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Competition and choice in publicly funded health care

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Abstract

Several European countries with traditional publicly funded, publicly administered national health systems are currently giving patients greater choice of hospital provider. This paper aims to inform current international policy debate on patient choice in publicly funded health care by reviewing relevant economic theory and evidence. It focuses on the role of patient choice as a mechanism for improving the quality of hospital services by stimulating non-price competition. A typology of different forms of competition and choice is developed, distinguishing supply-side elements (price regulation and barriers to entry and exit) and demand-side elements (active versus passive payer and degree of patient choice). In theory patient-driven competition may be a more effective mechanism than payer-driven competition for improving aspects of quality that are accurately perceived by patients (e.g. waiting times, amenity, customisation). International evidence is considered, focusing particularly on recent patient choice initiatives in Denmark, England, the Netherlands, Norway and Sweden. Evidence suggests that the impact of patient choice on competition has been limited. In standard economic models, by contrast, patient choice is an effective mechanism for stimulating competition. A political economy critique of standard models is employed to examine why they apparently give so little insight into observed behaviour. It is argued that two fundamental political factors limit competition in publicly funded health care: (i) corporatism – the embedding of producer interests in the policy-making process – and (ii) concern for equity of access. The varying strength of corporatism and equity concerns in different countries influences the varying strength of economic obstacles to competition such as barriers to entry and exit and switching costs.

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1. Introduction

The topic of choice has recently come to the fore in several European countries with traditional publicly funded, publicly administered national health care systems – including England, Denmark, Sweden and Norway. These countries are all experimenting with patient choice as a mechanism for reducing waiting times and improving other aspects of the patient experience. Implicit in much discussion of choice in public systems are assumptions about the nature and extent of competition between providers. Among the traditional public systems, England is unusual in explicitly linking a desire for more competition with the introduction of patient choice.

This paper aims to clarify and inform the debate on choice and competition in publicly funded health care. It does so by examining the potential role of patient choice of provider as a mechanism for improving the quality of publicly funded hospital services by stimulating non-price competition. It considers three large strands of literature, with special reference to the role of non-price competition driven by patient choice: (1) economic models of competition and regulation in hospital markets, (2) international evidence on the effects of price and non-price competition in hospital markets, and (3) political economy discussions of the political constraints on competition in publicly funded systems.

2. Publicly funded health care

Our interest is in patient choice and competition in systems that are dominated by public funding. The assumption is that, given the objectives of a public system, universal coverage, equal access and control of tax financed budgets, the efficiency of instruments such as patient choice and competition may be expected to differ from that anticipated in a predominately privately financed health care system. There is one problem—there are hardly any health care systems dominated by private funding that permit comparison with public systems. As Figure 1 indicates, in large high-income OECD countries (with GDP > US$150bn and GDP per capita > US$10,000) public funding makes up around 70-85% of total health expenditure in all of these countries – with the notable exceptions of the USA and Switzerland, where the figures are 44% and 56% respectively. Nominal institutional differences such as private sector sickness funds in Germany and the Netherlands and the prevalence of private sector not-for-profit hospitals in Europe may be of marginal importance relative to the influence of the state

as the dominant payer. Public funding has been in the ascendant across almost all developed countries since the late 1960s.

Under these circumstances, we focus on stereotypical public systems, Denmark, England, Norway and Sweden. These countries have the highest share of public funding and a tradition of public administration. While these countries provide the most interesting cases for analysis of choice and competition, the arguments are relevant to all the publicly funded European systems.

3. Patient choice

We focus mainly on patient choice of hospital provider (whether publicly or privately owned). In principle, patient choice of public insurance plan can also be used to drive competition. However, in a publicly funded system, the goal of equality of access for equal need encourages policy-makers to regulate the content of the benefit package and the quality of services. This limits the scope for competition between public insurance plans, since regulators are reluctant to allow differences in publicly funded insurance premiums to reflect differences in coverage or service quality. In addition competition between insurance plans encourages risk selection that is difficult for public authorities to control and can be both inefficient and inequitable.[1]

We focus on the role of patient choice in stimulating non-price competition – that is, providers competing to attract patients by improving quality of care as perceived by the patient. Patient choice of provider cannot readily be used to stimulate price competition. The obvious reason is that the patient does not pay the price and so has no incentive to shop around for price discounts. In theory, schemes could be devised to allow patient-driven price competition in public services. For example, providers could be allowed to charge patients a variable copayment. However, copayments could not cover more than a small fraction of overall provider costs if the service is to remain "publicly funded". Conceivably, price competition is possible even if copayments are small – or even negative. For example, the patient could be given a cash award to cover the cost of their treatment and invited to shop around for the best deal, keeping any savings. In practice, however, patient-driven price

competition is almost never observed in health care markets due to transaction costs and the "special" characteristics of health care – in particular, uncertainty of patient demand, asymmetry of information about patient need and service quality, and asymmetry of information about patient risk (Newhouse 2002).

