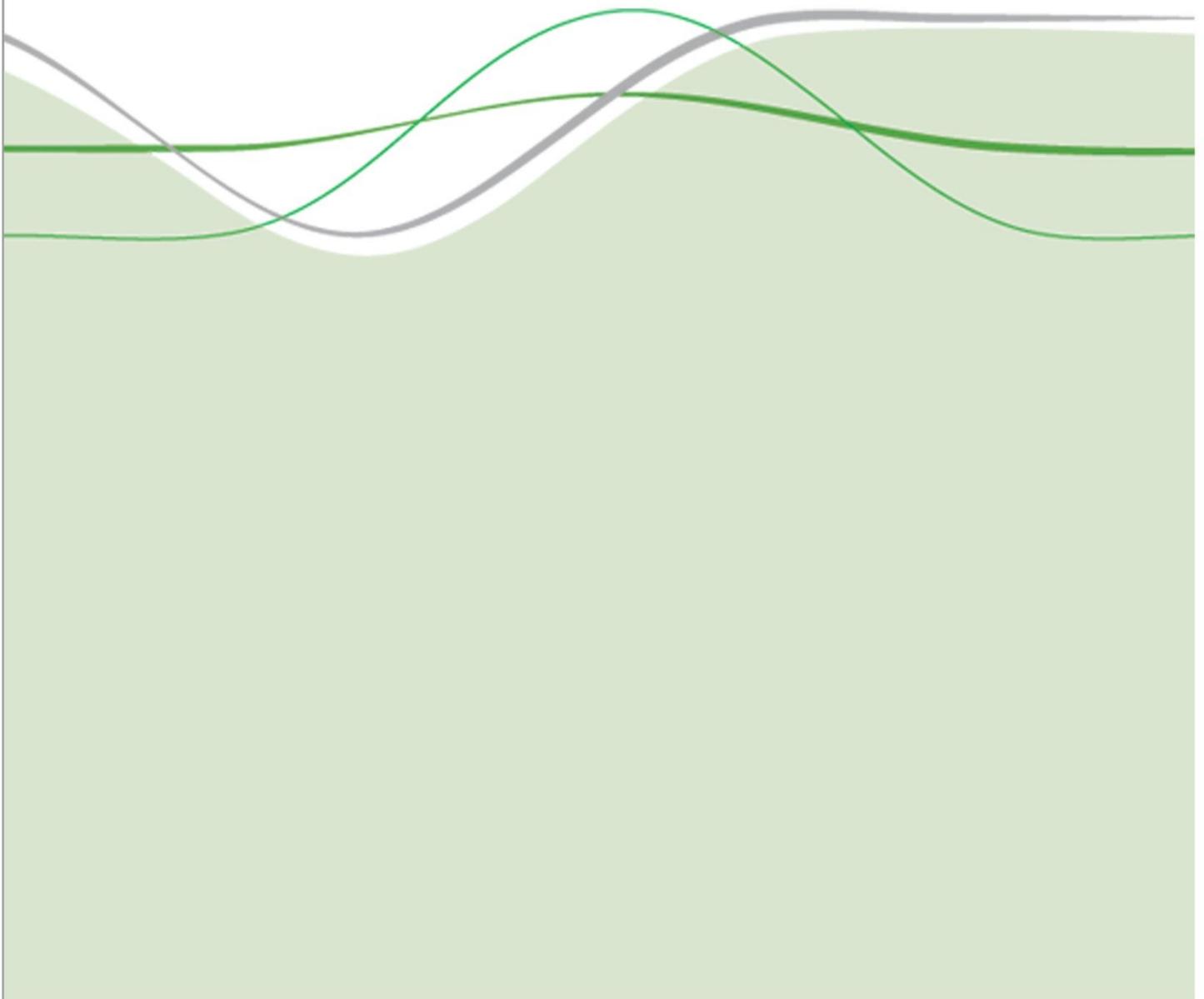


Private Provision of Publicly Funded Health Care: The Economics of Ownership

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KEY POINTS

- Private ownership of organisations providing health care to NHS (i.e. publicly funded) patients is a matter of public controversy in the UK.
- The controversy is mainly with respect to ownership of hospitals: most primary care providers to the NHS have long been privately, not publicly, owned.
- The health care systems of all high-income countries contain a mixture of public and private providers.
- Empirical evidence about the comparative impacts of public and private, not for profit and for profit, on the quality and cost of health care is unavoidably context specific and unsurprisingly mixed.
- Health care is characterised by small numbers of collective purchasers with the potential for significant market power.
- Excess profit – economic rent – can be seen as a leakage of funds that could otherwise contribute to treatment but collective purchasing can be used to reduce that excess.
- Private organisations may place different emphases on efficiency and patient care than their public owned counterparts, but collective purchasers can tailor their arrangements to take advantage of that.
- Regulatory mechanisms designed for publicly owned providers may need to be adapted to adequately manage mixed public/private provision.
- Overall economics suggests the key issues are *how* purchasers contract with providers and *how* providers are regulated, not who own the providers.

1. INTRODUCTION

Googling "Private ownership in the NHS" provides a host of links that reveal antipathy in the UK towards privately owned health care providers. The increase in non-NHS bodies providing health care is described in terms such as "creeping privatisation" or a "sell-off". There are strongly stated concerns regarding the increasing use of non-publicly owned, especially for-profit, firms to provide services: concerns that the NHS is being undermined, that future services will be at risk or even that health care that is free at the point of delivery – a key tenet of the NHS – is about to be abandoned. There are, however, also staunch defenders of the role of the private sector in health care who argue that private providers increase patient choice, reduce waiting times and drive innovation and efficiency improvements. Depending on the viewpoint, private ownership is either a disaster or a salvation for the NHS.

The purpose of this paper is to provide a view of the ownership debate through the lens of economics¹. The language of economics is used by both those for and those against private provision in a publicly-funded health care system such as the NHS, and yet its use is both selective and partisan. We believe, therefore, that the following pages will be informative for anyone with an interest in health care policy.

Our goal is not to try to resolve the question of whether the private ownership of health care provision is good or bad, but to improve understanding of how economics can or cannot help to resolve that question. Which supposedly economic arguments have validity and which do not? We are very conscious that concerns about the role of privately owned organisations in the NHS go beyond economics. For example, for an individual who judges that it is morally wrong for health care to be motivated by the pursuit of profit, this briefing has less to offer but at least it indicates some of the consequences of that value judgement.

The economics literature that informs this overview includes; the theory of the organisation of production; theories of behaviour and motivation and the role of incentives and payments in influencing decisions. Rather than attempt, and inevitably fail, to summarise all of the substantial contributions in the economics literature, we provide references of particular interest at key points. We also offer suggested starting points in the literature for readers wanting to find out more for themselves.

2. PRELIMINARIES

The economic perspective on ownership that is most relevant to our discussion starts with the observation that production typically requires a combination of what are generically called inputs. In health care a lot of those inputs are the expert services of health care professionals, but often there are a range of experts, complemented and supported by numerous other staff, and they all need to work together, they need somewhere to work and they need a range of materials and equipment to work with. We limit our discussion to the process of producing health care and so do not consider further the ownership of organisations that produce these other inputs, such as pharmaceuticals, medical equipment and hospital buildings.

¹ We focus solely on ownership forms. In this paper we do not discuss the implications of having a plurality of providers of publicly funded health care nor of the role of competition as compared to competition between them. The 2012 report of the Office of Health Economics Commission on Competition in the NHS provides a concise summary of those issues.

In this view, the production of health care, like the production of anything else, requires inputs to be appropriately organised and coordinated. The body that is responsible for organising inputs, overseeing production and receiving any revenue generated from the sale of what is produced is variously termed an organisation or firm or business. Almost every standard economic textbook will provide an introduction to the definition of a firm, the economic perspective on production and the role of ownership. A more thorough discussion of the underlying rationale for the emergence of firms can be found in texts concerned with the Industrial Organisation branch of economics². In health care, especially in the NHS in the UK, the term health care *provider* is often used, which encompasses both the big (a large hospital) and the small (such as a lone GP) of health care production. When talking of health care we will use the term *provider* to distinguish it from general market production, which we will denote as being undertaken by *firms*.

