REPORT OF A SURVEY OF HOSPITAL ADMISSIONS BY THE SOUTH-EAST ENGLAND FACULTY

IN 1963 THE FACULTY PUBLISHED a report of a Survey of General-Practitioner Hospital Beds within the faculty area (1963). From this survey it appeared "that implementation of the hospital plan (1962) as envisaged is likely to be very detrimental to the standards of general practice of members and associates of the College in South-east England."

The 1963 annual general meeting of the faculty therefore included a symposium on "The future of general practice in relation to the hospital plan", and it was during the discussion that the question was raised of how many patients admitted to hospital did not in fact need the special resources of a hospital for diagnosis and treatment, but had been admitted for social reasons. The interest of members was aroused particularly because there seemed no reason why these patients above all others should not continue under the medical charge of their general practitioner during their hospital stay, or perhaps even be cared for in their own homes if more domiciliary help were organized.

Some previous assessments made of hospital populations suggested that the proportion was quite high. Forsyth and Logan (1960) had calculated that one-quarter of the male and two-fifths of the female patients in medical beds in Barrow-in-Furness required 'hotel care' only. Crombie and Cross (1959), examining the records of a Birmingham general hospital for a year, considered that at least 12.5 per cent and possibly 43 per cent of patients admitted to medical beds fell into this category. They also produced evidence that the absence of a willing and able relative or friend accounted for the presence in hospital of slightly more than half of these patients. An assessment was made by the appropriate hospital physician of all patients in the medical wards of three large Birmingham general hospitals at the time of a single visit by the investigators; 13 per cent did not need hospital care on strictly medical grounds, but in only four per cent was it considered that admission might conceivably have been prevented by augmented domiciliary medical and social services (Mackintosh *et al.* 1961). More recently a member of the faculty (Wood 1964) considered that of 86 patients admitted from his practice in 1959 only seven might have been managed by a family doctor alone, in a general-practitioner ward, while Winch and Balme (1965) judged that 68 per cent of patients admitted to Whipps Cross Hospital during an 18-week period could have been looked after medically entirely by a general practitioner.

The contrasting opinions in the last two papers serve to confirm the view of the Faculty Board in 1963 that there was need for a study in which the assessment would be made by the doctor who would himself be

undertaking the care of the patient if facilities for hospital care by general practitioners or greater assistance with home care were made widely available.

The faculty therefore agreed to embark on an investigation whose objectives were defined initially as:

1. To determine in a number of practices what proportion of patients who are admitted to hospital could be cared for in a general-practitioner bed in a district hospital, and to relate this to the total population from whom these patients are drawn.

2. The provisional assumption is made that such patients would in the main be admitted because adequate nursing care is not available in their homes, but that they would not require specialized medical treatment or supervision apart from perhaps a single specialist consultation; the second objective is therefore to gather enough information to test the validity of this assumption, and indicate whether other classes of patient might be suitable for such general-practitioner beds.

3. To determine what proportion of the cases covered by 1 above could be nursed at home if better domiciliary services were available, and what sort of extension of the present domiciliary services would be needed to achieve this.

It was decided that midwifery as such should be excluded from the inquiry, as presenting a different set of problems, but admissions to gynaecological beds were included even if they arose from a disorder of pregnancy, of which abortion was the commonest.

Method

Owing to the very small amount of heavy industry within its boundaries, it was not thought possible to select a sample of practices to reflect the distribution of different types in England and Wales within the faculty area, which comprises the counties of Kent, Surrey and Sussex as they were before the formation of the Greater London Council, Hampshire and the Isle of Wight having become the major part of the newly formed Wessex Faculty in January 1964. Volunteer practitioners were therefore relied on to keep the necessary records, and a minimum of 50 was aimed at. To cover all seasons, records were kept for a full 12 months. During this time the doctors completed a standard card for each National Health Service patient admitted to a hospital or nursing home other than to an obstetric bed; private patients were omitted because of the impossibility of ascertaining the size of the practice population from which they were drawn.

Advice on the design of the card was received both from the Ministry of Health Statistics Division and the college Records and Statistical Advisory Unit; this unit undertook the analysis of the cards. A small pilot run was carried out for three weeks by members of the Faculty Board to show up any difficulties in completion of the card; as a result some modifications were made before it was printed in the final form shown in table 1. During the pilot run the final diagnosis was also recorded; this involved the doctors in extra work because the card could not be completed at one sitting; a significant difference between diagnosis on admission and the final diagnosis was so rare that it was thought justifiable to be content

TABLE I
THE COLLEGE OF GENERAL PRACTITIONERS HOSPITAL ADMISSION RECORD CARD

INFLUENCE OF DOMICILIARY FACILITIES: Indicate by NO or YES

Hospital admission would have been necessary whatever domiciliary care were available — 0 NO 1 YES — 20 ☐

If 'NO' ring the appropriate answer to each of the following:

Patient could have been nursed at home if:

Home help available for longer period on weekdays — 0 NO 1 YES — 21 ☐

Home help available during weekends — 0 NO 1 YES — 22 ☐

Day sitter available — 0 NO 1 YES — 23 ☐

Night sitter available — 0 NO 1 YES — 24 ☐

Cooked meal provided (e.g. "Meals on Wheels") once daily — 0 NO 1 YES — 25 ☐

Cooked meal provided (e.g. "Meals on Wheels") twice daily — 0 NO 1 YES — 26 ☐

Domiciliary physiotherapy available — 0 NO 1 YES — 27 ☐

Other additional help (other than already mentioned) had been provided — 0 NO 1 YES — 28 ☐

(Specify).....