We are primarily concerned with patient choice of provider as a *policy instrument* rather than a *policy goal*. Patient choice of provider is sometimes advocated as a policy goal, due to heterogeneity in patient needs and preferences between service characteristics. Service characteristics include the mode and intensity of treatment (e.g. medicine versus surgery, pharmaceutical brand and dose, number of diagnostic tests), access (e.g. waiting time, patient travel time, consultation length) and amenity level (e.g. attributes of hotel and nursing services). If patients value those characteristics differently, then an increase in choice of provider may help improve the fit between what the patient wants and what he gets – a form of allocative efficiency. We refer to the policy goal of increased patient choice of available service characteristics as the "customization" of services; it is sometimes also known as "personalisation" (Appleby, Harrison and Devlin 2003). Customisation refers primarily to expanding the role of the patient (as opposed to the health care professional) in choosing among the available set of health services. It is not primarily about expanding the set of available health services through increased health care expenditure or improved productive efficiency. Indeed, there may be a trade-off between the two: increased customisation may have administrative and other opportunity costs that lead to reduced availability of health services and may lower the overall quality of service received (Appleby, Harrison and Devlin 2003).

Customization can thus be seen as one potentially welfare-enhancing aspect of quality of care. It may contribute to economic efficiency, if its value to patients compares favourably with its opportunity costs. It may also contribute to the political goal of "retention" of middle class voters within the publicly funded part of the health system (Perri 6 2004). It may be achieved by a variety of policy instruments, including "command and control" regulation – for example, by stipulating a minimum range of service characteristics that all providers must offer. Our focus is not on the policy goal of customization, it is on the policy instrument of

[1] See the Economist (2004) on recent problems in European countries where competition between payers is encouraged.

non-price competition stimulated by patient choice of provider and its effects on different aspects of quality of care – including customisation.

4. Why competition in publicly funded health care?

It is useful to clarify what we mean by "competition". Stigler (1987) defines competition as "a rivalry between individuals (or groups or nations) that arises whenever two or more parties strive for something that all cannot obtain". In this general sense, at least three forms of competition exist in all publicly funded health care systems. First, non-market (i.e. political) competition for scarce public resources and associated economic rents. Such competition is ubiquitous and intensive and arises at all levels including provider organisations (e.g. non-market competition between hospitals for capital investment) and speciality groupings (e.g. non-market competition between cancer and mental health services for research funding). Second, labour market competition between physicians for posts with higher earnings and/or better working conditions – resulting, for example, in public payers having to pay a premium to attract primary care physicians to deprived inner city areas. Third, competition in other relevant input markets such as the pharmaceutical, equipment and construction industries. We focus on a rather different form of competition that, historically, has been rare in publicly funded health care: service market competition between providers to attract patients and the associated public funding.

Why might introducing competition of this kind help to improve health care performance? Following Vickers (1995), we can identify three economic arguments:

1. More efficient behaviour by providers. Providers have an incentive to minimise costs in order to compete more effectively by reducing price and/or improving quality.
2. Exit of inefficient providers. Providers unable (or unwilling) to minimise costs may ultimately fail to break even and thus exit the market.
3. Spur to innovation that increases quality and/or reduces cost

Note that "quality" potentially refers to any aspect of services that may be valued by patients, including levels of access, amenity, customisation and responsiveness as well as health outcomes. All three arguments refer to "productive efficiency" in the sense of minimising the cost of producing a specific quantity and quality of service, given fixed input prices. (Or,

equivalently, maximising the quantity or quality of service given fixed costs and input prices). The first two focus on "static" efficiency in the sense that they treat technology as fixed, whereas the latter focuses on "dynamic" efficiency involving technological change.

The first mechanism focuses on the short-run behavioural response of the provider to the competitive situation it faces – including *credible threats* of lower prices and/or higher quality from existing providers or from potential new entrants to the market. This mechanism is perhaps most powerful if providers are motivated to maximise profits or financial surplus; but can also apply to the extent that providers are motivated by a break-even constraint – as long as the threat to management and clinicians is credable. The second and third mechanisms require medium to long-term time horizons.

