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Choice and Competition: Evidence from Health Care

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Introduction

During the past two decades, policy-makers have promoted choice and competition in health care as a means of increasing productivity and responsiveness to consumers. In the USA, managed care has led to the introduction of price competition between health care providers. In western Europe, England, Denmark, Sweden, Norway and Holland among others, are all seeking to increase competition and patient choice.

Those promoting competition and choice often appeal to a simple economic argument. Competitive pressure helps make private firms more efficient. They cut costs and improve their goods and services in order to attract consumers, and this continual drive for improvement is good for the economy. Firms that are unable, or unwilling, to become more efficient will be priced out of the market while new, more efficient, firms will enter the market. It seems easy to transfer this logic to the provision of public services. Giving purchasers or service users the ability to choose applies competitive pressure to health care providers and, analogously with private markets, they will raise their game to attract business.

The aims of this chapter are first to subject this assumption to the scrutiny provided by the theoretical and empirical economic evidence on competition between providers and on patient choice in health care markets. Does either

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economic theory or the empirical evidence suggest that greater competition will improve health outcomes? What is the experience of increasing choice into previously low choice systems? Will all patients gain, or are some likely to lose? Second, based on this, I offer a personal view as to the desirability of the use of greater choice and competition mechanisms in the UK health care market.

Before proceeding, it is worth noting that competition between health care suppliers and patient choice are not necessarily the same policy, even if the two may be bundled together in political rhetoric. Competition between health care suppliers can operate with relatively little choice being exercised by consumers, for example, in systems where patients have little choice of insurer or of a 'gatekeeper' for health care services but in which insurers and gatekeepers 'shop around' for health care on behalf of their insurer populations or patients. Even where consumers have more choice of supplier, the nature of health care means they typically rely heavily on professional advice in seeking use of care and may use the same provider of care for care over a period of time (for example, for those with chronic health care conditions). This gives the individual provider monopoly with respect to the consumer. So choice may more realistically (and usefully) promoted by offering patients choice of an insurer or gatekeeper rather than choice for every episode of health care and competition promoted between suppliers of health care for business from the gatekeeper/insurer.

In this chapter I do not examine in any depth issues around patient choice of insurer, but focus instead on the effect of competition between suppliers of health care, as this has been the nature of reforms to date in the UK. However, in the conclusion I discuss briefly competition for insurer as it has been promoted as a possible means of increasing efficiency in a number of European countries as well as being part of the health care system in the USA.

The rest of the chapter discusses the impact of competition between suppliers in health care markets. The provision of information on provider performance is a prerequisite for choice driven competition between providers and so the role of information in increasing competition is examined. The next section considers the effects of attempts to increase direct choice by the patient of their care provider and the final section offers some concluding comments.

Competition between hospitals

I begin by examining the theoretical and empirical economic evidence on the effect of greater competition between providers in health care markets. Note

that most of the evidence focuses on a narrow set of outcomes, primarily the effect of competition on prices and quality of health care, sometimes with a focus on winners and losers, that almost all studies provide evidence only on positive questions, such as ‘does competition increase quality?’ and that most of the evidence comes from the USA or, in Europe, the UK.

The impact of competition on health care markets: What economic theory predicts

Health care markets are usually thought to differ from textbook competitive markets in a number of important ways. These include: the fact that the product is differentiated (due, for example, to hospital’s different geographical location or different styles of health care), that information is imperfect and that government regulation is extensive as a response to these departures from the textbook competitive market. In addition, many firms, even in a system like that of the USA, are not-for-profit (Dranove and Satterthwaite, 2000). In these types of complex markets, economic theory fails to provide strong guidance as to whether competition is optimal. In particular, where there is product differentiation, competition can provide too little quality or variety, too much, or just the right amount. The intuition is as follows. Competition may ‘underprovide’ variety since competitive firms cannot capture the consumer surplus from additional variety. A monopolist may provide more variety as it is the only seller in the market and can capture the consumer surplus. Alternatively, competition may produce too much variety since in a competitive market part of the profit from new variety will come from ‘stealing demand’ from other firms. A firm deciding to offer a new variety will not take account of this external effect so there will be excessive product variation (Gaynor and Vogt, 2000).

