Quality in general practice

A commentary on the quality of care provided by general practitioners

FRANK HONIGSBAUM, B.A.
London

THE nation needs good medical care—no service does more to promote the health and happiness of the people. But financial factors are also involved, for bad medicine is costly. It means shorter working lives, excessive absenteeism, unnecessary prescriptions, too many examinations, prolonged hospital stays and much else. The nation cannot afford a Health Service which fails to make efficient use of the resources available. Yet no subject is more neglected in Britain today. Little is known about the quality of care rendered under the Service and few attempts have been made to evaluate it. More, by contrast, has been done in America under a system confined mainly to private enterprise. Should services financed from public funds be subject to less scrutiny? Quality in medical care is hard to measure and, like the dynamic effects of the Common Market, cannot be quantified. Traditional safeguards attached to public spending are also important where health is concerned. Much, as Forsyth and Logan (1962) have shown, can be learned from statistical studies[1]. This paper attempts to assess the quality of care provided under the Health Service on the basis of the limited data available.

Comparative performance

We can do little to judge the overall performance of the Service; causation in the field of public health is too complex for that. Medical care can do much to extend life-expectation in under-developed countries but, elsewhere, environmental forces and social customs probably exert greater influence. However, Britain's ranking in the world league health tables leaves no ground for complacency. It stands in eighth place when all the most sensitive indicators available (standardized death rate, late foetal death rate, infant mortality rate, maternal mortality rate) are combined into one index[2] and it falls even lower (18th place) when life-expectation for males alone are considered[3]. Even Greece and Spain can offer their year-old boys the hope of longer life.

Where women are concerned, the country ranks much higher (sixth place)[3] and we know, from the consultation rates available for general practice, that they make more use of the Health Service than men. The spread is greatest between the ages of 15 and 45: women then see their general practitioner 3·7 times per year on the average as opposed to only 2·5 for men—a difference of 48 per cent[4]. Maternity may account for part of this difference but this may also help to explain why women (at the age of one year) can now expect to live six years longer than men as compared to only 4·2 years at the start of the Service in 1948[5]. This represents a gain of 43 per cent in 20 years. Only four countries in the world now have a greater gap in life-expectancies (see table I). Does this mean that men neglect their health at the prime of life so that they suffer more severe illness after age 45 and die sooner? We cannot be sure but the data available strongly suggests the need for an industrial medical service to give men easier access to medical care. A study published in 1958 found that men who work near their homes (and, hence, their doctors) see their general practitioner much more often than those employed further away. Women, by contrast, are not deterred by work. Those in

full-time employment see their general practitioner even more often than women working part-time or not at all[6].

TABLE I
LIFE-EXPECTANCY AT ONE YEAR—MALE AND FEMALE

Country	*Male*	*Female*	*Difference*	*Rank*
France	68·6 years	75·6 years	7·0 years	1
Finland	65·8	72·8	7·0	1
U.S.A.	67·7	74·6	6·9	2
Austria	67·7	74·1	6·4	3
England and Wales	69·0	75·1	6·1	4
Australia	68·5	74·5	6·0	5
Scotland	68·0	74·0	6·0	5
Czechoslovakia	68·2	74·1	5·9	6
West Germany	68·4	74·1	5·7	7
Canada	69·5	75·0	5·5	8
Belgium	68·4	73·9	5·5	8
N. Ireland	68·9	74·1	5·2	9
Iceland	71·2	76·3	5·1	10
Switzerland	69·4	74·5	5·1	10
Portugal	65·8	70·9	5·1	10
New Zealand	69·2	74·2	5·0	11
Japan	68·8	73·8	5·0	11
Netherlands	71·2	76·1	4·9	12
Poland	70·0	74·9	4·9	12
East Germany	69·5	74·2	4·7	13
Italy	69·4	74·1	4·7	13
Hungary	69·1	73·5	4·4	14
Denmark	70·7	74·8	4·1	15
Spain	69·2	73·3	4·1	15
Norway	71·9	75·9	4·0	16
Sweden	71·8	75·7	3·9	17
Eire	69·3	72·7	3·4	18
Bulgaria	69·9	73·0	3·1	19
Israel	71·0	74·0	3·0	20
Greece	70·5	73·5	3·0	20
Rumania	66·2	69·2	3·0	20
Yugoslavia	67·3	70·2	2·9	21

SOURCE: Life-expectancies taken from Table 1.8 in Dept. of Health and Social Security (1970). *Annual Report of Chief Medical Officer for 1969.* p. 29. London: HMSO.

Quality within the Health Service

So much for the performance of the Health Service as a whole. Now let us try to assess the quality of its several sections. Here we shall confine ourselves to a comparison of the hospital and general practitioner branches since supply shortages in the local authority sector are so severe as to make a quality analysis meaningless. At the last count (in 1965), for example, 20 out of 83 county boroughs still had no special housing for the elderly and 25 out of 57 county councils had less than 50 home helps per 100,000 population[7]. The first task in the local authority sector is clearly to extend the range of services available.

There is reason to believe that the quality of care provided in the hospital sector has risen steadily since the National Health Service began while that in the general practice sector has fallen.

Staffing comparisons

This suggestion emerges partly from an examination of manpower figures (see table II).

At the start of the Service, there were far more general practitioners in relation to population than hospital doctors, but now the reverse applies. The gap between the two narrowed steadily until the number of hospital doctors per million of population finally exceeded the number of general practitioners in 1966.

The ratio of practitioners to population improved only in the first five years of the Service; since 1958, it has fallen steadily and is now nearly back to its 1949 level. The average list size fell slightly in 1970 but, over the previous decade, it rose remorselessly—from 2,290 per practitioner in 1959 to 2,479 in 1969[8].

The hospital service was certainly understaffed in 1949 and the deficiency was met mainly by increasing the medical supply of the country as a whole up to 1958 (table 2). Since then, the total number of doctors in relation to population has fallen and, although there was some improvement in 1968, the ratio was still below the 1958 level. This can only mean one thing—the hospital service was able to improve its staffing ratio after 1958 only at the expense of the general practitioner service.

TABLE II
GENERAL PRACTITIONERS AND HOSPITAL DOCTORS—1949–1968

	Doctors per million of population		
Year	*General practitioners*	*Hospital*	*Total*
1949	430	330	752
1952	477	390*	867*
1953	490	390*	880*
1954	496	398*	894*
1955	493	403*	896*
1956	496	408*	904*
1957	492	412*	904*
1958	497	418*	915*
1959	491	398	889
1960	488	406	894
1961	481	408	889
1962	475	419	894
1963	469	424	893
1964	458	428	886
1965	445	435	880
1966	438	444	882
1967	434	459	893
1968	433	473	906

*Estimate

SOURCE: British Medical Association Advisory Panel Report (1970). *Health Services Financing.* p. 590. London: British Medical Association.

The need for hospital staff in 1949 was great but many now think that the process has gone too far and that there are too many doctors working in hospital. Thus, the Walton Hospital in Liverpool had only six part-time consultants, a handful of residents and few clerks before the War. Now it has 65 consultants plus a substantial increase in the junior staff. Dr Robert Kemp, a senior physician at the Hospital commented: " If the understaffing was remarkable, the overstaffing is equally ludicrous. The prime mistake in policy was to retain all the available beds, staff them as if they were all needed, and continue to use them as if they were all vitally necessary "[9].

What effect has this development had on the quality of care rendered in general practice? In the absence of detailed studies, we can only make a reasoned guess. The fall in the general practitioner ratio suggests that each practitioner has less time available for each patient than in the 1950s and, to the extent that time affects quality, quality may

have fallen. American doctors cope with additional patients by working longer hours but this does not apply in Britain.

Thus, practitioners in both countries see about 150–160 patients each week—but whereas British general practitioners take 39–43 hours, Americans take 50–60 hours. American general practitioners, it is true, deal with more serious illnesses and spend more time in hospital than the British general practitioners who do more home visits[10].

Professor David Mechanic, in his study of general practice in 1966, found that British general practitioners tend to reduce the amount of time they spend with each patient as list size increases.[11] However, this need not necessarily have happened. In recent years, there has been a significant fall in the rate of home visits, and this, together with improvements in practice organisation, has made it easier for practitioners to cope with a larger number of patients.

Age distribution

Perhaps a clearer indication of a fall in quality can be seen from the change in the age distribution of general practitioners.

We know, from the detailed studies made of quality in North America, that the age of the practitioner is a key factor: the older the doctor, the poorer his care tends to be[12]. Since 1963, there has been a pronounced rise in the average age of the practitioner: about seven out of every ten are now 40 or over[13].

Refresher courses

To some extent, any effect this has had on quality may have been offset by the sharp increase in the number of doctors attending refresher courses. As late as 1968, some half the corps had never attended but in 1970 nearly eight out of ten doctors participated and the proportion should rise even higher in the future as attendance is now required in order to qualify for seniority payments[14]. Sir George Godber, the Chief Medical Officer of the Department of Health, rates this growth in postgraduate education as the greatest achievement of the 1960s and one member of his staff (Dr R. H. L. Cohen) made it clear in 1968 that the Department saw such expansion as " the quickest and surest single step to improve the quality of medical care "[15].

