FAIR WORK COMMISSION

Matter No.: AM2016/31

Four Yearly Review of Modern Awards – Health Professionals and Support Services Award

SUBMISSION

Dental Hygienists Association of Australia Limited ("DHAA")

Date: 31 July 2019

Lodged by:

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Introduction

1. This Submission is filed on behalf of the Dental Hygienists Association of Australia Limited **(DHAA**) in accordance with the Directions issues by Vice President Catanzariti on 20 June 2019.

2. As per the Directions, this Submission addresses two issues which are outstanding from the Decision of the Full Bench Decision of 3 December 2018. [1]
   a) whether the occupations of Dental Hygienist and Oral Health Therapist should be covered by the Award;
   b) whether the List of Common Health Professionals contained in Schedule C of the Health Professionals and Support Services Award ("**the Award"**) should be indicative or exhaustive.

3. DHAA is the **employee representative professional association** for Dental Hygienists and Oral Health Therapists. The current DHAA membership is 1,530.

4. DHAA's membership is of employee Dental Hygienists and Oral Health Therapists in the public and private sectors. DHAA's membership does not include Dental Therapists. The table below is a summary comparison of the key differences between Dental Hygienists, Dental Therapists and Oral Health Therapists.

	Dental Hygienist	**Dental Therapist**	**Oral Health Therapist**
Education	2 year Advanced Diploma or 3 year Bachelors Degree	Certificate or Diploma	3 year Bachelors Degree
Current education providers	Currently Tafe SA and Griffith University	There have been no training programs for some 10 years	Currently 9 training programs in Australia
Scope of practice	Preventive only treatments (eg scaling, fluoride, sealants, mouthguards), including the treatment of gum disease in adults	Preventive and restorative (simple fillings) treatment and extractions in children and adolescents	Combines the role of the hygienist and therapist
Age restrictions on patients	Can treat patients of all ages	Age restricted, depending on training. Often under 25 years.	Can treat patients of all ages, but may have restrictions on the age of dental therapy patients.
Employment	Traditionally work in the private sector	Traditionally work in the public sector	Working in both the private and public sectors. AHPRA data tells us that the majority work in private practice in dental hygiene roles.

5. The Australian Dental Association (ADA) whose members employ Dental Hygienists and Oral Health Therapists in the private sector, is the employer representative for Dental Hygienists and Oral Health Therapists. ADA and DHAA have closely consulted since the Full Bench decision was issued on 3 December 2018. These meetings have resulted in agreement and a joint employer/employee position on the two outstanding issues, which is:
   a) the List of Common Health Professionals in the Health Professionals and Support Services Award is exhaustive, and should remain exhaustive and
   b) Dental Hygienists and Oral Health therapists are not covered by the Award and should remain not covered by the Award and that this in the best interests of both employers and employees in the dental industry.

[1] [2018]FWCFB 7350

Outline of Claims

6. The outcome of our consultation and collaboration with ADA is a proposed Award variation. The objective of the proposed variation to the Award (at Attachment 1) is to simply and clearly maintain the status quo that Dentists, Dental Hygienists and Oral Health Therapists are not covered by the Award.

7. The proposed variation is consistent with the Full Bench decision of the Australian Industrial Relations Commission of December 2009.[2]

8. The proposed variation is sought as part of the Four Yearly Review of Modern Awards arising from s. 156 of the Fair Work Act and the associated discretion available to the Commission to make variations to modern awards.

9. In Re Four Yearly Review of Modern Awards – Preliminary Jurisdictional Issues[3], the Full Bench indicated that in conducting a 4 yearly review, the Commission will have regard to the historical context applicable to each modern award[4] and previous Commission decisions relevant to any contested issue. The Full Bench stated that "previous Full Bench decisions should generally be followed, in the absence of cogent reasons for not doing so."[5]

10. In the Preliminary Jurisdictional Issues Decision, the Full Bench stated that with regard to the modern awards objectives set out in s. 134(1) of the Fair Work Act, that "no particular primacy is attached to any of the s. 134 considerations and not all of the matters identified will necessarily be relevant in the context of a particular proposal to vary a modern award."[6]

11. The Full Bench also stated that "the Commission will proceed on the basis that prima facie the modern award being reviewed achieved the modern awards objective at the time it was made."[7]

12. The origin of the issue regarding whether the list of Common Health Professionals was meant to be exhaustive or indicative is a letter from Fair Work Ombudsman to Fair Work Commission on 24 November 2014 addressing perceived issues in the Stage 2 Modern Awards.[8]

13. The author, Chief Counsel, Janine Webster states that "*These provisions have been identified through analysis of the Fair Work Ombudsman's (FWO) wide-ranging interactions with workplace participants (including small businesses, individual employees, as well as employer and employee representatives). The attached table includes queries commonly raised with the FWO and issues which may be a source of uncertainty for workplace participants to understand and implement award entitlements. The FWO provides this information to assist the Commission and relevant* parties *to achieve the modern award objectives, in particular,*

[2] [2009] AIRC FB 948
[3] [2014]FWCFB 1788
[4] Ibid {24}
[5] Ibid [27]
[6] Ibid [32]
[7] Ibid [60]
[8] Webster, Janine, Fair Work Ombudsman Chief Counsel "Award Stage Group 2 Modern Awards" 24 November 2014.

the need to ensure a simple easy to understand modern award system under subsection 134(1)(g) of the Fair Work Act 2009."[9]

14. In this letter, FWO state, "*The FWO has received enquiries about whether health professionals other than those listed in Schedule C may be covered by the Schedule C award. Clause 4.1(b) states that this industry and occupational award covers an "employer engaging a health professional employee falling within the classification listed in clause 15". Clause 15 then sets out various pay rates for the various levels of Health Professional Employees. Clause B.2 of Schedule B provides that a list of indicative roles for each pay level. Schedule C contains a list of "Common Health Professionals" however, it may be unclear how the Schedule C list is to be applied (e.g. it may be interpreted as a nonexhaustive list of examples of the types of health professionals covered by the award or as a limit on the scope of coverage of the award).*"

15. On 8 December 2014, Fair Work Commission staff prepared an Exposure Draft of the Award, which stated *"Parties are asked to clarify whether the list of common health professionals contained in Schedule B is an exhaustive list of those covered by the award or whether it is an indicative list of examples of the types of health professionals*."[10]

16. Therefore, this issue was not raised as a proposed variation by any of the interested parties. It was first raised by Fair Work Ombudsman. It was then raised again by Fair Work Commission in the exposure draft of 8 December 2014.

17. The Health Services Union stated in their submission of 28 January 2015 in relation to the Award that "The list of common health professionals in Schedule B is an indicative list of the types of health professionals that are covered by this award. It is not an exhaustive list. There are other classes of health professionals who meet the Classification Definitions in Schedule A.2 (for health professionals) than those classes listed in Schedule B."[11] They did not specify who those classes were.

18. The HSU position that the List was indicative and not exhaustive was opposed by AI Group (28/1/15 and 4/3/15), Business SA (28/1/15), Australian Dental Association (21 August 2015), Private Hospital Industry Employer Association (17 February 2015) and by the Dental Hygienists Association of Australia (21/8/15) and submissions thereafter, most recently 14 March 2018[12] (see Attachment 2) and at arbitration before the Full Bench on 11 and 12 December 2017.[13]

19. In its submission of 12 February 2018,[14] the HSU states that "*To treat the list as exhaustive has the highly undesirable outcome that award coverage is determined at the discretion of an employer with a creative approach to job description. That approach is inconsistent with the modern awards objective.*"

[9] Ibid, p. 1
[10] Exposure Draft, Health Professionals and Support Services Award 2014, 8 December 2014.
[11] Health Services Union, Outline of Submissions, Subgroup 2B awards, 28 January 2015.
[12] DHAA Submission of 14 March 2018.
[13] AM2016/31, 11 December 2017: PN1075-1117; PN1299-1323; PN1338-1647, and 12 December 2017: PN1767-1778.
[14] Health Services Union, 12 February 2018, para 60.

20. DHAA refutes this view. Award coverage cannot be determined at the discretion of an employer. The List is of occupations, not of jobs. As such, incorrect assumptions about award coverage by employers are much more likely to be made if the List is indicative.

21. Employers and employees want certainty as to whether their health professional occupation is covered by the HPSS award or not. This outcome can be definitively obtained from an exhaustive list of occupations covered by the Award. DHAA submits that further clarity would be obtained by adding another list of health occupations that are not covered by the Award, namely an exclusion clause.

22. The normal process of seeking to make an award variation under section 157 of Fair Work Act can be utilised if the List needs to be altered for any reason.

Change in the Dental Industry Since 2009 and Likely Future Change – Does this Warrant a Change in Award Coverage?

23. In 2009, Dental Therapists were in the List of Common Health Professionals. Dental Hygienists were briefly in the list and were then removed via the award variation application of DHAA in October 2009, by way of the AIRC Full Bench decision in December 2009.[15] Oral health therapists have never been covered by the Award.

24. The significant change that has occurred since 2009 is the legacy nature of the profession of Dental Therapist. All dental therapy training schools are now closed. The only training in that discipline is now in a Bachelor of Oral Health.

25. Registration numbers of Dental Therapists are steadily declining as Certificate and Diploma trained Dental Therapists are retiring.[16] [17] The table below illustrates the comparative change in registration numbers of Dental Therapists, Dental Hygienists and Oral Health Therapists between 2006 and 2019.

Occupation	2006	Increase / decrease	2019
Dental Therapist	1,380	-37%	876
Dental Hygienist	796	181%	1,442
Oral Health Therapist	410	454%	1,861

26. DHAA submits that Fair Work Commission should not make a significant variation to the Award such that two award free occupations become covered by an Award **because** one legacy occupation – Dental Therapy – has always been covered by the Health Professionals and Support Services Award.

27. At [120] the Full Bench said[18] that the Commission dismissed the application of the CAA to remove the occupation of chiropractors from the Award because the award modernisation process did not preclude the extension of awards to work performed that is of a similar nature to work that has historically been regulated by awards. This decision is

[15] [2009] AIRC FB 948
[16] Dental Board of Australia Registrant Data, Reporting period: 01 January 2019 to 31 March 2019.
[17] AIHW Dental Statistics and Research Series Number 53 'Dentists, specialists and allied practitioners in Australia, Dental Labour Force Collection 2006'.
[18] [2018] FWCFB 7350, 3 December 2018.

distinguishable because the same Full Bench in the same year decided to vary the same Award to exclude Dental Hygienists.[19] There is no cogent reason to disrupt the status quo.

28. No witness evidence has been provided to date as to why Dental Hygienists and Oral Health Therapists should be covered by an award. ADOHTA has made one submission on 28 February 2017[20] and has provided no witness evidence.

29. DHAA has provided witness evidence as to why such a change should **not** be made and provided reasons why its employee members believe they would be harmed by such a change.[21] In their evidence in 2017, Dr Melanie Hayes and Dr Carol Tran expressed a view that Dental Hygienists and Oral Health Therapists would be harmed if Fair Work Commission quashed their award free status. DHAA submits witness evidence from Ms Kay Ball, Oral Health Therapist; Ms Alison Taylor, lecturer and clinical tutor in dental hygiene at TAFE Australia; Ms Susan Melrose, Dental Hygienist; Ms Christina Zerk, Dental Hygienist; and Ms Lyn Carman, Dental Hygienist. These witness statements relate to their own experience and circumstances. (Attachment 3)

30. In the 2009 Decision of the AIRC, at [3] the Full Bench stated "it (DHAA) further submitted that award coverage of Dental Hygienists would disadvantage its members in the following ways: (a) The award would act to erode Dental Hygienists' real high hourly wage both immediately and over time which they have maintained successfully for decades via private individual negotiations, without any industrial instrument benchmarks being used or desired; (b) The existence of the Award minimum rate of pay would be used by their employers as a benchmark to disadvantage Dental Hygienists in negotiations on remuneration; (c) The Award's classification structure would be used to limit promotion and progression for Dental Hygienists; (d) The Award's classification structure and low entry pay rates for graduates would significantly disadvantage new graduates in comparison to current award-free conditions."

31. The DHAA submits that the same concerns considered and accepted by the Full Bench in 2009 continue to exist in 2019.

32. The DHAA submits that the validity of its concerns is supported by the witness statement of Mr Benjamin Marchant, (Attachment 4), who has been a registered pharmacist since 2006 and is the Victorian President of the Pharmaceutical Society of Victoria. [22]

33. Based on his direct observation and experience, Mr Marchant states that there has been a steady decline in real wages for pharmacists since they became covered by the Pharmacy Industry Award in 2010.

34. Mr Marchant states "while the Pharmacy Industry Award sets a minimum rate, employers are treating that as a Government recommended standard rate for Pharmacist employees."[23] Mr Marchant posits that the application of the HPSS Award may have a similar effect on Dental Hygienists, and Oral Health Therapists.[24]

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[19] [2009] AIRC FB 948
[20] ADOHTA Submission of 28 February 2017.
[21] Witness Statement of Dr Melanie Hayes of 9 June 2017 and Witness Statement of Carol Tran of 9 June 2017 referenced in [107] and [108] of [2018] FWCFB 7350 p16.
[22] Witness Statement of Mr Benjamin Marchant of 16 July 2019.
[23] Ibid
[24] Ibid

35. The DHAA submits a witness statement from Mr Samson Chan[25], a registered pharmacist and partner of Cura Pharmacy Group, which employs over forty pharmacists in Victoria. Mr Chan states, "I can confirm that all pharmacists we employed were paid above award when the Pharmacy Industry Award 2010 was introduced. Since then, there was a steady decline of pharmacist wages towards the award rate." His witness statement demonstrates the difficulty that employers face in continuing to pay over award payments when, as stated by Mr Chan, "as employers we are able to justify (wages of employee pharmacists falling in real terms) by using the award wage as a benchmark." (Attachment 5)

The Suppositions concerning why Oral Health Therapists were not in the List of Common Health Professionals in 2009

36. The Full Bench Decision stated at [88] that the ADOHTA submits the recognition of the occupation by the Dental Board of Australia (DBA) did not occur until after the HPSS award was made and that is why the occupation was left off the List. There has been no evidence provided by ADOHTA to support this assertion in relationship to the List. Therefore DHAA submits that the assertion holds no weight.

37. None of the extensive materials on the AIRC archive site of the AM2008/13 award modernization process of the HPSS award from 2008-2010[26] provide support for ADOHTA's view that the omission of Oral Health therapist from the List was related to recognition by the Dental Board, or indeed any other reason.

38. ADOHTA state in their submission of 28 February 2017[27] that "Oral health therapists have been a recognised profession since 2000 after the University of Queensland developed the Bachelor of Oral Health (BOH) course." DHAA supports this submission. In 1998, the first Bachelor of Oral Health degree program was offered by University of Queensland/ Queensland University of Technology. In 2002, Adelaide University offered its first Bachelor of Oral Health degree program, then Griffith University (2004) and University of Melbourne (2005) did the same. In 2005, University of Newcastle offered a Bachelor of Oral Health. In 2006 the University of Sydney and Latrobe University also offered a Bachelor of Oral Health as did Charles Sturt University in 2008. By 2009, Oral Health Therapist was a recognised working degree-qualified and registered occupation in every state and territory of Australia. [28] [29]

39. ADOHTA state in their submission of 28 February 2017[30], "The New South Wales Dental Board recognised Oral Health Therapists as a separate division in 2008." DHAA accept this submission.

40. ADOHTA state "At the introduction of the National Registration and Accreditation Scheme in 2010, Oral Health Therapists were only registered by one State Dental Board." DHAA refutes this statement. Graduates of the Oral Health Therapy course were recognised by the State

[25] Witness Statement of Mr Samson Chan of 30 July 2019.
[26] http://www.airc.gov.au/awardmod/fullbench/industries/awardmodindustry.cfm?award=health
[27] Ibid
[28] AIHW Dental Statistics and Research Series Number 53 'Dentists, specialists and allied practitioners in Australia, Dental Labour Force Collection' 2006 and 2011.
[29] Oral Health Therapy Programs in Australia and New Zealand, Edited by Annetta K L Tsang, The University of Queensland. Pp 17-25.
[30] Ibid

and Territory dental boards for registration in the categories of Dental Hygienist and Dental Therapists. By recognition of their qualifications for registration, the dental boards were recognising Oral Health Therapists.[31]

41. ADOHTA also state, "…. and so were not automatically transitioned by the Dental Board of Australia (DBA) as a stand-alone profession." This statement is not correct. The Dental Board of Australia did recognise the occupation of oral health therapy because it was pre-existing in New South Wales, as ADOHTA stated in their submission.

42. There appears to an inference that Oral Health Therapists were only recognised and working as such in New South Wales. This is not the case. Oral Health Therapist was a recognised, working, registered occupation in every State and Territory of Australia in 2009. We refer in particular to the Australian Government's Australian Institute of Health and Welfare's "Dental Labour Force Collection 2006" referenced below.

43. DHAA dispute the inferred correlation that has been made, without evidence, that the profession was "new" or "emerging" in 2009 and therefore was somehow deliberately left off the List of Common Health Professionals.

44. ADOHTA states in their submission, "OHT's are employed in the public sector, education and research as well as in private practice. In all areas other than private practice, they are covered by relevant awards and in Queensland, New South Wales, South Australia and Victoria the OHT category is specifically named." DHAA submits that Oral Health Therapists working in education and research have been covered by AM2014/229 the *Higher Education Industry Academic Staff Award 2010*. Dental hygienists, dentists, and Oral Health Therapists are covered by this award by virtue of the sector they are working in, their teaching duties and their research requirements.

45. DHAA submits the following evidence demonstrates that the occupation of Oral Health Therapist was and had been a known occupation in 2009 and for many years before that time:
    - 45.1.1 The Health (Drugs and Poisons) Regulation 1996 Chapter 4 Poisons: section 248B(1) refers to authorizing Oral Health Therapists to administer specific S2 and S3 poisons. This was a Queensland Regulation – Reg 414 of 1996 made under the Health Act 1937.[32] (Attachment 6)
    - 45.1.2 The Poison and Therapeutic Goods Amendment (Oral Health Therapists) Regulation 2007, Schedule 1 (1) to (4) refers to authorizing Oral Health Therapists to possess and be supplied with local anaesthetics.[33] (Attachment 7)
    - 45.1.3 The NSW Dental Practice Regulation 2004 - Reg 7a (now repealed) prescribed Oral Health Therapist as a prescribed class of dental auxiliary for the purposes of the Dental Practice Act 2001.[34] (Attachment 8)
    - 45.1.4 The NSW Dental Practice Amendment (Oral Health Therapists) Regulation 2007 under the Dental Practice Act 2001. This 2007 Regulation amended the Dental Practice Regulation 2004 to provide for Oral Health Therapists by prescribing Oral Health Therapists as a class of dental auxiliary for the purposes of

[31] AIHW Dental Statistics and Research Series Number 53 'Dentists, Specialists and Allied Practitioners in Australia, Dental Labour Force Collection' 2006.
[32] Queensland Regulation – Reg 414 of 1996 made under the Health Act 1937.
[33] Poison and Therapeutic Goods Amendment (Oral Health Therapists) Regulation 2007, Schedule 1 (1) to (4) p3.
[34] The NSW Dental Practice Regulation 2004 - Reg 7a.

registration under the Dental Practice Act 2001 (the Act), and authorised activities for Oral Health Therapists who are registered under the Act and the qualifications that are necessary qualifications for registration as an Oral Health Therapist under the Act. [35] (Attachment 9)

45.1.5 The Australian Government's Australian Institute of Health and Welfare's "Dental Labour Force Collection 2006" (Attachment A) published in 2011 states in relation to the Australian dental labour force in 2006, "The allied practitioner proportion of 23% was made up of therapists (9%), prosthetists (7%), hygienists (5%) and Oral Health Therapists (2%). The overall picture is one of small changes in the decade to 2006, with some evidence that the main areas of growth are in the allied practitioner component. Between 2003 and 2006, Oral Health Therapists (OHTs) became much more prominent, a trend that is likely to continue."[36]

45.1.6 The allied dental practitioner surveys collected data in 2006 on OHTs in five states (excluding Tasmania, ACT and NT.)[37] Under Methods, the study states "all allied personnel registered with the dental board in each State/Territory were surveyed." The survey was administered in conjunction with registration renewal and with assistance from the state/territory dental boards and/or health departments.[38]

45.1.7 The Australian Government's Australian Institute of Health and Welfare, "Dental Workforce 2011" study shows the existence of 397 registered Oral Health Therapists in 2006, 651 in 2009 and 1,108 in 2011.[39] (see Attachment B)

45.1.8 The witness statement of Ms Kay Ball describes that she has been working as an Oral Health Therapist for 14.5 years (para 3). Ms Ball states (para 4) that since her graduation in December 2004 from Queensland University with a Bachelor of Applied Science (Oral Health) (para 2), her employers, her colleagues and her have described her profession and her job as an Oral Health Therapist. [40]

45.1.9 In her witness statement, Ms Alison Jane Taylor states at paragraph 4 that she knows from her own professional experience that the occupation of Oral Health Therapist existed in 2009 and before then. Ms Taylor states that she worked as a Clinical Tutor in the Bachelor of Oral Health program at the University of Adelaide from 2004 – 2017. She states that for the duration, graduates of the program were called Oral Health Therapists.[41]

The Relevance of the 2018 New South Wales Award

46. At [120] in their Decision, the Full Bench state that the occupations of Dental Therapist, Dental Hygienist and Oral Health Therapist are all covered by a recent Award of the Industrial Relations Commission of New South Wales – *Health Employees Oral Health Therapists (State) Award 2018*.[42]

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[35] The NSW Dental Practice Amendment (Oral Health Therapists) Regulation 2007 under the Dental Practice Act 2001 p1.

[36] Balasubramanian, M and Teusner, DN, Australian Government's Australian Institute of Health and Welfare's "Dental Labour Force Collection 2006" AIHW Dental Statistics and Research Series, Number 53, 2011 p viii

[37] Ibid p35

[38] Ibid p35.

[39] Balasubramanian, M and Teusner, DN, Australian Government's Australian Institute of Health and Welfare's "Dental Workforce 2011" Cat. No. HWL 50, 2011 p 5.

[40] Witness statement of Kay Ball

[41] Witness statement of Alison Jane Taylor

[42] [2018] FWCFB 7350

47. A New South Wales Award was made at the same time which also covered dentists employed by the public sector. This award is called the *Health Employees Dental Officers (state) award 2017*.[43] (Attachment 10)

48. The DHAA submits that the existence of a new public sector State award should have no relevance to a consideration of coverage of the HPSS award.

49. This is because the status quo remains unchanged since 2009 that some dental professionals in the public sector are covered by state awards. All other Dental Hygienists, Oral Health Therapist and Dentists working clinically in the private sector remain award free.

50. The same occupations in the public sector were and still are possibly covered by a State Award applying only to the public sector and in some cases, a mature iteration of a State or Federal enterprise Agreement. For example, in Victoria, the Victorian Public Health Sector (Dental Therapists, Dental Hygienists and Oral Health Therapists') Enterprise Agreement 2018-2022 [2019] FWCA 1399 is negotiated between the CPSU and the Victorian Hospitals' Industrial Association (VHIA). This Federal Agreement covers Dental Hygienists, Oral Health Therapists and Dental Therapists.

51. This Agreement and its previous iterations do not reference the HPSS Award in relation to coverage of Dental Therapists, nor is the HPSS referenced for the purposes of the Better Off Overall Test as per s186(2)(d) of Fair Work Act.

52. Another example of long-term EBA coverage of dental professionals in the public sector is the South Australian Modern Public Sector Enterprise Agreement; Salaried Employees 2017, File No. 372. This State Agreement negotiated between the PSA division of CPSU and SA Dental does not reference any State award, including for dental therapists.

53. Therefore, a new suite of NSW state awards covering all dental professionals does not warrant a change in coverage of the HPSS award.

ADA comments in 2009 in relation to a separate and non-related application (SM2010/31)

54. At [116] of their Decision[44] the Full Bench commented on a letter that had been submitted to AIRC by the ADA on 8th April 2010, stating that the decision of the Full Bench on 24 December 2009 to delete Dental Hygienists from the Award, had caused confusion within dental practices.

55. DHAA submits that there probably was confusion in dental practices and in industry in general, in the three to four months after the new modern awards commenced, including the HPSS Award.

56. However, it is evident from Dr Hewson's witness statement and testimony seven years later in 2017[45] that the ADA no longer believes that the award-free status of Dental Hygienists or Oral Health Therapists is confusing of undesirable.

[43] 1 July 2017, Health Employees Dental Officers (State) Award 2017, Case No 194489 of 2017, Industrial Relations Commission of NSW, Chief Commissioner Kite, 4 July 2017.
[44] [2018] FWCFB 750 p16
[45] Witness statement of Dr Neil David Hewson, 9 June 2017, paragraph 28 (in Australian Dental Association, AM2016/31 – Submission in reply – witness statements, 9 June 2017).

57. The collaborative work of ADA (employers) and DHAA (employees) since 2009 on seeking to retain the award free status of Dental Hygienists and Oral health Therapists demonstrates harmony between the employers and the employees which is a significant benefit to the industry. Such a benefit would be disrupted by a change to the HPSS award, to cover all dental professionals.

Summary

58. No good reason exists for the Commission to disrupt the status quo that Dental Hygienists and Oral Health Therapists are not covered by the Health Professionals and Support Services Award.

59. This List of Common Health Professionals should remain exhaustive for the sake of clarity and simplicity for employers and employees.

60. A List of Health Professionals **not** covered by the Award, namely Dental Hygienists, Oral Health Therapists and Dentists would assist to achieve clarity.

61. Award variations are available in the usual way if justified by the requirements of Fair Work Act.

62. Change in the dental industry since 2009 does not justify a change in award coverage. The significant change is a continuing, permanent decline in numbers of Dental Therapists (who have always been covered by the HPSS Award). That occupation is now a "legacy" profession. It is not logical to default to the award coverage position of the legacy profession.

63. Witness evidence supports DHAA's members' unchanged strong position evinced in its application to AIRC in 2009 that award coverage poses significant and permanent harm to Dental Hygienists and Oral Health Therapists. They see a future where their incomes would dwindle inexorably towards the minimum rates of pay in the Award. DHAA submits witness evidence that this deleterious effect occurred with Pharmacists' incomes after award coverage occurred, under the Pharmacy Industry Award.

64. The existence of State public sector awards should not alter the status quo of coverage by the HPSS Award. The status quo is that those not covered by State public sector awards or the Higher Education Industry Award 2010, are award-free. This means that all Dental Hygienists and Oral Health Therapists in the private sector, other than those working in Universities and TAFES are award free.

65. The DHAA and ADA's consistent position representing employees (DHAA) and employers (ADA) is that the best interests of the dental industry are served by maintaining the status quo that Dental Hygienists, Oral Health Therapists and Dentists are not covered by the Health Professionals and Support Services Award.

Katrina Murphy for
Dental Hygienists Association of Australia Limited
31 July 2019

Attachments

Attachment 1 ..... Application to vary Health Professionals and Support Services Award

Attachment 2 ..... DHAA Submission of 14 March 2018

Attachment 3 ..... Witness statements of:

- Kay Ball, Oral Health Therapist, of 16 June 2019;
- Alison Taylor, lecturer and clinical tutor in dental hygiene at TAFE Australia, of 19 June 2019;
- Susan Melrose, Dental Hygienist, of 26 June 2019;
- Christina Zerk, Dental Hygienist, of 24 June 2019; and
- Lyn Carman, Dental Hygienist, of 30 July 2019.

Attachment 4 ..... Witness Statement of Benjamin Marchant of 16 July 2019

Attachment 5 ..... Witness Statement of Samson Chan, Registered Pharmacists, of 30 July 2019

Attachment 6 ..... Queensland Regulation – Reg 414 of 1996 made under the Health Act 1937

Attachment 7 ..... Poison and Therapeutic Goods Amendment (Oral Health Therapists) Regulation 2007, Schedule 1(1) to (4)

Attachment 8 ..... The NSW Dental Practice Regulation 2004 - Reg 7a

Attachment 9 ..... The NSW Dental Practice Amendment (Oral Health Therapists) Regulation 2007 under the Dental Practice Act 2001 p1

Attachment 10 ..... Health Employees Dental Officers (State) Award 2017

Attachment A ..... Balasubramanian, M and Teusner, DN, Australian Government's Australian Institute of Health and Welfare's "Dental Labour Force Collection 2006" AIHW Dental Statistics and Research Series, Number 53, 2011

Attachment B ..... Balasubramanian, M and Teusner, DN, Australian Government's Australian Institute of Health and Welfare's "Dental Workforce 2011" Cat. No. HWL 50, 2011

ATTACHMENT 1

ANNEXURE – SCHEDULE OF VARIATIONS TO THE HEALTH PROFESSIONALS AND SUPPORT SERVICES AWARD

3. Definitions and interpretation

[Varied by PR994550, PR997603, PR997772, PR503634, PR535562, PR544798, PR545994, PR703713]

3.1 In this award, unless the contrary intention appears:

health industry means employers whose business and/or activity is in the delivery of health care, medical services and dental services in the private sector,

4. Coverage

[Varied by PR994550, PR544798]

4.1 This award covers the following employers and occupations:

(a) employers throughout Australia of employees in the health industry (as defined) in the classifications listed in this award and those employees to the exclusion of any modern award;

(b) employers in the private sector engaging a health professional in the occupations listed in clause 4.9.

4.2 This award does not cover an employee excluded from award coverage by the Act.

[4.3 substituted by PR994550 from 01Jan10]

4.3 The award does not cover employees who are covered by a modern enterprise award, or an enterprise instrument (within the meaning of the Fair Work (Transitional Provisions and Consequential Amendments) Act 2009 (Cth)), or employers in relation to those employees.

[New 4.4 inserted by PR994550 from 01Jan10]

4.4 The award does not cover employees who are covered by a State reference public sector modern award, or a State reference public sector transitional award (within the meaning of the Fair Work (Transitional Provisions and Consequential Amendments) Act 2009 (Cth)), or employers in relation to those employees.

[4.5 inserted by PR994550 from 01Jan10]

4.5 This award covers any employer which supplies labour on an on-hire basis in the industry set out in clause 4.1 in respect of on-hire employees in classifications covered by this award, and those on-hire employees, while engaged in the performance of work for a business in that industry. This subclause operates subject to the exclusions from coverage in this award.

[4.6 inserted by PR994550 from 01Jan10]

4.6 This award covers any employer which supplies on-hire employees in classifications set out in this award and those on-hire employees, if the employer is not covered by another modern award containing a classification which is more appropriate to the work performed by the employee. This subclause operates subject to the exclusions from coverage in this award.

[4.7 inserted by PR994550 from 01Jan10; substituted by PR544798 ppc 01Jan14]

4.7 This award covers employers which provide group training services for apprentices and trainees engaged in the industry and/or parts of industry set out at clause 4.1 and those apprentices and trainees engaged by a group training service hosted by a company to perform work at a location where the activities described herein are being performed. This clause operates subject to the exclusions from coverage in this award.

[4.4 renumbered as 4.8 by PR994550 from 01Jan10]

4.8 Where an employer is covered by more than one award, an employee of that employer is covered by the award classification which is most appropriate to the work performed by the employee and to the environment in which the employee normally performs the work.

4.9 This award covers health professionals who are engaged in the occupations set out in Schedule C aw. Health professionals in the following occupations are not covered by this award:

(a) Dental Hygienist;

(b) Oral Therapist;

(c) Dentists (including specialist dentists);

(d) Doctors (including specialist doctors);

Schedule C—Health Professional occupations covered by this award

[Varied by PR988397, PR991493, PR994550]

Acupuncturist

Aromatherapist

Art Therapist

Audiologist

Biomedical Engineer

Biomedical Technologist

[Cardiac Technologist Health Information Manager deleted by PR994550 from 01Jan10]

[Cardiac Technologist inserted by PR994550 from 01Jan10]

Cardiac Technologist

Child Psychotherapist

Chiropractor

Client Advisor/Rehabilitation Consultant

Clinical Perfusionist

Community Development Worker

Counsellor

Dental Therapist

Dietician

Diversional Therapist

Exercise Physiologist

Genetics Counsellor

[Health Information Manager inserted by PR994550 from 01Jan10]

Health Information Manager

Homeopathist

Masseur, Remedial

Medical Imaging Technologist (MIT)

(Including: Medical Radiographer; Ultrasonographer; Magnetic Resonance Imaging Technologist; Nuclear Medicine Technologist; and Radiation Therapist)

Medical Laboratory Technician

Medical Librarian

Medical Photographer/Illustrator

Medical Record Administrator

Medical Technician/Renal Dialysis Technician

Musculoskeletal Therapist

Music Therapist

Myotherapist

Naturopathist

Nuclear Medicine Technologist (NMT)

Occupational Therapist

Orthoptist

Osteopath

Pastoral Carer

Pharmacist

Physiotherapist

Play Therapist

Podiatrist

Prosthetist/Orthotist

Psychologist

Radiation Therapy Technologist (RTT)

Recreation Therapist

Reflexologist

Research Technologist

Medical Scientist

Social Worker

Sonographer

Speech Pathologist

Welfare Worker

Youth Worker

ATTACHMENT 2

14 March 2018

The Dental Hygienists' Association of Australia Ltd.

(AM2014/204)(AM2016/31) formerly (AM2014/204)

4 yearly review of Modern Awards
Health Professionals and Support Services award 2010

SUBMISSION OPPOSING VARIATION SOUGHT BY HEALTH SERVICES UNION IN SUBMISSION 12 FEBRUARY 2018

DENTAL HYGIENISTS ASSOCIATION OF AUSTRALIA LIMITED.

The Dental Hygienists Association of Australia Limited (DHAA) is the peak professional national organisation of dental hygienists and oral health therapists in Australia, with 1500 members.

The DHAA wants to retain the status quo of award-free status for Dental Hygienists and Oral Health Therapists. The DHAA has no other interest in this matter. The DHAA files this submission in reply in relation to the 4 Yearly Review of the *Health Professionals and Support Services Award 2010* ("the Award") in accordance with Directions issued on 21 December 2018, and specifically in response to the HSU's most recent proposal to vary the award dated 12 February 2018. The DHAA submission relies on:

- the DHAA's previous submissions, in particular the submission of 22 May 2017 **(attached)**.
- Witness evidence and sworn statement from Dr Melanie Hayes, President (and now CEO) of DHAA (AM2016/31 on 11 December 2017 at PN 1464 -PN1563 and Exhibit #DHAA1 Statement of Melanie Jane Hayes and
- Witness evidence and sworn statement from Dr Carol Tran PN1568-PN 1646 and Exhibit #DHAA2 Statement of Dr Carol Tran.

List of Common Health Professionals – the HSU's Views

The HSU posits that the List of Common Health Professionals must be seen as indicative rather than exhaustive. The DHAA has already provided extensive submissions refuting this view, in particular our submission of 22 May 2017 (copy attached) and in witness evidence and sworn statement from Dr Melanie Hayes (AM2016/31 at PN 1464 -PN1563) and Exhibit #DHAA1 Statement of Melanie Jane Hayes and Witness evidence and sworn statement from Dr Carol Tran PN1568-PN 1646 and Exhibit #DHAA2 Statement of Dr Carol Tran.

The DHAA have no vested interest in the drafting of this Award other than ensuring that these two occupations of dental hygienist and oral health therapist remain specifically award free.

Award Free Status

If the Full Bench is of a view that the List of Common Health Professionals should be indicative rather than exhaustive, DHAA submits that the variation proposed by the HSU at clause 61 of their submission of 12 February 2018 should be altered. The HSU's proposed wording is:

A.2 Health Professional employees – definitions
An indicative list of common health professionals which are covered by the definitions is contained in Schedule B – Indicative List of Common Practice Areas and Titles.

DHAA's proposed re-wording is:

A.2 Health Professional employees – definitions
An indicative list of common health professionals which are covered by the definitions is contained in Schedule B – Indicative List of Common Practice Areas and Titles. This list does not include the award free occupations of Dental Hygienist or Oral Health Therapist.

Oral Health Therapist vs Dental Therapists

In relation to the 2009 AIRC Full Bench decision [2009] AIRFB 958, DHAA did not make application to the Full Bench of AIRC to have the occupation of oral health therapist removed from award coverage because the occupation was not in the List of Common Health Professionals, therefore there was no need to do so. Only the occupation of Dental Hygienist was on the List. Therefore, the DHAA's application to preserve traditional award free status referred only to dental hygienists. (*ref para 18 of Exhibit #DHAA1 Statement of Melanie Jane Hayes.*)

There was a new view posited at the Hearing on 11 and 12 December 2018 by the HSU in cross examination of Dr Hayes at PN 1487-1498 (but not supported by any witness evidence) that the occupation of oral health therapist did not exist at the time of the 2009 AIRC Full Bench decision.

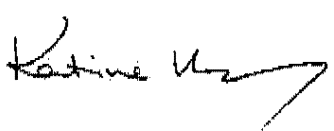
The view was also posited (e.g. PN 1725) that the occupation of oral health therapist which emerged after 2009 has essentially replaced the occupation of dental therapist. The view of the HSU appears to be that this change since 2009 is sufficiently substantive to warrant inclusion of oral health therapist in the List of Common Health Professionals, because the occupation is an organic development of the occupation of Dental Therapist which is currently covered by the Health Professionals and Support Services Award.

DHAA submits that this view is not correct (PN 1498.)

Oral Health Therapist has been a registered profession with State Boards since 2006. This data is retained by the Australian Institute of Health and Welfare since 2006. (PN 1498). There were 371 oral health therapists registered in 2006. The attached statistics from the Australian Institute of Health and Welfare show that in 2006, oral health therapists were employed in New South Wales, Victoria, Queensland, Western Australia and South Australia (see attachment.) Moreover, the profession of oral health therapist is equally built on the professions of dental therapist and dental hygienist. (PN 1496)

DHAA submits that there has been no evidence submitted, to support the HSU's contention that award coverage for oral health therapists is warranted due to changes/development in that occupation since 2009, particularly given that the occupation has no history of award coverage.

Yours sincerely,



Katrina Murphy, representing DHAA Ltd
13 March 2018

Katrina Murphy, Managing Director

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22 May 2017

The Dental Hygienists' Association of Australia Ltd.

(AM2014/204)(AM2016/31) formerly (AM2014/204)

4 YEARLY REVIEW OF MODERN AWARDS
HEALTH PROFESSIONALS AND SUPPORT SERVICES AWARD 2010

SUBMISSION IN REPLY

DENTAL HYGIENISTS ASSOCIATION OF AUSTRALIA LIMITED.

The Dental Hygienists Association of Australia Limited (DHAA) is the peak professional national organisation of dental hygienists and oral health therapists in Australia, with 1030 members.

The DHAA files this submission in reply in relation to the 4 Yearly Review of the *Health Professionals and Support Services Award 2010* ("the Award") in accordance with Directions issued on 23 November 2016.

This submission in reply supports the DHAA's submission and supporting Witness Statement from Dr Melanie Hayes, President of DHAA filed on 17 March 2017. That submission related solely to our view that the Award's Schedule B - List of Common Health Professionals, is exhaustive in nature as opposed to indicative, meaning that any occupation not listed in the Schedule is unambiguously and unequivocally not covered by this award. The status quo of the occupations of dental hygienist and oral health therapist is that they are not covered by this or any modern Award. The DHAA submits that this status quo should not be disturbed. Any variation to the award consequential of these proceedings must not result in any ambiguity with regard to the current award-free status of these two occupations.

The 17 March 2017 DHAA submission addressed the submissions of the Health Services Union of Australia of 28 January 2015, 4 March 2015 and 16 July 2015 at paras 10-24, notwithstanding that at paragraph 22 the HSUA acknowledges that dental hygienists were removed from award coverage by [2009] AIRCFB 948) and the Australian Workers Union (15 July 2015 at para 4) that Schedule B – List of Common Health Professionals is indicative, not exhaustive.

This DHAA submission in reply addresses paragraphs 4 to 37 inclusive of the HSUA's submission of 17 March 2017. DHAA will cross-examine the HSUA's Industrial Officer Alex Leszcynski regarding the content of his witness statement when this matter is heard before the Full Bench.

List of Common Health Professionals – the HSUA's Views

The HSUA posits that the List of Common Health Professionals must be seen as indicative rather than exhaustive because:

a) This the only logical interpretation (paragraph 4 of HSUA 17 March submission)
b) This is common sense (para 5)
c) This is consistent with the approach taken by the Commission (para 5)
d) This is consistent with the modern awards objective (para 5)
e) The classification structure in the Award is broad enough to cover all health professionals. Therefore because, the term "health professionals" is not specifically defined in the award, it follows that the default position should be that ***all*** health professionals are covered by the

award, unless expressly they are not (such as the dental hygienists, presumably as per para 33). Making the list indicative rather than exhaustive neatly accommodates this view of universal coverage as the default position.

f) Because of the use of the word "common" which according to the HSUA means that there would be other Health Professionals in the list who fall within the scope of the classifications but are not on the list, and because the HSUA believe that the classification structure covers all health professionals (para 7), it would be "perverse" to regard the Schedule as anything other than indicative (para 9).

g) The titles of health professionals alter from organisation to organisation, and from time to time, there are "frequent changes" (para 20) as per the once in four years change of the Play Therapist versus Child Life Therapist example elucidated in Mr Leszcynski's witness statement and referred to in para 19. Therefore the HSUA posits that making the list indicative rather than exhaustive is the logical conclusion from this state of flux, otherwise an occupation could end up denied of award coverage because the title they were using for their occupation was not the exact words used to describe that occupation in Schedule B. (paras 11, 12, 19, 20 et al). There is no mention of the option of the HSUA or other interested party seeking to vary the award under s 160 of Fair Work Act to correct the occupational name change.

h) Some occupations are not included in the list but should be. Again, the best course of action is apparently not for the HSUA to seek to vary the award to effect coverage (under s 158(1)(3)), but to assert that it makes more sense for the List to be indicative.

i) HSUA states that The Australian Dental and Oral Health Therapists Association claims that its members are confused (para 22) because their occupation is not in the Schedule. HSUA posits that it is a better option to make the list indicative to ease that confusion. It is not clear how this will ease ADOTA's confusion. Again, for reasons that are not apparent, HSUA asserts that is a better option to make things vaguer with an "indicative" list than to make things definite by accepting the list as is (viz. exhaustive) and HSUA and/or ADOHTA seeking to vary the award for the occupation of oral health therapist to be covered by the award (if that is indeed what ADOTA members want.) APESMA (Outline of Submissions 17 March 2017)has taken the usual approach of employee associations in these proceedings to seek to vary the award to include Translators and Interpreters in the List of Common Health Professionals (Schedule B.) It is not clear why ADOHTA or HSUA cannot do the same.

j) HSUA states that because the nature of health professional terminology is of an "evolving nature" the Schedule must be indicative otherwise the HPSS Award "would be stuck with the health professional nomenclature of a particular point in time, and would become quickly out of date." Given that the Four Yearly Proceedings are designed specifically for interested parties to make application to correct ambiguity and update the awards, it is part of the role and purpose of employee associations such as the HSUA to make application to vary the award if they believe that there is a cogent and supportable argument to support a change (as apparently they do with the Child Life Therapists/ Play Therapists.)

k) The HSUA posits that to make the list indicative will work to "minimise confusion about award coverage" (para 22) The HSUA references the undesirability of "lack of certainty." (23). It is illogical to suggest that an "indicative" list is "clearer" than an exhaustive list. If this was the case, the HSUA would have drafted their own Rules (R2016/196) on the same indicative lines. But they are not drafted in such a way. Their Rules, like all well drafted

industrial instruments, are very specific as to coverage and non-coverage issues. For example, clause 38(d) (refer Attachment) provides a list of health classifications which may be members of the Victoria No. 3 Branch of the HSUA. The list is exhaustive. It is clearly designed to ensure there is no confusion. As an exhaustive list, it provides clarity about who is covered and who is not. Such is the nature and purpose of an exhaustive list. The Rules contain specific provisions about how the list can be altered/updated – analogous to the provisions available to vary the Award via application to Fair Work Commission.

l) HSUA maintains that the fact that the Award has an exhaustive list of occupations is not usual with regard to modern awards. They give two examples of the 130 modern awards as evidence for this point. They state that there is "no reason" why the Award should be "an exception to other modern awards by creating an exhaustive list of health professionals."

HSUA first makes reference to Schedule B of the Aged Care Award 2010. This schedule defines the classifications into levels. i.e. Level 1 through to Level 7. Each level has a list of 'indicative tasks' such as cleaner and laundry hand. The Health Professionals and Support Services Award 2010 also has a Schedule B which has classification definitions divided into levels with indicative tasks such as cleaner and laundry hand.

The Health Professionals and Support Services Award Schedule C cannot properly be compared to the Aged Care Award 2010 Schedule B, as it is entirely unrelated. The HPSS Schedule B is related, but not schedule C. The Health Professionals and Support Services Award Schedule C has a list of 'Common Health Professionals'. Health Professionals who are in most cases degree qualified. To compare the Aged Care Award 2010 Schedule B and the Health Professionals and Support Services Award 2010 Schedule C is like comparing apples and oranges.

The HSU claims there is no reason why the HPSS Award should be an exception to other modern awards by creating an exhaustive list of health professions.

The DHAA submit that the format of the HPSS Award is not an exception. For example:

- the Aboriginal Community Controlled Health Services Award 2010 has an exhaustive list of job titles at Schedule B, B.3. Dental. B.3. includes an exhaustive list including Dental Assistants and Dental Therapists. It also has an exhaustive list of ancillary staff being cleaners, drivers and caretakers.

- the Ambulance and Patient Transport Industry Award 2010. Schedule B of this award has a very detailed exhaustive list at B1.

- the Animal Care and Veterinary Services Award 2010 has a list of Exhaustive job titles at Schedule B, and indicative tasks to classify employees within the levels under that job titles.

- the Broadcasting and Recorded Entertainment Award 2010 has an exhaustive list covered by seven separate Schedules. Only 3 of these schedules mention indicative tasks, all others are exhaustive.

If the HSUA continue to press this arm of their argument, the DHAA will submit documentary evidence of all 130 of the modern awards at arbitration to demonstrate that the HSUA's

submission that the exhaustive list of health professions should be made indicative to be in line with other modern awards is unsubstantiated.

m) The HSUA argue that to regard the schedule as exhaustive would have "undesirable and anomalous effects including the removal from award coverage of health professionals who have hitherto been regarded as covered by the Award." (para 29) No examples are given.

n) The HSUA state "there can be no rationale for treating one type of health professional as covered by the award, and another as outside the scope of its benefits" (para 29). This is the core of the HSUA's position – that all health professionals should be covered by the award, as the default position. They do not offer a rationale. There is of course a rationale opposing this position. An example of that rationale was accepted by the Full Bench of the AIRC, in their decision ([2009] AIRFB 958, to accept the DHAA's application to vary the award by removing the occupation of dental hygienist from the List of Common Health Professionals to render the occupation award-free.

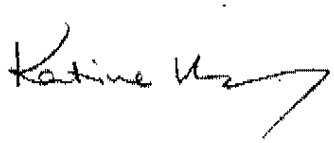
o) The HSUA argue that the modern award objectives are not served by an exhaustive list (paras 29-32.) In fact, the opposite is the case. Certainty and simplicity is achieved by having a list which clearly states which occupations are covered, and which are not. This assists all parties, including Fair Ombudsman telephone advisors, to easily understand and give correct advice on award coverage to health sector employers.

Proposed Variation

As per our previous submissions, the DHAA submits to Fair Work Commission that the exhaustive status of Schedule B is not ambiguous. However to ensure that submissions to claim that it is ambiguous are quashed permanently, DHAA proposes the following variation with numbering based on the current award, not the current Exposure Draft. The proposed change is highlighted in bold.

Clause 4.1 (b): employers engaging a health professional employee falling within the classifications described in clause 15. **Clause 15 has application only to the occupations specified in Schedule B – List of Common Health Professionals.**

Yours sincerely,



Katrina Murphy, representing DHAA Ltd
22 May 2017

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Australian Government
Australian Institute of Health and Welfare

AIHW DENTAL STATISTICS AND RESEARCH UNIT
RESEARCH REPORT 49 • JULY 2011

research report 49

Oral health practitioners in Australia, 2006

This report provides information on the oral health practitioner labour force in Australia, comprising dental therapists, dental hygienists and dual-qualified hygienists and therapists—commonly referred to as oral health therapists. Estimates in this report are derived from the 2006 national dental labour force data collection. Where appropriate, comparisons have been made with data from previous collections.

Main findings

In 2006, there were 1,171 practising dental therapists, 674 practising hygienists and 371 practising oral health therapists. Dental therapists were the oldest group among the oral health labour force, with an average age of 42.9 years. The oral health practitioner workforce was overwhelmingly female, with 98.8% of dental therapists, 96.7% of hygienists and 94.8% of oral health therapists being female in 2006.

New South Wales had the lowest rate of practising dental therapists with 3.3 per 100,000 population, and Western Australia had the highest with 13.9 per 100,000. The highest rate of practising hygienists was in the Australian Capital Territory, at 11.3 per 100,000 population, while the lowest was in Tasmania at 1.0 per 100,000 (excluding the Northern Territory who had no registered hygienists in 2006). Queensland had the highest rate of oral health therapists, with 5.6 per 100,000 population, while there were no registered oral health therapists in Tasmania, the Northern Territory or the Australian Capital Territory.

The large majority (82.0%) of dental therapists worked in the public sector while hygienists practised predominantly in the private sector (92.7%). Two-thirds of oral health therapists (62.0%) worked in private general practice. The distribution of hygienists across remoteness areas was highly skewed towards the more populous regions. Oral health therapists worked the longest week (33.4 hours).

Contents

Background

Since the late 1990s, there has been a substantial change in the structure of dental therapy and dental hygiene training programs. Historically, programs were predominantly single qualification Advanced Diplomas. In recent years, these programs have been replaced by Bachelor of Oral Health courses training dual-qualified hygienists and therapists, commonly referred to as oral health therapists. The first Bachelor of Oral Health course was an academic upgrade program offered by The University of Queensland (2002), quickly followed by the establishment of programs in other states.

Dental hygienists are trained in an accredited school and registered by the state/territory board to provide various dental services including examinations, scaling and polishing teeth, prevention, health promotion and radiography in accordance with the restrictions in place by the dental boards. Dental therapists provide various clinical and preventive services to preschool-aged and school-aged children and young adults, which include services such as examinations, fillings, extractions, health promotion and prevention. Oral health therapists are eligible to register as both a dental therapist and dental hygienist, but may not necessarily maintain dual registration or employment in a dual capacity.

Legislation in states and territories that defines the scope of practice for this labour force group has changed considerably since 2000. These changes and their timing varied by state/territory and by occupational groups, and are expected to have an impact on the practising patterns of these occupational groups. As of 2010, under national registration arrangements, scope of practice provisions have become uniform across all jurisdictions (a description of clinical services performed by hygienists and dental therapists in 2006 can be found in Balasubramanian & Teusner 2011).

Previous AIHW dental labour force reports have treated dental therapists and hygienists separately. Due to these recent legislative changes and the rapid emergence of the oral health therapist labour force, it is appropriate to compare the characteristics of the three occupational groups, and understand how they are employed in the delivery of dental services. As an oral health therapist can practise as either or both a therapist and hygienist, for the purposes of this report, the three occupational groups have been categorised according to registration type, rather than how they are principally employed.

Data collection and methods

This publication reports population estimates derived from the Dental Labour Force Data Collection 2006. The data collection was done by a questionnaire distributed in the second half of 2006 to all oral health practitioners registered with the dental boards in all states and territories. The overall response rates were high across the three occupational groups (dental therapists 81%, hygienists 76% and oral health therapists 82%). Data collection methods and response rates varied by state and territory (for full details see Balasubramanian & Teusner 2011).

To calculate population estimates, data were weighted for non-response. Not all questionnaires were completed in full, and missing data were imputed based on the assumption that non-respondents had the same characteristics as respondents.

Overall numbers

In 2006, the employed oral health labour force consisted of 1,171 dental therapists, 674 dental hygienists and 371 oral health therapists. In total, 2,216 practitioners were currently employed (Table 1). These three groups comprised 16% of the registered clinical dental labour force, which also includes dentists and dental prosthetists (dentists were the largest occupational group at 77%, and dental prosthetists comprised 7% of the dental labour force. Dental assistants are currently not registered and dental technicians are registered in most states and territories but do not provide clinical services).

Table 1: Oral health practitioner registrations, by labour force status, 2006

	Oral health practitioner type				
Labour force status	Dental therapists	Hygienists	Oral health therapists	Total	Percentage of oral health practitioner labour force
Employed	1,171	674	371	2,216	86
Employed in another state/territory	16	26	12	54	2
On leave (more than 3 months)	44	38	11	93	4
Overseas	5	16	1	22	1
Not in paid work	45	18	8	70	3
Working in dentistry but not as an oral health practitioner	46	10	3	59	2
Working in another industry/profession	53	2	4	59	2
Total	**1,380**	**784**	**410**	**2,574**	**100**
Percentage employed	85	86	90	86	

Note: Column/row totals may not sum to total due to rounding estimates.

Between 2000 and 2006 there was a decline in the number of registered and practising dental therapists per 100,000 population, resulting from the cessation of dental therapy courses and from an unknown number of therapists completing academic upgrades to become oral health therapists. Over the same period the practising rate of hygienists increased slightly from 2.1 in 2000 to 3.3 in 2006 (Figure 1).

In 2006, there were 1.8 oral health therapists per 100,000 population. In 2000 and 2003, there were small numbers (about 30 and 50 respectively) of employed dual-qualified oral health therapists but, due to inconsistent registration of oral health practitioners across the state/territories, numbers were difficult to estimate, and were included in the dental therapist estimates for those time points. State and territory dental boards began registration of therapists and hygienists at different times, but by 2005 these groups were registered in all states and territories, improving the capacity to calculate national estimates (Figure 1).

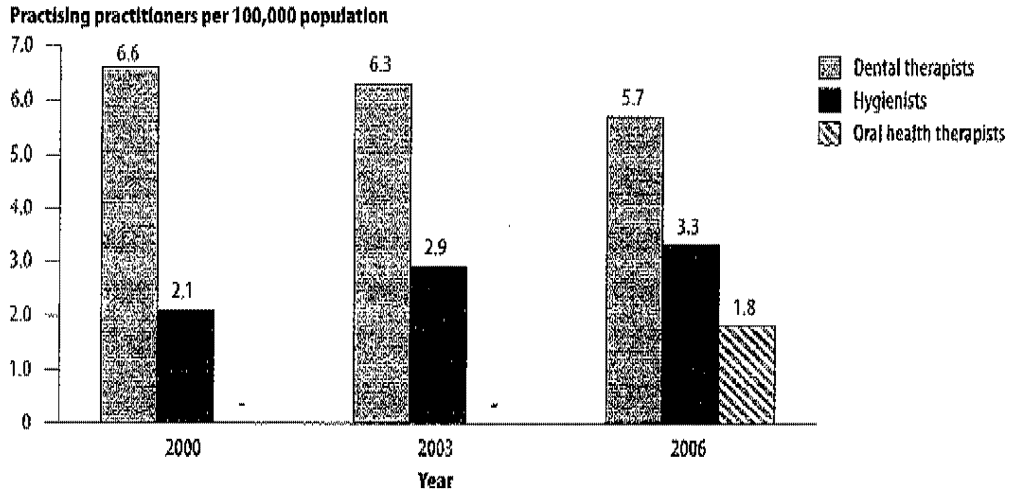


Figure 1: Practising oral health practitioners per 100,000 population, 2000, 2003 and 2006

Demographic characteristics

The oral health practitioner labour force was predominantly female. Of the dental therapist, hygienist and oral health therapist labour force, males comprised 1.2%, 3.3% and 5.2%, respectively, in 2006. Dental therapists had the highest average age (42.9 years) compared with hygienists (37.7 years) and oral health therapists (36.4 years). Nearly one-third (29.1%) of the oral health therapist labour force was in the youngest age group (20–29 years). In contrast, only 7.2% of dental therapists were in the youngest age group, and nearly one-fifth (17.7%) were 50 years or older. Hygienists were more evenly distributed across age groups (Figure 2).

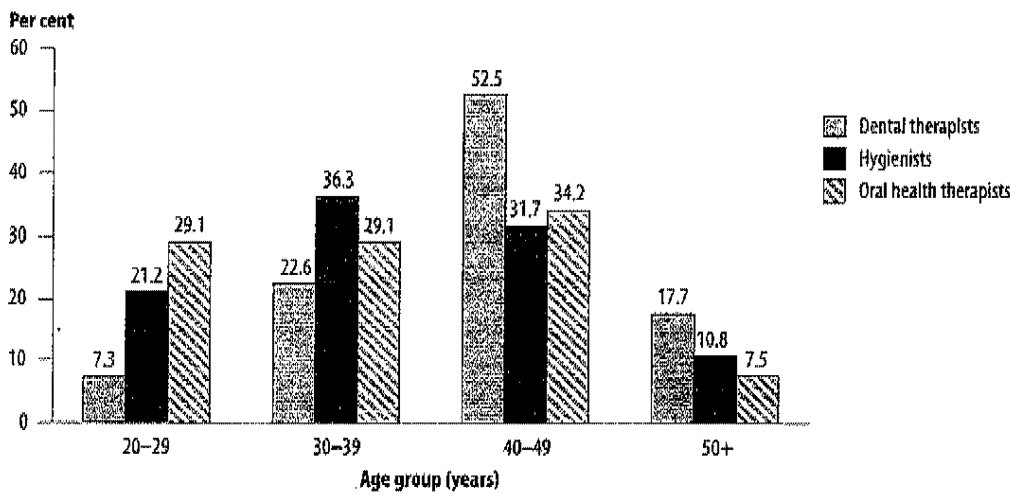


Figure 2: Proportion of practising oral health practitioners, by occupational group and age group, 2006

Geographic distribution

The numbers of oral health practitioners per 100,000 population varied by state and territory. Variations largely relate to historical differences in state oral health policy and availability of training programs. Western Australia had the highest rate of dental therapists (13.9), the Australian Capital Territory the highest rate of hygienists (11.3), and Queensland had the highest rate of oral health therapists (5.6) (Table 2).

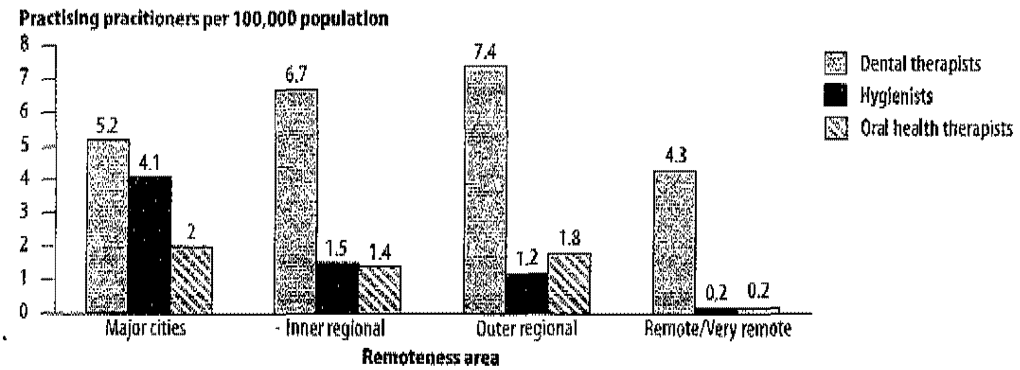
Table 2: Number of oral health practitioners and number practising per 100,000 population, by state and territory, 2006

Registration type	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
					Number of practitioners				
Dental therapists	225	196	245	286	121	56	19	23	1,171
Hygienists	149	120	74	135	154	5	38	–	674
Oral health therapists	39	41	228	38	26	–	–	–	371
Total	**413**	**356**	**546**	**458**	**300**	**61**	**57**	**23**	**2,216**
					Number practising per 100,000 population				
Dental therapists	3.3	3.8	6.0	13.9	7.7	11.4	5.7	11.0	5.7
Hygienists	2.2	2.3	1.8	6.6	9.8	1.0	11.3	–	3.3
Oral health therapists	0.6	0.8	5.6	1.8	1.7	–	–	–	1.8
Total	**6.1**	**6.9**	**13.4**	**22.3**	**19.2**	**12.4**	**17.0**	**11.0**	**10.7**

Note: Column/row totals may not sum to total because of rounding of estimates.

Information on geographic location is presented using remoteness areas. The remote areas are structured according to the Australian Standard Geographical Classification developed by the Australian Bureau of Statistics (for details see ABS 2006). Categories include *Major cities*, *Inner regional*, *Outer regional* and *Remote* and *Very remote* areas. These categories provide an indication of the degree of remoteness, or distance, from major cities.

The distribution of practitioners across remoteness areas differed by occupational group. The practising rate of dental therapists was highest in *Outer regional* areas. In contrast, the practising rate for hygienists was highest in *Major cities*, while the oral health therapist labour force was more evenly distributed across the three least remote areas with only a few working in *Remote* or *Very remote* areas (Figure 3).



Note: Remote and Very remote areas have been combined into the Remote category

Figure 3: Practising oral health practitioners per 100,000 population by occupational group and remoteness area, 2006

Practice characteristics

Dental therapists were predominantly employed in the public sector, with 60.4% working in school dental services and 16.2% working in community dental services (Table 3).

In contrast, hygienists were predominantly employed in the private sector, with nearly one-fifth (19.3%) working in private specialist practice.

Nearly two-thirds (62.0%) of the oral health practitioner labour force worked in the private sector (Table 3).

Table 3: Practising oral health practitioners, by occupational group and practice type, 2006

	Dental therapists		Hygienists		Oral health practitioners	
Practice type	Number	Per cent	Number	Per cent	Number	Per cent
Public						
School Dental Service	707	60.4	5	0.7	127	34.3
Community Dental Service	190	16.2	11	1.7	4	1.0
Dental hospital	26	2.2	6	0.8	5	1.4
Teaching	18	1.6	14	2.1	5	1.3
Public other	18	1.6	13	2.0	—	—
Private						
Private general practice	127	10.9	494	73.2	184	49.5
Specialist—Orthodontic	70	6.0	73	10.9	35	9.4
Specialist—Periodontic	1	0.1	44	6.6	9	2.5
Specialist—Other	10	0.8	12	1.8	2	0.6
Private other	3	0.2	1	0.2	—	—
Total	**1,171**	**100.0**	**674**	**100.0**	**371**	**100.0**

Notes
Column/row totals may not sum to total due of rounding of estimates,
— means zero or rounded to zero.

Practice activity

Oral health therapists, who worked on average 33.4 hours per week, had the longest week, compared with hygienists and dental therapists, who worked, on average, 28.2 and 28.0 hours per week, respectively. Although there was variation in hours worked per week by age group, the pattern of oral health therapists working a longer week was consistent across all age groups (Table 4). For dental therapists and oral health therapists, younger and older age groups (20–29 years and 50 years or older) worked a longer week than those in the 30–39 years and 40–49 years age groups.

Table 4: Practising oral health practitioners, average hours worked per week, by age group, 2006

Age group (years)	Dental therapists	Hygienists	Oral health therapists
20–29	35.1	34.0	38.0
30–39	23.0	27.4	30.7
40–49	28.8	28.0	31.1
50+	29.2	25.1	37.4
All	**28.0**	**28.2**	**33.4**

The majority oral health practitioners worked in one practice location: 80.5% of dental therapists, 64.9 of hygienists, and 55.3% of oral health therapists (Figure 4).

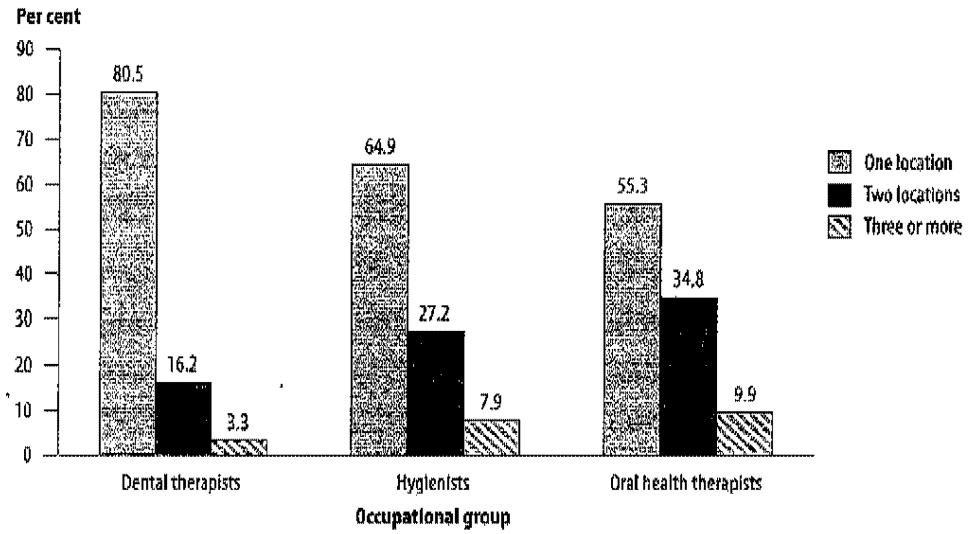
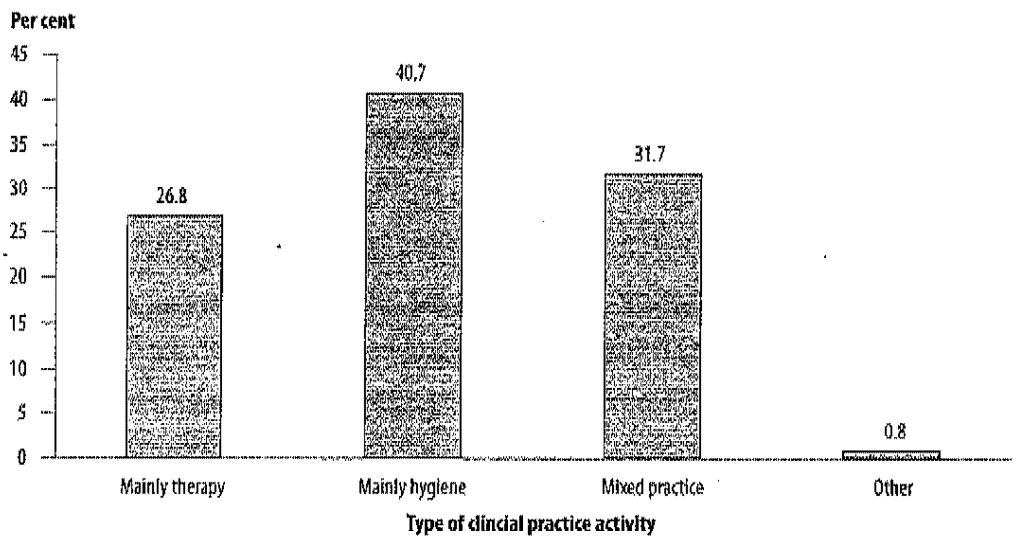


Figure 4: Practising oral health practitioners, by occupational group and number of practice locations worked, 2006

The most commonly reported type of clinical practice activity for the oral health therapist labour force was working mainly in hygiene practice. About one-quarter (26.8%) worked mainly in therapy, and nearly one-third (31.7%) worked in mixed practice (hygiene and therapy clinical activity) (Figure 5).



Note: Mainly therapy: 70% or more of hours worked were dedicated to therapy clinical practice. Mainly hygiene: 70% or more of hours worked were dedicated to hygiene clinical practice. Mixed practice: those not classified as mainly hygiene or mainly therapy were working the majority of their hours in dual hygiene and therapy clinical practice. Other: includes practitioners whose hours worked were dedicated mainly to non-clinical activities.

Figure 5: Percentage of practising oral health therapists, by type of clinical practice activity, 2006

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Balasubramanian M & Teusner DN 2011. Dentists, specialists and allied practitioners: the Austrralian dental labour force 2006. Dental statistics and research series no. 53. Cat. no. DEN 202. Canberra: AIHW.

Acknowledgments

The author of this report was Dana Teusner of the Dental Statistics and Research Unit at the Australian Institute of Health and Welfare (AIHW).

This research is supported by the AIHW.

research report 49

THE ZIMBABWE

ATTACHMENT 3

IN THE FAIR WORK COMMISSION

Matter No:
AM2014/204

Matter: Health Professionals and Support Services Award 2010

Applicant:
Dental Hygienists Association of Australia Ltd

WITNESS STATEMENT OF KAY BALL

I, **Kay Elizabeth Ball** of [redacted], Occupation - Oral Health Therapist, **at Bastow and Chye Complete Dental (Wynnum West & Lota)** make the following statement with regard to the matter before Fair Work Commission, Health Professionals and Support Services Award 2010, Matter Number AM2014/204.

1. I am a member of the Dental Hygienists Association of Australia Ltd (DHAA.)

2. My qualification is Bachelor of Applied Science (Oral Health) from Queensland University. I graduated in 2004 (year).

3. I have worked as an Oral Health Therapist for 14.5 years.

4. I was working as an Oral Health Therapist in 2009 and prior to 2009. My employers, my colleagues and I have described my profession and my job as an Oral Health Therapist since my graduation in December 2004.

5. I know from my own professional experience that the occupation and profession of Oral Health Therapist existed in 2009 and prior to 2009.

6. Since I commenced employment, I have negotiated my own favourable terms and conditions of employment on the understanding that my occupation was

award-free.

7. My hourly rate is some 37.7% higher than the highest award rate that I would most likely be classified under if I was covered by the Health Professionals and Support Services Award, namely Level 2, Pay Point 4 which is currently $32.91 per hour.

8. There is no scope for me to progress beyond this level because my occupation in a private practice has no potential or need for me to acquire managerial accountabilities.

9. My view is that my employer would not continue to pay my current rate of hourly pay if my occupation became covered by the Health Professionals and Support Services Award, and that my conditions of employment would gradually worsen.

10. My view is that, at best, my pay rate would be frozen from the date that my occupation became covered by the Award until and if the applicable minimum Award rate overtook my current hourly rate. Such an outcome would be extremely damaging for my family finances.

11. I am very concerned that my employer would state that because I was paid over-award, that the over award component compensated me for all the supposedly beneficial provisions of the award such as overtime, weekend penalty rates and paid tea breaks.

12. Therefore, being covered by an award offers me no benefits and worse, significantly jeopardises my current salary and employment conditions.

13. I believe that award coverage would be seen by my employer as a significant change which warranted issuing a new employment contract with a new reduced hourly wage rate.

14. As far as I know, there is no opportunity for me to pursue the benefits of

enterprise bargaining because my employer is too small, whether or not my occupation becomes covered by the award.

15. I believe that imposition of award coverage on health professional occupations such as mine that have been award-free for decades is a backward move, which will seriously impact my family's finances.

16. I believe that imposition of award coverage on oral health therapists/dental hygienists will disadvantage women like me in particular because the minimum rates of pay will operate quickly to drive our take home wages down.

17. I believe that the impact of award coverage on me personally will be to significantly harm my negotiating position with my employer in the immediate, medium and long-term future.

18. I do not think this is fair when I have enjoyed the benefits of award-free status for the entire period of my employment and I believe my opinion should be listened to by Fair Work Commission.

19. I do not understand why the status quo would be or should be disrupted now after so many years of award-free status for my occupation. I am very worried and concerned about any such change.

I declare that this witness statement is true and correct:

Name: Kay Elizabeth Ball

Signature: [redacted] Date: 16.06.2019

IN THE FAIR WORK COMMISSION

Matter No:
AM2014/204

Matter: Health Professionals and Support Services Award 2010

Applicant:
Dental Hygienists Association of Australia Ltd

WITNESS STATEMENT OF Alison Taylor

I, Alison Jane Taylor of [redacted], **Lecturer & Clinical Tutor in Dental Hygiene** at **TAFE SA 33 Blacks Rd Gilles Plains 5086** make the following statement with regard to the matter before Fair Work Commission, Health Professionals and Support Services Award 2010, Matter Number AM2014/204.

1. I am a member of the Dental Hygienists Association of Australia Ltd (DHAA.)

2. My qualification is Dental Hygienist from Gilles Plains TAFE. I graduated in 1990.

3. I have worked as a Dental Hygienist for 29 years.

4. I know from my own professional experience that the occupation and profession of Oral Health Therapist existed in 2009 and prior to 2009. I worked as a Clinical Tutor in the Bachelor of Oral Health program at the University of Adelaide from 2004 until 2017. I know from my own professional experience that Graduates of the program over that entire period were called Oral Health Therapists. I taught in the dental hygiene component of the program.

5. When I worked as a private practice dental hygienist, I negotiated my own favourable terms and conditions of employment on the understanding that my occupation was award-free.

6. I believe that imposition of award coverage on health professional occupations such as mine that have been award-free for decades is a backward move, which would seriously impact my family's finances.

7. I believe that imposition of award coverage on oral health therapists/dental hygienists will disadvantage women like me in particular because the minimum rates of pay will operate quickly to drive our take home wages down.

8. I do not understand why the status quo would be or should be disrupted now after so many years of award-free status for my occupation. I am very worried and concerned about any such change.

I declare that this witness statement is true and correct:

Name: Alison Taylor

Signature: [redacted] 19 June 2019

IN THE FAIR WORK COMMISSION

Matter No:
AM2014/204

Matter: Health Professionals and Support Services Award 2010

Applicant:
Dental Hygienists Association of Australia Ltd

WITNESS STATEMENT OF SUSAN MELROSE

I, Susan Janine Melrose of [redacted], Occupation, Dental Hygienist at Weston Dental Surgery Unit 2/24 Mahony Court Weston ACT 2611 make the following statement with regard to the matter before Fair Work Commission, Health Profession/als and Support Services Award 2010, Matter Number AM2014/204.

1. I am a member of the Dental Hygienists Association of Australia Ltd (DHAA.)

2. My qualification is Statement of Attainment for Australian Defence Force Trained Dental Hygienists from University of Queensland. I graduated in 2004.

3. I have worked as a Dental Hygienist for 14 years.

4. Since I commenced employment in private practice, I have negotiated my own very favourable terms and conditions of employment on the understanding that my occupation was award-free.

5. My hourly rate is some 109 percent higher than the highest award rate that I would most likely be classified under if I was covered by the Health Professionals and Support Services Award, namely Level 2, Pay Point 4 which is currently $32.91 per hour.

6. Employment at previous private practices had no scope for me to progress beyond this level because my occupation in those private practices has no potential or need for me to acquire managerial accountabilities. However, my current employment does involve some managerial tasks, but I am renumerated at the same pay rate whether working a clinical or managerial day.

7. My view is that my previous employers would not have continued to pay my current rate of hourly pay if my occupation became covered by the Health Professionals and Support Services Award, and that my conditions of employment would have gradually worsened.

8. My view is that, at best, my pay rate may have frozen from the date that my occupation became covered by the Award until and if the applicable minimum Award rate overtook my current hourly rate. Such an outcome would be extremely damaging for my family finances.

9. At previous private practices I believe my employer would have stated that because I was paid over-award, that the over award component compensated me for all the supposedly beneficial provisions of the award such as overtime, weekend penalty rates and paid tea breaks.

10. Therefore, being covered by an award offers me no benefits and worse, I strongly believe it would significantly jeopardises any future salary and employment conditions.

11. I believe that award coverage would be seen by many employers as a significant change which warranted issuing a new employment contract with a new reduced hourly wage rate.

12. As far as I know, there is no opportunity for me to pursue the benefits of enterprise bargaining because my employer is too small, whether or not my occupation becomes covered by the award.

13. I believe that imposition of award coverage on health professional occupations such as mine that have been award-free for decades is a backward move, which would seriously impact my family's finances.

14. I believe that imposition of award coverage on oral health therapists/dental hygienists will disadvantage women like me in particular because the minimum rates of pay will operate quickly to drive our take home wages down.

15. I believe that the impact of award coverage on me personally will be to significantly harm my negotiating position with my employer in the immediate, medium and long-term future.

16. I do not think this is fair when I have enjoyed the benefits of award-free status for the entire period of my employment in private practice and I believe my opinion should be listened to by Fair Work Commission.

17. I do not understand why the status quo would be or should be disrupted now after so many years of award-free status for my occupation. I am very worried and concerned about any such change.

I declare that this witness statement is true and correct:

Name: Susan Melrose

Signature [redacted]

Date: 26.6.2019

IN THE FAIR WORK COMMISSION

Matter No:
AM2014/204

Matter: Health Professionals and Support Services Award 2010

Applicant:
Dental Hygienists Association of Australia Ltd

WITNESS STATEMENT OF Christina Zerk

I, **Christina Zerk** of [redacted], Occupation, **Dental Hygienist** make the following statement with regard to the matter before Fair Work Commission, Health Professionals and Support Services Award 2010, Matter Number AM2014/204.

1. I am a member of the Dental Hygienists Association of Australia Ltd (DHAA.)

2. My qualification is Advanced Diploma of Oral Health (Dental Hygiene) from TAFE SA. I graduated in 2017.

3. I have worked as a Dental Hygienist for 1.5 years.

4. Since I commenced employment, I have negotiated my own favourable terms and conditions of employment on the understanding that my occupation was award-free.

5. The hourly rate I have been able to negotiate for myself as a new graduate Dental Hygienist is 35% higher than Pay point 1 (UG 2 qualification) I would have been classified under if I was covered by the Health Professionals and Support Services Award.

6. In addition to this there is no scope for me to progress beyond Level 2, Pay Point 4 because my occupation in a private practice has no potential or need for me to acquire managerial accountabilities which limits future income.

7. My view is that my employer would not continue to pay my current rate of hourly pay if my occupation became covered by the Health Professionals and Support Services Award, and that my conditions of employment would gradually worsen.

8. My view is that, at best, my pay rate would be frozen from the date that my occupation became covered by the Award until and if the applicable minimum Award rate overtook my current hourly rate. Such an outcome would be extremely damaging for my family finances.

9. I am very concerned that my employer would state that because I was paid over-award, that the over award component compensated me for all the supposedly beneficial provisions of the award such as overtime, weekend penalty rates and paid tea breaks.

10. Therefore, being covered by an award offers me no benefits and worse, significantly jeopardises my current salary and employment conditions.

11. I believe that award coverage would be seen by my employer as a significant change which warranted issuing a new employment contract with a new reduced hourly wage rate.

12. As far as I know, there is no opportunity for me to pursue the benefits of enterprise bargaining because my employer is too small, whether or not my occupation becomes covered by the award.

13. I believe that imposition of award coverage on health professional occupations such as mine that have been award-free for decades is a backward move, which will seriously impact my family's finances.

14. I believe that imposition of award coverage on oral health therapists/dental hygienists will disadvantage women like me in particular because the minimum rates of pay will operate quickly to drive our take home wages down.

15. I believe that the impact of award coverage on me personally will be to significantly harm my negotiating position with my employer in the immediate, medium and long-term future.

16. I do not think this is fair when I have enjoyed the benefits of award-free status for the entire period of my employment and I believe my opinion should be listened to by Fair Work Commission.

17. I do not understand why the status quo would be or should be disrupted now after so many years of award-free status for my occupation. I am very worried and concerned about any such change.

I declare that this witness statement is true and correct:

Name: Chrsitina Zerk

Signature: _____ Date: 24/06/2019

IN THE FAIR WORK COMMISSION

Matter No:
AM2014/204

Matter: Health Professionals and Support Services Award 2010

Applicant:
Dental Hygienists Association of Australia Ltd

WITNESS STATEMENT OF LYN CARMAN

I **Lyn Dawn Carman** of [redacted], Occupation, **Dental Hygienist** at **Dental on Eyre, 16 East Terrace, Cleve SA 5640** make the following statement with regard to the matter before Fair Work Commission, Health Professionals and Support Services Award 2010, Matter Number AM2014/204.

1. I am a member of the Dental Hygienists Association of Australia Ltd (DHAA.)

2. My qualification Associate Diploma from TAFE SA. I graduated in 1986.

3. I have worked as a Dental Hygienist for 33 years.

4. I know definitively from my own personal and professional experience the occupation and profession of Oral Health Therapist existed in 2009 and prior to 2009.

5. In 2008 I employed an Oral Health Therapist in my business as a dental practice owner.

6. Since I commenced employment, I have always negotiated my own favourable terms and conditions of employment on the understanding that my occupation was award-free.

7. I have always negotiated my own favourable terms and conditions of employment with the knowledge this was also the best position the practice and the excellent patient outcomes.

8. My hourly rate is currently approx 150% higher than the highest award rate that I would most likely be classified under if I was covered by the Health Professionals and Support Services Award, namely Level 2, Pay Point 4 which is currently $33.89 per hour.

9. I have always been very proud of the care and service I have been able to offer and felt extremely valued by my employers and patients. My view is if my occupation were to be covered by the Health Professionals and Support Services Award, it would mean a gradual erosion of value and excessive decrease in my family finances.

10. Therefore, being covered by an award offers me no benefits and worse, significantly jeopardises my current salary and employment conditions.

[redacted]

11. I believe that award coverage would be seen by my employer as a significant change which warranted issuing a new employment contract with a new significantly reduced hourly wage rate.

12. As far as I know, there is no opportunity for me to pursue the benefits of enterprise bargaining because my employer is too small, whether or not my occupation becomes covered by the award.

13. I believe that imposition of award coverage on health professional occupations such as mine that have been award-free for decades is a backward move, which will seriously impact my family's finances, after being employed in this occupation for 33years.

14. I strongly believe that imposition of award coverage on oral health therapists/dental hygienists will disadvantage women like me in particular because the minimum rates of pay will operate quickly to drive our take home wages down.

15. I believe that the impact of award coverage on me personally will be to significantly harm my negotiating position with my employer in the immediate, medium and long-term future.

16. As a previous business owner and employer of an Oral Health Therapist and Hygienists I was extremely pleased to be able to negotiate employment in the absence of an award and feel it was of benefit for my employees and therefore the patients and my business.

17. I do not think this is fair when I have enjoyed the benefits for 33 years of award-free status for the entire period of my employment and I believe my opinion should be listened to by Fair Work Commission.

18. I do not understand why the status quo would be or should be disrupted now after so many years of award-free status for my occupation. I am very worried and concerned about any such change.

I declare that this witness statement is true and correct:

Name: Lyn Carman

Signature: [redacted]

Date:.....30th July 2019

ATTACHMENT 4

IN THE FAIR WORK COMMISSION

Matter No: AM2014/204

Matter: Health Professionals and Support Services Award 2010

Applicant: Dental Hygienists Association of Australia Ltd

WITNESS STATEMENT OF Benjamin Marchant

I, Benjamin Marchant, of [redacted], Pharmacist (Director of Pharmacy at Mildura Base Hospital) and Victorian President, Pharmaceutical Society of Australia, make the following statement with regard to the matter before Fair Work Commission, Health Professionals and Support Services Award 2010, Matter Number AM2014/204.

Statement

I am a registered pharmacist since 2006 and am currently the Victorian President of the Pharmaceutical Society of Australia since 2015. The Pharmaceutical Society of Australia is the peak body representing pharmacists practising in all areas in Australia. I have also provided expert advice in relation to the pharmacy profession to the Victorian Government, the Australian Pharmacy Council and RMIT University through a range of advisory committees and working groups.

I would like to comment on the impact of the Pharmacy Industry Award 2010 to the pharmacy profession, which is likely to be similar to that of the Health Professionals and Support Services Award 2010 to the dental profession.