Analyses that take account of the multi-product nature of hospital production and the imprecision of measures of both quality and price have shown that the impact of competition between hospitals on price and quality is ambiguous (Dranove and Satterthwaite, 2000). The impact of competition will depend on the responsiveness of the buyer of health care to both quality and price. This will depend on how precisely price and quality can be observed. If price and/or quality cannot be measured and reported well, this will make the buyer less responsive to changes in price or quality. If quality is observed accurately but price is observed poorly, then demand becomes less responsive to price, allowing providers to raise their prices, but also giving the provider an incentive to increase and possibly ‘overproduce’ quality. If price is observed accurately but

quality is observed poorly, then the levels of quality supplied will be too low. Finally, if quality has several attributes, one of which is easier to observe than another (for example, clinical quality and patient amenity), then competition may lead to overproduction of the one that is easily observed and underproduction of the one that is less easy to observe.

The level of prices will also impact on the outcome of supplier competition. In a market in which buyers of health care are covered by generous health insurance (as in the USA before the 1980s), buyers will not be sensitive to price, but will be responsive to differences in quality. So price may be high, but quality will also be high. In markets where buyers have 'harder' budget constraints, price may be more important and hospitals will compete on prices, leaving quality to fall below efficient levels. Where a single price is fixed for all providers for a treatment (as in prospective payment systems), there will be no price competition and so all competition will be in terms of quality. Competition may lead to excessive levels of quality and excessive product differentiation (Gaynor, 2004), but if government reimbursement for a treatment is too low, competition may lead to the quality of this treatment being too low.

As individuals differ in the severity of their illnesses, any regime that sets a single price for all patients of a certain type – for example, a single price for the treatment of a certain condition – will set up incentives to treat the less costly patients and to avoid treating or 'undertreat' the more costly patients. Such regimes include the diagnosis-related group (DRG) system used in the USA by the government and any kind of prospective payment system, in which reimbursement is set in advance of treatment. These incentives exist regardless of whether there is competition or not, but competition may sharpen them, resulting in differential treatment of patients. So, for example, patients who are more expensive to treat may get worse quality care or remain untreated (known as 'skimping' and 'dumping') while hospitals compete for lower cost patients by offering them better quality ('creaming') (Ellis, 1998). Differential treatment might also arise in markets where patients are covered by insurers who differ in the generosity with which they reimburse hospitals.

The US evidence on competition and health outcomes

Almost all the evidence comes from the US market, and much of this comes from one – albeit very large – market, California.² The results of these studies shows impact of competition depends on the ‘rules of the game’: the institutional features of the health care market. Three regimes can be identified in the US health care market (Dranove and Satterthwaite, 2000). In the first, which operated in the 1960s and 1970s, consumers were covered by generous insurance and hospitals were reimbursed retrospectively for their full costs. In the second, which began in the early 1980s, payers increasingly used prospective payment schemes (PPS), which reimburse hospitals according to the average cost for a procedure or treatment group. The third regime began in the 1980s, took hold in the 1990s, and is known as managed care. Under these arrangements, payers limit the choice of health care suppliers that their insured population may use, in return for lower insurance costs. Managed care organizations have an incentive to be concerned about price and have also been very active in seeking information on quality.

Most studies suggest that the switch to both prospective payment and managed care increased price competition and lowered costs (or lowered the growth in costs) (e.g. Zwanziger and Melnick, 1988; Feldman *et al.*, 1990; Robinson, 1991; Melnick *et al.*, 1992; Gaskin and Hadley, 1997; Keeler *et al.*, 1999; Baker and Phibbs, 2002; Heidenreich *et al.*, 2002; Bundorf *et al.*, 2004). There is also evidence that hospitals in competitive markets decreased the amount of uncompensated care they provided in response to the introduction of increased price competition (Gruber, 1992; Dranove and Satterthwaite, 2000; Gaynor and Vogt, 2000). Dranove *et al.* (2008) suggest that the managed care backlash of the mid-1990s weakened MCOs ability to play competitive hospitals off against one another to secure price discounts, making demand less sensitive to price.

