

Dental Earnings and Expenses Estimates

2015/16 Methodology

Published 13 September 2017

The Dental Earnings and Expenses Estimates reports provide a detailed study of the self-employed earnings and expenses of primary care dentists who carried out some NHS/Health Service work in England, Wales, Northern Ireland or Scotland in a given financial year.

This methodology document is designed to accompany Dental Earnings and Expenses Estimates, 2015/16, and each subsequent edition of the report.

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This product may be of interest to remuneration boards, employers, stakeholders, policy officials, commissioners and members of the public. Interests will range from pay comparisons of the NHS workforce at local, regional and national levels to managing recruitment, staffing and training and prioritising commissioning.

Introduction

1. The Dental Earnings and Expenses Estimates reports provide a detailed study of the self-employed earnings and expenses of primary care dentists who carried out some NHS/Health Service work in England, Wales, Northern Ireland or Scotland in a given financial year.
2. This report was produced by NHS Digital, in consultation with the Dental Working Group (DWG) which includes representatives from Department of Health; NHS England; the Welsh Government; the Department of Health, Northern Ireland; the Northern Ireland Health and Social Care Business Services Organisation; Scottish Government; NHS National Services Scotland: Information Services Division; the British Dental Association; the Secretariat for the Review Body on Doctors' and Dentists' Remuneration; the NHS Business Services Authority Information Services; HMRC: Knowledge, Analysis and Intelligence Division; and the National Association of Specialist Dental Accountants and Lawyers (NASDAL).

Data Sources

3. Data used to produce *Dental Earnings and Expenses Estimates* are taken from five different sources:
 - year end dental activity data provided by the NHS Business Services Authority (NHS BSA) Information Services for England and Wales;
 - year end dental activity data provided by the Northern Ireland Health and Social Care Business Services Organisation (BSO) for Northern Ireland;
 - year end dental activity data provided by the NHS National services Scotland Information Services Division (ISD) for Scotland;
 - the [Dental Working Patterns Survey](#) produced by NHS Digital;
 - data from Self Assessment tax returns; held and analysed by HM Revenue and Customs (HMRC) statisticians.
4. Dental activity data from NHS BSA Information Services, BSO and ISD are used to derive the self-employed NHS/Health Service dental population as well as levels of activity and demographic information for dentists; the survey responses are used to produce further analyses on weekly working hours, percentage of dental time spent on NHS dentistry, and business arrangements.
5. Dental population data (NHS BSA Information Services, BSO and ISD information) and the survey responses are matched with tax data by HMRC statisticians, and an anonymised dataset is created, which is used to produce earnings and expenses estimates that are weighted up to the dental population.
6. The tax data cover income from all dental sources, including from private dental practice. As a result, the earnings and expenses estimates presented in *Dental Earnings and Expenses Estimates* cover both NHS/Health Service and private dentistry. It is not possible to analyse separately earnings and expenses from NHS and private practice. When considering the results presented in the reports it is important to keep some of the key differences between sources of income in the NHS/Health Service and private dental systems in mind. These include:

- In England and Wales NHS earnings originate from a contract between the dental provider and the NHS England (Region)/LHB¹. In England and Wales at the end of the financial year the amount of activity performed by an NHS provider is compared to their contract. If the provider has not delivered at least 96% of contracted activity, some practice income could be claimed back by NHS England (Region)/LHB (see [Dental Earnings and Expenses Estimates](#), for further information on clawback). No such function exists in the private sector.
 - In Northern Ireland, Health Service earnings originate from a commissioning arrangement between the Health and Social Care Board and the dental provider.
 - In Scotland, NHS earnings originate from an arrangement between the dental provider and an NHS Board;
 - These NHS/Health Service earnings are largely based on the amount of NHS/Health Service activity delivered;
 - Private earnings are determined by the amount of demand from individual patients who chose to receive private dental care, which may be in addition to the receipt of NHS care;
7. It is not possible to determine with absolute certainty how any dentist allocates their dental work between NHS/Health Service and private practice. However, as an approximation of this division, dentists who completed the Dental Working Patterns Survey have provided an estimate of how they spend their time. These responses have been used to inform analyses by working patterns, which examine average earnings and expenses against the percentage of dental time spent on NHS/Health Service dentistry.
8. The NHS BSA Information Services, BSO and ISD data along with findings from the Dental Working Patterns Survey are also used to produce the *Dental Working Hours* series of reports published by NHS Digital. However, *Dental Earnings and Expenses Estimates*, excludes dentists with no self-employment income, some of whom may be included in [Dental Working Hours](#). As such, the dental populations in the two reports are not the same and comparisons between the two should be made with this in mind.
9. The datasets, the process of merging them, and the analyses performed by HMRC statisticians on behalf of NHS Digital are described in further detail below.

Deriving the Dental Population for Analysis

10. The dental population for the earnings and expenses datasets are derived from year end NHS BSA Information Services, BSO and ISD dental activity data for England and Wales, Northern Ireland and Scotland respectively.
11. The datasets do not consider, nor contain data on, dentists who performed only private dentistry in the relevant year.