REASON FOR ADMISSION (Ring only *first* number which applies) — 18 ☐

1. Specialist SURGICAL diagnosis and/or treatment (i.e. operative) (Specify operation if possible) .....
2. Specialist MEDICAL diagnosis and/or treatment (i.e. non-operative)
3. Investigation by G.P. (Specify briefly).....
4. Continuous observation
5. Nursing care
6. Purely social reasons* (Specify).....
7. Other reasons (Specify) .....

*e.g. Holiday relief, psycho-social pressures by relatives or neighbours; either their unwillingness to look after the patient or the doctor's anxiety not to leave the patient in their care, etc.

Practitioner's name ..... Ref. No. (Office use) 1 2 3

Hospital..... Ref. No. (Office use) 4 5

Patient's name ..... Ref. No. (Office use) 6 7

Date of admission ..... Ref. No. (Office use) 8 9

Sex: 0 Male 1 Female 10

Age (years) 11 12

Occupation ..... Social status: (1–5) 13

Diagnosis on admission ..... Code No. (Office use) 14 15 16 17

CLASSIFICATION: In your opinion into which of the following categories does patient fall? Ring appropriate number 19

1. Requires specialist care and/or investigation, and could in no circumstances be cared for in a G.P. bed
2. Could be cared for in a G.P. bed in a district general hospital, i.e., with consultant and resident medical assistance readily available
3. Could be cared for in a G.P. hospital, i.e., with no resident medical staff, and consultant assistance less readily available
4. Could be cared for in other accommodation (e.g. local authority home, etc.) Specify .....

with the former on the final print.

It will be seen that the replies to the crucial questions, on reason for admission, classification and influence of domiciliary facilities (boxes 18, 19, 20) are matters of individual opinion. Although scrutiny of the earlier sections enabled the survey recorder to query obvious anomalies (which proved to be rare) it was considered that this was a correct approach if the analysis was to be useful as a guide to future policy; if additional facilities for care of his patients, whether at home or in hospital, were provided for the general practitioner, the extent to which he made use of them would depend on the personal judgment that those taking part in the survey were asked to record.

A letter was sent to all members and associates of the faculty by the provost, outlining what was involved and inviting volunteers. Replies were received from 79 doctors, 75 of whom started the survey; 14 of these subsequently had to withdraw for various reasons, including death of a partner, removal from the area, domestic troubles, pressure of work, a misunderstanding of the instructions by one partnership which led to many admissions being overlooked until it was too late to trace these, and one extremely frustrating incident when the disappearance of a batch of record cards in the post invalidated the practice figures and necessitated withdrawing its records from the analysis.

The preparations occupied almost a year. The survey covered the calendar year 1965. A recorder was appointed, and a supply of cards were sent to each volunteer with the following letter of instruction:

December, 1964.

Dear Doctor,

Faculty hospital admission survey

First I want to thank you on behalf of the Faculty Board for volunteering to take part in this survey.

A supply of record cards is enclosed. One of these should be completed for every patient on your N.H.S. list who is admitted during 1965 to hospital or private nursing home, *except* those admitted to an obstetric bed. Cards should *not* be completed for temporary residents, for patients whom you treat privately, or for patients whose admission is arranged by another doctor while the patient is away from home.

The card is designed to be completed at the time of admission, and you may need to make special arrangements with the patients or hospitals concerned to make sure that you are informed of admissions from the waiting list as they occur.

The card is largely self-explanatory, and I need hardly stress the importance of reading it carefully before the survey starts; the following instructions are in amplification:

1. Please leave empty boxes numbered 1 to 9 (marked "office use").

2. *Social status* (Box 13). Please estimate this on the basis of the Registrar general's social grades. These are:

    1. *Professional, etc. occupations.* Examples: medical practitioner, chartered electrical engineer, company secretary.

    2. *Intermediate occupations.* Examples: pharmacist, garage proprietor, works manager, draughtsman.

3. *Skilled occupations.* Examples: foreman, farm manager, bus and lorry driver, fitter.

4. *Partly skilled occupations.* Examples: agricultural worker, machine tool operator, furnaceman.

5. *Unskilled occupations.* Examples: labourer, lorry driver's mate.

Social status will thus usually be related to the occupation of the head of the household.

3. *Diagnosis.* As far as possible, please use the terms of the College 'Classification of Disease', published in our *Journal* in May 1963 (No. 39, page 207). If you care to enter also the appropriate code number in boxes 14 to 17, this would be most helpful, but you are quite free to leave this to be done centrally if you wish.

4. *Classification.* (Page 3). In considering this you should make the assumption, at present usually hypothetical, that general-practitioner beds are available to you in the nearest hospital scheduled to become a district general hospital in the hospital plan for England and Wales. In your case this is..... Only one number should be ringed.

5. *Influence of domiciliary facilities.* (Page 4). If 24-hour attendance of a trained nurse is required, this should be treated as an absolute indication for hospital admission; on the other hand if some practicable extension of the local authority home nursing service would enable a patient to be cared for at home, this should be specified in section 28. If the answer under section 20 is "yes", there is no need to answer any further question on this page.

At the end of January, please fill in the enclosed form about yourself, and return to me together with all record cards so far completed, so that I can check that no snags are arising. In the meantime, if there are any points about which you are not clear, do not hesitate to write to me. I can also usually be reached by telephone at.....

Yours sincerely,
SURVEY RECORDER.

Only section 4 calls for comment. It was urged by the statistical advisers that each doctor should be given a named hospital to which to direct his thoughts; this was therefore entered by the survey recorder, after referring to the hospital plan, before despatch of the letter.

