

Version 1, published August 2020

## **Announcement of methodological changes to Dental Earnings and Expenses Estimates**

### **Introduction**

The Dental Earnings and Expenses Estimates series of Official Statistics present earnings and expenses estimates for full and part-time self-employed primary care dentists working in the UK as either Providing-Performer/Principal or Associate dentists.

The earnings and expenses estimates are based upon anonymised tax data from HM Revenue and Customs' Self-Assessment database and cover both NHS/Health Service and private income from dental activity.

This notice describes changes agreed for the 2018/19 report following consultation with stakeholder groups and a formal publication review.

### **England and Wales Analysis**

Until the 2017/18 report (published in August 2019), figures for England and Wales were presented together, although some high-level figures for the earnings and expenses estimates in Wales were included in a separate chapter.

However, the Welsh Government has requested separate analysis for Wales to better understand the data so results will now be presented for England and Wales separately.

### **Determining Dental Working Arrangements in England and Wales**

Information on the dental workforce is provided by the NHS Business Services Authority (NHS BSA) for England and Wales, the Northern Ireland Health and Social Care Business Services Organisation (BSO) and the NHS National Services Information Services Division Scotland (ISD). Workforce data is used to compile the underlying population characteristics and weighting variables for survey analysis in each country.

Unavoidable changes to NHS BSA IT systems have meant that the data items used to determine the working arrangements (i.e. dental type) of dentists in England and Wales were no longer reliable, and a review of historical figures revealed that the data items had been growing increasingly inaccurate over a period of several years. A range of options for determining dental type in England and Wales were considered and, following close discussions with NHS BSA and our stakeholder groups, a new methodology was agreed for 2018/19 onwards based upon the access rights of dentists using the NHS BSA Compass system. NHS Digital are unable to validate this data so it may not be fully accurate, however, when compared to self-declaration by dentists in the Dental Working Patterns Survey (run by NHS Digital) there is closer alignment in dental type compared to the old methodology.

This change in methodology has resulted in large numbers of dentists being reclassified as Providing-Performer and a consequential decrease in Associate dentist numbers. More detail can be found in the Methodology section within the Dentists' Working Patterns, Motivation and Morale, 2018/19 and 2019/20 publication, also published by NHS Digital. A different methodology is used to determine dental type for dentists Scotland and Northern Ireland which are therefore unaffected by this change.

The changes have also led to a review of the stratification and weighting methodologies used in England and Wales, discussed in the next section.

## **Stratification of the Population and Weighting of the Results**

The earnings and expenses estimates are published by a range of characteristics including dental type, gender, and age band. The figures are based upon a sample and are weighted according to the entire self-employed NHS primary care population for the applicable country and dentist type, which helps mitigate for sampling error.

To weight the population, dentists are allocated to strata according to their characteristics. Until 2017/18, these strata included the contract type (GDS, PDS or Mixed GDS/PDS). However, there are ever decreasing numbers of PDS or mixed GDS/PDS contract holders and as a result, contract type is no longer included in the strata for England.

This means that the dental population in England is now allocated to one of 16 strata according to:

- dental type (Providing-Performer or Associate)
- gender (male or female)
- and age band (under 35, 35 to 44, 45 to 54 or 55 and over)

The much smaller dental population in Wales does not allow for stratification according to dental type and four age bands, so six strata are used to weight the figures for Wales:

- gender (male or female)
- and age band (under 35, 35 to 44, 45 and over)

## **Impact of Methodological Changes**

The publication of separate figures for England and Wales, the new methodology for identifying dental type and the changes in the weighting of results means 2018/19 figures are not comparable with earlier results.

To allow for meaningful comparisons to be made with earlier results, HMRC has been commissioned to re-run the 2017/18 analysis only. This means a new time series is now in effect for the England and Wales results and comparisons should not be made with previous years.

The change in how dental type is determined has resulted in the removal of the rolling three-year longitudinal analysis, which reported figures for dentists whose dental and

contract types were the same over the three years in question. This analysis could not be undertaken for the 2020 publication as only two years' data are available. We will explore options to reinstate this analysis in due course, but its viability is dependent upon sample size and other data quality considerations.

### **Timing**

These changes will be implemented in the 2018/19 Dental Earnings and Expenses Estimates publication of 27 August 2020.

### **Further information**

If you have any comments or questions about these changes, please contact NHS Digital on 0300 303 5678 or email [PrimaryCareWorkforce@nhs.net](mailto:PrimaryCareWorkforce@nhs.net).