

Competition policy in five European countries

What can be learned for health policy in England?

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It is the final report of a wider project that commissioned and produced five case studies detailing competition policies in France, Portugal, Germany, the Netherlands and Norway. These case studies and an overview article¹ are published in a special section of *Health Policy* on policies towards hospital and GP competition in five European countries. The overview article is available to read via open access: www.sciencedirect.com/science/article/pii/S0168851016303190

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Abstract

We analyse policies affecting competition for primary and secondary care in the health sector in five European countries: France, Germany, the Netherlands, Norway and Portugal. The countries were chosen to reflect differences in financing arrangements (social insurance versus tax-based systems), provider ownership, regulatory frameworks, gatekeeping arrangements, and patients' ability to choose a provider.

We exploit the diversity of institutional details and concepts of competition to relate policies in the English National Health Service (NHS) to international experiences and to derive possible policy lessons for the English NHS. We examine six policy dimensions:

- patient choice of hospital and quality indicators
- competition, quality and hospital payment
- hospital mergers
- involvement of private providers
- GP choice and competition policies
- selective contracting aimed at patients with chronic conditions.

We conclude that:

- proximity to health care providers, rather than quality, remains the key driver of choice
- there is potential tension between stimulating quality competition and controlling expenditure because restrictions on hospital treatments imply that money does not follow the patient, and hospitals may react by making access more difficult or letting their waiting times increase
- assessment of proposed hospital mergers requires better information, particularly on quality
- there is limited scope for further expansion in the use of private providers to treat NHS patients given the current focus on controlling expenditure
- the economic rationale for entry control in general practice is unclear
- selective contracting for patients with chronic and multiple conditions – a form of competition 'for the market', which aims to reduce fragmentation of care – raises concerns for competition and regulation because of the long-term nature of the implied contracts and the restricted pool of potential providers willing to bid for these contracts.

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Introduction

How does competition work in the health care sector?

Competition is a multifaceted process whereby producers strive to attract customers from their rivals by providing a more appealing combination of price and quality. In conventional markets, this process will lead to greater efficiency in production to keep prices down, and consumers will benefit via lower prices, products that better suit their needs and a greater variety of products.

The health care sector differs in that consumers (ie patients) are usually insulated from costs by third-party payers operating through public or private insurance. If insurers restrict the choices of patients then health care providers will compete for the business of an insurer as well as for patients. Depending on the objectives of that insurer and the contracts they are offered, providers may not be concerned with attracting more patients. Not only the target of competition but also its mechanisms are different in health care. If prices are set by the insurer then providers can only compete on quality for patients. But patients may find it difficult to judge the quality of health care due to information asymmetries and the infrequent use of services, and competition among providers may be limited due to natural monopolies and barriers to entry and exit from the market. Hence, the question – what do we expect or want of competition? – is not so easily answered in health care settings, and lessons from other sectors might not apply. Within the health care sector, institutional details matter and differ across services and countries.

The diversity of institutional details and concepts of competition motivate this study. We describe how policies affecting competition have been implemented and promoted in five countries: France, Germany, the Netherlands, Norway and Portugal.

We exploit this diversity to relate policies in the English National Health Service (NHS) to international experiences² and to derive possible policy lessons for the English NHS. We restrict attention to primary (GP) and secondary (hospital) services, since arrangements for other services, especially pharmaceuticals, raise separate issues.

Generally policy toward competition in health care markets appears to be based on acceptance of the argument that competition is *potentially* beneficial in driving down costs and improving quality. That argument receives some, though not complete, endorsement from economic models of health care delivery. In particular, most models suggest that when providers face regulated prices, greater competition will drive up quality.^{3,4,5} Several countries have experienced a move towards introducing policies intended to increase competition. Until recently this was also the case for England, where at present there seems limited interest in introducing further such policies, with the focus being shifted to cost containment and integration of care instead.

As there is a diversity of what exactly competition is across different settings, there is also a variety of policy responses. We examine six policy dimensions related to competition in health care:

- patient choice of hospital and quality indicators
- competition, quality and hospital payment
- hospital mergers
- involvement of private providers
- GP choice and competition policies
- selective contracting aimed at patients with chronic conditions.

For each policy dimension we first review current policies in England, then existing empirical evidence, and finally we provide policy lessons.

Methods

We draw on detailed case studies of policies in France,⁶ Germany,⁷ the Netherlands,⁸ Norway,⁹ Portugal,¹⁰ and an overview¹ recently published in *Health Policy*. The countries were chosen to reflect differences in financing arrangements (social insurance versus tax-based systems), provider ownership, regulatory frameworks, gatekeeping arrangements, and patients' ability to choose a provider. The case studies were written by independent academics following a common template. For each topic we review also the empirical evidence for England, and if relevant from the US.

We are careful not to use the term 'competition policy' because this is often synonymous with controls over mergers based on antitrust law. Instead we refer more broadly to policies that enhance competition, such as relaxing constraints on patient choice of provider or encouraging providers to compete on quality by ensuring that their revenue increases if they attract more patients.

Table 1 gives a brief overview of salient features of these health care systems and the extent to which policies to increase competition are present in a country. This table does not set out the extent to which these policies have been used in practice, which is discussed in more detail below drawing on existing empirical evidence. For example, although a country may have an extensive patient choice policy where patients can access any provider, and which is supported by quality indicators in the public domain, very few patients may exercise this choice in practice.

