PRACTICE OBSERVED

Referral to hospital: can we do better?

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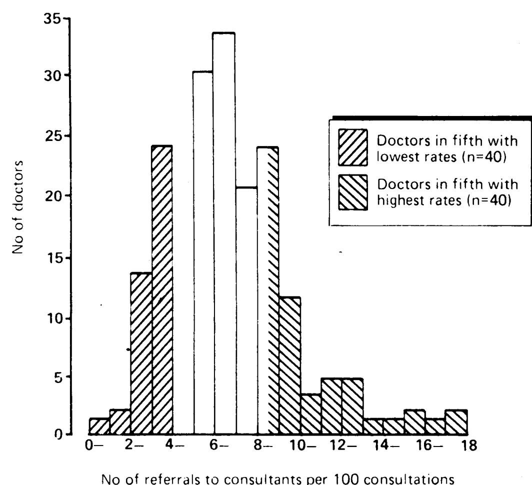
The variation in rates of referral to hospital in general practice is such that questions about quality and cost can no longer be avoided. In considering referral to hospital the government has now declared that family practitioner committees and the health authorities "should act to ensure that the use of hospital facilities achieves the maximum benefit for patients and services are used to ensure quality of care in a cost effective way."[1] No definition of benefit is vouchsafed. Benefits might be finding disease, altering the outcome of the disease, or reducing anxiety. In this paper we consider four broad strategies that could be envisaged: adopting norms, rationing, management incentives, and performance review.

Adopting norms

The search for economies is most likely to be expressed as a drive to improve the specificity of the decision to refer—that is, to reduce unnecessary referrals. Doctors referring many patients would be encouraged to reduce their referral rates on the assumption that many of the patients they refer do not benefit from, or may be harmed by, referral. Little if anything will be done to increase the sensitivity of the doctor's decision to refer—that is, to increase the number of appropriate referrals. If the Department of Health and Social Security were to make an analogy with its use of data on prescribing regional medical officers might visit the deviants and endeavour to effect a regression to the mean.

One problem in drawing an analogy with data on prescribing is that the variance in rates of referral to hospital is much larger than that in prescribing rates. A recent study showed a 25-fold difference between the outliers and a fourfold difference between doctors in the top and bottom fifths for referrals (figure).[2] The number of general practitioners with high referral rates to be visited by regional medical officers would thus be many times the number with high prescribing rates currently being visited. If visits to doctors with high referral rates were to be triggered when rates exceeded 25% above the local mean (as is the case for prescribing rates) a quarter of the general practitioners in the country would be visited. On the other hand, if a much more stringent limit were set any change in referral rates of those general practitioners visited would have little effect on the overall pattern.



Distribution of rates of referral to consultants among 201 doctors in previous study

How referral rates should be calculated remains unresolved: the denominator may be the practice list, episodes of illness, categories of disease, or number of consultations. A demographic denominator would be most useful epidemiologically and would most readily permit relevant comparisons. The limitation here is that the rates would apply to practices rather than to individual doctors, and we know that great variations exist within practices. Even though personal lists may exist in a partnership, personal rates derived by arbitrary division of the referral rate in the practice would be only approximate. It might be attractive to relate referral rates to episodes of illness, but the problem here is that the search for the end of an episode in general practice is often unfruitful. Similarly, although it would be interesting to relate rates to categories of disease, the distribution of morbidity (even for major diseases) within a practice would be difficult to determine reliably at present. Recording of morbidity in general practice is as much a record of the language, perceptions, and habits of thinking of the individual recorders as it is a record of established disease. Using consultations as the denominator has the merits of simplicity of calculation and reliability; it raises the question of whether referral rates are at least in part a function of consulting rates.

Whatever the method of calculating referral rates, the problem of interpretation remains. By concentrating on general practitioners with high and low rates of referral the government's white paper implies that the norm for referral rates should lie somewhere around the present average. But does the present average represent a professional consensus about what is desirable, or should it be higher or lower? Should we expect all general practitioners to have the same referral rate? If differences in knowledge, skill, and aptitude necessitate some variability how much is acceptable? None of these questions can be answered through analysis of referral rates alone. Numbers and rates do not tell us enough in themselves to allow us to form judgments about what is desirable. For this it is necessary to look at the appropriateness of referrals in terms of their actual or expected outcomes.

Although the appropriateness of referrals cannot confidently be inferred from consideration of aggregated data, further data, such as low rates of investigation before and after the referral, low rates of consequent admission to hospital, and high rates of single outpatient consultations, might help to target "problem" doctors. High rates of non-attendance

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(poor compliance with referral) might also be a useful marker, provided the figures were considered in relation to local norms. But for these data to be helpful they will have to be specific both to specialties and to individual consultants. By the time the data become sufficiently detailed to permit even the most tentative judgments they will almost be qualitative descriptions and will need analysis by case conference. Indeed, when we come to consider the sensitivity of the decision to refer and the cost of late referral or non-referral only an analysis of critical events—a case discussion—will be likely to distinguish inappropriate from appropriate referrals.