England and Wales

- In England and Wales only those self-employed dentists who had recorded at least one NHS Unit of Dental Activity (UDA) or one NHS Unit of Orthodontic Activity (UOA) in the relevant year are included.
- The dataset includes dentists working under a variety of contract types: General Dental

¹ Contracts between dental providers and Primary Care Trusts were in place until April 2013
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Services (GDS), Personal Dental Services (PDS), Trust-led Dental Services (TDS), as well as a combination of these contracts; however, dentists working solely under TDS contracts are excluded.

- In England, dentists working under mixed GDS/TDS or PDS/TDS contracts are retained within the dataset, as their main earnings likely to be from their GDS or PDS contract; these dentists were coded in the dataset as operating under a GDS or PDS contract only.
- Dentists working under a combination of GDS/PDS or GDS/PDS/TDS contracts were coded as working under mixed GDS/PDS contracts.
- The datasets also include dentists working under a variety of dental type classifications, which denote their relationship to the contract held with a particular NHS England (Region)/LHB.
- NHS England (Regions)/LHBs hold contracts with providers who deliver an agreed level of dental services. A provider who sub-contracts all of the dental activity under their primary contract with the NHS England (Region)/LHB is termed a Provider Only.
 - A provider who also performs any dental activity under a contract is termed in this report a Providing-Performer.
 - A dentist who performs dental activity under a dental contract, but does not hold a contract, is termed in this report a Performer Only.
- Results are presented by two dental types – Providing-Performer and Performer Only. A dentist listed within the data at least once as a Providing-Performer, regardless of any other arrangements as a Provider Only or a Performer Only under other contracts, is identified as a Providing-Performer. All Provider Only dentists were removed from the dataset.
- ‘Other’ dentists were coded as Performer Only. While most ‘other’ dentists are likely to be salaried, and are therefore removed as part of the exclusion criteria employed by HMRC statisticians, some may remain in the self-employed NHS dental population.
- Table 1 provides a description of the dental types used under the 2015/16 contractual system in England and Wales, the equivalent terms used under the previous contractual arrangements, and other equivalent terms used by dentists.

Table 1: Summary of England and Wales dental contracts included

Dental Type	Description	Comparison to the 2005/06 Report	Other terms used by dentists
Providing-Performer	Under contract with a NHS England (Region)/LHB and also performing dentistry	Previously practice owner, non-associate or first-party associate	Principal
Performer Only	Working for practice owner, principal or limited company	Previously second-party associate, assistant or locum	Associate
Other ²	Includes Foundation Dentists/Vocational Dental Practitioners, community service dentists	n/a	n/a

Notes:

1. Most of these dentists are likely to be salaried and therefore removed as part of the exclusion criteria employed by HMRC some, however, may remain in the population.

Northern Ireland

- In Northern Ireland only those self-employed GDS dentists who were registered to provide Health Service dentistry are included.
- The initial dataset includes dentists working under a variety of arrangements, including Principal Dentists, Associate Dentists, Assistant Dentists, Foundation Dentists/Vocational Dental Practitioners (VDPs), and General Professional Trainees (GPTs).
 - All Assistant Dentists, VDPs and GPTs were removed from the data used to produce the earnings and expenses estimates as they are still in training, and are likely to have employment income but no self-employment income.

Scotland

- In Scotland only those self-employed dentists who had an arrangement with an NHS Board to provide general dental services in the relevant year are included.

Comparison with other dental populations

12. The dental populations differ from those published elsewhere including NHS Digital’s Dental Working Hours.

Table 2: Differences in dental populations between NHS Digital Dental Publications

Area of Difference	Dental Earnings and Expenses Estimates	Dental Working Hours, UK	NHS Dental Statistics for England
Countries covered	England, Wales, Northern Ireland and Scotland	England, Wales, Northern Ireland and Scotland	England
Dentists with employment income but no self-employment income	Excluded	Included	Included
Dentists with TDS contracts only	Excluded	Excluded	Included

13. *NHS Dental Statistics for England* should be considered the definitive source for population numbers and workforce changes in England for the period. The definitive workforce figures for Wales are provided in *NHS BSA Information Services*, available via the [StatsWales](http://statswales.wales.gov.uk) website.

14. Details of the overall dental populations are available as follows:

- England – <http://www.digital.nhs.uk>
- Wales – <https://statswales.wales.gov.uk/Catalogue/Health-and-Social-Care/General-Dental-Services/Current-Contract/NHSPerformers-by-LocalHealthBoard-ContractType>
- Northern Ireland – <http://www.hscbusiness.hscni.net/1805.htm>
- Scotland – <http://www.isdscotland.org/Health-Topics/Workforce/Publications/data-tables.asp?id=1407%20-%201407>

Contractual Arrangements and Dentist Type

England and Wales

15. Under the NHS system in England and Wales, Provider Only and Providing-Performer dentists (or in some case, Dental Bodies Corporate) held contracts with NHS England (Regions)/LHBs to provide a defined level of dental activity. Each contract is given a value, based on the number of units of orthodontic activity (UDAs) and units of dental activity (UOAs) to be provided, and the contract holding dentist receives a 1/12th of the contract value in payment each month.
16. Providing-Performer and Performer Only dentists are identified within the data provided by NHS BSA Information Services