There are some fundamental questions regarding business organisations. What is meant by “ownership”? What are the goals and objectives of different organisations? To what extent does ownership imply ultimate control? We eschew these questions and take simple, pragmatic approaches to defining terms. In common usage ownership of an organisation implies the rights to purchase or dispose of any assets of the business including any financial surplus that results from the process of production. Henceforth, by *private* ownership we take those rights to be vested in a group of private individuals, whilst public ownership implies those rights reside ultimately with society as a whole and are exercised by (delegated to) a group of publicly accountable individuals.

An unavoidable implication of these definitions is that ownership does not of itself tell us about motivation. A private health care provider may be owned by a group of altruistic individuals – their objective may be to improve health and they may be completely unconcerned with profit. It is also possible that a publicly owned body is established where the individuals in control actually seek to maximise the financial surplus of the organisation – and they may be explicitly rewarded for doing so.

The debate about ownership in the NHS often presumes that publicly owned providers operate in the public interest, whilst privately owned ones have a degree of commitment towards profit. But this presumption is misleading, as can be seen in the large literature that is concerned with the governance of public organisations³ and with the conception of private health care organisations in many other countries where there is an acceptance that many of these are “not for profit” charities⁴. We will proceed as if publicly owned providers have goals that are focused on their own conception of the public interest⁵ whilst privately owned providers are concerned with either pursuing profit (we denote these “for profit” – FP) or have goals other than profit but which do not align exactly with the public interest (we denote these NFP). The different forms of ownership that we consider, and their possible objectives are summarised in Table 1.

² A standard and authoritative text is Tirole (1988) which provides a thorough overview of this branch of economics. Holmstrom and Tirole (1989) provide a useful summary of the role of firms as viewed in economics.

³ A good starting point to investigate this literature is Tiemann et al. (2012) which includes a concise overview and key further references.

⁴ There is a very considerable literature on not-for-profit production and Sloan (2000) provides a discussion of these in relation to health care.

⁵ There is no universal conception of either “public” or “interest”. The former may include all residents of a country, taxpayers, or patients, whilst the latter may include financial (contributing to control of public expenditure) as well as health concerns.

Table 1. Ownership and objectives

		Objectives
Privately Owned	For profit (FP)	Profit (but may include objectives of managers, clinicians and using some resources for these other purposes)
	Not for profit (NFP)	Privately defined altruism / philanthropy (but may include objectives of managers, clinicians and using some resources for these other purposes)
Publicly Owned		Public interest (but may include objectives of managers, clinicians and using some resources for these other purposes)

The economics literature that deals with the potential link between the ownership of organisations, their goals and objectives and their resulting decisions is vast. These issues are a central focus of economics as a field of study and body of knowledge because economics is often defined as the “study of the allocation of scarce resources” and organisations play a pivotal role in deploying and utilising resources. It is therefore both impractical and unhelpful to try to survey this field with a view to trying to summarise what it has to say about ownership of health care providers in a publicly funded system. We take a different approach and start by setting out some of the most frequently stated concerns and objections to the perceived growth in private ownership in the NHS. We then subject this perceived populist view of the topic to some selected concepts and ideas drawn from the vast economics literature. As might be expected, some concerns can be allayed by a better understanding of how profit oriented organisations are predicted and evidenced to operate. Other concerns may be confirmed. There may also be issues that are not popularly raised but which the economics of ownership indicates could be important to consider.

Our approach focuses exclusively on the impact of ownership on the process of production of health care and we do not consider the preferences that people might have regarding what form of organisation treats them. Those preferences may be strong and ingrained but other than suggesting, notwithstanding the productive benefits of one type of ownership over another, that preferences might prevail there did not seem to us a lot that economics can contribute on this issue.

We have tried to avoid frequent references to outside sources as there are too many strands of literature and too many studies of this important topic to ever do justice to that literature. We offer selected references for key ideas and we give some guidance for further reading. The ideas that we review lie at the intersection of two branches of economics – health economics and industrial organization – and the Elsevier *Handbooks* on these areas are an excellent starting place for examining those ideas in greater depth. A number of the references that we suggest are to be found in those Handbooks.

The structure of the rest of this briefing is as follows. In the next section we outline the context, with a summary description of the current public/private mix of health care provision in the NHS in the UK. Then in Section 4 we summarise under a number of headings the public conception of ownership issues in the NHS and go on in Sections 5-8 to view each of these through the lens of what we argue to be the relevant economics. The approach we follow is that of theory – asking what we *might* expect to be the consequences of ownership and how it *might or might not* be possible to influence those

consequences. There is a good reason for approaching these issues in the abstract in the first instance. It is always good to know what to be looking for before beginning a search and the theory suggests the sorts of behaviour of health care suppliers that might be influenced by ownership. Whether that actually is the case or not is an empirical question and we turn to the empirical evidence, its strengths and limitations in Section 9. Having set out the main theoretical arguments and empirical evidence we draw some overall conclusions in Section 10.

3. THE LANDSCAPE OF OWNERSHIP OF HEALTH CARE PROVIDERS IN THE NHS

In the UK the large majority of health care expenditure has, since the creation of the NHS in 1948, been on services provided by publicly owned (i.e. state owned) providers, including hospitals. Although the institutional arrangements have changed over the years, that remains the case at the time of writing.

Within that overall picture, however, the majority of NHS primary care in the UK is, and has been, provided by private individuals, partnerships and companies contracted to the NHS: GPs, dentists, pharmacists, opticians. Ownership of high street pharmacies and opticians, and whether local NHS GPs and dentists are private contractors to the NHS (as most are), as opposed to salaried employees of the NHS, has been largely uncontroversial. This may be due to the way in which GPs and other providers of primary care are regulated through their contracts with the NHS. An individual GP practice may seek to maximise its income for NHS work but its ability to do so is limited by the NHS contract. The important role of regulation is discussed in Section 8 below.

Ownership of providers of secondary care, including acute hospitals, has been a much more controversial issue, however, and for that reason it is the focus of the remainder of this briefing.

It is useful to put the question of ownership into context. Data on the extent to which NHS funded health care is provided by privately owned organisations is scattered. Private, sometimes referred to as "independent", provision has always been a small minority of NHS funded provision outside primary care. But it has been a growing minority in recent years, at least in England. The NHS in the other countries of the UK makes less use of private providers of health care than does the NHS in England.

The annual accounts of the NHS in England, published by the Department of Health, include figures on "purchases of health care from non-NHS providers", although this includes non-NHS local authorities (which are public sector bodies operating at the local level) as well as voluntary sector and other private sector providers.⁶ Table 1 shows these purchases from non-NHS providers since financial year 2000/01; both the amount spent in money of the day and that amount expressed as a percentage of total NHS expenditure (for England). Over the 16 years to 2016/17, total NHS purchases from non-NHS providers (including local authorities as well as privately owned organisations) increased eightfold in cash terms from £1.55bn to £12.75bn. Accordingly, the share of total NHS spend in England that has gone to non-NHS providers has more than trebled between 2000/01 and 2016/17, from 3.5% of total NHS spending up to 10.9% in the most recent year. The 2016/17 figures show that more than three-quarters of the

⁶ See for example Table 29 on page 170 of: Department of Health (2017) "Department of Health Annual Report and Accounts 2016-17." HC11. London: Department of Health.

spending on non-NHS providers – nearly £10bn and equal to 8.3% of total NHS spend – went to private organisations rather than (public) local authorities.

The split between for-profit and not-for-profit organisations is, unfortunately, not available from routinely published data. The source documents refer to “independent sector providers”, which includes both for-profit (FP) and not-for-profit (NFP) private sector organisations. However the distinction between FP and NFP providers is important when considering the economics of ownership. We have already distinguished (Table 1) between the objectives of FPs and NFPs and we highlight the implications of this distinction wherever relevant in the remainder of this paper.