Table 1: Overview of key policies that relate to competition

	England	France	Germany	Netherlands	Norway	Portugal
Patient choice of hospital	Extensive	Extensive	Extensive	Extensive	Extensive from 2001	Restricted
Hospital competition on quality	Yes	Yes	Yes	Yes	Yes	Limited
Hospital competition on prices	No	No	No	Yes	No	No
Hospital mergers	Mostly approved	Mostly approved	Mostly approved	Mostly Approved	Very few cases	Mostly Approved
Involvement of private providers	Increasing	Extensive	Extensive	Extensive	Limited	Increasing
GP choice and quality competition	Extensive	Extensive	Extensive	Restricted	Extensive from 2001	Limited by shortage of GPs
Selective contracting aimed at patients with chronic conditions	Yes	No	Yes	Yes	No	No

Findings

Patient choice of hospital and quality indicators

For competition between health care providers to be effective, one pre-requisite is that demand responds to quality. Patients must be able to choose and when choosing to make informed choices. Hence a focus on improving patient choice and patient information forms an important element of competition policy.

In England before 2006, the choice of hospitals for elective hospital treatment was generally constrained to the set of local NHS hospitals that had contracts with the patient's local health authority. In 2006 constraints on choice of provider were relaxed with patients being offered a choice of at least four providers, including one from the independent sector, and from 2008 they could choose any qualified provider wherever located. To facilitate choice, quality indicators are increasingly available in the public domain. On the NHS Choices website, patients can access information on risk-adjusted mortality rates, infection control and cleanliness, user ratings and food choices. For specific treatments, such as hip replacements, they can access data on waiting times (from GP referral to treatment), volumes of treated patients, hip revisions and other indicators (www.nhs.uk).

The English developments are in line and in some cases ahead of developments in the other five countries. France and Germany have a long tradition of free choice of hospital. In France, unlike England, health outcomes, such as mortality rates, are not reported due to concerns over risk adjustment, possibly because of low hospital volumes, sample size, and potential underreporting of negative outcomes. By contrast, process measures of quality (eg, hospital-acquired conditions and catering services) and activity (eg, number of stays or length of stay) are available on the website (www.scopesante.fr) with over 450 indicators. In 2015 the site had 340,000 visitors.⁶

In Germany, quality reporting remains limited despite extensive patient choice⁷. In the Netherlands, the government introduced mandatory publication of hospital waiting times, standardised mortality ratios and other outcomes.⁸ Norway introduced patient choice in 2001 and further facilitated it in 2015 by removing constraints on hospital volumes and allowing private providers to treat publicly funded patients. There is information on waiting times for selected procedures and since 2012 some quality indicators.⁹ In Portugal patient choice is generally restricted and there is limited information on hospital performance.¹⁰

Empirical evidence

There is some evidence from England that following the introduction of choice policies, patients are more likely to choose based on quality. Following the introduction of choice reforms in 2006, patients having a coronary artery bypass were more likely to choose hospitals with lower condition-specific mortality rates.¹¹ Similarly patients having a hip replacement were more likely to choose hospitals with lower readmission rates,¹² greater health gains, as measured by patient-reported outcome measures (PROMs),¹³ and lower overall mortality rates and MRSA infection rates.¹⁴ The responsiveness of demand to quality remains low, however, and proximity to provider remains the most important driver of patient choice of the provider.¹⁵

These findings are in line with evidence reported in the case studies for the five countries. In the Netherlands, patients having angioplasty are more likely to choose hospitals with a good (overall and cardiology) reputation and low readmissions after treatment for heart failure.¹⁶ Patient choice of hospital for hip replacement is affected by information in the public domain on reputation and waiting times, as well as travel time.¹⁷ In Norway, half of patients bypassing their local hospital do so under their own initiative (as opposed to, for example, the GP's initiative), especially the better educated⁹. In Germany, patients having a coronary artery bypass are willing to travel further to hospitals with a better reputation.¹⁸

These findings are also consistent with US studies.^{4,19} While hospitals with higher quality are rewarded with more patients, the response of demand to higher quality is relatively small, and distance to hospital remains the key determinant of choice. The evidence also suggests that patients with higher socioeconomic status are more likely to exercise choice. In all studies, distance to the hospital remains a strong predictor of hospital choice.

Lessons

Despite encouraging choice, change in patients' demand in response to quality differences across hospitals remains relatively small. The evidence suggests that proximity to provider is the key driver of choice. This currently limits the extent to which choice policies can effectively raise quality or improve patient allocation across providers. Patients make choices in conjunction with their GPs, so it is important that choice policies take account of the role of GPs as the primary agent acting on behalf of the patient.

For choice policies to be effective, they need to further enable patients to bypass their closest hospital. One option is to provide better information by making the indicators more relevant and accessible to patients. Countries differ in the amount and type of information they produce. There is a proliferation of indicators across clinical (process measures of quality and health outcomes) and non-clinical aspects. However, it is not clear that this will in itself lead to more patients making informed and effective choices, or that the costs of providing better information will be outweighed by the benefits. Indicators in the public domain need to be designed so that they can be easily understood. There is also a risk of information overload if too many indicators are provided.

The cost of developing quality indicators depends on whether they can exploit existing routine administrative information systems (eg, as for in-hospital mortality) or a new method for data collection (as with patient-reported outcome measures) is required. Whether the benefits of new data collections overcome the costs needs careful assessment. Moreover, regulation focused on providing information to support consumer choice can bring challenges of its own – for example, it can focus providers on those measures of quality to the exclusion of other, less easily measurable but important measures of quality, and restrict innovation.

