
Completed joint venture between the Carlyle Group and Palamon Capital Partners LP for the acquisition of Integrated Dental Holdings Group and Associated Dental Practices

ME/4926/11

The OFT's decision on reference under section 22 given on 10 June 2011. Full text of decision published 30 June 2011.

Please note that the square brackets indicate figures or text which have been deleted or replaced in ranges at the request of the parties or third parties for reasons of commercial confidentiality.

PARTIES

1. **The Carlyle Group** (Carlyle) is a global alternative asset manager, which sponsors funds that invest globally across various disciplines in a range of industries. The Carlyle Group does not presently have interests in any business providing dental treatment in the UK or elsewhere in the European Union.
2. **Palamon Capital Partners LP** (Palamon) is a private equity firm, focussing on investing in Europe in service oriented businesses with high growth potential.
3. **Associated Dental Practices (ADP)** is made up of a group of entities presently owned by Palamon through ADP Healthcare. The main operating entity is ADP Dental Company Limited. ADP operates around 130 practices throughout England and Wales with approximately 330 self employed dentists. ADP's practices offer the full range of NHS dental services and ADP generated revenue of approximately £[] million in 2010.

4. **Integrated Dental Holdings Group (IDH)** is a dental group with approximately 325 practices throughout the UK, consisting of 281 practices in England, 29 practices in Scotland and 15 practices in Wales, with approximately 850 self-employed dentists, and offers NHS and private dental treatment. IDH focuses primarily on providing NHS dental services and generated revenue of approximately £[] million in the financial year ending April 2010.

TRANSACTION

5. On 11 May 2011 Carlyle and Palamon completed a deal to jointly control IDH and ADP. They did this by creating a new joint venture company which, via a wholly owned subsidiary, acquired ADP. This subsidiary company then acquired IDH. As such ADP and IDH have ceased to be distinct enterprises. The two stages are referred to collectively as the merger. The merger was announced on 28 January 2011.

JURISDICTION

6. The merger was notified to the European Commission (the Commission) on 15 February 2011 by means of a Reasoned Submission. The parties' requested that jurisdiction for the case to be transferred in its entirety to the UK pursuant to Article 4(4) of the EC Merger Regulation. The Office of Fair Trading (OFT) informed that Commission that it did not oppose the request. On 22 March 2011 the Commission transferred the case in its entirety to the UK.
7. The statutory deadline pursuant to section 34A of the Enterprise Act 2002 (the Act) is 10 June 2011.

REGULATORY ENVIRONMENT

8. The provision of NHS dentistry in England and Wales is tightly regulated.¹ The key features of the system are:

¹ The parties do not overlap in Northern Ireland or Scotland.

- dentists wishing to supply NHS dentistry treatments must be registered with the General Dental Council (GDC) and with the relevant Primary Care Trust (PCT) as a 'performer';
- practices wishing to supply NHS dentistry treatments must have a contract (Service Level Agreement or SLA) with the relevant PCT. This agreement contracts the level of dental or orthodontic treatments per year that the PCT wants provided by that practice. SLAs can be for a fixed term (Personal Dental Services contracts) or on a rolling basis (General Dental Services contracts);
- dental and orthodontic treatments are made up of treatment units known as Units of Dental Activity (UDAs) and Units of Orthodontic Activity (UOAs) respectively. Each practice will have an aggregate number of UDAs and/or UOAs to deliver each year;
- PCTs pay dental practices for delivering UDAs and UOAs (the amount of which is negotiated between them at the tendering process stage);
- for the majority of practices the level of UDAs allocated to them was based on their level of activity in 2006 when the UDA based contracts were introduced. New or additional UDAs are allocated through a competitive tendering process;
- generally, practices are not paid for any UDA / UOA performed above their allocated level and PCTs have the right to revoke contracts if less than 96 per cent of allocated UDAs / UOAs are delivered.² Unperformed treatments can be added to a practice's allocation for the following year at the discretion of the PCT;
- patients pay a regulated amount for their treatments. Each treatment is classified in one of three payment bands.³ Thus, dental practices receive income from both patients and PCTs;

² The OFT understands that revoking a contract is the final course of action after several other steps are first taken (which including discussing the issue with the practice and sending a letter of breach to it).

³ These are currently **£17** (e.g. for check-ups, preventative care, scale and polish, x-rays); **£47** (e.g. for fillings, root canals and extractions); and **£204** (e.g. for crowns, dentures and bridges).

- the quality of NHS dentistry is regulated on three fronts: the first being the requirements of the Care Quality Commission (CQC); the second being the professional practising standards set out by the GDC; and the third being the requirements of the contracts with PCTs.
9. With regards to the future structure of dentistry provision the Health and Social Care Bill (HSC Bill), which proposes structural reform to the NHS, is currently before the House of Commons. It is not clear to the OFT what form the HSC Bill will take, particularly in respect of NHS Commissioning Bodies and how they will operate in practice. It is also not clear when the proposals (in whatever form) will be implemented.⁴
10. The Department of Health has committed to running a series of contract pilots in 50 to 60 locations around the country, designed to test three different contract models. These are expected to commence in the summer of 2011.
11. Given the uncertainties surrounding the form of any reforms and their timing, the OFT has not included regulatory changes in its counterfactual in this case.

MARKET DEFINITION

Product scope

12. The parties submit that there are four possible product markets:
- the provision of dental services under contract with the NHS;
 - the provision of (private and NHS) dentistry treatment to patients;
 - the provision of orthodontic service under contract with the NHS; and
 - the provision of (private and NHS) orthodontics to patients;

⁴ As a part of its merger investigation the OFT spoke to the UK's Chief Dental Officer.