From my personal experience, most pharmacists practising in the community (private sector) were paid above award when the Pharmacy Industry Award 2010 was introduced. Since then, there has been a steady decline of pharmacist wages towards the award rate. While the Pharmacy Industry Award sets a minimum rate, employers are treating that as a government recommended standard rate for pharmacist employees.

The unintended impact of the Pharmacy Industry Award is that the wages for most pharmacists are kept relatively low, causing many experienced pharmacists to leave the profession to seek other career options. There has also been a steady fall in the academic quality of new entrants to the profession with the Australia Tertiary Admission Rank (ATAR) score to pharmacy degrees across Australian universities falling from the mid to high 90s to as low as 60s in recent years.

In my opinion, I believe the Pharmacy Industry Award has devalued the pharmacy profession and led to a decline in the overall service quality through the community pharmacy sector to the general public.

Similar to the Pharmacy Industry Award 2010, the Health Professionals and Support Services Award 2010 may have a similar impact on dental hygienists, dental therapists and oral health therapists if they are included in the award.

I declare that this statement is true and correct.

Benjamin Marchant, B PHARM MPS

Signature: [redacted]

Date: 16 July 2019

ATTACHMENT 5

IN THE FAIR WORK COMMISSION
Matter No: AM2014/204
Matter: Health Professionals and Support Services Award 2010
Applicant: Dental Hygienists Association of Australia Ltd

WITNESS STATEMENT OF Samson Chan

I, ...Samson Chan... (full name) of [redacted], Registered Pharmacist, make the following statement with regard to the matter before Fair Work Commission, Health Professionals and Support Services Award 2010, Matter Number AM2014/204.

Statement

I am a registered pharmacists since 1981, and is currently a partner of the Cura Pharmacy Group which comprises of 4 community pharmacies and 1 Private hospital pharmacy servicing 3 hospitals and 9000 aged care beds in the state of Victoria. We currently employ over 40 pharmacists and I have been a partner of the group since 1989

I would like to discuss the impact of the Pharmacy Industry Award 2010 on the pharmacy profession, and hopefully relate the situation for pharmacists over the past 9 years to the potential impact of the Health Professionals and Support Services Award 2010 may have if Dental Hygienists and Oral Health Therapists are included.

I can confirm that all pharmacists we employed were paid above award when the Pharmacy Industry Award 2010 was introduced. Since then, there was a steady decline of pharmacist wages towards the award rate. While we are able to continue to pay most of our staff pharmacists above award over the past 9 years, there has been a downward trend in real terms. I have provided the table below to demonstrate the impact:

	Pharmacy Industry Award Pharmacist ordinary hour rate	Cura Pharmacy group Pharmacist ordinary hour rate
2009	NA	
21 June 2010	$22.75	$32.00 on average
21 June 2019	$28.71	$33.00 on average
CPI increased by 22.5% between 2010 and 2019	Award rate increased by 26% between 2010 and 2019	

The wages of our employee pharmacists had fallen in real terms but as employers we are able to justify that by using the award wage as a benchmark.

As a pharmacist I am extremely disappointed that the pharmacist's wage is kept to such a low level and the award machinery has made it extremely difficult for the pharmacy profession to make significant changes to reflect the training and responsibilities that we hold.

It is my understanding that Dental Hygienists and Oral Health Therapists are currently award free, and their salary rate is significantly higher than that of the Health Professionals and Support Services Award 2010. This situation is very similar to that of pharmacists and the adversed impact on the future of the Dental and Oral Health profession cannot be underestimated.

I declare that this statement is true and correct

Samson Chan, B PHARM MPS [redacted]

Signature: [redacted] Date: 30/7/2019

ATTACHMENT 6

Queensland Consolidated Regulations

HEALTH (DRUGS AND POISONS) REGULATION 1996 - REG 248B

Oral health therapists

248B Oral health therapists

(1) To the extent necessary to perform an oral health therapist's functions as an **oral health therapist**, an **oral health therapist** is authorised to administer the following S2 and S3 poisons—

(a) lignocaine when in preparations for topical human therapeutic use (other than eye drops) that contain not more than 10% lignocaine;

(b) silver salts;

(c) ether;

(d) fluorides;

(e) phenol;

(f) ferric sulphate;

(g) adrenalin of a strength of not more than 0.1%, if administered by a pre-loaded device for the management of anaphylaxis.

Example for paragraph (g)—

an EpiPen

(2) *Subsection (3)* applies to a person (a **"trainee"**) who is undergoing a course of training, the successful completion of which will qualify the trainee to practise as an **oral health therapist**.

(3) To the extent necessary to undergo the course of training, the trainee is authorised to administer the S2 and S3 poisons mentioned in *subsection (1)* .

ATTACHMENT 7

2007 No 567

New South Wales

Poisons and Therapeutic Goods Amendment (Oral Health Therapists) Regulation 2007

under the

Poisons and Therapeutic Goods Act 1966

Her Excellency the Governor, with the advice of the Executive Council, has made the following Regulation under the *Poisons and Therapeutic Goods Act 1966*.

REBA MEAGHER, M.P.,
Minister for Health

Explanatory note

The object of this Regulation to amend the *Poisons and Therapeutic Goods Regulation 2002* to:

(a) authorise oral health therapists registered under the *Dental Practice Act 2001* to be in possession of, and be supplied with, wholesale quantities of certain local anaesthetics, and

(b) make other amendments of a machinery nature.

The *Dental Practice Amendment (Oral Health Therapists) Regulation 2007*, which among other things, prescribes oral health therapists as a class of dental auxiliary for the purposes of registration under the *Dental Practice Act 2001*, is due to commence on the same day.

This Regulation is made under the *Poisons and Therapeutic Goods Act 1966*, including the definition of ***Supply by wholesale*** in section 4 (1) and section 45C (the general regulation-making power).

Poisons and Therapeutic Goods Amendment (Oral Health Therapists) Regulation 2007

under the

Poisons and Therapeutic Goods Act 1966

1 Name of Regulation

This Regulation is the *Poisons and Therapeutic Goods Amendment (Oral Health Therapists) Regulation 2007*.

2 Commencement

This Regulation commences on 30 November 2007.

3 Amendment of Poisons and Therapeutic Goods Regulation 2002

The *Poisons and Therapeutic Goods Regulation 2002* is amended as set out in Schedule 1.

Schedule 1 Amendments

(Clause 3)

[1] Appendix C Supply by wholesale

Insert "**or oral health therapists**" after "**Dental therapists**" in the heading to clause 8.

[2] Appendix C, clause 8 (1)

Insert "or oral health therapist" after "dental therapist".

[3] Appendix C, clause 8 (1)

Insert "or oral health therapy" after "dental therapy".

[4] Appendix C, clause 8 (2)

Omit the subclause. Insert instead:

(2) In this clause:

dental therapist means a person who is registered under the *Dental Practice Act 2001* as a dental auxiliary in the class of dental therapist.

oral health therapist means a person who is registered under the *Dental Practice Act 2001* as a dental auxiliary in the class of oral health therapist.

[5] Appendix C, clause 8A

Omit subclause (2). Insert instead:

(2) In this clause:

dental hygienist means a person who is registered under the *Dental Practice Act 2001* as a dental auxiliary in the class of dental hygienist.

ATTACHMENT 8

New South Wales Repealed Regulations

This legislation has been repealed.

DENTAL PRACTICE REGULATION 2004 - REG 7A

Oral health therapists and their activities--section 19

7A Oral health therapists and their activities--section 19

(1) For the purposes of section 19 (1) (c) of the Act, oral health therapists are prescribed as a class of dental auxiliary.

(2) For the purposes of section 19 (3) of the Act, the following activities are, to the extent that the activities constitute restricted dental practices, prescribed as authorised activities for oral health therapists:

(a) the assessment of oral health conditions (excluding dental examination and treatment planning) and the recording of periodontal disease,

Note: Dental examination and treatment planning involving dental treatment of children under 18 years of age is prescribed as an authorised activity in paragraph (l) (i) below.

(b) the irrigation of the mouth,

(c) the insertion and removal of surgical packs,

(d) the application and removal of rubber dams,

(e) the cleaning and polishing of teeth and restorations,

(f) simple prophylaxis,

(g) the topical application of sealants, fluoride solutions and medicaments,

(h) the removal of dental calculus not involving surgical techniques requiring incisions,

(i) root planing,

(j) the application of topical anaesthetics,

(k) the giving of supraperiosteal or mandibular nerve block injections of local anaesthetics not involving, in either case, any other regional, intra-osseous or intra-ligamental anaesthesia,

(l) any of the following activities involving dental treatment of children who are under the age of 18 years:

(i) dental examination and treatment planning,

(ii) the extraction of primary teeth not involving either surgical techniques or incisions,

(iii) the pulp capping of primary or permanent teeth and the pulpotomy of deciduous teeth,

(iv) the restoration of primary or permanent teeth, excluding any indirect procedure,

(m) the removal of sutures,

(n) the selection of orthodontic bands,

(o) the removal of orthodontic archwires, bands and attachments,

(p) dental radiography for dental examination,

(q) the taking of study model impressions and their pouring up at the written request of a dentist,

(r) dental health education, including dietary counselling for dental purposes,

(s) the giving of pre-operative and post-operative instruction.

ATTACHMENT 9

New South Wales

Dental Practice Amendment (Oral Health Therapists) Regulation 2007

under the

Dental Practice Act 2001

Her Excellency the Governor, with the advice of the Executive Council, has made the following Regulation under the *Dental Practice Act 2001*.

REBA MEAGHER, M.P.,
Minister for Health

Explanatory note

The object of this Regulation is to amend the *Dental Practice Regulation 2004* as follows:

(a) to provide for oral health therapists by prescribing:

(i) oral health therapists as a class of dental auxiliary for the purposes of registration under the *Dental Practice Act 2001* (***the Act***), and

(ii) authorised activities for oral health therapists who are registered under the Act, and

(iii) the qualifications that are necessary qualifications for registration as an oral health therapist under the Act,

(b) to prescribe the application of topical anaesthetics as authorised activities for registered dental hygienists,

(c) to clarify that the authorised activities for registered dental hygienists and registered dental therapists include dental health education,

(d) to include certain Bachelor degrees among the qualifications prescribed as necessary qualifications for registration as a dental hygienist or dental therapist under the Act.

This Regulation is made under the *Dental Practice Act 2001*, including sections 19 (1) (c) and (3), 21 (1) (a) and 158 (the general regulation-making power).

ATTACHMENT 10

New South Wales Industrial Relations Commission
(Industrial Gazette)

Health Employees Dental Officers (State) Award 2017

Date	09/02/2018
Volume	382
Part	2
Page No.	241
Description	AIRC - Award of Industrial Relations Commission
Publication No.	C8742
Category	Award
Award Code	1422
Date Posted	13/02/2018

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(1422) **SERIAL C8742**

HEALTH EMPLOYEES DENTAL OFFICERS (STATE) AWARD 2017

INDUSTRIAL RELATIONS COMMISSION OF NEW SOUTH WALES

Application by Ministry of Health.

(Case No. 194489 of 2017)

Before Chief Commissioner Kite 4 July 2017

AWARD

Arrangement

1. Definitions

"Dental Officer" means a person appointed as such by a hospital who holds a dental qualification registrable with the Dental Board of Australia.

"Hospital" means a public hospital as defined under section 15 of the *Health Services Act* 1997.

"Ministry" means the Ministry of Health.

"Officer" means a Dental Officer, as defined herein, occupying a position as specified in clause 3, Salaries, in a hospital as defined above.

"Service", unless the context otherwise indicates or requires, means relevant service before and/or after commencement of this Award in any one or more New South Wales public health organisations or any other organisations deemed acceptable by the Ministry.

"Specialist" means a person appointed by the hospital who:

(a) holds a dental qualification registrable in Australia;

(b) after full registration has spent not less than six years in the practice of dentistry whether in New South Wales or elsewhere, deemed by the hospital to be of equivalent standing;

(c) has spent not less than four years in supervised specialist training and/or experience, and either:

(1) has obtained an appropriate dental qualification in his/her speciality acceptable to the hospital, or

(2) is deemed by the Ministry to be a specialist by recognition of his/her experience and demonstrated performance at specialist level.

"Union" means Health Services Union NSW.

"Weekly rates" will be ascertained by dividing an annual amount by 52.17857 or a weekly rate can be multiplied by 52.17857 to obtain the annual amount.

2. Conditions of Service

The Public Hospital (Professional and Associated Staff) Conditions of Employment (State) Award, as varied or replaced from time to time, shall apply to all persons covered by this Award.

In addition, the Health Industry Status of Employment (State) Award, as varied or replaced from time to time, shall also apply to all relevant employees.

3. Salaries

Salaries shall be in accordance with the rates contained in the Health Professional Medical Salaries (State) Award, as varied or replaced from time to time.

4. Classifications

4.1 Dental Officer Level 1

(a) Dental officers employed at level 1 are newly qualified employees. Dental officers at this level are beginning practitioners who are developing their skills and competencies in dentistry.

(b) Level 1 staff are responsible and accountable for providing a professional level of service to the health facility. Under the general oversight of a more experienced dentist, a level 1 year 1 dental officer performs examinations, investigations and basic treatment of commonly encountered dental diseases or dental health problems requiring standard corrective, restorative, or preventive measures.

(c) Dental officers on level 1 year 2-4 serve as practicing dentists who perform routine dental work requiring the independent examination, investigation, treatment planning and treatment of patients. This is a moderate skill level and includes the moderately experienced dentist who is competent in basic tasks. He or she may require regular professional support and mentoring.

(d) Level 1 staff participate in quality activities and workplace education. Level 1 year 2-4 staff may be required to provide supervision to undergraduate student on observational placements, work experience students and to level 1 year 1 dental officers.

4.2 Dental Officer Level 2

(a) Progression to level 2 from level 1 is dependent upon having a minimum of 2 years clinical experience, meeting the annual performance review requirements and successfully completing the standard Dental Officers Skills Assessment set by the Centre for Oral Health Strategy conducted by the clinical supervisor.

(b) The level 2 dental officer is a general dental practitioner who performs the full range of professional dental tasks described for the level 1 dental officer. The work differs from the level 1 dental officer in that the dental officer regularly encounters, diagnoses, and administers treatment for dental diseases and dental health problems of greater-than-usual difficulty.

(c) Positions at this level are required to exercise independent professional judgement on routine matters. They may require professional supervision from more senior staff members when performing novel, complex or critical tasks.

(d) Positions at this level assist in the development of policies, procedures, standards and practices, participate in quality improvement activities and may participate in clinical research activities as required.

(e) Dental registrars (dentists undertaking training as Specialists by masters degree) are placed on level 2, with remuneration linked to the proportion of time spent providing dental services to public patients.

4.3 Dental Officer Level 3 - Senior Dentist

(a) This level is only achieved by appointment to such a position. Level 3 dental officers are experienced and capable of operating with a level of independence reflective of their skill and competency in general dentistry. Some of these dental officers will be entitled to clinical manager allowances.

(b) The level 3 dental officer will have the majority of the following duties and attributes:

(i) highly advanced skills in managing most of the difficult clinical situations, complex medical histories and those with disabilities.

(ii) widely recognised for their exceptional competence in general dental work and has a proven record for carrying out a broad range of advanced and complex dental procedures. This may include the attainment of a Fellowship or Membership of the Royal Australasian College of Dental Surgeons (RACDS) or equivalent organisation as recognised by the Ministry of Health.

(iii) experienced clinician who demonstrates advanced clinical reasoning skills;

(iv) duties and responsibilities involving planning, implementing, evaluating and reporting on services;

(v) responsibility for identifying opportunities for improvement in clinical practice, develop and lead ongoing quality improvement activities with other staff;

(vi) conduct clinical research

(vii) acts as a mentor to other clinical staff and teaches undergraduate students

(viii) may be responsible for providing clinical supervision and support to level 1 and 2 dental officers, technical and support staff;

(ix) responsible for components of clinical governance; and

(x) participate in the provision of clinical development in-service education programs to staff and students.

4.4 Dental Officer Level 4 - Head of Department/Senior Clinical Adviser

(a) This level is only achieved by appointment. Level 4 dental officers will have the competencies of a level 3 Dental Officer plus additional areas of expertise. They may have a clinical, education or management focus or may have elements of all three features. Current grade 5 dental officers will go to level 4 on transition to the new structure.

(b) In recognition of their superior clinical expertise, a clinician at this level is responsible for quality assurance, development of better practice and clinical research within a facility and is actively involved in teaching staff and students in their field of clinical specialty. The level 4 dental officer also has responsibility for education support to other clinicians in the management of patients requiring ongoing specialist treatment in a geographic network, region or zone.

(c) Staff at level 4 deliver and/or manage and direct the delivery of services in a complex clinical setting. They perform novel, complex or critical discipline specific clinical work with a high level of professional knowledge and by the exercise of substantial professional judgement.

(d) Dental officers at this level would undertake work with significant scope and/or complexity and/or undertake professional duties of an innovative, novel and/or critical nature without direction.

(e) Roles that may be undertaken at level 4 include, but are not limited to, the following:

Level 4 - Clinical Stream

Level 4 dental officers are experienced dentists who are:

(i) widely recognised for their exceptional competence in general dental work and have a proven record for carrying out a broad range of advanced and complex dental procedures.

(ii) maintain a clinical caseload and provides:

clinical education in the area of expertise through in-service training to under-graduate and/or post-graduate students;

in-service to other dental officers in their clinical specialist area of expertise;

consultation and advice to specialist teams across an area or geographic or clinical network; and

discipline specific professional supervision and leadership either within a facility or across facilities and/or Local Health District(s).

Level 4 - Management Stream

Level 4 dental officers may be appointed as:

(i) Department Head - responsible for operational co-ordination of staffing and related clinical services and may work across a geographic region, zone or clinical network. Department Heads may also be required to maintain a clinical load.

(ii) Unit Head or Team Leader- responsible for the leadership, guidance and line management of a multi-disciplinary clinical unit or specialist team that may work across a geographic region, zone or clinical network. The work involves supervision of other dental officers and support staff as well as a clinical load.

4.5 Dental Officer Levels 1 - 3 Management Allowances

(a) Dental Officers in level 1(2nd year and thereafter), level 2 and level 3 may be paid a management allowance in addition to their rate of pay. The management allowance is paid as part of an employee's permanent salary following a merit selection process. If an employee is required to relieve for 5 days or more in the role of the manager, and performs all of the duties of the supervisor, then the management allowance will be paid to such employee. There are two levels of allowances, which are paid in the following circumstances:

i. Clinic Manager Level 1 - A dental officer managing a dental clinical service that may encompass more than one small clinic. The work involves, clinical management, supervision of other dental officers, other oral health practitioners, and support staff as well as a clinical load. A level 1 managerial allowance would be paid.

ii. Clinic Manager Level 2- is responsible for the leadership, guidance and line management of a multi-disciplinary clinical unit that may work across a geographic region, zone or clinical network. The work involves clinical management, supervision of other dental officers, other oral health practitioners, and support staff as well as a clinical load. A level 2 managerial allowance would be paid. Level 1 dental officers are not eligible for this allowance.

4.6 Specialists

(a) Employees occupying positions as specialists who have satisfied the full requirements of the Dental Board of Australia in a recognised speciality will be appointed to the Specialist scale in accordance with their years of experience in the speciality.

(b) Continued payment as a specialist will be on the basis of a dentist remaining employed in the specialist area concerned.

4.7 Hospital Specialist

(a) These will be differentiated from the board specialists as follows:

(i) Hospital specialists provide specialist services in an area of work that is not a specialty recognised by the Dental Board of Australia.

(ii) For the purpose of this Award, a hospital specialtist will work in the specialties of special needs, geriodontics or restorative dentistry. Additional specialties can be recognised with the approval of the Chief Dental Officer. The Medical and Dental Advisory Committee

assesses the merit of individual specialists for recognition as a hospital specialist within the categories determined by the Chief Dental Officer.

(iii) Hospital specialists do not have access to the senior clinical specialist classification.

4.8 Senior Clinical Specialist

(a) Board Specialists may progress to the level of Senior Specialist. This is seen as recognition for an exceptional clinical leader who has made significant contributions to dentistry in his/her area of speciality. This is a personal appointment, where it can also be demonstrated that the specialist is appointed to a position having such duties and responsibilities as deemed by the employer to require the services of a senior clinical specialist.

(b) Except in exceptional circumstances, this appointment would follow about 10 years of experience as a specialist. This classification is not available to hospital specialists. This appointment is considered upon application by or on behalf of an individual board specialist to the Medical and Dental Advisory Committee of the Local Health District(s). Appeal of any such decision lies with the Chief Dental Officer.

4.9 Specialist - Management Allowance

(a) A specialist or a senior clinical specialist managing a clinical service that involves, clinical management, supervision and teaching of other specialists, other oral health practitioners, undergraduate students and support staff as well as a clinical load. A hospital specialist may be eligible for the payment of this allowance. The management allowance is paid as part of an employee's permanent salary following a merit selection process. If an employee is required to relieve for 5 days or more in the role of the manager, and performs all of the duties of the supervisor, then the management allowance will be paid to such employee.

4.10 Area Directors of Oral Health Clinical Services

(a) Positions at this level lead, direct and co-ordinate all public sector oral health services within a Local Health District(s). They have significant responsibility for the human physical and financial resources under their control. Positions at this level will also make a major contribution towards the development and achievement of the strategic directions of the Area.

(b) The position exercises a high degree of independence in the determination of overall strategies, priorities, work standards and the allocation of resources. It will also make independent decisions related to area wide expert practice in their field and will be responsible for outcomes for clients and the organisation from the practice of other dental officers and staff. The position makes strategic management and service development decisions.

(c) Positions at this level may include operational and strategic roles but are not limited to the following:

(i) professional responsibility with regard to strategic workforce and service development and professional practice across an AHS;

(ii) provides professional co-ordination and leadership across an area to department heads and acts as a central point of contact for strategic consultation and liaison with Senior Executive management;

(iii) a dual role of department head within a facility;

(iv) required to provide an expert speciality consultancy role in their area of expertise; and

(v) involved in the provision of training to staff within the Local Health District(s).

(d) There will be three levels of Area Director of Clinical Services reflecting the size of the Local Health District(s) and the complexity and mix of the dental facilities within it.

(e) Area Director of Oral Health Clinical Services - Level 1

The level 1 reports to a health services manager responsible for oral health services. This is the lead dentist in a Local Health District(s) that provides the usual range of oral health services from community clinics but does not have

(i) a dental teaching hospital where dental specialist services are also provided

(ii) a Rural and Regional Centre of Oral Health or

(iii) a dental clinical school.

(f) Area Director of Oral Health Clinical Services - Level 2

The level 2 reports to a health services manager responsible for oral health services. This is the lead dentist in a Local Health District(s) that provides the usual range of oral health services from community clinics but:

(i) does not have a dental teaching hospital,

(ii) has a Rural and Regional Centre of Oral Health and/or

(iii) a dental clinical school.

(g) Area Director of Oral Health Clinical Services - Level 3

The level 3 would also have the role of health services manager responsible for oral health services. This is the lead dentist in a Local Health District(s) that provides the usual range of oral health services from community clinics, and, in addition, has:

(i) a dental teaching hospital where dental specialist services are also provided

(ii) a Rural and Regional Centre of Oral Health and/or

(iii) a dental clinical school.

5. Transition Arrangements

(a) Employees skills, responsibilities and qualifications will be assessed against the classification descriptors in clause 4 and will be placed on the appropriate level, maintaining their existing incremental date. Years of service at the relevant skill level will be used to determine the appropriate salary rate within the classification level. Employees will maintain their existing incremental date.

6. No Extra Claims

Other than as provided for in the *Industrial Relations Act* 1996 and the Industrial Relations (Public Sector Conditoins of Employment) Regulation 2014, there shall be no further claims/demands or proceedings instituted before the Industrial Relations Commission of New South Wales for extra or reduced wages, salaries, rates of pay, allowances or conditions of employment with respect to the employees covered by the Award that take effect prior to 30 June 2018 by a party to this Award.

7. Area, Incidence and Duration

(i) This Award takes effect from 1 July 2017 and shall remain in force for a period of one year.

(ii) This Award rescinds and replaces the Health Employees' Dental Officers (State) Award published 26 June 2009 (368 I.G. 402) and all variations thereof.

(ii) This Award shall apply to persons employed in classifications contained herein employed in or in connection with the New South Wales Health Service as defined in the *Health Services Act* 1997, or their successors, assignees or transmittees.

P. KITE, Chief Commissioner

Printed by the authority of the Industrial Registrar.

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HEALTH EMPLOYEES DENTAL OFFICERS (STATE) AWARD 2017

INDUSTRIAL RELATIONS COMMISSION OF NEW SOUTH WALES

Application by Ministry of Health.

(Case No. 194489 of 2017)

Before Chief Commissioner Kite 4 July 2017

AWARD

Arrangement

1. Definitions

"Dental Officer" means a person appointed as such by a hospital who holds a dental qualification registrable with the Dental Board of Australia.

"Hospital" means a public hospital as defined under section 15 of the *Health Services Act* 1997.

"Ministry" means the Ministry of Health.

"Officer" means a Dental Officer, as defined herein, occupying a position as specified in clause 3, Salaries, in a hospital as defined above.

"Service", unless the context otherwise indicates or requires, means relevant service before and/or after commencement of this Award in any one or more New South Wales public health organisations or any other organisations deemed acceptable by the Ministry.

"Specialist" means a person appointed by the hospital who:

(a) holds a dental qualification registrable in Australia;

(b) after full registration has spent not less than six years in the practice of dentistry whether in New South Wales or elsewhere, deemed by the hospital to be of equivalent standing;

(c) has spent not less than four years in supervised specialist training and/or experience, and either:

(1) has obtained an appropriate dental qualification in his/her speciality acceptable to the hospital, or

(2) is deemed by the Ministry to be a specialist by recognition of his/her experience and demonstrated performance at specialist level.

"Union" means Health Services Union NSW.

"Weekly rates" will be ascertained by dividing an annual amount by 52.17857 or a weekly rate can be multiplied by 52.17857 to obtain the annual amount.

2. Conditions of Service

The Public Hospital (Professional and Associated Staff) Conditions of Employment (State) Award, as varied or replaced from time to time, shall apply to all persons covered by this Award.

In addition, the Health Industry Status of Employment (State) Award, as varied or replaced from time to time, shall also apply to all relevant employees.

3. Salaries

Salaries shall be in accordance with the rates contained in the Health Professional Medical Salaries (State) Award, as varied or replaced from time to time.

4. Classifications

4.1 Dental Officer Level 1

(a) Dental officers employed at level 1 are newly qualified employees. Dental officers at this level are beginning practitioners who are developing their skills and competencies in dentistry.

(b) Level 1 staff are responsible and accountable for providing a professional level of service to the health facility. Under the general oversight of a more experienced dentist, a level 1 year 1 dental officer performs examinations, investigations and basic treatment of commonly encountered dental diseases or dental health problems requiring standard corrective, restorative, or preventive measures.

(c) Dental officers on level 1 year 2-4 serve as practicing dentists who perform routine dental work requiring the independent examination, investigation, treatment planning and treatment of patients. This is a moderate skill level and includes the moderately experienced dentist who is competent in basic tasks. He or she may require regular professional support and mentoring.

(d) Level 1 staff participate in quality activities and workplace education. Level 1 year 2-4 staff may be required to provide supervision to undergraduate student on observational placements, work experience students and to level 1 year 1 dental officers.

4.2 Dental Officer Level 2

(a) Progression to level 2 from level 1 is dependent upon having a minimum of 2 years clinical experience, meeting the annual performance review requirements and successfully completing the standard Dental Officers Skills Assessment set by the Centre for Oral Health Strategy conducted by the clinical supervisor.

(b) The level 2 dental officer is a general dental practitioner who performs the full range of professional dental tasks described for the level 1 dental officer. The work differs from the level 1 dental officer in that the dental officer regularly encounters, diagnoses, and administers treatment for dental diseases and dental health problems of greater-than-usual difficulty.

(c) Positions at this level are required to exercise independent professional judgement on routine matters. They may require professional supervision from more senior staff members when performing novel, complex or critical tasks.

(d) Positions at this level assist in the development of policies, procedures, standards and practices, participate in quality improvement activities and may participate in clinical research activities as required.

(e) Dental registrars (dentists undertaking training as Specialists by masters degree) are placed on level 2, with remuneration linked to the proportion of time spent providing dental services to public patients.

4.3 Dental Officer Level 3 - Senior Dentist

(a) This level is only achieved by appointment to such a position. Level 3 dental officers are experienced and capable of operating with a level of independence reflective of their skill and competency in general dentistry. Some of these dental officers will be entitled to clinical manager allowances.

(b) The level 3 dental officer will have the majority of the following duties and attributes:

(i) highly advanced skills in managing most of the difficult clinical situations, complex medical histories and those with disabilities.

(ii) widely recognised for their exceptional competence in general dental work and has a proven record for carrying out a broad range of advanced and complex dental procedures. This may include the attainment of a Fellowship or Membership of the Royal Australasian College of Dental Surgeons (RACDS) or equivalent organisation as recognised by the Ministry of Health.

(iii) experienced clinician who demonstrates advanced clinical reasoning skills;

(iv) duties and responsibilities involving planning, implementing, evaluating and reporting on services;

(v) responsibility for identifying opportunities for improvement in clinical practice, develop and lead ongoing quality improvement activities with other staff;

(vi) conduct clinical research

(vii) acts as a mentor to other clinical staff and teaches undergraduate students

(viii) may be responsible for providing clinical supervision and support to level 1 and 2 dental officers, technical and support staff;

(ix) responsible for components of clinical governance; and

(x) participate in the provision of clinical development in-service education programs to staff and students.

4.4 Dental Officer Level 4 - Head of Department/Senior Clinical Adviser

(a) This level is only achieved by appointment. Level 4 dental officers will have the competencies of a level 3 Dental Officer plus additional areas of expertise. They may have a clinical, education or management focus or may have elements of all three features. Current grade 5 dental officers will go to level 4 on transition to the new structure.

(b) In recognition of their superior clinical expertise, a clinician at this level is responsible for quality assurance, development of better practice and clinical research within a facility and is actively involved in teaching staff and students in their field of clinical specialty. The level 4 dental officer also has responsibility for education support to other clinicians in the management of patients requiring ongoing specialist treatment in a geographic network, region or zone.

(c) Staff at level 4 deliver and/or manage and direct the delivery of services in a complex clinical setting. They perform novel, complex or critical discipline specific clinical work with a high level of professional knowledge and by the exercise of substantial professional judgement.

(d) Dental officers at this level would undertake work with significant scope and/or complexity and/or undertake professional duties of an innovative, novel and/or critical nature without direction.

(e) Roles that may be undertaken at level 4 include, but are not limited to, the following:

Level 4 - Clinical Stream

Level 4 dental officers are experienced dentists who are:

(i) widely recognised for their exceptional competence in general dental work and have a proven record for carrying out a broad range of advanced and complex dental procedures.

(ii) maintain a clinical caseload and provides:

clinical education in the area of expertise through in-service training to under-graduate and/or post-graduate students;

in-service to other dental officers in their clinical specialist area of expertise;

consultation and advice to specialist teams across an area or geographic or clinical network; and

discipline specific professional supervision and leadership either within a facility or across facilities and/or Local Health District(s).

Level 4 - Management Stream

Level 4 dental officers may be appointed as:

(i) Department Head - responsible for operational co-ordination of staffing and related clinical services and may work across a geographic region, zone or clinical network. Department Heads may also be required to maintain a clinical load.

(ii) Unit Head or Team Leader- responsible for the leadership, guidance and line management of a multi-disciplinary clinical unit or specialist team that may work across a geographic region, zone or clinical network. The work involves supervision of other dental officers and support staff as well as a clinical load.

4.5 Dental Officer Levels 1 - 3 Management Allowances

(a) Dental Officers in level 1(2nd year and thereafter), level 2 and level 3 may be paid a management allowance in addition to their rate of pay. The management allowance is paid as part of an employee's permanent salary following a merit selection process. If an employee is required to relieve for 5 days or more in the role of the manager, and performs all of the duties of the supervisor, then the management allowance will be paid to such employee. There are two levels of allowances, which are paid in the following circumstances:

i. Clinic Manager Level 1 - A dental officer managing a dental clinical service that may encompass more than one small clinic. The work involves, clinical management, supervision of other dental officers, other oral health practitioners, and support staff as well as a clinical load. A level 1 managerial allowance would be paid.

ii. Clinic Manager Level 2- is responsible for the leadership, guidance and line management of a multi-disciplinary clinical unit that may work across a geographic region, zone or clinical network. The work involves clinical management, supervision of other dental officers, other oral health practitioners, and support staff as well as a clinical load. A level 2 managerial allowance would be paid. Level 1 dental officers are not eligible for this allowance.

4.6 Specialists

(a) Employees occupying positions as specialists who have satisfied the full requirements of the Dental Board of Australia in a recognised speciality will be appointed to the Specialist scale in accordance with their years of experience in the speciality.

(b) Continued payment as a specialist will be on the basis of a dentist remaining employed in the specialist area concerned.

4.7 Hospital Specialist

(a) These will be differentiated from the board specialists as follows:

(i) Hospital specialists provide specialist services in an area of work that is not a specialty recognised by the Dental Board of Australia.

(ii) For the purpose of this Award, a hospital specialtist will work in the specialties of special needs, geriodontics or restorative dentistry. Additional specialties can be recognised with the approval of the Chief Dental Officer. The Medical and Dental Advisory Committee assesses the merit of individual specialists for recognition as a hospital specialist within the categories determined by the Chief Dental Officer.

(iii) Hospital specialists do not have access to the senior clinical specialist classification.

4.8 Senior Clinical Specialist

(a) Board Specialists may progress to the level of Senior Specialist. This is seen as recognition for an exceptional clinical leader who has made significant contributions to dentistry in his/her area of speciality. This is a personal appointment, where it can also be demonstrated that the specialist is appointed to a position having such duties and responsibilities as deemed by the employer to require the services of a senior clinical specialist.

(b) Except in exceptional circumstances, this appointment would follow about 10 years of experience as a specialist. This classification is not available to hospital specialists. This appointment is considered upon application by or on behalf of an individual board specialist to the Medical and Dental Advisory Committee of the Local Health District(s). Appeal of any such decision lies with the Chief Dental Officer.

4.9 Specialist - Management Allowance

(a) A specialist or a senior clinical specialist managing a clinical service that involves, clinical management, supervision and teaching of other specialists, other oral health practitioners, undergraduate students and support staff as well as a clinical load. A hospital specialist may be eligible for the payment of this allowance. The management allowance is paid as part of an employee's permanent salary following a merit selection process. If an employee is required to relieve for 5 days or more in the role of the manager, and performs all of the duties of the supervisor, then the management allowance will be paid to such employee.

4.10 Area Directors of Oral Health Clinical Services

(a) Positions at this level lead, direct and co-ordinate all public sector oral health services within a Local Health District(s). They have significant responsibility for the human physical and financial resources under their control. Positions at this level will also make a major contribution towards the development and achievement of the strategic directions of the Area.

(b) The position exercises a high degree of independence in the determination of overall strategies, priorities, work standards and the allocation of resources. It will also make independent decisions related to area wide expert practice in their field and will be responsible for outcomes for clients

and the organisation from the practice of other dental officers and staff. The position makes strategic management and service development decisions.

(c) Positions at this level may include operational and strategic roles but are not limited to the following:

(i) professional responsibility with regard to strategic workforce and service development and professional practice across an AHS;

(ii) provides professional co-ordination and leadership across an area to department heads and acts as a central point of contact for strategic consultation and liaison with Senior Executive management;

(iii) a dual role of department head within a facility;

(iv) required to provide an expert speciality consultancy role in their area of expertise; and

(v) involved in the provision of training to staff within the Local Health District(s).

(d) There will be three levels of Area Director of Clinical Services reflecting the size of the Local Health District(s) and the complexity and mix of the dental facilities within it.

(e) Area Director of Oral Health Clinical Services - Level 1

The level 1 reports to a health services manager responsible for oral health services. This is the lead dentist in a Local Health District(s) that provides the usual range of oral health services from community clinics but does not have

(i) a dental teaching hospital where dental specialist services are also provided

(ii) a Rural and Regional Centre of Oral Health or

(iii) a dental clinical school.

(f) Area Director of Oral Health Clinical Services - Level 2

The level 2 reports to a health services manager responsible for oral health services. This is the lead dentist in a Local Health District(s) that provides the usual range of oral health services from community clinics but:

(i) does not have a dental teaching hospital,

(ii) has a Rural and Regional Centre of Oral Health and/or

(iii) a dental clinical school.

(g) Area Director of Oral Health Clinical Services - Level 3

The level 3 would also have the role of health services manager responsible for oral health services. This is the lead dentist in a Local Health District(s) that provides the usual range of oral health services from community clinics, and, in addition, has:

(i) a dental teaching hospital where dental specialist services are also provided

(ii) a Rural and Regional Centre of Oral Health and/or

(iii) a dental clinical school.

5. Transition Arrangements

(a) Employees skills, responsibilities and qualifications will be assessed against the classification descriptors in clause 4 and will be placed on the appropriate level, maintaining their existing incremental date. Years of service at the relevant skill level will be used to determine the appropriate salary rate within the classification level. Employees will maintain their existing incremental date.

6. No Extra Claims

Other than as provided for in the *Industrial Relations Act* 1996 and the Industrial Relations (Public Sector Conditoins of Employment) Regulation 2014, there shall be no further claims/demands or proceedings instituted before the Industrial Relations Commission of New South Wales for extra or reduced wages, salaries, rates of pay, allowances or conditions of employment with respect to the employees covered by the Award that take effect prior to 30 June 2018 by a party to this Award.

7. Area, Incidence and Duration

(i) This Award takes effect from 1 July 2017 and shall remain in force for a period of one year.

(ii) This Award rescinds and replaces the Health Employees' Dental Officers (State) Award published 26 June 2009 (368 I.G. 402) and all variations thereof.

(ii) This Award shall apply to persons employed in classifications contained herein employed in or in connection with the New South Wales Health Service as defined in the *Health Services Act* 1997, or their successors, assignees or transmittees.

P. KITE, Chief Commissioner

Printed by the authority of the Industrial Registrar.

IRC No. 1766 of 2008 – Bishop C – New Award – effective 17 September 2008 (368 IG 414)
IRC No. 179 of 2012 – Staff J – Award Review Variation – effective 19 March 2012 (373 IG 168)
IRC No. 636 of 2015 – Stanton C – Award Review Variation – effective 15 October 2015 (378 IG 441)
Case No. 2017/00195617 – Kite C – New Award – effective 1 July 2017 (382 IG 277)
Case No. 2018/00198585 – Murphy C – New Award – effective 1 July 2018 (IG pending)

HEALTH EMPLOYEES ORAL HEALTH THERAPISTS (STATE) AWARD 2018

INDUSTRIAL RELATIONS COMMISSION OF NEW SOUTH WALES

AWARD

1. Arrangement

2. Definitions

"Dental Clinic" means any dental clinic whether fixed or mobile or any Oral Health Training School.

"Dental Therapist" means a person appointed as such and who possesses an approved qualification of proficiency in theory and technique in preventative and operative dental care of children. A dental therapist must hold the relevant registration from the Dental Board of Australia.

"Dental Hygienist" means a person appointed as such and who possesses an approved qualification of proficiency in theory and technique in dental hygiene. A dental hygienist must hold the relevant registration from the Dental Board of Australia.

"Ministry" means the Ministry of Health.

"Oral Health Therapist" means a person appointed as such and who holds the relevant registration from the Dental Board of Australia as an oral health therapist or both the registrations of dental therapist and dental hygienist.

"Service" unless the context otherwise indicates or requires, means relevant service before and/or after commencement of this Award in any one or more New South Wales public health organisations or any other organisations deemed acceptable by the Ministry of Health.

"Union" means the Health Services Union NSW.

3. Classification Structure

3.1 Level 1

(a) Oral Health therapists who hold an approved qualification requiring less than three years of full time study shall commence on the level 1, Year 1 salary. Single registered dental therapist and dental hygienists also commence on this rate. Single registered dental therapist and dental hygienists have limited progression entitlements as described in the Clause 4 Transition Arrangements.

(b) Oral health therapists who hold an appropriate degree, or other qualification deemed equivalent by the Ministry of Health, requiring three years of full time study shall commence on the level 1, year 2 salary.

(c) Oral health therapists who hold an appropriate degree, or other qualification deemed equivalent by the Ministry of Health, requiring four years or more full time study shall commence on the level 1, year 3 salary.

(d) Oral health therapists employed at level 1 are newly qualified employees. Oral health therapists at this level are beginning practitioners who are developing their skills and competencies.

(e) Level 1 staff are responsible and accountable for providing a professional level of service to the health facility.

(f) Level 1 staff work under discipline specific professional supervision. Level 1 staff exercise professional judgment commensurate with their years of experience, as experience is gained, the level of professional judgment increases and professional supervision decreases.

(g) Level 1 staff participate in quality activities and workplace education.

(h) After working as a health professional for 12 months, level 1 staff may be required to provide supervision to undergraduate students on observational placements and to work experience students.

3.2 Level 2

(a) Progression to level 2 from level 1 is automatic following completion of 12 months satisfactory service at the level 1 year 4 salary step. Single registered dental therapist and dental hygienists have limited progression entitlements as described in the Clause 4 Transition Arrangements.

(b) Level 2 oral health therapists are expected to have obtained respective new practitioner competencies and to perform duties in addition to those at level 1.

(c) Oral health therapists at this level are competent independent practitioners who have at least 3 years clinical experience in their profession and work under minimal professional supervision.

(d) Positions at this level are required to exercise independent professional judgement on routine matters. They may require professional supervision from more senior staff members when performing novel, complex or critical tasks.

(e) Level 2 staff may be required to supervise level 1 oral health therapists and technical and support staff as required.

(f) Level 2 oral health therapists may be required to teach and supervise undergraduate students, including those on clinical placements.

(g) Positions at this level assist in the development of policies, procedures, standards and practices, participate in quality improvement activities and may participate in clinical research activities as required.

(h) Sole Practitioner Allowance

(i) The sole practitioner allowance is payable to positions at level 1 or level 2 where they:

are the only oral health practitioner at the site; and
are required to exercise independent professional judgement on a day to day basis without ready access to another like professional for informal consultation, assistance and advice; or

undertake administrative and/or managerial responsibilities that would otherwise not be expected of a level 1 or level 2 position.

(j) The allowance paid to sole practitioners at levels 1 and 2 is equal to the difference between the maximum level 2 salary and the minimum level 3 salary.

3.3 Levels 3 and 4

(a) Creation of positions at levels 3 and above will be on a needs basis as determined by the employer.

(b) Positions at Levels 3 and 4 may have a clinical, education or management focus or may have elements of all three features.

(c) Oral health therapists working in positions at Levels 3 and 4 are experienced clinicians who possess expertise or a high level of broad generalist knowledge within their discipline.

(d) Level 3 and 4 staff demonstrate advanced reasoning skills and operate autonomously with minimum direct clinical supervision. Level 3 and 4 staff provide clinical services to client groups and circumstances of a complex nature requiring advanced practice skills. They are able to apply professional knowledge and judgement when performing novel, complex or critical tasks specific to their discipline.

(e) Staff at this level are expected to exercise independent professional judgement when required in solving problems and managing cases where principles, procedures, techniques and methods require expansion, adaptation or modification.

(f) Level 3 and 4 staff have the capacity to provide clinical supervision and support to Level 1 and 2 oral health therapists, technical and support staff. Level 3 and 4 staff are involved in planning, implementing, evaluating and reporting on services. Level 3 and 4 staff identify opportunities for improvement in clinical practice, develop and lead ongoing quality improvement activities with other staff.

(g) The expertise, skills and knowledge of a Level 3 or 4 oral health therapist is such that they may have the responsibility of a consultative role within their area(s) of expertise. Level 3 and 4 staff may also conduct clinical research and participate in the provision of clinical in-service education programs to staff and students.

(h) Level 3 and 4 staff may be required to manage specific tasks or projects. Roles that may be undertaken at Levels 3 and 4 include, but are not limited to, the following:

(i) Senior Clinician

The employer will establish Senior Clinician positions at Level 3 or Level 4 as it deems appropriate based on the needs of the service.

Oral health therapists at Level 2 may also make application to the employer for personal progression to a Senior Clinician Level 3. A Senior Clinician Level 3 may make such an application to progress to Level 4.

(j) Senior Clinician Level 3

Level 3 Senior Clinicians are oral health therapists who, in addition to performing the full range of activities permitted under the relevant scope of practice, are recognized as having high levels of knowledge and clinical expertise in several areas of their scope of practice.
A Level 3 Senior Clinician may have an operational/supervisory role in a small facility.

(k) Senior Clinician Level 4

In addition to applying high level clinical skills as expected for a Senior Clinician, Level 4 Senior Clinicians may have the following roles:

A Level 4 Senior Clinician's expert level of knowledge and clinical practice in several areas of the scope of practice is such that they provide a consultancy service in these areas across an Area, geographic region or clinical network.

A Level 4 Senior Clinician's high level knowledge and clinical expertise across all areas of the relevant scope of practice is such that they provide a consultancy service within their discipline across an Area, geographic region or clinical network. A "generalist" Level 4 Senior Clinician would usually work in a rural or regional area.

(l) Level 4 Senior Clinicians provide advice to service managers on clinical service delivery development, practice and redesign. A Level 4 Senior Clinician will have the ability to assist and provide guidance to service managers in the development of clinical services in response to demand and client needs. Level 4 Senior Clinicians make a contribution to education activities related to their area of expertise.

(m) Student Educator - (Level 4)

A student educator is responsible for the discipline specific clinical supervision, teaching and co-ordination of educational activities for students on clinical placements within one or more health facilities. This involves liaison with education providers regarding educational outcomes of the clinical placement and student education and placement quality evaluation within an area, region, network or zone. The work may include contributing to discipline workforce research or clinical placement improvement initiatives.

A student educator may also be required to undertake research into adult education principles, models of best practice in training and education and training program development as required, in order to support and improve the delivery of training to students.

The student educator may also have a clinical load.

4. Transition Arrangements

Single registered therapists and hygienists will have limited transition to the new oral health therapists scale, until the full oral health therapist qualifications are obtained. This is due to the broader scope of work of the oral health therapist over the existing classifications.

The transition will be:

Existing Grade 1 dental therapists and dental hygienists move to the new oral health therapist scale based on years of service to a maximum of Level 2 Year 2. Incremental progression beyond this can only occur with registration for the full scope of work of the oral health therapist.

Existing Grade 2 and Grade 3 Therapists move to the new oral health therapist scale based on years of service to a maximum of Level 2 Year 4.

Existing Community Dental Health Programs Officers move to Level 3 of the new oral health therapist scale based on years of service.

New positions of Level 3 or Level 4 will be advertised based upon the broader scope of work of the oral health therapist. If these are unable to be filled by suitably qualified applicants, consideration will be given to re-advertising the position(s) with single registration criteria.

There will be no new appointments to the classification of Community Dental Health Programs Officer or Dental Therapist Tutor. Any new appointments to the classifications of single registered dental therapist or dental hygienist will be employed against the new oral health therapist scale with the limited progression entitlements as prescribed in the transition arrangements for current employees.

5. Anti-Discrimination

(i) It the intention of the parties bound by this Award to seek to achieve the object in section 3 (f) of the *Industrial Relations Act* 1996 to prevent and eliminate discrimination in the workplace. This includes discrimination on the grounds of race, sex, marital status, disability, homosexuality, transgender identity, age and responsibilities as a carer.

(ii) It follows that in fulfilling their obligations under the dispute resolution procedure prescribed by this Award the parties have obligations to take all reasonable steps to ensure that the operation of the provisions of this Award are not directly or indirectly discriminatory in their effects. It will be consistent with the fulfilment of these obligations for the parties to make application to vary any provision of the Award which, by its terms or operation, has a direct or indirect discriminatory effect.

(iii) Under the *Anti-Discrimination Act* 1977, it is unlawful to victimise an employee because the employee has made or may make or has been involved in a complaint of unlawful discrimination or harassment.

(iv) Nothing in this clause is to be taken to affect:

(a) any conduct or act which is specifically exempted from anti-discrimination legislation;

(b) offering or providing junior rates of pay to persons under 21 years of age;

(c) any act or practice of a body established to propagate religion which is exempted under section 56(d) of the *Anti-Discrimination Act* 1977;

(d) a party to this Award from pursuing matters of unlawful discrimination in any State or federal jurisdiction.

(v) This clause does not create legal rights or obligations in addition to those imposed upon the parties by the legislation referred to in this clause.

NOTES -

(a) Employers and employees may also be subject to Commonwealth anti-discrimination legislation.

(b) Section 56(d) of the *Anti-Discrimination Act* 1977 provides:

"Nothing in this Act affects ... any other act or practice of a body established to propagate religion that conforms to the doctrines of that religion or is necessary to avoid injury to the religious susceptibilities of the adherents of that religion.

6. Salaries

Salaries shall be in accordance with the rates contained in the *Health Professional Medical Salaries (State) Award*, as varied or replaced from time to time.

7. Conditions of Employment

Conditions of Employment for employees shall be those prescribed in the *Public Hospital (Professional and Associated Staff) Conditions of Employment (State) Award*, as varied or replaced from time to time, subject to the preservation of accrued rights for employees transferred from the Public Service on 1 October 1986.

8. Dispute Resolution

The dispute resolution procedures contained in the said *Public Hospital (Professional and Associated Staff) Conditions of Employment (State) Award*, as varied or replaced from time to time, shall apply.

9. No Extra Claims

Other than as provided for in the *Industrial Relations Act* 1996 and the *Industrial Relations (Public Sector Conditions of Employment) Regulation* 2014, there shall be no further claims/demands or proceedings instituted before the Industrial Relations Commission of New South Wales for extra or reduced wages, salaries, rates of pay, allowances or conditions of employment with respect to the employees covered by the Award that take effect prior to 30 June 2019 by a party to this Award.

10. Area, Incidence and Duration

(i) This Award takes effect from 1 July 2018 and shall remain in force for a period of one year.

(ii) This Award rescinds and replaces the *Health Employees' Oral Health Therapists (State) Award* published 9 February 2018 (382 IG 277) and all variations thereof.

(ii) This Award shall apply to persons employed in classifications contained herein employed in the New South Wales Health Service under s115(1) of the *Health Services Act* 1997, or their successors, assignees or transmittees.

Australian Government
Australian Institute of Health and Welfare

Better information and statistics for better health and wellbeing

AIHW DENTAL STATISTICS AND RESEARCH SERIES
Number 53

Dentists, specialists and allied practitioners in Australia

Dental Labour Force Collection, 2006

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Contents

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Abbreviations

ABS	Australian Bureau of Statistics
ADA	Australian Dental Association
ADC	Australian Dental Council
ADPA	Australian Dental Prosthetists Association
ADTA	Australian Dental Therapists Association
AHMAC	Australian Health Ministers' Advisory Council
AIHW	Australian Institute of Health and Welfare
AIHW DSRU	Australian Institute of Health and Welfare Dental Statistics and Research Unit
ARCPOH	Australian Research Centre for Population Oral Health
ARIA	Accessibility/Remoteness Index of Australia
ASGC	Australian Standard Geographical Classification
CD	Census collection district
DEST	Department of Education, Science and Training
DHAA	Dental Hygienists' Association of Australia
ERP	Estimated resident population
FTE	Full-time equivalent
GDP	General dental practitioner
OHT	Oral health therapist
OMFS	Oral and maxillofacial surgery
SD	Statistical division

Abbreviations of places

ACT	Australian Capital Territory
Aust	Australia
NSW	New South Wales
NT	Northern Territory
Qld	Queensland
SA	South Australia
Tas	Tasmania
Vic	Victoria
WA	Western Australia

Symbols

%	percentage
–	zero or rounded to zero
n	number
. .	not applicable
n.a.	not available

Throughout this publication, data from the AIHW DSRU Dental Labour Force Surveys may not add to the totals shown due to the estimation process used for non-responses.

Summary

The dental labour force comprises dentists, dental specialists and allied practitioners, including dental hygienists, dental therapists, oral health therapists (dual-qualified hygienists and therapists) and dental prosthetists.

The Australian dental labour force in 2006 continued to be dominated by general dental practitioners (67%) and specialists (about 10%). The allied practitioner proportion of 23% was made up of therapists (9%), prosthetists (7%), hygienists (5%) and oral health therapists (2%).

The overall picture is one of small changes in the decade to 2006, with some evidence that the main areas of growth are in the allied practitioner component. Between 2003 and 2006, oral health therapists (OHTs) became much more prominent, a trend that is likely to continue.

There was modest growth in the supply of dentists (including dental specialists) in the decade to 2006, from 46.6 to 50.3 full-time equivalent practising dentists per 100,000 population. Supply was highest in the Australian Capital Territory and lowest in Tasmania and the Northern Territory, with all other States around the national average.

Around 10,400 dentists were practising in Australia in 2006, with four out of every five working in the private sector. The average age of dentists is rising (from 44.4 years to 45.1 years between 2000 and 2006).

Dentists are tending to work slightly fewer hours per week (down from 39.3 hours in 2000 to 38.5 in 2006). This could be the result of an increasing proportion of female dentists in the labour force—female dentists are more likely to work part-time and have career breaks than male dentists. In 2006, about 29% of practising dentists were women.

There were around 1,300 dental specialists in Australia in 2006. Orthodontists were the largest speciality group (39%), followed by oral and maxillofacial surgeons (16%), prosthodontists (13%), periodontists (11%), endodontists (9%) and paediatric dentists (8%).

Capital cities continue to have more dentists per capita than other areas. Between 2003 and 2006, increases in dentist numbers occurred only in *Major cities*, with falls in *Inner regional* areas. New dental schools have been established in regional areas aimed at increasing the supply of practitioners there, but the impact of these new schools will not be evident until 2010-15.

There were around 3,100 allied dental practitioners in Australia in 2006. Almost all dental hygienists, dental therapists and oral health therapists were women, while nearly 90% of the 900 or more practising dental prosthetists were men.

1 Introduction

The health workforce has gained considerable global attention in recent years and is a high priority of the Australian Health Ministers' Advisory Council (AHMAC). This report presents the national dental labour force statistics for Australia and is based on data collected in 2006 from the registered clinical labour force (dentists, hygienists, therapists, oral health therapists and prosthetists). It provides valuable information to facilitate appropriate oral health service planning and administration.

1.1 Aim and objectives

The primary aim of this data collection is to examine labour force characteristics for dentists and allied dental professionals in Australia. The objectives are:

- identify the total numbers of registered and practising dentists and allied dental practitioners.
- describe the demographic and practice characteristics of the dental labour force.
- describe the geographic distribution of the dental labour force across jurisdictions and across remoteness areas.
- describe the specialist dental labour force and compare this with the dentist labour force.

1.2 Scope and data preparation

In most states and territories, data were collected in conjunction with the registration process. In other states and territories, data were collected by direct mailing conducted by the Australian Institute of Health and Welfare, Dental Statistics and Research Unit (AIHW DSRU). In most cases, the timing of direct mailings approximated the registration renewal period. The scope of the collection included all registered dental practitioners (dentists, therapists, hygienists, oral health therapists and prosthetists). Some dental boards excluded practitioners registering for the first time.

The data collection included demographic characteristics, practice status, and practice characteristics and activity at up to three locations. Practice activity items were based on the last week of practice. The dentist collection also collected eight specialist categories. Specialists not listed in these categories were usually classified as 'other' and were asked to specify their specialisation.

Population data, remoteness and geographic classification were based on information from the Australian Bureau of Statistics (ABS). As this is a population census rather than a sample survey, standard errors and 95% confidence intervals are not applicable.

Estimation procedures

The figures from the data collection are estimates. Not all registered practitioners responded to the questionnaire, and not all responding practitioners answered all questions. Data were imputed to account for item non-response and weighted to account for population non-response. These two processes produced estimates that approximate the distribution of registered dentists and allied practitioners.

Imputation: estimation for item non-response

The imputation process involved an initial examination of all information provided by a respondent. Where possible, work status was imputed based on the participant's response to other survey questions. For example, if a respondent provided information on hours worked and area of work but left the work status question blank, it was considered appropriate to assume that they were employed. Missing values remaining after this process were considered for their suitability for further imputation. Suitability was based on the level of non-response to that item. Imputation was usually only applied in cases where the proportion of missing values was less than 10% of the total.

In imputation, the known probabilities of particular responses occurring were used to assign a response category value to each record using a random number generator. Imputed values were based on the distribution of responses occurring in the responding sample. Fundamental to estimating missing values for survey respondents who returned partially completed questionnaires was the assumption that respondents who answered various questions were similar to those who did not.

Age group and sex values within each state and territory were first imputed to account for missing age and sex values. Other variables deemed suitable for this process were then imputed. In 2006, these variables were: area of practice (general practice, registered specialist, restricted practice and so forth), type of practice (solo, solo with assistant, dental hospital and so forth), specialist category (orthodontics, periodontics and so forth), hours worked group, remoteness code (*Major city*, *Inner regional*, *Outer regional* and *Remote/Very remote*), and statistical division. These imputed variables were similar for all professions, except that area of practice and specialist categories were not used for the allied dental labour force groups.

Weighting: estimation for population non-response

Each survey record (a record equates to a respondent) was assigned a weight that was calibrated to align with independent data on the population of interest, referred to as 'benchmarks'. In principle, this weight was based on the population number (the benchmark) divided by the number in the responding sample.

Benchmark data were the number of registered practitioners in each state and territory, provided to the AIHW DSRU by the state and territory dental boards. Where possible, benchmarks were broken down by age group and sex. Where data were not available from the boards, benchmark figures were obtained from other sources, such as dental board annual reports. Hence, the weight for each record was based on particular characteristics that were known for the whole population.

Producing estimates for the population by weighting the data from respondents adjusted for bias in the responding group of practitioners, but only for known population characteristics (age and sex, where provided, in the case of the Dental and Allied Dental Labour Force Surveys). If information for a variable was not known for the whole population, the variable could not be used in the calculation of weights nor in the adjustment process.

For variables not used in the calculation of weights (for the Dental and Allied Dental Labour Force Survey, this means all variables other than state/territory, age and sex), it was assumed that respondents and non-respondents had the same characteristics. If the assumption was incorrect, and non-respondents were different from respondents, then the estimates would have some bias. The extent of this cannot be measured without more detailed information about non-respondents.

1.3 Report structure

This report is structured to present the findings from the dentist collection, findings on dental specialists and findings from the allied dental labour force (therapists, hygienists, oral health therapists and prosthetists). Descriptions of the methods used are incorporated within the respective chapters.

2 Dentists

Dentists aim to improve the oral health of patients in accordance with the ethics of the profession and the law, and within the scope of their education, training and experience. In Australia, dentists comprise the majority of the dental labour force. They are registered with state or territory dental boards, either as a 'general practitioner' and/or a specialist. They are trained through any one of the six dental schools in Australia or meet the Australian Dental Council (ADC) requirements for practice. Since 2006, three new dental schools at La Trobe University (Victoria), James Cook University (Queensland) and Charles Sturt University (New South Wales) have been established. The ADC is responsible for the accreditation of education programs and the assessment of overseas qualifications (ADC 2009). Dentists practise in both the private and public sectors and are responsible for the supervision of hygienists, therapists and oral health therapists.

Box 1: Dentist

Dentists are responsible for the evaluation, diagnosis, prevention and/or treatment (nonsurgical, surgical or related procedures) of diseases, disorders and/or conditions of the oral cavity, maxillofacial area and/or the adjacent and associated structures and their impact on the human body.

This chapter presents the findings of the 2006 national dental labour force collection for dentists. Estimates reported in this section include both general practitioner dentists and dental specialists. Findings on the geographic distribution of dentists are based on jurisdictions, remoteness category and statistical divisions. Where possible, estimates from previous reports have been used to highlight changes over time.

2.1 Method

Data were collected on work status, hours worked, area and type of practice and specialist classification. An example of the questionnaire used in South Australia is in Appendix B1.

With the exception of Western Australia and Tasmania, the questionnaire was completed in conjunction with registration renewal, with assistance from the state/territory dental boards or state health departments. In Western Australia and Tasmania, the data were collected by the AIHW DSRU. Table 1 lists the timing of this data collection by state/territory together with response rates. The overall response rate was 79.6%. Response rates are estimates, as some practitioners might maintain registrations in more than one state or territory, but they might have completed the questionnaire in only one state/territory. The response rates ranged from 33.1% in the Australian Capital Territory to 90.7% in New South Wales.

Survey data were weighted to full enumeration of all registered dentists based on available registration information. Weighting varied for each state/territory depending on availability of age, sex and specialist registration data. Rounding of estimates may result in rows or columns not adding up to totals in some tables.

Table 1: Dentist data collection details by state/territory, 2006

State/ territory	Timing	Mail-out type	Reminder mail-out	Response rate (%)
NSW	July–Sept	Surveyed with registration renewal	No	90.7
Vic	Nov–Dec	Surveyed with registration renewal	No	77.0
Qld	June–July	Surveyed with registration renewal	No	73.8
WA	Nov–Dec	Direct mailed by AIHW DSRU	Yes[(a)]	67.5
SA	July–Sept	Surveyed with registration renewal	No	86.9
Tas	Nov–Dec	Direct mailed by AIHW DSRU	Yes[(a)]	62.2
ACT	June–July	Surveyed with registration renewal	No	33.1
NT	Nov–Dec	Surveyed with registration renewal	No	49.5

(a) Follow-up mail-out consisted of one reminder mailing of the survey questionnaire about 4 weeks after initial mail-out.

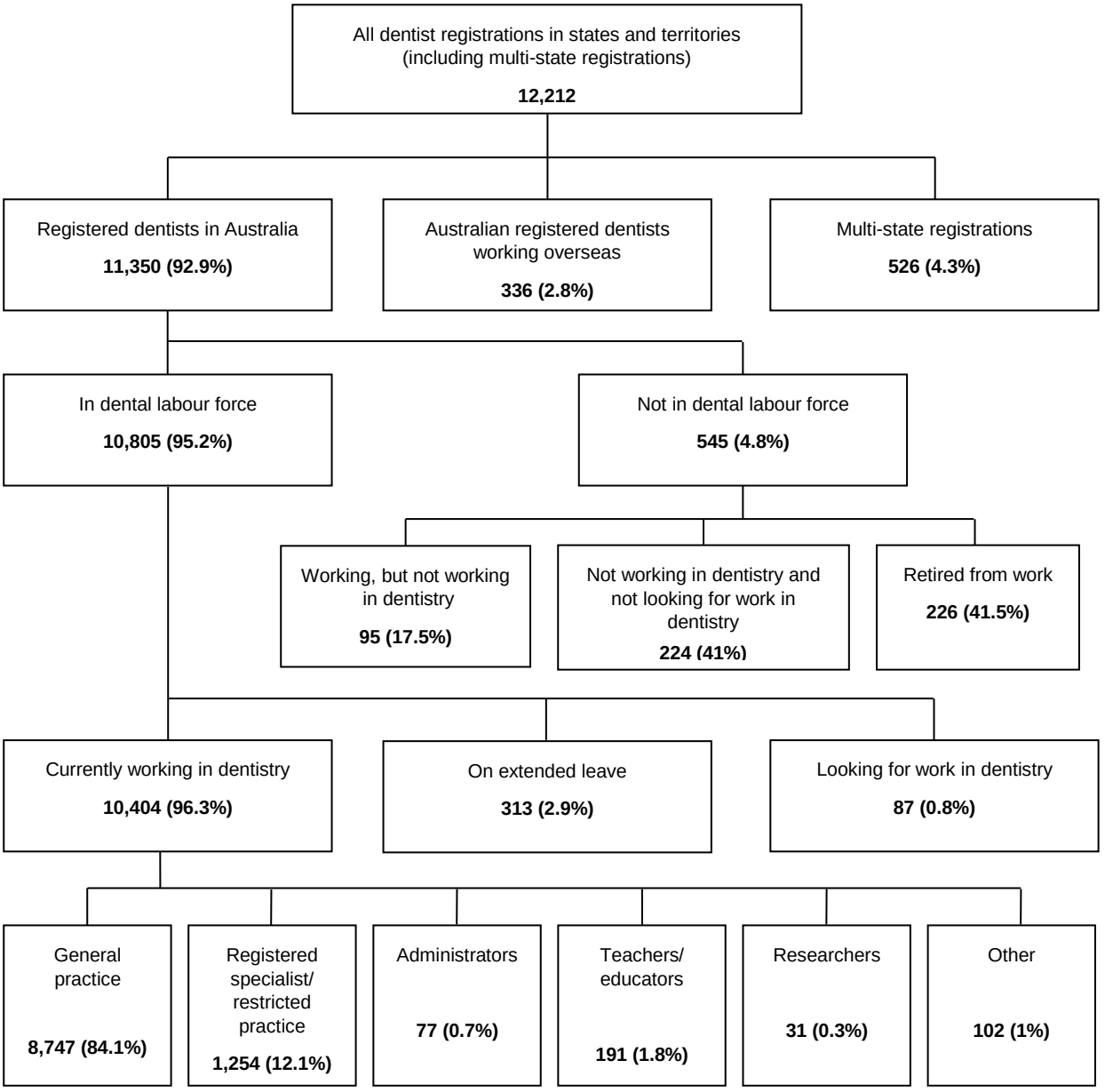
2.2 Overall numbers

- There were an estimated 12,212 dentist registrations in Australia in 2006, including multi-state registrations. An estimated 336 dentists were practising overseas, 526 were registered in more than one jurisdiction and a further 545 were no longer in the dental labour force (Figure 1, Table A1.1).
- Male dentists have more multi-state registrations (approximately double) than their female colleagues (Table A1.1).
- The number of dentists in the dental labour force increased by 10.1% between 2003 and 2006. An estimated 10,805 dentists were in the Australian dental labour force in 2006, 10,404 of them practising dentistry, 313 on extended leave and 87 looking for work in dentistry (Figure 1).
- Most practising dentists were working in clinical practice, 8,747 in general practice and 1,254 in registered dental specialist/restricted practice (Figure 1).
- The number of full-time equivalent (FTE) dentists (See Box 2) per 100,000 population (based on a 35-hour week) increased from 53.8 in 2003 to 55.2 in 2006 (Table A1.1).

Box 2: Full-time equivalent (FTE) rate

The FTE rate (number of FTE workers per 100,000 population) is a measure of supply. The use of FTE rates allows for comparisons of supply to be made across geographic areas and over time.

The number of FTE workers equals the number of dentists multiplied by the average weekly hours worked, and divided by the standard working week hours (35, 37.5 and 40 hours per week).

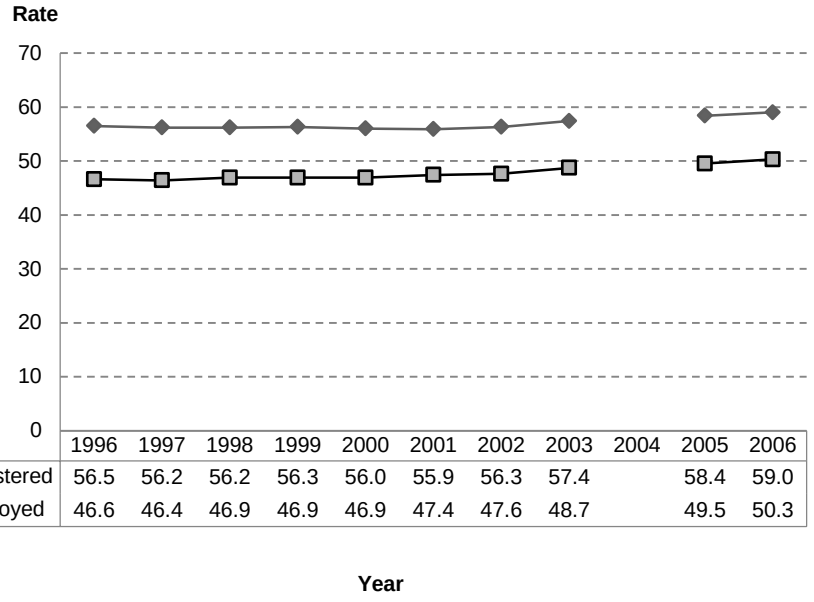


Note: Estimates may not sum to totals due to rounding.

Figure 1: All registered dentists in Australia, 2006

Over the decade

- The number of registrations increased from 10,109 in 1996 to 12,212 in 2006, an increase of 20.8%. The registered dentists rate per 100,000 population (see Box 3) increased from 56.5 to 59.0 in the same period (Figure 2).
- The number of practising dentists increased from 8,338 in 1996 to 10,404 in 2006 (24.8% increase). The practising dentists rate (see Box 3) increased from 46.6 to 50.3 in the same period (Figure 2).



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Registered	56.5	56.2	56.2	56.3	56.0	55.9	56.3	57.4		58.4	59.0
Employed	46.6	46.4	46.9	46.9	46.9	47.4	47.6	48.7		49.5	50.3

Note: There was no data collection in 2004.

Figure 2: Registered and practising dentists, 1996 to 2006 (per 100,000 population)

Box 3: Registered/practising dentists rate

This is the number of registered or practising dentists per 100,000 population. These measures provide a better estimate of the change in the supply of dentists as changes in the size of population are also taken into account.

2.3 Demographic characteristics

- The number of practising dentists increased from 8,991 in 2000 to 10,404 in 2006, a 15.7% increase. In 2000, 22.9% of practising dentists were female, increasing to 26.3% in 2003 and 28.9%in 2006 (Figure 3).

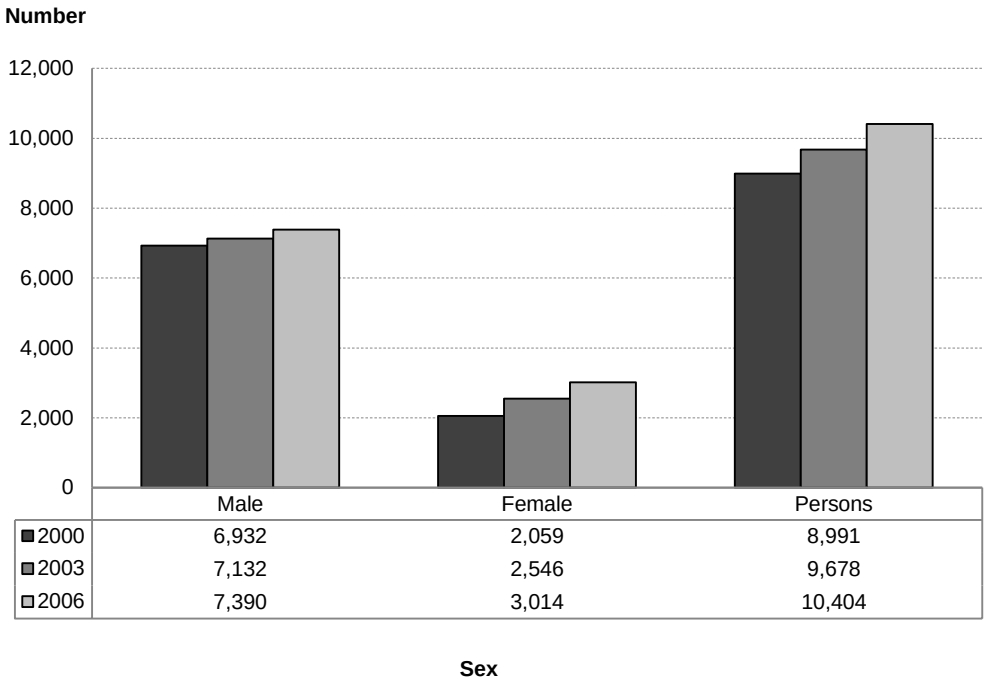


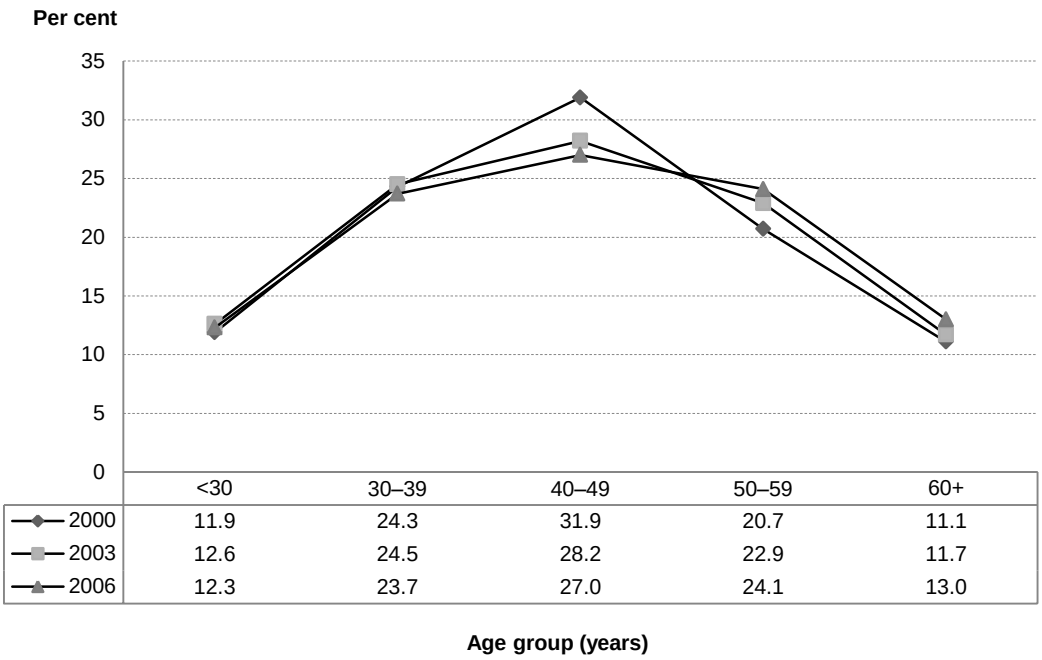
Figure 3: Practising dentists by sex, 2000, 2003 and 2006

- The average age of all dentists increased marginally from 44.4 years in 2000 to 45.1 years in 2006. Female dentists were, on average, nearly 10 years younger than their male counterparts (Table 2).

Table 2: Average age of dentists by sex, 2000, 2003 and 2006

	Age (years)		
Year	Male	Female	Persons
2000	46.2	38.2	44.4
2003	46.9	38.1	44.6
2006	47.6	38.9	45.1

- The highest percentage of dentists was 40-49 years old (27% in 2006), but there has been an increase in the size of older age groups. In 2000, just under a third (31.8%) of dentists were aged 50 years or older compared with 37.1% in 2006 (Figure 4). The highest percentage of female dentists (34.1%) was aged 30–39 years, while for male dentists the highest percentage (27.4%) was aged 40–49 years (Table A1.2).



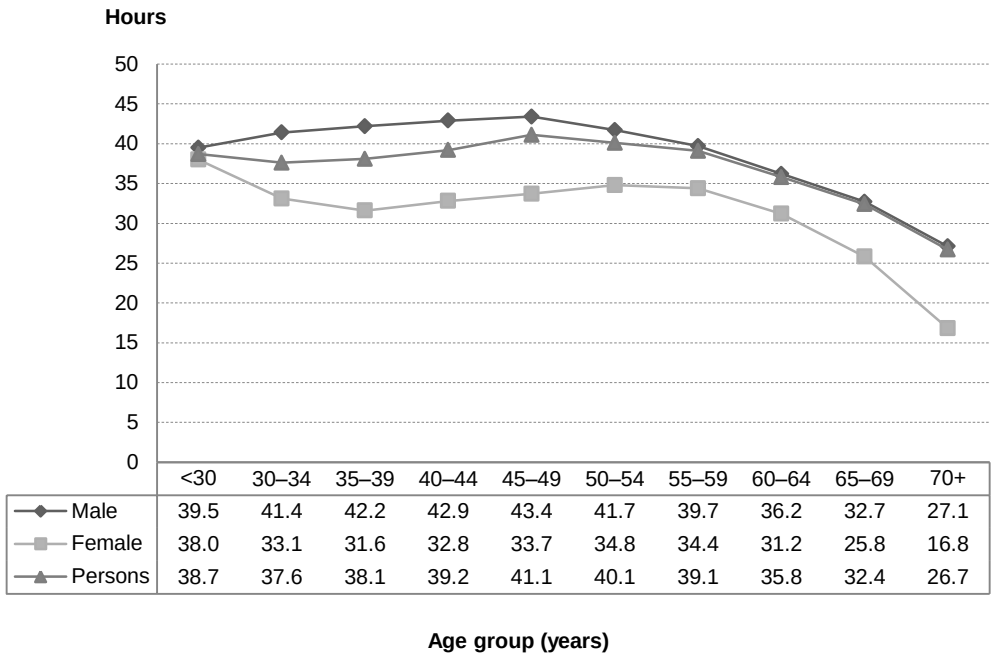
	<30	30–39	40–49	50–59	60+
2000	11.9	24.3	31.9	20.7	11.1
2003	12.6	24.5	28.2	22.9	11.7
2006	12.3	23.7	27.0	24.1	13.0

Figure 4: Practising dentists by age group, 2000, 2003 and 2006 (per cent)

2.4 Practice characteristics

Hours worked per week

- Between 2000 and 2006, the average working hours per week decreased marginally from 39.3 to 38.5. In a normal week, male dentists worked 40.2 hours, about five hours more than their female colleagues (Table A1.3).
- The average hours worked per week was 38.7 among younger dentists, peaked at 41.1 hours for those aged 45-49, and then decreased across older age groups. Males worked more hours than females in all age groups (Figure 5).



	<30	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	70+
Male	39.5	41.4	42.2	42.9	43.4	41.7	39.7	36.2	32.7	27.1
Female	38.0	33.1	31.6	32.8	33.7	34.8	34.4	31.2	25.8	16.8
Persons	38.7	37.6	38.1	39.2	41.1	40.1	39.1	35.8	32.4	26.7

Figure 5: Practising dentists by average hours usually worked per week, age group and sex, 2006

Area of practice

- Across areas of practice (see Box 4), 84.1% of dentists (around 8,750) were in general practice, while 12% (around 1,250) were registered specialists or in restricted practice (Table A1.4).
- Female dentists were comparatively younger than male dentists across all areas of practice. Age differences ranged from about four years in administrative areas to 8–10 years in other areas, such as general and specialist practice (Table A1.4).
- The average hours worked per week were highest for registered specialists who worked at least 3 hours more per week (41.8 hours) than the national average of 38.4. Female dentists worked fewer hours than male dentists across most areas of practice. Male dentists in general practice worked about six hours a week more than their female colleagues. In other areas of practice, the difference was 4.9 hours among registered specialists and 5.3 hours in restricted practice (Table A1.5).

Box 4: Area and type of practice

Area of practice is the activity in which the dentist is engaged. This is classified into seven categories: general practice, registered specialist, restricted practice, administration, teaching/education, research and other.

Type of practice is the private or public nature of the dentist's work place. The private sector is further classified into seven categories: solo, solo with assistant, partnership; associateship, assistant, locum and health fund. The public sector is classified into six categories: dental hospital, school dental service, general dental service, defence service, other public and tertiary education. Dentists could also be working in both public and private settings. In this case they are categorised as 'other'.

Type of practice

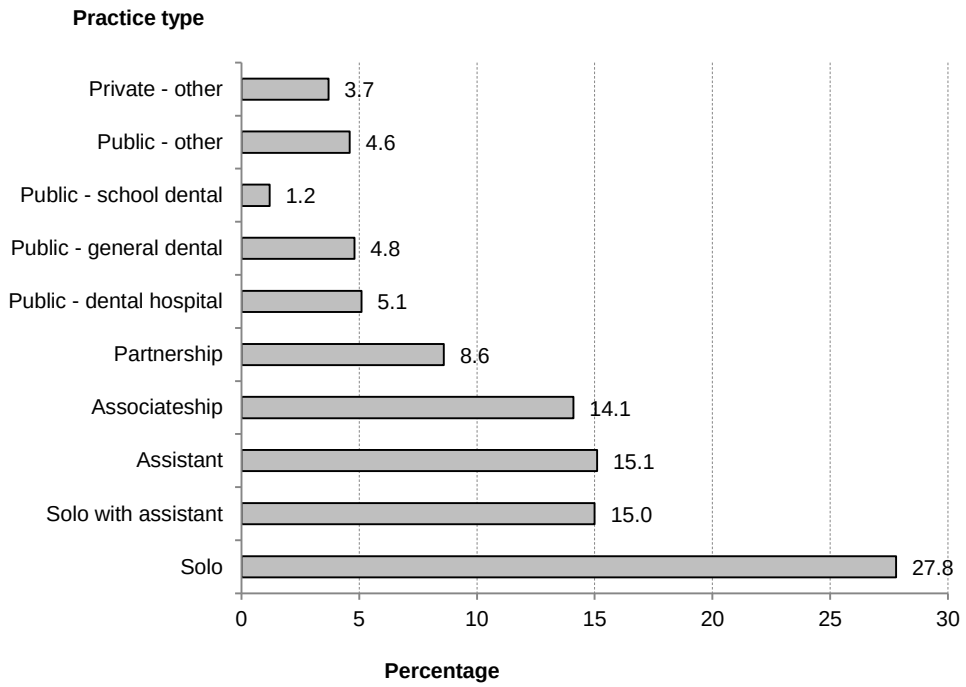
- In 2006, 76% of all practising dentists reported working at one location only, while 18% worked in two locations and 5% worked in three locations (Table 3).

Table 3: Practising dentists by state/territory and number of work locations, 2006

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
One location									
Male	1,932	1,297	1,216	608	369	109	122	33	5,686
Female	749	554	449	228	143	36	56	30	2,244
Persons	**2,681**	**1,851**	**1,665**	**835**	**512**	**145**	**178**	**63**	**7,931**
Two locations									
Male	479	282	206	115	154	13	30	8	1,286
Female	193	188	100	58	62	6	10	4	620
Persons	**672**	**469**	**305**	**172**	**216**	**19**	**40**	**11**	**1,906**
Three locations									
Male	169	79	41	52	67	8	—	2	418
Female	40	49	18	11	31	—	—	2	150
Persons	**208**	**128**	**58**	**63**	**98**	**8**	**—**	**4**	**568**
All locations									
Male	2,580	1,658	1,462	774	590	130	152	43	7,390
Female	981	791	566	297	236	42	66	36	3,014
Persons	**3,561**	**2,449**	**2,028**	**1,071**	**826**	**172**	**218**	**78**	**10,404**

Based on main area of practice (first practice location):

- Most practising dentists (83%) worked in the private sector (Table A1.6). This percentage has remained stable over time—82.6% in 2000 and 83.6% in 2003.
- A large minority (42.8%) worked in solo practice or solo practice with an assistant, 15.1% worked as assistants, 14.1% as associates and 8.6% as partners. About 5% practised in a hospital setting and 4.8% worked in general dental services (Figure 6).
- Dentists working as solo practitioners were older (49.5 years) than those in other types of practice and older than the national average of 45.1 years (Table A1.6).
- Assistants were, on average, 37.5 years old, those working in health funds 38.8 years and those in the defence services 39.2 years. Female dentists were younger than their male colleagues in all types of practice (Table A1.6).
- Dentists working in solo private practice worked more hours per week than those in other types of practice (Table A1.7).



Note: Public other includes defence forces, tertiary educators and practitioners who reported 'public other' type of practice. Private other includes locum, health fund and practitioners who reported 'other' type of practice.