Treatment of Performer only Dentists within the Dental Earnings and Expenses Estimates Report

17. Performer Only dentists, who could be described as sub-contractors (delivering dental activity on behalf of the contract holder), do not hold contracts with NHS England (Regions)/LHBs, and do not directly receive payments from them. Rather, Performer Only dentists receive their earnings from the contract holding dentist. This means that their Self Assessment tax returns will reflect payments received for work performed under an NHS contract in one of two ways:
 - the Performer Only dentist can receive a gross payment from the contract holder, from which the expenses due to the contract holder will be deducted by the Performer Only dentist. Dentists receiving gross payments are likely to record higher earnings and expenses than those who receive payments that are net of expenses, and are also likely to have a higher Expenses to Earnings Ratio. The level of taxable income is not, however, affected by the way in which payments are received.
 - the Performer Only dentist can receive a net payment per UDA or UOA provided from the contract holder, from which expenses due to the contract holder have already been deducted by the contract holder.
18. When considering the detailed expenses breakdown, it should be noted that some Performer Only dentists have no expenditure in one or more of the expense categories which will affect the average expenses figures in these categories. For example, a Performer Only dentist may employ a part time assistant to deal with administrative matters, thereby incurring some employee expenses while other Performer Only dentists will do their own administrative work.
19. *Dental Earnings and Expenses Estimates*, presents results for Performer Only dentists as a single cohort. However, in recognising the differing methods of completing Self Assessment tax returns, for the purposes of the main findings and the detailed expenses breakdowns, results for Performer Only dentists are also presented by two cohorts (Performer Only dentists with Expenses to Earnings Ratios between 0.0 and 50.0 per cent, and above 50.0 per cent). This differential is used to distinguish between the two cohorts and is reviewed annually to ensure the Expenses to Earnings Ratio percentage limit is appropriate.

Determining Dental Type in Northern Ireland and Scotland

20. The data provided by BSO and ISD do not include dental type classifications enabling Principal and Associate dentists to be identified. NHS Digital and DWG agreed a two-step method for deriving dental type for the Dental Earnings and Expenses Estimates publication although it is important to note that the methodology differs from that used in the Dental Working Hours series which uses responses to the Dental Working Patterns Survey.

- It has been noted in the distribution of Expenses to Earnings Ratios produced by HMRC that there are two discernible cohorts of dentists in each of Northern Ireland and Scotland. Since in general, Principal Dentists incur higher expenses and thus have a higher Expenses to Earnings Ratio, an initial classification was employed which classified dentists with Expenses to Earnings Ratios up to and including 40 per cent as Associates, and dentists with Expenses to Earnings Ratios above 40 per cent were coded as Principals.
 - However, in common with Performer Only dentists in England and Wales, Associate dentists can receive payments in two ways and those Associate dentists receiving gross payments with a correspondingly higher Expenses to Earnings Ratio than other Associate dentists could wrongly be identified as Principal Dentists if only Expenses to Earnings Ratio was considered.
 - As a result, following the initial classification described, any dentists identified as Principals but with reported employee expenses of £0 were re-classified as Associates, since the latter are unlikely to incur this expenses type.
21. For Northern Ireland, there is an additional step as the data supplied by BSO includes information on the size of the practice in which each dentist works. If a dentist works in a practice by themselves they are classified as a Principal dentist. This criterion has been added to the methodology employed by HMRC to determine if a dentist is a Principal or an Associate. The methodology for determining dental type in Northern Ireland is therefore:
- Principal: Expenses to Earnings Ratio >40% and employee expenses > £0, or practice size is a single hander
 - Associate: Expenses to Earnings Ratio ≤ 40% or Expenses to Earnings Ratio >40% and employee expenses = £0.
22. The methodology for Scotland is therefore:
- Principal: Expenses to Earnings Ratio >40% and employee expenses > £0
 - Associate: Expenses to Earnings Ratio ≤ 40% or Expenses to Earnings Ratio >40% and employee expenses = £0.
23. The accuracy of this methodology has been checked by comparing responses to the [Dental Working Patterns Survey](#) which asked dentists to identify themselves as Principal or Associate; very few dentists classify themselves differently.

Dental Working Patterns Survey

24. NHS Digital, in conjunction with DWG, conducts a biennial Dental Working Patterns Survey (covering two distinct financial years), which is administered to all self employed primary care dentists in England, Wales, Northern Ireland and Scotland who undertook some NHS/Health Services work during one or more of the survey years. The survey gathers a range of information relating to working patterns including average weekly working hours and allocation of working time between NHS/Health Service and private work, motivation and morale and business arrangements (for Providing-Performer/Principal dentists). All dentists included in the analysis based on results from the Dental Working Patterns Survey answered every (relevant) question in the survey. However, those Providing-Performer dentists who do not answer the business arrangement question are retained within the survey dataset as long as all other questions are answered.
25. Since not all dentists responded to the Dental Working Patterns Survey and not all responses passed validation, analysis within the Dental Earnings and Expenses Estimates publication that draws upon survey responses is based upon a subset of the derived dental population.
26. For more information on the survey data used in each report, including response rates and representativeness, as well as a copy of the survey itself, please see the relevant sections of the [Dental Working Hours](#), report.