Table 2. NHS expenditure on non-NHS providers (England)

	2000 /01	2005 /06	2010 /11	2011 /12	2012 /13	2013 /14	2014 /15	2015 /16	2016 /17
Total purchases									
£bn (money of the day)	1.55	4.42	8.56	8.67	9.19	9.45	10.37	12.23	12.75
% of total NHS spend ¹	3.5%	6.4%	8.2%	8.2%	8.3%	8.9%	9.4%	10.7%	10.9%
Of which:									
Voluntary and private									
£bn (money of the day)	n.a.	n.a.	n.a.	n.a.	n.a.	6.98	8.59	9.36	9.76
% of total NHS spend ¹						6.6%	7.8%	8.2%	8.3%
Local authorities & devolved administrations									
£bn (money of the day)	n.a.	n.a.	n.a.	n.a.	n.a.	2.47	1.77	2.87	2.98
% of total NHS spend ¹						2.3%	1.6%	2.5%	2.5%

¹Defined as Revenue Departmental Expenditure Limit (RDEL).

Sources: Sources: Department of Health, Departmental Report 2002, Figure 3.4; Department of Health, Resource Accounts, for 2005/06; House of Commons Health Committee "Public Expenditure on Health and Personal Social Services 2009" Ev42, Table 20a; Department of Health, Annual Report and Accounts, for 2011/12; 2012/13; 2013/14; 2014/15; 2015/16

NHS expenditure on private sector providers of health care is most common in the community health services sector. Community services cover NHS care that is delivered to patients outside hospitals and for access to which a patient has to be referred by a GP or specialist clinician rather than being able to access the services themselves directly. A study for the Nuffield Trust (Lafond et al., 2014) reports that, in 2012/13, 31% (up from 15% in 2006/07) of NHS community services expenditure in England was on private not-for-profit and for-profit providers, versus 69% being spent on NHS bodies.⁷ The historically high share of private community health service providers is in part attributed to a policy intervention, the Transforming Community Services programme, which commenced in 2008 and encouraged the creation of new employee-owned organisations (including former NHS employees) to deliver those services.

⁷ Lafond S et al. (2014) "Into the Red? The State of the NHS' Finances." London: Nuffield Trust. Here Table 2.1.

By comparison, 19% of NHS spending in England on mental health care services went to private providers in 2012/13 (Lafond et al., 2014). Within mental health care, hospital based care was 28% (by value) privately provided in the UK.⁸

Compared to these types of services, acute general, non-psychiatric, hospital care provision for the NHS in England remains dominated by NHS-owned providers. Only 4.1% of expenditure on such hospital services went to private providers in 2012/13 (Lafond et al., 2014), but this nevertheless represents a notable increase on the corresponding 0.8% share of the private sector in 2000/01 (Sussex, 2009). Owing to differences in the case mixes of private and public hospitals, private hospitals account for a somewhat higher proportion of non-emergency hospital admissions: 8% of such admissions in 2014 (NHS Partners Network, 2015).

The contribution of privately owned organisations to hospital health care in other publicly funded health care systems in Europe varies considerably from country to country. For example, in the Netherlands the vast majority of acute hospitals are owned and run by NFP private foundations (Kroneman et al., 2016). In Germany (2012 figures) private hospitals have 52.5% of hospital beds (35.2% not-for-profit and 17.2% for-profit); and in France (2011 figures) private hospitals have 38% of hospital inpatient beds (14% not-for-profit and 24% for-profit). By contrast in Sweden private hospitals only provide 4% of all hospital beds.

Whilst the majority of hospital services for NHS patients in England are provided by publicly owned hospitals (as in the rest of the UK), their organisational status has changed substantially. The development of Foundation Trusts was intended to free these providers from direct public control, giving them more discretion and control over their activities including purchasing and disposing of assets and any operating surplus. A full discussion of these changes and the resulting governance of these hitherto publicly-owned hospitals can be found in (Verzulli et al., 2017).

4. PERCEPTIONS REGARDING OWNERSHIP

Numerous ideas are voiced in discussions of public versus private ownership of health care providers. Some of these carry more weight than others. Some are about whether the provider is FP or NFP, rather than being about private or public ownership per se. The relevance of some is dependent on how health care providers are paid and on the extent to which health care is publicly rather than privately funded.

In this section we describe these perceptions about the pros and cons of public and private ownership, FP and NFP, of health care providers. The context is the NHS in England. We draw on public debate – in the media and by campaigning organisations – in the UK but many of these perceptions apply equally to any other tax funded or social insurance funded health care system; a category that includes the health care systems of almost all high income countries, including arguably the USA where a little over half of health care is financed through government funded programs such as Medicare, Medicaid and the Veterans Health Administration.

Although we cannot be sure that the list of perceptions presented here is comprehensive, we have been following the ownership debate in the UK context for the

⁸ LaingBuisson Ltd press release, 29 January 2013. Available here: http://www.laingbuisson.co.uk/Portals/1/PressReleases/LHMR_1314_PR.pdf Accessed 4 December 2016.

last 30 years and are confident that we have captured all those that are commonly aired. (Pollock (2004) and Davidson and Evans (2010) set out several arguments against private, particularly FP, ownership of providers of NHS funded health care.) In the remainder of this section the arguments voiced about the impact of the profit motive on health care providers are discussed first. That is then followed by issues that apply to private NFPs as well as FPs, in comparison with publicly owned providers.

4.1. The profit motive in health care

Privately owned FPs have profit as an incentive, as they are dependent on private capital (equity and debt) provided with an expectation of earning an extractable return. This is generally argued to lead to both benefits and problems (Weisbrod and Schlesinger, 1986).

On the positive side, the profit motive is presented as a stimulus to the owners and managers of the FP health care provider to be more efficient⁹, more responsive to the requirements of patients and more innovative.

In contexts other than health care it is generally accepted that these benefits of FP ownership depend on the existence of effective competition between providers. If competition is ineffective, prices are no longer constrained to reflect costs and hence the incentive to be more efficient, responsive and innovative is weakened. A provider with monopoly power may simply raise prices as an easier route to profits.

Critics of FP ownership of health care providers highlight a number of downsides of the pursuit of profit. The first group of arguments concern the incentive for FPs to cut costs and raise revenues even where that conflicts with the interests of patients. Whilst the same criticisms could be made of public and NFP private providers, the risk of harm is usually presented as greater with private FP providers due to:

- an incentive to cut costs even where that harms service quality, if quality is hard for service users to perceive or competition with other providers is ineffective. For example FPs may seek higher profits by employing lower quality staff or/and paying staff less, or by employing fewer staff and making them cover ever larger responsibilities;
- services being less secure for local populations. Private investors could withdraw/close/sell-up for commercial reasons without taking sufficient account of the impact on the local population and its health;
- an incentive to shift costs onto patients and their carers, for example charging (more) for use of TV and telephones by hospital inpatients and for car parking for visitors and outpatients;
- 'cherry-picking' the more profitable patients, i.e. those requiring the lowest treatment costs relative to the price paid; and deterring or turning away less profitable patients, leaving them to travel longer distances to obtain care at other providers;
- a disincentive to incur costs trying to prevent (further) illness and promote health behaviour;

⁹ There are many types of *efficiency*. The sense in which we use the term here and henceforth is in relation to producing a given health care service at the lowest cost. This could be termed *cost-efficiency* but for ease of exposition we omit the qualifier.

- supplier-induced demand, if payment for services provided is per unit of service/activity delivered.

An additional argument arises from the generation of profits which are sometimes criticised as a leakage of funds from the NHS. This argument is raised not only in the context of privately-owned FP providers, but also in debate around the 'private finance initiative (PFI)' under which the private sector lends money to public health care providers to enable them to build and equip new facilities (new or extended hospitals, clinics etc.).

Another argument posited against FPs as health care providers concerns the motivations of the staff employed by different organisations. Staff who choose to work for a public or other NFP organisation, it is argued, may on average be more motivated to help others, have a stronger 'public service ethos', a greater degree of intrinsic motivation, and be less concerned with financial reward, than the staff of an FP. It matters to those staff that they work for a public organisation or a charity (NFP).

