Too few doctors — or too many?

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"Inescapable conclusion that this country is faced with a serious shortage of doctors". (Royal Commission on Medical Education, 1965-68).

THIS conclusion has led the Royal Commission to recommend doubling the existing numbers of doctors within the next 30 years. This is an expensive proposal that is likely to add many millions of pounds to the annual budget of the nation. It requires careful examination. Estimates of medical manpower requirements are fraught with difficulties and hazards. The proposals of the Willink Committee (1957) were shattered by Lafitte and Squire (1960) and few of the recommendations of the Platt Report (1961) have been fully implemented.

In view of past experiences, are the present Royal Commission's proposals any more reliable? The following observations suggest that their case is 'not proven'.

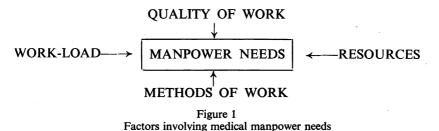
Estimation of manpower needs

With the facts and information available the Royal Commission has endeavoured to make an estimate of future medical manpower needs. It has followed the traditional steps of estimating probable population changes and likely medical work-load in the future and then calculating manpower resources that would be required. The difficulties of such estimations are well known and are reviewed by Morrison (1968) and Shannon (1968). No definitive account has been taken in these estimations of possible changes in methods and techniques of carrying out the medical work and whether these methods could be improved effectively.

The Royal Commission "decided to consider very carefully the possibility of increasing the effectiveness of the country's existing number of doctors. . . . We did not think, however, that any improvements in these respects would do more than help to meet increasing demands for medical service which we had excluded from our calculations."

No studies were carried out by the Royal Commission, and it had no access to any past data in order to investigate and assess the efficiency and effectiveness of the ways in which doctors work. Such facts must be available before a real shortage can be accepted and before future manpower needs can be calculated reliably.

To calculate such needs at least four factors must be considered, namely, the work-load, resources, methods of work and its quality (figure 1).



The probable future work-load depends on medical progress and can only be guessed J. ROY. COLL. GEN. PRACTIT., 1969, **17**, 355

at. It is unlikely, however, that the volume of the common diseases will alter appreciably in the next 20 years.

The ways in which medical resources are utilized to achieve high quality care are critical in any calculations and although there is a sad lack of data there are pointers that suggest that important changes are taking place now or are possible in the future to make better use of doctors.

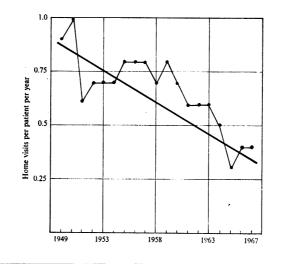
Falling work-load in general practice

The Royal Commission accepts the modern concept for the "new general practice". Staffed by specialoids and paramedical auxiliaries working in large groups from central purpose-built premises, these community-based medical teams will be better organized than are general practitioners at present.

No follow-through is made by the Commission of the consequences of such radical changes on the productivity of doctors. Better organization, better co-operation and better care should, hopefully, lead to better health and presumably should influence the medical manpower needs in general practice.

Recent reports suggest that there has been a fall in the work-load of some practices. These have been quoted elsewhere (Fry 1968).

In my own practice in South-east London records show a progressive fall in the number of visits (figure 2) which is not offset by an increase in surgery attendances.



1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967
0.9	1.0	0.6	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	0.7	0.6	0.6	0.6	0.5	0.3	0.4	0.4

Figure 2 Home visiting rates in my general practice (1949–1968)

The reasons for these falling work rates are various but essentially they have resulted from better organization, greater delegation to nurses, health visitors and medical secretaries and increasing co-operation from patients.

Weston Smith and Mottram (1967) reported that in their practice a nurse carries out 41 per cent of all first-visits. Hodgkin (1968) records that 10–15 per cent of the general practitioner's work can be delegated to a nurse.

These facts show that through better organization it has been possible to improve

356

productivity in general practice by some 15-30 per cent without any major or expensive reorganization. The Royal Commission's proposals for general practice in the future could lead to even greater improvements in saving of medical manpower.

Is it correct therefore to assume that we will continue to need one general practitioner for 2,000 to 2,500 persons as at present? Should we not be thinking in terms of one general practitioner to 3,000 or 3,500 persons, supported by a health team who, together, could cope with present and future community needs? In such circumstances some 5,000 *fewer* general practitioners will be required for a population of the present size.