Stratification of the Population and Weighting of the Results

27. Earnings and expenses estimates are published by a range of characteristics including dental type, contract type, geographic region (in England), gender and age band. These figures are based on a sample and are weighted according to the entire self-employed NHS dental population for the country and dental type in question.
28. Results by weekly hours and percentage of dental time spent on NHS/Health Service dentistry (derived from the survey data) are based on a survey sample and are weighted according to the self-employed NHS dental population.
29. Results by business arrangement (also derived from the survey data) are based on a sub-sample (those Providing-Performers/Principal dentists that answered the business arrangement question) but are weighted according to the self-employed Providing-Performer/Principal population as applicable.
30. As the results throughout the report are estimates based upon samples that have been weighted to the full self-employed NHS dental populations, they are subject to sampling error. Differences between groups and sub-groups of dentists may not be statistically significant and where significance has been tested this is noted in the report.
31. To weight the population as needed, dentists are allocated to strata according to their characteristics.

Stratification – England and Wales

32. The self-employed NHS dental population is allocated to one of 32 strata according to:
 - dental type (Providing-Performer or Performer Only);
 - contract type (GDS, PDS or Mixed GDS/PDS);
 - gender (male or female);
 - and age (under 35, 35 to 44, 45 to 54 or 55 and over).

33. Whilst full stratification of all four variables would lead to a possible of 48 strata, the low numbers of mixed contract dentists do not allow for this cohort to be split by gender or age. In addition, due to the continued reduction of the PDS population the two age bands of <35 and 35-44 years for Providing-Performer and Performer Only dentists were combined. This is consistent with the stratification methodology used within the [Dental Working Hours 2014/15 & 2015/16](#) report. The move to 32 strata marks a change in 2012/13 from preceding years where 34 strata were used for weighting in both dental reports.
34. Due to the low population of dentists who perform more orthodontic work than non-orthodontic work (units of orthodontic activity > units of dental activity), a different system of weighting was employed for the analyses presented that section of the report and the age variable was replaced by a variable flagging the dentists who primarily undertake majority of orthodontic work and those who do not. This means that the weighted average taxable income estimates for all self-employed primary care dentists in that section differ slightly from the averages shown in the rest of the report.
35. It should also be noted that the Expenses to Earnings Ratio (EER) figures presented in report tables are calculated by dividing average expenses by average gross income for the applicable grouping which is not the same as the weighted average Expenses to Earnings Ratio for that group.

Stratification – Northern Ireland and Scotland

36. Because of the smaller sample sizes in Northern Ireland and Scotland, the self-employed NHS/Health Service dental population is allocated to one of six strata according to:
 - gender (male or female);
 - age (under 35, 35 to 44, 45 and over).
37. Due to the low population of dentists who were classified as ‘Orthodontic Items/Courses ≥ 30%’, a different system of weighting was employed for the analyses presented in the applicable sections of the report. In these cases, a variable for dentists classified as ‘Orthodontic Items/Courses ≥ 30%’ and ‘Orthodontic Items/Courses < 30%’ was added as an additional stratum to the variables described above (thus resulting in 12 strata). This means that the weighted average taxable income estimates for all self-employed GDS dentists in these sections differ slightly from the averages shown in the rest of the report.
38. In Northern Ireland only, for analyses by percentage of dental time spent on Health Service dentistry, the groupings used to analyse this variable (≤25%, >25<75%, ≥75%, and no survey response) are added as an additional stratum resulting in 24 strata. This means that the weighted average taxable income estimates for all self-employed GDS dentists for these analyses will differ slightly to the average shown in the rest of the report.

Calculating the Percentage of Earnings from Health Service Dentistry in Northern Ireland

39. NHS Digital and DWG agreed the methodology for deriving the measure of “Percentage of Gross Earnings from Health Service Dentistry” in Northern Ireland as follows:
 - Gross earnings specifically from Health Service dentistry (supplied by BSO) was divided by total gross earnings provided by HMRC to produce a percentage of a dentists’ total gross earnings from Health Service work.