This was accompanied by a *pro forma* to be completed by the doctor, which in addition to his name, address, age and qualifications included present medical or surgical appointments, whether or not he had access to general-practitioner hospital beds (and if so, where) and the number of patients on his N.H.S. list on 31 December 1964. If in partnership he was asked to give the partnership list and the names of his partners. When the *pro formae* were received by the recorder, every doctor was allotted a three digit identifying number, which also incorporated information as to whether he was single-handed or in partnership, whether he had access to general-practitioner hospital beds, and the approximate distance of his main surgery from the nearest district general hospital.

Doctors were asked to send completed record cards to the survey recorder every two months, and to return a further *pro forma* with the last batch giving their N.H.S. list on 31 December 1965 and any changes in the medical personnel of their practice. Meanwhile a list of all hospitals in the S.E. Metropolitan and S.W. Metropolitan hospital regions was

compiled and coded according to the type of hospital. Over 250 hospitals were involved to which 30 or more outside these regions were added as the survey progressed.

Every card was scrutinized for omissions and anomalies by the recorder before forwarding to the Records Unit in Birmingham, where a further check for omissions was made. A fair amount of correspondence with participating doctors resulted, which, added to periodic reminders about overdue records found necessary with some practices, meant that the recorder's spare time was pretty fully occupied for the duration of the survey! Diagnosis was usually coded at the Records Unit, where the appropriate doctor and hospital number was also entered; two practitioners took the trouble to fill in the diagnostic code (College classification) themselves.

Despite the scrutiny described, a few cards were found to be incomplete when the final analysis was started; as the number involved was too small to affect the conclusions to be drawn it was decided not to incur delay by going back to the doctor at this late stage. All these records are included in table II, but in subsequent tables they are only included if they carried the relevant information.

Results

The reader will have realized that the record cards provide a good deal of information additional to that needed for the main objectives of this study, and it is hoped to examine some other implications in a later paper.

The survey was completed by 61 practitioners, of whom nine were single-handed, the remainder being organized in 22 partnerships. All the partners in 15 of these participated (a number being neither members nor associates of the College); in the remaining seven practices volunteers were accepted on the assurance that the practice population for which they accepted responsibility was clearly defined and readily identifiable. The practices were widely distributed over the whole practice area, and varied in character from London suburban through coastal resort and small town urban to truly rural. The largest complete group working from one centre comprised four doctors, although two partners from a six doctor group also participated.

The mean of the total N.H.S. lists at the beginning and end of the survey year was 136,429, giving an average of 2,236 per practitioner. This is lower than that for England and Wales on 1 October 1965 (2,412) and for the executive council areas of Kent (2,381), Surrey (2,318), and Brighton (2,261), but greater than the average for East Sussex (1,982), Eastbourne (2,071) and West Sussex (2,111). Twenty five of the doctors have access to general-practitioner beds; they cared for 54,595 N.H.S. patients, 40 per cent of the total covered by the survey; this proportion is believed to be high even for south-east England, which is known to have a higher proportion of general-practitioner beds than most parts of England, and is certainly much higher than in England and Wales as a whole, where there were in October 1965 2,194 principals having paragraph 10(*a*) (i.e. 'bed fund') appointments to general-practitioner hospitals out of a total of 20,027.

Five thousand seven hundred and eighty-eight hospital admissions

TABLE I

ANALYSIS BY AGE, SEX AND REASON FOR ADMISSION

Reason for admission	Males							Females							Sex NK	Total	Percentage of total admissions
	0–4	5–14	15–44	45–64	65+	NK	Total	0–4	5–14	15–44	45–64	65+	NK	Total			
I. Patients suitable only for specialist bed																	
Specialist surgical diagnosis/treatment	56	139	206	251	200	2	854	47	93	393	329	222	4	1,088	10	1,952	*33.6*
Specialist medical diagnosis/treatment	46	23	67	95	68	—	299	36	10	131	106	89	4	376	5	680	*11.7*
Other reasons	2	3	3	1	2	1	12	—	—	11	5	8	—	24	—	36	*0.6*
TOTALS	104	165	276	347	270	3	1,165	83	103	535	440	319	8	1,488	15	2,668	*46.1*
II. Patients suitable for general-practitioner bed in district general hospital																	
Specialist surgical diagnosis/treatment	33	109	129	118	99	2	490	22	80	301	166	98	4	671	5	1,166	*20.1*
Specialist medical diagnosis/treatment	34	18	47	98	93	2	292	30	16	50	77	99	1	273	2	567	*9.8*
Investigation by general practitioner	4	2	1	5	5	—	17	2	—	3	5	4	—	14	—	31	*0.5*
Continuous observation	5	9	10	6	11	—	41	5	9	13	4	9	—	40	1	82	*1.4*
Nursing care	4	1	1	2	4	—	12	1	2	1	2	12	—	18	—	30	*0.5*
Purely social reasons	—	—	—	—	2	—	2	—	—	—	—	—	—	—	—	2	—
Other reasons	—	—	—	1	1	—	2	—	—	—	2	—	—	2	—	4	*0.1*
TOTALS	80	139	188	230	215	4	856	60	107	368	256	222	5	1,018	8	1,882	*32.5*
III. Patients suitable for general-practitioner bed in general-practitioner hospital																	
Specialist surgical diagnosis/treatment	35	54	68	69	28	3	257	9	48	137	90	37	1	322	3	582	*10.4*
Specialist medical diagnosis/treatment	9	3	12	23	29	—	76	7	4	12	16	24	2	65	1	142	*2.5*
Investigation by general practitioner	3	1	—	7	13	—	24	4	1	4	7	19	1	36	—	60	*1.0*
Continuous care	8	8	6	4	19	—	45	5	3	14	11	17	—	50	—	95	*1.6*
Nursing care	8	1	2	12	73	1	97	1	1	8	23	110	1	144	1	242	*4.2*
Purely social reasons	1	1	1	2	15	—	20	1	—	1	4	20	—	26	—	46	*0.8*
Other reasons	—	—	—	1	1	—	2	—	—	—	1	2	—	3	—	5	*0.1*
TOTALS	64	68	89	118	178	4	521	27	57	176	152	229	5	646	5	1,172	*20.2*
IV. Patients who could be cared for in other accommodation																	
Specialist surgical diagnosis/treatment	—	—	—	—	—	—	—	—	—	1	—	1	—	2	—	2	—
Specialist medical diagnosis/treatment	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	1	—
Continuous observation	1	—	—	—	—	—	1	1	—	—	—	3	—	4	—	5	*0.1*
Nursing care	—	—	—	1	7	—	8	—	—	1	—	11	—	12	—	20	*0.3*
Purely social reasons	—	—	1	6	4	—	11	1	—	—	2	21	—	24	1	35	*0.6*
Other reasons	—	—	1	1	—	—	2	—	—	—	—	—	—	—	—	2	—
TOTALS	1	—	2	8	11	—	22	2	—	2	3	36	—	43	1	66	*1.2*
TOTALS OF ALL GROUPS	249	372	555	703	674	11	2,564	172	267	1,081	851	807	18	3,195	29	5,788	*100.0*