The two main criticisms of competition in publicly funded health care are (1) the potential harm to equity that may arise because competition requires "losers" as well as "winners", and (2) the potential harm to productive efficiency that may arise if competition erodes or "crowds out" the intrinsic motivation of public service workers. That is, in Le Grand's colourful terminology, public service workers may turn from "knights" into "knaves" (Le Grand 2003). This may harm productive efficiency in two ways: first, increased "shirking" (e.g. working less hard and for shorter hours) and second, reduced co-operation with employees of other organisations in contributing towards public goods such as clinical networks. The argument about crowding out of intrinsic motivation applies to all "extrinsic" financial and non-financial motivations for improved performance – including, for example, fee-for-service verses salary payment for consultants, or for-profit versus not-for-profit ownership of providers – and does not apply exclusively to the incentives arising from competition.

5. Competition and choice in publicly funded health care

The limited evidence on the impact of competition for patients on activity and quality appears to present conflicting results. Some studies report little impact of choice on provider behaviour, others suggest significant change. We expect one reason for the conflicting results is that the studies examine choice in systems with different provider incentives.

In Table 1 we identify the main forms of patient choice that can be identified in the literature. In most health care systems the choice available to the patient is a function of the control

exercised by the third party payer. An “active” payer negotiates with hospitals and selects those offering the most attractive package of quality and cost. Patients must use these hospitals under no choice and restricted choice regimes. “Passive” payers simply reimburse the hospital when the patient is treated under any choice regime. With passive payers, if there is any competitive pressure on providers it comes from the marginal impact on demand of patients willing to switch rather than the greater market power of the third party payer.

In publicly funded systems it is often assumed that the effect of introducing patient choice will be to increase provider competition on quality. However, the competitive response to choice will be a function of the form of reimbursement, freedom of entry and exit and market concentration. Historically publicly funded systems have reimbursed hospitals on the basis of global budgets or block contracts. The key element is that hospitals obtain little or no financial reward for seeking new patients, improving quality or pursuing cost efficiency. The payer was usually a county council or local Health Authority and in our typology appeared to be “passive payers”. Hospitals in financial difficulty were usually bailed out and exit was rare. To strengthen the incentives of providers to reduce costs and to respond to patient demand, a number of countries are introducing an element of payment per case based on a fixed DRG price. At present no country uses fixed DRG prices as the sole means of reimbursing hospitals but, as the proportion rises, governments expect hospitals to behave more competitively. However, it will remain the case that the effectiveness of any pricing regime in stimulating competition will depend on barriers to entry and exit. If passive purchasers continue to fund hospitals that face financial difficulty, it does not matter what form pricing takes.

Evidence from the US (Zwanziger and Melnick, 1988) suggested that an active payer in a market with no price regulation could secure greater efficiency gains than a passive payer even controlling for the impact of introduction of fixed prices for Medicare. However, negotiating prices under selective contracting reduces consumer choice rather than increasing it.

The rhetoric of patient choice usually includes the view that limited public funds should flow to the “successful” hospitals and be withdrawn from the less successful. If, at the margin, patients wish to change hospitals, this is a necessary condition for there to be real choice. However, if such reallocations are to occur, there are important implications for market entry

and exit. The competitive effects of any reimbursement regime is highly dependent on the conditions for entry and exit.

What is the evidence? Denmark for a decade and Norway and Sweden more recently have offered patients choice of any hospital in the country. Studies report very little patient movement and point to a lack of response by hospitals to the opportunity to compete for patients. Two comments are common. First, patients are reluctant to take advantage of the opportunity for treatment outside the local area—demand with respect to quality elsewhere appears highly inelastic. Relevant to this result is the fact that patients choosing to go to a non-local hospital had to incur important search and travel costs (Goddard and Hobben 2003). As in any market, such costs increase the degree of local monopoly. Second, payment regimes made it unattractive for hospitals to expand capacity and attract non-resident patients. Hospitals were paid by global budgets/block contracts in the early years of choice. All these countries are now introducing an element of DRG pricing at the margin of historic budgets in an effort to strengthen the incentives to reduce costs and compete for patients who are allowed to choose on quality. However, whether the change to the pricing regime will stimulate provider response depends on whether budget constraints become hard. Earlier work on the Norwegian system pointed to the unwillingness of county councils to penalise hospitals in financial difficulty (Norwegian Ministry of Finance, 1999). The national government has now taken ownership of hospitals from the county councils. It remains to be seen how this may affect the threat of exit. In Denmark counties still adopt strategies to protect the budgets of local providers (Vrangbaek and Bech, 2004).