Figure 6: Practising dentists by practice type at main location, 2006 (per cent)

Based on all areas of practice:

- Most of the dentists (78.1%) practised only in the private sector, 13.3% practised only in the public sector and 8.6% practised in both public and private sectors. Among female dentists, a greater proportion (37.1%) worked in both public and private sectors, compared with 25.5% practising only in the private sector (Table 4).
- Dentists working in both the public and private sectors were relatively younger and worked more hours than dentists practising only in public or only in the private sector (Table 4).
- Around 33.4% of dentists in the public sector worked part-time (less than 35 hours per week), compared with 26.4% in the private sector (Table 4).

Table 4: Practising dentists by sector, age and hours worked, 2006

	Public	Private	Public and private	Total
		Number practising		
Persons	1,386	8,126	895	10,404
		Percentage		
% Female	44.2	25.5	37.1	28.97
		Average age (years)		
Male	48.0	47.6	46.7	47.6
Female	39.7	38.9	37.7	38.9
Persons	**44.2**	**45.4**	**43.4**	**45.1**
		Average total hours usually worked per week		
Male	35.9	40.6	42.0	40.2
Female	33.9	33.5	37.9	34.1
Persons	**35.0**	**38.8**	**40.5**	**38.5**
		Average direct patient care hours worked per week		
Male	28.8	35.3	35.4	34.7
Female	28.3	29.6	32.5	29.7
Persons	**28.6**	**33.9**	**34.3**	**33.4**
		Percentage part-time		
Male	28.8	20.1	19.8	21.0
Female	39.2	44.7	34.1	42.4
Persons	**33.4**	**26.4**	**25.1**	**27.2**

Note: Sector of practice was determined by the practitioner's reported type of practice at main, second and third practice locations.

2.5 Geographic distribution

Distribution across jurisdictions

- Between 2003 and 2006, the number of practising dentists increased in all jurisdictions except South Australia. Increases ranged from 1% in the Australian Capital Territory to about 20% in the Northern Territory (Table 5).

Table 5: Practising dentists by state/territory, 2000, 2003 and 2006 (number)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2000	3,126	2,204	1,564	913	821	119	184	60	8,991
2003	3,346	2,284	1,821	957	833	157	216	65	9,678
2006	3,561	2,449	2,028	1,071	826	172	218	78	10,404

- The number of FTE dentists working 35 hours or more increased across all jurisdictions except South Australia (Table 6).

Table 6: Full-time equivalent dentists by state/territory, 2000, 2003 and 2006 (per 100,000 population)

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2000	55.8	50.5	49.9	55.1	58.3	27.9	65.1	33.3	52.7
2003	57.4	49.7	53.1	52.8	57.7	37.3	71.8	36.9	53.8
2006	60.4	50.5	54.2	55.4	54.3	37.6	75.5	44.0	55.2

Note: FTE is calculated by multiplying the number of practising dentists by the average hours worked per week and dividing the result by 35.

- The percentage of female dentists varied slightly by state and territory. The Northern Territory had the highest proportion of females (46.2%) and Tasmania had the lowest (24.4%).

Box 5: Remoteness areas and statistical divisions

Remoteness areas

The Remoteness Structure is defined in census years, beginning with 2001, then 2006. It comprises three levels: Census collection district (CD), remoteness area (RA) and state/territory. Within a jurisdiction, each RA represents an aggregation of non-contiguous geographical areas sharing common characteristics of remoteness.

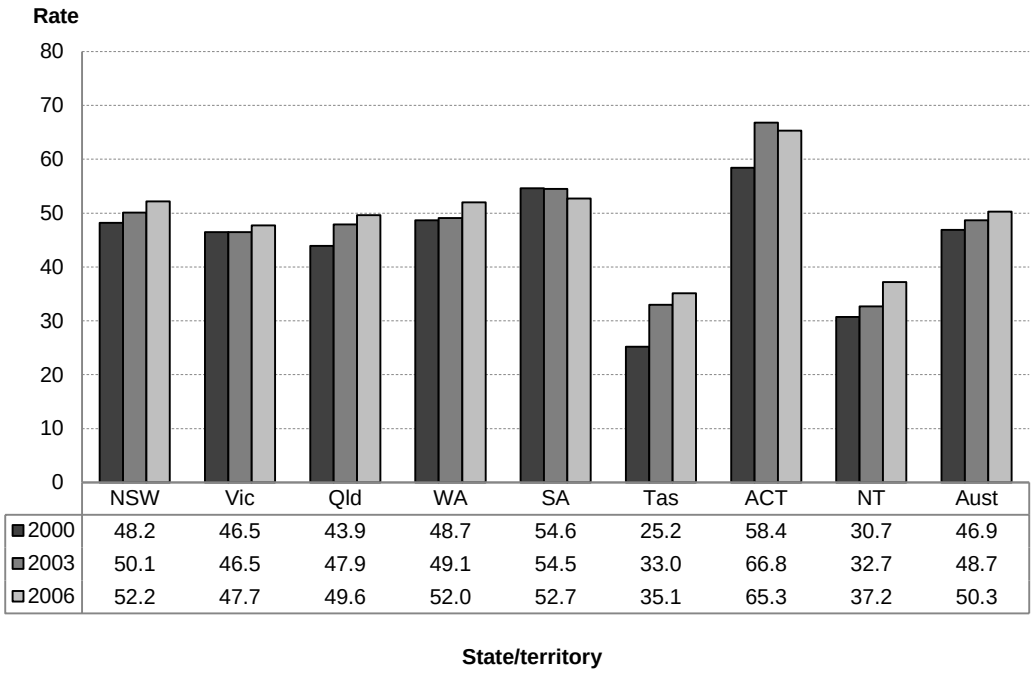
This is based on the Accessibility/Remoteness Index of Australia (ARIA), where the remoteness index value of a point is based on the physical road distance to the nearest town or service. These categories are: *Major cities*, *Inner regional*, *Outer regional*, *Remote* and *Very remote*. This report combines *Remote* and *Very remote* areas into one category '*Remote/Very remote*'.

Statistical division

A statistical division (SD) is a general purpose spatial unit and is the largest and most stable spatial unit within each jurisdiction. There are 61 SDs in Australia. SD names indicate a generalised region (e.g. Far North in Queensland). This classification is helpful as it enables stratification of labour force data in a more detailed fashion between better known areas in a jurisdiction.

Source: Australian Bureau of Statistics, Australian Standard Geographic Classification (ASGC) (ABS 2008).

- Between 2003 and 2006, the number of practising dentists increased from 48.7 to 50.3 per 100,000 population nationally (Figure 7).
- The number of practising dentists per 100,000 population varied greatly between the sectors. In 2006, there were 6.7 public dentists, 39.3 private dentists and 4.3 dentists who worked in both the public and private sectors. The number of practising dentists per 100,000 population in the public sector ranged from 2.0 in the Australian Capital Territory to 8.5 in South Australia. For the private sector, it ranged from 30.9 in Tasmania to 57.8 in the Australian Capital Territory. For those practising in both the public and private sectors, it ranged from 1.0 in Tasmania to 6.2 in South Australia (Figure 8).

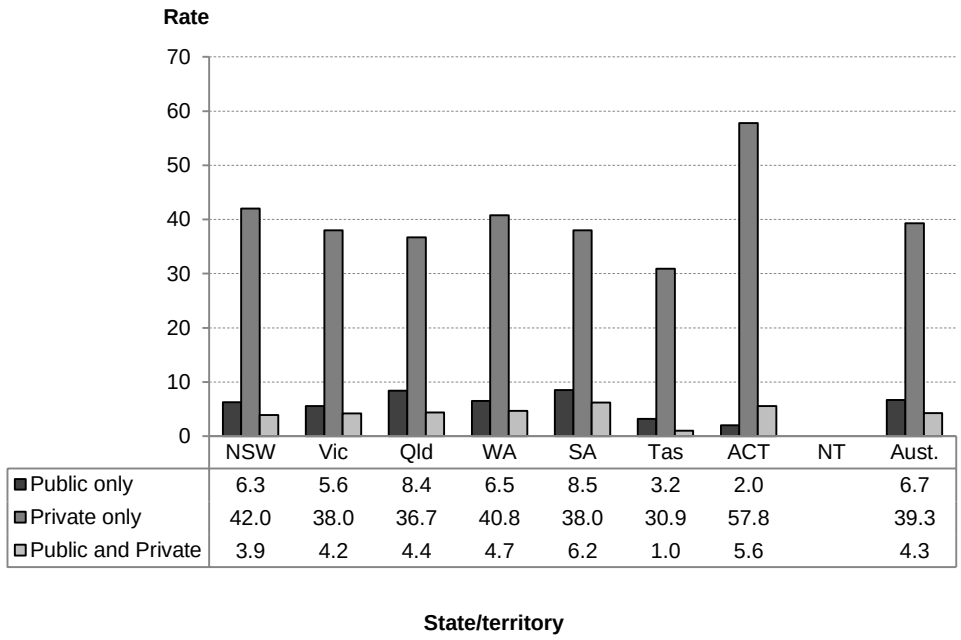


	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
2000	48.2	46.5	43.9	48.7	54.6	25.2	58.4	30.7	46.9
2003	50.1	46.5	47.9	49.1	54.5	33.0	66.8	32.7	48.7
2006	52.2	47.7	49.6	52.0	52.7	35.1	65.3	37.2	50.3

Figure 7: Practising dentists by state/territory, 2000, 2003 and 2006 (per 100,000 population)

- Practising dentists in Tasmania, the Australian Capital Territory and the Northern Territory were older than their colleagues in other jurisdictions. Across all jurisdictions, female dentists were younger than their male colleagues. The difference in average age by sex ranged from 8.2 years in Queensland to 13.4 years in the Northern Territory (Table A1.10).
- Practising dentists across five jurisdictions (Victoria, Queensland, Western Australia, South Australia and Tasmania) worked fewer hours than the national average of 38.5 hours per week. Male dentists worked more hours per week than female dentists in all jurisdictions except the Northern Territory, where female dentists worked nearly 2 hours per week more than their male colleagues (Table A1.10).
- The average age of dentists working in general practice ranged from 43.7 years in Victoria to 47.4 years in the Northern Territory. The average hours worked per week in general practice ranged from 35.8 hours in South Australia to 41.9 hours in the Northern Territory (Table A1.11).

- The average age of registered specialists ranged from 48 years in Victoria to 52 years in the Australian Capital Territory. Registered specialists in Tasmania worked more hours per week than those in other jurisdictions (Table A1.11).



	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust.
Public only	6.3	5.6	8.4	6.5	8.5	3.2	2.0		6.7
Private only	42.0	38.0	36.7	40.8	38.0	30.9	57.8		39.3
Public and Private	3.9	4.2	4.4	4.7	6.2	1.0	5.6		4.3

Notes
1. Sector of practice was determined by the practitioner's reported type of practice at main, second and third practice locations.
2. NT excluded due to small numbers, therefore response bias of those working in the public sector.

Figure 8: Practising dentists by sector and state/territory, 2006 (per 100,000 population)

Distribution across remoteness areas

- Between 2003 and 2006, the number of practising dentists increased only in *Major cities* (by 11%). *Inner regional*, *Outer regional* and *Remote/Very remote* areas decreased by 5.9%, 4.3% and 4.4% respectively (Table 7).

Table 7: Practising dentists by remoteness area of main practice, 2000, 2003 and 2006

Year	Major city	Inner regional	Outer regional	Remote/Very remote	Australia
2000	7,097	1,255	557	82	8,991
2003	7,590	1,433	564	91	9,678
2006	8,428	1,349	540	87	10,404

Note: Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.

- In 2006, *Major cities* had the highest number of FTE practising dentists per 100,000 population. In *Inner regional* and *Outer regional* areas, the number of FTE dentists per 100,000 population decreased between 2003 and 2006 (Table 8).

Table 8: Full-time equivalent dentists by remoteness area of main practice, 2003 and 2006

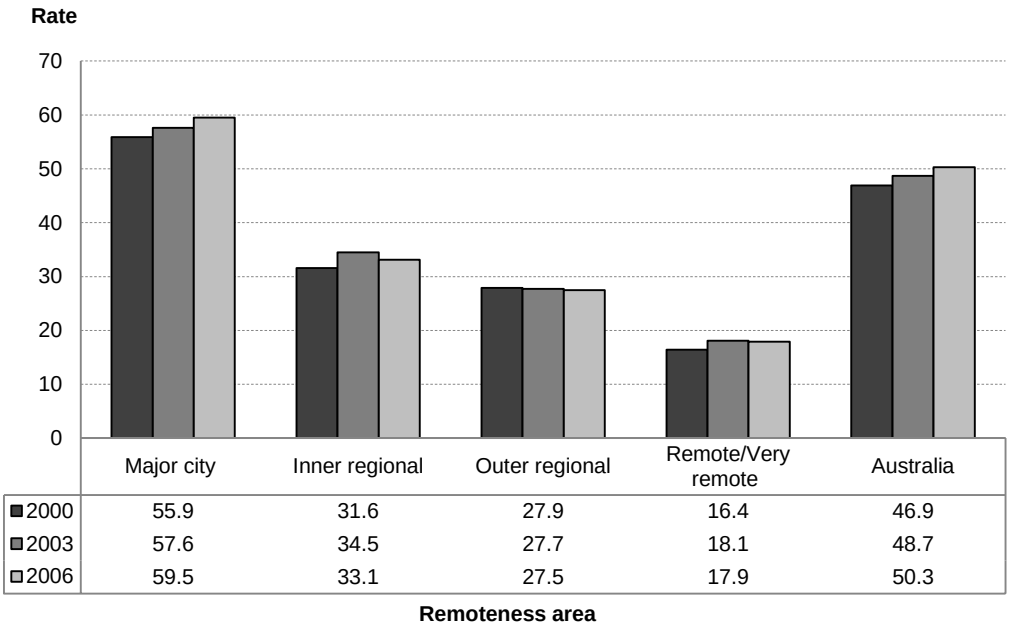
Year	Major city	Inner regional	Outer regional	Remote/Very remote	Australia
2003	63.7	38.3	31.0	19.8	53.9
2006	65.3	36.2	30.4	20.3	55.2

Notes

1. FTE is calculated by multiplying the number of practising dentists by the average hours worked per week and dividing the result by 35.

2. *Note:* Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.

- The number of practising dentists per 100,000 population ranged from 59.5 in *Major cities* to 17.9 in *Remote/Very remote* areas. Between 2003 and 2006, the number of practising dentists per 100,000 population decreased in *Inner regional*, *Outer regional* and *Remote/Very remote* areas (Figure 9).

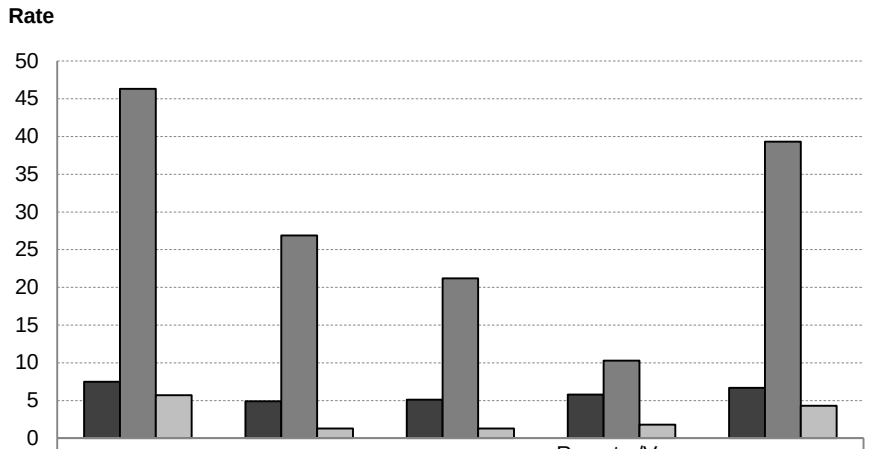


	Major city	Inner regional	Outer regional	Remote/Very remote	Australia
2000	55.9	31.6	27.9	16.4	46.9
2003	57.6	34.5	27.7	18.1	48.7
2006	59.5	33.1	27.5	17.9	50.3

Note: Remote/Very remote includes Migratory areas.

Figure 9: Practising dentists by remoteness area of main practice, 2000, 2003 and 2006 (per 100,000 population)

- The percentage of female dentists increased across all remoteness areas between 2003 and 2006, with the biggest increase in the *Remote/Very remote* area. The average age of all practising dentists was relatively similar across remoteness areas, ranging from 43.3 years in *Remote/Very remote* areas to 46.1 years in *Outer regional* areas (Table A1.13).
- The number of dentists per 100,000 population working in the private sector only was highest in *Major cities* (46.3 dentists per 100,000) and lowest in *Remote/Very remote* areas (10.3 dentists per 100,000) in 2006 (Figure 10).



	Major city	Inner regional	Outer regional	Remote /Very remote	Australia
Public only	7.5	4.9	5.1	5.8	6.7
Private only	46.3	26.9	21.2	10.3	39.3
Public and private	5.7	1.3	1.3	1.8	4.3

Remoteness area

Notes

1. Sector of practice was determined by the practitioner's reported type of practice at main, second and third practice locations.

2. Remote/Very remote includes Migratory areas.

Figure 10: Practising dentists by sector of practice and remoteness area of main practice, 2006 (per 100,000 population)

- There was little difference in the hours worked per week across remoteness areas. Dentists in *Remote/Very remote* areas worked the most hours (39.7 hours), while those in *Inner regional* areas worked the least (38.3). Males worked, on average, 40.2 hours per week. In contrast, females worked, on average, 34.1 hours per week, ranging from 33.8 hours per week in *Major cities* to 40 hours per week in *Remote/Very remote* areas (Table A1.17).
- About 80% of all dental practitioners were in the *Major cities*, while less than 1% were in *Remote/Very remote* areas. The percentage of dentists working only in the public sector was lowest in *Major cities* (12.6%) and highest in *Remote/Very remote* areas (32.4%). Males worked, on average, more hours per week than females in all except *Remote/Very remote* areas (Table A1.17, Table A1.15).

3 Dental specialists

Dental specialists are trained as general practitioners in dentistry but have additional qualifications and experience. In Australia, specialist education and training is offered in 12 specialities, which have Australian Dental Council (ADC) accreditation. These include:

- orthodontics
- oral and maxillofacial surgery
- prosthodontics
- periodontics
- endodontics
- paediatric dentistry
- oral pathology and oral medicine
- public health dentistry
- dento-maxillofacial radiology
- special needs dentistry.

Specialist training is offered by six dental schools throughout Australia,[1] but not all these schools offer training programs for all specialities (DEST 2007). The training generally involves an additional three years of postgraduate education leading to specialist registration. Oral and maxillofacial surgery training is offered as a fellowship through the Royal Australian College of Dental Surgeons and requires completion of a medical degree (ADC 2009). Qualifications from the United Kingdom, Ireland and New Zealand must meet the concerned state or territory dental board's guidelines for specialist registration. Other overseas qualifications must meet the ADC requirements for general practice, followed by an application for specialist registration to the concerned state or territory dental boards (ADC 2009).

Specialists play a key role in maintaining clinical excellence and in providing leadership in dentistry. Monitoring and surveillance of dental specialists is important as it can inform decisions related to specialist training and improving the geographic reach of specialists, especially in supporting primary care (Gallagher & Wilson et al. 2009; Maupome et al. 2001).

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1 The Universities of Melbourne, Sydney, Queensland, Adelaide, Western Australia and Griffith University offer specialist training programs.

3.1 Method

Dental specialist data were collected as part of the dentist labour force questionnaire. Section 7 of the questionnaire classified specialists into nine categories: orthodontics, periodontics, prosthodontics, dento-maxillofacial radiology, oral and maxillofacial surgery, endodontics, paediatric dentistry and oral pathology (see Box 6). Specialists not classified within these nine specialities were classified as 'other' (see Questionnaire in Appendix B1).

In previous dental labour force reports, specialists were defined by area of practice and registered specialty status (AIHW DSRU 2005; Teusner et al. 2008; Teusner & Spencer 2003). Those who indicated that they were practising as a clinical specialist, as opposed to other areas of practice, were classified as specialists. This report includes all registered specialists regardless of their area of practice, that is, clinical, administration, research etc. Where possible, earlier time points have been revised according to the criteria used in this report and hence some estimates may differ from previously published reports.

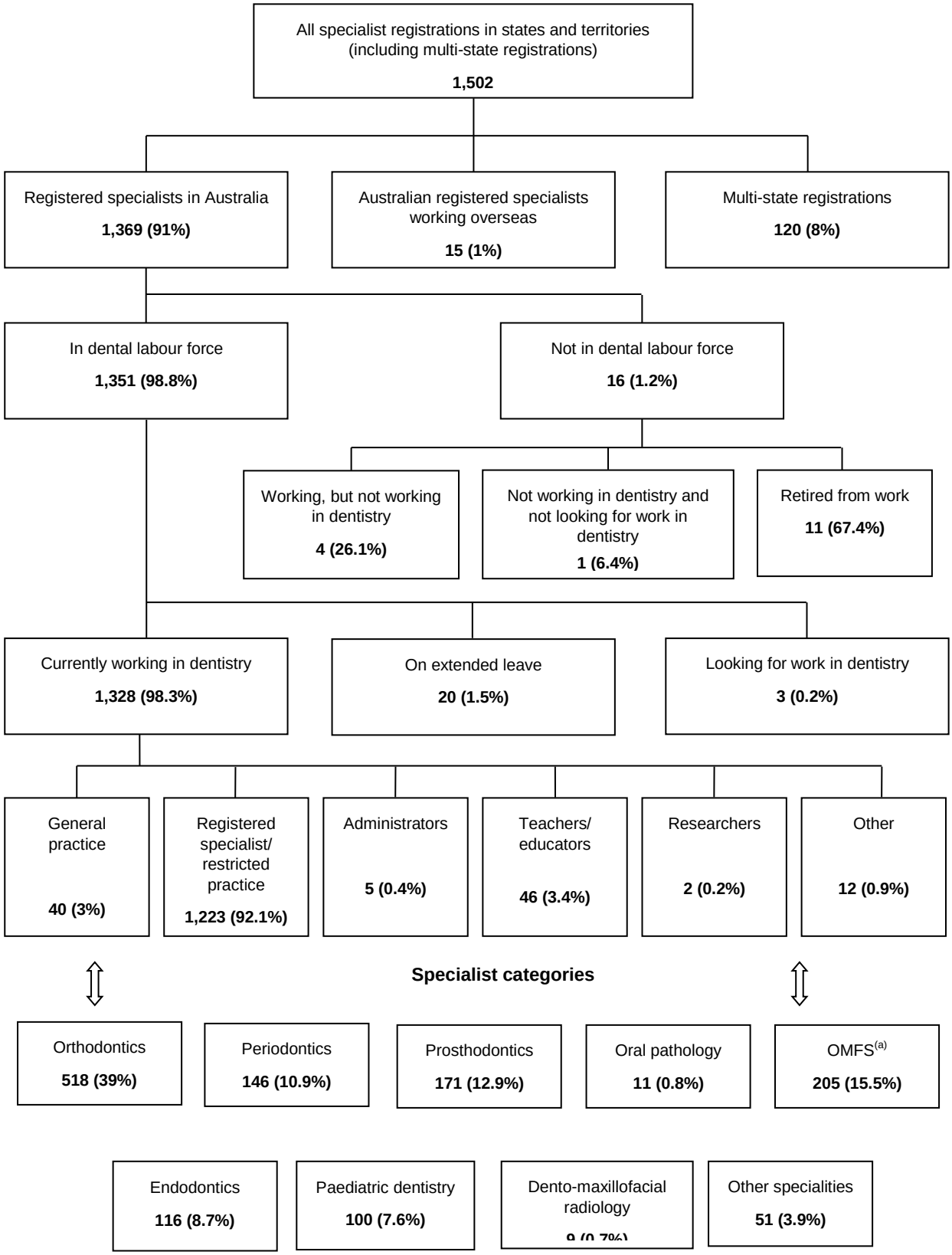
3.2 Overall numbers

Between 2003 and 2006:

- The total number of specialist registrations increased from 1,376 to 1,502, an overall increase of 9.1%.
- The number of practising specialists increased by 8.3%.

In 2006:

- Most of the specialist labour force were practising (1,328 persons, 98.3%) (Figure 11).
- Specialist practitioners were involved in general practice (3%), registered/restricted practice (92.1%), administration (0.4%), teaching (3.4%) and research (0.2%) (Figure 11).
- Orthodontists were the largest group in the specialist labour force (39%), followed by oral and maxillofacial surgeons (15.5%), prosthodontists (12.9%) and periodontists (10.9%) (Figure 11).



Note: Estimates may not sum to totals due to rounding.

(a) Oral and maxillofacial surgery

Figure 11: All dental specialists in Australia, 2006

Box 6: Specialities in dentistry

In Australia, 12 specialities are recognised for registration, and are provided as accredited training programs in six dental schools.

Oral and maxillofacial surgery

Oral and maxillofacial surgery (OMFS) is concerned primarily with the diagnosis, surgical and adjunctive treatment of diseases, injuries and defects involving both the functional and aesthetic aspects of the hard and soft tissue of the oral and maxillofacial region. Specialists train for OMFS in Australia only through the Royal Australasian College of Dental Surgery. Training is offered in the form of a fellowship, and after registration a specialist can practice in a wide variety of hospital and clinical settings.

Prosthodontics

Prosthodontics is the part of dentistry pertaining to the restoration and maintenance of oral function, comfort, appearance and health of the patient by the replacement of missing teeth and contiguous tissues with artificial substitutes (Boucher 2002). It could best be described as restoring a patient's oral functioning and rebuilding their smile through the use of dental implants, bridgework, dentures and/or crowns. It has three main branches: removable prosthodontics, fixed prosthodontics and maxillofacial prosthodontics. Prosthodontics is offered as a three-year training program in five of the six dental schools.

Endodontics

Endodontics is concerned with the morphology, physiology, and pathology of the human tooth, in particular the dental pulp, crown, root and peri-radicular tissues. The study and practice of endodontics includes the biology of these tissues and the aetiology, prevention, diagnosis and treatment of diseases and injuries that affect them (ADA 2010).

Orthodontics

Orthodontics gained importance in the early 20th century, and was added as a speciality in its own right. Major responsibilities include diagnosis, prevention, interception and treatment of all forms of malocclusion (improper bites) of the teeth and associated alterations in their surrounding areas (Boucher 2002).

Periodontics

Periodontics is concerned with the prevention, diagnosis and treatment of diseases affecting the gums and supporting structures of the teeth (periodontium). It was recognised as a speciality in the middle of the 20th century (Neuman & Carranza 2006).

Paediatric dentistry

Paediatric dentistry is concerned with the provision of oral healthcare services to children aged 1–17. It includes both restorative and preventive components, and involves training a child to accept dentistry, and restoring and maintaining primary, mixed and permanent dentitions.

Public health dentistry

Dental public health is the prevention and control of dental diseases and the promotion of dental health through organised community efforts. It serves the community as the patient rather than the individual. It is concerned with dental health education of the public, applied dental research and administration of group dental care programs, as well as the prevention and control of dental diseases on a community basis (ABDPH 2000).

Oral pathology

Oral pathology deals with the nature, identification and management of diseases affecting the oral and maxillofacial regions. It involves research; diagnosis of diseases using clinical, radiographic, microscopic, biochemical or other examinations; and management of patients.

Oral medicine

Oral medicine deals with the significance and relationship of oral and systemic diseases. Registration as an oral medicine specialist is only available in Victoria and New South Wales.

Special needs dentistry

Special needs dentistry is concerned with providing and enabling the delivery of oral care for people with an impairment or disability. It is a relatively new speciality that is recognised for registration and practice only in South Australia.

In addition, oral medicine and oral pathology training and registration are offered together as one speciality. Participants of the 2006 survey also indicated forensic odontology and geriatric dentistry as dental specialities. They are not currently considered as specialist qualifications by the state/territory dental boards in Australia.

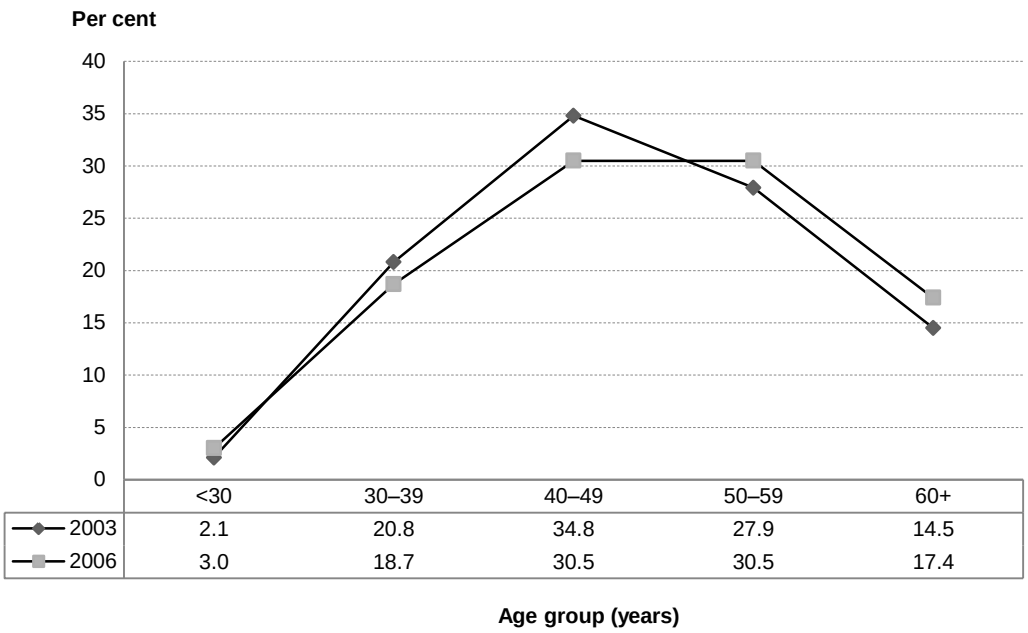
3.3 General characteristics of specialists

- The number of male specialists was nearly five times higher than females. Females comprised 17.5% of the specialist labour force. This proportion did not change between 2003 and 2006 (Table 9).

Table 9: Practising specialists by sex, 2003 and 2006

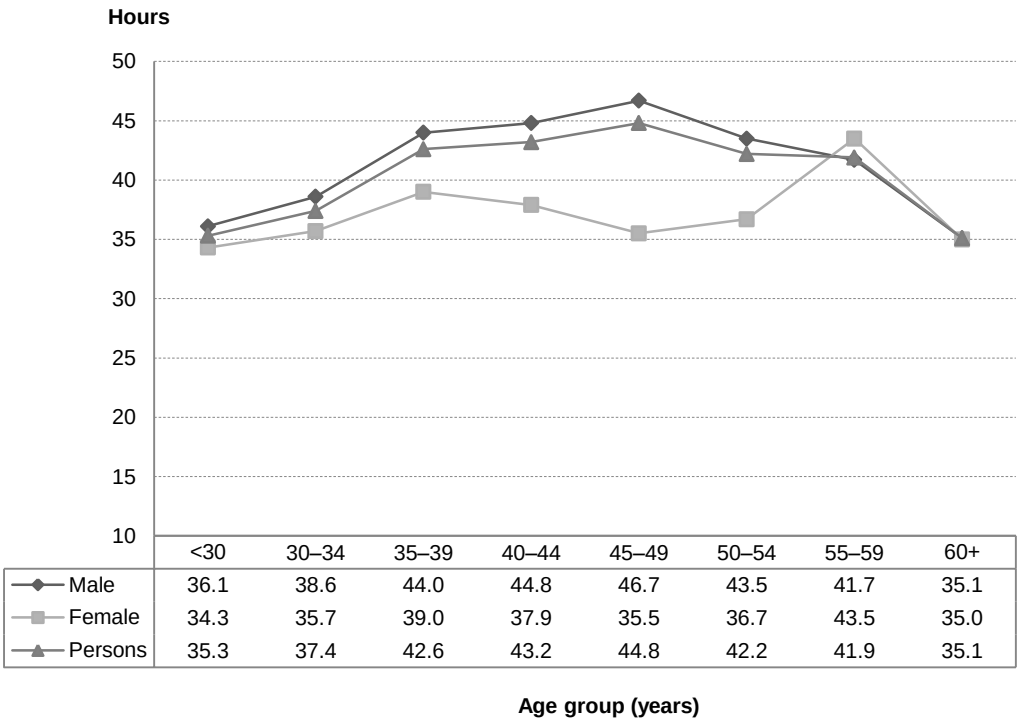
	Number of practising specialists		
Year	Male	Female	Persons
2003	1,012	216	1,228
2006	1,095	233	1,328

- Between 2003 and 2006, the average age of specialists increased from 48.2 to 49.1 years. Female specialists were, on average, 8 years younger than their male colleagues (Table A2.2).
- The largest group of dental specialists was aged 40–59 years. Between 2003 and 2006, the percentage of younger dental specialists (30–49 years) decreased while the percentage of older dental specialists increased (Figure 12).
- In 2006, all practising specialists worked, on average, 41.1 hours per week. Male specialists worked around five hours more (41.9 hours) than their female colleagues (37.1 hours) (Table A2.1).
- The average hours worked per week was 35.3 hours in younger dentists, peaking at around 44.8 hours for those aged 45–49 years and then declining across older age groups. Males worked more hours than females in all age groups, except for 55–59 year old females (Figure 13).



	<30	30–39	40–49	50–59	60+
2003	2.1	20.8	34.8	27.9	14.5
2006	3.0	18.7	30.5	30.5	17.4

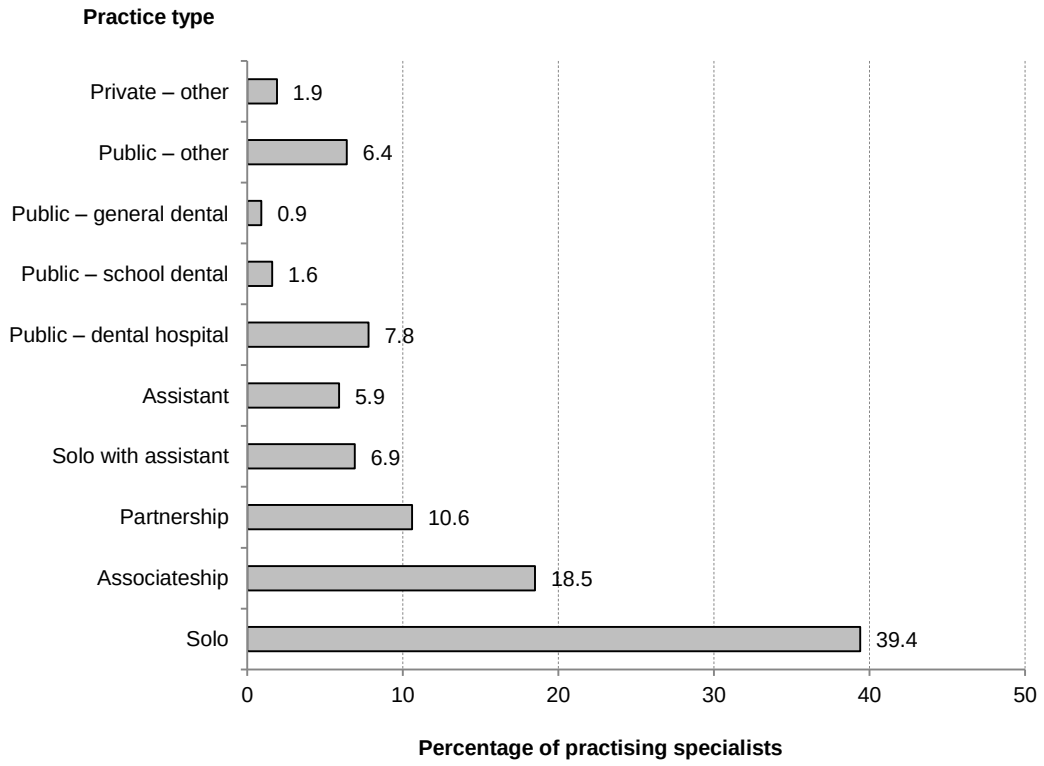
Figure 12: Practising specialists by age group, 2003 and 2006



	<30	30–34	35–39	40–44	45–49	50–54	55–59	60+
Male	36.1	38.6	44.0	44.8	46.7	43.5	41.7	35.1
Female	34.3	35.7	39.0	37.9	35.5	36.7	43.5	35.0
Persons	35.3	37.4	42.6	43.2	44.8	42.2	41.9	35.1

Figure 13: Practising specialists by average hours usually worked per week, age group and sex, 2006

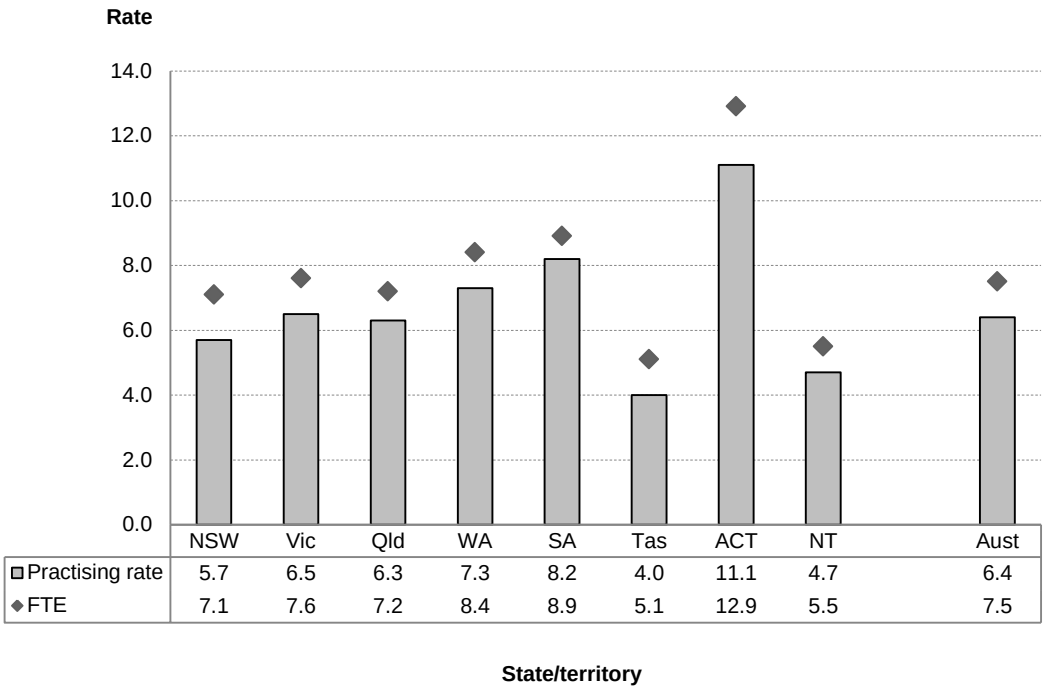
- In 2006, the largest proportion of specialists worked in solo private practice settings (39.4%), while 18.5% were associates, 10.6% were in partnerships, 6.9% worked solo with assistant and 5.9% were assistants. In the public sector, nearly 8% of the specialists worked in dental hospital settings (Figure 14).



Note: Public-other includes defence forces, tertiary educators and practitioners who reported 'public other' type of practice. Private-other includes locum, health fund and practitioners who reported 'other' type of practice.

Figure 14: Practising specialists by practice type at main location, 2006

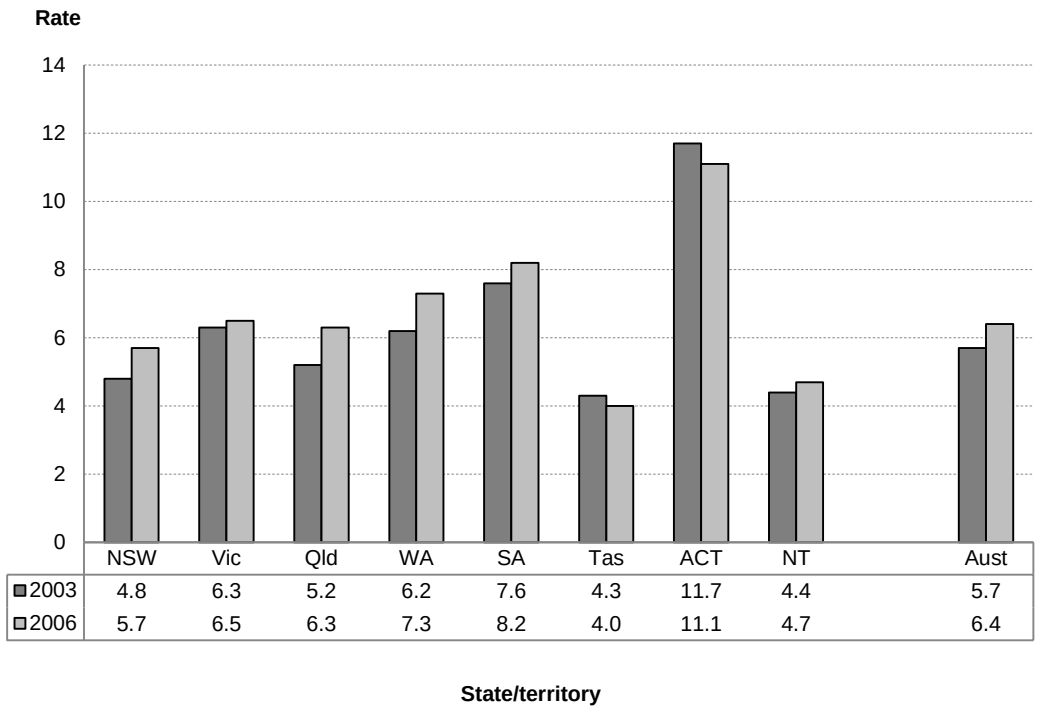
- In 2006, there were 6.4 practising dental specialists per every 100,000 population. The highest rate was in the Australian Capital Territory (11.1) and lowest in Tasmania (4.0). New South Wales had comparatively fewer numbers of specialists per 100,000 population than Victoria, Queensland, Western Australia and South Australia (Figure 15).
- Between 2003 and 2006, the practising rate of specialists per 100,000 population in Australia increased from 5.7 to 6.4. This was consistent across all states/territories except Tasmania and the Australian Capital Territory (Figure 16).
- Across remoteness areas, the practising rate of specialists per 100,000 population was highest in *Major cities* in 2006 (8.3). *Remote/Very remote* areas had practising rates of less than 1 specialist per 100,000 population (Figure 17).
- Between 2003 and 2006, the practising rate of specialists increased moderately in the *Inner regional* and *Remote/Very remote* areas, more considerably in the *Major cities* (from 7.5 to 8.3) and was stable in the *Outer regional* areas (1.8) (Figure 17).



	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Practising rate	5.7	6.5	6.3	7.3	8.2	4.0	11.1	4.7	6.4
FTE	7.1	7.6	7.2	8.4	8.9	5.1	12.9	5.5	7.5

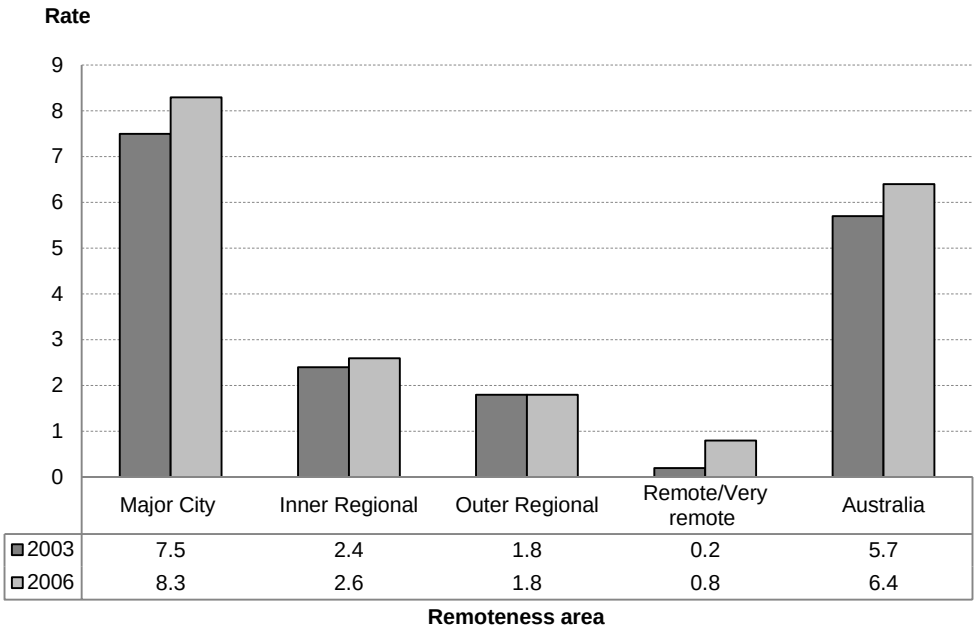
Note: FTE is calculated by multiplying the number of practising dentists by the average hours worked per week and dividing the result by 35.

Figure 15: Practising specialists and FTE by state/territory, 2006 (per 100,000 population)



	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
2003	4.8	6.3	5.2	6.2	7.6	4.3	11.7	4.4	5.7
2006	5.7	6.5	6.3	7.3	8.2	4.0	11.1	4.7	6.4

Figure 16: Practising specialists by state/territory, 2003 and 2006 (per 100,000 population)



Note: Remote/Very remote includes Migratory areas.

Figure 17: Practising specialists by remoteness area of main practice, 2003 and 2006 (per 100,000 population)

- In 2006, the majority of dental specialists (931 persons, 70.1%) were practising only in the private sector, while 160 (12.0%) were practising only in the public sector and 237 (17.8%) were practising in both public and private sectors. There was a greater percentage of female specialists practising in the public sector (32.3) than the private sector (13.9) (Table A2.2).
- Specialists in the private sector and in both the public and private sectors worked more hours than those only in the public sector. The trend was similar in direct patient care hours worked per week (Table A2.2).

3.4 Specialist groups

Orthodontists, oral and maxillofacial surgeons (OMFS), prosthodontists, periodontists, endodontists and paediatric dentists will be classified separately due to their higher numbers. Oral pathologists, dento-maxillofacial radiologists and those classified as 'others' will be combined into one group 'other' for this section.

Comparisons among specialist groups

- Orthodontists were the largest specialist group followed by OMFS (Table 10).
- Between 2003 and 2006, there was a very small increase in the practising rate across some specialist categories. But there was a decrease in the number of orthodontists per 100,000 population (from 2.7 to 2.5) (Table 10).

Table 10: Practising specialists by specialist group, 2003 and 2006

Year	Ortho	Perio	Prosth	OMFS	Endo	Paed	Other	All specialists
				Number of practitioners				
2003	538	139	149	183	98	65	56	1,228
2006	518	146	171	206	116	100	71	1,328
				Practising rate per 100,000 population				
2003	2.7	0.7	0.7	0.9	0.5	0.3	0.6	5.7
2006	2.5	0.7	0.8	1.0	0.6	0.5	0.3	6.4

Note: The following abbreviations have been used in this table: Ortho (Orthodontist), Perio (Periodontist), Prosth (Prosthodontist), OMFS (Oral and maxillofacial surgeon), Endo (Endodontist), Paed (Paediatric dentist).

- The practising rate of dental specialist categories per 100,000 population varied from 2.5 for orthodontists to 0.3 for the other categories. Orthodontists have the highest FTE rate (for 35 hours per week) at 2.9 for every 100,000 population. OMFS have the second highest FTE (1.3), followed by prosthodontists (1.0) (Figure 18).
- Females were in the minority across all specialist categories except for paediatric dentistry, where they accounted for 57.3% of all paediatric dentists (Figure 19).
- Average age varied by specialist group. Prosthodontists and OMFS had the highest average age (51.0 years) and paediatric dentistry had the lowest average age (45.2 years) (Table A2.5).
- Female specialists were younger than their male counterparts and worked fewer hours, except for the 'other' category (Table A2.5).

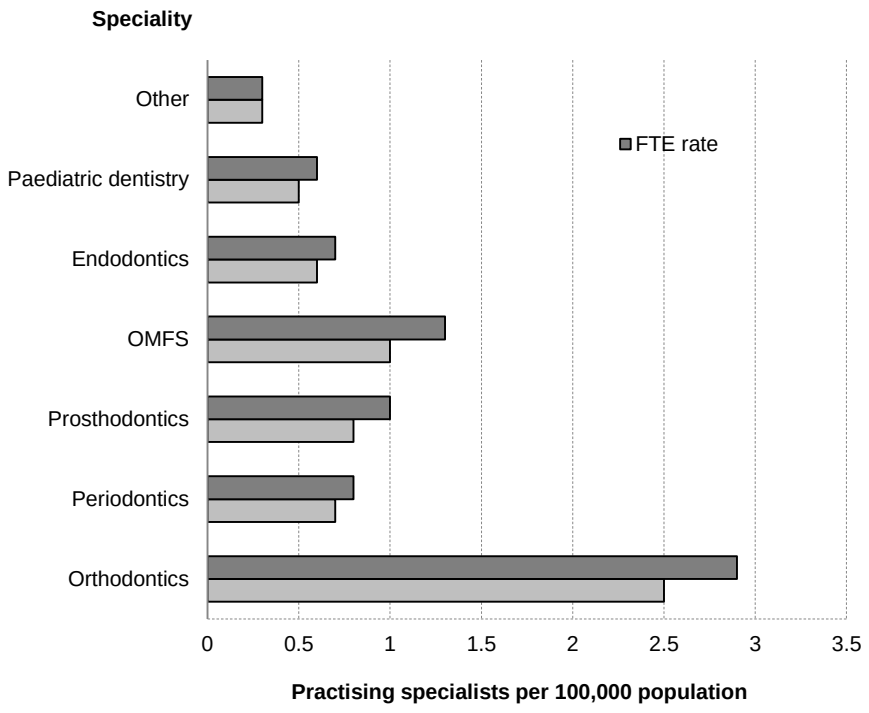


Figure 18: Practising specialists and full-time equivalent rate by speciality, 2006 (per 100,000 population)

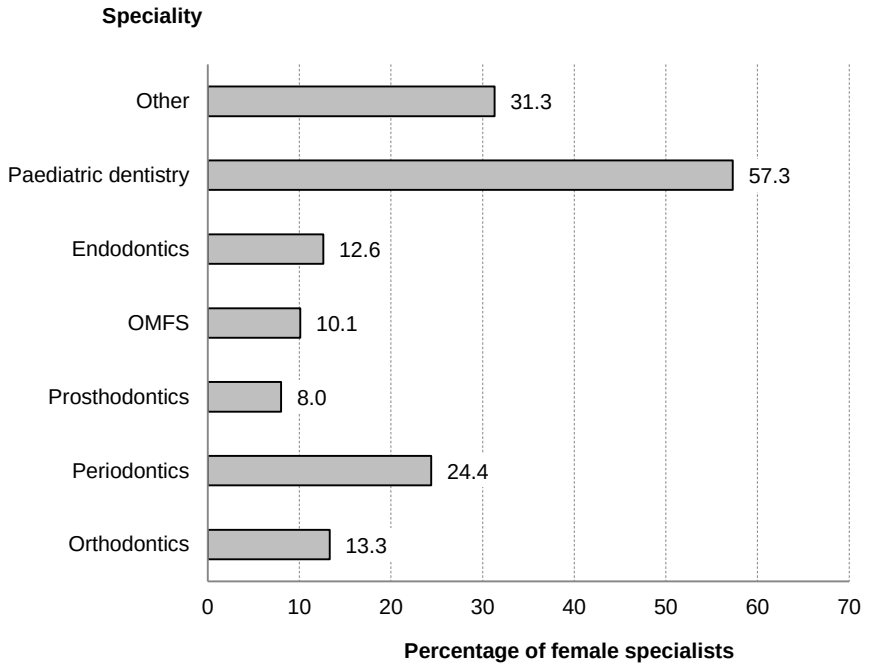
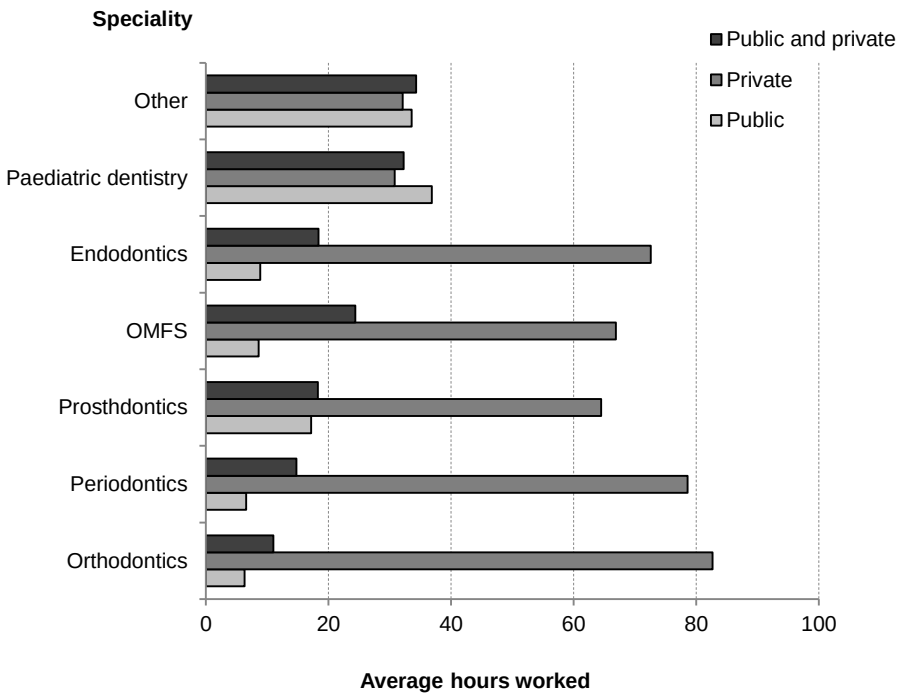


Figure 19: Sex distribution of specialist categories, 2006

- In 2006, there was a trend across all specialist groups for a large percentage to work in the private sector. But this was different in paediatric dentistry and the 'other' category, where the distribution of specialists in all three sectors was more uniform (Figure 20).



Notes

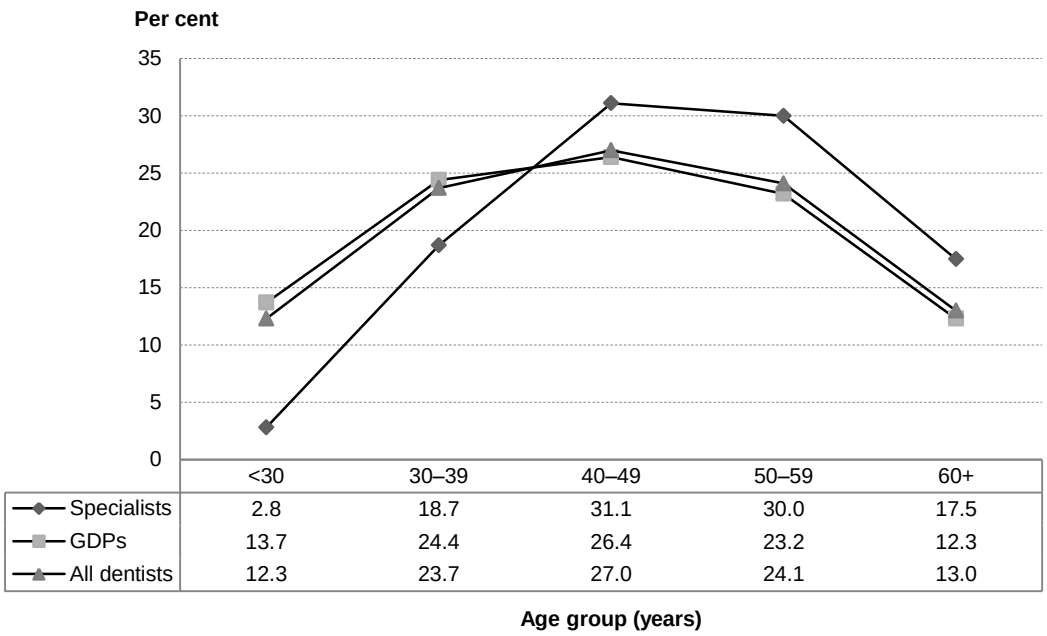
1. Sector of practice was determined by the practitioner's reported type of practice at main, second and third practice locations.

2. Other includes oral pathology, oral medicine, dento-maxillofacial radiology and those classified as 'other' specialty type.

Figure 20: Practising specialists by sector of practice and average hours worked per week, 2006

Differences between specialists and general dental practitioners

- The proportion of females (17.5%) in the specialist labour force was substantially lower than the proportion of female general dental practitioners (30.6%).
- Across age groups, the largest proportion of specialists and general dental practitioners were aged 40–59 years. Over a third (38.1%) of general dental practitioners were younger than 40, while only 21.5% of specialists were younger than 40 (Figure 21).
- The average age of specialists (49.1 years) was higher than general dental practitioners (44.5) and all dental practitioners (45.1 years) (Table A1.4, Table A2.2).



	<30	30–39	40–49	50–59	60+
Specialists	2.8	18.7	31.1	30.0	17.5
GDPs	13.7	24.4	26.4	23.2	12.3
All dentists	12.3	23.7	27.0	24.1	13.0

Figure 21: Practising specialists, general dental practitioners and all dentists by age group, 2006

- Specialists worked the longest in the 30–34 years and 55–59 years age groups (49.4 hours and 43.3 hours per week respectively). There was a steep fall in specialist work hours in the 35–39 years age group. Meanwhile, general dental practitioners peaked in the 45–49 years age group and were more consistent with the national average (Figure 22).

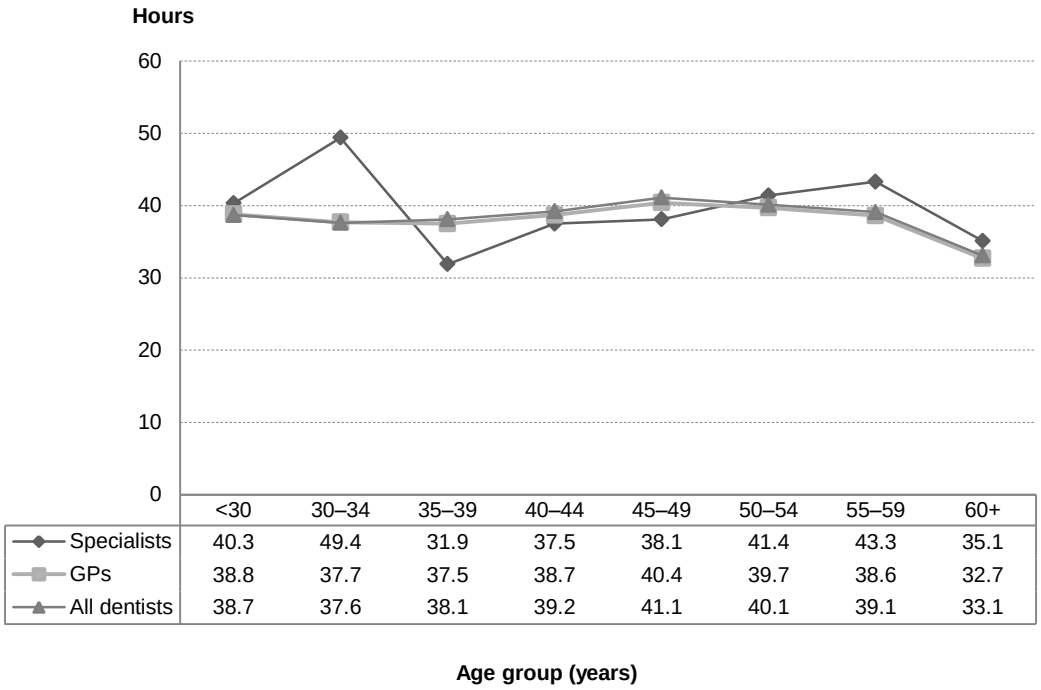


Figure 22: Practising specialists, general dental practitioners and all dentists by average hours usually worked per week and age group, 2006

Table 11: Practising specialists and dentists by state/territory, 2006

Type	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
Specialists	390	331	260	151	129	20	37	10	1,328
GDPs	3,171	2,118	1,769	920	697	152	181	69	9,076
All dentists	3,561	2,449	2,028	1071	826	172	218	78	10,404

- Only 11% of specialists worked in areas outside *Major cities*, while one-fifth (20.2%) of GDPs worked in Regional and *Remote/Very remote* areas (Table 12, Table A2.4).

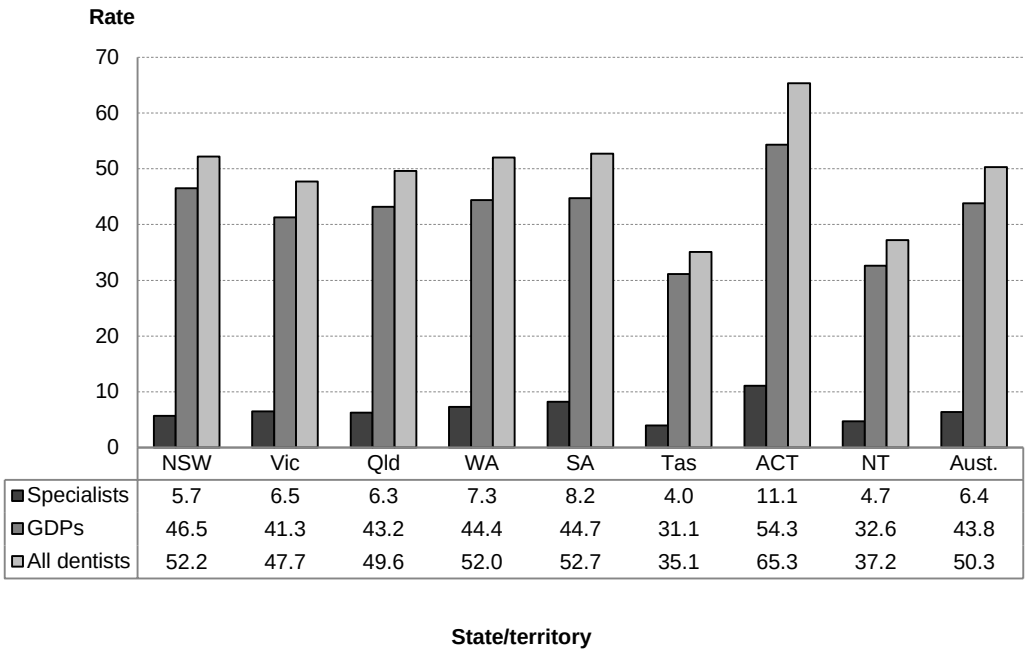
Table 12: Practising specialists and dentists by remoteness area of main practice, 2006

Type	Major city	Inner regional	Outer regional	Remote/Very remote	Australia
Specialists	1,182	105	36	4	1,328
GDPs	7,245	1,243	504	83	9,076
All dentists	8,428	1,349	540	87	10,404

Notes

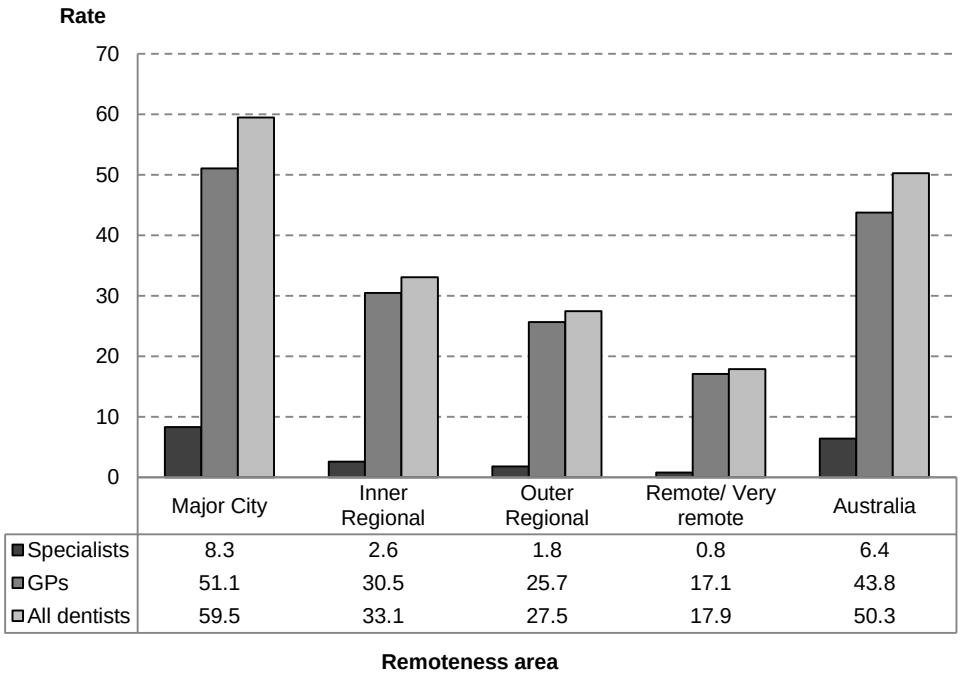
1. Remoteness areas defined by ASGC (ABS 2008).
2. *Remote/Very remote* includes Migratory areas.
3. Estimates may not sum up due to rounding.

- The number of specialists and general dental practitioners per 100,000 population was highest in the Australian Capital Territory and lowest in Tasmania. Nationally, there were 6.4 specialists compared with 43.8 general dental practitioners per every 100,000 persons (Figure 23).



	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust.
Specialists	5.7	6.5	6.3	7.3	8.2	4.0	11.1	4.7	6.4
GDPs	46.5	41.3	43.2	44.4	44.7	31.1	54.3	32.6	43.8
All dentists	52.2	47.7	49.6	52.0	52.7	35.1	65.3	37.2	50.3

Figure 23: Practising specialists, general dental practitioners and all dentists by state/territory, 2006 (per 100,000 population)

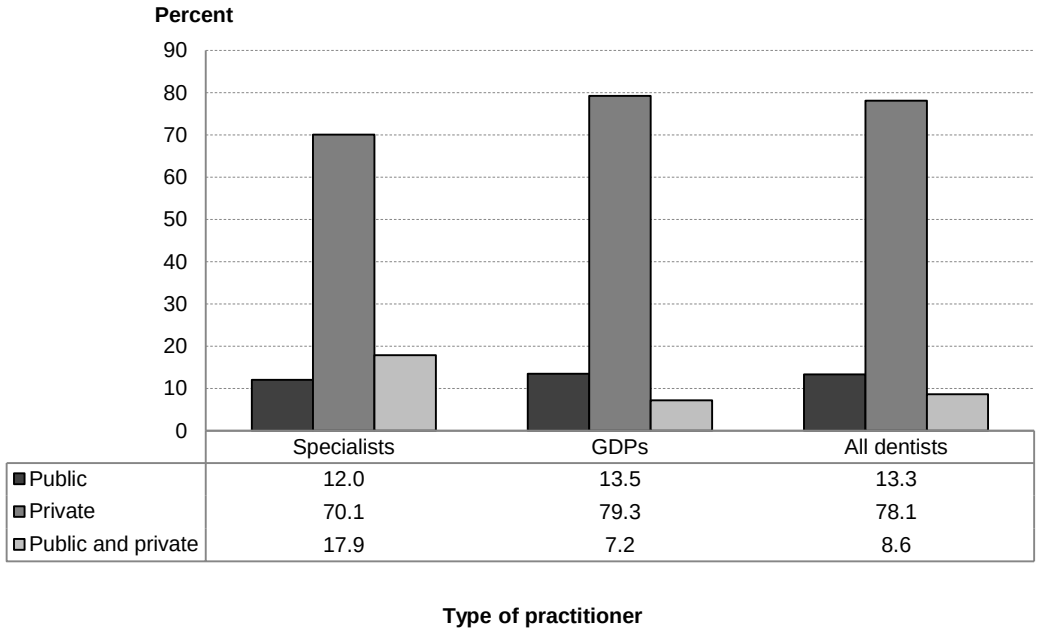


	Major City	Inner Regional	Outer Regional	Remote/ Very remote	Australia
Specialists	8.3	2.6	1.8	0.8	6.4
GPs	51.1	30.5	25.7	17.1	43.8
All dentists	59.5	33.1	27.5	17.9	50.3

Note: Remote/Very remote includes Migratory areas.

Figure 24: Practising specialists, general dental practitioners and all dentists by remoteness area, 2006 (per 100,000 population)

- Across remoteness areas, the numbers of specialists and general dental practitioners per 100,000 population showed similar patterns. This ranged from 8.3 in *Major cities* to 0.8 in *Remote/Very remote* areas for specialists; and from 51.1 to 17.1 for general dental practitioners (Figure 24).
- While similar proportions of specialists and general dental practitioners practised solely in the public sector (12% and 13.5% respectively), specialists were more likely than general dental practitioners to practise in both the public and private sectors (Figure 25).



	Specialists	GDPs	All dentists
Public	12.0	13.5	13.3
Private	70.1	79.3	78.1
Public and private	17.9	7.2	8.6

Note: Sector of practice was determined by the practitioner's reported type of practice at main, second and third practice locations.

Figure 25: Practising specialists, general dental practitioners and all dentists by sector of practice, 2006 (per 100,000 population)

4 Allied dental practitioners

This chapter presents the findings of the 2006 allied dental practitioner survey. This includes four groups: dental hygienists, dental therapists, oral health therapists (OHTs) and dental prosthetists. First, the methods for data collection and analysis are explained. Later, these four groups are individually discussed.

As of 2006, the estimated numbers of practising dual registered hygienists and therapists are reported as a separate labour force group (OHTs). This leads to some interpretation issues when comparing 2006 estimates with earlier data collections.

4.1 Methods

The allied dental practitioner surveys included two types of questionnaires: one for dental hygienists, dental therapists and OHTs combined, and the other for dental prosthetists. Data were collected on age, sex, work status, hours worked, and practice characteristics (see Appendix B2 and B3). All allied personnel registered with the dental board in each state/territory were surveyed. The survey was administered in conjunction with registration renewal, and with assistance from the state/territory dental boards and/or health departments.

Dental hygienists, therapists and OHTs were differentiated on the basis of their registration type. Data were individually analysed on the basis of these three categories. The national response rates varied from 76.7% for hygienists to 81.4% for therapists to 82% for OHTs. Data collection methods and resulting response rates varied by state/territory (Table 13).

Table 13: Hygienists, therapists and OHTs data collection details by state/territory, 2006

State/ territory	Data collection period	Mail-out type	Reminder mail-out	Dental hygienist response rate (%)	Dental therapist response rate (%)	OHTs response rate (%)
NSW	Jul–Sept	Registration renewal	No	89.2	91.4	97.8
Vic	Oct –Nov	Registration renewal	No	87.8	75.5	93.6
Qld	Jun–Jul	Registration renewal	No	66.7	78.4	78.5
WA	Nov–Dec	AIHW DSRU	Yes[(a)]	68.1	79.1	66.7
SA	May–Jun	Registration renewal	No	77.3	79.6	92.3
Tas	Nov–Dec	AIHW DSRU	Yes[(a)]	100.0	96.7	—
ACT	Aug–Sep	Dental Board/AIHW DSRU[(b)]	Yes[(a)]	31.7	95.0	—
NT	Nov–Dec	Registration renewal	No	n.a.	52.0	—

(a) Follow-up consisted of one reminder mailing of the survey questionnaire about 4 weeks after initial mail-out.

(b) In ACT, the Dental Board surveyed hygienists in conjunction with registration renewal and AIHW DSRU conducted direct mail-out to all therapists.

Dental hygienists were not surveyed in the Northern Territory. In 2006, there were 12 registered hygienists in the Northern Territory. Data for OHTs were available in only five states.

Dental prosthetist registration data were supplied by the state/territory dental boards and/or prosthetist associations. The national response rate for the prosthetist survey was 61.3%. The collection was conducted in all states and territories except the Northern Territory, where prosthetists have only recently been permitted to practise. For Western Australia and Tasmania, data were collected by direct mail-out from the AIHW Dental Statistics and Research Unit. Data collection methods and resulting response rates varied by state/territory (Table 14).

Table 14: Dental prosthetist data collection details by state/territory, 2006

State/ territory	Data collection period	Mail-out type	Reminder mail-out	Response rate (%)
NSW	Jul–Sep	Surveyed with registration renewal	Yes	56.3
Vic	Oct–Nov	Surveyed with registration renewal	No	69.3
Qld	Jun–Jul	Surveyed with registration renewal	No	69.9
WA	Nov–Dec	Direct mailed by AIHW DSRU	Yes[(a)]	31.5
SA	May–Jun	Surveyed with registration renewal	No	64.9
Tas	Nov–Dec	Direct mailed by AIHW DSRU	No	100.0
ACT	Aug–Sep	Surveyed with registration renewal	No	57.1
NT	n.a.	n.a.	n.a.	n.a.

(a) Follow-up consisted of one reminder mailing of the survey questionnaire about 4 weeks after initial mail-out.

Weighting of data varied between state/territory depending on available registration information. For the purposes of generating estimates, it was assumed that non-respondents had the same characteristics as respondents; hence, data were weighted up to the number registered in each state/territory. Rounding of estimates may result in rows or columns not summing to totals in some tables. As a result of weighting, greater attention will be required when reading data from states/territories that have lower response rates and estimates based on small groups.

Oral health therapists

Comparisons of 2006 estimates with previous data collections have been complicated by the emergence of the new OHTs group. In earlier reports (2000, 2003 and 2005) OHTs were either included in the total for therapists or were reported in both the hygienist and therapist reports. The separate reporting of OHTs has resulted in a decrease in the number of dental therapists in some states and territories.

Recategorisation of previous data collections based on this new classification was not possible due to collection process differences. For example, the 2003 allied dental labour force survey used different sources for listing hygienists/therapists: state/territory dental board registers, Australian Dental Therapist Association register and Dental Hygiene Association of Australia register.

Prosthetists

There was no 2006 data collection for prosthetists in the Northern Territory. In tables reporting numbers of practitioners per 100,000 population by remoteness, if no practitioner data were available the population estimate was correspondingly reduced (Australian estimates exclude the Northern Territory population).

4.2 Dental hygienists

Dental hygienists are trained in an accredited school and registered by the state/territory board to provide a limited range of dental services (such as scaling and polishing teeth, health education and training, radiography) in accordance with restrictions in place by the dental boards.

The profession of dental hygiene began in 1976, when dental hygienists became recognised as dental auxiliaries in South Australia. Dental hygienists are allowed to register and practice in all states and territories. Dental hygienists can work in both the public and private sectors under the supervision of a dentist (see Box 7).

Box 7: Services performed by dental hygienists:

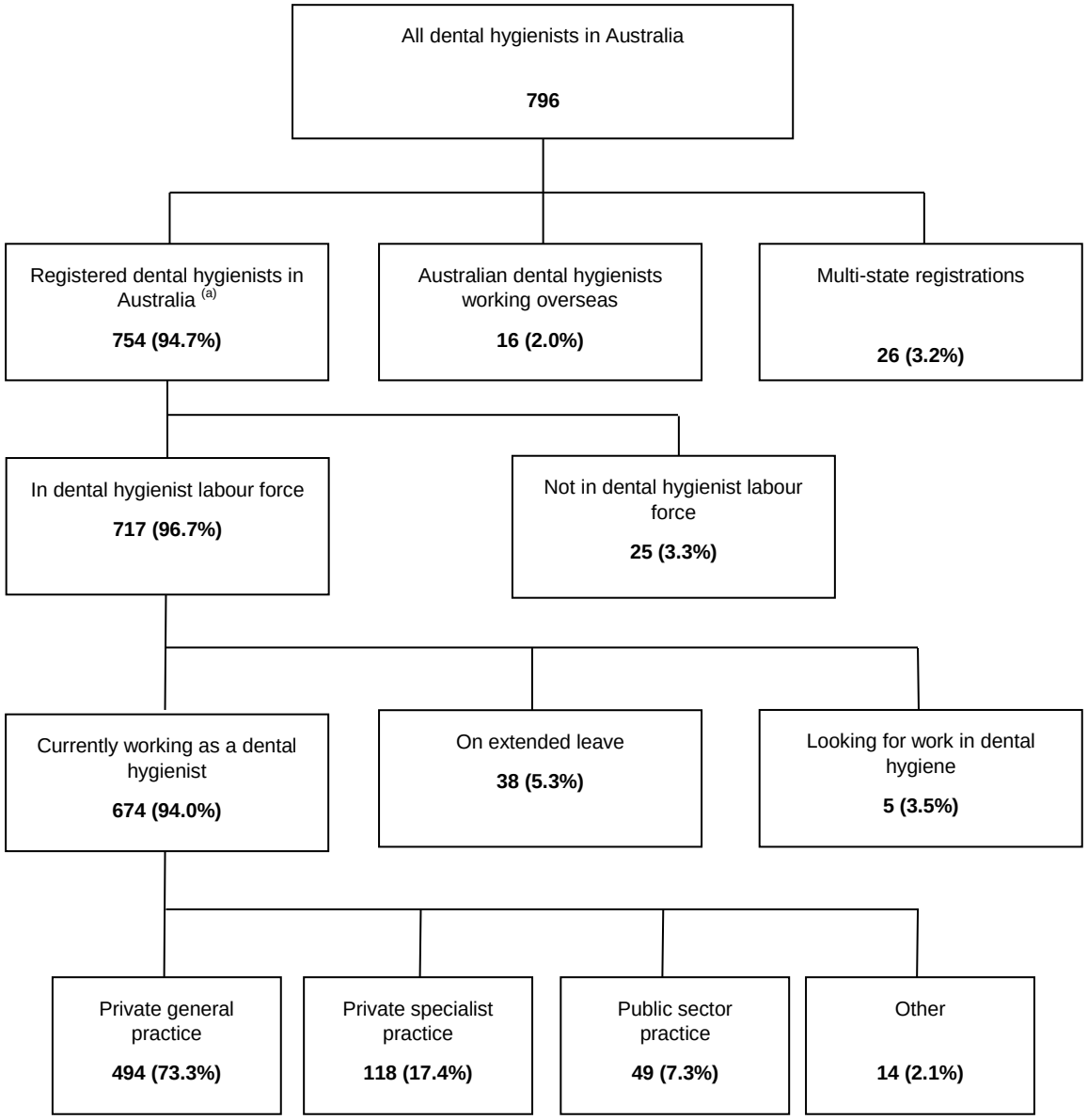
- oral examination and the assessment and recording of oral conditions
- taking impressions of teeth (other than for prosthodontic or prosthetic dental treatment
- the application of preventive and therapeutic solutions to the teeth
- preventive dental procedures, including the application of fissure sealants
- the non-surgical management of gingival and periodontal conditions, including root debridement
- orthodontic procedures that do not initiate tooth movement
- the placement and removal of metallic and non-metallic separators
- splinting to stabilise mobile teeth
- the polishing and recontouring of restorations
- the application of professional available bleaching agents
- the removal of sutures
- the application and removal of periodontal packs
- diagnostic dental radiography
- administration of local anaesthetic solutions for dental procedures
- placement of temporary restorations not involving the removal of tooth structures.

Source: SA Dental Practice Act 2001.

Note: There were some variations in scope of practice by state and territory.

This section presents the findings of the dental hygienist labour force survey. First, the overall numbers are presented, followed by demographic and practice characteristics. Second, the findings on the geographic classification of hygienists, based on jurisdictions and remoteness category, are presented. When possible, comparisons are made with data available from previous surveys. However, such comparisons should be made with caution due to the addition of the OHT category.

Overall numbers



(a) There was no collection in the NT. 12 hygienists have been included in the total number of registered practitioners but have not been included in the other estimates.

Note: Estimates may not sum to totals due to rounding.

Figure 26: All registered dental hygienists in Australia, 2006

- In 2006, there were an estimated 796 dental hygienists. Multi-state registrations contributed to 3.2%, while 2.0% were working overseas. Most registered dental hygienists (96.7%) were classified in the hygienist labour force (Figure 26, Table A3.1).
- Of the 717 dental hygienists in the labour force, 94.0% (674 practitioners) were in active practice, while 5.3% were on extended leave and 3.5% were looking for work (Figure 26, Table A3.1).
- About 73% of practising hygienists were working in private general practice. Another 17.5% were working in private specialist practice, and only 7.3% (49 practitioners) were employed in the public sector (Figure 26).

Table 15: Number of dental hygienists and practising rate, 1997 to 2006

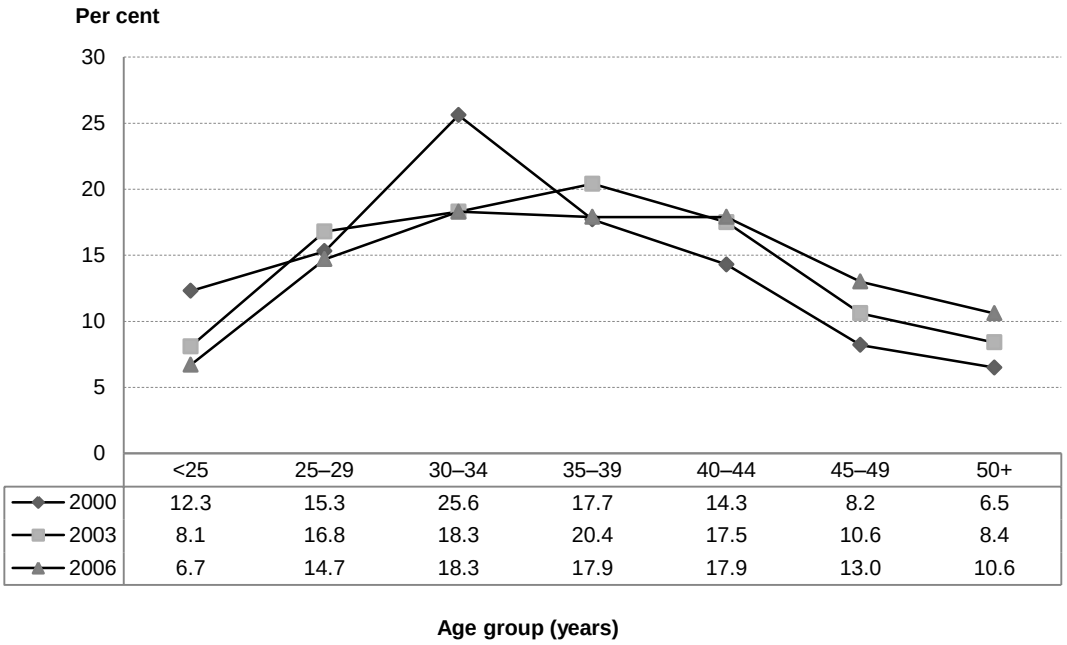
	1997	2000	2001	2002	2003	2004	2005	2006
Number of practising hygienists	282	416	471	515	577	n.a.	666	674
Practising rate per 100,000 population	1.5	2.2	2.5	2.6	2.9	n.a.	3.3	3.3

Note: There was no data collection in 2004.

- Between 1997 and 2006, the number of practising dental hygienists increased from 282 to 674, a 139% increase. The number of practising hygienists per 100,000 population also increased, from 1.5 to 3.3 (Table 15).
- In 2006, there were 3.8 registered dental hygienists per 100,000 population. Based on a 35 hours per week FTE, there were 2.7 practising hygienists per 100,000 population (Table A3.1).