TABLE III

ANALYSIS BY TYPE OF HOSPITAL, SEX AND REASON FOR ADMISSION (5,752 PATIENTS)

Reason for admission	*District hospital*						*Other general hospital*					
	With G.P. beds			*Without G.P. beds*			*With G.P. beds*			*Without G.P. beds*		
	M	*F*	*Total*	*M*	*F*	*Total*	*M*	*F*	*Total*	*M*	*F*	*Total*
I. Patients considered suitable only for specialist bed												
Specialist surgical diagnosis/ treatment	15	16	31	332	397	729	95	135	230	180	302	482
Specialist medical diagnosis/ treatment	2	2	4	95	125	220	13	15	28	69	76	145
Other reasons	—	—	—	6	2	8	1	—	1	2	6	8
TOTALS	17	18	35	433	524	957	109	150	259	251	384	635
II. Patients considered suitable for G.P. bed in district general hospital												
Specialist surgical diagnosis/ treatment	61	61	122	232	331	563	33	40	73	92	137	229
Specialist medical diagnosis/ treatment	11	10	21	144	128	272	24	23	47	62	48	110
Investigation by G.P.	6	3	9	2	3	5	—	2	2	2	5	7
Continuous observation	4	1	5	21	19	40	3	4	7	8	10	18
Nursing care	—	1	1	3	6	9	1	—	1	4	6	10
Purely social reasons	—	—	—	—	—	—	—	—	—	1	—	1
Other reasons	—	—	—	—	—	—	—	1	1	1	—	1
TOTALS	82	76	158	402	487	889	61	70	131	170	206	376
III. Patients considered suitable for G.P. bed in G.P. hospital												
Specialist surgical diagnosis/ treatment	31	29	60	80	107	187	21	20	41	32	25	57
Specialist medical diagnosis/ treatment	5	4	9	29	28	57	5	3	8	14	17	31
Investigation by G.P.	4	7	11	4	4	8	4	6	10	3	1	4
Continuous observation	5	3	8	13	20	33	5	6	11	13	7	20
Nursing care	8	8	16	31	54	85	7	6	13	17	19	36
Purely social reasons	2	—	2	8	5	13	2	5	7	5	7	12
Other reasons	—	1	1	—	—	—	—	—	—	—	1	1
TOTALS	55	52	107	165	218	383	44	46	90	84	77	161
IV. Patients who could be cared for in other accommodation												
Specialist surgical diagnosis/ treatment	—	1	1	—	—	—	—	—	—	—	—	—
Specialist medical diagnosis/ treatment	—	—	—	—	—	—	—	1	1	—	—	—
Continuous observation	—	—	—	—	—	—	—	—	—	—	—	—
Nursing care	1	1	2	1	2	3	1	—	1	1	—	1
Purely social reasons	—	1	1	2	3	5	—	2	2	1	3	4
Other reasons	—	—	—	2	—	2	—	—	—	—	—	—
TOTALS	1	3	4	5	5	10	1	3	4	2	3	5
TOTALS OF ALL GROUPS	155	149	304	1,005	1,234	2,239	215	269	484	507	670	1,177
Percentage of all patients			*5.3*			*39.0*			*8.4*			*20.1*

