# Dental Council Workforce Analysis 2016-2017

# Primary reporting periods:

Dentists and dental specialists 1<sup>st</sup> October 2015 – 30<sup>th</sup> September 2017

Dental therapists, hygienists, and technicians 1<sup>st</sup> April 2015 – 31<sup>st</sup> March 2017



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# Introduction

This report provides an overview of the oral health workforce based on data from the Dental Council (the Council) registration system, workforce survey data collected from oral health practitioners and graduate data from the universities offering dental related programmes.

The report provides workforce data for 2016 and 2017 using the same approach and methodology used for the 2013-2015 report.

From a workforce planning point of view, the interest is mainly in key changes or critical observations over time. Observations over an extended period also potentially allow for predictive analysis which can support future workforce planning based on a data driven, evidence-based approach rather than intuitive perceptions. Key trends and movements are highlighted in the executive summary of each section.

#### General

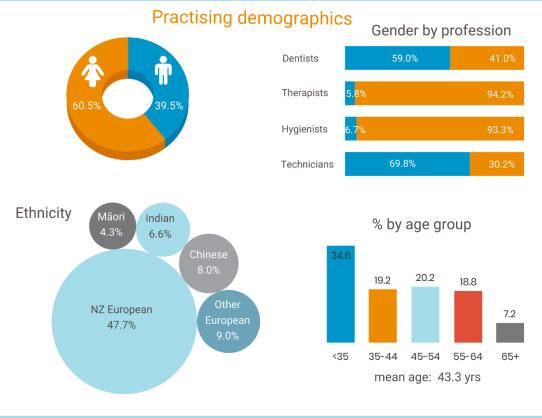
The report relies on survey information provided by practitioners. The quality and validity of this information is therefore largely dependent on the information provided in the survey. In some areas of this report, the survey returns were lower than previous years which can impact on the validity of the statistics, particularly as these are relatively small in number. Lower reporting was mainly in the areas of employment type and working hours.

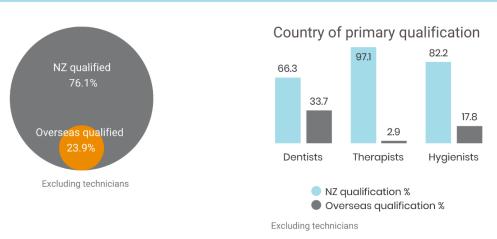
This report follows classifications based on Statistics New Zealand standards where they exist and are applicable. Population estimates for district health boards for 2016 and 2017 were unavailable from Statistics New Zealand – population values were linearly interpolated between 2015 and 2018 for all DHB analysis.

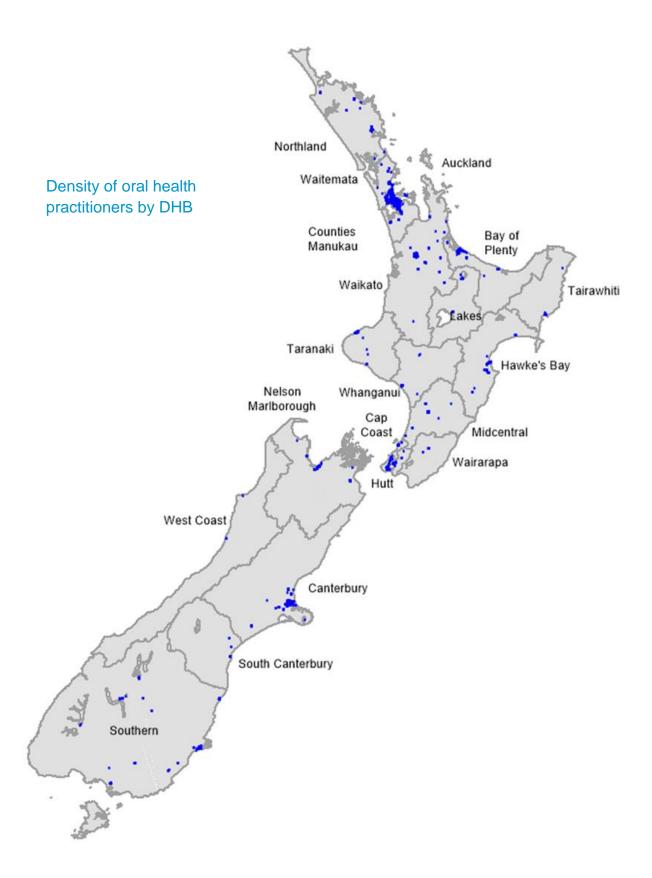
Unless otherwise stated numbers in brackets represent column percentages throughout the report.

Where practitioner groups were subcategorised for reporting purposes, for example dentists and dental specialists, the practitioner's highest scope of practice level dictated the categorisation.









# Section 1: The dentist and dental specialist workforce



# Dentists and dental specialists

2017 workforce at a glance



2,596 practising

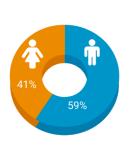
2,865 registered

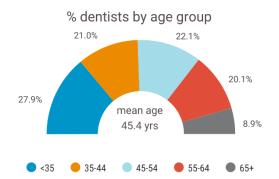


269 not practising

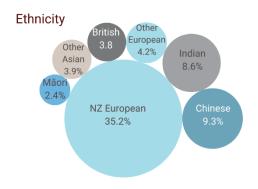


# Practising demographics







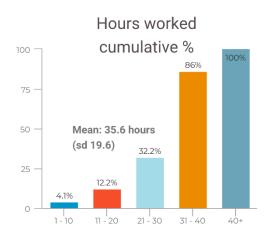


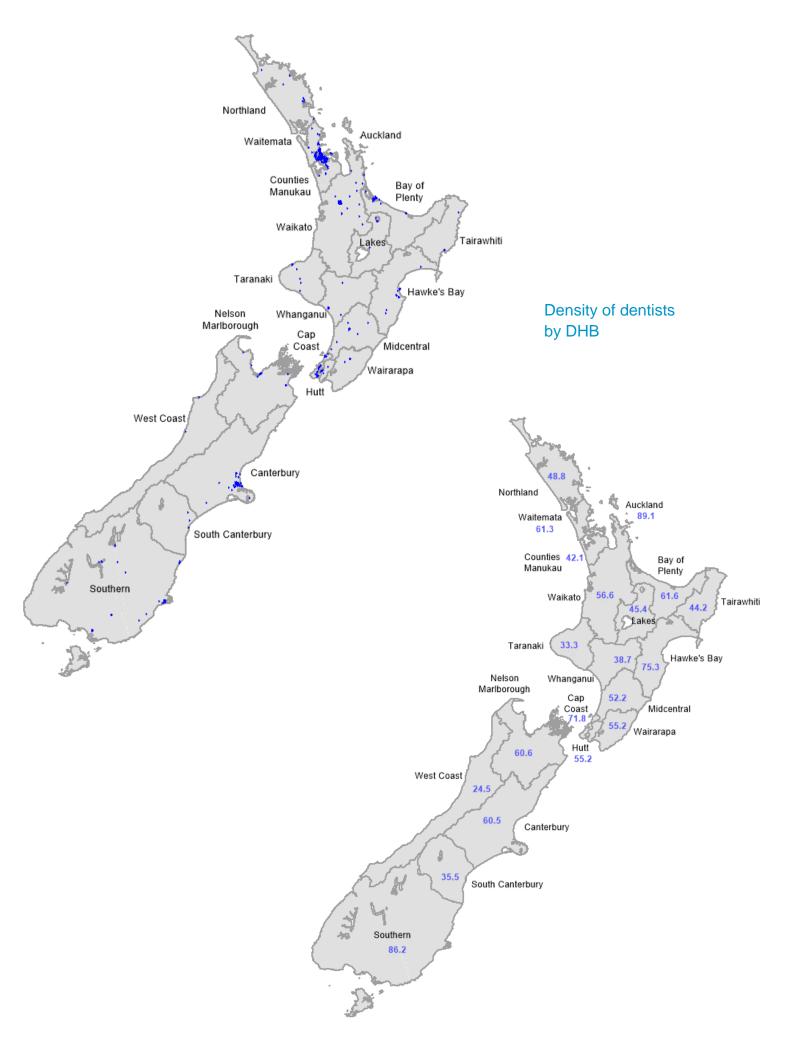




NZ qualification %Overseas qualification %







# Executive summary dentists and dental specialists

### Number of dentists and dental specialists

The total number of dentists and dental specialists has increased by about 2.5% year-on-year. Table 1-1

In 2017 there was a total of 2,865 dentists and dental specialists on the register: an increase of 4.8% over 2015. A total of 2,596 (90.6%) held practising certificates for the 2017 year which is a significantly higher proportion than the 83.8% for 2015. Table 1-1

Table 1-1. Registered dentists and dental specialists

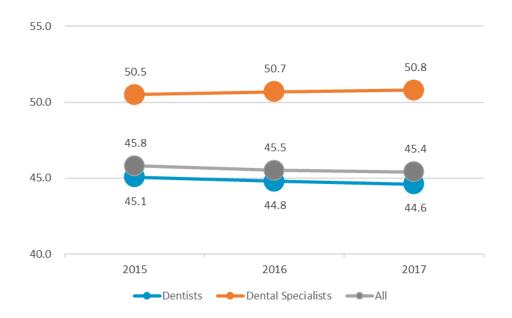
|   | 2015  | % YoY | 2016  | % YoY | 2017  |
|---|-------|-------|-------|-------|-------|
| Registered dentists with practising certificates              | 1,972 | 8.4   | 2,138 | 6.9   | 2,285 |
| Registered dental specialists with practising certificates    | 320   | -8.1  | 294   | 5.8   | 311   |
| Registered dentists with no practising certificates           | 432   | -25.7 | 321   | -29.0 | 228   |
| Registered dental specialists with no practising certificates | 11    | 327.3 | 47    | -12.8 | 41    |
| Total   | 2,735 | 2.4   | 2,800 | 2.3   | 2,865 |

### **Demographics**

The mean age shows a very small decline for practising dentists and slight increase for dental specialists. Figure 1-1

The mean age for practising dentists was 44.6, for dental specialists 50.8, and for the total group 45.4 in 2017.

Figure 1-1. Mean age of practising dentists and dental specialists



An age group distribution indicates that there are gradual increases in the earlier age groups (15-24, 25 to 29 and 30-34), until there is a sustained but steep decline in numbers from 55 years onwards. Over the last 5 years there has been a flattening of the numbers over 50 (from a peak in 2013). A total of 231 dentists and dental specialists aged 65 years and older had practising certificates in 2017; 31 of these were 75 years or older. Figure 1-2 & Table 1-4

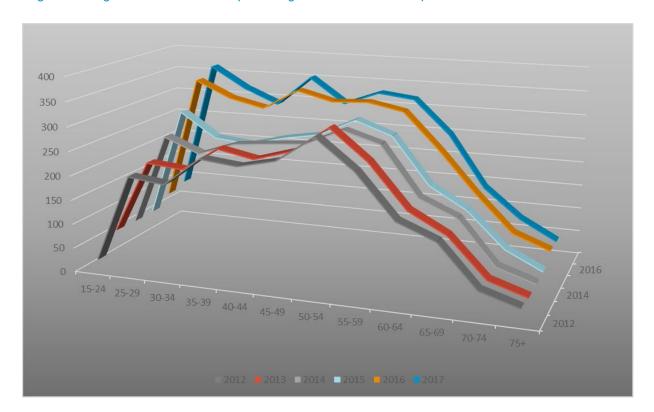


Figure 1-2. Age band distribution of practising dentists and dental specialists

Females continue to increase in numbers from 35.1% of practising dentists and dental specialists in 2012 to 41% in 2017. Overall, female dental specialists have increased from 24.9% in 2012 to 30.7% in 2017. Table 1-5 & Table 1-6

The ethnicity reported reflects the diversity of the profession. New Zealand European remains the largest ethnicity at 35.2%, with Māori 2.4% of practising dentists and dental specialists. The most reported other ethnicities included: Chinese (241, 9.3%), Indian (223, 8.6%), Other European (110, 4.2%), Other Asian (102. 3,9%), British (99, 3.8%), South African (63, 2.4%), South Korea (63, 2.4%), and Iraqi (55, 2.1%). Table 1-7

From 2015 and based on actual numbers, decreases compared with 2017 were reported for Other European (-54.9%), Other East Asian (-20.9%), New Zealand European (-17.5%) and Chinese (-7.3%). Some of these movements may be explained by a significant increase of undefined ethnicities reported for 2017 (proportional 18.4% increase). Table 1-7

### Registration

The proportion of overseas graduates shows a continued increase of practising overseas trained dentists and dental specialists - 30.3% in 2012 to 31.3% in 2015 and 33.7% in 2017. The greatest number of graduates in 2017 were from the UK (225: 8.7%) India (172: 6.6%), South Africa (108: 4.2%) and Australian qualified dentists and dental specialists represent 2.3% of registrants in the practising practitioner group. An increase of qualifications from the following countries were noted

between 2016 and 2017: Australia (53 to 59: +11.3%), United States of America (39 to 49: +25.6%), South Africa (87 to 108: +24.1%). Table 1-9, Table 1-10

There has been significant shifts in the types of registrations from 2012 to 2017. Dentist examination registrations (NZDREX) reduced from about 50% in 2012 to none in 2017. The decline in NZDREX numbers is due to a change in August 2016 of the examinations being administered by NDEB of Canada.

In 2017 TTMR registrations was a quarter of overseas qualified dentist registration, and the proportional number of registrations granted to those with prescribed qualifications or individual assessments of equivalence increased from 30% in 2012 to over 73% since 2016. Figure 1-3, Table 1-13

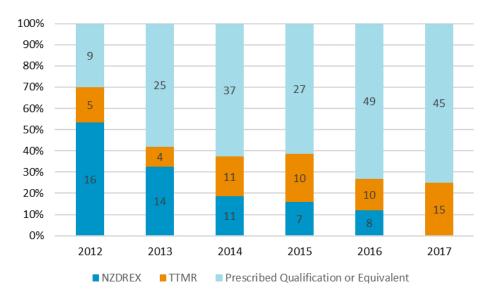


Figure 1-3. Types of registration pathways for dentists

Since 2012, the number of dental graduates from the University of Otago have been higher than the number of local students and has shown a consistent increase practising rate following graduation, with 134.5% in 2017. This is due to international funded students registering and practising in New Zealand following graduation. Figure 1-4, Table 1-12

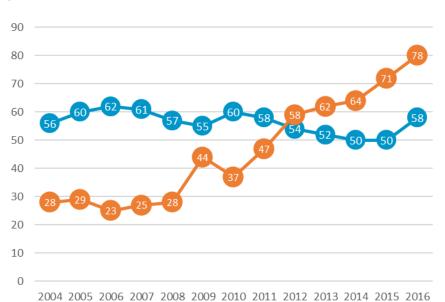


Figure 1-4. Longitudinal cohort remainder rate of university of Otago dental graduates, as at 30 September 2017

### Practising characteristics

The type of primary employment reported has shown a decrease of self-employed dentists and dental specialists (down from 67.5% in 2015 to 53.5% in 2017), with an also reported decrease of employees (16.5% to 13.1%) over the same period. This is likely as a result of half the response rate to these workforce questions (no response up from 15.1 to 32.6). Table 1-15

Using a 40-hour work week as a norm, it was found that 86% of dentists reported working 40 hours or less per week in 2017, slightly down from 2015 (89.7%). About 63% of dental specialists reported the same hours or less in 2017. This is a decrease from 75% in 2015. Table 1-16

The dentists with the highest mean hours of work reported were those in the MOH/DHB as primary employees with an average of 34.8 hours per week reported. Self-employed dentists in private practice reported 32.4 hours per week for 2017, similar to the hours reported in 2015. The MOH/DHBs also reported the highest mean hours as secondary employer with 15.9 hours worked in 2017 (similar to 2015). Table 1-19

Oral and maxillofacial surgeons practising primarily in universities reported an average week of 52.5 hours, followed by 42.0 hours for those oral and maxillofacial surgeons working in the MoH/DHBs as primary employers - up from 47.5 and 41.2 hours respectively in 2015. One endodontist reported 45 hours per week in the MOH/DHB. Table 1-21

Personal choice (44.5%) and parental responsibilities (20.7%) remain the main reasons for working part-time, followed by semi-retirement (10.3%) and insufficient dental work (9.2%). For "other" reasons offered (4.8%), the main reason provided was the contract hours offered (10 respondents) followed by choice (9 respondents). Table 1-17

The reasons given by those who are in New Zealand but are not currently practising shows retirement as the biggest category (25.6% in 2017) followed by parental responsibilities (18.6%). Both remain the major categories from previous years. Table 1-30

#### Geographical distribution

Six territorial authorities (TAs) have no dentists or dental specialists recorded. Based on 2017 data, these include: South Wairarapa, Westland, Hurunui, Mackenzie, Waimate and Chatham Islands territories. A total of 68.2 (43.2 FTE) dentists and dental specialists per 100,000 NZ population over 15 years of age is reported. In 2015, 62.3 dentists and dental specialists per 100,000 NZ population over 15 years of age were reported (39.5 FTE) – an increase of 9.5% (+9.4% FTE). Table 1-27

## Postgraduate studies

Postgraduate studies reported by dentists and dental specialists shows variation over the years with a high of 143 in 2013. The numbers have decreased to 86 reported in 2016 and 78 in 2017. Table 1-31

# Workforce survey response rate

Survey response rates have declined from 2015 (88.1%) to 2017 (75.0%). This will have an impact on some of the statistics in this report, as variables such as reported hours are used to derive FTE equivalents. Continued declines will negatively impact the comparative value of some of the survey derived statistics. Table 1-2

Table 1-2. Dentist and dental specialist survey responses

| Year | Response rate |
|------|---------------|
| 2015 | 88.1%         |
| 2016 | 78.1%         |
| 2017 | 75.0%         |

(Data source: Workforce survey)

# Dentists and dental specialists workforce data tables

Table 1-3. Number of dentists and dental specialists with practising certificates, by workforce reporting

| Report year       | Total | Male (%) | Female (%) | % overseas graduates |
|-------------------|-------|----------|------------|----------------------|
| 1983              | 1,142 | 93.7     | 6.3        | 6.2                  |
| 1984              | 1,148 | 93.7     | 6.3        | 5.3                  |
| 1985              | 1,176 | 92.6     | 7.4        | 4.9                  |
| 1986              | 1,204 | 91.8     | 8.2        | 5.1                  |
| 1987              | 1,219 | 90.2     | 9.8        | 6.3                  |
| 1988              | 1,233 | 88.7     | 11.3       | 6.4                  |
| 1989              | 1,215 | 88.1     | 11.9       | 5.8                  |
| 1990              | 1,226 | 87.4     | 12.6       | 6.4                  |
| 1991              | 1,262 | 86.7     | 13.3       | 6.7                  |
| 1992              | 1,287 | 85.2     | 14.8       | 6.8                  |
| 1993              | 1,306 | 84.2     | 15.8       | 7.4                  |
| 1994              | 1,312 | 84.0     | 16.0       | 7.5                  |
| 1995              | 1,346 | 83.2     | 16.8       | 8.8                  |
| 1996              | 1,364 | 81.7     | 18.3       | 8.4                  |
| 1997              | 1,473 | 79.5     | 20.5       | 12.1                 |
| 1998              | 1,496 | 79.0     | 21.0       | 13.1                 |
| 1999              | 1,558 | 77.2     | 22.8       | 14.5                 |
| 2000              | 1,591 | 76.4     | 23.6       | 16.1                 |
| 2001              | 1,601 | 76.3     | 23.7       | 16.9                 |
| 2002              | 1,645 | 75.6     | 24.4       | 18.2                 |
| 2003              | 1,662 | 74.5     | 25.5       | 19.7                 |
| 2004              | 1,747 | 73.0     | 27.0       | 21.1                 |
| 2005              | 1,682 | 72.8     | 27.2       | 21.0                 |
| 2006              | 1,717 | 70.8     | 29.2       | 22.8                 |
| 2007              | 1,779 | 70.1     | 29.9       | 24.0                 |
| 2008 <sup>a</sup> | 1,867 | 68.6     | 31.4       | 25.4                 |
| 2009 <sup>b</sup> | 2,000 | 66.5     | 33.5       | 27.6                 |
| 2010/11           | 2,083 | 66.0     | 34.0       | 30.4                 |
| 2011/12           | 2,127 | 64.9     | 35.1       | 30.3                 |
| 2012/13           | 2,166 | 64.7     | 35.3       | 30.5                 |
| 2013/14           | 2,235 | 63.0     | 37.0       | 30.5                 |
| 2014/15           | 2,292 | 61.9     | 38.1       | 31.3                 |
| 2015/16           | 2,432 | 60.5     | 39.5       | 32.6                 |
| 2016/17           | 2,596 | 59.0     | 41.0       | 33.7                 |

<sup>&</sup>lt;sup>a</sup> Reporting date 31 March (previously 31<sup>st</sup> December)
<sup>b</sup> Reporting date changed to 30 September for 2009 onwards (Data source: Dental register)

Figure 1-5. Trends in the proportion of female and overseas qualified dentists and dental specialists with practising certificates, from 1983 to 2017

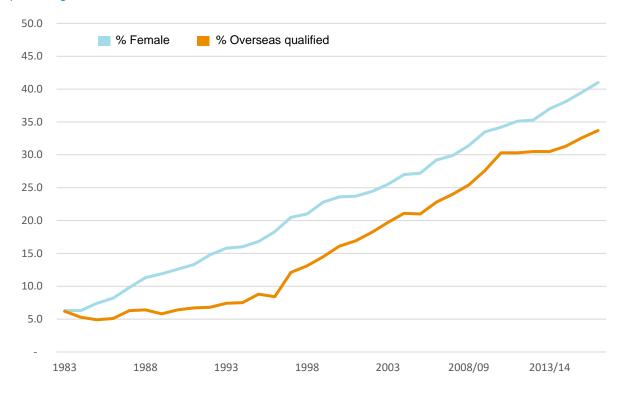


Table 1-4. Age of dentists and dental specialists by practising certificate status, as at 30 September 2017

| Age bands | Practising certificate (%) | No practising certificate (%) |
|-----------|----------------------------|-------------------------------|
| 15 - 24   | 91 (3.5)                   | _                             |
| 25 - 29   | 340 (13.1)                 | 24 (8.9)                      |
| 30 - 34   | 292 (11.2)                 | 28 (10.4)                     |
| 35 - 39   | 254 (9.8)                  | 35 (13.0)                     |
| 40 - 44   | 290 (11.2)                 | 62 (23.0)                     |
| 45 - 49   | 276 (10.6)                 | 24 (8.9)                      |
| 50 - 54   | 299 (11.5)                 | 29 (10.8)                     |
| 55 - 59   | 290 (11.2)                 | 29 (10.8)                     |
| 60 - 64   | 233 (9.0)                  | 15 (5.6)                      |
| 65 - 69   | 130 (5.0)                  | 9 (3.3)                       |
| 70 - 74   | 70 (2.7)                   | 8 (3.0)                       |
| 75+       | 31 (1.2)                   | 6 (2.2)                       |
| Total     | 2,596                      | 269                           |

Figure 1-6. Age of dentists and dental specialists by practising certificate status, as at 30 September 2017

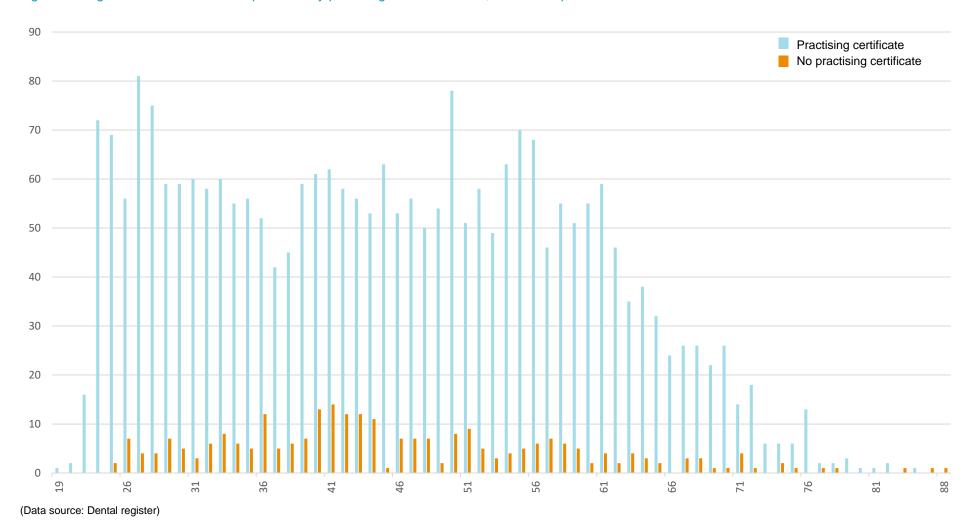


Figure 1-7. Age of registered dentists and dental specialists by gender, as at 30 September 2017

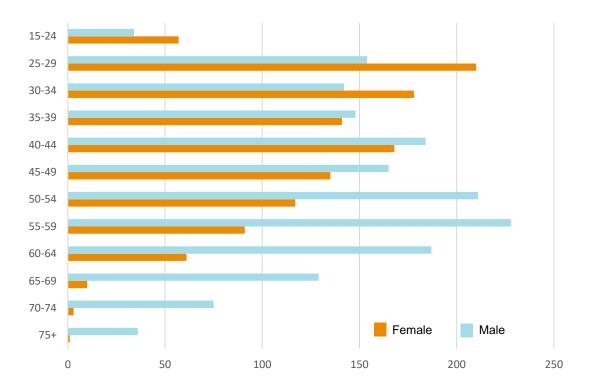


Table 1-5. Gender of dentists and dental specialists by practising certificate status

|      | Gender        | Practising certificate (%) | No practising certificate (%) | Total (%)    |
|------|---------------|----------------------------|-------------------------------|--------------|
|      | Male          | 1,471 (60.5)               | 219 (59.5)                    | 1,690 (60.4) |
| 2016 | Female        | 961 (39.5)                 | 149 (40.5)                    | 1,110 (39.6) |
|      | Total (row %) | 2,432 (86.9)               | 368 (13.1)                    | 2,800        |
|      | Male          | 1,531 (59.0)               | 162 (60.2)                    | 1,693 (59.1) |
| 2017 | Female        | 1,065 (41.0)               | 107 (39.8)                    | 1,172 (40.9) |
|      | Total (row %) | 2,596 (90.6)               | 269 (9.4)                     | 2,865        |

Table 1-6. Scope of practice registrations for dentists and dental specialists, by gender

|      |                              | Total | Male (row %) | Female (row %) |
|------|------------------------------|-------|--------------|----------------|
|      | Dentists                     | 2,459 | 1,451 (59.0) | 1,008 (41.0)   |
|      | Dental specialists           | 341   | 239 (70.1)   | 102 (29.9)     |
|      | Total                        | 2,800 | 1,690 (60.4) | 1,110 (39.6)   |
|      | Specialty <sup>a</sup>       |       |              |                |
|      | Endodontics                  | 34    | 24 (70.6)    | 10 (29.4)      |
|      | Oral & Maxillofacial Surgery | 50    | 49 (98.0)    | 1 (2.0)        |
|      | Oral Medicine                | 5     | 3 (60.0)     | 2 (40.0)       |
| 2016 | Oral Pathology               | 8     | 3 (37.5)     | 5 (62.5)       |
| 20   | Oral Surgery                 | 10    | 9 (90.0)     | 1 (10.0)       |
|      | Orthodontics                 | 108   | 71 (65.7)    | 37 (34.3)      |
|      | Paediatric Dentistry         | 21    | 9 (42.9)     | 12 (57.1)      |
|      | Periodontology               | 36    | 24 (66.7)    | 12 (33.3)      |
|      | Prosthodontics               | 32    | 26 (81.3)    | 6 (18.7)       |
|      | Public Health Dentistry      | 19    | 8 (42.1)     | 11 (57.9)      |
|      | Restorative Dentistry        | 10    | 9 (90.0)     | 1 (10.0)       |
|      | Special Needs Dentistry      | 9     | 5 (55.6)     | 4 (44.4)       |
|      | Dentists                     | 2,513 | 1,449 (57.7) | 1,064 (42.3)   |
|      | Dental specialists           | 352   | 244 (69.3)   | 108 (30.7)     |
|      | Total                        | 2,865 | 1,693 (59.1) | 1,172 (40.9)   |
| 2017 | Specialty <sup>a</sup>       |       |              |                |
| 20   | Endodontics                  | 36    | 25 (69.4)    | 11 (30.6)      |
|      | Oral & Maxillofacial Surgery | 49    | 48 (98.0)    | 1 (2.0)        |
|      | Oral Medicine                | 5     | 3 (60.0)     | 2 (40.0)       |
|      | Oral Pathology               | 9     | 4 (44.4)     | 5 (55.6)       |

| Oral Surgery            | 10  | 9 (90.0)  | 1 (10.0)  |
|-------------------------|-----|-----------|-----------|
| Orthodontics            | 111 | 73 (65.8) | 38 (34.2) |
| Paediatric Dentistry    | 21  | 9 (42.9)  | 12 (57.1) |
| Periodontology          | 37  | 24 (64.9) | 13 (35.1) |
| Prosthodontics          | 34  | 28 (82.4) | 6 (17.6)  |
| Public Health Dentistry | 20  | 8 (40.0)  | 12 (60.0) |
| Restorative Dentistry   | 10  | 9 (90.0)  | 1 (10.0)  |
| Special Needs Dentistry | 11  | 5 (45.5)  | 6 (54.5)  |
|                         |     |           |           |

<sup>&</sup>lt;sup>a</sup> Registrations in multiple specialist scopes of practice occur (Data source: Dental register)

Table 1-7. Self-identified ethnicity by practising dentists and dental specialists

| Ethnicity   | 2016 (%)   | 2017 (%)   |
|---|------------|------------|
| New Zealand European  | 966 (39.7) | 913 (35.2) |
| Māori   | 70 (2.9)   | 63 (2.4)   |
| Chinese   | 244 (10.0) | 241 (9.3)  |
| Indian  | 225 (9.3)  | 223 (8.6)  |
| Other European  | 132 (5.4)  | 110 (4.2)  |
| Other Asian   | 112 (4.6)  | 102 (3.9)  |
| Other East Asian  | 46 (1.8)   | 52 (1.9)   |
| British   | 89 (3.7)   | 99 (3.8)   |
| South African   | 51 (2.1)   | 63 (2.4)   |
| South Korean  | 52 (2.1)   | 63 (2.4)   |
| Other   | 79 (3.2)   | 94 (3.6)   |
| Iraqi   | 56 (2.3)   | 55 (2.1)   |
| Samoan  | 9 (0.4)    | 8 (0.3)    |
| Fijian  | 8 (0.3)    | 8 (0.3)    |
| Egyptian  | 8 (0.3)    | 9 (0.3)    |
| Other Pacific Peoples   | 2 (0.1)    | 5 (0.2)    |
| Tongan  | 2 (0.1)    | 3 (0.1)    |
| Niuean  | _          | 1 (0.0)    |
| Cook Island Māori   | 1 (0.0)    | _          |
| Unknown   | 461 (19.0) | 664 (25.6) |
| Total <sup>a</sup>  | 2,567      | 2,724      |
| Total selecting an 'Other' group                              | 371        | 363        |
| Total practising dentists and dental specialists <sup>b</sup> | 2,432      | 2,596      |

<sup>&</sup>lt;sup>a</sup> Total is greater than number of practising dentists and dental specialists due to self-identification of multiple ethnicities. <sup>b</sup> Denominator used for percentage values is total practising dentists and dental specialists.

(Data sources: Dental register and workforce survey)

Table 1-8. Self-identification of 'other' ethnicity based on 2017 data

| Malaysian                | 30 | Ceylonese, Irish, Dutch    | 2 | Hispanic                 | 1 |
|--------------------------|----|----------------------------|---|--------------------------|---|
| Taiwanese                | 25 | Croatian                   | 2 | Indonesian Chinese       | 1 |
| Malaysian Chinese        | 21 | Danish                     | 2 | Iranian                  | 1 |
| Sri Lankan               | 20 | French, UAE                | 2 | Iranian, Persian         | 1 |
| Undefined                | 12 | Greek                      | 2 | Irish Chinese            | 1 |
| Australian               | 9  | Indonesian                 | 2 | Irish, English           | 1 |
| Irish                    | 8  | Italian, South American    | 2 | Israeli                  | 1 |
| American                 | 7  | Japanese                   | 2 | Israeli Russian          | 1 |
| Brazilian                | 7  | Macedonian                 | 2 | Kiwi Asian, Singaporean  | 1 |
| Malay                    | 7  | New Zealand Born           | 2 | Kurd                     | 1 |
| Russian                  | 7  | New Zealand Chinese        | 2 | Latvian                  | 1 |
| English                  | 5  | Portuguese                 | 2 | Lebanese New Zealand     | 1 |
| Filipino                 | 5  | Punjabi Indian             | 2 | Libyan                   | 1 |
| Middle Eastern           | 5  | South African              | 2 | Lithuanian               | 1 |
| Serbian                  | 5  | South African Indian       | 2 | Malaysia                 | 1 |
| South American           | 5  | Swedish                    | 2 | Malaysian Indian         | 1 |
| African                  | 4  | Taiwanese, Kiwi            | 2 | Mediterranean            | 1 |
| German                   | 4  | USA                        | 2 | Middle Eastern, Iranian  | 1 |
| New Zealander            | 4  | Welsh                      | 2 | Natural Born Us Citizen  | 1 |
| Pakistani                | 4  | African And Middle Eastern | 1 | Netherlands              | 1 |
| Taiwan                   | 4  | African Botswana           | 1 | New Zealand Sri Lankan   | 1 |
| Thai                     | 4  | African Of Indian Origin   | 1 | New Zealand Tamil        | 1 |
| Ukrainian                | 4  | Albanian                   | 1 | North American           | 1 |
| Dutch                    | 3  | American European          | 1 | Norwegian European       | 1 |
| Fijian Indian            | 3  | Arab                       | 1 | Palestinian              | 1 |
| Hungarian                | 3  | Arabian                    | 1 | Persian                  | 1 |
| Italian                  | 3  | Australian European        | 1 | Rhodesian Born/ Zimbabwe | 1 |
| Korean                   | 3  | Bangladeshi                | 1 | Russian Israeli          | 1 |
| Latin American           | 3  | Belgian                    | 1 | Scandinavian             | 1 |
| New Zealand Born Chinese | 3  | Bidayuh                    | 1 | Sinhalese                | 1 |
| Polish                   | 3  | Botswana                   | 1 | South Africa European    | 1 |
| Romanian                 | 3  | Burmese                    | 1 | South American Brazilian | 1 |
| Scottish                 | 3  | Cambodian                  | 1 | South East, Middle East  | 1 |
| Singaporean              | 3  | Chilean                    | 1 | Sudanese                 | 1 |
| South East Asian         | 3  | Chinese New Zealand        | 1 | Tahitian                 | 1 |
| United Kingdom           | 3  | Chinese Taiwan             | 1 | Turkish                  | 1 |
| Argentinian              | 2  | Colombian                  | 1 | United Kingdom British   | 1 |
| Bengali                  | 2  | Czech                      | 1 | USA Citizen              | 1 |
| British                  | 2  | Egyptian                   | 1 | Vietnamese               | 1 |
| Bulgarian                | 2  | English, Irish             | 1 | White Zambian            | 1 |
| Canadian                 | 2  | European                   | 1 | Yemeni                   | 1 |
| Caucasian                | 2  | French                     | 1 | Yugoslavian              | 1 |
| Caucasian American       | 2  | Hebrew                     | 1 | J                        |   |

(Data sources: Dental register & workforce survey)

Table 1-9 Country of primary qualification for practising dentists and dental specialists, for 2016

| Country of qualification | Dental specialists<br>(Row %) | Dentists<br>(Row %) | Total<br>(Column %) |
|--------------------------|-------------------------------|---------------------|---------------------|
| New Zealand              | 220 (13.4)                    | 1,418 (86.6)        | 1,638 (67.4)        |
| Overseas                 | 74 (9.3)                      | 720 (90.7)          | 794 (32.6)          |
| Total                    | 294 (12.1)                    | 2,138 (87.9)        | 2,432               |
| Breakdown of overse      | eas qualifications            |                     |                     |
|                          | (Column %) a                  | (Column %)          | (Column %)          |
| Argentina                | _                             | 7 (0.3)             | 7 (0.3)             |
| Australia                | 6 (2.0)                       | 47 (2.2)            | 53 (2.2)            |
| Bangladesh               | _                             | 1 (0.0)             | 1 (0.0)             |
| Belgium                  | _                             | 1 (0.0)             | 1 (0.0)             |
| Bolivia                  | _                             | 1 (0.0)             | 1 (0.0)             |
| Brazil                   | 1 (0.3)                       | 9 (0.4)             | 10 (0.4)            |
| Bulgaria                 | _                             | 2 (0.1)             | 2 (0.1)             |
| Canada                   | 1 (0.3)                       | 10 (0.5)            | 11 (0.5)            |
| Chile                    | _                             | 1 (0.0)             | 1 (0.0)             |
| China                    | 1 (0.3)                       | 3 (0.1)             | 4 (0.2)             |
| Colombia                 | 1 (0.3)                       | 3 (0.1)             | 4 (0.2)             |
| Czech Republic           | _                             | 3 (0.1)             | 3 (0.1)             |
| Egypt                    | 1 (0.3)                       | 6 (0.3)             | 7 (0.3)             |
| Fiji                     | 1 (0.3)                       | 8 (0.4)             | 9 (0.4)             |
| Finland                  | _                             | 1 (0.0)             | 1 (0.0)             |
| France                   | 1 (0.3)                       | 1 (0.0)             | 2 (0.1)             |
| Germany                  | 3 (1.0)                       | 3 (0.1)             | 6 (0.2)             |
| Greece                   | _                             | 2 (0.1)             | 2 (0.1)             |
| Hong Kong                | _                             | 2 (0.1)             | 2 (0.1)             |
| Hungary                  | _                             | 1 (0.0)             | 1 (0.0)             |
| India                    | 8 (2.7)                       | 151 (7.1)           | 159 (6.5)           |
| Iran                     | _                             | 1 (0.0)             | 1 (0.0)             |
| Iraq                     | 3 (1.0)                       | 51 (2.4)            | 54 (2.2)            |
| Ireland                  | 5 (1.7)                       | 2 (0.1)             | 7 (0.3)             |
| Israel                   | _                             | 4 (0.2)             | 4 (0.2)             |
| Italy                    | 3 (1.0)                       | _                   | 3 (0.1)             |
| Jordan                   | 3 (1.0)                       | 2 (0.1)             | 5 (0.2)             |
| Korea                    | _                             | 3 (0.1)             | 3 (0.1)             |
| Kosovo                   | _                             | 1 (0.0)             | 1 (0.0)             |
| Latvia                   | _                             | 1 (0.0)             | 1 (0.0)             |
| Libya                    | 1 (0.3)                       | _                   | 1 (0.0)             |
| Macedonia                | _                             | 1 (0.0)             | 1 (0.0)             |
| Malaysia                 | 3 (1.0)                       | 4 (0.2)             | 7 (0.3)             |
| Mexico                   | 1 (0.3)                       | _                   | 1 (0.0)             |

| Country of qualification | Dental specialists (Row %) | Dentists<br>(Row %) | Total<br>(Column %) |
|--------------------------|----------------------------|---------------------|---------------------|
| Netherlands              | 1 (0.3)                    | 4 (0.2)             | 5 (0.2)             |
| Pakistan                 | _                          | 3 (0.1)             | 3 (0.1)             |
| Philippines              | _                          | 7 (0.3)             | 7 (0.3)             |
| Poland                   | _                          | 4 (0.2)             | 4 (0.2)             |
| Puerto Rico              | _                          | 1 (0.0)             | 1 (0.0)             |
| Romania                  | _                          | 7 (0.3)             | 7 (0.3)             |
| Russia                   | _                          | 12 (0.6)            | 12 (0.5)            |
| Serbia                   | _                          | 3 (0.1)             | 3 (0.1)             |
| Singapore                | 1 (0.3)                    | 9 (0.4)             | 10 (0.4)            |
| South Africa             | 9 (3.1)                    | 78 (3.6)            | 87 (3.6)            |
| Sri Lanka                | 2 (0.7)                    | 11 (0.5)            | 13 (0.5)            |
| Sweden                   | _                          | 3 (0.1)             | 3 (0.1)             |
| Switzerland              | _                          | 1 (0.0)             | 1 (0.0)             |
| Syria                    | _                          | 1 (0.0)             | 1 (0.0)             |
| Taiwan                   | _                          | 2 (0.1)             | 2 (0.1)             |
| Thailand                 | _                          | 2 (0.1)             | 2 (0.1)             |
| Turkey                   | _                          | 1 (0.0)             | 1 (0.0)             |
| Ukraine                  | _                          | 2 (0.1)             | 2 (0.1)             |
| United Kingdom           | 15 (5.1)                   | 193 (9.0)           | 208 (8.6)           |
| USA                      | 2 (0.7)                    | 37 (1.7)            | 39 (1.6)            |
| Venezuela                | _                          | 1 (0.0)             | 1 (0.0)             |
| Yugoslavia               | 1 (0.3)                    | 5 (0.2)             | 6 (0.2)             |

<sup>&</sup>lt;sup>a</sup> Percentages calculated from totals inclusive of New Zealand qualifications (Data source: Dental register)

Table 1-10. Country of primary qualification for practising dentists and dental specialists, for 2017

| Country of qualification | Dental specialists<br>(Row %) | Dentists<br>(Row %) | Total<br>(Column %) |
|--------------------------|-------------------------------|---------------------|---------------------|
| New Zealand              | 231 (13.4)                    | 1,489 (86.6)        | 1,720 (66.3)        |
| Overseas                 | 80 (9.1)                      | 796 (90.9)          | 876 (33.7)          |
| Total                    | 311 (12.0)                    | 2,285 (88.0)        | 2,596               |
| Breakdown of overse      | as qualifications             |                     |                     |
|                          | (Column %) <sup>a</sup>       | (Column %)          | (Column %)          |
| Argentina                | _                             | 7 (0.3)             | 7 (0.3)             |
| Australia                | 4 (1.3)                       | 55 (2.4)            | 59 (2.3)            |
| Bangladesh               | _                             | 1 (0.0)             | 1 (0.0)             |
| Belgium                  | _                             | 1 (0.0)             | 1 (0.0)             |
| Bolivia                  | _                             | 1 (0.0)             | 1 (0.0)             |
| Brazil                   | 1 (0.3)                       | 9 (0.4)             | 10 (0.4)            |
| Bulgaria                 | _                             | 2 (0.1)             | 2 (0.1)             |
| Canada                   | 2 (0.6)                       | 13 (0.6)            | 15 (0.6)            |
| Chile                    | _                             | 2 (0.1)             | 2 (0.1)             |
| China                    | 1 (0.3)                       | 5 (0.2)             | 6 (0.2)             |
| Colombia                 | 1 (0.3)                       | 3 (0.1)             | 4 (0.2)             |
| Czech Republic           | _                             | 3 (0.1)             | 3 (0.1)             |
| Egypt                    | 1 (0.3)                       | 6 (0.3)             | 7 (0.3)             |
| Fiji                     | 1 (0.3)                       | 9 (0.4)             | 10 (0.4)            |
| France                   | 1 (0.3)                       | 2 (0.1)             | 3 (0.1)             |
| Germany                  | 3 (1.0)                       | 5 (0.2)             | 8 (0.3)             |
| Hong Kong                | _                             | 3 (0.1)             | 3 (0.1)             |
| Hungary                  | _                             | 1 (0.0)             | 1 (0.0)             |
| India                    | 9 (2.9)                       | 163 (7.1)           | 172 (6.6)           |
| Iran                     | _                             | 1 (0.0)             | 1 (0.0)             |
| Iraq                     | 3 (1.0)                       | 53 (2.3)            | 56 (2.2)            |
| Ireland                  | 6 (1.9)                       | 5 (0.2)             | 11 (0.4)            |
| Israel                   | _                             | 4 (0.2)             | 4 (0.2)             |
| Italy                    | 2 (0.6)                       | _                   | 2 (0.1)             |
| Jordan                   | 2 (0.6)                       | _                   | 2 (0.1)             |
| Korea                    | _                             | 3 (0.1)             | 3 (0.1)             |
| Kosovo                   | _                             | 1 (0.0)             | 1 (0.0)             |
| Latvia                   | _                             | 1 (0.0)             | 1 (0.0)             |
| Macedonia                | _                             | 1 (0.0)             | 1 (0.0)             |
| Malaysia                 | 4 (1.3)                       | 4 (0.2)             | 8 (0.3)             |
| Mexico                   | 1 (0.3)                       | _                   | 1 (0.0)             |
| Netherlands              | 1 (0.3)                       | 4 (0.2)             | 5 (0.2)             |
| Pakistan                 | _                             | 4 (0.2)             | 4 (0.2)             |
| Philippines              | _                             | 9 (0.4)             | 9 (0.3)             |

| Country of qualification | Dental specialists (Row %) | Dentists (Row %) | Total<br>(Column %) |
|--------------------------|----------------------------|------------------|---------------------|
| Poland                   | _                          | 4 (0.2)          | 4 (0.2)             |
| Puerto Rico              | _                          | 1 (0.0)          | 1 (0.0)             |
| Romania                  | _                          | 7 (0.3)          | 7 (0.3)             |
| Russia                   | _                          | 12 (0.5)         | 12 (0.5)            |
| Serbia                   | _                          | 3 (0.1)          | 3 (0.1)             |
| Singapore                | 2 (0.6)                    | 11 (0.5)         | 13 (0.5)            |
| South Africa             | 10 (3.2)                   | 98 (4.3)         | 108 (4.2)           |
| Sri Lanka                | 2 (0.6)                    | 11 (0.5)         | 13 (0.5)            |
| Sweden                   | _                          | 3 (0.1)          | 3 (0.1)             |
| Syria                    | _                          | 1 (0.0)          | 1 (0.0)             |
| Taiwan                   | _                          | 2 (0.1)          | 2 (0.1)             |
| Thailand                 | _                          | 2 (0.1)          | 2 (0.1)             |
| Turkey                   | _                          | 1 (0.0)          | 1 (0.0)             |
| Ukraine                  | _                          | 2 (0.1)          | 2 (0.1)             |
| United Kingdom           | 17 (5.5)                   | 208 (9.1)        | 225 (8.7)           |
| USA                      | 5 (1.6)                    | 44 (1.9)         | 49 (1.9)            |
| Yugoslavia               | 1 (0.3)                    | 5 (0.2)          | 6 (0.2)             |

 $<sup>^{\</sup>rm a}$  Percentages calculated from totals inclusive of New Zealand qualifications (Data source: Dental register)

Table 1-11. Cohort remainder rate for University of Otago dental graduates, as at 30 September 2017

| Graduation cohort | Total number of domestic dental graduates <sup>a</sup> | Number of dental<br>graduates with practising<br>certificates <sup>b</sup> | Cohort remainder rate |
|-------------------|--|--|-----------------------|
| 1946-1950         | 128  | _  | _                     |
| 1951-1955         | 175  | _  | _                     |
| 1956-1960         | 176  | 2  | 1.1                   |
| 1961-1965         | 188  | 12   | 6.4                   |
| 1966-1970         | 239  | 48   | 20.1                  |
| 1971-1975         | 212  | 63   | 29.7                  |
| 1976-1980         | 272  | 140  | 51.5                  |
| 1981-1985         | 269  | 161  | 59.9                  |
| 1986-1990         | 224  | 127  | 56.7                  |
| 1991-1995         | 247  | 146  | 59.1                  |
| 1996              | 54   | 24   | 44.4                  |
| 1997              | 52   | 28   | 53.8                  |
| 1998              | 55   | 23   | 41.8                  |
| 1999              | 58   | 22   | 37.9                  |
| 2000              | 60   | 30   | 50.0                  |
| 2001              | 60   | 26   | 43.3                  |
| 2002              | 59   | 18   | 30.5                  |
| 2003              | 56   | 25   | 44.6                  |
| 2004              | 56   | 28   | 50.0                  |
| 2005              | 60   | 29   | 48.3                  |
| 2006              | 62   | 23   | 37.1                  |
| 2007              | 61   | 25   | 41.0                  |
| 2008              | 57   | 28   | 49.1                  |
| 2009              | 55   | 44   | 80.0                  |
| 2010              | 60   | 37   | 61.7                  |
| 2011              | 58   | 47   | 81.0                  |
| 2012              | 54   | 58   | 107.4                 |
| 2013              | 52   | 62   | 119.2                 |
| 2014              | 50   | 64   | 128.0                 |
| 2015              | 50   | 71   | 142.0                 |
| 2016              | 58   | 78   | 134.5                 |

(Data sources: Dental register and Faculty of Dentistry)

<sup>&</sup>lt;sup>a</sup> For the purpose of this analysis a domestic dental graduates is defined as a dental student not externally funded <sup>b</sup> There are internationally-funded students who register in New Zealand—resulting in the number of registrants exceeding the domestic graduates

Table 1-12. Longitudinal analysis of the cohort remainder rate of University of Otago dental graduates

## Year of graduation

|                          | 2016       | 2015       | 2014       | 2013           | 2012           | 2011            | 2010                   | 2009           | 2008      | 2007      | 2006      | 2005      |
|--------------------------|------------|------------|------------|----------------|----------------|-----------------|------------------------|----------------|-----------|-----------|-----------|-----------|
|                          |            |            |            | Total number   | of graduates,  | not externally- | funded <sup>a, b</sup> |                |           |           |           |           |
|                          | 58         | 50         | 50         | 52             | 54             | 58              | 60                     | 55             | 57        | 61        | 62        | 60        |
| Practising status as at: |            |            | Number of  | Otago dental g | graduates with | practising cert | ificates (cohor        | t remainder ra | te)       |           |           |           |
| September 2017           | 78 (134.5) | 71 (142.0) | 64 (128.0) | 62 (119.2)     | 58 (107.4)     | 47 (81.0)       | 37 (61.7)              | 44 (80.0)      | 28 (49.1) | 25 (41.0) | 23 (37.1) | 29 (48.3) |
| September 2016           |            | 73 (146.0) | 64 (128.0) | 63 (121.2)     | 59 (109.3)     | 46 (79.3)       | 38 (63.3)              | 41 (74.5)      | 32 (56.1) | 24 (39.3) | 22 (35.5) | 28 (46.7) |
| September 2015           |            |            | 65 (130.0) | 63 (121.2)     | 54 (100.0)     | 43 (74.1)       | 37 (61.7)              | 38 (69.1)      | 31 (54.4) | 18 (29.5) | 23 (37.1) | 26 (43.3) |
| September 2014           |            |            |            | 65 (125.0)     | 61 (113.0)     | 46 (79.3)       | 39 (65.0)              | 37 (67.3)      | 30 (52.6) | 21 (34.4) | 24 (38.7) | 29 (48.3) |
| September 2013           |            |            |            |                | 62 (114.8)     | 48 (82.8)       | 41 (68.3)              | 38 (69.1)      | 31 (54.4) | 23 (37.7) | 26 (41.9) | 30 (50.0) |
| September 2012           |            |            |            |                |                | 60 (103.4)      | 48 (80.0)              | 39 (70.9)      | 30 (52.6) | 26 (42.6) | 30 (48.4) | 30 (50.0) |
| September 2011           |            |            |            |                |                |                 | 57 (95.0)              | 46 (83.6)      | 34 (59.6) | 27 (44.3) | 29 (46.8) | 32 (53.3) |
| March 2010               |            |            |            |                |                |                 |                        | 45 (81.8)      | 45 (78.9) | 38 (62.3) | 34 (54.8) | 35 (58.3) |
| March 2009               |            |            |            |                |                |                 |                        |                | (56.1)    | (72.1)    | (64.5)    | (71.7)    |
| December 2007            |            |            |            |                |                |                 |                        |                |           |           | (50.0)    | (71.7)    |
| December 2006            |            |            |            |                |                |                 |                        |                |           |           |           | (65.0)    |
| December 2005            |            |            |            |                |                |                 |                        |                |           |           |           |           |
| December 2004            |            |            |            |                |                |                 |                        |                |           |           |           |           |

For the purpose of this analysis a domestic student is defined as a student not externally funded
 There are internationally-funded students who register in New Zealand—resulting in the number of registrants exceeding the domestic graduates (Data sources: Dental register and Faculty of Dentistry)

Table 1-13. Overseas qualified dentists with practising certificates—type of registration pathway by year of first New Zealand registration, as at 30 September 2017

| Year of first<br>registration in<br>New Zealand | NZDREX (%) | Prescribed qualification<br>or equivalency<br>assessed (%) | Trans-Tasman Mutual<br>Recognition (%) |
|---|------------|--|--|
| 1971-1975                                       |            | 2 (0.5)  |  |
| 1976-1980                                       | _          | 3 (0.7)  | _                                      |
| 1981-1985                                       |            | 3 (0.7)  | _                                      |
| 1986-1990                                       | _          | 15 (3.7)   | _                                      |
| 1991-1995                                       | 11 (3.4)   | 19 (4.6)   | _                                      |
| 1996  | 3 (0.9)    | 2 (0.5)  | _                                      |
| 1997  | 13 (4.0)   | 7 (1.7)  | _                                      |
| 1998  | 16 (5.0)   | 5 (1.2)  | _                                      |
| 1999  | 12 (3.7)   | 1 (0.2)  | _                                      |
| 2000  | 24 (7.5)   | 5 (1.2)  | 1 (1.5)                                |
| 2001  | 13 (4.0)   | 3 (0.7)  | <del>-</del>                           |
| 2002  | 14 (4.4)   | 9 (2.2)  | _                                      |
| 2003  | 13 (4.0)   | 14 (3.4)   | 1 (1.5)                                |
| 2004  | 12 (3.7)   | 18 (4.4)   | 1 (1.5)                                |
| 2005  | 17 (5.3)   | 21 (5.1)   | 4 (6.1)                                |
| 2006  | 20 (6.2)   | 19 (4.6)   | <del>_</del>                           |
| 2007  | 24 (7.5)   | 12 (2.9)   | 1 (1.5)                                |
| 2008  | 14 (4.4)   | 16 (3.9)   | <del>_</del>                           |
| 2009  | 20 (6.2)   | 23 (5.6)   | 2 (3.0)                                |
| 2010  | 22 (6.9)   | 19 (4.6)   | 1 (1.5)                                |
| 2011  | 17 (5.3)   | 14 (3.4)   | 2 (3.0)                                |
| 2012  | 15 (4.7)   | 14 (3.4)   | 5 (7.6)                                |
| 2013  | 15 (4.7)   | 24 (5.9)   | 5 (7.6)                                |
| 2014  | 9 (2.8)    | 22 (5.4)   | 8 (12.1)                               |
| 2015  | 9 (2.8)    | 25 (6.1)   | 10 (15.2)                              |
| 2016  | 8 (2.5)    | 49 (12.0)  | 10 (15.2)                              |
| 2017  | _          | 45 (11.0)  | 15 (22.7)                              |
| Total   | 321        | 409  | 66                                     |

