

REPORT OF
THE OFFICE OF HEALTH ECONOMICS COMMISSION ON

Competition in the NHS

JANUARY 2012

About the Office of Health Economics

OHE provides authoritative resources, research and analyses in health economics, health policy and health statistics through independent research and consultancy.

OHE was founded in 1962 to:

- Commission and undertake research on the economics of health and health care
- Collect and analyse health and health care data for the UK and other countries
- Disseminate the results of its work and stimulate discussion of them and their policy implications

The research and editorial independence of the OHE is ensured by its Policy Board and Editorial Board, both chaired by Professor Tony Culyer (University of Toronto, University of York).

The OHE funded the work of the OHE Commission on Competition in the NHS. The OHE is supported by an annual research grant from the Association of the British Pharmaceutical Industry (ABPI) and by revenue from commissioned research and consultancy.

Members of the OHE Commission on Competition in the NHS

Jim Malcomson (Chair) – Professor of Economics, University of Oxford and Fellow, All Souls College

Mike Bailey – Medical Director and Deputy Chief Executive, St George's Hospital, London

Anita Charlesworth – Chief Economist, The Nuffield Trust

Nigel Edwards – Senior Fellow at The King's Fund, a Director with the Global Healthcare Group at KPMG LLP and, until July 2011, Acting Chief Executive, NHS Confederation

Julian Le Grand – Richard Titmuss Professor of Social Policy, London School of Economics and Political Science

Carol Propper – Professor of Economics, Imperial College and Bristol University

Bob Ricketts – Director, Provider Policy, Department of Health

Jon Sussex – Deputy Director, Office of Health Economics

Adrian Towse – Director, Office of Health Economics

Secretariat

Jon Sussex (Office of Health Economics)

Arik Mordoh (Office of Health Economics), until September 2011

CONTENTS

FOREWORD	4
EXECUTIVE SUMMARY	5
1. INTRODUCTION	8
2. BASIC PRINCIPLES OF COMPETITION	10
2.1 Competition in the market and for the market	10
2.2 Who chooses?	12
2.3 Objections	12
3 COMPETITION IN THE NHS SO FAR	16
3.1 The roots of competition in the NHS	16
3.2 NHS competition from 2000 to "any qualified provider"	16
3.3 Beyond AQP: competitive procurement	18
3.4 The NHS "Principles and Rules for Cooperation and Competition"	19
4 EVIDENCE ON THE IMPACT OF COMPETITION IN HEALTH CARE PROVISION	20
4.1 Impact of competition when prices are flexible	20
4.2 Impact of competition when prices are fixed by a regulator	21
4.3 Impact of new entry	23
4.4 Impact of competition on inequality	24
5 LESSONS FROM LONG-TERM CARE	25
6 ASSESSING THE DESIRABILITY AND FEASIBILITY OF COMPETITION	27
6.1 Desirability and feasibility	27
6.2 Regulatory issues	27
6.3 Medical training	28
6.4 Framework for assessing feasibility of competition	29
7 INTEGRATION AND COMPETITION	32
7.1 Services integrated with A&E departments	32
7.2 Integrated care pathways	34
8 CONCLUSIONS, POLICY IMPLICATIONS AND RECOMMENDATIONS	37
REFERENCES	40
APPENDIX I – TERMS OF REFERENCE FOR THE OHE COMMISSION ON COMPETITION IN THE NHS	43
APPENDIX II – FRAMEWORK FOR ASSESSING THE FEASIBILITY OF COMPETITION IN PROVISION OF HEALTH CARE SERVICES	44

FOREWORD

The role for competition in the NHS is a hot political issue. Views are highly polarised but often on the basis of inadequate evidence. Since its beginning as an academic discipline, economics has been concerned with where competition serves the public interest and where it does not. So, when asked by the Office of Health Economics to chair its Commission on Competition in the NHS, I was naturally intrigued to investigate further what one can say about the role for competition in the NHS on the basis of economic theory and evidence. I started with no preconceived views on this issue. It has been long established that at least some aspects of health care have characteristics that are problematic for competition. But in many aspects of our lives, we take competition for granted and it often seems to serve us well. Health care consists of an enormous variety of different services. So it is natural to ask for which (if any) of those services the NHS would be well-served by greater competition.

The answer is important for all of us. If competition between providers of some health services were to result in better care for the same budget, this would certainly be valuable in these times of straitened public finances. If, on the other hand, competition would result in deterioration in the quality of those services (a "race to the bottom"), it would clearly not serve the public interest.

I agreed to give time to chairing the OHE Commission on condition that the right people agreed to join me on it: health economists of course, but also those involved in the delivery of care on the ground and those engaged directly in public policy to ensure that our deliberations were well grounded in practical concerns. The team we assembled has been superb to work with, all willing to take seriously the arguments put by others. It is a great tribute to them that, despite their differing standpoints, our discussions have resulted in an agreed report. It is, moreover, a great tribute to the Commission's secretariat (provided by the OHE) that its work has been so smooth and its report so timely.

The OHE Commission's report is certainly not the last word on the role for competition in the NHS: the evidence available is more limited than we would have liked and theory can take us only so far. We have, nevertheless, developed a framework for assessing the role for competition in health services. We have, moreover, tried out our framework in workshops with commissioners of NHS care, who found it sensible and useful for practice. So there is good reason for our report to be taken seriously by policy makers, local NHS commissioners, providers of services to the NHS and all those engaged in the policy debate about how to get the best from the NHS. If it is, the OHE Commission will have served its purpose.

Jim Malcomson
Professor of Economics, University of Oxford and Fellow, All Souls College
January 2012

EXECUTIVE SUMMARY

Purpose and composition

Competition in the NHS is controversial. The NHS is far from being a competition-free zone, but the extent of competition remains confined to a minority of the services provided to NHS patients.

The OHE Commission on Competition in the NHS was set up, a little over a year ago, to consider the circumstances where competition between providers of health care might be both feasible and expected to yield benefits, and where not. Health care is not a single service but an enormous variety of different services. There is therefore no presumption that the desirability or feasibility of competition will be the same for all types of health care in all situations.

The geographical scope of the OHE Commission's investigation and this report is England, but the ideas and evidence presented are of much wider relevance and interest.

Together the members of the OHE Commission provide expertise and experience of: competition/regulation economics, NHS economics, health policy, NHS management and health care provision. The OHE Commission has reviewed and discussed a large quantity of evidence in the published academic and policy "grey" literature. It has commissioned some additional research and, in September and December 2011, respectively, organised and ran two workshops with clinicians and commissioning managers in the NHS.

Scope of enquiry

The potential roles for competition are to:

- Reduce inefficiencies that may arise, particularly where existing providers have monopoly power
- Encourage providers to be more responsive to the wishes of patients, GPs and commissioners of health services
- Stimulate innovation, including through market entry
- Provide information about how high a level of quality is obtainable for a given price or, if prices are flexible, how far it is possible to obtain the same quality of services at lower cost
- Identify providers that are not producing good value for money

The scope of this report considers both competition in markets for health care services, such as the current "any qualified provider" approach, and competition for the right to serve a market, such as procurement by NHS commissioners via periodic competitive tendering exercises.

The OHE Commission has focused its investigation mainly on quality-based competition with fixed prices set by a regulator. But we have not excluded the possibility that there may be health care services and situations – specifically those where service quality can be clearly defined, measured and monitored – where price competition might have a beneficial role alongside quality competition.

Common concerns about competition

We consider the circumstances in which the objections to competition in the NHS that are commonly raised are likely to be significant and when not.

Many of the concerns that are raised about the use of competition in the NHS, while valid in some circumstances, do not constitute fundamental objections of principle. They are often concerns about practical issues of implementation and the applicability of market mechanisms in different specific situations. These might be based on doubts about the capability of purchasers and providers to operate the systems required for competition, or stem from deep seated cultural and other less tangible objections. Problems of capability and

capacity need to be taken into account, but are not vetoes to considering competition as a tool for improving health care.

In addition, though the issue often is raised, we are not aware of any evidence that competition per se has hampered the integration of care. Nor is integration of care provision necessarily a barrier to competition. There can be competing integrated providers of care; or a single provider of integrated care selected by periodic competitive tendering; or a range of other prime contractor or alliance arrangements such that parts or all of services to be integrated are subject to competition. Integration of care can be supported through the regulatory framework within which competition operates, e.g. if organisations are required to share data and to support common care standards.

Competition does not require or equate to privatisation. Competition between NHS organisations is entirely possible and already happens. There is no need to change their ownership. But equally there is no reason in principle to rule out private not-for-profit or for-profit providers from joining in any competition where this could benefit patients and/or taxpayers.

Conclusions

Such evidence as exists concerning the impact of competition between health care providers when prices are allowed to be flexible is that it leads to lower costs and shorter waiting times for patients, but that it may also lead to lower quality care. The latter danger arises particularly where the quality of care is not visible to patients and their GPs, or becomes visible only after a considerable time lag.

However, evidence both from the UK and internationally suggests that quality based competition with prices fixed by a regulator can be beneficial, producing higher quality care at the same cost on average and, importantly, not leading to increased inequity in access to health care. It is therefore sensible to consider the extension of quality competition with fixed prices where it is feasible.

Competition is *potentially* useful to stimulate the provision of better quality and more health care for the NHS's budget beyond what is possible in the absence of competition. But this does not mean that competition is desirable or feasible for *all* NHS services in *all* locations. Health care markets, where they are established, need to be monitored and managed. Competing providers may have greater incentives to skimp on quality where that will be observed only indistinctly or not at all, or to attempt to "cherry pick" by treating only the lower cost patients and dumping those with higher treatment costs onto other providers. As resources are required to promote competition and to monitor and manage it so that it does not lead to worsened quality, choices need to be made about priority areas for applying competition.

Therefore, selecting where and when to promote and enable competition is an important decision for health policy makers and local NHS commissioners alike. Competition has a role in improving services, but is not a panacea and careful thought is needed to decide where and how to use it.

The provision of accurate and timely information on the quality of services is fundamental to competition. More provider-specific information about the quality of care provided and the patient outcomes that result from it needs to be collected and made available to regulators, commissioners, GPs and patients. That is the case whether competition is limited to quality alone (prices are fixed by a regulator) or to quality and price simultaneously (i.e. prices are flexible). A good start has been made in the collection of patient reported outcomes, but production of that information needs to be progressively and rapidly increased and widened to cover the majority of health care. Moreover if competition is to support more integrated care, NHS commissioners and patients need clear, consistent and comparable information on the extent to which services are well co-ordinated around the patient's and their carers' needs.

Entry of new providers into a market can be an important source of innovation. New entry could be by a publicly owned provider already active in another part of the country, or it could be by a privately owned organisation, whether active elsewhere in the health care system or entirely new to it, whether not-for-profit or for-profit. But new entry is not easy and can appear very risky to the potential entrant. NHS commissioners

need to be clear about the extent of their commitment to enabling and supporting new entry in those markets where they find scope for beneficial innovation.

In general, local NHS commissioners need to consider the desirability of competition to improve the provision of specific health services locally and, **using the OHE Commission framework published in this report**, the feasibility of competition where it would be desirable. The desirability of competition will depend on the comparative performance of local providers. Where current provider performance suggests the most significant scope for improvement, and competition for those services appears feasible, it makes sense for NHS commissioners to actively promote and facilitate competition where the transactions costs of competition are not too high. In addition to local initiative, the NHS Commissioning Board might usefully take on the responsibility for driving the development of competitive local markets for some services.

The impact of competition needs to be evaluated, both by NHS commissioners on the basis of their local experience of the impact of competition on outcomes (and costs, where relevant) and nationally through explicit research funding devoted to the evaluation of the impact of competition. The introduction of routine collection of patient reported outcome measures (PROMs) for a wider range of NHS-funded care should enable better assessment.

Recommendations

Based on these conclusions, the OHE's recommendations are for the Department of Health:

1. To establish a presumption across the NHS that where competition is feasible and could improve the performance of local providers, local commissioners should actively support competition. To promote the OHE Commission's framework to NHS commissioners as a useful tool for determining the feasibility of competition locally.
2. Not to require commissioners to introduce competition for all services, but if some commissioners do not widen the scope of competition between providers of those services for which competition has been beneficial elsewhere, to require them to publish their justification for not doing so.
3. To provide guidance on options for appropriate use of competition as part of the process of commissioning integrated care.
4. To continue to expand the programme of routine collection and publication of patient outcome measures.
5. To fund the evaluation of the impact of competition for NHS-funded services.

And for local NHS commissioners to:

1. Prioritise opportunities for beneficial expansion of competition *in* and *for* provision of health care services. Assess the feasibility of competition using the OHE Commission's framework.
2. Consider using competitive "any qualified provider" arrangements wherever competition reasonably can be expected to be beneficial and feasible in the local health economy, and where episodes of care are well defined and outcomes are relatively easily monitored.
3. Consider competitive procurement options for other services where competition can reasonably be expected to be beneficial and feasible in the local health economy, and where episodes of care are not well defined and/or outcomes continue to be difficult to measure.
4. Be explicit about those local health care markets where they would actively welcome new entry.
5. Generate evidence about, and participate in evaluation of, the impact of competition.

1. INTRODUCTION

Discussion of competition between providers of NHS-funded care elicits a wide range of reactions from the extremely negative to the strongly supportive. The starting point for the Office of Health Economics (OHE) in setting up a Commission on Competition in the NHS was a desire to explore in an objective and neutral way the theoretical and empirical evidence about the role for competition.

Health care is not a single service, but an enormous variety of different services. There is therefore no presumption that the desirability or feasibility of competition will be the same for all types of health care in all situations. The OHE Commission set itself the task of investigating for which kinds of health care competition is more or less feasible and what the evidence is about its desirability or otherwise. In doing so, we also looked at lessons from social care, where competition has had a significant role.

Over the last year, there has been much discussion in the context of policy for the NHS in England about the desirability of integrated care. We therefore have considered explicitly how integration of care might operate in a more competitive environment.

The NHS today is not a competition-free zone. Many elements of health care are actively subject to market forces and have been for decades – ranging from NHS-funded optician services to the design and construction of hospitals. The reason for considering whether and where there might be benefit in extending the role of competition is that the NHS, like other health care systems around the world, needs to improve its performance and has limited resources to achieve that.

No-one will deny that the NHS has, over the years, achieved large improvements in the health care it delivers without much emphasis on competition – although a surprising amount of competition actually has been present. The point at issue is how to go further, to get still better health care across the whole NHS, and to what extent, for which services, more competition between providers is desirable and feasible to achieve that and where it is not.

It is not enough to observe that the quality of care and the number of patients treated for each million pounds spent varies from place to place around the country. The questions are: how can all providers of care be brought to the level of the best, and how can the best go on getting better? Competition, suitably regulated, is a major driver of performance for providers of other goods and services. Having the option to go elsewhere, not having to just take what we are given by a single monopolistic provider, is taken for granted by most of us for almost all of the services and goods we need or want and, where it is absent, dissatisfaction is widespread. The July 2011 Open Public Services White Paper made clear the Government's intention to break down monopoly provision of any public service unless there is a special reason to retain it (HM Government, 2011). The OHE Commission takes the view that it would be foolish not to assess where competition might help improve the performance of NHS-funded health care.

Policies other than competition will have an important part to play in improving NHS performance in the coming years. For example, target setting (when targets are kept to manageable numbers, they are persistently followed up and the penalties for failure are severe, e.g. loss of employment) has been an important factor in bringing waiting times down for non-emergency hospital care, and for reducing rates of hospital acquired infections, in the past (Propper et al., 2008). The continued spread of formal clinical governance arrangements and improvement of quality regulation can be expected to have a positive impact. Competition is not the only lever available. The question the OHE Commission has investigated is under what circumstances competition is most likely to be a lever worth pulling.

