

Orthodontic therapists
working patterns
inferential analysis



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Glossary of terms

Term	Meaning
Active in the UK dental sector	Whether someone is: <ul style="list-style-type: none"> • Currently working in the dental sector • Seeking work in the dental sector
Clinical / non-clinical	Whether someone is working in a role that is: <ul style="list-style-type: none"> • Clinical (fully or at least 75%) • Mix of clinical and non-clinical • Non-clinical (fully or at least 75%) • Other
Employment status	Whether someone works: <ul style="list-style-type: none"> • Employed • Self-employed / locum / agency • Business owner / part owner • In training • On parental leave • On sick leave • Working unpaid / pro-bono • Not applicable • Prefer not to say
Healthcare sector	Sector worked in: <ul style="list-style-type: none"> • NHS (fully or at least 75% of time) • Mix of NHS and private • Private (fully or at least 75% of time) • Other
Non-response bias	Is a bias that can happen when there is a significant difference between those who respond and those who don't respond to a survey
Weekly hours worked	Hours worked per week by range

Term	Meaning
Work setting	Setting worked in: <ul style="list-style-type: none">• General dental practice• Specialist dental practice• Community dental services• Dental hospital• Other hospital settings• Laboratory• Oral public health• Armed forces• In education / training as a student• In education / training as a member of staff• Researcher / academic• Other• Not applicable• Prefer not to say

Acknowledgements

The GDC is grateful to all the dental professionals who responded to the working patterns questions. We would also like to thank the professional bodies, trade organisations, employers and other government stakeholders who supported the development of questions and encouraged dental professionals to complete this data.

Any further questions or suggestions related to the publication of working patterns data can be submitted via email at research@gdc-uk.org.

Executive summary

- Since November 2023, working patterns questions have been available on the GDC's online portal, eGDC, alongside the annual renewal process. Responses from dental care professionals were requested for the first time as part of their 2024 annual renewal (June – August). Following the publication of the working patterns dental care professional summary tables in October 2024¹, this report presents the results from further analysis of responses from orthodontic therapists. Only statistically significant findings are reported.
- Of the 1,081 orthodontic therapists who completed their annual renewal in July 2024, 732 (68%) responded to working patterns questions.
- Four-fifths (80%) of orthodontic therapists were employed with the next largest employment status being self-employed (23%).
- Most (87%) orthodontic therapists reported their primary field of practice as being 'orthodontic therapist'. The next most frequently mentioned primary field of practice was dental therapists (9%).
- Most (81%) orthodontic therapists who responded only worked in one setting. Of these, over three-quarters (75%) indicated that they worked in specialist dental practice.

1. [Working patterns data](#)

1 Introduction

The General Dental Council (GDC) has undertaken further analyses of our working patterns data, bringing it together with equality, diversity and inclusion (EDI), registration and Fitness to Practise (FtP) data to derive greater insight and value from our working patterns responses. This report provides further analysis of orthodontic therapists' responses to the working pattern questions.

Of the 1,081 orthodontic therapists who completed their annual renewal in July 2024, 732 (68%) answered the working patterns questions. This analysis includes:

- Employment status
- Where orthodontic therapists work (location and setting)
- Healthcare sector orthodontic therapists deliver care in (NHS v private)
- Weekly hours worked by orthodontic therapists
- Whether orthodontic therapists work in clinical or non-clinical roles
- Variations by equality, diversity and inclusion characteristics
- Correlations between working patterns questions and incidence of FtP cases (at the aggregate level)

1.1 Methodology

Working patterns data is being collected using questions made available on the GDC's online portal (eGDC). This was done to maximise response rates, and data completeness, and was arrived at in dialogue with professional organisations, registrants and governmental stakeholders. We launched the data capture process by encouraging dental professionals to provide their data when they completed their annual renewal, beginning with dentists in 2023, and then dental care professionals in 2024. Completion of the working patterns questions is voluntary.

Analyses reported here are derived from orthodontic therapists' responses received up to 10 August 2024. Responses received after this date will be included in future outputs. Only orthodontic therapists who reported that they were either 'working in the dental sector' or 'looking for work in the dental sector' in the United Kingdom (UK) are included in these analyses.