Note: NZDREX = New Zealand Dentist Registration Examination (Data source: Dental register)

Table 1-14. Overseas qualified dental specialists with practising certificates—type of registration pathway by year of first New Zealand registration, as at 30 September 2017

| Year of first registration in New Zealand | Prescribed qualification or equivalency assessed (%) | Trans-Tasman Mutual<br>Recognition<br>(%) |
|---|--|---|
| 1971-1975                                 | 1 (1.3)  | _   |
| 1976-1980                                 | 1 (1.3)  | _   |
| 1981-1985                                 | 2 (2.6)  | _   |
| 1986-1990                                 | 3 (3.9)  | _   |
| 1991-1995                                 | 3 (3.9)  | _   |
| 1996                                      | 1 (1.3)  | _   |
| 1997                                      | 5 (6.5)  | _   |
| 1998                                      | 3 (3.9)  | _   |
| 1999                                      | 3 (3.9)  | _   |
| 2000                                      | 2 (2.6)  | 1 (0.3)                                   |
| 2001                                      | 4 (5.2)  | _   |
| 2002                                      | 2 (2.6)  | _   |
| 2003                                      | 2 (2.6)  | _   |
| 2004                                      | 1 (1.3)  | _   |
| 2005                                      | 3 (3.9)  | _   |
| 2006                                      | 1 (1.3)  | _   |
| 2007                                      | 2 (2.6)  | 1 (0.3)                                   |
| 2008                                      | 1 (1.3)  | _   |
| 2009                                      | 6 (7.8)  | _   |
| 2010                                      | 4 (5.2)  | _   |
| 2011                                      | 4 (5.2)  | _   |
| 2012                                      | 1 (1.3)  | _   |
| 2013                                      | 2 (2.6)  | _   |
| 2014                                      | 7 (9.1)  | _   |
| 2015                                      | 3 (3.9)  | _   |
| 2016                                      | 5 (6.5)  | _   |
| 2017                                      | 5 (6.5)  | 1 (0.3)                                   |
| Total                                     | 77   | 3   |

Table 1-15. Type of primary employment of practising dentists and dental specialists

|          |                                | Number (%)   | Total % |
|----------|--------------------------------|--------------|---------|
|          | Self-employed                  |              |         |
|          | Solo practice                  | 383 (26.4)   | 15.7    |
|          | Group practice                 | 1,067 (73.6) | 43.9    |
|          | Subtotal                       | 1,450        | 59.6    |
|          | Employees                      |              |         |
|          | Private practice               | 187 (47.1)   | 7.7     |
| <b>6</b> | DHB                            | 119 (30.0)   | 4.9     |
| 2016     | Faculty of Dentistry           | 63 (15.9)    | 2.6     |
| •        | Government Department, not MOH | 14 (3.5)     | 0.6     |
|          | lwi                            | 13 (3.3)     | 0.5     |
|          | МОН                            | 1 (0.3)      | 0.0     |
|          | Subtotal                       | 397          | 16.3    |
|          | Other forms of employment      | 22           | 0.9     |
|          | No reply to question           | 563          | 23.1    |
|          | Total                          | 2,432        |         |
|          | Self-employed                  |              |         |
|          | Solo practice                  | 355 (25.6)   | 13.7    |
|          | Group practice                 | 1,033 (74.4) | 39.8    |
|          | Subtotal                       | 1,388        | 53.5    |
|          | Employees                      |              |         |
|          | Private practice               | 141 (41.3)   | 5.4     |
|          | DHB                            | 116 (34.0)   | 4.5     |
| 2017     | Faculty of Dentistry           | 56 (16.4)    | 2.2     |
| .,       | Government Department, not MOH | 17 (5.0)     | 0.7     |
|          | lwi                            | 8 (2.3)      | 0.3     |
|          | МОН                            | 3 (0.9)      | 0.1     |
|          | Subtotal                       | 341          | 13.1    |
|          | Other forms of employment      | 21           | 0.8     |
|          | No reply to question           | 846          | 32.6    |
|          | Total                          | 2,596        |         |

Note: DHB = District health board; MOH = Ministry of Health (Data source: Workforce survey)

Table 1-16. Total number of hours worked per week by dentists and dental specialists practising in New Zealand

|      | Number of hours worked      | Total (%)    | Dentists (%) | Dental specialists (%) |
|------|-----------------------------|--------------|--------------|------------------------|
|      | 1 to 10                     | 66 (3.5)     | 61 (3.7)     | 5 (2.3)                |
|      | 11 to 20                    | 151 (8.1)    | 130 (7.9)    | 21 (9.8)               |
|      | 21 to 30                    | 377 (20.2)   | 351 (21.3)   | 26 (12.1)              |
|      | 31 to 40                    | 1,000 (53.6) | 920 (55.8)   | 80 (37.4)              |
| (0   | 41 to 50                    | 155 (8.3)    | 138 (8.4)    | 17 (7.9)               |
| 2016 | 51 to 60                    | 36 (1.9)     | 20 (1.2)     | 16 (7.5)               |
| N    | More than 60                | 79 (4.2)     | 30 (1.8)     | 49 (22.9)              |
|      | Number giving data on hours | 1,864        | 1,650        | 214                    |
|      | Mean no. of hours/week (SD) | 36.5 (19.3)  | 34.5 (17.5)  | 52.0 (27.1)            |
|      | Nil response or excluded    | 568          | 488          | 80                     |
|      | Total                       | 2,432        | 2,138        | 294                    |
|      | 1 to 10                     | 72 (4.1)     | 63 (4.0)     | 9 (4.4)                |
|      | 11 to 20                    | 143 (8.1)    | 128 (8.2)    | 15 (7.3)               |
|      | 21 to 30                    | 353 (20.0)   | 324 (20.8)   | 29 (14.1)              |
|      | 31 to 40                    | 950 (53.8)   | 874 (56.1)   | 76 (36.9)              |
| _    | 41 to 50                    | 151 (8.6)    | 133 (8.5)    | 18 (8.7)               |
| 2017 | 51 to 60                    | 40 (2.3)     | 16 (1.0)     | 24 (11.7)              |
| N    | More than 60                | 56 (3.2)     | 21 (1.3)     | 35 (17.0)              |
|      | Number giving data on hours | 1,765        | 1,559        | 206                    |
|      | Mean no. of hours/week (SD) | 35.6 (19.6)  | 34.1 (18.2)  | 47.6 (26.6)            |
|      | Nil response or excluded    | 831          | 726          | 105                    |
|      | Total                       | 2,596        | 2,285        | 311                    |

(Data source: Workforce survey)

Table 1-17. Reasons for part-time practice by dentist and dental specialist practising in New Zealand

|      | Reason for practising part-time | Females (%) | Males (%)  | Total (%)  |
|------|---------------------------------|-------------|------------|------------|
|      | Engaged in non-dental work      | 7 (1.6)     | 12 (2.9)   | 19 (2.2)   |
|      | Insufficient dental work        | 40 (9.2)    | 52 (12.7)  | 92 (10.9)  |
|      | Seeking dental work             | 8 (1.8)     | _          | 8 (0.9)    |
|      | Semi-retired from dentistry     | 12 (2.8)    | 63 (15.4)  | 75 (8.9)   |
| 2016 | Parental responsibilities       | 172 (39.4)  | 13 (3.2)   | 185 (21.9) |
| 20   | Personal choice                 | 154 (35.3)  | 229 (55.9) | 383 (45.3) |
|      | Studying                        | 23 (5.3)    | 22 (5.4)   | 45 (5.3)   |
|      | Health issues                   | 2 (0.5)     | 7 (1.7)    | 9 (1.1)    |
|      | Other (see below)               | 18 (4.1)    | 12 (2.9)   | 30 (3.5)   |
|      | Total working part time (row %) | 436 (51.5)  | 410 (48.5) | 846        |
|      | Engaged in non-dental work      | 12 (2.9)    | 20 (5.1)   | 32 (3.9)   |
|      | Insufficient dental work        | 32 (7.6)    | 43 (10.9)  | 75 (9.2)   |
|      | Seeking dental work             | 3 (0.7)     | 3 (0.8)    | 6 (0.7)    |
|      | Semi-retired from dentistry     | 14 (3.3)    | 70 (17.8)  | 84 (10.3)  |
| 2017 | Parental responsibilities       | 153 (36.3)  | 16 (4.1)   | 169 (20.7) |
| 20   | Personal choice                 | 166 (39.4)  | 197 (50.0) | 363 (44.5) |
|      | Studying                        | 21 (5.0)    | 21 (5.3)   | 42 (5.2)   |
|      | Health issues                   | 1 (0.2)     | 4 (1.0)    | 5 (0.6)    |
|      | Other (see below)               | 19 (4.5)    | 20 (5.1)   | 39 (4.8)   |
|      | Total working part time (row %) | 421         | 394        | 815        |

Reasons offered by the 39 who selected 'other' reasons for practising part-time, based on the 2017 data (number):

Contract hours offered (10)

Choice (9)

Starting new practice (5)

Extended holiday or overseas travel (4)

Insufficient dental work (3)

Carer (3)

Administration (1)

Renovation of surgery (1)

Practising overseas (1)

Seeking employment (1)

Undefined (1)

(Data sources: Dental register & workforce survey)

Table 1-18. Work by practice and employment type for dentists, by primary and secondary employer for 2016

|                             | General dentistry |  | Te     | Teaching <sup>a</sup>                    |        | Administration <sup>a</sup>              |             | Overall                                  |                                  |
|-----------------------------|-------------------|--|--------|--|--------|--|-------------|--|----------------------------------|
|                             | Number            | Mean hours<br>spent at work<br>type (SD) | Number | Mean hours<br>spent at work<br>type (SD) | Number | Mean hours<br>spent at work<br>type (SD) | Number b, d | Mean hours<br>spent at work<br>type (SD) | Number not reported <sup>c</sup> |
| Primary employer            |                   |  |        |  |        |  |             |  |                                  |
| Private practice (self-emp) | 1,276             | 31.3 (9.4)                               | 2      | 2.0 (1.0)                                | 34     | 5.5 (3.7)                                | 1,276       | 32.3 (10.4)                              | 21                               |
| Private practice (employee) | 160               | 32.5 (9.0)                               | 1      | 3.0                                      | 7      | 4.7 (2.8)                                | 160         | 33.5 (9.8)                               | 6                                |
| DHB or MOH                  | 97                | 35.7 (12.3)                              | 1      | 1.0                                      | 9      | 18.9 (14.1)                              | 104         | 37.6 (13.8)                              | 3                                |
| University                  | 20                | 29.1 (11.6)                              | 16     | 15.0 (10.6)                              | 3      | 19.7 (0.0)                               | 33          | 35.5 (18.8)                              | 2                                |
| Other                       | 25                | 16.0 (10.0)                              | 1      | 2.0                                      | 5      | 21.2 (13.7)                              | 27          | 32.9 (11.5)                              | _                                |
| Total number                |                   |  |        |  |        |  | 1,600       |  | 32                               |
| Secondary employer          |                   |  |        |  |        |  |             |  |                                  |
| Private practice (self-emp) | 51                | 11.2 (5.1)                               | 1      | 1.0                                      | 2      | 2.5 (1.5)                                | 53          | 12.3 (7.7)                               |                                  |
| Private practice (employee) | 6                 | 9.0 (2.2)                                | _      | _  | 1      | 26.0                                     | 7           | 11.4 (6.3)                               |                                  |
| DHB or MOH                  | 10                | 12.1 (4.3)                               | _      | _  | 4      | 19.0 (3.3)                               | 13          | 15.2 (6.5)                               |                                  |
| University                  | 2                 | 25.0 (15.0)                              | 9      | 8.0 (4.1)                                | 1      | 9.0                                      | 12          | 11.8 (9.8)                               |                                  |
| Other                       | 2                 | 22.0 (18.0)                              | _      | _  | 1      | 2.0                                      | 3           | 18.0 (15.7)                              |                                  |
| Total number                |                   |  |        |  |        |  | 88          |  |                                  |

<sup>&</sup>lt;sup>a</sup> Where specifically employed to do so
<sup>b</sup> Dentists reporting not working any hours and those who reported more than 80 hours per week, are excluded from these calculations
<sup>c</sup> Practice and employment type provided, but no hours recorded

d Totals of rows may sum greater than overall number per practice setting as multiple activities are performed, as well as activities not detailed in the table Note: DHB = district health board; MOH = Ministry of Health (Data source: Workforce survey)

Table 1-19. Work by practice and employment type for dentists, by primary and secondary employer for 2017

|                             | General dentistry |  | Teaching <sup>a</sup> |  | Admir  | Administration <sup>a</sup>              |             | Overall                                  |                                  |
|-----------------------------|-------------------|--|-----------------------|--|--------|--|-------------|--|----------------------------------|
|                             | Number            | Mean hours<br>spent at work<br>type (SD) | Number                | Mean hours<br>spent at work<br>type (SD) | Number | Mean hours<br>spent at work<br>type (SD) | Number b, d | Mean hours<br>spent at work<br>type (SD) | Number not reported <sup>c</sup> |
| Primary employer            |                   |  |                       |  |        |  |             |  |                                  |
| Private practice (self-emp) | 1,204             | 31.6 (9.4)                               | 8                     | 7.5 (7.3)                                | 40     | 7.9 (6.3)                                | 1,216       | 32.4 (9.8)                               | 23                               |
| Private practice (employee) | 129               | 30.5 (10.6)                              | _                     | _  | 3      | 6.3 (1.2)                                | 128         | 31.7 (12.0)                              | 3                                |
| DHB or MOH                  | 88                | 32.5 (13.8)                              | 3                     | 4.8 (4.0)                                | 13     | 14.4 (11.9)                              | 98          | 34.8 (12.8)                              | 6                                |
| University                  | 15                | 23.3 (14.8)                              | 8                     | 18.3 (11.3)                              | 3      | 6.3 (0.0)                                | 28          | 33.8 (15.7)                              | 3                                |
| Other                       | 23                | 11.8 (8.3)                               | 1                     | 4.0                                      | 7      | 18.1 (13.1)                              | 27          | 31.4 (7.8)                               | _                                |
| Total number                |                   |  |                       |  |        |  | 1,497       |  | 35                               |
| Secondary employer          |                   |  |                       |  |        |  |             |  |                                  |
| Private practice (self-emp) | 53                | 10.0 (4.6)                               | _                     | _  | 3      | 9.0 (0.9)                                | 58          | 10.2 (4.6)                               |                                  |
| Private practice (employee) | 2                 | 12.5 (3.5)                               | _                     | _  | _      | _  | 2           | 12.5 (3.5)                               |                                  |
| DHB or MOH                  | 7                 | 13.0 (9.8)                               | 3                     | 7.0 (5.1)                                | 6      | 9.0 (5.0)                                | 11          | 15.9 (13.0)                              |                                  |
| University                  | 2                 | 11.0 (7.0)                               | 12                    | 7.9 (4.4)                                | _      | _  | 14          | 9.1 (5.1)                                |                                  |
| Other                       | 2                 | 10.0 (6.0)                               | _                     | _  | 1      | 8.0                                      | 3           | 9.0 (5.1)                                |                                  |
| Total number                |                   |  |                       |  |        |  | 88          |  |                                  |

<sup>&</sup>lt;sup>a</sup> Where specifically employed to do so
<sup>b</sup> Dentists reporting not working any hours and those who reported more than 80 hours per week, are excluded from these calculations
<sup>c</sup> Practice and employment type provided, but no hours recorded

d Totals of rows may sum greater than overall number per practice setting as multiple activities are performed, as well as activities not detailed in the table Note: DHB = district health board; MOH = Ministry of Health (Data source: Workforce survey)

Table 1-20. Work by practice and employment type for dental specialists, by primary employer for 2016

|                                | N                | NoH or DHB    | Private | (self-employed) | Priva | te (employed) | University |               |
|--------------------------------|------------------|---------------|---------|-----------------|-------|---------------|------------|---------------|
|                                | No. <sup>a</sup> | Mean hrs (sd) | No.     | Mean hrs (sd)   | No.   | Mean hrs (sd) | No.        | Mean hrs (sd) |
| General Dentistry              | 5                | 26.0 (13.0)   | 14      | 28.7 (10.7)     | _     | _             | 1          | 45.0          |
| Dental Public Health           | 8                | 17.5 (11.3)   | 1       | 55.0            | 1     | 18.0          | 3          | 22.0 (12.0)   |
| Endodontics                    | 1                | 45.0          | 12      | 30.8 (14.6)     | 1     | 40.0          | 1          | 3.0           |
| Oral Medicine and Pathology    | 3                | 21.3 (8.0)    | 2       | 1.5 (0.5)       | 3     | 19.3 (25.2)   | 3          | 26.0 (8.5)    |
| Oral and Maxillofacial Surgery | 6                | 42.0 (16.1)   | 21      | 35.3 (9.4)      | 2     | 23.5 (21.5)   | 2          | 52.5 (7.5)    |
| Oral Surgery                   | _                | _             | 6       | 36.5 (16.5)     | 2     | 13.0 (7.0)    | _          | _             |
| Orthodontics                   | 3                | 21.7 (6.2)    | 45      | 34.8 (12.2)     | 3     | 21.3 (12.0)   | 3          | 15.0 (4.1)    |
| Paediatric dentistry           | 4                | 33.0 (8.2)    | 6       | 25.2 (12.3)     | _     | _             | 1          | 20.0          |
| Periodontics                   | _                | _             | 17      | 32.0 (13.5)     | 1     | 20.0          | 2          | 23.0 (17.0)   |
| Prosthodontics                 | 1                | 30.0          | 11      | 29.2 (10.1)     | 2     | 13.0 (12.0)   | 3          | 16.7 (2.4)    |
| Restorative dentistry          | 1                | 12.0          | 4       | 17.8 (11.5)     | _     | _             | 2          | 7.5 (2.5)     |
| Special needs dentistry        | 3                | 20.0 (9.8)    | _       | _               | _     | _             | _          | _             |
| Administration/Management      | 3                | 8.0 (5.7)     | 1       | 5.0             | _     | _             | _          | _             |
| Research                       | _                | _             | _       | _               | _     | _             | 6          | 12.2 (6.1)    |
| Teaching                       | 3                | 6.0 (1.6)     | _       | _               | _     | _             | _          | _             |
| Other                          | 5                | 31.8 (10.2)   | 26      | 31.3 (9.0)      | 3     | 31.3 (10.9)   | 6          | 41.7 (11.8)   |
| No hours recorded <sup>b</sup> | 1                |               |         |                 | 1     |               |            |               |
| Total number <sup>c</sup>      | 47               |               | 166     |                 | 19    |               | 33         |               |

<sup>&</sup>lt;sup>a</sup> Specialists reporting not working any hours and those who reported more than 80 hours per week, are excluded from these calculations <sup>b</sup> Practice and employment type provided, but no hours recorded <sup>c</sup> Total of the column above may sum to greater than this, as some specialists reported activities in multiple scope activities (Data source: Workforce survey)

Table 1-21. Work by practice and employment type for dental specialists, by primary employer for 2017

|                                | N                | NoH or DHB    | Private | (self-employed) | Priva | te (employed) | University |               |
|--------------------------------|------------------|---------------|---------|-----------------|-------|---------------|------------|---------------|
|                                | No. <sup>a</sup> | Mean hrs (sd) | No.     | Mean hrs (sd)   | No.   | Mean hrs (sd) | No.        | Mean hrs (sd) |
| General Dentistry              | 5                | 26.0 (13.0)   | 14      | 28.7 (10.4)     | _     | _             | 1          | 45.0          |
| Dental Public Health           | 8                | 17.5 (11.3)   | 1       | 55.0            | 1     | 18.0          | 3          | 22.0 (12.0)   |
| Endodontics                    | 1                | 45.0          | 12      | 30.8 (13.7)     | 1     | 40.0          | 1          | 3.0           |
| Oral Medicine and Pathology    | 3                | 21.3 (10.0)   | 2       | 1.5 (0.5)       | 3     | 19.3 (25.2)   | 3          | 26.0 (8.5)    |
| Oral and Maxillofacial Surgery | 6                | 42.0 (16.1)   | 21      | 35.3 (9.4)      | 2     | 23.5 (21.5)   | 2          | 52.5 (7.5)    |
| Oral Surgery                   | _                | _             | 6       | 36.5 (16.5)     | 2     | 13.0 (7.0)    | _          | _             |
| Orthodontics                   | 3                | 21.7 (6.2)    | 45      | 34.8 (12.2)     | 3     | 21.3 (12.0)   | 3          | 15.0 (4.1)    |
| Paediatric dentistry           | 4                | 33.0 (8.2)    | 6       | 25.2 (12.3)     | _     | _             | 1          | 20.0          |
| Periodontics                   | _                | _             | 17      | 32.0 (12.8)     | 1     | 20.0          | 2          | 23.0 (17.0)   |
| Prosthodontics                 | 1                | 30.0          | 11      | 29.2 (10.1)     | 2     | 13.0 (12.0)   | 3          | 16.7 (2.4)    |
| Restorative dentistry          | 1                | 12.0          | 4       | 17.8 (11.5)     | _     | _             | 2          | 7.5 (2.5)     |
| Special needs dentistry        | 3                | 20.0 (9.8)    | _       | _               | _     | _             | _          | _             |
| Administration/Management      | 3                | 8.0 (5.7)     | 1       | 5.0             | _     | _             | _          | _             |
| Research                       | _                | _             | _       | _               | _     | _             | 6          | 12.2 (6.1)    |
| Teaching                       | 3                | 6.0 (1.6)     | _       | _               | _     | _             | _          | _             |
| Other                          | 5                | 31.8 (9.1)    | 26      | 31.3 (9.0)      | 3     | 31.3 (10.9)   | 6          | 41.7 (11.8)   |
| No hours recorded <sup>b</sup> |                  |               | 1       |                 | _     |               | 1          |               |
| Total number <sup>c</sup>      | 46               |               | 167     |                 | 18    |               | 34         |               |

<sup>&</sup>lt;sup>a</sup> Specialists reporting not working any hours and those who reported more than 80 hours per week, are excluded from these calculations <sup>b</sup> Practice and employment type provided, but no hours recorded <sup>c</sup> Total of the column above may sum to greater than this, as some specialists reported activities in multiple scope activities (Data source: Workforce survey)

Table 1-22. Work by practice and employment type for dental specialists, by secondary employer for 2016

|                                | M                | MoH or DHB    |     | (self-employed) | Priva | te (employed) | University |               |
|--------------------------------|------------------|---------------|-----|-----------------|-------|---------------|------------|---------------|
|                                | No. <sup>a</sup> | Mean hrs (sd) | No. | Mean hrs (sd)   | No.   | Mean hrs (sd) | No.        | Mean hrs (sd) |
| General Dentistry              | 1                | 4.0           | _   | _               | _     | _             | _          | _             |
| Dental Public Health           | 1                | 16.0          | _   | _               | _     | _             | _          | _             |
| Endodontics                    | _                | _             | _   | _               | _     | _             | _          | _             |
| Oral and Maxillofacial Surgery | 8                | 16.3 (17.7)   | 1   | 20.0            | 2     | 26.0 (12.0)   | _          | _             |
| Oral Medicine and Pathology    | 1                | 10.0          | _   | _               | _     | _             | 1          | 15.0          |
| Oral Surgery                   | _                | _             | _   | _               | _     | _             | _          | _             |
| Orthodontics                   | 4                | 11.0 (5.2)    | 1   | 2.0             | _     | _             | _          | _             |
| Paediatric dentistry           | 1                | 3.0           | 2   | 6.5 (2.5)       | 1     | 8.0           | 1          | 15.0          |
| Periodontics                   | _                | _             | 1   | 10.0            | _     | _             | _          | _             |
| Prosthodontics                 | 3                | 7.3 (5.6)     | _   | _               | _     | _             | _          | _             |
| Restorative dentistry          | _                | _             | _   | _               | _     | _             | _          | _             |
| Special needs dentistry        | 2                | 5.0 (1.0)     | _   | _               | 1     | 8.0           | _          | _             |
| Administration/Management      | 1                | 8.0           | _   | _               | _     | _             | _          | _             |
| Research                       | _                | _             | _   | _               | _     | _             | _          | _             |
| Teaching                       | _                | _             | _   | _               | _     | _             | _          | _             |
| Other                          | 4                | 10.8 (5.5)    | _   | 7.0 (3.0)       | _     | _             | 2          | 6.0 (2.0)     |
| No hours recorded <sup>b</sup> | 19               |               | 23  |                 | 17    |               | 12         |               |
| Total number <sup>c</sup>      | 45               |               | 30  |                 | 21    |               | 16         |               |

<sup>&</sup>lt;sup>a</sup> Specialists reporting not working any hours and those who reported more than 80 hours per week, are excluded from these calculations <sup>b</sup> Practice and employment type provided, but no hours recorded <sup>c</sup> Total of the column above may sum to greater than this, as some specialists reported activities in multiple scope activities (Data source: Workforce survey)

Table 1-23. Work by practice and employment type for dental specialists, by secondary employer for 2017

|                                | N                | MoH or DHB    |     | (self-employed) | Priva | te (employed) | University |               |
|--------------------------------|------------------|---------------|-----|-----------------|-------|---------------|------------|---------------|
|                                | No. <sup>a</sup> | Mean hrs (sd) | No. | Mean hrs (sd)   | No.   | Mean hrs (sd) | No.        | Mean hrs (sd) |
| General Dentistry              | 1                | 4.0           | _   | _               | _     | _             | _          | _             |
| Dental Public Health           | _                | _             | _   | _               | _     | _             | _          | _             |
| Endodontics                    | _                | _             | _   | _               | _     | _             | _          | _             |
| Oral and Maxillofacial Surgery | 4                | 17.5 (5.6)    | 2   | 8.0 (0.0)       | _     | _             | _          | _             |
| Oral Medicine and Pathology    | _                | _             | _   | _               | _     | _             | _          | _             |
| Oral Surgery                   | _                | _             | _   | _               | _     | _             | _          | _             |
| Orthodontics                   | 5                | 6.8 (5.1)     | 2   | 6.0 (4.0)       | 1     | 4.0           | _          | _             |
| Paediatric dentistry           | _                | _             | 1   | 8.0             | _     | _             | 2          | 9.5 (6.5)     |
| Periodontics                   | _                | _             | _   | _               | _     | _             | 1          | 10.0          |
| Prosthodontics                 | 3                | 9.0 (2.2)     | _   | _               | 1     | 5.0           | 1          | 4.0           |
| Restorative dentistry          | _                | _             | 1   | 10.0            | _     | _             | _          | _             |
| Special needs dentistry        | 1                | 8.0           | 1   | 8.0             | _     | _             | _          | _             |
| Administration/Management      | 1                | 12.0          | _   | _               | _     | _             | _          | _             |
| Research                       | _                | _             | 1   | 6.0             | _     | _             | 1          | 4.0           |
| Teaching                       | _                | _             | _   | _               | _     | _             | _          | _             |
| Other                          | 4                | 5.3 (2.9)     | 2   | 9.0 (1.0)       | 1     | 4.0           | 2          | 6.0 (0.0)     |
| No hours recorded <sup>b</sup> | 22               |               | 25  |                 | 5     |               | 8          |               |
| Total number <sup>c</sup>      | 41               |               | 35  |                 | 8     |               | 15         |               |

<sup>&</sup>lt;sup>a</sup> Specialists reporting not working any hours and those who reported more than 80 hours per week, are excluded from these calculations <sup>b</sup> Practice and employment type provided, but no hours recorded <sup>c</sup> Total of the column above may sum to greater than this, as some specialists reported activities in multiple scope activities (Data source: Workforce survey)

Table 1-24. Geographic distribution of practising dentists and dental specialists by Territorial Authority (TA), for 2016

| TA area                        | Number of dentists (%) | Number of dental specialists (%) | Total<br>(%) | FTE dentists [N reporting hours] |
|--------------------------------|------------------------|----------------------------------|--------------|----------------------------------|
| Far North                      | 13 (0.6)               | _                                | 13 (0.5)     | 10.4 [11]                        |
| Whangarei                      | 26 (1.2)               | 5 (1.7)                          | 31 (1.3)     | 25.2 [26]                        |
| Kaipara                        | 3 (0.1)                | _                                | 3 (0.1)      | 2.6 [3]                          |
| Auckland unitary authority     | 561 (26.2)             | 80 (27.2)                        | 641 (26.4)   | 506.6 [554]                      |
| Rodney                         | 25 (1.2)               | 1 (0.3)                          | 26 (1.1)     | 20.3 [24]                        |
| North Shore                    | 109 (5.1)              | 23 (7.8)                         | 132 (5.4)    | 105.1 [112]                      |
| Waitakere                      | 55 (2.6)               | 6 (2.0)                          | 61 (2.5)     | 51.2 [56]                        |
| Auckland                       | 245 (11.5)             | 38 (12.9)                        | 283 (11.6)   | 221.8 [244]                      |
| Manukau                        | 93 (4.3)               | 9 (3.1)                          | 102 (4.2)    | 80.0 [87]                        |
| Papakura                       | 21 (1.0)               | 1 (0.3)                          | 22 (0.9)     | 16.8 [18]                        |
| Franklin                       | 13 (0.6)               | 2 (0.7)                          | 15 (0.6)     | 11.5 [13]                        |
| Thames-Coromandel District     | 12 (0.6)               | _                                | 12 (0.5)     | 7.2 [9]                          |
| Hauraki District               | 2 (0.1)                | _                                | 2 (0.1)      | 0.8 [1]                          |
| Waikato District               | 2 (0.1)                | _                                | 2 (0.1)      | 1.1 [1]                          |
| Matamata-Piako District        | 9 (0.4)                | _                                | 9 (0.4)      | 7.1 [8]                          |
| Hamilton City                  | 76 (3.6)               | 12 (4.1)                         | 88 (3.6)     | 81.1 [80]                        |
| Waipa District                 | 17 (0.8)               | _                                | 17 (0.7)     | 11.8 [15]                        |
| Otorohanga District            | 7 (0.3)                | _                                | 7 (0.3)      | 5.7 [6]                          |
| South Waikato District         | 4 (0.2)                | _                                | 4 (0.2)      | 3.8 [4]                          |
| Waitomo District               | 1 (0.0)                | _                                | 1 (0.0)      | 1.0 [1]                          |
| Taupo District                 | 10 (0.5)               | _                                | 10 (0.4)     | 8.3 [9]                          |
| Western Bay of Plenty District | 9 (0.4)                | _                                | 9 (0.4)      | 5.3 [7]                          |
| Tauranga City                  | 59 (2.8)               | 7 (2.4)                          | 66 (2.7)     | 52.6 [59]                        |
| Rotorua District               | 21 (1.0)               | 1 (0.3)                          | 22 (0.9)     | 20.3 [21]                        |
| Whakatane District             | 9 (0.4)                | _                                | 9 (0.4)      | 6.2 [8]                          |
| Kawerau District               | _                      | _                                | _            | _                                |
| Opotiki District               | 2 (0.1)                | _                                | 2 (0.1)      | 1.0 [1]                          |
| Gisborne District              | 11 (0.5)               | 1 (0.3)                          | 12 (0.5)     | 9.9 [12]                         |
| Wairoa District                | 2 (0.1)                | _                                | 2 (0.1)      | 1.9 [2]                          |
| Hastings District              | 25 (1.2)               | 5 (1.7)                          | 30 (1.2)     | 22.7 [24]                        |
| Napier City                    | 22 (1.0)               | 3 (1.0)                          | 25 (1.0)     | 22.5 [23]                        |
| Central Hawke's Bay District   | 3 (0.1)                | _                                | 3 (0.1)      | 1.6 [2]                          |
| New Plymouth District          | 19 (0.9)               | 6 (2.0)                          | 25 (1.0)     | 26.1 [23]                        |
| Stratford District             | 1 (0.0)                | _                                | 1 (0.0)      | 0.9 [1]                          |
| South Taranaki District        | 7 (0.3)                | _                                | 7 (0.3)      | 3.8 [5]                          |
| Ruapehu District               | 2 (0.1)                | _                                | 2 (0.1)      | 1.5 [2]                          |
| Wanganui District              | 13 (0.6)               | 1 (0.3)                          | 14 (0.6)     | 8.3 [10]                         |
| Rangitikei District            | 3 (0.1)                | _                                | 3 (0.1)      | 1.1 [2]                          |

| TA area                   | Number of dentists (%) | Number of dental specialists (%) | Total<br>(%) | FTE dentists [N reporting hours] |
|---------------------------|------------------------|----------------------------------|--------------|----------------------------------|
| Manawatu District         | 2 (0.1)                | _                                | 2 (0.1)      | 2.0 [2]                          |
| Palmerston North City     | 32 (1.5)               | 6 (2.0)                          | 38 (1.6)     | 31.8 [32]                        |
| Tararua District          | 3 (0.1)                | _                                | 3 (0.1)      | 3.1 [3]                          |
| Horowhenua District       | 5 (0.2)                | _                                | 5 (0.2)      | 4.2 [5]                          |
| Kapiti Coast District     | 19 (0.9)               | _                                | 19 (0.8)     | 14.3 [18]                        |
| Porirua City              | 9 (0.4)                | _                                | 9 (0.4)      | 5.4 [7]                          |
| Upper Hutt City           | 12 (0.6)               | _                                | 12 (0.5)     | 9.6 [12]                         |
| Lower Hutt City           | 44 (2.1)               | 6 (2.0)                          | 50 (2.1)     | 35.6 [42]                        |
| Wellington City           | 110 (5.1)              | 15 (5.1)                         | 125 (5.1)    | 93.4 [110]                       |
| Masterton District        | 8 (0.4)                | 1 (0.3)                          | 9 (0.4)      | 7.7 [7]                          |
| Carterton District        | 5 (0.2)                | _                                | 5 (0.2)      | 2.9 [3]                          |
| South Wairarapa District  | _                      | _                                | _            | _                                |
| Tasman District           | 14 (0.7)               | _                                | 14 (0.6)     | 9.3 [12]                         |
| Nelson City               | 26 (1.2)               | 8 (2.7)                          | 34 (1.4)     | 24.9 [28]                        |
| Marlborough District      | 12 (0.6)               | _                                | 12 (0.5)     | 11.0 [11]                        |
| Kaikoura District         | 1 (0.0)                | _                                | 1 (0.0)      | 0.8 [1]                          |
| Buller District           | 1 (0.0)                | _                                | 1 (0.0)      | 1.0 [1]                          |
| Grey District             | 4 (0.2)                | _                                | 4 (0.2)      | 2.9 [3]                          |
| Westland District         | _                      | _                                | _            | _                                |
| Hurunui District          | 1 (0.0)                | _                                | 1 (0.0)      | _                                |
| Waimakariri District      | 14 (0.7)               | 1 (0.3)                          | 15 (0.6)     | 9.6 [12]                         |
| Christchurch City         | 162 (7.6)              | 26 (8.8)                         | 188 (7.7)    | 137.8 [161]                      |
| Selwyn District           | 8 (0.4)                | _                                | 8 (0.3)      | 3.5 [5]                          |
| Ashburton District        | 6 (0.3)                | _                                | 6 (0.2)      | 6.2 [6]                          |
| Timaru District           | 13 (0.6)               | 1 (0.3)                          | 14 (0.6)     | 8.2 [10]                         |
| Mackenzie District        | _                      | _                                | _            | _                                |
| Waimate District          | _                      | _                                | _            | _                                |
| Chatham Islands Territory | _                      | _                                | _            | _                                |
| Waitaki District          | 14 (0.7)               | 1 (0.3)                          | 15 (0.6)     | 10.7 [12]                        |
| Central Otago District    | 8 (0.4)                | _                                | 8 (0.3)      | 6.8 [7]                          |
| Queenstown-Lakes District | 14 (0.7)               | 3 (1.0)                          | 17 (0.7)     | 11.9 [14]                        |
| Dunedin City              | 90 (4.2)               | 46 (15.6)                        | 136 (5.6)    | 111.4 [113]                      |
| Clutha District           | 5 (0.2)                | _                                | 5 (0.2)      | 3.7 [4]                          |
| Southland District        | 2 (0.1)                | _                                | 2 (0.1)      | 1.5 [2]                          |
| Gore District             | 4 (0.2)                | _                                | 4 (0.2)      | 1.6 [2]                          |
| Invercargill City         | 23 (1.1)               | 5 (1.7)                          | 28 (1.2)     | 23.3 [28]                        |
| TLA code not available    | 516 (24.1)             | 54 (18.4)                        | 570 (23.4)   | 323.0 [348]                      |
| Total                     | 2,138                  | 294                              | 2,432        | 1,776.7 [1951]                   |

Note: FTE = Full time equivalent. Dentists include dental specialists.

Due to rounding, individual figures may not always sum to the stated totals (Data sources: Dental register, workforce survey & Statistics New Zealand)

Table 1-25. Population to practising dentists and dental specialists and FTE ratios by TA, for 2016

|                                   | Total<br>population | Population<br>aged 15+<br>years <sup>a</sup> | Population<br>aged 15+<br>years-to-<br>dentist ratio<br>a, b | Dentists per<br>100,000<br>population<br>aged 15+ b | Population<br>aged 15+<br>years-to-<br>FTE-dentist<br>ratio | FTE per<br>100,000<br>population<br>aged 15+ |
|-----------------------------------|---------------------|--|--|---|---|--|
| Far North                         | 63,226              | 49,509                                       | 3,808.4  | 26.3  | 4,749.0   | 21.1   |
| Whangarei                         | 87,677              | 68,821                                       | 2,220.0  | 45.0  | 2,736.4   | 36.5   |
| Kaipara                           | 21,646              | 17,378                                       | 5,792.6  | 17.3  | 6,748.6   | 14.8   |
| Auckland                          | 1,576,687           | 1,261,338                                    | 1,967.8  | 50.8  | 2,490.1   | 40.2   |
| Thames-Coromandel<br>District     | 29,160              | 24,701                                       | 2,058.4  | 48.6  | 3,430.7   | 29.1   |
| Hauraki District                  | 19,344              | 15,652                                       | 7,825.8  | 12.8  | 20,868.9  | 4.8  |
| Waikato District                  | 71,609              | 54,864                                       | 27,431.8   | 3.6   | 48,767.7  | 2.1  |
| Matamata-Piako District           | 33,872              | 26,858                                       | 2,984.3  | 33.5  | 3,809.7   | 26.2   |
| Hamilton City                     | 159,013             | 125,376                                      | 1,424.7  | 70.2  | 1,545.5   | 64.7   |
| Waipa District                    | 51,641              | 40,838                                       | 2,402.2  | 41.6  | 3,453.5   | 29.0   |
| Otorohanga District               | 9,993               | 7,673  | 1,096.2  | 91.2  | 1,358.1   | 73.6   |
| South Waikato District            | 23,548              | 18,132                                       | 4,532.9  | 22.1  | 4,771.5   | 21.0   |
| Waitomo District                  | 9,486               | 7,256  | 7,256.0  | 13.8  | 7,256.0   | 13.8   |
| Taupo District                    | 36,925              | 29,329                                       | 2,932.9  | 34.1  | 3,555.1   | 28.1   |
| Western Bay of Plenty<br>District | 48,206              | 38,983                                       | 4,331.5  | 23.1  | 7,355.3   | 13.6   |
| Tauranga City                     | 128,994             | 102,990                                      | 1,560.4  | 64.1  | 1,957.0   | 51.1   |
| Rotorua District                  | 71,438              | 55,552                                       | 2,525.1  | 39.6  | 2,743.3   | 36.5   |
| Whakatane District                | 35,015              | 27,146                                       | 3,016.2  | 33.2  | 4,378.3   | 22.8   |
| Kawerau District                  | 6,791               | 5,124  | _  | _   | _   | _  |
| Opotiki District                  | 8,969               | 6,938  | 3,468.8  | 28.8  | 6,937.7   | 14.4   |
| Gisborne District                 | 47,455              | 35,990                                       | 2,999.1  | 33.3  | 3,635.3   | 27.5   |
| Wairoa District                   | 8,184               | 6,172  | 3,086.0  | 32.4  | 3,291.7   | 30.4   |
| Hastings District                 | 79,972              | 62,269                                       | 2,075.6  | 48.2  | 2,743.1   | 36.5   |
| Napier City                       | 61,514              | 49,260                                       | 1,970.4  | 50.8  | 2,186.9   | 45.7   |
| Central Hawke's Bay<br>District   | 13,735              | 10,936                                       | 3,645.4  | 27.4  | 7,055.7   | 14.2   |
| New Plymouth District             | 79,853              | 63,589                                       | 2,543.6  | 39.3  | 2,441.0   | 41.0   |
| Stratford District                | 9,327               | 7,317  | 7,317.0  | 13.7  | 8,130.0   | 12.3   |
| South Taranaki District           | 27,529              | 21,430                                       | 3,061.4  | 32.7  | 5,714.7   | 17.5   |
| Ruapehu District                  | 12,897              | 10,029                                       | 5,014.3  | 19.9  | 6,685.8   | 15.0   |
| Wanganui District                 | 44,317              | 35,594                                       | 2,542.5  | 39.3  | 4,288.5   | 23.3   |
| Rangitikei District               | 14,788              | 11,637                                       | 3,879.0  | 25.8  | 10,579.1  | 9.5  |
| Manawatu District                 | 29,615              | 23,372                                       | 11,686.0   | 8.6   | 11,686.0  | 8.6  |
| Palmerston North City             | 85,572              | 68,916                                       | 1,813.6  | 55.1  | 2,168.9   | 46.1   |
| Tararua District                  | 17,471              | 13,685                                       | 4,561.6  | 21.9  | 4,379.1   | 22.8   |
| Horowhenua District               | 31,916              | 26,039                                       | 5,207.7  | 19.2  | 6,163.0   | 16.2   |

|                              | Total<br>population | Population<br>aged 15+<br>years <sup>a</sup> | Population<br>aged 15+<br>years-to-<br>dentist ratio | Dentists per<br>100,000<br>population<br>aged 15+ b | Population<br>aged 15+<br>years-to-<br>FTE-dentist<br>ratio | FTE per<br>100,000<br>population<br>aged 15+ |
|------------------------------|---------------------|--|--|---|---|--|
| Kapiti Coast District        | 52,247              | 42,856                                       | 2,255.6  | 44.3  | 3,002.1   | 33.3   |
| Porirua City                 | 55,270              | 42,139                                       | 4,682.1  | 21.4  | 7,803.5   | 12.8   |
| Upper Hutt City              | 42,813              | 34,296                                       | 2,858.0  | 35.0  | 3,591.2   | 27.8   |
| Lower Hutt City              | 102,895             | 81,726                                       | 1,634.5  | 61.2  | 2,297.3   | 43.5   |
| Wellington City              | 205,591             | 171,924                                      | 1,375.4  | 72.7  | 1,840.7   | 54.3   |
| Masterton District           | 24,906              | 20,011                                       | 2,223.4  | 45.0  | 2,615.8   | 38.2   |
| Carterton District           | 8,904               | 7,206  | 1,441.3  | 69.4  | 2,528.5   | 39.5   |
| South Wairarapa District     | 10,219              | 8,326  | _  | _   | _   | _  |
| Tasman District              | 51,402              | 41,905                                       | 2,993.2  | 33.4  | 4,493.9   | 22.3   |
| Nelson City                  | 50,961              | 41,921                                       | 1,233.0  | 81.1  | 1,686.9   | 59.3   |
| Marlborough District         | 47,054              | 38,870                                       | 3,239.2  | 30.9  | 3,533.6   | 28.3   |
| Kaikoura District            | 3,984               | 3,343  | 3,343.3  | 29.9  | 4,179.2   | 23.9   |
| Buller District              | 10,277              | 8,513  | 8,512.7  | 11.7  | 8,512.7   | 11.7   |
| Grey District                | 13,690              | 11,006                                       | 2,751.4  | 36.3  | 3,861.6   | 25.9   |
| Westland District            | 9,580               | 8,020  | _  | _   | _   | _  |
| Hurunui District             | 12,702              | 10,238                                       | 10,238.0   | 9.8   | _   | _  |
| Waimakariri District         | 57,374              | 46,086                                       | 3,072.4  | 32.5  | 4,788.2   | 20.9   |
| Christchurch City            | 371,360             | 307,616                                      | 1,636.3  | 61.1  | 2,231.9   | 44.8   |
| Selwyn District              | 55,457              | 43,264                                       | 5,408.0  | 18.5  | 12,450.1  | 8.0  |
| Ashburton District           | 33,244              | 26,495                                       | 4,415.8  | 22.6  | 4,308.1   | 23.2   |
| Timaru District              | 46,524              | 38,267                                       | 2,733.4  | 36.6  | 4,652.6   | 21.5   |
| Mackenzie District           | 5,514               | 4,639  | _  | _   | _   | _  |
| Waimate District             | 7,824               | 6,397  | _  | _   | _   | _  |
| Chatham Islands<br>Territory | 647                 | 523  | _  | _   | _   | _  |
| Waitaki District             | 22,344              | 18,227                                       | 1,215.1  | 82.3  | 1,707.4   | 58.6   |
| Central Otago District       | 20,431              | 16,918                                       | 2,114.8  | 47.3  | 2,487.9   | 40.2   |
| Queenstown-Lakes<br>District | 37,275              | 31,064                                       | 1,827.3  | 54.7  | 2,610.4   | 38.3   |
| Dunedin City                 | 127,265             | 107,319                                      | 789.1  | 126.7   | 963.6   | 103.8  |
| Clutha District              | 17,660              | 14,189                                       | 2,837.7  | 35.2  | 3,809.0   | 26.3   |
| Southland District           | 31,798              | 25,142                                       | 12,571.2   | 8.0   | 16,761.6  | 6.0  |
| Gore District                | 12,464              | 10,023                                       | 2,505.7  | 39.9  | 6,466.2   | 15.5   |
| Invercargill City            | 54,424              | 43,817                                       | 1,564.9  | 63.9  | 1,880.5   | 53.2   |
| Missing/outside TA           | 105                 | 104  | _  | _   | _   | _  |
| Total                        | 4,661,590           | 3,743,080                                    | 1,539.1  | 65.0  | 2,106.7   | 47.5   |

 <sup>&</sup>lt;sup>a</sup> Population estimate as at 30 June 2016
 <sup>b</sup> Where hours are reported
 Note: Dentists include dental specialists.
 Due to rounding, individual figures may not always sum to the stated totals (Data sources: Dental register, workforce survey & Statistics New Zealand)

Table 1-26. Geographic distribution of practising dentists and dental specialists by TA, for 2017

| TA area                        | Number of dentists (%) | Number of dental specialists (%) | Total<br>(%) | FTE dentists<br>[N reporting hours] |
|--------------------------------|------------------------|----------------------------------|--------------|-------------------------------------|
| Far North                      | 16 (0.7)               | _                                | 16 (0.6)     | 9.4 [12]                            |
| Whangarei                      | 31 (1.4)               | 4 (1.3)                          | 35 (1.3)     | 25.7 [29]                           |
| Kaipara                        | 4 (0.2)                | _                                | 4 (0.2)      | 2.0 [3]                             |
| Auckland unitary authority     | 567 (24.8)             | 81 (26.0)                        | 648 (25.0)   | 467.1 [522]                         |
| Rodney                         | 31 (1.4)               | 2 (0.6)                          | 33 (1.3)     | 23.1 [28]                           |
| North Shore                    | 98 (4.3)               | 23 (7.4)                         | 121 (4.7)    | 92.2 [102]                          |
| Waitakere                      | 64 (2.8)               | 6 (1.9)                          | 70 (2.7)     | 42.9 [49]                           |
| Auckland                       | 253 (11.1)             | 38 (12.2)                        | 291 (11.2)   | 213.4 [237]                         |
| Manukau                        | 86 (3.8)               | 10 (3.2)                         | 96 (3.7)     | 66.6 [74]                           |
| Papakura                       | 17 (0.7)               | 1 (0.3)                          | 18 (0.7)     | 15.6 [16]                           |
| Franklin                       | 18 (0.8)               | 1 (0.3)                          | 19 (0.7)     | 13.3 [16]                           |
| Thames-Coromandel District     | 10 (0.4)               | _                                | 10 (0.4)     | 6.6 [8]                             |
| Hauraki District               | 1 (0.0)                | _                                | 1 (0.0)      | 0.7 [1]                             |
| Waikato District               | 3 (0.1)                | _                                | 3 (0.1)      | 2.0 [2]                             |
| Matamata-Piako District        | 11 (0.5)               | _                                | 11 (0.4)     | 6.6 [8]                             |
| Hamilton City                  | 79 (3.5)               | 12 (3.9)                         | 91 (3.5)     | 60.8 [69]                           |
| Waipa District                 | 19 (0.8)               | _                                | 19 (0.7)     | 10.1 [14]                           |
| Otorohanga District            | 7 (0.3)                | _                                | 7 (0.3)      | 3.2 [4]                             |
| South Waikato District         | 3 (0.1)                | _                                | 3 (0.1)      | 3.5 [3]                             |
| Waitomo District               | 1 (0.0)                | _                                | 1 (0.0)      | _                                   |
| Taupo District                 | 11 (0.5)               | _                                | 11 (0.4)     | 9.3 [10]                            |
| Western Bay of Plenty District | 8 (0.4)                | _                                | 8 (0.3)      | 4.1 [5]                             |
| Tauranga City                  | 56 (2.5)               | 6 (1.9)                          | 62 (2.4)     | 42.6 [46]                           |
| Rotorua District               | 24 (1.1)               | 1 (0.3)                          | 25 (1.0)     | 17.7 [20]                           |
| Whakatane District             | 13 (0.6)               | _                                | 13 (0.5)     | 8.2 [10]                            |
| Kawerau District               | 1 (0.0)                | _                                | 1 (0.0)      | 0.8 [1]                             |
| Opotiki District               | 1 (0.0)                | _                                | 1 (0.0)      | 0.9 [1]                             |
| Gisborne District              | 13 (0.6)               | 1 (0.3)                          | 14 (0.5)     | 7.9 [9]                             |
| Wairoa District                | 1 (0.0)                | _                                | 1 (0.0)      | 1.0 [1]                             |
| Hastings District              | 19 (0.8)               | 4 (1.3)                          | 23 (0.9)     | 14.3 [17]                           |
| Napier City                    | 24 (1.1)               | 5 (1.6)                          | 29 (1.1)     | 19.4 [22]                           |
| Central Hawke's Bay District   | 2 (0.1)                | _                                | 2 (0.1)      | 0.9 [1]                             |
| New Plymouth District          | 21 (0.9)               | 6 (1.9)                          | 27 (1.0)     | 20.9 [22]                           |
| Stratford District             | 1 (0.0)                | _                                | 1 (0.0)      | 1.0 [1]                             |
| South Taranaki District        | 5 (0.2)                | _                                | 5 (0.2)      | 3.3 [4]                             |
| Ruapehu District               | 2 (0.1)                | _                                | 2 (0.1)      | 1.3 [2]                             |
| Wanganui District              | 15 (0.7)               | 1 (0.3)                          | 16 (0.6)     | 8.4 [11]                            |
| Rangitikei District            | 2 (0.1)                | 1 (0.3)                          | 3 (0.1)      | 2.5 [2]                             |
| Manawatu District              | 4 (0.2)                | _                                | 4 (0.2)      | 3.6 [4]                             |
|                                | ,                      |                                  | ,            |                                     |

| TA area                   | Number of dentists (%) | Number of dental specialists (%) | Total<br>(%) | FTE dentists [N reporting hours] |
|---------------------------|------------------------|----------------------------------|--------------|----------------------------------|
| Palmerston North City     | 33 (1.4)               | 6 (1.9)                          | 39 (1.5)     | 30.7 [30]                        |
| Tararua District          | 3 (0.1)                | _                                | 3 (0.1)      | 1.7 [2]                          |
| Horowhenua District       | 8 (0.4)                | _                                | 8 (0.3)      | 5.4 [6]                          |
| Kapiti Coast District     | 22 (1.0)               | _                                | 22 (0.8)     | 14.3 [17]                        |
| Porirua City              | 7 (0.3)                | _                                | 7 (0.3)      | 4.7 [6]                          |
| Upper Hutt City           | 12 (0.5)               | _                                | 12 (0.5)     | 9.3 [11]                         |
| Lower Hutt City           | 43 (1.9)               | 4 (1.3)                          | 47 (1.8)     | 31.0 [36]                        |
| Wellington City           | 111 (4.9)              | 16 (5.1)                         | 127 (4.9)    | 81.9 [97]                        |
| Masterton District        | 9 (0.4)                | _                                | 9 (0.3)      | 8.5 [7]                          |
| Carterton District        | 3 (0.1)                | _                                | 3 (0.1)      | _                                |
| South Wairarapa District  | _                      | _                                | _            | _                                |
| Tasman District           | 15 (0.7)               | _                                | 15 (0.6)     | 8.6 [12]                         |
| Nelson City               | 21 (0.9)               | 8 (2.6)                          | 29 (1.1)     | 18.0 [22]                        |
| Marlborough District      | 17 (0.7)               | 1 (0.3)                          | 18 (0.7)     | 11.7 [13]                        |
| Kaikoura District         | 1 (0.0)                | _                                | 1 (0.0)      | 0.8 [1]                          |
| Buller District           | 2 (0.1)                | _                                | 2 (0.1)      | 0.9 [1]                          |
| Grey District             | 3 (0.1)                | _                                | 3 (0.1)      | 2.0 [3]                          |
| Westland District         | _                      | _                                | _            | _                                |
| Hurunui District          | _                      | _                                | _            | _                                |
| Waimakariri District      | 12 (0.5)               | 1 (0.3)                          | 13 (0.5)     | 6.0 [8]                          |
| Christchurch City         | 167 (7.3)              | 27 (8.7)                         | 194 (7.5)    | 130.5 [160]                      |
| Selwyn District           | 7 (0.3)                | _                                | 7 (0.3)      | 2.4 [3]                          |
| Ashburton District        | 4 (0.2)                | _                                | 4 (0.2)      | 3.1 [3]                          |
| Timaru District           | 12 (0.5)               | 1 (0.3)                          | 13 (0.5)     | 6.4 [7]                          |
| Mackenzie District        | _                      | _                                | _            | _                                |
| Waimate District          | _                      | _                                | _            | _                                |
| Chatham Islands Territory | _                      | _                                | _            | _                                |
| Waitaki District          | 14 (0.6)               | 1 (0.3)                          | 15 (0.6)     | 9.9 [14]                         |
| Central Otago District    | 8 (0.4)                | _                                | 8 (0.3)      | 5.0 [6]                          |
| Queenstown-Lakes District | 12 (0.5)               | 3 (1.0)                          | 15 (0.6)     | 5.3 [7]                          |
| Dunedin City              | 87 (3.8)               | 44 (14.1)                        | 131 (5.0)    | 99.3 [104]                       |
| Clutha District           | 3 (0.1)                | _                                | 3 (0.1)      | 1.7 [2]                          |
| Southland District        | 3 (0.1)                | _                                | 3 (0.1)      | 0.8 [1]                          |
| Gore District             | 4 (0.2)                | _                                | 4 (0.2)      | 1.5 [3]                          |
| Invercargill City         | 28 (1.2)               | 5 (1.6)                          | 33 (1.3)     | 22.9 [25]                        |
| TLA code not available    | 639 (28.0)             | 72 (23.2)                        | 711 (27.4)   | 352.3 [371]                      |
| Total                     | 2,285                  | 311                              | 2,596        | 1,641.7 [1842]                   |

Note: FTE = Full time equivalent. Dentists include dental specialists.