13. The parties consider that orthodontic services are separate from general dentistry since these services are provided by trained orthodontists and operate under a separate NHS regime. The OFT agrees. From the demand-side there will be little, if any, substitution between general dentistry services and orthodontic services. As the parties point out, on the supply-side there is little substitution from general dentistry to orthodontics with a general dentist required to demonstrate their knowledge of orthodontics to register with a PCT to provide UOAs.
14. On whether general dentistry services should be further segmented between NHS treatments and private treatments, the parties argue that there is considerable interaction between the two and that private provision is constrained by NHS provision (because patients will consider the differences between the two when deciding which treatment to have).
15. On the demand-side the OFT does consider, on a cautious basis, that there may be reasons for considering NHS and private treatments separately. Some private treatments arguably do not have closely substitutable NHS treatments (for example, cosmetic whitening or cosmetic fillings). A competitor submitted to the OFT results of its own research showing that moving from NHS to private dentists accounted for less than 15 per cent of patient moves.
16. The parties submitted that the large majority of practices in the UK which provide NHS treatments also provide private treatments by simple dint of the fact that patients who ordinarily receive NHS treatments will, on occasion, receive private treatment because their preferred treatment is not available on the NHS (for example, a cosmetic filling). Such patients do not normally seek out private only practices for the sake of these occasional treatments.
17. As such, the parties argue, it is clear that there are no supply-side reasons why NHS treatments should be distinct from private treatments since practices perform both. Indeed, from the supply-side, even those practices who currently undertake solely private treatments can bid for NHS contracts as long as they meet the registration requirements.⁵

⁵ OFT / CC guidance says that the OFT will generally only consider demand-side factors in forming a product scope but supply-side factors may be relevant when production assets can be

18. However, the parties submit that the OFT should not assume that []. Indeed, the parties provided evidence to the OFT that for them [].
19. Moreover, as set out in its guidance (footnote 5 above) the OFT is only likely to broaden its product scope if the conditions of competition for NHS and private treatments were the same. This is not the case here. In order to supply NHS treatments a private practice must first have a SLA with the PCT to do so.
20. Finally, the OFT considered whether each NHS contract was its own market. However, the OFT has aggregated NHS contacts on the basis that aggregating a range of contracts where the same set of firms would have been credible bidders can provide more useful information about the competitive constraints on each than would focussing on each contract individually.⁶
21. Therefore on a cautious basis, the OFT has examined the merger on the basis of NHS dentistry treatments being separate from private treatments and NHS orthodontic treatments being separate from private treatments.

Geographic scope

22. The parties submit that for both the provision of dentistry and the provision of orthodontics there are two relevant geographic markets.
23. With respect to the provision of dental and orthodontic services under contract with the NHS the parties submit that the relevant geographic market is that of individual PCTs. This was confirmed by PCTs and the NHS.
24. With respect to the provision of dentistry to patients the parties submit that the market is more local in scope and should be assessed at the

used by firms to supply a range of different products that are not demand-side substitutes, such firms can transfer asset uses within a year and the conditions of competition between the firms are the same for each product type ('Merger Assessment Guidelines', OFT1254, September 2010, paragraph 5.2.17).

⁶ 'Merger Assessment Guidelines', OFT1254, September 2010, paragraph 5.2.18

local level based on customer catchment areas. The parties submit that the appropriate isochrone radii are as follows:

- 1.5 miles within the M25 motorway in London,
- 3 miles for urban conurbations, and
- 5 miles for rural conurbations.

25. These radii are based on the parties' experience and the samples of patient home to practice distances prepared by the parties within which between [a large proportion] and [] per cent of a practices' patients live.
26. Responses from some third parties have highlighted that the local area markets are potentially wider than those submitted by the parties.
27. Most PCTs who the OFT spoke to do not have a strict measure of distance from patient to practice for local dentistry services. However, some PCTs use drive times of 15 minutes in urban areas and 30 minutes in rural areas to assess patients' access to dental services. One of these PCTs, NHS Norfolk, publish on its website a dental access standard with an urban radius of five miles and a rural radius of 10 miles both of which are equated to a 30 minute drive time.⁷
28. Competitors confirm that patients in rural areas are more likely to travel further distances to visit their dentist but also that this does not necessarily equate to longer travel times. One competitor notes that a 30 minute drive time would likely capture 85 per cent of its customers based on a sample of two of its practices.⁸
29. Following responses from third parties the OFT analysed the information supplied by the parties for a sample of their practices on the distance from patients' home addresses to practices. The OFT found that approximately 80 per cent of a practice's patients are within radii of around:

⁷ South East Essex PCT and Bedfordshire PCT are two other examples who use these measures for access standards.

⁸ Further, 60 per cent of its patients are within a 15 minute drive time. The sample used by this third party comprised one urban area practice and one rural area practice.

- 2.5 miles within the M25 motorway in London,
 - 5 miles for urban conurbations, and
 - 8 miles for rural conurbations.
30. The OFT also found that approximately 90 per cent of a practice's patients are within radii of:
- 4 miles within the M25 motorway in London,
 - 7 miles for urban conurbations, and
 - 10 miles for rural conurbations.
31. Based on the evidence from third parties with respect to the size of local areas of overlap the OFT has used the radii based on the information from the parties for 80 per cent of a practice's patients.
32. With respect to the provision of orthodontics to patients the parties submit that they estimate that patients may travel up to 20 miles to access orthodontic services, but consider radii ranging from 7 miles to 10 miles to 15 miles, with 10 miles submitted as the appropriate radius by the parties.
33. The OFT received no representation from third parties against a 10 mile radius for local markets in orthodontics, however in light of the expansion of the radii used for general dentistry the OFT has used a radius of 15 miles.
34. The OFT has therefore examined this merger on:
- a PCT-wide level for both NHS dentistry and orthodontics;
 - a local basis of 2.5 miles, 5 miles and 8 miles (as set out in paragraph 29) for dentistry; and
 - a radius of 15 miles for orthodontic services.