This expectation, however, may never be realised for the courses, as now arranged, leave much to be desired. Few are relevant to the work done[16] and even the best are no panacea. Sir Francis Fraser, one of the pioneers of the programme, put it many years ago: " Experience has shown that they (the courses) have considerable value, but they offer so much information in a short time that much of it is wasted and the educational value is disproportionate to the effort devoted to them by the teachers "[17]. Dr (now Sir) John Brotherston, Chief Medical Officer of the Scottish Home and Health Department, has recently come to a similar conclusion: " Postgraduate courses and access to remoter diagnostic facilities are valuable adjuvants, but they are no substitutes for the healthy abrasive processes of the normal daily challenge and opportunity "[18].

In any case, any form of refresher course, no matter how good, appears to have little effect on quality. This emerges clearly from the studies made of quality in North America[19]. Far more important is the length of education a doctor receives *before* he enters general practice[20]. In Sweden, many doctors spend ten years or more in the hospital world before they become general practitioners and the Royal Commission on Medical Education has recommended a period of five years after registration in place of the one year now prevailing. Thus far, however, this suggestion has been coldly received by the profession and is unlikely to be implemented.

Assessments of general practice

In general, then, the standard of general practice appears to have been adversely affected both by a fall in the number of general practitioners and a rise in their average age.

Has this, in fact, happened? We cannot tell for certain but the little evidence available points strongly in that direction. It is presented below and is based mainly on statistical studies of general practice.

These studies, of course, are no substitute for direct observation and an investigation of quality on the North American pattern is badly needed in Great Britain. The only time anything like this was attempted was in 1949 by an Australian, Dr Joseph Collings[21]. Collings found deplorably low standards existing in all respects—from surgery accommodation on the one hand to methods of diagnosis on the other. His report was denounced and an attempt, in the form of counter-studies, was made to rebut it but the more astute leaders of the profession—like the late Dr Bruce Cardew—recognised that Collings was right and initiated a movement for reform[22].

During the next two decades, substantial improvements were made in surgery accommodation and practice organisation but we do not know what effect this has had on quality.

Inadequacies of patients' attitudes

Some observers have pointed to the high degree of patient satisfaction with general practice as an indication of an improvement in quality[23] but we know that the reactions of patients are a poor guide. Patients in Britain have always been easy to satisfy, even where the restricted care provided under the old National Health Insurance (NHI) Act was concerned. Two American observers, in 1938, found overwhelming approval of the panel system among the people that used it[24]—yet, only five years later, the Labour Party denounced the system because:

"... it does not provide sufficient guarantee for the *efficiency* of the doctors employed. ... The general public lacks the knowledge for appraising the quality of his (the panel practitioner's) knowledge and his efficiency is not in fact subject to any adequate public control. If he has a manner which ingratiates him with his clients, he can retain and even increase his practice, even though his technical competence may be very low."[25] (original italics).

Since 1938, the expectations of patients in Britain have risen and the surveys that have been made may not reflect their true feelings. One expert on the subject (Dr Mark Abrams) believes that "most attitude studies of satisfaction with the Health Service have been superficial and have not really got below the surface"[26].

Attitude surveys are certainly no guide to quality. This emerged clearly from a study made of the maternity services in 1962[27]. In midwifery as in few other areas of medical care, close judgements about quality can be made but, even where the failures seemed gross, patients were satisfied—and the same applied to the doctors and midwives involved. From this, it would appear that there is no substitute for direct evaluation by qualified observers. The time is ripe for another study on the Collings model—and the standards he found in 1949 were so low that they would need to have risen considerably before they could meet the demands of a modern medical service.

Failure in preventive medicine and early diagnosis

Let us now present the evidence pointing to a low standard of care in general practice.

Failures in screening

Its first weakness lies in the field of prevention. Britain has the largest general practitioner corps in the world and one of the virtues of such a service is supposed to be its ability to detect early disease. Sir George Godber ranked this as its leading

attribute[28] and Dr John Fry has gone so far as to suggest that the existence of general practice in Britain rules out the need for the type of periodic screening programme found in the U.S.: " . . . we do not have to have mass community surveys because we are seeing them (the patients) all the time "[29]. The general practitioner sees at least 70 per cent of his patients each year and 95 per cent once every five years. As a result, Fry believes, Britain does not have the mass of hidden, undiagnosed illnesses so prevalent elsewhere.

The evidence available, however, does not support this claim. Judging from the estimates made by Dr J. M. Last and Professor Robert Logan, there does not appear to be any less unrecognised illness in Britain than in America[30]. Thus, for every diabetic known to a general practitioner in Britain, one is unknown—and the same ratio applies in the United States[31]. In Britain, some 20–25 per cent of the patients in an average general practice suffer from a clinical condition unknown to the doctor and it is doubtful if the incidence is any greater in the United States over the nation as a whole.

Evidence of general practitioner failure also comes from the screening programme for cervical cancer. Here, Britain has lagged far behind America and Canada. Screening started in British Columbia as early as 1950 but it did not begin in Britain until 1964 and, even then, it was restricted to women over 35, once every five years. With the general practitioner as the main point of contact with the public, one would have expected the programme to be channelled through him but the Department started it mainly through the hospital service.

This method, however, failed to reach enough women and the work has been gradually transferred to general practitioners so that they now carry out about 25 per cent of the examinations. This has not, however, significantly altered the proportion of women seen. Only two women are being screened out of every 18 at risk and the situation is getting worse. In 1969, 1·6 million women were covered but the number for 1970 could be as little as 1·4 million. Professor Hugh McLaren, one of the leading advocates of cervical cancer screening in Britain, is greatly disturbed by the outlook: " This is a ridiculous state of affairs. We are always trumpeting about our health service but we are being left far behind by the United States and Canada "[34].

It should be noted, however, that doubts have arisen about the efficacy of even an effective detection programme. Little, it seems, can be done to stop the spread of cervical cancer even when caught at an early stage. No study has yet been done which shows a decline in mortality due to screening of cancer of the cervix[35].

Failure in geriatrics

Another example of failure comes from the field of geriatrics. This ought to be one of the strong points of a family doctor service but British doctors appear no more interested in the health of the elderly than doctors elsewhere. This emerged from a study made in Edinburgh in 1962 of the patients over 65 in three general practices[32]. No less than two out of every three patients examined had illnesses unknown to the family doctor and a large number of these illnesses were remedial. Dementia was perhaps the easiest to recognise but only 3·5 per cent of the 27·5 per cent who had a clear degree of it had been detected. Forsyth and Logan found similar neglect of the elderly in their study of outpatient work. They expected to find the departments dominated by elderly patients because of the many infirmities among the aged, but, in fact, the opposite applied: they were under-represented in relation to their need for care[33].

Capitation fee system

The capitation system by which general practitioners are paid is supposed to offer an incentive for early detection and treatment of illness before it imposes a strain on

practice but few practitioners have made any attempt to introduce screening examinations. Nearly all rely on self-reporting and the capitation system does nothing to encourage this. In fact, it seems to act as a deterrent since it offers no financial inducement for additional work. Patients who arrive in the surgery without pronounced symptoms are likely to receive a cold reception. They have been largely responsible for the periodic complaints raised by doctors about the number of patients who abuse the service[36]. Yet the average patient sees his general practitioner fewer times per year in Britain (about 4) than in America (about $4\frac{1}{2}$) where a formidable charge must be paid for each consultation[37]. From this it would appear that the personality barrier created by the capitation system can be a stronger deterrent to care than the financial barrier imposed by private practice. Here we have the reason why it is often said: " American patients hate their doctors; British doctors hate their patients "[38].

Is this also why chemists are so popular in Britain? They provide even more medical care than practitioners: for every patient who takes his complaint to the doctor, more than two treat themselves with medicine from the chemist. This surprising discovery emerged from a study conducted in Bermondsey in 1964[39].

America, furthermore, has gone much further in the way of periodic medical examinations, particularly for businessmen and members of group practice prepayment plans. The idea was proposed under the panel system in Britain as long ago as the 1920s but we are still waiting for it to be realised[40]. Health Service patients receive nothing like the two-hour multiphasic screening examination provided for all members of the Kaiser Permanente Plan in America[41]. If anything, there is probably less undetected illness in the United States than in Britain except for those below the poverty line.

Clinical failures

Even when British general practitioners are presented with recognisable illness, they do not always deal effectively with it. Epilepsy, because of its social implications, is a disability eminently suited for their care but we find repeated evidence of neglect over the years. One survey published in 1960 found that half the cases known had not at any time been referred to hospital for specialist advice[42].

Similarly, only half the diabetics uncovered in a Bedford study subsequently received adequate attention from their doctors[43]. According to Professor A. L. Cochrane (Honorary Director of the Medical Research Council's Epidemiological Research Unit in Cardiff), this applies " not only for diabetes but for all diseases "[44].

Where alcoholism is concerned, many general practitioners not only fail to recognise it—they refuse to accept that the illness has a medical context![45]

Negligence in midwifery

General practitioner negligence in maternity work has also been noticeable, particularly where antenatal care is concerned. According to one study, they carry out the necessary haemoglobin and blood pressure exams in less than half the cases under their care[46] and this is the main reason why they are responsible for so many maternal and perinatal deaths in which avoidable factors have been found[47].