Due to rounding, individual figures may not always sum to the stated totals (Data sources: Dental register, workforce survey & Statistics New Zealand)

Table 1-27. Population to practising dentists and dental specialists and FTE ratios by TA, for 2017

|                                   | Total<br>population | Population<br>aged 15+<br>years <sup>a</sup> | Population<br>aged 15+<br>years-to-<br>dentist ratio | Dentists per<br>100,000<br>population aged<br>15+ <sup>b</sup> | Population<br>aged 15+<br>years-to-FTE-<br>dentist ratio | FTE per<br>100,000<br>population<br>aged 15+ |
|-----------------------------------|---------------------|--|--|--|--|--|
| Far North                         | 65,151              | 51,217                                       | 3,201.1  | 31.2   | 5,477.8  | 18.3   |
| Whangarei                         | 89,453              | 70,341                                       | 2,009.8  | 49.8   | 2,742.4  | 36.5   |
| Kaipara                           | 22,191              | 17,855                                       | 4,463.8  | 22.4   | 8,927.7  | 11.2   |
| Auckland                          | 1,583,474           | 1,268,777                                    | 1,958.0  | 51.1   | 2,716.4  | 36.8   |
| Thames-Coromandel District        | 30,521              | 26,002                                       | 2,600.2  | 38.5   | 3,969.8  | 25.2   |
| Hauraki District                  | 19,589              | 15,903                                       | 15,903.3   | 6.3  | 22,719.0   | 4.4  |
| Waikato District                  | 73,719              | 56,527                                       | 18,842.4   | 5.3  | 28,263.7   | 3.5  |
| Matamata-Piako District           | 34,144              | 27,117                                       | 2,465.2  | 40.6   | 4,124.2  | 24.2   |
| Hamilton City                     | 161,227             | 127,051                                      | 1,396.2  | 71.6   | 2,089.7  | 47.9   |
| Waipa District                    | 52,882              | 41,776                                       | 2,198.7  | 45.5   | 4,126.0  | 24.2   |
| Otorohanga District               | 10,266              | 7,977  | 1,139.5  | 87.8   | 2,512.3  | 39.8   |
| South Waikato District            | 23,595              | 18,163                                       | 6,054.4  | 16.5   | 5,189.5  | 19.3   |
| Waitomo District                  | 9,443               | 7,312  | 7,312.0  | 13.7   | _  | _  |
| Taupo District                    | 38,251              | 30,559                                       | 2,778.1  | 36.0   | 3,277.1  | 30.5   |
| Western Bay of Plenty<br>District | 49,612              | 40,267                                       | 5,033.3  | 19.9   | 9,761.6  | 10.2   |
| Tauranga City                     | 133,387             | 106,579                                      | 1,719.0  | 58.2   | 2,504.8  | 39.9   |
| Rotorua District                  | 73,677              | 57,505                                       | 2,300.2  | 43.5   | 3,248.9  | 30.8   |
| Whakatane District                | 35,429              | 27,491                                       | 2,114.7  | 47.3   | 3,362.9  | 29.7   |
| Kawerau District                  | 6,922               | 5,238  | 5,238.0  | 19.1   | 6,984.0  | 14.3   |
| Opotiki District                  | 9,129               | 7,085  | 7,085.3  | 14.1   | 8,097.5  | 12.3   |
| Gisborne District                 | 47,510              | 36,179                                       | 2,584.2  | 38.7   | 4,594.2  | 21.8   |
| Wairoa District                   | 8,189               | 6,224  | 6,224.0  | 16.1   | 6,224.0  | 16.1   |
| Hastings District                 | 82,045              | 64,238                                       | 2,793.0  | 35.8   | 4,500.0  | 22.2   |
| Napier City                       | 62,627              | 50,220                                       | 1,731.7  | 57.7   | 2,592.0  | 38.6   |
| Central Hawke's Bay<br>District   | 14,019              | 11,173                                       | 5,586.3  | 17.9   | 12,414.1   | 8.1  |
| New Plymouth District             | 80,705              | 64,279                                       | 2,380.7  | 42.0   | 3,075.5  | 32.5   |
| Stratford District                | 9,433               | 7,404  | 7,404.0  | 13.5   | 7,404.0  | 13.5   |
| South Taranaki District           | 27,357              | 21,260                                       | 4,252.0  | 23.5   | 6,491.6  | 15.4   |
| Ruapehu District                  | 13,344              | 10,507                                       | 5,253.7  | 19.0   | 7,930.1  | 12.6   |
| Wanganui District                 | 45,033              | 36,189                                       | 2,261.8  | 44.2   | 4,295.4  | 23.3   |
| Rangitikei District               | 14,876              | 11,724                                       | 3,908.0  | 25.6   | 4,689.6  | 21.3   |
| Manawatu District                 | 29,931              | 23,644                                       | 5,911.0  | 16.9   | 6,567.8  | 15.2   |
| Palmerston North City             | 85,644              | 68,933                                       | 1,767.5  | 56.6   | 2,247.2  | 44.5   |
| Tararua District                  | 17,542              | 13,769                                       | 4,589.8  | 21.8   | 8,220.5  | 12.2   |
| Horowhenua District               | 32,433              | 26,477                                       | 3,309.7  | 30.2   | 4,926.0  | 20.3   |

|                              | Total<br>population | Population<br>aged 15+<br>years <sup>a</sup> | Population<br>aged 15+<br>years-to-<br>dentist ratio | Dentists per<br>100,000<br>population aged<br>15+ b | Population<br>aged 15+<br>years-to-FTE-<br>dentist ratio | FTE per<br>100,000<br>population<br>aged 15+ |
|------------------------------|---------------------|--|--|---|--|--|
| Kapiti Coast District        | 53,093              | 43,611                                       | 1,982.3  | 50.4  | 3,060.4  | 32.7   |
| Porirua City                 | 56,041              | 42,777                                       | 6,111.0  | 16.4  | 9,053.4  | 11.0   |
| Upper Hutt City              | 43,626              | 35,093                                       | 2,924.4  | 34.2  | 3,783.6  | 26.4   |
| Lower Hutt City              | 103,790             | 82,651                                       | 1,758.5  | 56.9  | 2,664.0  | 37.5   |
| Wellington City              | 207,381             | 174,048                                      | 1,370.5  | 73.0  | 2,126.4  | 47.0   |
| Masterton District           | 25,411              | 20,421                                       | 2,269.0  | 44.1  | 2,409.6  | 41.5   |
| Carterton District           | 9,018               | 7,313  | 2,437.6  | 41.0  | _  | _  |
| South Wairarapa District     | 10,437              | 8,552  | _  | 0.0   | _  |  |
| Tasman District              | 53,304              | 43,711                                       | 2,914.0  | 34.3  | 5,112.4  | 19.6   |
| Nelson City                  | 52,021              | 42,941                                       | 1,480.7  | 67.5  | 2,388.9  | 41.9   |
| Marlborough District         | 48,808              | 40,540                                       | 2,252.2  | 44.4  | 3,472.4  | 28.8   |
| Kaikoura District            | 4,308               | 3,667  | 3,666.7  | 27.3  | 4,583.3  | 21.8   |
| Buller District              | 10,204              | 8,525  | 4,262.7  | 23.5  | 9,216.6  | 10.9   |
| Grey District                | 13,730              | 11,111                                       | 3,703.8  | 27.0  | 5,487.1  | 18.2   |
| Westland District            | 10,441              | 8,889  | _  | _   | _  | _  |
| Hurunui District             | 12,905              | 10,426                                       | _  | _   | _  |  |
| Waimakariri District         | 58,348              | 46,973                                       | 3,613.3  | 27.7  | 7,796.3  | 12.8   |
| Christchurch City            | 374,920             | 311,032                                      | 1,603.3  | 62.4  | 2,384.3  | 41.9   |
| Selwyn District              | 58,215              | 45,428                                       | 6,489.7  | 15.4  | 18,733.2   | 5.3  |
| Ashburton District           | 33,289              | 26,590                                       | 6,647.5  | 15.0  | 8,577.4  | 11.7   |
| Timaru District              | 46,848              | 38,535                                       | 2,964.2  | 33.7  | 5,997.6  | 16.7   |
| Mackenzie District           | 6,588               | 5,697  | _  | _   | _  |  |
| Waimate District             | 7,777               | 6,404  | _  | _   | _  | _  |
| Chatham Islands<br>Territory | 683                 | 566  | _  | _   | _  | _  |
| Waitaki District             | 22,788              | 18,653                                       | 1,243.6  | 80.4  | 1,884.2  | 53.1   |
| Central Otago District       | 21,662              | 18,086                                       | 2,260.8  | 44.2  | 3,635.4  | 27.5   |
| Queenstown-Lakes<br>District | 42,150              | 35,627                                       | 2,375.2  | 42.1  | 6,722.1  | 14.9   |
| Dunedin City                 | 128,729             | 108,738                                      | 830.1  | 120.5   | 1,095.0  | 91.3   |
| Clutha District              | 17,920              | 14,477                                       | 4,825.8  | 20.7  | 8,392.7  | 11.9   |
| Southland District           | 32,996              | 26,385                                       | 8,794.9  | 11.4  | 35,179.6   | 2.8  |
| Gore District                | 12,478              | 10,045                                       | 2,511.3  | 39.8  | 6,587.1  | 15.2   |
| Invercargill City            | 54,649              | 44,033                                       | 1,334.3  | 74.9  | 1,927.1  | 51.9   |
| Missing/outside TA           | 161                 | 159  | _  | _   | _  | _  |
| Total                        | 4,727,469           | 3,804,669                                    | 1,465.6  | 68.2  | 2,317.50   | 43.2   |

 <sup>&</sup>lt;sup>a</sup> Population estimate as at 30 June 2017
 <sup>b</sup> Where hours are reported
 Note: Dentists include dental specialists.
 Due to rounding, individual figures may not always sum to the stated totals (Data sources: Dental register, workforce survey & Statistics New Zealand)

Table 1-28. Population to practising dentists and dental specialists and FTE ratios by DHB, for 2016

|                       | No with practising certificates | Total population <sup>a</sup> | Population aged<br>15+ years | FTE dentists and dental specialists | Population aged<br>15+ years-to-<br>dentist ratio | Dentists per<br>100,000 population<br>aged 15+ years | Population aged<br>15+ years-to-FTE-<br>dentist ratio | FTE per 100,000 population aged 15+ years |
|-----------------------|---------------------------------|-------------------------------|------------------------------|-------------------------------------|---|--|---|---|
| Northland             | 56                              | 172,549                       | 135,775                      | 49.1                                | 2,425   | 41.2   | 2,766.7   | 36.1                                      |
| Waitemata             | 235                             | 580,455                       | 465,256                      | 210.5                               | 1,980   | 50.5   | 2,210.0   | 45.2                                      |
| Auckland              | 286                             | 486,337                       | 403,904                      | 259.1                               | 1,412   | 70.8   | 1,558.7   | 64.2                                      |
| Counties-Manukau      | 136                             | 527,807                       | 405,867                      | 122.5                               | 2,984   | 33.5   | 3,313.2   | 30.2                                      |
| Waikato               | 147                             | 397,713                       | 313,731                      | 139.7                               | 2,134   | 46.9   | 2,246.2   | 44.5                                      |
| Lakes                 | 37                              | 108,365                       | 84,816                       | 32.8                                | 2,292   | 43.6   | 2,585.9   | 38.7                                      |
| Bay of Plenty         | 87                              | 228,003                       | 181,121                      | 74.9                                | 2,082   | 48.0   | 2,417.4   | 41.4                                      |
| Tairawhiti            | 14                              | 47,455                        | 35,990                       | 11.9                                | 2,571   | 38.9   | 3,037.1   | 32.9                                      |
| Hawke's Bay           | 57                              | 116,695                       | 92,316                       | 53.2                                | 1,620   | 61.7   | 1,736.9   | 57.6                                      |
| Taranaki              | 33                              | 163,785                       | 129,023                      | 33.9                                | 3,910   | 25.6   | 3,811.6   | 26.2                                      |
| Whanganui             | 21                              | 63,662                        | 50,695                       | 17.7                                | 2,414   | 41.4   | 2,860.1   | 35.0                                      |
| MidCentral            | 56                              | 173,273                       | 138,970                      | 51.6                                | 2,482   | 40.3   | 2,694.5   | 37.1                                      |
| Hutt                  | 61                              | 145,708                       | 116,088                      | 45.8                                | 1,903   | 52.5   | 2,534.7   | 39.5                                      |
| Capital and Coast     | 155                             | 304,339                       | 250,024                      | 130.4                               | 1,613   | 62.0   | 1,917.7   | 52.1                                      |
| Wairarapa             | 12                              | 44,035                        | 35,476                       | 12.2                                | 2,956   | 33.8   | 2,913.9   | 34.3                                      |
| Nelson-Marlborough    | 62                              | 149,485                       | 122,632                      | 53.1                                | 1,978   | 50.6   | 2,311.6   | 43.3                                      |
| West Coast            | 5                               | 33,534                        | 27,570                       | 6.5                                 | 5,514   | 18.1   | 4,225.3   | 23.7                                      |
| Canterbury            | 220                             | 534,257                       | 437,133                      | 185.5                               | 1,987   | 50.3   | 2,356.2   | 42.4                                      |
| South Canterbury      | 14                              | 59,922                        | 49,324                       | 10.8                                | 3,523   | 28.4   | 4,556.5   | 21.9                                      |
| Southern <sup>b</sup> | 216 [153]                       | 323,696                       | 266,868                      | 188.9 [118.0]                       | 1,236 [1,744]                                     | 80.9 [57.3]  | 1,412.7 [2,261.1]                                     | 70.8 [44.2]                               |
| Unknown               | 522                             |                               |                              |                                     |   |  |   |   |
| Total                 | 2,432                           | 4,661,076                     | 3,742,580                    | 1,690.0                             | 1,539   | 65.0   | 2,214.6   | 45.2                                      |

<sup>&</sup>lt;sup>a</sup> Population estimates by DHB for 2016 are unavailable from Statistics NZ; values were linearly interpolated between 2015 and 2018. Due to rounding, individual figures may not always sum to the stated totals. Dentists include dental specialists.

<sup>&</sup>lt;sup>b</sup> Data in square brackets for Southern DHB exclude dentists and dental specialists who reported the University of Otago as their primary employer (Data sources: Workforce survey and Statistics New Zealand)

Table 1-29. Population to practising dentists and dental specialists and FTE ratios by DHB, for 2017

|                       | No with practising certificates | Total population <sup>a</sup> | Population aged<br>15+ years | FTE dentists and dental specialists | Population aged<br>15+ years-to-<br>dentist ratio | Dentists per<br>100,000 population<br>aged 15+ years | Population aged<br>15+ years-to-FTE-<br>dentist ratio | FTE per 100,000 population aged 15+ years |
|-----------------------|---------------------------------|-------------------------------|------------------------------|-------------------------------------|---|--|---|---|
| Northland             | 53                              | 176,798                       | 139,449                      | 45.0                                | 2,631   | 38.0   | 3,102.3   | 32.2                                      |
| Waitemata             | 232                             | 585,311                       | 469,712                      | 194.3                               | 2,025   | 49.4   | 2,417.5   | 41.4                                      |
| Auckland              | 288                             | 482,673                       | 401,807                      | 256.1                               | 1,395   | 71.7   | 1,569.1   | 63.7                                      |
| Counties-Manukau      | 138                             | 533,914                       | 411,335                      | 117.4                               | 2,981   | 33.5   | 3,503.7   | 28.5                                      |
| Waikato               | 138                             | 404,826                       | 319,763                      | 113.3                               | 2,317   | 43.2   | 2,821.6   | 35.4                                      |
| Lakes                 | 35                              | 111,929                       | 88,032                       | 30.8                                | 2,515   | 39.8   | 2,862.8   | 34.9                                      |
| Bay of Plenty         | 83                              | 234,505                       | 186,641                      | 71.5                                | 2,249   | 44.5   | 2,611.3   | 38.3                                      |
| Tairawhiti            | 12                              | 47,510                        | 36,179                       | 9.2                                 | 3,015   | 33.2   | 3,921.9   | 25.5                                      |
| Hawke's Bay           | 50                              | 117,489                       | 92,933                       | 42.4                                | 1,859   | 53.8   | 2,190.5   | 45.7                                      |
| Taranaki              | 33                              | 167,070                       | 132,046                      | 32.6                                | 4,001   | 25.0   | 4,050.5   | 24.7                                      |
| Whanganui             | 15                              | 64,725                        | 51,691                       | 14.5                                | 3,446   | 29.0   | 3,577.2   | 28.0                                      |
| MidCentral            | 55                              | 174,447                       | 139,940                      | 51.5                                | 2,544   | 39.3   | 2,719.9   | 36.8                                      |
| Hutt                  | 54                              | 147,416                       | 117,775                      | 45.5                                | 2,181   | 45.9   | 2,587.0   | 38.7                                      |
| Capital and Coast     | 137                             | 307,579                       | 253,347                      | 113.6                               | 1,849   | 54.1   | 2,230.7   | 44.8                                      |
| Wairarapa             | 14                              | 44,870                        | 36,253                       | 13.4                                | 2,589   | 38.6   | 2,710.5   | 36.9                                      |
| Nelson-Marlborough    | 60                              | 154,171                       | 127,165                      | 45.7                                | 2,119   | 47.2   | 2,784.1   | 35.9                                      |
| West Coast            | 4                               | 34,368                        | 28,541                       | 2.9                                 | 7,135   | 14.0   | 9,841.6   | 10.2                                      |
| Canterbury            | 222                             | 542,415                       | 444,467                      | 173.3                               | 2,002   | 49.9   | 2,564.4   | 39.0                                      |
| South Canterbury      | 12                              | 61,243                        | 50,648                       | 10.1                                | 4,221   | 23.7   | 5,002.3   | 20.0                                      |
| Southern <sup>b</sup> | 182 [126]                       | 333,393                       | 276,137                      | 152.0 [100.4]                       | 1,517 [2,192]                                     | 65.9 [45.6]  | 1,816.4 [2,751.1]                                     | 55.1 [36.3]                               |
| Unknown               | 779                             |                               |                              | _                                   |   |  |   |   |
| Total                 | 2,596                           | 4,726,651                     | 3,803,860                    | 1,535.0                             | 1,465   | 68.2   | 2,478.2   | 40.4                                      |

<sup>&</sup>lt;sup>a</sup> Population estimates by DHB for 2017 are unavailable from Statistics NZ; values were linearly interpolated between 2015 and 2018. Due to rounding, individual figures may not always sum to the stated totals. Dentists include dental specialists.

<sup>&</sup>lt;sup>b</sup> Data in square brackets for Southern DHB exclude dentists and dental specialists who reported the University of Otago as their primary employer (Data sources: Workforce survey and Statistics New Zealand)

Table 1-30. Practising pattern, dentists and dental specialists who reported they are not currently practising in New Zealand

|      | Employment status                          | Females     | Males      | Overall number |
|------|--|-------------|------------|----------------|
|      | Practising overseas                        | 94 (83.2)   | 147 (84.5) | 241 (84.0)     |
|      | Overseas and not practising                | 6 (5.3)     | 8 (4.6)    | 14 (4.9)       |
|      | In NZ but not practising                   | 13 (11.5)   | 19 (10.9)  | 32 (11.1)      |
|      | Total not currently practising             | 113 (39.4)  | 174 (60.6) | 287            |
|      | Employment status of 'In NZ but not practi | sing' group |            |                |
|      | Another health profession                  | 2           | 1          | 3              |
| 2016 | Non-health profession                      | 1           | _          | 1              |
| .,   | Full-time study                            | _           | 1          | 1              |
|      | Parental responsibilities                  | 1           | _          | 1              |
|      | Other unpaid work                          | 3           | 2          | 5              |
|      | Seeking work                               | 1           | _          | 1              |
|      | Retired                                    | 2           | 9          | 11             |
|      | Not reported                               | 3           | 6          | 9              |
|      | Practising overseas                        | 122 (81.3)  | 194 (87.4) | 316 (84.9)     |
|      | Overseas and not practising                | 8 (5.3)     | 5 (2.3)    | 13 (3.5)       |
|      | In NZ but not practising                   | 20 (13.3)   | 23 (10.4)  | 43 (11.6)      |
|      | Total not currently practising             | 150 (40.3)  | 222 (59.7) | 372            |
|      | Employment status of 'In NZ but not practi | sing' group |            |                |
| 2017 | Another health profession                  | 2           | 3          | 5              |
|      | Non-health profession                      | 2           | 4          | 6              |
|      | Full-time study                            | 1           | _          | 1              |
|      | Parental responsibilities                  | 7           | 1          | 8              |
|      | Retired                                    | 1           | 10         | 11             |
|      | Not reported                               | 7           | 5          | 12             |

(Data source: Workforce survey)

Table 1-31. Postgraduate training undertaken by dentists and dental specialists

|      | Expected year of completion    | Current APC<br>(%) | No current APC<br>(%) | Overall<br>(%) |
|------|--------------------------------|--------------------|-----------------------|----------------|
|      | 2015                           | 9 (12.2)           | 1 (8.3)               | 10 (11.6)      |
|      | 2016                           | 24 (32.4)          | 3 (25.0)              | 27 (31.4)      |
|      | 2017                           | 17 (23.0)          | 3 (25.0)              | 20 (23.3)      |
|      | 2018                           | 11 (14.9)          | 1 (8.3)               | 12 (14.0)      |
| 2016 | 2019                           | 2 (2.7)            | 2 (16.7)              | 4 (4.7)        |
| 20   | 2020                           | 2 (2.7)            | _                     | 2 (2.3)        |
|      | 2024                           | _                  | 1 (8.3)               | 1 (1.2)        |
|      | Completed before period        | 2 (2.7)            | _                     | 2 (2.3)        |
|      | Not stated/unsure              | 7 (9.5)            | 1 (8.3)               | 8 (9.3)        |
|      | Total in postgraduate training | 74 (86.0)          | 12 (14.0)             | 86             |
|      | 2016                           | 8 (11.4)           | 1 (12.5)              | 9 (11.5)       |
|      | 2017                           | 20 (28.6)          | 1 (12.5)              | 21 (26.9)      |
|      | 2018                           | 15 (21.4)          | 3 (37.5)              | 18 (23.1)      |
| 17   | 2019                           | 9 (12.9)           | 2 (25.0)              | 11 (14.1)      |
| 2017 | 2020                           | 2 (2.9)            | 1 (12.5)              | 3 (3.8)        |
|      | Completed before period        | 1 (1.4)            | _                     | 1 (1.3)        |
|      | Not stated/unsure              | 15 (21.4)          | _                     | 15 (19.2)      |
|      | Total in postgraduate training | 70 (89.7)          | 8 (10.3)              | 78             |

(Data source: Workforce survey)

Table 1-32. Branch of postgraduate training being undertaken, based on 2017 data

| Branch of dentistry                    | Students/Trainees |
|--|-------------------|
| General dentistry                      | 7                 |
| Dental public health                   | 6                 |
| Endodontics                            | 4                 |
| Oral pathology                         | 3                 |
| Oral Surgery                           | 3                 |
| Oral and maxillofacial surgery         | 5                 |
| Orthodontics                           | 12                |
| Paediatric dentistry                   | 5                 |
| Periodontics                           | 3                 |
| Prosthodontics                         | 7                 |
| Special needs dentistry                | 2                 |
| Other/not reported/not a dental branch | 21                |
| Total                                  | 78                |

(Data source: Workforce survey; not University data)

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# Section 2: The dental therapists workforce



# Dental therapists

2017 workforce at a glance



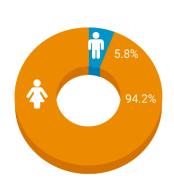
961 practising

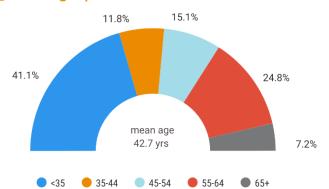
1,011 registered

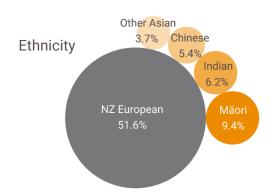


50 not practising

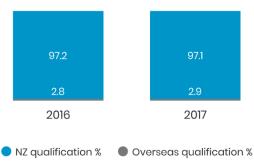
# Practising demographics

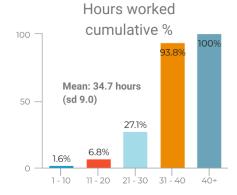


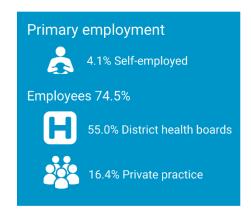


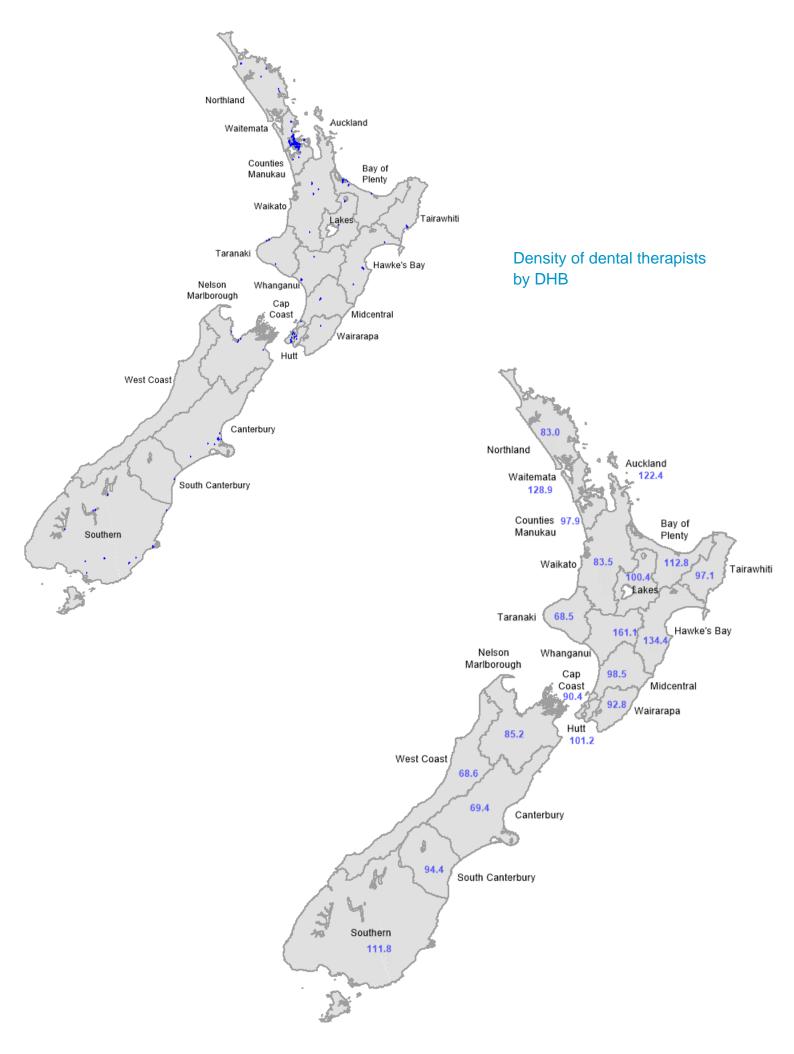


### Country of primary qualification









#### Executive summary dental therapists

#### Number of dental therapists

Since 2015 the total number of dental therapists has increased with 4.0% (2016) and 2.9% (2017) year-on–year. The greatest movement was a decrease of dental therapists without practising certificates by around 41.0% between 2015 and 2016, increasing by 22% the following year. Table 2-1

In 2017 there was a total of 1,011 dental therapists on the register: an increase of 7.0% from 2015. Of those, 961 (95.1%) held annual practising certificates.

Table 2-1. Registered dental therapists

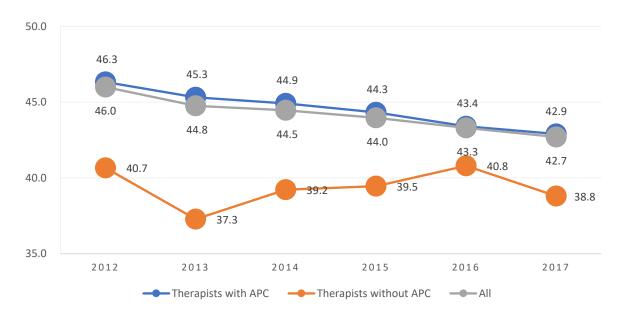
|   | 2015 | % YoY | 2016 | % YoY | 2017  |
|---|------|-------|------|-------|-------|
| Dental therapists with practising certificates    | 875  | 7.7   | 942  | 2.0   | 961   |
| Dental therapists without practising certificates | 70   | -41.4 | 41   | 22.0  | 50    |
| Total   | 945  | 4.0   | 983  | 2.9   | 1,011 |

#### **Demographics**

Over the reporting period the mean age has steadily dropped from 44.0 (2015) to 42.7 (2017). This is as a result of the oral health graduates entering the profession of dental therapy. Figure 2-1

However, this downward trend will reverse with the transfer of the oral health graduates to the oral health therapy scope of practice in the next workforce report (the OHT scope came into effect on 1 November 2017). With no dental therapy qualification available in New Zealand, and hardly any overseas dental therapists entering the profession, a decline of numbers in the dental therapy scope of practice is expected.

Figure 2-1. Mean age of practising dental therapists



The age group distribution over time shows an uneven distribution that has peaks at both ends, particularly in the 25-29 and 55-59 age bands. The transfer of oral health graduates as oral health therapists from November 2017, will further skew the age distribution towards the right. Figure 2-2

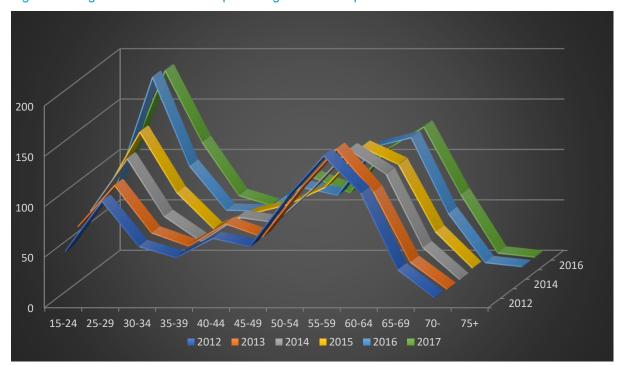


Figure 2-2. Age band distribution of practising dental therapists

Females continue to dominate the dental therapy workforce, with males below 6% of the practising profession but slowly increasing over time with the oral health graduates registering as dental therapists (4.8% in 2015). Table 2-3

The ethnicity reported by dental therapists reflects the diversity of the profession, with the largest Māori representation (9.4%). NZ European is the largest group at 496 (51.6%) followed by Indian (6.2%) and Chinese (5.4%). From 2015 and base3d on actual numbers, the largest movements were a drop in New Zealand European by 8.3%%, and a decrease of 4.7% for Māori, while Indian representation increased by 71.4% and Chinese by 26.8%. A proportional increase of 12.5% undefined ethnicities from those reported in 2015 may contribute towards the shifts reported. Table 2-6

#### Registration

The number and proportion of overseas qualified dental therapists remained fairly stable over the 2015 to 2017 period: between 23 (2.6%) and 28 (2.9%) of practising dental therapists. The number of New Zealand qualified, practising dental therapists continues to increase as a result of the oral health graduates' registrations, but remains proportionally similar around 97%. Table 2-8

Based on 2017 data, 60.7% of the overseas qualified dental therapists registered have a prescribed qualification or a qualification considered equivalent to the New Zealand prescribed qualifications. The remainder registered on the basis of similar registration in Australia (25%) or passing the New Zealand dental therapy examination (14.3%). Table 2-9

During the reporting period there has been a continued increase in the scope of practice registrations for all the previous "additional" scope of practice activities that now form part of the dental therapy scope of practice. These increases were mainly as a result of the oral health graduates entering the profession with these clinical capabilities as part of their undergraduate education. The number of

practising registrants in adult care dental therapy remain stable, from 12 in 2015 to 13 in 2016 and 2017. Table 2-10

#### Practising characteristics

The reported type of primary employment is reasonably flat for self-employed dental therapists - from 41 (2015) to 39 in 2017. Employees in private practice shows the biggest reported change with a growth of 14.5% from 138 (2016) to 158 (2017); this is up from 107 reported in 2015 (+47.7%). Employees that reported primary employment in DHBs are down from 553 (2015) to 529 in 2017 (-4.3%). It should be noted that response to this question decreased in 2017, so caution should be taken in assumptions on the movements ("no responses" increased from 17% 2015 to 21.3% 2017). Table 2-11

Using a 40-hour work week as a norm, it was found that almost 94% (2017) of dental therapists work 40 hours or less per week. This has been fairly constant over the reporting periods from 2013 onwards. Table 2-12

The dental therapists with the highest reported mean hours of work were those with DHBs/MoH as primary employer, reporting 34.0 hours per week for 2017 (sd 7.5). This is slightly less than the 35.0 hours reported in 2015 (sd 12.5). The majority of dental therapists work in DHB environments (55.0% 2017). Table 2-11, Table 2-15

Of the 50 dental therapists who reported not practising in 2017, 20 (40.0%) indicated they were practising overseas, 4 (8.0%) were overseas but not practising, and 26 (52.0%) were in New Zealand but not practising. Of those in New Zealand but not practising, the majority offered parental responsibilities and working in another health profession as the reason (6, 23.1% respectively). Four (15.4%) offered full-time study as a reason. Table 2-21

#### Geographical distribution

The analysis of territorial authorities (TAs) shows there are still a number of TAs without any dental therapy services reported. For 2017, these include: Hauraki, Otorohanga, Kawerau, Carterton, South Wairarapa, Kaikoura, Mackenzie and Chatham Islands territories. Table 2-16

Comparing the district health board distributions, the FTE dental therapists reported increased from 640.7 in 2015 to 662.5 in 2017, an increase of 3.4%. During the same period the population aged <15 increased by 0.9%. Reported increases between 2016 and 2017 were in South Canterbury (83.7%), Wairarapa (33.3%) and Hutt (21.6%). The largest decreases during the same period were West Coast (-17.1%), Southern (-14%) and Lakes (-12.7). Table 2-20

#### Postgraduate studies

Twelve dental therapists indicated they were undertaking postgraduate studies in the 2017 workforce survey, with the most reported areas of postgraduate studies being: oral health (3), other (3), general dentistry (2) and dental public health (2). Table 2-22, Table 2-23

#### Workforce survey response rates

Dental therapists have the highest workforce survey response rate of all the professions, with an average of over 80% for the period 2012-2017. During the same period, the survey response rate was lowest in 2017 (80.7%) and the highest in 2015 (92.0%). Table 2-2

Table 2-2. Dental therapist survey responses

| Year | Response rate (%) |
|------|-------------------|
| 2015 | 92.0              |
| 2016 | 81.3              |
| 2017 | 80.7              |

## Dental therapists workforce data tables

Table 2-3. Number of dental therapists with practising certificates, by workforce reporting year

| Report<br>year | Total | Female (row %) | Male (row %) | % overseas<br>graduates |
|----------------|-------|----------------|--------------|-------------------------|
| 2007           | 673   | 664 (98.7)     | 9 (1.3)      | a                       |
| 2008           | 648   | 633 (97.7)     | 15 (2.3)     | _                       |
| 2009           | 647   | 632 (97.7)     | 15 (2.3)     | _                       |
| 2010/11        | 740   | 715 (96.6)     | 25 (3.4)     | _                       |
| 2011/12        | 804   | 769 (95.6)     | 35 (4.4)     | 2.6                     |
| 2012/13        | 820   | 788 (96.1)     | 32 (3.9)     | 2.4                     |
| 2013/14        | 841   | 802 (95.4)     | 39 (4.6)     | 2.4                     |
| 2014/15        | 875   | 833 (95.2)     | 42 (4.8)     | 2.6                     |
| 2015/16        | 942   | 893 (94.8)     | 49 (5.2)     | 2.8                     |
| 2016/17        | 961   | 905 (94.2)     | 56 (5.8)     | 2.9                     |

Data not available from historic reports
 (Data sources: Dental register & previous workforce reports)

Table 2-4. Age of dental therapists by practising certificate status, as at 31 March 2017

| Age bands | Practising certificate (%) | No practising certificate (%) |
|-----------|----------------------------|-------------------------------|
| 15 - 24   | 95 (9.9)                   | 3 (6.0)                       |
| 25 - 29   | 186 (19.4)                 | 9 (18.0)                      |
| 30 - 34   | 115 (12.0)                 | 9 (18.0)                      |
| 35 - 39   | 62 (6.5)                   | 8 (16.0)                      |
| 40 - 44   | 51 (5.3)                   | 5 (10.0)                      |
| 45 - 49   | 80 (8.3)                   | 7 (14.0)                      |
| 50 - 54   | 65 (6.8)                   | 4 (8.0)                       |
| 55 - 59   | 108 (11.2)                 | 2 (4.0)                       |
| 60 - 64   | 130 (13.5)                 | 3 (6.0)                       |
| 65 - 69   | 63 (6.6)                   | <del>-</del>                  |
| 70 - 74   | 5 (0.5)                    | _                             |
| 75+       | 1 (0.1)                    | <del>-</del>                  |
| Total     | 961                        | 50                            |

Figure 2-3. Age of dental therapists by practising certificate status, as at 31 March 2017

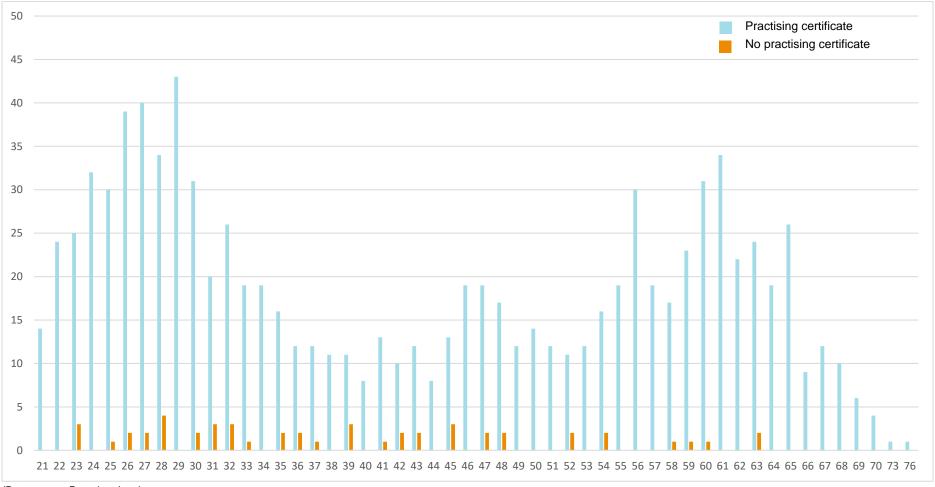


Figure 2-4. Age of registered dental therapists by gender, as at 31 March 2017

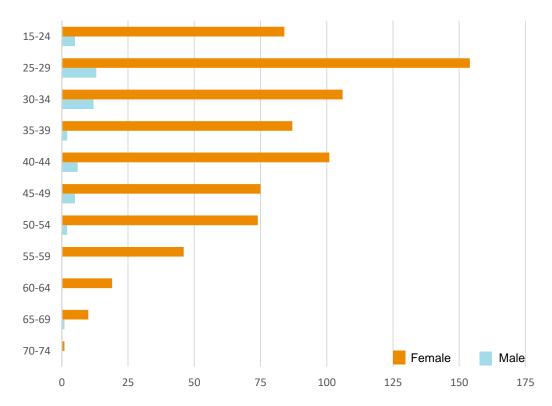


Table 2-5. Gender of dental therapists by practising certificate status

|      | Gender | Practising certificate (%) | No practising certificate<br>(%) | Total<br>(%) |
|------|--------|----------------------------|----------------------------------|--------------|
|      | Female | 893 (94.8)                 | 38 (92.7)                        | 931 (94.7)   |
| 2016 | Male   | 49 (5.2)                   | 3 (7.3)                          | 52 (5.3)     |
|      | Total  | 942 (95.8)                 | 41 (4.2)                         | 983          |
|      | Female | 905 (94.2)                 | 46 (92.0)                        | 951 (94.1)   |
| 2017 | Male   | 56 (5.8)                   | 4 (8.0)                          | 60 (5.9)     |
|      | Total  | 961 (95.1)                 | 50 (4.9)                         | 1,011        |

Table 2-6. Self-identified ethnicity by practising dental therapists

| Ethnicity   | 2016 (%)   | 2017 (%)   |
|---|------------|------------|
| New Zealand European  | 514 (54.6) | 496 (51.6) |
| Māori   | 98 (10.4)  | 90 (9.4)   |
| Chinese   | 50 (5.3)   | 52 (5.4)   |
| Indian  | 50 (5.3)   | 60 (6.2)   |
| Other Asian   | 35 (3.7)   | 36 (3.7)   |
| Other European  | 24 (2.5)   | 28 (2.9)   |
| Other   | 23 (2.4)   | 25 (2.6)   |
| Fijian  | 20 (2.1)   | 24 (2.5)   |
| Samoan  | 16 (1.7)   | 14 (1.5)   |
| South Korean  | 16 (1.7)   | 26 (2.7)   |
| Other East Asian  | 13 (1.4)   | 9 (0.9)    |
| Iraqi   | 9 (1.0)    | 9 (0.9)    |
| British   | 8 (0.8)    | 7 (0.7)    |
| Cook Island Māori   | 7 (0.7)    | 5 (0.5)    |
| Niuean  | 6 (0.6)    | 5 (0.5)    |
| South African   | 6 (0.6)    | 9 (0.9)    |
| Other Pacific Peoples   | 5 (0.5)    | 5 (0.5)    |
| Tongan  | 2 (0.2)    | 1 (0.1)    |
| Tokelauan   | 1 (0.1)    | 1 (0.1)    |
| Egyptian  | 1 (0.1)    | _          |
| Unknown   | 164 (17.4) | 181 (18.8) |
| Total <sup>a</sup>  | 1,068      | 1,083      |
| Total selecting an 'Other' group                              | 100        | 103        |
| Total practising dentists and dental specialists <sup>b</sup> | 942        | 961        |

<sup>&</sup>lt;sup>a</sup> Total is greater than number of dental therapists due to self-identification of multiple ethnicities.

b Denominator used for percentage values is total practising dental therapists. (Data sources: Dental register and workforce survey)

Table 2-7. Self-identification of 'other' ethnicity by dental therapists based on 2017 data

| Ethnicity        | Count | Ethnicity                        | Count |
|------------------|-------|----------------------------------|-------|
| Taiwanese        | 13    | Cambodian                        | 1     |
| Filipino         | 9     | Canadian First Nations           | 1     |
| Dutch            | 8     | Chinese Malaysian                | 1     |
| Malaysian        | 4     | Croatian                         | 1     |
| Japanese         | 3     | Danish                           | 1     |
| Middle Eastern   | 3     | East African Kenyan              | 1     |
| African          | 2     | Fijian Indian                    | 1     |
| American         | 2     | French                           | 1     |
| Australian       | 2     | Georgian                         | 1     |
| German           | 2     | Greek                            | 1     |
| Iranian          | 2     | Hong Kong                        | 1     |
| Irish            | 2     | Indo - Fijian                    | 1     |
| Korean           | 2     | Indonesian                       | 1     |
| Latin American   | 2     | Indonesian, Malaysian            | 1     |
| Pakistani        | 2     | Kiribati                         | 1     |
| Rotuman          | 2     | Laos                             | 1     |
| Russian          | 2     | Latin American, Spanish, Italian | 1     |
| South African    | 2     | Nepalese                         | 1     |
| Thai             | 2     | New Zealand                      | 1     |
| Vietnamese       | 2     | New Zealand Born Indo-Fijian     | 1     |
| Zimbabwe         | 2     | New Zealand Pakeha               | 1     |
| Afghan           | 1     | New Zealander                    | 1     |
| Afghanistan      | 1     | Thailand                         | 1     |
| African Somalian | 1     | Ukrainian                        | 1     |
| African Zimbabwe | 1     | Vietnamese New Zealander         | 1     |
| Albanian         | 1     | Undefined                        | 2     |
| British          | 1     |                                  |       |

Table 2-8. Country of primary qualification for practising dental therapists

| Country of qualification | 2016<br>(%)      | 2017<br>(%) |
|--------------------------|------------------|-------------|
| New Zealand              | 916 (97.2)       | 933 (97.1)  |
| Overseas                 | 26 (2.8)         | 28 (2.9)    |
| Total                    | 942              | 961         |
| Breakdown of oversea     | s qualifications |             |
|                          | (%)              | (%)         |
| Australia                | 4 (0.4)          | 6 (0.6)     |
| Canada                   | _                | 1 (0.1)     |
| China                    | _                | _           |
| Fiji                     | 6 (0.6)          | 6 (0.6)     |
| Hong Kong                | 1 (0.1)          | 1 (0.1)     |
| India                    | 6 (0.6)          | 6 (0.6)     |
| Philippines              | 3 (0.3)          | 3 (0.3)     |
| Russia                   | 1 (0.1)          | 1 (0.1)     |
| Samoa                    | 1 (0.1)          | 1 (0.1)     |
| South Africa             | 1 (0.1)          | 1 (0.1)     |
| United Kingdom           | 3 (0.3)          | 2 (0.2)     |

<sup>&</sup>lt;sup>a</sup> Percentages calculated from totals inclusive of New Zealand qualifications (Data source: Dental register)

Table 2-9. Overseas qualified dental therapists with practising certificates—type of registration pathway by year of first New Zealand registration, as at 31 March 2017

| Year of first<br>registration in<br>New Zealand | NZDTREX (%) | Prescribed<br>qualification or<br>equivalency assessed<br>(%) | Trans-Tasman Mutual<br>Recognition (%) |
|---|-------------|---|--|
| 1986 - 1990                                     | _           | _   | _                                      |
| 1991 - 1995                                     | _           | _   | _                                      |
| 1996  | _           | _   | _                                      |
| 1997  | _           | _   | _                                      |
| 1998  | _           | _   | _                                      |
| 1999  | _           | _   | _                                      |
| 2000  | _           | _   | _                                      |
| 2001  | _           | _   | _                                      |
| 2002  | _           | _   | _                                      |
| 2003  | _           | _   | _                                      |
| 2004  | _           | _   | 1 (14.3)                               |
| 2005  | _           | _   | 1 (14.3)                               |
| 2006  | _           | 4 (23.5)  | _                                      |
| 2007  | 1 (25.0)    | 1 (5.9)   | _                                      |
| 2008  | _           | _   | _                                      |
| 2009  | 1 (25.0)    | 3 (17.6)  | _                                      |
| 2010  | _           | 1 (5.9)   | 1 (14.3)                               |
| 2011  | _           | 1 (5.9)   | 1 (14.3)                               |
| 2012  | 1 (25.0)    | _   | _                                      |
| 2013  | _           | 3 (17.6)  | _                                      |
| 2014  | 1 (25.0)    | 1 (5.9)   | _                                      |
| 2015  | _           | 1 (5.9)   | 3 (42.9)                               |
| 2016  | _           | 2 (11.8)  | _                                      |
| 2017  | _           |   | _                                      |
| Total   | 4           | 17  | 7                                      |

Note: NZDTREX = New Zealand Dental Therapy Registration Examination (Data source: Dental register)

Table 2-10. Scope of practice registrations, including previous "additional" scope of practice activities a

|      | Scope of practice activities                      | Total |
|------|---|-------|
|      | Dental therapists                                 |       |
|      | Dental therapy practice                           | 983   |
|      | Radiography in Dental Therapy Practice            | 964   |
| 2016 | Diagnostic Radiography in Dental Therapy Practice | 768   |
|      | Pulpotomies in Dental Therapy Practice            | 977   |
|      | Stainless Steel Crowns in Dental Therapy Practice | 784   |
|      | Adult Care in Dental Therapy Practice             | 13    |
|      | Dental therapists                                 |       |
|      | Dental therapy practice                           | 1,011 |
|      | Radiography in Dental Therapy Practice            | 1,001 |
| 2017 | Diagnostic Radiography in Dental Therapy Practice | 811   |
| 7    | Pulpotomies in Dental Therapy Practice            | 1,002 |
|      | Stainless Steel Crowns in Dental Therapy Practice | 829   |
|      | Adult Care in Dental Therapy Practice             | 13    |

<sup>&</sup>lt;sup>a</sup> The above indented scope activities were registered as "additional" scopes of practices until March 2011, whereafter these activities were considered part of the dental therapy scope of practice, and merged into the general scope. The above reflects the levels of capabilities in these clinical areas.

(Data source: Dental register)

Table 2-11. Type of primary employment of practising dental therapists <sup>a</sup>

|      |                                | Number (%) | Total % |
|------|--------------------------------|------------|---------|
|      | Self-employed                  |            |         |
|      | Solo practice                  | 9 (26.5)   | 1.0     |
|      | Group practice                 | 25 (73.5)  | 2.7     |
|      | Subtotal                       | 34         | 3.6     |
|      | Employee                       |            |         |
|      | Private practice               | 138 (19.8) | 14.6    |
|      | DHB                            | 531 (76.1) | 56.4    |
| 2016 | Universities                   | 12 (1.7)   | 1.3     |
| •    | Government Department, not MOH | 5 (0.7)    | 0.5     |
|      | lwi                            | 9 (1.3)    | 1.0     |
|      | Ministry of Health             | 3 (0.4)    | 0.3     |
|      | Subtotal                       | 698        | 74.1    |
|      | Other forms of employment      | _          | _       |
|      | No reply to question           | 210        | 22.3    |
|      | Total                          | 942        |         |
|      | Self-employed                  |            |         |
|      | Solo practice                  | 15 (38.5)  | 1.6     |
|      | Group practice                 | 24 (61.5)  | 2.5     |
|      | Subtotal                       | 39         | 4.1     |
|      | Employee                       |            |         |
|      | Private practice               | 158 (22.1) | 16.4    |
|      | DHB                            | 529 (73.9) | 55.0    |
| 2017 | Universities                   | 12 (1.7)   | 1.2     |
| •    | Government Department, not MOH | 6 (0.8)    | 0.6     |
|      | lwi                            | 8 (1.1)    | 0.8     |
|      | Ministry of Health             | 3 (0.4)    | 0.3     |
|      | Subtotal                       | 716        | 74.5    |
|      | Other forms of employment      | 1          | 0.1     |
|      | No reply to question           | 205        | 21.3    |
|      | Total                          | 961        |         |

<sup>&</sup>lt;sup>a</sup> Only the data captured against the dental therapy workforce survey were included in the analysis for oral health graduates registered in both the dental hygiene and dental therapy scopes of practice. However, there might be some overlap in data reported between the two scopes of practice.