HORIZONTAL ISSUES

Private dentistry and orthodontics

35. The parties overlap in the provision of private treatments of dentistry and orthodontics.
36. The parties submitted that the total value of private dental treatments delivered in the UK in 2009/10 was £2.4 billion (compared to over £3 billion for NHS dentistry treatments).
37. The parties submitted that the majority of their patients receive NHS only treatments and revenue from private treatments is minor for both parties. IDH derived around [] per cent of its revenue from private treatments and ADP [] per cent over the period [] to []. Nationally, the parties submitted that, on average, around 45 per cent of a practice's income comes from private treatments.⁹ These are overall averages. Several individual practices of the parties' received a high percentage of their revenue from private treatments. However, over [] per cent of IDH practices receive less than 10 per cent of their revenue from private treatments. ADP has two private-only practices.
38. The parties submitted that the over 90 per cent of the private dentistry treatments which they carry out are to NHS patients who are opting for a cosmetic version of an NHS treatment, for example a white filling as opposed to a standard NHS filling. On this basis the parties submitted that the main constraint on the price of private treatments is the price of NHS treatments and as these treatments are normally carried out on the same visit as an NHS treatment (such as a check up) the merger does not change the level of competition to provide these treatments.
39. The parties also submitted that for other types of treatments a patient is able to choose any dentist and that competition is not less than that for NHS treatments and in fact far greater as the patient can choose between private only practices and NHS practices which have no UDA or UOA contract restrictions for private treatments.
40. The OFT did not receive information on private treatments delivered at the local level. Instead, the parties submitted evidence using the number

of dentists working within the local overlap areas. The parties submitted evidence that in the local areas of overlap there are no areas where, combined, they have over 50 per cent of the share of dentists and in all areas the parties have a far greater share of supply of NHS dentistry than share of dentists (indicating that one or both of the parties concentrate on NHS dentistry in those areas).

41. The parties argued that those dentists in rival practices have the capacity to supply private treatments, perhaps more so than indicated by their share of dentists (given the parties' disproportionate share of NHS dentistry), therefore the 50 per cent share of dentists is an upper threshold.
42. The OFT therefore does not believe there is a realistic prospect of a substantial lessening of competition (SLC) for the provision of private treatment for dentistry.
43. For orthodontics, the parties overlap in two areas. One in Taunton the other in Sandwich / Cliftonville. Both are discussed below (with respect to NHS orthodontic treatments). Based on the outcome of the analysis pertaining to NHS orthodontic treatments, the OFT has not found it necessary to consider the provision of private orthodontic treatments separately.

NHS dentistry at the PCT level

44. The parties overlap in 43 PCTs and in these overlap areas have shares of UDAs in excess of 25 per cent in [] PCTs. The highest combined share of UDAs that the parties have is [] per cent (with an increment of around [] per cent).
45. PCTs and competitors confirmed the parties' argument that competition in the supply of dentistry to the NHS is in the form of competition for new UDA volumes put out to tender by PCTs. The parties and PCTs told the OFT that only a small number (less than five per cent) of UDAs are put out to tender each year. Moreover, a very low number of contracts are revoked each year by PCTs (less than a third of PCTs contacted had

⁹ This is supported somewhat by 'NHS Dental Earnings and Expenses, England and Wales, 2008/09' report which says around a third of practices supplying NHS treatments spend at least half of their on private treatments.

terminated a contract within the last five years (averaging less than one contract per year) and even in those cases the number was generally between one and five with the primary reason being retirement of a dentist).

46. Therefore, the OFT considers that in this instance it is appropriate to place more weight on competition for new contracts in order to assess the level of competition between the parties and their competitors in the supply of NHS dentistry to PCTs.
47. The parties submitted that in the last five years they have bid on [] tenders and have competed directly on less than [] occasions. The parties also submit that for each tender there are at least five competitors and that there are no restrictions on those bidding currently providing UDAs within the PCT.
48. Competitors and PCTs confirm that the tender process does not restrict competition to those currently operating within the PCT and PCTs provide evidence of those winning tenders being from outside the PCT and setting up a new practice to fulfil the contract. PCTs also confirmed the large number of competitors for each tender with estimates at 10–20 at the expression of interest stage and 5-10 at the short listing stage. PCTs expressed no concerns with respect to the impact of the merger on competition for new UDA contracts.
49. On the basis of the evidence above and the lack of concerns from third parties the OFT does not believe there is a realistic prospect of an SLC in the provision of dentistry to the NHS.

NHS dentistry at the local level

50. The OFT has investigated whether the merger would lead to a worsening of some non-price factors of competition. Prices that patients pay are regulated and payments received by the practices from the PCTs are unaffected by the merger. In terms of which specific non-price factors may be affected by the merger, several third parties (PCTs, the Department of Health and competitors) told the OFT that factors of competition between dental practices include:

- length of waiting list for appointment,
 - length of waiting time at practice before appointment,
 - convenience of opening hours,
 - general quality of the practice environment, and
 - ease of access to practice by telephone or internet.
51. The parties have submitted that the scope for competition between practices at the local level is currently severely curtailed due to the regulatory framework through which NHS dental services are supplied. In particular, in terms of non-price factors the parties submitted that:
- quality standards are regulated;
 - some aspects of the offering, such as opening hours and the provision of free oral hygiene, are contracted by the PCTs; and
 - output is overwhelming set with reference to 2006 output levels.
52. The parties submitted that various aspects of quality are regulated by various bodies. The CQC requires practice operators to be registered with it, and the CQC regulates and monitors quality of treatments, suitability of premises and ensuring appropriately qualified staff undertake the treatments.¹⁰ The CQC also requires practices to have in place suitable complaints mechanisms. All practitioners must be registered with the General Dental Council as well as with the relevant PCT.
53. Despite this, the regulations pertaining to quality set a minimum acceptable standard and not the standard which patients may demand in a competitive environment. For instance, one competitor submitted that competition is based around availability and as such opening hours are a key patient criterion which will be extended more in areas with high NHS competition.

¹⁰ The requirements are set out in the *Health and Social Care Act 2008 (Regulated Activities) Regulations 2010*.