Their performance here, furthermore, shows no sign of improvement despite the periodic studies that have been made. Although the overall maternal mortality rate in England and Wales fell from 1957 to 1967, the number of deaths from toxaemia of pregnancy rose in 1967 to the same number as in 1963. Since these deaths can be avoided

with proper antenatal care, it was no wonder that a Departmental Committee commented:

"... This emphasises the need for continuing scrupulous attention to antenatal care. The general practitioner as doctor of first contact with the pregnant woman has an important function to ensure early arrangements for antenatal care whether he elects to provide maternity medical services or not"[48].

Negligence in prescribing

Still other evidence of general practitioner neglect emerges from the pharmaceutical world. Chemists frequently complain of patients not warned about the dangers associated with the drugs they prescribe. Thus, a patient who is taking monoamine oxidase inhibitors (a widely-prescribed antidepressant) can die if he eats cheese—yet none of the seven patients queried by one pharmaceutical student had been warned of the danger[49]. Furthermore, no less than four of these patients had a pound of cheese in their bag! Despite this discovery, the manager of the pharmacy in which the student was employed would not let her tell the doctors involved of their responsibilities in such cases. Here we can see why so few instances of general practitioner neglect ever appear in the pharmaceutical press.

Negligence in hygiene

General practitioner failure is even more evident when it comes to diagnosis and treatment. Collings painted a deplorable picture of hasty examinations and inadequate treatment in 1949. We have good reason to believe that the situation has not changed much since.

In their survey of general practice in 1963, Ann Cartwright and Rosalind Marshall found only six per cent with a wash basin in their examination or treatment room![50] Many others (59 per cent), it was true, had one in their consulting room but that still left 35 per cent without any wash basin at all in their surgeries. How, under such conditions, can adequate care be carried out? Do practitioners working without wash basins dare even to touch patients? If so, what infections do they transmit? This finding is the most revealing we have uncovered. It suggests strongly that low standards still prevail in the general practitioner sector.

Though the method by which general practitioners are paid was altered in 1966 so as to give them an incentive to improve their premises, it is doubtful if more than a minority have taken advantage of it. Some indication of this comes from the records of the General Practice Finance Corporation, established in 1967 to help modernize premises. It has made only 1,211 loans over the past four years—yet there are over 10,000 practices in the United Kingdom as a whole.[51] Other doctors may have financed improvements from their own funds, secured loans from other sources or moved into health centres (which are financed by local authorities) but a survey conducted by the Patients Association in 1970 found medical waiting rooms inferior to those of dentists[52].

Inadequate time for consultations

If time is any guide, then the way practitioners work also has not changed much. Appointment systems have grown since 1949 but patients are still seen at five to ten minute intervals[53]: this compares with the 15 minute period allowed under the Kaiser-Permanente Plan in California[54].

A recent study carried out in Exeter revealed that many patients were referred to hospital on the basis of symptoms alone: general practitioners did not even attempt a tentative diagnosis[55].

Furthermore, according to a study published by the Oxford Regional Hospital Board in 1963, more than one out of every five patients referred arrived with symptoms too vaguely described to be classified[56].

Deficiencies in diagnostic investigation

Further evidence of general practitioner weakness comes from their failure to use hospital diagnostic facilities as often as good care would dictate. Direct access to pathological and radiological services has grown sharply since the Service began so that they in most areas now have the right to order a wide range of tests themselves.

However, despite the fact that they handle about nine out of ten cases of illness themselves, they are responsible for only about one out of every ten tests carried out in these departments. In 1970, 18,900 general practitioners in England ordered a total of 8·5 million tests (4·7 million pathological, 3·8 million radiological) for 47·3 million people[57]. That means, on the average, only 450 tests per practitioner or one test for every five or six patients. The rate of use, furthermore, varies widely.

Sir George Godber has suggested that 75 per cent of the work is done for 25 per cent of general practitioners[58]. Forsyth and Logan found five per cent of practitioners not making any use of the facilities at all[59]. Where radiology alone is concerned, the proportion in some cities was as high as 30–40 per cent in 1965[60]. One pathologist anxious to encourage referrals reported only 20 per cent of the doctors in his area using the service intelligently and fully[61].

What this means, in terms of patient care, was revealed by one study published in 1970. Some 296 patients in an urban group practice were given routine blood tests where the general practitioner would not have ordered them and no less than 50 of these patients (16·9 per cent of the total) had conditions discovered of clinical significance[62]. Here we see clear evidence of the iceberg of illness undetected in general practice.

Dr J. A. D. Anderson, in a study made of the use of x-ray facilities, was also disturbed by the failure of patients referred by general practitioners to attend for follow-up when it was recommended by the radiologist: " If these patients go elsewhere, or if the practitioner deliberately decides that the suggestion to re-x-ray should be ignored, there is perhaps little cause for alarm; but if the re-examination merely goes by default, it is possible that the health of a few patients is being needlessly jeopardised "[63].

Domiciliary consultations

A similar picture of family doctor weakness applies where domiciliary consultations are concerned. These offer them the chance to meet consultants directly in order to discuss difficult cases but not only are few meetings requested but family doctors fail to attend more than half the number they do arrange. In Scotland, they attend 90 per cent of the consultations but in South-east England the proportion falls as low as 30 per cent[64].

The average general practitioner requests only 20 consultations per year and this compares with a total of some 10,000 occasions on which he sees patients in his practice. Once again, the rate of use varies widely. One study in South-east England found that over half the consultations were ordered by less than one quarter of the doctors.

Most practitioners see the service not as a chance to improve skills but to by-pass waiting lists and secure beds for elderly patients. In South-east England, six times as many consultations are ordered for patients over 60 as for those under 60 (18·8 versus 3·3 per 1,000 persons)[65].

Hospital outpatient departments

Furthermore, the use of the service has hardly grown since 1957. General practitioners prefer, instead, to hand over responsibility entirely to consultants as can be judged from the steady growth of outpatient attendances over the years at a rate that exceeds the rise in population. For every patient a general practitioner ' retains ' for investigation by means of a domiciliary consultation, he refers 23 to the outpatient department—and this ratio has remained steady for the past 13 years[66].

Everyone expected outpatient referrals to fall as practitioners won access to diagnostic facilities but, if anything, the reverse has applied: the more tests they order, the more patients they refer to hospital—which suggests that they lack the confidence, competence and equipment needed to deal with patients after diagnoses are established[67].

This applies even where minor conditions are concerned, the kind of problems Americans regard as their ' bread and butter ' and would not think of referring elsewhere. The range, as well as the quality, of general practice has been affected by the Health Service: it has narrowed sharply since 1948. Much of this has been due to the advance of specialisation and was needed to protect patients from practitioners who might otherwise have tried to carry out treatment beyond their competence. But many experts think the process has gone too far: is it really necessary for casualty departments to remove sebaceous cysts? According to Cartwright and Marshall, 85 per cent of general practitioners think it is their job but only 62 per cent of them do it[50]. One study found that only 30 per cent of the casualty work in eight hospitals was outside the range of a general practitioner or nurse.[68] In another study made of outpatient departments, Forsyth and Logan found that, in general medicine alone, 38 per cent of the patients had been discharged after only one consultation and without the need for a diagnostic investigation. In 27 per cent, not even an abnormality could be detected. Even higher percentages applied where paediatric departments were concerned[69].

Deficiencies in equipment

Part of the problem is that general practitioners do not have the equipment—or, they claim, the time—to do the work themselves. This applies not only to outpatients but to inpatients as well. A study recently carried out in the Oxford region suggests that they could handle as much as one third of the inpatient load at 60 per cent of the cost if they had their own beds at hand[70].

Similar findings apply to the use of diagnostic facilities. Nearly 90 per cent of practitioner requests are for simple investigations like haemoglobin estimation and urine microscopy. Often these requests are made simply because they do not possess a grey-wedge photometer or even a microscope as their counterparts do in other countries[71]. While access to beds may be out of their control, the possession of equipment like this is not. Yet over half the general practitioners in England and Wales do not own a microscope and only 31 per cent have a haemoglobinometer[72]. Both these instruments can be bought for less than £100. A new microscope costs about £50–£70 (second-hand as little as £25) while a haemoglobinometer costs about £40.

The physical condition of surgeries has undoubtedly improved since 1948—although the absence of wash basins (as above) has not received the attention it deserves. There has been no corresponding extension in the amount of equipment. In fact, due to contraction of range, they probably have less equipment now than they did when the Health Service started. One of the clearest points to emerge from Cartwright's study of general practice was the failure of general practitioners to adopt new techniques[73].

Poor records

If the equipment is meagre, what about the records? Here we come to the heart of the quality problem for as Dr John Fry once said: " Records are the very basis of all good medicine. It is only by means of an efficient system of keeping notes and records that we can satisfactorily diagnose and treat our patient's ills and follow their progress "[74].