4.2. Markets and regulation

This group of arguments concerns the different institutional arrangements necessitated when ownership of at least some health care providers is private, whether FP or NFP, rather than public. These arguments apply whenever there is at least one private provider in the market, even if some or most of the other providers in that same market are publicly owned. The institutional and regulatory arrangements have to apply to all providers if they are to apply to any.

Private ownership may imply what are termed transaction costs. The argument here is that you cannot have private provision without a market, because private monopolies, even if regulated, cannot be trusted to act in the public interest. This argument implicitly or explicitly assumes that, by contrast, public providers can be trusted to act in the public interest. If there is a market this then necessitates contracts and invoices and so on, which implies transaction costs. These costs could be avoided, or at least reduced, if everything were done by public bodies, it is argued.

Competition, encouraged as a corollary of private ownership of providers, may also mean that existing public providers are put at risk. The argument is commonly deployed in the UK that to permit competition for even some of its services may make a publicly owned hospital financially unviable for all of its services, because of the extent of fixed joint costs that cannot be saved when marginal business is lost.

In the same vein it may be argued that having privately owned providers, whether NFP or FP, means that greater costs of regulation will have to be incurred than if provision is by public organisations. This assumes that publicly owned bodies can, to an extent, be trusted to self-regulate. A related, but somewhat extreme, argument that has been put by opponents of private ownership is that some private companies are connected with individuals (owners, investors, managers) charged with criminal activities, with the implication that this would be less likely to occur with publicly owned providers (Davidson et al., undated).

Co-operation between health care providers is often needed for the provision of an integrated bundle of care, for one or more health problems, to a single patient. Given that, a criticism sometimes made of private ownership is that it is inimical, or at least less conducive, to such cooperation. A closely related argument is that planning of health

care services and facilities is made more difficult by the existence of the market mechanisms that are a corollary of private ownership.

4.3. Private provision and access

One of the principles underpinning the NHS is that care should be free at the point of use. Some commentators make a connection between private ownership and the extent to which patients pay for the services they receive. In this perception, private ownership and price rationing of health services go together. However, it is straightforward for healthcare to be made free at the point of use independently of whether the provider of that care is publicly or privately owned, NFP or FP. This can be done by the payer (the NHS commissioner, in the UK context) reimbursing the provider directly and does not relate to ownership.

4.4. Symbolism

Finally an argument heard in the UK, where there is a widespread degree of attachment to "the NHS" as a symbol of social solidarity at the national level, is that to permit private ownership of organisations providing NHS-funded care is to undermine the power of that symbol and to weaken social solidarity.

5. PERCEPTIONS VERSUS ECONOMICS

To what extent can the economics of ownership help in assessing the validity and importance of these perceptions? There are some issues where economics is of little assistance and we should be upfront about those. Arguments about who funds health care are logically distinct from those about who owns the organisations that provide the care. Our focus is on who owns the providers of publicly funded health care.

Second, arguments as to whether or not private ownership of health care providers in some way devalues the 'brand' of the NHS are not ones that we can usefully contribute to.¹⁰

Third, whilst we are able to consider the role of different inherent motivation according to ownership, we will not consider whether a change of ownership changes motivation. In common with much of economics we treat preferences, and hence the sources of motivation, as given¹¹.

The concept of profit and the idea that profit represents a loss of resources that could be made available for the NHS is relatively straightforward to address and we do that in section 6 below.

Arguments about how ownership may affect decisions that are made, whether there are mechanisms for mitigating such effects, what those mechanisms are and the costs that they entail, and what are the implications of different ownership for the overall value of

¹⁰ <http://www.telegraph.co.uk/news/uknews/1538196/Government-accused-of-selling-off-NHS-brand.html> Accessed 19 October 2017.

¹¹ There has been increasing interest from economists in the insights from psychology regarding motivation. In the domain of education it has long been argued that intrinsic motivation to study might be eroded by explicit rewards (Jordan, 1952) and in this view it is possible that altruistic individuals employed by a financially motivated organisation might become more selfish. This approach lies more in the realm of psychology and is beyond the scope of this paper.

what can be produced, are all very firmly in the domain of economics and are complex and profound. These issues are our focus in sections 7 and 8 of this paper.

We find it useful to divide the exposition of these issues between:

- matters that relate to how those who are responsible for purchasing health care (these are called *commissioners* in the NHS) might seek to guide and influence the providers' decisions; and
- how ownership impacts on *regulation* and *competition* – where we look at issues concerning managing the interactions between providers of health care and how regulatory authorities within and beyond the NHS can influence provider behaviour.

The distinction between these two types of issues reflects two different but interconnected approaches in economics to the questions of how productive activity is organised and managed. The first approach is to address how those who trade with organisations can write *contracts* that generate appropriate *incentives*. The second approach focuses on the strategic interdependencies between organisations and asks how the outcome of their interactions might be influenced.

As with any attempt to compartmentalize complex and inter-related issues our approach has limitations. Many conceptual ideas have commonalities across the distinction that we make and the two approaches may be complementary because what cannot be achieved by the one might be the focus of the other. Nevertheless, we hope to provide some useful insights into how the perceptions set out above may or may not be relevant.

6. PROFIT, OWNERSHIP AND RESOURCES FOR HEALTH CARE

An important distinction, but one that is seldom made when considering profit, is between what economists refer to as respectively 'normal' and 'supernormal' profits or 'economic rent'¹². 'Normal profit' is the cost of capital and would have to be paid by anyone investing in provision of health care, including where that investor is the Government, i.e. the taxpayer or social insurance payer. Even the Government has to pay interest when it borrows, or has to raise taxes by taking money away from citizens who would obtain a return from it if it remained in their own pockets. 'Normal' profit is the rate of profit that could be earned in the next best alternative use (that is no more or less risky than the health care investment) of that capital, and is otherwise known as the opportunity cost of capital. 'Normal' profit is no more a leakage of funds from the NHS than is paying for any other input necessary to deliver health care, such as staff costs.

However, if a provider is able to earn profits over and above the 'normal' rate, then this excess 'supernormal profit' or 'economic rent' can be seen as a leakage: a transfer of funds intended for health care going needlessly into the pockets of investors. There exist ways of recovering some of these funds through taxation but there are costs of implementing taxes: both direct costs (the need for a tax collection system) and more subtly through the potential distortion of decisions that all practical tax systems induce. These latter are often termed the 'deadweight losses' of taxation.

Further problems arise when economic decision makers devote resources to appropriating rents at the expense of productive activity, e.g. by lobbying for special

¹² There are a number of terms for this concept; abnormal profit, pure profit, or excess profit are all used alongside or in place of supernormal profit and economic rent.

treatment or by tax avoidance, which are legal but potentially wasteful activities (referred to as 'rent seeking' by economists) because there is no net gain for society as a whole. It is fair to conclude that economic rents are a pernicious source of leakage of funds that might otherwise be put to socially beneficial use (Buchanan et al, 1980), and as we shall see an important part of designing purchasing arrangements in health care is to try to minimise them. But such rents are not the preserve only of FP health care providers. Private NFP and public organisations may have multiple goals and generating a financial surplus is one means by which those goals might be achieved. Thus organisations may seek and achieve economic rents without reporting profits.

As mentioned in Section 5, the PFI is sometimes seen as a further route to excess profits by private organisations. The PFI raises many interesting economic issues and the interested reader is referred to Sussex (2001)¹³ for a full analysis of them. For the purposes of the present paper it should be noted that the PFI has been a government-promoted route by which *publicly owned NHS organisations* borrow capital from the private sector to finance major capital investments, as an alternative to borrowing the investment funds from the Treasury. Before the PFI was introduced, NHS hospitals were already being designed and built by private sector organisations, and non-clinical services (catering, cleaning, security, car parking etc.) were already being contracted out to private companies by publicly owned NHS providers of health care services. Thus the PFI is outside the scope of this paper.

7. PURCHASING AND OWNERSHIP IN HEALTH CARE

One important distinction between health care provision and more general productive activity is the agglomeration of purchasing. In most markets individual consumers are viewed as dealing with rather larger producer organisations. More or less the expectation is that these organisations offer their goods and services on a "take-it-or-leave-it" basis. Of course their offerings have to be acceptable to consumers, but there is little or no interaction in determining what the offering is other than for the consumer to purchase or not.