Competition, quality and hospital payment

An internal market was introduced in England in the 1990s in which purchasers (local health authorities) were separated from the providers (the hospitals). Most contracts took the form of block contracts or cost and volume contracts. Hospital prices could be negotiated and purchasers had limited information on quality apart from waiting times. Since 2003/04, a

diagnosis related group (DRG) fixed pricing system – known as Payment by Results – has been introduced. Initially it covered only 15 treatments but now covers around 60% of acute hospital activity.^{20,21} From 2003–04 hospitals could also apply for foundation trust status, giving them more independence, greater financial flexibility and control over operational decisions.²² Various choice reforms (see section ‘Patient choice of hospital and quality indicators’ above) further expanded the scope for competition. However, it appears that in recent years concerns over expenditure have led commissioners to make increased use of volume caps or reduced tariffs for volumes in excess of expected ones.²³ There is also limited scope for entry and exit, and commissioners retain some discretion in allocating resources between providers to ensure their sustainability, which in turn might undermine the effectiveness of competition in driving performance.^{24,25}

There is some form of hospital competition under DRG pricing in four out of the five countries reviewed. In France, where private hospitals account for 60% of treatments, revenues of public hospitals were determined administratively on a historical basis before 2005. A DRG system covering both public and private hospitals was phased in between 2005 and 2008. In the Netherlands, hospital competition has been a feature since 2000 when DRG payment replaced fixed budgets. Prices are fixed for some treatments and negotiated with health insurers for others. The latter expanded from 10% to 70% between 2005 and 2012. Insurers can engage in selective contracting with hospitals and form limited provider networks to obtain more favourable prices and quality.

In Germany, hospitals are paid by DRGs and compete for patients who have historically had free choice. DRG tariffs vary by state and are determined by state-level collective negotiations between sickness funds and hospitals. Payers and providers are organised in corporatist bodies. Quantities and services are negotiated between sickness funds and individual hospitals. Hospitals are mostly restricted to providing inpatient care and ambulatory surgery.

In Norway, hospitals have been paid by DRG since 1997 as part of a mixed payment system in which the price initially covered 30% of treatment costs. This share increased to 40% in 1998, has since fluctuated between 40% and 60%, and is currently 50%. Hospitals also receive a block grant based on population demographics of their health region. DRG pricing initially covered only inpatient care by public hospitals and was later extended to outpatient care and private providers. Direct competition for patients was only possible after the 2001 patient choice reform. In 2002 the ownership of public hospitals was transferred from the county to the higher-state level and hospitals were given more autonomy and independence. Although hospitals are state-owned, decision-making is decentralised to hospitals, which are more likely to respond to competition.

In Portugal, public hospitals are funded by global budgets calculated on predicted patient volumes and predetermined DRG prices so that hospital revenue does not vary with the number of patients treated. Public hospitals have regional catchment areas with access defined by citizens’ residence. Choice for highly specialised care may be mediated by specialists. Since 2012, patients waiting longer than a predetermined time within a public hospital can choose another accredited public or private hospital.

Empirical evidence

In England there is evidence suggesting that competition between providers increases quality, as measured by reduction in heart attack mortality, if prices (ie hospital tariffs) are fixed.²⁶ Some of the studies exploit the natural experiment of the expansion of patient choice in 2006.^{27,28} The expansion of patient choice also reduced hip fracture mortality in more competitive areas, but had no effect on stroke mortality.²⁹ It also had no effect on coronary artery bypass mortality and emergency readmissions rates, and it increased hip and knee replacement emergency readmission rates³⁰. More research is required to understand the mechanisms behind these results, though one study²⁶ shows that reductions in heart attack mortality were achieved through the improved management of services.

Earlier studies found that competition when prices were not fixed increased heart attack mortality and reduced waiting times^{31,32} in the 1990s, when purchasers negotiated mostly on price and waiting times, and did not have access to good clinical quality indicators. There is also evidence that hospitals' quality responds positively to rivals' quality for some clinical indicators (such as overall and stroke mortality rates, knee replacement and stroke readmissions, and three indicators of patients' experience).³³ There is also some evidence that competition increases efficiency, as measured by a reduction in the preoperative length of stay for patients having a hip replacement.³⁴

In France, before the introduction of a DRG payment, admissions grew less rapidly in public hospitals than in private hospitals.³⁵ After its introduction, this trend was reversed and public hospitals exposed to competition from private ones reduced their length of stay by 4.4% (0.24 days), whereas there was no reduction for public hospitals without private competitors. As a result of competition, public hospitals expanded their catchment areas by 2 minutes, about 9% of patients' median travel time (22 minutes), and hospitals responded to an increase in competitors' quality by increasing their quality.³⁶

In the Netherlands, where prices are negotiated for most treatments, the hospital price-cost margin was lower in areas where insurers had larger or hospitals had smaller market shares.³⁷ For cataract surgery, however, provider concentration did not affect negotiated prices or quality.³⁸

In Norway, the introduction of DRG pricing in 1997 led to gains in technical efficiency and increases in volume.³⁹ The 2001 patient choice reform and greater hospital autonomy after 2002 further stimulated activity, leading to larger hospital deficits.⁴⁰ Although average waiting time for elective care fell from 250 days in 1998–2000 to around 70 days from 2005 onwards, it remains unclear how much of this reduction can be attributed to competition.⁴¹

The evidence on hospital competition on quality in the US is mixed.¹⁹ A first seminal study suggested that competition reduced heart attack mortality and costs after a DRG system was introduced, but increased costs when hospitals were reimbursed.⁴² A second study confirmed the positive effect of competition on quality, but the findings suggest that this is concentrated among high-severity patients.⁴³ A third study instead found that competition reduced quality,⁴⁴ a fourth study had mixed results⁴⁵ and a fifth one found no effect.⁴⁶ A recent study in Italy also found that competition does not affect quality.⁴⁷

