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ORIGINAL ARTICLES

Evaluating general practice fundholding in the United Kingdom

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GP fundholding was the most radical element in the package of reforms introduced into the British National Health Service in April 1991. Despite initial hostility from the British Medical Association, this scheme has become increasingly popular with GPs, such that it now covers one-third of the UK population. GP fundholding has generated considerable interest internationally and the British Government has hailed it as a great success. When the organizational changes were first implemented formal evaluation was not encouraged by the government. Nevertheless, some health services researchers have carried out evaluative studies on the impact of GP fundholding. This paper discusses the problems faced by those attempting to evaluate health care reforms, using the studies on fundholding to illustrate the difficulties. A summary of the main findings from these studies reveals extensive gaps in current knowledge about the impact of the scheme. Claims that the introduction of GP fundholding has resulted in improvements in efficiency, responsiveness and quality of care are in general not supported by the evidence.

Key words: GP fundholding, internal market, health care reform, evaluation, evidence-based policy

The British National Health Service (NHS) was founded in 1948 to provide comprehensive health services to the whole population, irrespective of means, allocated on the basis of need. Funding comes from general taxation and most services are free at the point of use. A small private sector continued to flourish after 1948. NHS consultants can spend part of their time in private practice and patients are free to take out private health insurance if they so wish. General practitioners (GPs) are independent contractors and patients can choose to register with any GP in their locality. The GP is responsible for their general medical care and for acting as a gatekeeper to the rest of the service, referring patients to hospital-based specialists or community health services when necessary. Virtually the whole population is registered with GPs who retain a monopoly of medical care outside the hospital. On the whole patients do not have direct access to hospital or community health services, except via referral from their GP.

The NHS continues to be very popular with the British electorate. Although there have always been some inequalities in access to care and variations in quality, the principle of a universal service providing comprehensive coverage, largely free at the point of use, attracts strong support. Throughout its history the NHS has provided adequate and sometimes excellent standards of clinical care at remarkably low cost. It compares well in this respect with the health services of other developed countries in Europe and North America.[1] Hospital and community health services, accounting for 70% of total costs, are provided out of a centrally controlled cash-limited budget. Hospital doctors are salaried employees whereas GPs are self-employed. The well-developed primary care system and the GPs' gatekeeping function has helped to keep costs down and in contrast to fee-for-service systems there are few incentives to over-treat.

THE CASE FOR REFORM

However, during the 1970s and 1980s it became clear that the NHS was finding it difficult to cope with increasing demands resulting from demographic change, technological advance and growing public expectations. The most obvious manifestation of the mismatch between demand and provision was lengthening waiting lists. There was also a growing awareness of problems within the system. Studies of out-patient referrals and hospital admissions drew attention to unexplained variations in utilization rates, suggesting inefficiencies and a lack of consensus among doctors about when it was appropriate to intervene.[2] This led to questions about the effectiveness of medical care and to calls to examine value for money in health services.

The 1979 general election marked the turning point in the post-war consensus on the welfare state. The Conservative Party led by Margaret Thatcher came to power with a promise to implement a programme of reforms based on the radical theories of the new Right. They pledged to 'roll back the frontiers of the State'. The NHS was accused of bureaucratic inefficiency, professional paternalism, resistance to change, absence of consumer choice and poor quality standards. For the right-wing critics the solution

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to these ills was to introduce new ways of working derived from experience in commercial business and in particular to foster competition and consumerism. Following a review of alternative methods of funding and organizing health services, the government opted to preserve the existing taxation-based funding system and to concentrate on various methods to increase efficiency and value for money. This was to be achieved by devolving responsibility, promoting competition and encouraging consumerism. The main mechanism was the introduction of an internal market in which health care purchasing was to be separated from the provision of services.[3]

INTERNAL MARKET

The internal market was to be established by encouraging hospitals and community units to become self-governing provider trusts. In this way they were to be separated from direct management by the district health authority (DHA), allowing them to control their own finances, staffing resources and capital investment. Meanwhile, not 1 but 2 different types of purchaser were introduced: DHA purchasers and GP fundholders. These represented 2 different and arguably incompatible models of purchasing. Whereas DHA purchasers were exhorted to carry out formal needs assessments as the basis for their purchasing plans and to balance priorities for the complete range of health care needs in a large (approximately 500,000) population, GP fundholders were expected to respond to their patients' demands by purchasing a selected range of services for the relatively small practice population (approximately 10,000 patients). Purchasers choose between competing provider trusts, which can theoretically be anywhere in the country. They agree service contracts with them specifying price, volume and quality of care.