G.P. hospital			*Teaching hospital*			*Geriatric hospital*			*Mental hospital (including subnormal)*			*Other special hospital*			*Private hospital or nursing home*		
M	*F*	*Total*	*M*	*F*	*Total*	*M*	*F*	*Total*	*M*	*F*	*Total*	*M*	*F*	*Total*	*M*	*F*	*Total*
6	7	13	109	152	261	1	1	2	6	—	6	100	76	176	9	—	9
1	1	2	54	39	93	—	1	1	38	92	130	27	27	54	—	—	—
—	1	1	1	—	1	1	2	3	1	13	14	—	—	—	—	—	—
7	9	16	164	191	355	2	4	6	45	105	150	127	103	230	9	—	9
7	10	17	32	59	91	—	2	2	—	—	—	32	29	61	1	3	4
2	3	5	18	25	43	2	3	5	1	9	10	26	24	50	1	—	1
3	1	4	—	—	—	—	—	—	—	—	—	4	—	4	—	—	—
—	—	—	1	1	2	1	—	1	—	1	1	3	3	6	—	1	1
1	—	1	—	1	1	1	2	3	—	—	—	2	2	4	—	—	—
1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	1	1	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—
14	15	29	51	86	137	5	7	12	1	10	11	67	58	125	2	4	6
68	99	167	15	24	39	—	—	—	1	1	2	6	12	18	3	5	8
11	3	14	7	3	10	—	1	1	—	1	1	5	5	10	—	—	—
9	18	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	8	13	—	1	1	1	3	4	—	—	—	2	1	3	—	1	1
12	29	41	2	—	2	14	16	30	—	1	1	—	2	2	5	7	12
—	1	1	—	2	2	3	5	8	—	—	—	—	1	1	—	1	1
—	—	—	2	—	2	—	1	1	—	—	—	—	—	—	—	—	—
165	158	263	26	30	56	18	26	44	1	3	4	13	21	34	8	14	22
—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	3	3	—	—	—	—	—	—
—	2	2	—	—	—	3	3	6	—	1	1	—	1	1	1	2	3
—	4	4	—	—	—	6	8	14	2	—	2	1	—	1	—	3	3
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	6	6	—	1	1	9	11	20	2	4	6	1	1	2	1	5	6
126	188	314	241	308	549	34	46	80	49	122	171	208	183	391	20	23	43
		5.5			*9.6*			*1.4*			*3.0*			*6.8*			*0.8*

were recorded, and are analysed in tables II and III. The annual admission rate per 1,000 patients on list works out at 42.4. National statistics are not absolutely comparable, being kept for discharges and deaths instead of for admissions; this rate for England and Wales comes to 80 per 1,000 population, obstetric discharges and, so far as possible hospital transfers being excluded (Ministry of Health, Annual Report, 1965). The discrepancy is considerable, being similar to that found during the morbidity survey undertaken in 1955–6 by the Registrar General's department in conjunction with the College (Logan and Cushion 1958), and has not been satisfactorily explained. It suggests that doctors who volunteer to keep records of their work for research purposes form a self-selected group with an above-average tendency to care for their patients at home. The highest admission rate recorded by any practice in this study was 74.6 per 1,000, by a single-handed, full-list practitioner in what is now a Greater London borough; in only six of the 31 practices was the rate over 55, being under 30 in three.

In these the question naturally presents itself as to whether the records are complete; the doctors concerned are happy that few if any hospital admissions during the year were overlooked, and one of the practices is a four-man partnership well-known to the recorder to be excellently supported by ancillary help and unlikely to fall down on a project of this kind. The lowest recorded rate was 19.6 per 1,000, by a partnership of two with a combined list of 3,500 in a Kent coastal town. Females constituted 55 per cent of all admissions, this preponderance being similar in all the adult age groups.

It will be seen that the doctors took the view that 53.9 per cent of the patients they admitted to hospital could have been cared for in a general-practitioner bed, 32.5 per cent in a district general hospital, 20.2 per cent in a general-practitioner hospital and 1.2 per cent in other accommodation such as a local-authority home. A majority of these were admitted for specialist surgical diagnosis and treatment (30.5 per cent of all admissions), and will be looked at in more detail later. Among the remainder, 12.3 per cent were admitted for specialist medical diagnosis or treatment, and for the remaining 11 per cent no specialist assistance was considered to be needed. Nearly half of these (5 per cent) were admitted for nursing care which they were presumably not able to obtain at home, but only 83 patients (1.4 per cent) were admitted for purely social reasons.

If those considered suitable for care in non-hospital accommodation are excluded, there were during the survey year 1,306 admissions of patients whom the practitioners felt they could adequately care for in a general-practitioner bed, with or without some specialist assistance of a non-surgical kind. This amounts to 20.4 admissions per practitioner (9.7 per 1,000 on list) of whom nine were aged 65 and over; if we relate this to the average length of stay of patients in general-practitioner beds in England and Wales in 1965, which is 15.4 days, a doctor might expect to have on average one such patient in hospital at any one time. 44.6 per cent of patients in this category were aged 65 and over, compared with 25.6 per cent of all admissions recorded in the survey. Of the patients considered suitable for other than hospital accommodation, more than