In many health care systems the link between consumer and producer is mediated by a third party. That can be a private insurance company – in which case the consumer often has a take-it-or-leave-it interaction with the insurer but the insurer plays an active role in determining what health care is offered (by selectively contracting with hospitals and GPs) – or a public insurer such as the NHS is in effect. Whilst the organisational separation between financing (insurance) and actual delivery of health care is the norm when there is private insurance it has not always been so in the NHS. Even since its inception the separation existed for GPs, dentists, pharmacists and opticians, but that separation only developed in regard of hospital services with the advent of the purchaser-provider split initiated with the reforms that began with the NHS and Community Care Act of 1990 (Flynn and Williams, 1997).

The intercession of a collective purchaser for health services has important implications for discussing ownership. Whereas individual consumers might be regarded as powerless, a centralised purchaser does not have to, and mostly will not, accede to take-it-or-leave-it offers. Instead they have the ability to negotiate with, and possibly dictate

¹³ Sussex J (2001) "The Economics of the Private Finance Initiative" London: Office of Health Economics.

to, the providers of health care what it is that they wish to happen. In that negotiation process they can consider different ways of both specifying and paying for the health care they are purchasing and that throws open many possibilities for attempting to ensure that what the provider delivers is what the purchaser wants (Chalkley, 2006). This is intriguing – if the purchaser is a public body, then does it matter at all in such a setting whether the provider is publicly owned or privately owned, and if the latter does it matter at all what the motivation of that provider is?

Collective 'public' purchasing fundamentally changes the central question regarding ownership of providers. It is no longer a case of what will differently owned providers do but rather the extent to which differently owned providers can be influenced to do what the purchaser on our collective behalfs wants them to do. A myriad of questions then arise regarding how a purchaser can achieve what it wants and what it has to give up in order to do that.

As a convenient starting point we will address the following question. When, and if so under what circumstances, might the ownership of a health care provider be totally irrelevant? To address that question we need to introduce a little more of the language of economics.

As discussed in the Preliminaries section above, ownership can be seen as the right to decide: who to employ, what those employees are tasked to do, which assets are purchased and which are disposed of, and how any surplus is used or distributed. In the context of health care, it is clear that the purchaser of health care has an interest in all of these decisions. Referring back to the section on public perceptions, we can see echoes of that interest and a concern that private ownership might not address the purchasers', i.e. the 'public's', interest in respect to these things. The purchaser may want all ill people treated – not just those that are not costly to treat; it may want a balance between the highest quality and the least costly care – not a focus on just one.

The economics of contracts sets out to understand how different ways in which the purchaser can specify a contract might serve to align the provider's choices with the purchaser's interests. More generally this relates to how decisions delegated by one individual or organisation – termed the principal – to another – termed the agent – can be aligned with the interests of that principal when the agent has their own agenda and preferences. This is the essence of the problem of agency. It is all-pervasive in economic systems and has been extensively discussed in regard to business organisations which have potentially internal principals and agents (Besanko et al., 2015 and Baron, 1989).

This line of enquiry is very powerful. First it suggests that ownership of health care provision may not be as problematic as it seems at first sight. Rather it suggests that any form of ownership raises potential problems because even in publicly owned firms decisions have to be delegated to someone. Second it provides a means to begin to sort out the substantial elements of the problem from the inconsequential ones. In this regard it is not of great consequence that the profit motive in an FP private provider of health care might, other things being equal, lead the provider to cut treatment quality if we can devise a contract that ensures that other things are not equal and it faces a decline in its profits if it reduces quality. Third it begins to suggest that the focus should be on the fundamental limitations of agreements and contracts and on how these might interact with ownership rather than on ownership per se.

The potential resource offered by agency and contract theories in facilitating greater understanding of the importance of ownership in health care is immense. We cannot

hope to review and survey it all but here we draw attention to some key ideas and their implications.

7.1. In a world of complete contracts ownership does not matter

Suppose it were possible for the purchaser of health care to set out exactly what treatments it requires under each and every contingency. This would form the basis of a contract that would run to many volumes and that would specify what treatments are to be delivered to each and every kind of patient that might arrive, about what investments should be made in future treatments and technology, and so on. The underlying arrangement would be simple however – the purchaser would specify that the providing organisation will get paid only if it discharges its obligations under the contract.

In this extreme setting the agency problem evaporates. The principal (the publicly owned purchaser) can get exactly the health care it wants, for the patients it wants, by instructing the provider regarding those wants and making payment conditional upon compliance. In regard to what health care is delivered to whom, using what resources a world of complete contracts is a world in which public versus private ownership is irrelevant.

However, the importance of this observation is not in its somewhat esoteric conclusion but rather in its drawing attention to the severity of the requirements for complete contracts and in leading to a consideration of the reasons why health care contracts can never be complete.

7.2. Contracts can never be complete in the world of health care

The limitations on contracts are many and numerous. Most attention in the associated literature has focused on four broad obstacles, each of which applies in the context of health care purchasing.

First, there are many events and contingencies that can affect the purchaser's notion of what constitutes the appropriate health care to be delivered. It is simply not possible to anticipate all of these and so many cannot be specified in advance. This is sometimes described as 'bounded' rationality, to capture the idea that however willing the purchaser might be to attempt to specify a comprehensive agreement, it will not be able to do so (Hart and Holmstrom, 2010; Hart and Moore 2007,2008).

A closely related problem is that the costs of writing ever more comprehensive contracts may become prohibitive. This is one manifestation of what are termed transaction costs (Besonak et al., 2015 and Williamson, 1989).

A rather different problem leading to incompleteness of contracts is the difficulty in establishing verifiable criteria. Contracts require some mechanism for their enforcement. In commercial contexts this is often the courts, though NHS contracts preclude use of courts and rely on arbitration. But in any case a third party arbitrator of some kind has to be able to verify whether a particular action, treatment or contingency has been applied. Much of the information on, for example, the quality of health care that has been delivered might be observable to both the purchaser and the health care provider but not verifiable by a third party. This gives rise to problems in specifying all aspects of performance (Holmstrom and Milgrom, 1991).

Finally there may be information that the provider is privy to but which the purchaser simply cannot obtain. This is referred to as *asymmetric information* and in health care it is pervasive on account of the expert and specialised nature of health care services – an

idea that goes to the heart of the problems associated with the market delivery of health care (Arrow, 1963). Physicians can determine information about their patients that cannot be ascertained by anyone else.

7.3. When contracts are incomplete, ownership is important in health care for determining what kind of contract is best

The most prevalent manifestations of contract incompleteness that have been discussed in regard to health care are: the unverifiable nature of many of the decisions of health care providers especially in regard to the quality of health care they supply and their efficiency (control over costs); and the prevalence of asymmetric information in regard to a patient's exact medical circumstances. These features of health care seem almost universally accepted and it will be apparent when referring back to the perceptions section earlier that these lie at the heart of many concerns about private ownership. These imperfections in practical purchasing arrangements imply that however desirable it might be for a purchaser to pin down decisions on efficiency and quality, or to condition what is paid according to the exact circumstances of the patient, it is never going to be practicable.

The analysis of incomplete health care contracts has generated a lot of literature in economics. A robust conclusion is that that ownership, as it impacts on the objectives of a health care organisation, will certainly affect what kind of contract a purchaser may want to specify. A simple example can illustrate this.

Suppose we are examining a contract for the treatment of just a single patient whose medical condition we know exactly. The health care provider chooses both how much effort to put into treatment – we can call this *quality* – and how much effort to put into keeping the costs of treatment under control – we can call this *efficiency*. Neither quality nor efficiency might be measured directly but it may be possible to observe and verify either some indicator of quality (perhaps how much treatment the patient is given) or some indicator of efficiency (perhaps how much cost is incurred in treating the patient) or even both of these. Making the payment depend on these observations would involve a form of *pay-for-performance* contract. If a FP provider is characterised as having a higher intrinsic concern for efficiency, whilst a NFP provider has a bigger concern for quality, then the performance payment might be tailored to encourage (incentivise) whatever effort that particular provider is less inclined to exert. Setting a fixed price for the patient's treatment is a strong incentive to exert effort to control costs so the NFP might be given that kind of contract and may be relied upon to maintain treatment quality simply given its intrinsic concern. The FP might be inclined to skimp on quality with that arrangement, so their contract might have some minimum treatment standard.