In terms of the effect on quality, it is the generally accepted view (though the empirical support is quite weak) that the first regime resulted in a ‘medical arms race’ (Robinson and Luft, 1985).³ Within the managed care regime, an emerging

² Some of the early evidence is difficult to interpret because of the methods of analysis used. In early studies, hospital markets were not well defined and there was no recognition of the fact that the measure of competition might be affected by the outcomes that were being studied. Later studies tend to have paid more attention to these issues, and are more reliable indicators of outcomes.

³ As buyers were not sensitive to price, hospitals competed on quality, both to attract buyers and to attract physicians to practice at their hospitals. This had the impact of raising both price and quality in areas with more hospitals (Joskow, 1980).

consensus is that competition where prices are fixed leads to an improvement in both costs and quality provided the fixed prices are high enough, while the results in systems where both price and quality competition occur are less positive.

Kessler and McClellan (2000) examined the treatment of elderly patients admitted to hospital with a heart attack. All these patients, because of their age, were covered by government insurance (Medicare), which paid generously for AMI treatment under PPS. This influential paper showed that higher competition was associated with high quality – lower AMI death rates – and lower cost increases. Similar findings are reported by Rogowski *et al.* (2007), who look at deaths across a broader range of medical conditions and Sari (2002) who measure quality of health care by number of in-hospital complications. Kessler and Geppert (2005) found that competition led to more appropriate care for elderly Medicare patients admitted to hospital following a heart attack. They examined the extent to which competition had an impact on patients who were sicker compared with those who were healthier and found in more competitive markets there was greater variation in medical care. Furthermore, this variation was on average beneficial. Healthy patients in more competitive markets received less intensive treatment than those in more concentrated markets, without any significant difference in health outcomes. Sicker patients in more competitive markets received more intensive treatment and had better health outcomes than similar patients in more concentrated markets. The effect of competition is that there is more appropriate treatment.

Whether hospitals increase quality when operating in competitive markets also appears to depend also on the precise mix of payers that the hospitals have. There is evidence that HMOs have preferences for higher quality hospital care (Schulman *et al.*, 1997; Chernew *et al.*, 1998; Escarce *et al.*, 1999; Gaskin *et al.*, 2002; Young *et al.*, 2002; Rainwater and Romano, 2003). This leads to both price reductions and quality improvements in competitive environments where HMO penetration is high (e.g. Mukamel *et al.*, 2001; Sari, 2002; Rogowski *et al.*, 2007). However, not all the evidence supports this view; Kessler and McClellan (2000) find no association between the two and Shortell and Hughes (1988) and Shen (2003) both find higher HMO penetration to be negatively associated with hospital quality of care.

Where reimbursement rates are set by Medicare (or another government insurer) that sets relatively low rates, hospitals may respond to competition for patients by reducing quality. Gowrisankaran and Town (2003) examined the treatment of both Medicare and HMO patients and found that competition

reduced death rates for HMO patients but increased those of Medicare patients. There is also research showing that falls in reimbursement rates are associated with poorer quality. A change in payment methods in New Jersey reduced subsidies for hospital care for the uninsured and changed hospital payment to price competition from a rate-setting system based on hospital cost. This led to an increase in AMI mortality and a relative decrease in the use of cardiac procedures (Volpp *et al.*, 2003).⁴

A related issue is whether price-based competition changes the type of services provided. Mukamel *et al.* (2000) examined whether hospitals in more price-competitive environments shifted resources from activities related to clinical service, which are not easily observed and evaluated by patients, into hotel services, which are easily observed. They studied the change to selective contracting in California in the early 1980s and found some evidence to support resource shifting. In not-for-profit hospitals, resource use declined more in clinical services than in hotel services.

Evidence on competition and health outcome from outside the USA

The evidence on competition between hospitals outside the USA is extremely limited, mainly because such competition has been extremely rare. In addition, some of this evidence is less about competition per se than about the effect of changes to the payment mechanisms that have accompanied policies to increase competition.