DHA purchasing is similar to the traditional top-down planning model, except now districts are expected to consult with GPs and local consumers and to plan for admissions, procedures and service needs, in contrast to the previous planning system which was based on bed numbers and staffing resources. GP fundholding, on the other hand, is bottom-up and demand led, with responsiveness to patients as its key characteristic. In addition to competition between providers, the new system introduced a competitive market between purchasers, since patients can, at least in theory, choose whether or not to register with a fundholding practice.

GP FUNDHOLDING

The decision to give funds to volunteer general practices to buy a range of hospital services for their patients came as a surprise to most of those who had followed the policy debates in the run up to the Prime Minister's review. It was seen as the 'wild card' in the pack of reforms, somewhat out of step with the other changes. The British Medical Association and the majority of GPs vociferously opposed its introduction initially. However, despite this early opposition the scheme has rapidly gained favour with GPs such that it now covers more than one-third of the population.

The fundholding scheme has been described as 'a mini-ambulatory HMO'.[4] Practices are given a budget to purchase hospital out-patient services, admissions for elective surgery, diagnostic tests and investigations, community health services and paramedical services and to cover their prescribing, staffing and management costs. Initially the scheme was to be restricted to practices with registered lists in excess of 11,000 patients but this lower limit has been gradually decreased until it now stands at 5,000. In addition, smaller practices are now allowed to group together to hold a joint budget. Although GP fundholding represents a substantial transfer of resources to GPs, the fundholders have purchasing power over only approximately one-quarter of the total hospital and community health care costs of their patients. The remaining services are still the direct responsibility of the DHA purchasers who purchase accident and emergency services, general medical admissions, tertiary services and some community services. The DHA also has to bear the cost of 'expensive patients', i.e. those whose health care costs amount to more than £6,000 per annum.

Despite many calls to introduce the market system on a pilot or 'shadow' basis or at least to carry out a through-going evaluation of the new arrangements, the pleas were ignored by the Secretary of State on the grounds that to commission research would suggest a failure of resolve and impede progress with implementation. The opportunity to carry out longitudinal research and to select appropriate controls was gravely damaged by this refusal to build in evaluation from the beginning.

However, despite the lack of encouragement or funding from central government, some evaluation of the reforms has been carried out. These have mostly been small-scale studies, conducted by academics and funded from a variety of sources including health authorities and non-governmental agencies. No attempt has been made here to review all such studies systematically, but I shall describe the variety of approaches to evaluation, some of the problems faced by those undertaking this work and some selected findings.

APPROACHES TO EVALUATION

The studies fall into 3 basic types:

- Monitoring

These studies describe the process of implementing the reforms, the attitudes of those affected and the impact of the changes on staff, on structures, on patient flow, etc. Most of the work done so far falls into this category. Much of it is qualitative or impressionistic, sometimes purely anecdotal in nature. It is not analytical and it does not attempt to address searching questions about the value of the scheme or about the risks as well as the benefits.

- Theory-testing

Usually carried out by economists, these studies aim to evaluate the extent to which the reforms have created the conditions in which the market system should produce effects predicted by micro-economic theory. The emphasis is primarily on theoretical analysis and indirect indicators rather than on direct empirical evidence.[5,6]

The problem with many of these studies is that they tend to ignore the body of evidence derived from health services research about the complexity of the factors influencing clinical behaviour. The economic theories often do not fit the real world of clinical practice, since the vagaries of doctors' and patients' behaviour cannot be explained by reference to anything as straightforward as profit maximization or supplier-induced demand.

- Empirical evaluation

This type of study attempts to assess the extent to which specified objectives have been achieved. Usually, but not exclusively, quantitative in nature it requires some type of quasi-experimental design with control or comparison groups to assess the impact of the change or innovation. This is the most rigorous but most difficult type of study to carry out. Very few such studies have been published to date.

Those wanting to mount evaluative studies face a number of difficulties including the following:

- Clarifying objectives

In evaluating health care reforms it is necessary to define criteria against which success or failure will be judged. This is not a straightforward task. One can either choose to judge the outcomes against subjective criteria as defined by the various players involved or against normative criteria. The majority of studies published so far have adopted the former approach. For example, Glennerster and colleagues interviewed GPs in 26 fundholding practices about their reasons for entering the scheme.[7] Their replies indicated that they hoped to be able to use their financial leverage to improve hospital services for their patients and to develop new practice-based services. They wanted to defend their freedom of referral which some saw as potentially under threat if they relied on DHA contracts. They looked forward to being able to control their own staff budgets giving them freedom to employ staff without having to seek approval of the Family Health Services Authority (FHSA). And they were attracted by the extra money available to strengthen practice management and computing. In addition, some GPs relished the excitement of a new challenge, a welcome distraction from the relentless pressure of everyday general practice.