Lessons

There is fixed-price hospital competition on quality for publicly funded patients in the countries explored in the case studies, except for Portugal where patients are generally restricted to their local hospital. The introduction of competition with DRG pricing is not without controversy. One criticism is that competition hampers cooperation and coordination of services between different providers. This is exemplified by a recent debate in France where critics suggested that competition will reduce coordination and synergies among providers, leading to missed opportunities to improve quality and reduce costs. In response, a new policy tool was introduced in 2016 – known as ‘groupement hospitalier de territoire’ – to foster cooperation and integration of public hospitals. Under it, each hospital has to join a group associated with a teaching hospital, and can share activity, equipment, medical teams and a joint information system.⁶ A key question remains: can competition and cooperation coexist, since any attempt to encourage coordination may come at the cost of reduced competition (see also the next section on hospital mergers)? Another concern is whether fixed-price systems that funnel money into elective operations might weaken incentives for prevention, by making it harder for GPs and community services to work with hospitals to reduce the need for elective operations, since that would reduce the hospital’s income.

A second common criticism of competition under a DRG-type payment is that the system can encourage excessive increase in volumes and total hospital spending. This is exemplified by recent policy developments in the Netherlands. Concerns over expenditure control at time of financial restraints have led to the introduction of a ‘macro budget instrument’, which potentially penalises all hospital revenues if the target total expenditure for all hospitals is exceeded. The government can require hospitals to repay excess revenues in proportion to their market shares. Health insurers have also introduced expenditure caps for hospitals, reducing hospitals’ incentives to compete on quality. Similar concerns have been raised in England where commissioners increasingly attempt to control expenditure by imposing volume caps and reducing the tariff for higher than expected volumes. A key lesson is that there appears to be a tension between competition and expenditure control, since the scope for quality competition is diminished when volume controls or tariff reductions are introduced.

One way to reduce the concern over excessive volumes is to set lower prices. DRG prices are normally set to reflect past average hospital costs. However, in Norway the price covers only 40–60% of average cost and is determined by parliament each year through the political process. DRG prices that are below average costs might help in mitigating excessive incentives to increase volumes, a common concern with DRG systems, but will also hinder quality competition since hospital profit margins from attracting additional patients are reduced and possibly negative. The tension between expenditure control and quality competition remains.

Hospital mergers

Hospital mergers can reduce competition and restrict patient choice and thus are increasingly subject to scrutiny by competition authorities. In England, the Competition and Markets Authority (CMA) reviewed six hospital mergers up to July 2015 and stopped one after a detailed investigation.⁴⁸ Mergers will be authorised only if they are in the overall interest of the patient, with an emphasis on clinical quality. The CMA review process is designed to examine both the benefits and the potential adverse effects for patients following a merger.⁴⁹

In the five countries reviewed, very few hospital mergers have been blocked. In the Netherlands, up to 2015, 26 out of 27 hospital mergers were cleared after an initial or substantial assessment. In France, 90 mergers between private hospitals since 1995, mostly hospitals of small or medium size, were cleared without detailed investigation. No merger case has concerned public hospitals. In Germany, 182 mergers were approved between 2004 and 2014 and seven were prohibited. In Norway, competition law does not apply to state-owned health enterprises, but only to small number of private non-profit or for-profit hospitals. Similarly, in Portugal, hospital mergers in the NHS are seen as administrative acts. The competition authority only has jurisdiction over private hospitals, which are mostly small, located in medium-sized cities and owned by large groups.

The assessment of whether a hospital merger should be allowed revolves mostly around the degree of market concentration that would arise as a result. For example, in Germany mergers will be prohibited if the merged hospitals obtain more than 40% market share or if the merger leads to significant concentration (three or fewer firms with 50% market share, or five or fewer firms with 66%). In the Netherlands the competition authority assesses if a dominant position arises that appreciably restricts competition. In France the competition authority computes local market shares of merging parties. In areas with limited private providers, the pressure from public hospitals has been considered sufficient to maintain competition.

Empirical evidence

In England, out of 223 general hospitals in 1997, 112 merged between 1997 and 2006. A study found that mergers did not affect clinical quality and productivity, but did reduce activity and increase waiting times.⁵⁰ In the US, mergers do not affect clinical quality for most of the indicators used in empirical analyses.^{51,52} One study found that mergers did not affect heart attack and stroke mortality, but increased readmission rates and early discharges for newborns.⁵³ Another study of 42 mergers in 16 states found that mergers did not affect quality in the majority of cases, and in the other cases quality sometimes increased and sometimes decreased.^{19,54} Hospital mergers have also led to cost reductions.^{55,56,57}

Lessons

When hospitals wish to merge, regulators need to consider at least two possible effects. Merging hospitals will usually claim that the merge will improve collaboration and, as a result, improve services and increase quality, or that economies of scale will allow trusts to perform better financially and achieve productivity gains. But the merger will increase the market power of merging hospitals and reduce patient choice, and the reduction in competition might reduce quality and patient services.⁵⁸ Across the countries reviewed, the

main criterion applied is the extent to which the market will remain competitive following the merger. If there are sufficient numbers of competitors, allowing for competition and patient choice, the merge is very likely to be cleared. Countries differ in hospital density and distribution, with France having a high number of hospitals (more than 1,000), whereas the Netherlands has a relatively low and declining number (81 in 2015) with an average market share of 50%.