Moreover, as Professor Peter Smith says in the conclusion of his review for the OECD of market mechanisms in health care: "competition can take many different forms, and sharpening competitive forces is likely in general to be an important tool for most health systems. Policy makers nevertheless need to shape market-type mechanisms with care, to align other policy levers, and to monitor vigilantly, in order to maximise the benefits they secure." (Smith, 2009, p. 72)

The OHE Commission's terms of reference are given in full at Appendix I. They can be summarised as:

To investigate for which health care services and in which circumstances competition or contest is likely to be beneficial overall and for which it is likely to be harmful.

Our focus is competition between providers: we do not consider in this report the merits or demerits of creating competition between commissioners of care. Furthermore, we do not analyse the relative merits of different forms of ownership for health care providers: public, private not-for-profit and private for-profit. Competition is an issue worthy of consideration in its own right and is the focus of this report. Competition is not dependent on who owns the assets and employs the staff.

The geographical scope of our investigation and this report is England, but the ideas and evidence presented are of much wider relevance and interest.

The OHE Commission is chaired by Jim Malcomson, Professor of Economics at the University of Oxford and Fellow of All Souls College. Together, the members of the Commission provide expertise and experience of: competition/regulation economics, NHS economics, health policy, NHS management and health care provision. The Commission has met five times since it commenced its work in December 2010. Over the last year, in and between those meetings, it has reviewed and discussed a large quantity of evidence in the published academic and policy "grey" literature. It has commissioned additional research where that was considered to add most value within the timeframe. In addition, in September and December 2011, respectively, it organised and ran two workshops with clinicians and commissioning managers in the NHS to obtain up-to-date information, views and challenge from those responsible for obtaining high quality care for patients.

The report is structured as follows. The basic economic principles of different kinds of competition are set out in Chapter 2, before a review in Chapter 3 of the extent to which competition is already present in the NHS and how it has developed over time. Evidence on the impact of competition in health care provision is summarised in Chapter 4, including a critical review of how competition and health care quality are measured in empirical studies. Chapter 5 then presents a review of original research on what the experience of competition in long-term care provision in England may tell us about competition in health care provision. Chapter 6 sets out an analytical framework the OHE Commission has constructed, and tested in a seminar with NHS commissioners of care, to assess the feasibility of competition for the many different kinds of NHS-funded services. Chapter 7 is devoted to the question of how far competition makes sense in the context of integrated care provision. The implications for policy are considered in Chapter 8. Conclusions and recommendations are presented in Chapter 9.

2. BASIC PRINCIPLES OF COMPETITION

2.1 Competition in the market and for the market

In this section, we describe the different kinds of competition that are possible, in principle. We return in Chapter 6 to a more detailed consideration of the factors affecting the feasibility of competition of any kind. Useful references for a general discussion of competition in sectors other than health care are Armstrong and Sappington (2006) on competition and regulation, and Armstrong (2008) on the interaction between competition and consumer protection. Our focus in the following pages is on competition in provision of health care.

The potential roles for competition between providers of health care services are to:

- Reduce inefficiencies that may arise, particularly where existing providers have monopoly power
- Encourage providers to be more responsive to the wishes of patients, GPs and commissioners of health services
- Stimulate innovation, including through market entry
- Provide information about how high a level of quality is obtainable for a given price or, if prices are flexible, how far it is possible to obtain the same quality of services at lower cost
- Identify providers that are not producing good value for money

Thus the ultimate purpose of competition for NHS-funded services would be to stimulate greater efficiency and quality in their provision.

A secondary purpose is to offer patients choice for its own sake, if they want that. Thus, the desirability of competition *in* a particular health care market depends not only on the scope for improved performance in the provision of that service, but also on how much patients are likely to value choice per se for that type of health care.

A view widely held among economists is that when prices are fixed, so long as they are fixed at a level above the marginal cost of producing the service, competition should lead to higher quality of services than the absence of competition. Providers can be expected to try to attract patients by offering better quality services than their rivals, given that they improve their net financial position as a result. (If price is set below the marginal cost of providing a service to an acceptable level of quality, then we can expect that no provider would be willing to supply the services concerned as to do so would leave them financially worse off.) However, when providers compete on price as well as quality, economic theory is unclear whether more competition can be expected to yield better or worse quality. Either is possible theoretically, depending on whether quality is readily detectable and whether payers are more sensitive to service quality than to price or the other way around. (See Gaynor, 2006, for an excellent survey of economic theory about the interaction between competition and quality in health care.)

The OHE Commission has focused its investigation mainly on quality-based competition with fixed prices set by a regulator for the pragmatic reason that throughout 2011 the Government has made clear its intention for the foreseeable future to discourage price-based competition. The most recent (at time of writing) official statement concerns amendments to the Health and Social Care Bill in the light of the report of the NHS Futures Forum set up by the Government to advise on its reforms, and is very clear:

“there will be new safeguards against price competition, cherry picking and privatisation” (DH, 2011a)

However, the OHE Commission has retained an open mind to the possibility that price competition may not be universally undesirable in health care, and that there may be services and situations – specifically those where service quality can be clearly defined, measured and monitored – where price competition might have a beneficial role alongside quality competition in future. The theoretical literature identifies the risk of quality

skimping by providers when price competition exists and patients and payers are insensitive to service quality, e.g. because it is difficult to specify and measure (Dranove and Satterthwaite, 1992; Gaynor, 2006). But economic theory also suggests that fixed price regulation does not deliver "first best" levels of quality unless payers can tell which services are most appropriate for each patient (Allen and Gertler, 1991). Also, determining prices for a large number of different health care services at levels that do not lead to unwanted consequences (such as too little or too much supply) is not a straightforward task for a regulator. In the following chapter, we summarise what the empirical literature can tell us about the likely impact of price competition between health care providers, as well as of quality competition with fixed prices.

Where economies of scale or scope in providing a health care service are large relative to the numbers of patients likely to want it, it would be impractical and wasteful to establish and maintain multiple providers operating in the market at the same time, among which patients could choose. But competition for the right to serve the market for a period of time (usually a few years in practice) might still be beneficial. In principle this might occur naturally: what economists refer to as "contest" (Sussex, 1998). That is where a new entrant may take over an incumbent monopolistic provider or drive it out where it sees the opportunity to supply the market more efficiently (lower cost, or higher quality for the same cost) than the incumbent is doing and still earn an adequate financial return. If the threat of such contest is real, at least as perceived by the incumbent provider, then it may be sufficient to induce high performance from that provider. However, in practice many barriers to entry or takeover exist that make reliance on unregulated contest unattractive to customers/payers in most markets. We discuss these barriers in Chapter 6 below.

An alternative is some form of managed competition *for* a particular health care market. This would take the form of a competitive procurement exercise managed by the payer (or by a group of payers). The winner of the competitive tender would receive a contract to provide the specified services to an agreed standard (which would be monitored) for a period of years, at the end of which the contract would be retendered. Such competitive tendering entails transactions costs at each round of procurement and monitoring costs while the contract is running. Chalkley and Malcomson (2000) note how widespread this form of purchasing of services is by governments and their agencies. They provide a review of the economics of this type of procurement, concluding that while fixed price contracts may often suffice, some element of cost sharing may sometimes be desirable. In addition, contract length needs to be sufficient to give the supplier reassurance that there is no undue risk of being left with health care assets not fully paid for that cannot be put to alternative use. An expectation that the contract will be renewed if performance is satisfactory is important for inducing providers to provide high quality services.

There are numerous variants of the basic competitive procurement model, including franchising. With franchising, the responsibility for maintaining facilities in a particular place and running services there is put out to competitive tender periodically, so that patients continue to go to the same hospital or health centre (say) for treatment, and many of the health care professional staff may remain the same, but the people running the facility and the way in which they do so may change from time to time. The first example of an entire NHS acute hospital being franchised out to another organisation to run following a competitive tendering exercise was signed off in November 2011: the ten-year contract for a private company, Circle, to run the Hinchingbrooke Hospital in Huntingdon for the NHS from February 2012.

Competition for a market will not increase choice for patients. At any given place and time patients will only have available to them the provider who has most recently succeeded in competing to supply that market. But by dint of periodic re-running of the procurement exercise, a health care commissioner can use competition for the market as a driver of improved quality and productivity. For the threat of losing the (whole) market to be perceived by the incumbent provider to be real, and thus an effective stimulus, at least one credible alternative provider to the incumbent must exist.

A variant on procurement to select a single provider for a given market for a number of years is for the procurement exercise to be used to identify a small number of providers, say two or three, who will be permitted to compete in the marketplace. This has the advantage of maintaining credible alternative suppliers, and of providing an obvious benchmark against which to compare the performance of each supplier (i.e. their

local rival). It also may be an appropriate approach to establishing competition if a market with multiple local providers, among which patients may choose, does not develop of its own accord.

The advent of new entrants may be particularly attractive where they are expected to provide innovative ways of delivering services, or indeed innovative services for satisfying patients' health care needs. Incumbents may be set in their ways and resistant to change. The experience of competition from an innovative new entrant may be necessary to overcome that inertia in the incumbent or it could replace the incumbent entirely. But new entry is not easy (Gaynor and Town, 2010) and the costs, particularly the political costs, may be high for incumbent providers reducing in scale or exiting the market to make room for new entrants. The central procurement of independent sector treatment centres (ISTCs), described in Chapter 3, can be seen as an attempt to encourage innovation via new entry for the benefit of patients and payers.

For competition to be effective at improving provider performance on average, not only must success in competition pay off for the provider, but failure must also cost it – perhaps to the extent of forcing it to exit the market for a service. Thus "exit" is as important to effective competition as "entry". If providers that are unsuccessful, i.e. inefficient or/and provide low quality, continue to provide a service and are bailed out financially in spite of their poor performance, competition may achieve little.

2.2 Who chooses?

We note that the identity of the "customer" in NHS markets will vary according to the particular health service. The possibilities are:

- Individual patient without GP advice – e.g. for primary care (which GP, dentist, optician) and even for many people choosing which hospital to go to for routine care; the National Patient Choice Survey published in February 2010 found that only 43% of respondents considered their own GP to be the most important source of information for that purpose (Department of Health, 2010b)
- Individual patient with GP advice available – e.g. elective hospital services, for at least 43% of patients (see the previous bullet point)
- GP on behalf of the individual patient – e.g. for some community-based services and/or more specialised elective hospital services where the patient feels not fitted to choose
- PCT/Clinical Commissioning Group – commissioning local services, including emergency care
- NHS Commissioning Board – commissioning highly specialised and costly services

The individual patient or their GP is able to choose when there is a range of existing providers available in the market. But in the last two cases in this list, the "customer" is effectively running a procurement exercise, enabling competition *for* the market.

2.3 Objections

The work of the OHE Commission started with the recognition that competition will not be desirable or feasible for all types of NHS-funded health care services in all circumstances. But, conversely, we are clear that a refusal to countenance competition among providers in any circumstance would be to give up a powerful tool for generating improved performance in some situations. Numerous objections to competition in provision of NHS-funded services have been raised in the public debate on the issue. We look critically at some of these objections later in the report, specifically the fears that increased competition would lead to:

- Greater unfairness, by disadvantaging already underprivileged socioeconomic groups. Whether competition has this effect is an empirical question. The evidence on the impact on equity is discussed in Chapter 4.
- Fragmentation of services when what is needed is better integration of care. This is a major potential issue, which we analyse and discuss in Chapter 7.
- Loss of economies of scale and scope if competing providers are trying to win even relatively small amounts of current activity from multi-service hospitals, particularly from those hospitals providing Accident &

Emergency (A&E) services. The financial viability of the multi-service provider may in principle be undermined by losses of activity at the margin and the consequent inability to achieve economies of scope or scale. This again is a major potential issue, which we discuss in detail in Chapter 7.

Other objections raised against competition in the NHS are considered in the following paragraphs.

2.3.1 "Competition means privatisation"

No, it does not. Who owns health care provider organisations, and the nature of the corresponding governance arrangements, and whether existing publicly owned organisations might be sold to the private sector, are separate questions from whether they compete with one another.

It would be unusual to increase privately owned provision of publicly funded health services without also requiring competition. But the reverse is not true: it is quite possible to have competition without private ownership of providers, i.e. competition between publicly owned providers, and between public and private providers.

Not-for-profit providers, whether public bodies or private charitable providers, can be expected to have different objectives from for-profit providers. For example, this might mitigate their willingness to skimp on difficult-to-measure aspects of quality in order to cut costs. But ownership is not the subject of the Commission's work. The OHE Commission has focused on the question of competition, and all that we present in this report applies to publicly-owned providers as much as to existing privately-owned providers.

2.3.2 "Competition implies wasteful duplication and unused spare capacity"

Providers bearing the costs of significant amounts of unsold spare capacity find it hard to survive in a competitive market. Where prices are flexible, they are likely to be undercut by other providers and, where prices are fixed, they will not be able to afford to invest in improved quality to the same extent as providers with more fully used capacity. Duplication nevertheless remains an issue where there are significant economies of scale or economies of scope. It would be wasteful, for example, to set up and run two A&E departments in close proximity to one another other than in a densely populated urban area. We discuss this issue further in Chapter 6.

Substantial economies of scope or scale might render a service, such as A&E, unsuitable for having multiple providers in the market. But for health care services where the potential performance gain is large (high desirability of competition) and economies of scale or scope are substantial, competition *for* the market via managed procurement exercises might not be ruled out unless other factors add to the unattractiveness of competition, as we discuss in Chapter 6.

2.3.3 "Competition necessitates high transactions costs"

It might be thought that competition implies additional bureaucracy – searching for and negotiating with providers, agreeing contracts, sending invoices and payments, and monitoring and enforcing all those – with consequent organisational and transaction costs that could be avoided in the absence of competition. So as not to exaggerate the issue, it should be noted that all but the first of these, the search costs, are also entailed even if there is a single unchallenged provider. But in the latter case there will be a smaller number of contracts, payments, etc., with which to deal, so the transactions costs should be lower with only one provider.

An analysis of the impact on transaction and organisational costs in the NHS in England of the abolition of the internal market in 1997 by the new Labour Government concluded that: "It is indeed possible that transaction costs may be lower where there is co-operation rather than competition. Achieving co-operation is, however, itself costly", and "There is . . . no evidence that the real organisational costs of delivering health care will be lower in the post- [abolition of the internal market] NHS than they were in the internal market" (Croxson, 1999, pp. 57-58). We are not aware of any empirical analysis of the transactions costs impact of removing (in 1997) or then partially reintroducing (from 2002 onwards) competition in NHS provision. But where transactions costs look likely to be significant, they must clearly be weighed against the potential performance gains from competition resulting in more and better quality care for patients.

2.3.4 "In health care, making people compete demotivates them"

This fear relates to how competition might be incentivised. Economic theory recognises that financial gain is not the sole motivation for providing services. Health care policies directed at encouraging competition commonly rely on financial incentives so that if an organisation or individual competes successfully they will be financially better off as a result. For example, the "Payment by Results" policy in the NHS in England (see Chapter 3) aims to incentivise providers to win more NHS activity by ensuring that, if they do, their revenues will be higher and, at the margin, their financial surpluses too.

But there is a fear that financial incentives may crowd out the intrinsic motivation of individual health care staff. That is, staff motivated by a desire to help the sick may feel their vocation is tainted by linking more and better care for patients to higher incomes for the organisation that employs them or for themselves. They may consider such commercial incentives to be demeaning to what they do and why they do it: "I work because I want to help patients, not because I want to get rich". If so, they may work less well, or leave their jobs, if they feel that financial incentives are too strong. In Julian Le Grand's words: "Our society regards altruistic or public-spirited behaviour as morally superior to self-interested behaviour and deliberately to encourage the latter at the expense of the former seems perverse" (Le Grand, 1997, p. 162).