For the analysis of responses, we tested if a difference in results was statistically significant at a 95% confidence level and only statistically significant results are reported.

The appendices contain further details on data collection and question design (4.1 Question design and format), on data cleaning (4.2 Data cleaning), on statistical linear models used to test hypotheses, p values and effect sizes² (4.3 Statistical analysis models), comparisons of the respondent numbers with GDC registration data across EDI characteristics and selected registration fields (4.4 Non-response bias), and notations for the statistically significant differences (4.5 Statistical notation).

2. The effect size measures the strength of a relationship between two or more variables (i.e. what proportion of the difference in the data is explained by this relationship).

2 Results

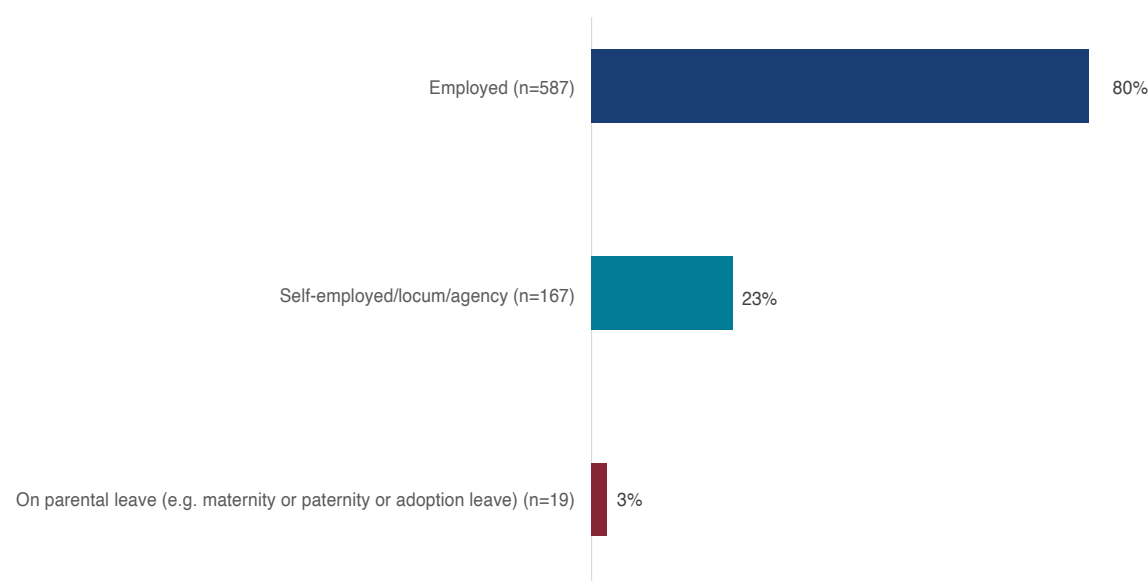
2.1 Active in the UK dental sector

Of the 732 orthodontic therapists included in this analysis, almost all were working in the dental sector and less than 1% were looking for work in the dental sector. There were no variations by EDI characteristics, registration fields or route of qualification.

2.2 Employment status

Orthodontic therapists were asked about their employment status within the dental sector (Figure 1). They could select multiple responses for this question. Most (94%) orthodontic therapists indicated only one employment status.

Figure 1 – Most common employment status³



Four-fifths (80%) of orthodontic therapists were employed, with the next largest employment status being self-employed (23%). There were no significant differences by EDI characteristics, registration data or region of qualification.

3. The employment status responses of 'business owner / part owner', 'on sick leave', 'in training' and 'working unpaid' were less than 1% each and therefore have been omitted from the figure.

2.3 Primary field of practice

Orthodontic therapists were asked about their primary field of practice⁴. Most (87%) orthodontic therapists reported their primary field of practice as being 'orthodontic therapist'. The next most frequently mentioned primary field of practice was dental therapists (9%).

2.4 Clinical / non-clinical work

There were no correlations between clinical and non-clinical role by other working patterns questions (including whether the respondent worked in the NHS or private sectors), registration characteristics, route of qualification or time since primary qualification.

