctors holding surgical appointments and only a quarter of those in anaesthetics or the minor specialties reported any contact with senior medical staff. For contact with other general practitioners, the respective figures were 20·2 per cent and 42·8 per cent.

Access to beds

Of the 145 doctors who worked in general-practitioner hospital units, 140 said that

they had access to hospital beds to which they could admit their own patients and retain full responsibility for their treatment; 48 (34·0 per cent) of these doctors stated categorically that they would not have sought part-time hospital work without this. Of the 173 doctors who worked in specific specialties, 139 said that they had no such access; 46 (33·1 per cent) of this group indicated a definite preference for an appointment where this facility existed, although in the case of geriatrics this proportion rose to 57·3 per cent.

Among the doctors with appointments in general-practitioner units, it is interesting to note that only eight doctors (17·4 per cent) of those with higher qualifications felt that access to hospital beds was an essential prerequisite of their appointment compared with 40 (42·4 per cent) of the others.

Advantages of the appointments

Each doctor was invited to describe what he felt were the main advantages of his hospital appointment. The four most commonly mentioned answers by the two main groups of doctors are given in order of frequency in table 5.

TABLE 5

ADVANTAGES OF APPOINTMENTS

Specialty appointments		*General-practitioner hospital appointments*	
Advantages	*Doctors (%)*	*Advantages*	*Doctors (%)*
1. Contact with hospital staff	*58·6* (N=95)	1. Advantage to patients (e.g. convenience, continuity etc.)	*51·1* (N=74)
2. Continuing education	*48·2* (N=78)	2. Access to hospital beds	*30·4* (N=44)
3. Variety and interest to work	*47·5* (N=77)	3. Access to hospital equipment	*29·6* (N=43)
4. Improved standard of care in practice	*34·6* (N=56)	4. Exercise of responsibility for hospital care	*27·6* (N=40)

Table 5 indicates that the two groups of doctors see the advantages of their hospital appointments quite differently. None of the first four advantages mentioned by either group coincide. Indeed 'contact with hospital staff' and 'continuing education' were ranked sixth and eighth by the doctors in general-practitioner hospital appointments (22·8 per cent and 13·8 per cent respectively), while ' advantage to patients ' and ' access to beds' were ranked seventh and tenth by those holding specialty appointments (14·8 per cent and 9·3 per cent respectively).

Within the specialty group a higher proportion of doctors (63·0 per cent) under the age of 45 years thought that contact with hospital staff was an advantage compared with 48·6 per cent of the older doctors. Otherwise the pattern of response remained fairly constant irrespective of qualifications, experience or the nature of the specialty.

Reasons for accepting the appointments

The doctors were also invited to list their reasons for accepting their hospital appointments in order of importance. The most common reason for accepting the general-practitioner hospital type of appointment was that it had been part of the practice commitments and the decision to undertake hospital work was implicit in the choice of practice. This was included among the first three reasons mentioned by 50 (34·8 per cent) of the doctors in this group.

On the other hand financial gain was most frequently mentioned by 75 (43·4 per

cent) of the doctors holding specialty appointments (although only 16·1 per cent thought that this had been one of the advantages of their hospital appointment). Other reasons given tended to mirror the lists of advantages and the pattern of replies was again fairly constant except for those doctors holding anaesthetics appointments. In their case the desire to maintain specialist skills was most often stated to be one of the three main reasons for accepting the appointments.

Satisfaction with appointment

Of the 329 doctors included in the survey, 246 (74·5 per cent), declared themselves unequivocally satisfied with the conditions of their hospital appointments. There was no difference between the groups in this respect. Among the dissatisfied or 'uncertain' doctors, however, there were some interesting differences according to their age, qualifications and hospital experience.

Table 6 illustrates some of these.

TABLE 6

ANALYSIS OF UNSATISFIED DOCTORS, BY AGE QUALIFICATIONS, AND HOSPITAL EXPERIENCE

Doctors		*Specialty appointments doctors (%)*	*General-practitioner hospital appointments doctors (%)*
Age	<45 years	*32·1* (N=25)*	*25·4* (N=15)
	45 years+	*16·8* (N=17)*	*19·7* (N=17)
Higher Qualifications?	Yes	*29·6* (N=24)	*31·4* (N=16)*
	No	*19·4* (N=18)	*16·3* (N=16)*
Duration of Hospital Experience	12 months +	*25·6* (N=37)	*24·8* (N=27)*
	<12 months	*14·0* (N=5)	*(11·0* (N=3)*

* Differences are statistically significant (P<0·01)

The highest proportion of doctors in both types of appointment who are dissatisfied with some aspects of their part-time hospital work are to be found among the younger, more highly qualified doctors with the longest full-time hospital experience. Within the individual specialties only one doctor (six per cent) in a minor specialty felt any dissatisfaction with his hospital work compared with eight (33·3 per cent) in surgery, and four in psychiatry (40·0 per cent).

The dissatisfied doctors were invited to specify the reasons for their dissatisfaction. In the specialty group of appointments eight doctors complained that the range of their hospital work was too limited, seven said they did not have enough clinical responsibility, six thought the grade of their appointment was unsatisfactory, and five felt that they did not have enough contact with consultant staff.