Financial incentives for competition are clearly not the whole story: there is a risk of undermining intrinsic motivation to do the right thing for patients, and there are other ways to improve performance than merely by paying for it (Hunter, 2009). But empirical evidence (see Chapter 4) suggests that health care providers do nevertheless respond positively to financial incentives, and to the benefit of patients in some circumstances, especially when prices are fixed and competition focuses on the quality of care offered. Hence, like many others, Le Grand concludes that there are "theoretical and empirical arguments for preferring choice and competition in many situations" (Le Grand, 2009, p. 479), but not in *all* situations.

2.3.5 "Patients lack the necessary information"

Patients and/or their advisors need information on the service quality offered by different providers if competition is to lead to beneficial outcomes. Lack of patient information, or awareness of it, or willingness or ability to use it, is a well-recognised aspect of health care. That is why there are so many intermediaries acting on behalf of patients, including GPs and local commissioning organisations. It also is why there is justified and persistent pressure to improve the flows of information to patients. Lack of information hinders good quality care even in the absence of competition. But the consequences of inadequate information about quality are likely to be more damaging in the presence of competition as NHS providers then have incentives to skimp on quality in order to meet financial and other obligations, an issue we take up next. We say more about the important issue of information for patients and their advisors in Chapter 6.

2.3.6 Quality skimping

Where quality is difficult for patients or their representatives (e.g. GPs, health care commissioners) to detect, competition may encourage providers to skimp on unobserved aspects of quality in order to save money and improve their financial position. A provider's financial incentive to skimp on quality in order to meet financial targets is actually a feature of any prospective payment system; whether "block contracts" where payment is largely insensitive to the number and type of patients treated, or activity-based funding like "Payment by Results" in England. A provider's revenue is by definition not dependent on the unobserved quality of its services, whether or not there is competition. But if competition makes the provider's financial position less secure, the incentive to skimp may become more compelling. This concern is reflected in the framework the OHE Commission has developed for considering the services for which competition is appropriate (see Chapter 6). But there are ways to mitigate this problem that are the same with or without competition: better information, active monitoring and regulators required to act on what they see.

2.3.7 Patient selection

Patient selection by providers comprises "cherry picking", i.e. trying to attract only the low cost cases (relative to the payment received), and "dumping", i.e. trying to avoid high cost cases (relative to payment received). If

it is practical for a health care provider to predict whether patients with particular characteristics are likely to be more or less costly to treat – e.g. according to the patient’s age, sex, evident co-morbidities or disabilities – then it has an incentive to try to ensure that it only treats low cost patients and deters high cost patients or diverts them to other health care providers. Similarly to quality skimming, this is an issue for prospective payment arrangements whether or not there is competition. Again, like skimming, if competition makes the provider’s financial position less secure, the incentive to select among patients may become stronger.

There is concern that, with increased competition, patient selection might undermine the financial stability of providers offering a comprehensive range of services. As with quality skimming, this concern is reflected in the framework the OHE Commission has developed for considering the services for which competition is appropriate (see Chapter 6). Also, as with quality skimming, there are ways to mitigate this problem that are the same with or without competition: better information about casemix treated at different providers, and regulators and payers acting on that information.

2.3.8 What happens if a provider fails?

The commercial failure of a health care provider cannot be allowed to threaten the wellbeing of patients. To be effective, competition requires that providers unable or unwilling to provide high quality services at reasonable cost be forced out of business. The credible threat of that is a big part of how competition drives good performance. But this does not mean that patients would be left stranded if a particular provider were to fail. Where there are multiple providers, i.e. there is competition *in* the market, others can either take over the failed provider’s assets and staff or replace them. Where there is a single local provider, it is the responsibility of the commissioner to ensure an interim solution – involving continued use of existing assets and staff – and the establishment of a new longer-term provider, *whether or not* the failed provider was selected via competitive procurement.

In the next chapter, we review the extent to which competition between providers has already featured in the NHS in England up to now.

3. COMPETITION IN THE NHS SO FAR

3.1 The roots of competition in the NHS

For most of the first 40 years of the NHS, from its creation in 1948 to the mid-1980s, competition was not a word much heard in health policy discussions in the UK. Nevertheless, from the outset there has been active rivalry between health care providers in the NHS in practice. This has been most obvious between hospitals to establish the highest reputation, to attract the best medical staff, and to host prestige specialist units (heart surgery centres, radiotherapy centres, neurosciences centres, and so on); and between individual clinicians and their teams. Overt commercial competition also has, perhaps surprisingly, deep roots in the NHS. To design and build hospitals and other NHS facilities, architects, health care designers and building contractors have been selected by competitive tender for decades, and long before the advent of the "Private Finance Initiative" (PFI) in 1994.

In the 1980s, compulsory competitive tendering was introduced for non-clinical, but nevertheless essential, services in NHS hospitals: catering, cleaning and laundry. Over the following years, the same competitive tendering approach spread to many other hospital support services: parking, security, energy management, estate management. In 1986, the provision of NHS optician services was made fully competitive, with NHS-funded service users being provided with vouchers to spend at an optician of their choosing.

April 1991 saw the introduction of the NHS "internal market": completely splitting the responsibility for providing health care from the responsibility for purchasing it. Such a separation had always existed for NHS "Family Health Services": GPs, dentists, pharmacists and opticians in community based primary care were private businesses contracted to the NHS. The 1991 internal market created a purchaser/provider split for the provision of hospital and other secondary care services, too: NHS Trusts did the providing, local Health Authorities and fundholding GP practices did the purchasing.

Evidence of the impact of competition in the NHS internal market 1991-1997 is thin as there was no formal programme of evaluative research. The empirical evidence is summarised in the next chapter. The overall assessment of commentators on the internal market was that competition was most evident at the margins of NHS activity, much of it driven by GP fundholders, but that in total the extent of competition was surprisingly small: "Perhaps the most striking conclusion . . . is how little overall measurable change there seems to have been related to the core structures and mechanisms of the internal market" (Le Grand et al., 1998).

Independent sector providers – some for-profit, some not-for-profit – have long been present in a small way in the NHS beyond primary care: providing care to NHS patients, i.e. paid for not by the patients themselves but out of NHS funding. In around half of the country, they provided terminations of pregnancies where local NHS obstetrics departments were unwilling to do so. Independent providers also have been a mainstay of hospice care for terminally ill patients, and a major provider of mental health services and long-term nursing care for the frail elderly. The boundary between nursing care and social care for frail people is a blurred one, and we note that the independent sector is now dominant in provision of residential care (see Chapter 5). Increasingly, independent sector providers also have contributed to provision of elective surgery to NHS-funded patients, initially through ad hoc arrangements with local health care commissioners or as subcontractors to NHS providers and, since 2004, also under procurement of Independent Sector Treatment Centres (ISTCs) run by the Department of Health. (See Sussex, 2009, for a concise history of independent sector provision of NHS secondary care.) But, in total, independent sector providers currently account for only a small proportion, around 2%, of total NHS expenditure on acute hospital care.

3.2 NHS competition from 2000 to "any qualified provider"

After initially rejecting the NHS internal market when it came into office in 1997, the New Labour government subsequently embraced competition. The progression of competition-related policies since 2000 has been well summarised by Mays and colleagues (2011a) and here we restrict ourselves to highlighting the key features: introduction of activity-based payment; encouragement of greater diversity of providers; and enablement of patient choice for non-emergency hospital services. These were the three policy "legs" that, taken together, have given impetus to the possibility of using competition to improve performance in the NHS.

Activity-based funding of NHS hospital services in England was introduced progressively from 2003/04 under the misleading name: "Payment by Results" (PbR). Under PbR, hospitals are paid a fixed national price for each patient treated (inpatient spell, outpatient attendance, A&E attendance), for both emergency and elective cases. Previously, NHS hospitals had been financed mainly from block contracts so that if they attracted additional patients at the margin they were unlikely to be paid the marginal costs of caring for them. PbR changed that by giving providers the confidence that they would be paid for each additional patient. This is a pre-requisite for competition in the provision of those services. (For more details on PbR and its impact, see Farrar et al., 2009.)

Competition in the NHS in England since the start of PbR is often characterised as being on the basis of quality and not price. That is explicitly the case with PbR. But it needs to be remembered that PbR covers only 25% of total NHS expenditure -- £26 billion out of total NHS spending of £103 billion in 2009/10 (House of Commons Health Committee, 2010). For the other 75% of NHS-funded services, there is price flexibility and hence the possibility that competition is already taking place, or could in the future do so, on the basis of price as well as quality. Price competition is being talked down in current Government policy towards the NHS but could return as a policy tool.

Over the last ten years, health care policy in England has included encouragement for health care purchasers to consider a wider variety of types of provider organisations, including not-for-profit and for-profit independent providers. The government encouraged independent provision not only of non-emergency hospital services, but also primary care services. As a result, for-profit companies, charities and social enterprises all have won contracts, including GP contracts. Even though the range of providers has widened rapidly, and their activity is growing, the independent sector currently still delivers only a few per cent of total NHS services. (Allen and Jones, 2011, provide a good summary of the position in mid-2011.)

The single biggest expansion of independent sector provision was the result of the Independent Sector Treatment Centre (ISTC) programme, initiated in 2002. The policy was intended to bring innovation and higher performance to the delivery of non-emergency surgical and diagnostic services via private organisations competing for centrally-procured contracts to provide those services in specified locations around the country. It was also expected that the presence of independent sector providers would stimulate innovation, and hence higher performance, among existing NHS providers (Turner et al., 2011). Evidence is currently lacking as to the success or otherwise of the policy – see Chapter 4.

Patient choice has a slightly more recent history than either PbR or diversity of providers. Since January 2006, patients requiring a referral to a specialist have been entitled to a choice of four or five providers. Since April 2008, NHS patients resident in England have been entitled to choose for routine elective procedures among all providers (public or private) willing to supply to NHS quality standards at the PbR price. In 2009 the NHS Constitution made this a right for NHS patients in England. The policy was initially named "any willing provider" (AWP), but since has been rebranded as "any qualified provider" (AQP) to highlight the requirement that certain service standards must be met and the providers open to regulation by the Care Quality Commission.

Evaluation of patient choice so far indicates that it is taking time to take hold: Dixon and Robertson (2011), in their summary of the patient choice policy and its impact, report that around half of patients recall being offered choice, but only a minority of those appear to be actively selecting their providers, although it is difficult to tell just how many are. It remains unclear, however, how many patients need actively to exercise choice for the threat of losing business to be sufficiently credible to provider organisations that they respond positively.

AWP/AQP initially applied to routine elective care with a price set as part of the national PbR tariff, whether provided in a hospital or in the community. The NHS Cooperation and Competition Panel (CCP) estimated this to account for £12 billion of NHS spending in England in 2009/10 (CCP, 2011). But the range of services for which patients are being offered the choice of "any qualified provider" is being extended. By September 2012, local NHS commissioners are required to offer patients three or more additional community or mental health services on an "any qualified provider" basis, with all providers being paid the same locally agreed tariff price if

there is no national tariff for that service. The kinds of additional services that the Department of Health proposes (DH, 2011b) local commissioners should consider for “any qualified provider”, i.e. competitive, provision are:

- Musculoskeletal services for back and neck pain
- Adult hearing services in the community
- Continence services for adults and children
- Diagnostic tests closer to home – some types of imaging, cardiac and respiratory investigations
- Wheelchair services for children
- Podiatry
- Venous leg ulcer and wound healing
- Primary care psychological therapies for adults

Further services also are being selected by some local NHS commissioners for patient choice between any qualified provider, including anti-coagulation therapy, dermatology and diabetes education services (an up-to-date list is provided on the NHS “Supply2Health” website at <http://www.supply2health.nhs.uk/AQPResourceCentre/AQPMap/AQPMap.aspx>).

Surveying the extent to which the NHS in England had changed overall during the decade to 2010 in the direction of giving greater rein to market forces in the provision of publicly funded health care, Mays and Dixon (2011b) concluded that use of market forces has nevertheless only been modest overall hitherto and has been focused on elective hospital care rather than chronic care, mental health, community health services or any other types of health care.

3.3 Beyond AQP: competitive procurement

NHS commissioners of health care in England have the option to use competitive procurement, i.e. competitive tendering, to select service providers where AQP does not apply, but they are not obliged to. Current official guidance states: “it remains a matter for commissioners to determine when and how to use procurement as a tool for securing contracts” and the same discretion applies to providers who act as a prime contractor and sub-contract specific elements of service (DH, 2010c; para.1.11). The guidance recommends that “Procurement options should be considered for securing services outside the scope of existing contracts, including: additional choices for patients; new service models; significant increases in capacity and where existing contracts are due to expire or be terminated (e.g. where contract management is unable to address underperformance)” (DH, 2010c; para.2.3). NHS Standard Contract duration is three years, although longer is permitted.

Procurement is being pursued with different degrees of enthusiasm around the country and is being targeted toward different services. We are aware of Primary Care Trusts (PCTs) competitively procuring (usually on three year contracts):

- Community physiotherapy
- Diagnostic ultrasound
- Pathology services
- Sexual health services

At the extreme, where the performance of most or all of a hospital or other type of health care provider is cause for major concern, there may be a case for competitive tendering of the management of an entire hospital. The Hinchingbrooke Hospital example already referred to comes under this heading. The emphasis there is apparently on changing the way the hospital is run, i.e. how it is managed, while many of the staff – managers, doctors, nurses, allied health professionals and managers – remain the same. Franchising could be used to replace some or all of the managers and even the health care staff, but in practice this may be hard to achieve. Franchising an entire hospital avoids politically unpopular hospital closure, but is a major and

uncertain undertaking: the competitive tender exercise for Hinchingsbrooke Hospital commenced with an advertisement in October 2009 and took more than two years to reach contract signing. Subsequent exercises may not take as long, but whole-hospital franchising is likely to be worth serious consideration only when more limited but easier to implement paths have been tried and found inadequate – such as actions at the level of individual, particularly high cost or low quality, services to improve or remove them (Sussex, 1998).

3.4 The NHS “Principles and Rules for Cooperation and Competition”

Since 2009, the NHS in England has been subject to an explicit set of “Principles and Rules for Cooperation and Competition” that commissioners and providers are required to follow. The CCP exists to advise the NHS and the Department of Health whether the actions of commissioners and providers of NHS-funded care are in breach of those principles and rules. The latest, July 2010, version of the principles and rules is shown in Figure 1. The wording reflects a desire that competition not be seen as an end in itself and that – as we discuss in Chapter 7 – it should be used in a way that is sensitive to the need to integrate different elements of a patient’s care.

Figure 1: The Department of Health’s “Principles and Rules for Cooperation and Competition”

Obligations on commissioners	Cooperation and agreements	Conduct of individual organisations	Mergers and vertical integration
<p>1</p> <p>Commissioners must commission services from providers who are best placed to deliver the needs of their patients and populations.</p>	<p>4</p> <p>Commissioners and providers must cooperate to improve services and deliver seamless and sustainable care to patients.</p>	<p>7</p> <p>Providers must not refuse to accept services or to supply essential services to commissioners where this restricts commissioner or patient choice against patients’ and taxpayers interests.</p>	<p>10</p> <p>Mergers, including vertical integration, between providers are permissible when there remains sufficient choice and competition or where they are otherwise in patients’ and taxpayers interests, for example because they will deliver significant improvements in the quality of care.</p>
<p>2</p> <p>Commissioning and procurement must be transparent and non-discriminatory and follow the Procurement Guide issued in July 2010.</p>	<p>5</p> <p>Commissioners and providers should promote patient choice, including – where appropriate – choice of any willing provider, and ensure that patients have accurate and reliable information to exercise more choice and control over their healthcare.</p>	<p>8</p> <p>Commissioners and providers must not discriminate unduly between patients and must promote equality.</p>	
<p>3</p> <p>Payment regimes and financial intervention in the system must be transparent and fair.</p>	<p>6</p> <p>Commissioners and providers should not reach agreements which restrict commissioner or patient choice against patients’ and taxpayers interests.</p>	<p>9</p> <p>Appropriate promotional activity is encouraged as long as it remains consistent with patients’ best interests and the brand and reputation of the NHS.</p>	

Source: DH, 2010a

4. EVIDENCE ON THE IMPACT OF COMPETITION IN HEALTH CARE PROVISION

A 2011 review by Gaynor and Town of the published evidence on the relationship between competition and quality in health care finds that the number of empirical studies is accelerating, although it currently remains limited to hospital services. Gaynor and Town conclude that most studies show, in line with economic theory, that when prices are fixed by a regulator competition leads to improved quality. It is less clear whether social welfare overall is increased, as there is a risk of quality being invested in by providers beyond the point where the extra benefit justifies the extra cost, as a result of competition under fixed prices. But patients are never made worse off by improved quality.