Brouwer, van Exel, Hermans and Stoop (2003) report the result of three experiments to facilitate cross-border patient movement in the border regions of the Netherlands. The quality dimensions of the alternative hospitals offered included lower waiting times and or high clinical reputation. The trials included patients from the Netherlands, Germany and Belgium. In spite of the fact that efforts were made to reduce the cost of switching and receiving hospitals were reimbursed, the response was very low. Evidence on willingness to travel *within* the Netherlands to reduce waiting times also suggests a very low elasticity of demand.

The English experience of choice (to date) has been different. The London Patient Choice Project (LPCP) offered patients likely to wait more than nine months for certain elective procedures the choice of another hospital within the metropolitan area. Over the period

October 2002-June 2004, of the 22,500 patients offered choice, 15,000 choose to move to another hospital, an acceptance rate of 66% (Dawson, Jacobs, Martin and Smith, 2004). Central to this outcome, LPCP reduced switching costs by organising and paying for transport, identifying hospitals with excess capacity, evaluating quality and providing this information to patients. Another important difference with the Nordic experience was that significant investment in new capacity took place in London as choice was introduced. The evidence that the offer of a fixed price per case for accepting choice patients *per se* altered hospital behaviour is weak. The relative success of LPCP in getting patients to change hospitals appears to rest on a combination of reducing switching costs and emergence of an environment of excess capacity.

6. The effects of patient-driven competition on quality: standard economic theory

Most standard economic models start from the assumption that patient demand is responsive to quality and therefore that choice is an effective mechanism for stimulating non-price competition. An exception is sometimes made for emergency services, for which provider-level patient demand tends to be inelastic (Chalkley and Malcomson 1998a). For other services, it is standardly assumed that most hospitals in metropolitan areas are in a position to engage in *monopolistic competition* (Dranove and Satterthwaite 2000). That is, once patient choice and/or payer choice is unleashed, each individual hospital will face a downward sloping demand curve that is elastic in both price and quality – even though demand in the relevant geographical market as a whole is of course highly inelastic. In effect, patient choice is modelled as an effect on the quality elasticity of demand.

The standard result is that monopolistic competition under either negotiated or fixed price reimbursement can yield an efficient level of quality (Rogerson 1994) – but not for quality attributes that are poorly perceived by the patient (Dranove and Satterthwaite 1992, 2000; Chalkley and Malcomson 1998b, 2000). This result is intuitive. Essentially, providers will compete to attract patients – and the associated revenues – by improving those aspects of quality to which patient demand is most responsive.

It is likely that there will be asymmetries of information between patient, provider and payer on at least some dimensions of quality (Arrow 1963). For example, patient perceptions of likely waiting time may be better informed than perceptions of likely clinical outcomes. If so,

then demand will be relatively unresponsive to poorly perceived dimensions of quality. The marginal cost to the provider of improving those dimensions may then outweigh the marginal revenue from attracting additional patients. This may lead to inefficiently low quality on those dimensions, since the marginal social benefit of those quality improvements (the benefit to patients) will be higher than the marginal private benefit to the provider.

A possible exception is if the provider is *fully* benevolent and acts "as if" it cares as much for the patient's welfare as for its financial surplus and working conditions. Although standard theory recognises this possibility, the consensus is that a more likely scenario is *partial* benevolence – sustained by professional norms of medical ethics and long-run reputation concerns, as well as more selfless altruistic motivations (Chalkley and Malcomson 2000). Partial benevolence does not change the basic result, although it may attenuate the size of the effect of competition on quality dimensions. The size of the effect of competition on any particular attribute of quality will therefore depend upon (i) the marginal cost to the provider of improving that attribute, (ii) the patient elasticity of demand for that attribute, and (iii) the degree of provider benevolence.

Standard theory also recognises the possibility that competition may be impossible due to binding capacity constraints – especially in traditional publicly funded, publicly administered systems such as the UK NHS (Chalkley and Malcomson 1998a). This is for the simple reason that providers already have sufficient demand to break-even without needing to increase demand by raising quality.