TABLE IV
GROUPS ANALYSED BY DIAGNOSTIC CLASS

Diagnostic group	Males						Females						Patients suitable for home care if additional help were available		
	Patient considered suitable for:				Total	Per cent of male admissions	Patient considered suitable for:				Total	Per cent of female admissions			
	Specialist bed only	G.P. bed in district hospital	G.P. hospital	Other accommodation			Specialist bed only	G.P. bed in district hospital	G.P. hospital	Other accommodation			M	F	Total
1. Communicable diseases	23	13	6	—	42	*1.6*	18	12	5	1	36	*1.1*	2	2	4
2. Neoplasms	116	45	36	1	198	*7.7*	216	111	69	2	398	*12.5*	1	8	9
3. Allergic, endocrine, metabolic and nutritional	20	30	15	—	65	*2.5*	58	48	6	—	112	*3.5*	1	1	2
4. Diseases of blood and blood-forming organs	8	11	2	—	21	*0.8*	7	13	8	—	28	*0.9*	1	—	1
5. Mental, psychoneurotic and personality disorders	45	14	2	3	64	*2.5*	111	12	4	4	131	*4.1*	2	1	3
6. Diseases of nervous system and sense organs	104	39	55	3	201	*7.8*	112	61	85	8	266	*8.3*	17	27	44
7. Diseases of circulatory system	98	136	73	3	310	*12.1*	100	99	94	4	297	*9.3*	13	20	33
8. Diseases of respiratory system	126	143	101	3	373	*14.5*	116	118	82	—	316	*9.8*	13	8	21
9. Diseases of digestive system	270	191	91	—	552	*21.5*	237	207	83	—	527	*16.5*	3	7	10
10. Diseases of genito-urinary system	113	78	61	1	253	*9.9*	213	154	80	1	448	*14.0*	2	5	7
11. Complications of pregnancy, childbirth and puerperium	—	—	—	—	—	—	46	59	18	—	123	*3.8*	—	1	1
12. Diseases of skin and cellular tissue	14	14	20	—	48	*1.9*	16	16	19	1	52	*1.6*	—	6	6
13. Diseases of bones and organs of movement	66	39	20	4	129	*5.0*	82	30	34	3	149	*4.7*	3	8	11
14. Congenital malformations	36	8	2	—	46	*1.8*	34	3	3	1	41	*1.3*	—	1	1
15. Certain diseases of early infancy	3	—	—	—	3	*0.1*	4	3	—	—	7	*0.2*	—	—	—
16. Symptoms and ill-defined conditions	18	14	6	3	41	*1.6*	19	11	15	14	59	*1.8*	3	7	10
17. Accidents, poisoning and violence	103	81	30	—	214	*8.3*	96	59	41	4	200	*6.3*	2	7	9
18. Prophylactic procedures	—	—	1	1	2	*0.1*	2	—	—	—	2	*0.1*	1	—	1
Not recorded	2	—	—	—	2	*0.1*	1	2	—	—	3	*0.1*	—	—	—
TOTALS	1,165	856	521	22	2,564	*100.0*	1,488	1,018	646	43	3,195	*100.0*	64	109	173

two thirds were in this age group.

Table IV gives a breakdown into diagnostic groups: 43.8 per cent of all patients admitted suffered from diseases of the circulatory, respiratory and digestive systems; the number in the first two groups considered suitable for general-practitioner beds was disproportionately high, but digestive disorders followed the overall pattern.

The influence of domiciliary facilities has not so far been considered; in only three per cent of admissions was it thought that additional facilities provided by an outside agency would have rendered admission unnecessary. Table IV shows the diagnostic groups included; the nervous system and special senses account for a quarter of all these cases.

Table V shows the high proportion of aged:

TABLE V

PROPORTION OF PATIENTS WHO COULD HAVE BEEN NURSED AT HOME

Total admissions		*Patients who could have been nursed at home*			
		Under 65	*65 and over*	*Total*	*Per cent*
Male ..	2564	24	40	64	*2.2*
Female ..	3196	37	72	109	*3.5*
TOTAL ..	5760	61	112	173	*3.0*

The additional facilities listed were varied and usually multiple; they proved difficult to analyse, and no particular pattern emerged. In view of the small proportion of patients concerned, it was not thought worth while to follow this up further.

Returning to the views of the doctor; the pilot exercise had suggested that these might be quite markedly affected by whether he was accustomed to looking after patients in general-practitioner hospital beds or not. The opinions of these two groups were therefore analysed separately and are compared in table VI. Our initial impression is amply confirmed; doctors having access to general-practitioner beds considered 28.3 per cent of their patients suitable for care in a general-practitioner hospital compared with 15.1 per cent of their colleagues, and these included 16.8 per cent of admissions for specialist surgical diagnosis and treatment compared with their colleagues' 5.7 per cent. On patients suitable for general-practitioner beds in a district hospital there was much closer agreement; so that in all general practitioners with access were willing to look after 58.9 per cent of their patients in general-practitioner beds, 36.4 per cent being surgical cases.

The disposal of patients admitted by doctors having access to general-practitioner beds is shown in table VII for those patients considered suitable for a general-practitioner bed. This brings to light an oversight in the design of the record card, in that it does not show, in the case of a hospital known to have specialist as well as general-practitioner beds, to which

TABLE VI

REASONS FOR ADMISSION: DOCTORS WITH AND WITHOUT ACCESS TO G.P. BEDS COMPARED

Reason for admission (groups II and III)	*Doctors with access to G.P. beds*				*Doctors without access to G.P. beds*				*Percentage of all admissions*
	M	*F*	*Total*	*Per cent*	*M*	*F*	*Total*	*Percent*	
I Patients suitable only for specialist beds									
TOTALS	394	521	915	*41.5*	771	967	1,738	*49.1*	*46.1*
II Patients suitable for G.P. bed in district general hospital									
Specialist surgical diagnosis/treatment	172	246	418	*19.6*	328	425	753	*21.3*	*20.1*
Specialist medical diagnosis/treatment	93	87	180	*8.4*	199	186	385	*10.8*	*9.8*
Investigation by G.P.	14	9	23	*1.0*	3	5	8	*0.2*	*0.5*
Continuous observation	13	9	22	*1.0*	28	31	59	*1.7*	*1.4*
Nursing care	5	4	9	*0.4*	7	14	21	*0.6*	*0.5*
Purely social reasons	1	—	1	—	1	—	1	—	—
Other reasons	—	2	2	*0.1*	2	—	2	—	*0.1*
TOTALS	298	357	655	*30.6*	568	661	1,229	*34.7*	*32.5*
III Patients suitable for G.P. bed in G.P. hospital									
Specialist surgical diagnosis/treatment	154	222	376	*16.8*	103	100	203	*5.7*	*10.4*
Specialist medical diagnosis/treatment	25	13	38	*1.7*	51	52	103	*2.9*	*2.5*
Investigation by G.P.	22	33	55	*2.5*	2	3	5	*0.1*	*1.0*
Continuous observations	20	22	42	*1.9*	25	28	53	*1.5*	*1.6*
Nursing care	38	65	103	*4.6*	59	79	138	*3.9*	*4.2*
Purely social reasons	6	10	16	*0.7*	14	16	30	*0.8*	*0.8*
Other reasons	2	1	3	*0.1*	—	2	2	—	*0.1*
TOTALS	267	366	633	*28.3*	254	280	534	*15.1*	*20.2*
IV Patients considered suitable for other accommodation									
TOTALS	8	18	26	*1.2*	14	25	39	*1.1*	*1.2*
TOTALS OF ALL GROUPS	967	1,262	2,229	*100.0*	1,607	1,933	3,540	*100.0*	*100.0*