- Attributing causation

Most of the published studies have relied solely on GPs' accounts to determine whether or not these objectives had been achieved. So for example some investigators have reported a perceived shift in the balance of power between GP fundholders and hospital consultants[8] and increased responsiveness to GPs and their patients on the part of hospital management.[9,10] However, similar claims have been made by those GPs involved in non-fundholding groups engaged in helping DHA purchasers to improve services,[11–14] so it is difficult to ascertain the extent to which the reported improvements can reasonably be attributed to this particular purchasing model.

- Choosing controls

In order to conduct a scientific evaluation it is essential to be able to distinguish the direct effects of the alternative models of purchasing and to assess these against normative criteria. Studies which look at the experience of fundholders only, with no comparison group, can easily fall into the trap of falsely attributing all change to the model they are studying. Choice of comparison group is not easy and it has to be recognized that the possibility of bias can never be totally eliminated in a non-experimental situation.

- Selection effects

Early entrants to the fundholding scheme were volunteers who were not necessarily typical of their fellow practitioners. Many came from well-organized practices in middle-class areas. Their patients and the types of problems they faced differed in fundamental ways from many hard-pressed inner-city practices.

- Time scale

Another major difficulty faced by those evaluating policy changes is judging the appropriate time at which to measure change. The evolutionary nature of the reforms and the fact that the DHA purchasers were explicitly required to maintain a 'steady state' in the first couple of years after the organizational changes, meant that the 2 purchasing models could not be fairly compared in the early stages. On the other hand, as the reforms progress and fundholding becomes more popular among GPs, it is becoming increasingly hard to find non-fundholding practices whose performance could be compared against the fundholders. Since it is almost impossible to judge the optimal time at which the predicted and unforeseen effects of the scheme would be manifest, some form of continuous monitoring is required.

- Isolating the effects of specific innovations

The fact that many other changes were occurring at the same time further complicated the situation. The purchaser-provider split was not the only measure introduced by the government to reshape services. The Patients' Charter required hospitals to meet certain quality standards and to monitor these.[15] Changes were also being introduced in the system for remunerating GPs, aimed at providing incentives for them to undertake more preventive care[16] and the organization and funding of community care was also undergoing fundamental reform.[17] The last addition to this quartet of major governmental initiatives was the establishment of public health targets outlined in the Health of the Nation strategy.[18] All these initiatives constituted a major upheaval in the organization of health services and not surprisingly some of the initial plans were modified or dropped and others were substituted. Instead of a well-defined and carefully planned package of reforms, the government had unleashed an evolutionary process in which policy was being made 'on the hoof'. Changes often occurred faster than could be accommodated by the relatively slow pace of academic research.

- Specifying and operationalizing normative criteria for evaluation

Ideally one would want to judge the impact of the changes against the explicit objectives of those responsible for introducing them. It is clear that the government intended to improve efficiency and value for money. They

also explicitly intended the reforms to increase patient choice and to encourage quality improvements and responsiveness to demand. At the same time they claimed that they intended health services to continue to be free at the point of use and allocated according to need. Many disbelieved their intentions in this latter regard, but Mrs Thatcher was insistent that the NHS was 'safe in our hands' and the founding principles remained unchallenged.

FINDINGS TO DATE

So how have the studies of GP fundholding tackled these issues and what are their conclusions so far?

Are GP fundholders more efficient?

- Prescribing costs

Three studies have found that fundholding provided an incentive to curb the steep increases in prescribing costs which have been a feature of GP prescribing in recent years.[19–21] The direct incentive to keep costs down led fundholding practices to introduce prescribing formularies and to switch to generic preparations instead of more expensive brand-name drugs. In many cases they were able to make savings in their drugs budgets which they were then able to reinvest in the development of new services or in improving their practice premises. It is possible, however, that the ability to hold down cost increases will reach a plateau after 2 or 3 years when no further improvements are possible.