All the studies made of quality in North America have relied heavily on an examination of medical records but no investigation has been conducted in Britain since the Health Service began. Before the War, it was true, records of panel practitioners under the NHI Act were periodically reviewed by regional medical officers of the Ministry but the profession deeply resented the procedure and it has not been renewed since.

We therefore know little about the condition of records in general practice today. One of the few clues to the subject was provided by the Secretary of the Socialist Medical Association (SMA) in 1957 (Dr David Kerr). He then told the Royal Commission on Doctors' and Dentists' Remuneration: " I think it is no secret that the system of record keeping among the vast majority of practitioners is entirely farcical "[75]. Since then, there has been some improvement due to the influence of the Royal College of General Practitioners but the negligible amount of research published by general practitioners (on the basis of their records) suggests that the gain from this source has been slight[76].

A recent survey of research problems in group practice found that half the doctors involved had difficulty persuading their partners to co-operate and some even returned to solo practice so they could carry out the work they wanted to do[77].

More benefit has come from the spread of secretarial assistance. Over 70 per cent of practices in England and Wales now receive grants to cover secretarial expenses and some 15,000 secretaries or receptionists are thought to be employed[78]. This certainly has made it easier to keep records but there is evidence which suggests that many have still not done so.

Absence of basic data

A study was made of the use of the health services in Exeter during the year ending October, 1967. The statisticians involved hoped to use general practitioner records for the study but not only was this considered unethical—the records were so poor that a special census had to be taken in order to secure the information needed. Even basic items like surname, address and date of birth were inaccurately listed—while data regarding occupation, marital status, family size and smoking habits were often not recorded at all[79].

Poor referral letters

Further evidence of poor record-keeping comes from the letters sent to outpatient departments. After a detailed study of a sample of letters sent in 1962, Forsyth and Logan came to the conclusion that the letters were " grossly inadequate "[80].

No less than two thirds of those sent to physicians did not even mention the drugs or treatment given. This can be a dangerous omission. In another study, it was found that many of the drugs general practitioners failed to mention " could have caused disasters "[81]. Some pathologists find practitioners' notes so poorly written that they prefer to see patients directly, not just have the specimens sent for examination. This was the procedure followed by Dr David Stark Murray (one of the leaders of the SMA) at the Kingston Hospital before he retired. " We believe in general practice ", he wrote in 1965, "but some of the clinical notes sent with patients make it hard to believe in all of them "[82].

Written communication is more vital in Britain than elsewhere because general practitioners are largely cut off from hospital and rarely see consultants face to face. This, by itself, means the omission of many minor symptoms and other relevant information which they feel ought not to be put down on paper[83].

No letters, no matter how well written, can equal the value of direct contact and Sir George Godber, in 1961, recognised the need to establish closer contact between the two worlds[84]. Many experts see this as the key to the quality problem in general practice. As Brotherston has put it:

" I do not believe that it will be easy for general practice to lift itself up unaided by its own boot straps. What is involved in a new deal for general practice is a realignment of forces in the whole health care field. The present sharp separation of domiciliary medical care and hospital medical care is hallowed

by nothing except history. It is not even ancient. Before 1948 it was only from the comparatively few large hospitals that the general practitioner was excluded. In excluding the general practitioner as in many other things the National Health Service took the pattern of the voluntary teaching hospitals as the norm. In so far as there was a case for excluding the general practitioner, this was based on his practice of surgery. Long before 1948 surgery had become a skill which should only be safely deployed under the control of the fully trained specialist. But the independent general practitioner surgeon has been dead for 20 years, and no-one, least of all the general practitioners, would wish him back again. I suspect that in excluding general practitioners from hospitals to get rid of the independent general practitioner surgeon, we lost the baby with the bath water."[18]

Much may be learned about quality by examining the relationships between the two worlds and attempting to assess the extent to which they affect the standard of practice.

The general practitioner and the hospital

Only one out of three general practitioners has a direct working relationship with the hospital world—either by controlling their own beds (11 per cent), by working as clinical assistants (19 per cent), or both (four per cent)[85]. Until recently, this proportion was growing since the number working as clinical assistants had risen at a faster rate than the fall in the number of those with their own beds. Between 1962 and 1968, the proportion working as clinical assistants rose from 16 per cent to 19 per cent whereas the proportion with beds fell slightly, from a little over to a little under 11 per cent[86].

Once the hospital plan comes into operation, however, this is likely to be reversed. There is no prospect, at present, of enough clinical assistant posts to absorb the large number of practitioners who will lose their own beds. The hospital plan calls for the closure of the smaller hospitals in which general practitioners have beds and their replacement by larger district general hospitals.[87] Practitioners, it was said, would enter the latter in increasing numbers as members of consultant firms rather than by controlling beds of their own. In 1969, they had only 120 non-maternity beds in wards or units of general hospitals. A survey conducted in the Oxford region[88] showed this to be the role practitioners preferred and it would certainly do more to lessen their sense of isolation. A general practitioner with beds of his own may, in the absence of clinical conferences, practice alone as much in hospital as outside it. Furthermore, he is tempted to do too much and, without junior staff, cannot provide continuous cover. To raise the quality of care, they need, above all else, contact with consultants but they do not want to join hospital firms as clinical assistants. They want a grade with higher pay, more interesting work and greater independence. Up till now, however, consultants have been unwilling to give it to them. Negotiations on the subject are deadlocked[89]. If the differences are not resolved, then we can expect to see fewer and fewer practitioners working in the hospital world.

Advantage of excluding practitioners from midwifery

How would this affect quality? In the case of maternity, the answer is clear—quality would rise. General practitioners are paid extra for maternity work and this makes them hold on to mothers who, because of the risks involved, ought to be booked in specialist units. Perinatal mortality is significantly higher among doctors with access to maternity beds (28 per 1,000 births) than among those without beds (19 per 1,000)[90]. With the trend toward hospital confinements growing stronger each year (from 64 per cent of the total in 1959 to 84 per cent in 1969)[91], the only way to preserve a place for practitioners in midwifery is on a selective basis. The work will eventually have to be restricted to those who take postgraduate courses in the subject. Furthermore, it would be better if they were given access to beds only within the confines of specialist units in order to remove all temptation to do too much on their own.

Cottage hospitals

Next we come to cottage hospitals. What would be the effect on quality if they were closed and the work transferred elsewhere? Here the answer is less clear.

As far as the hospital sector itself is concerned, quality would rise because these hospitals do not have enough resources to undertake the full range of care. This applies particularly to major surgery. Even though consultants are now used in the operating theatre, cottage hospitals do not have the elaborate equipment needed for this work.

Yet the effect of closure on general practice itself is likely to be damaging. Practitioners have long had access to cottage hospitals in rural areas, and, partly for this reason, standards in rural general practice have always been higher. Once these hospitals are lost, rural practitioners are likely to be dragged down to the urban level. They may even fall below it if urban doctors, due to closer location, win more places in district general hospitals.

Perhaps the best way to preserve standards in rural areas is not to close cottage hospitals but to restrict their range of care? They are too small to cover all cases. Surgery in particular should be excluded (except in an emergency) and their work should be confined to patients not requiring the full resources of a district general hospital. To help this, some consolidation of cottage hospitals into larger units may be desirable on economic grounds. Many contain only 10 to 25 beds but at least 100 to 200 beds are needed for efficient operation[92].

Even this, however, needs qualification. Medicine provides a vital, personal service and decisions cannot always be made on economic grounds. It may be desirable to retain small cottage hospitals for social or humanitarian reasons even though cost calculations weigh heavily against them. In any case, the effect of closure on both the quality and range of general practice needs also to be considered. If general practitioners find it necessary to refer cases to consultants which they could previously handle themselves, then the overall costs of care may rise even though ' uneconomic ' cottage hospitals have been closed.[93]

Urban areas

In urban areas, a similar solution could be found by giving full clinical responsibility in intermediate and self-care units of district general hospitals. This, however, might still leave practitioners isolated from consultants and thus not solve the quality problem.

The clinical assistant grade has been used mainly to relieve the staff shortage in hospitals, not raise the standards of general practice. Even so, one study detected a noticeable improvement in diagnostic powers and range of work done. Practices in which one partner acted as a clinical assistant referred fewer patients to outpatient departments and had the highest admission rate for inpatients.[94]

Even greater benefits could flow from the continuity in care such contact provides. Hospital doctors are less reluctant to discharge patients to doctors they know. Is this partly why bed stays are so much shorter in the Oxford region than in Liverpool?[95] Of all the regions, Liverpool offers the smallest place for general practitioners in hospital while Oxford has nearly the largest.[96] Even maternal mortality is low in Oxford, because practitioners work closely with obstetricians. At one time, Oxford had one of the highest maternal mortality rates in the country but that was before it established an area-wide organisation. Now it has the lowest—as much as one third below the national average—and this once caused Sir George Godber to ask a pertinent question: " Is it coincidence that in that region there is the most effective area organisation which includes the general practitioners? It may be, but it may also be cause and effect."[97] Substantial cost savings,

then, as well as improvements in quality, could be realised by the integration of general practitioners in consultant firms.