Demographic characteristics

- Female hygienists continued to dominate this group (in number). The proportion of females remained similar, at about 97% in 2003 and 2006 (Table A3.1).
- The average age of dental hygienists increased from 34.9 years in 2000 to 36.1 years in 2003 and 37.7 in 2006. Female dental hygienists were slightly older (37.8 years) than their male colleagues (35.9 years) (Table A3.2).
- In 2006, at least 50% of all practising dental hygienists were aged 30–44. As the number of younger practitioners decreased, there was an increase in the percentage of practising hygienists in older age groups (40–44, 45–49 and 50+ years) (Figure 27).



	<25	25–29	30–34	35–39	40–44	45–49	50+
2000	12.3	15.3	25.6	17.7	14.3	8.2	6.5
2003	8.1	16.8	18.3	20.4	17.5	10.6	8.4
2006	6.7	14.7	18.3	17.9	17.9	13.0	10.6

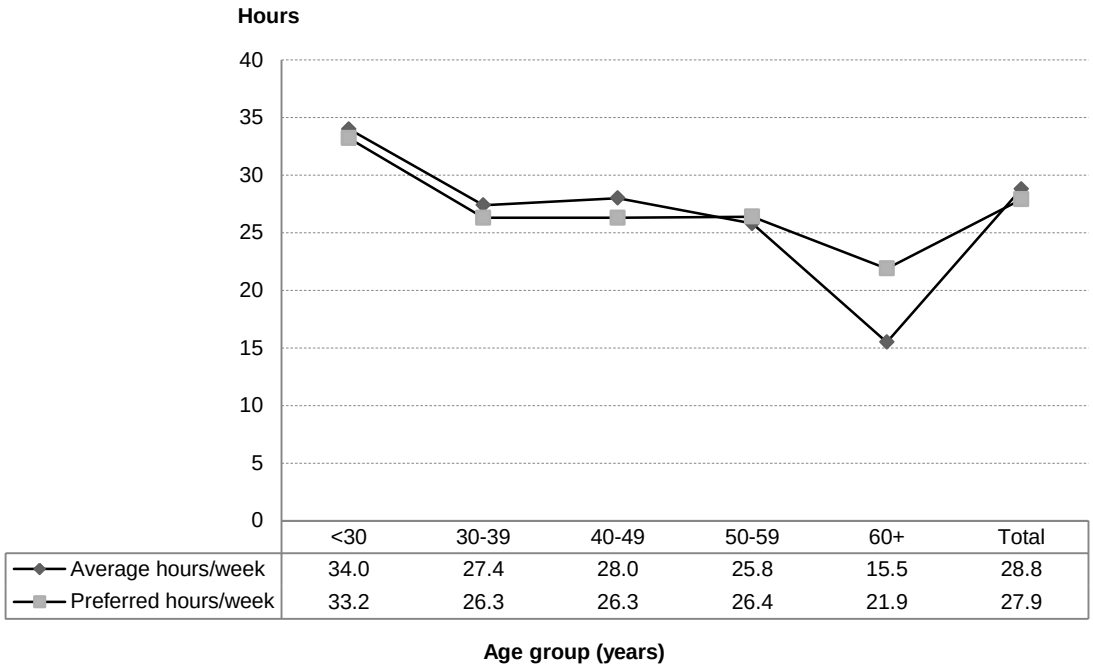
Note: There was no collection in the NT.

Figure 27: Practising dental hygienists by age group, 2000, 2003 and 2006

Practice characteristics

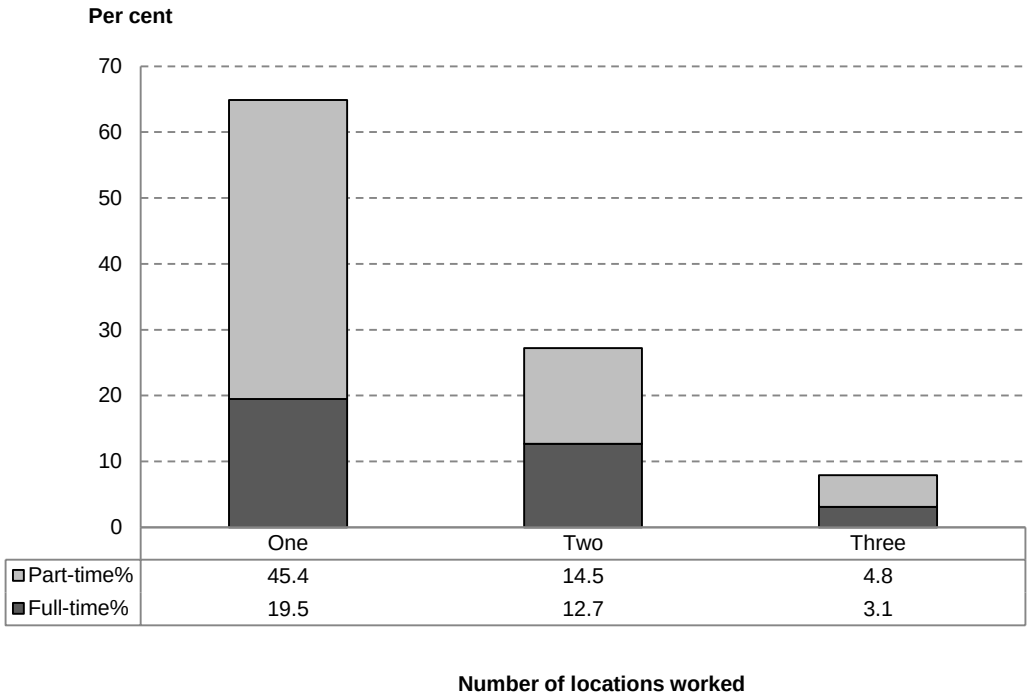
In 2006, all dental hygiene practitioners worked an average of 28.8 hours per week. Male hygienists worked slightly longer hours than their female colleagues. This differentiation was similar across age groups except in older age groups (50+ years). Female hygienists worked longer hours than males in this group. However, this comparison should be viewed with caution, as there were very few male hygienists in this age group (Table A3.6).

- The national average of total hours worked was similar to preferred hours to work. However, the younger age groups (50 years or younger) preferred to work fewer hours and the older age groups (50+ years) preferred to work slightly more (Figure 28).
- The majority (64.9%) worked in only one location. A small proportion (7.9%) worked in three or more practice locations and more than half of those worked part-time (less than 35 hours per week) (Figure 29).
- Hygienists indicated that their main reasons for working part-time were to accommodate 'child rearing' (36.1%) and 'personal preference' (34.6%). The reasons were similar when compared with the previous data collections of 2003 and 2005 (Figure 30).



	<30	30-39	40-49	50-59	60+	Total
Average hours/week	34.0	27.4	28.0	25.8	15.5	28.8
Preferred hours/week	33.2	26.3	26.3	26.4	21.9	27.9

Figure 28: Practising dental hygienists by hours worked, preferred hours per week and age group, 2006



	One	Two	Three
Part-time%	45.4	14.5	4.8
Full-time%	19.5	12.7	3.1

Figure 29: Practising dental hygienists by number of locations worked and full-time status, 2006 (per cent)

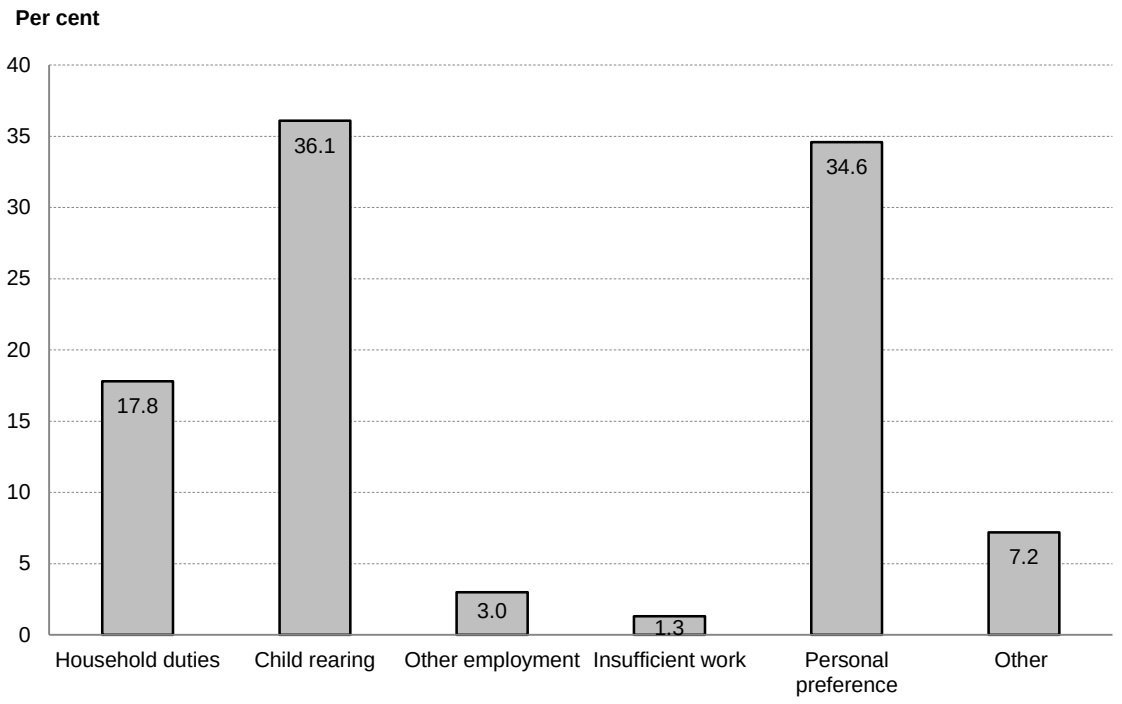


Figure 30: Practising dental hygienists by most common reasons for working part-time, 2006

- Based on main practice location, the majority of practising hygienists worked in the private sector (92.7%). This included 73.2% in private general practice and 17.5% in private specialist practice. Only 7.3% of hygienists worked in the public sector, of which teaching occupied the highest proportion (Table A3.7, Figure 31).
- Based on all practice locations, 5.6% worked only in the public sector, 88.4% worked only in the private sector, and 5.9% worked in both the public and private sectors (Table 16).
- The average age of practitioners working in the public sector alone was at least two years older than the national average of 37.7 years (Table 16).
- Hygienists working in both the public and private sectors had longer working weeks compared with hygienists working in only one sector (Table 16).

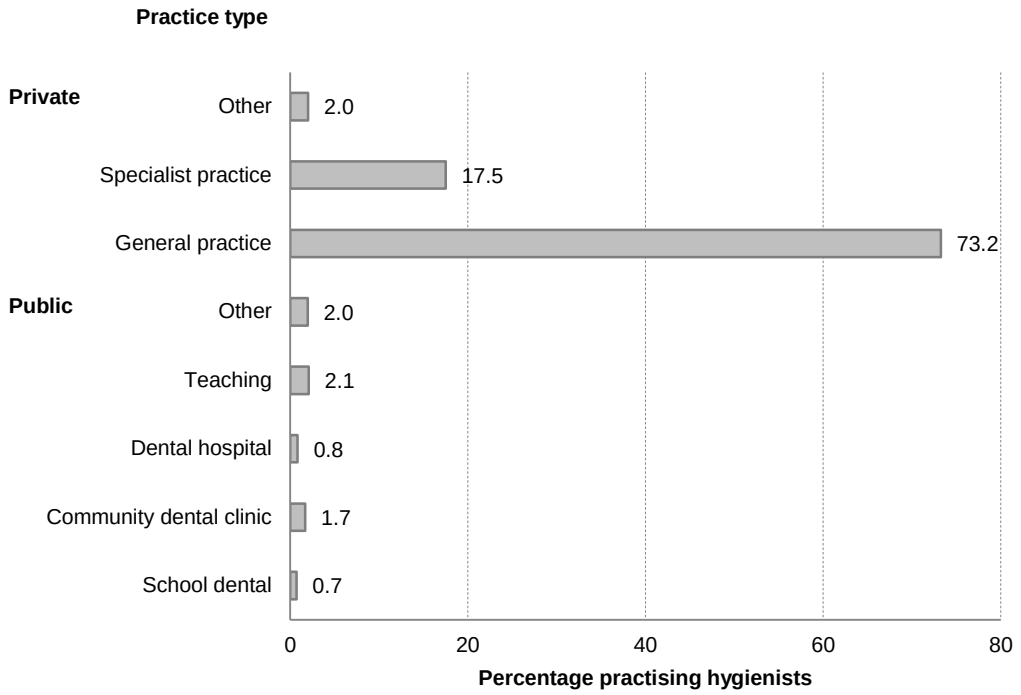


Figure 31: Practising dental hygienists by type of practice at main practice, 2006 (per cent)

Table 16: Practising dental hygienists by sector, age and hours worked in all practice locations, 2006

	Public	Private	Public and private[(a)]	Total
		Number employed		
Persons	38	596	40	674
		Percentage		
% Female	88.3	97.4	93.1	96.7
		Average age (years)		
Male	40.6	36.5	25.0	35.9
Female	39.9	37.5	39.4	37.8
Persons	40.0	37.5	38.4	37.7
		Average total hours usually worked per week		
Male	36.0	26.5	39.9	30.0
Female	23.1	28.8	33.2	28.8
Persons	25.0	28.7	33.7	28.8
		Percentage part-time		
Male	33.8	52.2	0.0	42.1
Female	72.4	66.0	49.1	65.3
Persons	67.9	65.6	45.7	64.6

a) Public and private is based on all practice locations.

Note: Sector of practice was determined by the practitioner's reported type of practice at main, second and third practice locations.

- Hours dedicated to various areas of practice were totalled for all practice locations reported. The majority of hours worked (90.9%) were dedicated to clinical practice. Small percentages were dedicated to teaching/education (3.2%), oral health promotion (2.7%), administration/management (1.1%), chair-side assistance (0.7%), research and other areas of practice (1.3%)

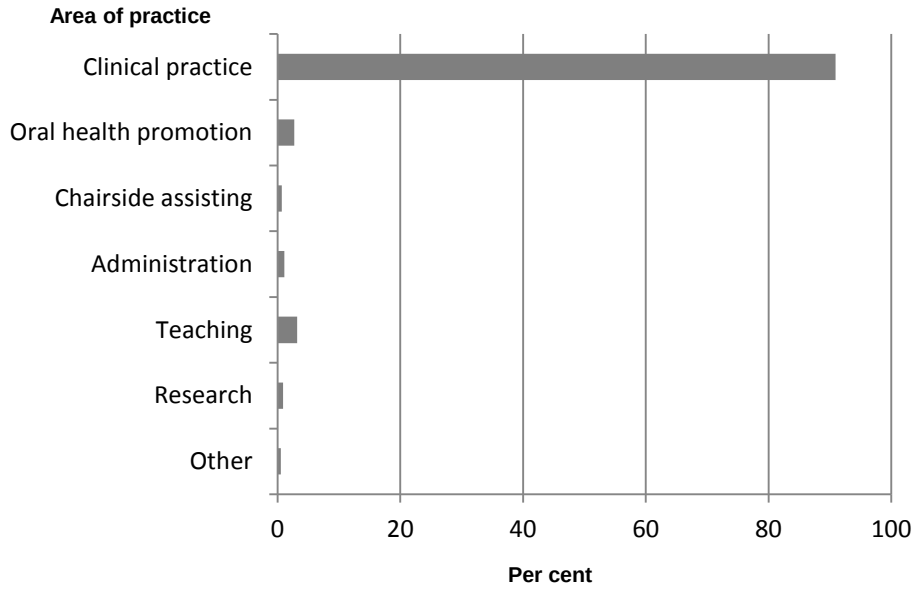


Figure 32: Average hours worked by dental hygienists by area of practice at main practice, 2006 (per cent)

Distribution by geographic classification

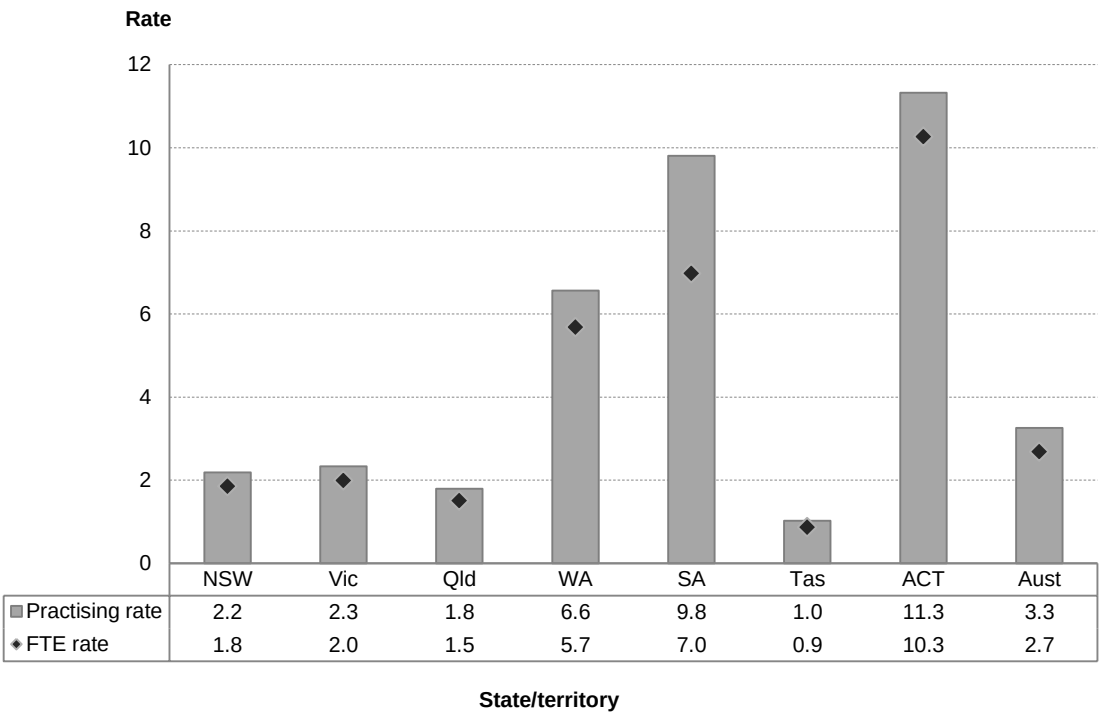
- Between 2003 and 2006, the number of practising dental hygienists increased in New South Wales, Western Australia, South Australia and the Australian Capital Territory. Increases ranged from 15% in South Australia to 45% in Western Australia. The decrease in the number of hygienists in Victoria and Queensland should be interpreted with caution as some hygienists have been categorised as OHTs since 2006 (see Section 4.1) (Table 17).

Table 17: Practising dental hygienists by state/territory, 2000, 2003 and 2006

Year	NSW	Vic	Qld	WA	SA	Tas[(a)]	ACT	Total
2000	56	97	45	81	110	. .	22	416
2003	104	123	81	93	134	6	30	557
2006	149	120	74	135	154	5	38	674

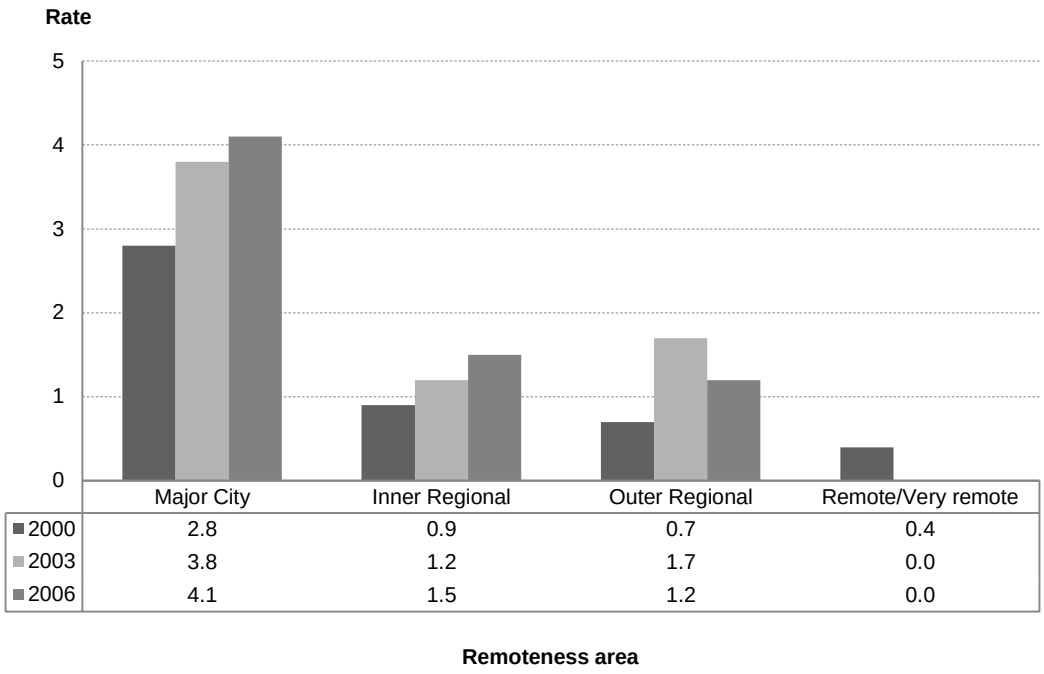
(a) Hygienists were not permitted to practice in Tasmania until 2001.

- The practising rate of dental hygienists per 100,000 population was highest in the Australian Capital Territory (11.3 hygienists) and lowest in Tasmania (1.0 hygienists). The FTE rate (35 hours per week) was lower than the practising rate. This ranged from 0.9 per 100,000 population in Tasmania to 10.3 in the Australian Capital Territory (Figure 33, Table A3.1).
- In 2006, the average age of practising dental hygienists was similar in all states/territories, except Western Australia. Western Australia had the lowest average age of 32.6 years, and the trend was similar to 2003 figures. South Australia had the highest average age of 40.4 years (Table A3.2).



	NSW	Vic	Qld	WA	SA	Tas	ACT	Aust
Practising rate	2.2	2.3	1.8	6.6	9.8	1.0	11.3	3.3
FTE rate	1.8	2.0	1.5	5.7	7.0	0.9	10.3	2.7

Figure 33: Practising and full-time equivalent dental hygienists by state/territory 2006 (per 100,000 population)



Note: Remote/Very remote includes Migratory areas.

Figure 34: Practising hygienists by remoteness area, 2000, 2003 and 2006 (per 100,000 population)

- Female dental hygienists were older than their male colleagues in all states/territories except New South Wales, Western Australia and the Australian Capital Territory (Table A3.2).
- The average hours worked per week ranged from 24.9 in South Australia to 31.7 in the Australian Capital Territory. Male hygienists worked more hours than their female colleagues in Victoria, Queensland, Western Australia and South Australia (Table A3.4).
- The average age of dental hygienists was lowest in *Remote/Very remote* areas (31.0 years) compared with *Major cities* (37.7 years), *Inner regional* (38.0 years) and *Outer regional* (37.7 years) (Table A3.3).
- The average hours worked per week was highest in *Remote/Very remote* areas (32.0 hours) and lowest in *Outer regional* areas (26.7 hours) (Table A3.5).
- The practising rate of hygienists in *Major cities* ranged from 2.3 in Queensland to 12.4 in South Australia; in *Inner regional* areas from 1.0 in Queensland to 4.1 in South Australia; and in *Outer regional* areas from 1.2 in Queensland to 2.3 in Western Australia (Table A3.9).

4.3 Dental therapists

Dental therapists provide a restricted range of clinical services predominantly to school-aged children. However, since 2006 age restrictions have been extended to include young adults in some states and territories. In Australia, training of dental therapists began in 1967, first in Tasmania, followed by South Australia (Dunning 1972). Western Australia, New South Wales, Queensland and Victoria began training in the early 1970s (Satur 2009). A therapist might also be involved in non-clinical roles, such as oral health promotion, education and preventive dentistry.

Historically, therapists were only employed in the public sector. Western Australia allowed private sector practice in the late 1990s and following the National Competition Policy in 1998–2004, all states and territories have allowed therapists to practice in both the public and private sectors. Dental therapists provide a prescribed list of services (based on the discretion of the state/territory dental boards (see Box 8).

Box 8: Services performed by dental therapists:

- oral examination
- the taking of impressions of teeth (other than for the purposes of prosthodontic or prosthetic dental treatment
- the application of preventive and therapeutic solutions to teeth
- preventive dental procedures, including the application of fissure sealants
- the administration of local anaesthetic solutions for dental procedures
- dental prophylaxis, including the removal of dental calculus
- splinting to stabilise mobile teeth
- restoration of coronal tooth structure, including pulp capping and pulpotomy
- extraction of deciduous teeth
- diagnostic dental radiography.

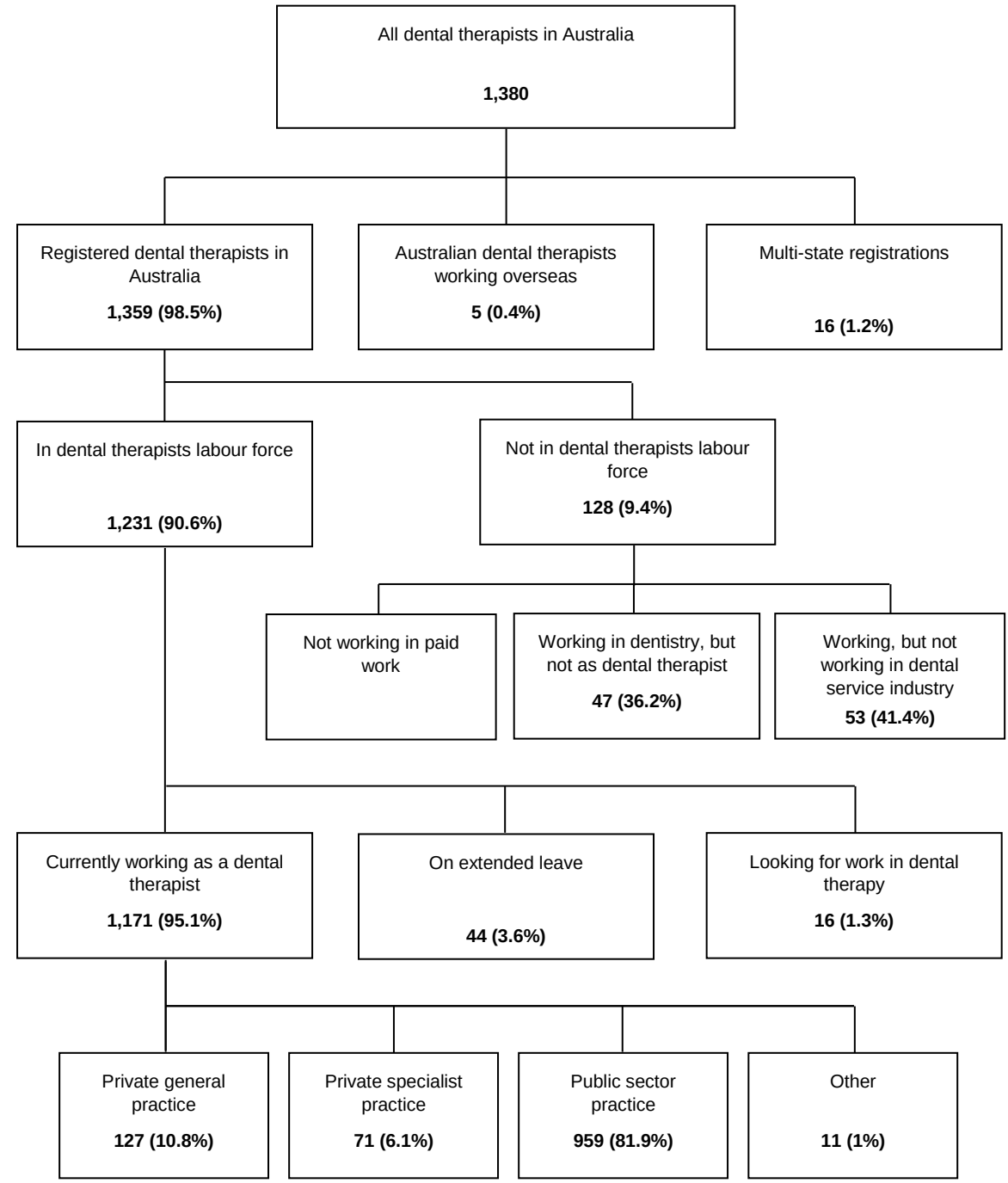
Source: SA Dental Practice Act 2001.

Note: There were some variations in scope of practice by state and territory.

This section presents the findings of the dental therapist labour force data collection. Subsections include the overall numbers of the 2006 collection, with comparisons of prior collections from 1997; demographic characteristics; practice characteristics; and geographic distribution. Comparisons with prior collections should be carefully read, due to the new categorisation of OHTs (see Section 4.1).

Overall numbers

- In 2006, there were 1,380 dental therapists in Australia, including multi-state registration (1.2%) and overseas practitioners (0.4%) (Figure 35, Table A4.1).
- Of all registered dental therapists, 90.6% (1,231 practitioners) were in the labour force and 9.4% were not in the labour force. The latter were: not working in any paid work (22.3%); working in dentistry, but not as a dental therapist (36.2%); or working, but not in dentistry (41.4%) (Figure 35, Table A4.1).



Note: Estimates may not sum to totals due to rounding.

Figure 35: All registered dental therapists in Australia, 2006

- About 95% of therapists (1,171 practitioners) in the labour force were in active practice while 3.6% were on extended leave and 1.3% were looking for work in dental therapy (Figure 35, Table A4.1).
- The therapist workforce was dominated by females, accounting for 98.8% of all registered therapists in Australia (Table A4.1).

Table 18: Number of dental therapists and practising rate, 1997 to 2006

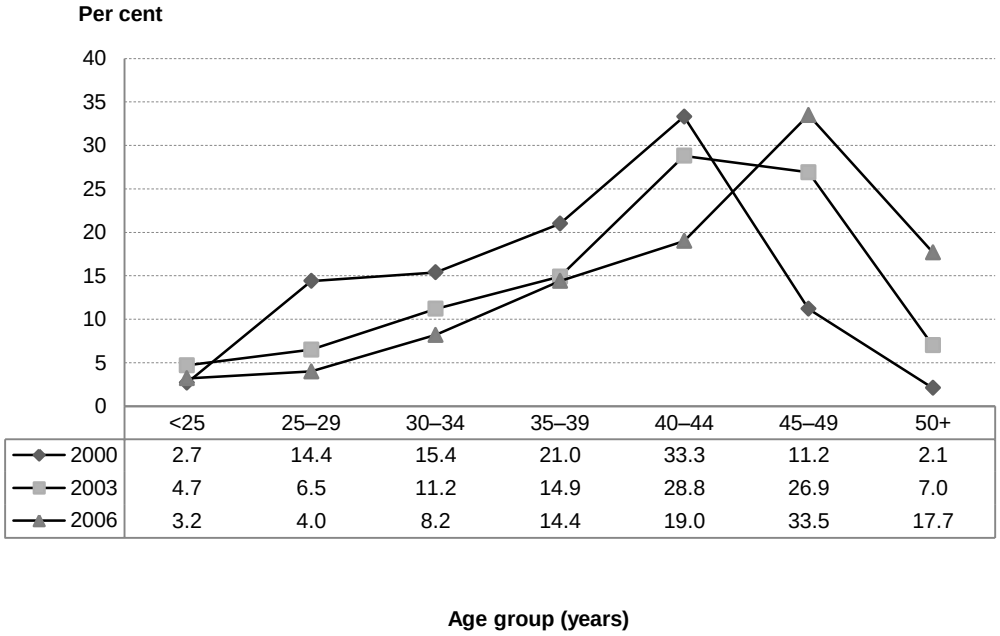
	1997	2000	2001	2002	2003	2004	2005	2006
Number of practising therapists	1,324	1,317	1,210	1,203	1,242	n.a.	1,521	1,171
Practising rate per 100,000 population	7.1	6.9	6.2	6.1	6.3	n.a.	7.5	5.7

Note: There was no data collection in 2004.

- The number of practising therapists decreased from 1,324 in 1997 to 1,203 in 2002. The increase in 2003 and 2005 can be attributed to the rising number of OHTs (practising therapy and hygiene). The pattern was similar for the number of practising therapists per 100,000 population (practising rate) (Table 18).

Demographic characteristics

- Female practitioners accounted for 98.8% of all practising therapists (Table A4.1).
- The average age of practising dental therapists increased from 37.9 years in 2000 to 40.3 years in 2003 and 42.9 years in 2006. On average, female therapists were at least four years older than their male colleagues (Table A4.2).
- Between 2000 and 2006, there was a decrease in the percentage of therapists in the younger and middle aged groups (younger than 45 years) and an increase in the older age groups (45 years and over) (Figure 36).

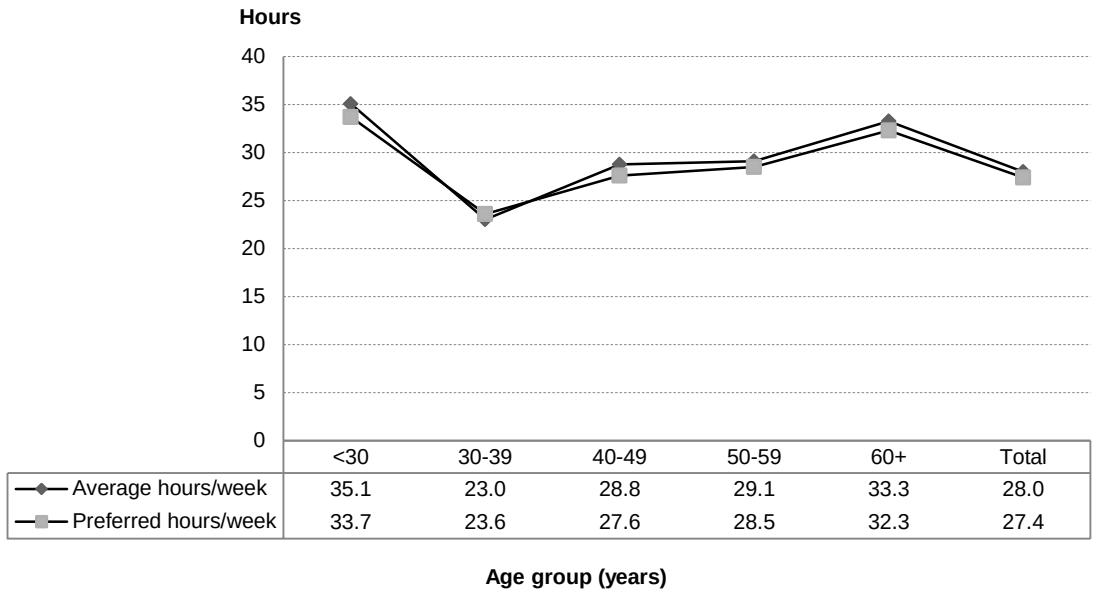


	<25	25–29	30–34	35–39	40–44	45–49	50+
2000	2.7	14.4	15.4	21.0	33.3	11.2	2.1
2003	4.7	6.5	11.2	14.9	28.8	26.9	7.0
2006	3.2	4.0	8.2	14.4	19.0	33.5	17.7

Figure 36: Practising dental therapists by age group, 2000, 2003 and 2006

Practice characteristics

- In 2006, therapists worked, on average, 28 hours per week. Those younger than 30 and older than 60 worked more hours than the others (Figure 37).



	<30	30-39	40-49	50-59	60+	Total
Average hours/week	35.1	23.0	28.8	29.1	33.3	28.0
Preferred hours/week	33.7	23.6	27.6	28.5	32.3	27.4

Figure 37: Practising dental therapists by hours worked, preferred hours per week and age group, 2006

- A large majority (80.5%) practised in one location only (Figure 38).
- More than half (60.4%) were employed in the public school dental services and 16.2% in public community dental clinics. About half of those in private practice worked in general practice (Figure 39).

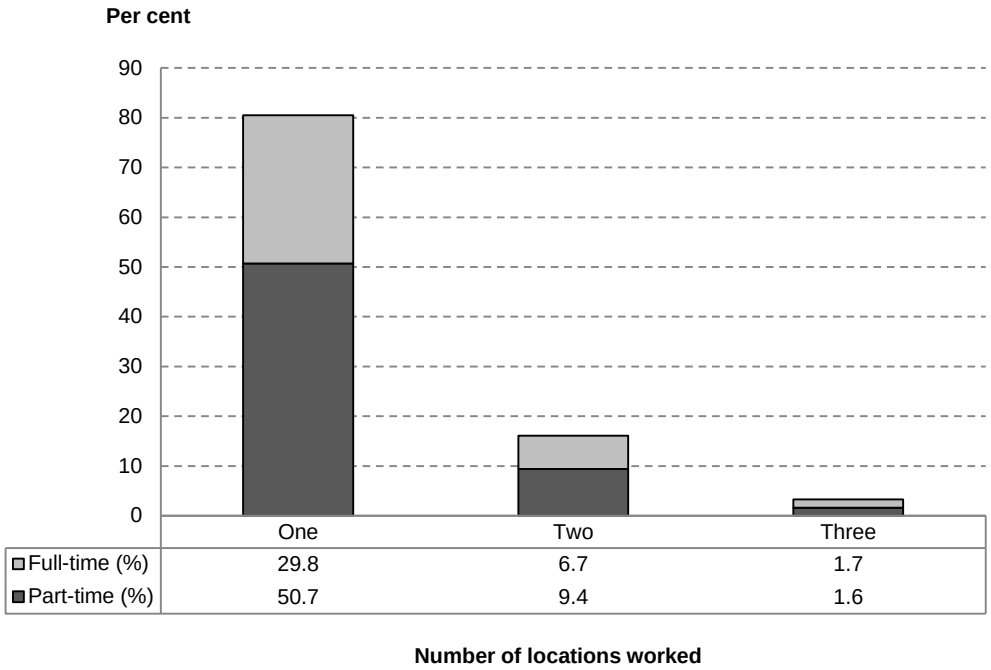


Figure 38: Practising dental therapists by number of locations worked and full-time status, 2006 (per cent)

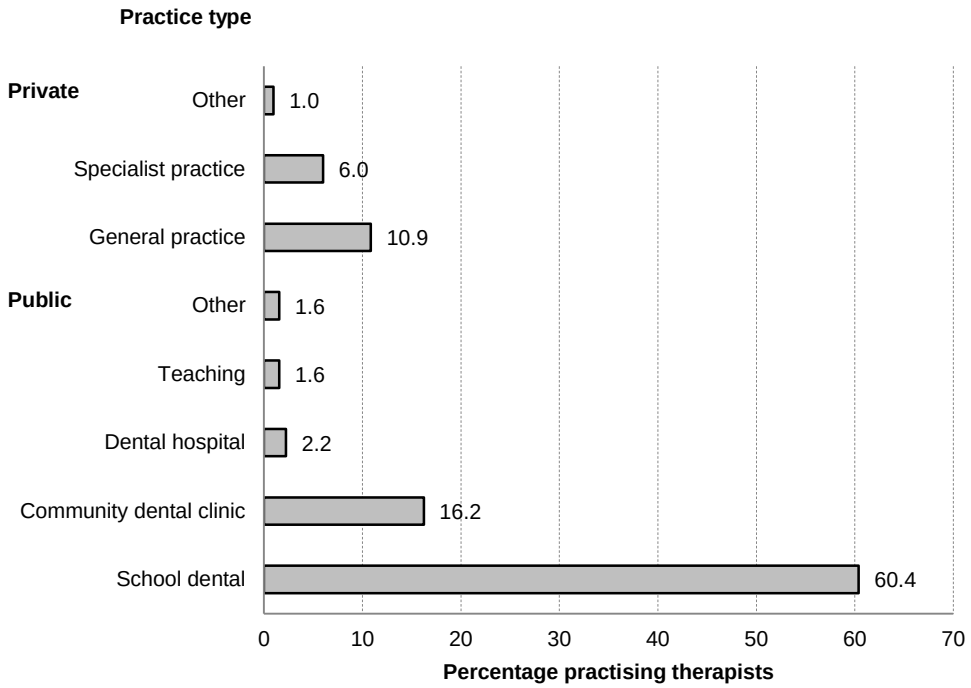


Figure 39: Practising dental therapists by type of practice at main practice location, 2006

Table 19: Practising dental therapists by sector, age and hours worked in all practice locations, 2006

	Public	Private	Public and private	Total
		Number employed		
Persons	928	194	49	1,171
		Percentage		
% female	98.7	99.3	97.3	98.8
		Average age (years)		
Male	38.6	33.0	44.0	38.6
Female	43.3	41.4	42.7	43.0
Persons	**43.3**	**41.3**	**42.8**	**42.9**
		Average total hours usually worked per week		
Male	31.0	45.0	35.0	33.0
Female	28.8	22.6	31.1	27.9
Persons	**28.9**	**22.8**	**31.2**	**28.0**
		Percentage part-time		
Male	53.8	0.0	0.0	44.3
Female	57.7	83.1	60.3	62.0
Persons	**57.6**	**82.6**	**58.7**	**61.8**

Note: Sector of practice was determined by the practitioner's reported type of practice at main, second and third practice locations.

- The average age of therapists working in the public sector (43.3 years) was higher than those in the private sector (41.3 years) and in the public and private sectors (42.8 years). Female therapists working in both public and private practices were younger than their male colleagues, but when working in only one type of practice they were older (Table 19).
- Therapists working in both public and private practices worked more hours than those who were working in only one sector (public or private) (31.2 hours) (Table 19).
- A larger proportion (62.0%) of female therapists worked part-time compared with male therapists (44.3%) (Table 19).
- Hours dedicated to various areas of practice were totalled for all practice locations. The majority of hours worked (80.1%) were dedicated to dental therapy clinical practice, 8.2% to administration/management and 4.9% to dental hygiene practice. Small percentages were dedicated to teaching/education (2.9%), oral health promotion (1.9%), chair-side assistance (1.1%) research and other areas of practice (0.8%) (Figure 40).
- The main reasons stated for working part-time were 'child rearing' and 'personal preference'. These were similar to the reasons provided by hygienists (Figure 41).

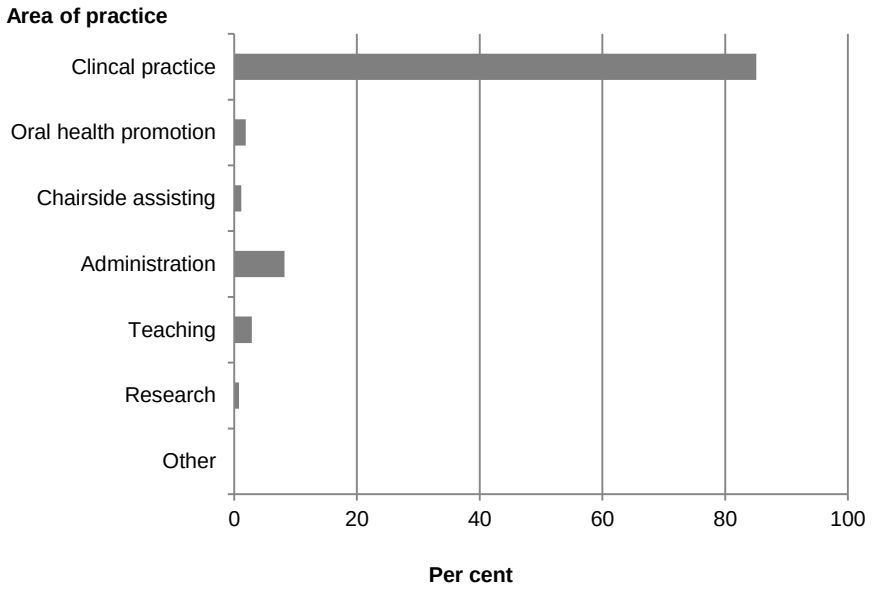


Figure 40: Average hours worked by dental therapists based on area of main practice location, 2006 (per cent)

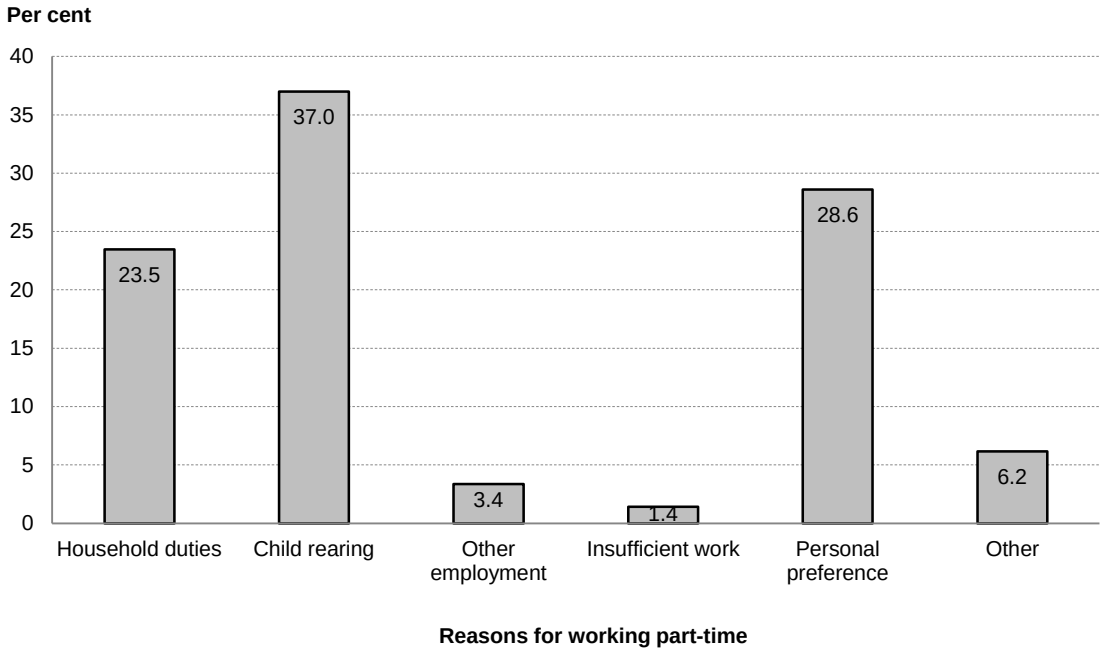


Figure 41: Practising dental therapists by most common reasons for working part-time, 2006 (per cent)

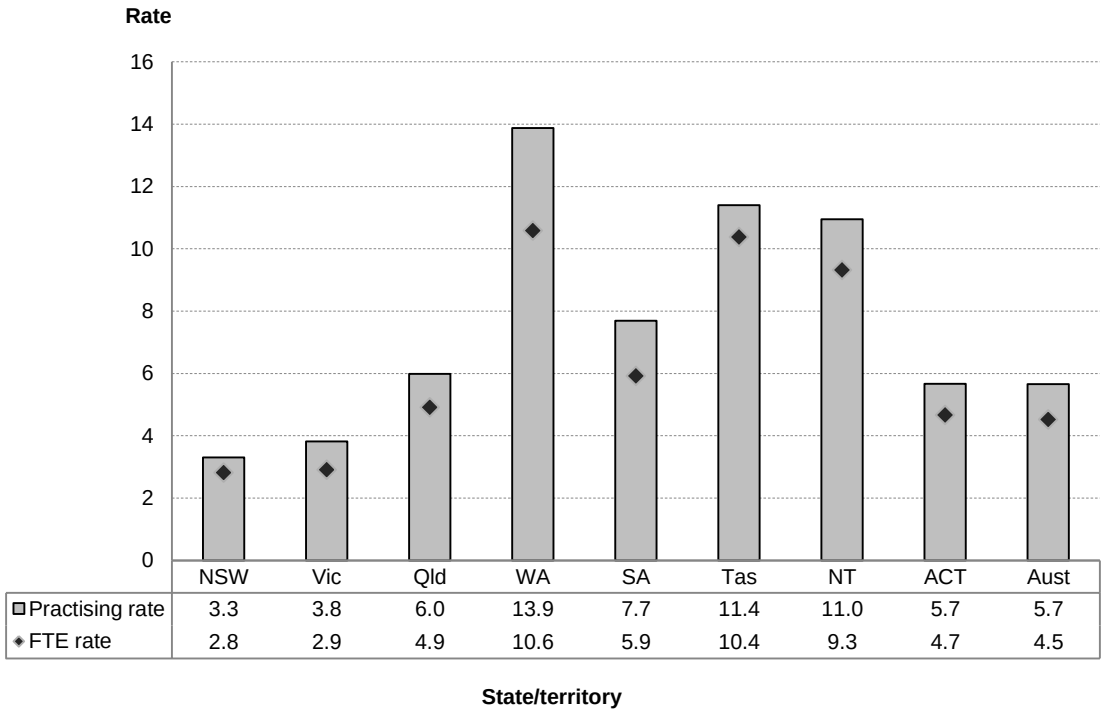
Distribution by geographic classification

- Between 2003 and 2006, the number of practising therapists increased in New South Wales, Victoria and the Northern Territory. Queensland had the largest decrease, followed by Western Australia and South Australia (Table 20).

Table 20: Practising dental therapists by state/territory, 2000, 2003 and 2006

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
2000	216	140	361	331	128	50	19	16	1,121
2003	195	152	354	309	128	61	22	16	1,236
2006	225	196	245	286	121	56	19	23	1,171

- The number of therapists per 100,000 population ranged from 3.3 in New South Wales to 13.9 in Western Australia. Nationally, the number of FTE dental therapists per 100,000 population, based on a 35-hour week, was less than the practising rate (5.7 and 4.5 respectively) (Figure 42).

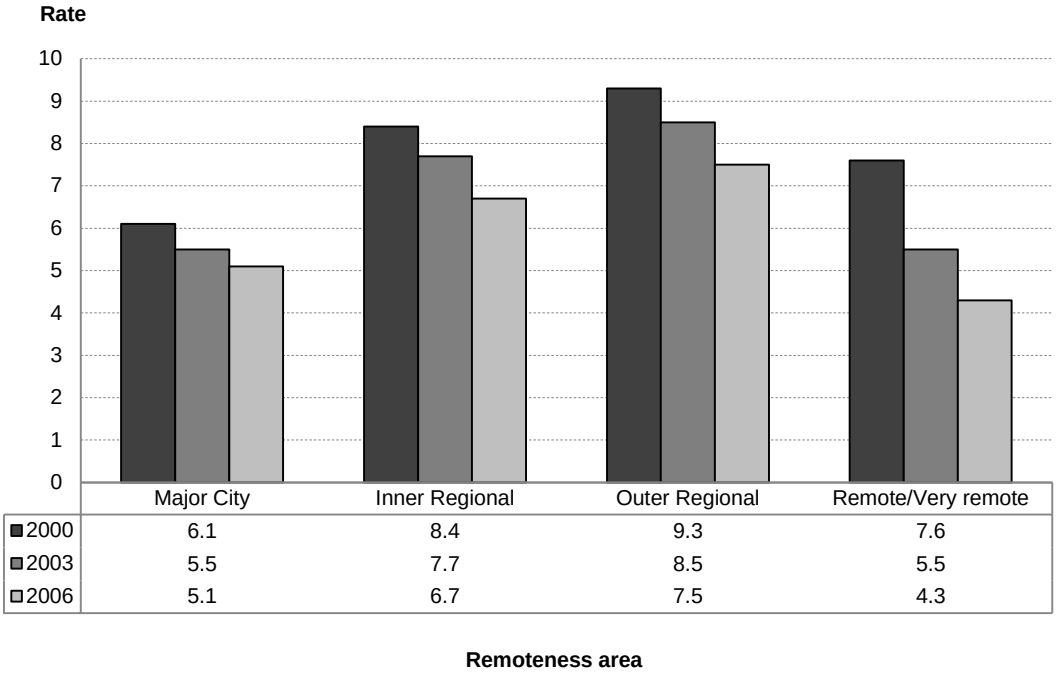


	NSW	Vic	Qld	WA	SA	Tas	NT	ACT	Aust
Practising rate	3.3	3.8	6.0	13.9	7.7	11.4	11.0	5.7	5.7
FTE rate	2.8	2.9	4.9	10.6	5.9	10.4	9.3	4.7	4.5

Figure 42: Practising and full-time equivalent dental therapists by state/territory, 2006 (per 100,000 population)

- Average age varied slightly by state/territory, ranging from 40.2 years in Victoria to 44.9 years in the Australian Capital Territory. Female therapists were older than their male colleagues in all states except Tasmania (Table A4.2).
- Between 2003 and 2006, average hours worked by therapists decreased slightly. The trend was similar in all states/territories except Western Australia and Tasmania. Male therapists worked more hours than their female colleagues but this trend was opposite in Queensland and South Australia (Table A4.4).

- In 2006, the number of practising therapists per 100,000 population was highest in *Outer regional* areas (7.5 practitioners). Between 2003 and 2006, the practising rate across all remoteness areas decreased (Figure 43, Table A4.9).



	Major City	Inner Regional	Outer Regional	Remote/Very remote
2000	6.1	8.4	9.3	7.6
2003	5.5	7.7	8.5	5.5
2006	5.1	6.7	7.5	4.3

Note: Remote/Very remote includes Migratory areas

Figure 43: Practising therapists by remoteness area, 2000, 2003 and 2006 (per 100,000 population)

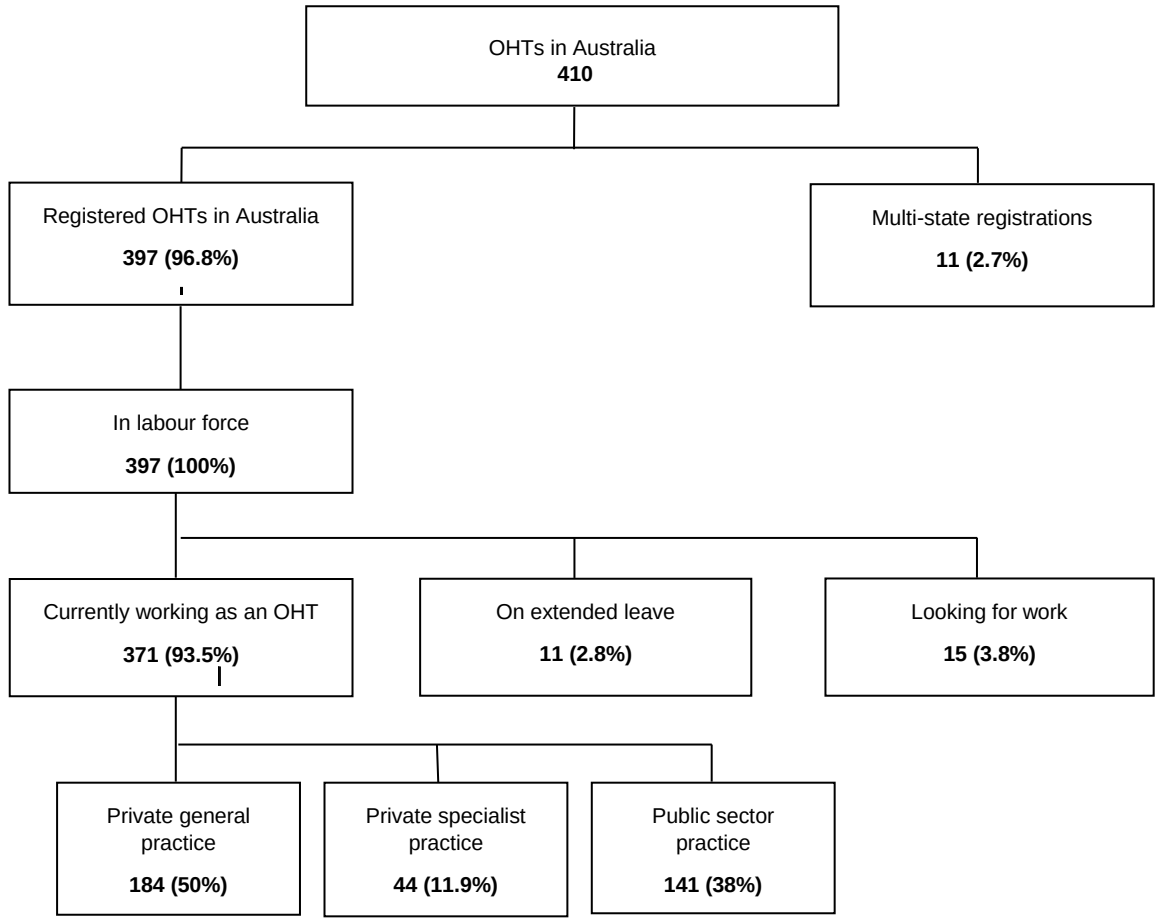
- Between 2003 and 2006, the average age of practising dental therapists across all remoteness areas increased. In 2006, it ranged from 39.9 years in *Remote/Very remote* areas to 43.3 years in *Major cities*. Female practitioners in *Major cities* and *Inner regional* areas were older than their male colleagues (Table A4.3).
- The average hours worked decreased across all remoteness areas between 2003 and 2006. In 2006, average hours varied only marginally by remoteness areas, ranging from 27.7 in *Inner regional* to 29.1 hours in *Outer regional* areas. Male therapists worked more hours than females in all remoteness areas, except *Remote/Very remote* areas (Table A4.5).
- The practising rate of therapists in *Major cities* ranged from 2.8 in New South Wales to 14.7 in Western Australia; in *Inner regional* areas from 4.7 in Victoria to 14.8 in Western Australia; in *Outer regional* areas from 3.9 in New South Wales to 14.6 in Western Australia; and in *Remote/Very Remote* areas from 2.7 in Western Australia to 8.1 in the Northern Territory (Table A4.9).

4.4 Oral health therapists

Allied dual practitioners are qualified in both dental therapy and hygiene and are commonly referred to as Oral Health Therapists (OHTs). They are eligible to register as both a dental therapist and dental hygienist but may not necessarily maintain dual registration.

The emergence of the OHT labour force has followed substantial change in the structure of educational programs. Historically, hygiene and therapy programs were single qualification Advanced Diplomas. Since the early 2000s, these programs have been replaced by Bachelor of Oral Health (BOH) courses, training dual qualified hygienists and therapists.

Information on OHT registrations was available for the five largest states. In 2006 Tasmania, the Northern Territory and the Australian Capital Territory did not have dual practitioners. As the number of OHTs is expected to grow over the coming decade, it is of increasing importance to understand their practice characteristics, and to determine differences from the therapist/hygienist groups. The 2006 collection year was the first year where OHTs were reported separately hence there are no comparisons with earlier time points.



Notes

1. Estimates may not sum to totals due to rounding.
2. Data was collected for NSW, Vic, Qld, WA and SA only.

Figure 44: All registered OHTs in Australia, 2006

Overall numbers

- In 2006, there were 410 OHTs in Australia, with 2.7% having multi-state registrations. Of the 397 in the labour force, 93.5% were actively practising while 2.8% were on leave and 3.8% were looking for work (Figure 44, Table A5.1).
- There were 1.8 practising OHTs per 100,000 population. The number of full-time equivalent OHTs per 100,000 population was similar, at 1.7 (Table A5.1).

Demographic characteristics

- Females accounted for around 95% of practising OHTs. The average age of male OHTs (33.0 years) was younger than females (36.6 years) and the average age of all practitioners was 36.4 years (Table A5.2).
- 18.6% of practising dual practitioners were aged 45–49, while 18.0% were aged 25–29 and 16.3% were aged 30–34 (Figure 45, Table A5.6).

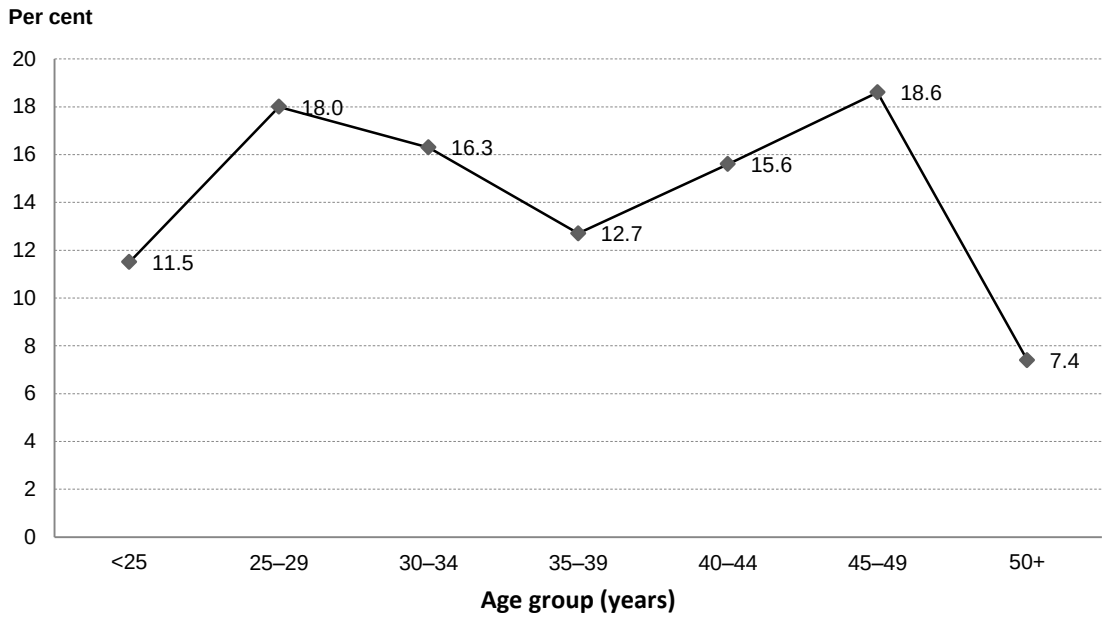


Figure 45: Practising OHTs by age group, 2006

Practice characteristics

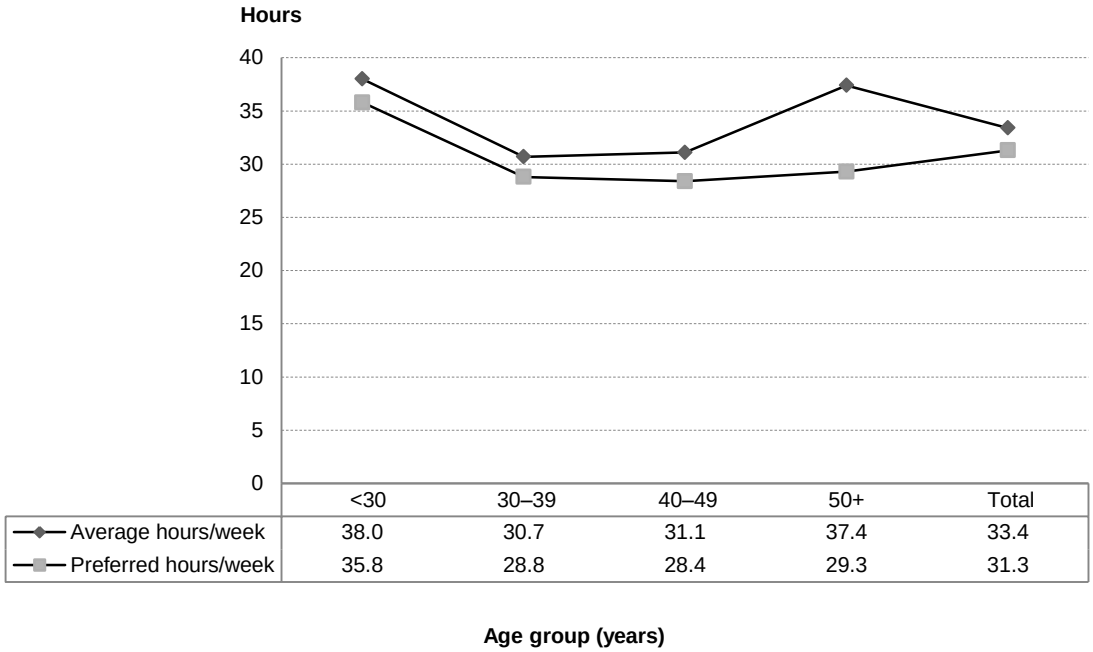
- OHTs worked for 33.4 hours per week on average. Those in the youngest age group worked the most hours and preferred to work more hours than those in older age groups (Figure 46, Table A5.6).
- Based on their main practice location, around 60% of OHTs were employed in the private sector: 49.5% in private general practice and 11.9% in private specialist practice; while 38.0% were employed in public practices, of which school dental services comprised 34.3% (Figure 47, Table A5.7).
- Based on all their practice locations, 28% were employed in the public sector only, 50% in the private sector only, and 22% in both public and private sectors (Table 21).
- The average age of OHTs working in only the private sector was lower than the age of those working in public only or both public and private practices (Table 21).

Table 21: Practising OHTs by sector, age and hours worked in all practice locations, 2006

	Public	Private	Public and private	Total
		Number employed		
Persons	104	186	82	371
		Percentage		
% female	91.6	95.5	97.2	94.8
		Average age (years)		
Male	33.0	33.1	32.5	33.0
Female	38.1	35.0	38.4	36.6
Persons	**37.7**	**34.9**	**38.2**	**36.4**
		Average total hours usually worked per week		
Male	41.2	35.5	46.7	39.1
Female	35.8	30.6	35.6	33.2
Persons	**36.2**	**30.8**	**35.9**	**33.4**
		Percentage part-time		
Male	0.0	28.3	0.0	12.2
Female	26.8	54.6	40.9	44.0
Persons	**24.5**	**53.4**	**39.7**	**42.4**

Note: Sector of practice was determined by the practitioner's reported type of practice at main, second and third practice locations.

- OHTs employed in the public sector worked more hours per week than those employed in the private sector only, and those in both public and private sectors (Table 21).
- OHTs working in the private sector worked more part-time hours than those in other sectors (Table 21).



	<30	30–39	40–49	50+	Total
Average hours/week	38.0	30.7	31.1	37.4	33.4
Preferred hours/week	35.8	28.8	28.4	29.3	31.3

Figure 46: OHTs by average hours worked and preferred hours per week, and age group, 2006

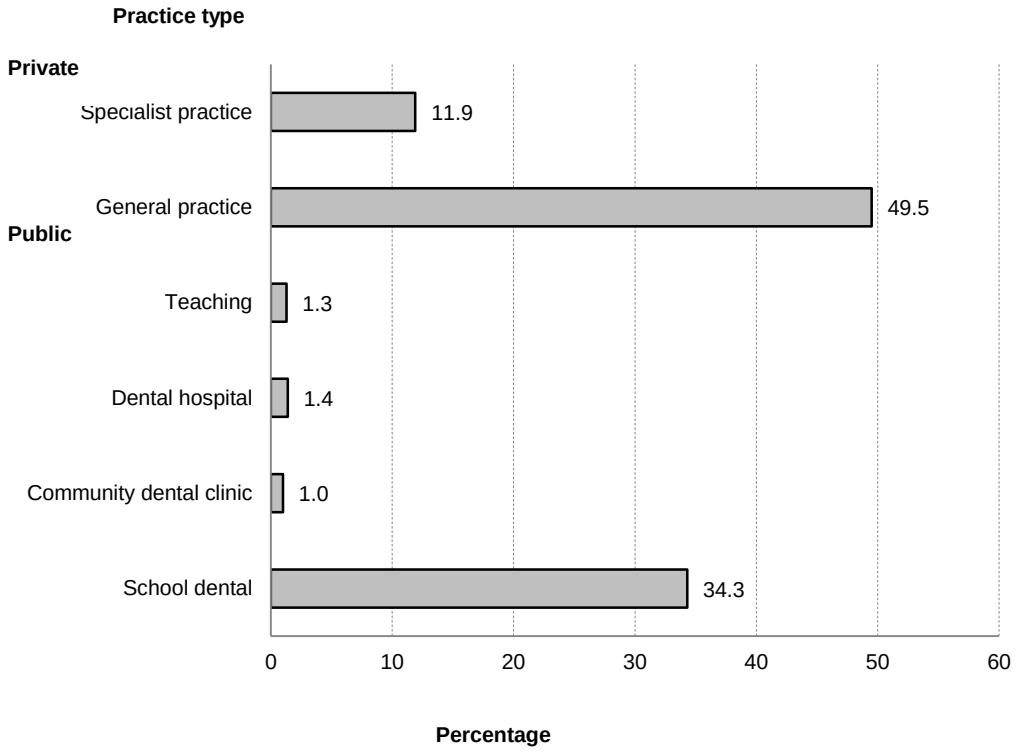


Figure 47: Practising OHTs by type of practice based on main practice location, 2006

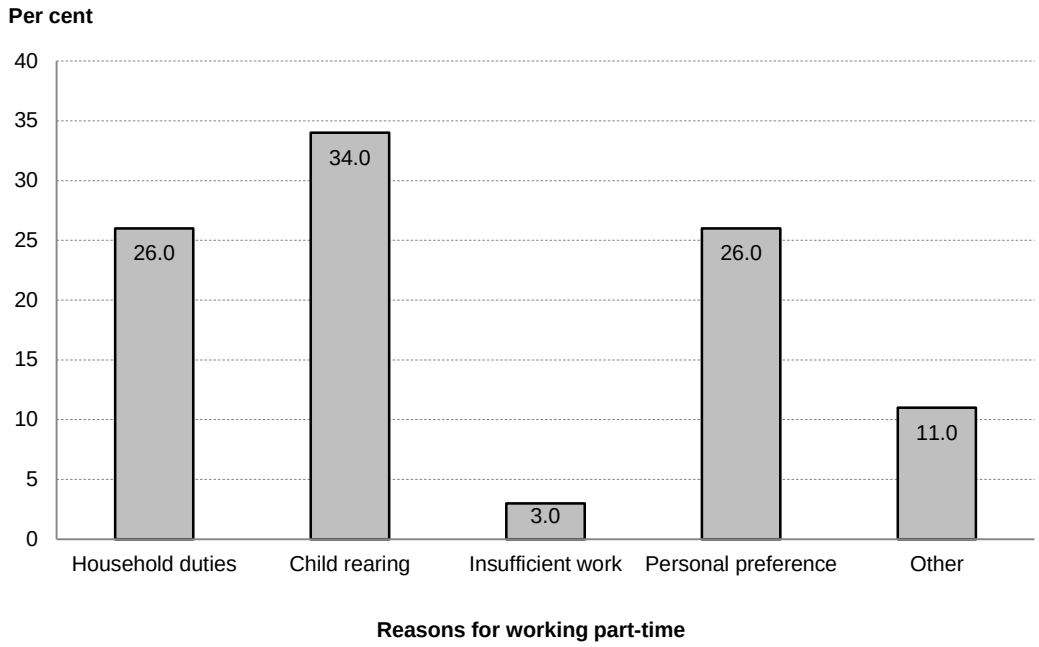


Figure 48: Practising OHTs by most common reasons for working part-time, 2006

- The main reason for working part-time was similar to dental hygienists and therapists; 'child rearing' (34%) was the most commonly cited reason followed by 'household duties' and 'personal preference' (26.0%) (Figure 48).
- Hours dedicated to various areas of practice were totalled for all practice locations; 51.7% of all hours were dedicated to dental hygiene clinical practice and 39.7% to dental therapy clinical practice. Small percentages were dedicated to administration/management (2.8%), teaching/education (2.5%), oral health promotion (2.1%), chair-side assistance (0.6%), research and other areas of practice (0.6%).

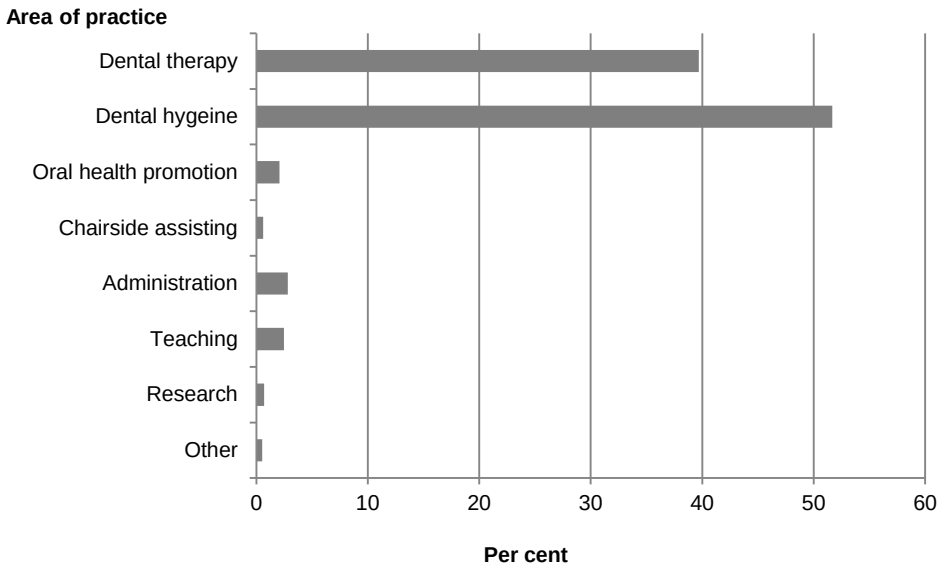
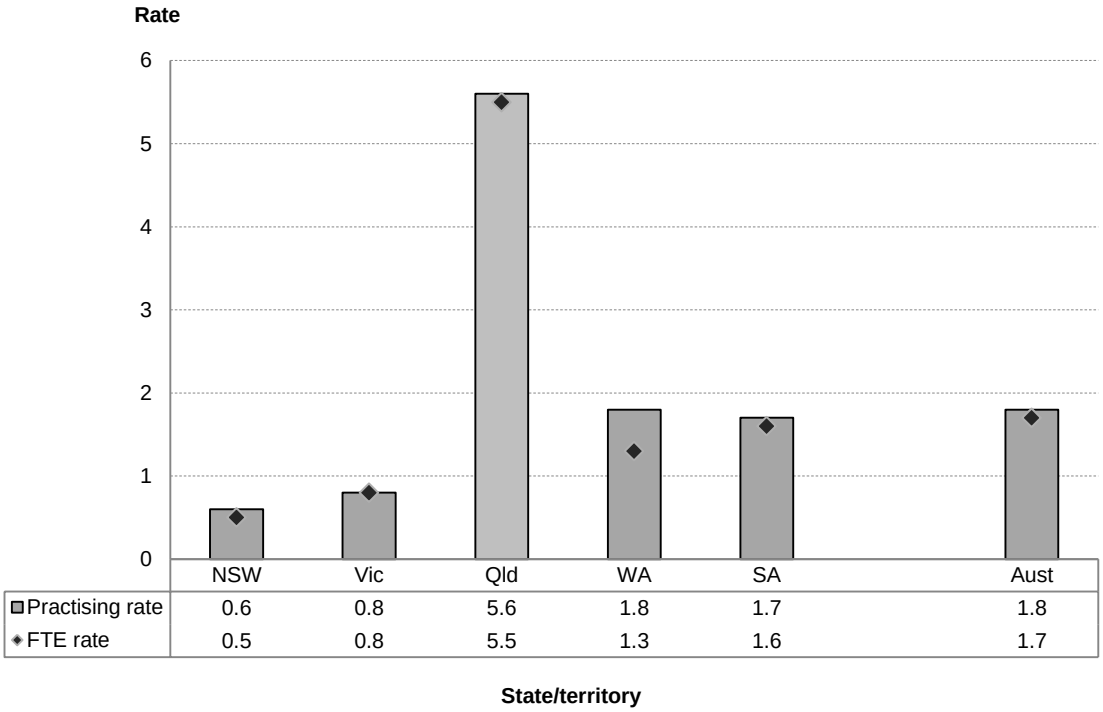


Figure 49: Average hours worked, by activity by OHTs, 2006 (per cent)

Distribution by geographic classification

- The number of practising OHTs per 100,000 population ranged from 0.6 in New South Wales to 5.6 in Queensland. The number of full-time equivalent OHTs per 100,000 population was similar to the practising rate, as the average hours worked were very close to 35 hours per week (Figure 50).



	NSW	Vic	Qld	WA	SA	Aust
Practising rate	0.6	0.8	5.6	1.8	1.7	1.8
FTE rate	0.5	0.8	5.5	1.3	1.6	1.7

Figure 50: Practising and full-time equivalent OHTs by state/territory, 2006 (per 100,000 population)

- The average age of practising OHTs ranged from 32.8 years in Victoria to 39.9 years in Western Australia. Female OHTs were older than their male colleagues in all states except Victoria (Table A5.2).
- Male OHTs worked more hours than females in New South Wales, Victoria and Queensland. OHTs in Victoria worked the longest week (35.4 hours) and those in Western Australia the shortest (25.3 hours) (Table A5.4).
- Practitioners in *Remote/Very remote* areas were older (40.5 years), and females were older than males in all areas (Table A5.3).
- Male OHTs in *Major cities* and *Inner regional* areas worked more hours than their female colleagues. OHTs in *Remote/Very remote* areas (39.2 hours) worked a longer week than those in other areas (Table A5.5).

4.5 Dental prosthetists

This section presents the findings of the 2006 national dental prosthetist survey. Dental prosthetists are part of the allied dental labour force responsible for the construction and fitting of dentures and sporting mouthguards (see Box 9). Registration of dental prosthetists is with the respective state/territory dental boards.

Box 9: Services provided by dental prosthetists

Dental prosthetists are responsible for the construction and fitting of dentures and sporting mouthguards. Dental prosthetists maintain, repair and reline dentures either by direct consultation with a patient or by referral from a dentist. A dental prosthetist can provide the following treatment:

- the manufacture of dental prostheses, and corrective dental appliances prescribed by a registered dentist or a registered specialist
- the fitting of, and taking impressions or measurements for the purposes of fitting, a denture to the jaw.

Overall numbers

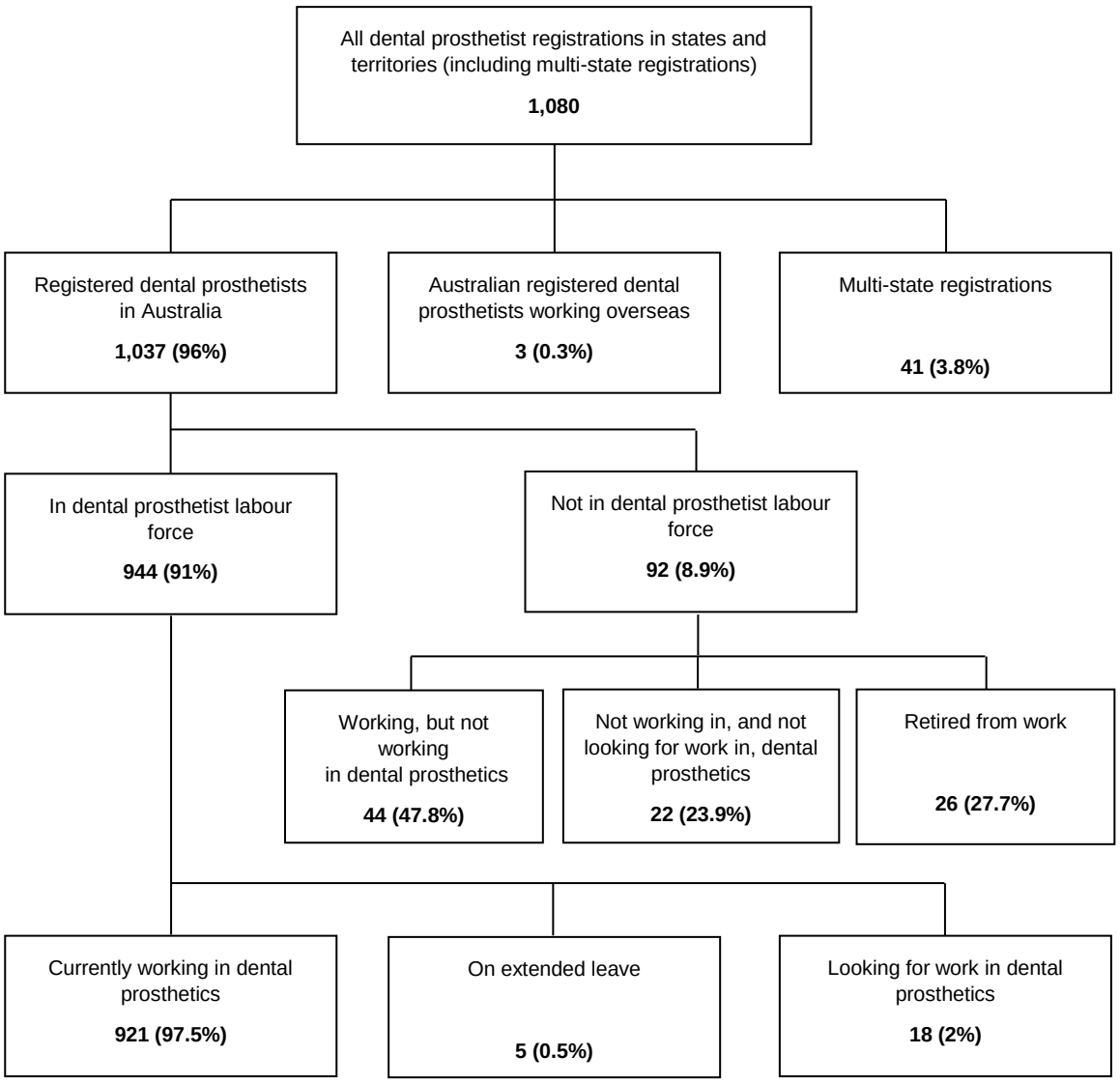
- Between 1998 and 2006, the number of practising prosthetists increased gradually from 785 to 921. The practising rate of dental prosthetists per 100,000 population remained relatively stable: 4.2 in 1998, 4.5 in 2002 and 4.4 in 2006 (Table 22).

Table 22: Dental prosthetists and practising rate, 1998 to 2006 (number)

	1998	2000	2001	2002	2003	2004	2005	2006
Number of practising prosthetists	785	872	887	888	878	n.a.	862	921
Practising rate per 100,000 population	4.2	4.6	4.6	4.5	4.5	n.a.	4.2	4.4

Note: There was no data collection in 2004.

- In 2006, there were 1,080 registered dental prosthetists in Australia. Multi-state registrations contributed to 3.8% (Figure 51, Table A6.1).
- Of the total registrations in 2006, an estimated 944 were in the workforce, with 92 not classified as being in the prosthetist labour force as they were either not working in dental prosthesis or were retired from work. Of those in the prosthetist labour force, 921 were employed/practising in dentistry (Figure 51, Table A6.1).

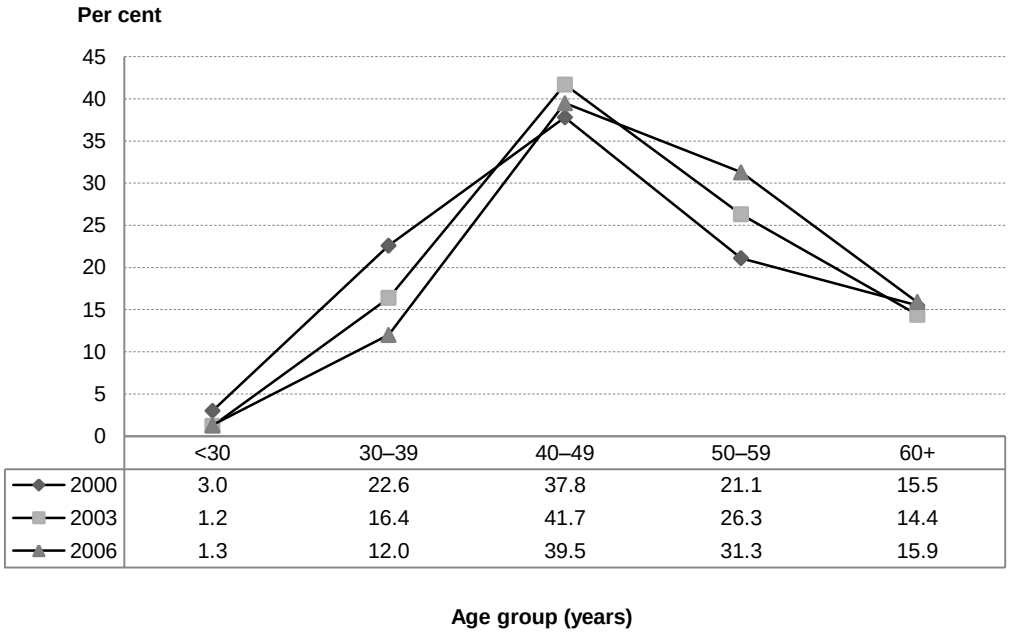


Note: Estimates may not sum to totals due to rounding.