Most of the non-US evidence on competition comes from the UK, which has had two periods during which competition has been promoted in the National Health Service (NHS). The first was the ‘internal market’ of the 1990s. This encouraged competition between NHS hospitals for contracts for hospital care from two sets of buyers (geographically-based district health authorities and the smaller GP fundholders). Prices could be negotiated between hospitals and the buyers and price lists (not including any discounts) were supposed to be publicly available. Information on quality was very limited. The second period was from the mid-2000s onwards, when Tony Blair promoted greater choice

⁴ The more competitive market conditions of the 1990s also led to harsher financial conditions. Bazzoli *et al.* (2008), who looked at the impact of financial performance on quality, found some limited evidence that hospital financial condition (measured as cash flow as a proportion of total revenue) is negatively associated with the number of in-hospital complications, medical errors and deaths.

for patients and competition between hospitals. Under this regime, prices were fixed, and patients were given the right to go where they wished for hospital treatment. Greater information was provided though a website that provided access to some information on hospital performance (Gaynor *et al.*, 2010).

Economic theory suggests that with fixed prices, hospital competition should improve quality, but that in markets where prices are not fixed and buyers very sensitive to price and other attributes of care, quality might fall. The experience of the two regimes broadly supports these predictions. In the internal market of the 1990s incentives in this market were weakened by political desires to limit competition (Le Grand, 1999). There is some weak (due to poor quality cost data) evidence suggests that greater competition was associated with lower costs (Söderlund *et al.*, 1997) (Propper *et al.*, 1998; Propper, 1996). The stronger results come from evidence on quality and waiting times. This shows that waiting times and quality – at least as measured by deaths of patients admitted to hospitals with heart attacks – both fell more where hospitals were exposed to greater competition (Propper *et al.*, 2004, 2008). This combination of a fall in waiting times and quality fits with the predictions of economic theory: demanders in this market were very sensitive to price and volume and quality information was weak, so that competition focused providers on the former at the expense of the latter.⁵

The emerging evidence from the ‘Choose and Book’ reforms suggests that with regulated prices and better information on quality, hospitals focused on improving the latter to secure demand. Gaynor *et al.* (2010) found that hospitals which were of higher quality attracted more patients and drew patients from further away after the reforms. This suggests that patients (or their GPs on their behalf) were choosing higher quality hospitals after the reform. This is supported by a study of patients who had cardiac surgery, which found that hospitals with higher quality (as measured by lower death rates following surgery) increased their market share post-reforms (Seiler, 2011). Cooper *et al.* (2010) and Gaynor *et al.* (2010) both found that the reforms led to fewer deaths for heart attack patients in hospitals facing more competition. In addition,

⁵ There is also evidence to suggest that the two types of purchasers were differentially able to reap the benefits from provider competition. Compared with district health authorities, GP fundholders were able to secure shorter waiting times for their patients, were more able to move contracts and generally appeared to be more responsive to patients’ wishes and more willing to exploit competition between hospitals for their business (Le Grand, 1999; Croxson *et al.*, 2001; Propper *et al.*, 2002; Dusheiko *et al.*, 2004). Case study evidence suggests that fundholders did not engage in patient dumping, even though they had the incentive to do so (Matsaganis and Glennerster, 1994). For more evidence on the effect of competition on waiting times see Dawson *et al.* (2007) and Siciliani and Martin (2007).

Gaynor *et al.* (2010) found that this increase in quality was not associated with a rise in total hospital expenditure, suggesting that the reforms increased patient benefit at no increase in cost.

These studies suggest that competition improved outcomes but do not examine how these gains arose. A recent study suggests that this may have been through improvement in management. Bloom *et al.* (2010) found that, during the same period as the 'Choose and Book' reforms, better management in NHS hospitals was associated with better outcomes. These outcomes included financial performance, clinical quality and overall ratings from the health care quality regulator. In addition, they found that competition led to better management: hospitals with more competitors around them had higher management quality.

Finally, a recent study of the wave of hospital consolidations and mergers in the NHS between 1997 and 2003 suggests that these consolidations brought few gains. Activity in hospitals fell post merger, but labour productivity remained the same, deficits continued to rise and patients waited longer for care (Gaynor *et al.*, 2012). This again provides support for the benefits of competition in a regulated health care system.