(Data source: Workforce survey)

Table 2-12. Total number of hours worked per week by dental therapists practising in New Zealand

| Number of hours worked      | 2016       | 2017       |
|-----------------------------|------------|------------|
| 1 to 10                     | 7 (0.9)    | 12 (1.6)   |
| 11 to 20                    | 40 (5.4)   | 40 (5.2)   |
| 21 to 30                    | 145 (19.5) | 155 (20.3) |
| 31 to 40                    | 501 (67.4) | 508 (66.7) |
| 41 to 50                    | 40 (5.4)   | 37 (4.9)   |
| 51 to 60                    | 3 (0.4)    | 5 (0.7)    |
| More than 60                | 7 (0.9)    | 5 (0.7)    |
| Number giving data on hours | 743        | 762        |
| Mean no. of hours/week (SD) | 35.0 (8.6) | 34.7 (9.0) |
| No response or excluded     | 199        | 199        |
| Total                       | 942        | 961        |

Table 2-13. Reasons for part-time practice by dental therapists practising in New Zealand

|      | Reason for practising part-time | Females (%) | Males (%) | Total (%)  |
|------|---------------------------------|-------------|-----------|------------|
|      | Engaged in non-dental work      | 6 (2.2)     | 1 (14.3)  | 7 (2.5)    |
|      | Insufficient dental work        | 35 (12.9)   | 1 (14.3)  | 36 (12.9)  |
|      | Seeking dental work             | 7 (2.6)     | _         | 7 (2.5)    |
|      | Semi-retired                    | 6 (2.2)     | _         | 6 (2.2)    |
| 2016 | Parental responsibilities       | 52 (19.1)   | 2 (28.6)  | 54 (19.4)  |
| 20   | Personal choice                 | 134 (49.3)  | 1 (14.3)  | 135 (48.4) |
|      | Studying                        | 5 (1.8)     | _         | 5 (1.8)    |
|      | Health issues                   | 2 (0.7)     | _         | 2 (0.7)    |
|      | Other                           | 25 (9.2)    | 2 (28.6)  | 27 (9.7)   |
|      | Total working part time         | 272 (97.5)  | 7 (2.5)   | 279        |
|      | Engaged in non-dental work      | 13 (4.7)    | _         | 13 (4.6)   |
|      | Insufficient dental work        | 35 (12.6)   | 2 (28.6)  | 37 (13.0)  |
|      | Seeking dental work             | 7 (2.5)     | _         | 7 (2.5)    |
|      | Semi-retired                    | 7 (2.5)     | _         | 7 (2.5)    |
| 17   | Parental responsibilities       | 45 (16.2)   | _         | 45 (15.8)  |
| 2017 | Personal choice                 | 129 (46.4)  | 1 (14.3)  | 130 (45.6) |
|      | Studying                        | 8 (2.9)     | 1 (14.3)  | 9 (3.2)    |
|      | Health issues                   | 4 (1.4)     | _         | 4 (1.4)    |
|      | Other (see below)               | 30 (10.8)   | 3 (42.9)  | 33 (11.6)  |
| ·    | Total working part time         | 278 (97.5)  | 7 (2.5)   | 285        |

Reasons offered by the 33 who selected 'other' reasons for practising part-time, based on the 2017 data (number):

Contract hours offered (16)

Administration/Management (8)

Personal (2)

Not enough dental work (2)

Health issues (2)

Extended holiday/travel (1)

Doing non-dental work (1)

Other/Unknown (1)

Table 2-14. Work by practice and employment type for dental therapists, by primary and secondary employer for 2016

|                             | Dental therapy   |  |     | Teaching <sup>a</sup>                    |     | Administration <sup>a</sup>              |     | Overall <sup>c</sup>                     |  |
|-----------------------------|------------------|--|-----|--|-----|--|-----|--|--|
|                             | No. <sup>b</sup> | Mean hours<br>spent at work<br>type (SD) | No. | Mean hours<br>spent at work<br>type (SD) | No. | Mean hours<br>spent at work<br>type (SD) | No. | Mean hours<br>spent at work<br>type (SD) |  |
| Primary employer            |                  |  |     |  |     |  |     |  |  |
| Private practice (self-emp) | 30               | 17.8 (13.3)                              | 1   | 10.0                                     | 5   | 16.6 (6.8)                               | 34  | 28.0 (9.9)                               |  |
| Private practice (employee) | 84               | 12.0 (11.5)                              | _   | _  | 2   | 11.5 (3.5)                               | 136 | 28.9 (10.7)                              |  |
| DHB or MOH                  | 515              | 33.4 (9.1)                               | 2   | 20.0                                     | 29  | 30.6 (8.2)                               | 527 | 34.8 (8.0)                               |  |
| Universities                | 6                | 17.5 (11.1)                              | 10  | 26.2 (12.5)                              | 1   | 40.0                                     | 12  | 36.4 (16.5)                              |  |
| Other                       | 8                | 32.4 (10.1)                              | _   | _  | 1   | 30.0                                     | 13  | 34.5 (8.7)                               |  |
| Total number                | 643              |  | 13  |  | 38  |  | 722 |  |  |
| Secondary employer          |                  |  |     |  |     |  |     |  |  |
| Private practice (self-emp) | 4                | 13.5 (10.6)                              | _   | _  | 1   | 16.0                                     | 10  | 13.0 (9.7)                               |  |
| Private practice (employee) | 35               | 8.1 (6.3)                                | _   | _  | _   | _  | 48  | 11.5 (9.0)                               |  |
| DHB or MOH                  | 13               | 11.5 (11.8)                              | _   | _  | 5   | 12.8 (7.2)                               | 62  | 9.9 (7.3)                                |  |
| Universities                | 1                | 2.0                                      | _   | _  | _   | _  | 1   | 10.0                                     |  |
| Other                       | 2                | 7.5 (2.5)                                | _   | _  | _   | _  | 4   | 16.3 (13.9)                              |  |
| Total number                | 55               |  | _   |  | 6   |  | 125 |  |  |

Where specifically employed to do so
 Practitioners reporting not working any hours and those who reported more than 80 hours per week, are excluded from these calculations
 Totals of columns may sum greater than overall number per practice setting as multiple activities are performed, as well as activities not detailed in the table Note: DHB = District health board; MOH = Ministry of Health

Table 2-15. Work by practice and employment type for dental therapists, by primary and secondary employer for 2017

|                             | Dental therapy   |  |     | Teaching <sup>a</sup>                    |     | Administration <sup>a</sup>              |     | Overall <sup>c</sup>                     |  |
|-----------------------------|------------------|--|-----|--|-----|--|-----|--|--|
|                             | No. <sup>b</sup> | Mean hours<br>spent at work<br>type (SD) | No. | Mean hours<br>spent at work<br>type (SD) | No. | Mean hours<br>spent at work<br>type (SD) | No. | Mean hours<br>spent at work<br>type (SD) |  |
| Primary employer            |                  |  |     |  |     |  |     |  |  |
| Private practice (self-emp) | 27               | 12.4 (11.2)                              | _   | _  | 3   | 25.0 (10.8)                              | 38  | 30.1 (9.3)                               |  |
| Private practice (employee) | 96               | 12.8 (11.0)                              | _   | _  | 3   | 17.0 (10.6)                              | 156 | 28.2 (10.3)                              |  |
| DHB or MOH                  | 508              | 33.1 (8.7)                               | 2   | 20.0                                     | 24  | 28.1 (10.1)                              | 522 | 34.0 (7.5)                               |  |
| Universities                | 8                | 13.8 (7.0)                               | 10  | 23.4 (11.2)                              | 2   | 7.5 (2.5)                                | 12  | 32.7 (7.0)                               |  |
| Other                       | 9                | 38.9 (2.1)                               | _   | _  | 1   | 5.0                                      | 15  | 39.3 (1.7)                               |  |
| Total number                | 648              |  | 12  |  | 33  |  | 743 |  |  |
| Secondary employer          |                  |  |     |  |     |  |     |  |  |
| Private practice (self-emp) | 9                | 5.9 (6.5)                                | _   |  | 1   | 16.0                                     | 14  | 8.8 (9.0)                                |  |
| Private practice (employee) | 35               | 7.4 (5.1)                                | 1   | 3.0                                      | 2   | 13.0 (7.0)                               | 54  | 10.1 (7.2)                               |  |
| DHB or MOH                  | 16               | 16.6 (12.1)                              | 1   | 15.0                                     | 1   | 23.0                                     | 68  | 11.7 (9.0)                               |  |
| Universities                | 1                | 2.0                                      | _   | _  | _   | _  | 1   | 9.0                                      |  |
| Other                       | 2                | 20.5 (19.5)                              | _   | _  | _   | _  | 2   | 22.5 (17.5)                              |  |
| Total number                | 63               |  | 2   |  | 4   |  | 139 |  |  |

Where specifically employed to do so
 Practitioners reporting not working any hours and those who reported more than 80 hours per week, are excluded from these calculations
 Totals of columns may sum greater than overall number per practice setting as multiple activities are performed, as well as activities not detailed in the table
 Note: DHB = District health board; MOH = Ministry of Health (Data source: Workforce survey)

Table 2-16. Geographic distribution of practising dental therapists by Territorial Authority (TA)

| TA area Far North              | Number of dental therapists (%)  15 (1.6) 19 (2.0) | FTE<br>[N reporting<br>hours] | Number of dental therapists (%) | FTE                 |
|--------------------------------|--|-------------------------------|---------------------------------|---------------------|
|                                | dental<br>therapists (%)                           | [N reporting hours]           | dental                          |                     |
| Far North                      |  |                               | . , ,                           | [N reporting hours] |
| Far North                      |  |                               |                                 |                     |
|                                | 19 (2.0)   | 11.4 [14]                     | 11 (1.1)                        | 6.6 [8]             |
| Whangarei                      |  | 14.3 [16]                     | 20 (2.1)                        | 14.2 [17]           |
| Kaipara                        | 2 (0.2)  | _                             | 1 (0.1)                         |                     |
| Auckland unitary authority     | 356 (37.8)   | 252.8 [279]                   | 376 (39.1)                      | 260.1 [291]         |
| Rodney                         | 16 (1.7)   | 11.1 [14]                     | 20 (2.1)                        | 14.0 [16]           |
| North Shore                    | 74 (7.9)   | 45.5 [52]                     | 70 (7.3)                        | 50.8 [56]           |
| Waitakere                      | 49 (5.2)   | 37.4 [39]                     | 52 (5.4)                        | 37.4 [43]           |
| Auckland                       | 109 (11.6)   | 74.0 [84]                     | 116 (12.1)                      | 73.3 [80]           |
| Manukau                        | 78 (8.3)   | 65.8 [68]                     | 86 (8.9)                        | 64.9 [73]           |
| Papakura                       | 15 (1.6)   | 8.2 [10]                      | 17 (1.8)                        | 9.7 [12]            |
| Franklin                       | 15 (1.6)   | 10.9 [12]                     | 15 (1.6)                        | 10.1 [11]           |
| Thames-Coromandel District     | 2 (0.2)  | 1.6 [2]                       | 3 (0.3)                         | 1.7 [2]             |
| Hauraki District               | _  | _                             | _                               | _                   |
| Waikato District               | 5 (0.5)  | 1.2 [2]                       | 6 (0.6)                         | 5.6 [6]             |
| Matamata-Piako District        | 3 (0.3)  | 1.4 [2]                       | 1 (0.1)                         | 1.0 [1]             |
| Hamilton City                  | 46 (4.9)   | 31.6 [38]                     | 48 (5.0)                        | 33.8 [40]           |
| Waipa District                 | 10 (1.1)   | 8.5 [10]                      | 8 (0.8)                         | 6.3 [8]             |
| Otorohanga District            | 1 (0.1)  | _                             | _                               | _                   |
| South Waikato District         | 2 (0.2)  | 1.8 [2]                       | 2 (0.2)                         | 1.8 [2]             |
| Waitomo District               | 1 (0.1)  | 0.9 [1]                       | 1 (0.1)                         | 0.9 [1]             |
| Taupo District                 | 5 (0.5)  | 4.2 [5]                       | 6 (0.6)                         | 3.4 [5]             |
| Western Bay of Plenty District | 6 (0.6)  | 5.2 [6]                       | 6 (0.6)                         | 4.6 [6]             |
| Tauranga City                  | 30 (3.2)   | 20.7 [22]                     | 43 (4.5)                        | 31.9 [34]           |
| Rotorua District               | 18 (1.9)   | 13.2 [16]                     | 19 (2.0)                        | 12.4 [16]           |
| Whakatane District             | 7 (0.7)  | 6.7 [7]                       | 5 (0.5)                         | 3.8 [4]             |
| Kawerau District               | _  | _                             | _                               | _                   |
| Opotiki District               | 2 (0.2)  | 0.8 [1]                       | 2 (0.2)                         | 1.5 [2]             |
| Gisborne District              | 12 (1.3)   | 9.5 [11]                      | 11 (1.1)                        | 9.2 [9]             |
| Wairoa District                | 4 (0.4)  | 3.4 [4]                       | 3 (0.3)                         | 1.3 [2]             |
| Hastings District              | 17 (1.8)   | 10.4 [13]                     | 16 (1.7)                        | 12.4 [14]           |
| Napier City                    | 11 (1.2)   | 7.0 [9]                       | 12 (1.2)                        | 7.5 [9]             |
| Central Hawke's Bay District   | 1 (0.1)  | 0.9 [1]                       | 2 (0.2)                         | 1.8 [2]             |
| New Plymouth District          | 20 (2.1)   | 16.9 [19]                     | 19 (2.0)                        | 14.9 [15]           |
| Stratford District             | 3 (0.3)  | 0.8 [1]                       | 2 (0.2)                         | 1.6 [2]             |
| South Taranaki District        | 3 (0.3)  | 1.2 [2]                       | 3 (0.3)                         | 2.1 [3]             |
| Ruapehu District               | 3 (0.3)  | 2.2 [3]                       | 3 (0.3)                         | 2.1 [3]             |
| Wanganui District              | 18 (1.9)   | 2.2 [5]<br>14.5 [16]          | 18 (1.9)                        | 14.4 [17]           |
| Rangitikei District            | 4 (0.4)  | 14.5 [16]                     | 4 (0.4)                         | 2.2 [3]             |

|                           | 20                                    | 16                            | 2017                                  |                               |  |
|---------------------------|---------------------------------------|-------------------------------|---------------------------------------|-------------------------------|--|
| TA area                   | Number of<br>dental<br>therapists (%) | FTE<br>[N reporting<br>hours] | Number of<br>dental<br>therapists (%) | FTE<br>[N reporting<br>hours] |  |
| Manawatu District         | 1 (0.1)                               | 0.9 [1]                       | 2 (0.2)                               | 1.0 [1]                       |  |
| Palmerston North City     | 23 (2.4)                              | 18.3 [19]                     | 23 (2.4)                              | 13.7 [14]                     |  |
| Tararua District          | 3 (0.3)                               | 1.5 [2]                       | 3 (0.3)                               | 1.7 [2]                       |  |
| Horowhenua District       | 2 (0.2)                               | 0.9 [1]                       | 1 (0.1)                               | _                             |  |
| Kapiti Coast District     | 9 (1.0)                               | 5.3 [8]                       | 8 (0.8)                               | 3.5 [5]                       |  |
| Porirua City              | 5 (0.5)                               | 4.4 [5]                       | 8 (0.8)                               | 6.0 [7]                       |  |
| Upper Hutt City           | 8 (0.8)                               | 6.4 [7]                       | 5 (0.5)                               | 4.6 [5]                       |  |
| Lower Hutt City           | 22 (2.3)                              | 13.8 [17]                     | 26 (2.7)                              | 20.4 [24]                     |  |
| Wellington City           | 35 (3.7)                              | 22.7 [24]                     | 33 (3.4)                              | 22.0 [26]                     |  |
| Masterton District        | 11 (1.2)                              | 4.9 [7]                       | 8 (0.8)                               | 5.2 [7]                       |  |
| Carterton District        | _                                     | _                             | _                                     | _                             |  |
| South Wairarapa District  | _                                     | _                             | _                                     | _                             |  |
| Tasman District           | 7 (0.7)                               | 6.0 [7]                       | 10 (1.0)                              | 7.4 [9]                       |  |
| Nelson City               | 8 (0.8)                               | 4.4 [5]                       | 5 (0.5)                               | 4.4 [5]                       |  |
| Marlborough District      | 9 (1.0)                               | 5.0 [7]                       | 7 (0.7)                               | 3.8 [5]                       |  |
| Kaikoura District         | _                                     | _                             | _                                     | _                             |  |
| Buller District           | 1 (0.1)                               | 1.0 [1]                       | 1 (0.1)                               | 1.0 [1]                       |  |
| Grey District             | 2 (0.2)                               | 1.5 [2]                       | 2 (0.2)                               | 0.9 [1]                       |  |
| Westland District         | 1 (0.1)                               | 1.0 [1]                       | 1 (0.1)                               | 1.0 [1]                       |  |
| Hurunui District          | 1 (0.1)                               | 0.5 [1]                       | 1 (0.1)                               | 0.5 [1]                       |  |
| Waimakariri District      | 3 (0.3)                               | 2.5 [3]                       | 5 (0.5)                               | 4.5 [5]                       |  |
| Christchurch City         | 56 (5.9)                              | 37.1 [44]                     | 54 (5.6)                              | 37.1 [45]                     |  |
| Selwyn District           | 4 (0.4)                               | 2.4 [3]                       | 2 (0.2)                               | 1.4 [2]                       |  |
| Ashburton District        | 4 (0.4)                               | 3.4 [4]                       | 5 (0.5)                               | 3.4 [4]                       |  |
| Timaru District           | 6 (0.6)                               | 3.3 [5]                       | 7 (0.7)                               | 5.0 [7]                       |  |
| Mackenzie District        | _                                     | _                             |                                       | _                             |  |
| Waimate District          | _                                     | _                             | 1 (0.1)                               | 1.0 [1]                       |  |
| Chatham Islands Territory | _                                     | _                             | _                                     | _                             |  |
| Waitaki District          | 2 (0.2)                               | 1.4 [2]                       | 2 (0.2)                               | 1.3 [2]                       |  |
| Central Otago District    | 2 (0.2)                               | 2.0 [2]                       | 2 (0.2)                               | 1.0 [1]                       |  |
| Queenstown-Lakes District | 5 (0.5)                               | 2.5 [3]                       | 6 (0.6)                               | 3.9 [5]                       |  |
| Dunedin City              | 44 (4.7)                              | 35.4 [37]                     | 39 (4.1)                              | 24.9 [29]                     |  |
| Clutha District           | 4 (0.4)                               | 1.6 [2]                       | 3 (0.3)                               | 2.2 [3]                       |  |
| Southland District        | 3 (0.3)                               | 1.8 [2]                       | 3 (0.3)                               | 1.8 [2]                       |  |
| Gore District             | 4 (0.4)                               | 2.6 [3]                       | 4 (0.4)                               | 2.9 [3]                       |  |
| Invercargill City         | 12 (1.3)                              | 7.9 [9]                       | 12 (1.2)                              | 10.1 [11]                     |  |
| TLA code not available    | 19 (2.0)                              | 4.2 [5]                       | 21 (2.2)                              | 6.1 [7]                       |  |
| Total                     | 942                                   | 650.1 [743]                   | 961                                   | 662.5 [763]                   |  |

Note: FTE = Full time equivalent

(Data sources: Dental register, workforce survey & Statistics New Zealand)

Table 2-17. Population to practising dental therapists and FTE ratios by TA, for 2016

|                                   | Total<br>population | Population<br>aged <15<br>years <sup>a</sup> | Population<br>aged <15<br>years-to-<br>dental<br>therapist ratio | Dental<br>therapist per<br>100,000<br>population<br>aged <15 b | Population<br>aged <15<br>years-to-<br>FTE-dental<br>therapist ratio | FTE per<br>100,000<br>population<br>aged <15 |
|-----------------------------------|---------------------|--|--|--|--|--|
| Far North                         | 63,226              | 13,717                                       | 914.5  | 109.4  | 1,208.5  | 82.7   |
| Whangarei                         | 87,677              | 18,856                                       | 992.4  | 100.8  | 1,323.2  | 75.6   |
| Kaipara                           | 21,646              | 4,268  | 2,134.0  | 46.9   | _  | _  |
| Auckland                          | 1,576,687           | 315,349                                      | 885.8  | 112.9  | 1,247.7  | 80.1   |
| Thames-Coromandel District        | 29,160              | 4,459  | 2,229.7  | 44.8   | 2,744.2  | 36.4   |
| Hauraki District                  | 19,344              | 3,693  | _  | _  | _  | _  |
| Waikato District                  | 71,609              | 16,746                                       | 3,349.1  | 29.9   | 13,669.9   | 7.3  |
| Matamata-Piako District           | 33,872              | 7,014  | 2,337.9  | 42.8   | 5,009.8  | 20.0   |
| Hamilton City                     | 159,013             | 33,638                                       | 731.3  | 136.8  | 1,063.6  | 94.0   |
| Waipa District                    | 51,641              | 10,803                                       | 1,080.3  | 92.6   | 1,270.9  | 78.7   |
| Otorohanga District               | 9,993               | 2,320  | 2,319.7  | 43.1   | _  | _  |
| South Waikato District            | 23,548              | 5,416  | 2,708.0  | 36.9   | 3,094.9  | 32.3   |
| Waitomo District                  | 9,486               | 2,230  | 2,230.3  | 44.8   | 2,411.2  | 41.5   |
| Taupo District                    | 36,925              | 7,596  | 1,519.2  | 65.8   | 1,830.4  | 54.6   |
| Western Bay of Plenty<br>District | 48,206              | 9,223  | 1,537.1  | 65.1   | 1,765.1  | 56.7   |
| Tauranga City                     | 128,994             | 26,004                                       | 866.8  | 115.4  | 1,259.3  | 79.4   |
| Rotorua District                  | 71,438              | 15,886                                       | 882.6  | 113.3  | 1,205.8  | 82.9   |
| Whakatane District                | 35,015              | 7,869  | 1,124.1  | 89.0   | 1,178.9  | 84.8   |
| Kawerau District                  | 6,791               | 1,667  | _  | _  | _  | _  |
| Opotiki District                  | 8,969               | 2,032  | 1,015.8  | 98.4   | 2,708.9  | 36.9   |
| Gisborne District                 | 47,455              | 11,465                                       | 955.4  | 104.7  | 1,206.9  | 82.9   |
| Wairoa District                   | 8,184               | 2,012  | 503.1  | 198.8  | 591.9  | 169.0  |
| Hastings District                 | 79,972              | 17,703                                       | 1,041.4  | 96.0   | 1,702.2  | 58.7   |
| Napier City                       | 61,514              | 12,254                                       | 1,114.0  | 89.8   | 1,756.8  | 56.9   |
| Central Hawke's Bay<br>District   | 13,735              | 2,798  | 2,798.3  | 35.7   | 3,198.1  | 31.3   |
| New Plymouth District             | 79,853              | 16,263                                       | 813.2  | 123.0  | 963.8  | 103.8  |
| Stratford District                | 9,327               | 2,010  | 669.9  | 149.3  | 2,679.6  | 37.3   |
| South Taranaki District           | 27,529              | 6,099  | 2,032.9  | 49.2   | 5,303.2  | 18.9   |
| Ruapehu District                  | 12,897              | 2,868  | 956.1  | 104.6  | 1,303.8  | 76.7   |
| Wanganui District                 | 44,317              | 8,722  | 484.6  | 206.4  | 602.6  | 166.0  |
| Rangitikei District               | 14,788              | 3,151  | 787.8  | 126.9  | 2,471.4  | 40.5   |
| Manawatu District                 | 29,615              | 6,243  | 6,243.3  | 16.0   | 7,135.2  | 14.0   |
| Palmerston North City             | 85,572              | 16,656                                       | 724.2  | 138.1  | 908.9  | 110.0  |
| Tararua District                  | 17,471              | 3,786  | 1,262.1  | 79.2   | 2,524.2  | 39.6   |
| Horowhenua District               | 31,916              | 5,878  | 2,938.8  | 34.0   | 6,354.2  | 15.7   |

|                              | Total<br>population | Population<br>aged <15<br>years <sup>a</sup> | Population<br>aged <15<br>years-to-<br>dental<br>therapist ratio | Dental<br>therapist per<br>100,000<br>population<br>aged <15 <sup>b</sup> | Population<br>aged <15<br>years-to-<br>FTE-dental<br>therapist ratio | FTE per<br>100,000<br>population<br>aged <15 |
|------------------------------|---------------------|--|--|---|--|--|
| Kapiti Coast District        | 52,247              | 9,391  | 1,043.4  | 95.8  | 1,780.3  | 56.2   |
| Porirua City                 | 55,270              | 13,132                                       | 2,626.3  | 38.1  | 2,984.5  | 33.5   |
| Upper Hutt City              | 42,813              | 8,517  | 1,064.6  | 93.9  | 1,341.2  | 74.6   |
| Lower Hutt City              | 102,895             | 21,169                                       | 962.2  | 103.9   | 1,534.0  | 65.2   |
| Wellington City              | 205,591             | 33,667                                       | 961.9  | 104.0   | 1,484.7  | 67.4   |
| Masterton District           | 24,906              | 4,895  | 445.0  | 224.7   | 1,009.3  | 99.1   |
| Carterton District           | 8,904               | 1,698  | _  | _   | _  | _  |
| South Wairarapa District     | 10,219              | 1,893  | _  | _   | _  | _  |
| Tasman District              | 51,402              | 9,497  | 1,356.7  | 73.7  | 1,582.8  | 63.2   |
| Nelson City                  | 50,961              | 9,040  | 1,130.0  | 88.5  | 2,078.2  | 48.1   |
| Marlborough District         | 47,054              | 8,184  | 909.3  | 110.0   | 1,653.3  | 60.5   |
| Kaikoura District            | 3,984               | 641  | _  | _   | _  | _  |
| Buller District              | 10,277              | 1,764  | 1,764.3  | 56.7  | 1,764.3  | 56.7   |
| Grey District                | 13,690              | 2,684  | 1,342.2  | 74.5  | 1,760.2  | 56.8   |
| Westland District            | 9,580               | 1,561  | 1,560.7  | 64.1  | 1,560.7  | 64.1   |
| Hurunui District             | 12,702              | 2,464  | 2,464.3  | 40.6  | 5,476.3  | 18.3   |
| Waimakariri District         | 57,374              | 11,288                                       | 3,762.6  | 26.6  | 4,470.4  | 22.4   |
| Christchurch City            | 371,360             | 63,744                                       | 1,138.3  | 87.9  | 1,719.3  | 58.2   |
| Selwyn District              | 55,457              | 12,193                                       | 3,048.3  | 32.8  | 5,134.0  | 19.5   |
| Ashburton District           | 33,244              | 6,749  | 1,687.3  | 59.3  | 1,985.1  | 50.4   |
| Timaru District              | 46,524              | 8,257  | 1,376.1  | 72.7  | 2,483.2  | 40.3   |
| Mackenzie District           | 5,514               | 875  | _  | _   | _  | _  |
| Waimate District             | 7,824               | 1,427  |  | _   | _  | _  |
| Chatham Islands<br>Territory | 647                 | 124  | _  | _   | _  | _  |
| Waitaki District             | 22,344              | 4,117  | 2,058.7  | 48.6  | 2,941.0  | 34.0   |
| Central Otago District       | 20,431              | 3,513  | 1,756.5  | 56.9  | 1,756.5  | 56.9   |
| Queenstown-Lakes<br>District | 37,275              | 6,211  | 1,242.3  | 80.5  | 2,535.2  | 39.4   |
| Dunedin City                 | 127,265             | 19,946                                       | 453.3  | 220.6   | 564.2  | 177.2  |
| Clutha District              | 17,660              | 3,471  | 867.8  | 115.2   | 2,169.6  | 46.1   |
| Southland District           | 31,798              | 6,656  | 2,218.6  | 45.1  | 3,749.7  | 26.7   |
| Gore District                | 12,464              | 2,441  | 610.3  | 163.8   | 939.0  | 106.5  |
| Invercargill City            | 54,424              | 10,608                                       | 884.0  | 113.1   | 1,338.5  | 74.7   |
| Missing/outside TA           | 105                 | 1  | _  | _   | _  | _  |
| Total <sup>c</sup>           | 4,661,590           | 918,510                                      | 975.1  | 102.6   | 1,412.8  | 70.8   |

 <sup>&</sup>lt;sup>a</sup> Population estimate as at 30 June 2016
 <sup>b</sup> Where hours are reported
 <sup>c</sup> Due to rounding, individual figures may not always sum to the stated totals (Data sources: Dental register, workforce survey & Statistics New Zealand)

Table 2-18. Population to practising dental therapists and FTE ratios by TA, for 2017

|                                   | Total<br>population | Population<br>aged <15<br>years <sup>a</sup> | Population<br>aged <15<br>years-to-<br>dental<br>therapist<br>ratio <sup>a, b</sup> | Dental<br>therapist per<br>100,000<br>population<br>aged <15 b | Population<br>aged <15<br>years-to-FTE-<br>dental<br>therapist ratio | FTE per<br>100,000<br>population<br>aged <15 |
|-----------------------------------|---------------------|--|---|--|--|--|
| Far North                         | 65,151              | 13,934                                       | 1,266.7   | 78.9   | 2,103.2  | 47.5   |
| Whangarei                         | 89,453              | 19,112                                       | 955.6   | 104.6  | 1,348.3  | 74.2   |
| Kaipara                           | 22,191              | 4,336  | 4,336.0   | 23.1   | _  | _  |
| Auckland                          | 1,583,474           | 314,697                                      | 837.0   | 119.5  | 1,210.1  | 82.6   |
| Thames-Coromandel District        | 30,521              | 4,519  | 1,506.2   | 66.4   | 2,697.7  | 37.1   |
| Hauraki District                  | 19,589              | 3,685  | _   | _  | _  | _  |
| Waikato District                  | 73,719              | 17,191                                       | 2,865.2   | 34.9   | 3,083.6  | 32.4   |
| Matamata-Piako District           | 34,144              | 7,027  | 7,027.3   | 14.2   | 7,397.2  | 13.5   |
| Hamilton City                     | 161,227             | 34,175                                       | 712.0   | 140.5  | 1,010.4  | 99.0   |
| Waipa District                    | 52,882              | 11,106                                       | 1,388.3   | 72.0   | 1,755.9  | 57.0   |
| Otorohanga District               | 10,266              | 2,289  | _   | _  | _  | _  |
| South Waikato District            | 23,595              | 5,432  | 2,716.0   | 36.8   | 2,976.4  | 33.6   |
| Waitomo District                  | 9,443               | 2,131  | 2,130.7   | 46.9   | 2,303.4  | 43.4   |
| Taupo District                    | 38,251              | 7,692  | 1,282.0   | 78.0   | 2,262.4  | 44.2   |
| Western Bay of Plenty<br>District | 49,612              | 9,345  | 1,557.6   | 64.2   | 2,031.6  | 49.2   |
| Tauranga City                     | 133,387             | 26,808                                       | 623.4   | 160.4  | 839.7  | 119.1  |
| Rotorua District                  | 73,677              | 16,172                                       | 851.2   | 117.5  | 1,304.2  | 76.7   |
| Whakatane District                | 35,429              | 7,938  | 1,587.6   | 63.0   | 2,116.8  | 47.2   |
| Kawerau District                  | 6,922               | 1,684  | _   | _  | _  | _  |
| Opotiki District                  | 9,129               | 2,043  | 1,021.7   | 97.9   | 1,362.2  | 73.4   |
| Gisborne District                 | 47,510              | 11,331                                       | 1,030.1   | 97.1   | 1,228.3  | 81.4   |
| Wairoa District                   | 8,189               | 1,965  | 654.9   | 152.7  | 1,511.3  | 66.2   |
| Hastings District                 | 82,045              | 17,807                                       | 1,112.9   | 89.9   | 1,436.0  | 69.6   |
| Napier City                       | 62,627              | 12,407                                       | 1,033.9   | 96.7   | 1,654.3  | 60.4   |
| Central Hawke's Bay<br>District   | 14,019              | 2,847  | 1,423.3   | 70.3   | 1,603.8  | 62.4   |
| New Plymouth District             | 80,705              | 16,427                                       | 864.6   | 115.7  | 1,102.5  | 90.7   |
| Stratford District                | 9,433               | 2,029  | 1,014.7   | 98.6   | 1,248.8  | 80.1   |
| South Taranaki District           | 27,357              | 6,097  | 2,032.4   | 49.2   | 2,903.5  | 34.4   |
| Ruapehu District                  | 13,344              | 2,837  | 945.6   | 105.8  | 1,350.8  | 74.0   |
| Wanganui District                 | 45,033              | 8,845  | 491.4   | 203.5  | 614.2  | 162.8  |
| Rangitikei District               | 14,876              | 3,152  | 788.0   | 126.9  | 1,416.6  | 70.6   |
| Manawatu District                 | 29,931              | 6,287  | 3,143.3   | 31.8   | 6,286.7  | 15.9   |
| Palmerston North City             | 85,644              | 16,711                                       | 726.6   | 137.6  | 1,217.6  | 82.1   |
| Tararua District                  | 17,542              | 3,773  | 1,257.6   | 79.5   | 2,219.2  | 45.1   |

| kenzie District mate District tham Islands Territory aki District tral Otago District enstown-Lakes District edin City na District chland District er District crargill City ing/outside TA | 6,588 7,777 683 22,788 21,662 42,150 128,729 17,920 32,996 12,478 54,649 161  | 891 1,373 117 4,135 3,576 6,523 19,991 3,443 6,611 2,433 10,615 2   | 1,373.3  2,067.3  1,788.0  1,087.1  512.6  1,147.6  2,203.8  608.2  884.6  —   |  | 1,373.3  3,242.9 3,764.2 1,661.8 804.5 1,564.8 3,673.0 838.9 1,048.4  | — 72.8 — 30.8 26.6 60.2 124.3 63.9 27.2 119.2 95.4 —   |
|---|---|---|--|--|---|--|
| mate District tham Islands Territory aki District tral Otago District enstown-Lakes District edin City na District chland District e District crargill City                                 | 7,777<br>683<br>22,788<br>21,662<br>42,150<br>128,729<br>17,920<br>32,996<br>12,478<br>54,649   | 1,373<br>117<br>4,135<br>3,576<br>6,523<br>19,991<br>3,443<br>6,611<br>2,433<br>10,615  | 2,067.3<br>1,788.0<br>1,087.1<br>512.6<br>1,147.6<br>2,203.8<br>608.2  |  | 3,242.9<br>3,764.2<br>1,661.8<br>804.5<br>1,564.8<br>3,673.0<br>838.9   |  |
| mate District tham Islands Territory aki District tral Otago District enstown-Lakes District edin City na District chland District  | 7,777<br>683<br>22,788<br>21,662<br>42,150<br>128,729<br>17,920<br>32,996   | 1,373<br>117<br>4,135<br>3,576<br>6,523<br>19,991<br>3,443<br>6,611   | 2,067.3<br>1,788.0<br>1,087.1<br>512.6<br>1,147.6<br>2,203.8<br>608.2  |  | 3,242.9<br>3,764.2<br>1,661.8<br>804.5<br>1,564.8<br>3,673.0<br>838.9   |  |
| mate District tham Islands Territory aki District tral Otago District enstown-Lakes District edin City na District  | 7,777<br>683<br>22,788<br>21,662<br>42,150<br>128,729<br>17,920   | 1,373<br>117<br>4,135<br>3,576<br>6,523<br>19,991<br>3,443  | 2,067.3<br>1,788.0<br>1,087.1<br>512.6<br>1,147.6<br>2,203.8   | <br>48.4<br>55.9<br>92.0<br>195.1<br>87.1<br>45.4  | 3,242.9<br>3,764.2<br>1,661.8<br>804.5<br>1,564.8<br>3,673.0  | <br>30.8<br>26.6<br>60.2<br>124.3<br>63.9<br>27.2  |
| mate District tham Islands Territory aki District tral Otago District enstown-Lakes District edin City na District  | 7,777<br>683<br>22,788<br>21,662<br>42,150<br>128,729   | 1,373<br>117<br>4,135<br>3,576<br>6,523<br>19,991   | 2,067.3<br>1,788.0<br>1,087.1<br>512.6   | <br>48.4<br>55.9<br>92.0<br>195.1<br>87.1  | 3,242.9<br>3,764.2<br>1,661.8<br>804.5  | <br>30.8<br>26.6<br>60.2<br>124.3<br>63.9  |
| mate District tham Islands Territory aki District tral Otago District enstown-Lakes District  | 7,777<br>683<br>22,788<br>21,662<br>42,150  | 1,373<br>117<br>4,135<br>3,576<br>6,523   |  | <br>48.4<br>55.9<br>92.0   | 3,242.9<br>3,764.2<br>1,661.8   | —<br>30.8<br>26.6<br>60.2  |
| mate District<br>tham Islands Territory<br>aki District<br>tral Otago District  | 7,777<br>683<br>22,788<br>21,662  | 1,373<br>117<br>4,135<br>3,576  | <br>2,067.3<br>1,788.0   | —<br>48.4<br>55.9  | <br>3,242.9<br>3,764.2  | —<br>30.8<br>26.6  |
| mate District<br>tham Islands Territory<br>aki District   | 7,777<br>683<br>22,788  | 1,373<br>117<br>4,135   | 2,067.3  | —<br>48.4  | 3,242.9   | —<br>30.8  |
| mate District<br>tham Islands Territory   | 7,777<br>683  | 1,373<br>117  | _  | _  | · —   | _  |
| mate District   | 7,777   | 1,373   | <br>1,373.3<br>  | —<br>72.8<br>—   | <br>1,373.3<br>   | —<br>72.8<br>—   |
|   |   |   | —<br>1,373.3   | —<br>72.8  | —<br>1,373.3  | —<br>72.8  |
| kenzie District   | 6,588   | 891   | _  | _  | _   | _  |
| Iranaia District  |   |   |  |  |   |  |
| aru District  | 46,848  | 8,313   | 1,187.6  | 84.2   | 1,679.5   | 59.5   |
| ourton District   | 33,289  | 6,699   | 1,339.7  | 74.6   | 1,970.2   | 50.8   |
| yn District   | 58,215  | 12,787  | 6,393.3  | 15.6   | 9,133.3   | 10.9   |
| stchurch City   | 374,920   | 63,888  | 1,183.1  | 84.5   | 1,722.0   | 58.1   |
| makariri District   | 58,348  | 11,375  | 2,275.1  | 44.0   | 2,542.0   | 39.3   |
| ınui District   | 12,905  | 2,479   | 2,478.7  | 40.3   | 5,508.1   | 18.2   |
| tland District  | 10,441  | 1,551   | 1,551.3  | 64.5   | 1,551.3   | 64.5   |
| District  | 13,730  | 2,619   | 1,309.3  | 76.4   | 2,909.6   | 34.4   |
| er District   | 10,204  | 1,679   | 1,678.7  | 59.6   | 1,678.7   | 59.6   |
| oura District   | 4,308   | 641   | _  | _  | _   | _  |
| borough District  | 48,808  | 8,268   | 1,181.1  | 84.7   | 2,204.8   | 45.4   |
| on City   | 52,021  | 9,080   | 1,816.0  | 55.1   | 2,075.4   | 48.2   |
| man District  | 53,304  | 9,593   | 959.3  | 104.2  | 1,296.4   | 77.1   |
| h Wairarapa District  | 10,437  | 1,885   | _  | _  | _   | _  |
| erton District  | 9,018   | 1,705   | _  | _  | _   | _  |
| terton District   | 25,411  | 4,990   | 623.8  | 160.3  | 964.3   | 103.7  |
| ington City   | 207,381   | 33,333  | 1,010.1  | 99.0   | 1,518.6   | 65.9   |
| er Hutt City  | 103,790   | 21,139  | 813.0  | 123.0  | 1,036.2   | 96.5   |
| er Hutt City  | 43,626  | 8,533   | 1,706.7  | 58.6   | 1,855.1   | 53.9   |
| ua City   | 56,041  | 13,263  | 1,657.9  | 60.3   | 2,210.6   | 45.2   |
| ti Coast District   | 53,093  | 9,482   | 1,185.3  | 84.4   | 2,728.6   | 36.6   |
| whenua District   | 32,433  | 5,955   | 5,955.3  | 16.8   | _   | _  |
|   | ti Coast District rua City er Hutt City er Hutt City ington City terton District erton District th Wairarapa District man District on City borough District oura District er District | ti Coast District 53,093 rua City 56,041 er Hutt City 43,626 er Hutt City 103,790 ington City 207,381 terton District 25,411 erton District 9,018 th Wairarapa District 10,437 man District 53,304 on City 52,021 borough District 48,808 oura District 4,308 er District 10,204 or District 13,730 | ti Coast District 53,093 9,482 rua City 56,041 13,263 er Hutt City 43,626 8,533 er Hutt City 103,790 21,139 ington City 207,381 33,333 terton District 25,411 4,990 erton District 9,018 1,705 th Wairarapa District 10,437 1,885 man District 53,304 9,593 on City 52,021 9,080 borough District 48,808 8,268 oura District 4,308 641 er District 10,204 1,679 er District 13,730 2,619 | ti Coast District 53,093 9,482 1,185.3 rua City 56,041 13,263 1,657.9 er Hutt City 43,626 8,533 1,706.7 er Hutt City 103,790 21,139 813.0 ington City 207,381 33,333 1,010.1 terton District 25,411 4,990 623.8 erton District 9,018 1,705 — th Wairarapa District 10,437 1,885 — man District 53,304 9,593 959.3 on City 52,021 9,080 1,816.0 borough District 48,808 8,268 1,181.1 oura District 4,308 641 — er District 10,204 1,679 1,678.7 or District 13,730 2,619 1,309.3 | ti Coast District 53,093 9,482 1,185.3 84.4  rua City 56,041 13,263 1,657.9 60.3  er Hutt City 43,626 8,533 1,706.7 58.6  er Hutt City 103,790 21,139 813.0 123.0  ington City 207,381 33,333 1,010.1 99.0  terton District 25,411 4,990 623.8 160.3  erton District 9,018 1,705 — —  th Wairarapa District 10,437 1,885 — —  man District 53,304 9,593 959.3 104.2  on City 52,021 9,080 1,816.0 55.1  borough District 48,808 8,268 1,181.1 84.7  oura District 10,204 1,679 1,678.7 59.6  or District 10,204 1,679 1,678.7 59.6  or District 13,730 2,619 1,309.3 76.4 | ti Coast District 53,093 9,482 1,185.3 84.4 2,728.6 rua City 56,041 13,263 1,657.9 60.3 2,210.6 ru Hutt City 43,626 8,533 1,706.7 58.6 1,855.1 ru Hutt City 103,790 21,139 813.0 123.0 1,036.2 ru fington City 207,381 33,333 1,010.1 99.0 1,518.6 ru fuerton District 25,411 4,990 623.8 160.3 964.3 ru fuerton District 9,018 1,705 — — — — ru fuerton District 53,304 9,593 959.3 104.2 1,296.4 ru fuerton City 52,021 9,080 1,816.0 55.1 2,075.4 ru fuerton District 4,308 641 — — — ru fuerton District 4,308 641 — — — ru fuerton District 10,204 1,679 1,678.7 59.6 1,678.7 ru fuerton District 13,730 2,619 1,309.3 76.4 2,909.6 |

 <sup>&</sup>lt;sup>a</sup> Population estimate as at 30 June 2017
 <sup>b</sup> Where hours are reported
 <sup>c</sup> Due to rounding, individual figures may not always sum to the stated totals.
 (Data sources: Dental register, workforce survey & Statistics New Zealand)

Table 2-19. Population to practising dental therapists and FTE ratios by district health board (DHB), for 2016

|                    | No with practising certificates | Total population <sup>a</sup> | Population<br>aged <15 years | FTE dental therapists | Population aged<br><15 years-to-dental<br>therapist ratio | Dental therapist per<br>100,000 population<br>aged <15 years | Population aged <15<br>years-to-FTE-dental<br>therapist ratio | FTE per 100,000<br>population aged<br><15 years |
|--------------------|---------------------------------|-------------------------------|------------------------------|-----------------------|---|--|---|---|
| Northland          | 38                              | 172,549                       | 36,774                       | 27.0                  | 968   | 103.3  | 1,363.3   | 73.4  |
| Waitemata          | 139                             | 580,455                       | 115,199                      | 94.3                  | 829   | 120.7  | 1,221.9   | 81.8  |
| Auckland           | 103                             | 486,337                       | 82,433                       | 71.2                  | 800   | 124.9  | 1,157.8   | 86.4  |
| Counties-Manukau   | 110                             | 527,807                       | 121,940                      | 85.1                  | 1,109   | 90.2   | 1,432.9   | 69.8  |
| Waikato            | 73                              | 397,713                       | 83,982                       | 49.9                  | 1,150   | 86.9   | 1,683.8   | 59.4  |
| Lakes              | 25                              | 108,365                       | 23,549                       | 18.1                  | 942   | 106.2  | 1,302.8   | 76.8  |
| Bay of Plenty      | 50                              | 228,003                       | 46,882                       | 38.8                  | 938   | 106.7  | 1,208.3   | 82.8  |
| Tairawhiti         | 11                              | 47,455                        | 11,465                       | 8.6                   | 1,042   | 95.9   | 1,333.2   | 75.0  |
| Hawke's Bay        | 33                              | 116,695                       | 24,378                       | 22.7                  | 739   | 135.4  | 1,076.3   | 92.9  |
| Taranaki           | 27                              | 163,785                       | 34,762                       | 19.8                  | 1,287   | 77.7   | 1,757.9   | 56.9  |
| Whanganui          | 23                              | 63,662                        | 12,967                       | 16.2                  | 564   | 177.4  | 800.4   | 124.9   |
| MidCentral         | 29                              | 173,273                       | 34,303                       | 21.8                  | 1,183   | 84.5   | 1,577.2   | 63.4  |
| Hutt               | 32                              | 145,708                       | 29,620                       | 21.3                  | 926   | 108.0  | 1,390.6   | 71.9  |
| Capital and Coast  | 44                              | 304,339                       | 54,316                       | 29.4                  | 1,234   | 81.0   | 1,849.0   | 54.1  |
| Wairarapa          | 10                              | 44,035                        | 8,559                        | 3.9                   | 856   | 116.8  | 2,223.0   | 45.0  |
| Nelson-Marlborough | 23                              | 149,485                       | 26,853                       | 14.3                  | 1,168   | 85.7   | 1,877.8   | 53.3  |
| West Coast         | 4                               | 33,534                        | 5,964                        | 3.5                   | 1,491   | 67.1   | 1,691.8   | 59.1  |
| Canterbury         | 67                              | 534,257                       | 97,124                       | 45.8                  | 1,450   | 69.0   | 2,119.5   | 47.2  |
| South Canterbury   | 7                               | 59,922                        | 10,598                       | 4.3                   | 1,514   | 66.1   | 2,450.3   | 40.8  |
| Southern b         | 72 [60]                         | 323,696                       | 56,828                       | 49.9 [38.7]           | 789 [947]   | 126.7 [105.6]  | 1,140 [1,469.4]   | 87.7 [68.1]                                     |
| Unknown            | 22                              |                               |                              | 4.5                   |   |  |   |   |
| Total              | 942                             | 4,661,076                     | 918,496                      | 650.1                 | 975   | 102.6  | 1,412.8   | 70.8  |

<sup>&</sup>lt;sup>a</sup> Population estimates by DHB for 2016 are unavailable from Statistics NZ; values were linearly interpolated between 2015 and 2018. Due to rounding, individual figures may not always sum to the stated totals

<sup>&</sup>lt;sup>b</sup> Data in square brackets for Southern DHB exclude dental therapists who reported the University of Otago as their primary employer (Data sources: Workforce survey and Statistics New Zealand)

Table 2-20. Population to practising dental therapists and FTE ratios by DHB, for 2017

|                       | No with practising certificates | Total population <sup>a</sup> | Population<br>aged <15 years | FTE dental therapists | Population aged<br><15 years-to-dental<br>therapist ratio | Dental therapist per<br>100,000 population<br>aged <15 years | Population aged <15<br>years-to-FTE-dental<br>therapist ratio | FTE per 100,000<br>population aged<br><15 years |
|-----------------------|---------------------------------|-------------------------------|------------------------------|-----------------------|---|--|---|---|
| Northland             | 31                              | 176,798                       | 37,349                       | 25.2                  | 1,205   | 83.0   | 1,482.1   | 67.5  |
| Waitemata             | 149                             | 585,311                       | 115,599                      | 101.8                 | 776   | 128.9  | 1,135.8   | 88.0  |
| Auckland              | 99                              | 482,673                       | 80,866                       | 70.0                  | 817   | 122.4  | 1,155.2   | 86.6  |
| Counties-Manukau      | 120                             | 533,914                       | 122,579                      | 85.4                  | 1,021   | 97.9   | 1,434.9   | 69.7  |
| Waikato               | 71                              | 404,826                       | 85,063                       | 51.8                  | 1,198   | 83.5   | 1,641.4   | 60.9  |
| Lakes                 | 24                              | 111,929                       | 23,897                       | 15.8                  | 996   | 100.4  | 1,512.5   | 66.1  |
| Bay of Plenty         | 54                              | 234,505                       | 47,864                       | 42.1                  | 886   | 112.8  | 1,136.9   | 88.0  |
| Tairawhiti            | 11                              | 47,510                        | 11,331                       | 9.2                   | 1,030   | 97.1   | 1,228.3   | 81.4  |
| Hawke's Bay           | 33                              | 117,489                       | 24,557                       | 23.0                  | 744   | 134.4  | 1,068.8   | 93.6  |
| Taranaki              | 24                              | 167,070                       | 35,024                       | 18.6                  | 1,459   | 68.5   | 1,880.5   | 53.2  |
| Whanganui             | 21                              | 64,725                        | 13,034                       | 15.3                  | 621   | 161.1  | 854.7   | 117.0   |
| MidCentral            | 34                              | 174,447                       | 34,507                       | 21.3                  | 1,015   | 98.5   | 1,620.0   | 61.7  |
| Hutt                  | 30                              | 147,416                       | 29,641                       | 25.9                  | 988   | 101.2  | 1,146.6   | 87.2  |
| Capital and Coast     | 49                              | 307,579                       | 54,231                       | 30.1                  | 1,107   | 90.4   | 1,801.7   | 55.5  |
| Wairarapa             | 8                               | 44,870                        | 8,617                        | 5.2                   | 1,077   | 92.8   | 1,665.2   | 60.1  |
| Nelson-Marlborough    | 23                              | 154,171                       | 27,006                       | 16.7                  | 1,174   | 85.2   | 1,622.0   | 61.7  |
| West Coast            | 4                               | 34,368                        | 5,827                        | 2.9                   | 1,457   | 68.6   | 2,009.4   | 49.8  |
| Canterbury            | 68                              | 542,415                       | 97,948                       | 47.3                  | 1,440   | 69.4   | 2,069.7   | 48.3  |
| South Canterbury      | 10                              | 61,243                        | 10,595                       | 7.9                   | 1,060   | 94.4   | 1,345.4   | 74.3  |
| Southern <sup>b</sup> | 64 [52]                         | 333,393                       | 57,256                       | 42.9 [32.9]           | 895 (1,101)   | 111.8 [90.8]   | 1,334.6 (1,741.6)   | 74.9 [57.4]                                     |
| Unknown               | 34                              |                               |                              | 4.2                   |   |  |   |   |
| Total                 | 961                             | 4,726,651                     | 922,791                      | 662.5                 | 960   | 104.1  | 1,393.0   | 71.8  |

<sup>&</sup>lt;sup>a</sup> Population estimates by DHB for 2017 are unavailable from Statistics NZ; values were linearly interpolated between 2015 and 2018. Due to rounding, individual figures may not always sum to the stated totals

<sup>&</sup>lt;sup>b</sup>Data in square brackets for Southern DHB exclude dental therapists who reported the University of Otago as their primary employer (Data sources: Workforce survey and Statistics New Zealand)

Table 2-21. Practising pattern, dental therapists who reported that they are not currently practising in New Zealand

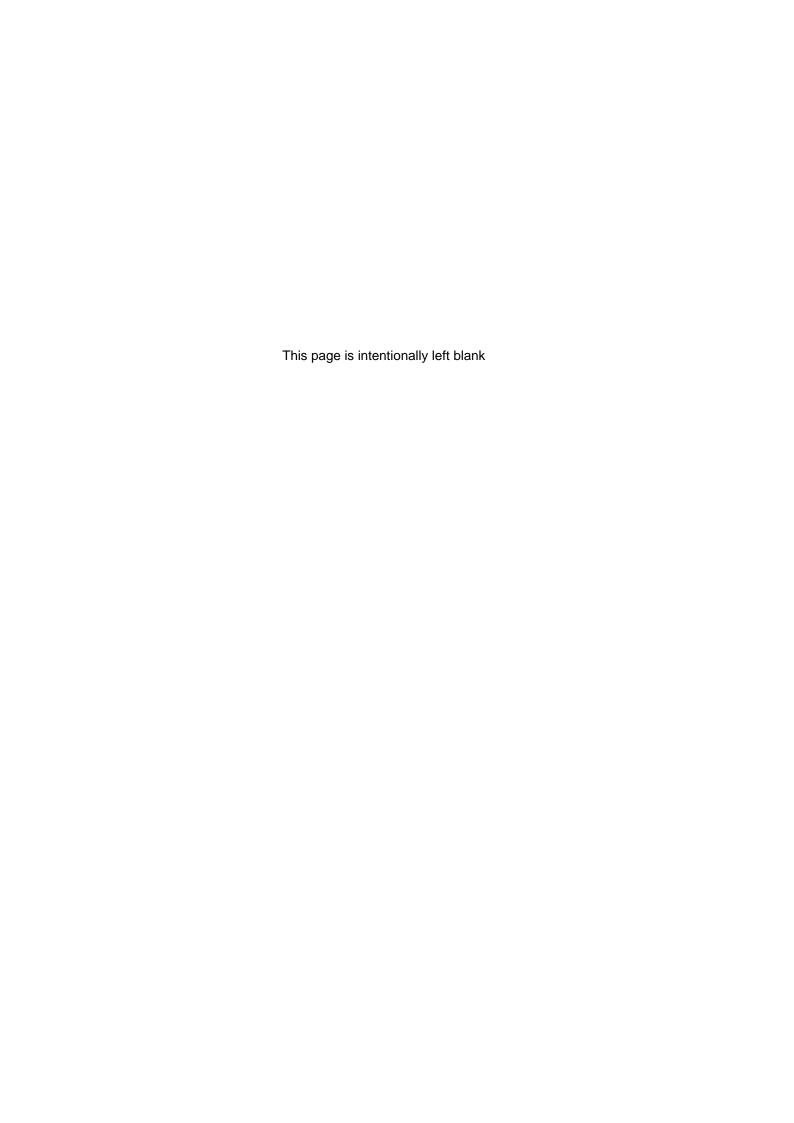
|      | Employment status                          | Females (%) | Males (%) | Total (%) |
|------|--|-------------|-----------|-----------|
|      | Practising overseas                        | 16 (35.6)   | 4 (100.0) | 20 (40.8) |
|      | Overseas and not practising                | 4 (8.9)     | _         | 4 (8.2)   |
|      | In NZ but not practising                   | 25 (55.6)   | _         | 25 (51.0) |
|      | Total not currently practising             | 45 (91.8)   | 4 (8.2)   | 49        |
|      | Practising status not stated               | 126         | 11        | 137       |
|      | Employment status of 'In NZ but not practi | sing' group |           |           |
| 2016 | Another health profession                  | 7           | _         | 7         |
| 8    | Non-health profession                      | _           | _         | _         |
|      | Full-time study                            | 6           | _         | 6         |
|      | Parental responsibilities                  | 6           | _         | 6         |
|      | Other unpaid work                          | 1           | _         | 1         |
|      | Seeking work                               | 1           | _         | 1         |
|      | Retired                                    | _           | _         | _         |
|      | Not reported                               | 4           |           | 4         |
|      | Practising overseas                        | 18 (37.5)   | 2 (100.0) | 20 (40.0) |
|      | Overseas and not practising                | 4 (8.3)     | _         | 4 (8.0)   |
|      | In NZ but not practising                   | 26 (54.2)   | _         | 26 (52.0) |
|      | Total not currently practising             | 48 (96.0)   | 2 (4.0)   | 50        |
| 17   | Practising status not stated               | 181         | 14        | 195       |
| 2017 | Employment status of 'In NZ but not practi | sing' group |           |           |
|      | Another health profession                  | 6           | _         | 6         |
|      | Non-health profession                      | 1           | _         | 1         |
|      | Full-time study                            | 4           | _         | 4         |
|      | Parental responsibilities                  | 6           | _         | 6         |
|      | Seeking work                               | 1           | _         | 1         |
|      | Retired                                    | 1           | _         | 1         |
|      | Not reported                               | 7           |           | 7         |

Table 2-22. Postgraduate training undertaken by dental therapists

|      | Expected year of completion    | Current APC<br>(%) | No current APC<br>(%) | Overall<br>(%) |
|------|--------------------------------|--------------------|-----------------------|----------------|
|      | 2015                           | 12 (60.0)          | _                     | 12 (57.1)      |
|      | 2016                           | 3 (15.0)           | 1 (100.0)             | 4 (19.0)       |
| 16   | 2017                           | 1 (5.0)            | _                     | 1 (4.8)        |
| 2016 | 2020                           | 1 (5.0)            | _                     | 1 (4.8)        |
|      | Not stated/unsure              | 3 (15.0)           | _                     | 3 (14.3)       |
|      | Total in postgraduate training | 20 (95.2)          | 1 (4.8)               | 21             |
|      | 2015                           | 1 (9.1)            | <del>_</del>          | 1 (8.3)        |
|      | 2016                           | 6 (54.5)           | 1 (100.0)             | 7 (58.3)       |
| 2017 | 2018                           | 3 (27.3)           | _                     | 3 (25.0)       |
| Ñ    | 2019                           | 1 (9.1)            | _                     | 1 (8.3)        |
|      | Total in postgraduate training | 11 (91.7)          | 1 (8.3)               | 12             |

Table 2-23. Branch of dental practice in which postgraduate training being undertaken, based on 2017 data

| Branch of dental practice    | Students/Trainees |
|------------------------------|-------------------|
| Oral health                  | 3                 |
| Public health                | 2                 |
| Dentistry                    | 2                 |
| Orthodontic auxiliary        | 1                 |
| Adult care in dental therapy | 1                 |
| Other                        | 3                 |
| Total                        | 12                |



# Section 3: The dental hygienists and orthodontic auxiliaries workforce



Dental hygienists & orthodontic auxiliaries

2017 workforce at a glance



€ 897 practising

952 registered

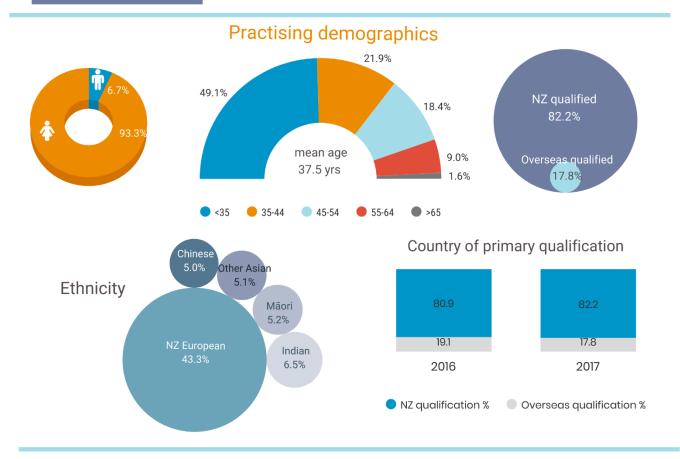


55 not practising

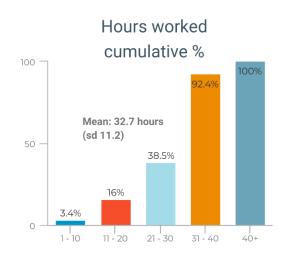
784 practising dental hygienists

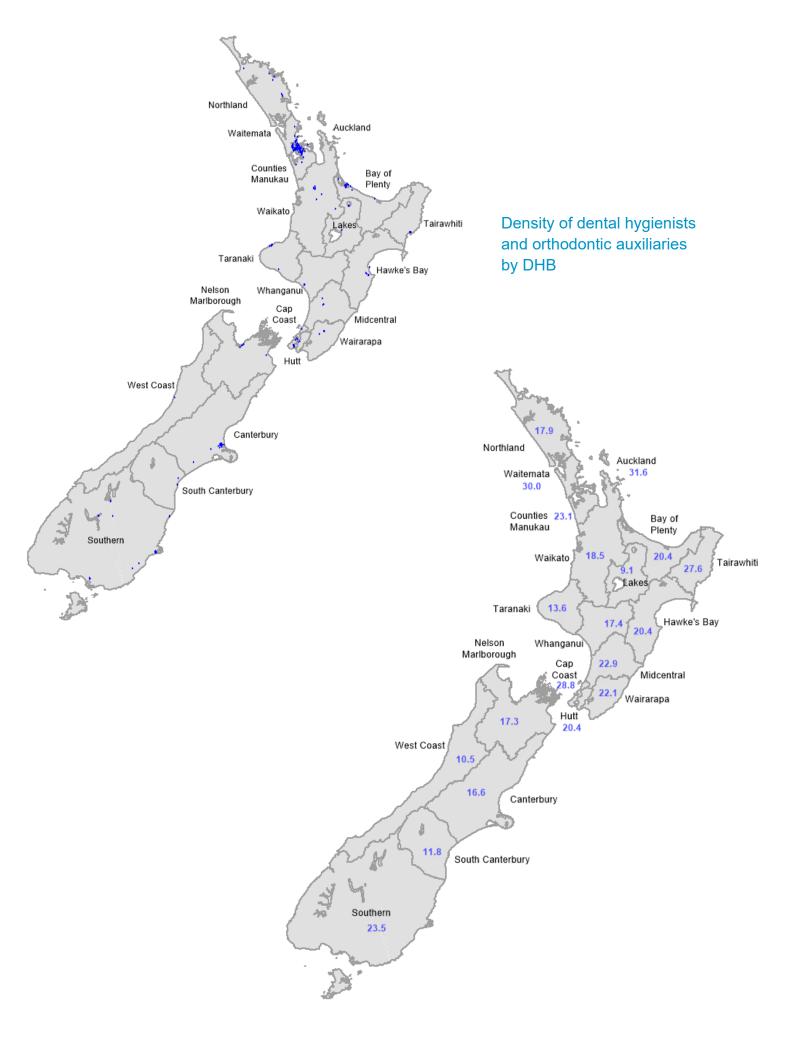


113 practising orthodontic auxiliaries









# Executive summary dental hygienists and orthodontic auxiliaries

# Number of dental hygienists and orthodontic auxiliaries

The total number of dental hygienists and orthodontic auxiliaries increased from 829 in 2015 to 952 in 2017 with an average annual growth of 7.2%. The most significant relative growth was in 2016 for practising orthodontic auxiliaries (21.4%) and 13.8% for dental hygienists, with less growth in 2017. Some of this shift is as a result of less practitioners without practising certificates for 2016. Table 3-1

As a result, 94.2% of these practitioners held a practising certificate in 2017 compared to 88.7% in 2015.