- Hospital contracts and referrals

From the first year of the reforms fundholders were free to negotiate contracts with new providers if they were unhappy with the service provided by their local hospitals. District purchasers, on the other hand, were required to maintain a 'steady state' in the first year. The fact that some fundholders changed their traditional referral patterns and negotiated quality improvements has been hailed by some as illustrative of the fact that fundholders are 'better' contractors than DHAs.[7] In fact of course GPs had always been free to refer to any consultant or hospital of their choice, but this freedom had been curtailed by the introduction of DHA purchasing. There was a danger that some fundholders, while working hard to achieve benefits for their patients, would have little consideration for the effects of their activities on the wider population.[22] Interestingly though, there was some evidence that the first-wave fundholders were particularly anxious to support their local hospitals.[23] The rate at which they referred to hospitals outside their local districts decreased during the 3 year study period. The knowledge that referral rates varied widely led some to believe that inappropriate referrals were a common problem. If GPs had been referring patients unnecessarily, they might have been expected to reduce their referral rates once they had to pay for them. Howie et al.'s study of fundholders in Scotland found a decrease in investigations and referrals among patients consulting for joint pain following the implementation of the scheme.[24] However, this study did not include a control group, so it is possible that this change was caused by some factor unassociated with fundholding. We monitored referral rates in fundholding and non-fundholding practices before and after the reforms and found little difference between the 2 groups of practices.[23] There was no evidence in our study that fundholding was encouraging a shift from specialist to general practice care or that budgetary pressures were affecting referral behaviour.

- New practice-based facilities

Fundholders were able to reinvest any savings they made. Many used this money to develop new practice-based services, such as physiotherapy, counselling or specialist outreach clinics. These services were very popular with patients, but it is debateable whether they were cost-effective innovations. In the first year of our study the practices which had introduced their own physiotherapy services increased their use of physiotherapy by threefold, but their rates of referral to hospital consultants in orthopaedics and rheumatology remained at the same or higher levels. Although others have found that on-site physiotherapy reduces prescribing costs[25], this was not the case in our study. Consultant outreach clinics, which were a popular innovation among fundholders, require hospital specialists to spend considerable time travelling from practice to practice. Unless this results in wider benefits, such as better communication between GPs and specialists, it may not be an efficient use of an expensive resource. Bailey and colleagues[26] studied outreach clinics in fundholding and non-fundholding practices. They found very little evidence of direct contact between GPs and specialists, despite the existence of the clinics. Further concerns about cost-effectiveness were raised in a review of the increasing use of diagnostic and other technology in general practice, fuelled by the fundholding scheme.[27] The experience of the development of minor surgery facilities in general practice reinforces the point that these do not necessarily substitute for hospital services.[28]

- Transaction costs

It seems axiomatic that the administrative costs incurred in dealing with numerous small-scale purchasers will be greater than when purchasing is carried out by one large DHA.[29] For the most part DHA purchasers agreed block contracts with their providers.[30] These allow little scope for the exercise of purchaser leverage over quality of care or clinical effectiveness, but they are relatively straightforward to administer. Fundholders, on the other hand, opted for more complex contracts, sometimes on a cost-per-case basis.[7] These require fairly sophisticated and costly administrative arrangements in both the practice and the provider unit. This raises the key question of whether the greater cost of this form of purchasing is justified in terms of greater benefits. This question cannot be answered by reference to the available evidence.

Does fundholding improve choice and quality?

- Quality standards

Both fundholders and DHA purchasers included quality standards in their contracts with provider units. These often covered specific requirements in relation to the provision of information, communication with GPs, cour-

tesy to patients and waiting times.[7] Studies of GPs' impressions of the benefits achieved as a result of fundholding have found fundholders convinced that there have been quality improvements.[7,8,10,31] However, to date only 1 study has attempted a systematic measurement of the impact on quality of care and this found no major benefits.[32]

- Choice

The government hoped that the reforms would offer greater choice to patients and they made it easier for patients to change GPs if they wanted to. However, the only study to test the impact of the new system found no increase in the rate of movement between GPs.[33] If patients are to have a greater say in the treatment they receive they are crucially dependent on their GPs to offer them choices. Reliance on DHA contracting in theory constrains GPs' freedom to refer and, hence, their ability to offer patients a choice of hospital, whereas fundholders can make their own decisions. A study in the North Western Regional Health Authority found that GPs were no more likely to take account of patients' preferences after the implementation of the reforms in either fundholding or non-fundholding practices.[34]

- Information and communication

Improved communication between GPs and hospital consultants and provider unit managers has been seen as one of the great benefits of the fundholding scheme.[7,8,10,31] However, reports from non-fundholders involved in purchasing groups have made similar claims[11] suggesting that this may be a general effect of the purchaser-provider split, rather than a specific feature of fundholding.

Does fundholding lead to greater inequity?

- Access

There have been numerous anecdotal reports of fundholders' patients being offered hospital appointments more quickly than those from non-fundholding practices, but few attempts have been made to assess the extent to which this has occurred. An analysis of in-patient and out-patient waiting times in the Oxford Region in 1992/93 found no difference between the length of waits experienced by the patients of fundholders and non-fundholders, contrary to the widely held belief of GPs.[35] However, towards the end of each financial year since the implementation of the reforms there have been press reports of hospitals refusing elective admissions from non-fundholding practices because the DHA contract targets have been met and the funding allocation spent[36], suggesting that the patients of fundholders are indeed getting a better deal.