Other evidence

The Nordic countries have NHS-type systems where care is provided by the public sector and finance is provided through taxation. In Norway, Denmark and Sweden some elements of patient choice driven competition has been introduced, primarily to decrease waiting times. In all three countries, it has been accompanied by a move towards output-related (DRG-type) payments. A review of Denmark and Sweden concluded that the incentives for hospitals to accept patients from outside their area have been weak and, perhaps unsurprisingly, only a small proportion of patients went out of area under these schemes (Williams and Rossiter, 2004). The evidence does not support a strong reduction in waiting times in Denmark. In Sweden there is some evidence that the move to output related payments in the late 1980s and early 1990s initially increased productivity (Gerdtham *et al.*, 1999) and reduced waiting times, but at the expense of increased total costs (Kastberg and Siverbo, 2007). In the mid-1990s, adjustments were made to control costs, but this led to longer waiting times and the initial productivity increases ceased (Hakansson, 2000). There appears to be little assessment of the impact of output related payments on provider competition or outcomes in Norway. Another country with an NHS system also attempted to increase competition. New Zealand, in 1993, pursued

a 'big-bang' policy change whereby they pushed through a radical set of market orientated reforms designed to improve efficiency via increased competition between providers (Gauld, 2000). However, these reforms failed to bring about the improvements in performance that were hoped for and also had several adverse consequences.

The use of information in health care markets

The provision of information on provider performance is a prerequisite for choice driven competition between providers. However, the evidence – mainly from the USA – suggests that such information does not necessarily improve outcomes.

Marshall (2002) suggests very different use of information on provider performance by consumers, buyers and health care providers. Although consumers state they want more information, published data has only a small impact on consumer decision-making. Lack of interest in, and lack of use of, performance data appears to be due to difficulties in understanding the information, lack of trust in the data, problems with timely access to the information, and lack of choice. Purchasers use information on providers to a greater extent than patients. Information appears to be most used by health care providers, suggesting a strong potential 'yardstick' competition function for information.

Public reporting of performance may engender positive responses by providers, but it may also have unintended consequences. This stems from the fact that outcomes, particularly quality, are very difficult to measure in health care (Propper and Wilson, 2006). Information on performance gives providers the incentive to do well according to the criteria that are published; the problem is that they will do this by increasing efforts to improve the published criteria, which is not necessarily the same thing as improving actual outcomes. Possible responses include the improvement of performance and the exodus of poor performers but also, less positively, the selection of patients, differential treatment of patients and manipulating the data to appear to do better (Propper and Wilson, 2003). Examples of manipulation of the data from the UK include the re-categorization of patients during the 1990s to reduce published inpatient waiting lists. Smith (1995) provides an extensive list of some of the less positive responses of providers to the publication of information in health care.

Report cards have been introduced in the USA to provide information, at the level of individual surgeons in hospitals, on the quality of outcomes.

Studies of the impact of the mandatory New York coronary artery bypass graft surgery report cards, which were introduced in the late 1980s, concluded that mortality decreased, and the severity of patients operated on increased. Possible explanations include: the exodus of low volume, high mortality surgeons, a marked improvement in the performance of non-low volume surgeons, and improvement in the performance of surgeons new to the system (Hannan *et al.*, 1994). Dranove *et al.* (2003) used the same data to examine the impact of report cards on appropriate matching of patients to hospitals, on the quality and incidence of intensive cardiac treatments and on the resource use and health outcomes that determine the net consequences of report cards on social welfare. They found that report cards led to substantial selection by providers of patients, increased sorting of patients to providers on the basis of severity of their illness, and significant declines in the use of intensive cardiac procedures for sicker patients. The introduction of report cards appears to have altered both the mix of patients (less ill patients were admitted where there were report cards) and the treatments given to admitted patients also changed. Both healthier and sicker patients received more treatment, but while this improved the outcomes for healthier patients, it worsened outcomes for sicker ones, because hospitals avoided performing intensive surgical therapies that were monitored for sicker patients and instead used less effective medical therapies. Overall, Dranove *et al.* (2003) concluded that these cards reduced patient welfare, though the longer-term effects might be more positive. For example, the increased patient sorting that report cards engender might lead to more accurate and effective treatment as hospitals become more specialized in the treatment of certain types of patients.

In summary, while consumers have access to more information, information in health care markets is often too complex for direct use by consumers. It is often in a form that is of limited use for buyers of health care. It is most widely used by providers themselves and they appear to respond quickly to the incentives given by the information. In these responses they will focus on improving measured outcomes; this may or may not improve actual outcomes and there is considerable evidence of 'gaming the system'.