Few mergers are blocked. This may be because most mergers do not reduce competition significantly. But competition authorities have inadequate information for detailed assessments. The key challenge is predicting the effect on quality. The scant empirical evidence reviewed above does not suggest that mergers increase quality as claimed by most merging hospitals, and in some cases it might reduce it. There is therefore a risk that some mergers have been passed with no benefits in terms of quality and with reduced patient choice.

In some countries (such as France, Norway and Portugal), mergers between public hospitals are treated as internal reorganisations of public services, and not subject to authorisation from the competition authority. The rationale for exempting public hospitals from the scrutiny of competition authorities remains unclear. Hospital competition policies encourage public hospitals to compete on quality, and it would seem a natural concern that quality may suffer as a result of a merger between public hospitals.

We highlight that countries have very different starting points in relation to hospital density, with France and Germany having a large number of smaller hospitals compared with the UK. The evidence suggests that mergers do not seem to deliver higher quality but the pressure for regulators to approve mergers seems pervasive. Strengthening the evidence test on quality seems important, particularly for countries with lower hospital density where the effect on patient choice is likely to be more important.

Involvement of private providers

In some countries, private providers can compete with public providers for publicly funded patients. This is increasingly the case in England where private hospitals and other independent sector providers were allowed to enter the NHS for elective care from 2003 onwards, with the aim of expanding capacity and reducing waiting times. The role of private providers was further expanded in 2006 to extend patient choice and stimulate competition.⁵⁹ By 2010, private providers treated 4% of NHS elective patients and focused on a small number of high-volume procedures.⁶⁰ In 2013, 10.8% of total commissioner expenditure was used to purchase care from non-NHS providers.⁶¹ The proportion of NHS patients having a hip replacement in private hospitals increased from zero in 2002 to over 20% in 2012.¹²

The use of private providers to treat publicly insured patients varies greatly across countries. The mix of public and private providers also varies within the country in France, Germany and Portugal. In France private hospitals provide 60% of surgery. In Germany about 30% of hospitals are public, 35% are private non-profit hospitals and 35% are for-profit hospitals with many owned by chains. In Portugal private providers can provide services to both publicly funded and privately funded patients. In Norway most hospitals are public with only

few private non-profit hospitals. Some private for-profit hospitals have a contract with the NHS for specific treatments. In the Netherlands, hospitals have private non-profit status.

Empirical evidence

In England patients appear equally satisfied with public and private (independent sector) providers.⁶² Private providers treat less patients with complex conditions.^{63,64} Patients having a hip replacement through private providers have higher health gains⁶⁵ and shorter length of stay.⁶⁶ In France public and private non-profit hospitals have the same case-mix-adjusted heart attack mortality, but for-profit private hospitals have lower mortality.⁶⁷ In Germany private and public hospitals have similar costs under DRG payments⁶⁸, but private providers had higher costs under the previous payment system rewarding length of stay.⁶⁹

The extensive empirical evidence from a review study on US hospitals⁷⁰ showed mixed results about quality in for-profit and public hospitals depending on the region, data source, and the period of analysis. For-profit private hospitals in the US have a stronger incentive to upcode, i.e. to classify patients in more profitable tariffs/DRGs^{71,72} and to select patients with less severe conditions.⁷³ A review⁷⁴ of 317 published papers across a range of countries cautiously concluded that public and non-profit hospitals tend to be more efficient than for-profit ones.

Lessons

The willingness of a public funder to contract to private providers depends on the quality and efficiency of these providers and the tariff that is paid for the publicly funded treatments. Economic theory suggests that private providers should have stronger incentives to contain costs, but whether they provide higher or lower quality depends on at least two forces going in opposite directions. On the one hand, private providers may skimp on quality to increase profits; on the other, in the presence of a for-profit motive they might compete more aggressively to attract demand by increasing quality.^{75,76,77} The empirical literature does not make a compelling case for either the quality or efficiency of private providers to be generally greater than public providers. If quality and efficiency do not differ between public and private providers, contracting to private providers may be an option to expand publicly funded capacity quickly.

Under a DRG-type payment system, policy makers must decide whether to set the same prices for public and private providers. In France, DRG prices are higher for public hospitals. Private hospitals have argued that this differential payment breaches European state aid law.⁶ In England, more favourable contracts were initially offered to new private providers (known as independent sector treatment centres) as part of a national procurement programme to diversify the market, but now both NHS and independent sector providers receive the same DRG payment (where fixed prices apply). Public and private providers differ in a number of dimensions, which could lead to differences in costs for reasons outside of their control⁷⁸ such as different obligations (eg, the provision of an emergency department in public hospitals), regulatory constraints (VAT, pension contributions, access to capital), and performance management regimens. When contracting with private providers, such differences need to be taken into account and, if the purchaser agrees on a differential price across types of provider, the purchaser needs to assess whether the additional expenses or savings are compensated by the higher quality.

GP choice and competition policies

In England patients must register with a general practice, which acts as gatekeeper for elective hospital care. Patients do not pay for general practice (though a small charge is levied on about 10% of dispensed drugs). General practice revenue varies mainly with number of patients via capitation and quality incentives. Patients have free choice of GP, but this is constrained by the fact that general practices restrict access to their list by agreeing catchment areas with the local health authority and also by temporarily closing their list. Patients can choose any practice in the catchment area they live in and that does not have a closed list.