type of bed the patient was admitted. If we assume that patients considered suitable for a general-practitioner bed would be admitted to one, then 41 per cent of those for whom such a bed in a general hospital was thought appropriate, and 67 per cent of those classed as suitable for a general-practitioner hospital, were admitted to a general-practitioner bed of some kind, though only 41 per cent of the latter entered such a hospital. This accords with the opinion frequently heard in the faculty, that the general-practitioner hospitals in the area have insuffiicent beds to meet the needs of the practitioners on their staffs.

The large proportion of surgical cases thought suitable for general-practitioner beds has already been remarked; out of the 794 such patients under the care of doctors having access to general-practitioner beds, 179 (22 per cent) were admitted to general-practitioner hospitals and a further 254 (32 per cent) to hospitals having general-practitioner beds; we have no evidence as to whether the latter went into such beds. Returning to table III, we see that 184 patients were admitted to general-practitioner hospitals for specialist surgical diagnosis and treatment, five per cent of all surgical admissions in the survey.

This total does not include patients considered suitable only for a specialist bed but admitted to a general-practitioner hospital. This seemed an anomalous classification, so the individual records were identified and scrutinized; in 14 cases it appeared that the general-practitioner hospital had been used only as a 'staging post', the patient being transferred to a specialist hospital within a day or two. The remaining two (varicose veins and lipoma of back respectively) may have been thoughtlessly or mistakenly classified, a reminder that the results of a survey of this kind cannot claim great accuracy, but only to give a broad picture.

Discussion

The first question presenting itself is to what extent conclusions drawn from this survey could be applied to the faculty area, or the country, as a whole. The doctors participating were volunteers, and it has already been implied that in size of list, access to general-practitioner beds and hospital admission rates they are not a representative sample. On the other hand, the geographical and social distribution of their practices in the faculty area is wide, there being no obvious preponderance of any one type. It therefore seems reasonable to assume that the patient population in the survey is sufficiently representative of the people of the area for valid conclusions to emerge. The opinions of the two groups of doctors separated in table VI show a high degree of consistency with the one striking exception of surgical cases considered suitable for a general-practitioner hospital, and it is suggested that they do offer a guide to the judgments likely to be made by the generality of conscientious practitioners in this and similar areas.

The study does not answer the vexed question of to what extent it is desirable that general practitioners should have facilities to care for their patients in hospital beds, nor is it intended to discourse on the merits or otherwise of patients being admitted to general-practitioner hospitals, or

TABLE VII

ANALYSIS OF PATIENTS CONSIDERED SUITABLE FOR G.P. BED BY DOCTORS HAVING ACCESS TO HOSPITAL BEDS, BY TYPE OF HOSPITAL TO WHICH ACTUALLY ADMITTED

Reason for admission	*Admitted to G.P. hospitals*			*Admitted to other hospitals with G.P. beds (or to nursing home)*			*Admitted to hospitals having no G.P. beds*			*Totals*
	M	*F*	*Total*	*M*	*F*	*Total*	*M*	*F*	*Total*	
Group II. Patients considered suitable for G.P. bed in district general hospital										
Specialist surgical diagnosis/treatment	6	8	14	82	84	166	84	154	238	418
Specialist medical diagnosis/treatment	1	2	3	32	24	56	60	61	121	180
Other reasons	4	2	6	11	11	22	18	11	29	57
TOTALS	11	12	23	125	119	244	162	226	388	655
Percentage of total in group II			*3.6*			*37.3*			*59.1*	*100.0*
Group III. Patients considered suitable for G.P. bed in G.P. hospital										
Specialist surgical diagnosis/treatment	68	97	165	45	43	88	41	82	123	376
Specialist medical diagnosis/treatment	11	2	13	8	4	12	6	7	13	38
Other reasons	28	56	84	36	27	63	23	50	73	220
TOTALS	107	155	262	89	74	163	70	139	209	634
Percentage of total in group III			*41.2*			*25.7*			*33.1*	*100.0*
TOTAL OF BOTH GROUPS	118	167	285	214	193	407	232	365	597	1,289
Percentage of patients in both groups			*22.1*			*31.6*			*46.3*	*100.0*

general-practitioner beds in general hospitals, for major surgery. These problems have many facets, which have already been discussed in several papers (Warren 1962, Clyne *et al.* 1963, Marsh 1965, Oxford Regional Hospital Board 1965). What does emerge is more precise information about the proportion and type of patients concerned, and about the views of the practitioners who are most concerned in the decision as to what hospital admission is in fact sought.