Consultants in health centres

Short of full integration, what can be done to bring general practitioners closer to the hospital world? Reliance, until now, has been placed on medical centres and clinical conferences where they can meet consultants periodically. This has undoubtedly done some good but the amount of activity varies from area to area, depending on the extent to which they and consultants are willing to participate in unpaid work.

The alternative is to bring consultants into the community. This has long been possible through the domiciliary consultation but that method, at least in England and Wales, has been unproductive.

Far better results could be obtained by holding outpatient sessions in health centres[98]—and, if the centres are properly equipped, no less than 85 per cent of the outpatient load could be transferred there.[99] This finding emerged from a study made of a general medicine clinic held in a health centre in Northern Ireland. Similar results were obtained in one area of Scotland. Though cottage hospitals rather than health centres were involved in this area, there was little difference as far as outpatients were concerned. Only a few simple diagnostic services were available—yet almost half the outpatients were sent to the cottage hospitals instead of the larger hospitals miles away.

Only seven per cent of the outpatients in this study had to be referred to the larger hospitals for more specialised investigations. The arrangement caused some travelling for consultants but the convenience for patients was great and the overall costs less. The study showed clearly that it was more expensive for the community to move patients than consultants.[100]

Cottage hospitals in England and Wales are due to be closed under the hospital plan but the same benefits could be realised by holding outpatient sessions at health centres. As Forsyth and Logan discovered, only about 20 per cent of outpatients are admitted to wards so there is no strong reason why both services should operate from the same site.[101]

Department of Health's policy

So far, however, the Department of Health has opposed the development: it believes consultants should work only in hospital and it wants the hospital to be large enough to house at least two consultants in each department. That, as the Bonham-Carter report demonstrated, means even larger district general hospitals than in the original hospital plan. Instead of hospitals with 600–800 beds covering 100,000–150,000 people, the report called for hospitals twice that size—which means that patients will have even farther to travel if our outpatient sessions are not held at health centres.[102]

Yet, in the Oxford region, the Department forced the Witney Health Centre to secure Nuffield money in order to finance such sessions.[103] Nevertheless, not only did the experiment prove more convenient for patients—it held out promise of improvement in quality, if for no other reason than that patients were less overawed when general practitioners were present: " They may even be able to tell the consultant what is wrong with them, not stammer out polite agreement with whatever he says."[104]

Still the Department failed to respond. In Scotland, this does not apply. There, under the influence of its Chief Medical Officer (Sir John Brotherston), the Department is doing all it can to bring practitioners and consultants together.[105]

In England and Wales this is not the case. Periodically, Sir George Godber and his staff support the idea[106] but the effect of their Department's policies is to push the profession further apart.

Sir George Godber has less freedom of action than Sir John Brotherston. Not only is he subject to greater consultant pressure but he does not have as much influence over health centres as Sir John Brotherston.

In Scotland, the centres come directly under Department control whereas, in England and Wales, they are under local authorities. This is why, the English Department claims, it cannot allow regional hospital board funds to be used to finance outpatient sessions in health centres; only local authorities can put up the money.

On the one hand, the Department of Health makes it difficult for practitioners to work in hospital; on the other hand, it does nothing to bring consultants into the community. The implementation of the hospital plan, in particular, will force increasing numbers of practitioners out of hospital and experience has shown that, once they are out, it will be hard to coax them back.[107]

As early as 1968, Dr Robert Smith (then Director of the General Practice Research Unit at Guy's Hospital) detected the growing gap between general practitioners and the hospital: " . . . we find that the walls are going even higher at the moment and that there is an ever-increasing move to keep the general practitioner out."[108]

What this means in terms of quality is that the work of general practitioners will be confined to minor illness and their diagnostic skills will wither. As one put it: " . . . how can you remember anything about diabetes if you're never allowed to do anything but the most superficial management?"[109] Nor will the effects be confined to general practice for, due to Britain's unique referral system, " the standard of medicine in this country depends on the standards of general practice."[110] Once a general practitioner makes an error it is hard to correct, for how can hospitals treat patients that he fails to refer? The only alternative is to give patients freer access to casualty departments but policy here, if anything, seems to be moving in the opposite direction.

Two other developments are exacerbating the problem. For one thing, local authority clinics are increasingly being manned by general practitioners, particularly in the new health centres now coming into operation. Even more important is the spread of group practices and partnerships. This is making it more and more difficult to change doctors, especially in small towns.[111]

The root of the problem lies in the hospital plan. Whether this was originally intended or not cannot be determined but the district general hospital has become a subtle device to keep the profession divided. It is hard to see how significant numbers of practitioners and consultants can work together if huge hospitals are constructed remote from many practices. Instead of concentrating all hospital patients on one site, we need to disperse them more widely through the area in accordance with the principle of progressive patient care.[112] This would permit many patients to be treated in intermediate and self-care units (as well as outpatient clinics) located near their homes. Health centres and cottage hospitals would be ideal for this purpose. Through them, we could bring some patients and consultants to smaller institutions in the community rather than force all patients and general practitioners to travel long distances to remote district general hospitals.

Failure of consultations between partners

In place of contacts with consultants, the Department hopes to promote co-operation between general practitioners. As long ago as 1959, Sir George Godber cited the growth of partnerships as the most important change in general practice and, as the gains from such growth, he " put first this benefit of consultation between colleagues." [54]

There is no evidence which suggests that this has happened. Most partnerships have been formed for reasons of financial and work convenience; very little clinical

consultation takes place. Bruce Cardew himself recognised this in 1959.[113] One study made in 1966 found that 40 per cent of practitioners hardly ever see another doctor for advice and over 30 per cent not more than five times a month. Yet only 19 per cent in this study were in solo practice.[11]

Group practices

Nor is the situation any different in the group practices that have been formed. The difference between these and many partnerships is hard to determine but the main point of distinction is thought to lie in the degree of clinical consultation involved. The little evidence available on the subject, however, does not reveal much difference in operation. One study covering eight groups in 1963 found that no less than three of the practices did not hold any clinical conferences at all![114] Only four of the groups held regular weekly conferences, and judging from the remarks made at a symposium in 1969, they appear to be less representative of group practices throughout the country as a whole than the three cited. Here is what one doctor had to say at the symposium on group practice (sponsored by the Royal College of General Practitioners):

"... One of the advantages of group practice was that the doctors could raise each other's standards. This was important but it could only happen when the members of a group were prepared to have self-criticism concerning their treatment and diagnosis. How many groups could stand fairly rigorous self-criticism among the members? A lot of groups did not have this and it would put great strain on the practice if they did, but the end result could only be good."[115]

In any case, from studies made in North America, it would appear that practice in partnerships or groups has little effect on quality, even when practitioners do partly specialise as is the custom there.[116] Without such specialisation, one would expect even less benefit. In North America, group practice at least seems to extend the range of care but, in Britain, there is little evidence that this occurs. Cartwright and Marshall did find more procedures being performed by those in partnership[50] but Forsyth and Logan reported a higher referral rate to hospital among those in partnership than those in solo practice.[117]

Health centres

Nor is the situation any different in the growing number of health centres now coming into operation. These, in 1948, were seen as the panacea for all that was wrong with general practice but, until 1964, only 24 had been built, housing only 211 out of the 20,000 general practitioners at work in England and Wales.[118] Since then, an increasing number have been added so that, by the end of 1970, 217 were in operation covering over 1,000 doctors, and these numbers are expected to double within a few years. By 1973, nearly one in ten practitioners should be working in health centres.[119]

Despite this mushroom growth, we find no evidence that health centres make any difference in terms of the range and quality of care offered. Only ten out of 229 centres covered in a recent study[118] were sited in the grounds of regional board hospitals and only seven made provision for regular outpatient clinics.

By the end of 1970, regular consultant clinics were held at 58 centres in the United Kingdom as a whole but most of these were in restricted specialities (ophthalmology, orthopaedics, psychiatry) and were probably offered as part of the school health service. Only nine centres had clinics in general medicine and six of these were located in Scotland.[119] Few, in addition, contain adequate laboratory or x-ray facilities so that we can expect to find the same high pattern of hospital referrals from health centres as occurs in practice generally.

Only in centres like the one at Darbyshire House in Manchester do we see the difference such facilities can make. This centre not only has a laboratory with a technician

on the premises but x-ray equipment as well. As a result, its hospital referral rate in the first eight years of operation was 30 per cent below that of the country as a whole. With these facilities, one practice in the centre also managed to cut its known incidence of anaemia by more than 50 per cent.[120]

Nor have the centres done much to promote co-operation between partners. Until 1963, only 15 per cent of the doctors within them used the centres as main surgeries; the rest continued to see most of their patients on their own premises.

Since then, there has been a dramatic change so that now some 80–90 per cent of general practitioners hold their main surgeries there.[118] But branch surgeries continue to exist and some doctors practising in health centres refuse even to reveal the size of their lists. There is a tendency to assume that practitioners working in health centres practise in groups but this is far from the case. Most are probably not even in partnership.

This certainly was true in the health centres built before 1960 (according to a report issued by the Medical Practitioners' Union).[121] Since then, the number of partnerships has grown in and out of health centres but—and this is the essential point—the partnerships do not normally embrace all the doctors working in the centres. Rather, each partnership remains in competition with the others as before. With such conditions, how can clinical consultation occur?