From 2015, practices have been able to accept patients outside their catchment area without the obligation to make home visits, but as yet there has been no analysis to show the extent to which patients or practices have exercised this option. Patients can access information on the quality and facilities of practices from the NHS Choices website. Until 2002, the number and location of practices was regulated by a national body and, on its abolition, control of entry was passed to the local health authority.

In Norway since 2001 individuals have been able to freely choose their GP and change GP up to twice a year. GPs, who act as gatekeepers, can fix their list size between 500 to 2,500 patients and refuse additional patients once their set size is reached. The GP choice reform was accompanied by a change in payment so that GPs are paid by capitation plus fee-for-service for consultations and other services. Capitation accounts for 30% of each GP's income with the remaining 70% for fee-for-service payment. Patients face a copayment.

GP choice and competition has been a systemic feature in France and Germany, where the gatekeeping role is either recent or only recently encouraged. In France there is no list system and no restrictions on patient choice of GP. Two-thirds of GPs are self-employed and paid by fee-for-service. Most GPs are required to charge regulated fees but some are permitted to charge above the regulated level. In Germany patients can generally access specialists without seeing a GP. However, from 2007 sickness funds are required to have 'gatekeeping contracts', a form of selective contracting, with a partner organisation representing more than 50% of GPs in an area. The aim is to improve coordination of care and reduce costs. Currently there are 91 partner organisations, involving 16,500 GPs and covering 4 million individuals. These contracts involve a mix of capitation and fee-for-service. In Portugal patients are free to choose a GP if there is space on their list. Choice is, however, severely constrained by excess demand.

Attempts to stimulate competition among GPs in the Netherlands have been contentious. Before 1998, GPs negotiated collectively on contractual conditions, divided the market through sharing agreements and regulated entry. When the Dutch Competition Act was introduced in 1998, the GPs came under scrutiny of the competition authority. The national GP association applied for an exemption from cartel prohibition, which was declined, leading to a strike of GPs in 2005. In 2011 the competition authority imposed a fine of €7.7 million. The association formally objected, though it conceded that regional GP associations would not engage in collective negotiations about price, volume and service levels. In 2015 a court annulled the fine because the competition authority had failed to provide sufficient evidence that the association had harmed competition.⁸

Empirical evidence

Patients are reluctant to travel to access GPs so markets are geographically small. In England 40% of patients choose the nearest practice. However, choice of practice is also affected by practice quality and characteristics of GPs.⁷⁹ Practices in areas with more competition seem to have higher quality,⁸⁰ though financial quality incentives have also increased quality.⁸¹

In Norway the 2001 choice reform increased GP consultations, patient satisfaction and reduced waiting time for consultations from 8.3 to 7.2 days.⁹ GPs operating in more competitive markets (using a proxy of available patient list slots) have higher referrals⁸² and fewer emergency admissions.⁸³ In Germany, initial evaluations of gatekeeping contracts suggest there are fewer avoidable hospitalisations and dangerous drug combinations, and higher patient satisfaction, but more specialist visits, higher pharmaceutical expenditure and ambiguous effects on costs.⁷

Lessons

As with secondary care, competition, better information, and greater choice can improve quality and accessibility. There are no formal restrictions on GP choice in the Portuguese, French and German systems. In Portugal, however, choice is severely hindered by GP shortages with some patients not being able to register with a GP. The relaxation of constraints on choice in Norway in 2001 led to GPs being more responsive to patients.

Market conditions for general practice differ substantially from those for secondary care. Perhaps because patients interact much more frequently with GPs, they generally choose practices close to where they live. The barriers to establishing a new practice and expanding an existing practice are significant in England (and in the UK as a whole). Restrictions to the sale of intangible assets (ie goodwill) are also a significant barrier to exit. A much higher proportion of general practices are privately owned than is the case for hospital care and, because of the small number of GPs in each practice, financial incentives are likely to have stronger and more immediate impacts. This may explain why attempts in the Netherlands to remove restrictions on GP entry and competition have been strongly resisted by GPs.

Selective contracting aimed at patients with chronic conditions

Individuals with chronic conditions often require a complex pattern of health and social care. Conventional approaches to competition often presume that providers will compete to deliver a particular service, and the focus may be on improving the quality of that service rather than improving the package of care. As a response to this in England, a range of new care models are being developed to integrate services for people with complex care needs, as well as for whole populations. The desire is to motivate providers to design better packages of care. Two main models are emerging:

- the multispecialty community provider model, where groups of GP practices come together to offer a range of services, including community and outpatient services
- primary and acute care systems, which involve integrating primary, community, mental health and hospital services to improve coordination and to shift care away from the secondary sector.⁸⁴

These models can be interpreted as a form of selective contracting where the commissioner (purchaser or health services) contracts with a group of practices or providers for the delivery of a range of services. This is a form of competition 'for the market'.⁸⁵

In our international review, two countries – Germany and the Netherlands – have recently introduced a form of competition for the market to address the fragmentation of care pathways for patients with chronic conditions. In the Netherlands, health insurers contracted with networks of GPs. In Germany, sickness funds contracted with ambulatory care providers.

In the Netherlands in 2010, bundled payments were introduced nationwide for diabetes (type 2), chronic obstructive pulmonary disease (COPD) and vascular risks to support primary care coordination through care groups and to reduce specialist visits and hospitalisation. Care groups are legal entities acting as contractors and employ or subcontract providers to offer coordinated outpatient care. There are about 100 groups, with a median of 50 GPs in each, covering 80% of GPs.⁸⁶ Prices are negotiated between care groups and insurers. Additional payments are being considered for patients with depression and for frail elderly people.