54. With respect to opening times the parties have submitted that contracts with PCTs detail opening times for the practice; this has been confirmed by PCTs.¹¹ However PCTs say that practices may provide additional opening hours above those in the contract and the contract level of opening hours should be viewed as a minimum standard. A competitor told the OFT that in local areas of competing practices opening hours tend to be longer in order to attract patients.
55. In order to demonstrate how the non-price factors do not affect a dental practice's offering, the parties undertook a series of econometric analyses. This was done to examine whether increasing concentration through the merger may dampen the parties' non-price offering across a range of aspects of local competition.
56. The parties' regression analysis used data on profit margins, local market concentration (by share of UDAs based on the three different measures of the local areas discussed in paragraphs 24 to 34), customer satisfaction survey results, opening hours, marketing expenditure, and UDA quota fulfilment.¹² The parties submitted 96 sets of empirical analyses, none of which provided evidence of greater UDA supply concentration being correlated to lower competitive efforts from practices.
57. However, while the OFT accepts that the regressions are useful evidence in supporting the parties' submission that there is no relationship between these non-price factors of dentistry and local market concentration, the OFT has some reservations about accepting categorically that no relationship exists between local concentration and the various variables used in the regressions. In particular, the OFT is concerned that other variables that the parties said determine the factors in paragraph 42 (for example, local area demographic factors or area-specific costs of provision of dentistry)—and which could have controlled for the very wide differences between practices in the parties' data—were omitted from the analysis, reducing its explanatory power to

¹¹ PCTs and dental practices contract for a wide variety of aspects of a practice's functions including the provision of free oral hygiene and visits to primary schools to discuss oral hygiene.

¹² UDA (and UOA) data from the NHS used to calculate local area concentration were not available to the parties but the OFT was able to receive the relevant data from the NHS and share it with the parties' advisers within a confidentiality ring framework.

virtually nothing in the regression specifications that the parties submitted to the OFT.

58. Put differently, showing that there appears to be no statistical relationship between concentration, and nothing but concentration, and (say) marketing expenditure is not the same as saying that there is no statistical relationship between concentration and marketing expenditure when controlling for other factors affecting marketing expenditure.
59. In addition to the statistical analysis, the parties also provided two case study analyses. One concerned the area in Taunton. ADP operates three dental practices in Taunton. The first was acquired in 2003, the second in 2006 and the third in February 2008. The parties provided evidence across a range of factors over the period of the acquisitions.
60. In Taunton itself there are several competitors although ADP alone had a share of UDAs of over [] per cent. In terms of profit margins, one point to note is the []. This may be a result of patients switching between them.
61. The parties also submitted results of customer satisfaction surveys for the Taunton practices.¹³ The results [].
62. Opening hours for the practices acquired in 2006 and 2008 have not changed since ADP acquired them.
63. As for UDA fulfilment, the parties provided evidence for two of their three practices in Taunton. The data show that [].
64. Overall, the OFT found the evidence on Taunton inconclusive but accepts that, for Taunton at least, there seemed to be little direct affect between the various acquisition and some non-price factors of competition (for example, opening hours).
65. The parties also submitted a similar case study of the Leeds area. Due to data limitations the parties were only able to analyse one acquisition in 2008 out of the total nine IDH had made in this area since 2006. It should be noted that the case study does not detail the level of NHS

¹³ From the NHS' Vital Signs survey which began in 2008.

dental services carried out by the practices or the number of alternate practices in the area.

66. The evidence on the impact on the IDH practices' margins was []. With respect to customer satisfaction surveys the parties were unable to provide time series data. Opening hours remained constant for all but two practices which increase their opening hours following acquisition. The UDA quota fulfilment is [].
67. Overall, as in Taunton the OFT found the evidence on Leeds inconclusive.
68. Given that the parties were not able to persuade the OFT that dental practices could not alter their non-price factors of competition the OFT undertook considerable analysis of whether the parties had the ability to alter their output levels (without which unilateral effects could not result from the merger). The following section discusses this.

The ability to vary NHS dental output

69. The parties have submitted that the UDA contract serves to limit practices' ability to compete for one another's patients. Once a practice has reached its UDA cap it cannot accommodate more NHS patients and so need make no competitive efforts to win patients from other practices.
70. Moreover, the parties submitted that dental practices have every incentive to achieve at least 96 per cent of their UDA allocation since, if they do not, they risk the PCT either revoking their contract or adjusting downward their UDA allocation and reallocating the residual UDAs to another practice.
71. The parties therefore argue that practices will invest sufficient effort to achieve between 96 and 100 per cent of their UDA allocation but no more (since there is no guarantee that they will be paid for these additional units delivered).¹⁴ The OFT considers that these very efforts to

¹⁴ Some PCTs have told the OFT that they have, on occasion, paid for a relatively small number units delivered over the UDA allocation.

achieve at least 96 per cent of their contracted for UDAs constitute competition between dental practices.

72. This is supported by third parties who state that competition between practices can take place to attract new patients who are not currently receiving dental care. Further, it is not clear to the OFT that such competition cannot be for UDAs levels significantly below the 96 per cent threshold of UDA delivery and therefore the lessening of competition between the parties in some local areas may be substantial. This would be the case if the punishment for not achieving at least 96 per cent of contracted for UDAs was insufficient to deter the merger parties from doing so if the rewards from internalising any switching between them as a result were great enough.
73. In particular, the OFT is concerned that once the competitive constraint on each was removed, the parties could diminish some non-price aspect of its offering (which would decrease its costs of operating) in order to increase profits. A sufficient proportion of patients unwilling to tolerate the diminished offering would seek treatments at the merger parties' other practice which would allow the merged entity to increase profits overall to the detriment of patients. This is a 'unilateral effect'.
74. The parties have submitted that existing safeguards in the UDA contractual system would prevent this from happening. For example, the parties submitted that any shortfall in UDA supply (below 96 per cent of a practice's overall allocation) is added to the subsequent year's UDA supply. Practices cannot therefore fall short of their UDA obligations beyond the very short term.
75. Evidence received from third parties on the binding nature of the UDA contracts indicates that, while the contracts themselves are rigidly worded, there is scope for discretion from PCTs for under- and over-provision of contracted for UDAs without the withdrawal of the contract and in some cases without a full reduction in the remuneration a practice receives.
76. The parties told the OFT that PCTs clawback payments for UDAs which are not performed. This in itself, they argued, provided an incentive for

practices to achieve as close to 100 per cent of their contracted allocation as they can.