40. This represents one measure available of dentists' division of work between Health Service and private dentistry in Northern Ireland but is subject to caveats:
- BSO reports Health Service earnings for Associate as well as Principal dentists. However, in some cases, part of the Associates' payment for this work will be given to the owner of the practice in which the Associate works. Thus there will be some cases where BSO's reported Health Service gross earnings will be higher than the total gross earnings reported by the Associate on their Self Assessment tax form. This is because total gross earnings will be net of the payment made to the Principal in whose practice they work.
 - Similarly, the corresponding Principals' Health Service earnings will be subject to some under-counting.
41. Principal dentists in Northern Ireland may also receive income from the Health Service for providing education to dentists in training (Assistants, Foundation Dentists/VDPs and GPTs). In most circumstances, and where the Self Assessment tax return has been completed correctly, this income will not be declared as gross earnings, but used to 'offset' the expenses incurred for providing such services. However, this income is included as earnings in the BSO Health Service figures which means that the percentage of earnings from Health Service activity will be overstated for many Principal dentists providing such education services.
42. It is not possible to quantify the extent to which the issues described in this section affect the results of the analyses, but to some extent the effects will be negated for results shown for all dentists, and will only affect those dentists near the boundaries of the three Health Service percentage bands ($>0 \leq 25$ per cent, >25 to <75 per cent, ≥ 75 per cent). A considerable number of dentists showed percentages above 100 per cent in the 2008/09 financial year, and taking account of the discrepancy described above would not result in those dentists changing from one band to another.
43. This measure is fundamentally different to the measure of percentage of time spent on Health Service dentistry used in the Dental Working Hours report, and the two cannot be compared.

HMRC Analyses

44. Following validation of the responses to the Dental Working Patterns Survey and the population datasets provided by NHS BSA Information Services, BSO and ISD, the datasets are merged to produce a final population dataset.
45. The merged dataset is sent to the HM Revenue and Customs (HMRC), Knowledge, Analysis and Intelligence (KAI) division which matches it to Self Assessment tax returns and produces weighted and aggregate non-disclosive earnings and expenses estimates for the self-employed NHS/Health Service dental population.
46. Data are taken from Self Assessment tax returns for dentists with accounting years ending during the fourth quarter of the financial year (i.e. 1 January to 5 April) and this period most closely matches that of the activity data provided by NHS BSA Information Services, BSO and ISD, and has been found to be representative of the entire financial year. The tax data cover income from all dental sources, including private dental practice.
47. During validation activity, HMRC statisticians apply exclusion criteria to the dataset in order to derive the sample upon which to perform their earnings and expenses analyses as follows:
 - dentists not found or no Self Assessment tax return when dataset created;
 - dentists with accounting period not 12 months or not in the relevant year²;
 - dentists with inconsistent/incomplete earnings and expenses information;
 - dentists with non-dental income reported;
 - Providing-Performer/Principal dentists with Expenses to Earnings Ratios <10% or >90%;
 - Performer Only/Associate dentists with Expenses to Earnings Ratios <0.1% or >90%;
 - dentists with employment income but no self-employment income;
 - dentists with no accounting period in quarter four.
48. These exclusions may not be exhaustive. For example, the sample used by HMRC statisticians could include a small number of dentists with non-dental income. While this would not affect high level results, figures for groups with low sample and population counts may be affected by any extreme values. Because the findings of the report relate only to self-employed primary care dentists, those dentists with employment income but no self-employment income are excluded from both the HMRC analyses and the dental population.³
49. As noted, the total self-employed NHS/Health Service dental population will differ from dental workforce statistics in other reports published by NHS Digital and elsewhere. As the population estimates provided in *Dental Earnings and Expenses Estimates*, are not intended to be definitive, these are rounded to the nearest 50.
50. In order to maintain taxpayer confidentiality, HMRC suppressed the results for any analyses that would produce results for subgroups with low sample numbers. Footnotes are provided in these cases. In addition, to acknowledge a degree of sampling error, earnings and expenses estimates have been rounded to the nearest one hundred pounds.
51. HMRC provide standard error information for taxable income which is used to calculate statistical significance at the 5% level in the Key Findings and where those values are shown throughout the report.

² as 'part-year' dentists are likely to earn less than the full-year cohort and their inclusion could otherwise distort the figures

³ HMRC statisticians determine the number of dentists with employment income but no self-employment income in the sample, then estimate the number of these dentists to be excluded from the dental population.

Additional Information

Dental Incorporation

52. *Dental Earnings and Expenses Estimates*, considers only those primary care dentists who are self-employed (i.e. they have earnings from self-employment). Traditionally, the employment status of the vast majority of primary care dentists (both Providing-Performer/Principal and Performer Only/Associate) has been self-employment. These dentists complete Self Assessment tax returns which, subject to exclusion criteria, are used to inform the analyses presented in the Dental Earnings and Expenses Estimates reports.
53. Since the introduction of the Dentists Act 1984 (Amendment) Order 2005 (SI 2005/2011), it has been possible for dentists to incorporate their business(es) and become a director and/or an employee of a limited company (Dental Body Corporate), with the potential to operate in a more tax-efficient manner. Both types of dentists considered in the report are able to incorporate their businesses; for Providing-Performer/Principal dentists, the business tends to be a dental practice while for Performer Only/Associate dentists, the business is the service that they provide as a sub-contractor.
54. It is not currently possible to determine how many dentists have incorporated their business(es) and what the precise consequences of incorporation may be for the results presented in *Dental Earnings and Expenses Estimates*. Some example potential arrangements and their likely effects include:
- a dentist is a director of a limited company and extracts a basic salary along with dividend payments in lieu of self-employment income. This is thought to be the most tax efficient method for incorporated dentists to take payment. Since dentists with employment income but no self-employment income are excluded from the population dataset, they and their dental earnings would not be accounted for in the report;
 - in England a dentist is a director of a limited company and takes all payment as self-employment income. As this dentist has self-employment income, they is likely to be included in the report, but since the limited company held the contract with an NHS England (Region) rather than the individual, they are likely to be classified as a Performer Only dentist. However, their earnings are likely to be closer to the higher Providing-Performer dentist results than those of typical Performer Only dentists;
 - in England a practice-owning dentist is a director of a limited company but also a self-employed Performer Only at another practice. A basic salary and dividend payments are taken from the limited company, and self-employment income is taken from the second practice. As the dentist has self-employment income, they are likely to be included in the report (subject to other exclusion criteria), but may have lower than average levels of self-employment income. This dentist is likely to be classed as a Performer Only in this report as they do not hold a contract with an NHS England (Region) for their self-employment income and the other contract is held by the limited company.
55. Although it was perviously thought that the take-up of dental incorporation was increasing, substantial reductions in tax efficiencies for corporate dentists suggests a reversal in trend; however, there is currently little or no evidence to substantiate this position.