In Germany sickness funds can sign 'selective contracts' with providers which are intended to stimulate quality, achieve better coordination and cooperation in patients' care and to be evidence-based.⁷ Disease management programmes for chronic diseases (asthma, breast cancer, COPD, diabetes, ischaemic heart disease) were introduced in 2002 by some sickness funds. Participation for patients is voluntary. In 2012 there were more than 10,000 programs covering 7.16 million patients. Ambulatory care providers are reimbursed by a combination of fee-for-service, capitation and pay-for-performance.

In Germany, 'integrated care contracts' are another form of selective contracting that aim to overcome intersectoral barriers through case management and coordinated patient pathways. Contracts cover a population for a given condition, such as stroke or hip replacement. They can integrate providers *horizontally* (eg, within ambulatory care) or *vertically* across sectors (eg, inpatient and ambulatory care). During 2004–08, 1% of funding for ambulatory physicians was earmarked for these contracts. In 2008–11 there were about 6,400 contracts and coverage increased from 1.66 to 1.92 million patients. Sickness funds negotiate with single or networks of providers, including rehabilitative care providers. Payment varies from fee-for-service to capitation. Patients' participation is voluntary. Patients are committed to contracted providers but not penalised by sickness funds if they seek alternative providers.⁷

Empirical evidence

Although there is evidence that some integrated care is cost-effective, overall the evidence is weak.⁸⁷ A review of 38 schemes in eight countries found no effect on health in most cases; in 11 there was no effect on secondary care costs or utilisation, three reported lower secondary use, and in 19 the evidence was mixed or unclear.⁸⁸

In the Netherlands a study found improvements in the organisation and coordination of care for diabetes, and better protocol adherence, but increased administrative costs and large price variations unrelated to quality.⁸⁹ The findings of a related study suggest that mortality rates also fell.⁹⁰ One study found that one additional care group reduced contract prices for

diabetes by 1.5% (€5) while regional insurer market concentration had no effect on price.⁸⁶ There are large price variations, possibly due to lack of experience in negotiating contracts and uncertainty about care covered by the bundle.⁸

In Germany, evaluations of disease management programmes for diabetes type 2 reported positive effects on patient outcomes and survival.⁹¹ An evaluation for COPD found improvements in mortality, morbidity and process quality, but higher costs.⁹²

Lessons

At first sight, having a single organisation deliver a whole range of integrated health care and related services would seem to run counter to competition. Health care policy makers have attempted to resolve this tension by encouraging integration of services through preferred contracts. But there are difficulties with establishing competition *for* rather than *in* the market, such as the long-term nature of the contracts (eg, 5–10 years) and establishing a pool of potential providers willing to bid for the contract.⁸⁵

One study⁸⁸ highlights additional problems in designing contracts for integrated services when separate organisations have come together to tender. One concern is that the allocation of funding within the overarching delivery organisation may be skewed towards the provider with the highest bargaining power.

It is therefore not surprising that the evidence regarding the effects of these sorts of arrangements is mixed. The case studies suggest that there may be some limited benefits in relation to higher quality care for patients, but that these are achieved through greater expenditure rather than efficiency. This may be explained by integrated financing being better at revealing where services need to be improved – where there is *unmet need* – rather than delivering that improvement within a given budget.⁸⁸

Integration of services remains an issue at the frontier of policy developments, whether focused on competition or organisational design. A key question remains: can integrated services coexist with competition? And, if this is not the case, do the opportunities for improvement generated by integrated services outweigh the benefits of preserving competition?

Discussion: policy implications for the English NHS

We have seen how policies aimed at stimulating competition can have different implications depending on the service (primary or secondary), the dimension on which providers compete (quality or price, or both), market structure, and the diversity of providers (eg, for-profit versus non-profit). In this final section, we draw policy implications for the English NHS.

Proximity to the provider remains the key driver of patient choice

The NHS Choices portal provides an extensive range of information including both clinical indicators and non-clinical ones related to patient experience. Despite this, the empirical evidence suggests that patients only respond to this information to a limited extent, so hospitals have little incentive to compete for patients by improving services. Regulators and commissioners need to address important issues regarding first how to encourage patients to process and act on the available information on quality, and second the role that GPs play in taking decisions on behalf of the patient about their hospital treatment.

A key policy issue is how to raise awareness of quality information in a cost-effective manner, either by further investing resources to increase the availability and accessibility of information or encouraging the use of existing information.

There is a potential tension between stimulating quality competition and controlling expenditure

In England, funders are increasingly attempting to cap hospital volumes and expenditure, or to reduce the per-patient tariff for high volumes. This is reminiscent of block contracts and of cost and volume contracts during the internal markets of the 1990s, which provided weak, if not adverse, incentives to compete on quality. Moreover, the lack of fixed national tariffs will imply that money does not follow the patient and therefore will reduce the scope for patients making an informed choice, which is now part of the NHS Constitution (2015)*⁹³. If providers receive no additional funding when chosen by more patients, they may react by making access more difficult or letting their waiting list increase.

One possible solution is to introduce staggered reductions in the per-patient tariff as volume increases (eg, going from 100% of average tariff to 80% for volume in excess of a pre-determined volume threshold 1, 70% for a higher predetermined threshold 2, 60% for threshold 3, etc), but with the tariff always remaining at or above the marginal cost to avoid perverse incentives. Another possibility is to have a mixed payment system with a tariff at say 70% of the average cost, but combined with a fixed budget to ensure that hospitals do not make losses at predicted volumes. English NHS policymakers do not face a dichotomous choice between a fixed budget and an average-cost pricing rule. They can adopt an intermediate strategy, combining elements of both payment systems, and develop policies which are better aligned with patient choice.