In theory, the effects of patient-driven non-price competition on quality are the same under either negotiated or fixed price reimbursement – with one important difference. Under fixed price reimbursement, the level of quality will depend crucially on the level at which the fixed price is set. If the price is "too low", then quality will be inefficiently low since providers will be unable to afford higher quality (Joskow, 1983). Note also that the monopolistic competition result does not apply either to historic reimbursement – where there can be no competition – or to retrospective reimbursement – which leads to inefficient over-production of quality.

Finally, it is also worth considering the effects of non-price competition on variations in quality between providers. This is of interest because equality of access is always one of the

primary goals of publicly funded health systems. The current UK Prime Minister has claimed that patient choice will reduce inequalities of access: "Choice mechanisms enhance equity by exerting pressure on low-quality or incompetent providers" (Tony Blair 23 January 2003). In theory, however, quality levels are unlikely to converge. One reason is that the strength of non-price competition – and therefore quality levels – will vary from one part of the country to another, depending on the quality elasticity of patient demand. This will depend on local variations in patient preferences and switching costs and, in particular, on variations in provider concentration. Patient travel costs mean that some providers in rural areas will have a virtual monopoly on services, and so their quality elasticity of demand is highly inelastic. Such providers will have no incentive to raise quality to an efficient level.

A second reason why quality levels may not converge is that providers may face "unavoidable" differences in the marginal costs of producing different quality attributes – i.e. differences not attributable to organisational slack. One important such source of cost variation is differences in factor productivity and, in particular, the productivity of hospital consultants. Factor productivity and therefore average costs will vary unavoidably, because consultants (like other highly skilled workers) will vary unavoidably in ability and effort.

7. The English experiment

England is embarking on an experiment unique in the Western world. Reimbursement of hospitals will be at nationally fixed prices per procedure/diagnosis (HRG) for all hospital activity. The new reimbursement policy has two objectives. First to force relatively high cost providers to reduce costs. Second, to accommodate the introduction of patient choice of provider. The government expects that hospitals will compete on quality and consequently overall levels of quality will rise in the NHS.

Joskow (1983) warned that health care policy makers should look at the experience of other regulated industries that have tried to set fixed prices reflecting average industry costs when the industry is made up of markets differing in competitiveness and in the demand from heterogeneous consumers. With fixed prices in the airline industry, the observed non-price competition on quality was predictable but not that desired by the regulator. In monopolised segments of the market, where producers had costs below the fixed price, there was no incentive to improve quality. In monopolised markets where costs were above the fixed price,

quality was reduced. In some cases, to avoid the service being withdrawn, the regulator would effectively force a provider in a profitable market to cross-subsidise the high cost service. In more competitive segments of the market, producers with costs below the fixed price did compete on amenities and quality with a consequent rise in unit costs.

Joskow's analysis was undertaken twenty years ago but it is highly relevant to considering the impact of the new English regime. Figure 2 plots the relationship between the unit costs of English Trusts and market concentration. As the Herfindahl index increases from 0 to 1 the degree of monopoly increases. The reference cost index is a case-mix adjusted indicator of the extent to which a Trusts unit costs are above or below the national average. The National Tariff (the government's fixed price) will reflect the average cost per HRG observed for all Trusts. Roughly, Trusts with an RCI greater than 100 will have to reduce costs to remain solvent, Trust with an RCI below 100 will be able to increase costs.

The scatter suggests that as the degree of monopoly increases, there is an increasing proportion of Trusts with costs below 100. These Trusts enjoy a windfall surplus as a result of introducing the National Tariff. The surplus may be spent on activities worthwhile to the Trust but unlikely to affect patient perceived quality. An obvious example is reduction in outstanding Trust financial deficits. Expenditure of the surplus could also include things like replacement of ageing equipment, crèches for children of nurses, new carpets and for non-PFI Trusts, improved maintenance of buildings. Attracting new patients may be a low priority—especially for Trusts that have difficulty recruiting labour or capital capacity constraints. If managers and clinicians want to attract new patients from non-local areas, the surplus would be directed toward patient relevant quality. The impact of this strategy on demand depends on the elasticity of demand with respect to quality faced by the Trust. We would expect the elasticity to be lower the greater the distance/travel costs faced by the patient.