77. Nationally the parties submitted that around only five per cent of UDAs are re-allocated each year, which typically comprise 2 per cent from newly commissioned UDAs and 3 per cent from re-commissioned UDAs. Despite receiving responses from a large number of PCTs, they could only provide very few examples of UDA contracts being revoked or UDAs re-allocated. This evidence indicated that this is not primarily based on under-performing against a practice's UDA contract but rather is mostly accounted for by the NHS dental practices closing down because of retirement, death or a desire to concentrate on private dentistry.
78. The parties' own experience is consistent with this. [].
79. The OFT has analysed the parties' delivery performance against their contracted UDAs. For the period 2008 to 2011, IDH's average UDA performance level was [] per cent of contracted for UDAs (across the [] practices about which the OFT requested this information). For ADP, the result was [] per cent (for the same period, also across the [] practices about which the OFT requested this information).
80. But when the data are analysed by individual practice, wide and persistent variations in the gap between contracted levels and actual levels emerge. The information supplied to the OFT by the parties in relation to the gap between performed and contracted for UDAs show that for all their practices in 2010-11, both parties had over [] per cent of practices which fell outside of the 96–104 per cent thresholds discussed above (some by [] – for example by [] per cent).
81. Moreover, the evidence did not show that any under-performance gap was added to the following year's UDA allocation. ADP practices, on average, []. Even so, for IDH [].
82. The evidence indicates that the regulatory framework itself does not guarantee that a dental practice will deliver at least 96 per cent of its contracted for UDAs. The parties told the OFT that, according to the Department of Health statistics, nationally around half of all dental

practices offering NHS treatments failed to fulfil their contracts. The parties submitted that under-provision is sometimes the result of PCTs over-commissioning UDAs and this has been supported by evidence from PCTs. Several PCTs have told the OFT that in such instances they would be willing to revise a practice's UDA allocation.

83. An important aspect of the parties argument with respect to UDA under-provision is that in some PCT areas they have off-setting agreements which enable them to combine UDA volumes across practices in a local area (or even across a PCT). As such, shortfall in one practice could be offset against over- provision in another. This was confirmed by one PCT which said that it has 'netted off' UDAs between practices of the same ownership group.
84. However, even when []. This brings into doubt the regulatory framework's ability to counter any harm arising from the merger. In any case, that providers can underperform in one practice to make up the difference in another practice indicates that unilateral effects may be possible in this market since practices can pick up patient switching from the other practice that they own.
85. While the OFT accepts that the regulatory framework limits the scope for unilateral effects, it is not convinced that the regulations have eliminated competition to the point that no substantial lessening of competition can arise from the merger.
86. On the basis of all the evidence available to the OFT in this case (discussed above), the OFT believes that it has reasonable grounds to suspect that the parties do have the ability to alter non-price factors of competition at the local level and internalise to some degree patient switching post-merger. As such the OFT concerns remain that the parties may compete against each other for patients at the local level, and practices are able, in practice, to deliver less than 96 per cent of their UDA allocation or more than 104 per cent. This is likely to allow the parties to have considerably more scope to internalise any patient switching than a simple reading of the regulatory framework suggests.

87. The following section discusses the merger parties' incentive to worsen the non-price factors of competition such that unilateral effects arise as a result of the merger.

The incentive to worsen the NHS dentistry offer

88. The parties submitted that they have no incentive to reduce the number of UDAs performed at any individual practice as each UDA is incrementally profitable.
89. For NHS dentistry the marginal revenue from an additional UDA is constant. This is because the revenue that the dental practice receives comprises the per-UDA price set out in the contract with the PCT (on average £[] per UDA for ADP) and the regulated amount that the patient pays.
90. The parties submit that the majority of the incremental cost of providing an additional UDA is made up by dentist fees and laboratory or material costs (on average £[] per UDA for ADP). Based on some of the non-price factors which the OFT believes the parties have the ability to alter, the parties estimated that the average cost of attracting an additional UDA is very small in comparison to these main incremental costs (£[] for ADP).
91. The parties submit that the potential benefit of any quality of service reduction will be small and the incentive to increase the number of UDAs performed exists until the costs related to quality of service reach more than [] times average incremental cost of other factors. This led the parties to submit that even if the incremental costs of quality of service was £[] the breakeven diversion ratio would be [] per cent which, they argued, indicates that even with a market share of [] per cent there would be no incentive post-merger to reduce the quality of service offering of the practices.
92. The parties' argument relies upon the price per UDA and the incremental cost per UDA not only being constant (over a relevant range of output of UDAs) within each practice but being constant between practices. Yet the OFT notes that both the parties and PCTs have stated that there is wide variation between practices in the contracted for price per UDA

(PCTs have given ranges from £11 to £35 per UDA). In addition the evidence from the parties shows that there is also [] gross margin []. On the basis of these two pieces of evidence the OFT cannot rule out that the parties would have the incentive to reduce the quality of service post-merger in local areas with market concentration of less than [] per cent.

93. Moreover, the OFT is not convinced that the costs in question when considering the possibility of unilateral effects are necessarily small (that is, around £[]). The OFT notes that there are certain parameters of competition based on quality which are not included in their cost estimates. For example, the OFT notes that reducing opening times (to perhaps the minimum stipulated in the PCT's UDA contract) was not included in the parties' estimate of costs. This could be a significant cost saving. Another possibility is that the parties could worry less about staffing gaps, which can result in missing UDA targets, but can be difficult and expensive to address. Or they could reduce the availability or quality of in-house training for dentists, or less experienced labour (whether dentists, dental nurses or reception staff) with lower costs per UDA which, it is reasonable to assume, would represent a lower level of treatment quality (whilst still complying with CQC, GDC and PCT regulations). Again, this could represent a sizeable marginal cost saving.¹⁵ Possibilities of such cost savings through a worsening of a practice's overall offer would mean that unilateral effects could arise as a result of the merger in local areas of concentration below [] per cent.
94. The evidence above leads the OFT to conclude that while there may be a reduction in the incentive of the parties to reduce the costs associated with non-price factors of competition compared to a standard non-regulated market based on the limited number of non-price factors of competition and constant marginal revenue an incentive does still exist and this is increased by the differentials in price per UDA and profit margins between individual practices.
95. On the balance of evidence submitted, the OFT considers that dental practices do compete on non-price factors and the OFT is not persuaded

¹⁵ Neither party employs dentists but rather has self-employed dentists working in their practices. The parties told the OFT that they are paid by giving them a proportion of per UDA revenue which the practice receives. Thus, in this context having cheaper labour would mean paying the dentists a lower per UDA rate.

that these non-price factors are minor. For example, reducing opening hours, operating with staffing gaps, reducing training or using less experienced staff with lower per UDA costs may significantly increase the merged entity's profits at the expense of patients. The OFT considers that it is not fanciful to consider that the merger would remove a substantial competitive constraint in some local areas to the point that the merged entity could worsen non-price factors of competition. The next section discusses whether there are such local areas.