The evidence where prices are flexible is more mixed, with some studies showing competition leading to higher quality care, but some linking competition to lower quality. This indeterminateness with respect to the impact of competition on quality and social welfare when prices are flexible rather than fixed also is consistent with economic theory (Gaynor and Town, 2011).

We review first the empirical evidence on the impact of competition where health care providers are able to determine prices, albeit in negotiation with payers/commissioners. We then turn to the impact where prices are fixed by a regulator and beyond the discretion of providers, so that competition is limited to qualitative aspects of services.

4.1 Impact of competition when prices are flexible

Most of the empirical evidence on the effect on efficiency and quality of competition among health care providers derives from the US. Much of this is of limited relevance to the UK owing to major differences between the US and UK health care systems, not least of which is the preponderance of fee-for-service payment arrangements in the US at the time that many of the earlier analyses were conducted. However, Cookson and Dawson (2006) summarise the US empirical studies that are most relevant to the NHS – namely where managed care organisations, analogous to English PCTs and clinical commissioning groups, have driven competition among the providers that their insurees are permitted to access – as showing that: “There is clear evidence from the US that payer-driven price competition has substantially reduced prices, costs and excess capacity since the mid-1980s, following the rise of managed care” (Cookson and Dawson, 2006, p. 226). Peter Smith concurs, in his authoritative review for the OECD, that: “There is quite strong evidence that competition for business from collective health services purchasers has led to cost reductions” (Smith, 2009; page 63).

But the US evidence of the impact of competition on quality when there is price flexibility for providers is decidedly mixed: some studies imply that quality declines under competition, perhaps due to providers’ attempts to save costs, but other studies show quality improving with competition, perhaps due to providers’ attempts to attract additional patient referrals (Gaynor, 2006, provides a good review of this evidence). No clear picture has emerged from the US about the impact of competition on quality when there is price flexibility.

UK empirical evidence is much more limited and so far concerns only health care provided by acute hospitals. What little empirical evidence there is about the effect of competition based on price and quality flexibility in the internal market of the 1990s suggests that it had no impact on productivity, and hence costs (Söderlund et al., 1997), but may have led to lower quality, at least as measured by hospital AMI mortality rates (Propper et al., 2008). Propper and colleagues found that hospitals that were likely to have been subject to greater competition, because there were more competitors nearby, demonstrated greater reductions in (readily observable because published) waiting times for patients, but at the cost of greater rates of mortality from acute myocardial infarction (AMI) (not, at the time, published). They concluded: “Our results indicate that hospitals in competitive markets reduced unmeasured and unobserved quality in order to improve measured and observed waiting times” (Propper et al., 2008, p.138).

Reviews of the fairly sparse evaluation literature about the NHS internal market 1991-1997, conclude that its measurable impact was limited in any direction, good or bad (Le Grand et al., 1998; Mays et al., 2000; Mays et al., 2011; West, 1997). This is put down to weak incentives to compete and strong constraints that discouraged it.

4.2 Impact of competition when prices are fixed by a regulator

In their recent review of the evidence on the effects of hospital competition on quality of care in the NHS in England, Bevan and Skellern (2011) concluded that it remains an open question whether competition under fixed prices since 2003 has yet been effective in raising the clinical quality of NHS care. But they were clear that introducing patient choice for elective surgery has not reduced the quality of care, and they supported the introduction of patient choice as an end in itself.

The quantitative evidence on the impact on health outcomes of competition between hospitals in England since 2003 rests largely on just two published studies, as has been confirmed by numerous authors (including Bevan and Skellern, 2011; Mordoh, 2011; Propper and Dixon, 2011), namely:

- Gaynor et al. (2010) "Death by market power: reform, competition and patient outcomes in the National Health Service", covering the period 2003/04 to 2007/08 and published both as an NBER Working Paper and a CMPO (University of Bristol) Working Paper; and
- Cooper et al. (2011) "Does hospital competition save lives? Evidence from the English NHS patient choice reforms", published in *The Economic Journal*.

Both studies have concluded that competition under fixed prices in the NHS in recent years appears to be associated with beneficial changes in the quality of hospital services. Both studies have received much of attention and comment in policy and academic circles; some favourable some critical.

Gaynor and colleagues (2010) conclude:

"We find that the effect of competition is to save lives without raising costs. Patients discharged from hospitals located in markets where competition was more feasible were less likely to die, had shorter length of stay and were treated at the same cost." (Gaynor et al., 2010; quoted from the abstract)

And:

"These results suggest that competition is an important mechanism for enhancing the quality of care patients receive. Monopoly power is directly harmful to patients, in the worst way possible -- it substantially increases their risk of death. The adoption of pro-market policies in European countries, as well as policies directed at increasing or maintaining competition such as antitrust enforcement, appears to have an important role to play in the functioning of the health sector and assuring patients' well being." (Gaynor et al., 2010, p. 32 of NBER Working Paper)

The principal quality measure on which this conclusion is based is the rate of death of acute myocardial infarction (AMI) patients aged 55 or over within 30 days of hospital admission. Hospitals in areas where more competition was likely from other providers showed greater improvements in their AMI mortality rates. Gaynor and colleagues found similar results when the quality measure was the 28-day in-hospital mortality rate for all causes. The authors estimated a 0.2% reduction in the all-cause mortality rate, i.e. 0.2% of premature deaths that otherwise would have occurred were averted, that they attributed to the pro-competition reforms (Gaynor et al., 2010).

In general the econometric analysis in this study has not been criticised: it uses a "difference in difference" approach to strip out the effects of other factors that may be affecting hospitals' mortality rates and statistical techniques to check that the causation is from competition to quality. But the wider policy conclusion drawn from the study has been criticised. The criticism has been mainly on the grounds that AMI or all-cause mortality rates may not be reliable indicators of overall quality of care in a hospital as around half of admissions, and most deaths within a month of admission, are for patients admitted as emergencies and consequently the acute hospital services to treat those patients are not themselves subject to competition. Gaynor et al. recognised this in their study and argue:

"It seems unlikely that hospitals deliberately choose lower quality in the form of an increased probability of death. However, hospitals that face less competitive pressure may choose to exert less effort or supply less quality in ways that indirectly affect mortality." (Gaynor et al., 2010, p. 15 of NBER Working Paper)

Working independently from Gaynor and his colleagues, Cooper et al. (2011) reached very much the same conclusion in their empirical study of the NHS in England, again using a "difference in differences" approach to strip out the confounding effects of other factors. Using the 30-day AMI mortality rate as their quality measure (as Gaynor et al. also did) they found that:

"The conclusion, then, is that hospital competition, introduced in a fixed priced market, can lead to an increase in the quality of hospital services, as economic theory would predict." (Cooper et al., 2011, p. F251)

They estimated that:

"the reforms resulted in approximately 300 fewer deaths per year after the reforms were introduced in 2006." (Cooper et al., 2011, p. F251)

from the lowering of the AMI mortality rate alone.

They justified the use of AMI mortality rate – one of the few quality measures for which good data were available – in terms similar to Gaynor et al. (2010) and by referencing a study by Bloom et al. (2010). The latter study found that higher competition is positively correlated with management quality (measured via a survey tool), and that management quality is in turn strongly correlated with financial and clinical outcomes including survival rates from emergency heart attack admissions. This supports, in Cooper and colleagues' view, AMI mortality as a proxy for the quality of a hospital's services in general. Others have expressed scepticism (see, for example, Bevan and Skellern (2011) and Pollock et al. (2011)).

Given the importance of the Gaynor et al. (2010) and Cooper et al. (2011) empirical studies, the OHE Commission asked Arik Mordoh (Office of Health Economics) to undertake a critical analysis of the methods and results of these two studies and of other quantitative analyses relevant to the question of the impact on health care quality of competition under fixed prices in the NHS in England. He produced a detailed critique of how competition is measured, how quality is measured and of the identification strategies used to try to establish a causal link between measured competition and quality. The full analysis is published on the OHE website. The major findings of interest for the present discussion are as follows:

- It is impossible to measure directly the degree of competition taking place in a market. Most quantitative studies have used hospital market concentration measures as proxies for it. The Herfindahl-Hirschman Index of market concentration (HHI) is the most commonly used proxy measure for the degree of competition (lower concentration meaning more competitors active in the market), but there are many others, including counts of numbers of providers in markets. For both kinds of concentration measure, a range of ways of defining "the market" have been analysed, including observed referral patterns, travel times, geographical distances, administrative boundaries. The vigour of competition does not necessarily depend on the number of providers in a market, but a greater number is deemed to be at least indicative of greater scope for competition. The role of new entry – and of exit of incumbents – is less well analysed in the empirical literature even though entry is expected in theory to be a major driver of innovation in health care, which indicates a target for future research.
- How greater or lesser degrees of competition for hospital services might lead to actions or changed behaviours by the managers and clinicians of hospitals such that quality would be affected is largely a "black box". The transmission mechanism is neither analysed nor described. An exception is Bloom et al. (2010), referred to above, although that is limited to a statistical association observed between general management quality and measured hospital outcomes without determining how management brings about greater quality of clinical care when under pressure from competitors – e.g. whether via incentives aimed at staff, or imposed changes to procedures, or in some other way.

- Mortality rates have been the most frequently used measures of hospital quality in quantitative studies. Mordoh finds 28 empirical studies of competition and quality in hospital care. All use outcome measures of quality, as distinct from measures of process quality (e.g. patients' reports of their experience of hospital care). The AMI mortality rate is by far the single most commonly used quantitative measure of quality, used in 19 out of 28 studies. Other mortality rates for hospital patients, complication rates, readmission rates and the frequency of patient safety events also all have been used. The suitability of any one measure as a proxy for overall hospital quality remains unclear.

A legitimate concern is that providers subject to greater competition may put greater emphasis on aspects of quality such as mortality that are more "visible", possibly to the neglect of other aspects of quality.

Clearly, the rate at which people die within 30 days of admission to a hospital with an acute myocardial infarction (which fortunately is low) is not a wholly convincing measure of hospital services quality in general, even if it is arguably a better guide than no guide at all. As Propper (a co-author of the Gaynor et al. (2010) study) and Dixon put it: "It will be important to assess the effect of competition on a wider set of process and outcome measures in future as data improve (eg, patient-reported outcomes related to the elective treatments for which competition is most relevant)" (Propper and Dixon, 2011, pp. 86-87).

It might be hoped that qualitative studies could fill some of the gaps in understanding any links between competition and quality. But such qualitative studies as have so far been reported, based on interviews with managers of health care provider organisations, have found only patchy evidence of deliberate competitive activity by NHS hospital trusts in England so far (see Brereton and Gubb (2010), Dixon et al. (2010) and Sussex and Farrar (2009)). The Cooperation and Competition Panel takes the view that the "any willing provider" policy for routine elective care is still in the process of taking effect, but that it is beneficial overall:

"We have found that patients, providers and commissioners are still adapting to the opportunities arising from choice and competition in routine elective care. But emerging evidence shows that patients and taxpayers are benefitting from higher quality care, greater accessibility, and more efficient delivery in services that represent around 15% of PCT expenditure on healthcare (ie approximately £12 billion in 2009-10). These benefits can be expected to grow as patients become more aware of their ability to choose, and providers respond to patient expectations by improving services." (CCP, 2011, p. 3)

The extent to which NHS patients in England actively make use of the opportunity to choose has been studied and reported in detail by Dixon and colleagues (Dixon et al., 2010). Summarising that and the other empirical evidence so far available, Dixon and Robertson (2011) conclude: that the extent of active choice by patients, and hence its impact, has been limited; that hospital providers did not perceive significant changes in their markets as a result of the introduction of patient choice; but that patient choice, or the threat of it, may stimulate providers to improve services in order to enhance their overall reputations.

4.3 Impact of new entry

Evidence on the impact of competition via entry of new providers of NHS-funded care is lacking. The obvious examples of such entry are the two waves of Independent Sector Treatment Centres (ISTCs) that were procured at the national level by the Department of Health in order to increase capacity and patient choice in the provision of routine elective surgery. However, there are currently no quantitative studies comparing the efficiency of ISTCs relative to the existing providers with which they were introduced to compete (Allen and Jones, 2011). The only evidence on quality of outcomes shows no significant differences between ISTCs and NHS providers for three types of routine day case surgery, after adjusting for casemix (Browne et al., 2008).

A qualitative study by Turner et al. (2011) found that ISTC entry was associated with managerial innovation but not medical innovation. That is, the management of ISTCs were able to introduce new operational routines and procedures and recruit clinicians to conform to them, unencumbered by the entrenched practices of clinicians in existing providers. Turner and colleagues also report finding that "the threat of new forms of competition had been used instrumentally by the managers of NHS trusts to drive change within their hospitals" (Turner et al., 2011, p. 526). They conclude: "Our evidence shows that ISTCs have introduced new

models of service delivery for elective care, and that their clinical procedures (especially those related to systematising the care process) have influenced neighbouring NHS trusts." But: "Our analysis suggests that NHS trusts – that combine service delivery, research and teaching – represent stronger learning environments in which medical innovations are more likely to emerge" (Turner et al., 2011, p. 528 for both quotations).

4.4 Impact of competition on inequality

Although competition is often seen as a way of improving provider efficiency and/or quality – hence our concentration on these aspects so far – it is not commonly proposed as a route to achieving reduced social inequality. On the contrary, competition is sometimes seen as threatening to widen social inequality in access to health care if it leads to the interests of the most mobile sections of the population being prioritised over the less mobile, who are likely to be disproportionately represented in disadvantaged social groups.

However, analyses of the impact of competition between providers of NHS-funded care in England in both the 1990s internal market and in the fixed-price markets since 2002 have found no detrimental impact on social equality so far. Cookson et al. (2010), in a quantitative analysis of NHS hospital utilisation by the population of England from 1991 to 2001, concluded: "No evidence is found that competition had any effect on socioeconomic health care inequality". In a subsequent study Cookson et al. (2011) have undertaken a similar analysis for the period from 2003 to 2008, when quality-based competition with fixed prices was being promoted in the NHS in England. Their findings for the later period are that quality-based competition did not undermine social equity and may actually have led to a small improvement, i.e. a small reduction in social inequalities in access to non-emergency hospital admissions.

5. LESSONS FROM LONG-TERM CARE

In addition to reviewing and critically appraising the published evidence about the impact of competition in the NHS, we investigated whether the experience of the care homes market in the UK had any lessons of relevance to health care. Long term (non-health) care of elderly people has for some years been delivered in a market setting. The care is paid for both by private individuals out of their own pockets and by the public sector, i.e. Local Authorities and, to a lesser extent and only when there is a health care (i.e. nursing) element, by the NHS. The private and voluntary sectors have grown to provide over 90% of care home places in 2010, compared with just over 60% of places twenty years ago, and public sector provision (Local Authority and NHS) has declined – see Tables 1 and 2.