We do not suggest that the regional medical service would necessarily carry out such a task mechanistically and without reflection. We wish to warn, however, against a simplistic approach and to point out the size and complexity of the exercise should it be undertaken.

Rationing

All health care systems are subject to rationing. In open market systems access to the service is controlled by the ability and willingness of the client to pay. In the NHS rationing is achieved by imposing cash limits, which may be experienced by the patient as delays in getting an appointment with a consultant, waiting time in the outpatient clinic, anxiety, and other non-monetary costs. Could the quality of referral in the NHS be improved, and could the costs be cut by more explicit rationing?

A nominal charge could be levied on patients at the time of their referral to hospital. Currently patients are charged £2.60 per item for their prescriptions. A patient not exempt from prescription charges who is suffering from a chronic disease might pay £30 to £100 a year as a levy for drug treatment. A similar charge for referral for a second opinion would not therefore constitute a break with current practice. It could be argued that imposing a charge, even a nominal one, would cause patients to reflect on the need for such a second opinion and would also cause doctors to be more discriminating. This discrimination, however, may have more to do with the doctor's perception of the patient's motivation and willingness and ability to pay than with a sense of clinical priority. Furthermore, certain categories of patients might reasonably have to be excluded from paying this referral charge; some 70% of prescriptions are issued to patients who do not have to pay for them. The categories to be excluded from payment are likely to include most patients who will require referral. Imposing charges on new referrals is therefore likely to have a weak and uncertain effect.

Though no firm proposals have been put forward, some health authorities have examined the possibility of imposing referral quotas on general practitioners. How these quotas could be arrived at was not made clear. Target mean referral rates might be set for the various specialist departments within the region or might be related to the incidence and prevalence of the major diseases; no less realistically, they might be set by dividing the estimated number of consultations available in each specialty by the size and distribution of the practice list. The problem here is that when the quotas are exhausted the need to refer may remain. Quotas might provide guidelines about the availability of resources, and to this extent they might be useful. They cannot be expected to act as a definitive control. Moreover, most discussions of quotas or norms assume that the need for referral is constant, at least in relation to the demography of the practice, and take no account of variations in the knowledge, skills, or anxiety levels of general practitioners, which may be compensated for by referral.

Neither charges nor referral quotas would necessarily improve the quality of the decision whether to refer. They leave unanswered the question of how the doctor should respond to clinical need when the quotas have been filled. However imperfect the present device of rationing by waiting, it may well be safer and fairer than rationing by charges or quotas.

Management incentives

It might be possible to change the referral behaviour of general practitioners by restructuring their contract so as to provide the appropriate incentives. What would be the shape of such a restructuring?

The present contract does little to encourage discrimination in the use of hospital services. Drawing on his studies of health maintenance organisations in the United States, Maynard proposed that the general practitioner should become the budget holder for both primary and secondary care.[3] What he envisaged is an internal market in the NHS with incentives to maximise quality and minimise cost. For hospital referrals the practice would profit from having the lowest rates and the lowest cost per referral it could achieve. It would lose when patients who thought that its threshold for referral was too high or that the quality of the referral was unattractive transferred to other practices. The practice would therefore "buy" hospital services that were as cheap as possible while still attractive to patients (those with pleasant and accessible premises and those that provided early appointments and the likelihood of a consultant opinion at first appointment, and so on). The practice would be penalised financially by high rates of referral, expensive referrals, and loss of unsatisfied patients.

The model is elegant, but would it work? There are several difficulties. Firstly, the skill required to manage such an internal market is almost certainly beyond the present capacity of most general practices. Nevertheless, general practices might be able to engage the services of management organisations that could select hospitals for referral that were to the best advantage of both the practice and the patient. Secondly, competition between practices would have an important part to play in regulating this internal market. At the moment there is virtually no competition between practices, and in many parts of the country there is little choice. Competition might result only from an excess of general practitioners or practices over the needs of the population, but professional self interest continues to oppose any such "wasteful" overproduction of doctors. Thirdly, patients have the right to change practices under the terms of the present contract, but there is little evidence that they do so. Fourthly, the financial impact of the decision of a patient or even a whole family to change to another practice is likely to remain small. In the United States, the decision to change from one health maintenance organisation to a competitor at the end of an annual contract is most often made not by individuals but by large client organisations like companies, insurance groups, and unions. The threat and impact of such changes are therefore considerable. Fifthly, there is no guarantee that patients (or groups, for that matter) would be in a position to make qualitative judgments about referral to hospital without the availability and full disclosure of relevant information. We return to this need below. Sixthly, this form of contract, in which general practitioners profit from their economical management, poses an important ethical question. Levinson suggested that if a practice as part of its economies restricts referral of patients to particular hospitals or particular consultants these restrictions should be declared to patients who would be using the practice.[4] There is no moral objection to

making such cost cutting agreements, only to their non-disclosure.

None the less, experience in the United States suggests that competition between health maintenance organisations can be both effective and efficient.[5] To be so, however, they require something more than an internal market. Quality assurance is based on professional peer review. Wherever possible explicit standards are negotiated and subjected to medical audit.