Probably less of it goes on in health centres than in closely-bound practices existing outside. Even in Scotland, where much closer ties have been established with hospital, health centres seem to have had little effect on practice. The 23 doctors working in the Stranraer and Sighthill Health Centres still spend only five minutes with the average patient and they go through one third of their surgery load in three minutes or less.[122]

General practitioners and the community team

If general practitioners have little to learn from colleagues, then how about from district nurses, health visitors and other members of the community team?

Attachment schemes have grown in recent years so that substantial numbers of local authority personnel are now closely allied to practitioners. This is the most promising development in general practice since the Health Service began and will no doubt do much to raise standards. The effect of such schemes, however, seems to be more on range than quality, since they provide aid mainly where treatment rather than diagnosis is concerned. If nothing else, the schemes encourage family doctors to play a greater role in local authority work, stimulating them to assume responsibility for antenatal clinics and cancer tests in particular.[123]

The development of community teams also facilitates early discharge from hospital and thus holds out the hope of substantial savings from shorter bed stays. Here, however, the participation of home helps is needed if full benefits are to be realised. At the moment, none are employed in health centres[1]—yet these centres are supposed to be the focal point around which community teams are organised.

This, in any case, was the situation in the health centres recently studied by Dr Ronald Gibson, late Chairman of Council of the British Medical Association. He believes that the attachment of paramedical personnel is one of the distinguishing characteristics of health centre practice: " . . . in fact, without them," he argues, " one should stop talking about a health ' centre '."[124]

Nurses

Of all the workers involved, the district nurse conveys the greatest benefit, relieving doctors from the need to carry out many home visits, and minor technical procedures. She saves, it is estimated, some four to eight per cent of the doctor's time[125] but we do not

know how the time saved is used. There is no conclusive evidence yet which shows that practitioners working with nurses make more thorough examinations or better diagnoses than those working without them. This is more likely to happen when the nurse is incorporated within the practice itself and working at the surgery as well as in the patient's home. Then she is able to carry out minor diagnostic tests which otherwise would have to be done at hospital.[126]

Only 25 per cent of local authority nurses, however, are attached to general practices[127] and only about one in three of these have surgery responsibilities.[128] In addition, some 15 per cent of practices employ nurses of their own.[125] Most attached nurses are used only for home visits and the only way they can directly affect quality is by follow-up of treatment. Any form of attachment, furthermore, no doubt inspires better record-keeping since attached personnel are usually given access to them.

Midwives

Some 15 per cent of midwives are now attached to general practice[127] but we do not know what effect they have on quality. They probably inspire more careful work in antenatal care but may increase general practitioner recklessness in booking. If attachments are arranged in midwifery, it is more important to 'attach' practitioners to obstetricians than midwives to practitioners.

Health visitors

Health visitors have been attached in greater numbers—now some 29 per cent of the total[127]—and their value, as far as quality is concerned, clearly depends on the role played by the general practitioner. One school of thought wishes to stress the social, as opposed to the clinical, aspects of practice since so many patients (36 per cent according to one estimate) have a social component in their complaint.

This estimate was made by Professor Margot Jefferys[129] and should be treated with caution. She is a strong advocate of the social work concept of general practice. In 1968, she even contended that "there is a social component of some sort in every illness and in every consultation."[130] In a sense, of course, this is true but few social components are severe enough to warrant special attention.

Probably less than ten per cent fall into this category if the closest study made of the subject to date is any guide. This was conducted by J. A. S. Forman and E. M. Fairbairn for the Nuffield Provincial Hospitals Trust in a group practice to which a medical social worker was attached for a three-year period. Out of 14,400 patients, only 409 cases were referred to the social worker over the three years—less than 140 cases per year—and in only about half these cases was the social component a major factor.[131]

Health visitors (as well as social workers) can certainly help to untangle the social factors and speed up the process of diagnosis and treatment. However, they can offer little aid where organic illness is concerned and that still accounts for the bulk of general practitioner work. If the general practitioner is to fulfil his role as a primary diagnostician, he will have to maintain his competence in clinical medicine and Mechanic has found a clear correlation between clinical and social interest. Those doctors who make the largest number of diagnostic investigations show the greatest interest in the social and psychological aspects of practice.[132]. This suggests that a good clinician makes a good social worker and that the quality of both aspects of practice would suffer if an attempt were made to separate them. This applies, however, only at the diagnosis stage. Once a significant social problem is discovered, it may take much time to treat it more than a family doctor can spare. At that point, he will need the aid of social workers and perhaps a special corps of salaried doctors, trained in social medicine, should be created to work with them.

This would leave the practitioner free to fulfil his main role—that of the primary diagnostician in the field of clinical medicine. Everyone needs a doctor for diagnosis and treatment—only a few have social problems which require the aid of social workers. The public uses the Health Service 12½ times more frequently than all the social services provided by local authorities put together.

This astonishing ratio emerged from a study made by the Royal College of General Practitioners of the use of the Health Service in Stoke. It covers all the services provided by local authorities—health as well as welfare—and compares the usage made of them with the other two sectors of the Health Service. On this basis, the ratio is 1 to 12½.[133]

The general practitioner handles nine out of ten patient contacts alone. To the bulk of the public, then, the general practitioner is the Welfare State and it is vital to preserve him.

Professor Margot Jeffreys provided further evidence in support of this, She found the general practitioner to be the largest single channel through which clients came to the attention of the social welfare services. No less than 30 per cent of the cases were referred by him and, for the Health Service as a whole, the figure came to 58 per cent.[134]

Any attempt to turn him into a social worker would undermine his clinical competence and equip him for the wrong job. It is doubtful, in any case, if Britain could fill its medical schools if they were turned into training grounds for social work. As it is, some 350 doctors emigrate permanently each year, mainly because general practice in Britain offers little hope of hospital appointments.[135] With the supply of Commonwealth doctors now in danger and with so many practitioners, particularly in London, nearing retirement age, Britain can no longer afford such manpower losses. More than two out of three general practitioners today are over the age of 40 and the emigration loss of the past nine years alone exceeds, in total, all the general practitioners over 59.[13]

To preserve general practice and raise its quality, some means must be found of bringing general practitioners and consultants together.

Recently, two reports have been issued which suggest that this view is at last gaining ground in official circles.[136] [137]

One doctor has said: " . . . Much of the recent advance in general practice has been an exercise in improving organisation, administration and team-work. Future improvement should be more concerned with increasing the clinical skills and clinical responsibility of the general practitioner."[70]

Acknowledgements

This paper was prepared as the result of my participation in an informal study group which is reviewing the operation of the National Health Service. The other members of this group are Dr Peter Draper, Mr Nicholas Bosanquet, and Dr Aubrey Sheiham. Though the paper was prepared by me alone, I received helpful comments from the other members of the group and I wish to thank them for their aid.

I am also grateful to Dr D. L. Crombie and Stephen Israel for supplying and clarifying data contained in the paper. The research for this study was carried out at the British Museum and the libraries of the London School of Hygiene and Tropical Medicine, the British Medical Association and the Royal College of General Practitioners. To the staffs of each, I am deeply indebted for their many kindly acts of assistance. Lastly, I wish to thank my wife, Naomi, not only for her sane judgments and helpful suggestions but for her usual incisive criticism of my work.

REFERENCES

1. Forsyth, G. & Logan, R. F. L. (1962). In *Towards a Measure of Medical Care*. pp. 66–86. London: Nuffield Provincial Hospitals Trust.
2. Ministry of Health (1967). *On the State of the Public Health.* Annual Report of Chief Medical Officer for 1966. pp. 24–26. London: H.M.S.O.
3. Department of Health and Social Security (1970). *On the State of the Public Health.* Annual Report of Chief Medical Officer for 1969. p. 29. London: H.M.S.O.; also *British Medical Journal* (1970). **4**, 191–192.