Figure 51: All registered dental prosthetists in Australia, 2006

Demographic characteristics

- The representation of females in the prosthetist workforce increased from 8.2% in 2000 to 9.2 in 2003 and 10.0% in 2006. The average age of all practising prosthetists increased from 47.4 years in 2000 to 48.7 in 2003 and 50.1 in 2006. Females were about six years younger than their male colleagues (Table A6.3).
- The majority (nearly 75%) of practising prosthetists were aged over 40. This increased from 74.4% in 2000 to 82.4% in 2003 and 86.7% in 2006. The percentage of prosthetists younger than 40 years decreased from 25.6% in 2000 to 13.3% in 2006 (Figure 52).



	<30	30–39	40–49	50–59	60+
2000	3.0	22.6	37.8	21.1	15.5
2003	1.2	16.4	41.7	26.3	14.4
2006	1.3	12.0	39.5	31.3	15.9

Figure 52: Practising dental prosthetists by age group, 2000, 2003 and 2006

Practice characteristics

- In 2006, most prosthetists (75.7%) had been practising for at least 10 years, with 35.9% practising longer than 20 years. This trend was very similar in 2003 (Figure 53).

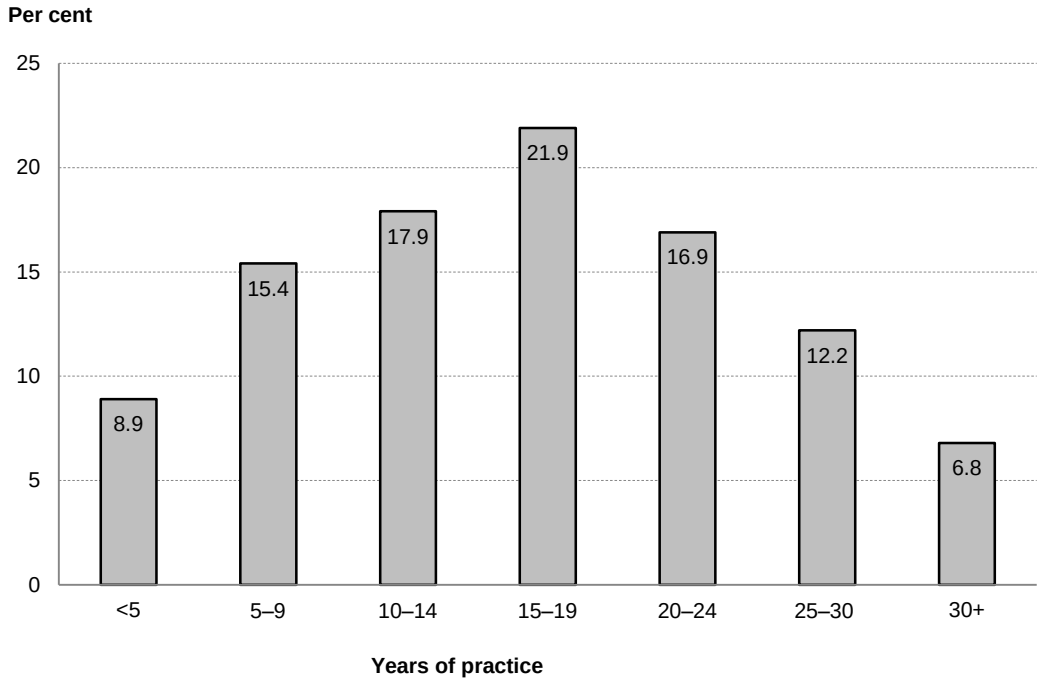


Figure 53: Practising dental prosthetists by years of practice, 2006

- All practising prosthetists worked, on average, 43.0 hours per week. Male prosthetists worked more hours than females (43.8 hours compared with 36.8 hours) (Table A6.7).
- Between 2000 and 2006, the average working hours per week remained relatively stable (43.6 hours in 2000 and 43.0 hours in both 2003 and 2006).
- Across age groups, the average hours worked per week was 41.9 hours in prosthetists aged younger than 35 years, peaking at 45.9 hours for those aged 35–39 and then decreasing across older age groups. Males worked more hours than females in all age groups. The average hours worked by females were inconsistent, with fewer practising hours reported in the 40–44 and 55–59 years age groups (Table A6.7).
- In 2006, 77.5% of all prosthetists practised in only one location, 18.3% practised in two locations and 4.5% practised in three locations. Based on their main practice location, 90.5% of practising prosthetists were employed in the private sector.
  Only 7% worked in a government clinic or laboratory. Of practising prosthetists, 81.5% were self-employed, 7.7% were employees in private practice and 1.3% were employees in commercial laboratories. Very small percentages worked in a public educational institution (1.6%) or 'other' practice type (0.9%) (Figure 54, Table A6.8).

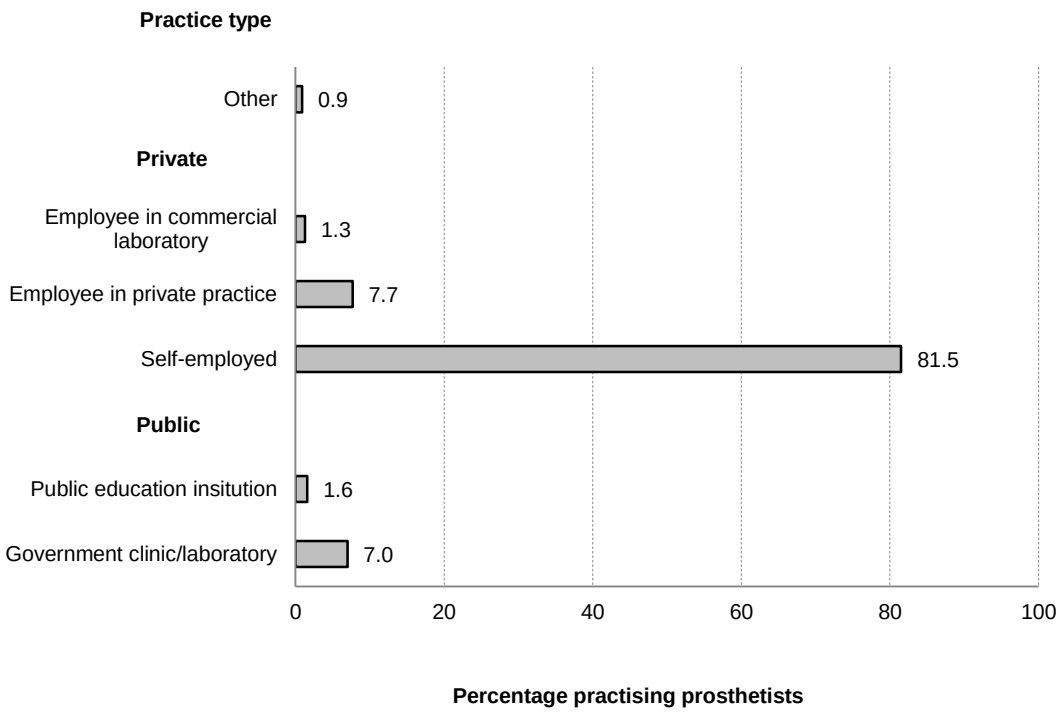


Figure 54: Practising dental prosthetists by type of practice, 2006

Based on all practice locations, 89.1% of practising prosthetists were employed only in the private sector, 5.0% were working only in the public sector and 5.9% were working in both sectors. Only 9.1% of prosthetists in the private sector were female, less than the proportion of females working only in the public sector (18.2%) and in both sectors (17.2%) (Table 23).

The average age of all practising prosthetists was higher in the public sector (50.8 years) than the private sector (50.2 years). Moreover, the prosthetists who practised in both sectors were relatively younger (47.8 years) than those who worked only in the public or private sector (Table 23).

Prosthetists in the public sector worked fewer hours per week (38.8 hours) than those in the private sector (42.6 hours). But the prosthetists working in both sectors practised for longer hours (53.1 hours) (Table 23).

The average clinic hours worked per week ranged from 22.9 in the public sector to 17.8 in the private sector and 25.0 for prosthetists working in both sectors (Table 23).

Prosthetists who worked only in the private sector had more laboratory hours (24.5 hours per week) than those in the public sector or both sectors (Table 23).

Around 20% of prosthetists in the private sector worked part-time. This was similar to the public sector (16.8% working part-time) and those working in both sectors (15.8%) (Table 23).

Table 23: Practising dental prosthetists by sector, age and hours worked, 2006

	Public	Private	Public and private	Total
		Number employed		
Persons	46	820	54	921
		Percentage		
% female	18.2	9.1	17.2	10.0
		Average age (years)		
Male	52.9	50.9	47.6	50.8
Female	41.4	44.0	48.4	44.2
Persons	**50.8**	**50.2**	**47.8**	**50.1**
		Average total hours usually worked per week		
Male	40.5	43.2	55.3	43.8
Female	31.3	36.7	42.5	36.8
Persons	**38.8**	**42.6**	**53.1**	**43.0**
		Average clinical hours worked per week		
Male	23.4	18.0	25.8	18.6
Female	20.0	15.5	19.6	16.0
Persons	**22.9**	**17.8**	**25.0**	**18.3**
		Average laboratory hours worked per week		
Male	24.7	25.0	19.3	24.8
Female	15.3	19.8	22.0	19.8
Persons	**23.1**	**24.5**	**19.8**	**24.2**
		Percentage part-time		
Male	6.9	18.9	7.2	17.6
Female	9.9	2.9	8.6	3.6
Persons	**16.8**	**21.8**	**15.8**	**21.2**

Note: Sector of practice was determined by the practitioner's reported type of practice at main, second and third practice locations.

- Prosthetists working part-time (less than 35 hours per week) were asked to indicate their major reasons for doing so. The most common reasons given were 'personal preference' (30.5%) and 'insufficient work available' (28.8%) (Figure 55).

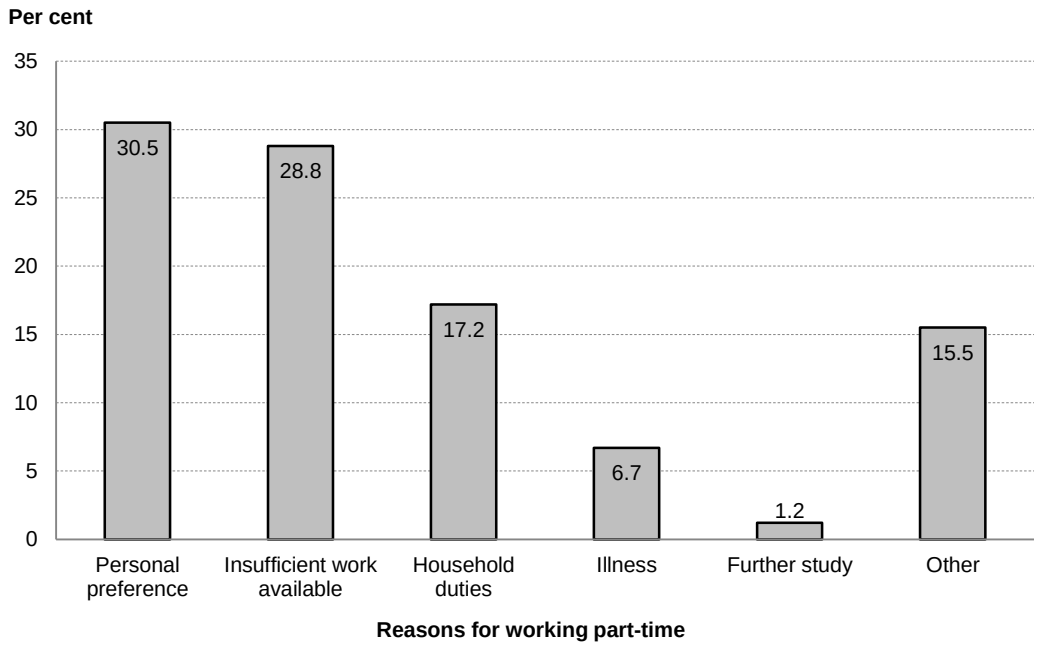


Figure 55: Practising dental prosthetists by most common reason for working part-time, 2006 (per cent)

- While 13.4% of practising dental prosthetists worked in mainly clinical practice, 33.2% worked mainly in laboratory practice and 53.3% worked in both clinical and laboratory practices (see Box 10, Table A6.2).
- The average age of practising prosthetists in mainly laboratory practice (48.1 years) was marginally younger than those working mainly in clinical practice (50.1 years) and those working in both clinical and laboratory practices (49.5 years) (see Box 10, Table A6.2).

Box 10: Clinical versus laboratory practice

Hours dedicated to various areas of practice were totalled for all practice locations and used to categorise practitioners into practice area groups. Prosthetists who worked more hours in clinical practice than laboratory practice were categorised as working 'mainly in clinical practice'. Prosthetists who dedicated 70% or more of hours worked to clinical practices were categorised as working 'mainly clinical'; those who worked fewer than 30% clinical hours as working 'mainly laboratory' and the remaining prosthetists were categorised as 'clinical and laboratory'.

- Prosthetists were asked to estimate the number of dentures completed or repaired in the past week by denture type (full/partial). Dentures completed/repaired were totalled for all practice locations worked. It was estimated that, on average, dental prosthetists completed 4.6 full dentures and 3.2 partial dentures, and repaired 3.0 full dentures and 2.4 partial dentures, per week (Table A6.11).
- The completion of full dentures comprised 35% of all denture services, followed by completion of partial dentures (25%), repair of full dentures (22%) and repair of partial dentures (18%). The percentage of completed/repaired dentures was similar across practice types. Prosthetists in mainly clinical practice, laboratory practice or both clinical and laboratory practices all made more new complete and partial dentures when compared with those repaired (Figure 56, Figure 57).

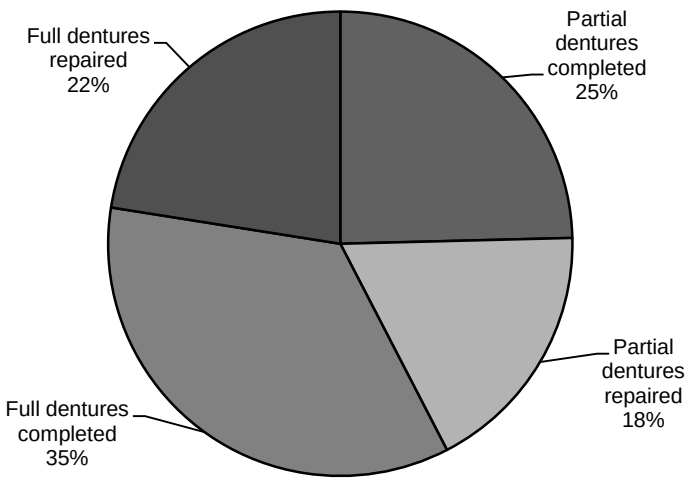
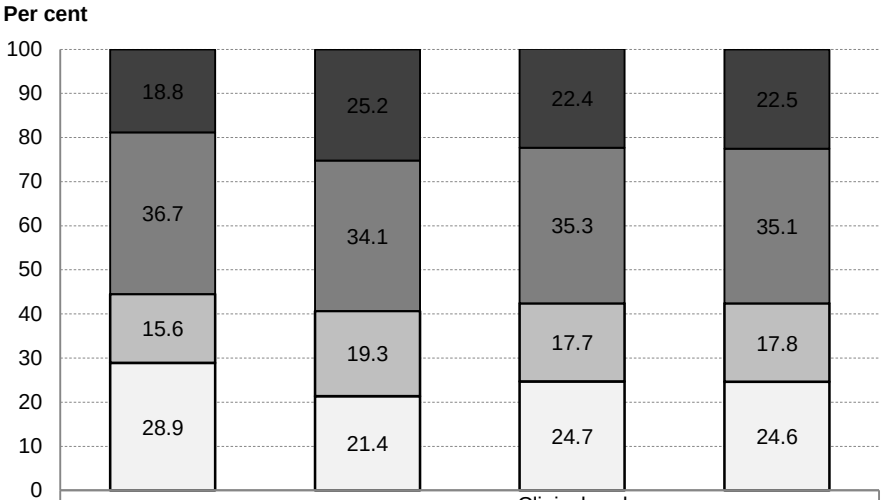


Figure 56: Dentures completed or repaired by practising dental prosthetists, 2006 (per cent)



	Clinical practice only	Laboratory practice only	Clinical and laboratory practice	All prosthetists
Full dentures repaired	18.8	25.2	22.4	22.5
Full dentures completed	36.7	34.1	35.3	35.1
Partial dentures repaired	15.6	19.3	17.7	17.8
Partial dentures completed	28.9	21.4	24.7	24.6

Main practice setting

Figure 57: Full and partial denture services by main practice setting of dental prosthetists, 2006 (per cent)

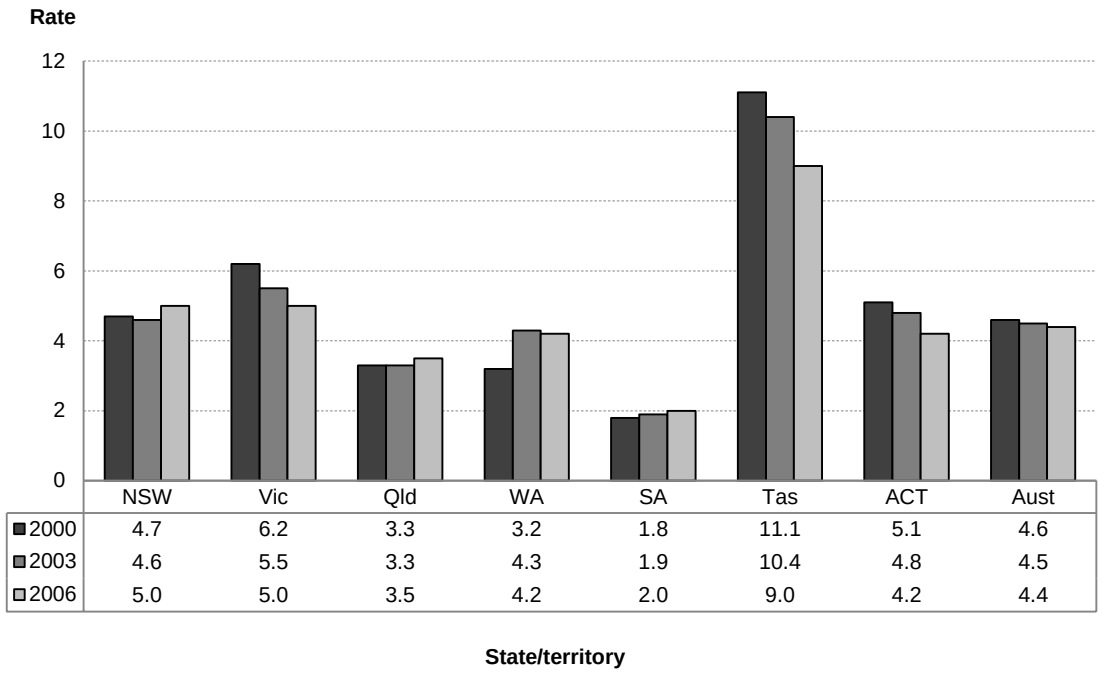
Distribution by geographic classification

This subsection presents the geographic distribution of prosthetists across states/territories (jurisdictions) and remoteness areas. All the characteristics described separately earlier such as age, sex, hours worked per week, area and type of practice are now classified based on this geographic categorisation.

- Between 2003 and 2006, the number of practising dental prosthetists increased in New South Wales, Queensland, Western Australia and South Australia. The increase was highest in New South Wales (10.2%), followed by South Australia (6.4%). Tasmania recorded the largest decrease (Table 24).

Table 24: Practising dental prosthetists by state/territory, 2000, 2003 and 2006

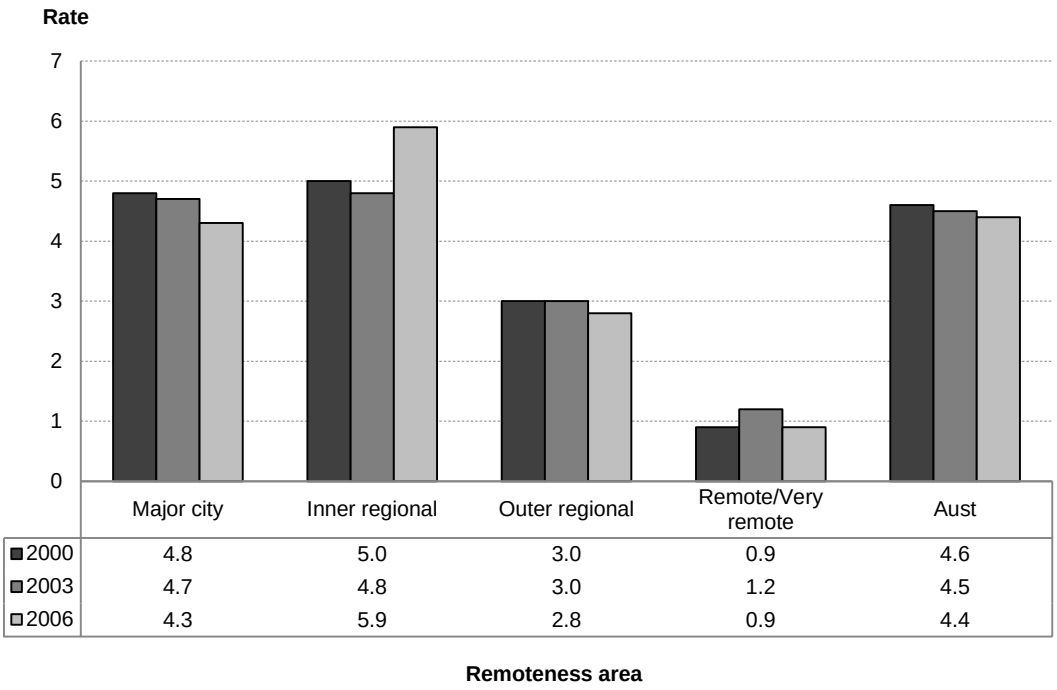
Vic	Qld	WA	SA	Tas	NT	ACT	Total
297	117	60	27	52	. .	16	872
268	125	84	29	50	. .	15	878
258	145	86	31	44	. .	14	921



	NSW	Vic	Qld	WA	SA	Tas	ACT	Aust
2000	4.7	6.2	3.3	3.2	1.8	11.1	5.1	4.6
2003	4.6	5.5	3.3	4.3	1.9	10.4	4.8	4.5
2006	5.0	5.0	3.5	4.2	2.0	9.0	4.2	4.4

Figure 58: Dental prosthetists by state/territory, 2000, 2003 and 2006 (per 100,000 population)

- The practising rate of dental prosthetists per 100,000 population in 2006 ranged from 2.0 in South Australia, to 5.0 in New South Wales and Victoria, and 9.0 in Tasmania. Even though Tasmania had the greatest decrease in the number of prosthetists, the practising rate continues to be higher than in other jurisdictions.
- Between 2003 and 2006, the average age increased across all jurisdictions except South Australia. In 2006, the average age of prosthetists by state/territory was lowest in Victoria (48.4 years) and highest in the Australian Capital Territory (56.0 years). Female prosthetists were younger than their male colleagues in all jurisdictions (Table A6.3).
- There was some variation among states/territories in the average hours worked. Prosthetists working in Western Australia worked the fewest hours (37.7 hours), followed by South Australia (39.5 hours). Prosthetists in the Australian Capital Territory worked 46.4 hours per week, at least 3 hours more than the national average of 43.0 hours. Between 2003 and 2006, the average hours worked per week increased only in Victoria and the Australian Capital Territory. Queensland remained stable at 43.5 hours, and all other jurisdictions recorded a decrease. The national average remained the same, at 43.0 hours per week (Table A6.5).
- In 2006, the practising rate of prosthetists varied across remoteness areas, ranging from 5.9 in *Inner regional* areas to 0.9 in *Remote/Very remote* areas. Between 2003 and 2006, the practising rate decreased in all areas except *Inner regional* areas (Figure 59, Table A6.4).



	Major city	Inner regional	Outer regional	Remote/Very remote	Aust
2000	4.8	5.0	3.0	0.9	4.6
2003	4.7	4.8	3.0	1.2	4.5
2006	4.3	5.9	2.8	0.9	4.4

Note: Remote/Very remote includes areas.

Figure 59: Practising dental prosthetists by remoteness area, 2000, 2003 and 2006 (per 100,000 population)

- Average ages of employed prosthetists were similar across remoteness areas, ranging from 49.5 years in *Inner regional* areas to 48.7 years in *Outer regional* areas (Table A6.4).
- Prosthetists in *Remote/Very remote* areas worked more hours (47.5 per week) than those in other areas. This was similar between the sexes (Table A6.6).

5 Discussion

The purpose of this chapter is to provide a picture of some of the changes across the Australian dental labour force over time. It presents comparisons between general dental practitioners, specialists, hygienists, therapists, dual practitioners and prosthetists.

Composition of the dental labour force

In 2006, the dental labour force was dominated by general dental practitioners (67%) and specialists (nearly 10%). Prosthetists comprised 7% of the labour force, hygienists 5%, therapists 9% and OHTs 2% (Table 25).

Table 25: Net growth of the dental labour force, 2003 and 2006

	Type of practitioner					
	GDPs	Specialists	Hygienists[(a)]	Therapists[(a)]	OHTs [(a)]	Prosthetists
	Full-time equivalent practitioners, 2003[(b)]					
Male	7,040	1,206	18	18	. .	996
Female	2,240	216	468	1,020	. .	81
Persons	**9,278**	**1,423**	**486**	**1,038**	**. .**	**1,077**
	Full-time equivalent practitioners, 2006[(b)]					
Male	7,187	1,311	19	14	22	1,036
Female	2,686	247	536	923	334	97
Persons	**9,874**	**1,558**	**555**	**937**	**356**	**1,132**
	Net growth					
Male	2.1	8.7	4.3	–24.7	. .	4.0
Female	19.9	14.4	14.4	–9.5	. .	20.2
Persons	**6.4**	**9.5**	**14.1**	**–9.7**	**. .**	**5.1**

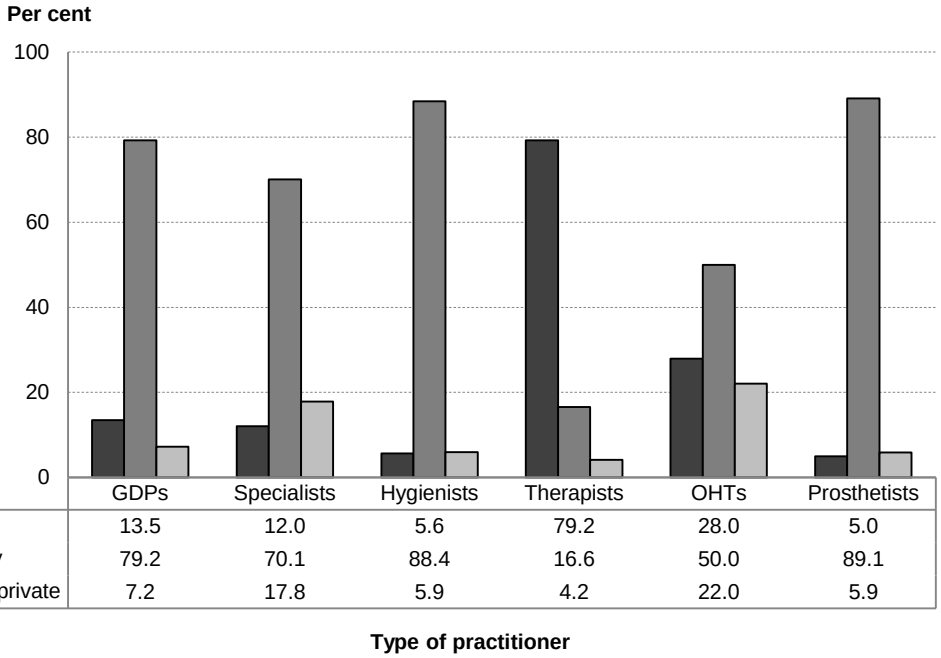
(a) OHT data were first collected in 2006. In 2003 OHTs were categorised as either hygienists or therapists. Caution is advised when interpreting the change in numbers in these groups.

(b) FTE practitioner is based on working 35 hours per week, calculated by multiplying the number of practitioners by the average hours worked per week and dividing the result by 35.

Between 2003 and 2006, the net growth of hygienists, therapists and OHTs combined was at least twice that of dentists. Although supplying only a minority of dental visits, oral health practitioners provide services to a variety of defined population groups in a range of settings (such as children in school dental clinics, residents in residential care facilities).

Practice setting and activity

The Australian dental labour force is predominantly based in the private sector. In 2006, four-fifths of general practitioner dentists worked only in the private sector. This trend was similar among dental specialists, hygienists and prosthetists. The only group that was predominantly public were therapists (79.2% in the public sector). OHTs were more varied: 50% worked only in private practices, around 28% worked only in public practices and around 22% worked in both sectors (Figure 60). However, this is a rapidly emerging group, and future distribution across sectors is likely to shift over the next decade.



	GDPs	Specialists	Hygienists	Therapists	OHTs	Prosthetists
Public only	13.5	12.0	5.6	79.2	28.0	5.0
Private only	79.2	70.1	88.4	16.6	50.0	89.1
Public and private	7.2	17.8	5.9	4.2	22.0	5.9

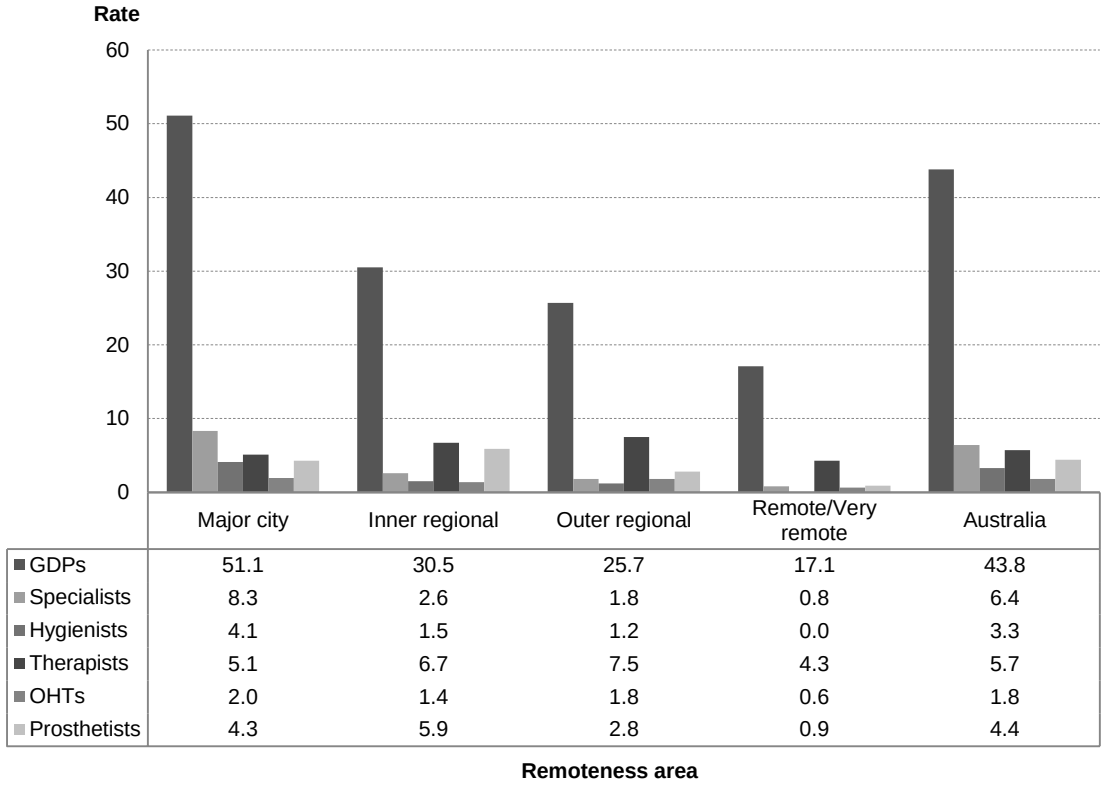
Note: Sector of practice was determined by the practitioner's reported type of practice at main, second and third practice locations.

Figure 60: Practising dental labour force by sector of practice, 2006

In the decade to 2006, there was only a slight decrease in hours worked. Female participation in the dentist labour force has continued to grow and may affect the average hours worked per week. More female dentists work part-time and have more career breaks (Brennan et al. 1992). It has been projected that by 2020 around 40% of the dental labour force will be female (Teusner et al. 2008). The average hours worked by OHTs is notably higher than therapists and hygienists across all age groups, indicating that this newly emerging university-qualified group may have different career patterns than their counterparts.

Geographic distribution

With the exception of therapists, the geographic distribution of the dental labour force varies. Practising rates are highest in the most populous areas and lowest in the least populous areas. There are more therapists per 100,000 population in *Inner regional* and *Outer regional* areas than in *Major cities*. *Remote* and *Very remote* areas have more therapists than other allied practitioners per 100,000 population. The geographic distribution of OHTs is relatively even (with the exception of *Remote/Very remote* Areas), but as the group continues to grow, its regional distribution may alter (Figure 61).



	Major city	Inner regional	Outer regional	Remote/Very remote	Australia
GDPs	51.1	30.5	25.7	17.1	43.8
Specialists	8.3	2.6	1.8	0.8	6.4
Hygienists	4.1	1.5	1.2	0.0	3.3
Therapists	5.1	6.7	7.5	4.3	5.7
OHTs	2.0	1.4	1.8	0.6	1.8
Prosthetists	4.3	5.9	2.8	0.9	4.4

Note: Remote/Very remote includes Migratory areas.

Figure 61: Practising dental labour force by remoteness area of main practice, 2006 (per 100,000 population)

The rate of public sector dentists per 100,000 population varied by state/territory and remoteness area, reflecting variations in state and territory oral health policies and availability of training programs (Table 26). The establishment of new schools in regional areas was largely aimed at increasing supply of practitioners in regional areas. However, the impact of the new schools will not be evident until 2010-15 (ARCPOH 2008).

Table 26: Full-time equivalent public dentists by remoteness area of main practice and state/territory, 2006

Remoteness area of main practice	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				FTE public dentists per 100,000 population[(a)]					
Major city	9.3	7.8	11.1	10.0	13.0	..	1.6	..	9.4
Inner regional	4.8	3.9	9.0	3.7	4.9	4.7	–	..	5.4
Outer regional	2.6	5.4	9.6	2.4	3.3	–	..	17.1	5.9
Remote/Very remote	–	–	5.6	4.4	–	–	..	21.8	7.1
Total	**7.9**	**6.9**	**10.2**	**8.1**	**10.4**	**3.0**	**1.6**	**19.2**	**8.2**

(a) FTE practitioner is based on working 35 hours per week. This is obtained by multiplying the number of dentists by the average hours worked per week and dividing the result by 35.

Notes

1. Remoteness areas defined by ASGC (ABS 2008).
2. *Remote/Very remote* includes Migratory areas.

Appendix A: Data tables

A1 Dentist tables

Table A1.1: Registered dentists by work status, sex and state/territory, 2006

Work status	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia	Total %
					Male					
Working in dentistry[(a)]	2,580	1,658	1,462	590	774	130	43	152	7,390	85.6
Mainly in another state	71	39	37	15	12	2	8	5	188	2.2
Only in another state	100	30	50	7	29	—	2	6	222	2.6
On leave	188	2	10	—	2	2	—	—	203	2.4
Overseas	7	65	105	6	16	—	2	7	207	2.4
Not working	69	27	45	7	22	5	—	3	177	2.1
Not working in dentistry	29	16	—	9	1	2	2	—	58	0.7
Retired	99	27	11	6	32	2	2	7	185	2.1
Total	**3,142**	**1,863**	**1,720**	**640**	**888**	**142**	**58**	**179**	**8,632**	**100.0**
					Female					
Working in dentistry[(a)]	981	791	566	236	297	42	36	66	3,014	84.2
Mainly in another state	18	3	7	—	3	—	4	3	38	1.1
Only in another state	31	7	12	5	15	1	6	2	78	2.2
On leave	61	23	11	4	8	—	—	3	110	3.1
Overseas	29	39	43	6	8	—	—	3	129	3.6
Not working	50	39	22	4	9	—	—	—	123	3.4
Not working in dentistry	18	14	—	—	14	—	2	—	48	1.3
Retired	22	5	5	1	4	—	—	3	41	1.1
Total	**1,212**	**920**	**666**	**255**	**356**	**43**	**47**	**81**	**3,580**	**100.0**
					Persons					
Working in dentistry[(a)]	3,561	2,449	2,028	826	1,071	172	78	218	10,404	85.2
Mainly in another state	89	41	44	15	15	2	12	8	226	1.8
Only in another state	130	36	62	12	43	1	7	7	300	2.5
On leave	249	25	21	4	9	2	—	3	313	2.6
Overseas	37	104	148	12	24	—	2	10	336	2.8
Not working	119	66	66	10	31	5	—	3	301	2.5
Not working in dentistry	47	29	—	9	15	2	4	—	106	0.9
Retired	122	32	16	7	36	2	2	10	226	1.8
Total	**4,354**	**2,783**	**2,386**	**895**	**1,244**	**185**	**105**	**260**	**12,212**	**100.0**
Employed in state/territory[(a)] (%)	81.8	88.0	85.0	92.3	86.1	93.0	74.7	84.0	85.2	. .
Proportion female (%)	27.6	32.3	27.9	28.5	27.7	24.1	45.3	30.2	29.0	. .
Practising rate[(b)]	52.2	47.7	49.6	52.7	52.0	35.1	37.2	65.3	50.3	. .
Registered dentists rate	63.9	54.3	58.3	57.1	60.4	37.8	49.8	77.8	59.0	. .
FTE rate (35 hours per week)[(c)]	60.4	50.5	54.2	54.3	55.4	37.6	44.0	75.5	55.2	. .
FTE rate (37.5 hours per week)[(c)]	56.4	47.2	50.6	50.7	51.7	35.1	41.1	70.5	51.5	. .
FTE rate (40 hours per week)[(c)]	52.9	44.2	47.4	47.5	48.4	32.9	38.5	66.1	48.3	. .

(a) Practising solely or mainly in state/territory of registration.

(b) Practising rate: the number of practising dentists per 100,000 population.

(c) Full-time equivalent dentists per 100,000 population. Calculated by multiplying the number of practising dentists by the average weekly hours worked and then dividing by a reference week (35, 37.5 and 40 hours per week have been provided). This value is then population standardised to allow comparisons with other states/territories.

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A1.2: Registered dentists by work status, sex and age group, 2006

	Age group (years)					
Work status	**<30**	**30–39**	**40–49**	**50–59**	**60+**	**Total**
			Male			
Working in dentistry[(a)]	643	1,432	1,983	2,062	1,270	7,390
Mainly in another state	13	28	34	70	44	188
Only in another state	16	42	68	64	34	222
On leave	15	36	51	65	36	203
Overseas	18	42	59	63	26	207
Not working	9	28	24	37	79	177
Not working in dentistry	—	9	12	25	10	58
Retired	—	4	7	17	157	185
Total	**714**	**1,621**	**2,237**	**2,404**	**1,655**	**8,632**
			Female			
Working in dentistry[(a)]	636	1,029	827	443	78	3,014
Mainly in another state	10	9	8	8	—	38
Only in another state	14	28	19	12	5	78
On leave	19	62	19	8	—	110
Overseas	33	50	31	12	—	129
Not working	18	35	35	24	12	123
Not working in dentistry	—	15	17	15	—	48
Retired	—	—	6	14	19	41
Total	**732**	**1,229**	**962**	**537**	**121**	**3,580**
			Persons			
Working in dentistry[(a)]	1,279	2,461	2,810	2,505	1,348	10,404
Mainly in another state	23	36	42	79	46	226
Only in another state	29	70	87	76	39	300
On leave	34	99	69	74	37	313
Overseas	51	91	90	75	28	336
Not working	27	63	59	61	91	301
Not working in dentistry	3	25	28	40	10	106
Retired	—	5	12	31	177	226
Total	**1,446**	**2,850**	**3,198**	**2,941**	**1,776**	**12,212**

(a) Practising solely or mainly in state/territory of registration.

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A1.3: Practising dentists by hours worked per week, sex and age group, 2006

Hours worked per week	Age group (years)					Total
	<30	30–39	40–49	50–59	60+	
			Male			
<10	8	10	7	11	60	96
10–19	11	37	25	54	153	280
20–29	38	48	58	127	196	467
30–39	206	423	438	624	429	2,121
40–49	303	616	973	883	313	3,089
50–59	51	193	331	249	77	902
60+	24	105	150	115	42	436
Total	**643**	**1,432**	**1,983**	**2,062**	**1,270**	**7,390**
			Female			
<10	13	44	23	10	6	96
10–19	15	141	105	43	11	315
20–29	49	181	138	74	24	465
30–39	250	287	298	146	17	997
40–49	269	291	196	127	13	896
50–59	26	62	41	30	5	163
60+	16	24	26	14	3	82
Total	**636**	**1,029**	**827**	**443**	**78**	**3,014**
			Persons			
<10	21	54	30	20	66	192
10–19	26	179	130	97	164	595
20–29	87	229	196	200	219	932
30–39	456	709	736	770	447	3,118
40–49	572	907	1,169	1,010	326	3,984
50–59	77	255	372	279	82	1,065
60+	40	129	176	129	45	519
Total	**1,279**	**2,461**	**2,810**	**2,505**	**1,348**	**10,404**
			Average hours worked per week			
Males	39.5	41.8	43.2	40.7	33.4	40.2
Females	38.0	32.4	33.2	34.7	28.4	34.1
Persons	**38.7**	**37.9**	**40.3**	**39.7**	**33.1**	**38.5**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A1.4: Practising dentists by area of main practice, sex and age group, 2006

Area of main practice	Age group (years) <30	30–39	40–49	50–59	60+	Total	Average age
			Male				
General practice	595	1,225	1,627	1,650	990	6,087	47.0
Registered specialist	16	149	298	311	188	961	50.3
Restricted practice	6	7	18	23	20	73	52.0
Administration	1	9	14	21	13	59	51.0
Teaching/education	15	21	19	37	33	124	50.6
Research	4	6	1	2	6	20	47.4
Other	5	16	6	19	20	65	50.3
Total	**643**	**1,432**	**1,983**	**2,062**	**1,270**	**7,390**	**47.6**
			Female				
General practice	601	913	714	368	64	2,660	38.5
Registered specialist	14	73	72	38	3	200	41.8
Restricted practice	3	4	4	10	—	20	44.2
Administration	—	4	7	7	1	19	46.9
Teaching/education	10	20	18	13	7	67	42.9
Research	2	3	3	2	1	11	44.8
Other	6	12	11	5	2	37	40.2
Total	**636**	**1,029**	**827**	**443**	**78**	**3,014**	**38.9**
			Persons				
General practice	1,196	2,138	2,342	2,017	1,054	8,747	44.4
Registered specialist	30	222	369	349	190	1,161	48.8
Restricted practice	8	11	21	33	20	93	50.3
Administration	1	12	21	28	15	77	50.0
Teaching/education	25	40	37	49	39	191	47.8
Research	7	9	4	5	8	31	46.5
Other	11	28	16	24	22	102	46.6
Total	**1,279**	**2,461**	**2,810**	**2,505**	**1,348**	**10,404**	**45.1**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A1.5: Practising dentists by area of main practice, sex and hours worked per week, 2006

Area of main practice	Total hours worked per week							Total	Average hours
	<10	10–19	20–29	30–39	40–49	50–59	60+		
				Male					
General practice	64	199	371	1,810	2,645	694	305	6,087	40.1
Registered specialist	11	39	61	234	344	171	102	961	42.6
Restricted practice	5	9	11	18	24	3	3	73	33.8
Administration	—	3	1	20	21	9	5	59	41.6
Teaching/education	11	22	14	17	28	16	17	124	34.8
Research	1	1	2	6	6	3	1	20	40.2
Other	5	6	6	16	20	7	4	65	34.8
Total	**96**	**280**	**467**	**2,121**	**3,089**	**902**	**436**	**7,390**	**40.2**
				Female					
General practice	85	277	417	898	805	116	62	2,660	33.8
Registered specialist	1	20	29	54	54	25	15	200	37.7
Restricted practice	1	4	5	8	3	—	—	20	28.5
Administration	1	—	2	5	8	2	—	19	37.3
Teaching/education	8	10	6	13	12	14	3	67	33.3
Research	—	1	1	3	5	1	—	11	34.0
Other	—	2	4	17	9	4	1	37	36.1
Total	**96**	**315**	**465**	**997**	**896**	**163**	**82**	**3,014**	**34.1**
				Persons					
General practice	148	476	788	2,707	3,450	810	367	8,747	38.2
Registered specialist	12	59	91	288	398	196	117	1,161	41.8
Restricted practice	6	13	16	26	27	3	3	93	32.6
Administration	1	3	4	25	29	12	5	77	40.6
Teaching/education	19	32	20	30	41	30	20	191	34.3
Research	1	2	3	9	11	4	1	31	38.1
Other	5	9	10	33	29	11	5	102	35.3
Total	**192**	**595**	**932**	**3,118**	**3,984**	**1,065**	**519**	**10,404**	**38.5**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A1.6: Practising dentists by sector/type of main practice, sex and age group, 2006

Sector/type of main practice	Age group (years) <30	30–39	40–49	50–59	60+	Total	Average age
			Male				
Public							
Dental hospital	66	61	38	57	78	300	46.6
Mainly school dental	3	6	18	30	13	69	51.1
Mainly general dental	38	42	64	58	54	256	46.7
Defence forces	15	19	8	7	4	53	38.2
Other public	11	27	30	43	31	141	49.2
Tertiary education institution	10	18	18	32	26	105	50.2
Total	**143**	**171**	**175**	**227**	**207**	**923**	
Private							
Solo	52	394	700	782	515	2,442	50.5
Solo with assistant	89	202	423	377	127	1,218	47.0
Partnership	23	165	203	179	70	640	46.3
Associateship	77	241	325	344	163	1,151	47.4
Assistant	227	222	121	97	109	776	40.3
Locum	10	18	14	21	43	106	51.2
Health fund	16	13	12	8	11	60	42.5
Total	**494**	**1,256**	**1,798**	**1,807**	**1,038**	**6,393**	
Other							
Other	6	5	10	27	25	74	56.5
Total	**643**	**1,432**	**1,983**	**2,062**	**1,270**	**7,390**	**47.6**
			Female				
Public							
Dental hospital	89	75	42	23	5	234	35.4
Mainly school dental	7	18	17	15	3	60	42.8
Mainly general dental	50	83	63	44	6	246	39.2
Defence forces	6	16	10	7	3	41	40.4
Other public	5	20	28	16	3	73	43.7
Tertiary education institution	8	17	21	15	8	70	44.1
Total	**165**	**229**	**182**	**121**	**28**	**724**	
Private							
Solo	27	128	165	110	20	450	44.0
Solo with assistant	49	104	126	61	4	345	40.7
Partnership	28	81	90	44	8	251	41.8
Associateship	55	132	84	35	5	312	37.6
Assistant	284	294	148	57	8	790	34.9
Locum	5	16	14	4	1	41	39.5
Health fund	17	25	11	3	1	57	35.0
Total	**465**	**780**	**639**	**314**	**48**	**2,246**	
Other							
Other	7	20	7	8	2	44	39.9
Total	**636**	**1,029**	**827**	**443**	**78**	**3,014**	**38.9**

(continued)

Table A1.6 (continued): Practising dentists by sector/type of main practice, sex and age group, 2006

Sector/type of main practice	Age group (years) <30	30–39	40–49	50–59	60+	Total	Average age
			Persons				
Public							
Dental hospital	156	136	80	80	82	534	41.5
Mainly school dental	9	24	35	45	17	130	47.2
Mainly general dental	88	124	127	102	60	502	43.0
Defence forces	20	35	18	14	7	94	39.2
Other public	16	47	58	59	34	213	47.4
Tertiary education institution	19	35	39	48	34	175	47.7
Total	**308**	**400**	**357**	**348**	**235**	**1,647**	
Private							
Solo	79	522	865	891	535	2,892	49.5
Solo with assistant	138	306	549	438	132	1,563	45.6
Partnership	51	247	293	223	77	891	45.0
Associateship	133	373	409	380	168	1,462	45.3
Assistant	511	516	269	154	117	1,566	37.5
Locum	15	35	28	25	45	147	47.9
Health fund	33	38	23	11	13	118	38.8
Total	**959**	**2,036**	**2,437**	**2,122**	**1,086**	**8,639**	
Other							
Other	13	25	17	36	27	118	50.0
Total	**1,279**	**2,461**	**2,810**	**2,505**	**1,348**	**10,404**	**45.1**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A1.7: Practising dentists by sector/type of main practice, sex and hours worked per week, 2006

Sector/type of main practice	Total hours worked per week <10	10–19	20–29	30–39	40–49	50–59	60+	Total	Average hours
				Male					
Public									
Dental hospital	10	43	12	92	112	16	14	300	35.9
Mainly school dental	—	3	9	34	21	—	3	69	37.1
Mainly general dental	3	7	28	121	84	12	1	256	36.9
Defence forces	—	4	1	25	15	6	1	53	37.8
Other public	5	10	14	45	42	10	14	141	38.7
Tertiary education institution	10	11	10	15	25	16	18	105	38.7
Total	**28**	**78**	**73**	**333**	**299**	**60**	**53**	**923**	
Private									
Solo	21	42	141	610	1,077	371	180	2,442	42.0
Solo with assistant	4	10	44	275	590	209	86	1,218	42.9
Partnership	1	5	24	200	311	67	32	640	41.8
Associateship	17	41	58	346	495	133	62	1,151	40.2
Assistant	15	78	91	292	248	41	12	776	34.5
Locum	9	14	20	28	22	8	4	106	31.7
Health fund	—	5	2	22	22	6	2	60	38.3
Total	**67**	**195**	**381**	**1,773**	**2,764**	**834**	**379**	**6,393**	
Other									
Other	1	7	13	15	26	8	4	74	36.1
Total	**96**	**280**	**467**	**2,121**	**3,089**	**902**	**436**	**7,390**	**40.2**
				Female					
Public									
Dental hospital	8	31	18	75	83	9	9	234	35.1
Mainly school dental	—	9	12	25	10	1	3	60	33.5
Mainly general dental	6	23	41	100	60	12	4	246	34.0
Defence forces	—	5	5	16	12	1	2	41	35.4
Other public	—	4	11	28	21	4	5	73	38.0
Tertiary education institution	5	10	7	18	12	14	2	70	34.1
Total	**19**	**82**	**95**	**263**	**199**	**42**	**26**	**724**	
Private									
Solo	8	20	46	136	174	49	17	450	38.2
Solo with assistant	3	29	41	124	111	23	14	345	36.3
Partnership	9	20	50	84	72	9	7	251	33.4
Associateship	8	32	66	97	93	10	5	312	32.7
Assistant	43	113	142	247	208	29	10	790	31.1
Locum	4	9	5	11	9	—	2	41	28.9
Health fund	1	7	13	15	20	1	—	57	32.8
Total	**76**	**230**	**363**	**713**	**687**	**121**	**55**	**2,246**	
Other									
Other	1	3	8	20	10	—	1	44	35.5
Total	**96**	**315**	**465**	**997**	**896**	**163**	**82**	**3,014**	**34.1**

(continued)

Table A1.7 (continued): Practising dentists by sector/type of main practice, sex and hours worked per week, 2006

Sector/type of main practice	Total hours worked per week <10	10–19	20–29	30–39	40–49	50–59	60+	Total	Average hours
				Persons					
Public									
Dental hospital	18	74	31	167	195	25	23	534	35.6
Mainly school dental	—	11	20	60	31	1	6	130	35.4
Mainly general dental	9	30	69	221	144	24	6	502	35.5
Defence forces	—	9	6	42	26	7	4	94	36.8
Other public	5	14	25	72	64	14	19	213	38.4
Tertiary education institution	15	21	17	34	38	30	21	175	36.9
Total	**46**	**160**	**168**	**596**	**497**	**102**	**78**	**1,647**	
Private									
Solo	29	62	186	746	1,251	420	198	2,892	41.4
Solo with assistant	6	39	85	399	700	232	101	1,563	41.5
Partnership	10	26	74	283	382	76	39	891	39.4
Associateship	25	73	124	442	588	142	67	1,462	38.6
Assistant	57	190	233	539	456	69	22	1,566	32.8
Locum	14	23	25	40	31	8	6	147	30.8
Health fund	1	12	15	37	42	7	2	118	35.7
Total	**143**	**425**	**743**	**2,486**	**3,451**	**956**	**434**	**8,639**	
Other									
Other	3	10	20	35	36	8	6	118	35.9
Total	**192**	**595**	**932**	**3,118**	**3,984**	**1,065**	**519**	**10,404**	**38.5**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A1.8: Practising dentists by area of practice, sector and age group, 2006

Area of practice	Age group (years) <30	30–39	40–49	50–59	60+	Total
			Public sector			
General practice						
Male	92	90	90	128	123	522
Female	121	149	118	75	16	478
Total	**213**	**238**	**207**	**202**	**139**	**1,000**
Specialist/restricted practice						
Male	4	12	16	14	23	69
Female	5	16	12	13	—	46
Total	**9**	**28**	**27**	**27**	**23**	**114**
Other						
Male	21	34	29	53	45	182
Female	6	25	26	21	10	89
Total	**27**	**59**	**55**	**75**	**56**	**272**
Total						
Male	117	136	134	195	191	773
Female	132	190	155	109	26	612
Total	**250**	**325**	**290**	**304**	**217**	**1,386**
			Private sector			
General practice						
Male	443	1,063	1,445	1,445	831	5,227
Female	403	677	546	259	43	1,927
Total	**846**	**1,740**	**1,991**	**1,704**	**873**	**7,154**
Specialist/restricted practice						
Male	13	119	250	271	152	805
Female	11	41	51	24	3	129
Total	**24**	**161**	**300**	**296**	**154**	**934**
Other						
Male	—	5	3	8	6	22
Female	6	2	2	3	1	15
Total	**6**	**7**	**5**	**11**	**7**	**37**
Total						
Male	456	1,188	1,698	1,724	988	6,054
Female	420	721	599	287	47	2,072
Total	**876**	**1,908**	**2,297**	**2,010**	**1,035**	**8,126**

(continued)

Table A1.8 (continued): Practising dentists by area of practice, sector and age group, 2006

	Age group (years)					
Area of practice	**<30**	**30–39**	**40–49**	**50–59**	**60+**	**Total**
			Public and private sectors			
General practice						
Male	60	72	92	77	36	338
Female	77	88	51	34	6	255
Total	**136**	**160**	**143**	**111**	**42**	**593**
Specialist/restricted practice						
Male	5	24	50	48	34	160
Female	1	21	14	11	—	48
Total	**6**	**45**	**64**	**59**	**34**	**208**
Other						
Male	5	12	8	18	21	65
Female	6	11	9	2	—	29
Total	**11**	**23**	**18**	**20**	**21**	**94**
Total						
Male	69	109	151	143	91	563
Female	84	120	74	47	6	332
Total	**154**	**229**	**225**	**191**	**97**	**895**
			Total			
General practice						
Male	595	1,225	1,627	1,650	990	6,087
Female	601	913	714	368	64	2,660
Total	**1,196**	**2,138**	**2,342**	**2,017**	**1,054**	**8,747**
Specialist/restricted practice						
Male	22	156	315	334	208	1,034
Female	17	78	75	48	3	220
Total	**39**	**233**	**390**	**382**	**210**	**1,254**
Other						
Male	26	52	40	79	72	269
Female	19	38	38	27	11	134
Total	**45**	**90**	**78**	**106**	**84**	**402**
Total						
Male	643	1,432	1,983	2,062	1,270	7,390
Female	636	1,029	827	443	78	3,014
Total	**1,279**	**2,461**	**2,810**	**2,505**	**1,348**	**10,404**

Notes

1. Sector of practice was determined by the practitioner's reported type of practice at main, second and third practice locations.

2: Column/row totals may not sum to total because of rounding of estimates

Table A1.9: Practising dentists by age, sex and state/territory, 2006

Age	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				Male					
<25	17	20	25	20	3	2	3	—	91
25–29	203	142	129	43	30	2	3	—	552
30–34	235	163	144	68	62	15	7	2	694
35–39	289	167	142	80	49	12	—	—	738
40–44	266	207	166	89	36	7	11	7	790
45–49	442	226	243	128	83	25	43	2	1,192
50–54	378	222	184	113	116	21	43	10	1,087
55–59	325	208	155	111	116	23	26	11	975
60–64	192	160	147	63	67	12	7	9	656
65–69	112	92	74	42	13	7	3	—	342
70–74	82	28	36	8	11	3	6	—	175
75+	39	22	17	9	4	3	—	2	97
Total	**2,580**	**1,658**	**1,462**	**774**	**590**	**130**	**152**	**43**	**7,390**
				Female					
<25	14	25	22	12	11	3	—	4	91
25–29	169	155	108	52	35	7	13	6	545
30–34	194	155	95	66	48	6	3	6	572
35–39	165	110	85	44	31	7	13	2	457
40–44	125	139	94	50	31	3	7	4	453
45–49	144	83	72	31	28	4	10	2	375
50–54	111	70	55	17	33	—	16	10	312
55–59	33	33	18	16	14	9	3	4	131
60–64	14	16	10	6	2	1	—	—	50
65–69	7	2	4	2	—	—	—	—	15
70–74	3	2	2	—	—	—	—	—	7
75+	1	2	1	—	2	—	—	—	6
Total	**981**	**791**	**566**	**297**	**236**	**42**	**66**	**36**	**3,014**
				Persons					
<25	31	45	47	32	14	5	3	4	181
25–29	372	297	237	96	65	9	16	6	1,098
30–34	429	318	238	134	110	21	10	7	1,267
35–39	454	276	226	124	80	19	13	2	1,195
40–44	392	347	260	139	67	10	18	11	1,243
45–49	586	309	315	160	112	29	53	4	1,567
50–54	489	291	239	130	149	21	60	19	1,399
55–59	358	241	174	127	130	32	29	15	1,106
60–64	205	176	158	69	69	13	7	9	707
65–69	119	94	78	44	13	7	3	—	357
70–74	86	30	38	8	11	3	6	—	182
75+	40	24	18	9	6	3	—	2	103
Total	**3,561**	**2,449**	**2,028**	**1,071**	**826**	**172**	**218**	**78**	**10,404**
				Average age (years)					
Males	47.7	47.2	47.0	47.4	48.9	50.1	50.2	53.7	47.6
Females	39.3	38.4	38.7	38.2	39.7	39.9	41.3	40.3	38.9
Persons	**45.4**	**44.4**	**44.7**	**44.8**	**46.3**	**47.6**	**47.5**	**47.6**	**45.1**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A1.10: Practising dentists by age group, sex, average hours worked per week and state/territory, 2006

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					Male				
<30	41.3	37.6	39.9	39.4	35.5	40.0	43.0	—	39.5
30–39	44.5	40.2	39.8	41.2	40.4	39.3	59.0	40.0	41.8
40–49	45.3	43.1	42.4	41.2	39.6	42.5	41.4	43.4	43.2
50–59	42.9	39.9	40.5	39.6	37.7	38.7	41.9	43.9	40.7
60+	33.7	32.3	34.8	31.9	34.2	34.7	28.1	32.5	33.4
Total	**42.2**	**39.2**	**39.7**	**39.1**	**37.9**	**39.0**	**41.1**	**40.5**	**40.2**
					Female				
<30	39.8	36.4	38.5	38.2	35.0	36.3	36.6	47.2	38.0
30–39	35.2	30.6	32.3	30.9	29.1	30.5	37.6	33.3	32.4
40–49	34.5	32.7	32.4	30.9	31.8	33.6	42.4	34.0	33.2
50–59	35.9	32.2	36.7	30.1	31.8	32.3	39.2	46.4	34.7
60+	32.0	25.2	27.6	29.9	22.5	27.2	—	—	28.4
Total	**35.9**	**32.6**	**34.3**	**32.4**	**31.4**	**32.8**	**39.1**	**42.4**	**34.1**
					Persons				
<30	40.6	37.0	39.2	38.8	35.2	37.2	38.8	47.2	38.7
30–39	40.7	35.8	36.9	36.9	35.7	36.3	43.7	34.6	37.9
40–49	42.3	39.5	39.6	38.4	37.1	40.8	41.6	40.7	40.3
50–59	41.7	38.4	39.8	38.4	36.7	37.6	41.2	44.9	39.7
60+	33.6	31.8	34.5	31.8	33.6	34.2	28.1	32.5	33.1
Total	**40.5**	**37.0**	**38.2**	**37.3**	**36.1**	**37.5**	**40.5**	**41.4**	**38.5**
					Average hours worked				
Males	42.2	39.2	39.7	39.1	37.9	39.0	41.1	40.5	40.2
Females	35.9	32.6	34.3	32.4	31.4	32.8	39.1	42.4	34.1
Persons	**40.5**	**37.0**	**38.2**	**37.3**	**36.1**	**37.5**	**40.5**	**41.4**	**38.5**

Table A1.11: Practising dentists by area of main practice, sex and state/territory, 2006

Area of main practice	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				Male					
General practice	2,197	1,326	1,213	627	454	114	119	37	6,087
Registered specialist	301	247	186	98	78	15	31	4	961
Restricted practice	—	17	20	19	13	2	2	—	73
Administration	12	13	19	7	7	—	—	—	59
Teaching/education	37	30	17	15	26	—	—	—	124
Research	6	5	1	—	8	—	—	—	20
Other	27	19	6	8	5	—	—	2	65
Total	**2,580**	**1,658**	**1,462**	**774**	**590**	**130**	**152**	**43**	**7,390**
				Female					
General practice	874	697	502	261	191	40	66	30	2,660
Registered specialist	61	61	37	23	16	2	—	—	200
Restricted practice	—	9	1	2	5	—	—	4	20
Administration	10	4	4	—	1	—	—	—	19
Teaching/education	16	11	15	9	17	—	—	—	67
Research	6	5	—	—	—	—	—	—	11
Other	16	4	8	2	6	—	—	2	37
Total	**981**	**791**	**566**	**297**	**236**	**42**	**66**	**36**	**3,014**
				Persons					
General practice	3,071	2,023	1,715	888	645	154	185	67	8,747
Registered specialist	362	308	223	121	95	16	31	4	1,161
Restricted practice	—	26	21	21	17	2	2	4	93
Administration	22	17	23	7	8	—	—	—	77
Teaching/education	52	41	31	24	42	—	—	—	191
Research	12	11	1	—	8	—	—	—	31
Other	42	23	14	9	11	—	—	4	102
Total	**3,561**	**2,449**	**2,028**	**1,071**	**826**	**172**	**218**	**78**	**10,404**
				Average hours worked per week					
General practice	40.2	36.7	38.0	37.0	35.8	36.7	40.4	41.9	38.2
Registered specialist	43.7	41.6	40.2	40.8	40.1	44.5	40.5	39.0	41.8
Restricted practice	. .	28.6	34.4	37.4	26.1	40.0	46.0	39.0	32.6
Administration	39.2	39.9	42.1	42.1	40.6	. .	. .	. .	40.6
Teaching/education	35.5	32.0	39.6	25.8	36.5	. .	. .	. .	34.3
Research	42.0	39.7	39.8	. .	32.3	. .	. .	. .	38.1
Other	37.1	29.0	38.2	45.3	30.7	. .	. .	37.0	35.3
Total	**40.5**	**37.0**	**35.8**	**37.3**	**36.1**	**37.5**	**40.5**	**41.4**	**38.5**
				Average age (years)					
General practice	44.8	43.7	43.8	44.0	45.7	47.2	46.6	47.4	44.4
Registered specialist	48.8	48.0	49.1	48.4	49.8	51.1	52.1	50.0	48.8
Restricted practice	. .	46.2	56.1	51.9	46.6	53.0	52.0	52.0	50.3
Administration	46.3	48.9	52.4	52.8	52.0	. .	. .	. .	50.0
Teaching/education	49.3	47.3	48.4	47.9	46.2	. .	. .	. .	47.8
Research	55.0	37.1	33.0	—	52.8	. .	. .	. .	46.5
Other	51.2	49.5	35.3	42.2	42.4	. .	. .	45.0	46.6
Total	**45.4**	**44.4**	**44.7**	**44.8**	**46.3**	**47.6**	**47.5**	**47.6**	**45.1**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A1.12: Practising dentists by sector/type of main practice, sex and state/territory, 2006

Sector/type of main practice	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				Male					
Public									
Dental hospital	120	51	84	19	22	3	—	—	300
Mainly school dental	1	8	24	21	14	—	—	2	69
Mainly general dental	69	62	45	38	29	7	—	6	256
Defence forces	19	12	14	3	1	—	—	4	53
Other public	64	23	34	6	8	—	—	6	141
Tertiary education institution	16	31	16	15	27	—	—	—	105
Total	**291**	**187**	**217**	**101**	**101**	**10**	**0**	**17**	**923**
Private									
Solo	981	486	429	263	168	46	55	13	2,442
Solo with assistant	411	301	261	125	63	31	21	4	1,218
Partnership	202	131	144	71	66	2	23	—	640
Associateship	360	262	205	144	123	18	33	6	1,151
Assistant	237	222	172	50	51	23	20	—	776
Locum	37	24	30	13	2	—	—	—	106
Health fund	25	20	1	1	13	—	—	—	60
Total	**2,253**	**1,447**	**1,243**	**667**	**487**	**121**	**152**	**23**	**6,393**
Other									
Other	36	24	3	6	2	—	0	4	74
Total	**2,580**	**1,658**	**1,462**	**774**	**590**	**130**	**152**	**43**	**7,390**
				Female					
Public									
Dental hospital	96	40	71	15	11	1	—	—	234
Mainly school dental	1	13	22	7	7	—	—	10	60
Mainly general dental	58	85	43	23	24	6	3	4	246
Defence forces	15	3	9	3	3	—	3	6	41
Other public	28	14	23	5	3	—	—	—	73
Tertiary education institution	11	16	16	12	15	—	—	—	70
Total	**210**	**169**	**184**	**64**	**64**	**7**	**7**	**19**	**724**
Private									
Solo	176	108	75	42	31	4	13	2	450
Solo with assistant	101	99	61	44	24	3	10	2	345
Partnership	80	66	42	25	18	1	16	2	251
Associateship	109	79	49	47	12	9	—	7	312
Assistant	233	248	140	64	69	16	20	—	790
Locum	10	12	9	9	1	—	—	—	41
Health fund	34	5	1	2	14	—	—	—	57
Total	**744**	**616**	**378**	**232**	**170**	**34**	**59**	**13**	**2,246**
Other									
Other	27	6	4	—	3	—	—	4	44
Total	**981**	**791**	**566**	**297**	**236**	**42**	**66**	**36**	**3,014**

(continued)

Table A1.12 (continued): Practising dentists by sector/type of main practice, sex and state/territory, 2006

Sector/type of main practice	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				Persons					
Public									
Dental hospital	217	91	155	34	33	5	—	—	534
Mainly school dental	2	21	46	28	21	—	—	11	130
Mainly general dental	128	146	89	62	53	13	3	9	502
Defence forces	34	14	23	6	4	—	3	9	94
Other public	92	37	57	10	11	—	—	6	213
Tertiary education institution	28	46	32	26	43	—	—	—	175
Total	**501**	**356**	**401**	**166**	**165**	**17**	**7**	**36**	**1,647**
Private									
Solo	1,157	594	504	305	199	51	68	15	2,892
Solo with assistant	512	400	323	169	88	34	31	6	1,563
Partnership	282	197	186	96	85	3	40	2	891
Associateship	469	341	254	190	134	27	33	13	1,462
Assistant	470	470	312	114	120	39	39	—	1,566
Locum	47	35	39	21	4	—	—	—	147
Health fund	59	25	3	4	27	—	—	—	118
Total	**2,998**	**2,063**	**1,621**	**899**	**657**	**155**	**212**	**36**	**8,639**
Other									
Other	63	30	7	6	5	—	—	7	118
Total	**3,561**	**2,449**	**2,028**	**1,071**	**826**	**172**	**218**	**78**	**10,404**

Note: Column/row totals may not sum to total because of rounding of estimates

Table A1.13: Practising dentists by age, sex and remoteness area, 2006

	Remoteness area				
Age (years)	**Major city**	**Inner regional**	**Outer regional**	**Remote/Very**	**Australia**
		Male			
<25	67	19	3	1	91
25–29	444	72	33	3	552
30–34	571	80	38	6	694
35–39	624	82	27	5	738
40–44	662	76	45	8	790
45–49	956	172	64	1	1,192
50–54	847	164	69	7	1,087
55–59	759	153	53	10	975
60–64	507	102	42	5	656
65–69	269	51	20	3	342
70–74	137	24	14	—	175
75+	79	15	1	2	97
Total	**5,922**	**1,010**	**408**	**50**	**7,390**
		Female			
<25	59	25	3	4	91
25–29	433	84	21	8	545
30–34	493	49	25	5	572
35–39	393	42	17	5	457
40–44	376	50	20	6	453
45–49	320	34	20	1	375
50–54	263	27	16	6	312
55–59	103	20	6	2	131
60–64	43	5	1	—	50
65–69	13	1	1	—	15
70–74	6	—	1	—	7
75+	6	—	—	—	6
Total	**2,506**	**339**	**132**	**37**	**3,014**
		Persons			
<25	126	45	6	5	181
25–29	877	156	54	11	1,098
30–34	1,064	130	63	11	1,267
35–39	1,017	124	44	10	1,195
40–44	1,038	126	65	14	1,243
45–49	1,275	206	83	3	1,567
50–54	1,110	191	85	13	1,399
55–59	862	174	59	12	1,106
60–64	551	108	43	5	707
65–69	281	51	22	3	357
70–74	143	24	15	—	182
75+	85	15	1	2	103
Total	**8,428**	**1,349**	**540**	**87**	**10,404**
		Average age (years)			
Male	47.4	48.7	48.2	48.0	47.6
Female	39.1	37.3	39.9	37.0	38.9
Persons	**44.9**	**45.8**	**46.1**	**43.3**	**45.1**

Notes

1. Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.
2: Column/row totals may not sum to total because of rounding of estimates

Table A1.14: Practising dentists by hours worked per week, sex and remoteness area, 2006

Hours worked per week	Remoteness area of main practice				Australia
	Major city	Inner regional	Outer regional	Remote/Very remote	
			Male		
<10	77	12	8	—	96
10–19	230	37	11	1	280
20–29	377	63	25	2	467
30–39	1,671	306	127	17	2,121
40–49	2,458	430	178	23	3,089
50–59	742	117	40	3	902
60+	367	46	20	3	436
Total	**5,922**	**1,010**	**408**	**50**	**7,390**
			Female		
<10	84	7	4	1	96
10–19	273	32	10	—	315
20–29	397	51	13	3	465
30–39	812	112	60	13	997
40–49	732	110	38	16	896
50–59	144	16	2	1	163
60+	64	11	5	3	82
Total	**2,506**	**339**	**132**	**37**	**3,014**
			Persons		
<10	160	19	11	1	192
10–19	504	69	21	1	595
20–29	775	114	38	6	932
30–39	2,483	418	187	30	3,118
40–49	3,191	539	216	38	3,984
50–59	886	133	42	4	1,065
60+	430	56	25	6	519
Total	**8,428**	**1,349**	**540**	**87**	**10,404**
			Average hours worked per week		
Male	40.4	39.5	39.6	39.5	40.2
Female	33.8	34.9	35.6	40.0	34.1
Persons	**38.4**	**38.3**	**38.6**	**39.7**	**38.5**

Notes

1. Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.
2: Column/row totals may not sum to total because of rounding of estimates

Table A1.15: Practising dentists by age, sex, average hours worked and remoteness area, 2006

	Remoteness area of main practice				
Age group (years)	**Major city**	**Inner regional**	**Outer regional**	**Remote/Very remote**	**Australia**
			Male		
<30	39.6	38.1	41.4	39.4	39.5
30–39	42.0	40.3	41.3	41.4	41.8
40–49	43.4	43.4	40.8	43.1	43.2
50–59	40.9	40.0	41.2	40.2	40.7
60+	33.4	33.5	32.9	32.1	33.4
Total	**40.4**	**39.5**	**39.6**	**39.5**	**40.2**
			Female		
<30	37.2	39.6	41.6	46.8	38.0
30–39	32.4	33.2	31.7	33.6	32.4
40–49	33.3	31.8	33.4	37.7	33.2
50–59	34.2	33.4	41.6	39.5	34.7
60+	28.6	28.1	24.4	—	28.4
Total	**33.8**	**34.9**	**35.6**	**40.0**	**34.1**
			Persons		
<30	38.4	39.0	41.5	45.0	38.7
30–39	37.9	37.8	37.4	37.7	37.9
40–49	40.3	40.5	38.8	40.7	40.3
50–59	39.6	39.2	41.3	40.0	39.7
60+	33.1	33.3	32.6	32.1	33.1
Total	**38.4**	**38.3**	**38.6**	**39.7**	**38.5**

Note: Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.

Table A1.16: Practising dentists by area of main practice, sex, hours worked and remoteness area, 2006

	Remoteness area				
Area of main practice	**Major city**	**Inner regional**	**Outer regional**	**Remote/Very remote**	**Australia**
			Male		
General practice	4,769	903	367	48	6,087
Registered specialist	849	85	28	—	961
Restricted practice	62	6	4	—	73
Administration	51	5	3	—	59
Teaching/education	118	5	2	—	124
Research	19	1	—	—	20
Other	54	5	5	2	65
Total	**5,922**	**1,010**	**408**	**50**	**7,390**
			Female		
General practice	2,177	326	126	31	2,660
Registered specialist	189	10	1	—	200
Restricted practice	16	—	—	4	20
Administration	15	1	3	—	19
Teaching/education	67	—	—	—	67
Research	11	—	—	—	11
Other	30	2	2	2	37
Total	**2,506**	**339**	**132**	**37**	**3,014**
			Persons		
General practice	6,946	1,229	492	80	8,747
Registered specialist	1,038	94	29	—	1,161
Restricted practice	79	6	4	4	93
Administration	66	6	5	—	77
Teaching/education	185	5	2	—	191
Research	30	2	—	—	31
Other	84	7	7	4	102
Total	**8,428**	**1,349**	**540**	**87**	**10,404**
			Average hours worked per week		
General practice	38.1	38.3	38.6	39.9	38.2
Registered specialist	42.0	40.7	37.2	. .	41.8
Restricted practice	32.0	35.2	32.8	39.0	32.6
Administration	40.8	39.0	39.5	. .	40.6
Teaching/Education	34.3	19.6	60.0	. .	34.3
Research	38.3	34.0	. .	. .	38.1
Other	34.7	40.7	37.8	37.0	35.3
Total	38.4	38.3	38.6	39.7	38.5

Notes

1. Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.

2: Column/row totals may not sum to total because of rounding of estimates

Table A1.17: Practising dentists by remoteness area, age, hours worked and sector, 2006

	Remoteness area of main practice				
	Major city	Inner regional	Outer regional	Remote/Very remote	Australia
			Number practising		
Male	5,922	1,010	408	50	7,390
Female	2,506	339	132	37	3,014
Persons	**8,428**	**1,349**	**540**	**87**	**10,404**
			Percentage		
Percentage female	29.7	25.1	24.4	42.5	29.0
			Average age		
Male	47.4	48.7	48.2	48.0	47.6
Female	39.1	37.3	39.9	37.0	38.9
Persons	**44.9**	**45.8**	**46.1**	**43.3**	**45.1**
			Average total hours worked per week		
Male	40.4	39.5	39.6	39.5	40.2
Female	33.8	34.9	35.6	40.0	34.1
Persons	**38.4**	**38.3**	**38.6**	**39.7**	**38.5**
			Average direct patient care hours worked per week		
Male	34.7	34.6	34.9	35.7	34.7
Female	29.3	31.4	30.9	34.6	29.7
Persons	**33.1**	**33.9**	**33.9**	**35.2**	**33.3**
			Sector of main practice		
Private	7,045	1,119	423	52	8,639
Public	1,287	221	110	30	1,647
Other	96	8	8	6	118

Note: Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.

Table A1.18: Number and practising rate of dentists by state/territory and remoteness areas, 2006

Remoteness area of main practice	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Major city	3,025	2,087	1,476	900	721	—	218	—	8,428
Inner regional	454	299	314	80	51	151	—	—	1,349
Outer regional	78	63	222	63	43	21	—	50	540
Remote/Very remote	4	—	16	27	12	—	—	28	87
Total	**3,561**	**2,449**	**2,028**	**1,071**	**826**	**172**	**218**	**78**	**10,404**
			Rate per 100,000 population						
Major city	61.1	54.4	60.5	61.2	63.3	. .	65.4	. .	59.5
Inner regional	32.7	28.8	35.1	31.4	26.9	47.5	. .	. .	33.1
Outer regional	17.6	25.0	35.9	33.3	23.6	13.1	. .	43.6	27.5
Remote/Very remote	11.7	. .	11.6	19.0	19.8	. .	. .	29.5	17.9
Total	**52.2**	**47.7**	**49.6**	**52.0**	**52.7**	**35.1**	**65.3**	**37.2**	**50.3**

Notes

1. Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.
2: Column/row totals may not sum to total because of rounding of estimates

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Table A1.19: Practising dentists by state/statistical division, number, average hours worked, practising rate and full-time equivalent rate, 2006

					FTE dentists per 100,000 population		
State/statistical division	No.	Number of Dentists	Population	Dentists per 100,000 population	35 hour week	37.5 hour week	40 hour week
NSW							
Sydney	05	2,745	4,284,379	64.1	74.4	69.4	65.1
Hunter	10	204	617,453	33.0	38.3	35.7	33.5
Illawarra	15	141	414,547	33.9	39.4	36.7	34.4
Richmond-Tweed	20	104	229,939	45.2	48.0	44.8	42.0
Mid-North Coast	25	97	297,006	32.5	37.5	35.0	32.8
Northern	30	56	179,775	31.3	36.0	33.6	31.5
North Western	35	31	115,754	26.5	32.5	30.3	28.4
Central West	40	50	178,501	28.1	33.4	31.2	29.2
South Eastern	45	56	207,161	27.1	27.6	25.7	24.1
Murrumbidgee	50	41	154,150	26.6	32.9	30.8	28.8
Murray	55	31	115,614	26.6	29.4	27.4	25.7
Far West	60	7	22,903	28.6	31.2	29.1	27.3
Total		**3,561**	**6,817,182**	**52.2**	**60.4**	**56.4**	**52.9**
Vic							
Melbourne	05	2,011	3,744,373	53.7	56.5	52.7	49.4
Barwon	10	122	269,988	45.2	47.9	44.7	41.9
Western District	15	21	102,386	20.4	23.3	21.8	20.4
Central Highlands	20	61	147,542	41.3	41.0	38.2	35.9
Wimmera	25	10	50,019	21.0	23.9	22.3	20.9
Mallee	30	22	91,854	24.5	30.9	28.8	27.0
Loddon	35	44	175,220	25.4	29.0	27.1	25.4
Goulburn	40	44	202,098	22.0	23.9	22.3	20.9
Ovens-Murray	45	25	96,406	26.2	27.4	25.6	24.0
East Gippsland	50	34	82,952	41.5	46.7	43.5	40.8
Gippsland	55	52	165,472	31.7	35.2	32.8	30.8
Total		**2,449**	**5,128,310**	**47.7**	**50.5**	**47.2**	**44.2**
Qld							
Brisbane	05	1,090	1,820,400	59.9	65.1	60.8	57.0
Gold Coast	07	254	518,059	49.0	54.4	50.8	47.6
Sunshine Coast	09	173	295,125	58.6	60.4	56.4	52.9
West Moreton	12	13	72,713	18.3	22.3	20.8	19.5
Wide Bay-Burnett	15	71	269,340	26.4	28.6	26.7	25.0
Darling Downs	20	92	227,074	40.7	45.5	42.4	39.8
South West	25	4	26,408	14.9	21.5	20.1	18.8
Fitzroy	30	75	200,604	37.6	45.0	42.0	39.4
Central West	35	1	11,565	12.2	20.8	19.5	18.2
Mackay	40	54	159,869	34.0	34.5	32.2	30.2
Northern	45	90	209,588	42.9	47.3	44.1	41.4
Far North	50	105	247,589	42.3	46.1	43.0	40.3
North West	55	5	33,212	16.5	19.5	18.2	17.0
Total		**2,028**	**4,091,546**	**49.6**	**54.2**	**50.6**	**47.4**

(continued)

Table A1.19 (continued): Practising dentists by state/statistical division, number, average hours worked, practising rate and full-time equivalent rate, 2006

					FTE dentists per 100,000 population		
State/statistical division	No.	Number of Dentists	Population	Dentists per 100,000 population	35 hour week	37.5 hour week	40 hour week
SA							
Adelaide	05	714	1,146,119	62.3	64.4	60.1	56.3
Outer Adelaide	10	39	128,922	30.2	30.6	28.5	26.7
Yorke and Lower North	15	9	45,589	20.3	19.5	18.2	17.0
Murray Lands	20	17	69,479	24.5	22.4	20.9	19.6
South-East	25	18	64,615	27.3	29.7	27.8	26.0
Eyre	30	9	34,760	27.3	32.2	30.1	28.2
Northern	35	20	78,720	25.2	24.3	22.7	21.3
Total		**826**	**1,568,204**	**52.7**	**54.3**	**50.7**	**47.5**
WA							
Perth	05	900	1,519,510	59.2	63.1	58.9	55.3
South West	10	85	217,791	39.2	40.3	37.6	35.3
Lower Great Southern	15	26	55,448	47.2	50.9	47.5	44.5
Upper Great Southern	20	10	18,792	54.1	49.6	46.3	43.4
Midlands	25	3	53,234	6.2	8.4	7.8	7.3
South Eastern	30	15	55,604	27.7	31.3	29.2	27.4
Central	35	16	61,328	26.5	27.2	25.4	23.8
Pilbara	40	6	44,333	12.8	15.0	14.0	13.1
Kimberley	45	9	33,005	26.2	29.7	27.7	26.0
Total		**1,071**	**2,059,045**	**52.0**	**55.4**	**51.7**	**48.4**
Tas							
Greater Hobart	05	95	205,566	46.1	48.9	45.6	42.8
Southern	10	1	36,084	4.6	5.5	5.1	4.8
Northern	15	47	138,702	33.6	37.2	34.7	32.5
Mersey-Lyell	20	29	109,570	26.5	27.5	25.7	24.1
Total		**172**	**489,922**	**35.1**	**37.6**	**35.1**	**32.9**
NT							
Darwin	05	50	116,487	43.2	50.1	46.8	43.9
Northern Territory-Bal	10	28	94,187	29.8	36.3	33.9	31.8
Total NT		**78**	**210,674**	**37.2**	**44.0**	**41.1**	**38.5**
ACT							
Canberra	05	218	334,225	65.3	75.5	70.5	66.1
Total ACT		**218**	**334,225**	**65.3**	**75.5**	**70.5**	**66.1**
Australia[(a)]		**10,404**	**20,699,108**	**50.3**	**55.2**	**51.5**	**48.3**

(a) Excludes external territories.