Local areas of concern

96. As discussed previously the OFT believes the appropriate local overlap areas are those based on the distance between a practice and a patients home address for 80 per cent of patients and as such are: 2.5 miles inside the M25, 5 miles for urban conurbations, and 8 miles for rural conurbations. Therefore, these measures have been employed by the OFT in calculating local area shares.
97. The parties submitted that there are two reasons for the threshold of concern for a realistic prospect of an SLC to be at a very high level. The first is the significant difference between the incremental costs associated with the non-price factors of competition discussed above. The parties consider that given the differences in their overall cost bases and the costs associated with the OFT's theory of harm, any lessening competition is unlikely to have a substantial affect on patients unless the local market is extremely concentrated (without prejudice to their argument that an SLC on the basis of unilateral effects cannot arise in this case given the regulatory framework).
98. The second is that the primary reason for a patient using a dental practice is familiarity with the dentist and as such a very low number of individuals would switch practice following a reduction in the non-price factors meaning that the ability of other practices to accommodate these patients is high. The parties therefore argue that there is no reason why rival practices with a combined share of 10 per cent in a local area (provided they had not met their UDA targets) could not attract the majority of patients switching from the parties practice.

99. In terms of what the threshold level should be, based on the parties' costs and revenues of supply UDAs, they estimate that the diversion ratio between the parties must be over [] per cent in order for reducing non-price factors of competition to be profitable. Even if the costs of providing additional UDAs were three times as much as average costs, the parties calculated that a diversion ratio of at least [] per cent would be required to give rise to unilateral effects at a level sufficient to give the OFT prima facie cause for concern over an SLC. Therefore, the parties argued that the OFT should not impose an intervention threshold at a level below [] per cent local share of supply.
100. The OFT disagrees that the threshold should be set as high as the parties suggest. The OFT notes that there are different types of suppliers providing NHS dentistry services. There are those, such as the parties, who are focussed on the provision of NHS dentistry and there are others who are primarily focussed on the provision of private dentistry treatment. In between these, there are some dentist practices who supply more or less NHS service provision. In other words, not all of the practices who offer NHS dentistry services locally will be equivalent in terms of their competitive offer to the parties who both focus almost exclusively on NHS dentistry services. Evidence available from the NHS on contracted UDAs shows that there are some practices which perform a very low number of UDAs – significantly below the average of UDAs per dentist. It is far from obvious that practices which primarily focus on private provision will really pose a significant competitive constraint on the parties post-merger, at least as compared with other practices who, like the parties, have a strong NHS focus.
101. In any given local area, the OFT understands that it would not be unreasonable to expect at least 10 per cent of the UDAs to be accounted for by practices that do a relatively limited amount of NHS work. As such, a threshold for intervention of 80 per cent of UDAs in a local area would come very close to allowing monopoly in the provision of dentistry services with a strong NHS focus.
102. Instead, the OFT considers it appropriate to use a 60 per cent threshold for joint share of supply as the primary indicator of likely competition concern in a local area. This share would allow one other equally sized competitor to the parties, with a similar focus, to co-exist in the market,

alongside parties with a lesser NHS focus. As such, the OFT considers that this threshold is roughly equivalent to a 'three to two' threshold.

103. In various retail cases the OFT has, in the past, ruled out competition concerns arising at the local level in those areas where the merger reduces fascia choice to four or above.¹⁶ However, the provision of NHS dentistry is regulated: all prices to patients are regulated and payments to practices by PCTs are unaffected by the merger (and as discussed above, some of the qualitative aspects of a practice's offer are also regulated). This does reduce (although does not eliminate) the competitive harm that can take place in this case relative to a typical retail market. As such, the OFT considers it appropriate to set a SLC threshold at a higher level than a 'four to three' merger would imply.
104. Such an approach was used by the OFT in Boots/Unichem, a case which involved pharmacies.¹⁷ Like NHS dentistry, pharmacies have a mix of price and quality regulations (particularly with respect to prescription-only medicines). In that case the OFT considered that because of the regulations (which created high barriers to entry) a reduction in fascia from 'four to three' or higher could give rise to a lessening of competition but it could not be expected to be substantial. The Competition Appeal Tribunal upheld the OFT's approach of applying a 'three to two' threshold to determining in which local areas the merger raised a realistic prospect of a substantial lessening of competition.¹⁸
105. Applying a 60 per cent threshold resulted in seven local areas being identified as giving rise to competition concerns. In addition, and as appropriate for the cautious standard applied by a first phase merger authority, the OFT also reviewed local competitive conditions within three further local areas in which the parties had above 50 per cent combined share of supply to assess in more detail the likelihood of competition concerns arising.
106. The evidence used for this exercise was to examine maps of NHS dentistry for the areas (since it is reasonable to assume that the more

¹⁶ For example, Anticipated acquisition by Asda Stores Limited of Netto Foodstores Limited, ME/4551/10, 23 September 2010; and Anticipated acquisition by Travis Perkins plc of the BSS Group plc, ME/4609/10, 26 October 2010.

¹⁷ Anticipated acquisition by Boots plc of Alliance UniChem plc, ME/2134/05, 6 February 2006.

¹⁸ Celesio AG v Office of Fair Trading, [2006] CAT 9.

proximate the parties are to each other relative to competitors, the closer competitors they have been pre-merger) and the relative sizes (in UDA terms) of the competitors.