Misuse of health visitors, district nurses and domiciliary midwives

These health visitors, district nurses and domiciliary midwives who work in their traditional ways are occupied wastefully. Attachment of a health visitor to a general practice increased her productivity by 25 per cent (Fry, *et al.* 1965). District nurses are underworked at present and employed on non-nursing tasks and are isolated from other nursing and medical colleagues (Hockey, 1966). Domiciliary midwives are now conducting less than one delivery each week. The annual number of home deliveries for each midwife in 1966 was between 30 and 40 (Annual Report of Ministry of Health for 1966). Facts such as these demand a reassessment of the work habits of these skilled nurses. Redeployment and greater co-operation could well lead to greater productivity.

The hospital specialist

Scant as are the reports of work-analysis studies from general practice, they are virtually absent from hospital practice. The Royal Commission did not commission any such studies on hospital specialists.

It is likely that the productivity of the hospital and the hospital specialist could be improved. Any improvements require basic data on what the specialist is doing and how he is doing it. We know that he is employed by the National Health Service, for a maximum of nine or 11 sessions a week. Each session is estimated to average two to three hours. This means that the specialist is occupied on NHS work for between 18 and 33 hours each week, plus extras such as travel, teaching, domiciliary consultations, committees and other professional work.

There is little published as to what goes on at each session. The report of the Nuffield Provincial Hospitals Trust on *Waiting in outpatient departments* (1965) gives some details of the work of specialists in these departments. These data, together with those in the Annual Reports of the Ministry of Health, begin to show a pattern of the work in outpatient departments (tables I and II). With assistance from registrars and housemen, the specialist appears to be managing to keep down the volume of work at his two to five weekly outpatient clinics.

There is no such data on the work of the specialist inside the hospital, but it has been stated that junior hospital doctors are working very long hours.

In projecting possible changes in the work of the hospitals it is well to recall that 'common diseases commonly occur' and that the top-ten conditions requiring admission to hospital at present are in order of frequency—tonsillectomy and adenoidectomy, acute chest infections, appendicitis, cancer, hernia, coronary heart disease, strokes, peptic ulcers and varicose veins. Most of these conditions are likely to continue as the most frequent reasons for hospital admissions, but they may be replaced by vaginal prolapse, enlargement of the prostate and mental disorders which are next in order of frequency. It is unlikely that these relatively undramatic disorders will require many more doctors to treat them.

The general practitioner and the hospital

An important factor affecting the volume of work of a hospital is the local general

TABLE IWork in outpatient departments

(Sources: "Waiting in outpatient departments" (1965) and "Annual Reports of Ministry of Health")

<u>Createlite</u>				New patients per clinic	Old patients per clinic	Total patients per clinic		
Speciality				(Each clinic may be shared between a specialist and one or more assistants)				
General medicine	••			4.3	17.5	21.8		
Paediatrics				4.0	12.9	16.9		
General surgery				7.7	18.6	26.3		
E.N.T	••		••	10.2	21.4	31.6		
Orthopaedic		••		9.3	27.7	37.0		
Gynaecological				8.5	14.5	23.0		
Maternity: Antenatal	••			6.5	32.4	38.9		
Postnatal	••			13.1	2.0	15.1		
Psychiatric	••	••		1.1	6.2	7.3		

practitioner. There is a great range of variation in the hospital referral habits of general practitioners. These differences, noted by Forsyth and Logan (1960), Thames Valley Faculty of College of General Practitioners (1962) and McLachlan (1966), do not seem

to be related to any specific or natural factors, in the general practitioners themselves. They could be altered by changing existing and outmoded customs. It is likely that hospitals are being overused at present. Priest (1962), Thames Valley Faculty of College of General Practitioners (1962) and McLachlan (1966) noted that the proportion of referred outpatients who are seen once only by the specialist and discharged without investigations back to the general practitioner is between 20 and 25 per cent of referrals. Priest considered that these 'once-only' referrals were 'not really necessary'.

Forsyth and Logan (1960) found that between 10 and 40 per cent of patients in various hospital wards need not have been in hospital on clinical grounds.