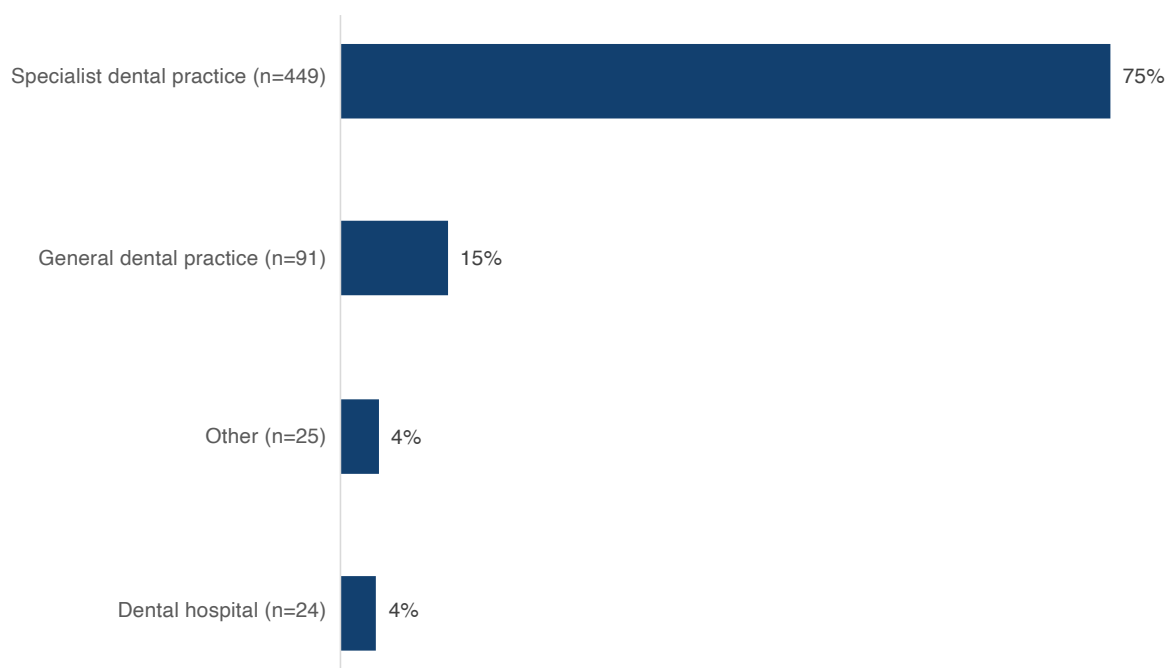
2.5 Weekly hours worked by orthodontic therapists

There were no correlations between hours worked and other working patterns questions (including whether a respondent worked in the NHS or private sectors), registration characteristics, route of qualification or time since primary qualification.

2.6 Work setting

Most (81%) orthodontic therapists who responded to the working patterns questions worked in only one setting. Of these, over three-quarters (75%) indicated that they worked in specialist dental practice (Figure 2).

Figure 2 – Main work settings for orthodontic therapists with only one reported setting⁵