Table 3-1. Registered hygienists and orthodontic auxiliaries

|   | 2015 | % YoY | 2016 | % YoY       | 2017 |
|---|------|-------|------|-------------|------|
| Dental hygienists with practising certificates          | 646  | 13.8  | 735  | 6.7         | 784  |
| Orthodontic auxiliaries with practising certificates    | 89   | 21.4  | 108  | 4.6         | 113  |
| Dental hygienists without practising certificates       | 73   | -28.8 | 52   | 3.8         | 54   |
| Orthodontic auxiliaries without practising certificates | 21   | -95.2 | 1    | <del></del> | 1    |
| Total   | 829  | 8.1   | 896  | 6.3         | 952  |

## **Demographics**

The mean age for this group in 2017 remained similar to 2015 for practising dental hygienists and orthodontic auxiliaries. The mean age of dental hygienists has remained flat from 2015 (36.8) to 2017 (36.7). The mean age for orthodontic auxiliaries slightly decreased from 44.2 in 2015 to 42.8 in 2017. The mean age for the overall group remains flat at 37.5 in 2017 (2015 37.7).

Similar to dental therapy, this trend is expected to reverse once the oral health graduates register as oral health therapists from November 2017 onwards. With no dental hygiene qualification available in New Zealand, and small numbers of overseas dental hygienists entering the profession, limited growth in this profession is expected in future. Figure 3-1

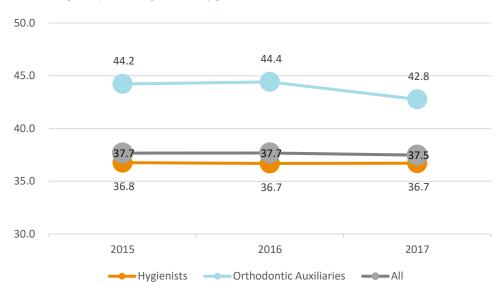


Figure 3-1. Mean age of practising dental hygienists and orthodontic auxiliaries

The age distribution showed increases in the earlier age groups, especially the 25-29- and 30-34 years' bands, reflecting increasing new entries of oral health graduates since 2008 into the profession. There was a strong wave for the 40-44 age group in 2015 but dissipating in subsequent years to follow a more gradual decline up to age 50 after which the decline accelerates towards retirement. Most leave the profession between ages 60-64 with 15 still practising in the over 65 age bands. Figure 3-2 & Table 3-4

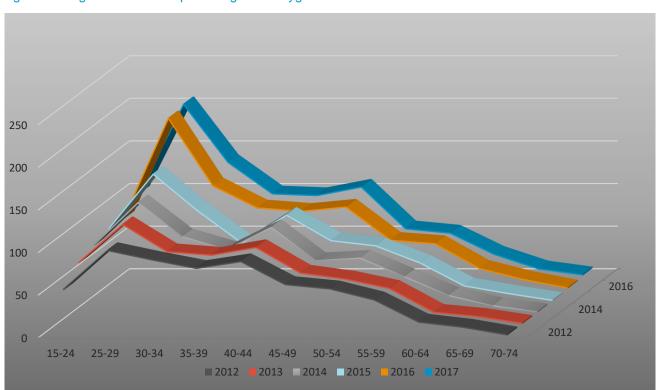


Figure 3-2. Age distribution of practising dental hygienists and orthodontic auxiliaries

Males continued to increase marginally in proportion to females but are still a low proportion of the population (6.7% of those practising in 2017, 5.3% in 2015). Table 3-5

The ethnicity reported by dental hygienists and orthodontic auxiliaries reflected the diversity of the profession. In 2017, the largest groups were NZ European (43.3%), with Māori 5.2% of practising dental hygienists and orthodontic auxiliaries. Other ethnicities reported include Indian (6.5%), Other Asian (5.1%) and Chinese (5.0%). From 2015 and based on actual number movements, an increase of 52.6% of Indian ethnicity was reported, with decreases reported for Other European (-56.3%) and Other Pacific Peoples (-50.0%). A doubling of undefined ethnicities from 2015 could explain some of these shifts (from 11.8 to 22.2). Table 3-6

## Registration

Overseas qualified dental hygienists and orthodontic auxiliaries continued to decline in proportion from 19.5% (2015) to 17.8% (2017), but the actual numbers increased by about 12%.

Accordingly, the number of New Zealand qualified dental hygienists and orthodontic auxiliaries continued to increase from 592 (2015) to 737 (2017). This group made up 82.2% of practising dental hygienists and orthodontic auxiliaries in 2017. The largest overseas countries represented were UK (5.8%), USA (2.3%) and Canada (2.0%). The rest were all under 2%, including Australia (1.6%). Table 3-8

Based on the 2017 data, 93.3% of the overseas qualified dental hygienists with a practising certificate had a prescribed qualification or a qualification considered equivalent to the New Zealand prescribed qualifications. Entering on the basis of registration in Australia (TTMR) made up 5.2% of overseas registrations; with only two successful New Zealand hygiene examination candidates with a practising certificate in 2017. Table 3-10

There has been an increase in the scope of practice registrations for all the previous "additional" scope of practice activities that now form part of the dental hygiene scope of practice. As with dental therapy, the increases are mostly driven by the oral health graduates entering the profession with these clinical capabilities as part of their undergraduate education. Table 3-11

#### Practising characteristics

The reported type of primary employment shows a shift from self-employed to employees. Self-employment increased from 90 (2015) to 98 (2017, +8.9%). Employees increased from 432 (58.8% 2015) to 559 (62.3% 2017), an increase of 29.4% in actual numbers. Most employees continue to work in private practice (43.1% 2017), followed by district health boards: up from 82 (11.2% 2015) to 153 (17.1% 2017). Table 3-12

Using a 40 hour work week as a norm, it was found that 92.4% of dental hygienists and orthodontic auxiliaries reported worked 40 hours or less per week and has been fairly constant over recent periods (92.9% in 2015). In 2017, the average number of hours of work per week reported was 32.7 (sd 11.2), consistent with 2015. Table 3-13

The dental hygienists and orthodontic auxiliaries with the highest reported mean hours of work in 2017 were those in Universities (43.5), followed by District Health Boards (DHBs) or the Ministry of Health (35.2) as primary employer. Table 3-16

Of the 341 reporting working part-time in 2017, just over two thirds reported personal choice (34.0%) or parental responsibilities (33.1%) as the reason. Table 3-14

Of the 77 dental hygienists reporting not practising in during 2017, 27 were practising overseas (35.1%), 8 were overseas but not practising (10.4%), and 42 were in New Zealand but not practising (54.5%). Of the latter group, most (15 35.7%) indicated the reason being parental responsibilities followed by working in another health profession (12 28.6%). Table 3-23

## Geographical distribution

The analysis of territorial authorities (TAs) shows very similar patterns over the years. The most significant shift was the number of full time equivalents (FTE) reported in Auckland, up from 172.9 (2015) to 223.5 (2017). However, there were still 16 out of the 73 TAs where no dental hygiene and orthodontic auxiliary practice was reported in 2017 compared to 19 in 2016. Table 3-17, Table 3-19

Comparing DHBs from 2016 to 2017, most showed reported increases in FTEs (Midcentral was the highest (22.8FTE in 2017) with 6 showing decreases of which West Coast (-28.6%) and Tairwhiti (-22.8%) had the greatest % decrease. Table 3-21, Table 3-22

#### Postgraduate studies

There was a decrease by 50% in those who reported undertaking postgraduate studies from 14 in 2015 to 7 in 2017. The most prominent areas of study reported in 2017 were orthodontics (3) followed by administration, general dentistry, oral health, and "other" with 1 each. Table 3-24, Table 3-25

#### Workforce survey response rates

The survey response rates for dental hygienists and orthodontic auxiliaries remained fairly constant around 77%. Table 3-2

Table 3-2. Dental hygienists and orthodontic auxiliaries survey responses

| Year | Response rate |
|------|---------------|
| 2015 | 77.7%         |
| 2016 | 78.1%         |
| 2017 | 76.7%         |

# Dental hygienists and orthodontic auxiliaries workforce data tables

Table 3-3. Number of dental hygienists and orthodontic auxiliaries with practising certificates, by workforce reporting year

| Report<br>year | Total | Female (%) | Male (%) | % overseas graduates |
|----------------|-------|------------|----------|----------------------|
| 2007           | 414   | 405 (97.8) | 9 (2.2)  | a                    |
| 2008           | 371   | 363 (97.8) | 8 (2.2)  | _                    |
| 2009           | 378   | 368 (97.4) | 10 (2.6) | _                    |
| 2010/11 b      | 502   | 483 (96.2) | 19 (3.8) | _                    |
| 2011/12        | 593   | 565 (95.3) | 28 (4.7) | 24.5                 |
| 2012/13        | 626   | 596 (95.2) | 30 (4.8) | 22.5                 |
| 2013/14        | 683   | 645 (94.4) | 38 (5.6) | 20.8                 |
| 2014/15        | 735   | 696 (94.7) | 39 (5.3) | 19.5                 |
| 2015/16        | 843   | 794 (94.2) | 49 (5.8) | 19.1                 |
| 2016/17        | 897   | 837 (93.3) | 60 (6.7) | 17.8                 |

<sup>&</sup>lt;sup>a</sup> Data not available from historic reports

(Data sources: Dental register & previous workforce reports)

<sup>&</sup>lt;sup>b</sup> Dental hygiene data include dental hygienists, dental auxiliaries (also known as dental assistants/chairside assistants) and orthodontic auxiliaries until September 2009, when the dental auxiliaries scope of practice was closed—some dental auxiliary practitioners retained limited dental hygiene registration.

Table 3-4. Age of dental hygienists and orthodontic auxiliaries by practising certificate status, as at 31 March 2017

| Age bands | Practising certificate (%) | No practising certificate (%) |
|-----------|----------------------------|-------------------------------|
| 15 - 24   | 100 (11.1)                 | 3 (5.5)                       |
| 25 - 29   | 204 (22.7)                 | 12 (21.8)                     |
| 30 - 34   | 136 (15.2)                 | 11 (20.0)                     |
| 35 - 39   | 99 (11.0)                  | 9 (16.4)                      |
| 40 - 44   | 97 (10.8)                  | 8 (14.5)                      |
| 45 - 49   | 107 (11.9)                 | 3 (5.5)                       |
| 50 - 54   | 58 (6.5)                   | 3 (5.5)                       |
| 55 - 59   | 53 (5.9)                   | 4 (7.3)                       |
| 60 - 64   | 28 (3.1)                   | 1 (1.8)                       |
| 65 - 69   | 11 (1.2)                   | 1 (1.8)                       |
| 70 - 74   | 4 (0.4)                    | _                             |
| Total     | 897 (94.2)                 | 55 (5.8)                      |

(Data source: Dental register)

Figure 3-3. Age of dental hygienists and orthodontic auxiliaries by practising certificate status, as at 31 March 2017

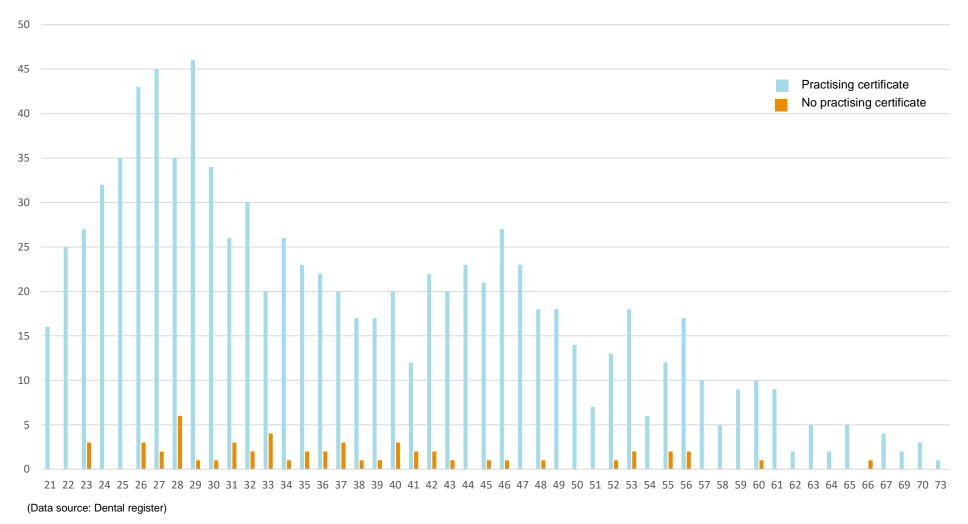
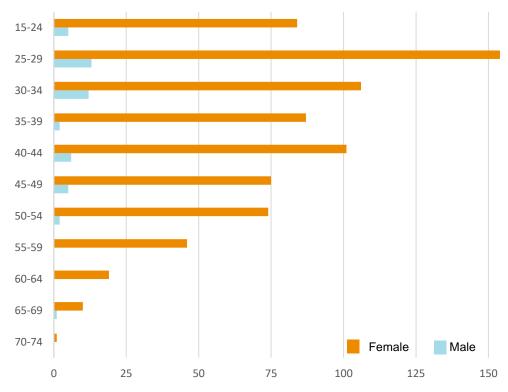


Figure 3-4. Age of registered dental hygienists and orthodontic auxiliaries by gender, as at 31 March 2017



(Data source: Dental register)

Table 3-5. Gender of dental hygienists and orthodontic auxiliaries by practising certificate status

| Gender | Practising certificate (%)    | No practising certificate (%)   | Total (%)  |
|--------|-------------------------------|---|--|
| Female | 794 (94.2)                    | 50 (94.3)   | 844 (94.2)   |
| Male   | 49 (5.8)                      | 3 (5.7)   | 52 (5.8)   |
| Total  | 843 (94.1)                    | 53 (5.9)  | 896  |
| Female | 837 (93.3)                    | 53 (96.4)   | 890 (93.5)   |
| Male   | 60 (6.7)                      | 2 (3.6)   | 62 (6.5)   |
| Total  | 897 (94.2)                    | 55 (5.8)  | 952  |
|        | Female Male Total Female Male | Female 794 (94.2) Male 49 (5.8) Total 843 (94.1)  Female 837 (93.3) Male 60 (6.7) | Gender       (%)       (%)         Female       794 (94.2)       50 (94.3)         Male       49 (5.8)       3 (5.7)         Total       843 (94.1)       53 (5.9)         Female       837 (93.3)       53 (96.4)         Male       60 (6.7)       2 (3.6) |

(Data source: Dental register)

Table 3-6. Self-identified ethnicity by practising dental hygienists and orthodontic auxiliaries

| Ethnicity   | 2016 (%)   | 2017 (%)   |
|---|------------|------------|
| New Zealand European  | 374 (44.4) | 389 (43.4) |
| Māori   | 48 (5.7)   | 47 (5.2)   |
| Indian  | 45 (5.3)   | 58 (6.5)   |
| Other Asian   | 39 (4.6)   | 46 (5.1)   |
| Chinese   | 37 (4.4)   | 45 (5.0)   |
| Other European  | 37 (4.4)   | 38 (4.2)   |
| Other   | 35 (4.2)   | 36 (4.0)   |
| British   | 31 (3.7)   | 34 (3.8)   |
| Other East Asian  | 18 (2.1)   | 16 (1.8)   |
| South African   | 16 (1.9)   | 21 (2.3)   |
| South Korean  | 16 (1.9)   | 16 (1.8)   |
| Fijian  | 15 (1.8)   | 18 (2.0)   |
| Samoan  | 9 (1.1)    | 11 (1.2)   |
| Iraqi   | 7 (0.8)    | 10 (1.1)   |
| Cook Island Māori   | 5 (0.6)    | 2 (0.2)    |
| Other Pacific Peoples   | 4 (0.5)    | 6 (0.7)    |
| Niuean  | 2 (0.2)    | 3 (0.3)    |
| Tongan  | 1 (0.1)    | 1 (0.1)    |
| Tokelauan   | 1 (0.1)    | 1 (0.1)    |
| Unknown   | 199 (23.6) | 199 (22.2) |
| Total <sup>a</sup>  | 939        | 997        |
| Total selecting an 'Other' group                              | 133        | 142        |
| Total practising dentists and dental specialists <sup>b</sup> | 843        | 897        |

<sup>&</sup>lt;sup>a</sup> Total is greater than number of dental hygienists and orthodontic auxiliaries due to self-identification of multiple ethnicities.

<sup>&</sup>lt;sup>b</sup> Denominator used for percentage values is total practising dental hygienists and orthodontic auxiliaries. (Data sources: Dental register and workforce survey)

Table 3-7. Self-identification of 'other' ethnicity by dental hygienists and orthodontic auxiliaries based on 2017 data

| Ethnicity               | Count | Ethnicity                       | Count |
|-------------------------|-------|---------------------------------|-------|
| Filipino                | 21    | Caucasian White                 | 1     |
| Taiwanese               | 14    | Chinese Malaysian               | 1     |
| Canadian                | 6     | Chinese New Zealander           | 1     |
| Japanese                | 6     | East African Kenyan             | 1     |
| Australian              | 5     | Fijian Indian                   | 1     |
| American                | 4     | Filipino Canadian               | 1     |
| Malaysian               | 4     | French                          | 1     |
| British                 | 3     | French Canadian                 | 1     |
| Iranian                 | 3     | Greek                           | 1     |
| Irish                   | 3     | Hong Kong                       | 1     |
| Middle Eastern          | 3     | Indo-Fijian                     | 1     |
| New Zealander           | 3     | Indonesian                      | 1     |
| Pakistani               | 3     | Indonesian, Malaysian           | 1     |
| Australian Aboriginal   | 2     | Kiribati                        | 1     |
| Cambodian New Zealander | 2     | Kiwi                            | 1     |
| Canadian Caucasian      | 2     | Korean                          | 1     |
| Dutch                   | 2     | Laos                            | 1     |
| English                 | 2     | Latin American                  | 1     |
| German                  | 2     | Macedonian                      | 1     |
| Rotuman                 | 2     | Moriori Chatham Islands         | 1     |
| Russian                 | 2     | Native North American, European | 1     |
| Swiss                   | 2     | Nepalese                        | 1     |
| Thailand                | 2     | New Zealand Born Fiji-Indian    | 1     |
| Zimbabwe                | 2     | North American                  | 1     |
| Afghanistan             | 1     | South African                   | 1     |
| Africa Zimbabwe         | 1     | South American                  | 1     |
| African                 | 1     | South American Chilean          | 1     |
| African European        | 1     | Sri Lankan                      | 1     |
| African Somalian        | 1     | Swedish New Zealand             | 1     |
| Bahamian                | 1     | Ukrainian                       | 1     |
| Cambodian               | 1     | Vietnamese New Zealander        | 1     |
| Canadian European       | 1     | White American                  | 1     |
| ·                       |       | Undefined                       | 2     |

Table 3-8. Country of primary qualification for practising dental hygienists and orthodontic auxiliaries, for 2016

| Country of qualification             | Dental hygienists<br>(Row %) | Orthodontic auxiliaries (Row %) | Total<br>(Column %) |  |  |  |
|--------------------------------------|------------------------------|---------------------------------|---------------------|--|--|--|
| New Zealand                          | 590 (86.5)                   | 92 (13.5)                       | 682 (80.9)          |  |  |  |
| Overseas                             | 145 (90.1)                   | 16 (9.9)                        | 161 (19.1)          |  |  |  |
| Total                                | 735 (87.2)                   | 108 (12.8)                      | 843                 |  |  |  |
| Breakdown of overseas qualifications |                              |                                 |                     |  |  |  |
|                                      | (Column %) <sup>a</sup>      | (Column %)                      | (Column %)          |  |  |  |
| Australia                            | 11 (1.5)                     | 1 (0.9)                         | 12 (1.4)            |  |  |  |
| Brazil                               | _                            | 1 (0.9)                         | 1 (0.1)             |  |  |  |
| Bulgaria                             | _                            | 1 (0.9)                         | 1 (0.1)             |  |  |  |
| Canada                               | 22 (3.0)                     | _                               | 22 (2.6)            |  |  |  |
| Columbia                             | _                            | 1 (0.9)                         | 1 (0.1)             |  |  |  |
| Egypt                                | _                            | 1 (0.9)                         | 1 (0.1)             |  |  |  |
| Fiji                                 | 4 (0.5)                      | _                               | 4 (0.5)             |  |  |  |
| Hong Kong                            | 1 (0.1)                      | 1 (0.9)                         | 2 (0.2)             |  |  |  |
| India                                | 4 (0.5)                      | _                               | 4 (0.5)             |  |  |  |
| Ireland                              | 1 (0.1)                      | _                               | 1 (0.1)             |  |  |  |
| Japan                                | 4 (0.5)                      | _                               | 4 (0.5)             |  |  |  |
| Philippines                          | 7 (1.0)                      | 5 (4.6)                         | 12 (1.4)            |  |  |  |
| Russia                               | 1 (0.1)                      | 1 (0.9)                         | 2 (0.2)             |  |  |  |
| Samoa                                | 1 (0.1)                      | _                               | 1 (0.1)             |  |  |  |
| South Africa                         | 15 (2.0)                     | _                               | 15 (1.8)            |  |  |  |
| Sri Lanka                            | 1 (0.1)                      | _                               | 1 (0.1)             |  |  |  |
| Sweden                               | 1 (0.1)                      | _                               | 1 (0.1)             |  |  |  |
| Switzerland                          | 1 (0.1)                      | 1 (0.9)                         | 2 (0.2)             |  |  |  |
| Ukraine                              | 1 (0.1)                      | _                               | 1 (0.1)             |  |  |  |
| United Kingdom                       | 51 (6.9)                     | 2 (1.9)                         | 53 (6.3)            |  |  |  |
| USA                                  | 19 (2.6)                     | 1 (0.9)                         | 20 (2.4)            |  |  |  |

<sup>&</sup>lt;sup>a</sup> Percentages calculated from totals inclusive of New Zealand qualifications (Data source: Dental register)

Table 3-9. Country of primary qualifications for practising dental hygienists and orthodontic auxiliaries, for 2017

| Country of qualification      | Dental hygienists (Row %) | Orthodontic auxiliaries (Row %) | Total<br>(Column %) |
|-------------------------------|---------------------------|---------------------------------|---------------------|
| New Zealand                   | 643 (87.2)                | 94 (12.8)                       | 737 (82.2)          |
| Overseas                      | 141 (88.1)                | 19 (11.9)                       | 160 (17.8)          |
| Total                         | 784 (87.4)                | 113 (12.6)                      | 897                 |
| Breakdown of overseas qualifi | cations                   |                                 |                     |
|                               | (Column %) a              | (Column %)                      | (Column %)          |
| Australia                     | 13 (1.7)                  | 1 (0.9)                         | 14 (1.6)            |
| Bulgaria                      | _                         | 1 (0.9)                         | 1 (0.1)             |
| Canada                        | 18 (2.3)                  | _                               | 18 (2.0)            |
| Columbia                      | _                         | 1 (0.9)                         | 1 (0.1)             |
| Egypt                         | _                         | 1 (0.9)                         | 1 (0.1)             |
| Fiji                          | 4 (0.5)                   | _                               | 4 (0.4)             |
| Hong Kong                     | 1 (0.1)                   | 1 (0.9)                         | 2 (0.2)             |
| India                         | 3 (0.4)                   | 2 (1.8)                         | 5 (0.6)             |
| Ireland                       | 1 (0.1)                   | _                               | 1 (0.1)             |
| Japan                         | 4 (0.5)                   | _                               | 4 (0.4)             |
| Philippines                   | 6 (0.8)                   | 6 (5.3)                         | 12 (1.3)            |
| Russia                        | 1 (0.1)                   | 1 (0.9)                         | 2 (0.2)             |
| Samoa                         | 1 (0.1)                   | _                               | 1 (0.1)             |
| South Africa                  | 17 (2.2)                  | _                               | 17 (1.9)            |
| Sri Lanka                     | 1 (0.1)                   | _                               | 1 (0.1)             |
| Sweden                        | 1 (0.1)                   | _                               | 1 (0.1)             |
| Switzerland                   | 1 (0.1)                   | 1 (0.9)                         | 2 (0.2)             |
| United Kingdom                | 49 (6.3)                  | 3 (2.7)                         | 52 (5.8)            |
| USA                           | 20 (2.6)                  | 1 (0.9)                         | 21 (2.3)            |

<sup>&</sup>lt;sup>a</sup> Percentages calculated from totals inclusive of New Zealand qualifications (Data source: Dental register)

Table 3-10. Overseas qualified dental hygienists with practising certificates—type of registration pathway by year of first New Zealand registration, as at 31 March 2017

| Year of first<br>registration in<br>New Zealand | NZDHREX (%) | Prescribed<br>qualification or<br>equivalency assessed<br>(%) | Trans-Tasman Mutual<br>Recognition<br>(%) |
|---|-------------|---|---|
| 1966 - 1970                                     | _           | _   | _   |
| 1971 - 1975                                     | _           | _   | _   |
| 1976 - 1980                                     | _           | _   | _   |
| 1981 - 1985                                     | _           | _   | _   |
| 1986 - 1990                                     | _           | _   | _   |
| 1991 - 1995                                     | _           | _   | _   |
| 1996  | _           | _   | _   |
| 1997  | _           | _   | _   |
| 1998  | _           | _   | _   |
| 1999  | _           | _   | _   |
| 2000  | _           | _   | _   |
| 2001  | _           | _   | _   |
| 2002  | _           | _   | _   |
| 2003  | _           | _   | _   |
| 2004  | _           | 46 (36.5)   | 1 (14.3)                                  |
| 2005  | _           | 7 (5.6)   | _   |
| 2006  | _           | 7 (5.6)   | _   |
| 2007  | _           | 10 (7.9)  | _   |
| 2008  | _           | 4 (3.2)   | _   |
| 2009  | _           | 7 (5.6)   | _   |
| 2010  | _           | 5 (4.0)   | _   |
| 2011  | _           | 4 (3.2)   | 1 (14.3)                                  |
| 2012  | 1 (50.0)    | 5 (4.0)   | _   |
| 2013  | _           | 5 (4.0)   | _   |
| 2014  | 1 (50.0)    | 8 (6.3)   | _   |
| 2015  | _           | 10 (7.9)  | 3 (42.9)                                  |
| 2016  |             | 8 (6.3)   | 2 (28.6)                                  |
| Total   | 2           | 126   | 7   |

Note: NZDHREX = New Zealand Dental Hygiene Registration Examination (Data source: Dental register)

Table 3-11. Scope of practice registrations, including previous "additional" scope of practice activities <sup>a</sup>

| Total          |
|----------------|
|                |
| 735            |
| 633            |
| 481            |
| 603            |
| 460            |
|                |
| 108            |
| 75             |
| 75             |
|                |
|                |
| 784            |
| 737            |
| 592            |
| 717            |
| 555            |
|                |
|                |
| 113            |
| <b>113</b> 113 |
| _              |

<sup>&</sup>lt;sup>a</sup> The above indented scope activities were registered as "additional" scopes of practices until March 2011, where after these activities were considered part of the dental hygiene and orthodontic auxiliary scopes of practice, and merged into the general scopes. The above reflects the levels of capabilities in these clinical areas. (Data source: Dental register)

Table 3-12. Type of primary employment of practising dental hygienists and orthodontic auxiliaries <sup>a</sup>

|      |                                | Number (%) | Total % |
|------|--------------------------------|------------|---------|
|      | Self-employed                  |            |         |
|      | Solo practice                  | 32 (35.2)  | 3.8     |
|      | Group practice                 | 59 (64.8)  | 7.0     |
|      | Subtotal                       | 91         | 10.8    |
|      | Employee                       |            |         |
|      | Private practice               | 349 (69.9) | 41.4    |
| "    | DHB                            | 123 (24.6) | 14.6    |
| 2016 | Universities                   | 12 (2.4)   | 1.4     |
|      | Government Department, not MOH | 9 (1.8)    | 1.1     |
|      | lwi                            | 2 (0.4)    | 0.2     |
|      | Ministry of Health             | 4 (0.8)    | 0.5     |
|      | Subtotal                       | 499        | 59.2    |
|      | Other forms of employment      | _          | _       |
|      | No reply to question           | 253        | 30.0    |
|      | Total                          | 843        |         |
|      | Self-employed                  | ·-         |         |
|      | Solo practice                  | 28 (28.6)  | 3.1     |
|      | Group practice                 | 70 (71.4)  | 7.8     |
|      | Subtotal                       | 98         | 10.9    |
|      | Employee                       |            |         |
|      | Private practice               | 387 (69.2) | 43.1    |
|      | DHB                            | 153 (27.4) | 17.1    |
| 2017 | Universities                   | 6 (1.1)    | 0.7     |
|      | Government Department, not MOH | 8 (1.4)    | 0.9     |
|      | lwi                            | 3 (0.5)    | 0.3     |
|      | Ministry of Health             | 2 (0.4)    | 0.2     |
|      | Subtotal                       | 559        | 62.3    |
|      | Other forms of employment      | _          | _       |
|      | No reply to question           | 240        | 26.8    |
|      | Total                          | 897        |         |

<sup>&</sup>lt;sup>a</sup> Only the data captured against the dental hygiene workforce survey were included in the analysis for oral health graduates registered in both the dental hygiene and dental therapy scopes of practice. However, there might be some overlap in data reported between the two scopes of practice.

Table 3-13. Total number of hours worked per week by dental hygienists and orthodontic auxiliaries practising in New Zealand

|      | Number of hours worked      | Dental hygienists (%) | Orthodontic auxiliaries (%) | Total<br>(%) |
|------|-----------------------------|-----------------------|-----------------------------|--------------|
|      | 1 to 10                     | 15 (2.9)              | 1 (1.4)                     | 16 (2.7)     |
|      | 11 to 20                    | 70 (13.4)             | 8 (11.4)                    | 78 (13.2)    |
|      | 21 to 30                    | 117 (22.4)            | 19 (27.1)                   | 136 (22.9)   |
|      | 31 to 40                    | 274 (52.4)            | 42 (60.0)                   | 316 (53.3)   |
|      | 41 to 50                    | 43 (8.2)              | _                           | 43 (7.3)     |
| 2016 | 51 to 60                    | 2 (0.4)               | _                           | 2 (0.3)      |
| (1   | More than 60                | 2 (0.4)               | _                           | 2 (0.3)      |
|      | Number giving data on hours | 523                   | 70                          | 593          |
|      | Mean no. of hours/week (SD) | 32.1 (10.0)           | 35.6 (8.5)                  | 32.5 (9.8)   |
|      | No response or excluded     | 212                   | 38                          | 250          |
|      | Total                       | 735                   | 108                         | 843          |
|      | 1 to 10                     | 22 (3.8)              | 1 (1.2)                     | 23 (3.4)     |
|      | 11 to 20                    | 75 (12.8)             | 9 (11.0)                    | 84 (12.6)    |
|      | 21 to 30                    | 131 (22.4)            | 19 (23.2)                   | 150 (22.5)   |
|      | 31 to 40                    | 307 (52.4)            | 53 (64.6)                   | 360 (53.9)   |
|      | 41 to 50                    | 43 (7.3)              | _                           | 43 (6.4)     |
| 2017 | 51 to 60                    | 3 (0.5)               | _                           | 3 (0.4)      |
| .,   | More than 60                | 5 (0.9)               | _                           | 5 (0.7)      |
|      | Number giving data on hours | 586                   | 82                          | 668          |
|      | Mean no. of hours/week (SD) | 32.4 (11.5)           | 34.7 (9.2)                  | 32.7 (11.2)  |
|      | No response or excluded     | 197                   | 32                          | 229          |
|      | Total                       | 783                   | 114                         | 897          |

Table 3-14. Reasons for part-time practice by dental hygienists and orthodontic auxiliaries practising in New Zealand

|      | Reason for practising part-<br>time | Females (%) | Males (%) | Total (%)  |
|------|-------------------------------------|-------------|-----------|------------|
|      | Engaged in non-dental work          | 5 (1.6)     | 1 (14.3)  | 6 (1.9)    |
|      | Insufficient dental work            | 57 (18.0)   | 3 (42.9)  | 60 (18.5)  |
|      | Seeking dental work                 | 6 (1.9)     | _         | 6 (1.9)    |
|      | Semi-retired                        | 5 (1.6)     | _         | 5 (1.5)    |
| 2016 | Parental responsibilities           | 107 (33.8)  | 1 (14.3)  | 108 (33.3) |
| N    | Personal choice                     | 109 (34.4)  | _         | 109 (33.6) |
|      | Studying                            | 5 (1.6)     | 2 (28.6)  | 7 (2.2)    |
|      | Health issues                       | 5 (1.6)     | _         | 5 (1.5)    |
|      | Other                               | 18 (5.7)    | _         | 18 (5.6)   |
|      | Total working part time             | 317         | 7         | 324        |
|      | Engaged in non-dental work          | 13 (3.9)    | _         | 13 (3.8)   |
|      | Insufficient dental work            | 45 (13.4)   | 1 (20.0)  | 46 (13.5)  |
|      | Seeking dental work                 | 9 (2.7)     | _         | 9 (2.6)    |
|      | Semi-retired                        | 5 (1.5)     | _         | 5 (1.5)    |
| 2017 | Parental responsibilities           | 113 (33.6)  | _         | 113 (33.1) |
| N    | Personal choice                     | 113 (33.6)  | 3 (60.0)  | 116 (34.0) |
|      | Studying                            | 7 (2.1)     | _         | 7 (2.1)    |
|      | Health issues                       | 5 (1.5)     | _         | 5 (1.5)    |
|      | Other (see below)                   | 26 (7.7)    | 1 (20.0)  | 27 (7.9)   |
|      | Total working part time             | 336         | 5         | 341        |

Reasons offered by the 27 who selected 'other' reasons for practising part-time, based on the 2017 data (number): Contract hours offered (12)

Personal (3)

Health problems (2)

Practising dental therapy (2)

Administration (1)

Choice (1)

Locum (1)

Seeking employment (1)

Travel (1)

Variable patient numbers (1)

Unknown (2)

Table 3-15. Work by practice and employment type for dental hygienists and orthodontic auxiliaries, by primary and secondary employer for 2016

|                             | Dental hygiene   |  | Orthodontic auxiliary |  | Т   | Teaching <sup>a</sup>                    |     | Administration <sup>a</sup>              |     | Overall <sup>c</sup>                        |                  |  |
|-----------------------------|------------------|--|-----------------------|--|-----|--|-----|--|-----|---|------------------|--|
|                             | No. <sup>b</sup> | Mean hours<br>spent at work<br>type (SD) | No.                   | Mean hours<br>spent at work<br>type (SD) | No. | Mean hours<br>spent at work<br>type (SD) | No. | Mean hours<br>spent at work<br>type (SD) | No. | Mean hours<br>spent at<br>work type<br>(SD) | No. not reported |  |
| Primary employer            |                  |  |                       |  |     |  |     |  |     |   |                  |  |
| Private practice (self-emp) | 77               | 25.3 (10.0)                              | 6                     | 24.0 (10.8)                              | _   | _  | 3   | 10.3 (10.4)                              | 87  | 25.8 (10.2)                                 | 4                |  |
| Private practice (employee) | 271              | 24.9 (9.4)                               | 69                    | 27.5 (11.8)                              | 1   | 12.0                                     | 9   | 13.7 (7.1)                               | 337 | 28.2 (9.7)                                  | 12               |  |
| DHB or MOH                  | 28               | 9.6 (8.6)                                | 5                     | 29.6 (13.3)                              | _   | _  | 1   | 32.0                                     | 124 | 35.7 (7.8)                                  | 2                |  |
| Universities                | 7                | 24.7 (10.2)                              | _                     | _  | 6   | 19.7 (8.5)                               | 2   | 30.0 (10.0)                              | 11  | 35.5 (16.1)                                 | 1                |  |
| Other                       | 9                | 34.3 (11.2)                              | _                     | _  | _   | _  | _   | _  | 11  | 34.5 (10.4)                                 | _                |  |
| Total number                | 392              |  | 80                    |  | 7   |  | 15  |  | 570 |   | 19               |  |
| Secondary employer          |                  |  |                       |  |     |  |     |  |     |   |                  |  |
| Private practice (self-emp) | 15               | 10.1 (4.9)                               | 1                     | 8.0                                      | _   | _  | 1   | 16.0                                     | 20  | 10.5 (5.1)                                  | 1                |  |
| Private practice (employee) | 54               | 9.6 (4.9)                                | 4                     | 4.0 (2.4)                                | 1   | 6.0                                      | _   | _  | 64  | 9.3 (5.0)                                   | 10               |  |
| DHB or MOH                  | 4                | 11.8 (5.4)                               | _                     | _  | _   | _  | _   | _  | 10  | 14.5 (5.2)                                  | 3                |  |
| Universities                | 1                | 7.0                                      | _                     | _  | 3   | 11.3 (6.2)                               | _   | _  | 5   | 11.6 (5.0)                                  | 1                |  |
| Other                       | 1                | 10.0                                     | _                     | _  | _   | _  | _   | _  | 2   | 2 (2.6)                                     | _                |  |
| Total number                | 75               |  | 5                     |  | 4   |  | 1   |  | 101 |   | 15               |  |

<sup>&</sup>lt;sup>a</sup> Where specifically employed to do so <sup>b</sup> Practitioners reporting not working any hours and those who reported more than 80 hours per week, are excluded from these calculations

<sup>&</sup>lt;sup>c</sup> Totals of columns may sum greater than overall number per practice setting as multiple activities are performed, as well as activities not detailed in the table Note: DHB = District health board; MOH = Ministry of Health (Data source: Workforce survey)

Table 3-16. Work by practice and employment type for dental hygienists and orthodontic auxiliaries, by primary and secondary employer for 2017

|                             | Denta            | al hygiene                                  | Orthodontic auxiliary Te |   | Teaching <sup>a</sup> Administration <sup>a</sup> |  |     | Overall <sup>c</sup>                     |     |   |                  |
|-----------------------------|------------------|---|--------------------------|---|---|--|-----|--|-----|---|------------------|
|                             | No. <sup>b</sup> | Mean hours<br>spent at<br>work type<br>(SD) | No.                      | Mean hours<br>spent at<br>work type<br>(SD) | No.   | Mean hours<br>spent at work<br>type (SD) | No. | Mean hours<br>spent at work<br>type (SD) | No. | Mean hours<br>spent at<br>work type<br>(SD) | No. not reported |
| Primary employer            |                  |   |                          |   |   |  |     |  |     |   |                  |
| Private practice (self-emp) | 90               | 25.0 (9.0)                                  | 5                        | 17.0 (14.6)                                 | _   | _  | 5   | 16.8 (13.8)                              | 97  | 27.0 (9.8)                                  | 1                |
| Private practice (employee) | 295              | 25.1 (12.0)                                 | 97                       | 26.4 (12.7)                                 | _   | _  | 6   | 13.3 (9.9)                               | 380 | 28.2 (10.7)                                 | 7                |
| DHB or MOH                  | 31               | 10.5 (8.2)                                  | 5                        | 21.8 (16.6)                                 | 1   | 6.0                                      | 3   | 28.3 (10.3)                              | 151 | 35.2 (6.7)                                  | 4                |
| Universities                | 3                | 23.3 (12.5)                                 | _                        | _   | 5   | 28.8 (9.8)                               | 2   | 6.0 (1.0)                                | 6   | 43.5 (16.6)                                 | _                |
| Other                       | 8                | 31.3 (12.7)                                 | _                        | _   | 1   | 10.0                                     | 1   | 30.0                                     | 11  | 36.5 (8.3)                                  | _                |
| Total number                | 427              |   | 107                      |   | 7   |  | 17  |  | 645 |   | 12               |
| Secondary employer          |                  |   |                          |   |   |  |     |  |     |   |                  |
| Private practice (self-emp) | 14               | 11.1 (4.2)                                  | _                        | _   | _   | _  | _   | _  | 15  | 10.6 (4.7)                                  | 3                |
| Private practice (employee) | 77               | 10.4 (5.7)                                  | 4                        | 6.8 (4.7)                                   | _   | _  | _   | _  | 86  | 10.4 (6.8)                                  | 10               |
| DHB or MOH                  | 5                | 13.4 (7.3)                                  | 1                        | 8.0   | _   | _  | _   | _  | 10  | 14.2 (6.7)                                  | 3                |
| Universities                | 1                | 3.0   | _                        | _   | 4   | 8.3 (3.9)                                | 1   | 16.0                                     | 6   | 12.5 (9.3)                                  | _                |
| Other                       | _                | _   | _                        | _   | _   | _  | _   | _  | _   | _   | _                |
| Total number                | 97               |   | 5                        |   | 4   |  | 1   | _  | 117 |   | 16               |

<sup>&</sup>lt;sup>a</sup> Where specifically employed to do so <sup>b</sup> Practitioners reporting not working any hours and those who reported more than 80 hours per week, are excluded from these calculations

<sup>&</sup>lt;sup>c</sup> Totals of columns may sum greater than overall number per practice setting as multiple activities are performed, as well as activities not detailed in the table Note: DHB = District health board; MOH = Ministry of Health

Table 3-17. Geographic distribution of practising dental hygienists and orthodontic auxiliaries by Territorial Authority (TA), for 2016

| TA area                        | Number of dental hygienists (%) | Number of orthodontic auxiliaries (%) | Total (%)  | FTE combined<br>[N reporting<br>hours] |
|--------------------------------|---------------------------------|---------------------------------------|------------|--|
| Far North                      | 8 (1.1)                         | 1 (0.9)                               | 9 (1.1)    | 6.6 [9]                                |
| Whangarei                      | 17 (2.3)                        | _                                     | 17 (2.0)   | 9.6 [14]                               |
| Kaipara                        | _                               | _                                     | _          | _                                      |
| Auckland unitary authority     | 311 (42.3)                      | 38 (35.2)                             | 349 (41.4) | 200.6 [245]                            |
| Rodney                         | 17 (2.3)                        | 1 (0.9)                               | 18 (2.1)   | 8.5 [14]                               |
| North Shore                    | 66 (9.0)                        | 6 (5.6)                               | 72 (8.5)   | 40.3 [49]                              |
| Waitakere                      | 35 (4.8)                        | 6 (5.6)                               | 41 (4.9)   | 26.8 [32]                              |
| Auckland                       | 118 (16.1)                      | 17 (15.7)                             | 135 (16.0) | 77.9 [94]                              |
| Manukau                        | 55 (7.5)                        | 6 (5.6)                               | 61 (7.2)   | 38.1 [43]                              |
| Papakura                       | 9 (1.2)                         | 1 (0.9)                               | 10 (1.2)   | 4.4 [6]                                |
| Franklin                       | 11 (1.5)                        | 1 (0.9)                               | 12 (1.4)   | 4.9 [7]                                |
| Thames-Coromandel District     | 2 (0.3)                         | _                                     | 2 (0.2)    | 0.8 [1]                                |
| Hauraki District               | _                               | _                                     | _          | _                                      |
| Waikato District               | 3 (0.4)                         | 1 (0.9)                               | 4 (0.5)    | 2.4 [3]                                |
| Matamata-Piako District        | 1 (0.1)                         | _                                     | 1 (0.1)    | _                                      |
| Hamilton City                  | 32 (4.4)                        | 1 (0.9)                               | 33 (3.9)   | 20.5 [26]                              |
| Waipa District                 | 10 (1.4)                        | _                                     | 10 (1.2)   | 4.1 [7]                                |
| Otorohanga District            | _                               | _                                     | _          | _                                      |
| South Waikato District         | 2 (0.3)                         | _                                     | 2 (0.2)    | 1.3 [2]                                |
| Waitomo District               | _                               | _                                     | _          | _                                      |
| Taupo District                 | 3 (0.4)                         | _                                     | 3 (0.4)    | 1.3 [2]                                |
| Western Bay of Plenty District | 4 (0.5)                         | _                                     | 4 (0.5)    | 2.1 [3]                                |
| Tauranga City                  | 19 (2.6)                        | 3 (2.8)                               | 22 (2.6)   | 14.9 [19]                              |
| Rotorua District               | 6 (0.8)                         | 1 (0.9)                               | 7 (0.8)    | 2.6 [5]                                |
| Whakatane District             | 3 (0.4)                         | _                                     | 3 (0.4)    | 2.7 [3]                                |
| Kawerau District               | _                               | _                                     | _          | _                                      |
| Opotiki District               | _                               | _                                     | _          | _                                      |
| Gisborne District              | 4 (0.5)                         | 2 (1.9)                               | 6 (0.7)    | 4.7 [6]                                |
| Wairoa District                | _                               | _                                     | _          | _                                      |
| Hastings District              | 9 (1.2)                         | 1 (0.9)                               | 10 (1.2)   | 4.0 [7]                                |
| Napier City                    | 6 (0.8)                         | _                                     | 6 (0.7)    | 3.5 [4]                                |
| Central Hawke's Bay District   | _                               | _                                     | _          | _                                      |
| New Plymouth District          | 13 (1.8)                        | 1 (0.9)                               | 14 (1.7)   | 6.4 [8]                                |
| Stratford District             | _                               | _                                     | _          | _                                      |
| South Taranaki District        | 3 (0.4)                         | _                                     | 3 (0.4)    | 2.1 [2]                                |
| Ruapehu District               | _                               | _                                     | _          | _                                      |
| Wanganui District              | 8 (1.1)                         | 2 (1.9)                               | 10 (1.2)   | 5.4 [6]                                |
| Rangitikei District            | 1 (0.1)                         | _                                     | 1 (0.1)    | _                                      |

| TA area                   | Number of dental hygienists (%) | Number of orthodontic auxiliaries (%) | Total (%) | FTE combined<br>[N reporting<br>hours] |
|---------------------------|---------------------------------|---------------------------------------|-----------|--|
| Manawatu District         | 2 (0.3)                         | _                                     | 2 (0.2)   | 1.5 [2]                                |
| Palmerston North City     | 13 (1.8)                        | 6 (5.6)                               | 19 (2.3)  | 10.7 [13]                              |
| Tararua District          | _                               | _                                     | _         | _                                      |
| Horowhenua District       | 1 (0.1)                         | _                                     | 1 (0.1)   | 0.8 [1]                                |
| Kapiti Coast District     | 6 (0.8)                         | _                                     | 6 (0.7)   | 3.1 [4]                                |
| Porirua City              | 3 (0.4)                         | _                                     | 3 (0.4)   | 2.0 [2]                                |
| Upper Hutt City           | 8 (1.1)                         | 1 (0.9)                               | 9 (1.1)   | 5.5 [6]                                |
| Lower Hutt City           | 14 (1.9)                        | 2 (1.9)                               | 16 (1.9)  | 10.3 [13]                              |
| Wellington City           | 49 (6.7)                        | 6 (5.6)                               | 55 (6.5)  | 33.3 [42]                              |
| Masterton District        | 3 (0.4)                         | _                                     | 3 (0.4)   | 2.6 [3]                                |
| Carterton District        | 2 (0.3)                         | _                                     | 2 (0.2)   | 1.4 [2]                                |
| South Wairarapa District  | _                               | _                                     | _         | <del>_</del>                           |
| Tasman District           | 4 (0.5)                         | _                                     | 4 (0.5)   | 3.0 [4]                                |
| Nelson City               | 4 (0.5)                         | 7 (6.5)                               | 11 (1.3)  | 6.6 [9]                                |
| Marlborough District      | 6 (0.8)                         | _                                     | 6 (0.7)   | 2.5 [4]                                |
| Kaikoura District         | _                               | _                                     | _         | _                                      |
| Buller District           | _                               | _                                     | _         | _                                      |
| Grey District             | 3 (0.4)                         | _                                     | 3 (0.4)   | 2.1 [3]                                |
| Westland District         | <del>_</del>                    | _                                     | _         | _                                      |
| Hurunui District          | _                               | _                                     | _         | _                                      |
| Waimakariri District      | 1 (0.1)                         | _                                     | 1 (0.1)   | _                                      |
| Christchurch City         | 46 (6.3)                        | 18 (16.7)                             | 64 (7.6)  | 36.0 [45]                              |
| Selwyn District           | 3 (0.4)                         | 1 (0.9)                               | 4 (0.5)   | 2.3 [3]                                |
| Ashburton District        | 2 (0.3)                         | _                                     | 2 (0.2)   | 1.8 [2]                                |
| Timaru District           | 3 (0.4)                         | 2 (1.9)                               | 5 (0.6)   | 2.4 [4]                                |
| Mackenzie District        | _                               | _                                     | _         | _                                      |
| Waimate District          | _                               | _                                     | _         | _                                      |
| Chatham Islands Territory | _                               | _                                     | _         | _                                      |
| Waitaki District          | 2 (0.3)                         | _                                     | 2 (0.2)   | 0.6 [1]                                |
| Central Otago District    | 3 (0.4)                         | _                                     | 3 (0.4)   | 2.2 [3]                                |
| Queenstown-Lakes District | 3 (0.4)                         | _                                     | 3 (0.4)   | 0.6 [1]                                |
| Dunedin City              | 42 (5.7)                        | 5 (4.6)                               | 47 (5.6)  | 30.7 [33]                              |
| Clutha District           | 2 (0.3)                         | <del>-</del>                          | 2 (0.2)   | 0.6 [1]                                |
| Southland District        | 1 (0.1)                         | _                                     | 1 (0.1)   | 1.0 [1]                                |
| Gore District             | 2 (0.3)                         | _                                     | 2 (0.2)   | 1.9 [2]                                |
| Invercargill City         | 9 (1.2)                         | 6 (5.6)                               | 15 (1.8)  | 8.5 [10]                               |
| TLA code not available    | 33 (4.5)                        | 3 (2.8)                               | 36 (4.3)  | 5.7 [7]                                |
| Total                     | 735                             | 108                                   | 843       | 474.7 [593]                            |