Performance review

The development of performance review is a major priority in contemporary thinking about continuing medical education in general practice. The Royal College of General Practitioners is committed to the idea of a contract sensitive to performance in the future.[6] Inevitably, therefore, ideas about education and ideas about terms and conditions of service are inextricably and often uncomfortably intertwined.

A preliminary step in performance review is feedback on current performance. We can assume that this is the intention of those who will provide general practitioners with data about their patterns of referral, "Körner data." Harris *et al* showed that feedback of data on prescribing, reinforced by working in a small group, does change behaviour, but the change does not outlive the duration of the group work.[7] Work in a small group has to be reinforced in order to maintain the change. Theoretically therefore, a higher proportion of appropriate referrals can be achieved by setting up a permanent form of qualitative peer review. Even so, our reservations about the interpretations of aggregated data will have to be borne in mind.

Better judgments about the specificity of referrals are more likely to derive from detailed audit than from Körner data alone. What we have in mind is the development of protocols for referral between groups of general practitioners and groups of consultants. Such protocols would be specific to a particular specialty or a particular condition and might include a range of information to be provided by the general practitioner before referral and obtained from the patient's history, from physical examination, and from investigations. Alternatively, protocols for communication could be agreed between general practitioners and a variety of specialists. Hart and Marinker suggested that all referrals from a general practitioner should include seven points (see box).[8]

A complementary list of desired information was looked for in communications from the consultant to the general practitioner. Audits can be carried out on the basis of such protocols and individual cases discussed on the basis of these audits. Experiments with groups of consultants and general practitioners are already taking place, and the results seem promising. The educational spin off goes far beyond the monitoring of referrals: it touches on every aspect of clinical standards and on the renegotiation of boundaries between general and specialist care.

The protocols relate to the referrals that are actually made; they do not deal with the problem of under-referral. This problem can be tackled only by another form of peer review: analysis of critical events. Practices may decide to monitor new cases of myocardial infarction, gastrointestinal carcinoma, blindness, or other conditions in which early recognition of symptoms and risk factors would result in early and beneficial referral to hospital.

It must be evident that, although peer review may offer the greatest likelihood of improving the quality of care, the time and effort required are considerable. Indeed, scepticism about both the cost effectiveness and opportunity cost of such an extensive exercise is in our view an essential component of any plans for such a development in general practice. This means that widespread experimentation and evaluation must precede any attempt at widespread introduction of these methods.[9] If, as we hope, these experiments are successful it will be important to consider what further resources, rewards, and sanctions would be required.

The major resource required will be professional time: the Royal College of General Practitioners has argued that time for peer review should be considered to be an essential component of the contract to care for patients. Information systems will be needed both within practices and between practices and hospitals. The government has already indicated its interest in generating annual practice reports to family practitioner committees and health authorities.[1] Criteria for the information to be contained in these reports and the amount of self analysis to be attained may eventually be linked to academic rewards like fellowship of the Royal College of General Practitioners, recognition by the Joint Committee for the Postgraduate Training of General Practitioners as a teaching practice, or the financial rewards and penalties of a future contract. The possible range of rewards and sanctions is beyond the scope of this paper.

Information that general practitioners should give when referring patients to consultants

- Clear identification of the patient
- A succinct description of the patient's personality (though there are dangers here of caricature and character assassination)
- A statement about the patient's present problem
- A summary of relevant past events, including the prescription of drugs and what is known about the patient's reaction to these drugs
- The doctor's formulation of the problem
- The doctor's expectation of the referral and the patient's expectation (if this is known)
- A statement of what the patient has been told about his condition and about the reason for referral.

Conclusion

Our main intention has been to explore the difficulties that the profession will face in trying to make sense of aggregated data about referral of patients from general practitioners to hospitals. We believe that attempts to adopt norms will have no effect on improving either the selectivity or sensitivity of referrals. Attempts to ration referrals by quotas or charges will decrease their volume but cannot be relied on to improve their quality. It is always possible that giving doctors a better knowledge of the limits on resources will encourage them to adopt a more discriminating sense of priorities, but the evidence for this is thin.

In the United Kingdom the referral system has its origins in the nineteenth century demarcation disputes among apothecaries, surgeons, and physicians. For a century and a half it has been sustained by codes of etiquette and the widely held belief that a rational system of health care is based on the virtual monopoly of primary care by community based general practitioners, who act as gatekeepers to specialist secondary care. This arrangement accords with our traditions of health care, is clinically logical, and seems to make economic sense. But the general practitioners' monopoly of primary medical care in this country may be questioned by those who would see it as a restrictive trade practice, and its future can no longer be taken

for granted. Indeed, the Department of Trade and Industry has opened the debate in a recent consultative document.[10] The current review of funding and provision of services in the NHS further questions past practice.

Those who would argue for continuing the referral system on which the NHS is based will have to do so on the ground of new evidence about effectiveness and efficiency. We have suggested that a combination of management incentives and peer review offers the most promising means of improving the quality of referrals. Experiments with both contract and medical audit are already overdue. The gains—better health outcome, cost savings, and reduced opportunity costs—are likely to be large.

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