Note: Column/row totals may not sum to total because of rounding of estimates.

A2 Specialist tables

Table A2.1: Practising specialists by hours worked per week, sex and age group, 2006

	Age group (years)					
Hours worked per week	**<30**	**30–39**	**40–49**	**50–59**	**60+**	**Total**
			Male			
<10	2	2	1	—	14	19
10–19	1	12	3	6	33	55
20–29	4	5	9	27	29	73
30–39	1	45	60	90	64	260
40–49	12	56	144	128	46	386
50–59	—	32	68	64	21	186
60+	1	17	48	30	19	116
Total	**22**	**168**	**333**	**345**	**227**	**1,095**
			Female			
<10	—	1	—	1	—	2
10–19	1	10	11	5	—	26
20–29	3	11	12	8	2	36
30–39	3	17	26	17	1	65
40–49	6	26	16	13	—	61
50–59	1	13	8	4	—	26
60+	—	4	6	5	2	16
Total	**15**	**81**	**79**	**53**	**4**	**233**
			Persons			
<10	2	4	1	1	14	21
10–19	2	21	14	10	33	82
20–29	7	16	21	34	31	109
30–39	4	61	87	107	65	325
40–49	19	82	160	141	46	448
50–59	1	44	76	68	21	212
60+	1	20	54	35	21	132
Total	37	249	413	398	232	1,328
			Average hours worked per week			
Male	36.1	42.0	46.0	42.7	35.1	41.9
Female	34.3	37.3	36.6	38.2	35.0	37.1
Persons	**35.3**	**40.4**	**44.2**	**42.1**	**35.1**	**41.1**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A2.2: Practising specialists by sector, age and hours worked, 2006

	Public	Private	Public and private	Total
		Number employed		
Persons	160	931	237	1,328
		Percentage		
% Female	32.3	13.9	21.9	17.5
		Average age (years)		
Male	51.7	50.6	50.0	50.6
Female	42.5	43.1	41.3	42.5
Persons	**48.7**	**49.5**	**48.0**	**49.2**
		Average total hours usually worked per week		
Male	39.0	42.1	42.6	41.9
Female	35.9	37.1	38.2	37.1
Persons	**38.0**	**41.5**	**41.6**	**41.1**
		Average direct patient care hours worked per week		
Male	24.0	35.0	33.7	33.8
Female	28.6	30.3	28.3	29.4
Persons	**25.7**	**34.3**	**32.5**	**33.0**
		Percentage part-time		
Male	30.0	21.9	23.5	23.0
Female	36.9	40.0	32.1	37.5
Persons	**32.2**	**24.4**	**25.4**	**25.5**

Note: Sector of practice was determined by type of work performed at main, second and third practice locations.

Table A2.3: Practising specialists by speciality, sex and state/territory, 2006

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
				Male					
Orthodontics	147	94	91	40	49	10	4	16	450
Periodontics	28	27	24	8	14	3	—	6	111
Prosthodontics	46	46	33	14	18	—	—	—	157
Oral and maxillofacial surgery	58	49	28	16	22	2	—	10	185
Endodontics	25	29	19	12	12	2	2	3	102
Paediatric dentistry	9	9	10	7	6	—	—	2	43
Other[(a)]	10	12	10	8	6	2	—	—	46
All specialists	323	265	215	105	126	18	6	37	1,095
General dental practitioners only	2,257	1,393	1,247	486	648	112	37	115	6,295
Total	**2,580**	**1,658**	**1,462**	**590**	**774**	**130**	**43**	**152**	**7,390**
				Female					
Orthodontics	17	19	18	7	7	1	—	—	69
Periodontics	6	10	9	2	9	—	—	—	36
Prosthodontics	9	1	1	1	—	—	—	—	14
Oral and maxillofacial surgery	5	4	7	1	3	—	—	—	21
Endodontics	6	2	2	1	4	—	—	—	15
Paediatric dentistry	19	20	5	8	2	—	4	—	58
Other[(a)]	6	10	1	4	—	—	—	—	21
All specialists	68	66	45	25	25	1	4	—	233
General dental practitioners only	914	725	522	211	272	40	32	66	2,781
Total	**981**	**791**	**566**	**236**	**297**	**42**	**36**	**66**	**3,014**
				Persons					
Orthodontics	163	113	109	47	56	11	4	16	520
Periodontics	34	37	34	11	22	3	—	6	147
Prosthodontics	56	48	35	15	18	—	—	—	171
Oral and maxillofacial surgery	64	53	35	17	24	2	—	10	206
Endodontics	30	30	21	13	16	2	2	3	117
Paediatric dentistry	28	29	15	15	8	—	4	2	100
Other[(a)]	16	22	11	12	6	2	—	—	67
All specialists	390	331	260	129	151	20	10	37	1,328
General dental practitioners only	3,171	2,118	1,769	697	920	152	69	181	9,076
Total	**3,561**	**2,449**	**2,028**	**826**	**1,071**	**172**	**78**	**218**	**10,404**

(a) Other includes oral pathology, dento-maxillofacial radiology, public health dentistry, special needs dentistry and oral medicine.

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A2.4: Practising specialists by speciality, sex and remoteness area, 2006

	Major city	Inner regional	Outer regional	Remote/Very remote	Australia
Orthodontics	436	61	22	—	520
Periodontics	131	10	6	—	147
Prosthodontics	165	4	1	—	171
Oral and maxillofacial surgery	186	16	3	—	206
Endodontics	110	5	2	—	117
Paediatric dentistry	91	4	1	4	100
Other[(a)]	61	4	2	—	67
All specialists	1,182	105	36	4	1328
General dental practitioners only	7,245	1,243	504	83	9,076
Total	**8,428**	**1,349**	**540**	**87**	**10,404**

(a) Other includes oral pathology, dento-maxillofacial radiology, public health dentistry, special needs dentistry and oral medicine.

Notes

1. Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.
2: Column/row totals may not sum to total because of rounding of estimates

Table A2.5: Practising specialists by speciality and selected characteristics, 2006

	Orthodontics	Periodontics	Prosthodontics	Oral and Maxillo-Facial Surgery	Endodontics	Paedodontics	Other	All Specialists
Average age								
Male	50.7	50.0	51.5	51.5	46.8	47.5	54.0	50.6
Female	41.6	41.5	44.3	46.4	42.9	43.5	39.1	42.5
Persons	49.5	47.9	51.0	51.0	46.3	45.2	49.5	49.2
Average total hours usually worked per week								
Male	40.3	42.7	42.5	45.4	42.9	44.7	35.7	41.9
Female	37.6	32.1	37.0	42.3	37.3	37.8	36.1	37.1
Persons	39.9	40.3	42.1	45.1	42.1	40.8	35.8	41.1
Average direct patient care hours worked per week								
Male	33.2	34.4	31.9	37.9	33.4	33.3	28.3	33.8
Female	31.1	26.0	27.7	34.5	25.1	30.2	26.0	29.4
Persons	32.9	32.5	31.6	37.5	32.2	31.5	27.5	33.0
Sector of practice (percentage of specialists)								
Public	6.3	6.8	17.1	8.7	8.5	37.0	33.8	12.1
Private	82.7	78.2	64.7	67.0	72.6	31.0	32.4	70.1
Public and private	11.0	15.0	18.2	24.3	18.8	32.0	33.8	17.9

A3 Dental hygienist tables

Table A3.1: Registered dental hygienists by work status and state/territory, 2006

Work status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT[(d)]	Australia
					Persons				
Working as hygienist[(a)]	149	120	74	135	154	5	38	n.a.	674
Mainly or only in other state	7	2	2	4	8	—	3	n.a.	26
On extended leave/overseas	7	15	3	15	13	2	—	n.a.	54
Not in paid work	2	7	—	6	3	—	—	n.a.	18
Working but not as an allied practitioner	2	3	—	3	4	—	—	n.a.	12
Total	**167**	**147**	**78**	**163**	**181**	**7**	**41**	**12**	**796**
Employed in state/territory[(a)] (%)	89.3	81.4	94.2	82.9	85.0	71.4	92.3	—	84.7
Proportion female (%)	95.3	98.4	96.2	96.4	98.6	100.0	92.3	—	96.8
Practising rate[(b)]	2.2	2.3	1.8	6.6	9.8	1.0	11.3	—	3.3
Registered hygienists rate	2.4	2.9	1.9	7.9	11.5	1.4	12.3	5.7	3.8
FTE rate (35 hours per week)[(c)]	1.8	2.0	1.5	5.7	7.0	0.9	10.3	—	2.7
FTE rate (37.5 hours per week)[(c)]	1.7	1.9	1.4	5.3	6.5	0.8	9.6	—	2.5
FTE rate (40 hours per week)[(c)]	1.6	1.7	1.3	5.0	6.1	0.8	9.0	—	2.3

(a) Practising solely or mainly in state/territory of registration.

(b) Practising rate is the number of practising hygienists per 100,000 population.

(c) Full-time equivalent hygienists per 100,000 population. Calculated by multiplying the number of practising hygienists by the average weekly hours worked and then dividing by a reference week (35, 37.5 and 40 hours per week have been provided). This value is then population standardised to allow comparisons with other states/territories.

(d) In 2006 there was no survey in the Northern Territory. But 12 hygienists were registered in the NT and were included in the totals.

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A3.2: Practising dental hygienists by age group, average age and state/territory, 2006

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	Australia
				Persons				
<25	6	7	—	23	6	—	3	46
25–29	17	23	6	40	10	—	3	99
30–34	28	25	17	23	23	1	6	124
35–39	30	16	15	15	34	2	9	121
40–44	25	24	18	15	28	2	9	121
45–49	25	15	12	13	23	—	3	91
50–54	12	2	3	6	21	—	3	47
55–59	7	7	2	—	6	—	—	22
60+	—	1	2	—	1	—	—	4
Total	**149**	**120**	**74**	**135**	**154**	**5**	**38**	**674**
				Average age (years)				
Male	42.0	28.5	31.5	37.3	27.5	—	39.0	35.9
Female	39.0	37.3	40.0	32.3	40.6	39.0	38.1	37.8
Persons	**39.1**	**37.1**	**39.7**	**32.6**	**40.4**	**39.0**	**38.2**	**37.7**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A3.3: Practising dental hygienists by age group, average age and remoteness areas of main practice, 2006

	Remoteness area of main practice				
Age (years)	**Major city**	**Inner regional**	**Outer regional**	**Remote/Very remote**	**Australia**
			Persons		
<25	42	1	1	—	44
25–29	87	7	4	—	99
30–34	104	13	5	1	124
35–39	103	13	5	—	121
40–44	109	9	3	—	121
45–49	79	10	4	—	92
50–54	43	5	—	—	47
55–59	19	1	2	—	22
60+	4	—	—	—	4
Total	**589**	**60**	**24**	**1**	**674**
			Average age (years)		
Male	35.9	—	—	—	35.9
Female	37.8	38.0	37.3	31.0	37.8
Persons	**37.7**	**38.0**	**37.3**	**31.0**	**37.7**

Notes

1. Column/row totals may not sum to total because of rounding of estimates.
2. Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.

Table A3.4: Practising dental hygienists by hours worked per week in all locations and state/ territories, 2006

Hours worked per week	**NSW**	**Vic**	**Qld**	**WA**	**SA**	**Tas**	**ACT**	**Australia**
				Persons				
<10	10	6	6	6	16	—	—	43
10–19	20	24	9	21	36	1	—	111
20–29	36	22	14	26	44	1	16	158
30–39	55	49	39	59	50	3	19	274
40–49	26	15	5	21	8	—	—	73
50–59	1	3	—	1	—	—	3	9
60+	1	1	2	1	—	—	—	5
Total	**149**	**120**	**74**	**135**	**154**	**5**	**38**	**674**
				Average hours worked per week				
Male	24.6	38.0	35.0	31.0	38.8	—	20.0	30.0
Female	29.8	29.7	29.0	30.3	24.6	29.7	32.8	28.8
Persons	**29.6**	**29.8**	**29.3**	**30.3**	**24.9**	**29.7**	**31.7**	**28.8**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A3.5: Practising dental hygienists by hours worked per week and remoteness area of main practice, 2006

Hours worked per week	Remoteness area of main practice				Australia
	Major city	Inner regional	Outer regional	Remote/Very remote	
			Persons		
<10	37	5	1	—	43
10–19	98	9	3	—	111
20–29	134	15	9	—	158
30–39	239	23	11	1	274
40–49	71	3	—	—	73
50–59	7	2	—	—	9
60+	3	3	—	—	5
Total	**589**	**60**	**24**	**1**	**674**
			Average hours worked per week		
Male	30.0	—	—	—	30.0
Female	28.8	29.6	26.7	32.0	28.8
Persons	**28.8**	**29.6**	**26.7**	**32.0**	**28.8**

Notes

1. Column/row totals may not sum to total because of rounding of estimates.
2. Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.

Table A3.6: Practising dental hygienists by hours worked per week and age group, 2006

Hours worked per week	Age group (years)					Total
	<30	30–39	40–49	50–59	60+	
			Persons			
<10	4	24	6	7	2	43
10–19	6	42	45	16	1	111
20–29	14	59	66	18	1	158
30–39	91	88	79	17	—	274
40–49	28	22	13	9	—	73
50–59	—	7	1	1	—	9
60+	—	3	3	—	—	5
Total	**143**	**245**	**214**	**69**	**4**	**674**
			Average hours worked per week			
Male	39.0	28.5	29.0	9.0	—	30.0
Female	33.8	27.4	28.0	26.1	15.5	28.8
Persons	**34.0**	**27.4**	**28.0**	**25.8**	**15.5**	**28.8**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A3.7: Practising dental hygienists by sector/ type of main practice and state/territory, 2006

Sector/type of main practice	NSW	Vic	Qld	WA	SA	Tas	ACT	Australia
				Persons				
Public								
School dental service	3	—	—	—	1	—	—	5
Community dental clinic	2	—	2	4	—	—	3	11
Dental hospital	—	—	2	3	3	—	—	6
Teaching institution	3	—	—	3	8	—	—	14
Other	4	—	3	4	3	—	—	13
Total	**13**	**—**	**6**	**13**	**13**	**—**	**3**	**49**
Private								
General practice	103	97	56	97	122	4	16	494
Specialist practice (orthodontic)	19	9	6	19	13	1	6	73
Specialist practice (periodontics)	6	13	6	4	6	—	9	44
Other	8	1	—	1	—	—	3	14
Total	**136**	**120**	**68**	**122**	**141**	**5**	**35**	**625**
Total	**149**	**120**	**74**	**135**	**154**	**5**	**38**	**674**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A3.8: Practising dental hygienists by sector/type of main practice and remoteness area, 2006

	Remoteness area of main practice				
Sector/type of main practice	Major city	Inner regional	Outer regional	Remote/Very remote	Australia
			Persons		
Public					
School dental service	4	1	—	—	5
Community dental clinic	10	—	2	—	11
Dental hospital	6	—	—	—	6
Teaching institution	14	—	—	—	14
Other	12	1	—	—	13
Total	**45**	**2**	**2**	**—**	**49**
Private					
General practice	419	51	22	1	494
Specialist practice (orthodontic)	69	4	—	—	73
Specialist practice (periodontics)	42	2	—	—	44
Other	14	—	—	—	14
Total	**544**	**58**	**22**	**1**	**625**
Total	**589**	**60**	**24**	**1**	**674**

Notes

1. Column/row totals may not sum to total because of rounding of estimates.
2. Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.

Table A3.9: Practising dental hygienists and rate per 100,000 population by state/territory and remoteness area of main practice, 2006

Remoteness area of main practice	NSW	Vic	Qld	WA	SA	Tas	ACT	Australia
Major city	122	105	57	126	141	—	38	589
Inner regional	20	14	9	4	8	5	—	60
Outer regional	7	1	8	4	4	—	—	24
Remote/Very remote	—	—	—	—	1	—	—	1
Total	**149**	**120**	**74**	**135**	**154**	**5**	**38**	**674**
			Rate per 100,000 population					
Major city	2.5	2.7	2.3	8.6	12.4	. .	11.3	4.1
Inner regional	1.5	1.3	1.0	1.7	4.1	1.6	—	1.5
Outer regional	1.5	—	1.2	2.3	2.1	—	. .	1.2
Remote/Very remote	. .	—	—	—	—	—	. .	—
Total	**2.2**	**2.3**	**1.8**	**6.6**	**9.8**	**1.0**	**11.3**	**3.3**

Notes

1. Column/row totals may not sum to total because of rounding of estimates.
2. Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.

A4 Dental therapist tables

Table A4.1: Registered dental therapists by work status and state/territory, 2006

Work status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					Persons				
Working as hygienist[(a)]	225	196	245	286	121	56	19	23	1,171
Mainly or only in other state	3	4	1	4	3	1	—	—	16
On extended leave/overseas	3	7	5	22	9	2	—	2	49
Not in paid work	14	7	3	19	1	1	—	—	45
Working but not as an allied practitioner	32	24	1	33	9	—	1	—	100
Total	**278**	**237**	**255**	**363**	**142**	**60**	**20**	**25**	**1,380**
Employed in state/territory[(a)] (%)	81.1	82.7	96.0	78.7	85.0	93.1	94.7	92.3	84.8
Proportion female (%)	99.6	97.8	99.0	99.3	98.2	94.8	100.0	100.0	98.8
Practising rate[(b)]	3.3	3.8	6.0	13.9	7.7	11.4	5.7	11.0	5.7
Registered therapists rate	4.1	4.6	6.2	17.6	9.1	12.2	6.0	11.9	6.7
FTE rate (35 hours per week)[(c)]	2.8	2.9	4.9	10.6	5.9	9.6	4.8	10.0	4.5
FTE rate (37.5 hours per week)[(c)]	2.6	2.7	4.6	9.9	5.5	8.9	4.5	9.3	4.2
FTE rate (40 hours per week)[(c)]	2.5	2.5	4.3	9.3	5.2	8.4	4.2	8.7	4.0

(a) Practising solely or mainly in state/territory of registration.

(b) Practising rate is the number of practising therapists per 100,000 population.

(c) Full-time equivalent therapists per 100,000 population. Calculated by multiplying the number of practising therapists by the average weekly hours worked and then dividing by a reference week (35, 37.5 and 40 hours per week have been provided). This value is then population standardised to allow comparisons with other states/territories.

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A4.2: Practising dental therapists by age group, average age and state/territory, 2006

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				Persons					
<25	3	15	—	14	4	—	—	2	37
25–29	11	19	4	3	6	3	—	2	47
30–34	23	19	27	14	6	5	—	2	96
35–39	20	38	38	47	16	6	1	2	169
40–44	46	32	68	46	14	8	7	2	222
45–49	79	46	91	105	33	23	6	10	392
50–54	37	20	17	46	31	4	4	4	163
55–59	5	5	—	13	10	5	—	—	39
60+	1	3	1	—	—	1	—	—	6
Total	**225**	**196**	**245**	**286**	**121**	**56**	**19**	**23**	**1,171**
				Average age (years)					
Male	30.0	37.3	38.5	33.0	41.0	45.3	—	—	38.6
Female	43.3	40.3	42.7	43.7	44.6	44.4	44.9	41.8	43.0
Persons	**43.3**	**40.2**	**42.7**	**43.6**	**44.6**	**44.5**	**44.9**	**41.8**	**42.9**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A4.3: Practising dental therapists by age group, average age and remoteness areas of main practice, 2006

	Remoteness area of main practice				
Age (years)	**Major city**	**Inner regional**	**Outer regional**	**Remote/Very remote**	**Australia**
			Persons		
<25	18	11	6	2	37
25–29	26	11	7	3	47
30–34	63	21	9	3	96
35–39	96	44	27	3	169
40–44	142	50	27	3	222
45–49	246	97	47	3	392
50–54	104	36	17	6	163
55–59	30	2	6	—	39
60+	4	1	1	—	6
Total	**728**	**274**	**147**	**21**	**1171**
			Average age (years)		
Males	37.5	38.0	50.0	—	38.6
Females	43.4	42.4	42.3	39.9	43.0
Persons	**43.3**	**42.3**	**42.3**	**39.9**	**42.9**

Notes

1. Column/row totals may not sum to total because of rounding of estimates.
2. Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.

Table A4.4: Practising dental therapists by sex, hours worked per week in all locations and state/territory, 2006

Hours worked per week	**NSW**	**Vic**	**Qld**	**WA**	**SA**	**Tas**	**ACT**	**NT**	**Australia**
				Persons					
<10	5	17	11	24	6	1	1	2	68
10–19	32	52	59	54	31	6	1	2	237
20–29	65	44	48	71	20	22	6	2	278
30–39	72	50	71	128	59	23	11	13	428
40–49	47	28	47	6	1	3	—	4	137
50–59	—	1	1	—	1	—	—	—	4
60+	4	4	6	3	1	1	—	—	20
Total	**225**	**196**	**245**	**286**	**121**	**56**	**19**	**23**	**1171**
				Average hours worked per week					
Male	38.0	39.5	21.0	45.0	15.0	37.8	—	—	33.0
Female	29.8	26.5	28.8	26.6	27.1	28.8	29.8	31.9	27.9
Persons	**29.8**	**26.7**	**28.8**	**26.7**	**26.9**	**29.4**	**29.8**	**31.9**	**28.0**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A4.5: Practising dental therapists by sex, hours worked per week and remoteness area of main practice, 2006

Hours worked per week	Remoteness area of main practice				Australia
	Major city	Inner regional	Outer regional	Remote/Very remote	
<10	48	9	9	3	68
10–19	148	64	23	3	237
20–29	174	67	36	1	278
30–39	259	101	56	12	428
40–49	82	30	21	3	137
50–59	1	1	1	—	4
60+	15	4	1	—	20
Total	**728**	**274**	**147**	**21**	**1,171**
			Average hours worked per week		
Male	35.4	29.1	35.4	—	33.0
Female	27.8	27.7	29.1	28.1	27.9
Persons	**27.9**	**27.7**	**29.1**	**28.1**	**28.0**

Notes

1. Column/row totals may not sum to total because of rounding of estimates.
2. Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.

Table A4.6: Practising dental therapists by sex, hours worked per week and age, 2006

Hours worked per week	Age group (years)					Total
	<30	30–39	40–49	50–59	60+	
			Persons			
<10	1	33	20	14	—	68
10–19	10	88	109	29	—	237
20–29	2	63	169	42	1	278
30–39	47	46	238	92	5	428
40–49	23	28	65	21	—	137
50–59	—	—	3	1	—	4
60+	1	6	10	3	—	20
Total	**85**	**264**	**614**	**201**	**6**	**1,171**
			Average hours worked per week			
Male	—	39.3	27.2	35.4	—	33.0
Female	35.1	22.7	28.8	29.1	33.3	27.9
Persons	**35.1**	**23.0**	**28.8**	**29.1**	**33.3**	**28.0**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A4.7: Dental therapists by sex, sector/type of main practice and state/territory 2006

Sector/type of main practice	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				Persons					
Public									
School dental service	68	75	231	158	107	40	8	19	707
Community dental clinic	102	60	1	1	1	13	9	2	190
Dental hospital	21	4	—	—	1	—	—	—	26
Teaching institution	7	5	—	3	4	—	—	—	18
Other	13	—	1	3	1	—	—	—	18
Total	**210**	**144**	**233**	**164**	**114**	**54**	**18**	**21**	**959**
Private									
General practice	3	25	6	85	3	2	2	2	127
Specialist practice (orthodontic)	11	24	5	29	1	—	—	—	70
Specialist practice (periodontics)	—	—	—	1	—	—	—	—	1
Other	1	1	—	6	3	—	—	—	11
Total	**15**	**50**	**11**	**121**	**6**	**2**	**2**	**1**	**210**
Total	**225**	**196**	**245**	**286**	**121**	**56**	**19**	**23**	**1,171**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A4.8: Practising dental therapists by sector/type of main practice and remoteness area, 2006

	Remoteness area of main practice				
Sector/type of main practice	Major city	Inner regional	Outer regional	Remote/Very remote	Australia
			Persons		
Public					
School dental service	401	176	111	18	707
Community dental clinic	107	63	17	3	190
Dental hospital	23	2	1	—	26
Teaching institution	17	1	—	—	18
Other	14	4	—	—	18
Total	**561**	**248**	**129**	**21**	**959**
Private					
General practice	91	21	16	—	127
Specialist practice (orthodontic)	63	5	3	—	70
Specialist practice (periodontics)	1	—	—	—	1
Other	11	1	—	—	11
Total	**166**	**27**	**18**	**—**	**210**
Total	**728**	**274**	**147**	**21**	**1,171**

Notes

1. Column/row totals may not sum to total because of rounding of estimates.
2. Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.

Table A4.9: Practising dental therapists and rate per 100,000 population by state/territory and remoteness area of main practice, 2006

Remoteness area of main practice	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Major city	138	136	140	216	78	—	19	—	728
Inner regional	69	49	70	38	15	33	—	—	274
Outer regional	18	11	29	28	24	23	—	15	147
Remote/Very remote	1	—	5	4	4	—	—	8	21
Total	**225**	**196**	**245**	**286**	**121**	**56**	**19**	**23**	**1,171**
				Rate per 100,000 population					
Major city	2.8	3.6	5.7	14.7	6.8	. .	5.7	. .	5.1
Inner regional	5.0	4.7	7.8	14.8	8.0	10.4	. .	. .	6.7
Outer regional	3.9	4.2	4.8	14.6	13.2	14.0	. .	13.3	7.5
Remote/Very remote	—	. .	3.6	2.7	6.4	. .	. .	8.1	4.4
Total	**3.3**	**3.8**	**6.0**	**13.9**	**7.7**	**11.4**	**5.7**	**11.0**	**5.7**

Notes

1. Column/row totals may not sum to total because of rounding of estimates.
2. Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.

A5 Oral health therapist tables

Table A5.1: Registered OHTs by work status and state/territory, 2006

Work status	NSW	Vic	Qld	WA	SA	Australia
			Persons			
Working as an OHT	39	41	228	38	26	371
Mainly or only in other state	4	1	3	5	—	12
On extended leave/overseas	1	2	9	—	—	12
Not in paid work	2	2	3	2	—	8
Working but not as an allied practitioner	—	1	4	2	—	6
Total	**46**	**47**	**246**	**45**	**26**	**410**
Employed in state/territory[(a)] (%)	84.4	86.4	92.7	83.3	100.0	90.5
Proportion female (%)	97.8	95.5	93.8	96.7	91.7	94.6
Practising rate[(b)]	0.6	0.8	5.6	1.8	1.7	1.8
Registered therapists rate	0.7	0.9	6.0	2.2	1.7	2.0
FTE rate (35 hours per week)[(c)]	0.5	0.8	5.5	1.3	1.6	1.7
FTE rate (37.5 hours per week)[(c)]	0.5	0.7	5.1	1.2	1.5	1.6
FTE rate (40 hours per week)[(c)]	0.5	0.7	4.8	1.2	1.4	1.5

(a) Practising solely or mainly in state/territory of registration.

(b) Practising rate is the number of practising OHTs per 100,000 population.

(c) Full-time equivalent OHTs per 100,000 population. Calculated by multiplying the number of practising OHTs by the average weekly hours worked and then dividing by a reference week (35, 37.5 and 40 hours per week have been provided). This value is then population standardised to allow comparisons with other states/territories.

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A5.2: Practising OHTs by age group, average age and state/territory, 2006

Age group (years)	NSW	Vic	Qld	WA	SA	Australia
			Persons			
<25	6	7	19	—	10	42
25–29	7	13	36	5	7	67
30–34	3	4	41	9	3	60
35–39	1	9	28	8	2	47
40–44	6	1	47	1	2	58
45–49	11	3	43	9	2	69
50–54	2	3	11	5	—	21
55+	2	—	3	1	—	6
Total	**39**	**41**	**228**	**38**	**26**	**371**
			Average age (years)			
Male	27.0	41.5	32.5	—	31.0	33.0
Female	36.8	32.3	37.5	39.9	29.8	36.6
Persons	**36.5**	**32.8**	**37.2**	**39.9**	**29.9**	**36.4**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A5.3: Practising OHTs by age group and remoteness areas of main practice, 2006

Age (years)	Major city	Inner regional	Outer regional	Remote/Very remote	Australia
			Persons		
<25	35	5	2	—	42
25–29	49	10	7	2	67
30–34	51	6	4	—	60
35–39	37	6	4	—	47
40–44	34	10	14	—	58
45–49	55	13	1	—	69
50–54	13	4	4	1	21
55+	4	2	—	—	6
Total	**277**	**56**	**35**	**3**	**371**
			Average age (years)		
Male	33.2	32.0	—	—	33.0
Female	36.1	38.4	37.2	40.5	36.6
Persons	**35.9**	**38.1**	**37.2**	**40.5**	**36.4**

Notes

1. Column/row totals may not sum to total because of rounding of estimates.
2. Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.

Table A5.4: OHTs by sex, hours worked per week in all locations and state/territory, 2006

Hours worked per week	NSW	Vic	Qld	WA	SA	Australia
			Persons			
<10	—	1	8	8	—	16
10–19	3	4	13	9	—	29
20–29	15	—	38	3	7	63
30–39	12	19	87	14	16	148
40–49	5	13	71	3	3	96
50–59	1	2	8	—	—	11
60+	2	1	4	2	—	8
Total	**39**	**41**	**228**	**38**	**26**	**371**
			Average hours worked per week			
Male	50.0	38.0	40.1	—	29.0	39.1
Female	32.5	35.3	34.2	25.3	34.6	33.2
Persons	**32.9**	**35.4**	**34.5**	**25.3**	**34.0**	**33.4**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A5.5: Practising OHTs by sex, hours worked per week and remoteness area of main practice, 2006

	Remoteness area of main practice				
Hours worked per week	**Major city**	**Inner regional**	**Outer regional**	**Remote/Very remote**	**Australia**
<10	11	4	1	—	16
10–19	27	1	1	—	29
20–29	48	12	3	—	63
30–39	103	27	16	2	148
40–49	70	11	13	1	96
50–59	10	—	1	—	11
60+	8	—	—	—	8
Total	**277**	**56**	**35**	**3**	**371**
	Average hours worked per week				
Male	39.9	35.0	—	—	39.1
Female	32.9	32.5	35.4	39.2	33.2
Persons	**33.3**	**32.6**	**35.4**	**39.2**	**33.4**

Notes

1. Column/row totals may not sum to total because of rounding of estimates.
2. Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.

Table A5.6: Practising OHTs by sex, hours worked per week and age, 2006

	Age group (years)				
Hours worked per week	**<30**	**30–39**	**40–49**	**50+**	**Total**
	Persons				
<10	1	11	4	—	16
10–19	3	12	12	2	29
20–29	7	18	35	3	63
30–39	51	36	49	12	148
40–49	37	25	25	8	96
50–59	6	4	—	1	11
60+	3	3	1	2	8
Total	**108**	**108**	**127**	**28**	**371**
	Average hours worked per week				
Male	39.6	40.6	36.6	—	39.1
Female	37.9	30.0	30.9	37.4	33.2
Persons	**38.0**	**30.7**	**31.1**	**37.4**	**33.4**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A5.7: Practising OHTs by sector/type of main practice and state/territory, 2006

Sector/type of main practice	NSW	Vic	Qld	WA	SA	Australia
			Persons			
Public						
School dental service	4	2	111	6	4	127
Community dental clinic	—	1	3	—	—	4
Dental hospital	—	—	5	—	—	5
Teaching institution	—	3	—	2	—	5
Other	—	—	—	—	—	—
Total	**4**	**6**	**119**	**8**	**4**	**141**
Private						
General practice	26	28	92	18	21	184
Specialist practice (orthodontic)	8	2	11	12	1	35
Specialist practice (periodontics)	—	4	5	—	—	9
Other	1	—	1	—	—	2
Total	**35**	**34**	**110**	**30**	**22**	**230**
Total	**39**	**41**	**228**	**38**	**26**	**371**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A5.8: Practising OHTs by sector/type of main practice and remoteness area, 2006

	Remoteness area of main practice				
Sector/type of main practice	Major city	Inner regional	Outer regional	Remote/Very remote	Australia
			Persons		
Public					
School dental service	68	38	19	3	127
Community dental clinic	2	1	—	—	4
Dental hospital	5	—	—	—	5
Teaching institution	4	—	1	—	5
Other	—	—	—	—	—
Total	**79**	**39**	**20**	**3**	**141**
Private					
General practice	158	14	11	—	184
Specialist practice (orthodontic)	30	3	3	—	35
Specialist practice (periodontics)	8	—	1	—	9
Other	2	—	—	—	2
Total	**199**	**16**	**15**	**—**	**230**
Total	**277**	**56**	**35**	**3**	**371**

Notes

1. Column/row totals may not sum to total because of rounding of estimates.
2. Remoteness areas defined by ASGC (ABS 2008); *Remote/Very remote* includes Migratory areas.

Table A5.9: Practising OHTs and rate per 100,000 population by state/territory and remoteness area of main practice, 2006

Remoteness area of main practice	NSW	Vic	Qld	WA	SA	Australia
Major city	32	37	156	30	23	277
Inner regional	6	2	41	5	2	56
Outer regional	1	1	31	2	1	35
Remote/Very remote	—	—	1	2	—	3
Total	**39**	**41**	**228**	**38**	**26**	**371**
			Rate per 100,000 population			
Major city	0.6	1.0	6.4	2.0	2.0	2.0
Inner regional	0.4	. .	4.6	1.8	. .	1.4
Outer regional	. .	. .	5.0	. .	. .	1.8
Remote/Very remote	. .	. .	. .	. .	. .	0.6
Total	**0.6**	**0.8**	**5.6**	**1.8**	**1.7**	**1.8**

Notes

1. Column/row totals may not sum to total because of rounding of estimates.
2. Remoteness areas defined by ASGC (ABS 2008).

A6 Dental prosthetist tables

Table A6.1: Registered prosthetists by work status and state/territory, 2006

Work status	NSW	Vic	Qld	WA	SA	Tas	ACT	Australia
Only/mainly in this state[(a)]	343	258	145	86	31	44	14	921
Mainly in another state	5	3	—	—	3	—	—	11
Only in another state	18	6	6	—	—	—	—	29
On leave	2	3	—	—	—	—	—	5
Overseas	—	—	3	—	—	—	—	3
Not in paid work	7	1	3	6	—	1	—	19
Working in dentistry but not as a dental prosthetist	37	4	—	6	2	1	—	51
Working but in another industry/profession	5	1	—	10	—	—	—	16
Retired	21	3	—	—	2	—	—	26
Total	**439**	**280**	**156**	**108**	**37**	**46**	**14**	**1,080**
Employed in state/territory[(a)] (%)	78.1	92.3	92.7	79.4	83.3	95.7	100.0	85.2
Proportion female (%)	1.0	1.7	2.0	3.7	—	2.3	37.5	2.2
Practising rate[(b)]	5.0	5.0	3.5	4.2	2.0	9.0	4.2	4.4
Registered prosthetists rate	6.4	5.5	3.8	5.2	2.4	9.4	4.2	5.2
FTE rate (35 hours per week)[(c)]	6.2	6.5	4.4	4.5	2.2	10.6	5.6	5.5
FTE rate (37.5 hours per week)[(c)]	5.8	6.1	4.1	4.2	2.1	9.9	5.2	5.1
FTE rate (40 hours per week)[(c)]	5.4	5.7	3.8	3.9	1.9	9.3	4.9	4.8

(a) Practising solely or mainly in state/territory of registration.

(b) Practising rate is the number of practising prosthetists per 100,000 population.

(c) Full-time equivalent prosthetists per 100,000 population. Calculated by multiplying the number of practising prosthetists by the average weekly hours worked and then dividing by a reference week (35, 37.5 and 40 hours per week have been provided). This value is then population standardised to allow comparisons with other states/territories.

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A6.2: Practising dental prosthetists by type of practice (clinical versus laboratory) and selected characteristics

	Mainly clinical	Mainly laboratory	Mix[(a)]
Male	106	273	449
Female	17	34	42
Persons	**124**	**306**	**491**
		Percentage	
Male	12.8	32.9	54.3
Female	18.3	36.5	45.1
Persons	**13.4**	**33.3**	**53.3**
		Average age	
Male	51.6	48.7	50.1
Female	41.2	42.8	42.9
Persons	**50.1**	**48.1**	**49.5**

(a) Prosthetists classified as practising in both clinical and laboratory settings.

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A6.3: Practising prosthetists by age group, average age and state/territory, 2006

Age group (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	Australia
				Persons				
<30	7	3	—	—	2	—	—	12
30–34	11	16	—	6	—	1	—	34
35–39	37	25	4	3	2	6	—	77
40–44	60	42	17	6	3	8	—	137
45–49	89	59	34	22	8	9	5	227
50–54	41	53	30	19	8	6	4	161
55–59	46	32	24	10	6	8	2	128
60–64	18	10	19	3	2	4	2	57
65–69	16	12	9	6	—	2	—	44
70–74	4	4	1	3	—	—	—	12
75+	14	3	6	6	2	—	2	32
Total	**343**	**258**	**145**	**86**	**31**	**44**	**14**	**921**
				Average age (years)				
Male	49.6	49.3	53.4	55.1	51.6	49.3	56.0	50.8
Female	46.2	39.4	52.7	35.7	36.0	46.8	—	44.2
Persons	**49.2**	**48.4**	**53.3**	**53.0**	**50.8**	**48.8**	**56.0**	**50.1**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A6.4: Practising prosthetists by age group and remoteness areas of main practice, 2006

	Remoteness area of main practice				
Age group (years)	**Major city**	**Inner regional**	**Outer regional**	**Remote/Very remote**	**Australia**
			Persons		
<30	5	6	—	—	12
30–34	19	12	3	—	34
35–39	48	21	6	1	77
40–44	100	30	6	—	137
45–49	158	57	12	—	227
50–54	110	36	15	—	161
55–59	76	44	7	—	128
60–64	37	15	3	1	57
65–69	30	12	1	1	44
70–74	11	1	—	—	12
75+	27	5	—	—	32
Total	**622**	**240**	**54**	**4**	**921**
			Average age (years)		
Male	51.0	50.3	50.2	55.0	50.8
Female	45.7	42.5	34.1	—	44.2
Persons	**50.4**	**49.5**	**48.7**	**55.0**	**50.1**

Notes

1. Column/row totals may not sum to total because of rounding of estimates.

2. Remoteness areas defined by ASGC (ABS 2008).

Table A6.5: Prosthetists by hours worked per week in all locations and state/territory, 2006

Hours worked per week	**NSW**	**Vic**	**Qld**	**WA**	**SA**	**Tas**	**ACT**	**Australia**
				Persons				
<10	5	10	—	6	2	2	—	25
10–19	23	6	6	3	—	1	—	39
20–29	16	23	7	19	5	4	—	74
30–39	57	32	23	16	3	9	4	143
40–49	128	105	62	22	15	19	4	355
50–59	66	49	29	13	3	6	5	170
60+	48	33	19	6	3	3	2	114
Total	**343**	**258**	**145**	**86**	**31**	**44**	**14**	**921**
				Average hours worked per week				
Male	43.8	45.6	44.0	38.6	39.3	44.2	46.4	43.8
Female	36.9	40.2	39.2	30.9	42.0	29.4	—	36.8
Persons	**43.1**	**45.1**	**43.5**	**37.7**	**39.5**	**41.3**	**46.4**	**43.0**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A6.6: Practising prosthetists by sex, hours worked per week and remoteness area of main practice, 2006

	Remoteness area of main practice				
Hours worked per week	**Major city**	**Inner regional**	**Outer regional**	**Remote/Very remote**	**Australia**
			Persons		
<10	22	2	—	—	25
10–19	26	11	—	—	39
20–29	50	19	5	—	74
30–39	101	38	3	—	143
40–49	240	89	23	3	355
50–59	109	44	16	1	170
60+	74	35	5	—	114
Total	**622**	**240**	**54**	**4**	**921**
			Average hours worked per week		
Male	43.5	43.9	46.3	47.5	43.8
Female	36.6	36.8	39.4	—	36.8
Persons	**42.7**	**43.2**	**45.6**	**47.5**	**43.0**

Notes

1. Column/row totals may not sum to total because of rounding of estimates.

2. Remoteness areas defined by ASGC (ABS 2008).

Table A6.7: Practising prosthetists by sex, hours worked per week and age, 2006

	Age group (years)					
Hours worked per week	**<30**	**30–39**	**40–49**	**50–59**	**60+**	**Total**
			Persons			
<10	—	1	9	6	9	25
10–19	—	5	17	6	11	39
20–29	3	11	23	24	12	74
30–39	—	8	48	51	36	143
40–49	5	50	134	118	47	355
50–59	3	16	79	56	16	170
60+	—	20	53	28	14	114
Total	**12**	**111**	**363**	**288**	**146**	**921**
			Average hours worked per week			
Male	42.6	46.1	46.3	43.5	36.5	43.8
Female	—	39.5	35.4	38.0	34.1	36.8
Persons	**42.6**	**44.7**	**44.8**	**43.2**	**36.4**	**43.0**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A6.8: Practising prosthetists by sector/type of main practice and state/territory, 2006

Sector/type of main practice	NSW	Vic	Qld	WA	SA	Tas	ACT	Australia
				Persons				
Public								
Government clinic/laboratory	20	13	20	3	—	7	2	65
Defence forces	—	—	—	—	—	—	—	—
Public education institution	9	4	2	—	—	—	—	15
Total	**28**	**17**	**20**	**3**	**0**	**7**		**79**
Private								
Self-employed	284	206	110	79	25	33	12	750
Employee in private practice	23	27	7	3	6	4	—	71
Employee in commercial laboratory	4	7	1	—	—	—	—	12
Total	**311**	**241**	**117**	**83**	**31**	**37**	**12**	**834**
Other								
Other	4	—	4	—	—	—	—	8
Total	**343**	**258**	**145**	**86**	**31**	**44**	**14**	**921**

Note: Column/row totals may not sum to total because of rounding of estimates.

Table A6.9: Practising prosthetists by sector/type of main practice and remoteness area, 2006

	Remoteness area of main practice				
Sector/type of main practice	Major city	Inner regional	Outer regional	Remote/Very remote	Australia
			Persons		
Public					
Government clinic/laboratory	37	19	8	—	65
Defence forces	—	—	—	—	—
Public education institution	13	—	—	1	15
Total	**51**	**19**	**8**	**0**	**79**
Private					
Self-employed	511	194	43	3	750
Employee in private practice	44	24	3	—	71
Employee in commercial laboratory	11	1	—	—	12
Total	**565**	**218**	**46**	**3**	**834**
Other					
Other	6	2	—	—	8
Total	**622**	**240**	**54**	**4**	**921**

Notes

1. Column/row totals may not sum to total because of rounding of estimates.

2. Remoteness areas defined by ASGC (ABS 2008).

Table A6.10: Practising prosthetists and rate per 100,000 population by state/territory and remoteness area of main practice, 2006

Remoteness area of main practice	NSW	Vic	Qld	WA	SA	Tas	ACT	Australia
Major city	240	183	94	67	23	—	14	622
Inner regional	98	62	33	6	6	35	—	240
Outer regional	5	13	13	13	2	9	—	54
Remote/Very remote	—	—	4	—	—	—	—	4
Total	**343**	**258**	**145**	**86**	**31**	**44**	**14**	**921**
			Rate per 100,000 population					
Major city	4.8	4.8	3.9	4.5	2.0	. .	4.2	4.4
Inner regional	7.1	6.0	3.7	2.5	3.3	11.0	. .	5.9
Outer regional	1.2	5.2	2.1	6.7	. .	5.5	. .	2.8
Remote/Very remote	. .	. .	3.1	. .	. .	. .	. .	0.9
Total	**5.0**	**5.0**	**3.5**	**4.2**	**2.0**	**9.0**	**4.2**	**4.4**

Notes

1. Column/row totals may not sum to total because of rounding of estimates.

2. Remoteness areas defined by ASGC (ABS 2008).

Table A6.11: Average number of completed/repaired dentures in the last week by type and state/territory

Dentures issued	NSW	Vic	SA	WA	Tas	ACT	Australia
Partial dentures completed	3.8	3.4	1.9	0.5	3.4	7.0	3.2
Partial dentures repaired	2.7	2.3	2.8	0.5	2.4	4.3	2.4
Full dentures completed	4.5	5.0	4.9	3.9	5.5	6.0	4.6
Full dentures repaired	3.1	2.4	3.0	3.6	2.1	4.4	3.0

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Appendix B: Questionnaire

B1 Dentist labour force questionnaire

Registration Number

2006 DENTIST LABOUR FORCE DATA COLLECTION

The information you provide is collected by the Australian Institute of Health and Welfare's Dental Statistics & Research Unit. The data collection is part of a national data set agreed by the Australian Health Ministers' Advisory Council to enable appropriate health planning and administration. **Even if you are no longer working in dentistry or have retired from practice, the questionnaire is still applicable.**

CONFIDENTIALITY of your responses is preserved by the Australian Institute of Health and Welfare Act (Section 29), which imposes strict restraints on the form and circumstances of data release, particularly protecting the release of information which could identify an individual.

Please tick the boxes and write responses, where appropriate, in the spaces provided.

1 Please indicate your: (a) Year of birth: 1 9 ☐ ☐ (b) Sex: Male ☐ 1 Female ☐ 2

2 Is your name on the latest dental register in another State or Territory? Yes ☐ 1 No ☐ 2

If yes, please specify the States/Territories of registration by ticking each appropriate box: NSW ☐ Vic ☐ QLD ☐ SA ☐ WA ☐ Tas ☐ NT ☐

3 Are you an Australian citizen?

Yes, Australian citizen ☐ 1 | No, permanent resident ☐ 2 | No, temporary resident ☐ 3

4 Which of the following best describes your current work status?

Working in dentistry		
Only in South Australia	☐ 1	Go to 6
Mainly in South Australia but also in other States/Territories	☐ 2	Go to 6
Mainly in other States/Territories, but also in South Australia	☐ 3	Go to 6
Only in States/Territories other than South Australia	☐ 4	Go to 6
On leave for 3 months or longer (e.g. maternity, long service leave)	☐ 5	Go to 6
Working overseas	☐ 6	Go to 8
Not working in dentistry		
Currently not working	☐ 7	Go to 5
Currently working, but not in dentistry	☐ 8	Go to 5
Retired from regular work	☐ 9	Go to 8

Working in dentistry includes the practice of dentistry or work that is principally concerned with the discipline of dentistry. This includes dental research, administration and the teaching of dentistry.

5 Are you looking for work in dentistry? Yes ☐ No ☐ 4

Either full or part-time ☐ 1 | Full-time ☐ 2 | Part-time ☐ 3

Go to 8

Full-time work is more than 35 hours per week.

6 Please indicate the practice/professional activity you currently perform as a dental practitioner. For each job or area of practice, please state **actual hours worked last week**. If you work in more than one job or practice location, please provide all in descending order of hours worked. If you were on leave last week, provide hours usually worked. *(Exclude travel time between work locations, and unpaid voluntary activities.)*

Location and hours	Main Location	2nd Location	3rd Location
Postcode			
Suburb	.....	.....	.....
Total hours worked per week			
Direct patient care hours per week			
Area of practice			
General practice	☐ 1	☐ 1	☐ 1
Registered specialist	☐ 2	☐ 2	☐ 2
Restricted practice	☐ 3	☐ 3	☐ 3
Administration	☐ 4	☐ 4	☐ 4
Teaching/Education	☐ 5	☐ 5	☐ 5
Research	☐ 6	☐ 6	☐ 6
Other *(please specify)*	☐ 7	☐ 7	☐ 7
	.....	.....	.....
Type of practice			
Private sector Solo	☐ 1	☐ 1	☐ 1
Solo with assistant	☐ 2	☐ 2	☐ 2
Partnership	☐ 3	☐ 3	☐ 3
Associateship	☐ 4	☐ 4	☐ 4
Assistant	☐ 5	☐ 5	☐ 5
Locum	☐ 6	☐ 6	☐ 6
Health fund	☐ 7	☐ 7	☐ 7
Public sector Dental Hospital	☐ 8	☐ 8	☐ 8
Mainly school dental service	☐ 9	☐ 9	☐ 9
Mainly general dental service	☐ 10	☐ 10	☐ 10
Defence forces	☐ 11	☐ 11	☐ 11
Other public	☐ 12	☐ 12	☐ 12
Tertiary education institution	☐ 13	☐ 13	☐ 13
Other Other practice type	☐ 14	☐ 14	☐ 14
(Please specify)	.....	.....	.....

7 If you are a specialist or in restricted practice, please indicate your speciality:

Orthodontics ☐ 1 Periodontics ☐ 2 Prosthodontics ☐ 3 Oral pathology ☐ 4

Oral and maxillofacial surgery ☐ 5 Endodontics ☐ 6 Paedodontics ☐ 7 Dento-maxillofacial radiology ☐ 8

Other Speciality ☐ 9 *(Specify)* .....

8 Your comments are invited: _____

_____

Thank you for your time and contribution.
Please return your completed questionnaire to the Dental Board of South Australia.

B2 Dental hygienist/therapist/dual practitioner questionnaire

2006 DENTAL AUXILIARIES LABOUR FORCE DATA COLLECTION

Registration Number

The information you provide is collected by the Australian Institute of Health and Welfare's Dental Statistics & Research Unit. The data collection is part of a national data set agreed by the Australian Health Ministers' Advisory Council to enable appropriate health planning and administration. **Even if you are no longer working as a dental hygienist, dental therapist or oral health therapist, the questionnaire is still applicable.**

CONFIDENTIALITY of your responses is preserved by the Australian Institute of Health and Welfare Act (Section 29), which imposes strict restraints on the form and circumstances of data release, particularly protecting the release of information that could identify an individual.

Please tick the boxes and write responses, where appropriate, in the spaces provided.

1 Please indicate your: (a) Year of birth: 1 9 ☐ ☐ (b) Sex: Male ☐ 1 Female ☐ 2

2 In which States and Territories does your name appear on the latest dental hygienist/dental therapist register?

Please specify the States/Territories of registration by ticking each appropriate box: NSW ☐ Vic ☐ Qld ☐ WA ☐ SA ☐ Tas ☐ NT ☐ ACT ☐

3 Are you an Australian citizen?

Yes, Australian citizen ☐ 1 No, permanent resident ☐ 2 No, temporary resident ☐ 3

4 Please indicate relevant qualification(s) obtained. Listing your initial qualification first, use **Key A** to indicate the qualification title.

Year of completion	State/Territory where qualification was obtained *(if overseas, specify country)*	Qualification – Use Key A codes *(If other, please specify)*

Key A: Qualification

1. Dental Nurse Certificate
2. Dental Hygiene Certificate
3. Dental Hygiene Associate Diploma
4. Dental Hygiene Associate Degree
5. Dental Therapy Certificate
6. Dental Therapy Diploma
7. Dental Therapy Associate Diploma
8. Dental Therapy Associate Degree
9. Bachelor of Oral Health (BOH)
10. BOH Academic upgrade
11. Other

5 Which of the following best describes your current work status?

Working as a dental auxiliary

- **Mainly** in South Australia ☐ 1
- **Mainly** in South Australia but **also** in other States/Territories ☐ 2
- **Mainly** in other States/Territories but **also** in South Australia ☐ 3
- **Only** in other States/Territories ☐ 4
- **On leave** for 3 months or longer (e.g. maternity, long service leave) ☐ 5
- Working overseas ☐ 6

Not working as a dental auxiliary

- Not in paid work ☐ 7
- Working in dentistry but not as a dental auxiliary ☐ 8
- Working but in another industry/profession ☐ 9

Working as a dental auxiliary includes the clinical practice of dental hygiene, dental therapy or work that is principally concerned with the discipline of dental hygiene/dental therapy. This includes dental research, oral health promotion, administration and teaching.

6 Are you looking for paid work as a dental auxiliary? Yes ☐ No ☐ 4

Either full or part-time ☐ 1 Full-time ☐ 2 Part-time ☐ 3

Full-time is 35 hours per week or more.

7 If at present you work **less** than a **total** of 35 hours per week as a dental auxiliary, please indicate your major reasons for doing so? *(tick as many as applicable)*

Household duties ☐ 1
Child rearing ☐ 2
Other employment ☐ 3
Dental auxiliary work not available ☐ 4
Personal preference ☐ 5
Other *(Please specify)* ☐ 6

.....

8 What is your preferred number of working hours per week? ☐ hours

9 What is your most likely career position in 12 months time? *(tick one option only)*

- ☐ 1 Working as a dental auxiliary full-time
- ☐ 2 Working as a dental auxiliary (part-time)
- ☐ 3 Working only in another profession/industry
- ☐ 4 On 3 months leave or longer
- ☐ 5 Not working/retired
- ☐ 6 Other *(Please specify)* .....

10 Please indicate the practice/professional activity you currently perform as a dental auxiliary. For each job or area of practice, please state **actual hours worked last week**. If you work in more than one job or practice location, please provide all in descending order of hours worked. If you were on leave last week, provide hours usually worked. *(Exclude travel time between work locations, and unpaid voluntary activities.)*

	Main Location	2nd Location	3rd Location	4th Location
Postcode				
Suburb	.....	.....	.....	.....
Position title				
Dental therapist	☐ 1	☐ 1	☐ 1	☐ 1
Oral health therapist	☐ 2	☐ 2	☐ 2	☐ 2
Dental hygienist	☐ 3	☐ 3	☐ 3	☐ 3
Other *(please specify)*	.....	.....	.....	.....
Practice details				
Number of dentists at this location:				
Number of hygienists at this location:				
Number of therapists at this location:				
Type of practice				
Public: school dental service	☐ 1	☐ 1	☐ 1	☐ 1
Public: community dental clinic	☐ 2	☐ 2	☐ 2	☐ 2
Public: dental hospital	☐ 3	☐ 3	☐ 3	☐ 3
Public: teaching institution	☐ 4	☐ 4	☐ 4	☐ 4
Public: other *(please specify)*	☐ 5	☐ 5	☐ 5	☐ 5
	.....	.....	.....	.....
Private: general practice	☐ 6	☐ 6	☐ 6	☐ 6
Private: specialist orthodontic practice	☐ 7	☐ 7	☐ 7	☐ 7
Private: specialist periodontal practice	☐ 8	☐ 8	☐ 8	☐ 8
Private: other *(please specify)*	☐ 9	☐ 9	☐ 9	☐ 9
	.....	.....	.....	.....
Area of practice (duties) and hours worked last week				
Clinical practice – dental therapy				
Clinical practice – dental hygiene				
Oral health promotion				
Chair-side assistance				
Administration/management				
Teaching/education				
Research				
Other *(please specify)*				
	.....	.....	.....	.....

Thank you for your time and contribution.
Please return your completed questionnaire to the Dental Board of South Australia

B3 Dental prosthetists labour force questionnaire

2006 DENTAL PROSTHETIST LABOUR FORCE NATIONAL DATA COLLECTION

Registration Number

The Australian Institute of Health and Welfare Dental Statistics & Research Unit, with the co-operation of State/Territory Dental Health Services and Dental Boards, is conducting a national data collection on the dental prosthetist labour force. This questionnaire contributes to a national data set, which will enable appropriate health planning and administration. **Even if you have retired, or you are no longer working as a Dental Prosthetist, the questionnaire is still applicable.**

CONFIDENTIALITY of your responses is preserved by the Australian Institute of Health and Welfare Act (Section 29), which imposes strict restraints on the form and circumstances of data release, particularly protecting the release of information which could identify an individual.

Please tick the boxes and write responses, where appropriate, in the spaces provided.

1 Please indicate your: (a) Year of birth: 1 9 ☐ ☐ (b) Sex: Male ☐ 1 Female ☐ 2

2 In which States and/or Territories does your name appear on the latest dental prosthetist register?

Please specify the States/Territories of registration by ticking each appropriate box: NSW ☐ Vic ☐ Qld ☐ SA ☐ WA ☐ Tas ☐ ACT ☐

3 Are you an Australian citizen?

Yes, Australian citizen ☐ 1 No, permanent resident ☐ 2 No, temporary resident ☐ 3

4 In what year did you first practise as a dental prosthetist in Australia? ☐ ☐ ☐ ☐

5 Which of the following best describes your current work status?

Working as a dental prosthetist

- Only in South Australia ☐ 1
- Mainly in South Australia but also working in other States/Territories ☐ 2
- Mainly in other States/Territories but also working in South Australia ☐ 3
- Only in States/Territories other than South Australia ☐ 4
- On leave for 3 months or longer (e.g. maternity, long service leave) ☐ 5
- Working overseas ☐ 6

Not working as a dental prosthetist

- Not in paid work ☐ 7
- Working in dentistry but not as a dental prosthetist ☐ 8
- Working but in another industry/profession ☐ 9
- Retired from work ☐ 10

Working as a dental prosthetist includes the technical and clinical practice of dental prosthetics or work that is principally concerned with dental prosthetics. This includes research, administration and teaching/education.

6 Are you looking for paid work in dental prosthetics? Yes ☐ No ☐ 4

Either full or part-time ☐ 1 Full-time ☐ 2 Part-time ☐ 3

Full-time is 35 hours per week or more.

7 If at present you work **less** than a **total** of 35 hours per week, please indicate your reasons for doing so? *(Tick as many as applicable)*

- Household duties ☐ 1
- Insufficient work available in dental prosthetics ☐ 2
- Further study ☐ 3
- Illness ☐ 4
- Preference ☐ 5
- Other *(Please specify)* ☐ 6

8 Please indicate the practice/professional activity you currently perform as a dental prosthetist. For each job or area of practice, please state **actual hours worked last week**. If you work in more than one job or practice location, please provide all in descending order of hours worked. If you were on leave last week, provide hours usually worked. *(Exclude travel time between work locations, and unpaid voluntary activities.)*

	Main Location	Second Location	Third Location
Postcode	☐☐☐☐	☐☐☐☐	☐☐☐☐
Suburb	.....	.....	.....
Type of practice			
Self-employed	☐ 1	☐ 1	☐ 1
Employee in private practice	☐ 2	☐ 2	☐ 2
Employee in commercial laboratory	☐ 3	☐ 3	☐ 3
Government clinic/laboratory	☐ 4	☐ 4	☐ 4
Defence forces	☐ 5	☐ 5	☐ 5
Public education institution	☐ 6	☐ 6	☐ 6
Other *(Please specify)*	☐ 7	☐ 7	☐ 7
	.....	.....	.....
Area of practice and hours worked per week			
Clinical	☐☐ hours	☐☐ hours	☐☐ hours
Laboratory	☐☐ hours	☐☐ hours	☐☐ hours
Teaching/education	☐☐ hours	☐☐ hours	☐☐ hours
Administration/management	☐☐ hours	☐☐ hours	☐☐ hours
Research	☐☐ hours	☐☐ hours	☐☐ hours
Other *(Please specify)*	☐☐ hours	☐☐ hours	☐☐ hours
	.....	.....	.....
Dentures issued			
Note: **Issued** refers to dentures fitted in a clinical setting	Partial dentures / Full dentures	Partial dentures / Full dentures	Partial dentures / Full dentures
Estimate the number of new dentures issued in the past week:	☐ / ☐	☐ / ☐	☐ / ☐
Estimate the number of repaired dentures issued in the past week:	☐ / ☐	☐ / ☐	☐ / ☐

Thank you for your time and contribution.
Please return completed questionnaire to the Dental Board of South Australia.

Appendix C: Estimated resident population by state/territory and remoteness area, 2006

	ASGC remoteness area					
State/territory	**Major city**	**Inner regional**	**Outer regional**	**Remote**	**Very remote**	**Total**
NSW	4,948,210	1,386,434	444,533	33,241	4,765	6,817,182
Vic	3,835,851	1,036,976	250,641	4,842	—	5,128,310
Qld	2,439,376	894,483	617,203	89,020	51,464	4,091,546
WA	1,471,372	256,118	190,359	92,494	48,700	2,059,045
SA	1,139,433	188,742	180,990	45,565	13,474	1,568,204
Tas	—	316,943	162,743	7,652	2,584	489,922
ACT	333,719	506	—	—	—	334,225
NT	—	—	115,379	45,908	49,388	210,674
Australia	**14,167,961**	**4,080,202**	**1,961,849**	**318,721**	**170,375**	**20,699,108**

Note: Remoteness areas defined by ASGC (ABS 2008).

Source: AIHW Population database 2009.

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List of tables

List of figures

List of boxes

Australian Government
Australian Institute of Health and Welfare

Dental workforce 2011

NATIONAL HEALTH WORKFORCE SERIES No. 4

Australian Government

Australian Institute of Health and Welfare

Authoritative information and statistics to promote better health and wellbeing

Dental workforce 2011

Australian Institute of Health and Welfare
Canberra

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Contents

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An Australian Government Initiative

HealthWorkforce AUSTRALIA

The work force survey data was provided by the Australian Health Practitioner Regulation Agency.

Australian Health Practitioner Regulation Agency

Abbreviations

ABS	Australian Bureau of Statistics
ADC	Australian Dental Council
AHMAC	Australian Health Ministers Advisory Council
AHPRA	Australian Health Practitioner Regulation Agency
AIHW	Australian Institute of Health and Welfare
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ASGC	Australian Standard Geographical Classification
ASGC RA	Australian Standard Geographical Classification Remoteness Area
DBA	Dental Board of Australia
DSRU	Dental Statistics Research Unit
FTE	full-time equivalent
HWA	Health Workforce Australia
NCVER	National Centre for Vocational Education Research
NHWDS	National Health Workforce Data Set
NRAS	National Registration and Accreditation Scheme
OHT	oral health therapists
OMFS	oral and maxillofacial surgery
TTMRA	Trans-Tasman Mutual Recognition Arrangement

Symbols

<	less than
+	and over
—	nil or rounded to zero
–	negative or minus value
. .	not applicable (category/data item does not apply)
n.a.	not available
n.p.	not published (data cannot be released due to quality issues, confidentiality or permission not granted)

Technical notes

1. Numbers in tables may not sum to the totals shown due to the estimation procedure to adjust for non-response (see Appendix A). As a result, the estimated numbers of dental practitioners may be in fractions, but are rounded to whole numbers for publication.
2. Percentages in tables may not sum to 100 due to rounding.
3. *Italic* type within a table denotes a subtotal.
4. Explicit references to categories of data items are in quotation marks.

Summary

This report presents information on the dental workforce, based on estimates derived from the new National Health Workforce Data Set: dental practitioners 2011, the first for this profession. The data set contains information on the demographic and employment characteristics of dental practitioners (dentists, dental hygienists, dental prosthetists, dental therapists and oral health therapists) registered in Australia in 2011. Data are collected via registration forms and a survey instrument administered by the Australian Health Practitioner Regulation Agency, in conjunction with the annual registration renewal process for dental practitioners.

Size of dental workforce

- In 2011, the total number of dental practitioners registered in Australia was 18,803, of whom 14,179 were dentists.
- Between 2006 and 2011, the number of dentists employed in dentistry increased by 22.4%, from 10,404 to 12,734.
- In 2011 there were also 1,065 dental hygienists, 1,044 dental therapists, 1,088 dental prosthetists and 994 oral health therapists employed in their fields.

Demography

- Just over one-third of employed dentists in 2011 were women (35.6%), an increase from 29.0% in 2006.
- Employed oral health therapists, dental hygienists and dental therapists were substantially more likely to be women (87.9%, 96.1% and 97.1%, respectively).
- Dental prosthetists were much more likely to be men. Women made up 14.2% of the workforce, an increase from 10.0% in 2006.
- Dentists employed in 2011 had an average age of 43.5 years (slightly down from 45.1 years in 2006) and 23% were aged 55 or over. Employed oral health therapists, dental hygienists, dental therapists and dental prosthetists were 32.6, 37.4, 46.3 and 49.3 years old on average, respectively.

Working arrangements

- Dentists worked, on average, 37.4 hours per week in 2011, with 29.9% working part time (less than 35 hours a week). This is a slight decrease from 38.5 hours per week in 2006.
- About four-fifths of employed dentists were working in private practice (81.2% of clinicians and 78.2% of all employed dentists). Two-thirds of dentists in private practice were working in group practices.
- There were 1,426 dentists working as specialists. Orthodontics was the most common specialty (567 dentists). Most specialists worked in private practice in *Major cities*.
- *Major cities* had more dentists per capita than other areas in 2011 at 64.1 full-time equivalent (FTE) dentists per 100,000 population. Between 2006 and 2011, the number of dentists increased in all geographical areas.

1 Introduction

This report provides data on the Australian dental workforce in 2011, and is the first report on this profession to use information from the new National Health Workforce Data Set (NHWDS): dental practitioners 2011. The NHWDS combines data from the National Registration and Accreditation Scheme (NRAS) with health workforce data collected via an optional survey at the time of annual registration renewal.

The mandatory registration process is administered by the Australian Health Practitioner Regulation Agency (AHPRA). A range of additional demographic and workforce information was collected in an optional survey at the same time as registration renewal occurred.

Where the data allow, this report compares the 2011 results with estimates derived from surveys conducted in earlier years. Registration data from the now superseded state and territory dental boards and councils are also presented to provide time series information where possible.

Box 1.1: Who are dental practitioners?

Dental practitioners diagnose and treat dental disease, restore normal oral function using a broad range of treatments, such as surgery and other specialist techniques, and advise on oral health. Dental practitioners include the following groups of professionals:

Dentists diagnose and treat dental disease, injuries, decay and malformations of the teeth, periodontal tissue (gums), hard and soft tissue found on the mouth and other dento-facial structures using surgery and other techniques.

Dental hygienists carry out preventative dental procedures under the direction of a dentist.

Dentist prosthetists are responsible for the construction and fitting of dentures and sporting mouthguards. They maintain, repair and reline dentures either by direct consultation with a patient or by referral from a dentist.

Dental therapists examine and treats diseases of the teeth in preschool, primary and secondary school children under the general supervision of a dentist. A dental therapist can specialise as an oral health specialist.

Oral health therapists is a new dental profession representing those dual qualified as hygienists and therapists, more recently qualified in a newly introduced Bachelor degree in Oral Health Therapy. Oral health therapists provide a wide range of dental care in a variety of settings to children, adolescents and adults.

Sources: ABS 2006; ABS 2009; DBA 2012; AIHW 2012.

1.1 Dental practitioners in Australia

In Australia, dental practitioners are trained to diagnose and treat dental disease, provide supportive services in preventive and restorative dental procedures, and construct and repair dental appliances (see Box 1.1 and Glossary).

Box 1.2: The Dental Board of Australia

The Dental Board of Australia (the National Board or the DBA) is the national dental regulator in Australia. It is established under the Health Practitioner Regulation National Law, as in force in each state and territory (the National Law) (DBA 2012).

The functions of the DBA include:

- registering dental practitioners and students
- developing standards, codes and guidelines for the dental profession
- handling notifications, complaints, investigations and disciplinary hearings
- assessing overseas trained practitioners who wish to practice in Australia
- approving accreditation standards and accredited courses of study.

The DBA has established state and territory boards to support its work in the national scheme. The DBA sets policy and professional standards, and the state and territory boards continue to make individual notification and registration decisions affecting individual dental practitioners, based on the national policies and standards (AHPRA 2011c).

The standards relevant to dental practitioners are available at the Dental Board of Australia website, <http://www.dentalboard.gov.au/Codes-Guidelines/Policies-Codes-Guidelines.aspx>.

1.2 National registration of dental practitioners

All dental practitioners must be registered with the AHPRA to practise in Australia. This applies to both those who trained in Australia and overseas. The AHPRA manages the NRAS, which replaced jurisdiction-based registration with a single national registration and accreditation system for health professionals in July 2010. As part of this scheme, the AHPRA supports National Health Practitioner Boards that are responsible for regulating registered health professions under nationally consistent legislation. Registration for each profession is granted by the relevant boards, subject to applicants meeting the standards and policies set by each. The outcome of an application is either 'registration', 'registration with conditions' or 'rejection'.

At its introduction, the NRAS covered registration for 10 health professions; with an additional four included from 1 July 2012 (see Box 1.3). The type of registration held by dental practitioners determines (or limits) the work they are licensed to perform. Registration is granted to dental practitioners who have fulfilled the full requirements of the Dental Board of Australia to practise. It permits dental practitioners to work unsupervised in their field. If a dental practitioner does not meet the requirements to become registered, they may obtain a registration with conditions—such as completion of further education or training within a specified period, or a specified period of supervised practice.

Box 1.3: Which professions are included in the National Registration and Accreditation Scheme?

Since 1 July 2010, the following 10 professions have been regulated under the scheme:

- chiropractors
- dental practitioners (including dentists, dental hygienists, dental prosthetists, oral health therapists and dental therapists)
- medical practitioners
- nurses and midwives
- optometrists
- osteopaths
- pharmacists
- physiotherapists
- podiatrists
- psychologists.

On 1 July 2012, the following four health professions were included in the scheme:

- Aboriginal and Torres Strait Islander health practitioners
- Chinese medicine practitioners
- medical radiation practitioners
- occupational therapists.

Source: AHPRA 2011b.

Although AHPRA registration data are used, the information provided in this report focuses on dental practitioners who make up the workforce; thus, most of the data exclude those not actively working in the dental profession. For this reason, figures in this report are not directly comparable with those on the number of registered dental practitioners released by the AHPRA (see Appendix B).

1.3 Dental Workforce Survey

Access to reliable, comprehensive, timely and nationally consistent trend data is required to understand the current health labour force and for workforce planning. The size, distribution and expertise of the health workforce are of keen interest to governments, educators, health-care providers and the community. There is particular interest in changes to the size and composition of the various health professions, and the potential impacts of these changes on health-care delivery.

Recognising this, the Australian Health Ministers Advisory Council (AHMAC) commissioned the Australian Institute of Health and Welfare (AIHW) in 1990 to develop national health labour force statistics on the major registrable health professions. Dental practitioners were identified as one of the key health professions for which ongoing information should be collected for monitoring and planning purposes. These practitioners have been the focus of a regular survey and AIHW report every 3 years. The most recent surveys were conducted in 2003, 2006 and 2009.

Before 2011, the National Dental Labour Force Collection was managed by each state and territory health authority, with a questionnaire administered by the dental board (or council) in each jurisdiction as part of the registration renewal process. Under agreement with the Health Workforce Principal Committee of the AHMAC, the AIHW Dental Research and Statistics Unit (DSRU) cleaned, collated and weighted the state and territory survey results to obtain national estimates of the total dental workforce, and reported the findings.

In 2010, the NRAS was introduced and the National Dental Labour Force Collection was replaced with the Dental Workforce Survey. The new national survey is administered by the AHPRA and included as part of the registration renewal process.

The survey is used to provide nationally consistent estimates of the dental workforce. It provides data not readily available from other sources, such as on the type of work done by, and job setting of, dental practitioners; the number of hours worked in a clinical or non-clinical role, and in total; and the numbers of years worked in, and intended to remain in, the dental workforce. The survey also provides information on those registered dental practitioners who are not undertaking clinical work or who are not employed.

The overall response rate was 80.3%. Of these respondents, 84.5 % completed the survey online and 15.5 % used the paper form.

Responses to the survey have been weighted to benchmark figures to account for non-response. The benchmarks used are the numbers registered by combinations of division of registration in each state and territory (using principal address) by sex and age group.

Past and present surveys have different collection and estimation methodologies and questionnaire designs. As a result, care should be taken in comparing historical data from the National Dental Labour Force Collection with data from the Dental Workforce Survey 2011.

A detailed description of the Dental Workforce Survey 2011, including a summary of changes from the 2009 National Dental Labour Force Collection and data collected, is in Appendix A.

1.4 Additional information

Before the introduction of the NRAS in 2010, dental practitioner registration numbers were published in annual reports of state and territory dental boards or councils. These figures are now published by the AHPRA (see Appendix B), and are available from the AHPRA website at <http://www.ahpra.gov.au/>.

An electronic version of this report is available from the AIHW website at <http://www.aihw.gov.au/workforce-publications/> (select link to *Dental workforce 2011*). Additional data tables from the NHWDS: dental practitioners 2011 are also available from the website.

2 Composition of the dental workforce

In 2011, the total number of dental practitioners registered in Australia was 18,803, predominantly composed of dentists (75.4%). Dental therapists comprised 6.2% of the workforce, prosthetists 6.1%, hygienists 6.4% and OHTs 5.9%. Between 2003 and 2011, the number of registered dentists has grown by 24.3% and the number of registered dental prosthetists by 8.3% (tables A.3 and 2.1).

Because of the advent of oral health therapists (who have dual qualifications/registrations as dental hygienists and dental therapists) and some issues with potential double counting in earlier years, the separate trends for oral health therapists, dental hygienists and dental therapists are not as clear.

For data reported for 2011, where practitioners have multiple registration they are assigned to a single category on the basis of the highest category in the table below. For example, a person with dual registration as a dentist and an oral health therapist is regarded as a dentist, and a person with a dual registration as a dental therapist and a dental prosthetist is regarded as a dental therapist. However, for OHTs this is not the case, as persons with dual dental hygienist, dental therapist registration were regarded as oral health therapists.

Table 2.1: Registered dental practitioner type, number, 2003 to 2011

Practitioner type	2003[(a)]	2006[(a)]	2009[(a)]	2011
Dentists	10,921	11,686	12,941	14,179
Oral health therapists[(b)]	. .	397	651	1,108
Dental hygienists[(c)]	686	770	1,031	1,206
Dental therapists	1,559	1,364	1,383	1,165
Dental prosthetists[(c)]	1,034	1,039	1,157	1,145

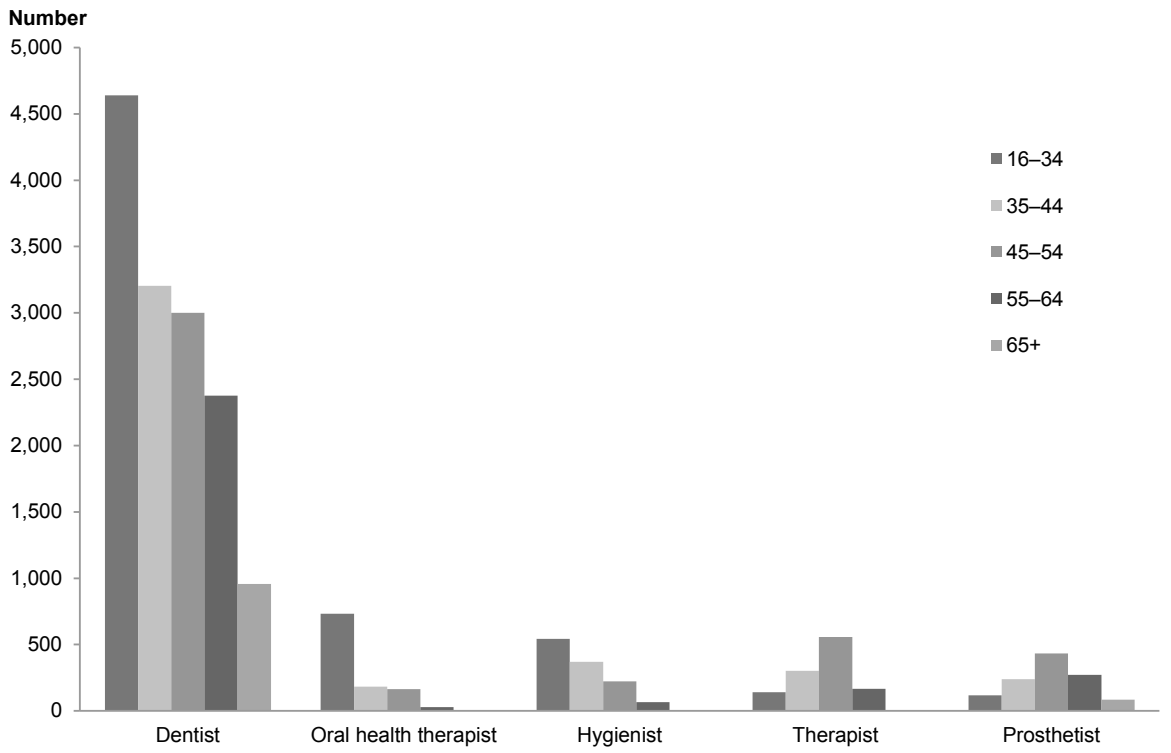
(a) Excludes multi-state registrations.

(b) Oral health therapists are not separately enumerated in 2003. Practitioners with dual qualifications/registrations are counted separately in dental hygienists and dental therapists. 2006 data excludes Tasmania, Australian Capital Territory and Northern Territory.

(c) 2006 data excludes the Northern Territory.

Sources: National Dental Labour Force Collection, 2003, 2006 and 2009; NHWDS: dental practitioners 2011.

The age profiles of oral health professionals varied, with oral health therapists concentrated in the youngest categories and the number of dental prosthesists peaking in the 45–54 year old age group (Figure 2.1).



Source: NHWDS: dental practitioners 2011.

Figure 2.1: Registered dental practitioners, by dental practitioner type and age group, 2011

The number of registered dentists per 100,000 population ranged from 70.7 in *Major cities* down to 27.3 in *Remote/Very remote* areas. Dental prosthetists on the other hand were relatively more common in *Inner regional* areas (5.7 per 100,000 population) with very low numbers in *Remote/Very remote* areas (0.4 per 100,000 population) (Table 2.2).

Table 2.2: Registered dental practitioners per 100,000 population, by remoteness area[(a)] and dental practitioner type, 2011

Practitioner type	Major cities	Inner regional	Outer regional	Remote/ Very remote[(b)]	Australia[(c)]
Dentists	70.7	45.8	36.3	27.3	63.5
Oral health therapists	5.2	4.5	4.3	2.8	5.0
Dental hygienists	6.4	3.1	2.7	1.0	5.4
Dental therapists	4.5	6.6	7.7	6.3	5.2
Dental prosthetists	5.3	5.7	3.7	0.4	5.1

(a) Derived from remoteness area of main job where available; otherwise, remoteness area of principal practice is used as a proxy. If remoteness area details are unavailable, remoteness area of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(b) Includes Migratory areas.

(c) Includes dental practitioners who did not state or adequately describe their location and those who were overseas.

Source: NHWDS: dental practitioners 2011.

The number of registered dentists per 100,000 population ranged from 68.2 in the Australian Capital Territory to 40.0 in Tasmania. Dental prosthetists, on the other hand, were relatively more prevalent in Tasmania (10.0), with the lowest concentration in the Northern Territory (2.2). The distribution of the other three categories is complicated by the extent that the relatively new category of oral health therapists has been taken up, so, for example, Tasmania and Western Australia have relatively low numbers of oral health therapists and higher numbers of dental therapists (Table 2.3).

Table 2.3 Registered dental practitioners per 100,000 population, by practitioner type, states and territories[(a)], 2011

Practitioner type	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia[(b)]
Dentists	65.0	60.5	60.7	62.1	65.7	40.0	68.2	44.8	63.5
Oral health therapists	2.8	4.6	9.6	2.3	8.1	0.6	4.6	4.8	5.0
Dental hygienists	4.9	3.0	2.6	11.2	13.5	2.7	13.8	3.0	5.4
Dental therapists	3.4	3.2	4.7	14.4	6.5	11.0	3.5	7.4	5.2
Dental prosthetists	5.7	5.8	4.8	3.4	2.7	10.0	4.1	2.2	5.1

(a) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(b) Includes dental practitioners who did not state or adequately describe their state or territory and those who were overseas.

Source: NHWDS: dental practitioners 2011.

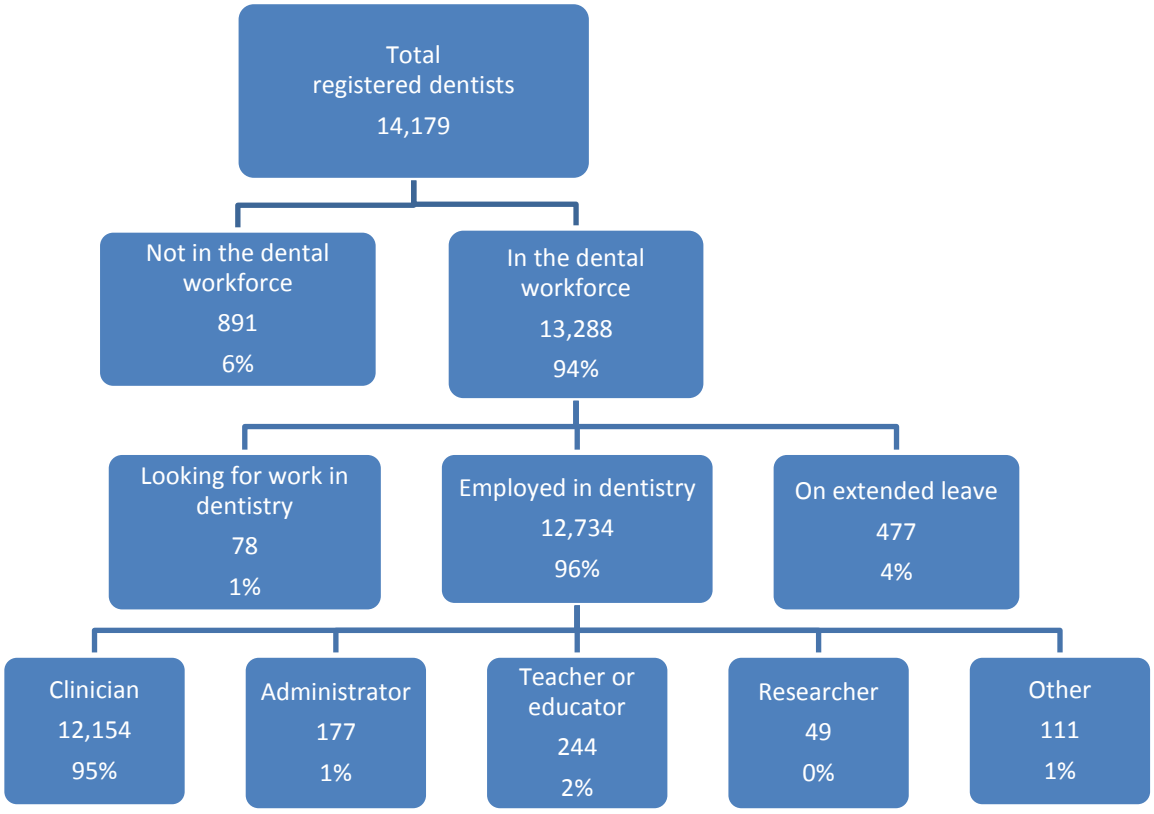
3 Dentists

3.1 Registered dentists

3.1.1 At a glance

	In 2011, there were 14,179 registered dentists, 12,734 of whom were employed in dentistry.
	Just over one-third of dentists were women.
	Dentists had an average age of 43.5 years. Dentists aged 55 and over made up 23% of the workforce.
	Dentists worked, on average, 37.4 hours per week. Dentists working part-time (less than 35 hours a week) made up 29.9% of the workforce.
	1,426 dentists worked as specialists. Orthodontics was the most common specialty.
	542 Australians started studying to be a dentist and 362 completed qualifications as dentists in 2011.