As we consider extending the purchase of health care to cover more patients, the necessary arrangements typically become more complex. There will now be concerns about how the different types of provider might trade-off treating more patients against treating patients better and so on.

The general message that comes from this sort of approach to different ownership – supposing that it gives rise to different objectives – is that the purchasing arrangement may need to be tailored to the ownership of the provider. But it does not suggest that being faced with providers with different objectives is necessarily problematic. There are of course limits to what can be achieved through incomplete contracts and those limits may vary according to the objectives of the provider. It will in general be easier to devise arrangements that deliver what the purchaser wants when the provider's

objectives align closely with the purchaser's, but this branch of economics often suggests that even very different objectives can in fact be reconciled by the appropriate choice of contract.

So to reiterate, concerns that privately owned providers of health care may choose efforts to control cost, quality, which patients to treat and so on, differently from their publicly owned counterparts, are well-founded. But whether this is problematic depends on what purchasers can do to align those efforts to their own goals. Contract theory suggests there may be rather a lot that health care purchasers can do. Perhaps some of the 'fear' of privately owned health care providers comes from implicitly thinking of applying the same purchasing rules to them as would be applied to publicly owned providers. Even the brief discussion we have offered here suggests that exact parity between privately owned and publicly owned providers – a 'level playing field' – may not be appropriate. However, the disparities that may need to be considered are as between the ways that different kinds of providers are paid, not just *how much* they are paid under a given mechanism.

The discussion above has largely assumed that incompleteness of contracts comes from unverifiable choices made by the provider. Similar arguments apply in regard to asymmetric information in that the goals of the provider may influence what constitutes the best purchasing mechanism (Jack, 2005). Again, however, there is no blanket concern that FP providers, for example, cannot be guided or managed by an appropriate purchasing mechanism any less well than NFP or public providers.

The economics literature concerning contract incompleteness due to *unforeseen* contingencies is rather different in focus and has been instrumental in re-establishing rationale for the emergence of different ownership arrangements (Hart and Holmstrom, 2010). If ownership is defined in terms of the right to decide how to deploy assets – what to produce and for whom – under all those circumstances that the contract does not anticipate or specify, it naturally becomes important who the owner is. Put simply, ownership is best conferred on those who will make the best decisions in these residual circumstances. This idea has generated an extensive consideration of when public or private ownership of assets might be preferable.

These ideas have been applied to more general questions than those considered in this briefing, including whether there is a naturally preferred form of ownership and if so what that is. The ideas and models are complex but in the terms we have used above, if unforeseen contingencies are more likely to be of concern for quality, then either public or NFP private ownership may be preferable to FP ownership, but if the unforeseen contingencies are more likely to be of concern for cost and efficiency, then private ownership may be preferable.

Combining all of the above it can be concluded that when approaching the issue of ownership from the perspective of managing the production of health care there is not a clear case for or against different forms of ownership in health care. A collective health care purchaser has many more instruments at their disposal than an isolated consumer with which to achieve the health care delivery they desire. Certainly purchasing arrangements need to be tailored to the kind of provider that is being contracted with, but there is no obvious reason to preclude private ownership on this basis.

7.4. Integrated purchaser/providers

The discussion above presumes a purchaser is contracting with a separately constituted provider and considers how it matters whether that provider is privately or publicly owned. That seems to describe the NHS in England, for the most part, where there are publicly owned hospitals but they are distinct from publicly owned purchasers of health care, operating under the same overarching institution. We have not explicitly considered the possibility that the purchaser and the publicly owned provider could integrate into a single organisation (Perry, 1989). That alternative has an ownership dimension but it is not solely a question of ownership. It also represents a choice about how to regulate the provision of health care, which we discuss in section 8.

8. OWNERSHIP, REGULATION AND COMPETITION IN HEALTH CARE

Our discussion so far has considered the mechanisms that purchasers of health care have at their disposal and how they might deploy them when faced with provider organisations with different types of ownership. We started by pointing out that health care purchasers are often more empowered than are individual consumers in other markets. In those other markets there are concerns regarding the behaviour of, in particular, FP privately owned firms, especially their ability to extract higher prices from consumers than can be justified in terms of the costs of production. The standard responses to those concerns are to rely upon and encourage competition between firms, and in the absence of that, impose regulatory restraints upon them (Armstrong and Sappington, 2007; Joskow and Rose, 1989).

Competition and regulation might be regarded as alternatives to empowered purchasing, but in health care these two mechanisms for moderating or modifying the behaviour of providers are pursued individually and jointly. In the NHS this has become more common following reforms to facilitate competition between publicly owned hospitals by encouraging patient choice, and associated oversight of competition in the NHS by the sector's economic regulator NHS Improvement and, in terms of general competition and merger law, by the Competition and Markets Authority (CMA). In the NHS in England the regulation of competition especially through oversight of mergers of hospitals applies to both publicly owned and privately owned hospitals. In other European countries this is not the case (Siciliani et al., 2017).

A market is not costless to operate: all markets are regulated to some degree and so entail the costs of regulators and on organisations to satisfy those regulators. All markets also entail transaction costs such as the writing and enforcement of contracts, and administrative activities such as invoicing. There is no clear empirical evidence that the authors are aware of as to the costs of running such a market for provision of health care, relative to the costs that would be incurred in regulating and trying to ensure efficiency in the absence of such markets. Croxson (1999) provides a discussion of the issues involved (in the context of an earlier debate about reversing the NHS 'internal market') but is unable to provide quantification.

8.1. Competition and quality

It is useful to start by reviewing briefly the role of competition in conventional markets served by privately owned FP organisations. The study of the links between competition, market structure and prices in this setting has a long heritage and prices are usually a

key focus of competition policy (Dranove and Satterthwaite, 2000). Competition is a process by which organisations seek to out-do each other and, given the key importance of winning customers in ensuring market share and generating revenue, the link between greater competition and downward pressure on prices is intuitive, as is the potential for competition to generate customer focused innovation. The link between competition and the structure of a market in terms of the number and types of organisations that serve it is more tenuous. Clearly the more organisations there are to serve a market the greater the *potential* for them to compete but whether this results in increased *effective* competition depends on what the relationships between those organisations are. Agreements between organisations have often been viewed with suspicion and are often proscribed, and organisations seeking to merge are subject to scrutiny.

One key distinction of health care markets, and which is central to our focus, is the preponderance of publicly owned or NFP privately owned health care providers. It is therefore important to consider from this rather different perspective what the role of competition in health care markets is, and whether private ownership of health care providers imposes particular challenges to the competition policy (Gaynor and Town, 2012).

A concern is that the profit motive might be associated with a “race to the bottom”, where health care providers reduce costs by cutting back on their quality of service if they expect that those making the decisions to buy their services will not be able to detect the consequent worsening of quality. Since competition is supposed to sharpen incentives through a desire to outdo their competitors, this concern might be exacerbated by competition. Economists have long been concerned about the implications of greater competition for product quality and there is a fairly standard argument that competition may degrade quality. If firms perceive it is more effective to win customers by offering lower prices than by offering better products, competition can lead to a combination of lower quality and lower prices, which may be what patients who had to pay for their health care might prefer (Zweifel et al., 2006).

However, that argument hinges on competing firms choosing both price and quality. In health care markets, because of how difficult it is for purchasers to detect all elements of service quality, and hence the fear of a “race to the bottom”, prices are often regulated or chosen by purchasers of health care rather than being in the control of providers. That is the case for the majority of health care services in the NHS. The means by which providers can compete is thus limited to the quality of care being offered. Most economic models suggest that if prices are regulated – as they are in health care markets – increased competition will result in upward pressure on product quality.