Below average cost Trusts in more competitive markets will face a more elastic demand and have a strategic incentive to invest the surplus in patient relevant quality. Where demand increases beyond existing capacity, the Trust can be expected to select the patients from which it will accept referrals. Trusts with unit costs above 100 will have to reduce costs to remain solvent. There may be some scope to reduce costs through efficiency savings. However, anecdotal evidence from the behaviour of Trusts in financial difficulty suggests adjustment includes actions such as closing wards and reducing outpatient clinics, both of

which may affect waiting times. For non-PFI hospitals, expenditure has been reduced on activities such as cleaning, catering and maintenance. These responses to the need to cut costs would be perceived as reductions in patient relevant quality.

Joskow reported that with the introduction of a fixed price, expenditure on amenities/quality increased the more competitive the market. The only study to look at the relation between quality and market competition in the UK health care market (Propper, 2004) found that quality (measured by mortality rates) fell as competition increased. This was under a regime of payer driven competition and restricted patient choice. It would appear that we will have to wait and observe the market response. On our crude evidence of costs and market competitiveness, the proportion of Trusts with an incentive to invest in quality appears relatively small. What we do not know is the elasticity of quality related patient demand. On the evidence from abroad and LPCP, those Trusts that choose to finance travel and reduce other switching costs will face a more elastic demand than other Trusts.

8. Discussion: the political constraints on competition

Evidence from the US suggests that payer choice and patient choice can both stimulate effective competition in the private sector, with dramatic effects on costs and prices although limited effects on clinical aspects of quality (Dranove and Satterthwaite 2000). The power of competition in the private sector is also borne out by recent UK experience of falling private sector fees for elective surgery. This was due to a fall in patient demand caused by the large recent expansion in NHS capacity and consequent fall in NHS waiting times.

In publicly funded health care, by contrast, neither payer choice nor patient choice appears to have much effect on competition. There therefore seems to be a fundamental mismatch between standard economic theory – which assumes that patient choice unleashes powerful forces of competition – and the reality of publicly funded health care.

One reason for this mismatch is “corporatism”: the embedding of producer interests in the policy-making process. In most publicly funded health care systems, incumbent producer interests are directly involved in the policy-making process through their formal professional associations. Incumbent producer interests are thus readily able to “capture” the policy-making process and avert any threat of competition that might erode their economic rents

(Stigler 1971). Competition is averted in various ways – for example, through high barriers to entry and exit and through high search and transaction costs that keep patient switching to a minimum.

Corporatism is particularly strong for example in Germany, where powerful associations of doctors, hospitals and sickness funds all participate in policy-making. By contrast, corporatism has become somewhat weaker in the UK since the 1980s, for two reasons. First, the radical market-oriented reforms of the Thatcher administration 1979-91 weakened the power of unions, professional associations and other producer interests in all sectors of the economy. Second, successive high profile cases of medical misconduct in the UK during the 1990s have harmed the reputation of the medical profession, in particular the "Bristol scandal" involving an incompetent paediatric heart surgeon, leading to reduced political power. It is not surprising that in England barriers to new entry have been significantly reduced but that we do not observe similar changes in other European countries. It remains to be seen whether government promises that the threat of exit will become more credible are carried out.

Assume for the moment that government adheres to its policy of creating a competitive market. In England, reduction in barriers to entry, creation of excess capacity, introduction of a pricing system based on average total cost and a willingness to accept bankruptcy by Trusts, may create a market that looks more like the economic models. For most hospitals average total cost is in excess of marginal cost; the price regime increases the financial penalty for losing patients and increases the attractiveness of competing for patients. It does not matter that patient demand with respect to quality appears to be very low. Very small changes in demand at the margin could have important implications for the financial balance of the hospital.

A second fundamental factor in the political economy of publicly funded systems is concern for equity. Perhaps an important reason why the traditional economic models of competition do not appear to fit publicly funded systems is that they do not include relevant constraints. If travel and other switching costs make local demand with respect to quality highly inelastic and if local providers cannot break even at current prices, the welfare loss imposed on the resident population is unlikely to be acceptable. To date the aspect of quality most associated with encouraging choice has been waiting time. It may be the case that as some patients are

observed to be treated earlier than others because they were willing to change providers, the difference in waiting time will not be treated as “inequitable” –no one has to stay at the local hospital, it is their “choice”. However, as waiting times are reduced and choice focuses on other attributes of health care—reputation of clinician or death rates—it is not clear that differences in the quality of services delivered as a consequence of competition are an acceptable market outcome. If this is the case, publicly funded health care markets will always be constrained in ways that that are not relevant in the modelling of markets where equity is not relevant.