Source: NHWDS: dental practitioners 2011.



Source: NHWDS: dental practitioners 2011.

Figure 3.1: Dentists: workforce status, 2011

3.1.2 Workforce status

The number of registered dentists in 2011 was 14,179 (Figure 3.1). This figure is the number of practitioner registrations provided by the AHPRA from the NRAS, which notionally closed on 30 November 2011.

Between 2006 and 2011, the number of dentists employed in dentistry increased by 22.4%, from 10,404 to 12,734 (Table 3.1).

Changes to the new nationally standardised survey questionnaire have resulted in a slight change in the pattern of responses to the employment-related questions. As such, comparing data over time should be done with caution. (See Appendix A for further information on changes to the employment-related questions.)

Table 3.1: Dentists: workforce status, 2006, 2009 and 2011

Workforce status	2006	2009	2011	Change between 2006 and 2011 (per cent)
In the dental workforce	**10,805**	**12,041**	**13,288**	**23.0**
Employed in dentistry	10,404	11,882	12,734	22.4
Looking for work in dentistry	*87*	*59*	*78*	*–10.9*
Employed elsewhere	n.a.	n.a.	11	. .
Not employed	n.a.	n.a.	66	. .
On extended leave	313	100	477	52.3
Not in the dental workforce	**881**	**900**	**891**	**1.1**
Overseas	336	418	464	38.2
Not looking for work in dentistry[(a)]	*319*	*301*	*261*	*–18.2*
Employed elsewhere	95	115	112	17.7
Not employed	224	186	149	–33.5
Retired from regular work	226	181	165	. .
Total dentists[(a)]	**11,686**	**12,941**	**14,179**	**21.3**
Multiple registrations	526	670	. .	. .
Total registrations	**12,212**	**13,611**	. .	. .

(a) For 2006 and 2009, dentists may have been registered in more than one state or territory; this figure accounts for this potential source of double counting. See Appendix A for further information.

Sources: National Dental Labour Force Collection, 2006 and 2009; NHWDS: dental practitioners 2011.

There was some movement between the number not looking for work in dental health and the response category of 'Retired from regular work' between 2006 and 2009 (Table 3.1).

The proportion of registered dentists who are employed in dentistry ranges from 93.0% in Queensland to 90.7% in New South Wales Australia (Table 3.2). The Australian percentage is lower than all the states and territories due to the inclusion of dentists registered in Australia who were overseas and were not included in any state or territory total.

Table 3.2: Dentists: workforce status and principal role of main job, state and territory[(a)], 2011

Workforce status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia[(b)]
In the dental workforce	**4,433**	**3,226**	**2,627**	**1,400**	**1,043**	**196**	**239**	**100**	**13,288**
Employed in dentistry	*4,252*	*3,098*	*2,526*	*1,331*	*1,000*	*187*	*231*	*96*	*12,734*
Clinician	4,092	2,959	2,412	1,269	915	183	224	87	12,154
Non-clinician	160	140	114	62	85	4	7	9	581
On extended leave or looking for work in dentistry	182	127	101	70	43	9	8	4	554
Not in the dental workforce	**253**	**123**	**89**	**60**	**34**	**9**	**12**	**4**	**891**
Total registered dentists	**4,687**	**3,349**	**2,716**	**1,460**	**1,077**	**204**	**251**	**104**	**14,179**

(a) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(b) Data include dentists who did not state or adequately describe their state or territory, and dentists who were overseas. Therefore, state and territory totals may not sum to the national total. In particular, the total for 'Not in the dental workforce' is noticeably higher than the sum of the state and territory figures due to dentists working overseas.

Source: NHWDS: dental practitioners 2011.

As outlined previously, the data transitioned from state- and territory-based systems to a national registration system in 2010. This has had consequences for the way data have been able to be reported by state and territory. Before the NRAS was introduced, data were reported by state of registration. With the new system, data in this report are being reported on the basis of the most current address at the time the survey was undertaken, unless stated otherwise.

To reflect the most recent contact address, the state and territory used in the report (referred to as current address) is derived from the location of the main job for dentists, or the location of the principal practice if their main job location was unavailable, or their residence address if the main job and principal practice locations were not available (see Appendix A). For example, if a dentist had a principal practice address in Sydney but worked for the week before the survey in the Northern Territory, they would be included in Northern Territory data for workplace location in this report. This change greatly enhances the accuracy of data reported for some areas where the turnover of dentists between jurisdictions was high. Notably, 9.4% more dental practitioners have the Northern Territory as their state of main job in the week before the survey than have it as their principal practice location.

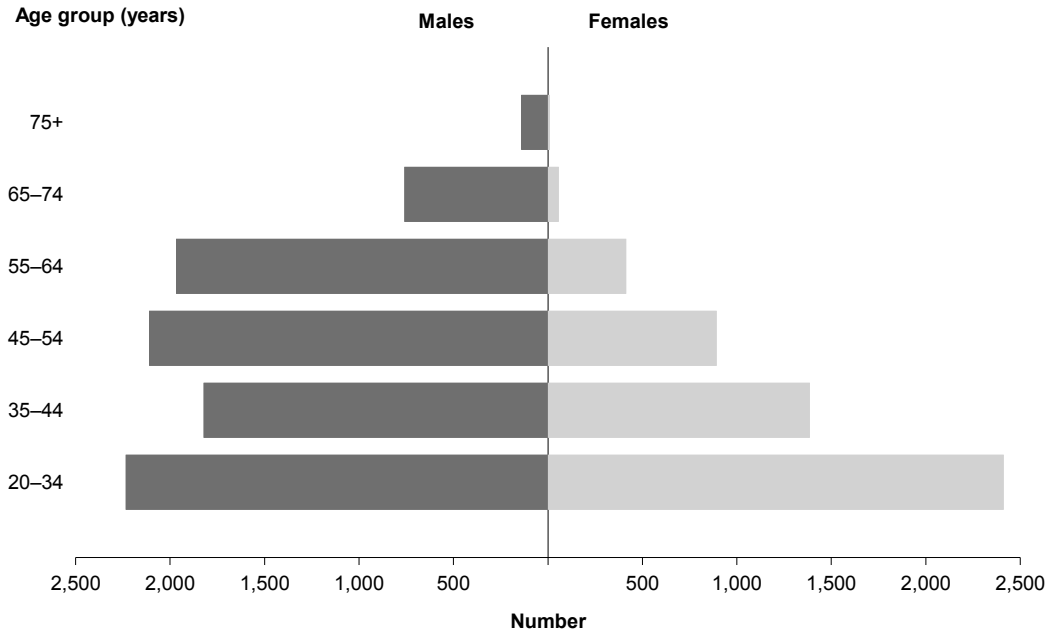
3.2 Dentists employed in dentistry in Australia

A dentist who reported working in dental health in the week before the survey is considered to have been employed in dentistry, or to be an employed dentist, at the time of the survey (see Glossary).

The characteristics and supply of dentists employed in Australia are the focus of the remainder of this section.

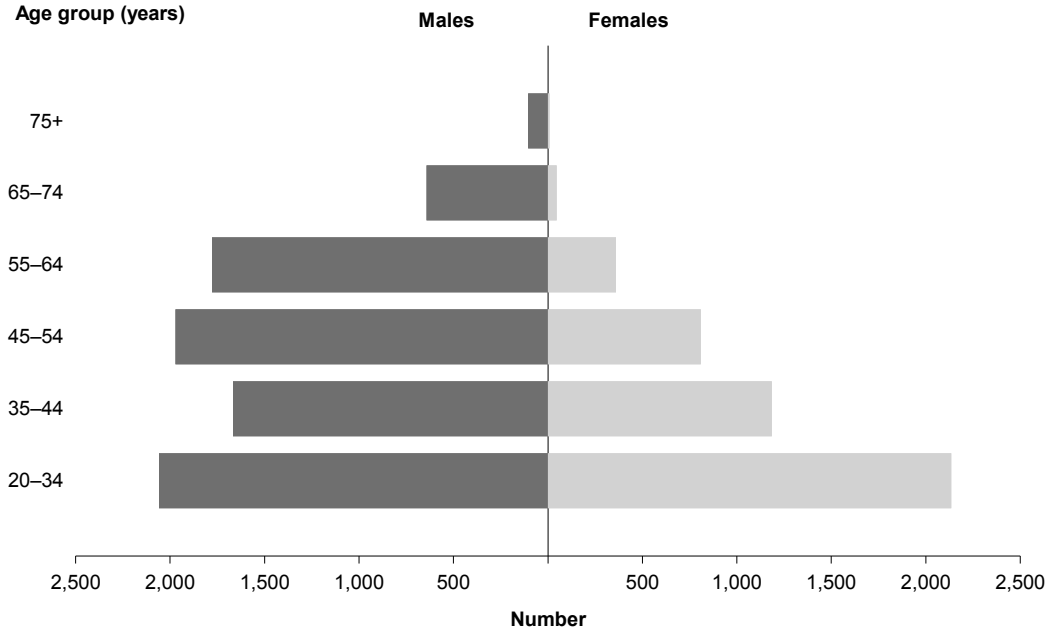
3.2.1 Age and sex

In 2011, the average age of employed dentists was 43.5 years, slightly younger than the average of 45.1 in 2006 (Table 3.4). The female proportion of the dentist workforce rose from previous years, with women forming 29.0% of the dentist workforce in 2006 and 35.6% in 2011. However, as can be seen in figures 3.2 and 3.3, the age pattern of women and men is different, with substantially more men in the older age groups and slightly more women registered and/or employed as dentists in the youngest group (20–34).



Source: NHWDS: dental practitioners 2011.

Figure 3.2: Number of registered dentists, by age group and sex, 2011



Source: NHWDS: dental practitioners 2011.

Figure 3.3: Number of employed dentists, by age group and sex, 2011

3.2.2 Aboriginal and Torres Strait Islander dentists

In 2011, there were 26 dentists employed in Australia who identified as Aboriginal or Torres Strait Islander. This represents 0.2% of all employed dentists who chose to provide their Indigenous status (Table 3.3). Ten of these dentists were employed in Queensland, which

had the highest proportion of dentists who identified as Aboriginal or Torres Strait Islander, at 0.4%.

Table 3.3: Employed dentists: Indigenous status, state and territory[(a)], 2011

Indigenous status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia[(b)]
Indigenous	5	6	10	n.p.	n.p.	—	—	—	26
Non-Indigenous	4,227	3,079	2,505	1,316	997	186	231	96	12,650
Not stated	20	13	11	n.p.	n.p.	1	—	—	58
Total	**4,252**	**3,098**	**2,526**	**1,331**	**1,000**	**187**	**231**	**96**	**12,734**
Percentage of employed dentists who are Indigenous[(c)]	**0.1**	**0.2**	**0.4**	**n.p.**	**n.p.**	**—**	**—**	**—**	**0.2**

(a) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(b) Data include employed dentists who did not state or adequately describe their state or territory, and those who were overseas.

(c) Percentages exclude the 'Not stated' category.

Source: NHWDS: dental practitioners 2011.

3.2.3 Field of dentistry

Role in dentistry

The principal role in dentistry describes the types of dentistry work undertaken by employed dentists. The 2011 survey categorised the roles as clinician, administrator, teacher/educator, researcher, and other. In 2011, the oldest group was teacher/educators with an average age of 51.7. Between 2006 and 2011, the number of administrators more than doubled, with the proportion of administrators who are women increasing from 24.7% in 2006 to 42.6% in 2011 (Table 3.4). This may be due the change in the question structure, as there are now fewer principal role categories than in the previous survey. This may have led to some dental practitioners self-identifying as administrators, when they may have chosen General practice, Registered specialist or Restricted practice in earlier surveys.

Table 3.4: Employed dentists: principal role in dentistry, selected characteristics, 2006 and 2011

Principal role in dentistry	Number	Average age	Aged 55 and over (per cent)	Women (per cent)	Average hours	FTE rate[(a)]
			2006			
General practice	8,747	44.4	n.a.	30.4	38.2	42.5
Registered specialist	1,161	48.8	n.a.	17.2	41.8	6.2
Restricted practice	93	50.3	n.a.	21.5	32.6	0.4
Administrator	77	50.0	n.a.	24.7	40.6	0.4

(continued)

Table 3.4 (continued): Employed dentists: principal role in dentistry, selected characteristics, 2006 and 2011

Principal role in dentistry	Number	Average age	Aged 55 and over (per cent)	Women (per cent)	Average hours	FTE rate[(a)]
			2006			
Teacher/educator	191	47.8	n.a.	35.1	34.3	0.8
Researcher	31	46.5	n.a.	35.5	38.1	0.2
Other	102	46.6	n.a.	36.3	35.3	0.5
Total	**10,402**	**45.1**	**23.6**	**29.0**	**38.5**	**50.9**
			2011			
Clinician	12,154	43.2	22.3	35.3	37.5	53.7
Non-clinician	*581*	*49.6*	*37.1*	*39.8*	*35.6*	*2.4*
Administrator	177	50.1	38.0	42.6	36.1	0.8
Teacher/educator	244	51.7	41.6	41.7	34.0	1.0
Researcher	49	45.4	n.p.	n.p.	43.3	0.3
Other	111	46.2	31.4	32.5	34.7	0.5
Total	**12,734**	**43.5**	**23.0**	**35.6**	**37.4**	**56.1**

(a) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

Area of dentistry

Survey respondents were asked to indicate the principal area of their main job in dentistry in the week before the survey. Fourteen response categories were provided, with only one response allowed. Table 3.5 provides these responses disaggregated by selected characteristics of the respondent. General dental practice is the most common area of practice, accounting for 77.4% of all dentists. Paedodontics was the group with the highest proportion of female dentists (63.1%) and the youngest average age (42.3). The 'Other' group was the oldest, with an average age of 54.2 and 54.0% of dentists over the age of 55.

Table 3.5: Employed dentists: principal area of main job, selected characteristics, 2011

Principal area of main job	Number	Average age (years)	Aged 55 and over (per cent)	Women (per cent)	Average weekly hours	FTE rate[(a)]
General dental practice	9,856	42.7	21.3	37.0	37.2	43.2
Dento-maxillofacial radiology	20	48.6	n.p.	n.p.	35.2	0.1
Endodontics	150	45.5	23.6	20.5	39.9	0.7
Oral and maxillofacial surgery	193	47.2	30.8	11.6	44.8	1.0
Oral surgery	77	46.4	n.p.	n.p.	33.5	0.3
Oral medicine	31	43.1	n.p.	n.p.	35.9	0.1
Oral pathology	14	42.9	n.p.	n.p.	34.8	0.1
Orthodontics	575	48.9	35.5	22.3	37.8	2.6
Paedodontics	124	42.3	17.6	63.1	39.4	0.6

(continued)

Table 3.5 (continued): Employed dentists: principal area of main job, selected characteristics, 2011

Principal area of main job	Number	Average age (years)	Aged 55 and over (per cent)	Women (per cent)	Average weekly hours	FTE rate[(a)]
Periodontics	216	45.9	26.6	29.0	39.3	1.0
Prosthodontics	203	48.6	34.2	18.1	40.2	1.0
Public health dentistry	238	48.2	35.0	46.0	37.3	1.0
Special needs dentistry	45	50.8	n.p.	n.p.	33.5	0.2
Other	102	54.2	54.0	30.3	30.5	0.4
Not stated/inadequately described	890	42.6	20.0	36.3	37.9	4.0
All	**12,734**	**43.5**	**23.0**	**35.6**	**37.4**	**56.1**

(a) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Source: NHWDS: dental practitioners 2011.

Box 3.1: Dental specialties

In Australia, 13 specialties are recognised for registration, and are provided as accredited training programs in six dental schools.

Oral and maxillofacial surgery

Oral and maxillofacial surgery (OMFS) is concerned primarily with the diagnosis, surgical and adjunctive treatment of diseases, injuries and defects involving both the functional and aesthetic aspects of the hard and soft tissue of the oral and maxillofacial region. Specialists train for OMFS in Australia only through the Royal Australasian College of Dental Surgery. Training is offered in the form of a fellowship, and after registration a specialist can practise in a wide variety of hospital and clinical settings.

Prosthodontics

Prosthodontics is the part of dentistry pertaining to the restoration and maintenance of oral function, comfort, appearance and health of the patient by the replacement of missing teeth and contiguous tissues with artificial substitutes (Boucher 1982). It could best be described as restoring a patient's oral functioning and rebuilding their smile through the use of dental implants, bridgework, dentures and/or crowns. It has three main branches: removable prosthodontics, fixed prosthodontics and maxillofacial prosthodontics. Prosthodontics is offered as a 3-year training program in five of the six dental schools.

Endodontics

Endodontics is concerned with the morphology, physiology and pathology of the human tooth, in particular the dental pulp, crown, root and peri-radicular tissues. The study and practice of endodontics includes the biology of these tissues and the aetiology, prevention, diagnosis and treatment of diseases and injuries that affect them (ADA 2009).

(continued)

Box 3.1 (continued): Dental specialties

Orthodontics

Orthodontics gained importance in the early 20th century, and was added as a speciality in its own right. Major responsibilities include diagnosis, prevention, interception and treatment of all forms of malocclusion (improper bites) of the teeth and associated alterations in their surrounding areas (Boucher 1982).

Periodontics

Periodontics is concerned with the prevention, diagnosis and treatment of diseases affecting the gums and supporting structures of the teeth (periodontium). It was recognised as a specialty in the middle of the 20th century (Newman & Carranza 2006).

Paediatric dentistry

Paediatric dentistry (paedodontics) is concerned with the provision of oral health-care services to children aged 1–17. It includes both restorative and preventive components, and involves training a child to accept dentistry, and restoring and maintaining primary, mixed and permanent dentitions.

Public health dentistry

Dental public health is the prevention and control of dental diseases and the promotion of dental health through organised community efforts. It serves the community as the patient rather than the individual. It is concerned with dental health education of the public, applied dental research and administration of group dental care programs, as well as the prevention and control of dental diseases on a community basis (ABDPH 2009).

Public health dentistry

Dental public health is the prevention and control of dental diseases and the promotion of dental health through organised community efforts. It serves the community as the patient rather than the individual. It is concerned with dental health education of the public, applied dental research and administration of group dental care programs, as well as the prevention and control of dental diseases on a community basis (ABDPH 2009).

Oral pathology

Oral pathology deals with the nature, identification and management of diseases affecting the oral and maxillofacial regions. It involves research; diagnosis of diseases using clinical, radiographic, microscopic, biochemical or other examinations; and management of patients.

Oral medicine

Oral medicine deals with the significance and relationship of oral and systemic diseases. Registration as an oral medicine specialist is only available in Victoria and New South Wales.

Special needs dentistry

Special needs dentistry is concerned with providing and enabling the delivery of oral care for people with an impairment or disability. It is a relatively new specialty that is recognised for registration and practice only in South Australia.

(continued)

Box 3.1 (continued): Dental specialties

Dental-maxillofacial radiology

Dental-maxillofacial Radiology concerns diagnostic imaging procedures applicable to the hard and soft tissues of the oral and maxillofacial region and to other structures that are relevant for the proper assessment of oral conditions. (ADA 2012)

Forensic odontology

Forensic odontology is the application of dental principles to legal issues, such as identification of individuals through marks left by teeth or identification of deceased persons through dental records.

Approved programs of study leading to these qualifications are listed on the AHPRA website at <http://www.ahpra.gov.au/Education/Approved-Programs-of-Study.aspx>.

Sources: AIHW DSRU 2012; DBA 2012

Dental specialists

The Australian Health Workforce Ministerial Council has approved the Dental Board of Australia's List of specialties and specialist titles. Dentists who have the necessary qualifications in the approved specialties and meet the other requirements for specialist and general registration are included on the Specialist Register and their specialties are recorded as part of the NRAS data.

In 2011, there were 1,464 employed dentists registered to practise in a dental specialty. Of these, 38 nominated that they were practising in the area of general dentistry when answering question 10, Principal area of main job, rather than their specialty in their main job. These were omitted from the following table (Table 3.6). A small number of dental practitioners (54) have more than one specialty. The data collected by the NRAS does not identify the primary specialty. However, the AIHW allocated a primary specialty on the basis of the responses to question 10.

The largest group of employed dentists with a specialty was orthodontists (567) and the smallest group with a specialty was registered to practise in oral pathology (6).

Oral and maxillofacial surgeons worked the most hours on average (45.8).

Women were most highly represented in the specialty of paediatric dentistry (61.6%) and were least represented among the oral and maxillofacial surgeons (9.3%).

The overwhelming majority of dental specialists were working in *Major cities* (88.6 %) and in private practice (77.2%). Paediatric dentistry had the lowest proportion of dental specialists working in private practice (55.9%).

A number of oral and maxillofacial surgeons were also, or alternatively, registered as a medical practitioner (see the Data Quality Statement at Appendix E).

Table 3.6: Employed dental specialists not working in the area of general dental practice: selected characteristics, 2011

Specialty	Number	Average age (years)	Aged 55 and over (per cent)	Women (per cent)	Major cities (per cent)[(a)]	Private practice (per cent)[(b)]	Average weekly hours	FTE rate[(c)]
Dental-maxillofacial radiology	10	46.5	n.p.	n.p.	n.p.	n.p.	38.3	—
Endodontics	136	45.8	22.7	21.5	96.5	81.2	41.2	0.7
Oral and maxillofacial surgery	164	51.8	41.4	9.3	89.4	78.4	45.8	0.9
Oral medicine	28	n.p.	n.p.	n.p.	n.p.	n.p.	39.1	0.1
Oral pathology	6	n.p.	n.p.	n.p.	n.p.	n.p.	38.8	—
Oral surgery	19	n.p.	n.p.	n.p.	n.p.	n.p.	43.0	0.1
Orthodontics	567	49.7	36.8	20.8	81.5	86.7	38.1	2.5
Paediatric dentistry	102	41.8	14.4	61.6	96.5	55.9	40.6	0.5
Periodontics	196	47.7	28.1	26.8	91.3	84.6	39.7	0.9
Prosthodontics	161	49.5	34.5	15.5	94.3	70.0	40.6	0.8
Public health dentistry (community dentistry)	9	n.p.	n.p.	n.p.	n.p.	n.p.	42.5	—
Special needs dentistry	14	n.p.	n.p.	n.p.	n.p.	n.p.	39.2	0.1
Forensic odontology	14	n.p.	n.p.	n.p.	n.p.	n.p.	37.1	0.1
All	**1,426**	**48.8**	**33.5**	**23.4**	**88.6**	**77.2**	**40.1**	**6.7**

(a) Proportion of specialist dentists working in *Major cities* derived from remoteness area of main job where available; otherwise, remoteness area of principal practice is used as a proxy. If remoteness area details are unavailable, remoteness area of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(b) Proportion of specialist dentists with a work setting of main job being: Solo private practice, Group private practice or Locum private practice.

(c) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Source: NHWDS: dental practitioners 2011.

The FTE rate per 100,000 population in *Major cities* was 8.7; 3 times the rate in *Inner regional* areas and 5 times the rate in *Outer regional* areas (Table 3.7).

Dental specialists not in *Major cities* tended to be older than those in *Major cities*, though the difference was not that large.

Table 3.7: Employed dental specialists not working in the area of general dental practice: selected characteristics, remoteness area, 2011

	Major cities	Inner regional	Outer regional	Remote /Very remote	Australia
Number	1,264	117	32	3	1,426
Average age (years)	48.7	50.4	51.1	n.p.	48.8
Aged 55 and over (per cent)	33.0	35.3	n.p.	n.p.	33.5
Women (per cent)	24.4	16.1	n.p.	n.p.	23.4
Private practice (per cent)[(a)]	76.9	85.6	n.p.	n.p.	77.2
Average weekly hours	40.2	39.3	38.1	n.p.	40.1
FTE rate[(b)]	8.7	2.8	1.6	1.2	6.7

(a) Proportion of specialist dentists with a work setting of main job being: Solo private practice, Group private practice or Locum private practice.

(b) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Source: NHWDS: dental practitioners 2011.

The jurisdiction with the highest FTE rate per 100,000 population for dental specialists was the Australian Capital Territory at 10.2, and the lowest was the Northern Territory with an FTE rate of 3.5, just over half the national average of 6.7 (Table 3.8). Victoria had the highest proportion of dental specialists who were women (28.5%) and Queensland had the lowest (19.8%).

Table 3.8: Employed dental specialists not working in the area of general dental practice: selected characteristics, states and territories, 2011

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Number	453	368	271	142	122	22	33	8	**1,426**
Average age (years)	49.1	48.5	48.2	48.0	50.9	52.8	47.0	52.8	**48.8**
Aged 55 and over (per cent)	35.1	30.3	30.8	31.1	45.4	n.p.	n.p.	n.p.	**33.5**
Women (per cent)	22.8	28.5	19.8	25.6	22.1	n.p.	n.p.	n.p.	**23.4**
Major cities (per cent)[(a)]	90.7	92.9	83.3	95.6	96.3	—	100.0	—	**88.6**
Private practice (per cent)[(b)]	76.5	78.9	73.2	78.1	79.0	n.p.	n.p.	n.p.	**77.2**
Average weekly hours	40.7	40.0	40.0	39.8	38.1	41.2	43.0	38.6	**40.1**
FTE rate[(c)]	6.7	7.0	6.4	6.3	7.5	4.7	10.2	3.5	**6.7**

(a) Proportion of specialist dentists working in *Major cities* derived from remoteness area of main job where available; otherwise, remoteness area of principal practice is used as a proxy. If remoteness area details are unavailable, remoteness area of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(b) Proportion of specialist dentists with a work setting of main job being: Solo private practice, Group private practice or Locum private practice.

(c) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Source: NHWDS: dental practitioners 2011.

3.2.4 Country of first dental qualification

Information about the country of first dental qualification was collected in previous National Dental Labour Force Collections, however, was not included as a survey question in 2011 as

it is now collected as part of the NRAS registration data. Although it is understood that country of first dental qualification is being entered for new registrants, data migrated from some of the previous jurisdiction-based systems did not contain this information in a consistent manner, thus it could not be included in this report due to variability in scope and coverage. It is anticipated that this information will improve over time and will be able to be reported in subsequent years.

3.2.5 Work setting

Dentists were asked to indicate the setting of their main job in dentistry in the week before completing the Dental Workforce Survey 2011. About four-fifths of employed dentists were working in private practice (81.2% of clinicians and 78.2% of all employed dentists). Two-thirds of dentists in private practice were working in group practices (66.7% of clinicians and 66.6% of all employed dentists). Hospitals were the next largest category with 4.7% of clinicians and 5.0% of all employed dentists working in this setting (Table 3.9).

Table 3.9: Employed dentists: work setting of main job and clinician status, number and average weekly hours worked, 2011

	Clinicians[(a)]		All dentists	
Work setting of main job	**Number**	**Average weekly hours worked**	**Number**	**Average weekly hours worked**
Private practice	*9,865*	*37.7*	*9,959*	*37.6*
Solo private practice	3,155	40.0	3,192	39.8
Group private practice	6,578	36.7	6,634	36.7
Locum private practice	133	31.4	133	31.4
Aboriginal health service	58	33.9	60	33.3
Community health care services	*468*	*35.5*	*502*	*35.7*
Health promotion service	14	35.2	18	33.2
Other community health care service	454	35.5	485	35.8
Hospital	567	37.9	635	37.9
Residential health care facility	14	24.2	15	23.9
Commercial/business service	34	34.3	48	34.0
Educational facilities	*89*	*35.9*	*308*	*35.7*
Tertiary educational facility	46	35.5	250	36.1
School	39	36.1	42	36.3
Other educational facility	4	38.1	16	26.8
Correctional service	13	33.9	14	34.2
Defence forces	117	36.4	130	37.3
Other government department or agency	125	38.0	162	37.9
Other	101	35.4	155	35.1
Not stated	702	37.9	744	37.9
Total	**12,154**	**37.5**	**12,734**	**37.4**

(a) Clinician includes those whose role in their main job was 'Clinician'.

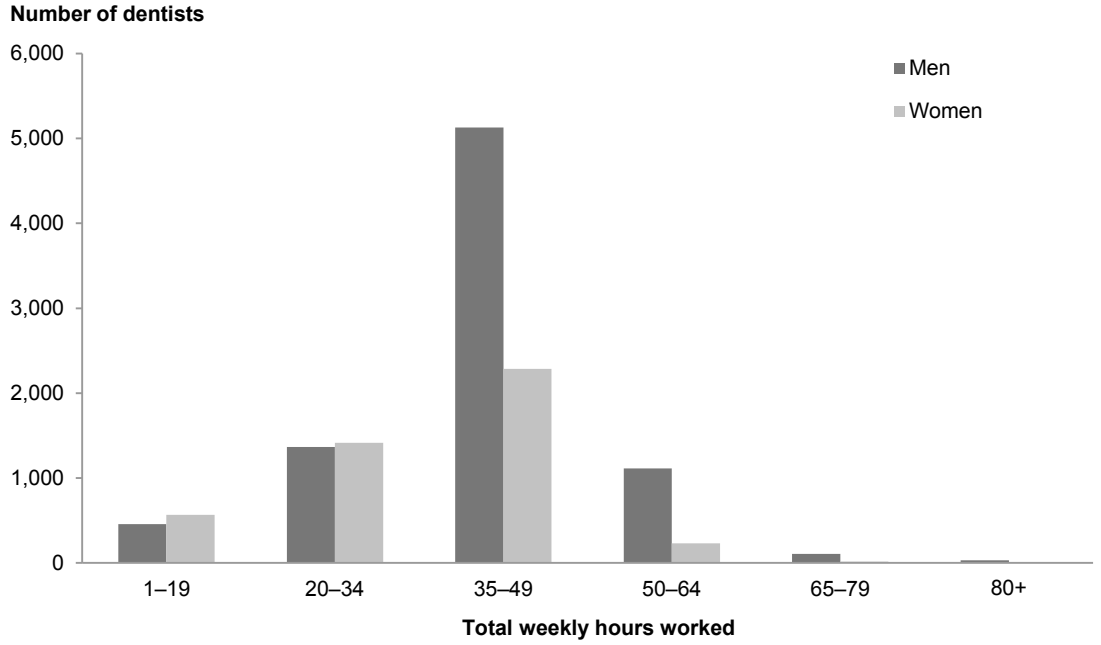
Source: NHWDS: dental practitioners 2011.

3.2.6 Working hours

Comparison of working hours over time should be undertaken with care, due to differences between the survey questions used in the Dental Workforce Survey 2011 and the previous National Dental Labour Force Collection (see Appendix A).

On average, employed dentists worked 37.4 hours a week in 2011, down slightly from 38.5 in 2006.

Male dentists work more hours, on average, than female dentists at 39.5 versus 33.7, respectively. Average hours worked per week has fallen for both men and women since 2006, from 40.2 and 34.1, respectively (Table 3.8). More women worked part time than men, in spite of there being more men than women overall (Figure 3.4).

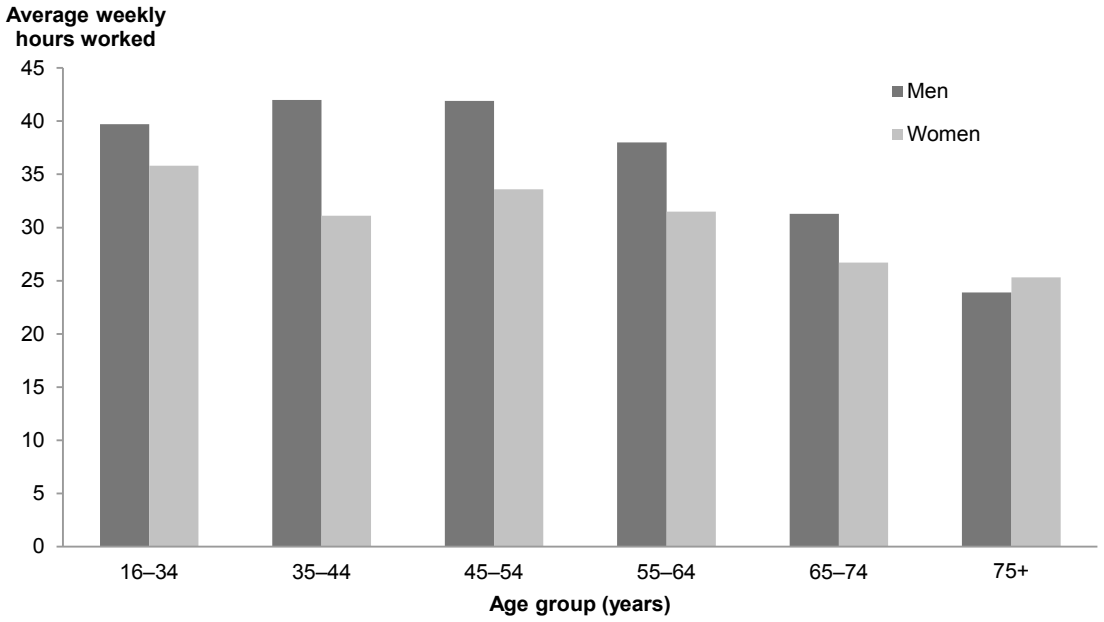


Source: NHWDS: dental practitioners 2011.

Figure 3.4: Employed dentists: total hours worked per week, by sex, 2011

Age

The difference in average hours between men and women differs by age group, with a gap of 3.9 hours between male and female dentists aged 20–34 years, and a gap of 10.9 hours for those aged 35–44 (Figure 3.5).



Source: NHWDS: dental practitioners 2011.

Figure 3.5: Employed dentists: average total weekly hours worked, by age group and sex, 2011

Work setting

Dentists working in solo private practice as their main job worked the most hours on average (39.8), while those in group practices worked 8% fewer hours on average (36.7). Dentists working in residential health-care settings as their main job worked the fewest hours on average (23.9) (Table 3.9).

States and territories

Dentists in the Northern Territory worked the most weekly hours on average (39.7), while South Australian dentists worked the fewest (36.0). The Northern Territory also had the smallest gap in average hours between men and women (1.8) compared with the national difference of 5.8 hours (Table 3.10).

Table 3.10: Employed dentists: average total weekly hours[(a)] worked, sex, state and territory, 2006 and 2011

Sex	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					2006[(b)]				
Persons	*40.5*	*37.0*	*38.2*	*37.3*	*36.1*	*37.5*	*40.5*	*41.4*	*38.5*
Men	42.2	39.2	39.7	39.1	37.9	39.0	41.1	40.5	40.2
Women	35.9	32.6	34.3	32.4	31.4	32.8	39.1	42.4	34.1

(continued)

Table 3.10 (continued): Employed dentists: average total weekly hours[(a)] worked, sex, state and territory, 2006 and 2011

Sex	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					2011[(c)(d)]				
Persons	*38.4*	*36.5*	*37.8*	*36.6*	*36.0*	*36.7*	*39.6*	*39.7*	*37.4*
Men	40.5	39.0	39.5	38.3	38.1	37.3	41.6	40.3	39.5
Women	34.3	32.8	34.4	33.5	32.1	33.6	35.9	38.5	33.7

(a) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 and 2011.

(b) State and territory estimates for 2006 are based on state or territory of registration and should be treated with caution due to small numbers of practitioners in some jurisdictions. See Appendix A for further information.

(c) State and territory estimates for 2011 derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(d) Includes dentists who did not state or adequately describe their state or territory and those who were overseas.

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

Remoteness areas

The Remoteness Areas from the Australian Standard Geographical Classification (ASGC) (ABS 2008) have been used in this report to show data by geographic region (see Glossary for further information).

Dentists working in *Remote/ Very remote* areas worked the most hours per week (39.8 in 2011 and 39.7 in 2006 on average) The difference in average hours worked for male versus female dentists was greatest in *Major cities* (6.3) and least in *Remote/Very remote* areas (2.3).

Table 3.11: Employed dentists: average total weekly hours[(a)] worked, remoteness area[(b)], 2006 and 2011

Sex	Major cities	Inner regional	Outer regional	Remote/Very remote[(c)]	Australia[(d)]
			2006		
Persons	*38.4*	*38.3*	*38.6*	*39.7*	*38.5*
Men	40.4	39.5	39.6	39.5	40.2
Women	33.8	34.9	35.6	40.0	34.1
			2011		
Persons	*37.4*	*37.5*	*37.7*	*39.8*	*37.4*
Men	39.7	38.7	38.8	40.7	39.5
Women	33.4	34.8	35.0	38.4	33.7

(a) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 to 2011.

(b) Derived from remoteness area of main job where available; otherwise, remoteness area of principal practice is used as a proxy. If remoteness area details are unavailable, remoteness area of residence is used. Records with no information on all three locations are coded to 'Not stated''.

(c) Includes *Migratory* areas.

(d) Includes dentists who did not state or adequately describe their location and those who were overseas.

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

Employment sector

Dentists in the public sector were more likely to work less hours and be women than those working in the private sector (Table 3.12). On average, dentists in the public sector worked 26.0 hours while those in the private sector worked 35.5 hours, and 42.4% of dentists in the public sector were women, compared with 34.2% in the private sector. The large apparent drop in average hours in the public sector between 2009 and 2011 (from 34.8 to 26.0) is due to a change in methodology. Data before 2009 is all hours worked by employment sector of main job where the 2011 data include both public and private hours worked and dentists appear in each sector that they work in.

To account for the fact that some dentists work in both sectors, the number of full-time equivalents (FTEs) has been calculated. The number of FTEs in the public sector was 1,928, compared with 10,606 in the private sector.

Table 3.12: Employed dentists: selected characteristics, by employment sector[(a)], 2006 to 2011

Characteristic	2006	2009	2011
		Private sector	
Number	8,757	9,453	11,353
Average age	45.4	45.4	43.5
Aged 55 and over (per cent)	n.a.	n.a.	22.5
Women (per cent)	25.5	29.8	34.2
Average weekly hours worked	38.8	37.6	35.5
FTE number	8,941	9,353	10,606
		Public sector	
Number	1,648	1,546	2,818
Average age	44.2	45.6	42.9
Aged 55 and over (per cent)	n.a.	n.a.	23.7
Women (per cent)	44.2	45.6	42.4
Average weekly hours worked	35.0	34.8	26.0
FTE number	1,518	1,416	1,928

(a) Care should be taken in interpreting change in the estimates over time due to changes in the way practitioners were assigned to a sector. Data for 2006 and 2009 are based on sector of main job whereas data for 2011 refer to all persons working in that sector. For calculation of average hours worked, 2011 data are based on reported hours worked in each sector whereas the 2006 and 2009 data are based on all hours worked classified by sector of main job.

Sources: National Dental Labour Force Collection, 2006 and 2009; NHWDS: dental practitioners 2011.

3.3 Geographic profile of employed dentists

3.3.1 Remoteness areas of Australia

The distribution of dentists across the remoteness classification in Australia is of considerable interest to both government and communities. Information on the work location of dental practitioners is collected in the Dental Workforce Survey 2011. This provides a means, in combination with other data on hours and population, of examining variability in the supply of dental practitioners across Australia.

Using the postcode of their main work location where available, each dentist is allocated to one of the following in the Australian Standard Geographical Classification Remoteness Area (ASGC RA): *Major cities*, *Inner regional*, *Outer regional*, *Remote*, *Very remote* and *Migratory* (see Glossary). Otherwise, remoteness area of principal practice is used as a proxy; if remoteness area of principal practice is unavailable, remoteness area of residence is used. For records with no information on all three locations, they are coded to 'Not stated' location. In this report, the *Remote*, *Very remote* and *Migratory* categories have been combined due to small numbers.

The number of dentists increased between 2006 and 2011 in all remoteness areas in terms of raw numbers and FTE per 100,000 population. In 2011, more than one-third (36.8%) of dentists in *Major cities* were female, which is slightly less than in *Remote/Very remote* areas (49.7%), which have the highest proportion of the four RAs. The average age of dentists in *Major cities* was 43.6, which was only slightly higher than the national average in 2011 (Table 3.13).

Table 3.13: Employed dentists: selected characteristics, by remoteness area, 2006 and 2011

Characteristic	Major cities	Inner regional	Outer regional	Remote/Very remote[(a)]	Australia[(b)]
			2006[(c)]		
Number	8,428	1,349	540	87	10,404
Average age	44.9	45.8	46.1	43.3	45.1
Aged 55 and over (per cent)	22.8	27.6	25.9	25.3	23.6
Women (per cent)	29.7	25.1	24.4	42.5	29.0
Average weekly hours[(d)] worked	38.4	38.3	38.6	39.7	38.5
FTE rate[(e)]	60.1	33.3	27.9	18.9	50.9
			2011[(f)]		
Number	10,055	1,844	685	130	12,734
Average age	43.6	42.4	43.5	43.5	43.5
Aged 55 and over (per cent)	22.6	23.1	26.6	27.4	23.0
Women (per cent)	36.8	31.3	28.1	39.7	35.6
Average weekly hours[(d)] worked	37.4	37.5	37.7	39.8	37.4
FTE rate[(e)]	64.1	42.1	33.5	26.4	56.1

(a) Includes *Migratory* areas.

(b) Includes dentists who did not state or adequately describe their location of practice and those who were overseas.

(c) Remoteness area of main job.

(d) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 to 2011.

(e) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

(f) Derived from remoteness area of main job where available; otherwise, remoteness area of principal practice is used as a proxy. If remoteness area details are unavailable, remoteness area of residence is used. Records with no information on all three locations are coded to 'Not stated'.

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

Between 2006 and 2011, the number of employed dentists increased by 22.4%. In combination with a slight fall in the average hours worked and the natural increase in population, the supply of dentists in terms of FTE per 100,000 population grew by 10.2%. The lowest growth was in *Major cities* (6.5%). Notwithstanding a 55.8% increase in FTE per 100,000 population between 2006 and 2011, the supply of dentists remains the lowest in *Remote/ Very remote* areas. In 2011, dentists in *Remote/Very remote* areas also have the distinction of having the highest proportion of dentists aged over 55 (27.4%), the highest proportion of dentists who are women (39.7%) and the highest average weekly hours worked of any Remoteness Area (39.8).

3.3.2 States and territories of Australia

Between 2006 and 2011, the number of employed dentists increased in all jurisdictions (Table 3.14). Victoria, Queensland, Western Australia and the Northern Territory had increases greater than the national rate of 22.4% (26.5%, 24.6%, 24.3% and 23.1%, respectively). The FTE rate rose by 10.2% overall, with the highest increase in Victoria (15.6%, from 46.5 to 53.8 FTE per 100,000 population).The only notional decrease was in the Australian Capital Territory (5.9%, from 69.5 to 65.5 FTE per 100,000 population). Part of these differences may be due to improvements in the methodology allocating dentists to states on the basis of where they reported working rather than on the registration data.

Table 3.14: Employed dentists: selected characteristics, state and territory, 2006 and 2011

Characteristic	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia[(a)]
									2006[(b)]
Number	3,561	2,449	2,028	1,071	826	172	218	78	10,404
Average age	45.4	44.4	44.7	44.8	46.3	47.6	47.5	47.6	45.1
Aged 55 and over (per cent)	22.7	23.1	23.0	24.0	27.7	33.7	20.6	33.3	23.6
Women (per cent)	27.6	32.3	27.9	27.7	28.5	24.1	30.2	45.3	29.0
Average weekly hours[(c)] worked	40.5	37	38.2	37.3	36.1	37.5	40.5	41.4	38.5
FTE rate[(d)]	55.7	46.5	49.8	51.0	50.0	34.6	69.5	40.3	50.9
					2011[(e)]				
Number	4,252	3,098	2,526	1,331	1,000	187	231	96	12,734
Average age	44.6	42.8	42.1	42.3	44.7	45.2	44.5	44.1	43.5
Aged 55 and over (per cent)	24.5	21.6	19.6	20.6	30.4	29	25.1	n.p.	23.0
Women (per cent)	34.1	40.4	33.6	36.7	34.7	15.4	35.1	n.p.	35.6
Average weekly hours[(c)] worked	38.4	36.5	37.8	36.6	36.0	36.7	39.6	39.7	37.4
FTE rate[(d)]	59.6	53.8	56.2	54.5	57.8	35.3	65.5	43.4	56.1

(a) Includes dentists who did not state or adequately describe their state or territory and those who were overseas.

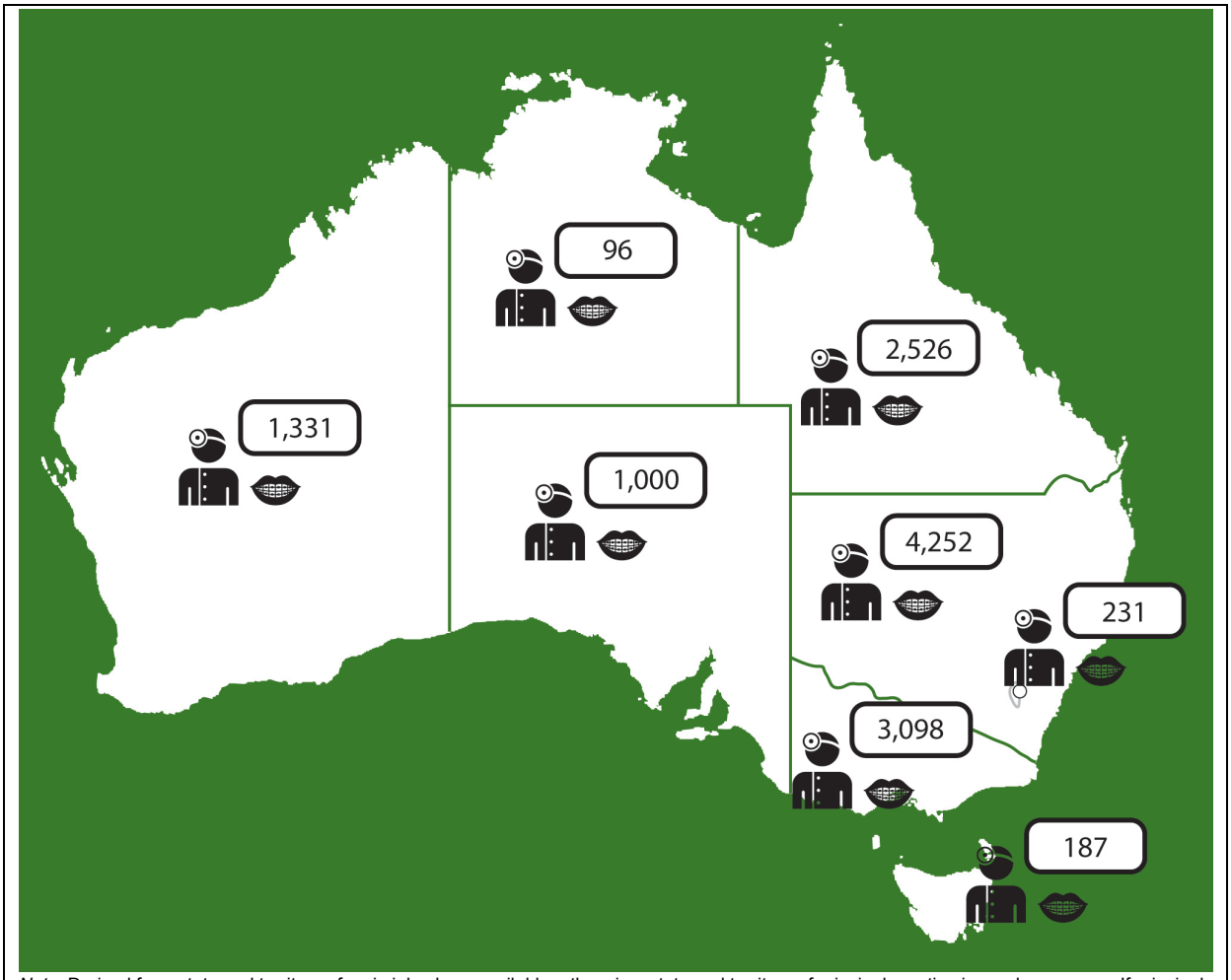
(b) State and territory estimates for 2006 are based on state or territory of registration and should be treated with caution due to low response rates in some jurisdictions. See Appendix A for further information.

(c) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 and 2011.

(d) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

(e) State and territory estimates for 2011 derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.



Note: Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

Source: NHWDS: dental practitioners 2011.

Figure 3.6: Employed dentists: state and territory, 2011

3.4 Supply of employed dentists

3.4.1 Overall supply

Data on the size and characteristics of the dental workforce present a valuable profile of dental practitioners, but do not give a complete picture of the overall level of service provided. Some dental practitioners have long working weeks and others work part time; therefore, their relative contributions to the level of service need to be taken into account to measure the overall supply effectively.

To do this, information on the number of employed dental practitioners, together with their average hours worked, have been used to calculate an FTE number of practitioners, based on a 'standard full-time working week' of 38 hours (Box 3.2).

To take account of population differences across Australia, and across time, ABS estimated resident population figures have been used to convert the FTE number to an FTE rate (FTE per 100,000 population) (see Appendix D).

Box 3.2: Full-time equivalent

The number of FTE dental practitioners is calculated by multiplying the number of practitioners by the average weekly hours worked, and dividing by the number of hours in a standard full-time working week.

FTE gives a useful measure of supply because it takes into account both those working full time and those working part time.

The concept of FTE depends on what may reasonably be regarded as a full-time job, and this varies across occupations. The Australian Bureau of Statistics (ABS) defines full-time work as being at least 35 hours per week, and many FTE calculations are based on this (ABS 1996). However, people in managerial or professional jobs tend to work more than 35 hours per week (ABS 2012) and dental practitioners have worked, on average, 37.4 hours per week (Table 3.6). In this report, a standard week of 38 hours has been used to calculate realistic FTE measures of service delivery by practitioners. That is, FTE measures the number of 38-hour week workloads provided by the dental practitioner workforce.

3.4.1 Supply of clinicians

The overall supply of clinicians increased between 2006 and 2011, from 49.0 FTE per 100,000 population in 2006 to 53.7 in 2011 (Table 3.15). The overall supply of dentists increased 10.2%, from 50.9 FTE per 100,000 population in 2006 to 56.1 in 2011 (Table 3.14).

Table 3.15: Employed dentists: FTE[(a)] per 100,000 population, by principal role of main job, 2006 and 2011

Principal role of main job	2006	2011
Clinician[(b)]	49.0	53.7
Non-clinician	*1.8*	*2.4*
Administrator	0.4	0.8
Teacher/educator	0.8	1.0
Researcher	0.2	0.3
Other	0.5	0.5
Total	**50.9**	**56.1**

(a) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

(b) Clinician includes those whose role in their main job was 'Clinician'.

Source: NHWDS: dental practitioners 2011.

4 Dental hygienists

4.1 Registered dental hygienists

4.1.1 At a glance

	In 2011, there were 1,206 registered dental hygienists, 1,065 of whom were employed in dental hygiene.
	About 1 in 26 employed dental hygienists were men.
	The average age of dental hygienists was 37.4; only 5.7% were aged 55 or over.
	On average, employed dental hygienists worked 29.1 hours a week in 2011. Almost two-thirds worked part time (less than 35 hours per week).
	Most employed dental hygienists worked in general dental practice.

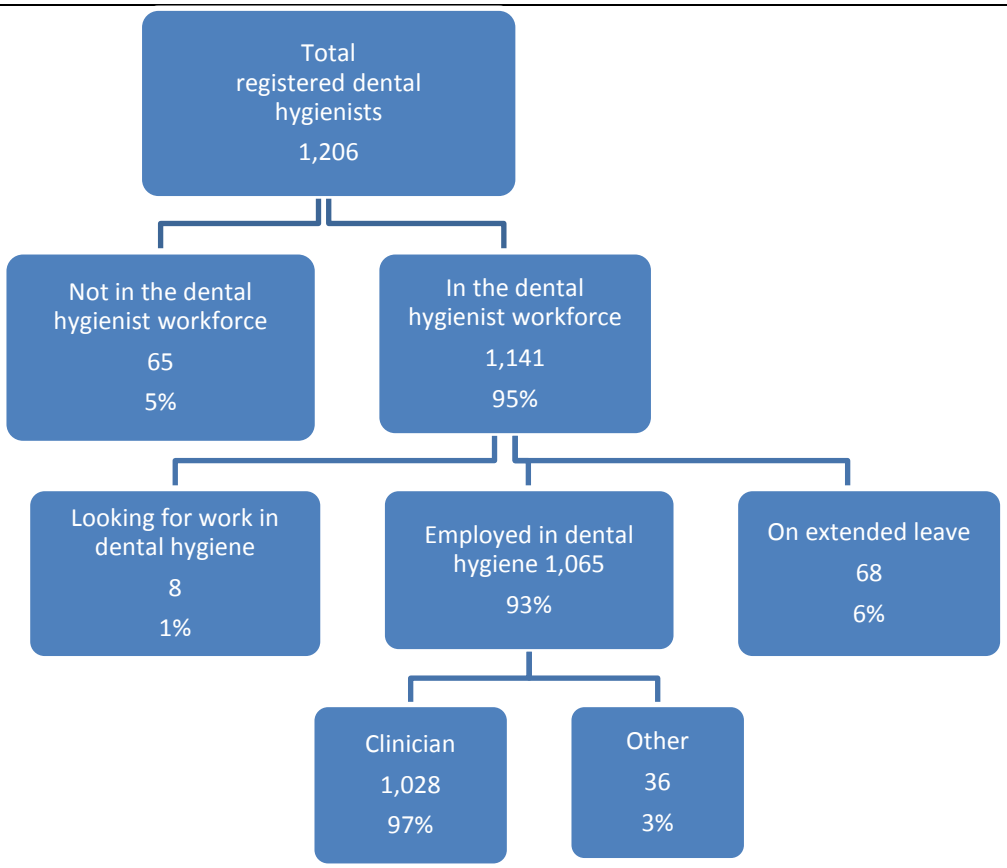
Source: NHWDS: dental practitioners 2011.

Box 4.1: Services provided by dental hygienists

Dental hygienists carry out preventative dental procedures under the direction of a dentist, including:

- oral examination and the assessment and recording of oral conditions
- taking impressions of teeth (other than for prosthodontic or prosthetic dental treatment)
- application of preventive and therapeutic solutions to the teeth
- preventive dental procedures, including the application of fissure sealants
- non-surgical management of gingival and periodontal conditions, including root debridement
- orthodontic procedures that do not initiate tooth movement
- placement and removal of metallic and non-metallic separators
- splinting to stabilise mobile teeth
- polishing and re-contouring of restorations
- application of professional available bleaching agents
- removal of sutures
- application and removal of periodontal packs
- diagnostic dental radiography
- administration of local anaesthetic solutions for dental procedures
- placement of temporary restorations not involving the removal of tooth structures.

Source: AIHW DSRU 2012, ABS 2006



Source: NHWDS: dental practitioners 2011.

Figure 4.1: Dental hygienists: workforce status, 2011

4.1.2 Workforce status

The number of registered dental hygienists in 2011 was 1,206 (Figure 4.1). Between 2006 and 2011, the number of dental hygienists employed in dentistry increased by 58.0% from 674 to 1,065 (Table 4.1). Due to the creation of the new dental profession of OHTs representing those dual qualified as hygienists and therapists, care should be taken in comparing these three categories over time.

Changes to the new nationally standardised survey questionnaire have resulted in a slight change in the pattern of responses to the employment-related questions. As such, comparing data over time should be done with caution. (See Appendix A for further information on changes to the employment-related questions.)

Table 4.1: Dental hygienists: workforce status, 2006[(a)], 2009 and 2011

Workforce status	2006[(a)]	2009	2011	Change between 2006 and 2011 (per cent)
In the dental workforce	**717**	**987**	**1,141**	**59.2**
Employed in dentistry	674	933	1,065	58.0
Looking for work in dentistry	*5*	*16*	*8*	*68.2*
Employed elsewhere	. .	. .	7	. .
Not employed	. .	. .	1	. .
On extended leave	38	38	68	**78.9**
Not in the dental workforce[(b)]	**41**	**44**	**65**	**58.5**
Overseas	16	14	13	**–18.0**
Not looking for work in dentistry	. .	. .	*46*	. .
Employed elsewhere	. .	. .	15	. .
Not employed	. .	. .	32	. .
Retired	. .	. .	5	. .
Total dental hygienists[(c)]	**770**	**1,031**	**1,206**	**56.6**
Multiple registrations	26	36	. .	. .
Total registrations	**796**	**1,067**	. .	. .

(a) 2006 data excludes the Northern Territory

(b) For 2006 and 2009, total includes dental hygienists not in the dental hygienist workforce.

(c) For 2006 and 2009, dental hygienists may have been registered in more than one state or territory; this figure accounts for this potential source of double counting. See Appendix A for further information.

Sources: National Dental Labour Force Collection, 2006 and 2009; NHWDS: dental practitioners 2011.

Of the 1,206 registered dental hygienists in 2011, 1,065 (88.3%) were employed in dentistry in Australia (Table 4.1). The Australian percentage is lower than all the states and territories except for New South Wales (86.6%), due to the inclusion of dental hygienists registered in Australia who were overseas and were not included in any state or territory total.

Table 4.2: Dental hygienists: workforce status, state and territory[(a)], 2011

Workforce status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia[(b)]
In the dental workforce	**329**	**163**	**111**	**250**	**217**	**14**	**50**	**7**	**1,141**
Employed in dentistry	*304*	*151*	*105*	*234*	*204*	*13*	*47*	*7*	*1,065*
On extended leave or looking for work in dentistry	25	12	6	15	13	1	2	—	76
Not in the dental workforce	22	5	5	14	4	—	1	—	65
Total registered dental hygienists	**351**	**168**	**116**	**264**	**221**	**14**	**51**	**7**	**1,206**

(a) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(b) Data include dental hygienists who did not state or adequately describe their state or territory, and dentists who were overseas. Therefore, state and territory totals may not sum to the national total. In particular, the total for 'Not in the dental workforce' is noticeably higher than the sum of the state and territory figures due to dental hygienists working overseas.

Source: NHWDS: dental practitioners 2011.

As outlined previously, the data transitioned from state- and territory-based systems to a national registration system in 2010. Before the NRAS was introduced in 2010, data were reported by state of registration. With the new system, data in this report are being reported on the basis of the most current address at the time the survey was undertaken, unless stated otherwise.

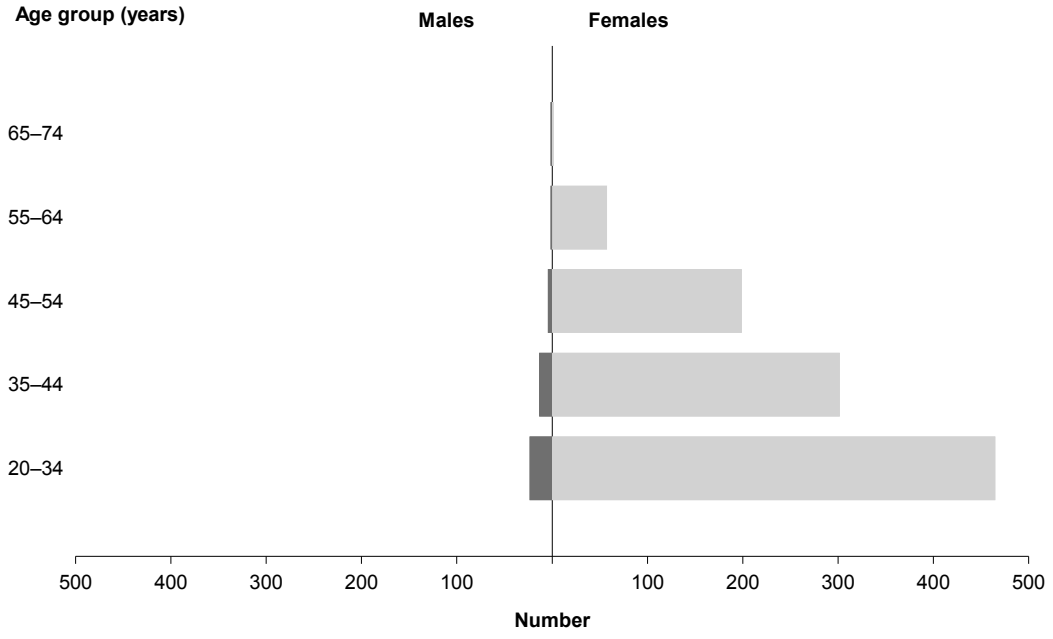
4.2 Dental hygienists employed in dental hygiene in Australia

A dental hygienist who reported working in dental health in the week before the survey is considered to have been employed in dentistry, or to be an employed dental hygienist, at the time of the survey (see Glossary).

The characteristics and supply of dental hygienists employed in Australia are the focus of the remainder of this section.

4.2.1 Age and sex

In 2011, the average age of employed dental hygienists was 37.1 years, slightly younger than the average of 37.7 in 2006 (Table 4.9). The proportion of women in the dental hygienist workforce was 96.1% in 2011.



Source: NHWDS: dental practitioners 2011.

Figure 4.2: Number of employed dental hygienists, by age group and sex, 2011

4.2.2 Aboriginal and Torres Strait Islander dental hygienists

There were 11 employed dental hygienists who identified themselves as Aboriginal and Torres Strait Islanders, representing about 1% of employed dental hygienists who responded to the question.

4.2.3 Field of dental hygiene

The principal role in dentistry describes the types of dental hygiene work undertaken by employed dental hygienists. The 2011 survey categorised the roles as clinician, administrator, teacher/educator, researcher, and other. In 2011, the largest group was clinicians, with 96.5% of employed dental hygienists identifying as clinicians. The oldest group was teacher/educators, with an average age of 48.4 (Table 4.3).

Table 4.3: Employed dental hygienists: principal role in main job, selected characteristics, 2011

Principal role in main job	Number	Average age	Aged 55 and over (per cent)	Women (per cent)	Average weekly hours	FTE rate[(a)]
Clinician	1,028	37.1	5.0	95.9	29	3.5
Non-clinician	*36*	*47.0*	*n.p.*	*n.p.*	*30.7*	*0.1*
Administrator	6	41.8	n.p.	n.p.	33.6	—
Teacher/educator	24	48.4	n.p.	n.p.	29.8	0.1
Researcher	n.p.	n.p.	n.p.	n.p.	n.p.	—
Other	n.p.	n.p.	n.p.	n.p.	n.p.	—
Total	**1,065**	**37.4**	**5.7**	**96.1**	**29.1**	**3.7**

(a) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

Area of dentistry

Survey respondents were asked to indicate the principal area of their main job in dentistry in the week before the survey. Fourteen response categories were provided, with only one response allowed. Table 4.5 provides these responses disaggregated by selected characteristics of the respondent with smaller categories aggregated with 'Other' for confidentiality purposes. General dental practice is the most common area of practice, with 59% of all employed dental hygienists. Periodontics was the next largest category, with 15% of all employed dental hygienists (Table 4.4).

Table 4.4: Employed dental hygienists: principal area of main job, selected characteristics, 2011

Principal area of main job	Number	Average age (years)	Aged 55 and over (per cent)	Women (per cent)	Average weekly hours	FTE rate[(a)]
General dental practice	629	37.1	4.4	97.5	28.6	2.1
Orthodontics	132	35.8	4.6	96.5	29.1	0.5
Periodontics	157	39.3	9.1	92.5	28.5	0.5
Prosthodontics	11	38.3	n.p.	n.p.	35.2	—
Public health dentistry	9	43.4	n.p.	n.p.	26.8	—
Special needs dentistry	4	44.4	n.p.	n.p.	33.9	—
Other	53	38.7	n.p.	n.p.	31.7	0.2
Not stated/inadequately described	70	37.6	n.p.	n.p.	32.0	0.3
All	**1,065**	**37.4**	**5.7**	**96.1**	**29.1**	**3.7**

(a) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Source: NHWDS: dental practitioners 2011.

4.2.4 Work setting

Dental hygienists were asked to indicate the setting of their main job in dentistry in the week before completing the Dental Workforce Survey 2011. The overwhelming majority of dental hygienists were working in private practice (91.0% of clinicians and 88.5% of all employed dental hygienists). Nearly two-thirds of dental hygienists in private practice were working in group practices (57.6% of clinicians and 57.4% of all employed dental hygienists) (Table 4.5).

Table 4.5: Employed dental hygienists: work setting of main job and clinician status, number and average weekly hours worked, 2011

	Clinicians[(a)]		All dental hygienists	
Work setting of main job	Number	Average weekly hours worked	Number	Average weekly hours worked
Private practice	*935*	*28.7*	*943*	*28.7*
Solo private practice	387	29.1	392	29.2
Group private practice	539	28.6	541	28.6
Locum private practice	9	16.8	9	16.8
Other	39	31.5	65	30.9
Not stated	54	33.3	57	33.4
Total	**1,028**	**29.0**	**1,065**	**29.1**

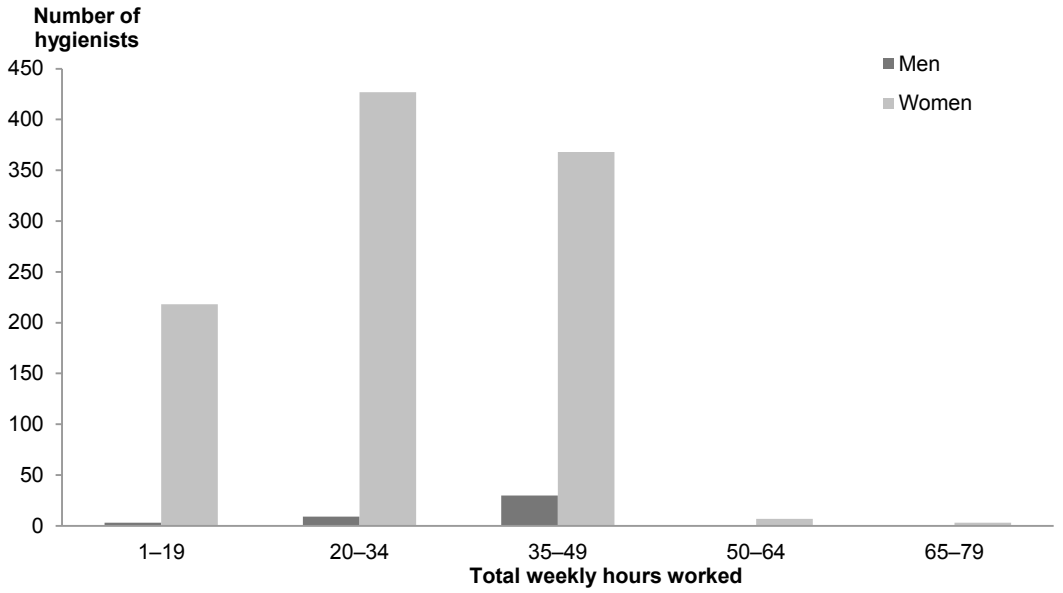
(a) Clinician includes those whose role in their main job was 'Clinician'.

Source: NHWDS: dental practitioners 2011.

4.2.5 Working hours

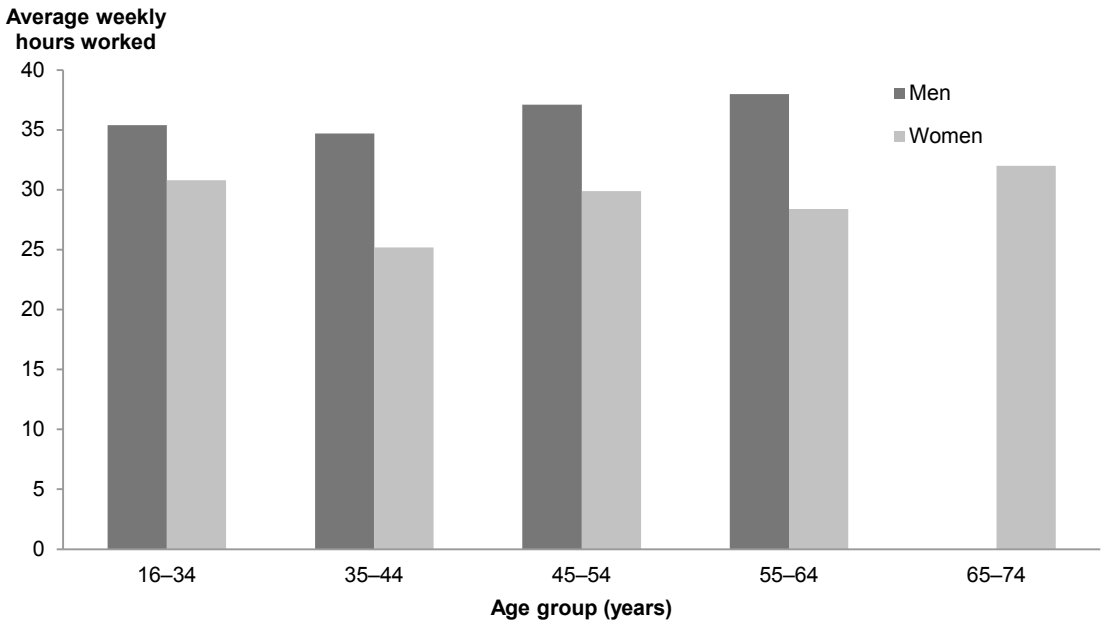
Comparison of working hours over time should be undertaken with care, due to differences between the survey questions used in the Dental Workforce Survey 2011 and the previous National Dental Labour Force Collection (see Appendix A).

On average, employed dental hygienists worked 29.1 hours a week in 2011, slightly up from 28.8 in 2006. Nearly two-thirds of dental hygienists (61.6%) worked part time (less than 35 hours per week) (Figure 4.3)



Source: NHWDS: dental practitioners 2011.

Figure 4.3: Employed dental hygienists: total hours worked per week, by sex, 2011



Source: NHWDS: dental practitioners 2011.

Figure 4.4: Employed dental hygienists: average total weekly hours worked, by age group, 2011

Work setting

Dental hygienists working in a solo private practice as their main job worked the most hours on average (29.1) per week (Table 4.5).

States and territories

Dental hygienists in New South Wales tended to work the most average hours (31.9), while South Australian dental hygienists worked the fewest (24.6) (Table 4.6).

Table 4.6: Employed dental hygienists: average total weekly hours[(a)] worked, sex, state and territory, 2006 and 2011

Sex	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					2006[(b)]				
Persons	*29.6*	*29.8*	*29.3*	*30.3*	*24.9*	*29.7*	*31.7*	*. .*	*28.8*
Men	24.6	38.0	35.0	31.0	38.8	. .	20.0	. .	30.0
Women	29.8	29.7	29.0	30.3	24.6	29.7	32.8	. .	28.8
					2011[(c) (d)]				
Persons	*31.9*	*28.1*	*29.2*	*29.5*	*24.9*	*32.7*	*29.1*	*28.5*	*29.1*
Men	39.6	31.2	37.9	36.3	20.6	. .	20.0	. .	34.6
Women	31.4	28.0	28.5	29.2	25.0	32.7	29.5	28.5	28.8

(a) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 and 2011.

(b) State and territory estimates for 2006 are based on state or territory of registration and should be treated with caution due to small numbers of practitioners. Northern Territory not included. See Appendix A for further information.

(c) State and territory estimates for 2011 derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(d) Includes dental hygienists who did not state or adequately describe their state or territory and those who were overseas.

Source: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

Remoteness areas

Dental hygienists working in *Inner regional* areas worked the most hours (39.6) in 2011. In 2011, dental hygienists working in *Remote and very remote* areas had the fewest average working hours (23.1) (Table 4.7).

Table 4.7: Employed dental hygienists: average total weekly hours[(a)] worked, remoteness area[(b)] of main job, 2006 and 2011

Sex	Major cities	Inner regional	Outer regional	Remote/Very remote[(c)]	Australia[(d)]
			2006		
Persons	*28.8*	*29.6*	*26.7*	*32.0*	*28.8*
Men	30.0	. .	. .	. .	30.0
Women	28.8	29.6	26.7	32.0	28.8

(continued)

Table 4.7 (continued): Employed dental hygienists: average total weekly hours[(a)] worked, remoteness area[(b)] of main job, 2006 and 2011

Sex	Major cities	Inner regional	Outer regional	Remote/Very remote[(c)]	Australia[(d)]
			2011		
Persons	*28.9*	*30.6*	*28.3*	*17.1*	*29.1*
Men	32.0	42.0	45.0	. .	34.6
Women	28.8	29.7	27.9	17.1	28.8

(a) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 to 2011.

(b) Derived from location of main job where available; otherwise, location of principal practice is used as a proxy. If principal practice details are unavailable, location of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(c) Includes *Migratory* areas.

(d) Includes dental hygienists who did not state or adequately describe their location and those who were overseas.

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

Employment sector

Dental hygienists work predominantly in the private sector, which has 768 full-time equivalent hygienists, compared with 48 in the public sector. Dental hygienists in the public sector were more likely to work fewer hours and be men than those working in the private sector (17.6 hours compared with 28.4 hours per week on average and 88.9% women compared with 96.1% women, respectively).

Table 4.8: Employed dental hygienists: selected characteristics, by employment sector[(a)], 2006 to 2011

Characteristic	2006	2011
	Private	
Number	596	1,027
Average age	38.4	37.2
Aged 55 and over (per cent)	n.a.	5.1
Women (per cent)	97.4	96.1
Average weekly hours worked in sector	28.7	28.4
FTE number	450	768
	Public	
Number	38	103
Average age	40.0	42.9
Aged 55 and over (per cent)	n.a.	18.3
Women (per cent)	88.3	88.9
Average weekly hours worked in sector	25.0	17.6
FTE number	25	48

(a) Care should be taken in interpreting change in the estimates over time due to changes in the way practitioners were assigned to a sector. Data for 2006 are based on sector of main job whereas but data for 2011 refer to all persons working in that sector. For calculation of average hours worked, 2011 data are based on reported hours worked in each sector whereas the 2006 data are based on all hours worked classified by sector of main job.

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

The large apparent drop in average hours in the public sector between 2009 and 2011 is due to a change in methodology; data before 2009 assign all hours to employment sector of main job, whereas the 2011 data include both public and private hours worked and dental hygienists appear in each sector in which they work (Table 4.8).

4.3 Geographic profile of employed dental hygienists

4.3.1 Remoteness areas of Australia

Information on the work location of dental hygienists is collected in the Dental Workforce Survey 2011, providing a means, in combination with other data on hours and population, of examining variability in the supply of dental hygienists across Australia.

Using the postcode of their main work location where available, each dental hygienist is allocated to one of the following in the ASGC RA: *Major cities*, *Inner regional*, *Outer regional*, *Remote*, *Very remote* and *Migratory* (see Glossary). Otherwise, remoteness area of principal practice is used as a proxy; if remoteness area of principal practice is unavailable, remoteness area of residence is used. For records with no information on all three locations, they are coded to 'Not stated' location. In this report, the *Remote*, *Very remote* and *Migratory* categories have been combined due to small numbers (Table 4.9).

Table 4.9: Employed dental hygienists: selected characteristics, remoteness area[(a)], 2006 and 2011

Characteristic	Major cities	Inner regional	Outer regional	Remote/Very remote[(a)]	Australia[(b)]
			2006[(c)]		
Number	589	60	24	1	674
Average age	37.7	38.0	37.3	n.p.	37.7
Aged 55 and over (per cent)	3.9	1.7	8.3	n.p.	3.9
Women (per cent)	96.2	100.0	100.0	n.p.	96.7
Average weekly hours[(d)] worked	28.8	29.6	26.7	n.p.	28.8
FTE rate[(e)]	3.2	1.1	0.9	n.p.	2.5
			2011[(f)]		
Number	891	119	50	4	1,065
Average age	37.6	36.3	37.0	36.0	37.4
Aged 55 and over (per cent)	5.8	5.0	2.2	—	5.7
Women (per cent)	96.5	92.1	98.0	100.0	96.1
Average weekly hours[(d)] worked	28.9	30.6	28.3	17.1	29.1
FTE rate[(e)]	4.4	2.2	1.8	0.3	3.7

(a) Includes *Migratory* areas.

(b) Includes dental hygienists who did not state or adequately describe their location of practice and those who were overseas.

(c) Remoteness area of main job.

(d) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 to 2011.

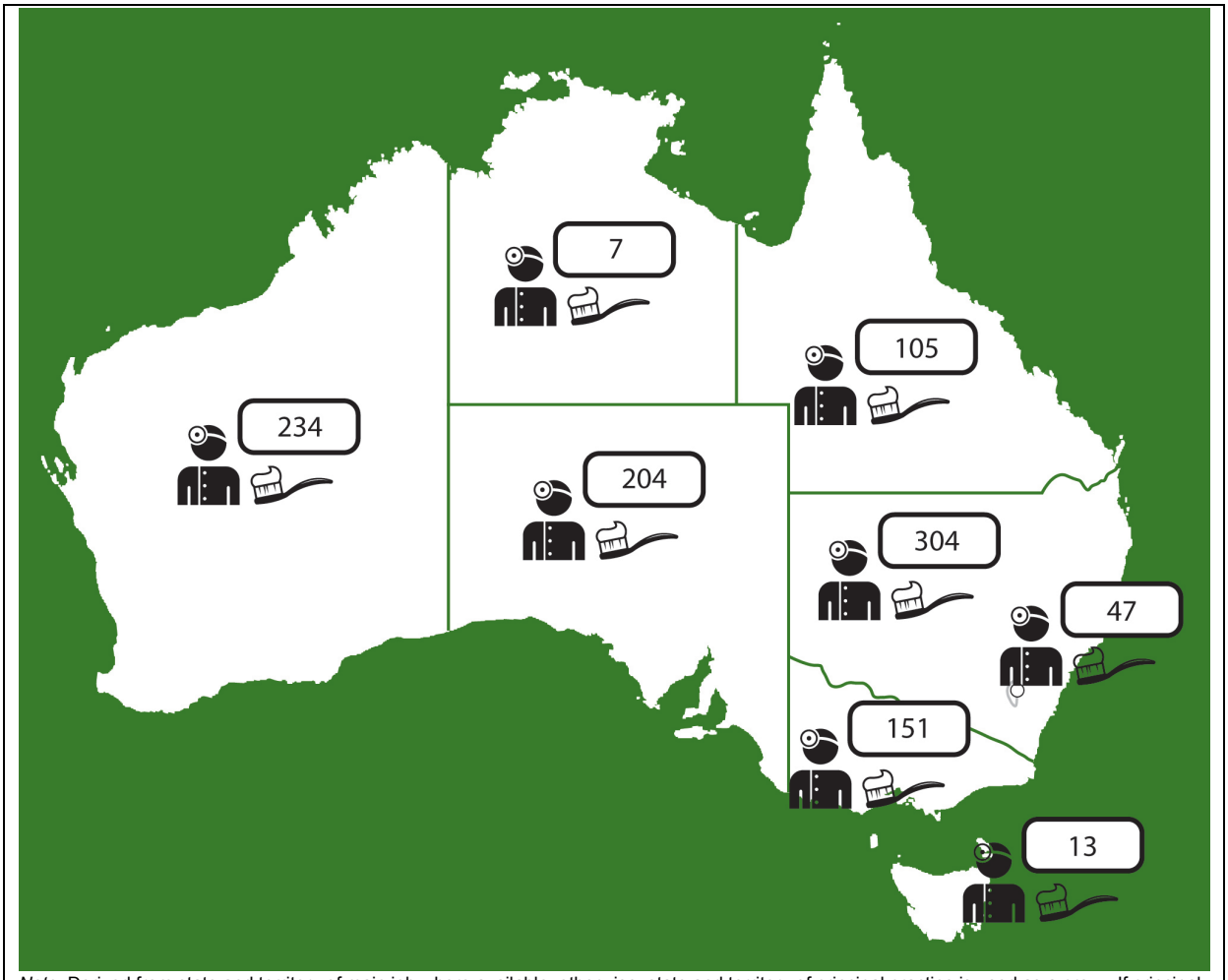
(e) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

(f) Derived from remoteness area of main job where available; otherwise, remoteness area of principal practice is used as a proxy. If remoteness area details are unavailable, remoteness area of residence is used. Records with no information on all three locations are coded to 'Not stated'.

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

Dental hygienists have shown considerable growth across all remoteness areas. *Major cities* have the highest supply of dental hygienists at 4.4 FTE per 100,000 population.

4.3.2 States and territories of Australia



Note: Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

Source: NHWDS: dental practitioners 2011.

Figure 4.5: Employed dental hygienists: state and territory, 2011

Table 4.10: Employed dental hygienists: selected characteristics, state and territory, 2006[(a)] and 2011[(b)]

Characteristic	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					2006				
Number	149	120	74	135	154	5	38	. .	674
Average age	39.1	37.1	39.7	32.6	40.4	39.0	38.2	. .	37.7
Aged 55 and over (per cent)	4.7	6.7	5.4	—	4.5	—	—	. .	3.9
Women (per cent)	96.2	98.1	95.9	95.7	98.3	100	91.7	. .	96.7
Average weekly hours[(c)] worked	29.6	29.8	29.3	30.3	24.9	29.7	31.7	. .	28.8
FTE rate[(d)]	1.7	1.8	1.4	5.2	6.4	0.8	9.5	. .	2.5
					2011				
Number	304	151	105	234	204	13	47	7	1,065
Average age	36.1	39.7	40.0	33.7	40.6	41.0	37.6	32.5	37.4
Aged 55 and over (per cent)	3.9	5.9	4.0	2.1	11.8	n.p.	n.p.	—	5.7
Women (per cent)	94.8	96.7	93.3	96.9	97.6	n.p.	n.p.	n.p.	96.1
Average weekly hours[(c)] worked	31.9	28.1	29.2	29.5	24.9	32.7	29.1	28.5	29.1
FTE rate[(d)]	3.5	2.0	1.8	7.7	8.2	2.2	9.8	2.3	3.7

(a) State and territory estimates for 2006 are based on state or territory of registration and should be treated with caution due to low response rates in some jurisdictions. See Appendix A for further information.

(b) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(c) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 to 2011.

(d) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

4.4 Supply of dental hygienists

4.4.1 Overall supply

Data on the size and characteristics of the dental hygienist workforce present a valuable profile of dental hygienists, but do not give a complete picture of the overall level of service provided. Some dental hygienists have long working weeks and others work part time; therefore, their relative contributions to the level of service need to be taken into account to measure the overall supply effectively.

To do this, information on the number of employed dental hygienists, together with their average hours worked, has been used to calculate an FTE number of practitioners, based on a standard full-time working week of 38 hours (Box 3.2).

To take account of population differences across Australia, and across time, ABS estimated resident population figures have been used to convert the FTE number to an FTE rate (FTE per 100,000 population) (see Appendix D)

4.3.2 Supply of employed dental hygienists

Across Australia, the overall supply of dental hygienists increased between 2006 and 2011, from 2.5 FTE per 100,000 population in 2006 to 3.7 in 2011 (Table 4.9).

5 Dental therapists

5.1 Registered dental therapists

5.1.1 At a glance

	In 2011, there were 1,165 registered dental therapists, 1,044 of whom were working as dental therapists.
	About 1 in 34 dental therapists were men in 2011.
	In 2011, the average age of employed dental therapists was 46.3 years and 14.3% of dental therapists were aged 55 and over.
	Employed dental therapists worked, on average, 28.8 hours a week in 2011, with 61.7% working part time (less than 35 hours per week).
	About half of employed dental therapists reported working in public health dentistry, with about a quarter working in general dental practice.

Source: NHWDS: dental practitioners 2011.