All models are abstractions and their predictions depend on the abstracting assumptions so that models alone cannot be relied upon to counter a concern that competition in conjunction with the profit motive might reduce quality. We need empirical evidence which in the context of health care is very challenging since we do not directly observe service quality and it is difficult to establish instances where competition, and competition alone, varies. Nevertheless there is a growing body of evidence across a number of jurisdictions to at least suggest that increased competition does not degrade quality. A substantial part of this evidence comes from the NHS but it relates not to competition between FP privately owned providers but to competition between NHS Trusts. It is therefore not directly of use in mediating the argument about the risks of private ownership. Nevertheless, it is reasonable to assert that there is little or no

substantial evidence to support the concern that introducing both competition and private ownership necessarily has a negative impact on service quality.

8.2. Mixed competition

We now turn to the more challenging question – does introducing private providers in competition with publicly owned ones disadvantage the latter? This is a challenging field because there are so many potential scenarios and the literature in regard to the particular issues that arise in the complex institutional setting of health care is only in its infancy. It is a priori unlikely that economic models will reach a consensus here – the answer to the question would seem inevitably to depend on *how* providers compete and on what they are allowed to choose versus what is regulated (prices, service quality, which patients to treat).

The key ideas concerning competition between private FP and publicly owned firms can be found in the economics literature concerning what it termed *mixed oligopoly* (Pita Barros and Siciliani, 2011; Sanjo, 2009). This literature has typically approached the central question from the opposite direction to that suggested by a concern for the introduction of private ownership in health care; it has asked whether taking public ownership of a producer in an otherwise imperfectly competitive market can be beneficial and generally answers in the affirmative.

This is at least suggestive of the idea that competition between privately owned and publicly owned health care providers might be beneficial. In essence this works because whilst private providers might be at an advantage when it comes to cutting costs and lowering prices, they might be at a disadvantage in regard to the quality of services they offer because they are not aligned with the interests of patients and so find it inherently more costly to provide appropriate service quality. This suggests a potential benefit from having providers with mixed motivations or ownership – private providers can attract and supply patients for whom quality is not crucial and can do so at low cost, whilst public providers might deliver higher cost, higher quality services for those patients for whom it is crucial¹⁴. However, this conclusion should be regarded as very tentative. The conventional framework of mixed oligopoly is one where firms choose both prices and quality and is only comparatively recently being adapted to health care settings.

Are there any robust conclusions to be drawn? In summary we think that based on the economics literature it is difficult to justify strong concerns about the introduction of privately owned providers into a system of publicly owned health care providers. For the most part that literature sees benefits of private ownership acting in conjunction with public ownership *as long as* that competition is appropriately focused.

8.3. Regulating prices

The caveat regarding the focus of competition is a very important one. The coexistence of privately owned and publicly owned health care providers moves the NHS away from the model of public ownership as the sole means of regulation. It therefore raises questions regarding the extent to which regulation will need to be bolstered in order to ensure the public interest, and what forms that regulation should take (Baron, 1989). There is an analogy to be drawn with the privatisation of telecommunications, electricity, gas and water supply industries in the UK in the 1980s and 1990s. Those privatisations were accompanied by a focus on how such industries should be regulated.

¹⁴ This does not of course need to be the case, as illustrated by Socha and Zweifel (2016).

However the analogy is limited (Bardey et al, 2012). In the case of privatised utilities it was assumed that suppliers would all be FP privately owned organisations with considerable market power (i.e. facing limited competition, at least initially) and the primary focus was on prices as quality is comparatively easy for consumers to see in those markets. In the literature concerning this conventional implementation of regulation it is presumed that consumers cannot specify prices, which remain the prerogative of suppliers. Regulation then becomes all about how to influence and constrain firms' pricing decisions

As we have indicated, health care is a very different setting with a mixture of private and public ownership and twin concerns regarding costs and quality of service provision in a context where health care purchasers have the ability to dictate prices. This begins to suggest that the distinction between *regulation* and *purchasing* is rather blurred in the health care sector. That is an important observation when it comes to addressing the concern that encouraging privately owned providers to enter health care markets might increase *regulatory* costs. It could be argued that investment in the infrastructure for regulation in the NHS has already been made and that the additional cost of dealing with privately owned providers might therefore be limited. In effect, the NHS in England committed itself to more transparency about regulatory costs once it instigated the split between purchasers and providers in the 1990s. Before that split, attempts to ensure that health care providers avoided wastefully high costs and/or delivered sufficient quality relied on self-regulation by health authorities. This also entailed regulatory costs but ones that were not visible outside the purchaser/provider organisations themselves.

The details of how the regulatory environment operates need to be carefully tailored to circumstances and the introduction of privately owned providers might necessitate more complex regulation (Mason et al., 2009; Midtun and Hagan, 2006; Brekke and Sjørgard, 2007)). For example, if it is believed that publicly owned providers have a strong intrinsic concern with the quality of health care they deliver and if competition is simply between like-minded providers, it may not be necessary to direct a lot of attention to price regulation. But if private providers are allowed to enter the market, price regulation may become pivotal to avoid quality erosion. This once again becomes a matter of being clear as to what instruments and mechanisms are potentially available to influence outcomes. If the health care provision is through a mixture of publicly and privately owned providers it might be necessary to tailor the purchasing arrangements accordingly. If private providers for example serve patients who are relatively insensitive to quality, perhaps those with the simplest and lowest cost medical conditions, while public providers deal with more complex and quality sensitive treatments, it may be necessary to set differential prices for them.

Whilst we cannot be sure that there will be no additional costs of regulation consequent upon the introduction of privately owned (FP or NFP) providers, it is not obvious that the regulatory oversight required or the associated costs of that oversight are significantly greater than those already in place.

8.4. Regulating mergers between providers

One further aspect of regulation is the oversight of mergers between health care providers. In other market settings this is an important part of competition policy. By convention it is deemed necessary to investigate mergers of firms that result in an increase in market power because that power may be exploited, e.g. to increase prices and hence providers' profits at the expense of their customers. There is a long tradition

of considering a trade-off between potential efficiency gains (achieved through greater scale of production in the merged organisation) and risks of higher prices (on account of greater market power).

Concerns about mergers of health care providers would still exist even when all providers are publicly owned and broadly the assessment of mergers follows the same criteria as in general competition policy (Siciliani et al., 2017). The fundamental question is whether the benefits of increased scale outweigh the risks associated with reducing the number of providers and hence the scope for purchasers to exercise choice. There is again a sense in which the regulatory mechanisms necessary to accommodate privately owned providers already exist in the NHS, so that there would not appear to be any substantially increased regulatory burden associated with the entry of private FP or NFP providers.

9. EMPIRICAL EVIDENCE

9.1. Why evidence is both extensive and limited

We start our discussion of the empirical evidence concerning the impact of ownership on health care delivery with a note of caution. There is a very large quantity of evidence generated concerning the relationship between various aspects of performance in health care delivery and the ownership structure of providers, but that evidence is of limited value in guiding the debate concerning whether private ownership in the NHS is a good or bad thing.

This deficiency has more fundamental causes than simply that there has not as yet been enough experience of different ownership models in the NHS. The evidence is diverse and comes from numerous jurisdictions in which privately owned FP, NFP and publicly owned providers have operated. Rather it is that the evidence is limited by what we can observe rather than what we would like to observe in order to adjudicate the benefits and costs of private ownership. There are three substantial problems.

First, what is typically observed are providers with different ownership subject to the *same* institutional and contractual arrangements as each other. The arguments we have set out above establish that if we are concerned with the different decisions that ownership might give rise to, then the contractual arrangements would need to be adapted according to ownership. That is seldom the case in practice and so we cannot be sure that any differences that are observed in outcome – say if privately owned providers are found to produce lower quality care – are not the consequence of those providers being paid for their health care delivery in an inappropriate manner.