Note: FTE = Full time equivalent (Data sources: Dental register, workforce survey & Statistics New Zealand)

Table 3-18. Population to practising dental hygienists and orthodontic auxiliaries and FTE ratios by TA, for 2016

|                                   | Total<br>population | Population<br>aged 15+<br>years <sup>a</sup> | Population aged<br>15+ years-to-<br>dental hygienist/<br>orthodontic<br>auxiliary ratio <sup>a, b</sup> | Dental<br>hygienist/<br>orthodontic<br>auxiliary per<br>100,000<br>population<br>aged 15+ b | Population<br>aged 15+<br>years-to-FTE-<br>dental<br>hygienist/<br>orthodontic<br>auxiliary ratio | FTE per<br>100,000<br>population<br>aged 15+ |
|-----------------------------------|---------------------|--|---|---|---|--|
| Far North                         | 63,226              | 49,509                                       | 5,501.0   | 18.2  | 7,558.6   | 13.2   |
| Whangarei                         | 87,677              | 68,821                                       | 4,048.3   | 24.7  | 7,187.5   | 13.9   |
| Kaipara                           | 21,646              | 17,378                                       | _   | _   | _   | _  |
| Auckland                          | 1,576,687           | 1,261,338                                    | 3,614.1   | 27.7  | 6,287.0   | 15.9   |
| Thames-Coromandel District        | 29,160              | 24,701                                       | 12,350.5  | 8.1   | 32,934.7  | 3.0  |
| Hauraki District                  | 19,344              | 15,652                                       | _   | _   | _   | _  |
| Waikato District                  | 71,609              | 54,864                                       | 13,715.9  | 7.3   | 22,624.2  | 4.4  |
| Matamata-Piako District           | 33,872              | 26,858                                       | 26,858.3  | 3.7   | _   | _  |
| Hamilton City                     | 159,013             | 125,376                                      | 3,799.3   | 26.3  | 6,108.4   | 16.4   |
| Waipa District                    | 51,641              | 40,838                                       | 4,083.8   | 24.5  | 9,900.1   | 10.1   |
| Otorohanga District               | 9,993               | 7,673  | _   | _   | _   | _  |
| South Waikato District            | 23,548              | 18,132                                       | 9,065.8   | 11.0  | 14,220.9  | 7.0  |
| Waitomo District                  | 9,486               | 7,256  | _   | _   | _   | _  |
| Taupo District                    | 36,925              | 29,329                                       | 9,776.4   | 10.2  | 23,003.4  | 4.3  |
| Western Bay of Plenty<br>District | 48,206              | 38,983                                       | 9,745.8   | 10.3  | 18,345.1  | 5.5  |
| Tauranga City                     | 128,994             | 102,990                                      | 4,681.3   | 21.4  | 6,900.5   | 14.5   |
| Rotorua District                  | 71,438              | 55,552                                       | 7,936.0   | 12.6  | 21,573.7  | 4.6  |
| Whakatane District                | 35,015              | 27,146                                       | 9,048.6   | 11.1  | 9,961.7   | 10.0   |
| Kawerau District                  | 6,791               | 5,124  | _   | _   | _   | _  |
| Opotiki District                  | 8,969               | 6,938  | _   | _   | _   | _  |
| Gisborne District                 | 47,455              | 35,990                                       | 5,998.3   | 16.7  | 7,657.4   | 13.1   |
| Wairoa District                   | 8,184               | 6,172  | _   | _   | _   | _  |
| Hastings District                 | 79,972              | 62,269                                       | 6,226.9   | 16.1  | 15,764.3  | 6.3  |
| Napier City                       | 61,514              | 49,260                                       | 8,210.0   | 12.2  | 14,278.3  | 7.0  |
| Central Hawke's Bay<br>District   | 13,735              | 10,936                                       | _   | _   | _   | _  |
| New Plymouth District             | 79,853              | 63,589                                       | 4,542.1   | 22.0  | 10,014.1  | 10.0   |
| Stratford District                | 9,327               | 7,317  | _   | _   | _   | _  |
| South Taranaki District           | 27,529              | 21,430                                       | 7,143.3   | 14.0  | 10,084.7  | 9.9  |
| Ruapehu District                  | 12,897              | 10,029                                       | _   | _   | _   | _  |
| Wanganui District                 | 44,317              | 35,594                                       | 3,559.4   | 28.1  | 6,591.5   | 15.2   |
| Rangitikei District               | 14,788              | 11,637                                       | 11,637.0  | 8.6   | _   | _  |
| Manawatu District                 | 29,615              | 23,372                                       | 11,686.0  | 8.6   | 15,581.3  | 6.4  |
| Palmerston North City             | 85,572              | 68,916                                       | 3,627.2   | 27.6  | 6,455.9   | 15.5   |
| Tararua District                  | 17,471              | 13,685                                       | _   | _   | _   | _  |

|                           | Total<br>population | Population<br>aged 15+<br>years <sup>a</sup> | Population aged<br>15+ years-to-<br>dental hygienist/<br>orthodontic<br>auxiliary ratio <sup>a, b</sup> | Dental<br>hygienist/<br>orthodontic<br>auxiliary per<br>100,000<br>population<br>aged 15+ b | Population<br>aged 15+<br>years-to-FTE-<br>dental<br>hygienist/<br>orthodontic<br>auxiliary ratio | FTE per<br>100,000<br>population<br>aged 15+ |
|---------------------------|---------------------|--|---|---|---|--|
| Horowhenua District       | 31,916              | 26,039                                       | 26,038.7  | 3.8   | 34,718.2  | 2.9  |
| Kapiti Coast District     | 52,247              | 42,856                                       | 7,142.6   | 14.0  | 13,713.8  | 7.3  |
| Porirua City              | 55,270              | 42,139                                       | 14,046.2  | 7.1   | 20,809.2  | 4.8  |
| Upper Hutt City           | 42,813              | 34,296                                       | 3,810.7   | 26.2  | 6,292.9   | 15.9   |
| Lower Hutt City           | 102,895             | 81,726                                       | 5,107.9   | 19.6  | 7,915.3   | 12.6   |
| Wellington City           | 205,591             | 171,924                                      | 3,125.9   | 32.0  | 5,162.9   | 19.4   |
| Masterton District        | 24,906              | 20,011                                       | 6,670.2   | 15.0  | 7,847.3   | 12.7   |
| Carterton District        | 8,904               | 7,206  | 3,603.2   | 27.8  | 5,147.4   | 19.4   |
| South Wairarapa District  | 10,219              | 8,326  | _   | _   | _   | _  |
| Tasman District           | 51,402              | 41,905                                       | 10,476.3  | 9.5   | 13,968.4  | 7.2  |
| Nelson City               | 50,961              | 41,921                                       | 3,811.0   | 26.2  | 6,351.6   | 15.7   |
| Marlborough District      | 47,054              | 38,870                                       | 6,478.3   | 15.4  | 15,705.1  | 6.4  |
| Kaikoura District         | 3,984               | 3,343  | _   | _   | _   | _  |
| Buller District           | 10,277              | 8,513  | _   | _   | _   | _  |
| Grey District             | 13,690              | 11,006                                       | 3,668.6   | 27.3  | 5,303.9   | 18.9   |
| Westland District         | 9,580               | 8,020  | _   | _   | _   | _  |
| Hurunui District          | 12,702              | 10,238                                       | _   | _   | _   | _  |
| Waimakariri District      | 57,374              | 46,086                                       | 46,086.3  | 2.2   | _   | _  |
| Christchurch City         | 371,360             | 307,616                                      | 4,806.5   | 20.8  | 8,556.8   | 11.7   |
| Selwyn District           | 55,457              | 43,264                                       | 10,816.0  | 9.2   | 19,228.4  | 5.2  |
| Ashburton District        | 33,244              | 26,495                                       | 13,247.5  | 7.5   | 15,140.0  | 6.6  |
| Timaru District           | 46,524              | 38,267                                       | 7,653.5   | 13.1  | 15,780.3  | 6.3  |
| Mackenzie District        | 5,514               | 4,639  | _   | _   | _   | _  |
| Waimate District          | 7,824               | 6,397  | _   | _   | _   | _  |
| Chatham Islands Territory | 647                 | 523  | _   | _   | _   | _  |
| Waitaki District          | 22,344              | 18,227                                       | 9,113.3   | 11.0  | 30,377.8  | 3.3  |
| Central Otago District    | 20,431              | 16,918                                       | 5,639.3   | 17.7  | 7,868.8   | 12.7   |
| Queenstown-Lakes District | 37,275              | 31,064                                       | 10,354.6  | 9.7   | 56,479.4  | 1.8  |
| Dunedin City              | 127,265             | 107,319                                      | 2,283.4   | 43.8  | 3,501.4   | 28.6   |
| Clutha District           | 17,660              | 14,189                                       | 7,094.3   | 14.1  | 23,647.8  | 4.2  |
| Southland District        | 31,798              | 25,142                                       | 25,142.3  | 4.0   | 25,142.3  | 4.0  |
| Gore District             | 12,464              | 10,023                                       | 5,011.3   | 20.0  | 5,275.1   | 19.0   |
| Invercargill City         | 54,424              | 43,817                                       | 2,921.1   | 34.2  | 5,185.4   | 19.3   |
| Missing/outside TA        | 105                 | 104  | _   | _   | _   | _  |
| Total <sup>c</sup>        | 4,661,590           | 3,743,080                                    | 4,440.2   | 22.5  | 7,885.1   | 12.7   |

 <sup>&</sup>lt;sup>a</sup> Population estimate as at 30 June 2016
 <sup>b</sup> Where hours are reported
 <sup>c</sup> Due to rounding, individual figures may not always sum to the stated totals (Data sources: Dental register, workforce survey & Statistics New Zealand)

Table 3-19. Geographic distribution of practising dental hygienists and orthodontic auxiliaries by TA, for 2017

| TA area                        | Number of<br>dental<br>hygienists | Number of orthodontic auxiliaries | Total      | FTE combined [N reporting hours] |
|--------------------------------|-----------------------------------|-----------------------------------|------------|----------------------------------|
| Far North                      | 10 (1.3)                          | 1 (0.9)                           | 11 (1.2)   | 7.7 [10]                         |
| Whangarei                      | 17 (2.2)                          | _                                 | 17 (1.9)   | 9.5 [13]                         |
| Kaipara                        | _                                 | _                                 | _          | _                                |
| Auckland unitary authority     | 332 (42.3)                        | 37 (32.7)                         | 369 (41.1) | 223.5 [272]                      |
| Rodney                         | 18 (2.3)                          | 3 (2.7)                           | 21 (2.3)   | 12.6 [18]                        |
| North Shore                    | 71 (9.1)                          | 6 (5.3)                           | 77 (8.6)   | 42.9 [52]                        |
| Waitakere                      | 37 (4.7)                          | 5 (4.4)                           | 42 (4.7)   | 27.3 [35]                        |
| Auckland                       | 119 (15.2)                        | 17 (15.0)                         | 136 (15.2) | 77.0 [92]                        |
| Manukau                        | 68 (8.7)                          | 5 (4.4)                           | 73 (8.1)   | 50.4 [59]                        |
| Papakura                       | 6 (0.8)                           | 1 (0.9)                           | 7 (0.8)    | 4.9 [5]                          |
| Franklin                       | 13 (1.7)                          | _                                 | 13 (1.4)   | 8.5 [11]                         |
| Thames-Coromandel District     | 1 (0.1)                           | _                                 | 1 (0.1)    | 0.9 [1]                          |
| Hauraki District               | _                                 | _                                 | _          | _                                |
| Waikato District               | 3 (0.4)                           | 1 (0.9)                           | 4 (0.4)    | 1.7 [2]                          |
| Matamata-Piako District        | 2 (0.3)                           | _                                 | 2 (0.2)    | 1.6 [2]                          |
| Hamilton City                  | 37 (4.7)                          | 3 (2.7)                           | 40 (4.5)   | 28.6 [34]                        |
| Waipa District                 | 7 (0.9)                           | 1 (0.9)                           | 8 (0.9)    | 5.2 [8]                          |
| Otorohanga District            | _                                 | _                                 | _          | _                                |
| South Waikato District         | 2 (0.3)                           | _                                 | 2 (0.2)    | 1.3 [2]                          |
| Waitomo District               | _                                 | _                                 | _          | _                                |
| Taupo District                 | 3 (0.4)                           | _                                 | 3 (0.3)    | 0.6 [2]                          |
| Western Bay of Plenty District | 8 (1.0)                           | _                                 | 8 (0.9)    | 3.7 [6]                          |
| Tauranga City                  | 26 (3.3)                          | 3 (2.7)                           | 29 (3.2)   | 17.6 [22]                        |
| Rotorua District               | 3 (0.4)                           | 1 (0.9)                           | 4 (0.4)    | 1.4 [4]                          |
| Whakatane District             | 3 (0.4)                           | _                                 | 3 (0.3)    | 2.8 [3]                          |
| Kawerau District               | _                                 | _                                 | _          | _                                |
| Opotiki District               | _                                 | _                                 | _          | _                                |
| Gisborne District              | 7 (0.9)                           | 2 (1.8)                           | 9 (1.0)    | 4.4 [6]                          |
| Wairoa District                | _                                 | _                                 | _          | _                                |
| Hastings District              | 12 (1.5)                          | 1 (0.9)                           | 13 (1.4)   | 7.7 [10]                         |
| Napier City                    | 6 (0.8)                           | 1 (0.9)                           | 7 (0.8)    | 4.1 [5]                          |
| Central Hawke's Bay District   | 1 (0.1)                           | _                                 | 1 (0.1)    | 0.9 [1]                          |
| New Plymouth District          | 13 (1.7)                          | 3 (2.7)                           | 16 (1.8)   | 12.5 [13]                        |
| Stratford District             | 1 (0.1)                           | _                                 | 1 (0.1)    | _                                |
| South Taranaki District        | 1 (0.1)                           | _                                 | 1 (0.1)    | 0.9 [1]                          |
| Ruapehu District               | _                                 | _                                 | _          | _                                |
| Wanganui District              | 8 (1.0)                           | 2 (1.8)                           | 10 (1.1)   | 7.0 [8]                          |
| Rangitikei District            | 1 (0.1)                           | _                                 | 1 (0.1)    | _                                |

| TA area                   | Number of<br>dental<br>hygienists | Number of orthodontic auxiliaries | Total    | FTE combined [N reporting hours] |
|---------------------------|-----------------------------------|-----------------------------------|----------|----------------------------------|
| Manawatu District         | 1 (0.1)                           | _                                 | 1 (0.1)  | _                                |
| Palmerston North City     | 16 (2.0)                          | 8 (7.1)                           | 24 (2.7) | 16.7 [19]                        |
| Tararua District          | _                                 | _                                 | _        | _                                |
| Horowhenua District       | 2 (0.3)                           | _                                 | 2 (0.2)  | 1.8 [2]                          |
| Kapiti Coast District     | 8 (1.0)                           | _                                 | 8 (0.9)  | 5.5 [7]                          |
| Porirua City              | 4 (0.5)                           | _                                 | 4 (0.4)  | 3.0 [3]                          |
| Upper Hutt City           | 6 (0.8)                           | 1 (0.9)                           | 7 (0.8)  | 6.3 [7]                          |
| Lower Hutt City           | 14 (1.8)                          | 1 (0.9)                           | 15 (1.7) | 11.1 [12]                        |
| Wellington City           | 58 (7.4)                          | 8 (7.1)                           | 66 (7.4) | 41.3 [51]                        |
| Masterton District        | 4 (0.5)                           | _                                 | 4 (0.4)  | 3.4 [4]                          |
| Carterton District        | 2 (0.3)                           | _                                 | 2 (0.2)  | 1.6 [2]                          |
| South Wairarapa District  | _                                 | _                                 | _        | _                                |
| Tasman District           | 5 (0.6)                           | 2 (1.8)                           | 7 (0.8)  | 5.3 [7]                          |
| Nelson City               | 6 (0.8)                           | 7 (6.2)                           | 13 (1.4) | 8.1 [9]                          |
| Marlborough District      | 5 (0.6)                           | _                                 | 5 (0.6)  | 3.3 [4]                          |
| Kaikoura District         | _                                 | _                                 | _        | _                                |
| Buller District           | _                                 | _                                 | _        | _                                |
| Grey District             | 3 (0.4)                           | _                                 | 3 (0.3)  | 1.5 [2]                          |
| Westland District         | _                                 | _                                 | _        | _                                |
| Hurunui District          | _                                 | _                                 | _        | _                                |
| Waimakariri District      | _                                 | 1 (0.9)                           | 1 (0.1)  | 1.0 [1]                          |
| Christchurch City         | 46 (5.9)                          | 16 (14.2)                         | 62 (6.9) | 38.5 [48]                        |
| Selwyn District           | 3 (0.4)                           | _                                 | 3 (0.3)  | 1.3 [2]                          |
| Ashburton District        | 3 (0.4)                           | _                                 | 3 (0.3)  | 1.0 [1]                          |
| Timaru District           | 3 (0.4)                           | 2 (1.8)                           | 5 (0.6)  | 3.1 [5]                          |
| Mackenzie District        | _                                 | _                                 | _        | _                                |
| Waimate District          | 2 (0.3)                           | _                                 | 2 (0.2)  | 1.2 [2]                          |
| Chatham Islands Territory | _                                 | _                                 | _        | _                                |
| Waitaki District          | 2 (0.3)                           | _                                 | 2 (0.2)  | 1.0 [2]                          |
| Central Otago District    | 4 (0.5)                           | _                                 | 4 (0.4)  | 1.1 [2]                          |
| Queenstown-Lakes District | 6 (0.8)                           | _                                 | 6 (0.7)  | 3.7 [5]                          |
| Dunedin City              | 29 (3.7)                          | 4 (3.5)                           | 33 (3.7) | 19.6 [23]                        |
| Clutha District           | 2 (0.3)                           | _                                 | 2 (0.2)  | 1.6 [2]                          |
| Southland District        | 1 (0.1)                           | _                                 | 1 (0.1)  | 1.0 [1]                          |
| Gore District             | 2 (0.3)                           | _                                 | 2 (0.2)  | _                                |
| Invercargill City         | 9 (1.1)                           | 5 (4.4)                           | 14 (1.6) | 11.1 [13]                        |
| TLA code not available    | 34 (4.3)                          | 2 (1.8)                           | 36 (4.0) | 5.7 [8]                          |
| Total                     | 784                               | 113                               | 897      | 542.7 [669]                      |

Note: FTE = Full time equivalent

(Data sources: Dental register, workforce survey & Statistics New Zealand)

Table 3-20. Population to practising dental hygienists and orthodontic auxiliaries and FTE ratios by TA, for 2017

|                                   | Total<br>population | Population<br>aged 15+<br>years <sup>a</sup> | Population aged<br>15+ years-to-<br>dental hygienist/<br>orthodontic<br>auxiliary ratio <sup>a, b</sup> | Dental<br>hygienist/<br>orthodontic<br>auxiliary per<br>100,000<br>population<br>aged 15+ b | Population<br>aged 15+<br>years-to-<br>FTE- dental<br>hygienist/<br>orthodontic<br>auxiliary ratio | FTE per<br>100,000<br>population<br>aged 15+ |
|-----------------------------------|---------------------|--|---|---|--|--|
| Far North                         | 65,151              | 51,217                                       | 4,656.1   | 21.5  | 6,651.6  | 15.0   |
| Whangarei                         | 89,453              | 70,341                                       | 4,137.7   | 24.2  | 7,443.5  | 13.4   |
| Kaipara                           | 22,191              | 17,855                                       | _   | _   | _  | _  |
| Auckland                          | 1,583,474           | 1,268,777                                    | 3,438.4   | 29.1  | 5,677.5  | 17.6   |
| Thames-Coromandel District        | 30,521              | 26,002                                       | 26,002.0  | 3.8   | 29,716.6   | 3.4  |
| Hauraki District                  | 19,589              | 15,903                                       | _   | _   | _  | _  |
| Waikato District                  | 73,719              | 56,527                                       | 14,131.8  | 7.1   | 34,259.0   | 2.9  |
| Matamata-Piako District           | 34,144              | 27,117                                       | 13,558.3  | 7.4   | 16,687.2   | 6.0  |
| Hamilton City                     | 161,227             | 127,051                                      | 3,176.3   | 31.5  | 4,446.2  | 22.5   |
| Waipa District                    | 52,882              | 41,776                                       | 5,222.0   | 19.1  | 8,072.7  | 12.4   |
| Otorohanga District               | 10,266              | 7,977  |   | _   | _  | _  |
| South Waikato District            | 23,595              | 18,163                                       | 9,081.7   | 11.0  | 14,530.7   | 6.9  |
| Waitomo District                  | 9,443               | 7,312  | _   | _   | _  | _  |
| Taupo District                    | 38,251              | 30,559                                       | 10,186.2  | 9.8   | 53,145.5   | 1.9  |
| Western Bay of Plenty<br>District | 49,612              | 40,267                                       | 5,033.3   | 19.9  | 10,956.9   | 9.1  |
| Tauranga City                     | 133,387             | 106,579                                      | 3,675.1   | 27.2  | 6,047.1  | 16.5   |
| Rotorua District                  | 73,677              | 57,505                                       | 14,376.2  | 7.0   | 41,074.8   | 2.4  |
| Whakatane District                | 35,429              | 27,491                                       | 9,163.8   | 10.9  | 9,996.8  | 10.0   |
| Kawerau District                  | 6,922               | 5,238  | _   | _   | _  | _  |
| Opotiki District                  | 9,129               | 7,085  |   | _   | _  | _  |
| Gisborne District                 | 47,510              | 36,179                                       | 4,019.9   | 24.9  | 8,317.1  | 12.0   |
| Wairoa District                   | 8,189               | 6,224  | _   | _   | _  | _  |
| Hastings District                 | 82,045              | 64,238                                       | 4,941.4   | 20.2  | 8,369.8  | 11.9   |
| Napier City                       | 62,627              | 50,220                                       | 7,174.3   | 13.9  | 12,174.5   | 8.2  |
| Central Hawke's Bay<br>District   | 14,019              | 11,173                                       | 11,172.7  | 9.0   | 12,414.1   | 8.1  |
| New Plymouth District             | 80,705              | 64,279                                       | 4,017.4   | 24.9  | 5,162.9  | 19.4   |
| Stratford District                | 9,433               | 7,404  | 7,404.0   | 13.5  | _  | _  |
| South Taranaki District           | 27,357              | 21,260                                       | 21,260.0  | 4.7   | 22,983.8   | 4.4  |
| Ruapehu District                  | 13,344              | 10,507                                       |   | _   | _  | _  |
| Wanganui District                 | 45,033              | 36,189                                       | 3,618.9   | 27.6  | 5,188.3  | 19.3   |
| Rangitikei District               | 14,876              | 11,724                                       | 11,724.0  | 8.5   | _  | _  |
| Manawatu District                 | 29,931              | 23,644                                       | 23,644.0  | 4.2   | _  | _  |
| Palmerston North City             | 85,644              | 68,933                                       | 2,872.2   | 34.8  | 4,133.9  | 24.2   |
| Tararua District                  | 17,542              | 13,769                                       | _   | _   | _  | _  |
|                                   |                     |  |   |   |  |  |

|                           | Total<br>population | Population<br>aged 15+<br>years <sup>a</sup> | Population aged<br>15+ years-to-<br>dental hygienist/<br>orthodontic<br>auxiliary ratio <sup>a, b</sup> | Dental<br>hygienist/<br>orthodontic<br>auxiliary per<br>100,000<br>population<br>aged 15+ b | Population<br>aged 15+<br>years-to-<br>FTE- dental<br>hygienist/<br>orthodontic<br>auxiliary ratio | FTE per<br>100,000<br>population<br>aged 15+ |
|---------------------------|---------------------|--|---|---|--|--|
| Horowhenua District       | 32,433              | 26,477                                       | 13,238.7  | 7.6   | 15,129.9   | 6.6  |
| Kapiti Coast District     | 53,093              | 43,611                                       | 5,451.4   | 18.3  | 7,929.3  | 12.6   |
| Porirua City              | 56,041              | 42,777                                       | 10,694.3  | 9.4   | 14,259.1   | 7.0  |
| Upper Hutt City           | 43,626              | 35,093                                       | 5,013.2   | 19.9  | 5,548.2  | 18.0   |
| Lower Hutt City           | 103,790             | 82,651                                       | 5,510.1   | 18.1  | 7,446.1  | 13.4   |
| Wellington City           | 207,381             | 174,048                                      | 2,637.1   | 37.9  | 4,216.8  | 23.7   |
| Masterton District        | 25,411              | 20,421                                       | 5,105.3   | 19.6  | 6,095.9  | 16.4   |
| Carterton District        | 9,018               | 7,313  | 3,656.3   | 27.3  | 4,717.8  | 21.2   |
| South Wairarapa District  | 10,437              | 8,552  | _   | _   | _  | _  |
| Tasman District           | 53,304              | 43,711                                       | 6,244.4   | 16.0  | 8,208.6  | 12.2   |
| Nelson City               | 52,021              | 42,941                                       | 3,303.2   | 30.3  | 5,317.8  | 18.8   |
| Marlborough District      | 48,808              | 40,540                                       | 8,108.0   | 12.3  | 12,284.8   | 8.1  |
| Kaikoura District         | 4,308               | 3,667  | _   | _   | _  | _  |
| Buller District           | 10,204              | 8,525  | _   | _   | _  | _  |
| Grey District             | 13,730              | 11,111                                       | 3,703.8   | 27.0  | 7,286.1  | 13.7   |
| Westland District         | 10,441              | 8,889  | _   | _   | _  | _  |
| Hurunui District          | 12,905              | 10,426                                       | _   | _   | _  | _  |
| Waimakariri District      | 58,348              | 46,973                                       | 46,972.7  | 2.1   | 46,972.7   | 2.1  |
| Christchurch City         | 374,920             | 311,032                                      | 5,016.6   | 19.9  | 8,089.3  | 12.4   |
| Selwyn District           | 58,215              | 45,428                                       | 15,142.7  | 6.6   | 34,285.3   | 2.9  |
| Ashburton District        | 33,289              | 26,590                                       | 8,863.3   | 11.3  | 26,590.0   | 3.8  |
| Timaru District           | 46,848              | 38,535                                       | 7,706.9   | 13.0  | 12,531.6   | 8.0  |
| Mackenzie District        | 6,588               | 5,697  | _   | _   | _  | _  |
| Waimate District          | 7,777               | 6,404  | 3,202.0   | 31.2  | 5,568.7  | 18.0   |
| Chatham Islands Territory | 683                 | 566  | _   | _   | _  | _  |
| Waitaki District          | 22,788              | 18,653                                       | 9,326.7   | 10.7  | 19,131.6   | 5.2  |
| Central Otago District    | 21,662              | 18,086                                       | 4,521.5   | 22.1  | 16,076.4   | 6.2  |
| Queenstown-Lakes District | 42,150              | 35,627                                       | 5,937.9   | 16.8  | 9,760.9  | 10.2   |
| Dunedin City              | 128,729             | 108,738                                      | 3,295.1   | 30.3  | 5,562.0  | 18.0   |
| Clutha District           | 17,920              | 14,477                                       | 7,238.7   | 13.8  | 9,048.3  | 11.1   |
| Southland District        | 32,996              | 26,385                                       | 26,384.7  | 3.8   | 26,384.7   | 3.8  |
| Gore District             | 12,478              | 10,045                                       | 5,022.7   | 19.9  | _  | _  |
| Invercargill City         | 54,649              | 44,033                                       | 3,145.2   | 31.8  | 3,975.9  | 25.2   |
| Missing/outside TA        | 161                 | 159  | _   | _   | _  | _  |
| Total <sup>c</sup>        | 4,727,469           | 3,804,669                                    | 4,241.5   | 23.6  | 7,011.3  | 14.3   |

 <sup>&</sup>lt;sup>a</sup> Population estimate as at 30 June 2017
 <sup>b</sup> Where hours are reported
 <sup>c</sup> Due to rounding, individual figures may not always sum to the stated totals (Data sources: Dental register, workforce survey & Statistics New Zealand)

Table 3-21. Population to practising dental hygienists and orthodontic auxiliaries and FTE ratios by district health board (DHB), for 2016

|                       | No with practising certificates | Total<br>population <sup>a</sup> | Population<br>aged 15+<br>years | FTE dental hygienists<br>and orthodontic<br>auxiliaries | Population aged 15+<br>years-to-dental<br>hygienist/ orthodontic<br>auxiliary ratio | Dental hygienist<br>/orthodontic auxiliary<br>per 100,000 population<br>aged 15+ years | Population aged 15+<br>years-to-FTE- dental<br>hygienist/ orthodontic<br>auxiliary ratio | FTE per 100,000 population aged 15+ years |
|-----------------------|---------------------------------|----------------------------------|---------------------------------|---|---|--|--|---|
| Northland             | 30                              | 172,549                          | 135,775                         | 19.3  | 4,526   | 22.1   | 7,044.1  | 14.2                                      |
| Waitemata             | 139                             | 580,455                          | 465,256                         | 74.2  | 3,347   | 29.9   | 6,270.3  | 15.9                                      |
| Auckland              | 120                             | 486,337                          | 403,904                         | 71.6  | 3,366   | 29.7   | 5,645.1  | 17.7                                      |
| Counties-Manukau      | 83                              | 527,807                          | 405,867                         | 49.4  | 4,890   | 20.5   | 8,220.1  | 12.2                                      |
| Waikato               | 52                              | 397,713                          | 313,731                         | 28.9  | 6,033   | 16.6   | 10,865.2   | 9.2                                       |
| Lakes                 | 7                               | 108,365                          | 84,816                          | 2.9   | 12,117  | 8.3  | 29,760.0   | 3.4                                       |
| Bay of Plenty         | 32                              | 228,003                          | 181,121                         | 23.3  | 5,660   | 17.7   | 7,790.1  | 12.8                                      |
| Tairawhiti            | 8                               | 47,455                           | 35,990                          | 5.7   | 4,499   | 22.2   | 6,314.0  | 15.8                                      |
| Hawke's Bay           | 16                              | 116,695                          | 92,316                          | 7.3   | 5,770   | 17.3   | 12,689.5   | 7.9                                       |
| Taranaki              | 16                              | 163,785                          | 129,023                         | 8.5   | 8,064   | 12.4   | 15,224.0   | 6.6                                       |
| Whanganui             | 11                              | 63,662                           | 50,695                          | 5.4   | 4,609   | 21.7   | 9,388.0  | 10.7                                      |
| MidCentral            | 23                              | 173,273                          | 138,970                         | 14.1  | 6,042   | 16.6   | 9,891.1  | 10.1                                      |
| Hutt                  | 23                              | 145,708                          | 116,088                         | 14.0  | 5,047   | 19.8   | 8,292.0  | 12.1                                      |
| Capital and Coast     | 73                              | 304,339                          | 250,024                         | 43.3  | 3,425   | 29.2   | 5,774.2  | 17.3                                      |
| Wairarapa             | 6                               | 44,035                           | 35,476                          | 4.0   | 5,913   | 16.9   | 8,981.4  | 11.1                                      |
| Nelson-Marlborough    | 23                              | 149,485                          | 122,632                         | 12.3  | 5,332   | 18.8   | 9,949.9  | 10.1                                      |
| West Coast            | 3                               | 33,534                           | 27,570                          | 2.1   | 9,190   | 10.9   | 13,286.9   | 7.5                                       |
| Canterbury            | 70                              | 534,257                          | 437,133                         | 41.0  | 6,245   | 16.0   | 10,668.3   | 9.4                                       |
| South Canterbury      | 5                               | 59,922                           | 49,324                          | 2.8   | 9,865   | 10.1   | 17,615.7   | 5.7                                       |
| Southern <sup>b</sup> | 66 [54]                         | 323,696                          | 266,868                         | 38.8 [27.8]   | 4,043 [4,942]   | 24.7 [20.2]  | 6,878.0 [9,608.2]  | 14.5 [10.4]                               |
| Unknown               | 37                              | 510                              | 374                             | 6.2   |   |  |  |   |
| Total                 | 843                             | 4,661,586                        | 3,742,954                       | 474.7   | 4,440   | 22.5   | 7,884.9  | 12.7                                      |

<sup>&</sup>lt;sup>a</sup> Population estimates by DHB for 2016 are unavailable from Statistics NZ; values were linearly interpolated between 2015 and 2018. Due to rounding, individual figures may not always sum to the stated totals

b Data in square brackets for Southern DHB exclude dental hygienists and orthodontic auxiliaries who reported the University of Otago as their primary employer (Data sources: Workforce survey and Statistics New Zealand)

Table 3-22. Population to practising dental hygienists and orthodontic auxiliaries, and FTE ratios by DHB, for 2017

|                       | No with practising certificates | Total population <sup>a</sup> | Population<br>aged 15+<br>years | FTE dental hygienists<br>and orthodontic<br>auxiliaries | Population aged 15+<br>years-to-dental<br>hygienist/ orthodontic<br>auxiliary ratio | Dental hygienist<br>/orthodontic auxiliary<br>per 100,000 population<br>aged 15+ years | Population aged 15+<br>years-to-FTE- dental<br>hygienist/ orthodontic<br>auxiliary ratio | FTE per 100,000<br>population aged<br>15+ years |
|-----------------------|---------------------------------|-------------------------------|---------------------------------|---|---|--|--|---|
| Northland             | 25                              | 176,798                       | 139,449                         | 19.3  | 5,578   | 17.9   | 7,244.1  | 13.8  |
| Waitemata             | 141                             | 585,311                       | 469,712                         | 81.8  | 3,331   | 30.0   | 5,740.4  | 17.4  |
| Auckland              | 127                             | 482,673                       | 401,807                         | 76.5  | 3,164   | 31.6   | 5,254.1  | 19.0  |
| Counties-Manukau      | 95                              | 533,914                       | 411,335                         | 62.2  | 4,330   | 23.1   | 6,618.4  | 15.1  |
| Waikato               | 59                              | 404,826                       | 319,763                         | 39.5  | 5,420   | 18.5   | 8,095.3  | 12.4  |
| Lakes                 | 8                               | 111,929                       | 88,032                          | 2.7   | 11,004  | 9.1  | 32,305.3   | 3.1   |
| Bay of Plenty         | 38                              | 234,505                       | 186,641                         | 22.7  | 4,912   | 20.4   | 8,240.2  | 12.1  |
| Tairawhiti            | 10                              | 47,510                        | 36,179                          | 4.4   | 3,618   | 27.6   | 8,317.1  | 12.0  |
| Hawke's Bay           | 19                              | 117,489                       | 92,933                          | 10.7  | 4,891   | 20.4   | 8,705.6  | 11.5  |
| Taranaki              | 18                              | 167,070                       | 132,046                         | 13.4  | 7,336   | 13.6   | 9,872.6  | 10.1  |
| Whanganui             | 9                               | 64,725                        | 51,691                          | 6.1   | 5,743   | 17.4   | 8,508.8  | 11.8  |
| MidCentral            | 32                              | 174,447                       | 139,940                         | 22.8  | 4,373   | 22.9   | 6,137.7  | 16.3  |
| Hutt                  | 24                              | 147,416                       | 117,775                         | 16.8  | 4,907   | 20.4   | 7,031.4  | 14.2  |
| Capital and Coast     | 73                              | 307,579                       | 253,347                         | 50.0  | 3,471   | 28.8   | 5,064.4  | 19.7  |
| Wairarapa             | 8                               | 44,870                        | 36,253                          | 5.4   | 4,532   | 22.1   | 6,713.5  | 14.9  |
| Nelson-Marlborough    | 22                              | 154,171                       | 127,165                         | 14.7  | 5,780   | 17.3   | 8,650.7  | 11.6  |
| West Coast            | 3                               | 34,368                        | 28,541                          | 1.5   | 9,514   | 10.5   | 18,715.2   | 5.3   |
| Canterbury            | 74                              | 542,415                       | 444,467                         | 47.3  | 6,006   | 16.6   | 9,401.7  | 10.6  |
| South Canterbury      | 6                               | 61,243                        | 50,648                          | 3.2   | 8,441   | 11.8   | 15,952.1   | 6.3   |
| Southern <sup>b</sup> | 65 [59]                         | 333,393                       | 276,137                         | 38.3 [31.6]   | 4,248 [4,680]   | 23.5 [21.4]  | 7,205.1 [8,745.4]  | 13.9 [11.4]                                     |
| Unknown               | 41                              |                               |                                 | 3.6   |   |  |  |   |
| Total                 | 897                             | 4,726,651                     | 3,803,860                       | 542.7   | 4,241   | 23.6   | 7,009.8  | 14.3  |

<sup>&</sup>lt;sup>a</sup> Population estimates by DHB for 2017 are unavailable from Statistics NZ; values were linearly interpolated between 2015 and 2018. Due to rounding, individual figures may not always sum to the stated totals

<sup>&</sup>lt;sup>b</sup> Data in square brackets for Southern DHB exclude dental hygienists and orthodontic auxiliaries who reported the University of Otago as their primary employer (Data sources: Workforce survey and Statistics New Zealand)

Table 3-23. Practising pattern, dental hygienists who reported that they are not currently practising in New Zealand

|      | Employment status                           | Females (%) | Males (%) | Total (%) |
|------|---|-------------|-----------|-----------|
|      | Practising overseas                         | 28 (35.9)   | 3 (42.9)  | 31 (36.5) |
|      | Overseas and not practising                 | 6 (7.7)     | 1 (14.3)  | 7 (8.2)   |
|      | In NZ but not practising                    | 44 (56.4)   | 3 (42.9)  | 47 (55.3) |
|      | Total not currently practising              | 78 (91.8)   | 7 (8.2)   | 85        |
|      | Practising status not stated                | 158         | 15        | 173       |
| 16   | Employment status of 'In NZ but not practis | ing' group  |           |           |
| 2016 | Another health profession                   | 14          | _         | 14        |
|      | Non-health profession                       | 1           | _         | 1         |
|      | Full-time study                             | 4           | 2         | 6         |
|      | Parental responsibilities                   | 11          | _         | 11        |
|      | Seeking work                                | 2           | _         | 2         |
|      | Retired                                     | 4           | _         | 4         |
|      | Not reported                                | 8           | 1         | 9         |
|      | Practising overseas                         | 26 (35.1)   | 1 (33.3)  | 27 (35.1) |
|      | Overseas and not practising                 | 7 (9.5)     | 1 (33.3)  | 8 (10.4)  |
|      | In NZ but not practising                    | 41 (55.4)   | 1 (33.3)  | 42 (54.5) |
|      | Total not currently practising              | 74 (96.1)   | 3 (3.9)   | 77        |
|      | Practising status not stated                | 181         | 24        | 205       |
| 17   | Employment status of 'In NZ but not practis | ing' group  |           |           |
| 2017 | Another health profession                   | 11          | 1         | 12        |
|      | Non-health profession                       | 1           | _         | 1         |
|      | Full-time study                             | 7           | _         | 7         |
|      | Parental responsibilities                   | 15          | _         | 15        |
|      | Seeking work                                | 2           | _         | 2         |
|      | Retired                                     | 2           | _         | 2         |
|      | Not reported                                | 3           | _         | 3         |

Table 3-24. Postgraduate training undertaken by dental hygienists and orthodontic auxiliaries

|      | Expected year of completion    | Current APC<br>(%) | No current APC (%) | Overall<br>(%) |
|------|--------------------------------|--------------------|--------------------|----------------|
|      | 2015                           | 9 (56.3)           | _                  | 9 (56.3)       |
|      | 2016                           | 5 (31.3)           | _                  | 5 (31.3)       |
| 2016 | 2019                           | 1 (6.3)            | _                  | 1 (6.3)        |
|      | 2020                           | 1 (6.3)            | _                  | 1 (6.3)        |
|      | Total in postgraduate training | 16                 | _                  | 16             |
|      | 2016                           | 2 (28.6)           | _                  | 2 (28.6)       |
|      | 2017                           | 1 (14.3)           | _                  | 1 (14.3)       |
| 2017 | 2018                           | 3 (42.9)           | _                  | 3 (42.9)       |
|      | 2019                           | 1 (14.3)           | _                  | 1 (14.3)       |
|      | Total in postgraduate training | 7                  | _                  | 7              |

Table 3-25. Branch of postgraduate training being undertaken, based on 2017 data

| Branch of dental practice | Students/Trainees |  |  |
|---------------------------|-------------------|--|--|
| Administration/Management | 1                 |  |  |
| General Dentistry         | 1                 |  |  |
| Oral health               | 1                 |  |  |
| Orthodontics              | 3                 |  |  |
| Other                     | 1                 |  |  |
| Total                     | 7                 |  |  |

# Section 4: The dental technicians and clinical dental technicians workforce



Dental technicians & clinical dental technicians

2017 workforce at a glance

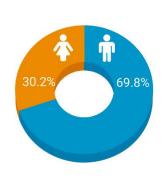


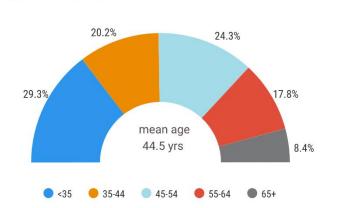
371 practising
407 registered
36 not practising

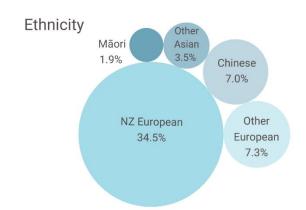


207 practising clinical dental technicians

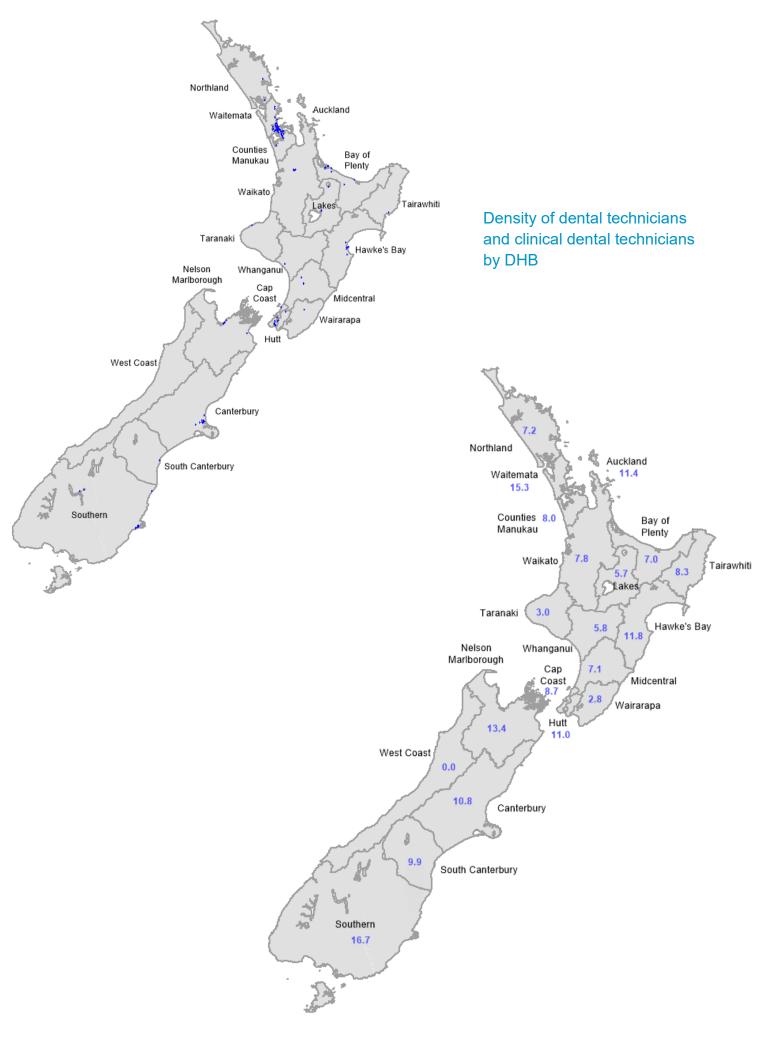
# Practising demographics











# Executive summary dental technicians and clinical dental technicians Number of dental technicians and clinical dental technicians

The total number of practising dental technicians remained stable compared with 2015 (164 in 2015 and 2017), while clinical dental technicians continue to grow year-on-year (+9.5% from 2015, 189 in 2015 to 207 in 2017). The number of practising clinical dental technicians (207) continue to outnumber the dental technicians (164). Dental technicians without practising certificates decreased by 46.7% from 2015 to 2017, while non practising clinical dental technicians remain relatively low (2.9% in 2017).

In 2017 there was a total of 407 dental technicians and clinical dental technicians on the register: a slight decrease of 1.7% during 2015-2017. Of those, a total of 91.2% held annual practising certificates. Table 4-1

Table 4-1. Registered dental technicians and clinical dental technicians

|   | 2015 | % YoY | 2016 | % YoY | 2017 |
|---|------|-------|------|-------|------|
| Dental technicians with practising certificates             | 164  | 6.7   | 175  | -6.3  | 164  |
| Clinical dental technicians with practising certificates    | 189  | 5.8   | 200  | 3.5   | 207  |
| Dental technicians without practising certificates          | 45   | -37.8 | 28   | -14.3 | 24   |
| Clinical dental technicians without practising certificates | 16   | -62.5 | 6    | 100.0 | 12   |
| Total   | 414  | -1.2  | 409  | -0.5  | 407  |

### **Demographics**

The mean age shows a decline from 2016 to 2017 for practising clinical dental technicians from 47.8 (2016) to 45.9 (2017) with 7 more clinical dental technicians. Dental technicians' mean age have risen from 41.9 (2015) to 42.5 (2016) to 42.6 (2017) with a decrease in numbers between 2016 and 2017 (-15). The overall mean age for 2017 is 44.5, similar to 2015 (44.8). Figure 4-1

The reduction in the mean age of clinical dental technicians is due to a large proportion of dental technician graduates continuing to complete the postgraduate clinical dental technology qualification directly after their bachelor degree, and registering accordingly.

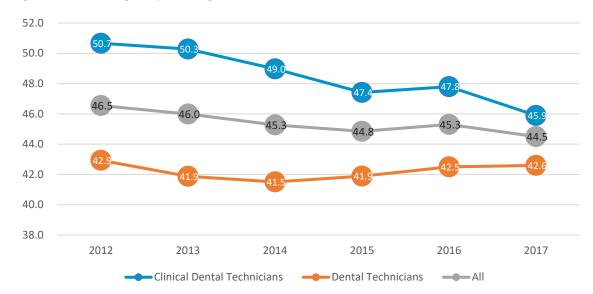


Figure 4-1. Mean age of practising dental technicians and clinical dental technicians

The age group distribution shows an increase in the workforce for the earlier years and rapid decrease from 60 years onwards, presumably as a result of retirement. Based on 2017 data, there were still 31 dental technicians and clinical dental technicians active in the workforce over age 65, with two in the age band 75+. Figure 4-2, Table 4-4

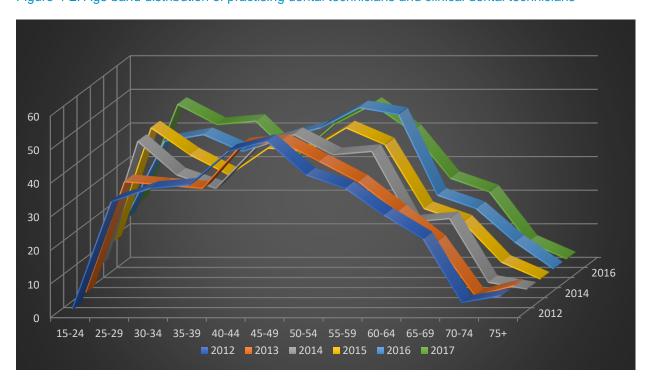


Figure 4-2. Age band distribution of practising dental technicians and clinical dental technicians

Females made up 30.2% of the practising dental technician and clinical technician workforce in 2017, representing a small proportional increase from 27.5% in 2015. In contrast males slightly increased in actual numbers from 256 (2015) to 259 in (2017), but proportionally is down to 69.8% in 2017 (2015 72.5%). Table 4-3

The ethnicity reported by dental technicians and clinical dental technicians reflected some diversity in the profession. New Zealand European makes up 34.5% and Māori 1.9%. Other ethnicities reported

include Other European (7.3%) and Chinese (7.0%). From 2015 and based on actual number movements, decreases were reported for Other European (-47.1%), Other Asian (-56.7%) and New Zealand European (-18.0%) ethnicities. An increase of 17% proportional undefined ethnicities from 2015 could be the reason for some of these shifts. Table 4-6

#### Practising characteristics

Reported self-employment has declined from 174 (49.3% 2015) to 148 (39.9%) in 2017, a decrease of -14.9% in actual numbers. Solo practice decreased from 38.5% in 2015 to 31.0% in 2017. Similarly, employees in private practice decreased by 11.1% in actual numbers, from 90 (25.5% 2015) to 80 (21.6% 2017). The number of technicians who have not completed this question doubled, so care should be taken in interpreting these movements. Table 4-9

The main reasons reported for part-time practice were insufficient dental work (26.7%) and parental responsibilities (24.4%) in 2017. In 2016 the main reasons were insufficient dental work (24.5%) and personal choice (22.4%) followed by parental responsibilities (18.4%). Table 4-10

Of the 26 dental technicians who reported that they were not practising in 2017, 6 (23.1%) were practising overseas, 3 (11.5%) were overseas but not practising, and 17 (65.4%) were in New Zealand but not practising. Of the last group, most (5) indicated they were working in another health profession, followed by practising in a non-health profession (3) or not practising due to parental responsibilities (3). Table 4-17

#### Geographical distribution

The number of hours recorded by dental technicians and clinical dental technicians were minimal, this prevented FTE analysis for this group.