Cash and Real Terms

56. Since the 2013/14 report, data have been presented in both cash terms and real terms using the most recent Gross Domestic Product (GDP) deflators published by Her Majesty's (HM) Treasury. The GDP deflator data is as at June of the reporting year so for the 2015/16 report the June 2017 deflators were used).
57. The Excel time series which is published alongside the Report includes other common indices (Retail Price Index (RPI), Retail Price Index excluding mortgage interest payments (RPIX) and Consumer Price Index (CPI)) as well as GDP⁴.
58. Since the year of the publication is used as the base year, the cash and real terms amounts in that year are identical.

Means, Medians and Quartiles

59. The mean is the average and can be defined as the sum of a list of values divided by the number of values in that list.
60. The median is the "middle" value in an ordered list of values, it is a point that splits the values in two, half above this point and half below.
61. Quartiles are points in an ordered list of values that has been split into four parts, each comprised of an equal number of values, the 1st quartile is the same as the 25th percentile, the 2nd quartile is the same as the median, etc. half of the values fall between the 1st and 3rd quartiles.
62. The position of the mean relative to the median can sometimes reveal information about the existence and/or extent of extreme values.

NHS England Regional Splits

63. The structure of the NHS changed on 1 April 2013 and the 2015/16 report reflects this. The country and regional section that previously included Strategic Health Authorities (SHAs) now contains NHS England (Region, local office), (in place from April 2015 but used for reporting purposes from April 2013) and continues to include NHS England (Regions).
64. Table 7 sets out the mapping of the regions.

⁴ See www.ons.gov.uk for more details

Table 3: NHS England Area Team, NHS England (Region, local office) and NHS England (Region) mapping

NHS England Area Team	NHS England (Region, local office)	NHS England (Region)	
North Yorkshire & Humber	NHS England (North, Yorkshire & Humber)	North of England	
South Yorkshire & Bassetlaw			
West Yorkshire			
Greater Manchester	NHS England (North, Lancashire & Greater Manchester)		
Lancashire			
Cumbria, Northumberland, Tyne & Wear	NHS England (North, Cumbria & North East)		
Durham, Darlington & Tees			
Cheshire, Warrington & Wirral	NHS England (North, Cheshire & Merseyside)		
Merseyside			
Derbyshire & Nottinghamshire	NHS England (Midlands and East, North Midlands)		Midlands & East
Staffordshire & Shropshire			
Birmingham, Solihull and the Black Country	NHS England (Midlands and East, West Midlands)		
Arden, Herefordshire and Worcestershire			
Hertfordshire and South Midlands	NHS England (Midlands and East, Central Midlands)		
Leicestershire and Lincolnshire			
East Anglia	NHS (England Midlands and East, East)		
Essex			
Bristol, North Somerset, Somerset & South Gloucestershire	NHS England (South, South West)	South	
Devon, Cornwall & Isles of Scilly			
Kent & Medway	NHS England (South, South East)		
Surrey & Sussex			
Bath, Gloucester, Swindon and Wiltshire	NHS England (South, South Central)		
Thames Valley			
Wessex	NHS England (South, Wessex)		
London	NHS England (London)		London

Note: breakdown by area team not in report

Glossary of Terms

65. A glossary of terms used throughout the Dental Earnings and Expenses Estimates reports is included below. Where terms relate to individual countries, this is indicated by (EW) for England & Wales, (NI) for Northern Ireland and (SC) for Scotland.