Table 1: Utilisation by sector of placement in the UK

	Year	1990	1995	2000	2005	2010
Private	Residential	140000	151000	163000	161000	171000
	Nursing	104000	174000	164000	146000	151000
Voluntary	Residential	36000	52000	50000	49000	45000
	Nursing	10000	17000	16000	14000	16000
NHS		68000	43000	24000	19000	14000
Local Authority		114000	71000	51000	32000	22000
Total		472000	508000	469000	421000	418000
Private and voluntary as percent of total placements		61%	78%	84%	88%	91%

Source: Laing & Buisson, 2010

Table 2: Sources of finance for independent care home residents 2010

Funding Source	Residential Care	Nursing Care	Total
Local Authorities	134000	65000	199000
NHS	0	31300	31300
Self-funding	81000	70000	151000
Total	215000	166300	381300

Source: Laing & Buisson, 2010

We commissioned a review by Julien Forder and Stephen Allan (Personal Social Services Research Unit, University of Kent, and London School of Economics and Political Science) of evidence about the impact of competition in the care homes market. Their report (Forder and Allan, 2011) is available from the OHE website. They focused mainly on the UK, but also considered relevant evidence from other countries, particularly the US.

Prices are not regulated in the UK care homes market, unlike at least that part of the NHS that is covered by the national "Payment by Results" tariff. Forder and Allan note that from the 1980s prices of care home places in the UK rose steadily in real terms until 2008/09, but over the last couple of years appear to have plateaued. Profit margins appear to be thin, though evidence for this is weak. Care homes appear to face quite high price elasticity of demand, which suggests that competition is active; if they raise prices they lose business to competitors:

"Across the UK there are over 10,000 care homes. By most overall measures, the care homes market appears to be highly competitive. Market concentration has been increasing in recent years but still remains very low." (Forder and Allan, 2011, p. 19)

Forder and Allan conclude that the small, but significant, literature for the UK shows that competition lowers prices but the scale of the impact is modest. The US evidence tells the same story. (The measure of competition used in both countries is usually the HHI, discussed in the previous chapter.)

Their review of the literature found no direct evidence of the effect of competition in the UK care homes market on the quality of care provided to elderly people. However: "Indirect sources might be interpreted as showing a modest positive effect, especially for Local Authority purchased care, but more work is needed in this area". Higher quality is associated with higher prices when comparing across providers at a given time, implying a degree of differentiation in the market.

US evidence is mixed. Some US studies find higher quality associated with more competitive conditions; others find the opposite; yet others find no obvious association. As with the health care studies discussed in Chapter 4 above, these studies may be limited in how well they can detect the effect of competition as most use the HHI concentration in local markets to measure that.

In the UK, the care home market is large – capacity of 474,000 places (Laing & Buisson, 2010) – and care homes for the elderly are numerous, generally small (fewer than 40 places per home on average) and serve geographically localised markets. They compete with one another on price. They could compete with one another on quality, and perhaps do, but the evidence of that is unclear. Only 9% of care home places are now provided by the public sector but the public sector funds 60% of all care home places. Thus, a large amount of publicly-funded care of the elderly is provided in a competitive market place and has been for many years. Prices are not regulated and greater competition seems to lead to lower prices. The impact of competition on the quality of care remains unknown.

We take from this analysis of the market for care homes for the elderly that competition in provision of a sensitive care service to a large number of frail people is not only feasible but commonplace. Price competition has not been barred and may have led to cost savings for purchasers of care, but it is necessary to proceed with caution as the impact on quality is uncertain: some evidence indicates that quality suffers when there is greater competition, some that it does not, or even benefits. The evidence, rather limited, therefore suggests a similar overall story to that from evidence of the impact of competition for hospital services when prices are not fixed (as in the US and the 1990s NHS internal market): a beneficial effect on prices, but an uncertain effect on quality.

6. ASSESSING THE DESIRABILITY AND FEASIBILITY OF COMPETITION

6.1 Desirability and feasibility

Introducing or widening the spread of competition across more types of NHS-funded services is not without difficulty and potential costs. The cost of establishing and managing competition and monitoring providers could limit the amount of competition with which any one NHS commissioner can cope. The quality of provision needs to be monitored whether there is competition or not, but multiple providers may imply greater costs of monitoring. Demand management is also a major concern to NHS commissioners, particularly where commercial providers are involved and have a financial interest in increased volumes and cross-selling of additional services. Ensuring that referral thresholds are respected, that only the services commissioned are being provided, and that service quality is high, requires a lot of monitoring and policing of providers by commissioners. These are all issues which arise even where competition in the market is not active, but competition could increase the difficulty and costs of demand management.

Given that introducing or extending competition places demands on NHS commissioners, it is necessary to determine priority service areas on which to focus efforts. Prioritisation requires commissioners to consider both how feasible it might be to have competition in or for the market for particular services, and how desirable it might be -- i.e. the scale of the benefits, if any -- that might be realised by competition.

Commissioners are likely to start by considering for which services competition is likely to be most desirable, before then turning to how feasible it might be. In other words, they first look for underperforming services, so as to be clear about the extent of benefits that could be realised by improving them. This should be a relatively straightforward exercise. Deciding whether competition can help improve that performance locally is potentially trickier, but the logical framework explained below in its concise form has been designed to make it easier.

Wherever competition is both feasible and expected to be beneficial (by stimulating greater efficiency, quality and responsiveness), but has not yet taken root, is then a high priority for promotion of competition and action to remove any institutional or other barriers that may be stifling it. Where competition appears difficult to engender or would not be expected to yield significant benefits even if it were present would, conversely, be a low priority.

In the following discussion, as in the whole of this report, we are explicitly considering both competition in the market between two or more providers operating simultaneously (as with AQP) and competition for the market where a contract to provide services in an area is re-tendered periodically and there is a credible opportunity for a new entrant to take over the contract if it can do better than the incumbent. With both competition in the market and for the market, but especially with the latter, the role of new entrants is of great importance. A new entrant may, more often than not, be providing comparable services elsewhere. But all new entrants offer the prospect of bringing new ideas and ways of working into a local health economy. Sometimes the credible threat of entry by a higher quality and/or lower cost rival will be sufficient to stimulate existing providers to improve their performance. But for that credibility to be sustained, and for potential entrants to be attracted to consider entering a particular market, it is helpful if occasionally in that market or similar markets there is actual new entry, not just the threat of it. Therefore, when considering the feasibility of competition, attention needs to be given to enabling entry into the market by credible providers.

Before describing how to assess the feasibility of competition for any given health service in a health economy, we consider two groups of issues that may be seen as barriers to competition: regulatory issues and medical training.

6.2 Regulatory issues

The form of price regulation and NHS contracting requirements in place will affect the impact that competition has. For example, if prices fixed for health care activity do not vary according to the quality of outcomes or the way in which the services are provided, then innovations that improve the quality or processes of care but also raise costs will be deterred. However, it is possible for policy makers, and sometimes

managers, to change the form of price regulation (if any) and/or contract structures if they are hindering the feasibility of competition where it is otherwise practicable and considered desirable (perhaps by quality premia on prices to reward innovations in the preceding example). The competition feasibility assessment framework described below does not include the form of price regulation, which is not immutable, but instead focuses on less malleable aspects of health care service provision.

The NHS Cooperation and Competition Panel (CCP) was created in January 2009 to advise the Department of Health and NHS bodies and regulators on competition issues arising in the NHS in England. The CCP checks on the application of the NHS “principles and rules of cooperation and competition” referred to in Chapter 3 above (see Figure 1), assessing whether the conduct of NHS-funded bodies (public and private) and any mergers between them are likely to adversely affect patients or taxpayers. Consequently, the CCP is building up case studies and other analytical publications about the implementation of competition for NHS-funded care. It is revealing how actions by some health care commissioners are counter to the interests of the general public as patients and taxpayers, even when the motivation is to stay within financial budgets or to make maximum use of take-or-pay contracts with ISTCs. Examples of actions determined by the CCP to be against the public interest are:

- PCTs or their Referral Management Centres directing GPs to refer patients to, or away from, particular providers
- Capping the number of patients a particular provider is allowed to treat in a year
- Threats of reduced payment or non-payment for activity beyond arbitrary limits
- Requiring providers to apply minimum waiting times before patients may access treatment (thereby preventing competition on the basis of shorter waiting times)
- Refusal to enter contracts with some providers even though they meet NHS standards and are willing to accept NHS tariff prices

(Source: CCP, 2011)

Our feasibility framework does not cover these types of barriers to competition as they are within local commissioners’ discretion to avoid; for those deemed generally undesirable by the CCP, we assume that future regulation will deter or bar them, i.e. we assume that the CCP’s advice is taken. The feasibility framework is instead concentrated on the extent to which hard-to-avoid-or-overcome factors need to be recognised when deciding where competition can be introduced or strengthened.

6.3 Medical training

An objection to permitting competition between NHS providers that is sometimes raised is that competition might prevent trainee health care staff from being exposed to the number and mix of patients necessary to give them adequate experience and hence competence. But the CCP reminds us that: “for a restriction on patient choice and competition to be justifiable in terms of clinical staff training, commissioners need to have adequately explored, and be satisfied that there are no other options available for ensuring the training of clinical staff, including through cooperative arrangements between multiple providers” (CCP, 2011, p. 5).

Dawson and colleagues undertook a major study for the Department of Health to address the question of how much concentration of services is necessary to satisfy professional training requirements, which was reported in 2004. (The full report can be downloaded from: <http://www.sdo.nihr.ac.uk/files/project/26-final-report.pdf>) Post-graduate medical training has been the area of professional training where in the past, for some specialties, Royal Colleges have made recommendations with minimum volume and casemix implications for the hospitals at which trainees were employed. Dawson et al. (2004) reported that even by 2004 the emphasis was on trainees being required to demonstrate achievement of competencies rather than for their employing hospitals to provide them with pre-specified volumes and mixes of training material, i.e. patients. The key points to note from Dawson et al. (2004) are that in “an important change from the pre-1997 trend”:

- Training regimes are becoming more flexible “with less emphasis than in the past on exposure to indicative numbers of procedures or clinical caseloads”
- These and other changes make it easier than before for smaller hospitals and hospitals outside existing teaching centres to employ trainee doctors – which by extension implies that a barrier to new entry is being reduced or removed
- Rotation of trainees through a number of hospitals, and even community settings, is increasingly the norm. In other words, trainees are increasingly expected to go to where the patients are rather than patients having to be brought to the trainees.

The implication is that the needs of post-graduate medical training are ceasing to be a significant impediment for competition in the market for hospital services. The OHE Commission is not aware of any developments since 2004 that would contradict this view.

6.4 Framework for assessing feasibility of competition

The OHE Commission, starting from economic first principles, has developed a framework for assessing the feasibility of competition for any given health care services. The full framework is described and explained in Appendix II. A condensed version is presented in the following paragraphs.

We have identified a number of possible demand- and supply-side characteristics of health care services that affect the feasibility of market competition. In our framework, feasibility of market competition refers to the likelihood that potentially beneficial rivalry can be sustained between providers, whether already in a particular health care market or contemplating entering it. For example, a rivalry process would be hard to sustain in a market where demand for a particular service or product is so low that only one supplier can operate profitably and potential new entrants would not be attracted. We have grouped the characteristics under 8 headings, described below. It is possible to disaggregate these further, as has been done in Appendix II.

When assessing the feasibility of competition, the identity of the decision-making “customer” is important. As noted in Chapter 2, the “customer” could be any of:

- Individual patient without GP
- Individual patient with GP advice available
- GP on behalf of their individual patient
- PCT/Clinical Commissioning Group
- NHS Commissioning Board

Competition is feasible whichever of these is the decision-making customer, but the nature of the customer can affect how some dimensions of competition are thought about. For example, acquiring and interpreting information about the outputs and quality of some health care services is likely to be easier for GPs than for patients, or easier for local commissioning bodies than for either of them, and may be easiest of all for clusters of local commissioners or the national NHS Commissioning Board in some cases. Also, patients will not be concerned about the price of the service, as they do not pay it, but a PCT or Clinical Commissioning Group might well be.

The eight main dimensions for assessing the feasibility of competition in provision of a health care service are:

- **Density and variability of demand** – The more people within a given area who want a particular health care service, the greater the likelihood that competition will be feasible. This will depend on population density per km² and on the incidence and prevalence rates of conditions requiring health care intervention. Also, a steady and predictable flow of demand is more attractive for new entrants considering providing a service in an area than is a variable and unpredictable flow, which can create cash flow problems and also increases uncertainty about the viability of continuing to compete once in a market.

- **Distance and travel time** – Interacts with, but is distinct from, *demand density*. Patients' willingness to travel to receive care, and to incur consequent cash, time and inconvenience costs, varies according to the type of services they seek. Willingness to incur time and other costs of travel appear to be higher in rural than urban areas. Dixon et al. (2010) in a major study of patient choice found "that patients outside of urban centres were more likely to be offered choice and to attend a non-local hospital. This challenges the belief (widely held among those we interviewed) that choice is relevant only in urban areas" (Dixon et al., 2010, p. xviii). Willingness to travel may be high for one-off access to specialised services to treat major health problems, but low for access to services dealing with frequently occurring or minor health issues. The more patients are willing to travel, the greater the scope for competition. When patients are not in a position to choose, e.g. when needing emergency care, the decisions of commissioners about where to pre-position service providers, and how many of them to have available, will depend in part on whether increased travel time will damage patients' health. This is most obviously the case for A&E services for severely ill patients.
- **Ease of acquiring information about output quality** – Some information about the quality of health care from a particular service provider may be obtained prior to the decision about where to obtain the service. The lower the costs of obtaining and digesting this information, the greater the potential for quality-based competition. Some services are harder than others to specify in contracts and consequently to monitor and enforce contracts subsequently – e.g. where important aspects of service will be subjectively felt by patients but are hard to measure objectively. Where this is the case, increased competition may have adverse consequences. Also, where switching costs are high – i.e. any costs that might be incurred by a patient or commissioner if they wish to switch away from providers they already know and turn to untried alternatives – then competition is less feasible than where the costs of switching between providers are low.
- **Economies of scale** – The existence of substantial fixed costs – e.g. of buildings, plant and equipment – may mean that the minimum efficient scale of some services is large relative to demand in an area, so that a single provider might be most efficient in such an area. But for some services and geographical areas this will not be a significant issue. The problem of large fixed costs is exacerbated if they are also "sunk" costs in that they cannot be put to a variety of uses: an office building is a fixed cost, but not a sunk cost, as the offices can serve numerous alternative uses; but a linear accelerator and its bunker can only be used for radiotherapy and represents a sunk cost of being in the radiotherapy "market". Significant sunk costs are a deterrent to competition via new entry. Finally, new or small providers may find it hard to compete with larger existing providers of services where there is significant "learning by doing" such that a provider who has done more cumulatively can supply at lower cost and/or higher quality as a result.
- **Economies of scope** – These exist where it is less costly or yields higher quality or both to deliver two or more services jointly than to provide them separately. For example, providing plastic surgery and trauma services together may be less costly for a given quality of service than providing each of them separately; or co-locating gynaecology and obstetrics services.
- **Scope for cherry picking and/or dumping** – Where costs of treating different patients are likely to vary widely between individual patients in a way that is not reflected (or not fully reflected) in the prices the provider would receive for supplying that treatment, all providers have a financial incentive to cherry pick the lower cost patients and dump onto other providers the higher cost patients. Providers' ability to do that depends in part on the ease of assessing a patient's likely costs before accepting them (e.g. are there observable characteristics correlated strongly with cost), the likelihood of payers observing the cherry picking or dumping, and their scope for regulating it, e.g. by effecting post hoc financial adjustments.
- **Asymmetric competitive constraints** – Existing providers may have different capacities to compete with one another. For example, a hospital-based provider might be able readily to expand into community provision by "reaching out" with its staff, whereas a community-based provider would not be able to match the hospital-based providers' back-up facilities (specialist diagnostics, inpatient beds for admissions of emergency exacerbations). This imbalance of power could render the weaker party unwilling to try to compete with its more powerful rival even for services it is capable of delivering, for fear of adversely affecting future relationships.

- **Politics: too important to fail** – An incumbent may be seen as too important to be allowed to fail even if there is another provider that is apparently able to replace it. The political risk associated with change may be deemed too high. If so, competition may be impractical.