Second, if we consider what are the *real* concerns in regard to health care delivery – whether patients receive the appropriate *quality* of care, whether health care is provided *efficiently* and whether there is comprehensive *access* to care on the basis of health care need – then these may be only partially observable. For the most part we can observe indicators of these fundamental characteristics of provider behaviour and decisions but those indicators are limited and partial. Amongst the most discussed of these concepts is quality of health care. Quality of health care seems many-faceted. The appropriateness of treatment, the thoroughness of aftercare, the information that is provided to the patient, the cleanliness of facilities, the 'bedside manner' of health carers and even the availability of visiting hours and car-parking can all be regarded as aspects of quality of health care. For the most part what is in practice observed are simple measures of the outcome of treatment: at the most extreme whether a patient survives or whether they

require to be readmitted to hospital following their treatment. The gap between what is observable and what matters also applies to the concept of efficiency. In its true sense efficiency relates to the quantities of all inputs consumed in producing an output so that an inefficient provider is one that consumes more of all inputs (or more of some and no less of others) to produce given outputs. But neither inputs nor outputs of health care are clearly observed and instead efficiency is proxied by looking at cost per treatment. Inputs that are not directly purchased are often not reflected in reported costs and treatments can vary in their quality – for the reasons already discussed.

Third, there is a ubiquitous problem in social and economic enquiry that we are constrained not to have controlled experiments but must rely on observing the outcome of behaviour and decisions made under uncontrolled conditions. So whereas we would like to observe how otherwise identical providers, subject only to different ownership, behave in treating identical patients, we actually observe providers that differ in terms of ownership and potentially many other characteristics as well (for example their scale and scopes) treating different patients.

All of this suggests that empirical evidence will always be subject to dispute and debate although this is an area where enormous progress has been made, especially in accounting for the third problem described above.

9.2. Summarising international evidence

Concerns about how ownership of health care providers might affect their delivery of health care are truly international (Pita Barros and Siciliani, 2011; Biesen et al, 2007; Busse et al, 2014; Barbetta et al, 2007; Kroneman et al, 2016; Chevreur et al, 2015). A lot of the evidence of the impact of ownership, especially prior to 2000, comes from the USA. Most studies use the fact that there are a variety of health care provider types in the USA – private FP, private NFP and public – and look at how, at a given point in time, those different types of providers perform in regard to “quality” and “efficiency”. Quality is almost invariably measured by patient mortality, hospital readmission or the prevalence of failed treatments, whilst efficiency is supposedly captured by financial performance measures such as cost per case, or profit (or surplus in the case of NFP providers). To take account of the fact that providers of care with differing ownership also serve different patients, and may have different scales of operation, regression analysis is used to control for these other factors. The biggest concern with the veracity of the findings comes from the fact that relatively little is known about patients’ true medical conditions and that the relevant details of health care providers are sometimes sketchy or poorly measured.

It will come as little surprise to read that, taken overall, the evidence is rather mixed. But perhaps the nature of the ambiguities is surprising. A comparatively recent meta-analysis (Herrera *et al*, 2014) fails to find compelling evidence of differences between privately owned and publicly owned providers in respect of *either* quality *or* efficiency. The *nature* of the evidence is however informative. In respect of quality it is comforting to know that there are no large and consistent effects of ownership on patient mortality for example, although this fails to reassure in respect of the many other and more subtle aspects of quality of care.

In respect of mortality, the most commonly reported difference, where one is observed, is for publicly owned hospitals to have higher mortality, and therefore are assumed to have lower quality of care. This has been reinforced by studies outside the USA, including Australia, France and Taiwan. Most attention has then focused on the extent to

which those differences are more apparent than real, due to publicly owned hospitals treating sicker patients.

In respect of efficiency, it is again important to reiterate the gap between what might be important and what can be measured, but nevertheless meta-analysis (Herrera *et al.*, 2014) fails to find compelling evidence of differences that can be accounted for by ownership. There is rather more consensus in respect of the difference between FP and NFP private providers with, on balance, a view that the profit motive is associated with lower costs of treatment, other things equal.

9.3. Evidence for the UK – are private providers actually higher quality?

International evidence is valuable but health systems vary considerably (Wendt *et al.*, 2009). There may thus be a concern that the UK with its heritage of a nationalised health care system is just different and that ownership may have substantially different associations with quality and efficiency in the NHS compared to elsewhere.

The UK experience with a variety of ownership in the NHS hospital sector is comparatively recent. Empirical evidence is less prevalent, but more contemporary and has tended to focus on quality of care. Emerging studies are showing findings broadly consistent with the international evidence. The initial appearance is that the newly engaged privately owned providers actually produce higher quality care, when that is measured crudely by mortality or hospital readmissions. That appearance however is something of a mirage. Once corrections are made for the differences in the patients being treated, there turns out to be no statistically significant difference in most cases – either between publicly owned and privately owned providers, or between FP and NFP private providers (Siciliani *et al.*, 2013, Pérotin *et al.*, 2013, Moscelli *et al.*, 2017).

In summary, whereas the analysis on the basis of economic principles that has preceded this section has accepted that there *could* be important differences between different ownership of health care providers in terms of efficiency and quality of care – and has examined ways in which this could be regulated – the empirical evidence in general fails to find differences in practice. The substantial caveat is that empirical studies may fail to measure much of what matters in regard to quality of care, or efficiency. Nevertheless, the best evidence we have does seem to suggest that if ownership matters, it does not actually matter a lot.

10. CONCLUSIONS

In the UK, the desirability or otherwise of private ownership of health care providers who are paid from taxpayers' funds to serve NHS patients is a recurring topic. A range of reasons are commonly produced for unease about private ownership in the NHS. Many of these concern views on the appropriateness, or not, of the profit motive when the service being provided is health care. But others are expressed in terms of public or private, whether the latter are for profit (FP) or not for profit organisations (NFPs such as charities and community interest companies).

Primary care provision has, since the creation of the NHS in 1948, been mainly by privately-owned NFP and FP businesses in the form of GPs, dentists, community pharmacists and opticians contracted to the NHS but not owned by the state. This has attracted comparatively little controversy, although organisations representing GPs have in recent years expressed disquiet at the (limited) spread of GP practices owned by

private companies (see for example Davidson and Evans, 2010). Private ownership of hospitals paid to treat NHS patients has been rather more controversial, however. In the hospital sector the extent of private ownership in the UK is quite modest compared to the Netherlands, Germany and France, but greater than in Sweden, for example. It is evident that a mixture of public and private ownership of hospitals exists in pretty much all high income countries' health care systems.

Viewed through the lens of economics, concern over ownership arises from the impossibility of complete contracts between purchasers of health care and providers of health care. Were complete contracts feasible they would render the question of ownership redundant. But contracts will always be incomplete: it is not possible to specify in advance all of the relevant circumstances around the care of every patient who is to be served, so as to ensure that they receive appropriate quality of care at a cost that reflects complete efficiency and does not leave the provider either with unsustainable losses or supernormal profits.

But the existence of the collective purchaser(s) for health care means that purchasers have power that individual consumers in other sectors do not have. NHS purchasing arrangements have the potential to ensure that private ownership does not lead either to a 'race to the bottom' – sacrificing quality in order to cut costs – or to supernormal profits being earned – which would siphon off NHS funds that could otherwise be used to deliver more health care.

Furthermore, public ownership is not without its own challenges. Efficiently delivered health care to the desired standard is, sadly, not guaranteed in publicly owned hospitals any more than it is in their privately owned counterparts (whether NFP or FP). All health care providers require regulation, public and private, NFP and FP. It may be that private providers may need greater contractual and regulatory emphasis on demonstrable quality standards and that publicly owned providers may require relatively more contractual and regulatory attention being given to costs and hence prices, say, but all providers require regulation for both quality and efficiency.

Perhaps unsurprisingly, empirical studies yield a mix of findings about the impact of ownership – public, private NFP or private FP – on health care quality and cost, and no single preference ordering across the types of ownership. Empirical studies are inevitably constrained by the contexts within which they are conducted: how health care provision operates in that country over that time period, the mix of providers and purchasers and how they interact, the contractual and regulatory arrangements that prevail, the incentives and barriers in place.

We conclude overall that when considering the ownership of health care providers in a publicly funded health care system, statements such as "public good, private bad", or the other way about, are misplaced. All health care providers require regulation. All health care providers require carefully thought out contractual arrangements that recognise the incentives and constraints they operate with – and these do differ between ownership types. The collective nature of health care purchasing provides the means for achieving this.

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