The readiness of the doctors to look after surgical cases in general-practitioner beds, particularly those practitioners who already have the facility to do so, was so striking that the diagnoses of the 1,165 considered suitable for a general-practitioner bed in a district general hospital were looked at in detail. The range was wide; in addition to 124 cases of disorders of tonsils and/or adenoids, they included 134 patients with appendicitis, 76 with hernias of various sites, 28 with diseases of the gall bladder, 47 cases of malignant neoplasm (17 of the breast), and 154 women with a variety of non-malignant disorders of the generative organs as well as 52 with a diagnosis of abortion.

Whether it is practicable, or desirable from the point of view of the patient, to provide facilities in district hospitals for many of the cases just listed to be under the care of their family doctor while in hospital will be questioned by many, but if all of these are excluded from consideration there still remain nearly one out of every four persons admitted to hospital in this survey who could have remained under the medical charge of their general practitioner. Only half of these would have needed the help of a consultant at any stage. If, to the figure of 9.7 per 1,000 on list already quoted, we add the patients who could have been cared for in other types of institutional accommodation, we arrive at ten admissions per 1,000 population per annum, who on an average bed occupancy of 15.3 days could occupy roughly 0.4 beds per 1,000 population. One must have reservations about extrapolating from this survey to England and Wales as a whole, but it is interesting to compare the figure of approximately 20,000 beds so obtained with the average daily number of beds (apart from maternity and dental) available in general-practitioner units in 1965 of 7,035. These were frequently occupied by surgical cases.

The Faculty Board has already expressed the view (1963) that day-to-day work in a hospital provides an important and valuable stimulus to higher standards of clinical work, and does much to overcome the professional isolation which is so frequent a feature of the family doctor's life. If this is accepted, the case for immediately starting several pilot schemes in which facilities are offered in district general hospitals for general practitioners to admit patients under their own clinical care seems overwhelming. Here could be ironed out any difficulties in organization and personal relationships, and necessary guidance obtained for a more general provision of this kind.

Finally, we turn to possible extensions of domiciliary care. The additional facilities envisaged in the last section of the record card were deliberately limited to those which could reasonably be provided by some public organization, whether statutory or voluntary, and excluded continuous skilled nursing care of a kind which could only be given by a

qualified nurse remaining full-time with the patient, as being a very uneconomic use of her skill. Even so, the low proportion of admissions which might have been avoided was found surprising, although it accords well with the assessment made by Mackintosh and his colleagues (1961) in Birmingham. It suggests that Crombie (1959) is right in implying that the lack of an able and willing relative is a more important factor in leading to otherwise unnecessary admissions to hospital than any other deficiency in home facilities.

Summary

1. A study of patients admitted to hospital, other than to obstetric beds, by 61 general practitioners in the south-east England faculty area is described. Data about 5,788 admissions from a total average population of 136,249 during the year 1965 are analysed.

2. It was considered by their doctor that 53.9 per cent of patients admitted could have been cared for in general-practitioner beds, in either a district general hospital or a general-practitioner hospital; in 11 per cent no consultant help was needed, in 12.3 per cent some specialist help other than surgical would have been required, and the remainder were admitted for specialist surgical diagnosis or treatment, some requiring major operations. The views of doctors with and without present access to general-practitioner beds are compared, and the implications of extrapolating these figures to the population as a whole examined.

3. 1.2 per cent of patients could have been cared for in other than hospital accommodation, and 3 per cent looked after at home if additional facilities had been provided by some external agency.

4. It is concluded that there is an urgent need for pilot schemes in which methods are developed whereby general practitioners can have medical charge of certain of their patients in district general hospitals.

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REFERENCES

Clyne, M. B., Macdonnell, J. A. and Scorer, C. G. (1963). *Lancet*, **1**, 260.
Crombie, D. L. and Cross, K. W. (1959). *Med. Press*, **242**, 316, 340.
Forsyth, G. and Logan, R. F. L. (1960). *The demand for medical care*, London.
Logan, W. P. D. and Cushion, A. A. (1958). Morbidity Statistics from General Practice, Vol. 1, London. H.M.S.O.
Mackintosh, J. M., McKeown, T. and Garratt, F. N. (1961). *Lancet*, **1**, 815.
Marsh, G. N. (1965). *Brit. med. J.*, **1**, 644.
Ministry of Health (1965). Annual Report, London. H.M.S.O.
Ministry of Health (1962). A Hospital Plan for England and Wales (Cmnd. 1604), London. H.M.S.O.
Oxford Regional Hospital Board (1965). *The work of a cottage hospital in a rural community*, Oxford.
South East England Faculty, College of General Practitioners (1963). *J. Coll. gen. Practit.*, **6**, 638.
Warren, M. D. (1962). *Lancet*, **2**, 601.
Winch, R. D. and Balme, H. W. (1965). *Brit. med. J.*, **1**, 855.
Wood, L. A. C. (1964). *J. Coll. gen. Practit.*, **8**, 223.

Future of British medicine—The possibilities. ANDREW SMITH. *Brit. med. J.* 1967. **2**, 369.

"There is only one possible solution for the future—to make N.H.S. general practice effective". Dr Smith points out that the consumers and at least some outside observers like British medicine but that the 'providers', especially the general practitioners, do not.

Two essentials for good general practice are practice premises "designed for the medical needs of a sophisticated society" and a change in the doctors' traditional patterns of work—"overvisiting is a luxury an under-doctored country can no longer afford".

Four major reforms are suggested to attract young doctors into general practice:

1. A change in the bias of medical education—in student selection as well as in teaching.
2. A pay structure geared to meritocracy.
3. Vocational training, given due recognition in a new pay structure.
4. Integration of general practitioners into the hospital service.