107. Three areas were examined: [].
108. In the [] and [] areas (which have some overlap with each other), the ADP practice in [] is among the most proximate to the [] IDH practices in [], together with some other dental practices in []. Additional dental practices are located in the area (including in []) but these are considerably further from the IDH practices. As such, on a cautious basis it is reasonable to assume that the ADP practice and the other competitors in [] itself are IDH's main competitors. Moreover, of the competing practices in [] one performs only a very small number of UDAs whilst another two are quite small. Another is less than half the size of the ADP practice. The OFT considers that there is a realistic prospect of a SLC in the [] and [] areas.
109. In [], the parties have one practice each reasonably close to each other, with two competing practices also in []. Other competitors are in the local area but further away and therefore likely to impose less of a competitive constraint on the parties. One of the competing practices in [] performs a very low number of UDAs. Therefore, the parties can be assumed to be close competitors in [] and the OFT has found that there is a realistic prospect of a SLC in the [] area.
110. [] was the third area in which the OFT applied a more detailed examination. In this area the parties each have one practice, closely located to each other. However, four competitors are also present in the town which make up the bulk of the remaining share. The OFT considers that these practices will continue to impart a competitive constraint on the merged entity and therefore no realistic prospect of a SLC arises in [].
111. Based on the OFT's approach, discussed above, the OFT has found that there is a realistic prospect of a SLC arising in the following nine areas.
 - []
 - []

- []
- []
- []
- []
- []
- []
- []

NHS orthodontics

112. The OFT has analysed the provision of NHS orthodontics to patients within an area of a 15 mile radius as well as on a PCT wide basis.

113. Since the regulatory framework and key characteristics of the market is the same as for NHS dentistry, the analytical approach in this case for orthodontics follows that of the provision of NHS dentistry. For the reasons set out for NHS dentistry on the scope for non-price competition, the OFT considers that orthodontic practices compete on non-price factors and therefore the potential for unilateral effects at the local level exists.

114. Likewise, for the reasons given for NHS dentistry combined with a lack of PCT concern, the OFT does not consider that the merger raises a realistic prospect for a SLC in the provision of NHS orthodontics at the PCT wide level.

115. The parties overlap in three local areas: [].

116. In the [] area, while the combined share is high, the increment arising from the merger is relatively low (less than [] per cent). The parties are not located especially closely to each other and both have other

competitors in more proximate locations. The OFT has found that no competition concerns arise as a result of the merger in this local area.

117. In [], the parties' combined share is small and the OFT considers that after the merger sufficient competitive constraint will remain.
118. In [], the parties will have a very high share of supply after the merger. The map shows that the parties are closely located although two other practices are also present in [] itself. However, since the parties' combined share is so high the OFT does not consider that these competitors will be in a position to place an effective constraint on the parties post merger. The OFT has found on the evidence available to it that the merger raises a realistic prospect of a SLC in the supply of NHS orthodontic treatments in the [] local area.

Barriers to entry and expansion

119. The parties submit that barriers to entry for general dentistry and orthodontics are low with entry costs for a new practice between £250,000 and £650,000 and the time taken to establish the practice being approximately 6 months. Similarly the parties submit that barriers to expansion are low with the cost of adding an additional dentist to an existing practice being £30,000–35,000 and taking up to 12 weeks.
120. At the PCT level, the evidence indicates that PCTs have not had any difficulties in attracting bids for UDA or UOA contracts. Indeed, there is some evidence from PCTs and competitors which show that a dentist does not currently need to be located within the PCT in order to bid successfully for a contract.
121. However, when consider the impact of the merger at the local level the OFT cannot be sure that sufficient new UDAs or UOAs will be tendered in these specific local areas to offset the competition concerns identified in this case. Without these, the OFT considers barriers to entry and expansion to be high.

Countervailing buyer power

122. Individual patients are unlikely to possess countervailing buyer power.

123. In terms of whether the PCTs have buyer power, the OFT notes that its competition concerns in this case relate to competition at the local level and competition on non-price factors. Whilst some of the non-price factors are contracted for, some are not and, in any case, before the merger the parties may be offering a standard of service above and beyond what was contracted for (for example, longer opening hours) as a result of pre-merger competition. In this scenario PCTs would not be able to counter the adverse effect of the merger.
124. The OFT therefore concludes that countervailing buyer power cannot be relied upon to prevent any SLC arising from the merger.

THIRD PARTY VIEWS

125. The OFT received responses from over 30 PCTs and held several rounds of discussions with those expressing concerns with the impact of the merger. Most PCTs were not concerned about the merger.
126. The OFT received no complaints from third parties (customers or competitors) with reference to competition at the PCT level. The OFT also received no complaints in relation to private dentistry or any form of orthodontics.
127. The OFT did however receive complaints from both PCTs and competitors with respect to the impact of the merger on competition at the local level for NHS dentistry. This included several PCTs (albeit a minority) expressing concern about the loss of non-price competition. Some were concerned about specific factors like opening times and waiting times while others were concerned about more general factors such as a loss of patient choice.

UNDERTAKINGS IN LIEU

128. Where the duty to make a reference under section 22(1) of the Act applies, pursuant to section 73(2) of the Act the OFT may, instead of making such a reference, and for the purpose of remedying, mitigating or preventing the substantial lessening of competition concerned or any adverse effect which has or may have resulted from it or may be expected to result from it, accept from such of the parties concerned undertakings as it considers appropriate.

129. The OFT has therefore considered whether there might be undertakings in lieu of reference (UILs) which would address the competition concerns outlined above. The OFT's guidance states that undertakings in lieu of reference are appropriate only where the competition concerns raised by the merger and the remedies to address them are clear cut, and those remedies are capable of ready implementation.¹⁹
130. The parties offered to divest the entire increment arising from the merger in those local areas which the OFT identified competition concerns.
131. As a structural remedy that will, in each local area, remove the overlap between the parties, the OFT considers that the proposed UILs are sufficient in principle to act as a clear-cut and comprehensive remedy to the competition concerns identified by the OFT.
132. In terms of whether the UILs are readily implementable, the OFT is concerned that the number of possible buyers could be low. As such, the OFT has considered whether an up-front buyer requirement is necessary in this case.
133. An up-front buyer requirement means that the proposed divestment purchasers will have committed contractually, subject to formal OFT approval of the UILs, to acquiring the relevant divestment practices before the OFT accepts UILs. This means that the OFT will accept UILs only where a provisional sale in the upfront buyer areas has been agreed, thereby demonstrating that a sale to a suitable purchaser is achievable. It also means that the OFT will consult publicly on the suitability of the proposed divestment purchasers, as well as any other aspects of the draft undertakings, during the public consultation period.
134. The OFT will seek an up-front buyer where the risk profile of the remedy requires it, for example where the OFT has reasonable doubts with regard to the ongoing viability of the divestment package and/or there exists only a small number of candidate suitable purchasers.²⁰

¹⁹ 'Mergers: Exceptions to the duty to refer and undertakings in lieu of reference guidance', OFT1122, paragraph 5.7.