The mean annual number of domiciliary consultations is 40 per specialist, but in less than one-half does a 'consultation' actually take place? Most often the specialist visits the patient alone.

These piecemeal data suggest possible

TABLE II							
OUTPATIENT	DEPARTMENTS.	CONSULTATION	TIMES				
PER PATIENT							

(Source: "Waiting in outpatient departments" (1965).)

Speciality	Average time per patient (minutes)			
		New patients	Old patients	
General medicine	• •	25	9	
Paediatrics	•••	18	8	
General surgery		10	8	
E.N.T		7	6	
Orthopaedic		10	7	
Fracture clinic		5	4	
Gynaecological		12	8	
Antenatal clinic		6	5	
Psychiatric		27	13	

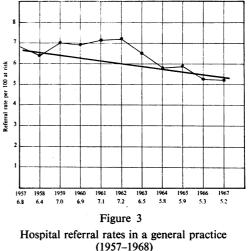
overuse of our hospitals. Could better co-operation between general practitioners and specialists and better facilities for general practitioners lead to fewer referrals.

Contrary to the national trend of rising rates of hospital referrals, the referral rates in my practice have fallen over the past 20 years (figure 3), showing that these rates are amenable to change.

Discussion

Contrary to the Royal Commission's view that it is not possible to increase the effectiveness and productivity of existing resources, data suggest considerable scope for improvements in our methods of work in providing medical care.

The National Health Service is faced with the same sets of problems and decisions that beset industry and other great organizations. The need for scientificallybased business-efficiency approach that involves careful work-analysis studies that must then be subjected to unemotional and



rational assessments, the results of which must then be applied, in order to improve the effectiveness of the work.

Presented with such possibilities how will the medical profession react? Will it yield to human nature and adopt a trade-union reaction, fighting for its rights and clinging to traditional customs and habits, although they may be shown to be defective and wasteful? Or will it accept the need for professional altruism seeking only to be able to provide a high quality of medical care for just rewards.

This modern doctor's dilemma presents a challenge to the profession and cries out for professional leadership of the highest quality. There must be a compromise of realism and ideals, a compromise requiring a balance between professional freedom and democracy, organizational changes within the profession in order to produce more effective co-operation, and there must be acceptance of some pattern of administrative power-structure and professional controls—designed to result in their best and most efficient use.

Summary

The recommendations of the Royal Commission on Medical Education that twice as many doctors will be required in Britain in 30 years time are challenged.

Facts are presented to show an increase in productivity in some general practices of 15-30 per cent.

Evidence is presented that suggests overuse of hospitals and underuse of community nursing personnel.

A falling rate of hospital referrals in one general practice shows the possibility of changing habits in general practice that could lead to fewer referrals to hospitals.

Planning for medical care of the future poses a challenge to the medical profession. The existing situation, requiring scientific work-analysis studies from which applications may be made to improve effectiveness through changes in traditional habits and customs, could create a serious modern doctors' dilemma.

Now is the time for strong professional leadership and example.

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ACCOMMODATION AT COLLEGE HEADQUARTERS

Temporary residential accommodation for members and associates and their families is provided at college headquarters. This building, overlooking Hyde Park on one side and Princes Gardens on the other, is central and easily accessible.

The charges, including breakfast, are as follows:

For single rooms	£2 10s. 0d. per night
For double rooms	£4 5s. 0d. per night
For a flatlet (bed-sitting room for two, bathroom and dressing room)	£6 per night
or	£36 per week
For a self-contained flat (double bedroom, sitting room, hall,	
kitchen and bathroom)	£42 per week

Children under the age of 12 years cannot be admitted, and dogs are not allowed.

Members and associates may, subject to approval, hire the reception rooms for meetings and social functions. The charges for these are:

Long room (will seat 100)	25 guineas for each occasion
Damask room (will seat 50)	15 guineas for each occasion
Common room and terrace	15 guineas for each occasion

A service charge of 10 per cent is added to all accounts to cover gratuities to domestic staff.

For the convenience of members, four car ports, outside 14 Princes Gate, have been rented by the College and may be hired, at a cost of 10s. 6d. per 24 hours.

Enquiries should be addressed to the Administrative Secretary, The Royal College of General Practitioners, 14 Princes Gate, London, S.W.7. (Tel. 01-584 6262). Whenever possible bookings should be made well in advance.