Accounting Year-End		The period to which earnings and expenses relate is an accounting year, which may end at any time in the tax year. The main results of this enquiry consider only data for dentists with accounting years (i.e. full 12 months) ending in the final quarter of the tax year, i.e. 1 January to 5 April. This allows analysis of information covering the period most compatible with that of health organisations' financial information.
Activity Type	EW	A dentist has been categorised according to the type of activity they undertake. A dentist who has performed more Units of Orthodontic Activity (UOAs) than Units of Dental Activity (UDAs) is assigned to the UOA > UDA category. A dentist who performed more or the same UDAs than UOAs is assigned to the UDA >= UOA category.
	NI	Each dentist has been categorised according to the type of activity they undertake: those whose Orthodontic Items of Service accounted for thirty per cent or more of their Total Items of Service (referred to as 'Orthodontic items \geq 30%'), and those whose Orthodontic Items of Service accounted for less than thirty per cent of their Total Items of Service ('Orthodontic items < 30%') across all their dental contracts.
	SC	Each dentist has been categorised according to the type of activity they undertake: those whose Orthodontic Paid Courses accounted for thirty per cent or more of their Total Paid Courses (referred to as 'Orthodontic Courses \geq 30%'), and those whose Orthodontic Paid Courses accounted for less than 30 per cent of their Total Paid Courses (referred to as 'Orthodontic Courses < 30%').
Associate Dentist	NI	A dental practitioner who is self-employed and enters into an agreement with a Principal Dentist that is neither partnership nor employment. Holds a dental surgeon (DS) number and performs primary care dental services.
	SC	A dental practitioner who is self-employed and enters into an arrangement with a Principal Dentist that is neither partnership nor employment. Also has an arrangement with an NHS Board and provides primary care dental services.
Body Corporate		This is the legal term for a corporation. This can be either a corporation sole (consisting of a single person) or a corporation aggregate (consisting of two or more persons) and can be either a Limited Company or a Limited Liability Partnership (LLP).

Business Arrangement		<p>Providing-Performer/Principal dentists can choose to run their businesses under a number of different arrangements. In this enquiry they are described as either:</p> <ul style="list-style-type: none"> • Limited Company • Limited Liability Partnership • True Partnership • Expenses Sharing Group • Sole trader without other dentists working for them • Sole trader with other dentists working for them • Other/Mixed <p>Please see the relevant glossary entries for further descriptions on each of these business arrangements.</p>
Cash Terms		<p>Cash (or nominal) value is an economic value expressed in historical nominal monetary terms</p>
Contract Type	EW	<p>The sample of dentists in the analysis includes those working within General Dental Services (GDS), Personal Dental Services (PDS) and Trust-led Dental Services (TDS); however, those performing dentistry solely within TDS have been excluded.</p> <p>A dentist is assigned a contract type (GDS, PDS or Mixed GDS/PDS) by considering all the contracts they have performed on in the relevant financial year. Dentists assigned any of three contract types may have performed some TDS activity.</p> <p>GDS providers have to provide a full range of mandatory dental services whereas most PDS providers do not unless they were involved in PDS pilots that were not specialist services. If a provider provides only specialist services, such as orthodontic work, this has to be under a PDS agreement. Trust-led schemes can provide services under PDS agreements and they pay dentists directly rather than through the NHS Dental Services Payments Online system.</p>
	NI	<p>General dental practitioners are independent contractors who have undertaken to provide dental treatment and appliances on behalf of Health and Social Services Boards. There is only one contract type, General Dental Services (GDS), under which dentists provide a full range of mandatory dental services.</p>
	SC	<p>General dental practitioners are independent contractors who have undertaken to provide NHS dental treatment and appliances on behalf of NHS Boards. There is only one contract type, General Dental Service (GDS), under which dentists in Scotland provide NHS dental treatment.</p>

Dental Type	EW	For the purposes of the report, a dentist is assigned a dental type based upon whether they held at least one contract with a NHS England (Region)/Local Health Board (LHB) and had records of dental activity in the relevant financial year (i.e. Providing-Performer dentists) or if they only had records of activity but did not hold a contract with a NHS England Region/LHB in the relevant financial year (i.e. Performer Only dentists). Please see the relevant glossary entries for further definitions of dentist types.
	NI, SC	For the purpose of this report, a dentist is assigned a dentist type, i.e. Principal or Associate.
Expenses		These refer to dentists' outgoings and relate to business costs such as premises, employees, and interest on business loans. These are also known as allowable expenses for tax purposes.
Expenses Sharing Group		A type of business arrangement under which a Providing-Performer/Principal dentist shares expenses with another dentist(s) but retain their own profits.
Expenses to Earnings Ratio (EER)		The expenses to earnings ratio (EER) is a measure of the proportion of an individual's gross earnings that is consumed by business expenses. For ease of understanding this is expressed as a percentage throughout this report.
General Professional Training (GPT)	NI	General professional training is usually undertaken immediately following qualification
Gross Earnings		Gross earnings (or gross income) refer to the total amount of a dentist's self-employment income, i.e. before deductions or expenses from all sources of self employment income are subtracted.
Items of Service	NI	Similar in principle to 'Units of Dental Activity' this is the sum of both 'Dental' and 'Orthodontic' activities
Limited Company		A business arrangement whereby the owners are legally responsible for its debts only to the extent of the amount of capital they invested.
Limited Liability Partnership		A business arrangement whereby the liability of the partnership is limited by law and the business is liable for any debts
Local Commissioning Group	NI	In April 2009, the commissioning arrangements in Northern Ireland changed with one Health and Social Care Board (HSCB) replacing the four Health and Social Services Boards (Northern, Southern, Eastern, and Western). At the same time, the HSCB established five local commissioning groups as sub-committees of the Board (Belfast, Northern, Southern, South Eastern, and Western).
Local Health Board (LHB)	EW	Seven Local Health Boards (LHBs) in Wales plan, secure and deliver healthcare services in their areas