Do patients respond to greater choice?

As noted above, direct patient choice may be limited in many health care systems, not just NHS-type ones. Even in private insurance systems, attempts to contain the growth of costs mean that patient choice is typically exercised at the

point of choice of insurer, rather than in direct choice of hospital conditional on insurance. Patients who are allowed to choose hospitals will make these choices on the basis of the benefits and costs associated with each of the hospitals they may choose between. Factors that play a part in this calculation will include what illness they have, the severity of the illness, the quality of the hospitals, the costs of accessing and using them, and the amount of information they have, both about their medical health and the benefits of care provided at different hospitals. Individuals who differ along these dimensions are likely to differ in their willingness to exercise choice.

Evidence from the UK

The Choose and Book reforms, as noted above, gave patients the ability to choose their provider. Initially this was between four or more providers (Department of Health, 2004) but from April 2008, patients were given the ability to choose from any provider in England, as long as the provider met NHS standards and were paid using the NHS-wide tariff (Department of Health, 2009a). Along with giving patients formal choice of where they could receive secondary care, the government also introduced a new information system that enabled paperless referrals and provided information on waiting times,⁶ known as 'Choose and Book' (Department of Health, 2004). Information on quality at the provider level was available from a website operational from 2007.⁷ The evidence comes from patient choice pilots prior to the roll out and emerging evidence on the operation of 'Choose and Book'.

The pilots offered patients who had been waiting over six months for certain treatments a choice of different provider. The evidence suggests high take-up of choice under the scheme: 67 per cent in the London scheme, 50 per cent in the national coronary heart disease pilot and 75 per cent in the Manchester pilot. The high take-up rate is likely to be driven by the fact that in order to qualify patients had to have been waiting six months, patients were provided with high levels of information about the available choices open to them and they were given advice and financial assistance with transport and accommodation for companions (Williams and Rossiter, 2004). This high take-up contrasts with rather lower take-up for patient choice policies in other countries. The reasons

⁶ Primarily waiting times which were based on the last 20 appointments at each hospital.

⁷ The website currently includes information collected by the national hospital accreditation bodies including risk adjusted mortality rates, infection rates, hospital activity rates for particular procedures (Department of Health, 2009b).

may include the fact that the financial factors in the UK pilots either did not operate, or operated only weakly, in choice schemes in other NHS-type systems. In the English pilots, it does not appear that the patients who took up choice differed in terms of severity or the deprivation of the area in which they lived. This again may be peculiar to the nature of the pilots. Patients were relatively homogenous; all had been waiting for at least six months and travel costs and information costs were similar across all groups.

Evidence from the Choose and Book scheme as it operated in four local health economies (Dixon *et al.*, 2010) suggests that even within two years of the reforms, patients' awareness of being offered choice was relatively high – around 50 per cent of patients recalled being offered choice. In addition, the study provides interesting evidence that GPs may underestimate the willingness of their patients to make choices and do not offer patients choices because they believe that the patient will not wish to make a choice. Around half (45 per cent) of the patients surveyed said that they knew before visiting their GP that they had the right to choose a hospital. Older patients and those looking after their family at home were more likely to know about choice, possibly because of their more regular contact with the health service, as were men and those holding a university degree. This went against GPs' perceptions that most patients were unaware of choice and that the young were more likely to be aware. In addition, there was some resistance, even among the study's sample of 'enthusiastic' GPs, to offering choice to every patient regardless of circumstances. GPs appeared to be more willing to let patients choose when the referral was fairly routine but were more directive when more specialist treatment was required.

Other evidence

The very limited Nordic and French evidence from patient choice in these countries systems suggests patients who travel have different socio-economic status; the French evidence also suggests patients who travel have different medical conditions (Williams and Rossiter, 2004). Extending patient choice may also change the flow of patients to hospitals. It seems likely that more severely ill patients will want to go to more high-tech hospitals, leading to a change in the distribution of patients across hospitals. For example, US research indicates that, even among heart attack patients, the more severely ill travel further and to more specialist hospitals (Tay, 2003). In a study of the effect of Choose and Book on patients for heart surgery, Seiler (2011) found that post reform sicker patients in England were more likely to go to higher quality hospitals.