The reasons for dissatisfaction among the doctors holding cottage hospital appointments did not follow the same pattern. Although eight of these doctors also complained of the limited range of their hospital work, a further eight expressed dissatisfaction with the level of their remuneration, and another eight wanted access to more beds. It was not possible to draw any conclusions from an analysis of the individual complaints as the numbers involved were too small.

Discussion

This survey was conducted with the intention of obtaining information which might give some indication of what is required to make part-time hospital appointments worth-

while from the general practitioners' point of view. Before such a question can be answered it is necessary to consider why general practitioners should seek hospital work. Much has been written on this subject since the beginning of the National Health Service. The educational value and additional interest of hospital work has been frequently mentioned (Taylor, 1954; Hunt, 1961; B.M.A., 1970). The need to provide a functional link between general practice and the hospital service has been emphasised, particularly in the Royal Commission Report on Medical Education (1968) and more recently in the Scottish Home and Health Department's Working Party Report on *Doctors in an Integrated Health Service* (1971).

The advantages in terms of professional stimulation for the doctors and continuity of care for their patients which are said to be gained from allowing general practitioners access to hospital beds are also a recurrent theme in some of these papers and reports, and many others (McKeown, 1965; Royal College of General Practitioners, 1970).

One of the main facts to emerge from the present study is that all these advantages of hospital work for general practitioners cannot be achieved in any one of the existing types of appointment. Less than half the doctors working in general-practitioner hospital units had contact with senior hospital staff, and about half admitted that they did not write case records. The educational value of such appointments must be limited under these circumstances.

On the other hand, a higher proportion of doctors working in general-practitioner units thought that their appointments were useful to the work of their practices and of benefit to their patients, compared with those working part-time in specific specialties. A significant proportion of the latter (21·4 per cent) similarly had no contact with senior hospital staff. Further, as less than a fifth of this group of doctors were treating their own patients in the course of their hospital work, it is difficult to envisage how 'functional' links between general practice and hospitals can be developed to a significant extent in this kind of appointment.

The question of the real desire for access to hospital beds among general practitioners has also been receiving much attention recently. The Royal College of General Practitioners believes that there is a "widespread desire among general practitioners to look after their patients in hospital" (The Royal College of General Practitioners, 1970). This view is supported by studies among general practitioners without access to beds which found that approximately two thirds appear to want such a facility (Cartwright, 1967; Warren, 1962).

On the other hand absence of hospital beds was considered among the three most serious problems facing general practice by only eight per cent of a sample of doctors surveyed in 1966 (Mechanic, 1968). Evidence from the Oxford region suggests that about half the general practitioners there wish access to hospital beds in which they can at least treat those of their own patients who require admission on social grounds (Rue, 1969).

In this study only a third of the doctors already working part-time in hospital in one capacity or another appeared to feel strongly on the need for their own beds. This is, of course, no argument against providing general-practitioner beds in hospital where practical, but it does appear to indicate that it is not an essential prerequisite for a satisfying hospital appointment.

Conclusions

The ideal form of hospital appointment for general practitioners would seem to be that which combines facilities in which they can undertake the hospital care of some, at least, of their own patients, either as inpatients or as outpatients, together with opportunities to meet regularly with senior hospital medical staff.

Existing appointments, either in general-practitioner hospital units or in specific specialties, in most cases, do not achieve this ideal. It may be that one way of attaining it is to provide general-practitioner beds in larger hospitals, either within specialist wards or as separate units. However, it is not clear whether the desired increase in contact with hospital staff would occur as a result.

Until the effectiveness of such arrangements can be demonstrated a good case can be made for allowing more general practitioners to treat their own patients in hospital in addition to continuing the present trend towards increasing the number of part-time specialty appointments available to them. In this way the benefits of access to beds *and* contact with hospital staff could be combined to the advantage of increased numbers of general practitioners and, hopefully, their patients.

The results of this survey suggest that it is pointless to argue for or against access to beds in general-practitioner hospital units compared with part-time specialty work in hospital teams. The benefits of each type of appointment are different and the question of which is the more appropriate cannot be answered. The majority of general practitioners appear to want some kind of close association with hospitals. What is needed, therefore, is a flexible approach to the problem of creating the circumstances whereby a variety of different forms of association can co-exist.

Summary

This paper reports the results of a survey of general practitioners holding a variety of part-time hospital appointments in Scotland. The object of the study was to obtain information from the doctors concerned, which would help to identify the kinds of hospital work which are most satisfying from the general practitioners' point of view. The survey involved 184 doctors holding part-time appointments in a specialty working under the supervision of a consultant, and 145 doctors working in general-practitioner hospital units.

In general terms, the doctors in the first group worked in a wider range of hospitals, spent slightly more time on their hospital work, saw fewer of their own patients, but had considerably more contact with hospital senior medical staff than those working in general-practitioner units. In contrast, the latter worked mainly in the smaller hospitals, dealt almost exclusively with their own patients, had less contact with senior medical staff, but thought that their hospital work was more useful to their practices than did the others.

The advantages of the two types of appointments were seen quite differently by the doctors holding them. However, access to beds, or lack of it, was declared a factor of major importance by only about a third of the doctors in either group, and both seemed equally satisfied with the general terms of their appointments.

In view of the differences between the two types of appointment and the fact that they each have their own advantages, there is little point in arguing the merits of one against the other. Accordingly, a plea is made for flexibility in allowing the further development of both.

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