A range of new care models are being developed in England (known as the vanguards)⁹⁴ to stimulate innovative organisational solutions with the acute sector (Dalton review)⁹⁵ and greater integration between service providers across sectors. The intention is for new cross-sector provider models to be paid by capitated budgets for integrated primary, secondary and community services,⁹⁶ with an additional element of outcome-based commissioning.

The key challenge is for NHS England and clinical commissioning groups (CCGs) to put in place organisational and financial incentives that reduce fragmentation of care by coordinating or integrating services, while adhering to the current procurement regulations.^{97,98}

When the new care models are rolled out, there is some uncertainty about the extent to which CCGs will have discretion to choose the prices and terms under which they will purchase hospital care. The debate about the choice between national and local tariffs needs to consider the risk that bespoke local arrangements might undermine incentives to compete on quality.

Information for assessing proposed hospital mergers requires improvement

In England, the CMA is responsible for hospital mergers with advice from NHS Improvement (previously Monitor). A merger will be authorised if the hospital market remains competitive after the merger, which is assessed by analysing GP referrals to the hospitals in the market under a phase 1 investigation. If the merger presents a threat to competition, a more detailed (phase 2) investigation is required and may result in the merger being blocked. This was the case in the proposed merger between Royal Bournemouth and Christchurch NHS Foundation Trust and Poole NHS Foundation Trust. However, the more recent proposed merger between Ashford and St Peter's Hospitals NHS Foundation Trust and Royal Surrey County Hospital NHS Foundation Trust was approved.

For future merger assessments, the critical issues to understand are the comparable services over which hospitals compete, how quality can be reliably measured, referrals and hospital market shares based on administrative data, and the predicted effects of changes in market structure following a merger using empirical models.

The evidence does not support the view that mergers improve quality. Given the relatively low number of providers in the English NHS compared with other European countries, and the significant transaction costs involved in a merger process, there is limited scope for encouraging hospitals to merge in England. There is, however, scope for obtaining synergies across hospitals through alternative models, such as clinical networks.

There is limited scope for further expansion of private providers to treat NHS patients

In the past decade, private provision (by independent sector providers) to NHS patients in England has increased to up to about 10% of treatments. Private providers are now paid at the same rate as public hospitals. The cost per procedure to the NHS is therefore the same across providers. In terms of quality, the empirical evidence is limited but suggests that patients are equally satisfied with public and independent sector providers, though for hip

replacement the health gains appear slightly greater in the private sector. Given that there are currently no entry barriers to private providers, it is unlikely that encouraging further entry with financial incentives would improve quality or efficiency. Moreover, given the current focus on expenditure control, an expansion of contracting to private providers would imply a reduction in capacity for public hospitals.

The economic rationale for controlling provider entry in general practice is unclear

Unlike the NHS hospital market which is open to any qualified provider, entry and location of new GP practices is heavily regulated by NHS England (or in some cases the local CCG). There are also restrictions on the sale of intangible assets by retiring GPs (known as goodwill), which reduce the financial rewards from providing a service attractive to patients.

General practice differs from secondary care in many respects. They are small, mainly privately owned businesses, operating in small geographical markets with a small number of rivals. They each care for a relatively small number of patients, see them more frequently, and so are likely to be better informed about their needs. Because of this, and their formal gatekeeping role, general practices have considerable influence on the care pathways of their patients. But none of these differences provides any obvious justification for having policies towards entry that differ from those in the secondary care. As with secondary care, competition, better information, and greater choice can improve quality and accessibility.

Selective contracting for patients with chronic and multiple conditions to reduce fragmentation of care raises different issues for competition and regulation

A range of new care models are being developed to integrate services for people with complex care needs⁹⁴ as proposed by NHS England's *Five year forward view*.⁹⁹ These include the multispecialty community provider (MCP) model, where groups of GP practices come together to offer a range of services including community and outpatient services, and primary and acute care systems (PACS), which involve a higher form of integration. These models can be interpreted as a form of selective contracting where the commissioner contracts with a group of practices or other providers to deliver a range of services. This may reduce the choices available for patients by replacing competition 'in the market' (as under any qualified provider and free choice arrangements) with competition 'for the market' (as under a competitive tendering process to appoint a specific provider⁹⁴) – a single organisation would deliver a whole range of services. There may be difficulties with establishing competition for the market, because of the long-term nature of the contracts (eg, 5–10 years), and establishing a pool of potential providers willing to bid for the contracts.

The evidence also suggests that while there may be benefits from these types of arrangements, they may also require additional expenditure and lead to significant price variation from area to area unless there is a clear, national methodology for calculating budgets. In summary, selective contracting for patients with chronic and multiple conditions has the potential to reduce fragmentation of care, but also raises some issues for competition and regulation that need to be addressed in future policy.

Conclusion

Policies aimed at enhancing competition in the health sector may focus on demand (patients) or supply (hospitals and GPs), or both. For example, the introduction of DRG pricing acts explicitly on supply, but its effect depends on patient choice policy, which will influence the extent to which hospitals can attract extra patients by raising quality. The effects of policies are further mediated by market structure, which is determined by the distribution of providers over geography (eg, rural versus metropolitan areas), and over time as providers merge, vertically integrate, enter or leave. Policies aimed at enhancing competition are therefore best seen as a portfolio of interdependent tools, aimed at patients, providers, and the markets through which they interact.

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