Conclusion

In this section, we raise issues that arise from the evidence and then speculate on a suitable direction of travel for choice in an English health care context still in considerable policy flux.

The evidence suggests: Institutional design matters: the effects of competition between providers depend on the features of the market. Important features include whether prices are set centrally or not, who makes the choice of provider, and the availability of information on quality and prices.

Where buyers care about price, competition between hospitals has led to lower costs or lower cost growth. The best US evidence suggests that quality is higher where markets are more competitive and prices are fixed, though there are exceptions.

It is important to distinguish between payer choice and patient choice, as they are not the same thing. In health care, the localness of the product often means that the number of hospital providers are limited, giving providers monopoly power. To redress this, purchaser power may be required. In this situation, payer choice may be more effective than patient choice. If payer choice is to operate well, this may mean restricting direct patient choice. Note that in resolution of this conflict, most health care systems are characterized by payer choice and limited direct patient choice of hospital supplier. However, payer competition does not mean that consumers have no choice; they can be offered choice of primary care provider and/or insurer (the Dutch system is an example of the latter).

The provision of information is a prerequisite for informed choice and therefore needed to increase competition and to make health care markets work. But such information is generally partial and so gives the providers opportunities to 'game the system'.

In terms of direction of travel: It seems clear that the very restricted choice models of NHS type systems of the past are not likely to survive. As examples, the Nordic countries, England and New Zealand, all NHS type systems, have all tried to increase provider choice. The extent to which it is possible has been limited to date by geography, particularly in the smaller of these countries, but there is clearly an appetite for greater choice.

While supply-side competition has its limitations, the emerging consensus from robust studies appears to be that competition between providers under fixed prices will result in lower cost (growth) and better outcomes.

If it is accepted that payer-driven competition is broadly beneficial, then the

logic is that it should be promoted. This is likely to require regulatory intervention. Competition is intended to increase pressure on hospitals, something that hospitals, just as other firms in a market, are likely to want to avoid. In the US, hospitals have tried to reduce this pressure by entering into preferential pricing agreements, negotiating access rights to selected buyers or by merging. Many not-for-profit providers have merged and where they have done so they often appeal to the fact that their principal motivation is to serve local communities and – in some cases – this argument has been accepted by the courts. However, the US experience suggests that the benefits of mergers between either for profits or not-for-profits may well be exaggerated (see also the recent evidence for the UK in Gaynor *et al.*, 2012). So regulatory policy will be needed to promote competition.

In the English context at present, the government has introduced a new regulatory regime for hospital providers (a body called Monitor is setting prices and together with the general competition authorities, dealing with mergers and hospital failure). It is currently too soon to assess the impact of this regime. But perhaps the most obvious policy issue which has not been addressed to date is the lack of choice of primary care providers. Despite government rhetoric, choice of GPs remains limited. In spite of encouragement, private providers have not entered in large numbers as rivals to GPs, and restrictions on patient choice, which must be linked to home location, still remain. There seems no justification for such restrictions. Freeing up the market in primary care would reduce the monopoly power that GPs current have and may also allow a greater plurality of purchasing arrangement to develop. For example, some GPs might want to enter vertically integrated systems with a limited number of hospital and other health care providers. Others might offer a wider range of hospital and health care choice. This would allow consumers to match with their preferred GP type, while allowing these GPs to use their market power, something that individual patient choice of hospital does not have.

Encouragement of greater choice in GP would be one way of moving towards patient choice of insurer and so introducing both demand- and supply side competition. Several western European countries have sought to increase patient choice of insurer, though in most this remains more of a desire than a reality. It is also clear from the experience of the Netherlands, where this policy has been in place for longest, that equity concerns and the resultant measures to limit cream skinning can limit the gains from insurer competition.

Greater choice of GPs, encouragement of entry and diversity of provision may all lead to diversity across consumers. By allowing individuals to choose the supplier or insurer that matches their tastes, it may result in better outcomes at lower cost.⁸

⁸ This aspect of competition/choice has been less studied. Besley and Ghatak (2005) show that matching in the labour market may play an important role in the production of public services. They show that matching between motivated agent and firms with missions reduces the need for incentive pay.