Competing interests: IH and KS are general practitioners and will therefore be directly affected by the government's planned changes to healthcare provision.

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Using markets to reform health care

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The English healthcare market will be different from conventional markets and may not behave in the same way. Predicting whether the reforms will produce the intended results is therefore difficult

This article is part of a series examining the government's planned market reforms to healthcare provision

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Many health systems are using market mechanisms, competition, and incentives as a way of driving reform. The benefits of this are seen as increased responsiveness to the needs of patients and payers, the ability to increase and reduce supply quickly when required, greater efficiency, innovation, and less unhelpful meddling in provider management by central authorities. These advantages are potentially important but come with some problems and costs. The policy question is at what point the costs exceed the expected benefits?

Costs of competition

Competition has costs for providers, payers, and patients. Competition reduces some management costs but transaction costs such as billing and contracting are likely to be higher than in managed systems and providers may have large marketing costs. The reforms proposed for the NHS have avoided one important transaction cost by setting prices nationally, although this may be at the cost of removing some of the power of market mechanisms. The more independent providers become, the more they will need to strengthen their governance arrangements and the greater the need for external regulation. Competition requires some duplication and redundancy, which carries a potentially high cost. This means that the evidence on costs is less clear than economic theory suggests,[1] particularly as this does not necessarily apply to systems with fixed prices.

The creation of spare capacity, which is required for competition, carries an appreciable risk of creating supplier induced demand because providers need to make productive use of their assets. This creates an industry to manage demand, pre-authorise treatment, review use of services, etc, which adds to costs for a relatively low marginal benefit. Too much effort may be put into differentiating products or aspects of quality that are important for competition but add cost and deliver little value to patients.

Choosing providers has a substantial costs for patients in terms of time spent searching and selecting. This is especially true for patients with long term conditions, and the benefits of switching may be low, particularly if they value continuity of care. Indeed, low benefit can be inferred from the observation that switching family doctors is uncommon in settings where patients have this right and where supply is less constrained than in the United Kingdom. Patients need to be able to switch providers if they are dissatisfied but may regard frequent changes as having limited value.

Effects of competition in the NHS are unpredictable

Effect on quality

The impact of competition and markets on the quality of care is contested, and it cannot automatically be assumed that quality will improve without supporting policies and regulatory machinery.[1 2] Several potential hazards exist.

Competition and market incentives can lead to the fragmentation of care and threaten continuity and integration, which are important for patients with long term conditions.[3–6] For example, disconnecting management of chronic disease from primary care is

associated with poorer outcomes, particularly for patients with several illnesses.[7] This is exemplified by the much higher death rate from chronic diseases in the more fragmented US system than in Europe.[8]

A related hazard is that new providers will carve out more profitable activities or narrow areas of expertise, leaving the remaining hospital services struggling, and calls have been made to regulate this trend in the US.[9] Medicine increasingly requires collaboration between networks of providers. Although these do exist in competitive systems—for example, in aircraft manufacturing—learning to collaborate with competitors requires some maturity and experience.

Markets can speed the adoption of innovation, but quality may suffer if these improvements are not shared because providers want to protect their competitive advantage. Market and target based systems can both lead to information being withheld or distorted.

Poorly designed incentives can produce the well documented problems of cream skimming, dumping, and skimping. Providers become unwilling to provide treatment for relatively high cost or high risk patients or fail to provide the full range of required treatment.[2] These behaviours are not unique to systems with competition. A related problem is that payment systems may allow and even reward ineffective or suboptimal care, and it is difficult to design systems that reward actions which produce benefits in the future. This means that making a business case for quality in a very competitive market with a short term time horizon can be difficult.[10]

The evidence on outcomes is unclear. A study by Propper et al suggested higher mortality in areas of high competition in the 1990s internal market.[1] Other evidence suggests that when purchasers pay specific attention to quality more competitive systems seem to produce high quality.[11] Fixed prices may reduce some aspects of quality if competition or regulation is inadequate to force improvement.[2]

Motivating providers

Economic motivation is only one explanation of clinical behaviour, but most pro-market analysis is sceptical about professionalism.[12] The danger is that economic incentives crowd out other motivation and reduce autonomy, self determination, and self esteem because doctors feel that professionalism is not valued.[13] The intrinsic motivation of providers is important when quality is difficult to measure and services are delivered to vulnerable people, but this motivation can be driven out by competition.[2] Dixon and colleagues argue that professional motivation and the ethical basis of services is important because it is difficult to capture all the aspects of care in contracts: trust cuts the cost of managing contracts.[14]

Competition, choice, and equity

Markets are not a very appropriate vehicle to deliver policy goals such as equity. It is often argued that choice will disproportionately benefit articulate and better educated patients and exacerbate inequalities. Positive steps can be taken to intervene in the market to overcome the barriers to access and uptake.[15] However, the work required and costs are considerable and success is far from assured.