Net Capital Allowances		<p>A dentist can claim tax allowances, called capital allowances, for the costs of, and improvements to vehicles and equipment which are not allowable as an expense in working out their taxable profits.</p> <p>The capital allowances figures in the report are actually net capital allowances, which are capital allowances plus a balancing adjustment arising when an item on which a dentist has claimed capital allowances is sold, given away or ceases to be used in the business.</p> <p>Net Capital Allowances can be claimed for the cost of:</p> <ul style="list-style-type: none"> • plant and machinery, this will cover items such as dental equipment, computers and business furniture; and • patents, certain specialist types of 'know-how' and research and development.
NHS England Area Team	EW	25 teams - responsible for GP and dental services, pharmacy services and certain aspects of optical services. Ten of the teams lead on specialised commissioning across England and a smaller number of the teams carry out the direct commissioning of prison and military health, in place from 2013 – see NHS England Regional Splits section for mapping to other regional splits.
NHS England (Region)	EW	One of four regions that cover healthcare commissioning and delivery across their geographies, in place from April 2013 – see NHS England Regional Splits section for mapping to other regional splits.
NHS England (Region, local office)	EW	13 Regions in place from April 2015 – see NHS England Regional Splits section for mapping to other regional splits.
Paid Courses	SC	Similar in principle to 'Units of Dental Activity', this is the sum of both 'Dental' and 'Orthodontic' activities
Percentage of dental time spent on NHS/Health Service dentistry		Defined as the percentage of time dentists devote to NHS dentistry (compared to private). Referred to as NHS commitment prior to 2008/09 and NHS/private share in 2008/09.
Performer Only	EW	A dentist that performs NHS activity on a contract, but does not hold a contract with a NHS England (Region)/LHB themselves.
Primary Care Dentist		A self-employed dentist who works in a primary rather than secondary care (hospital) setting (for example, a 'high street' dentist).
Principal Dentist	NI	A dental practitioner who is also an owner, director, or partner of a dental practice, holds a DS number, and also performs primary care dental services.
Principal Dentist Provider Only	SC	A dental practitioner who is also an owner, director, or partner of a dental practice, has an arrangement with an NHS Board to provide primary care dental services.

	EW	A dentist that holds a contract with a NHS England (Region)/LHB but does not perform dentistry on this or any other contract (i.e. all dentistry provided under the contract is sub-contracted); these dentists are excluded from the analyses in this report.
Providing-Performer	EW	A dentist that holds a contract with a NHS England (Regions)/LHB and also performs NHS dentistry on this or another contract.
Real Terms		Real values that have been adjusted from a cash value to remove the effects of general price level changes over time.
Self Assessment		Self Assessment is the system for the assessment and collection of income tax. It covers tax on income from: <ul style="list-style-type: none"> • self-employment (other than tax covered by the subcontractor deduction scheme) • other sources such as abroad or from letting accommodation; • additional tax payable by higher rate taxpayers on investment income and dividends. All self employed dentists and some salaried dentists should report their income on a self assessment tax return.
Sole-Trader		A business arrangement in which a Providing-Performer/Principal is solely responsible for the expenses of the practice and may work with or without help from Performer Only/Associate dentists.
Statistical Significance		In simplistic terms statistical significance is used in this report to illustrate the extent to which users can be confident that differences between compared results are not due to chance. If the difference between results is statistically significant users can be confident that the difference is notable and not the product of the methods used to generate the results.
Taxable Income		Taxable income is net income before tax, made up of gross earnings less expenses.
True Partnership		A business arrangement whereby the practice owners are liable for any debts.
Total Expenses		Total expenses are allowable expenses for tax purposes only, and include capital allowances.
Unit of Dental Activity (UDA)	EW	A UDA depends on the type of work undertaken (e.g. issue of prescription = 0.75 UDAs, repair of dental appliance (bridge) = 1.2 UDAs and removal of stitches = 1 UDA). A dentist is contracted to do a set number of UDAs during the year.
Unit of Orthodontic Activity (UOA)	EW	Similar to UDAs but for orthodontic work (e.g. full and comprehensive orthodontic assessment = 1 UOA)

<p>Vocational Dental Practitioners (VDP)</p>		<p>Those dentists qualifying at a UK dental school, are required to complete a period of vocational training (VT)/dental foundation training within a dental practice. A vocational dental practitioner works in an approved training practice under supervision and also receives additional training of specific relevance to general or community dental practice.</p>
<p>Weekly Working Hours</p>		<p>Total number of hours per week spent performing primary care dentistry (includes both clinical and administrative work), as derived from responses to the Dental Working Patterns Survey.</p>

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