We tested the feasibility framework at a workshop with NHS Commissioners and the Department of Health, held in September 2011. One participant thought it redundant as targets for competition were in their view "obvious". But all other participants considered it useful for NHS commissioners, helping to structure their thinking about priorities for competition in their local health economies, and potentially for use with other stakeholder groups to help them do the same. The workshop participants concluded the meeting by successfully and rapidly applying the framework to a practical example (community chemotherapy). The table at the end of Appendix II illustrates how applying the framework across a number of services shows up where feasibility is greatest (many green cells in the table) and least (many red).

We therefore commend the OHE Commission's feasibility framework to NHS commissioners as an aid to understanding the feasibility of competition in or for the markets for different types of health care services.

7. INTEGRATION AND COMPETITION

In this section of our report, we consider two objections that are sometimes raised against competition for health care service provision. The first is not usually presented as an issue of care integration, but is one nevertheless. It concerns the co-location of hospital services to deal with emergency cases. The second objection is that competition implies fragmentation of services that could be dangerous or costly, or both, if an integrated care pathway is desirable to ensure that the patient receives the different elements of care required over time.

7.1 Services integrated with A&E departments

The range of cases presenting at hospital Accident and Emergency (A&E) departments makes it desirable to have on hand a wide range of specialist diagnostic and treatment services that may rapidly be brought to the aid of an emergency patient when required. This implies that many of the specialist staff and facilities needed to provide those services should, for good health and economies-of-scope reasons, be closely integrated with, even physically adjacent to, the A&E department. The argument then proceeds: because many of those specialist staff are the same people who provide specialist non-emergency diagnosis and treatment, the financial viability of a hospital could be threatened if it were to lose out in competition to provide those non-emergency services. If the costs of the specialised staff and facilities can no longer be spread over so many non-emergency patients because a competitor has taken some of them away – particularly if the competitor has cherry picked the lower cost patients – then it may be too costly to go on providing the remaining emergency services: the economies of scope will have been lost. That could cause the hospital and its A&E department to close, with undesirable health impacts on the population in that area.

It appears common sense that some specialist diagnostic and treatment services would best be provided close to an A&E department. But how far this limits the scope for competition between providers of, for example, orthopaedic surgery or diagnostic MRI scans, depends on which services would advantageously be co-located (and hence those for which co-location does not matter) and how much of each service? An uncritical bundling of all acute hospital services, and of unspecified scale, under the heading “must co-locate with A&E and must not be threatened by competition” is not warranted. It may be that for ultimate patient safety all services should be immediately available 24 hours a day, but this is just not economical, so we have to face up to a trade-off. Hence it may be possible for an A&E-based hospital to lose some services completely or partially, if it is unsuccessful in competition with rival providers, without the cost-effectiveness of its A&E based services being undermined.

The OHE Commission therefore asked Rosalind Goudie and Maria Goddard (Centre for Health Economics, University of York) to review the guidance on which services are required to be co-located with A&E and the minimum practical scales of those services. We asked them in particular to ascertain the evidence base for that guidance. Their report is published on the OHE website. Goudie and Goddard (2011) have assembled and reviewed a large number of guidance documents and their report provides an excellent concise summary of them. The sheer quantity of guidance in circulation is impressive, and is in stark contrast to the paucity of economic analysis of which services, and to what scale, are most cost-effectively co-located with A&E.

Goudie and Goddard (2011) focused on the guidance produced by medical Royal Colleges and other medical associations on the configuration of A&E and supporting services. They found that:

“There appears to be a broad consensus about a set of “core” services required to be co-located where emergency care is provided. There is some debate about the degree to which a sub-set of this core is essential on-site or could be provided elsewhere subject to establishment of robust networks and patient pathways. There is far less explicit information available on the minimum scale of provision.” (Goudie and Goddard, 2011, p. 41)

They identified seven core services that emerged from the guidance literature consistently as being recommended for co-location with A&E:

- Acute medicine
- Critical care/intensive care

- Diagnostic imaging
- General surgery
- Laboratory services (i.e. pathology)
- Orthopaedics
- Paediatrics

But even with these, it is not clear from the guidance what the minimum efficient scale of the co-located service is likely to be, and there is almost no economic evaluation evidence to attempt to answer that question:

“Issues of scale are rarely discussed explicitly in terms of cost implications. Instead it is matters of patient safety, quality of care and staff training that are usually driving the discussion of the preferable scale of provision.”
(Goudie and Goddard, 2011, p. 2)

Goudie and Goddard (2011) found the same picture whichever of those services they looked at. To avoid repetition, we will just highlight what they say about the guidance for general surgery to be co-located with A&E. Table 3 summarises the guidance they found in this area and the strongest evidence cited in the guidance in support of its recommendations.

Table 3: Guidance and supporting evidence for co-locating general surgery with A&E

Content of guidance	Source	Evidence cited					
		None	College publication(s)	Government department publications	NHS publications	Clinical journal articles	Economic evaluation
One of the 'seven key specialties'.	CEM, 2008		✓				
24 hr access to general surgery is required if hospital receiving patients as emergencies or who are acutely ill.	RCP, 2002	✓					
A service which should preferably be on site or alternative pathways need to put in place.	CEM, 2008		✓				
A&E departments without general surgery on site need more emergency physicians to treat patients.	CEM, 2008		✓				
A&E departments without general surgery on site need clear procedures for dealing with common problems requiring general surgery, e.g. acute abdominal pain.	CEM, 2008		✓				
Separation of emergency and elective surgery is recommended to improve the quality of care delivered to patients. But services should preferably be provided on the same site due to imaging and equipment needs.	RCSE, 2011		✓				

Source: Goudie and Goddard, 2011, p. 20

In general, the authors conclude that:

"The evidence to support the guidance does not appear to draw upon economic evaluation. There is a high degree of circularity of argument as many documents cite other similar documents rather than primary sources. Expert opinion is a prevalent theme within the types of guidance cited and very often it is deemed to be 'self-evident' that a particular organisation of services is required. Whilst this evidence may well be valid, it is not usually based on economic analysis." (Goudie and Goddard, 2011. p. 41)

Goudie and Goddard's study, and the absence of evidence about the basis of medical guidance that they reveal, does not tell us whether competition for any of the services recommended to be co-located with A&E is feasible or desirable. But it does demonstrate that just as analysis, and not merely assertion, is needed when considering competition in or for the provision of a health care service, so also is analysis, not assertion, needed to justify an argument that competition be rejected were it to threaten part of, say, an elective surgical or diagnostic service (or services) at an A&E hospital. According to a CCP reported in July 2011, this kind of analysis is not currently forthcoming:

"for a restriction on patient choice in routine elective care to deliver benefits in terms of service continuity, the potential loss of routine elective care volumes by a provider would need to result in a significant risk that other services – with critical access requirements for patients – could no longer be sustained. While this argument is frequently advanced, we have not yet seen persuasive evidence of this relationship." (CCP, 2011, p. 5)

7.2 Integrated care pathways

An objection to competition in health care that is sometimes raised, particularly by medical organisations, is that it may be incompatible with provision of integrated care. The latter is widely seen as highly desirable, although the term itself does not have a single widely-agreed definition. "Integrated care" has been given a variety of meanings in the context of the NHS. This is not the place to review them all. The key feature of integrated care is that the patient experiences seamless care even though the overall bundle of care they require for a particular condition, or for a multiplicity of conditions from which they may suffer simultaneously, comprises more than one element and that at least some of the different elements of service are provided by different people (e.g. GP, specialist doctor(s), diagnostician, community nurse, therapist) and possibly in different locations and/or by different organisations.

The Royal College of General Practitioners, which summarised the competition-is-bad-for-integration position in a policy paper published in summer 2011 aimed at influencing amendments to the Health and Social Care Bill, stated:

"The Bill seeks both competition and better integration, which can be seen as mutually exclusive; it is difficult to see how competition rules could be framed to deliver both of these objectives. The fear is that it will no longer be possible to deliver integrated services in practice, especially where integration relies on close collaboration between different providers and commissioners, and could be seen as anti-competitive." (RCGP, 2011, p. 10)

But there is in fact no necessary incompatibility between integrated care for patients and competition in or for the market to provide elements of that integrated care. There are clear examples outside health care where competition helps to ensure efficiency and responsiveness to consumer wishes even though an integrated service is ultimately being sought. Buying a foreign holiday requires integration of: travel between home and airport, flights to and from destination, travel between airport and accommodation in the destination country (which may require access to local knowledge or language skills), booking of accommodation and perhaps purchase of additional elements of the holiday such as sporting activities, car hire, etc. At one extreme the customer can choose to buy all of these elements separately in competitive markets, in effect doing the integrating themselves. At the other extreme, they can pay a travel company to arrange everything for them – who may in turn buy elements of the package from competing sub-contractors or simply do everything itself. Or the customer can buy in a competitive market a package holiday with flights, accommodation, and transfer between destination airport and hotel in a single bundle, and they can choose from a local taxi firm to get them from home to the airport and choose their own activities from local competing suppliers at the

destination resort. The possible variations are too numerous to be worth going into. The point is that integration does not make competition for some or all elements of the integrated service either impossible or necessarily undesirable. Competition might or might not be good for integrated care.

The CCP noted in its review, conducted in the first half of 2011, of the operation of the AWP policy: "During this review there has been significant public debate about possible tensions between patient choice and competition and delivering integrated services for patients. PCTs did not tell us during this review, however, that restricting patient choice and competition in routine elective care was necessary to deliver integrated services to patients" (CCP, 2011, p. 14).

As Walshe and Ham put it, although planned and integrated care for patients requires a coordinated network of providers, "This does not rule out contestability among providers for roles within that network; nor should it prohibit competition between organisations to be the lead providers within networks for a defined period" (Walshe and Ham, 2011).

The King's Fund and the Nuffield Trust have considered whether competition policy is a barrier to integrated care, drawing on the experience of those developing integrated services. They concluded that:

"The key issue here is the unit of competition and whether this is defined narrowly (e.g. for an annual foot check) or broadly (e.g. for a year of care for a diabetic). It also begs the question as to how competition should operate – should it be competition for the market (i.e., tendering to providers) or within the market (i.e., patient choice of location and caregiver)" (Goodwin et al., 2011).

The authors recommend that to address this and "ensure clarity on the interpretation of integration rules" guidance should be provided to commissioners. We would concur with this. Applying the feasibility framework described in Chapter 6 should enable commissioners to decide whether and where competition could help secure more integrated services.

We note that many pilot schemes of integrated care are under way and being evaluated in the NHS and many local health care commissioners are procuring integrated care services, sometimes competitively. The extent to which NHS-funded care is already integrated is unclear. However, to the extent that desirable integration is lacking, after more than 60 years of the NHS the blame for this does not appear to lie with an excess of competition hitherto.

To tease out more exactly the extent to which it is desirable or otherwise to use competition when buying integrated care for patients, and what the various options for competition might be (analogous to the holiday example above), the OHE Commission ran a workshop in December 2011 with a small number of NHS local commissioners active in procuring integrated packages of care and with experts in the economics of competitive procurement of other kinds of integrated bundles of services, such as those needed to design, build and operate major facilities.

All at the workshop were agreed that competition is potentially a desirable element of the procurement of integrated care, improving patients' experience of care and perhaps also improving outcomes, although evidence about that is not yet clear. The workshop participants also agreed that integration of care does not imply that all aspects of that care have to be provided by a single organisation – and that provision by a single organisation does not guarantee that the care will be well integrated.

Integrated care requires the ready and complete transfer of information between the people and organisations serving a patient, and the coordination of the different service elements required. Information transfer and coordination of services may be as good or bad within a single combined provider organisation as between separate providers. The workshop participants made the important point that information transfer and coordination are characteristics that could and should be specified and required by a purchaser of care services. Competitive procurement, or even competition *in* the market for some elements of service, may be one way for the purchaser to insist on good integration as a condition of the provider winning the business. Workshop participants gave examples from their experience of how the threat of competition had succeeded

in stimulating existing providers to change how they organised, e.g. the interface between hospital and community based musculoskeletal services, so as to better integrate the care of patients while delivering that care in locations closer to patients' homes.

As illustrated by the holiday example above, a range of possibilities exists for how integrated health care services may be organised: within one, two or many organisations; and whether any of those organisations subcontract to (prime contractor models), or formally partner with (alliance contractor models), other providers to deliver the care required by patients. Integration of care is difficult and an open mind is needed as to how it can be achieved. Applying the feasibility framework described in Chapter 6 should enable commissioners to decide whether and where competition could help with that.

8. CONCLUSIONS, POLICY IMPLICATIONS AND RECOMMENDATIONS

The NHS is far from being a competition-free zone. Among other areas, there is already competition to provide primary care, mental health services and elective surgery. But the extent of competition remains confined to a minority of the services provided to NHS patients. The OHE Commission has considered the circumstances where competition might be both feasible and expected to yield benefits and where not.

The potential roles for competition between providers of health care services are to:

- Reduce inefficiencies that may arise, particularly where existing providers have monopoly power
- Encourage providers to be more responsive to the wishes of patients, GPs and commissioners of health services
- Stimulate innovation, including through market entry
- Provide information about how high a level of quality is obtainable for a given price or, if prices are flexible, how far it is possible to obtain the same quality of services at lower cost
- Identify providers that are not producing good value for money

But competition remains controversial in an NHS context. Many of the concerns that are raised about the use of competition, while valid in some circumstances, do not constitute fundamental objections of principle. They are often concerns about practical issues of implementation and the applicability of market mechanisms in different specific situations. They might be based on doubts about the capability of purchasers and providers to operate the systems required for competition, or stem from deep seated cultural and other less tangible objections. Health care often does not have clearly defined products, and even where it does these may not be straightforward to price. But problems of capability and capacity, while they need to be taken into account, should not be seen as vetoes to considering using competition as a tool for improving health care.

Competition is *potentially* useful to stimulate the provision of better quality and more health care for the NHS's budget beyond what is possible in the absence of competition. But this does not mean that competition is desirable or feasible for all NHS services in all locations. Health care markets, where they are established, need to be monitored and managed. Competing providers may have greater incentives than already exist (and they do already exist even where there is no competition) to skimp on quality where that will be observed only indistinctly or not at all, or to attempt to cherry pick by treating only the lower cost patients and dumping those with higher treatment costs (relative to the payment received) onto other providers. As resources are required to promote competition and to monitor and manage it so that it does not lead to worsened quality, choices need to be made about priority areas for applying competition.

Therefore, selecting where and when to promote and enable competition is an important decision for health policy makers and local NHS commissioners alike. Competition has a role, but it is not a panacea, and careful thought is needed to decide where and how to use it.

Empirical evidence relevant to the NHS about the effects of competition in health care markets is limited.

Such evidence as exists concerning the impact of competition among health care providers when prices are allowed to be flexible is that it leads to lower costs and shorter waiting times for patients, but that it also may lead to lower quality care. The latter danger arises particularly where the quality of care is not visible to patients and their GPs, or becomes visible only after a considerable time lag.

However, evidence both from the UK and internationally suggests that quality based competition with prices fixed by a regulator can be beneficial, producing higher quality care at the same cost on average, and, importantly, not leading to increased inequity in access to health care. It is therefore sensible to consider the extension of quality competition with fixed prices where it is feasible.

It is worth noting that fixing prices comes at a cost. Over time the process of determining at what levels to fix the prices of hundreds of different services may become increasingly problematic as providers' recorded costs converge onto the prices they know they will be paid and information about the possibility of cost reduction becomes increasingly obscured by the lack of benchmarks. It is in any case difficult to fix prices at levels appropriate to the service quality desired when that quality cannot be observed, and not all aspects of quality are observable. Consequently, the risk exists that prices fixed by a regulator may increasingly diverge from the costs of providing the services to the desired quality. While prices remain fixed, more resource will need to be devoted to determining appropriate prices than has been the case hitherto in the NHS in England. But we also note the experience of the price-regulated utilities in the UK (telecommunications, energy, water), where price regulation is pursued only as an interim solution until effective competition can be established to take its place.