The analysis of territorial authorities (TAs) showed that a number of TAs had no reported dental technology representation 25 (2017). A number of larger TAs had declining numbers reported between 2016 and 2017: Auckland (140 to 126), Dunedin (42 to 15), Christchurch (36 to 24) and Wellington (16 to 12) while Hamilton had an increase of 42.9% (14 to 20). Table 4-11, Table 4-13

#### Postgraduate studies

In 2017, of the 15 who indicated postgraduate studies, 13 were in the clinical dental technology branch of study.  $^{\text{Table 4-18}}$ 

#### Workforce survey response rates

The survey response rates for dental technicians and clinical dental technicians decreased over the reporting period: the last period covered in this report (2017) having the lowest rate of 74.7%. Table 4-2

Table 4-2. Survey responses

| Year | Response rate % |
|------|-----------------|
| 2015 | 87.4            |
| 2016 | 75.6            |
| 2017 | 74.7            |

## Dental technicians and clinical dental technicians workforce data tables

Table 4-3. Number of dental technicians and clinical dental technicians with practising certificates, by workforce reporting year

| Report<br>year | Total | Female (%) | Male (%)                |
|----------------|-------|------------|-------------------------|
| 2007           | 373   | 84 (22.5)  | 291 (78.0) a            |
| 2008           | 345   | 72 (20.9)  | 272 (78.8) <sup>b</sup> |
| 2009           | 346   | 77 (22.3)  | 265 (76.6) <sup>c</sup> |
| 2010/11        | 356   | 82 (23.0)  | 274 (77.0)              |
| 2011/12        | 357   | 88 (24.6)  | 269 (75.4)              |
| 2012/13        | 345   | 82 (23.8)  | 263 (76.2)              |
| 2013/14        | 351   | 91 (25.9)  | 260 (74.1)              |
| 2014/15        | 353   | 97 (27.5)  | 256 (72.5)              |
| 2015/16        | 375   | 106 (28.3) | 269 (71.7)              |
| 2016/17        | 371   | 112 (30.2) | 259 (69.8)              |
|                |       |            |                         |

<sup>&</sup>lt;sup>a</sup> As recorded in 2007 workforce report; reported as 1 gender unknown <sup>b</sup> Reported as 1 gender unknown <sup>c</sup> As recorded in 2009 workforce report; reported as 3 gender unknown (Data sources: Dental register & previous workforce reports)

Table 4-4. Age of dental technicians and clinical dental technicians by practising certificate status, as at 31 March 2017

| Age bands Practising certificate (%) |           | No practising certificate (%) |  |
|--------------------------------------|-----------|-------------------------------|--|
| 15 - 24                              | 19 (5.1)  | 1 (2.8)                       |  |
| 25 - 29                              | 48 (12.9) | 3 (8.3)                       |  |
| 30 - 34                              | 42 (11.3) | 3 (8.3)                       |  |
| 35 - 39                              | 43 (11.6) | 7 (19.4)                      |  |
| 40 - 44                              | 32 (8.6)  | 8 (22.2)                      |  |
| 45 - 49                              | 42 (11.3) | 8 (22.2)                      |  |
| 50 - 54                              | 48 (12.9) | 4 (11.1)                      |  |
| 55 - 59                              | 40 (10.8) | 2 (5.6)                       |  |
| 60 - 64                              | 26 (7.0)  | _                             |  |
| 65 - 69                              | 22 (5.9)  | _                             |  |
| 70 - 74                              | 7 (1.9)   | _                             |  |
| 75+                                  | 2 (0.5)   | _                             |  |
| Total                                | 371       | 36                            |  |

Figure 4-3. Age of dental technicians and clinical dental technicians by practising certificate status, as at 31 March 2017

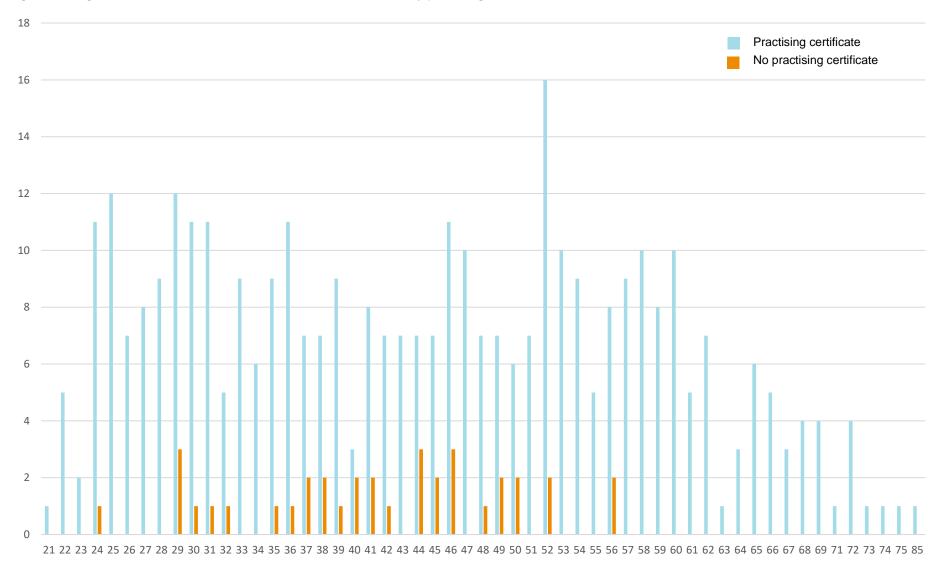


Figure 4-4. Age of registered dental technicians and clinical dental technicians by gender, as at 31 March 2017

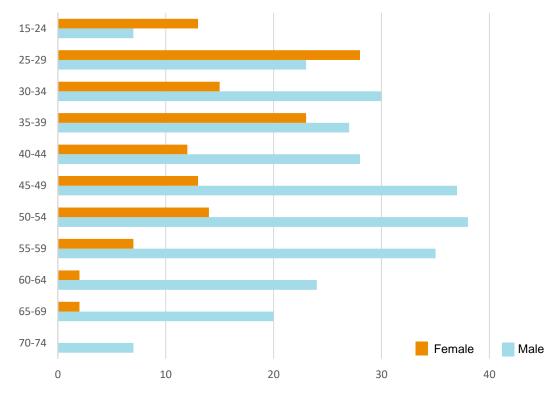


Table 4-5. Gender of dental technicians and clinical dental technicians by practising certificate status

|      | Gender | Practising certificate | No practising certificate | Total      |
|------|--------|------------------------|---------------------------|------------|
|      | Female | 106 (28.3)             | 16 (47.1)                 | 122 (29.8) |
| 2016 | Male   | 269 (71.7)             | 18 (52.9)                 | 287 (70.2) |
|      | Total  | 375 (91.7)             | 34 (8.3)                  | 409        |
| 2017 | Female | 112 (30.2)             | 17 (47.2)                 | 129 (31.7) |
|      | Male   | 259 (69.8)             | 19 (52.8)                 | 278 (68.3) |
|      | Total  | 371 (91.2)             | 36 (8.8)                  | 407        |

Table 4-6. Self-identified ethnicity by practising dental technicians and clinical dental technicians

| Ethnicity   | 2016 (%)   | 2017 (%)   |  |
|---|------------|------------|--|
| New Zealand European  | 142 (37.9) | 128 (34.5) |  |
| Māori   | 5 (1.3)    | 7 (1.9)    |  |
| Other European  | 21 (5.6)   | 27 (7.3)   |  |
| Chinese   | 24 (6.4)   | 26 (7.0)   |  |
| Other Asian   | 14 (3.7)   | 13 (3.5)   |  |
| South African   | 14 (3.7)   | 12 (3.2)   |  |
| British   | 10 (2.7)   | 11 (3.0)   |  |
| Other   | 18 (4.8)   | 10 (2.7)   |  |
| Indian  | 7 (1.9)    | 7 (1.9)    |  |
| Other East Asian  | 8 (2.1)    | 7 (1.9)    |  |
| Fijian  | 4 (1.1)    | 6 (1.6)    |  |
| Iraqi   | _          | 5 (1.3)    |  |
| Egyptian  | 2 (0.5)    | 2 (0.5)    |  |
| Niuean  | 1 (0.3)    | 1 (0.3)    |  |
| Other Pacific Peoples   | 1 (0.3)    | 1 (0.3)    |  |
| Samoan  | 1 (0.3)    | 1 (0.3)    |  |
| Tongan  | 1 (0.3)    | 1 (0.3)    |  |
| Unknown   | 95 (25.3)  | 103 (27.8) |  |
| Total <sup>a</sup>  | 368        | 368        |  |
| Total selecting an 'Other' group                              | 62         | 58         |  |
| Total practising dentists and dental specialists <sup>b</sup> | 375        | 371        |  |

<sup>&</sup>lt;sup>a</sup>Total is greater due to self-identification of multiple ethnicities.
<sup>b</sup> Denominator used for percentage values is total practising dental technicians.
(Data sources: Dental register and workforce survey)

Table 4-7. Self-identification of 'other' ethnicity by dental technicians and clinical dental technicians based on 2017 data

| Ethnicity             | Count | Ethnicity                | Count |
|-----------------------|-------|--------------------------|-------|
| German                | 12    | English                  | 1     |
| Japanese              | 10    | Eurasian                 | 1     |
| Middle Eastern        | 4     | Hawaiian                 | 1     |
| Cambodian             | 3     | Hungarian                | 1     |
| New Zealander         | 2     | Italian                  | 1     |
| Romanian              | 2     | Japanese Korean Filipino | 1     |
| Russian               | 2     | Jewish                   | 1     |
| Taiwanese             | 2     | Korean                   | 1     |
| Australian            | 1     | Malaysian                | 1     |
| Austrian              | 1     | New Zealand Chinese      | 1     |
| Botswana              | 1     | Pakeha                   | 1     |
| British               | 1     | Thai                     | 1     |
| Chinese Born Malaysia | 1     | Ukrainian                | 1     |
| Dutch                 | 1     | Zimbabwean               | 1     |

Table 4-8. Scope of practice registrations

|      | Scopes of practice                                 | Total |
|------|--|-------|
| 2016 | Dental technology practice                         | 409   |
|      | Clinical dental technology practice                | 206   |
|      | Implant overdentures in clinical dental technology | 17    |
|      | Dental technology practice                         | 407   |
| 2017 | Clinical dental technology practice                | 219   |
|      | Implant overdentures in clinical dental technology | 16    |

Table 4-9. Type of primary employment of practising dental technicians and clinical dental technicians

|      |                                | Dental<br>technicians (%) | Clinical dental technicians (%) | Total number<br>(%) | Total % |
|------|--------------------------------|---------------------------|---------------------------------|---------------------|---------|
|      | Self-employed                  |                           |                                 |                     |         |
|      | Solo practice                  | 47 (82.5)                 | 80 (80.0)                       | 127 (80.9)          | 33.9    |
|      | Group practice                 | 10 (17.5)                 | 20 (20.0)                       | 30 (19.1)           | 8.0     |
|      | Subtotal                       | 57                        | 100                             | 157                 | 41.9    |
|      | Employee                       |                           |                                 |                     |         |
|      | Private practice               | 42 (70.0)                 | 29 (64.4)                       | 71 (67.6)           | 18.9    |
| 2016 | DHB                            | 7 (11.7)                  | 8 (17.8)                        | 15 (14.3)           | 4.0     |
| 20   | Universities                   | 7 (11.7)                  | 6 (13.3)                        | 13 (12.4)           | 3.5     |
|      | Government Department, not MOH | 2 (3.3)                   | _                               | 2 (1.9)             | 0.5     |
|      | lwi                            | 1 (1.7)                   | _                               | 1 (1.0)             | 0.3     |
|      | Ministry of Health             | 1 (1.7)                   | 2 (4.4)                         | 3 (2.9)             | 0.8     |
|      | Subtotal                       | 60                        | 45                              | 105                 | 28.0    |
|      | Other forms of employment      | _                         | _                               | _                   | _       |
|      | No reply to question           | 58                        | 55                              | 113                 | 30.1    |
|      | Total                          | 175                       | 200                             | 375                 |         |
|      | Self-employed                  |                           |                                 |                     |         |
|      | Solo practice                  | 46 (80.7)                 | 69 (75.8)                       | 115 (77.7)          | 31.0    |
|      | Group practice                 | 11 (19.3)                 | 22 (24.2)                       | 33 (22.3)           | 8.9     |
|      | Subtotal                       | 57                        | 91                              | 148                 | 39.9    |
|      | Employee                       |                           |                                 |                     |         |
|      | Private practice               | 35 (66.0)                 | 45 (72.6)                       | 80 (69.6)           | 21.6    |
|      | DHB                            | 3 (5.7)                   | 8 (12.9)                        | 11 (9.6)            | 3.0     |
| 2017 | Universities                   | 8 (15.1)                  | 8 (12.9)                        | 16 (13.9)           | 4.3     |
| (1   | Government Department, not MOH | 2 (3.8)                   | _                               | 2 (1.7)             | 0.5     |
|      | lwi                            | _                         | _                               | _                   | _       |
|      | Ministry of Health             | 5 (9.4)                   | 1 (1.6)                         | 6 (5.2)             | 1.6     |
|      | Subtotal                       | 53                        | 62                              | 115                 | 31.0    |
|      | Other forms of employment      | _                         | _                               | _                   | _       |
|      | No reply to question           | 54                        | 54                              | 108                 | 29.1    |
|      | Total                          | 164                       | 207                             | 371                 |         |

Table 4-10. Reasons for part-time practice by dental technicians and clinical dental technicians practising in New Zealand

|      | Reason for practising part-time | Females (%) | Males (%) | Total (%) |
|------|---------------------------------|-------------|-----------|-----------|
|      | Engaged in non-dental work      | _           | 2 (6.7)   | 2 (4.1)   |
|      | Insufficient dental work        | 5 (26.3)    | 7 (23.3)  | 12 (24.5) |
|      | Seeking dental work             | 1 (5.3)     | _         | 1 (2.0)   |
|      | Semi-retired                    | _           | 5 (16.7)  | 5 (10.2)  |
| 2016 | Parental responsibilities       | 6 (31.6)    | 3 (10.0)  | 9 (18.4)  |
| 20   | Personal choice                 | 1 (5.3)     | 10 (33.3) | 11 (22.4) |
|      | Studying                        | 4 (21.1)    | 2 (6.7)   | 6 (12.2)  |
|      | Health issues                   | 1 (5.3)     | _         | 1 (2.0)   |
|      | Other                           | 1 (5.3)     | 1 (3.3)   | 2 (4.1)   |
|      | Total working part time         | 19          | 30        | 49        |
|      | Engaged in non-dental work      | _           | 1 (4.3)   | 1 (2.2)   |
|      | Insufficient dental work        | 3 (13.6)    | 9 (39.1)  | 12 (26.7) |
|      | Seeking dental work             | _           | 1 (4.3)   | 1 (2.2)   |
|      | Semi-retired                    | 1 (4.5)     | 4 (17.4)  | 5 (11.1)  |
| 2017 | Parental responsibilities       | 10 (45.5)   | 1 (4.3)   | 11 (24.4) |
| 20   | Personal choice                 | 2 (9.1)     | 4 (17.4)  | 6 (13.3)  |
|      | Studying                        | 3 (13.6)    | 2 (8.7)   | 5 (11.1)  |
|      | Health issues                   | 1 (4.5)     | 1 (4.3)   | 2 (4.4)   |
|      | Other (see below)               | 2 (9.1)     | _         | 2 (4.4)   |
|      | Total working part time         | 22          | 23        | 45        |

Reasons offered by the 2 who selected 'other' reasons for practising part-time, based on the 2017 data (number):

Health (1) Carer (1)

(Data source: Workforce survey)

Table 4-11. Geographic distribution of practising dental technicians and clinical dental technicians by Territorial Authority (TA), for 2016

| TA area                        | Number of dental technicians (%) | Number of clinical dental technicians (%) | Total (%)    |
|--------------------------------|----------------------------------|---|--------------|
| Far North                      | _                                | 2 (1.0)                                   | 2 (0.5)      |
| Whangarei                      | 4 (2.3)                          | 5 (2.5)                                   | 9 (2.4)      |
| Kaipara                        | 1 (0.6)                          | _   | 1 (0.3)      |
| Auckland unitary authority     | 80 (45.7)                        | 60 (30.0)                                 | 140 (37.3)   |
| Rodney                         | 6 (3.4)                          | 3 (1.5)                                   | 9 (2.4)      |
| North Shore                    | 27 (15.4)                        | 21 (10.5)                                 | 48 (12.8)    |
| Waitakere                      | 5 (2.9)                          | 6 (3.0)                                   | 11 (2.9)     |
| Auckland                       | 29 (16.6)                        | 13 (6.5)                                  | 42 (11.2)    |
| Manukau                        | 9 (5.1)                          | 12 (6.0)                                  | 21 (5.6)     |
| Papakura                       | 3 (1.7)                          | 1 (0.5)                                   | 4 (1.1)      |
| Franklin                       | 1 (0.6)                          | 4 (2.0)                                   | 5 (1.3)      |
| Thames-Coromandel District     | _                                | _   | _            |
| Hauraki District               | _                                | _   | _            |
| Waikato District               | 2 (1.1)                          | _   | 2 (0.5)      |
| Matamata-Piako District        | _                                | 1 (0.5)                                   | 1 (0.3)      |
| Hamilton City                  | 3 (1.7)                          | 11 (5.5)                                  | 14 (3.7)     |
| Waipa District                 | 1 (0.6)                          | 1 (0.5)                                   | 2 (0.5)      |
| Otorohanga District            | _                                | _   | _            |
| South Waikato District         | _                                | _   | _            |
| Waitomo District               | _                                | _   | _            |
| Taupo District                 | _                                | 2 (1.0)                                   | 2 (0.5)      |
| Western Bay of Plenty District | 1 (0.6)                          | _   | 1 (0.3)      |
| Tauranga City                  | 2 (1.1)                          | 9 (4.5)                                   | 11 (2.9)     |
| Rotorua District               | _                                | 2 (1.0)                                   | 2 (0.5)      |
| Whakatane District             | _                                | 2 (1.0)                                   | 2 (0.5)      |
| Kawerau District               | _                                | 1 (0.5)                                   | 1 (0.3)      |
| Opotiki District               | _                                | _   | _            |
| Gisborne District              | 2 (1.1)                          | 1 (0.5)                                   | 3 (0.8)      |
| Wairoa District                |                                  | _   | _            |
| Hastings District              | _                                | 1 (0.5)                                   | 1 (0.3)      |
| Napier City                    | 4 (2.3)                          | 5 (2.5)                                   | 9 (2.4)      |
| Central Hawke's Bay District   |                                  | _   | _            |
| New Plymouth District          | _                                | 4 (2.0)                                   | 4 (1.1)      |
| Stratford District             | _                                | ——————————————————————————————————————    | <del>-</del> |
| South Taranaki District        | _                                | _   | _            |
| Ruapehu District               | _                                | _   | _            |
| Wanganui District              |                                  | 2 (1.0)                                   | 2 (0.5)      |
| Rangitikei District            | _                                |   |              |
| Kangukei District              | <del>_</del>                     | <del>_</del>                              | _            |

| TA area                   | Number of dental technicians (%) |           | Total (%) |
|---------------------------|----------------------------------|-----------|-----------|
| Manawatu District         | _                                | 1 (0.5)   | 1 (0.3)   |
| Palmerston North City     | 3 (1.7)                          | 3 (1.5)   | 6 (1.6)   |
| Tararua District          | _                                | _         | _         |
| Horowhenua District       | _                                | 1 (0.5)   | 1 (0.3)   |
| Kapiti Coast District     | 1 (0.6)                          | 2 (1.0)   | 3 (0.8)   |
| Porirua City              | 1 (0.6)                          | 1 (0.5)   | 2 (0.5)   |
| Upper Hutt City           | 3 (1.7)                          | 3 (1.5)   | 6 (1.6)   |
| Lower Hutt City           | 2 (1.1)                          | 4 (2.0)   | 6 (1.6)   |
| Wellington City           | 8 (4.6)                          | 8 (4.0)   | 16 (4.3)  |
| Masterton District        | _                                | 1 (0.5)   | 1 (0.3)   |
| Carterton District        | _                                | _         | _         |
| South Wairarapa District  | _                                | _         | _         |
| Tasman District           | 1 (0.6)                          | _         | 1 (0.3)   |
| Nelson City               | 4 (2.3)                          | 5 (2.5)   | 9 (2.4)   |
| Marlborough District      | 2 (1.1)                          | 2 (1.0)   | 4 (1.1)   |
| Kaikoura District         | 1 (0.6)                          | _         | 1 (0.3)   |
| Buller District           | _                                | _         | _         |
| Grey District             | _                                | _         | _         |
| Westland District         | _                                | _         | _         |
| Hurunui District          | _                                | _         | _         |
| Waimakariri District      | _                                | 2 (1.0)   | 2 (0.5)   |
| Christchurch City         | 13 (7.4)                         | 23 (11.5) | 36 (9.6)  |
| Selwyn District           | _                                | 1 (0.5)   | 1 (0.3)   |
| Ashburton District        | _                                | 1 (0.5)   | 1 (0.3)   |
| Timaru District           | 3 (1.7)                          | 1 (0.5)   | 4 (1.1)   |
| Mackenzie District        | _                                | _         | _         |
| Waimate District          | _                                | _         | _         |
| Chatham Islands Territory | _                                | _         | _         |
| Waitaki District          | 1 (0.6)                          | 3 (1.5)   | 4 (1.1)   |
| Central Otago District    | _                                | _         | _         |
| Queenstown-Lakes District | 2 (1.1)                          | 2 (1.0)   | 4 (1.1)   |
| Dunedin City              | 25 (14.3)                        | 17 (8.5)  | 42 (11.2) |
| Clutha District           | _                                | _         | _         |
| Southland District        | _                                | _         | _         |
| Gore District             | _                                | _         | _         |
| Invercargill City         | _                                | 3 (1.5)   | 3 (0.8)   |
| TLA code not available    | 5 (2.9)                          | 7 (3.5)   | 12 (3.2)  |
| Total                     | 175                              | 200       | 375       |

Table 4-12. Population to practising dental technicians and clinical dental technicians by TA, for 2016

|                                | Total population | Population aged<br>15+ years <sup>a</sup> | Population aged<br>15+ years-to-<br>technicians ratio <sup>a</sup> | Technicians per<br>100,000 population<br>aged 15+ |
|--------------------------------|------------------|---|--|---|
| Far North                      | 63,226           | 49,509                                    | 24,754.3   | 4.0   |
| Whangarei                      | 87,677           | 68,821                                    | 7,646.7  | 13.1  |
| Kaipara                        | 21,646           | 17,378                                    | 17,377.7   | 5.8   |
| Auckland                       | 1,576,687        | 1,261,338                                 | 9,009.6  | 11.1  |
| Thames-Coromandel District     | 29,160           | 24,701                                    | _  | _   |
| Hauraki District               | 19,344           | 15,652                                    | _  | _   |
| Waikato District               | 71,609           | 54,864                                    | 27,431.8   | 3.6   |
| Matamata-Piako District        | 33,872           | 26,858                                    | 26,858.3   | 3.7   |
| Hamilton City                  | 159,013          | 125,376                                   | 8,955.4  | 11.2  |
| Waipa District                 | 51,641           | 40,838                                    | 20,419.0   | 4.9   |
| Otorohanga District            | 9,993            | 7,673                                     | _  | _   |
| South Waikato District         | 23,548           | 18,132                                    | _  | _   |
| Waitomo District               | 9,486            | 7,256                                     | _  | _   |
| Taupo District                 | 36,925           | 29,329                                    | 14,664.7   | 6.8   |
| Western Bay of Plenty District | 48,206           | 38,983                                    | 38,983.3   | 2.6   |
| Tauranga City                  | 128,994          | 102,990                                   | 9,362.7  | 10.7  |
| Rotorua District               | 71,438           | 55,552                                    | 27,776.2   | 3.6   |
| Whakatane District             | 35,015           | 27,146                                    | 13,572.8   | 7.4   |
| Kawerau District               | 6,791            | 5,124                                     | 5,124.0  | 19.5  |
| Opotiki District               | 8,969            | 6,938                                     | _  | _   |
| Gisborne District              | 47,455           | 35,990                                    | 11,996.6   | 8.3   |
| Wairoa District                | 8,184            | 6,172                                     | _  | _   |
| Hastings District              | 79,972           | 62,269                                    | 62,269.0   | 1.6   |
| Napier City                    | 61,514           | 49,260                                    | 5,473.3  | 18.3  |
| Central Hawke's Bay District   | 13,735           | 10,936                                    | _  | _   |
| New Plymouth District          | 79,853           | 63,589                                    | 15,897.3   | 6.3   |
| Stratford District             | 9,327            | 7,317                                     | _  | _   |
| South Taranaki District        | 27,529           | 21,430                                    | _  | _   |
| Ruapehu District               | 12,897           | 10,029                                    | _  | _   |
| Wanganui District              | 44,317           | 35,594                                    | 17,797.2   | 5.6   |
| Rangitikei District            | 14,788           | 11,637                                    | _  | _   |
| Manawatu District              | 29,615           | 23,372                                    | 23,372.0   | 4.3   |
| Palmerston North City          | 85,572           | 68,916                                    | 11,486.1   | 8.7   |
| Tararua District               | 17,471           | 13,685                                    | _  | _   |
| Horowhenua District            | 31,916           | 26,039                                    | 26,038.7   | 3.8   |
| Kapiti Coast District          | 52,247           | 42,856                                    | 14,285.2   | 7.0   |
| Porirua City                   | 55,270           | 42,139                                    | 21,069.3   | 4.7   |
| Upper Hutt City                | 42,813           | 34,296                                    | 5,716.1  | 17.5  |

|                           | Total population | Population aged<br>15+ years <sup>a</sup> | Population aged<br>15+ years-to-<br>technicians ratio <sup>a</sup> | Technicians per<br>100,000 population<br>aged 15+ |
|---------------------------|------------------|---|--|---|
| Lower Hutt City           | 102,895          | 81,726                                    | 13,620.9   | 7.3   |
| Wellington City           | 205,591          | 171,924                                   | 10,745.3   | 9.3   |
| Masterton District        | 24,906           | 20,011                                    | 20,010.7   | 5.0   |
| Carterton District        | 8,904            | 7,206                                     | _  | _   |
| South Wairarapa District  | 10,219           | 8,326                                     | _  | _   |
| Tasman District           | 51,402           | 41,905                                    | 41,905.3   | 2.4   |
| Nelson City               | 50,961           | 41,921                                    | 4,657.9  | 21.5  |
| Marlborough District      | 47,054           | 38,870                                    | 9,717.5  | 10.3  |
| Kaikoura District         | 3,984            | 3,343                                     | 3,343.3  | 29.9  |
| Buller District           | 10,277           | 8,513                                     | _  | _   |
| Grey District             | 13,690           | 11,006                                    | _  | _   |
| Westland District         | 9,580            | 8,020                                     | _  | _   |
| Hurunui District          | 12,702           | 10,238                                    | _  | _   |
| Waimakariri District      | 57,374           | 46,086                                    | 23,043.2   | 4.3   |
| Christchurch City         | 371,360          | 307,616                                   | 8,544.9  | 11.7  |
| Selwyn District           | 55,457           | 43,264                                    | 43,264.0   | 2.3   |
| Ashburton District        | 33,244           | 26,495                                    | 26,495.0   | 3.8   |
| Timaru District           | 46,524           | 38,267                                    | 9,566.8  | 10.5  |
| Mackenzie District        | 5,514            | 4,639                                     | _  | _   |
| Waimate District          | 7,824            | 6,397                                     | _  | _   |
| Chatham Islands Territory | 647              | 523                                       | _  | _   |
| Waitaki District          | 22,344           | 18,227                                    | 4,556.7  | 21.9  |
| Central Otago District    | 20,431           | 16,918                                    | _  | _   |
| Queenstown-Lakes District | 37,275           | 31,064                                    | 7,765.9  | 12.9  |
| Dunedin City              | 127,265          | 107,319                                   | 2,555.2  | 39.1  |
| Clutha District           | 17,660           | 14,189                                    | _  | _   |
| Southland District        | 31,798           | 25,142                                    | _  | _   |
| Gore District             | 12,464           | 10,023                                    | _  | _   |
| Invercargill City         | 54,424           | 43,817                                    | 14,605.6   | 6.8   |
| Missing/outside TA        | 105              | 104                                       | _  | _   |
| Total <sup>b</sup>        | 4,661,590        | 3,743,080                                 | 9,981.5  | 10.0  |

 <sup>&</sup>lt;sup>a</sup> Population estimate as at 30 June 2016
 <sup>b</sup> Due to rounding, individual figures may not always sum to the stated totals (Data sources: Dental register, workforce survey & Statistics New Zealand)

Table 4-13. Geographic distribution of practising dental technicians and clinical dental technicians by TA, for 2017

| TA area                        | Number of dental technicians (%) | Number of clinical dental technicians (%) | Total (%)  |
|--------------------------------|----------------------------------|---|------------|
| Far North                      | 2 (1.2)                          | _   | 2 (0.5)    |
| Whangarei                      | 3 (1.8)                          | 5 (2.4)                                   | 8 (2.2)    |
| Kaipara                        | _                                | _   | _          |
| Auckland unitary authority     | 56 (34.1)                        | 70 (33.8)                                 | 126 (34.0) |
| Rodney                         | 3 (1.8)                          | 4 (1.9)                                   | 7 (1.9)    |
| North Shore                    | 12 (7.3)                         | 20 (9.7)                                  | 32 (8.6)   |
| Waitakere                      | 6 (3.7)                          | 2 (1.0)                                   | 8 (2.2)    |
| Auckland                       | 20 (12.2)                        | 23 (11.1)                                 | 43 (11.6)  |
| Manukau                        | 10 (6.1)                         | 17 (8.2)                                  | 27 (7.3)   |
| Papakura                       | 1 (0.6)                          | 2 (1.0)                                   | 3 (0.8)    |
| Franklin                       | 4 (2.4)                          | 2 (1.0)                                   | 6 (1.6)    |
| Thames-Coromandel District     | 1 (0.6)                          | _   | 1 (0.3)    |
| Hauraki District               | _                                | _   | _          |
| Waikato District               | 1 (0.6)                          | _   | 1 (0.3)    |
| Matamata-Piako District        | 1 (0.6)                          | _   | 1 (0.3)    |
| Hamilton City                  | 9 (5.5)                          | 11 (5.3)                                  | 20 (5.4)   |
| Waipa District                 | 1 (0.6)                          | _   | 1 (0.3)    |
| Otorohanga District            | _                                | _   | _          |
| South Waikato District         | _                                | _   | _          |
| Waitomo District               | _                                | _   | _          |
| Taupo District                 | 1 (0.6)                          | 1 (0.5)                                   | 2 (0.5)    |
| Western Bay of Plenty District | 2 (1.2)                          | _   | 2 (0.5)    |
| Tauranga City                  | 4 (2.4)                          | 4 (1.9)                                   | 8 (2.2)    |
| Rotorua District               | _                                | 6 (2.9)                                   | 6 (1.6)    |
| Whakatane District             | _                                | 2 (1.0)                                   | 2 (0.5)    |
| Kawerau District               | _                                | _   | _          |
| Opotiki District               | _                                | _   | _          |
| Gisborne District              | 3 (1.8)                          | 1 (0.5)                                   | 4 (1.1)    |
| Wairoa District                | _                                | _   | _          |
| Hastings District              | 12 (7.3)                         | 19 (9.2)                                  | 31 (8.4)   |
| Napier City                    | 3 (1.8)                          | 4 (1.9)                                   | 7 (1.9)    |
| Central Hawke's Bay District   | _                                | _   | _          |
| New Plymouth District          | 2 (1.2)                          | 2 (1.0)                                   | 4 (1.1)    |
| Stratford District             | _                                | _   | _          |
| South Taranaki District        | _                                | _   | _          |
| Ruapehu District               | _                                | _   | _          |
| Wanganui District              | 3 (1.8)                          | 1 (0.5)                                   | 4 (1.1)    |
| Rangitikei District            | _                                | 1 (0.5)                                   | 1 (0.3)    |

| TA area                   | Number of dental technicians (%) | Number of clinical dental technicians (%) | Total (%) |
|---------------------------|----------------------------------|---|-----------|
| Manawatu District         | _                                | _   | _         |
| Palmerston North City     | 6 (3.7)                          | 3 (1.4)                                   | 9 (2.4)   |
| Tararua District          | 1 (0.6)                          | _   | 1 (0.3)   |
| Horowhenua District       | _                                | _   | _         |
| Kapiti Coast District     | 2 (1.2)                          | 5 (2.4)                                   | 7 (1.9)   |
| Porirua City              | _                                | 2 (1.0)                                   | 2 (0.5)   |
| Upper Hutt City           | 1 (0.6)                          | 2 (1.0)                                   | 3 (0.8)   |
| Lower Hutt City           | 6 (3.7)                          | 1 (0.5)                                   | 7 (1.9)   |
| Wellington City           | 3 (1.8)                          | 9 (4.3)                                   | 12 (3.2)  |
| Masterton District        | 3 (1.8)                          | 1 (0.5)                                   | 4 (1.1)   |
| Carterton District        | _                                | _   | _         |
| South Wairarapa District  | _                                | _   | _         |
| Tasman District           | 2 (1.2)                          | 1 (0.5)                                   | 3 (0.8)   |
| Nelson City               | 3 (1.8)                          | 3 (1.4)                                   | 6 (1.6)   |
| Marlborough District      | _                                | 1 (0.5)                                   | 1 (0.3)   |
| Kaikoura District         | _                                | _   | _         |
| Buller District           | _                                | _   | _         |
| Grey District             | 1 (0.6)                          | 1 (0.5)                                   | 2 (0.5)   |
| Westland District         | _                                | _   | _         |
| Hurunui District          | _                                | _   | _         |
| Waimakariri District      | _                                | _   | _         |
| Christchurch City         | 8 (4.9)                          | 16 (7.7)                                  | 24 (6.5)  |
| Selwyn District           | 2 (1.2)                          | _   | 2 (0.5)   |
| Ashburton District        | _                                | 1 (0.5)                                   | 1 (0.3)   |
| Timaru District           | 1 (0.6)                          | _   | 1 (0.3)   |
| Mackenzie District        | _                                | _   | _         |
| Waimate District          | _                                | _   | _         |
| Chatham Islands Territory | _                                | _   | _         |
| Waitaki District          | _                                | 1 (0.5)                                   | 1 (0.3)   |
| Central Otago District    | _                                | _   | _         |
| Queenstown-Lakes District | _                                | 2 (1.0)                                   | 2 (0.5)   |
| Dunedin City              | 5 (3.0)                          | 10 (4.8)                                  | 15 (4.0)  |
| Clutha District           | 1 (0.6)                          | _   | 1 (0.3)   |
| Southland District        | _                                | 1 (0.5)                                   | 1 (0.3)   |
| Gore District             | 1 (0.6)                          | _   | 1 (0.3)   |
| Invercargill City         | 1 (0.6)                          | 6 (2.9)                                   | 7 (1.9)   |
| TLA code not available    | 13 (7.9)                         | 14 (6.8)                                  | 27 (7.3)  |
| Total                     | 164                              | 207                                       | 371       |

Table 4-14. Population to practising dental technicians and clinical dental technicians by TA, for 2017

|                                | Total population | Population aged 15+<br>years <sup>a</sup> | Population aged<br>15+ years-to-<br>technicians ratio <sup>a</sup> | Technicians per<br>100,000 population<br>aged 15+ |
|--------------------------------|------------------|---|--|---|
| Far North                      | 65,151           | 51,217                                    | 25,608.7   | 3.9   |
| Whangarei                      | 89,453           | 70,341                                    | 8,792.7  | 11.4  |
| Kaipara                        | 22,191           | 17,855                                    | _  | _   |
| Auckland                       | 1,583,474        | 1,268,777                                 | 10,069.7   | 9.9   |
| Thames-Coromandel District     | 30,521           | 26,002                                    | 26,002.0   | 3.8   |
| Hauraki District               | 19,589           | 15,903                                    | _  | _   |
| Waikato District               | 73,719           | 56,527                                    | 56,527.3   | 1.8   |
| Matamata-Piako District        | 34,144           | 27,117                                    | 27,116.7   | 3.7   |
| Hamilton City                  | 161,227          | 127,051                                   | 6,352.6  | 15.7  |
| Waipa District                 | 52,882           | 41,776                                    | 41,776.0   | 2.4   |
| Otorohanga District            | 10,266           | 7,977                                     | _  | _   |
| South Waikato District         | 23,595           | 18,163                                    | _  | _   |
| Waitomo District               | 9,443            | 7,312                                     | _  | _   |
| Taupo District                 | 38,251           | 30,559                                    | 15,279.3   | 6.5   |
| Western Bay of Plenty District | 49,612           | 40,267                                    | 20,133.3   | 5.0   |
| Tauranga City                  | 133,387          | 106,579                                   | 13,322.4   | 7.5   |
| Rotorua District               | 73,677           | 57,505                                    | 9,584.1  | 10.4  |
| Whakatane District             | 35,429           | 27,491                                    | 13,745.7   | 7.3   |
| Kawerau District               | 6,922            | 5,238                                     | <u> </u>   | _   |
| Opotiki District               | 9,129            | 7,085                                     | _  | _   |
| Gisborne District              | 47,510           | 36,179                                    | 9,044.8  | 11.1  |
| Wairoa District                | 8,189            | 6,224                                     | _  | _   |
| Hastings District              | 82,045           | 64,238                                    | 2,072.2  | _   |
| Napier City                    | 62,627           | 50,220                                    | 7,174.3  | 13.9  |
| Central Hawke's Bay District   | 14,019           | 11,173                                    | <u> </u>   | _   |
| New Plymouth District          | 80,705           | 64,279                                    | 16,069.7   | 6.2   |
| Stratford District             | 9,433            | 7,404                                     | <u> </u>   | _   |
| South Taranaki District        | 27,357           | 21,260                                    | _  | _   |
| Ruapehu District               | 13,344           | 10,507                                    | _  | _   |
| Wanganui District              | 45,033           | 36,189                                    | 9,047.2  | 11.1  |
| Rangitikei District            | 14,876           | 11,724                                    | 11,724.0   | 8.5   |
| Manawatu District              | 29,931           | 23,644                                    | _  | _   |
| Palmerston North City          | 85,644           | 68,933                                    | 7,659.2  | 13.1  |
| Tararua District               | 17,542           | 13,769                                    | 13,769.3   | 7.3   |
| Horowhenua District            | 32,433           | 26,477                                    | —  | _   |
| Kapiti Coast District          | 53,093           | 43,611                                    | 6,230.2  | 16.1  |
| Porirua City                   | 56,041           | 42,777                                    | 21,388.7   | 4.7   |
| Upper Hutt City                | 43,626           | 35,093                                    | 11,697.6   | 8.5   |

|                           | Total population | Population aged 15+<br>years <sup>a</sup> | Population aged<br>15+ years-to-<br>technicians ratio <sup>a</sup> | Technicians per<br>100,000 population<br>aged 15+ |
|---------------------------|------------------|---|--|---|
| Lower Hutt City           | 103,790          | 82,651                                    | 11,807.3   | 8.5   |
| Wellington City           | 207,381          | 174,048                                   | 14,504.0   | 6.9   |
| Masterton District        | 25,411           | 20,421                                    | 5,105.3  | 19.6  |
| Carterton District        | 9,018            | 7,313                                     | _  | _   |
| South Wairarapa District  | 10,437           | 8,552                                     | _  | _   |
| Tasman District           | 53,304           | 43,711                                    | 14,570.2   | 6.9   |
| Nelson City               | 52,021           | 42,941                                    | 7,156.9  | 14.0  |
| Marlborough District      | 48,808           | 40,540                                    | 40,540.0   | 2.5   |
| Kaikoura District         | 4,308            | 3,667                                     | <u> </u>   | _   |
| Buller District           | 10,204           | 8,525                                     | _  | _   |
| Grey District             | 13,730           | 11,111                                    | 5,555.7  | 18.0  |
| Westland District         | 10,441           | 8,889                                     | <u> </u>   | _   |
| Hurunui District          | 12,905           | 10,426                                    | _  | _   |
| Waimakariri District      | 58,348           | 46,973                                    | _  | _   |
| Christchurch City         | 374,920          | 311,032                                   | 12,959.7   | 7.7   |
| Selwyn District           | 58,215           | 45,428                                    | 22,714.0   | 4.4   |
| Ashburton District        | 33,289           | 26,590                                    | 26,590.0   | 3.8   |
| Timaru District           | 46,848           | 38,535                                    | 38,534.7   | 2.6   |
| Mackenzie District        | 6,588            | 5,697                                     | _  | _   |
| Waimate District          | 7,777            | 6,404                                     | _  | _   |
| Chatham Islands Territory | 683              | 566                                       | _  | _   |
| Waitaki District          | 22,788           | 18,653                                    | 18,653.3   | 5.4   |
| Central Otago District    | 21,662           | 18,086                                    | ·<br>—   | _   |
| Queenstown-Lakes District | 42,150           | 35,627                                    | 17,813.7   | 5.6   |
| Dunedin City              | 128,729          | 108,738                                   | 7,249.2  | 13.8  |
| Clutha District           | 17,920           | 14,477                                    | 14,477.3   | 6.9   |
| Southland District        | 32,996           | 26,385                                    | 26,384.7   | 3.8   |
| Gore District             | 12,478           | 10,045                                    | 10,045.3   | 10.0  |
| Invercargill City         | 54,649           | 44,033                                    | 6,290.5  | 15.9  |
| Missing/outside TA        | 161              | 159                                       | _  | _   |
| Total <sup>b</sup>        | 4,727,469        | 3,804,669                                 | 10,255.2   | 9.8   |

Total b 4,727,469 3,804,1 a Population estimate as at 30 June 2017 b Due to rounding, individual figures may not always sum to the stated totals (Data sources: Dental register, workforce survey & Statistics New Zealand)

Table 4-15. Population to practising dental technicians and clinical dental technicians by district health board (DHB), for 2016

|                       | No with practising certificates | Total population <sup>a</sup> | Population aged 15+<br>years | Population aged 15+<br>years-to-technicians ratio | Technicians per<br>100,000 population<br>aged 15+ years |
|-----------------------|---------------------------------|-------------------------------|------------------------------|---|---|
| Northland             | 12                              | 172,549                       | 135,775                      | 11,315  | 8.8   |
| Waitemata             | 68                              | 580,455                       | 465,256                      | 6,842   | 14.6  |
| Auckland              | 38                              | 486,337                       | 403,904                      | 10,629  | 9.4   |
| Counties-Manukau      | 33                              | 527,807                       | 405,867                      | 12,299  | 8.1   |
| Waikato               | 23                              | 397,713                       | 313,731                      | 13,640  | 7.3   |
| Lakes                 | 4                               | 108,365                       | 84,816                       | 21,204  | 4.7   |
| Bay of Plenty         | 13                              | 228,003                       | 181,121                      | 13,932  | 7.2   |
| Tairawhiti            | 3                               | 47,455                        | 35,990                       | 11,997  | 8.3   |
| Hawke's Bay           | 10                              | 116,695                       | 92,316                       | 9,232   | 10.8  |
| Taranaki              | 4                               | 163,785                       | 129,023                      | 32,256  | 3.1   |
| Whanganui             | 2                               | 63,662                        | 50,695                       | 25,348  | 3.9   |
| MidCentral            | 8                               | 173,273                       | 138,970                      | 17,371  | 5.8   |
| Hutt                  | 11                              | 145,708                       | 116,088                      | 10,553  | 9.5   |
| Capital and Coast     | 23                              | 304,339                       | 250,024                      | 10,871  | 9.2   |
| Wairarapa             | 1                               | 44,035                        | 35,476                       | 35,476  | 2.8   |
| Nelson-Marlborough    | 17                              | 149,485                       | 122,632                      | 7,214   | 13.9  |
| West Coast            | _                               | 33,534                        | 27,570                       | _   | -   |
| Canterbury            | 44                              | 534,257                       | 437,133                      | 9,935   | 10.1  |
| South Canterbury      | 4                               | 59,922                        | 49,324                       | 12,331  | 8.1   |
| Southern <sup>b</sup> | 47 [34]                         | 323,696                       | 266,868                      | 5,678 [7,849]                                     | 17.6 [12.7]   |
| Unknown               | 10                              |                               |                              |   |   |
| Total                 | 375                             | 4,661,076                     | 3,742,580                    | 9,980   | 10.0  |

<sup>&</sup>lt;sup>a</sup> Population estimates by DHB for 2016 are unavailable from Statistics NZ; values were linearly interpolated between 2015 and 2018. Due to rounding, individual figures may not always sum to the stated totals

<sup>&</sup>lt;sup>b</sup> Data in square brackets for Southern DHB exclude dental hygienists and orthodontic auxiliaries who reported the University of Otago as their primary employer (Data sources: Workforce survey and Statistics New Zealand)

Table 4-16. Population to practising dental technicians and clinical dental technicians by DHB, for 2017

|                       | No with practising certificates | Total population <sup>a</sup> | Population aged 15+<br>years | Population aged 15+<br>years-to-technicians<br>ratio | Technicians per<br>100,000 population<br>aged 15+ years |
|-----------------------|---------------------------------|-------------------------------|------------------------------|--|---|
| Northland             | 9                               | 176,798                       | 139,449                      | 15,494   | 6.5   |
| Waitemata             | 52                              | 585,311                       | 469,712                      | 9,033  | 11.1  |
| Auckland              | 38                              | 482,673                       | 401,807                      | 10,574   | 9.5   |
| Counties-Manukau      | 35                              | 533,914                       | 411,335                      | 11,752   | 8.5   |
| Waikato               | 25                              | 404,826                       | 319,763                      | 12,791   | 7.8   |
| Lakes                 | 8                               | 111,929                       | 88,032                       | 11,004   | 9.1   |
| Bay of Plenty         | 12                              | 234,505                       | 186,641                      | 15,553   | 6.4   |
| Tairawhiti            | 4                               | 47,510                        | 36,179                       | 9,045  | 11.1  |
| Hawke's Bay           | 38                              | 117,489                       | 92,933                       | 2,446  | 40.9  |
| Taranaki              | 4                               | 167,070                       | 132,046                      | 33,012   | 3.0   |
| Whanganui             | 5                               | 64,725                        | 51,691                       | 10,338   | 9.7   |
| MidCentral            | 11                              | 174,447                       | 139,940                      | 12,722   | 7.9   |
| Hutt                  | 10                              | 147,416                       | 117,775                      | 11,778   | 8.5   |
| Capital and Coast     | 20                              | 307,579                       | 253,347                      | 12,667   | 7.9   |
| Wairarapa             | 4                               | 44,870                        | 36,253                       | 9,063  | 11.0  |
| Nelson-Marlborough    | 9                               | 154,171                       | 127,165                      | 14,129   | 7.1   |
| West Coast            | 2                               | 34,368                        | 28,541                       | 14,270   | 7.0   |
| Canterbury            | 28                              | 542,415                       | 444,467                      | 15,874   | 6.3   |
| South Canterbury      | 1                               | 61,243                        | 50,648                       | 50,648   | 2.0   |
| Southern <sup>b</sup> | 26 [10]                         | 333,393                       | 276,137                      | 10.621 [27,614]                                      | 9.4 [3.6]   |
| Unknown               | 30                              |                               |                              |  |   |
| Total                 | 371                             | 4,726,651                     | 3,803,860                    | 10,253   | 9.8   |

<sup>&</sup>lt;sup>a</sup> Population estimates by DHB for 2017 are unavailable from Statistics NZ; values were linearly interpolated between 2015 and 2018. Due to rounding, individual figures may not always sum to the stated totals

<sup>&</sup>lt;sup>b</sup> Data in square brackets for Southern DHB exclude dental hygienists and orthodontic auxiliaries who reported the University of Otago as their primary employer (Data sources: Workforce survey and Statistics New Zealand)

Table 4-17. Practising pattern, dental technicians and clinical dental technicians who reported that they are not currently practising in New Zealand

|      | Employment status                              | Females (%) | Males (%) | Total (%) |
|------|--|-------------|-----------|-----------|
|      | Practising overseas                            | 2 (10.0)    | 6 (33.3)  | 8 (21.1)  |
|      | Overseas and not practising                    | 2 (10.0)    | 3 (16.7)  | 5 (13.2)  |
|      | In NZ but not practising                       | 16 (80.0)   | 9 (50.0)  | 25 (65.8) |
|      | Total not currently practising                 | 20 (52.6)   | 18 (47.4) | 38        |
|      | Practising status not stated                   | 26          | 52        | 78        |
| 16   | Employment status of 'In NZ but not practising | ng' group   |           |           |
| 2016 | Another health profession                      | 1           | 2         | 3         |
|      | Non-health profession                          | 2           | 4         | 6         |
|      | Full-time study                                | 4           | 1         | 5         |
|      | Parental responsibilities                      | 7           | _         | 7         |
|      | Other unpaid work                              | _           | _         | _         |
|      | Retired  | _           | _         | _         |
|      | Not reported                                   | 2           | 2         | 4         |
|      | Practising overseas                            | 1 (9.1)     | 5 (33.3)  | 6 (23.1)  |
|      | Overseas and not practising                    | 2 (18.2)    | 1 (6.7)   | 3 (11.5)  |
|      | In NZ but not practising                       | 8 (72.7)    | 9 (60.0)  | 17 (65.4) |
|      | Total not currently practising                 | 11 (42.3)   | 15 (57.7) | 26        |
|      | Practising status not stated                   | 33          | 70        | 103       |
|      | Employment status of 'In NZ but not practising | ng' group   |           |           |
| 2017 | Another health profession                      | 1           | 4         | 5         |
|      | Non-health profession                          | 1           | 2         | 3         |
|      | Full-time study                                | 1           | _         | 1         |
|      | Parental responsibilities                      | 3           | _         | 3         |
|      | Other unpaid work                              | _           | 1         | 1         |
|      | Seeking work                                   | _           | 1         | 1         |
|      | Not reported                                   | 2           | 1         | 3         |

(Data source: Workforce survey)

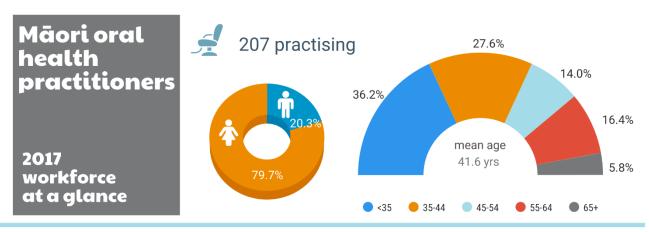
Table 4-18. Postgraduate training undertaken by dental technicians and clinical dental technicians

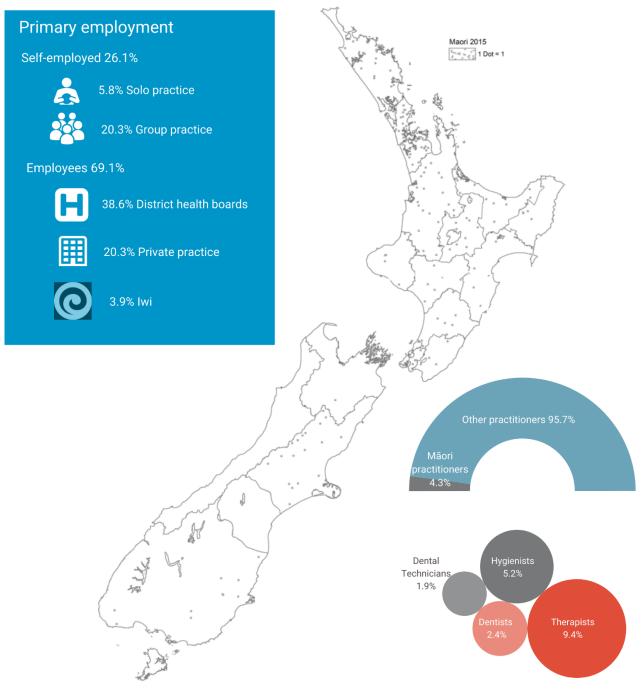
|      | Expected year of completion    | Current APC (%) | No current APC<br>(%) | Overall (%) |
|------|--------------------------------|-----------------|-----------------------|-------------|
|      | 2015                           | 16 (57.1)       | _                     | 16 (57.1)   |
|      | 2016                           | 2 (7.1)         | _                     | 2 (7.1)     |
| 2016 | 2017                           | 5 (17.9)        | _                     | 5 (17.9)    |
| 20   | 2018                           | 2 (7.1)         | _                     | 2 (7.1)     |
|      | Not stated/unsure              | 3 (10.7)        | _                     | 3 (10.7)    |
|      | Total in postgraduate training | 28 (100.0)      | _                     | 28          |
|      | 2016                           | 4 (28.6)        | _                     | 4 (26.7)    |
| 2017 | 2017                           | 9 (64.3)        | 1 (100.0)             | 10 (66.7)   |
| 20   | Not stated/unsure              | 1 (7.1)         | _                     | 1 (6.7)     |
|      | Total in postgraduate training | 14 (93.3)       | 1 (6.7)               | 15          |

<sup>(</sup>Data source: Workforce survey)
13 of the postgraduate training reported in 2017 related to clinical dental technology; the other two were a MHealthSc and PhD.

# Section 5: The Māori oral health practitioners workforce







### Executive summary Māori oral health practitioners

#### Māori representation

Māori made up 4.3% (207) of the total practising oral health workforce in 2017 down from the 2015 level of 5.4% (229). The largest proportional representation is in dental therapists (9.4%) followed by dental hygienists (5.2%). Table 5-1

Table 5-1. Māori ethnicity, self-identified by practising oral health practitioners

|  | 2015 2016   |                |                 |               |             | 2017           |                 |                |             |                |                 |
|--|-------------|----------------|-----------------|---------------|-------------|----------------|-----------------|----------------|-------------|----------------|-----------------|
| Dentists and dental specialists                          | Māori<br>71 | Total<br>2,292 | % Total<br>3.1% | % YoY<br>-1.4 | Māori<br>70 | Total<br>2,432 | % Total<br>2.9% | % YoY<br>-10.0 | Māori<br>63 | Total<br>2,596 | % Total<br>2.4% |
| Dental therapists  | 99          | 875            | 11.3%           | -1.0          | 98          | 942            | 10.4%           | -8.2           | 90          | 961            | 9.4%            |
| Dental hygienists and orthodontic auxiliaries            | 50          | 735            | 6.8%            | -4.0          | 48          | 843            | 5.7%            | -2.1           | 47          | 897            | 5.2%            |
| Dental technicians<br>and clinical dental<br>technicians | 9           | 353            | 2.5%            | -44.4         | 5           | 375            | 1.3%            | 40.0           | 7           | 371            | 1.9%            |
| Total  | 229         | 4,255          | 5.4%            | -3.5          | 221         | 4,592          | 4.8%            | -6.3           | 207         | 4,825          | 4.3%            |

#### **Demographics**

The age group distribution for Māori is skewed towards the younger age groups, with 25 to 29 being the largest group (21.7%). This is an encouraging sign for the future of Māori oral health practitioners. Dental hygienists and dental therapists are more prominent in the 25-29 age group, most likely oral health graduates registered in both scopes of practice. Dental therapists are also dominant in the 40-44 and 60-64 age bands. Figure 5-1

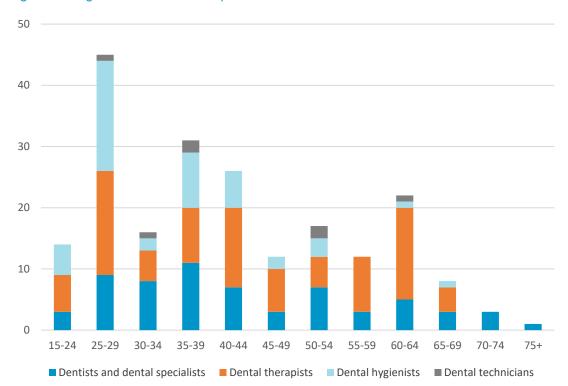


Figure 5-1. Age band distribution of practitioners self-identified as Māori

Females made up three quarters of the Māori workforce (165 79.7%) in 2017, increasing from 73.0% (138) in 2012. Table 5-4

#### Cohort remainder rates

The cohort remainder rates for Māori graduates was calculated with data kindly provided by the Faculty of Dentistry, University of Otago and Department of Oral Health, Auckland University of Technology. Limitations for these analyses include: small numbers, and Māori identification for the analysis relies on self-identification both during their studies and with the Council.

An increase from 2 to 7 dentistry students who identified as Māori, graduated in 2015 and 2016 respectively. The analysis did indicate that for dentists and dental specialists, the Māori graduate remainder rate of the 2015 cohort is 50%, while none of the 7 students from the 2016 cohort were registered with a practising certificate as at 30 September 2017. Table 5-6

In 2016 there were two oral health graduates who self-identified as Māori, but none were registered and practising as a dental hygienist or dental therapist as at 31 March 2017. Table 5-8 & Table 5-9

No Māori technology graduates were reported in the 2015 or 2016 cohorts, similar trend to earlier years.

Similar to previous years, it appears that there is a lag between graduation and practising for the various Māori cohorts.