4. General Register Office (1958). *Morbidity Statistics from General Practice.* Vol. 1. London: H.M.S.O.; also Ashford, J. P. & Pearson, N. G. (1970). *Journal of the Royal Statistical Society,* Series A, Part 3, p. 306; Fry, J. & Dillane, J. B. (1964). *Lancet,* **2,** 632–634.
5. Department of Health and Social Security (1970). *Digest of Health Statistics.* p. 5. London: H.M.S.O.
6. Brotherston, Sir John (1958). In. Pemberton, K. & Willard, H. *Recent Studies in Epidemiology.* pp. 131–145. Oxford: Blackwell.
7. Morris, J. N. (1970). *The National Health Service: three views.* p. 5. London: Fabian Society; also Davies, B. (1968). *Social Needs and Resources in Local Services.* London: Michael Joseph; Summer, Greta & Smith, R. (1969). *Planning Local Authority Services for the Elderly.* London: Allen & Unwin. Mittler, P. (1968). *Mental Health Services in the Community.* London: Fabian Society.
8. Department of Health and Social Security (1971). *Annual Report for* 1970. p. 8. London: H.M.S.O.; also British Medical Association (1970). *Health Services Financing.* p. 592, Table 9. London: B.M.A.; Department of Health and Social Security (1970). *Digest of Health Statistics.* p. 40. London: H.M.S.O.
9. *British Journal of Hospital Medicine* (1969). **2,** pp. 1877–1880.
10. Royal College of General Practitioners (1970). *Present State and Future Needs of General Practice.* pp. 8–17. London: R.C.G.P.; also Peterson, O. L. *et al.* (1956). *Journal of Medical Education,* **31,** Part 2; *American Medical News* (1971). 26 July, p. 12.
11. Mechanic, D. (1968). *Medical Care,* **6,** 245–260.
12. Peterson, O. L. *et al.* (1956). *Journal of Medical Education,* **31,** Part 2, 48, 53–55, 73, 145; also Clute, K. F. (1963). *The General Practitioner,* pp 319–320. Toronto: University of Toronto Press.
13. Department of Health and Social Security. (1970). *Digest of Health Statistics.* p. 38. London: H.M.S.O.
14. Department of Health and Social Security (1971). Annual Report for 1970, p. 52. London: H.M.S.O.
15. Department of Health and Social Security (1970). *On the State of the Public Health.* Annual Report of the Chief Medical Officer for 1969. p. 1–2. London: H.M.S.O.; also Office of Health Economics (1968). *The Consumer and the Health Service.* p. 26. London: O.H.E.
16. Cameron, J. K. (1970). *British Medical Journal,* **3,** 105.
17. *British Medical Journal* (1947). **2,** 353–357.
18. Brotherston, Sir John (1971). In. Gatherer, A. & Warren, M. D. (editors). *Management and the Health Services.* pp. 1–25. Oxford: Pergamon.
19. Peterson, O. L. *et al.* (1956). *Journal of Medical Education,* **31,** Part 2, 74–84; also Clute, K. F. (1963). *The General Practitioner,* p. 465. Toronto: University of Toronto Press.
20. Peterson, O. L. *et al.* (1956). *Journal of Medical Education,* **31,** Part 2, pp. 49–73.
21. Collings, J. S. (1950). *Lancet,* **1,** 555–585.
22. Cardew, B. (1953). *Medical World,* **79,** 441–458, 485–488.
23. Hart, J. T. (1971). *Lancet,* **1,** 405–412.
24. Orr, D. W. & Orr, Jean W. (1938). *Health Insurance with Medical Care.* pp. 37–54, 252–257, New York: Macmillan.
25. Labour Party (1943). *National Service for Health.* p. 9. London.
26. Office of Health Economics (1968). *The Consumer and the Health Service.* p. 33. London: O.H.E.
27. Smith, F. (1962). *Dissertation for D.P.H. Manchester.* Unpublished.
28. Godber, G. (1970). *Medical Care: The Changing Needs and Pattern.* p. 14. London: Churchill.
29. Office of Health Economics (1966). *Surveillance and Early Diagnosis in General Practice.* p. 36. London: O.H.E.
30. Last, J. M. (1963). *Lancet,* **2,** 28–31; also Logan, R. F. L. (1964). In McLachlan, G. (Editor) *Problems and Progress in Medical Care.* pp. 3–10; Office of Health Economics (1964). *New Frontiers in Health.* London: O.H.E.
31. Israel, S. & Teeling-Smith, G. (1967). *Social and Economic Administration,* **1,** 43–56.
32. Royal College of Physicians of Edinburgh (1963). *The Care of the Elderly in Scotland,* pp. 20–22. Edinburgh: R.C.P.; also Williamson, J. *et al.* (1964). *Lancet,* **1,** 1117–1120.
33. Forsyth, G. & Logan, R. F. L. (1968). *Gateway or Dividing Line?* pp. 34–38. London: O.U.P.
34. *Medical News Tribune,* (1971). **3,** (6 Aug.), 5; also McLaren, H. C. (1963). *The Prevention of Cervical Cancer.* London: English Universities Press; Wolfendale, M. & Handfield-Jones, R. P. C. (1964). *Lancet,* **2,** 901–902; Thompson, J. G. (1971). *Health Trends,* **3,** 24–25; Wakefield, J. (1971). *Health Trends,* **3,** 25–29; Higgins, I. T. T. (1971). *Lancet,* **2,** 1141–1143.
35. Knox, E. G. (1968). In. *Screening in Medical Care.* pp. 43–54. London: O.U.P.
36. Cartwright, Ann (1964). *Human Relations and Hospital Care.* p. 16. London: Routledge & Kegan Paul.
37. Logan, R. F. L. & Eimerl, T. S. (1965). *Millbank Memorial Fund Quarterly,* **43,** Part 2, 302–309.
38. Office of Health Economics (1968). *The Consumer and the Health Service.* p. 7. London: O.H.E.

39. Butterfield, W. J. H. (1968). *Priorities in Medicine*. pp. 8–22. London: Nuffield Provincial Hospitals Trust.
40. *British Medical Journal* (1927). **2**, *Suppl.*, 18–19; (1928). **2**, *Suppl.*, 41–42.
41. Collen, M. F. (1966). In. *Surveillance and Early Diagnosis in General Practice*. pp. 10–13. London: O.H.E.
42. Royal College of General Practitioners Research Committee (1960). *British Medical Journal*, **2**, 416–422; also Central Health Services Council (1969). *People with Epilepsy*. p. 19, para. 51. London: H.M.S.O.
43. Keen, H. (1966). In. *Surveillance and Early Diagnosis in General Practice*. pp. 19–23. London: O.H.E.
44. Office of Health Economics (1966). *Surveillance and Early Diagnosis in General Practice*. pp. 23–24. London: O.H.E.
45. Office of Health Economics (1970). *Alcohol Abuse*, pp. 37–38. London: O.H.E.
46. Logan, R. F. L. (1964). In. McLachlan, G. (1964). *Problems and Progress in Medical Care*. p. 12, London: O.U.P.; also Butler, N. R. & Bonham, D. G. (1963). *Perinatal Mortality*. pp. 70–75. London: E. & S. Livingstone.
47. Department of Health and Social Security (1969). *Report on confidential enquiries into maternal deaths in England and Wales*, 1964–1966, pp. 108–111. London: H.M.S.O.
48. Department of Health and Social Security (1970). *Domiciliary midwifery and maternity bed needs*, p. 20. London: H.M.S.O.
49. *Pharmaceutical Journal* (1970). **204**, 396–397.
50. Cartwright, Ann & Marshall, Rosalind (1965). *Medical Care*, **3**, 69–95.
51. *Lancet* (1971). **2**, 326.
52. Patients Association (1970). *Survey*. p. 43. London.
53. Royal College of General Practitioners (1970). *Present state and future needs of general practice*. Report from general practice No. 13. 2nd ed. p. 12. London: R.C.G.P.
54. *Medical Care Review* (1971). **28**, 489.
55. Teeling-Smith, G. (1971). *Hospital*, **103**, 199–203; also Ashford, J. P. & Pearson, N. G. (1970). *Journal of the Royal Statistical Society*, Series A, **133**, Part 3, 295–357.
56. Oxford Regional Hospital Board (1963). *Hospital outpatient services*. p. 26. Oxford: O.R.H.B.
57. Department of Health and Social Security (1971). *Annual Report for 1970*. pp. 154, 160, 258. London: H.M.S.O.
58. Godber, Sir George (1959). *Lancet*, **2**, 224–229.
59. Forsyth, G. & Logan, R. (1968). *Gateway or dividing line?* pp. 38-41. London: Oxford University Press.
60. Office of Health Economics (1968). *General Practice Today*. p. 20. London: O.H.E.
61. Signy, A. G. (1967). *Medical World*, **105**, 7–13.
62. Carmalt, M. H. B. *et al.* (1970). *British Medical Journal*, **1**, 620–623.
63. Anderson, J. A. D. (1968). *Lancet*, **2**, 97–99.
64. Royal College of General Practitioners (1970). *Present state and future needs of general practice*. 2nd. ed. pp. 29–30. London: R.C.G.P.
65. Smith, M. V. & Blythe, J. D. (1971). *Update Plus*, **1**, 135–139.
66. Forsyth, G. & Logan, R. (1968). *Gateway or dividing line?* p. 108. London: Oxford University Press.
67. Forsyth, G. & Logan, R. (1968). *Gateway or dividing line?* p. 41. London: Oxford University Press.
68. Nuffield Provincial Hospitals Trust (1960). *Casualty services and their setting*, pp. 63–64. London: O.U.P.
69. Forsyth, G. & Logan, R. (1968). *Gateway or dividing line?* pp. 62–74. London: Oxford University Press.
70. Loudon, I. S. L. (1970). *The demand for hospital care*. Oxford: United Oxford Hospitals.
71. Eimerl, T. S. (1962). *Lancet*, **1**, 851–852.
72. London School of Hygiene and Tropical Medicine (1971). *The Liverpool study*, Ch. 11, table, 11.9. London: L.S.H.T.M.
73. Cartwright, Ann (1967). *Patients and their Doctors*. p. 216. London: Routledge & Kegan Paul.
74. *British Medical Journal* (1956), **1**, *Suppl.* 339–341.
75. Kerr, D. (1958). Royal Commission on Doctors' and Dentists' remuneration (evidence). London: H.M.S.O.
76. Porter, A. (1969). *British Medical Journal*. **4**, 296.
77. Hardman, R. A. (1971). *Journal of the Royal College of General Practitioners*, **21**, 473–478.
78. Royal College of General Practitioners (1970). *Present state and future needs of general practice*. Report from general practice No. 13. 2nd. ed. pp. 33–34. London: R.C.G.P.
79. Ashford, J. P. & Pearson, N. G. (1970). *Journal of the Royal Statistical Society*, Series A, **133**, Part 3, p. 299.