Competition *in* the market is possible where individual patients, advised by their GPs as appropriate, are able to exercise effective choice and there are no overriding economies of scale or scope. In particular, where episodes of care are well-defined and outcomes are relatively easily monitored, choice of any qualified provider (AQP) makes sense.

But competition *for* the market may be equally attractive and is possible in a wider range of service types, including where episodes of care are not well-defined and/or outcomes are difficult to measure. Competition *for* a market typically requires a clinical commissioning group (or Primary Care Trust) either on its own or in a consortium with other groups/PCTs to run a competitive tender exercise, awarding contracts for fixed periods but with the clear option of renewal if the provider demonstrates satisfactory performance. Often a contract will be awarded to a single winning tenderer, but there may be other circumstances where it is desirable to award contracts to more than one provider simultaneously, perhaps on a geographical basis, to facilitate comparison of quality and efficiency. Whether for a single or multiple contractors, such procurement may involve price competition, so long as quality can be measured appropriately.

More provider-specific information about the quality of care provided and the patient outcomes that result from it needs to be collected and made available to regulators, commissioners, GPs and patients. That is the case whether competition is limited to quality alone (prices are fixed by a regulator) or to quality and price simultaneously (i.e. prices are flexible). A good start has been made in the collection of patient-reported outcomes but production of that information needs to be progressively and rapidly increased and widened to cover the majority of health care (not just the few, albeit common, surgical procedures for which PROMS are currently collected). To the extent that happens, consideration could in future be given to encouraging price competition for those services where quality comes to be better specified and measured, i.e. where the risk of quality worsening can be managed.

Two myths concerning competition need to be challenged. First the alleged incompatibility of competition and integration of care: we are not aware of any evidence that competition *per se* has hampered integration. Integration of care provision is not a barrier to competition. There can be competing integrated providers of care; or a single provider of integrated care selected by periodic competitive tendering; or a range of other prime contractor or alliance arrangements such that parts or all of services to be integrated are subject to competition.

Second, the muddling of competition and privatisation: in fact competition does not require privatisation. We would encourage competition, where it looks to be both beneficial and feasible, between publicly-owned providers. We do not propose changing the ownership of any existing providers. But we also would not wish to prevent private not-for-profit or for-profit providers from joining in any competition.

We note that the entry of new providers into a market can be an important source of innovation. New entry into provision of a service in a local health economy could be by a publicly owned provider already active in another part of the country, or it could be by a privately owned organisation, whether active elsewhere in the health care system or entirely new to it, whether not-for-profit or for-profit. But new entry is not easy and can appear very risky to potential entrants, making them reluctant to invest time and effort in the attempt. A major element of risk for new entrants is fear of being obstructed by other parts of the NHS or of lack of

commitment by purchasers to switch business away from the incumbent providers, given the political and other costs of closing the facilities of an existing provider. So NHS commissioners should be clear about the extent of their commitment to enabling and supporting new entry in some markets where they are aware of the scope for beneficial innovation.

In general, local NHS commissioners need to consider the desirability of competition to improve the provision of specific health services locally and, **using the OHE Commission framework published in this report**, the feasibility of competition where it would be desirable. The desirability of competition will depend on the comparative performance of local providers. Where current provider performance suggests the most significant scope for improvement and competition for those services appears feasible, it makes sense for NHS commissioners to actively promote and facilitate competition as long as the transactions costs of competition are not too high. In addition to local initiative, the NHS Commissioning Board might usefully take on the responsibility for driving the development of competitive local markets for some services.

The impact of competition needs to be evaluated, to inform its further spread or not, as the future evidence implies. Commissioners need to measure the impact of competition on outcomes (and costs, where relevant) as they progressively introduce it. The research evidence base is small and requires explicit research funding devoted to the evaluation of the impact of competition. The introduction of routine collection of patient reported outcome measures (PROMs), initially for common surgical procedures, but we hope in time for a much wider range of NHS-funded care, should enable a much better assessment than has been hitherto possible of the impact of competition on the quality of health care.

Based on these conclusions, the OHE's recommendations are for the Department of Health:

1. To establish a presumption across the NHS that where competition is feasible and could improve the performance of local providers, local commissioners should actively support competition. To promote the OHE Commission's framework to NHS commissioners as a useful tool for determining the feasibility of competition locally.
2. Not to require commissioners to introduce competition for all services, but if some commissioners do not widen the scope of competition between providers of those services for which competition has been beneficial elsewhere, to require them to publish their justification for not doing so.
3. To provide guidance on options for appropriate use of competition as part of the process of commissioning integrated care.
4. To continue to expand the programme of routine collection and publication of patient outcome measures.
5. To fund the evaluation of the impact of competition for NHS-funded services

And for local NHS commissioners to:

1. Prioritise opportunities for beneficial expansion of competition *in* and *for* provision of health care services. Assess the feasibility of competition using the OHE Commission's framework.
2. Consider using competitive "any qualified provider" arrangements wherever competition can reasonably be expected to be beneficial and feasible in the local health economy, and where episodes of care are well-defined and outcomes are relatively easily monitored.
3. Consider competitive procurement options for other services where competition can reasonably be expected to be beneficial and feasible in the local health economy, and where episodes of care are not well defined and/or outcomes continue to be difficult to measure.
4. Be explicit about those local health care markets where they would actively welcome new entry.
5. Generate evidence about, and participate in evaluation of, the impact of competition

REFERENCES

- Allen, P. and Jones, L. (2011) Diversity of health care providers. In Mays, N., Dixon, A. and Jones, L. eds. *Understanding New Labour's market reforms of the English NHS*. London: King's Fund. 16-29.
- Allen, R. and Gertler, P. (1991) Regulation and the provision of quality to heterogeneous consumers: The case of prospective pricing of medical services. *Journal of Regulatory Economics*. 3(4), 361-375.
- Armstrong, M. (2008) Interactions between competition and consumer policy. *Competition Policy International*. 4(1), 97-147.
- Armstrong, M. and Sappington, D. (2006) Regulation, competition and liberalization. *Journal of Economic Literature*. 44(2), 325-366.
- Bevan, G. and Skellern, M. (2011) Does competition between hospitals improve clinical quality? A review of evidence from two eras of competition in the English NHS. *British Medical Journal*. 343. Available at <http://www.bmj.com/content/343/bmj.d6470>. [Accessed 9 January 2012].
- Bloom, N., Propper, C., Seiler, S. and Van Reenen, J. (2010) *The impact of competition on management quality: Evidence from public hospitals*. CEP Discussion Paper 983. October. London: London School of Economics and Political Science.
- Brereton, L. and Gubb, J. (2010) *Refusing treatment. The NHS and market-based reform*. London: Civitas.
- Browne, J., Jamieson, L., Lewsey, J., Van der Meulen, J., Copley, L. and Black, N. (2008) Case-mix and patients' reports of outcome in independent sector treatment centres: Comparison with NHS providers. *BMC Health Services Research*. 8(78). Available at <http://www.biomedcentral.com/1472-6963/8/78>. [Accessed 9 January 2012].
- Chalkley, M. and Malcomson, J.M. (2000) Government purchasing of health services. In Culyer, A.J. and Newhouse, J.P. eds. *Handbook of health economics volume 1*. Amsterdam: Elsevier North Holland. 848-890.
- Cookson, R. and Dawson, D. (2006) Hospital competition and patient choice in publicly funded health care. In Jones, A.M. ed. *The Elgar companion to health economics*. Cheltenham: Edward Elgar Publishing. 221-232.
- Cookson, R., Dusheiko, M., Hardman, G. and Martin, S. (2010) Competition and inequality: Evidence from the English National Health Service 1991-2001. *Journal of Public Administration Research and Theory*. 20(suppl 2), i181-i205.
- Cookson, R., Laudicella, M. and Li Donni, P. (2011) *Does hospital competition harm equity? Evidence from the English National Health Service*. Centre for Health Economics Research Paper 66. York: University of York.
- Cooper, Z., Gibbons, S., Jones S. and McGuire A. (2011) Does hospital competition save lives? Evidence from the English NHS patient choice reforms. *The Economic Journal*. 121(554), F228-F260.
- CCP (Co-operation and Competition Panel). (2011) *Review of the operation of 'any willing provider' for the provision of routine elective care*. London: Co-operation and Competition Panel for NHS Funded Services.
- Croxxon, B. (1999) *Organisational costs in the New NHS*. London: Office of Health Economics.
- Dawson, D., Dowie, R. and Gravelle, H. (2004) *Balancing the concentration of services required for professional training requirements with demand and needs for local services: A policy analysis*. Report for the National Co-ordinating Centre for NHS Service Delivery and Organisation R&D. London: National Co-ordinating Centre for NHS Service Delivery and Organisation R&D.
- DH (Department of Health, UK). (2010a) *Principles and rules for cooperation and competition*. London: Department of Health.
- DH (Department of Health, UK). (2010b) *Report on the National Patient Choice Survey, England – February 2010*. London: Department of Health.
- DH (Department of Health, UK). (2010c) *Procurement guide for Commissioners of NHS-funded services*. London: Department of Health.
- DH (Department of Health, UK). (2011a) *Government response to the NHS Future Forum Report*. London: Department of Health

- DH (Department of Health, UK). (2011b) *Operational guidance to the NHS: Extending patient choice of provider*. London: Department of Health.
- Dixon, A. and Robertson, R. (2011) Patient choice of hospital. In Mays, N., Dixon, A. and Jones, L. eds. *Understanding New Labour's market reforms of the English NHS*. London: King's Fund. 52-65.
- Dixon, A., Robertson, R., Appleby, J., Burge, P., Devlin, N. and Magee, H. (2010) *Patient choice. How patients choose and how providers respond*. London: The King's Fund.
- Dranove, D. and Satterthwaite, M.A. (1992) Monopolistic competition when price and quality are imperfectly observable. *RAND Journal of Economics*. 23(4), 518-534.
- Farrar, S., Yi, D., Sutton, M., Chalkely, J., Sussex, J. and Scott, A. (2009) Has payment by results affected the way that English hospitals provide care? Difference-in-differences analysis. *British Medical Journal*. 339. b3047.
- Forder, J. and Allan, S. (2011) *Competition in the care homes market*. London: Office of Health Economics.
- Gaynor, M. (2006) Competition and quality in health care markets. *Foundations and trends in microeconomics*. 2(6), 441-508.
- Gaynor, M., Moreno-Serra, R. and Propper, C. (2010) *Death by market power: Reform, competition and patient outcomes in the National Health Service*. NBER Working Paper 16164. Cambridge, MA: National Bureau of Economic Research. [Also published as CMPO Working Paper 10/242. Bristol: The Centre for Market and Public Organisation, University of Bristol.].
- Gaynor, M. and Town, R.J. (2011 forthcoming) Competition in health care supply. In Pauly, M.V., McGuire, T.G. and Pita Barros, P. eds. *The handbook of health economics volume 2*. Amsterdam: Elsevier North Holland.
- Goodwin, N., Smith, J., Davies, A., Perry, C., Rosen, R., Dixon, A., Dixon, J. and Ham C. (2011) *Integrated care for patients and populations: Improving outcomes by working together*. A report to the Department of Health and the NHS Future Forum. London: The King's Fund and The Nuffield Trust.
- Goudie, R. and Goddard, M. (2011) *Review of evidence on what drives economies of scope and scale in the provision of NHS services, focusing on A&E and associated hospital services*. London: Office of Health Economics.
- HM Government. (2011) *Open public services: White paper*. Cm 8145. London: The Stationery Office.
- House of Commons Health Committee. (2010) *Public expenditure on health and personal social services 2009*. HC 269-i. London: The Stationery Office.
- Hunter, D.J. (2009) The case against choice and competition. *Health Economics, Policy and Law*. 4, 489-501.
- Laing & Buisson. (2010) *Care of elderly people: UK market survey 2010/11*. London: Laing & Buisson.
- Le Grand, J. (1997) Knights, knaves or pawns? Human behaviour and social policy. *Journal of Social Policy*. 26(2), 149-169.
- Le Grand, J. (2009) Choice and competition in publicly funded health care. *Health Economics, Policy and Law*. 4(4), 479-488.
- Le Grand, J., Mays, N. and Dixon, J. (1998) The reforms: Success, failure or neither? In Le Grand, J., Mays, N. and Mulligan, J. eds. *Learning from the NHS internal market*. London: King's Fund Institute.
- Le Grand, J., Mays, N. and Mulligan, J. (1998) *Learning from the NHS internal market*. London: The King's Fund.
- Mays, N. and Dixon, A. (2011) Assessing and explaining the impact of New Labour's market reforms. In Mays, N., Dixon, A. and Jones, L. eds. *Understanding New Labour's market reforms of the English NHS*. London: King's Fund. 124-142.
- Mays, N., Dixon, A. and Jones, L. eds. (2011a) *Understanding New Labour's market reforms of the English NHS*. London: King's Fund.
- Mays, N., Dixon, A. and Jones, L. (2011b) Return to the market: Objectives and evolution of New Labour's market reforms. In Mays, N., Dixon, A. and Jones, L. eds. *Understanding New Labour's market reforms of the English NHS*. London: King's Fund. 1-15.

- Mays, N., Mulligan, J. and Goodwin, N. (2000) The British quasi-market in health care: A balance sheet of the evidence. *Journal of Health Services Research and Policy*. 5(1), 49-58.
- Mordoh, A. (2011) *Critical review of the quality and competition measures and identification strategies used in health care studies*. London: Office of Health Economics.
- Pollock, A., Macfarlane, A., Kirkwood, G., Azeen Majeed, F., Greener, I., Morelli, C., Boyle, S., Mellett, H., Godden, S., Price, D. and Brhlikova, P. (2011) No evidence that patient choice in the NHS saves lives. *The Lancet*. 378(9809), 2057-2060.
- Propper, C., Burgess, S. and Gossage D. (2008) Competition and quality: Evidence from the NHS internal market 1991-9. *The Economic Journal*. 118(525), 138-170.
- Propper, C. and Dixon, J. (2011) Competition between hospitals. In Mays, N., Dixon, A. and Jones, L. eds. *Understanding New Labour's market reforms of the English NHS*. London: King's Fund. 78-88.
- Propper, C., Sutton, M., Whitnall, C. and Windmeijer, F. (2008) Did 'targets and terror' reduce waiting times in England for hospital care? *The B.E. Journal of Economic Analysis & Policy*. 8(2), Article 5.
- RCGP (Royal College of General Practitioners). (2011) *The Government's health reforms. An Analysis of the need for clarification and change*. London: Royal College of General Practitioners.
- Smith, P. (2009) Market mechanisms and the use of health care resources. In *Achieving better value for money in health care*. Paris: OECD. 53-77.
- Söderlund, N., Csaba, I., Gray, A., Milne, R. and Raftery, J. (1997) Impact of the NHS reforms on English hospital productivity: An analysis of the first three years. *British Medical Journal*. 315, 1126-1129.
- Sussex, J. (1998) *Competition and contestability between acute hospitals*. London: Office of Health Economics.
- Sussex, J. (2009) How fair? Competition between independent and NHS providers to supply non-emergency hospital care to NHS patients in England. *OHE Briefing*. 50. London: Office of Health Economics.
- Sussex, J. and Farrar, S. (2009) Activity-based funding for National Health Service hospitals in England: Managers' experience and expectations. *European Journal of Health Economics*. 10(2), 197-206.
- Turner, S., Allen, P., Bartlett, W. and Pérotin, V. (2011) Innovation and the English National Health Service: A qualitative study of the independent sector treatment centre programme. *Social Science & Medicine*. 73(4), 522-529.
- Walshe, K. and Ham, C. (2011) Can the government's proposals for NHS reform be made to work? *British Medical Journal*. 342. Available at <http://www.bmj.com/content/342/bmj.d2038>. [Accessed 9 January 2012].
- West, P. (1997) *Understanding the National Health Service: The creation of incentives?* Buckingham: Open University Press.