²⁰ 'Mergers: Exceptions to the duty to refer and undertakings in lieu of reference guidance', OFT1122, paragraphs 5.31–5.37.

135. The parties submitted that around 600 to 800 dental practices change hands annually. There are sales agents present who specialise in the buying and selling of dental practices.
136. Demand for new practices is so great that some potential buyers will pay these agents in order to be among the first to hear about a practice coming on to the market (the parties told the OFT).
137. Moreover, the parties said that increasingly demand is being driven by smaller groups buying practices, not just the larger corporate dental groups.
138. The parties also provided evidence to the OFT of competitors bidding against them for practices, although only one example was in an area identified as being of concern to the OFT in this case.
139. Finally, the parties provided a list of competitors who they have received recent expressions of interest in buying practices or who are (in the parties' opinion) very likely to express an interest in the practices relevant to this case. These were [nine competitors].
140. Despite the strong submissions of the parties, the OFT has sufficient residual concerns to seek an up-front buyer. This partly reflects the OFT's lack of experience in undertaking a divestment exercise in this market. In particular, the OFT does not have any information on whether the identified buyers are in fact likely or able to buy in the specific local areas in which the OFT has identified competition concerns.²¹ Moreover, the OFT does not have sufficient information on what proportion of the output of the operators listed above is accounted for by NHS treatments (that is, whether these operators are likely to be interested in the specific UDA contracts involved in the divestments).
141. The OFT has therefore decided that, on a cautious basis, any UILs that it accepts should include an up-front buyer provision.

ASSESSMENT

²¹ For example, a buyer is unlikely to receive OFT consent to purchase divestment assets if it is already present in the local area.

142. The parties overlap in the provision of dental and orthodontic services, both for NHS and private treatments.
143. The OFT has assessed this case on the basis of dental and orthodontic treatments separately. Further, it has also assessed the case on the basis of NHS treatments being separate from private treatments.
144. In terms of the geographic scope, the OFT has examined NHS dentistry and orthodontics on a PCT-wide basis. In addition, the OFT has applied a local analysis for both NHS and private treatments. The local areas used for this analysis are, for dentistry, 1.5 miles within the M25, 3 miles for other urban areas and 5 miles for rural areas. For orthodontics, the OFT has employed a 15 mile measure.
145. The OFT has not identified competition concerns for the provision of private dentistry. The parties are predominately focussed on NHS dentistry and provide fewer private treatments, on average, than their peers. The evidence available to the OFT indicates that the parties will face sufficient competitive constraints after the merger to prevent them from raising prices or worsening their quality of service. Therefore, the OFT has not found a realistic prospect of a SLC arises as a result of the merger with respect to private dentistry.
146. For private orthodontic treatments, the OFT has not found it necessary to conclude. This is because the parties overlap in only two local areas and in both these areas the OFT's analysis of NHS treatments can be relied upon for the private treatments.
147. The OFT did not receive any concerns from third parties about the provision of NHS dentistry treatments at the PCT level. At the PCT level, competition takes place between dental practice for new UDAs. The evidence available to the OFT in this case shows that the parties have seldom bid against in each and, when they have, the relevant PCTs receive sufficient other bids to provide competition for the contracts. Therefore, the OFT has not found a realistic prospect of a SLC arises as a result of the merger with respect to NHS dentistry at the PCT level.
148. At the local level, the OFT undertook substantial analysis. Third parties told the OFT that practices compete for patients via non-price factors

such as opening times, quality of the practice and waiting times. The OFT was concerned that following the merger the parties would worsen some aspect(s) of their non-price offering in order to increase profits at the expense of patients. For the reasons set out above, the OFT considers that after the merger the parties would have the ability and incentive to vary their NHS dental output through worsening their non-price offering in some local areas.

149. The OFT used a 60 per cent (of UDAs) local concentration measure as its primary threshold for competition concerns in this case. Seven local areas were identified as giving rise to an SLC on this basis. In addition, the OFT reviewed local competitive conditions within three further local areas in which the parties had above 50 per cent combined share. Based on the proximity and relative sizes of the practices of the parties and their competitors in these areas, the OFT considered that two further local areas posed competition concerns. On this basis the OFT has found a realistic prospect of a SLC in nine local areas, as listed in paragraph 111.
150. For orthodontic treatments the OFT has found a realistic prospect of a SLC in one of the three overlap areas ([]). This is because the parties have an especially high combined share and little competitive constraint will be imposed on the parties after the merger. The other two areas were cleared either because the parties combined share was low or because the increment was small and they were not located close to each other relative to competitors.
151. The OFT has found in this case that barriers to entry and expansion at the local level (for NHS dentistry and orthodontic treatments) are high and there is little countervailing buyer power (at the local level).
152. Third parties in this case are mostly unconcerned. However, those third parties who did express concern were concerned about the affect of the merger on non-price competition at the local level.
153. Consequently, the OFT believes that it is or may be the case that the merger has resulted or may be expected to result in a substantial lessening of competition within a market or markets in the United Kingdom.

DECISION

154. The OFT's duty to refer the completed joint venture between the Carlyle Group and Palamon Capital Partners LP for the acquisition of Integrated Dental Holdings Group and Associated Dental Practices to the Competition Commission pursuant to section 22 of the Act is suspended because the OFT is considering whether to accept undertakings in lieu of reference under section 73 of the Act. However, pursuant to section 34A(3) of the Act this decision does not prevent the OFT from making a reference in the event of no such undertakings being offered or accepted.