Efficient functioning of markets

Several important obstacles may prevent markets producing the results that the textbooks promise. Much of the policy discussion fails to tackle the measures required to make the market function correctly and to deal with the problem of market failure. Experience suggests that markets, particularly those with atomistic commissioners, may be much better at micro-efficiency and improving quality than they are at strategically shaping the system. Markets do not seem well adapted to producing appropriate changes in the configuration of specialist services or those, such as trauma, where critical mass is important. Partly this is because individual payers or referrers do not produce sufficient volumes to send signals to providers that they need to change and payers may favour local providers.

The costs to providers of stopping providing a service, which include the loss of coverage of overhead costs, represent a large barrier to change. In an environment with full cost pricing it is generally worth continuing to provide a service as long as income is greater than marginal cost because of the contribution made to overheads. Even when the market signals are strong, providers may be able to ignore them for some considerable time by relying on political support or inertia. This means that markets require a degree of management and oversight and cannot be expected to solve the complex problems of how best to configure emergency or specialist services.

Julian Le Grand suggests that one of the main reasons for the failure of the previous experiment with markets in the UK was the lack of an appreciable threat of exit. Although managers may have been motivated by the threat of failure, he argues that this threat did not influence clinicians, not least because the need for their services was likely to survive the demise of the organisation.[16] Closing providers or services is also difficult because of the politics. This problem is exacerbated by the UK's pattern of a relatively small number of large hospitals, which means that alternative providers are likely to be further away than might be the case in other countries. Market entry is difficult because of the close ties between payers and existing providers and the high costs of start up. In addition, given that hospitals cannot easily be reused and the importance of coherent teams, transition between providers has a high cost.

Problems can arise if increased efficiency leads to spare capacity. The phenomenon of supplier induced demand may mean that changes in admission thresholds will lead to the new capacity being used for new activity. In a system with a fixed budget this may not be affordable without reductions in spending elsewhere. Supplier induced demand can mean that resources are not used optimally and potentially that patients receive treatment that could have been delivered more cost effectively or may even be inappropriate. Targets are also capable of distorting clinical priorities if they are not properly implemented.

Current policy places a great deal of importance on the publication of quality and other information, which, it is hoped, will influence patients' decisions and redress the information imbalance between providers and patients. Information may not be sufficient—even a former US president chose to have his coronary artery bypass grafting in a hospital ranked 27th in publicly

available ratings.[17] His behaviour is in line with the conclusions of a review of the literature that showed that public disclosure of information has limited effect on the decisions of patients, payers, and referrers.[18] This may have been a consequence of how the information was presented and made available.

The influence of information on provider behaviour is more direct and positive and may result in poor quality providers exiting the system or improving. However, it may also lead to behaviours that achieve specified targets while ignoring other important patient outcomes or encourage the avoidance of high risk patients.[19]

Health care produces benefits that do not directly accrue to the payer or user. Markets for services may not take into account the contribution to research, development, education, and training, and the local economy that health care delivers as a by-product of its main business. It is difficult to design incentives which produce the desired effect without perverse or unintended consequences. It then becomes necessary to impose further incentives, policies, regulations, and other mechanisms to correct unwanted effects, which adds layers of complexity and cost.

Conclusions

Although market mechanisms are undoubtedly effective in terms of increasing responsiveness and efficiency, some caution is required as much of the evidence is debatable or unclear and little of it comes from systems with fixed administratively set prices of the sort being proposed for the English NHS. Furthermore, economic theory is only a partial guide to what may happen.

It is difficult to identify where the trade-offs between the costs and benefits of competitive systems are balanced. In particular, we have no empirical basis for identifying the costs of sustaining the spare capacity to ensure that contestability can work or what this level might be. The effect of the independent sector treatment centre programme on productivity and performance in the NHS seems to suggest that relatively small amounts of challenge at the margin may be sufficient to realise many of the benefits of competition.[20] It is important not to confuse contestability (the ability to market test services) with competition and compulsory outsourcing. If the benefits of competition are subject to sharply diminishing returns, the costs and disbenefits may quickly outweigh them.

Using markets has some advantages over top down-management, particularly as it is sometimes practised in the NHS, but there are also costs, unintended and perverse consequences, and potential for damaging some of the ingredients that have made the NHS special. In fact, the problem may be that market mechanisms have a tendency to be too powerful. Markets and competition are not an end in themselves; nor are they the only policy instruments –management and measures to change culture also have an important role. The application of market mechanisms needs to be carefully thought through.

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Summary points

Markets have benefits in terms of increased efficiency, responsiveness to need, flexibility, and choice

High levels of competition and choice create costs for providers, payers, and patients

Markets can have both positive and negative effects on quality

Healthcare markets do not conform well to textbook descriptions of how markets operate

Market mechanisms have limitations as a method for shaping the system and should be seen as part of a mix of policies rather than a magic bullet solution

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