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Figure 1: Publicly funded health expenditure as a percent of total health expenditure and total health expenditure as a percentage of GDP in 2000 for large high-income OECD countries

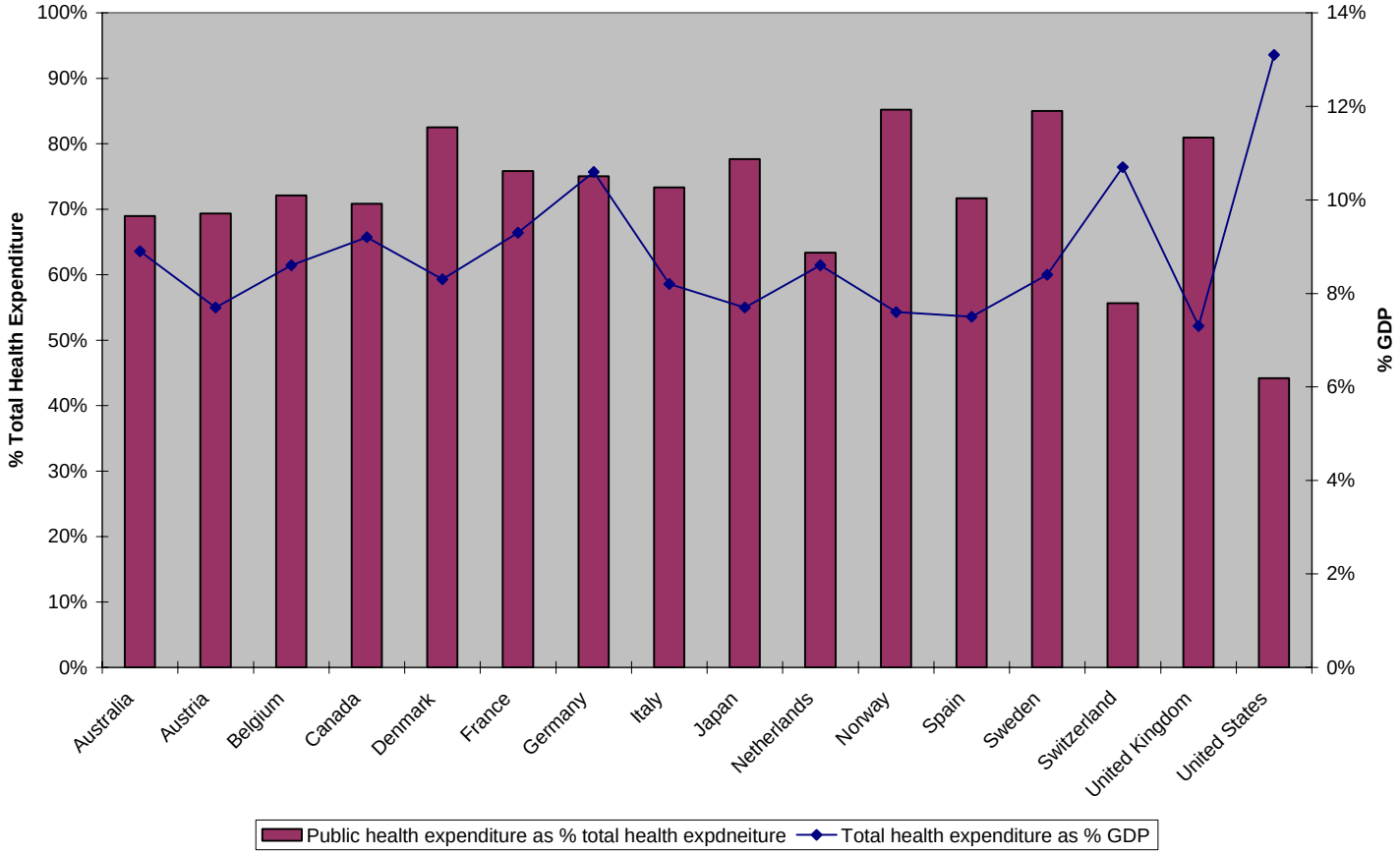
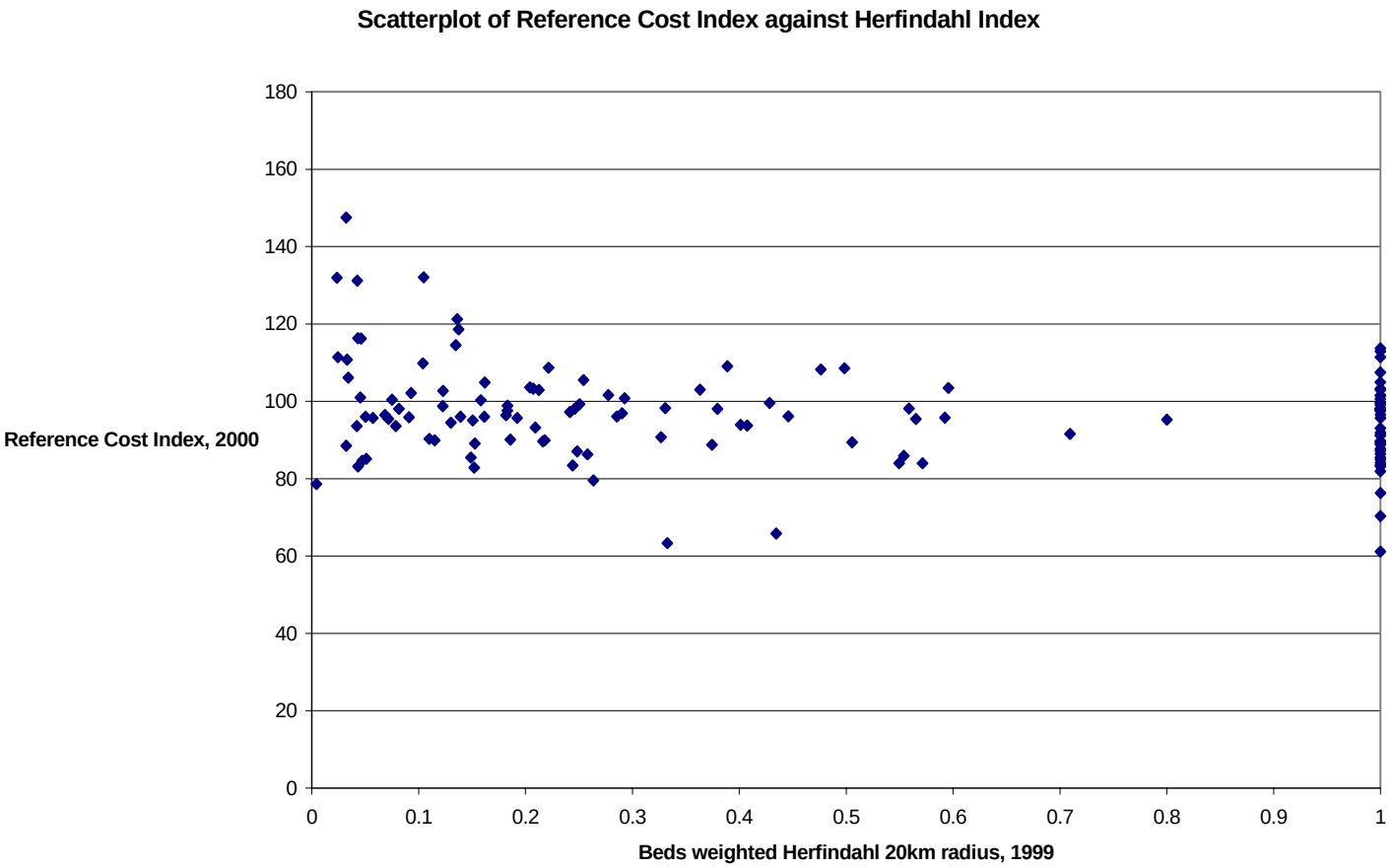


Table 1: Taxonomy of policies for competition and choice in publicly funded health care

Supply-side		Demand-side					
		No patient choice		Restricted patient choice		Unrestricted patient choice	
Reimbursement of providers	**Barriers to entry and exit**	**Passive payer**	**Active payer**	**Passive payer**	**Active payer**	**Passive payer**	**Active payer**
No price regulation	**High**	NHS pre-1991				Denmark, Norway, Sweden (a)	?
	Low				US preferred provider plans selective contracting		?
Price regulation	**High**				Germany / Netherlands Selective contracting	Denmark, Norway, Sweden (b)	?
	Low			NHS 2003- "system reform"	London Patient Choice Project	NHS 2008?	?

Figure 2: Relative cost and market concentration



Source: Jacobs, Martin and Siciliani (2004) Work in progress
Number of observations: 133
Correlation: -0.2368