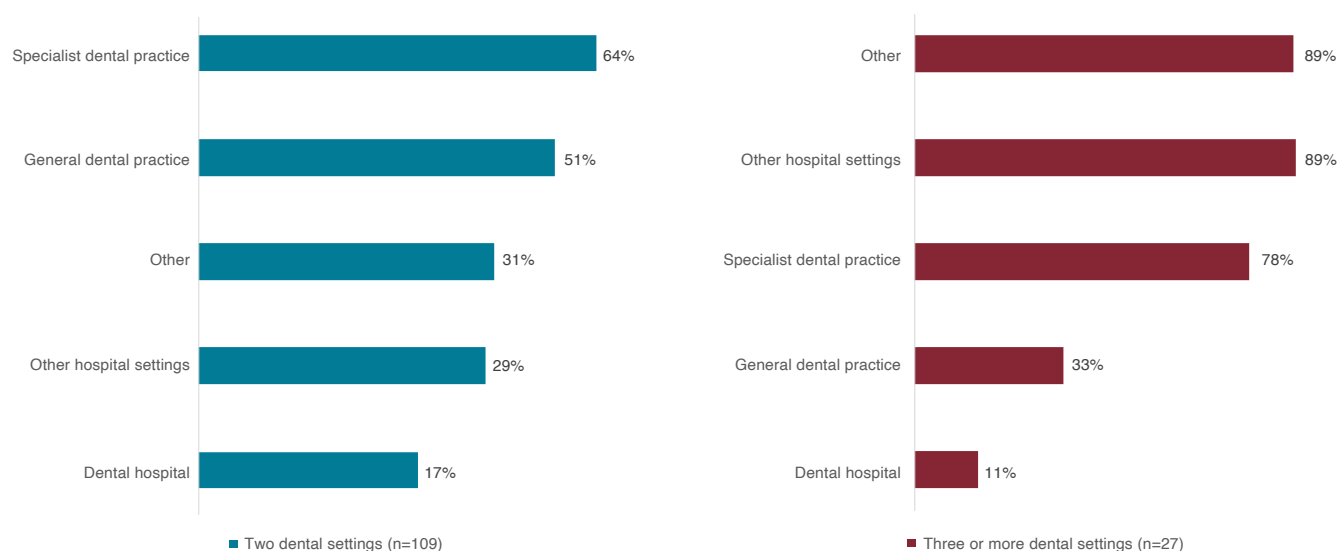


4. A dental professional may be registered under multiple titles with the GDC, but the working patterns question specifically asks for their primary field of practice.

5. Respondents who did not select a setting or who selected more than one were not included in this figure. Settings which accounted for fewer than 1% of responses were not included in this figure. These settings include: 'community dental service', 'researcher / academic', 'in education / training as a student', 'in education / training as a member of staff', 'armed forces', 'oral public health', 'non-clinical', 'other hospital settings', 'laboratory', 'not applicable'.

More than half (51%) of orthodontic therapists working in two dental settings and a third (33%) of those working in three or more dental settings were working in general dental practice, compared to 15% of those working in one dental setting^a (Figure 3).

Figure 3 – Types of dental settings by number of settings⁶



Although not a statistically significant result⁷, those working in three or more dental settings appear more likely to work in either 'other' or 'other hospital' setting compared to those working in one or in two dental settings.

2.7 Number of workplaces and number of countries of work

Most (99%) orthodontic therapists were working in only one UK country. More than three-fifths (62%) of orthodontic therapists had one workplace, 27% had two workplaces and 11% had three or more workplaces. There were no significant differences by EDI characteristics or registrant characteristics.

2.8 Fitness to Practise

The GDC does not use working patterns data in FtP case decision making. We matched our working patterns data to our FtP and EDI data to undertake pseudonymised⁸ analysis to explore possible links to working pattern responses. We found no correlation between involvement in an FtP concern⁹, working patterns responses or any respondent characteristics (such as EDI characteristics, time on the register or route of qualification)¹⁰.

6. Setting types with fewer than 5 responses were excluded from this figure. These include: 'laboratory', 'non-clinical', 'Armed Forces', 'in education / training as a student', 'in education / training as a member of staff', 'not applicable'.

7. Due to small category numbers invalidating the statistical test.

8. The person responding was given a dummy ID so that they could not be identified.

9. Which was defined as an orthodontic therapist being involved in a case that had at least progressed beyond the triage stage within the previous two years.

10. Fewer than one percent of orthodontic therapists who responded had an FtP case closed within the past two years.

3 Conclusions

Most orthodontic therapists who completed the working patterns questions were currently working in the dental sector. Orthodontic therapists told us that their primary field of practice was orthodontic therapist or dental therapist. The most frequently mentioned employment status was employed.

Four-in-five orthodontic therapists worked in one dental setting, with specialist dental practice being the most frequently mentioned setting. Of those working in two dental settings, more than half were working in general dental practice, while more than a third of those working in three or more dental settings were working in general dental practice. Comparatively only 15% of respondents working in only one dental setting worked in general dental settings.

There were no correlations between any working patterns questions and involvement in an FtP concern.

4 Technical appendix

4.1 Question design and format

GDC researchers looked at existing information on working patterns data including sources from the NHS, the Office for National Statistics (ONS), the Government Statistical Service (GSS) and the Institute for Social and Economic Research. This was combined with questions previously developed from GDC primary research.