80. Forsyth, G. & Logan, R. (1968). *Gateway or dividing line?* pp. 74–82. London: Oxford University Press.
81. Barnes, P. K. & Hoile, R. W. (1969). *British Medical Journal*, **4**, 424–425.
82. Murray, D. S. (1965). *Proceedings of the Royal Society of Medicine*, **58**, 449–451.
83. Hunt, J. H. (1968). *Practitioner*, **201**, 94–105; also Aylett, S. (1969). *British Medical Journal*, **2**, 247–248.
84. Godber, G. E. (1961). *British Medical Journal*, **2**, 843–847.
85. Israel, S. & Draper, P. (1971). *British Medical Journal*, **1**, 452–456.
86. Israel, S. (1971). Personal communication.
87. National Health Service (1962). *A Hospital Plan for England and Wales*. London: H.M.S.O.
88. Oxford Regional Hospital Board (1969). *The general practitioner and the hospital service in the* 1970s. Oxford: O.R.H.B.
89. *British Medical Journal* (1971). **2**, *Suppl.* 27–28, 115–119, 127–129; **3**, *Suppl.* 62, 65–66.
90. Hobbs, M. S. T. & Acheson, E. D. (1966). *British Medical Journal*, **1**, 499–505.
91. Department of Health and Social Security (1970). *Digest of Health Statistics*. p. 96. London: H.M.S.O.
92. Oxford Regional Hospital Board (1965). *The work of a cottage hospital in a rural community*. Oxford: O.R.H.B.; also Stainer, J. G. C. (1966). *Hospital*, **40**, 212–215; Evans, E. O. (1969). *Lancet*, 423–424; Oddie, J. A. *et al.* (1971). *Lancet*, **2**, 308–310; Emrys-Roberts, M. (1971). *Lancet*, **2**, 755–756; Shepherd, J. (1971). *Lancet*, **1**, 903–905; Purland, G. R. (1971). *British Hospital Journal and Social Service Review*, **81**, 68–69; Briggs, P. W. (1971). *British Hospital Journal and Social Service Review*, **81**, 1431–1432.
93. Halberstam, M. J. (1971). *New England Journal of Medicine*, **284**, 1180–1185.
94. Forsyth, G. & Logan, R. F. L. (1962). In *Towards a measure of medical care*, pp. 79–80. London: Nuffield Provincial Hospitals Trust.
95. Department of Health and Social Security (1970). *Digest of Health Statistics*. p. 63. London: H.M.S.O.
96. London School of Hygiene and Tropical Medicine (1971). *The Liverpool study*. Ch. 11. London: L.S.H.T.M.
97. Godber, G. E. (1963). *Lancet*, **1**, 1061–1066.
98. Draper, P. (1967). *Lancet*, **2**, 1406–1409.
99. Wade, O. L. & Elmes, P. C. (1969). *Update*, **1**, 721–724.
100. Gruer, Rosamond (1971). *Lancet*, **1**, 390–394.
101. Office of Health Economics (1970). *Building for health*, pp. 19–20. London: O.H.E.
102. Department of Health and Social Security (1969). *The functions of the District General Hospital.* London: H.M.S.O.
103. Teeling-Smith, G. (1971). *Hospital*, **133**, 199–203; also *Medical World Newsletter*, 1966, **1**, 4.
104. Slee, M. E. (1968). *Medical Officer*, **199**, 278.
105. *Lancet*, (1971). **2**, 250–251.
106. Office of Health Economics (1968). *The consumer and the health service*. pp. 25–28. London: O.H.E.
107. Smith, J. W. & O'Donovan, J. P. (1970). *British Medical Journal*, **2**, 653–656.
108. Office of Health Economics (1968). *The consumer and the health service*, pp. 25–28. London: O.H.E.
109. *British Medical Journal* (1970). **3**, 335–338.
110. Office of Health Economics (1965). *Surveillance and early diagnosis in general practice*. p. 41. London: O.H.E.
111. Cartwright, Ann (1964). *Human relations and hospital care*. p. 20–21. London: Routledge & Kegan Paul.
112. Butler, J. R. and Pearson, Mary (1970). *Who goes home?* pp. 73–74. London: Bell and Sons.
113. Cardew, B. (1959). *The future of the family doctor*. p. 6. London: Fabian Society.
114. Locke, K. R. (1965). *Medical Care*, **3**, 182–189.
115. Royal College of General Practitioners (1971). *Journal of the Royal College of General Practitioners*, **20**, *Supplement* 2, 65–66.
116. Peterson, O. L. *et al.* (1956). *Journal of Medical Education*, **31**, Part 2, pp. 100–101; also Clute, K. J. (1963). *The General Practitioner*. p. 318. Toronto: University of Toronto Press.
117. Forsyth, G. & Logan, R. (1968). *Gateway or dividing line?* pp. 41–42. London: Oxford University Press.
118. Curwen, M. & Brookes, B. (1969). *Lancet*, **2**, 945–948.
119. King Edward's Hospital Centre (1971). *Directory of British Health Centres*. London: K.E.H.C.
120. Ashworth, H. W. *et al.* (1963). *Medical World*, **99**, 466–475.
121. Sluglett, J. (1960). *Report on health centres*. p. 37. London: Medical Practitioners Union.
122. Scottish Home and Health Department (1967). *Sighthill and Stranraer health centres compared.* Edinburgh: S.H.H.D.

123. Warin, J. F. (1968). *British Medical Journal*, **2**, 41–45.
124. Gibson, R. (1970). *British Medical Journal*, **2**, 353–356.
125. Royal College of General Practitioners (1970). *Present state and future needs of general practice.* Report from general practice No. 13. 2nd. ed. pp. 32–33. London: R.C.G.P.
126. Boddy, F. A. (1969). *British Medical Journal*, **2**, 438–441.
127. Anderson, J. A. D. *et al.* (1970). *British Medical Journal*, **4**, 103–105.
128. Walker, J. H. & McClure, D. M. (1969). *British Medical Journal*, **3**, 584–587.
129. Jefferys, Margot (1965). *An Anatomy of the Social Welfare Services.* pp. 117–121. London: Michael Joseph.
130. Office of Health Economics (1969). *Human relations in general practice*, pp. 40–43. London: O.H.E.
131. Forman, J. A. S. & Fairbairn, E. M. (1968). *Social casework in general practice*, pp. 18–31. 34–37. London: Nuffield Provincial Hospitals Trust.
132. Mechanic, D. (1970). *Medical Care*, **8**, 15–25.
133. Crombie, D. L. (1971). *A model of the medical care system.* Birmingham: Royal College of General Practitioners.
134. Jefferys, Margot (1965). *An Anatomy of the Social Welfare Services.* pp. 45–46, 345. London: Michael Josephs.
135. Ministry of Health (1968). *British Medical Journal*, **1**, 45–48.
136. Scottish Home and Health Department (1971). *Doctors in an integrated health service.* Edinburgh: S.H.H.D.
137. Department of Health and Social Security (1971). *The organisation of group practice.* London: H.M.S.O.

THE GENERAL MEDICAL SERVICES

. . . General practice in the United Kingdom is becoming dangerously middle-aged. For every ten principals between the ages of 40 and 55 there are only six between the ages of 25 and 40 to replace them. The failure of recruitment to general practice from 1948 onwards was due to many factors, not least being the emphasis on hospital training and the impression given that general practice was only for failures who had fallen off a ladder leading to consultant status. Young men preferred emigration to general practice and the ensuing frustration of those remaining culminated in the medicopolitical crisis of 1964, and the publication of the charter for the family doctor service. This along with the increasing influence of the Royal College of General Practitioners prevented the complete collapse of the general medical services in the National Health Service.

It is now quite easy to enter general practice as a principal and the Medical Practices Committee has to accept applicants with less than two years' experience, yet between 1969 and 1970 the number of male principals born in the British Isles fell by 56. In England and Wales the proportion of female principals with unrestricted lists rose from 8·6 per cent of the total in 1965 to 10·7 per cent in 1970. This is a large increase, but it must be remembered that many women have family commitments which prevents their working 'full-time'. Apart from this the force is made up by the recruitment of general practitioners from overseas, so that up to 40 per cent of the principals of some executive council lists have been born outside this country.

Paradoxically, the relative ease with which inadequately trained doctors can become established has further hindered the recruitment of better trained graduates. . . . It is significant that the University of London, the largest producer of medical graduates in England, has no such Chair (of general practice).

MARKS, J. H. (1972). *Proceedings of the Royal Society for the Promotion of Health*, April.