#### Practising characteristics

Being an employee is the largest form of primary employment for Māori oral health practitioners, and increased by from 128 (55.9%) in 2015 to 143 (69.1%) in 2017. District health boards were reported as the largest primary employer accounting for 38.6% in 2017, followed by private practice (20.3%) and lwi accounted for 3.9% (down from 5.2% reported in 2015). Table 5-10

#### Geographical distribution

Geographical distribution of Māori oral health practitioners by territorial authorities and district health boards was completed for 2016-2017. The greatest concentrations were found in Auckland (60 29.0%) followed by the Hamilton (5.3%) in 2017. Only minor movements occurred during the period, mainly due to the small size of the group. However, it did highlight a concentration of Māori practitioners in the North Island. Table 5-11 - Table 5-14

## Māori oral health practitioners workforce data tables

Table 5-2. Māori ethnicity, self-identified by practising oral health practitioners

|      | Ethnicity | Total (%)    | Dentists and dental specialists (%) | Dental therapists (%) | Dental hygienists (%) | Dental technicians (%) |
|------|-----------|--------------|-------------------------------------|-----------------------|-----------------------|------------------------|
|      | Māori     | 221 (4.8)    | 70 (2.9)                            | 98 (10.4)             | 48 (5.7)              | 5 (1.3)                |
| 2016 | Other     | 4,371 (95.2) | 2,362 (97.1)                        | 844 (89.6)            | 795 (94.3)            | 370 (98.7)             |
| 20   | Total     | 4,592        | 2,432                               | 942                   | 843                   | 375                    |
|      | Māori     | 207 (4.3)    | 63 (2.4)                            | 90 (9.4)              | 47 (5.2)              | 7 (1.9)                |
| 2017 | Other     | 4,618 (95.7) | 2,533 (97.6)                        | 871 (90.6)            | 850 (94.8)            | 364 (98.1)             |
|      | Total     | 4,825        | 2,596                               | 961                   | 897                   | 371                    |

(Data source: Dental register and workforce survey)

Table 5-3. Age of practising Māori oral health practitioners, as at the end of the 2017 reporting periods <sup>a</sup>

| Age bands | Total (%) | Dentists and dental specialists (%) | Dental therapists (%) | Dental hygienists (%) | Dental technicians (%) |
|-----------|-----------|-------------------------------------|-----------------------|-----------------------|------------------------|
| 15 - 24   | 14 (6.8)  | 3 (4.8)                             | 6 (6.7)               | 5 (10.6)              | _                      |
| 25 - 29   | 45 (21.7) | 9 (14.3)                            | 17 (18.9)             | 18 (38.3)             | 1 (14.3)               |
| 30 - 34   | 16 (7.7)  | 8 (12.7)                            | 5 (5.6)               | 2 (4.3)               | 1 (14.3)               |
| 35 - 39   | 31 (15.0) | 11 (17.5)                           | 9 (10.0)              | 9 (19.1)              | 2 (28.6)               |
| 40 - 44   | 26 (12.6) | 7 (11.1)                            | 13 (14.4)             | 6 (12.8)              | _                      |
| 45 - 49   | 12 (5.8)  | 3 (4.8)                             | 7 (7.8)               | 2 (4.3)               | _                      |
| 50 - 54   | 17 (8.2)  | 7 (11.1)                            | 5 (5.6)               | 3 (6.4)               | 2 (28.6)               |
| 55 - 59   | 12 (5.8)  | 3 (4.8)                             | 9 (10.0)              | _                     | _                      |
| 60 - 64   | 22 (10.6) | 5 (7.9)                             | 15 (16.7)             | 1 (2.1)               | 1 (14.3)               |
| 65 - 69   | 8 (3.9)   | 3 (4.8)                             | 4 (4.4)               | 1 (2.1)               | _                      |
| 70 - 74   | 3 (1.4)   | 3 (4.8)                             | _                     | _                     | _                      |
| 75+       | 1 (0.5)   | 1 (1.6)                             | _                     | _                     | _                      |
| Total     | 207       | 63 (30.4)                           | 90 (43.5)             | 47 (22.7)             | 7 (3.4)                |

<sup>&</sup>lt;sup>a</sup> Dentists and dental specialists reporting period ends 30 September 2017; others end 31 March 2017 (Data source: Dental register)

Table 5-4. Gender of practising Māori oral health practitioners

|      | Gender | Total (%)  | Dentists and dental specialists (%) | Dental therapists (%) | Dental hygienists (%) | Dental technicians (%) |
|------|--------|------------|-------------------------------------|-----------------------|-----------------------|------------------------|
|      | Male   | 48 (21.7)  | 39 (55.7)                           | 2 (2.0)               | 3 (6.3)               | 4 (80.0)               |
| 2016 | Female | 173 (78.3) | 31 (44.3)                           | 96 (98.0)             | 45 (93.7)             | 1 (20.0)               |
| •    | Total  | 221        | 70 (31.7)                           | 0 (31.7) 98 (44.3)    |                       | 5 (2.3)                |
|      | Male   | 42 (20.3)  | 33 (52.4)                           | 3 (3.3)               | 2 (4.3)               | 4 (57.1)               |
| 2017 | Female | 165 (79.7) | 30 (47.6)                           | 87 (96.7)             | 45 (95.7)             | 3 (42.9)               |
| •    | Total  | 207        | 63 (30.4)                           | 90 (43.5)             | 47 (22.7)             | 7 (3.4)                |

(Data source: Dental register)

Table 5-5. Scope of practice registrations for practising Māori dentists and dental specialists, by gender

|      |                              | Totala | Male (row %) | Female (row %) |
|------|------------------------------|--------|--------------|----------------|
|      | Dentists                     | 68     | 38 (55.9)    | 30 (44.1)      |
|      | Dental specialists           | 3      | 2 (66.7)     | 1 (33.3)       |
|      | Total                        | 71     | 40 (56.3)    | 31 (43.7)      |
|      | Specialty                    |        |              |                |
|      | Endodontics                  | _      | _            | _              |
|      | Oral & Maxillofacial Surgery | _      | —            | _              |
|      | Oral Medicine                | _      | _            | _              |
| 9    | Oral Pathology               | _      | _            | _              |
| 2016 | Oral Surgery                 | 1      | 1 (100.0)    | _              |
|      | Orthodontics                 | _      | _            | _              |
|      | Paediatric Dentistry         | _      | _            | _              |
|      | Periodontology               | 1      | 1 (100.0)    | _              |
|      | Prosthodontics               | _      | _            | _              |
|      | Public Health Dentistry      | 1      | _            | 1 (100.0)      |
|      | Restorative Dentistry        | _      | _            | _              |
|      | Special Needs Dentistry      | _      | <u> </u>     |                |
|      | Dentists                     | 60     | 31 (51.7)    | 29 (48.3)      |
|      | Dental specialists           | 4      | 3 (75.0)     | 1 (25.0)       |
|      | Total                        | 64     | 34 (53.1)    | 30 (46.9)      |
|      | Specialty                    |        |              |                |
|      | Endodontics                  | _      | _            | _              |
|      | Oral & Maxillofacial Surgery | _      | _            | _              |
|      | Oral Medicine                | _      | _            | _              |
| _    | Oral Pathology               | _      | _            | _              |
| 2017 | Oral Surgery                 | 1      | 1 (100.0)    | _              |
|      | Orthodontics                 | 1      | 1 (100.0)    | _              |
|      | Paediatric Dentistry         | _      | _            | _              |
|      | Periodontology               | 1      | 1 (100.0)    | _              |
|      | Prosthodontics               | _      | _            | _              |
|      | Public Health Dentistry      | 1      | _            | 1 (100.0)      |
|      | Restorative Dentistry        | _      | _            | _              |
|      | Special Needs Dentistry      | _      | _            | _              |

<sup>&</sup>lt;sup>a</sup> A practitioner may be registered in multiple scopes of practice (Data source: Dental register)

Table 5-6. Cohort remainder rate for University of Otago Māori dentistry and dental specialist graduates, as at 30 September 2017

| Graduation cohort | Total number of Māori<br>domestic dental<br>graduates | Number of Māori dental graduates with practising certificates <sup>a</sup> | Māori cohort remainder rate |
|-------------------|---|--|-----------------------------|
| 1995              | 1   | _  | _                           |
| 1996              | 7   | _  | _                           |
| 1997              | 2   | 2  | 100.0                       |
| 1998              | 1   | _  | _                           |
| 1999              | 4   | 1  | 25.0                        |
| 2000              | 4   | _  | _                           |
| 2001              | 3   | 1  | 33.3                        |
| 2002              | 1   | _  | _                           |
| 2003              | 6   | 5  | 83.3                        |
| 2004              | 5   | 3  | 60.0                        |
| 2005              | 4   | 1  | 25.0                        |
| 2006              | 7   | 2  | 28.6                        |
| 2007              | 6   | 3  | 50.0                        |
| 2008              | 1   | _  | _                           |
| 2009              | 1   | _  | _                           |
| 2010              | 5   | 4  | 80.0                        |
| 2011              | 3   | 2  | 66.7                        |
| 2012              | 4   | 3  | 75.0                        |
| 2013              | 2   | 1  | 50.0                        |
| 2014              | 3   | 1  | 33.3                        |
| 2015              | 2   | 1  | 50.0                        |
| 2016              | 7   | _  | _                           |

<sup>&</sup>lt;sup>a</sup> No practising practitioners does not necessarily mean the graduates are not practising; they may have not selected Māori as ethnicity with the Council (Data sources: Dental register and Faculty of Dentistry, University of Otago)

Table 5-7. Longitudinal analysis of the cohort remainder rate of University of Otago Māori dental graduates

#### Year of graduation

|                            | 2016 | 2015     | 2014         | 2013           | 2012           | 2011              | 2010          | 2009         | 2008      |
|----------------------------|------|----------|--------------|----------------|----------------|-------------------|---------------|--------------|-----------|
|                            |      |          | Total number | of Māori denta | al graduates   |                   |               |              |           |
|                            | 7    | 2        | 3            | 2              | 4              | 3                 | 5             | 1            | 1         |
| Practising status as at: a |      |          | Number of Mā | ori dental gra | duates with pr | actising certific | cates (cohort | remainder ra | te)       |
| September 2017             | _    | 1 (50.0) | 1 (33.3)     | 1 (50.0)       | 3 (75.0)       | 2 (66.7)          | 4 (80.0)      | _            | _         |
| September 2016             |      | _        | 3 (100.0)    | 1 (50.0)       | 4 (100.0)      | 2 (66.7)          | 4 (80.0)      | 1 (100.0)    | _         |
| September 2015             |      |          | 3 (100.0)    | 1 (50.0)       | 3 (75.0)       | 2 (66.7)          | 2 (40.0)      | _            | 1 (100.0) |
| September 2014             |      |          |              | _              | 4 (100.0)      | 2 (66.7)          | 4 (80.0)      | _            | _         |
| September 2013             |      |          |              |                | _              | 2 (66.7)          | 4 (80.0)      | _            | 1 (100.0) |
| September 2012             |      |          |              |                |                | _                 | 3 (60.0)      | _            | _         |
|                            |      |          |              |                |                |                   |               |              |           |

<sup>&</sup>lt;sup>a</sup> No practising practitioners does not necessarily mean the graduates are not practising; they may have not selected Māori as ethnicity with the Council (Data sources: Dental register and Faculty of Dentistry)

Table 5-8. Longitudinal analysis of the cohort remainder rate of Māori oral health graduates, registered as dental therapists

#### Year of graduation

|                            |      |          | 100.0        | gradation        |                 |                 |                |               |          |
|----------------------------|------|----------|--------------|------------------|-----------------|-----------------|----------------|---------------|----------|
|                            | 2016 | 2015     | 2014         | 2013             | 2012            | 2011            | 2010           | 2009          | 2008     |
|                            |      |          | Total number | of Māori oral h  | nealth graduate | es              |                |               |          |
|                            | 2    | 3        | 14           | 6                | 8               | 3               | 3              | 5             | 9        |
| Practising status as at: a |      |          | Number of Ma | iori oral health | graduates wit   | h practising ce | rtificates (co | ohort remaind | er rate) |
| March 2017                 | _    | 1 (33.3) | 9 (64.3)     | 3 (50.0)         | 7 (87.5)        | 3 (100.0)       | 1 (33.3)       | 3 (60.0)      | 5 (55.6) |
| March 2016                 |      | _        | 10 (71.4)    | 2 (33.3)         | 6 (75.0)        | 2 (66.7)        | 2 (66.7)       | 3 (60.0)      | 5 (55.6) |
| March 2015                 |      |          | 12 (85.7)    | 5 (83.3)         | 6 (75.0)        | 3 (100.0)       | 2 (66.7)       | 4 (80.0)      | 5 (55.6) |
| March 2014                 |      |          |              | 1 (16.7)         | 7 (87.5)        | 3 (100.0)       | 2 (66.7)       | 2 (40.0)      | 6 (66.7) |
| March 2013                 |      |          |              |                  | _               | 3 (100.0)       | 2 (66.7)       | 5 (100.0)     | 4 (44.4) |
| March 2012                 |      |          |              |                  |                 | _               | 2 (66.7)       | 5 (100.0)     | 5 (55.6) |
|                            |      |          |              |                  |                 |                 |                |               |          |

<sup>&</sup>lt;sup>a</sup> No practising practitioners does not necessarily mean the graduates are not practising; they may have not selected Māori as ethnicity with the Council (Data sources: Dental register and Faculty of Dentistry, University of Otago and Department of Oral Health, Auckland University of Technology)

Table 5-9. Longitudinal analysis of the cohort remainder rate of Māori oral health graduates, registered as dental hygienists

#### Year of graduation

|                            | 2016 | 2015     | 2014         | 2013             | 2012           | 2011             | 2010             | 2009          | 2008     |
|----------------------------|------|----------|--------------|------------------|----------------|------------------|------------------|---------------|----------|
|                            |      |          | Total number | of Māori oral h  | nealth graduat | es               |                  |               |          |
|                            | 2    | 3        | 14           | 6                | 8              | 3                | 3                | 5             | 9        |
| Practising status as at: a |      |          | Number of Ma | iori oral health | graduates wi   | th practising ce | ertificates (col | nort remainde | rate)    |
| March 2017                 | _    | 1 (33.3) | 4 (28.6)     | 3 (50.0)         | 6 (75.0)       | 2 (66.7)         | 1 (33.3)         | 3 (60.0)      | 3 (33.3) |
| March 2016                 |      | _        | 5 (35.7)     | 3 (50.0)         | 4 (50.0)       | 2 (66.7)         | 2 (66.7)         | 3 (60.0)      | 4 (44.4) |
| March 2015                 |      |          | 12 (85.7)    | 5 (83.3)         | 6 (75.0)       | 3 (100.0)        | 2 (66.7)         | 4 (80.0)      | 3 (33.3) |
| March 2014                 |      |          |              | _                | 6 (75.0)       | 3 (100.0)        | 2 (66.7)         | 4 (80.0)      | 5 (55.6) |
| March 2013                 |      |          |              |                  | _              | 3 (100.0)        | 2 (66.7)         | 4 (80.0)      | 4 (44.4) |
| March 2012                 |      |          |              |                  |                | _                | 1 (33.3)         | 5 (100.0)     | 4 (44.4) |
|                            |      |          |              |                  |                |                  |                  |               |          |

<sup>&</sup>lt;sup>a</sup> No practising practitioners does not necessarily mean the graduates are not practising; they may have not selected Māori as ethnicity with the Council (Data sources: Dental register and Faculty of Dentistry, University of Otago and Department of Oral Health, Auckland University of Technology)

Table 5-10. Type of primary employment of practising Māori oral health practitioners

|      |                                | Total (%)  | Dentists and dental specialists (%) | Dental therapists (%) | Dental hygienists (%) | Dental technicians (%) |
|------|--------------------------------|------------|-------------------------------------|-----------------------|-----------------------|------------------------|
|      | Self-employed                  |            |                                     |                       |                       |                        |
|      | Solo practice                  | 15 (6.8)   | 9 (12.9)                            | 1 (1.0)               | 3 (6.3)               | 2 (40.0)               |
|      | Group practice                 | 47 (21.3)  | 39 (55.7)                           | 2 (2.0)               | 5 (10.4)              | 1 (20.0)               |
|      | Subtotal                       | 62 (28.1)  | 48 (68.6)                           | 3 (3.1)               | 8 (16.7)              | 3 (60.0)               |
|      | Employee                       |            |                                     |                       |                       |                        |
|      | Private practice               | 39 (17.6)  | 4 (5.7)                             | 12 (12.2)             | 21 (43.8)             | 2 (40.0)               |
| "    | DHB                            | 86 (38.9)  | 7 (10.0)                            | 66 (67.3)             | 13 (27.1)             | _                      |
| 2016 | Universities                   | 6 (2.7)    | 2 (2.9)                             | 3 (3.1)               | 1 (2.1)               | _                      |
| •    | Government Department, not MOH | 3 (1.4)    | 1 (1.4)                             | 1 (1.0)               | 1 (2.1)               | _                      |
|      | lwi                            | 10 (4.5)   | 4 (5.7)                             | 4 (4.1)               | 2 (4.2)               | _                      |
|      | Ministry of Health             | 3 (1.4)    | 1 (1.4)                             | 2 (2.0)               | _                     | _                      |
|      | Subtotal                       | 147 (66.5) | 19 (27.1)                           | 88 (89.8)             | 38 (79.2)             | 2 (40.0)               |
|      | Other forms of employment      | _          | _                                   | _                     | _                     | _                      |
|      | No reply to question           | 12 (5.4)   | 3 (4.3)                             | 7 (7.1)               | 2 (4.2)               | _                      |
|      | Total                          | 221        | 70                                  | 98                    | 48                    | 5                      |

|      |                                | Total (%)  | Dentists and<br>dental specialists<br>(%) | Dental therapists<br>(%) | Dental hygienists<br>(%) | Dental<br>technicians (%) |
|------|--------------------------------|------------|---|--------------------------|--------------------------|---------------------------|
|      | Self-employed                  |            |   |                          |                          |                           |
|      | Solo practice                  | 12 (5.8)   | 8 (12.7)                                  | 1 (1.1)                  | 2 (4.3)                  | 1 (14.3)                  |
|      | Group practice                 | 42 (20.3)  | 36 (57.1)                                 | 2 (2.2)                  | 4 (8.5)                  | _                         |
|      | Subtotal                       | 54 (26.1)  | 44 (69.8)                                 | 3 (3.3)                  | 6 (12.8)                 | 1 (14.3)                  |
|      | Employee                       |            |   |                          |                          |                           |
|      | Private practice               | 42 (20.3)  | 6 (9.5)                                   | 13 (14.4)                | 19 (40.4)                | 4 (57.1)                  |
|      | DHB                            | 80 (38.6)  | 4 (6.3)                                   | 61 (67.8)                | 14 (29.8)                | 1 (14.3)                  |
| 2017 | Universities                   | 7 (3.4)    | 3 (4.8)                                   | 3 (3.3)                  | 1 (2.1)                  | _                         |
| •    | Government Department, not MOH | 2 (1.0)    | _   | 1 (1.1)                  | 1 (2.1)                  | _                         |
|      | lwi                            | 8 (3.9)    | 2 (3.2)                                   | 4 (4.4)                  | 2 (4.3)                  | _                         |
|      | Ministry of Health             | 4 (1.9)    | 2 (3.2)                                   | 1 (1.1)                  | _                        | 1 (14.3)                  |
|      | Subtotal                       | 143 (69.1) | 17 (27.0)                                 | 83 (92.2)                | 37 (78.7)                | 6 (85.7)                  |
|      | Other forms of employment      | _          | _   | _                        | _                        | _                         |
|      | No reply to question           | 10 (4.8)   | 2 (3.2)                                   | 4 (4.4)                  | 4 (8.5)                  | _                         |
|      | Total                          | 207        | 63  | 90                       | 47                       | 7                         |

(Data source: Workforce survey)

Table 5-11. Geographic distribution of practising Māori dentists by Territorial Authority (TA)

| TA area                        | 2016 (%)  | 2017 (%)     |
|--------------------------------|-----------|--------------|
| Far North                      | 2 (2.9)   | 2 (3.2)      |
| Whangarei                      | 1 (1.4)   | 1 (1.6)      |
| Kaipara                        | _         | _            |
| Auckland unitary authority     | 16 (22.9) | 20 (31.7)    |
| Rodney                         | 1 (1.4)   | 1 (1.6)      |
| North Shore                    | 3 (4.3)   | 4 (6.3)      |
| Waitakere                      | 2 (2.9)   | 1 (1.6)      |
| Auckland                       | 7 (10.0)  | 10 (15.9)    |
| Manukau                        | 2 (2.9)   | 3 (4.8)      |
| Papakura                       | _         | _            |
| Franklin                       | 1 (1.4)   | 1 (1.6)      |
| Thames-Coromandel District     | _         | 1 (1.6)      |
| Hauraki District               | _         | <del>_</del> |
| Waikato District               | _         | _            |
| Matamata-Piako District        | 1 (1.4)   | 1 (1.6)      |
| Hamilton City                  | 2 (2.9)   | _            |
| Waipa District                 | 2 (2.9)   | 2 (3.2)      |
| Otorohanga District            | _         | _            |
| South Waikato District         | _         | _            |
| Waitomo District               | _         | _            |
| Taupo District                 | _         | <u>—</u>     |
| Western Bay of Plenty District | _         | 1 (1.6)      |
| Tauranga City                  | 3 (4.3)   | 2 (3.2)      |
| Rotorua District               | 2 (2.9)   | 2 (3.2)      |
| Whakatane District             | _         | _            |
| Kawerau District               | _         | _            |
| Opotiki District               | _         | _            |
| Gisborne District              | 2 (2.9)   | 1 (1.6)      |
| Wairoa District                | _         | _            |
| Hastings District              | 1 (1.4)   | 1 (1.6)      |
| Napier City                    | 3 (4.3)   | 2 (3.2)      |
| Central Hawke's Bay District   | _         | _            |
| New Plymouth District          | 2 (2.9)   | 2 (3.2)      |
| Stratford District             | _         | _            |
| South Taranaki District        | _         | _            |
| Ruapehu District               | 1 (1.4)   | _            |
| Wanganui District              | 1 (1.4)   | 1 (1.6)      |
| Rangitikei District            | _         | _            |
| Manawatu District              | _         | _            |
| Palmerston North City          | _         | _            |

| TA area                   | 2016 (%) | 2017 (%) |
|---------------------------|----------|----------|
| Tararua District          | _        | _        |
| Horowhenua District       | 2 (2.9)  | 1 (1.6)  |
| Kapiti Coast District     | 2 (2.9)  | 2 (3.2)  |
| Porirua City              | _        | _        |
| Upper Hutt City           | _        | _        |
| Lower Hutt City           | 2 (2.9)  | 1 (1.6)  |
| Wellington City           | 6 (8.6)  | 3 (4.8)  |
| Masterton District        | 1 (1.4)  | 1 (1.6)  |
| Carterton District        | _        | 1 (1.6)  |
| South Wairarapa District  | _        | _        |
| Tasman District           | _        | _        |
| Nelson City               | _        | _        |
| Marlborough District      | 2 (2.9)  | 2 (3.2)  |
| Kaikoura District         | _        | _        |
| Buller District           | _        | _        |
| Grey District             | _        | _        |
| Westland District         | _        | _        |
| Hurunui District          | _        | _        |
| Waimakariri District      | 1 (1.4)  | 1 (1.6)  |
| Christchurch City         | 5 (7.1)  | 3 (4.8)  |
| Selwyn District           | _        | _        |
| Ashburton District        | 1 (1.4)  | 2 (3.2)  |
| Timaru District           | 1 (1.4)  | _        |
| Mackenzie District        | _        | _        |
| Waimate District          | _        | _        |
| Chatham Islands Territory | _        | _        |
| Waitaki District          | 1 (1.4)  | 1 (1.6)  |
| Central Otago District    | _        | _        |
| Queenstown-Lakes District | _        | _        |
| Dunedin City              | 5 (7.1)  | 5 (7.9)  |
| Clutha District           | _        | _        |
| Southland District        | _        | —        |
| Gore District             | _        | _        |
| Invercargill City         | 1 (1.4)  | 1 (1.6)  |
| TLA code not available    | 1 (1.4)  | _        |
| Total                     | 70       | 63       |

Table 5-12. Geographic distribution of practising Māori dental therapists by TA

| TA area                        | 2016 (%)  | 2017 (%)  |
|--------------------------------|-----------|-----------|
| Far North                      | 5 (5.1)   | 4 (4.4)   |
| Whangarei                      | 3 (3.1)   | 4 (4.4)   |
| Kaipara                        | _         | _         |
| Auckland unitary authority     | 28 (28.6) | 25 (27.8) |
| Rodney                         | 1 (1.0)   | _         |
| North Shore                    | 9 (9.2)   | 10 (11.1) |
| Waitakere                      | 4 (4.1)   | 4 (4.4)   |
| Auckland                       | 6 (6.1)   | 4 (4.4)   |
| Manukau                        | 7 (7.1)   | 5 (5.6)   |
| Papakura                       | _         | 1 (1.1)   |
| Franklin                       | 1 (1.0)   | 1 (1.1)   |
| Thames-Coromandel District     | _         | _         |
| Hauraki District               | _         | _         |
| Waikato District               | 1 (1.0)   | 1 (1.1)   |
| Matamata-Piako District        | _         | _         |
| Hamilton City                  | 9 (9.2)   | 7 (7.8)   |
| Waipa District                 | 2 (2.0)   | 2 (2.2)   |
| Otorohanga District            | 1 (1.0)   | _         |
| South Waikato District         | 1 (1.0)   | 1 (1.1)   |
| Waitomo District               | _         | _         |
| Taupo District                 | 1 (1.0)   | _         |
| Western Bay of Plenty District | 3 (3.1)   | 1 (1.1)   |
| Tauranga City                  | 3 (3.1)   | 6 (6.7)   |
| Rotorua District               | 7 (7.1)   | 6 (6.7)   |
| Whakatane District             | 1 (1.0)   | _         |
| Kawerau District               | _         | _         |
| Opotiki District               | _         | 1 (1.1)   |
| Gisborne District              | 1 (1.0)   | _         |
| Wairoa District                | 2 (2.0)   | 2 (2.2)   |
| Hastings District              | 2 (2.0)   | 3 (3.3)   |
| Napier City                    | 1 (1.0)   | _         |
| Central Hawke's Bay District   | _         | _         |
| New Plymouth District          | 4 (4.1)   | 3 (3.3)   |
| Stratford District             | _         | _         |
| South Taranaki District        | _         | 1 (1.1)   |
| Ruapehu District               | 1 (1.0)   | 1 (1.1)   |
| Wanganui District              | 2 (2.0)   | 2 (2.2)   |
| Rangitikei District            | 1 (1.0)   | 1 (1.1)   |
| Manawatu District              | _         | _         |
| Palmerston North City          | 1 (1.0)   | 1 (1.1)   |

| TA area                   | 2016 (%) | 2017 (%) |
|---------------------------|----------|----------|
| Tararua District          | _        | _        |
| Horowhenua District       | _        | _        |
| Kapiti Coast District     | 2 (2.0)  | 1 (1.1)  |
| Porirua City              | _        | _        |
| Upper Hutt City           | _        | _        |
| Lower Hutt City           | 1 (1.0)  | 2 (2.2)  |
| Wellington City           | 1 (1.0)  | 1 (1.1)  |
| Masterton District        | 1 (1.0)  | 1 (1.1)  |
| Carterton District        | _        | _        |
| South Wairarapa District  | _        | _        |
| Tasman District           | _        | _        |
| Nelson City               | _        | _        |
| Marlborough District      | _        | _        |
| Kaikoura District         | _        | _        |
| Buller District           | _        | _        |
| Grey District             | _        | _        |
| Westland District         | _        | _        |
| Hurunui District          | _        | _        |
| Waimakariri District      | _        | 1 (1.1)  |
| Christchurch City         | 4 (4.1)  | 3 (3.3)  |
| Selwyn District           | 1 (1.0)  | 1 (1.1)  |
| Ashburton District        | _        | _        |
| Timaru District           | _        | _        |
| Mackenzie District        | _        | _        |
| Waimate District          | _        | _        |
| Chatham Islands Territory | _        | _        |
| Waitaki District          | _        | _        |
| Central Otago District    | _        | _        |
| Queenstown-Lakes District | _        | _        |
| Dunedin City              | 4 (4.1)  | 4 (4.4)  |
| Clutha District           | 1 (1.0)  | 1 (1.1)  |
| Southland District        | _        | _        |
| Gore District             | 1 (1.0)  | 1 (1.1)  |
| Invercargill City         | _        | _        |
| TLA code not available    | 2 (2.0)  | 2 (2.2)  |
| Total                     | 98       | 90       |

Table 5-13. Geographic distribution of practising Māori dental hygienists by TA

| 0 1                            |           |           |
|--------------------------------|-----------|-----------|
| TA area                        | 2016 (%)  | 2017 (%)  |
| Far North                      | 3 (6.3)   | 3 (6.4)   |
| Whangarei                      | 2 (4.2)   | _         |
| Kaipara                        | _         | _         |
| Auckland unitary authority     | 16 (33.3) | 14 (29.8) |
| Rodney                         | 2 (4.2)   | 1 (2.1)   |
| North Shore                    | 5 (10.4)  | 4 (8.5)   |
| Waitakere                      | 2 (4.2)   | 3 (6.4)   |
| Auckland                       | 7 (14.6)  | 6 (12.8)  |
| Manukau                        | _         | _         |
| Papakura                       | _         | _         |
| Franklin                       | _         | _         |
| Thames-Coromandel District     | -         | _         |
| Hauraki District               | _         | _         |
| Waikato District               | <u> </u>  | _         |
| Matamata-Piako District        | _         | _         |
| Hamilton City                  | 3 (6.3)   | 4 (8.5)   |
| Waipa District                 | 2 (4.2)   | 2 (4.3)   |
| Otorohanga District            | _         | _         |
| South Waikato District         | 1 (2.1)   | 1 (2.1)   |
| Waitomo District               | _         | _         |
| Taupo District                 | 1 (2.1)   | _         |
| Western Bay of Plenty District | 1 (2.1)   | 1 (2.1)   |
| Tauranga City                  | 4 (8.3)   | 2 (4.3)   |
| Rotorua District               | 1 (2.1)   | 1 (2.1)   |
| Whakatane District             | _         | _         |
| Kawerau District               | _         | _         |
| Opotiki District               | _         | _         |
| Gisborne District              | 1 (2.1)   | _         |
| Wairoa District                | _         | _         |
| Hastings District              | 1 (2.1)   | 3 (6.4)   |
| Napier City                    | 1 (2.1)   | 1 (2.1)   |
| Central Hawke's Bay District   | _         | _         |
| New Plymouth District          | 1 (2.1)   | 3 (6.4)   |
| Stratford District             | _         | _         |
| South Taranaki District        | _         | _         |
| Ruapehu District               | _         | _         |
| Wanganui District              | _         | 1 (2.1)   |
| Rangitikei District            | _         | _         |
| Manawatu District              | _         | _         |
| Palmerston North City          | 1 (2.1)   | _         |
|                                | •         | •         |

| TA area   | 2016 (%) | 2017 (%) |
|---|----------|----------|
| Tararua District                                | _        | _        |
| Horowhenua District                             | _        | _        |
| Kapiti Coast District                           | _        | 1 (2.1)  |
| Porirua City                                    | _        | _        |
| Upper Hutt City                                 | _        | _        |
| Lower Hutt City                                 | _        | _        |
| Wellington City                                 | 2 (4.2)  | 1 (2.1)  |
| Masterton District                              | 1 (2.1)  | 1 (2.1)  |
| Carterton District                              | _        | _        |
| South Wairarapa District                        | _        | _        |
| Tasman District                                 | _        | _        |
| Nelson City                                     | _        | _        |
| Marlborough District                            | _        | _        |
| Kaikoura District                               | _        | _        |
| Buller District                                 | _        | _        |
| Grey District                                   | _        | _        |
| Westland District                               | _        | _        |
| Hurunui District                                | _        | _        |
| Waimakariri District                            | _        | _        |
| Christchurch City                               | 3 (6.3)  | 3 (6.4)  |
| Selwyn District                                 | _        | _        |
| Ashburton District                              | _        | —        |
| Timaru District                                 | _        | _        |
| Mackenzie District                              | _        | _        |
| Waimate District                                | _        | _        |
| Chatham Islands Territory                       | _        | _        |
| Waitaki District                                | _        | _        |
| Central Otago District                          | _        | _        |
| Queenstown-Lakes District                       | _        | _        |
| Dunedin City                                    | 2 (4.2)  | 2 (4.3)  |
| Clutha District                                 | 1 (2.1)  | 1 (2.1)  |
| Southland District                              | _        | _        |
| Gore District                                   | _        | _        |
| Invercargill City                               | _        | _        |
| TLA code not available                          | _        | 2 (4.3)  |
| Total  (Data sources: Dental register, workford | 48       | 47       |

Table 5-14. Geographic distribution of practising Māori dental technicians by TA

| TA area                        | 2016 (%) | 2017 (%)  |
|--------------------------------|----------|-----------|
| Far North                      | _        | _         |
| Whangarei                      | 1 (20.0) | _         |
| Kaipara                        | _        | _         |
| Auckland unitary authority     | 1 (20.0) | 1 (14.3%) |
| Rodney                         | _        | _         |
| North Shore                    | 1 (20.0) | 1 (14.3)  |
| Waitakere                      | _        | _         |
| Auckland                       | _        |           |
| Manukau                        | _        | _         |
| Papakura                       | _        |           |
| Franklin                       | _        | _         |
| Thames-Coromandel District     | _        | _         |
| Hauraki District               | _        |           |
| Waikato District               | _        |           |
| Matamata-Piako District        | _        | _         |
| Hamilton City                  | _        | _         |
| Waipa District                 | _        | _         |
| Otorohanga District            | _        | _         |
| South Waikato District         | _        |           |
| Waitomo District               | _        | _         |
| Taupo District                 | _        | _         |
| Western Bay of Plenty District | _        | _         |
| Tauranga City                  | _        | _         |
| Rotorua District               | _        |           |
| Whakatane District             | 1 (20.0) | 1 (14.3)  |
| Kawerau District               | _        | _         |
| Opotiki District               | _        | _         |
| Gisborne District              | _        | _         |
| Wairoa District                | _        |           |
| Hastings District              | _        |           |
| Napier City                    | _        | 1 (14.3)  |
| Central Hawke's Bay District   | _        | _         |
| New Plymouth District          | _        | _         |
| Stratford District             | _        | _         |
| South Taranaki District        | _        | _         |
| Ruapehu District               | _        | _         |
| Wanganui District              | _        | _         |
| Rangitikei District            | _        | _         |
| Manawatu District              | _        | _         |
| Palmerston North City          | _        | _         |

| TA area                   | 2016 (%) | 2017 (%) |
|---------------------------|----------|----------|
| Tararua District          | _        | _        |
| Horowhenua District       | _        | _        |
| Kapiti Coast District     | _        | _        |
| Porirua City              | _        | 1 (14.3) |
| Upper Hutt City           | 1 (20.0) | 1 (14.3) |
| Lower Hutt City           | _        | _        |
| Wellington City           | _        | _        |
| Masterton District        | _        | _        |
| Carterton District        | _        | _        |
| South Wairarapa District  | _        | _        |
| Tasman District           | _        | _        |
| Nelson City               | _        | _        |
| Marlborough District      | _        | 1 (14.3) |
| Kaikoura District         | _        | _        |
| Buller District           | _        | _        |
| Grey District             | _        | _        |
| Westland District         | _        | _        |
| Hurunui District          | _        | _        |
| Waimakariri District      | _        | _        |
| Christchurch City         | _        | 1 (14.3) |
| Selwyn District           | _        | _        |
| Ashburton District        | _        | _        |
| Timaru District           | _        | _        |
| Mackenzie District        | _        | _        |
| Waimate District          | _        | _        |
| Chatham Islands Territory | _        | _        |
| Waitaki District          | _        | _        |
| Central Otago District    | _        | _        |
| Queenstown-Lakes District | _        | _        |
| Dunedin City              | 1 (20.0) | _        |
| Clutha District           | _        | _        |
| Southland District        | _        | _        |
| Gore District             | _        | _        |
| Invercargill City         | _        | _        |
| TLA code not available    | _        | _        |
| Total                     | 5        | 7        |

Table 5-15. Geographic distribution of practising Māori dentists by district health board (DHB)

|                    | 2016     | 2017     |
|--------------------|----------|----------|
| Northland          | 3 (4.3)  | 2 (3.2)  |
| Waitemata          | 6 (8.6)  | 9 (14.3) |
| Auckland           | 6 (8.6)  | 8 (12.7) |
| Counties-Manukau   | 2 (2.9)  | 3 (4.8)  |
| Waikato            | 7 (10.0) | 5 (7.9)  |
| Lakes              | 2 (2.9)  | 1 (1.6)  |
| Bay of Plenty      | 3 (4.3)  | 3 (4.8)  |
| Tairawhiti         | 2 (2.9)  | 1 (1.6)  |
| Hawke's Bay        | 4 (5.7)  | 4 (6.3)  |
| Taranaki           | 2 (2.9)  | 2 (3.2)  |
| Whanganui          | 2 (2.9)  | _        |
| MidCentral         | 3 (4.3)  | 1 (1.6)  |
| Hutt               | 2 (2.9)  | 1 (1.6)  |
| Capital and Coast  | 7 (10.0) | 5 (7.9)  |
| Wairarapa          | 1 (1.4)  | 2 (3.2)  |
| Nelson-Marlborough | 4 (5.7)  | 3 (4.8)  |
| West Coast         | _        | 0 (0.0)  |
| Canterbury         | 7 (10.0) | 5 (7.9)  |
| South Canterbury   | _        | _        |
| Southern           | 7 (10.0) | 8 (12.7) |
| Unknown            | _        | _        |
| Total              | 70       | 63       |

Table 5-16. Geographic distribution of practising Māori dental therapists by DHB

|                    | 2016 (%)  | 2017 (%)  |
|--------------------|-----------|-----------|
| Northland          | 8 (8.2)   | 9 (10.0)  |
| Waitemata          | 14 (14.3) | 13 (14.4) |
| Auckland           | 6 (6.1)   | 5 (5.6)   |
| Counties-Manukau   | 8 (8.2)   | 7 (7.8)   |
| Waikato            | 16 (16.3) | 12 (13.3) |
| Lakes              | 8 (8.2)   | 6 (6.7)   |
| Bay of Plenty      | 5 (5.1)   | 8 (8.9)   |
| Tairawhiti         | 1 (1.0)   | _         |
| Hawke's Bay        | 5 (5.1)   | 5 (5.6)   |
| Taranaki           | 5 (5.1)   | 4 (4.4)   |
| Whanganui          | 3 (3.1)   | 3 (3.3)   |
| MidCentral         | 2 (2.0)   | 2 (2.2)   |
| Hutt               | 1 (1.0)   | 2 (2.2)   |
| Capital and Coast  | 2 (2.0)   | 1 (1.1)   |
| Wairarapa          | 1 (1.0)   | 1 (1.1)   |
| Nelson-Marlborough | _         | _         |
| West Coast         | _         | _         |
| Canterbury         | 5 (5.1)   | 5 (5.6)   |
| South Canterbury   | _         | _         |
| Southern           | 6 (6.1)   | 7 (7.8)   |
| Unknown            | 2 (2.0)   | _         |
| Total              | 98        | 90        |

Table 5-17. Geographic distribution of practising Māori dental hygienists by DHB

|                    | 2016 (%) | 2017 (%) |
|--------------------|----------|----------|
| Northland          | 6 (12.5) | 4 (8.5)  |
| Waitemata          | 7 (14.6) | 8 (17.0) |
| Auckland           | 7 (14.6) | 6 (12.8) |
| Counties-Manukau   | _        | 1 (2.1)  |
| Waikato            | 7 (14.6) | 7 (14.9) |
| Lakes              | 2 (4.2)  | 1 (2.1)  |
| Bay of Plenty      | 5 (10.4) | 2 (4.3)  |
| Tairawhiti         | 1 (2.1)  | _        |
| Hawke's Bay        | 2 (4.2)  | 4 (8.5)  |
| Taranaki           | 1 (2.1)  | 3 (6.4)  |
| Whanganui          | _        | 1 (2.1)  |
| MidCentral         | 1 (2.1)  | _        |
| Hutt               | _        | _        |
| Capital and Coast  | 2 (4.2)  | 2 (4.3)  |
| Wairarapa          | 1 (2.1)  | 1 (2.1)  |
| Nelson-Marlborough | _        | _        |
| West Coast         | _        | _        |
| Canterbury         | 3 (6.3)  | 4 (8.5)  |
| South Canterbury   | _        | _        |
| Southern           | 3 (6.3)  | 3 (6.4)  |
| Unknown            | _        | _        |
| Total              | 48       | 47       |

Table 5-18. Geographic distribution of practising Māori dental technicians by DHB

|                    | 2016     | 2017     |
|--------------------|----------|----------|
| Northland          | 1 (20.0) | _        |
| Waitemata          | 1 (20.0) | 1 (14.3) |
| Auckland           | _        | _        |
| Counties-Manukau   | _        |          |
| Waikato            | _        | _        |
| Lakes              | _        |          |
| Bay of Plenty      | 1 (20.0) | 1 (14.3) |
| Tairawhiti         | _        | _        |
| Hawke's Bay        | _        | 1 (14.3) |
| Taranaki           | _        | _        |
| Whanganui          | _        | _        |
| MidCentral         | _        |          |
| Hutt               | 1 (20.0) | 1 (14.3) |
| Capital and Coast  | _        | 1 (14.3) |
| Wairarapa          | _        |          |
| Nelson-Marlborough | _        | 1 (14.3) |
| West Coast         | _        |          |
| Canterbury         | _        | 1 (14.3) |
| South Canterbury   | _        |          |
| Southern           | 1 (20.0) | _        |
| Unknown            | _        | _        |
| Total              | 5        | 7        |

Section 6: Appendices



Table 6-1. Geographic distribution of practising oral health practitioners by Territorial Authority, as at end of 2017 reporting periods

| TA area                        | Dentists and dental specialists (%) | Dental<br>therapists (%) | Dental<br>hygienists and<br>orthodontic<br>auxiliaries (%) | Dental<br>technicians and<br>clinical dental<br>technicians (%) | Total (%)   |
|--------------------------------|-------------------------------------|--------------------------|--|---|-------------|
| Far North                      | 16 (0.6)                            | 11 (1.1)                 | 11 (1.2)   | 2 (0.5)   | 43 (1.4)    |
| Whangarei                      | 35 (1.3)                            | 20 (2.1)                 | 17 (1.9)   | 8 (2.2)   | 92 (2.9)    |
| Kaipara                        | 4 (0.2)                             | 1 (0.1)                  | _  | _   | 5 (0.2)     |
| Auckland unitary authority     | 648 (25.0)                          | 376 (39.1)               | 369 (41.1)   | 126 (34.0)  | 1674 (53.1) |
| Rodney                         | 33 (1.3)                            | 20 (2.1)                 | 21 (2.3)   | 7 (1.9)   | 85 (2.7)    |
| North Shore                    | 121 (4.7)                           | 70 (7.3)                 | 77 (8.6)   | 32 (8.6)  | 328 (10.4)  |
| Waitakere                      | 70 (2.7)                            | 52 (5.4)                 | 42 (4.7)   | 8 (2.2)   | 182 (5.8)   |
| Auckland                       | 291 (11.2)                          | 116 (12.1)               | 136 (15.2)   | 43 (11.6)   | 657 (20.9)  |
| Manukau                        | 96 (3.7)                            | 86 (8.9)                 | 73 (8.1)   | 27 (7.3)  | 317 (10.1)  |
| Papakura                       | 18 (0.7)                            | 17 (1.8)                 | 7 (0.8)  | 3 (0.8)   | 49 (1.6)    |
| Franklin                       | 19 (0.7)                            | 15 (1.6)                 | 13 (1.4)   | 6 (1.6)   | 56 (1.8)    |
| Thames-Coromandel District     | 10 (0.4)                            | 3 (0.3)                  | 1 (0.1)  | 1 (0.3)   | 18 (0.6)    |
| Hauraki District               | 1 (0.0)                             | _                        | _  | _   | 2 (0.1)     |
| Waikato District               | 3 (0.1)                             | 6 (0.6)                  | 4 (0.4)  | 1 (0.3)   | 17 (0.5)    |
| Matamata-Piako District        | 11 (0.4)                            | 1 (0.1)                  | 2 (0.2)  | 1 (0.3)   | 16 (0.5)    |
| Hamilton City                  | 91 (3.5)                            | 48 (5.0)                 | 40 (4.5)   | 20 (5.4)  | 220 (7.0)   |
| Waipa District                 | 19 (0.7)                            | 8 (0.8)                  | 8 (0.9)  | 1 (0.3)   | 39 (1.2)    |
| Otorohanga District            | 7 (0.3)                             | _                        | _  | _   | 9 (0.3)     |
| South Waikato District         | 3 (0.1)                             | 2 (0.2)                  | 2 (0.2)  | _   | 7 (0.2)     |
| Waitomo District               | 1 (0.0)                             | 1 (0.1)                  | _  | _   | 3 (0.1)     |
| Taupo District                 | 11 (0.4)                            | 6 (0.6)                  | 3 (0.3)  | 2 (0.5)   | 26 (0.8)    |
| Western Bay of Plenty District | 8 (0.3)                             | 6 (0.6)                  | 8 (0.9)  | 2 (0.5)   | 25 (0.8)    |
| Tauranga City                  | 62 (2.4)                            | 43 (4.5)                 | 29 (3.2)   | 8 (2.2)   | 162 (5.1)   |
| Rotorua District               | 25 (1.0)                            | 19 (2.0)                 | 4 (0.4)  | 6 (1.6)   | 59 (1.9)    |
| Whakatane District             | 13 (0.5)                            | 5 (0.5)                  | 3 (0.3)  | 2 (0.5)   | 24 (0.8)    |
| Kawerau District               | 1 (0.0)                             | _                        | _  | _   | 1 (0.0)     |
| Opotiki District               | 1 (0.0)                             | 2 (0.2)                  | _  | _   | 3 (0.1)     |
| Gisborne District              | 14 (0.5)                            | 11 (1.1)                 | 9 (1.0)  | 4 (1.1)   | 40 (1.3)    |
| Wairoa District                | 1 (0.0)                             | 3 (0.3)                  | _  | _   | 4 (0.1)     |
| Hastings District              | 23 (0.9)                            | 16 (1.7)                 | 13 (1.4)   | 31 (8.4)  | 88 (2.8)    |
| Napier City                    | 29 (1.1)                            | 12 (1.2)                 | 7 (0.8)  | 7 (1.9)   | 60 (1.9)    |
| Central Hawke's Bay District   | 2 (0.1)                             | 2 (0.2)                  | 1 (0.1)  | _   | 5 (0.2)     |
| New Plymouth District          | 27 (1.0)                            | 19 (2.0)                 | 16 (1.8)   | 4 (1.1)   | 73 (2.3)    |
| Stratford District             | 1 (0.0)                             | 2 (0.2)                  | 1 (0.1)  | _   | 4 (0.1)     |
| South Taranaki District        | 5 (0.2)                             | 3 (0.3)                  | 1 (0.1)  | _   | 11 (0.3)    |
| Ruapehu District               | 2 (0.1)                             | 3 (0.3)                  | _  | _   | 5 (0.2)     |
| Wanganui District              | 16 (0.6)                            | 18 (1.9)                 | 10 (1.1)   | 4 (1.1)   | 52 (1.7)    |
| Rangitikei District            | 3 (0.1)                             | 4 (0.4)                  | 1 (0.1)  | 1 (0.3)   | 9 (0.3)     |

| TA area                   | Dentists and dental specialists (%) | Dental<br>therapists (%) | Dental<br>hygienists and<br>orthodontic<br>auxiliaries (%) | Dental<br>technicians and<br>clinical dental<br>technicians (%) | Total (%)<br>8 (0.3) |  |
|---------------------------|-------------------------------------|--------------------------|--|---|----------------------|--|
| Manawatu District         | 4 (0.2)                             | 2 (0.2)                  | 1 (0.1)  | _   |                      |  |
| Palmerston North City     | 39 (1.5)                            | 23 (2.4)                 | 24 (2.7)   | 9 (2.4)   | 103 (3.3)            |  |
| Tararua District          | 3 (0.1)                             | 3 (0.3)                  | _  | 1 (0.3)   | 7 (0.2)              |  |
| Horowhenua District       | 8 (0.3)                             | 1 (0.1)                  | 2 (0.2)  | _   | 12 (0.4)             |  |
| Kapiti Coast District     | 22 (0.8)                            | 8 (0.8)                  | 8 (0.9)  | 7 (1.9)   | 48 (1.5)             |  |
| Porirua City              | 7 (0.3)                             | 8 (0.8)                  | 4 (0.4)  | 2 (0.5)   | 25 (0.8)             |  |
| Upper Hutt City           | 12 (0.5)                            | 5 (0.5)                  | 7 (0.8)  | 3 (0.8)   | 28 (0.9)             |  |
| Lower Hutt City           | 47 (1.8)                            | 26 (2.7)                 | 15 (1.7)   | 7 (1.9)   | 104 (3.3)            |  |
| Wellington City           | 127 (4.9)                           | 33 (3.4)                 | 66 (7.4)   | 12 (3.2)  | 259 (8.2)            |  |
| Masterton District        | 9 (0.3)                             | 8 (0.8)                  | 4 (0.4)  | 4 (1.1)   | 29 (0.9)             |  |
| Carterton District        | 3 (0.1)                             | _                        | 2 (0.2)  | _   | 7 (0.2)              |  |
| South Wairarapa District  | _                                   | _                        | _  | _   | _                    |  |
| Tasman District           | 15 (0.6)                            | 10 (1.0)                 | 7 (0.8)  | 3 (0.8)   | 39 (1.2)             |  |
| Nelson City               | 29 (1.1)                            | 5 (0.5)                  | 13 (1.4)   | 6 (1.6)   | 57 (1.8)             |  |
| Marlborough District      | 18 (0.7)                            | 7 (0.7)                  | 5 (0.6)  | 1 (0.3)   | 35 (1.1)             |  |
| Kaikoura District         | 1 (0.0)                             | _                        | _  | _   | 1 (0.0)              |  |
| Buller District           | 2 (0.1)                             | 1 (0.1)                  | _  | _   | 5 (0.2)              |  |
| Grey District             | 3 (0.1)                             | 2 (0.2)                  | 3 (0.3)  | 2 (0.5)   | 11 (0.3)             |  |
| Westland District         | _                                   | 1 (0.1)                  | _  | _   | 1 (0.0)              |  |
| Hurunui District          | _                                   | 1 (0.1)                  | _  | _   | 1 (0.0)              |  |
| Waimakariri District      | 13 (0.5)                            | 5 (0.5)                  | 1 (0.1)  | _   | 22 (0.7)             |  |
| Christchurch City         | 194 (7.5)                           | 54 (5.6)                 | 62 (6.9)   | 24 (6.5)  | 384 (12.2)           |  |
| Selwyn District           | 7 (0.3)                             | 2 (0.2)                  | 3 (0.3)  | 2 (0.5)   | 17 (0.5)             |  |
| Ashburton District        | 4 (0.2)                             | 5 (0.5)                  | 3 (0.3)  | 1 (0.3)   | 14 (0.4)             |  |
| Timaru District           | 13 (0.5)                            | 7 (0.7)                  | 5 (0.6)  | 1 (0.3)   | 31 (1.0)             |  |
| Mackenzie District        | _                                   | _                        | _  | _   | _                    |  |
| Waimate District          | _                                   | 1 (0.1)                  | 2 (0.2)  | _   | 3 (0.1)              |  |
| Chatham Islands Territory | _                                   | _                        | _  | _   | _                    |  |
| Waitaki District          | 15 (0.6)                            | 2 (0.2)                  | 2 (0.2)  | 1 (0.3)   | 22 (0.7)             |  |
| Central Otago District    | 8 (0.3)                             | 2 (0.2)                  | 4 (0.4)  | _   | 16 (0.5)             |  |
| Queenstown-Lakes District | 15 (0.6)                            | 6 (0.6)                  | 6 (0.7)  | 2 (0.5)   | 34 (1.1)             |  |
| Dunedin City              | 131 (5.0)                           | 39 (4.1)                 | 33 (3.7)   | 15 (4.0)  | 255 (8.1)            |  |
| Clutha District           | 3 (0.1)                             | 3 (0.3)                  | 2 (0.2)  | 1 (0.3)   | 10 (0.3)             |  |
| Southland District        | 3 (0.1)                             | 3 (0.3)                  | 1 (0.1)  | 1 (0.3)   | 8 (0.3)              |  |
| Gore District             | 4 (0.2)                             | 4 (0.4)                  | 2 (0.2)  | 1 (0.3)   | 13 (0.4)             |  |
| Invercargill City         | 33 (1.3)                            | 12 (1.2)                 | 14 (1.6)   | 7 (1.9)   | 67 (2.1)             |  |
| TLA code not available    | 711 (27.4)                          | 21 (2.2)                 | 36 (4.0)   | 27 (7.3)  | 353 (11.2)           |  |
| Total                     | 2,596                               | 961                      | 897  | 371   | 4,825                |  |

Table 6-2. Population to oral health practitioners by district health board, as at end of 2017 reporting periods

|                       | Dentists and dental specialists           |   | Dental therapists                         |   | Dental hygienists and orthodontic auxiliaries |   | Dental technicians and clinical dental technicians |   |
|-----------------------|---|---|---|---|---|---|--|---|
|                       | Number with<br>practising<br>certificates | Number per<br>100,000<br>population aged<br>15+ years | Number with<br>practising<br>certificates | Number per<br>100,000<br>population aged<br><15 years | Number with practising certificates           | Number per<br>100,000<br>population aged<br>15+ years | Number with practising certificates                | Number per<br>100,000<br>population aged<br>15+ years |
| Northland             | 53  | 38.0  | 31  | 83.0  | 25  | 17.9  | 9  | 6.5   |
| Waitemata             | 232                                       | 49.4  | 149                                       | 128.9   | 141   | 30.0  | 52   | 11.1  |
| Auckland              | 288                                       | 71.7  | 99  | 122.4   | 127   | 31.6  | 38   | 9.5   |
| Counties-Manukau      | 138                                       | 33.5  | 120                                       | 97.9  | 95  | 23.1  | 35   | 8.5   |
| Waikato               | 138                                       | 43.2  | 71  | 83.5  | 59  | 18.5  | 25   | 7.8   |
| Lakes                 | 35  | 39.8  | 24  | 100.4   | 8   | 9.1   | 8  | 9.1   |
| Bay of Plenty         | 83  | 44.5  | 54  | 112.8   | 38  | 20.4  | 12   | 6.4   |
| Tairawhiti            | 12  | 33.2  | 11  | 97.1  | 10  | 27.6  | 4  | 11.1  |
| Hawke's Bay           | 50  | 53.8  | 33  | 134.4   | 19  | 20.4  | 38   | 40.9  |
| Taranaki              | 33  | 25.0  | 24  | 68.5  | 18  | 13.6  | 4  | 3.0   |
| Whanganui             | 15  | 29.0  | 21  | 161.1   | 9   | 17.4  | 5  | 9.7   |
| MidCentral            | 55  | 39.3  | 34  | 98.5  | 32  | 22.9  | 11   | 7.9   |
| Hutt                  | 54  | 45.9  | 30  | 101.2   | 24  | 20.4  | 10   | 8.5   |
| Capital and Coast     | 137                                       | 54.1  | 49  | 90.4  | 73  | 28.8  | 20   | 7.9   |
| Wairarapa             | 14  | 38.6  | 8   | 92.8  | 8   | 22.1  | 4  | 11.0  |
| Nelson-Marlborough    | 60  | 47.2  | 23  | 85.2  | 22  | 17.3  | 9  | 7.1   |
| West Coast            | 4   | 14.0  | 4   | 68.6  | 3   | 10.5  | 2  | 7.0   |
| Canterbury            | 222                                       | 49.9  | 68  | 69.4  | 74  | 16.6  | 28   | 6.3   |
| South Canterbury      | 12  | 23.7  | 10  | 94.4  | 6   | 11.8  | 1  | 2.0   |
| Southern <sup>b</sup> | 182 [126]                                 | 65.9 [45.6]   | 64 [52]                                   | 111.8 [90.8]  | 65 [59]                                       | 23.5 [21.4]   | 26 [10]  | 9.4 [3.6]   |
| Unknown               | 779                                       | - <b>-</b>  | 34  |   | 41  |   | 30   |   |
| Total                 | 2,596                                     | 68.2  | 961                                       | 104.1   | 897   | 23.6  | 371  | 9.8   |

a Population estimates by DHB for 2017 are unavailable from Statistics NZ; values were linearly interpolated between 2015 and 2018. Due to rounding, individual figures may not always sum to the stated totals

b Data in square brackets for Southern DHB exclude oral health practitioners who reported the University of Otago as their primary employer (Data sources: Workforce survey and Statistics New Zealand)