The questions were designed to minimise the burden on respondents and to capture factual data about working patterns. They were fixed response questions and took on average five minutes or less to complete. They were voluntary and every question had a 'prefer not to say' option to ensure that respondents had the possibility of avoiding answering any question which they might find to be sensitive in nature.

The working patterns questions were piloted with an external group of dental professionals.

4.2 Data cleaning

Any values that were left blank or entered in an invalid format (e.g. for text entry) were coded to unknown during the data cleaning process.

4.3 Statistical analysis

This analysis uses null hypothesis frequentist linear models to test for correlations in the data. The nine working patterns questions were combined with an additional 22 GDC registration fields and five fitness to practise fields. The large number of analyses has meant that only those with statistical significance ($p < 0.05$) and at least a small effect size have been highlighted as 'significant' (the model performance is included in 4.5 Statistical notation).

4.4 Non-response bias

Tables 1 to 5 show category comparisons between orthodontic therapists who completed the working patterns questions and the numbers of orthodontic therapists on GDC's register.

The main difference between the orthodontic therapist register's EDI characteristics and working patterns sample were:

Ethnicity: Orthodontic therapists who identified their ethnic group as 'White' accounted for 85% of working patterns orthodontic therapist respondents, compared to 80% of registered orthodontic therapists (Table 2).

Marital status: Orthodontic therapists who identified their marital status as 'Married' represented 54% of the working patterns orthodontic therapist respondents, compared to 51% of registered orthodontic therapists (Table 3).

Table 1 – Sex from working patterns compared with register data

	Orthodontic therapist working patterns respondents (10/8/2024) (n=732)	Orthodontic therapist register data (10/8/2024) (n=1,081)
Female	96%	95%
Male	2%	4%
Prefer not to say	1%	1%
Total	99%*	100%

*due to rounding

Table 2 – Ethnicity from working patterns compared with register data

	Orthodontic therapist working patterns respondents (10/8/2024) (n=732)	Orthodontic therapist register data (10/8/2024) (n=1,081)
Asian or Asian British	7%	10%
Black, Black British, Caribbean or African	2%	1%
Mixed or multiple ethnic groups	2%	2%
Other ethnic group	2%	2%
White	85%	80%
Unknown	0%	1%
Prefer not to say	3%	3%
Total	101%*	100%

*due to rounding

Table 3 – Marital status from working patterns compared with register data

	Orthodontic therapist working patterns respondents (10/8/2024) (n=732)	Orthodontic therapist register data (10/8/2024) (n=1,081)
Divorced	7%	6%
Formerly in a civil partnership which is now legally dissolved	<1%	<1%
In a registered civil partnership	1%	1%
Married	54%	51%
Never married and never registered in a civil partnership	26%	28%
Separated, but still legally in a civil partnership	0%	0%
Separated, but still legally married	1%	1%
Surviving partner from a registered civil partnership	0%	0%
Widowed	1%	<1%
Unknown	3%	4%
Prefer not to say	8%	8%
Total	101%*	100%

*due to rounding

Table 4 – Sexual orientation from working patterns compared with register data

	Orthodontic therapist working patterns respondents (10/8/2024) (n=732)	Orthodontic therapist register data (10/8/2024) (n=1,081)
Bisexual	1%	1%
Gay/Lesbian	1%	1%
Other sexual orientation	0%	0%
Straight/heterosexual	93%	91%
Unknown	0%	1%
Prefer not to say	4%	6%
Total	99%*	100%

*due to rounding

Table 5 – Age from working patterns compared with register data

	Orthodontic therapist working patterns respondents (10/8/2024) (n=732)	Orthodontic therapist register data (10/8/2024) (n=1,081)
16-21	0%	0%
22-30	8%	10%
31-40	44%	46%
41-50	35%	32%
51-60	11%	10%
61-65	1%	1%
65+	<1%	0%
Total	99%*	100%

*due to rounding

4.5 Statistical notation

^a Pearson Chi-Square $X^2 = 74.0$ (n=732), df = 2, p = 0.01, phi = 0.31 (medium effect size)



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