- Budget allocation

When the fundholding scheme was introduced, budgets were based on past patterns of service use, an unsatisfactory method of allocating resources for several reasons.[37] Firstly, it was extremely difficult to determine the extent of past activity because of inadequate routine data. Secondly, rates of referral and admission are known to vary widely among practices and these variations remain unexplained by conventional measures of need. Budgets allocated to fundholders varied by a factor of 3, partly for this reason and partly because hospital prices varied widely.[38] Thirdly, this method of allocating budgets provides an incentive for practices to increase their rates of prescribing and referral in the preparatory year and penalizes those practices that are already efficient. To counteract these problems the Department of Health has been anxious to move towards formula-based funding, although constructing a satisfactory weighted capitation formula is proving very difficult.[39]

Because the budgets for fundholders and non-fundholding practices are calculated differently, it is very difficult to establish whether or not funds are distributed equally. One attempt to make a comparison concluded that fundholding practices in the North West Thames Region were funded more generously than non-fundholding practices.[40] However, the authors of this study recognized that the inadequacies of the available data meant that they could not be completely confident about their findings.[41] Until better information systems are in place it will be hard to resolve the debate.

- Cream skimming

Since the fundholding scheme was first announced there has been concern that fundholders may indulge in 'cream skimming' or removal of patients with expensive health care needs from their lists.[42,43] Glennerster and colleagues have shown how the scheme includes incentives to indulge in cream skimming which would be both technically feasible and financially profitable.[7] Although there is no firm evidence that this is currently happening, press reports have suggested that it may be.[44] There is a real fear that fundholders may be tempted to select out certain patients when budgetary pressures begin to bite. Glennerster and colleagues recommend incorporating measures of the prevalence of chronic disease into the capitation formula to avoid this risk, but this information is not readily available to the health authorities responsible for setting the budgets.

- Two-tiers

In view of the strong popular attachment to the idea of a universal health service accessible to all according to need, the suggestion that fundholding increases inequalities by introducing a two-tier system is the most politically damaging charge of all. This accusation does however carry some force. GPs were encouraged to opt into the scheme on the grounds that they would be able to improve services for their patients. The first-wave fundholders were drawn from the ranks of well-organized larger practices with good facilities, mostly in prosperous areas. The benefits that these practices managed to extract helped to channel resources to those areas least in need. As we have seen, there are concerns that fundholders' patients will benefit at the expense of the patients of non-fundholders, for example, in shorter waiting times as a result of their ability to jump the queue, or practice-based consultant clinics which mean that the specialist is less often available in the hospital out-patient clinic. If cream skimming becomes prevalent among fundholders there is a danger that patients with expensive needs will find it difficult to find GPs willing to take them on to their lists. There are

also concerns that fundholding could have a destabilizing effect on local services by contracting with private providers, for example, for pathology services, thus removing resources from local hospitals and causing a leakage of NHS funds into the private sector.

CONCLUSIONS

Despite the lack of hard evidence of benefit and in the absence of a clear assessment of the risks, in September 1994 the Secretary of State for Health and Social Services announced her intention to extend fundholding to smaller practices.[45] This announcement underlined the government's confidence in the scheme and marked a significant shift towards demand-led purchasing and away from a system based on equitable allocation according to need. It is possible that this trade-off between equity and efficiency will result in the hoped-for quality improvements, although as we have seen it is by no means clear that fundholding will turn out to be a more efficient system. No doubt the government would argue that the benefits extracted by fundholders for their patients will eventually trickle down to benefit everyone else. Alternatively they may be hoping that it will become universal, on the assumption that all practices will then be able to reap the benefits.

However this is a high-risk strategy since it is not based on a systematic attempt to learn from experience. We simply do not know enough about the risks and benefits of the alternative models of health care purchasing because so little good research has been carried out. Claims that GP fundholding has proved to be a success are premature. Yet again policy is being formulated without waiting for adequate evidence. In the absence of hard evidence, rumour and anecdote shape public opinion. The NHS reforms are not popular with the electorate, who find them hard to understand and are unimpressed by unsubstantiated claims of benefit. It is time policy makers woke up to the need for policy to become evidence based. There are encouraging signs that the climate of opinion is now changing in favour of policy evaluation. The development of the NHS Research and Development programme is a major achievement which should enable a much more comprehensive programme of health services research to develop.[46] The next challenge will be to ensure that policy makers, health care practitioners and the public learn from the results.

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