APPENDIX I – TERMS OF REFERENCE FOR THE OHE COMMISSION ON COMPETITION IN THE NHS

In most markets, competition between providers and contest from potential new entrants are seen as desirable to drive efficiency and responsiveness to the wishes of consumers. However, health care is not like most markets. The policy debate about the role of competition in the NHS is often polarised, implying an “all or nothing” approach: competition for everything or for nothing. But such extreme positions are unlikely to represent the most socially beneficial outcome.

The purpose of the OHE Commission on Competition in the NHS is to investigate for which health care services and in which circumstances competition or contest is likely to be beneficial overall and for which it is likely to be harmful.

The Commission will collect evidence, consider and make recommendations to policy makers and implementers in the UK on:

- The characteristics of publicly funded health care services that determine whether competition or contest is likely to be beneficial
- Non-price and price competition
- How competition and contest, where potentially beneficial, might be enabled, promoted and regulated

Although the Commission is explicitly focused on competition and contest in the provision of health care, consideration will also extend to competition/contest between commissioners of health care insofar as it affects competition between providers.

The Commission is chaired by Professor James Malcomson, Professor of Economics at the University of Oxford and Fellow of All Souls College. The members of the Commission collectively provide expertise and experience of: competition/regulation economics, NHS economics, health policy, NHS management and health care provision.

The Commission will review existing evidence and procure additional research where most needed. The Commission is expected to meet approximately quarterly, but will contribute inputs via e-mail between meetings, and seminars will be run to gather and review evidence. Work is expected to start on December 2010 and a final report will be prepared by late 2011, both summarising the evidence and arguments and making recommendations for policy and implementation.

Commission members:

- Jim Malcomson (Chair) – Professor of Economics, University of Oxford and Fellow, All Souls College
- Mike Bailey – Medical Director and Deputy Chief Executive, St George’s Hospital, London
- Anita Charlesworth – Chief Economist, The Nuffield Trust
- Nigel Edwards – Senior Fellow at The King’s Fund, a Director with the Global Healthcare Group at KPMG LLP, and, until July, 2011 Acting Chief Executive, NHS Confederation
- Julian Le Grand – Richard Titmuss Professor of Social Policy, London School of Economics and Political Science
- Carol Propper – Professor of Economics, Imperial College and Bristol University
- Bob Ricketts – Director, Provider Policy, Department of Health
- Jon Sussex – Deputy Director, Office of Health Economics
- Adrian Towse – Director, Office of Health Economics

APPENDIX II – FRAMEWORK FOR ASSESSING THE FEASIBILITY OF COMPETITION IN PROVISION OF HEALTH CARE SERVICES

This appendix sets out a framework for assessing the feasibility of competition in the provision of health care services. Competition economics provides a theoretical structure. The Department of Health undertook a lot of preparatory work for market assessment, particularly in 2008. Drawing on these sources, our knowledge of the nature and variety of NHS-funded health care, and of the history of attempts to introduce/expand competition to provide that care, we have constructed a schematic table or "matrix" of dimensions for assessing the feasibility of:

- Competition in the market; or
- Contest, i.e. potentially naturally occurring competition for the market; or
- Franchising, i.e. "contest" managed by the payer.

The extent of competition for provision of NHS-funded health care is currently modest. The OHE Commission wishes to help NHS commissioners identify the highest priority areas of NHS services for applying that effort, which means identifying those services where competition is likely to be most feasible and most desirable. This appendix addresses the question of feasibility. It is a separate question how desirable competition is from a social welfare perspective in any particular case, and that will largely depend on the extent to which existing providers in a local health economy are underperforming on quality or efficiency.

The dimensions of feasibility of competition are listed in the table at the end of this Appendix and are explained in the following paragraphs. Table A2.1 can be used to gain an impression of the overall feasibility of competition for a particular type of health services – e.g. community based mental health care or hospital major trauma services. How propitious competition appears to be for a particular service on a particular dimension can be represented as green, yellow or red in order of declining feasibility of competition:

- Green implies no/low barrier to competition in the market and/or entry into it by new providers.
- Yellow implies some hindrance to competition between existing providers and/or some discouragement to potential new entrants.
- Red implies a major impediment to competition between existing providers and/or to new entry.

We have illustrated the purpose of the matrix by using it to provide a hypothetical initial characterisation of six different health care services. We have scored each service as green, yellow or red according to our assessment of the feasibility of competition as measured on 23 dimensions, grouped under five broader headings. This is a crude tool to help decide on priorities for competition on grounds of its feasibility; it is not a precise determination. But when comparing two services a greater preponderance of green is more encouraging to competition than a preponderance of yellow or, *a fortiori*, red.

When assessing the feasibility of competition, the identity of the decision-making "customer" is important, i.e. whether:

- Individual patient without GP advice – e.g. for primary care (which GP, dentist, optician)
- Individual patient with GP advice available – e.g. for elective hospital services
- GP on behalf of their individual patient – e.g. for some community based services and/or more specialised elective hospital services where the patient feels not fitted to choose
- PCT/Clinical Commissioning Group – commissioning local services, including emergency care
- NHS Commissioning Board – commissioning highly specialised and costly services.

Competition is feasible whichever of these is the decision-making customer, but the nature of the customer can affect how some dimensions of competition are thought about. For example, acquiring and interpreting information about the outputs and quality of some health care services is likely to be easier for GPs than for patients, or easier for local commissioning bodies than for either of them, and may be easiest of all for clusters of local commissioners or the national NHS Commissioning Board in some cases. Also, patients will not be

concerned about the price of the service, as they do not pay it, but a PCT or Clinical Commissioning Group might well be.

The dimensions for assessing the feasibility of competition in provision of health care services are:

- **Demand factors:**

- **Demand density** – The quantity of demand that might realistically be expected within a given geographic area (relative to the minimum efficient scale of providing the services). This will depend on population density per km² and characteristics, and on the incidence and prevalence rates of conditions requiring health care intervention. The more people wanting a service within a given area, the greater the likelihood that competition will be feasible.
- **Willingness to travel** – Interacts with, but is distinct from, demand density. Patients' willingness to travel to receive care, and to incur consequent cash, time and inconvenience costs, varies between patients and according to the type of services they seek. Willingness to travel may be high for one-off access to specialised services to treat major health problems; it may be low for access to more mundane services dealing with frequently occurring or minor health issues. The more patients are willing to travel the greater the scope for competition.
- **Health impact of travel time** – When patients actively choose where to go for health care, this can be assumed to be subsumed within the dimension willingness to travel, but when patients are not in a position to choose, e.g. when needing emergency care, the decisions of commissioners about where to preposition service providers, and how many of them to have available, will depend on whether increased travel time will damage patients' health. This is most obviously the case for A&E services for severely ill patients.
- **Demand variability** – Other things being equal, a steady and predictable flow of demand is more attractive for new entrants considering providing a service in an area than is a variable and unpredictable flow, which can create cash flow problems and also increases uncertainty about the viability of continuing to compete once in a market.

- **Ease of acquiring information about output quality:**

- **Search costs** – Some information about the quality of health care from a particular service provider may be obtained prior to the decision about where to obtain the service. The lower the costs of obtaining and digesting this information, the greater the potential for appropriate quality-based competition.
- **Switching costs** – Any costs that might be incurred by the customer if they wish to switch away from providers they already know about and turn instead to untried alternatives – e.g. the cost of gaining some experience with a new provider
- **Ease of defining and monitoring output and quality** – Some services are harder than others to specify in contracts and consequently to monitor and enforce contracts subsequently – e.g. where important aspects of service will be subjectively felt by patients but are hard to measure objectively.

- **Cost / technology factors:**

- **Economies of scale from fixed costs** – The existence of substantial fixed costs – e.g. of buildings, plant and equipment – may mean that the minimum efficient scale of some services is large relative to demand in an area, so that a single provider might be most efficient in such an area. But for some services and geographical areas this will not be a significant issue.
- **Sunk costs / specific assets** – Some fixed costs are not "sunk" in that they can be put to a variety of uses: an office building is a fixed cost but not a sunk cost as the offices can serve numerous alternative uses; but a linear accelerator and its bunker can only be used for radiotherapy and represents a sunk cost of being in the radiotherapy "market". Significant sunk costs are a deterrent to competition via new entry.
- **Economies of scale from learning by doing** – New or small providers may find it hard to compete with larger existing providers of services where there is significant "learning by doing" such that a provider that has done more cumulatively can supply at lower cost and/or higher quality as a result.
- **Economies of scope** – Exist where it is less costly or yields higher quality or both to deliver two or more services jointly than to provide them separately. For example providing plastic surgery and trauma services together may be less costly for a given quality of service than providing each of them separately; or co-locating gynaecology and obstetrics services.

- **Transactions costs with multiple providers** – Negotiating with and monitoring multiple providers may cost significantly more than dealing with a single provider, or such costs may be trivial.
- **Dependence on network infrastructure** – Provision of some health care services may depend on access to network infrastructures such as regional ambulance services. For a new entrant to a health care market dependent on that network (e.g. provision of emergency hospital services), gaining access to such infrastructure may be more costly or difficult than for an incumbent, especially if there are established relationships between incumbent rivals and the network provider.
- **Scope for cherry picking and/or dumping** – Where costs of treating different patients are likely to vary widely between individual patients in a way that is not reflected (or not fully reflected) in the prices the provider would receive for supplying that treatment, all providers have a financial incentive to cherry pick the lower cost patients and dump onto other providers the higher cost patients. Providers' ability to do that depends in part on the ease of assessing a patient's likely costs before accepting them (e.g. are there observable characteristics correlated strongly with cost), the likelihood of payers observing the cherry picking or dumping, and their scope for regulating it, e.g. by effecting post hoc financial adjustments.
- **Short term supply side factors:**
 - **Existing providers of same or substitute services** – If a significant number of patients in an area already have a realistic range of alternative providers available to them – either of identical services or of realistic substitute services – then the feasibility of competition in the short term is greater than if there is effectively only a single existing provider. In the longer term, the possibility of new entry may make the number of existing providers less important.
 - **Spare capacity in existing providers** – Spare capacity in one or more providers is needed for competition to happen in the short term. In the longer term additional capacity can be built/equipped/staffed, so spare capacity is a short term issue only.
 - **Asymmetric competitive constraints** – Existing providers may have different capacities to compete with one another. For example a hospital-based provider might be able readily to expand into community provision by “reaching out” with its staff, whereas a community-based provider would not be able to match the hospital-based providers' back-up facilities (specialist diagnostics, inpatient beds for admissions of emergency exacerbations). This imbalance of power could render the weaker party unwilling to try to compete with its more powerful rival even for services it is capable of delivering, for fear of adversely affecting future relationships.
 - **Input shortages (especially key staff)** – Specialised staff may be in limited supply, although this is less of a problem than it was ten years ago thanks to the investments in increased medical and nursing workforces in the UK over that period. The international market in skilled health care professionals is also active. Nevertheless, in the short run, there may be difficulties for a would-be competitor in accessing all of the necessary specialised staff. Capital market vagaries and restrictions on public sector bodies' borrowing also might constrain the availability of capital to finance investment in new and/or replacement capacity.
- **Institutional / political factors:**
 - **Ownership** – Does not affect the ability, in principle, to compete but does affect the feasibility of competition in practice for the following main reasons. (1) Based on the history of the NHS to date, an independent provider may fairly assume that a publicly owned rival will probably not be allowed to fail; that a mechanism will always be found to bail out an unsuccessful publicly owned provider. This may be explained on the grounds that public ownership may confer obligations that lead to higher costs, such as a responsibility to accept all patients however costly, or to provide training and education services that may not be fully reimbursed; or the reasons may simply be political. (2) Private ownership brings with it unavoidable additional tax costs, pension costs (due to the NHS pension not being fully funded by employee and employer contributions) and costs of capital (no access to low cost borrowing via the Exchequer) relative to NHS/public ownership. The perceived relevance of, and balance between, these factors may vary between locations and types of service being considered.
 - **Too important to fail** – An incumbent may be seen, independently of ownership, as too important to be allowed to fail even if there is another provider that is apparently able to replace it. The political risk associated with change may be deemed too high.

- **Incumbent's reputation** – The reputation of a provider may in part be independent of observed aspects of the current quality of the services it provides. An incumbent with a high overall reputation, perhaps for historical reasons, is hard to compete with even if only for services where the incumbent's current performance is poor.
- **Fear of "hold-up" / low credibility of payers** – Where an initial investment is required in sunk costs, a new entrant is dependent on the payer (PCT / GP consortium) not renegeing on the terms of the initial contract or agreement. The credibility of payers in that respect may be variable; there may be a local history of promises not being kept by the PCT due to changed circumstances or changed priorities, e.g. short notice withdrawal of funding from a service.
- **Entry deterrence:** Strength of potential entry deterrence by incumbents may vary across health care services, depending on how important to incumbents' overall business they are and on the incumbents' ability to cross-subsidise activities under threat of competition from the revenues received for less-threatened services.

Table A2.1: Competition feasibility framework with hypothetical example

					Elective hip replacement	Major trauma services	Supporting diabetes patients	Cancer chemo-therapy	End of life palliative care	Community based mental health care
Demand factors	Demand density	High	Medium	Low	High	Medium	High	High	High	High
	Willingness to travel	High	Medium	Low	Medium	N/A	Low	Low	Low	Low
	Health impact of travel time	None	Minor	Major	None	Major	None	Minor	None	None
	Demand variability	Low	Medium	High	Low	High	Low	Low	Low	Low
Ease of acquiring information about output quality	Search costs	Low	Medium	High	Medium	Low	Medium	Medium	Low	High
	Switching costs	Low	Medium	High	Low	High	Low	Medium	Low	Medium
	Ease of defining & monitoring output & quality	Easy	Medium	Difficult	Easy	Medium	Medium	Medium	Easy	Difficult
Cost/technology factors	Economies of scale from fixed costs	Small	Modest	Large	Small	Large	Small	Small	Small	Small
	Sunk costs/specific assets	None	Small	Large	Small	Large	None	None	None	None
	Economies of scale from learning by doing	None	Modest	Large	Modest	Large	None	None	None	None
	Economies of scope	None	Modest	Large	Modest	Large	None	None	None	None
	Transactions costs with multiple providers	Low	Modest	High	Low	High	Low	Low	Low	High
	Dependence on network infrastructure	None	Modest	Large	None	Large	Modest	Modest	None	Modest
Short term supply side factors	Scope for cherry picking and/or dumping	None	Minor	Major	Minor	Minor	Minor	None	None	Minor
	Existing providers of same or substitute services	Several	Few	One	Several	Few	Several	Several	Several	Few
	Spare capacity in existing providers	Substantial	Modest	None	Modest	Modest	Modest	Modest	Modest	None
	Asymmetric competitive constraints	None	Modest	Substantial	None	None	Modest	None	None	Modest
Institutional/political factors	Input shortages (especially key staff)	None	Modest	Substantial	None	Modest	None	None	None	Modest
	Ownership	Private	Mixed	Public	Mixed	Public	Public	Public	Private	Mixed
	Too important too fail	No	Maybe	Yes	No	Yes	No	No	No	No
	Incumbent's reputation	Low	Moderate	High	Varies	High	Varies	Varies	High	Varies
Entry deterrence	Fear of "hold-up"-low credibility of payers	None	Minor	Major	None	None	None	None	Major	Minor
	Strength of entry deterrence by incumbents	None	Weak	Strong	None/weak	Strong	None/weak	None/weak	None/weak	None/weak



Southside 7th Floor 105 Victoria Street London SW1E 6QT
Telephone: +44 (0)20 7747 8850 Facsimile: +44 (0)20 7747 8851 Blog: news.ohe.org Email: ohgeneral@ohe.org
www.ohe.org
© Office of Health Economics