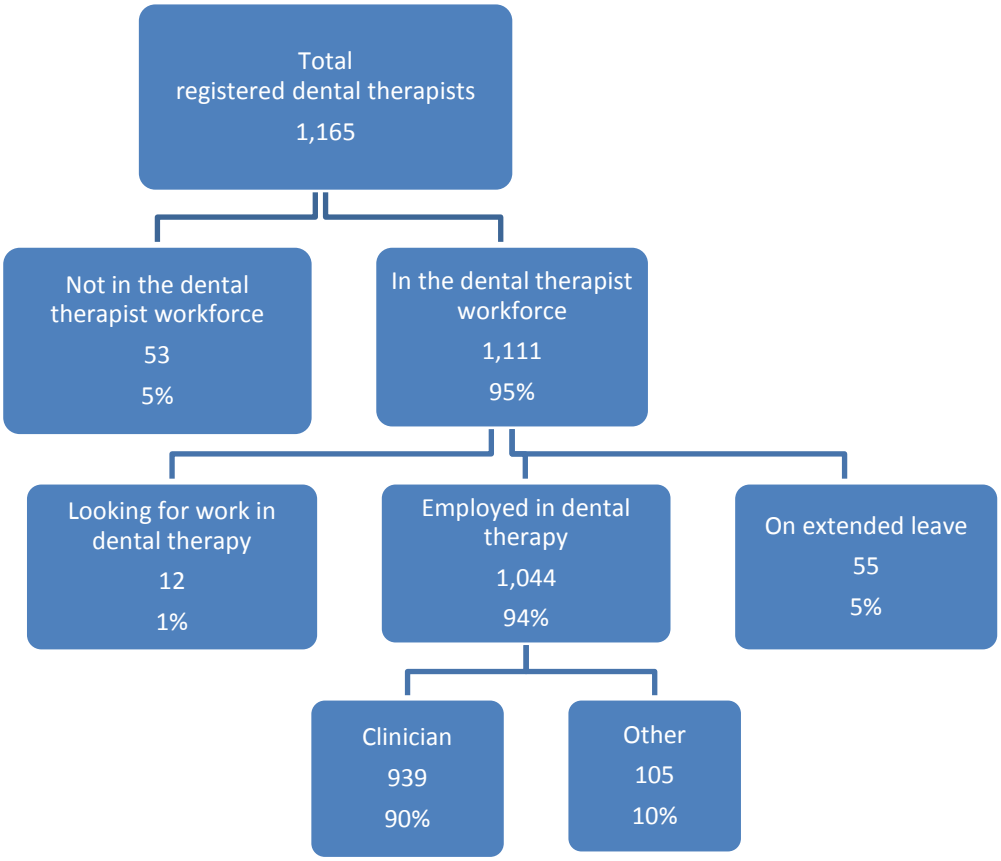
Box 5.1: Services provided by dental therapists

Dental therapists examine and treat diseases of the teeth in preschool, primary and secondary school children under the general supervision of a dentist, including:

- oral examination
- taking of impressions of teeth (other than for the purposes of prosthodontic or prosthetic dental treatment
- application of preventive and therapeutic solutions to teeth
- preventive dental procedures, including the application of fissure sealants
- administration of local anaesthetic solutions for dental procedures
- dental prophylaxis, including the removal of dental calculus
- splinting to stabilise mobile teeth
- restoration of coronal tooth structure, including pulp capping and pulpotomy
- extraction of deciduous teeth
- diagnostic dental radiography.

A therapist might also be involved in non-clinical roles, such as oral health promotion, education and preventive dentistry.

Source: AIHW DSRU 2012.



Source: NHWDS: dental practitioners 2011.

Figure 5.1: Dental therapists: workforce status, 2011

5.1.2 Workforce status

The number of registered dental therapists in 2011 was 1,165 (Figure 5.1). Between 2006 and 2011, the number of dental therapists employed in dentistry decreased by 10.8%, from 1,171 to 1,044 (Table 5.1). Due to the creation of the new dental profession of OHTs representing those dual qualified as hygienists and therapists, care should be taken in comparing these three categories over time.

Table 5.1: Dental therapists: workforce status, 2006, 2009 and 2011

Workforce status	2006	2009	2011	Change between 2006 and 2011 (per cent)
In the dental workforce	**1,231**	**1,288**	**1,111**	**–9.7**
Employed in dentistry	1,171	1,234	1,044	–10.8
Looking for work in dentistry	*16*	*13*	*12*	*–5.8*
Employed elsewhere	. .	. .	5	. .
Not employed	. .	. .	7	. .
On extended leave	44	41	55	26.0
Not in the dental workforce	**133**	**95**	**53**	**–59.8**
Overseas	5	4	5	–1.6
Not looking for work in dentistry	*128*	*91*	*40*	*–68.4*
Employed elsewhere	100	56	23	–76.6
Not employed	28	35	17	–39.2
Retired	. .	. .	8	. .
Total dental therapists[(a)]	**1,364**	**1,383**	**1,165**	**–14.6**
Multiple registrations	16	29	. .	. .
Total registrations	**1,380**	**1,412**	**. .**	**. .**

(a) For 2006 and 2009, dental therapists may have been registered in more than one state or territory; this figure accounts for this potential source of double counting. See Appendix A for further information.

Sources: National Dental Labour Force Collection, 2006 and 2009; NHWDS: dental practitioners 2011.

Changes to the new nationally standardised survey questionnaire have resulted in a slight change in the pattern of responses to the employment-related questions. As such, comparing data over time should be done with caution. (See Appendix A for further information on changes to the employment-related questions.)

Of the 1,165 registered dental therapists in 2011, 1,044 (89.6%) were employed in dentistry in Australia (Table 5.1).

Table 5.2: Dental therapists: workforce status and principal role of main job, state and territory[(a)], 2011

Workforce status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
In the dental workforce	**222**	**174**	**204**	**323**	**n.p.**	**n.p.**	**13**	**n.p.**	**1,111**
Employed in dentistry	*205*	*164*	*197*	*297*	*100*	*52*	*13*	*16*	*1,044*
Clinician	168	149	184	278	87	48	n.p.	n.p.	939
Non-clinician	37	15	13	18	13	4	n.p.	n.p.	105
On extended leave or looking for work in dentistry	18	10	7	26	n.p.	n.p.	—	—	67
Not in the dental workforce	**22**	**5**	**5**	**16**	**n.p.**	**n.p.**	**—**	**n.p.**	**53**
Total registered dental therapists	**244**	**179**	**210**	**339**	**107**	**56**	**13**	**17**	**1,165**

(a) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

Source: NHWDS: dental practitioners 2011.

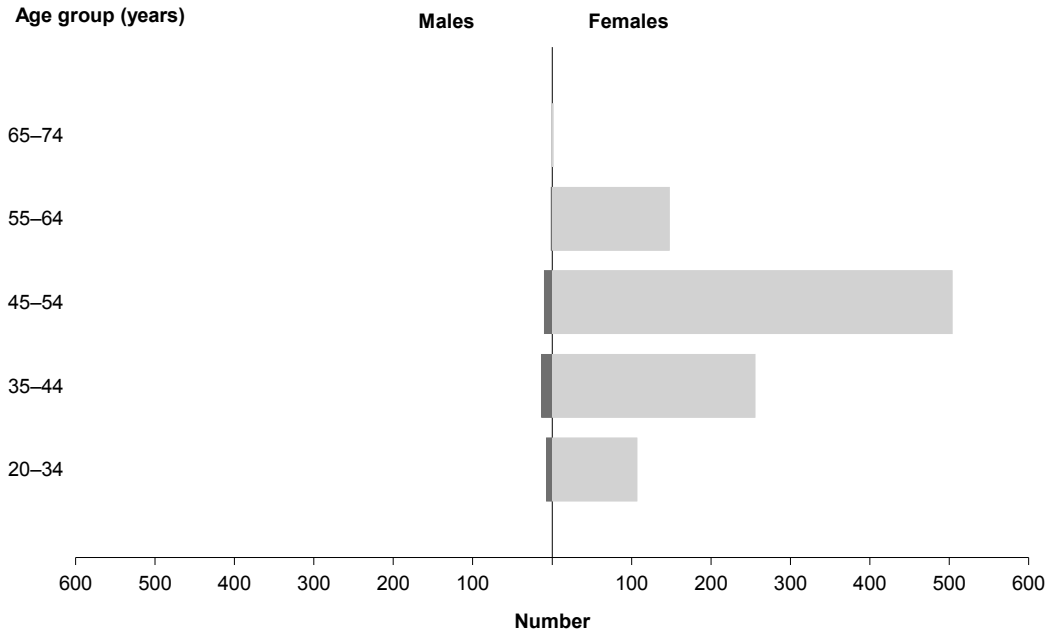
5.2 Dental therapists employed in dental therapy in Australia

A dental therapist who reported working in dental health in the week before the survey is considered to have been employed in dentistry, or to be an employed dental therapist, at the time of the survey (see Glossary).

The characteristics and supply of dental therapists employed in dentistry in Australia are the focus of the remainder of this section.

5.2.1 Age and sex

In 2011, the average age of employed dental therapists was 46.3 years, older than the average of 42.9 in 2006 (Table 5.3). The vast majority (97.1%) were women.



Source: NHWDS: dental practitioners 2011.

Figure 5.2: Number of employed dental therapists, by age group and sex, 2011

5.2.2 Aboriginal and Torres Strait Islander dental therapists

There were six employed dental therapists who identified themselves as Aboriginal and Torres Strait Islanders, representing about 0.6% of employed dental therapists who responded to the question.

5.2.3 Field of dental therapy

The principal role in dentistry describes the types of dental therapy work undertaken by employed dental therapists. The 2011 survey categorised the roles as clinician, administrator, teacher/educator, researcher, and other. In 2011, most (89.9%) employed dental hygienists identified as clinicians. The oldest group was administrators, with an average age of 48.2.

Table 5.3: Employed dental therapists: principal role in main job, selected characteristics, 2011

Principal role of main job	Number	Average age	Aged 55 and over (per cent)	Women (per cent)	Average hours	FTE rate[(a)]
Clinician	939	46.1	14.1	97.4	28.5	3.2
Non-clinician	105	47.6	15.6	94.3	31.5	0.4
Administrator	45	48.2	n.p.	n.p.	32.4	0.2
Teacher/educator	41	47.1	n.p.	n.p.	31.1	0.2
Researcher	4	47.6	n.p.	n.p.	29.2	—
Other	14	47.3	n.p.	n.p.	30.7	0.1
Total	**1,044**	**46.3**	**14.3**	**97.1**	**28.8**	**3.5**

(a) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Source: NHWDS: dental practitioners 2011.

Area of dentistry

Survey respondents were asked to indicate the principal area of their main job in dentistry in the week before the survey. Fourteen response categories were provided, with only one response allowed. Table 5.4 provides these responses disaggregated by selected characteristics of the respondent with smaller categories aggregated with 'Other' for confidentiality purposes. Public health dentistry is the most common area of practice, accounting for 48.9% of all employed dental therapists in 2011, followed by general dental practice (25.7%).

Table 5.4: Employed dental therapists: principal area of main job, selected characteristics, 2011

Principal area of main job	Number	Average age (years)	Aged 55 and over (per cent)	Women (per cent)	Average weekly hours	FTE rate[(a)]
General dental practice	268	44.6	9.9	95.6	27.8	0.9
Orthodontics	73	42.0	n.p.	n.p.	22.9	0.2
Paedodontics	83	47.8	n.p.	n.p.	30.9	0.3
Periodontics	16	50.0	n.p.	n.p.	23.5	—
Public health dentistry	510	47.6	16.9	98.1	29.8	1.8
Other	40	45.4	n.p.	n.p.	29.6	0.1
Not stated/inadequately described	54	45.8	n.p.	n.p.	30.3	0.2
Total	**1,044**	**46.3**	**14.3**	**97.1**	**28.8**	**3.5**

(a) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Source: NHWDS: dental practitioners 2011.

5.2.4 Work setting

Dental therapists were asked to indicate the setting of their main job in dentistry in the week before completing the survey. The most common work setting for dental therapists was educational facilities (34.5% of clinicians and 34.3% of all employed dental therapists). Most of these were working in schools. Community health-care services were the next most common work setting (23.2% of clinicians and 23.5% of all employed dental hygienists) (Table 5.5).

Table 5.5: Employed dental therapists: work setting of main job and clinician status, number and average weekly hours worked, 2011

	Clinicians[(a)]		All dental therapists	
Work setting of main job	**Number**	**Average weekly hours worked**	**Number**	**Average weekly hours worked**
Private practice	*193*	*23.4*	*203*	*23.4*
Solo private practice	64	24.6	67	24.7
Group private practice	129	22.8	136	22.8
Community health care services	218	29.3	245	29.4
Hospital	73	27.7	84	28.2
Educational facilities	*324*	*30.4*	*358*	*30.4*
Tertiary educational facility	7	33.4	31	31.9
School	318	30.3	324	30.3
Other educational facility	—	—	4	26.4
Other government department or agency	61	31.4	71	31.4
Other	26	31.4	36	32.5
Not stated	43	29.8	47	31.2
Total	**939**	**28.5**	**1,044**	**28.8**

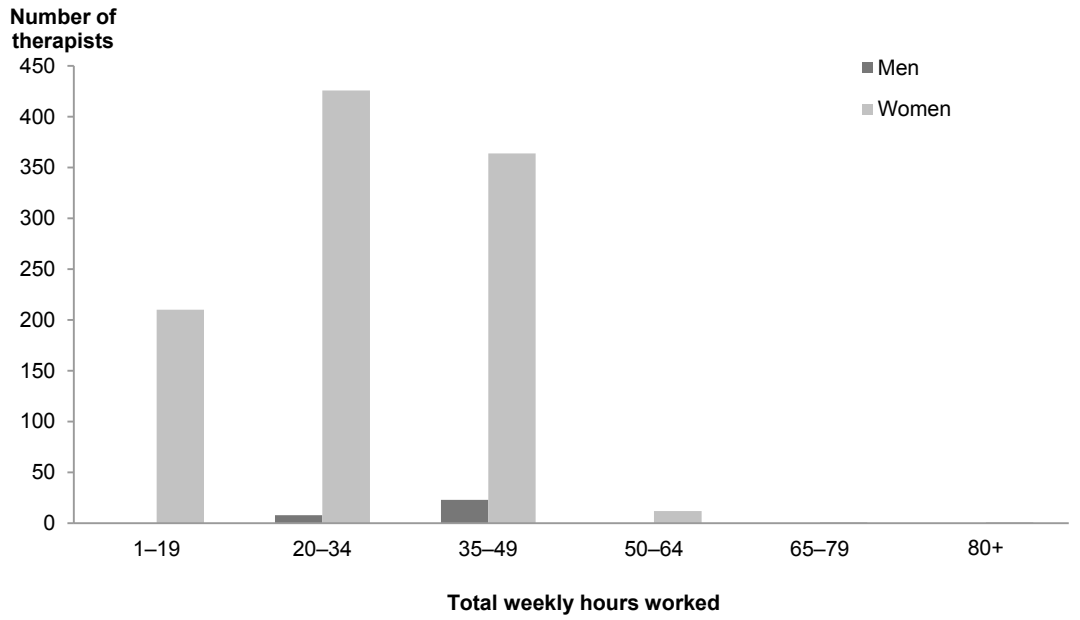
(a) Clinician includes those whose role in their main job was 'Clinician'.

Source: NHWDS: dental practitioners 2011.

5.2.5 Working hours

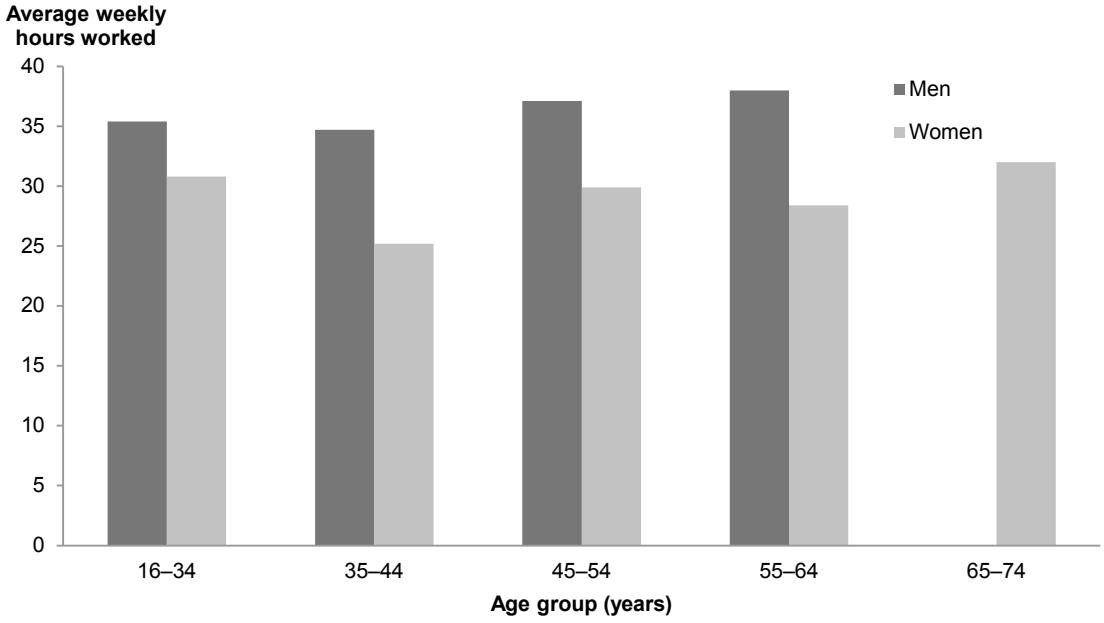
Comparison of working hours over time should be undertaken with care, due to differences between the survey questions used in the Dental Workforce Survey 2011 and the previous National Dental Labour Force Collection (see Appendix A).

On average, employed dental therapists worked 28.8 hours a week in 2011, slightly up from 28.0 in 2006. Almost two-thirds (61.7%) worked part time (less than 35 hours per week) (Figure 5.4).



Source: NHWDS: dental practitioners 2011.

Figure 5.3: Employed dental therapists: total hours worked per week, by sex, 2011



Source: NHWDS: dental practitioners 2011.

Figure 5.4: Employed dental therapists: average total weekly hours worked, by age group, 2011

Work setting

Dental therapists whose main work setting was categorised as 'Other' worked the most hours on average (32.5 per week). Those whose main work setting was tertiary education facilities worked 31.9 hours per week (Table 5.5).

States and territories

Dental therapists in the Northern Territory tended to work the most hours per week on average (35.6) while Victorian dental therapists worked the fewest (26.5) (Table 5.6).

Table 5.6: Employed dental therapists: average total weekly hours[(a)] worked, sex, state and territory, 2006 and 2011

Sex	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					2006[(b)]				
Persons	*29.8*	*26.7*	*28.8*	*26.7*	*26.9*	*29.4*	*29.8*	*31.9*	*28.0*
Men	38.0	39.5	21.0	45.0	15.0	37.8	. .	. .	33.0
Women	29.8	26.5	28.8	26.6	27.1	28.8	29.8	31.9	27.9
					2011[(c)]				
Persons	*28.7*	*26.7*	*31.2*	*27.8*	*28.8*	*30.6*	*31.0*	*35.6*	*28.8*
Men	37.6	31.5	38.0	39.0	42.0	34.6	. .	. .	35.7
Women	28.4	26.5	31.0	27.7	28.6	29.7	31.0	35.6	28.6

(a) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 and 2011.

(b) State and territory estimates for 2006 are based on state or territory of registration and should be treated with caution due to low response rates in some jurisdictions. See Appendix A for further information.

(c) State and territory estimates for 2011 derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

Source: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

Remoteness areas

Dental therapists working in *Remote and Very remote* areas worked the most hours per week on average (31.9 in 2011), and those working in *Inner regional* areas the fewest (28.1). However, the differences were relatively small.

Table 5.7: Employed dental therapists: average total weekly hours[(a)] worked, remoteness area[(b)], 2006 and 2011

Sex	Major cities	Inner regional	Outer regional	Remote/Very remote[(c)]	Australia
			2006		
Persons	*27.9*	*27.7*	*29.1*	*28.1*	*28.0*
Men	35.4	29.1	35.4	—	33.0
Women	27.8	27.7	29.1	28.1	27.9

(continued)

Table 5.8 (continued): Employed dental therapists: average total weekly hours[(a)] worked, remoteness area[(b)], 2006 and 2011

Sex	Major cities	Inner regional	Outer regional	Remote/Very remote[(c)]	Australia
			2011		
Persons	*28.6*	*28.1*	*30.4*	*31.9*	*28.8*
Men	36.5	36.5	30.4	. .	35.7
Women	28.5	27.7	30.4	31.9	28.6

(a) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 to 2011.

(b) Derived from remoteness area of main job where available; otherwise, remoteness area of principal practice is used as a proxy. If remoteness area details are unavailable, remoteness area of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(c) Includes *Migratory* areas.

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

Employment sector

Dental therapists in the public sector were more likely to work more hours and be older than those working in the private sector (29.1 compared with 21.4 hours per week on average and an average age of 46.8 compared with 44.7).

Table 5.8: Employed dental therapists: selected characteristics, by employment sector, 2006 and 2011[(a)]

Characteristic	2006	2011
	Private	
Number	194	290
Average age	41.3	44.7
Aged 55 and over (per cent)	n.a.	8.9
Women (per cent)	99.3	96.9
Average weekly hours worked in sector	22.8	21.4
FTE	116	163
	Public	
Number	928	822
Average age	43.3	46.8
Aged 55 and over (per cent)	n.a.	15.4
Women (per cent)	98.7	97.0
Average weekly hours worked in sector	28.9	29.1
FTE	706	629

(a) Care should be taken in interpreting change in the estimates over time due to changes in the way practitioners were assigned to a sector. Data for 2006 are based on sector of main job whereas data for 2011 refer to all persons working in that sector. For calculation of average hours worked, 2011 data are based on reported hours worked in each sector whereas the 2006 data are based on all hours worked classified by sector of main job.

Sources: National Dental Labour Force Collection, 2006; NHWDS: dental practitioners 2011.

The large apparent drop in average hours in the private sector between 2006 and 2011 is due to a change in methodology. Data before 2011 allocated all hours worked to the employment sector of the dental therapist's main job, whereas the 2011 data include both public and private hours worked and dental therapists appear in each sector that they work in.

5.3 Geographic profile of employed dental therapists

5.3.1 Remoteness areas of Australia

Information on the work location of dental therapists is collected in the Dental Workforce Survey 2011, providing a means, in combination with other data on hours and population, of examining variability in the supply of dental therapists across Australia.

Using the postcode of their main work location where available, each dental therapist is allocated to one of the following in the ASGC RA: *Major cities*, *Inner regional*, *Outer regional*, *Remote*, *Very remote* and *Migratory* (see Glossary). Otherwise, remoteness area of principal practice is used as a proxy; if remoteness area of principal practice is unavailable, remoteness area of residence is used. Records with no information on all three locations are coded to 'Not stated' location. In this report, the *Remote*, *Very remote* and *Migratory* categories have been combined due to small numbers.

Dental therapists have increased in number in *Remote* and *Very remote* areas and declined across all other remoteness areas. *Outer regional* areas have the highest supply of dental therapists at 5.3 FTE per 100,000 population (Table 5.9).

Table 5.9: Employed dental therapists: selected characteristics, remoteness area, 2006 and 2011

Characteristic	Major cities	Inner regional	Outer regional	Remote/Very remote[(a)]	Australia
			2006[(b)]		
Number	728	274	147	21	1171
Average age	43.3	42.3	42.3	39.9	42.9
Aged 55 and over (per cent)	4.7	1.1	4.8	—	3.8
Women (per cent)	99.1	97.4	99.3	100.0	**98.8**
Average weekly hours[(c)] worked	27.9	27.7	29.1	28.1	28.0
FTE rate[(d)]	3.8	4.9	5.7	3.2	4.2
			2011[(e)]		
Number	614	265	135	30	1,044
Average age	46.1	46.8	46.7	43.3	46.3
Aged 55 and over (per cent)	13.4	15.2	16.0	n.p.	14.3
Women (per cent)	97.7	95.4	97.0	100.0	97.1
Average weekly hours[(c)] worked	28.6	28.1	30.4	31.9	28.8
FTE rate[(d)]	3.0	4.5	5.3	4.9	3.5

(a) Includes *Migratory* areas.

(b) Remoteness area of main job.

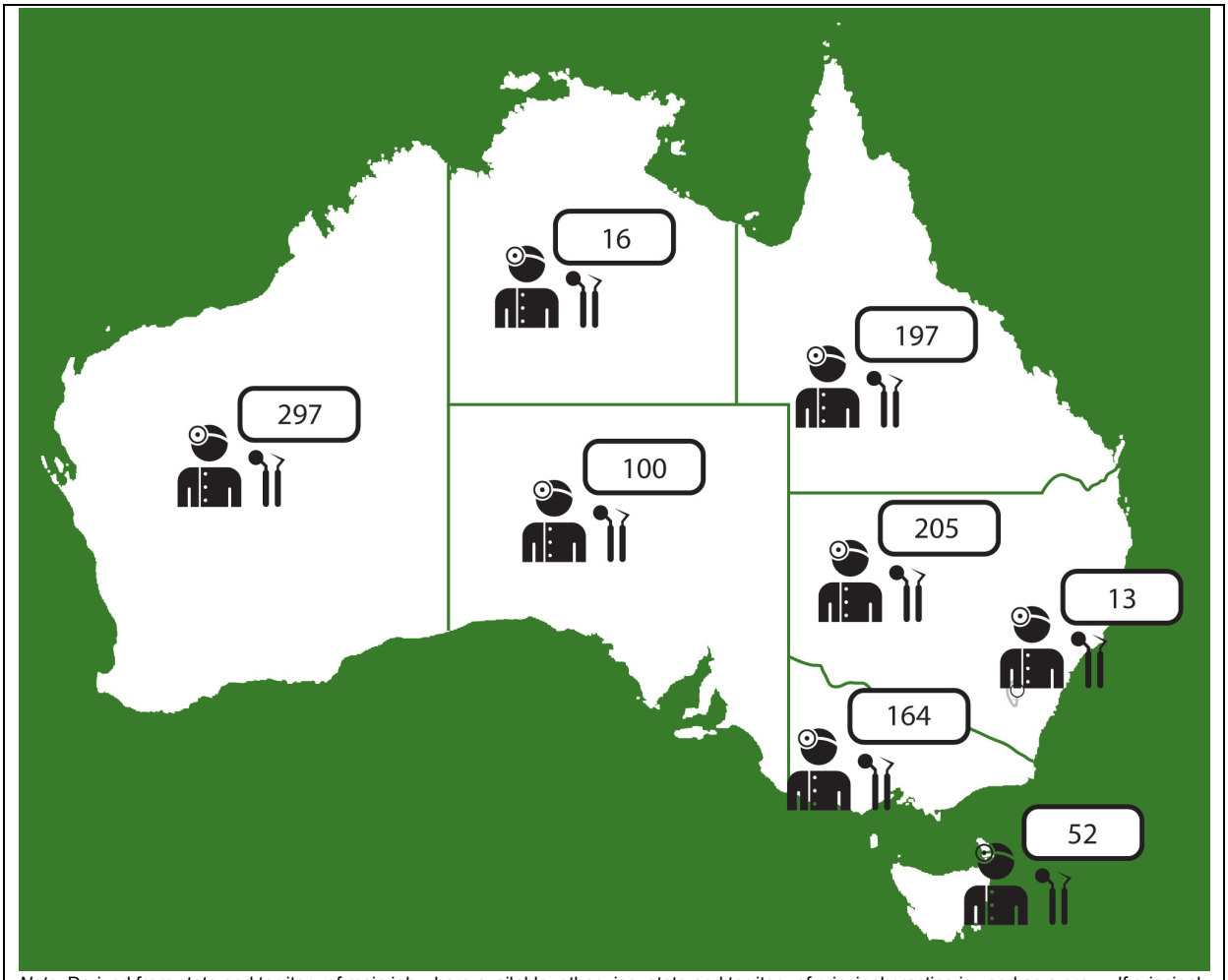
(c) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 to 2011.

(d) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

(e) Derived from remoteness area of main job where available; otherwise, remoteness area of principal practice is used as a proxy. If remoteness area details are unavailable, remoteness area of residence is used. Records with no information on all three locations are coded to 'Not stated'.

Source: NHWDS: dental practitioners 2011.

5.3.2 States and territories of Australia



Note: Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

Source: NHWDS: dental practitioners 2011.

Figure 5.5: Employed dental therapists: state and territory, 2011

Between 2006 and 2011, the number of employed dental therapists decreased in all jurisdictions except for Western Australia (Table 5.10). The FTE rate also decreased in all jurisdictions, with the largest proportional increase (35.3%) in the Australian Capital Territory. These differences may be due in part to improvements in the methodology allocating dental hygienists to states on the basis of where they reported working rather than on the registration data.

Table 5.10: Employed dental therapists: selected characteristics, state and territory, 2006[(a)] and 2011[(b)]

Characteristic	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					2006[(a)]				
Number	225	196	245	286	121	56	19	23	1,171
Average age	43.3	40.2	42.7	43.6	44.6	44.5	44.9	41.8	42.9
Aged 55 and over (per cent)	2.7	4.1	0.4	4.5	8.3	10.7	—	—	3.8
Women (per cent)	99.5	97.3	99.0	99.6	99.0	94.5	100	100	98.8
Average weekly hours[(c)] worked	29.8	26.7	28.8	26.7	26.9	29.4	29.8	31.9	28.0
FTE rate[(d)]	2.6	2.7	4.5	9.8	5.5	8.8	4.5	9.2	4.2
					2011[(b)]				
Number	205	164	197	297	100	52	13	16	1,044
Average age	47.6	44.5	47.5	44.1	48.3	48.7	48.6	50.8	46.3
Aged 55 and over (per cent)	16.4	10.6	8.1	12.6	29.9	n.p.	n.p.	n.p.	14.3
Women (per cent)	96.6	96.4	97.7	99.3	99.0	n.p.	n.p.	n.p.	97.1
Average weekly hours[(c)] worked	28.7	26.7	31.2	27.8	28.8	30.6	31.0	35.6	28.8
FTE rate[(d)]	2.1	2.1	3.6	9.2	4.6	8.2	2.9	6.5	3.5

(a) State and territory estimates for 2006 are based on state or territory of registration and should be treated with caution due to small numbers of practitioners. Northern Territory not included. See Appendix A for further information.

(b) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(c) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 to 2011.

(d) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

5.4 Supply of dental therapists

5.4.1 Overall supply

Data on the size and characteristics of the dental therapist workforce present a valuable profile of dental therapists, but do not give a complete picture of the overall level of service provided. Some dental therapists have long working weeks and others work part time; therefore, their relative contributions to the level of service need to be taken into account to measure the overall supply effectively.

To do this, information on the number of employed dental therapists, together with their average hours worked, has been used to calculate an FTE number of practitioners, based on a standard full-time working week of 38 hours (Box 3.2).

To take account of population differences across Australia, and across time, ABS estimated resident population figures have been used to convert the FTE number to an FTE rate (FTE per 100,000 population) (see Appendix D).

5.4.2 Supply of employed dental therapists

The overall supply of dental therapists in Australia decreased between 2006 and 2011, from 4.2 FTE per 100,000 population in 2006 to 3.5 in 2011 (Table 5.9).

6 Dental prosthetists

6.1 Registered dental prosthetists

6.1.1 At a glance

	In 2011, there were 1,145 registered dental prosthetists, 1,088 of whom were employed in dental prosthetics.
	About 1 in 7 dental prosthetists were women.
	In 2011, the average age of employed dental prosthetists was 49.3 years; 30.5% were aged 55 or over.
	On average, employed dental prosthetists worked 42.6 hours a week, and 19.4% worked part time (less than 35 hours per week).
	Only about half of employed dental prosthetists identified prosthodontics as the principal area of their main job.

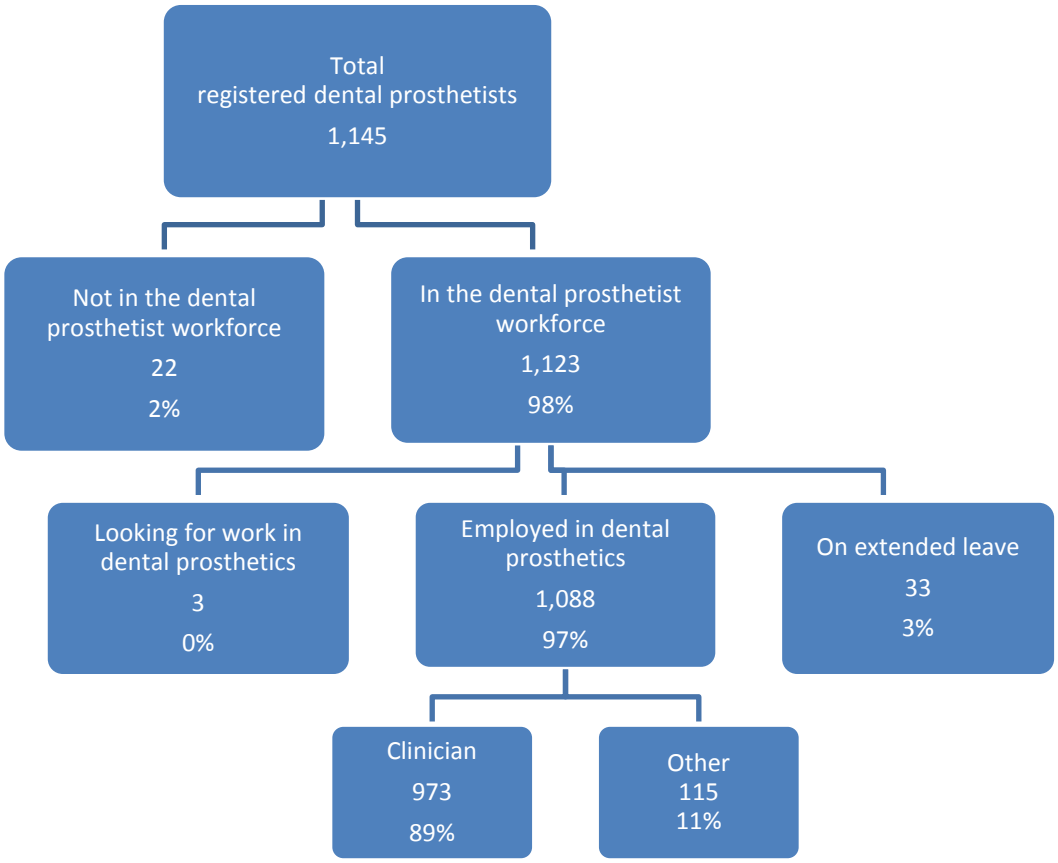
Source: NHWDS: dental practitioners 2011.

Box 6.1: Services provided by dental prosthetists

Dental prosthetists are responsible for the construction and fitting of dentures and sporting mouthguards. Dental prosthetists maintain, repair and reline dentures either by direct consultation with a patient or by referral from a dentist. A dental prosthetist can provide the following treatment:

- the manufacture of dental prostheses, and corrective dental appliances prescribed by a registered dentist or a registered specialist
- the fitting of, and taking impressions or measurements for the purposes of fitting, a denture to the jaw.

Source: AIHW DSRU 2012.



Source: NHWDS: dental practitioners 2011.

Figure 6.1: Dental prosthetists: workforce status, 2011

6.1.2 Workforce status

The number of registered dental prosthetists in 2011 was 1,145 (Figure 6.1). Between 2006 and 2011, the number of employed dental prosthetists increased by 18.1% from 921 to 1,088 (Table 6.1).

Table 6.1: Dental prosthetists: workforce status, 2006[(a)], 2009 and 2011

Workforce status	2006[(a)]	2009	2011	Change between 2006 and 2011 (per cent)
In the dental workforce	**944**	**1,040**	**1,123**	**19.0**
Employed in dentistry	921	1,013	1,088	18.1
Looking for work in dentistry	*18*	*25*	*3*	*–84.6*
Employed elsewhere	. .	. .	3	. .
Not employed	. .	. .	—	. .
On extended leave	5	2	33	551.2
Not in the dental workforce	**95**	**117**	**22**	**–76.8**
Overseas	3	2	3	—
Not looking for work in dentistry	*66*	*78*	*10*	*–84.7*
Employed elsewhere	44	63	4	–91.9
Not employed	22	15	7	–70.2
Retired	26	37	9	–66.5
Total dental prosthetists[(b)]	**1,039**	**1,157**	**1,145**	**10.2**
Multiple registrations	41	63	. .	. .
Total registrations	**1,080**	**1,220**	**. .**	**. .**

(a) 2006 data excludes the Northern Territory

(b) For 2006 and 2009, dental prosthetists may have been registered in more than one state or territory; this figure accounts for this potential source of double counting. See Appendix A for further information.

Sources: National Dental Labour Force Collection, 2006 and 2009; NHWDS: dental practitioners 2011.

Changes to the new nationally standardised survey questionnaire have resulted in a slight change in the pattern of responses to the employment-related questions. As such, comparing data over time should be done with caution. (See Appendix A for further information on changes to the employment-related questions.)

Of the 1,145 registered dental prosthetists in 2011, 1,088 (95.0%) were employed in dentistry in Australia (Table 6.1).

As outlined previously, the data transitioned from state- and territory-based systems to a national registration system in 2010. Before the NRAS was introduced in 2010, data were reported by state of registration. With the new system, data in this report are being reported on the basis of the most current address at the time the survey was undertaken, unless stated otherwise.

Table 6.2: Dental prosthetists: workforce status and principal role of main job, state and territory[(a)], 2011

Workforce status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia[(b)]
In the dental workforce	**401**	**n.p.**	**211**	**76**	**n.p.**	**51**	**15**	**n.p.**	**1,123**
Employed in dentistry	*388*	*313*	*205*	*73*	*42*	*49*	*14*	*n.p*	*1,088*
Clinician	330	284	188	70	n.p.	n.p.	n.p.	n.p.	973
Non-clinician	57	29	17	4	n.p.	n.p.	n.p.	n.p.	115
On extended leave or looking for work in dentistry	13	n.p.	7	3	n.p.	n.p.	n.p.	—	35
Not in the dental workforce	**9**	**n.p.**	**3**	**4**	**n.p.**	**—**	**—**	**n.p.**	**22**
Total registered dental prosthetists	**409**	**323**	**215**	**80**	**45**	**51**	**15**	**5**	**1,145**

(a) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(b) Data include dental prosthetists who did not state or adequately describe their state or territory, and those who were overseas. Therefore, state and territory totals may not sum to the national total. In particular, the total for 'Not in the dental workforce' is higher than the sum of the state and territory figures due to dental prosthetists working overseas.

Source: NHWDS: dental practitioners 2011.

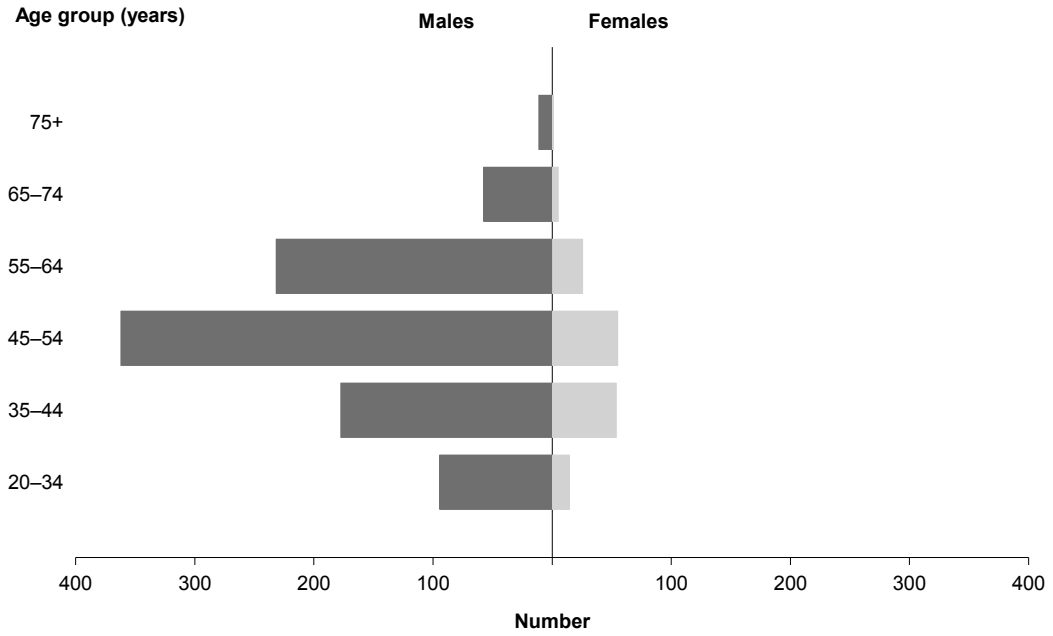
6.2 Dental prosthetists employed in dental prosthetics in Australia

A dental prosthetist who reported working in dental health in the week before the survey is considered to have been employed in dentistry, or to be an 'employed dental prosthetist', at the time of the survey (see Glossary).

The characteristics and supply of dental prosthetist employed in Australia are the focus of the remainder of this section.

6.2.1 Age and sex

In 2011, the average age of employed dental prosthetists was 49.3 years, slightly younger than the average of 50.1 in 2006 (Table 6.9). The proportion of women in the dental prosthetists workforce was 14.2% in 2011.



Source: NHWDS: dental practitioners 2011.

Figure 6.2: Number of employed dental prosthetists, by age group and sex, 2011

6.2.2 Aboriginal and Torres Strait Islander dental prosthetists

There were four employed dental prosthetists who identified themselves as Aboriginal and Torres Strait Islanders, representing about 0.4% of employed dental prosthetists who responded to the question.

6.2.3 Field of dental prosthetics

The principal role in dentistry describes the types of work undertaken by employed dental prosthetists. The 2011 survey categorised the roles as clinician, administrator, teacher/educator, researcher, and other. In 2011, the largest group was clinicians, accounting for 89.4% of employed dental prosthetists.

Table 6.3: Employed dental prosthetists: principal role of main job, selected characteristics 2011

Principal role of main job	Number	Average age	Aged 55 and over (per cent)	Women (per cent)	Average weekly hours	FTE rate[(a)]
Clinician	973	49.2	29.6	13.7	42.9	4.9
Non-clinician	*115*	*50.1*	*37.3*	*18.6*	*40.7*	*0.6*
Administrator	10	52.5	n.p.	n.p.	34.8	—
Teacher/educator	28	49.0	n.p.	n.p.	39.0	0.1
Researcher	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Other	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total	**1,088**	**49.3**	**30.5**	**14.2**	**42.6**	**5.5**

(a) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Source: NHWDS: dental practitioners 2011.

Area of dentistry

Survey respondents were asked to indicate the principal area of their main job in dentistry in the week before the survey. Fourteen response categories were provided, with only one response allowed. Table 6.4 provides these responses disaggregated by selected characteristics of the respondent with smaller categories aggregated with 'Other' for confidentiality purposes.

Table 6.4: Employed dental prosthetists: principal area of main job, selected characteristics, 2011

Principal area of main job	Number	Average age	Aged 55 and over (per cent)	Women (per cent)	Average weekly hours	FTE rate[(a)]
General dental practice	94	49.7	n.p.	n.p.	43.1	0.5
Orthodontics	4	53.9	n.p.	n.p.	30.4	—
Prosthodontics	564	50.9	36.3	13.7	43.0	2.9
Public health dentistry	18	48.7	n.p.	n.p.	37.6	0.1
Special needs dentistry	10	46.7	n.p.	n.p.	46.3	0.1
Other	307	46.8	24.6	14.4	42.8	1.5
Not stated/inadequately described	90	47.3	n.p.	n.p.	40.1	0.4
Total	**1,088**	**49.3**	**30.5**	**14.2**	**42.6**	**5.5**

(a) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Source: NHWDS: dental practitioners 2011.

6.2.4 Work setting

Dental prosthetists were asked to indicate the setting of their main job in dentistry in the week before completing the Dental Workforce Survey 2011. The overwhelming majority working in private practice (82.9% of clinicians and 79.0% of all employed dental prosthetists) (Table 6.5).

Table 6.5: Employed dental prosthetists: work setting of main job and clinician status, number and average weekly hours worked, 2011

	Clinicians[(a)]		All dental prosthetists	
Work setting of main job	Number	Average weekly hours worked	Number	Average weekly hours worked
Private practice	807	43.3	859	43.1
Hospital	37	42.2	45	40.9
Other	64	40.1	113	41.6
Not stated	65	40.4	71	39.7
Total	**973**	**42.9**	**1,088**	**42.6**

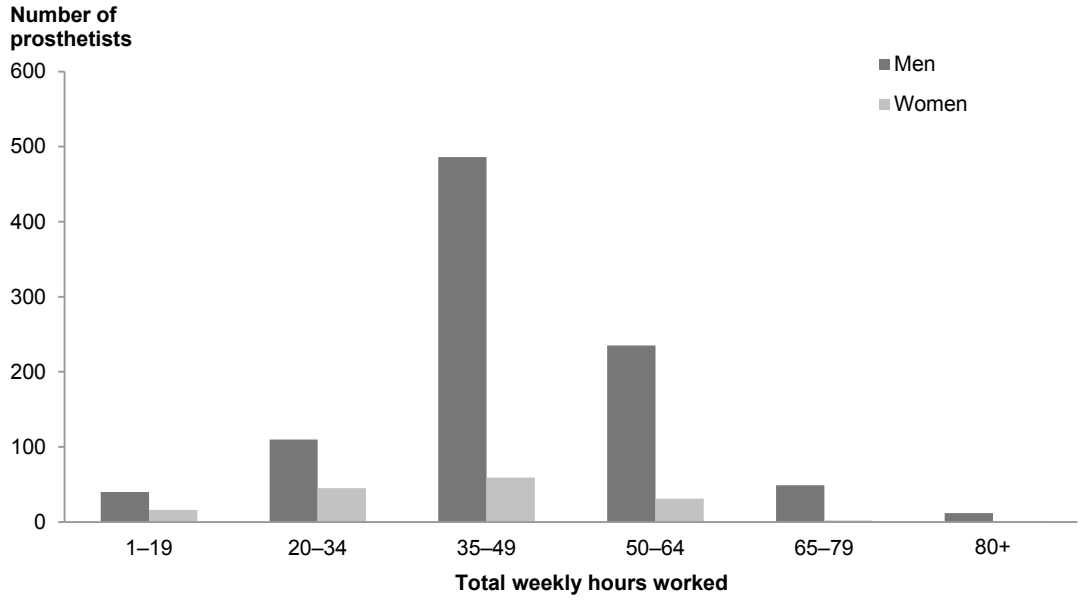
(a) Clinician includes those whose role in their main job was 'Clinician'.

Source: NHWDS: dental practitioners 2011.

6.2.5 Working hours

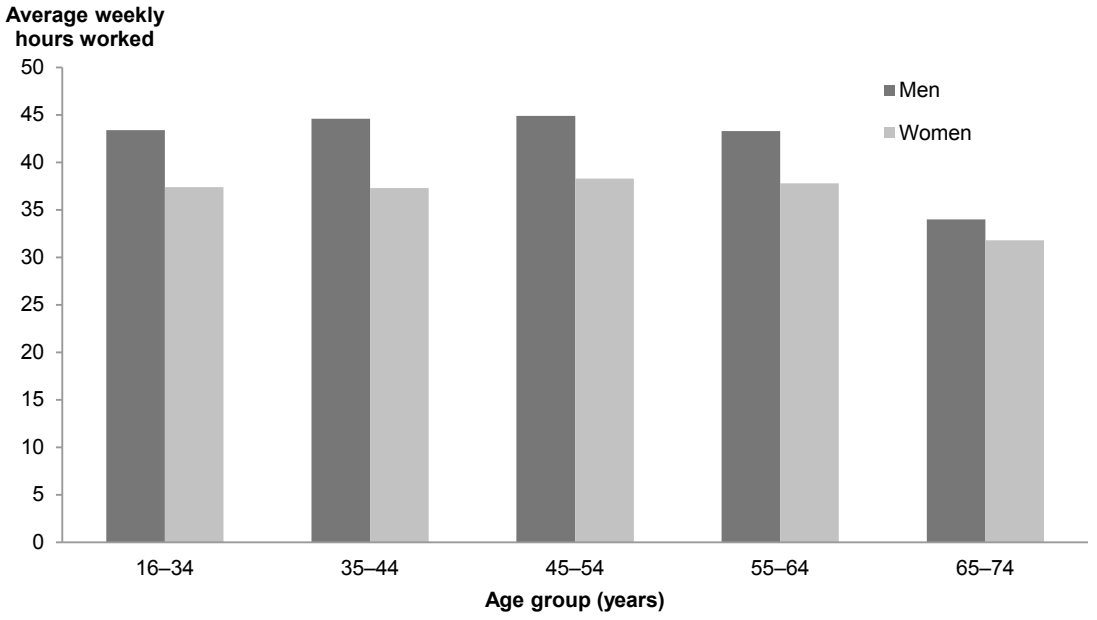
Comparison of working hours over time should be undertaken with care, due to differences between the survey questions used in the Dental Workforce Survey 2011 and the previous National Dental Labour Force Collection (see Appendix A).

On average, employed dental prosthetists worked 42.6 hours a week in 2011, slightly down from 43.0 in 2006. About 1 in 5 (19.4%) worked part time (less than 35 hours per week) (Figure 6.4). Male dental prosthetists worked 43.5 hours per week on average while female prosthetists worked 37.5 hours on average. This gap remained relatively constant across age groups (Figure 6.5).



Source: NHWDS: dental practitioners 2011.

Figure 6.3: Employed dental prosthetists: total hours worked per week, by sex, 2006 and 2011



Source: NHWDS: dental practitioners 2011.

Figure 6.4: Employed dental prosthetists: average total weekly hours worked by age group, 2011

Work setting

Dental prosthetists working in private practice as their main job worked the most hours on average (43.3 per week) (Table 6.5).

States and territories

Dental prosthetists in Queensland tended to work the most average hours (44.6 per week) (Table 6.6).

Table 6.6: Employed dental prosthetists: average total weekly hours[(a)] worked, sex, state and territory, 2006 and 2011

Sex	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					2006[(b)]				
Persons	*43.1*	*45.1*	*43.5*	*37.7*	*39.5*	*41.3*	*46.4*	*. .*	*43.0*
Men	43.8	45.6	44.0	38.6	39.3	44.2	46.4	. .	43.8
Women	36.9	40.2	39.2	30.9	42.0	29.4	. .	. .	36.8
					2011[(c)]				
Persons	*42.7*	*41.2*	*44.6*	*43.7*	*42.4*	*42.3*	*42.0*	*37.3*	*42.6*
Men	43.7	41.9	45.9	44.7	42.5	40.9	42.0	39.0	43.5
Women	37.2	35.9	35.6	38.8	40.0	45.6	. .	35.5	37.6

(a) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 and 2011.

(b) State and territory estimates for 2006 are based on state or territory of registration and should be treated with caution due to small numbers of practitioners. Northern Territory not included. See Appendix A for further information.

(c) State and territory estimates for 2011 derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

Source: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

Remoteness areas

The Remoteness Areas from the Australian Standard Geographical Classification (ASGC) (ABS 2008) have been used in this report to show data by geographic region (see Glossary for further information).

Dental prosthetists in *Inner regional* areas worked the most hours on average (44.1 per week) in 2011, but in 2006 dental prosthetists working in *Outer regional* areas had similarly long hours (Table 6.7).

Table 6.7: Employed dental prosthetists: average total weekly hours[(a)] worked, remoteness area[(b)] of main job, 2006 and 2011

Sex	Major cities	Inner regional	Outer regional	Remote/Very remote[(c)]	Australia
			2006		
Persons	*45.6*	*45.5*	*46.6*	*46.7*	*45.6*
Men	37.4	36.6	36.8	41.7	37.4
Women	42.7	42.7	43.4	44.9	42.8
			2011		
Persons	*42.1*	*44.1*	*43.6*	*n.p.*	*42.6*
Men	43.3	44.4	42.7	n.p.	43.5
Women	35.6	41.8	49.3	n.p.	37.6

(a) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 to 2011.

(b) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(c) Includes *Migratory* areas.

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

Employment sector

There were more dental prosthetists in the private sector than in the public sector both in terms of numbers and in terms of full-time equivalents, with 1,011 full-time equivalents in the private sector and 208 in the public sector. Dental prosthetists in the public sector were more likely to work fewer hours than those in the private sector (29.4 hours compared with 39.5 hours per week on average, respectively).

Table 6.8: Employed dental prosthetists: selected characteristics, by employment sector, 2006 and 2011[(a)]

Characteristic	2006	2011
	Private	
Number	820	973
Average age	50.2	49.4
Aged 55 and over (per cent)	n.a.	31.3
Women (per cent)	9.1	13.2
Average weekly hours worked in sector	42.6	39.5
FTE number	919	1,011
	Public	
Number	46	269
Average age	50.8	49.1
Aged 55 and over (per cent)	n.a.	28.7
Women (per cent)	18.2	16.7
Average weekly hours worked in sector	38.8	29.4
FTE number	47	208

(a) Care should be taken in interpreting change in the estimates over time due to changes in the way practitioners were assigned to a sector. Data for 2006 are based on sector of main job whereas data for 2011 refer to all persons working in that sector. For calculation of average hours worked, 2011 data are based on reported hours worked in each sector whereas the 2006 data are based on all hours worked classified by sector of main job.

Sources: National Dental Labour Force Collection, 2006; NHWDS: dental practitioners 2011.

The large apparent drop in average hours and increase in numbers in the public sector between 2006 and 2011 is due to a change in methodology; data before 2011 allocated all hours to the employment sector of the main job, whereas the 2011 data include both public and private hours worked and dental prosthetists appear in each sector that they work in.

6.3 Geographic profile of employed dental prosthetists

6.3.1 Remoteness areas of Australia

Information on the work location of dental prosthetists is collected in the Dental Workforce Survey 2011, providing a means, in combination with other data on hours and population, of examining variability in the supply of dental prosthetists across Australia.

Using the postcode of their main work location where available, each dental prosthetists is allocated to one of the following in the ASGC RA: *Major cities*, *Inner regional*, *Outer regional*, *Remote*, *Very remote* and *Migratory* (see Glossary). Otherwise, remoteness area of principal practice is used as a proxy; if remoteness area of principal practice is unavailable, remoteness area of residence is used. Records with no information on all three locations are coded to 'Not stated' location. In this report, the *Remote*, *Very remot*e and *Migratory* categories have been combined due to small numbers (Table 6.9).

Table 6.9: Employed dental prosthetists: selected characteristics, by remoteness area, 2006 and 2011

Characteristic	Major cities	Inner regional	Outer regional	Remote/Very remote[(a)]	Australia
			2006[(b)]		
Number	622	240	54	4	921
Average age	50.4	49.5	48.7	55.0	50.1
Aged 55 and over (per cent)	29.1	32.1	20.4	50.0	29.6
Women (per cent)	10.2	9.8	9.5	—	10.0
Average weekly hours[(c)] worked	42.7	43.2	45.6	47.5	43.0
FTE rate[(d)]	4.9	6.7	3.3	1.0	5.0
			2011[(e)]		
Number	781	232	72	2	1,088
Average age	48.7	50.1	53.4	n.p.	49.3
Aged 55 and over (per cent)	28.2	33.0	46.3	n.p.	30.5
Women (per cent)	15.1	11.2	14.0	n.p.	14.2
Average weekly hours[(c)] worked	42.1	44.1	43.6	n.p.	42.6
FTE rate[(d)]	5.6	6.2	4.1	0.4	5.5

(a) Includes *Migratory* areas.

(b) Remoteness area of main job.

(c) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 to 2011.

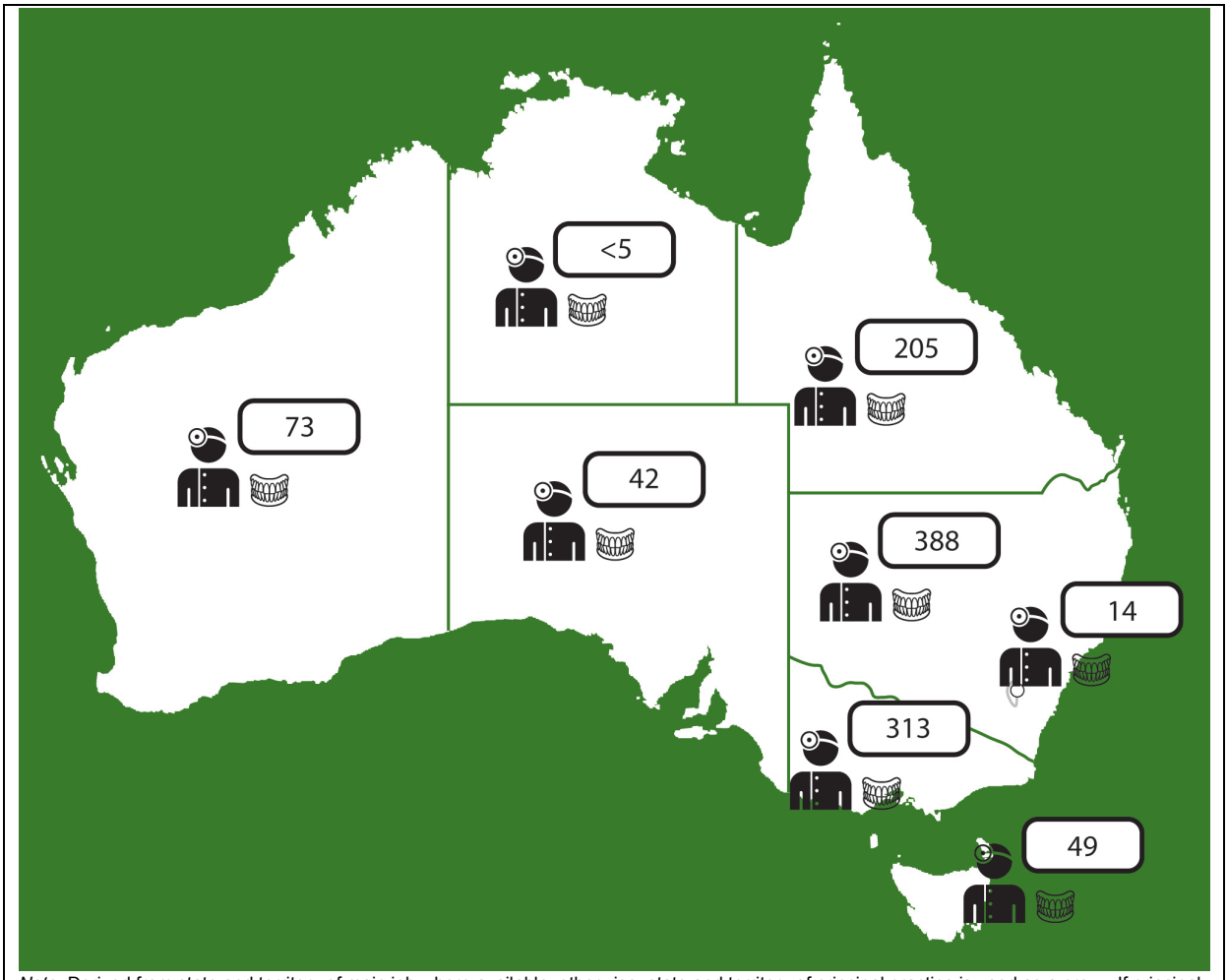
(d) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

(e) Derived from remoteness area of main job where available; otherwise, remoteness area of principal practice is used as a proxy. If remoteness area details are unavailable, remoteness area of residence is used. Records with no information on all three locations are coded to 'Not stated'.

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

The supply of dental prosthetists has increased in *Major cities* and *Outer regional* areas but declined in *Inner regional* areas. *Major cities* have the highest supply at 5.6 FTE per 100,000 population, whereas the rate in *Remote* and *Very remote* areas is extremely low.

6.3.2 States and territories of Australia



Note: Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

Source: NHWDS: dental practitioners 2011.

Figure 6.5: Employed dental prosthetists: state and territory, 2011

Between 2006 and 2011, the number of employed dental prosthetists increased in all jurisdictions except Western Australia and the Australian Capital Territory (Table 6.10). The FTE rate increased most in South Australia, rising from 2.1 to 2.9 FTE per 100,000 population (39.2%) The largest decrease was for the Australian Capital Territory, where the rate fell from 5.1 to 4.2 FTE per 100,000 population (17.8%) (Table 6.10).

Table 6.10: Employed dental prosthetists: selected characteristics, state and territory, 2006[(a)] and 2011[(b)]

Characteristic	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					2006				
Number	343	258	145	86	31	44	14	. .	921
Average age	49.2	48.4	53.3	53.0	50.8	48.8	56.0	. .	50.1
Aged 55 and over (per cent)	28.6	23.6	40.7	32.6	32.3	31.8	42.9	. .	29.6
Women (per cent)	10.9	8.9	8.9	11.1	15.0	18.2	—	. .	10.0
Average weekly hours[(c)] worked	43.1	45.1	43.5	37.7	39.5	41.3	46.4	. .	43.0
FTE rate[(d)]	5.7	6.0	4.1	4.1	2.1	9.8	5.1	. .	5.0
					2011				
Number	388	313	205	73	42	49	14	4	1088
Average age	48.3	49.5	49.8	49.9	48.3	51.7	56.4	45.3	49.3
Aged 55 and over (per cent)	27.9	31.5	32.0	n.p.	n.p.	n.p.	n.p.	n.p.	30.5
Women (per cent)	16.2	11.1	12.5	n.p.	n.p.	n.p.	—	n.p.	14.2
Average weekly hours[(c)] worked	42.7	41.2	44.6	43.7	42.4	42.3	42.0	37.3	42.6
FTE rate[(d)]	6.0	6.1	5.4	3.6	2.9	10.7	4.2	1.7	5.5

(a) State and territory estimates for 2006 are based on state or territory of registration and should be treated with caution due to low response rates in some jurisdictions. See Appendix A for further information.

(b) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(c) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 to 2011.

(d) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

6.4 Supply of dental prosthetists

6.4.1 Overall supply

Data on the size and characteristics of the dental prosthetists workforce present a valuable profile of dental prosthetists, but do not give a complete picture of the overall level of service provided. Some dental prosthetists have long working weeks and others work part time; therefore, their relative contributions to the level of service need to be taken into account to measure the overall supply effectively.

To do this, information on the number of employed dental prosthetists, together with their average hours worked, has been used to calculate an FTE number of practitioners, based on a standard full-time working week of 38 hours (Box 3.2).

To take account of population differences across Australia, and across time, ABS estimated resident population figures have been used to convert the FTE number to an FTE rate (FTE per 100,000 population) (see Appendix D).

6.4.2 Supply of dental prosthetists

Across Australia, the overall supply of dental prosthetists increased between 2006 and 2011, from 5.0 FTE per 100,000 population in 2006 to 5.5 in 2011 (Table 6.9).

7 Oral health therapists

Practitioners who are qualified in both dental therapy and hygiene are commonly referred to as oral health therapists (OHTs). They are eligible to register both as dental therapists and dental hygienists, but may not necessarily maintain dual registration (AIHW DSRU 2012).

The emergence of the OHT labour force has followed substantial change in the structure of educational programs. Historically, hygiene and therapy programs were single qualification Advanced Diplomas. Since the early 2000s, these programs have been replaced by Bachelor of Oral Health courses, training dual-qualified hygienists and therapists.

In 2006, information on OHT registrations was available for the five largest states. Tasmania, the Northern Territory and the Australian Capital Territory did not have dual practitioners. In 2009, information was available for all jurisdictions except Tasmania.

7.1 Registered oral health therapists

7.1.1 At a glance

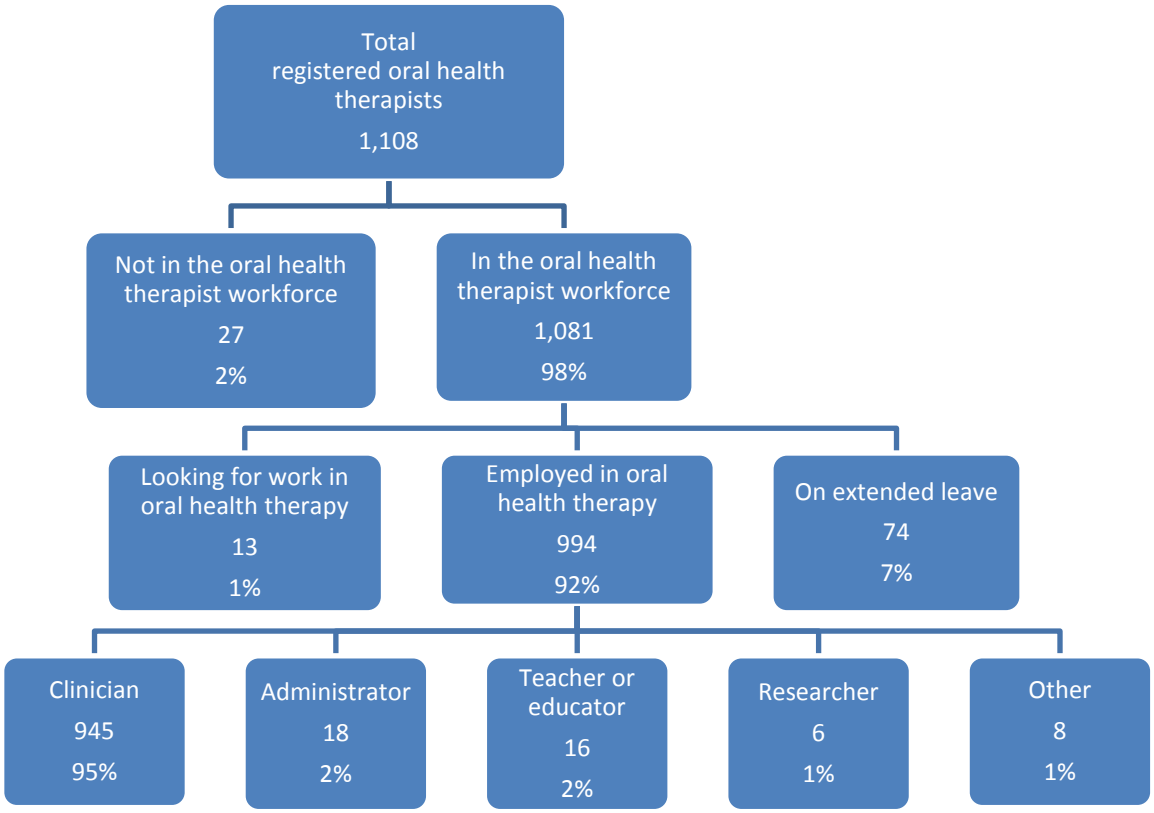
	In 2011, there were 1,108 oral health therapists, 994 of whom were employed in oral health therapy.
	About 1 in 8 oral health therapists were men (12.1%).
	The average age of oral health therapists was 32.6 years; only about 1 in 40 (2.4%) were aged 55 or older.
	Oral health therapists worked 33.3 hours per week on average, and 41.8% worked part time (less than 35 hours per week).
	About half of oral health therapists worked in general dental practices, accounting for 50.7% of all employed.

Source: NHWDS: dental practitioners 2011.

Box 7.1: Services performed by oral health therapists

Oral health therapists can practise as either or both a dental hygienist and therapist.

Source: AIHW DSRU 2012.



Source: NHWDS: dental practitioners 2011.

Figure 7.1: Oral health therapists: workforce status, 2011

7.1.2 Workforce status

The number of registered oral health therapists, (including persons registered as both dental hygienists and dental therapists) in 2011 was 1,108 (Figure 7.1). Of the 1,108 registered oral health therapists in 2011, 994 (89.7%) were employed in dentistry in Australia (Table 7.1).

Between 2006 and 2011, the number of oral health therapists employed in dentistry increased by 167% from 371 to 994 (Table 7.1). Due to the creation of the new dental profession of OHTs representing those dual qualified as hygienists and therapists, care should be taken in comparing these three categories over time. Notably the 2006 data did not include Tasmania, the Australian Capital Territory or the Northern Territory.

Table 7.1: Oral health therapists: workforce status 2006, 2009 and 2011

Workforce status	2006	2009	2011	Change between 2006 and 2011 (per cent)
In the dental workforce	**397**	**625**	**1,081**	**172.2**
Employed in dentistry	371	590	994	**167.8**
Looking for work in dentistry	*15*	*10*	*13*	***–10.7***
Employed elsewhere	. .	. .	n.p	. .
Not employed	. .	. .	n.p	. .
On extended leave	11	27	74	572.0
Not in the dental workforce	**—**	**25**	**27**	**. .**
Overseas	. .	4	n.p	. .
Not looking for work in dentistry	*. .*	*21*	*22*	. .
Employed elsewhere	. .	4	n.p	. .
Not employed	. .	11	n.p	. .
Retired	. .	. .	n.p	. .
Total oral health therapists	**397**	**651**	**1,108**	**179.1**
Multiple registrations [(a)]	11	16	. .	. .
Total registrations	**410**	**663**	**. .**	**. .**

(a) For 2006 and 2009, oral health therapists may have been registered in more than one state or territory; this figure accounts for this potential source of double counting. See Appendix A for further information.

Sources: National Dental Labour Force Collection, 2006 and 2009; NHWDS: dental practitioners 2011.

Changes to the new nationally standardised survey questionnaire have resulted in a slight change in the pattern of responses to the employment-related questions. As such, comparing data over time should be done with caution. (See Appendix A for further information on changes to the employment-related questions.)

Table 7.2: Oral health therapists: workforce status and principal role of main job, state and territory[(a)], 2011

Workforce status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia[(b)]
In the dental workforce	**198**	**247**	**423**	**n.p.**	**n.p.**	**3**	**17**	**11**	**1,081**
Employed in dentistry	*181*	*231*	*387*	*46*	*117*	*3*	*17*	*11*	*994*
Clinician	171	228	357	44	n.p.	3	17	n.p.	945
Non-clinician	10	3	30	3	n.p.	—	—	n.p.	48
On extended leave or looking for work in dentistry	17	16	37	n.p.	n.p.	—	—	—	87
Not in the dental workforce	**6**	**6**	**7**	**n.p.**	**n.p.**	**—**	**—**	**—**	**27**
Total registered oral health therapists	**204**	**252**	**431**	**55**	**133**	**3**	**17**	**11**	**1,108**

(a) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(b) Data include oral health therapists who did not state or adequately describe their state or territory, and those who were overseas. Therefore, state and territory totals may not sum to the national total. In particular, the total for 'Not in the dental workforce' is higher than the sum of the state and territory figures due to oral health therapists working overseas.

Source: NHWDS: dental practitioners 2011.

As outlined previously, the data transitioned from state- and territory-based systems to a national registration system in 2010. Before the NRAS was introduced, data were reported by state of registration. With the new system, data in this report are being reported on the basis of the most current address at the time the survey was undertaken, unless stated otherwise.

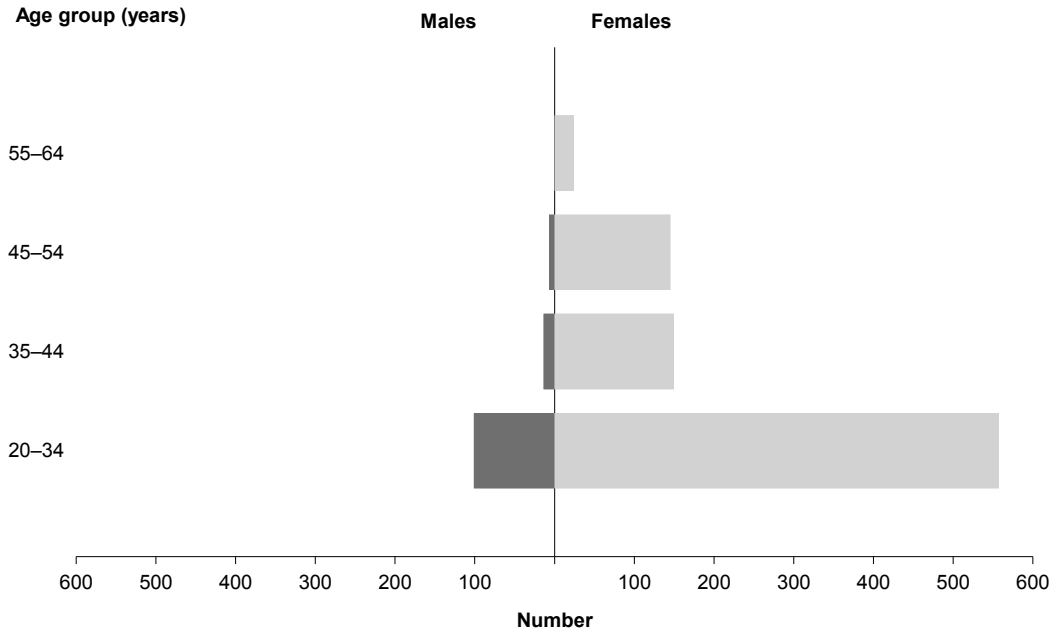
7.2 Oral health therapists employed in oral health therapy in Australia

An oral health therapist who reported working in dental health in the week before the survey is considered to have been employed in dentistry, or to be an employed oral health therapist, at the time of the survey (see Glossary). In 2011, there were 994 oral health therapists employed in dentistry in Australia (Figure 7.1).

The characteristics and supply of oral health therapists employed in Australia are the focus of the remainder of this section.

7.2.1 Age and sex

In 2011, the average age of employed oral health therapists was 32.6 years, slightly younger than the average of 36.4 in 2006 (Table 7.9). The majority (87.9%) were women.



Source: NHWDS: dental practitioners 2011.

Figure 7.2: Number of employed oral health therapists, by age group and sex, 2011

7.2.2 Aboriginal and Torres Strait Islander oral health therapists

There were seven employed oral health therapists who identified themselves as Aboriginal and Torres Strait Islanders, representing about 0.7% of employed oral health therapists who responded to the question.

7.2.3 Field of oral health therapy

The principal role in dentistry describes the types of oral health therapy work undertaken by employed oral health therapists. The 2011 survey categorised the roles as clinician, administrator, teacher/educator, researcher, and other. In 2011 the largest group was clinicians, with 95.0% of employed oral health therapists identifying as clinicians. The oldest group was administrator, with an average age of 45.4 (Table 7.3).

Table 7.3: Employed oral health therapists: principal role of main job, selected characteristics, 2011

Principal role of main job	Number	Average age	Aged 55 and over (per cent)	Women (per cent)	Average hours	FTE rate[(a)]
Clinician	945	32.1	2.4	87.5	33.2	3.7
Non-clinician	*48*	*42.2*	*n.p.*	*n.p.*	*35.7*	*0.2*
Administrator	18	45.4	n.p.	n.p.	36.9	0.1
Teacher/educator	16	43.4	n.p.	n.p.	36.8	0.1
Researcher	6	33.7	n.p.	n.p.	30.6	—
Other	8	39.7	n.p.	n.p.	35.2	—
Total	**994**	**32.6**	**2.4**	**87.9**	**33.3**	**3.9**

(a) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Source: NHWDS: dental practitioners 2011.

Area of dentistry

Survey respondents were asked to indicate the principal area of their main job in dentistry in the week before the survey. Fourteen response categories were provided, with only one response allowed. Table 7.4 provides these responses disaggregated by selected characteristics of the respondent with smaller categories aggregated with 'Other' for confidentiality purposes.

General dental practice was the most common area of practice, accounting for 50.7% of all employed oral health therapists. Public health dentistry was the next largest category, with 14.8% (Table 7.4).

Table 7.4: Employed oral health therapists: principal area of main job, selected characteristics, 2011

Principal area of main job	Number	Average age (years)	Aged 55 and over (per cent)	Women (per cent)	Average weekly hours	FTE rate[(a)]
General dental practice	504	31.5	2.5	86.1	33.2	2.0
Orthodontics	76	33.4	n.p.	n.p.	31.6	0.3
Paedodontics	44	35.0	n.p.	n.p.	36.1	0.2
Periodontics	108	30.3	0.9	90.5	31.5	0.4
Public health dentistry	147	36.4	4.1	89.4	35.2	0.6
Special needs dentistry	4	41.0	n.p.	n.p.	21.5	—
Other	51	31.8	2.0	86.8	32.7	0.2
Not stated/inadequately described	61	33.4	0.0	89.4	33.8	0.2
All	**994**	**32.6**	**2.4**	**87.9**	**33.3**	**3.9**

(a) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Source: NHWDS: dental practitioners 2011.

7.2.4 Work setting

Oral health therapists were asked to indicate the setting of their main job in dentistry in the week before completing the Dental Workforce Survey 2011. About two-thirds were working in private practice (67.2% of clinicians and 64.4% of all employed dental hygienists). Nearly two-thirds of oral health therapists in private practice were working in group practices (58.9% of clinicians and 59.2% of all employed dentists) (Table 7.5).

Table 7.5: Employed oral health therapists: work setting of main job and clinician status, number and average weekly hours worked, 2011

	Clinicians[(a)]		All oral health therapists	
Work setting of main job	**Number**	**Average weekly hours worked**	**Number**	**Average weekly hours worked**
Private practice	*635*	*32.2*	*640*	*32.1*
Solo private practice	258	30.9	258	30.9
Group private practice	374	33.2	379	33.1
Locum private practice	3	17.5	3	17.5
Community health care services	75	34.4	79	35.2
Hospital	49	36.9	53	36.5
Educational facilities	95	34.0	114	34.0
Other government department or agency	32	36.3	38	36.8
Other	17	35.8	20	36.0
Not stated	42	35.5	50	35.8
Total	**945**	**33.2**	**994**	**33.3**

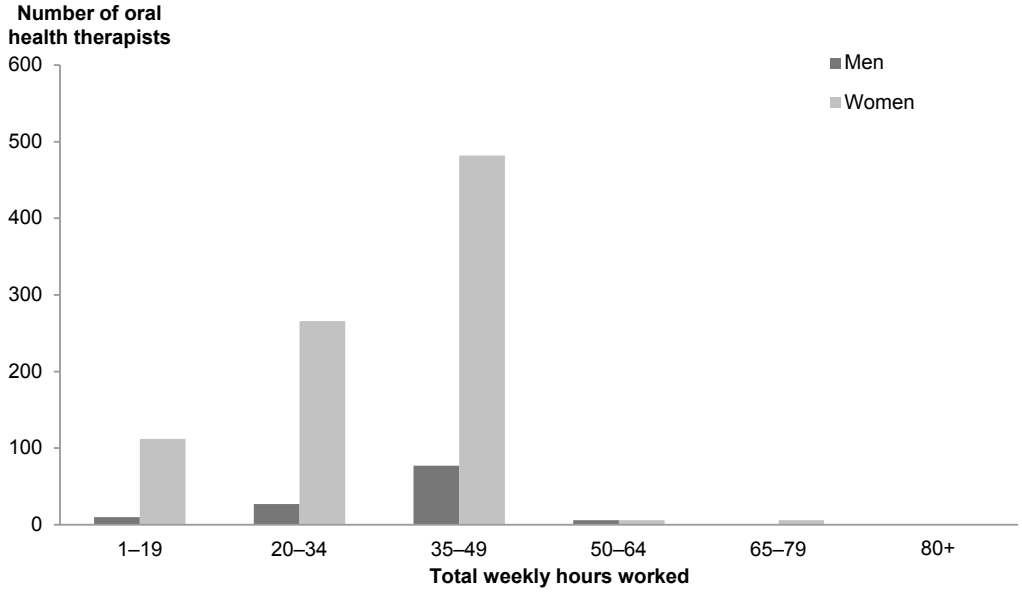
(a) Clinician includes those whose role in their main job was 'Clinician'.

Source: NHWDS: dental practitioners 2011.

7.2.5 Working hours

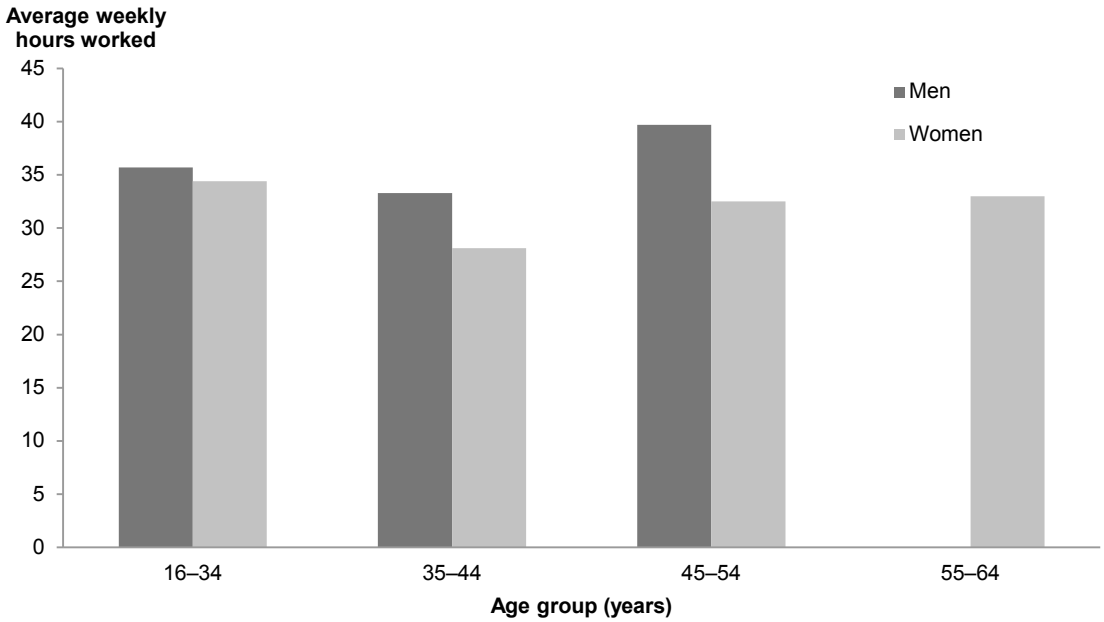
Comparison of working hours over time should be undertaken with care, due to differences between the survey questions used in the Dental Workforce Survey 2011 and the previous National Dental Labour Force Collection (see Appendix A).

On average, employed oral health therapists worked 33.3 hours a week in 2011, similar to the average hours in 2006 (33.4). Two-fifths (41.8%) worked part time (less than 35 hours per week) (Figure 7.3).



Sources: NHWDS: dental practitioners 2011.

Figure 7.3: Employed oral health therapists: total hours worked per week, by sex, 2011



Source: NHWDS: dental practitioners 2011.

Figure 7.4: Employed oral health therapists: average total weekly hours worked, by age group, 2011

Work setting

Oral health therapists working in hospitals as their main job worked the most hours on average (36.9 per week) (Table 7.5).

States and territories

Oral health therapists in the Northern Territory tended to work the most hours on average (36.7 hours per week) while those in Western Australia worked the fewest (28.4) (Table 7.6).

Table 7.6: Employed oral health therapists: average weekly hours[(a)] worked, sex, state and territory, 2006 and 2011

Sex	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					2006[(b)]				
Persons	*32.9*	*35.4*	*34.5*	*25.3*	*34.0*	. .	. .	. .	*33.4*
Men	50.0	38.0	40.1	. .	29.0	. .	. .	. .	39.1
Women	32.5	35.3	34.2	25.3	34.6	. .	. .	. .	33.2
					2011[(c)]				
Persons	*31.7*	*35.2*	*33.6*	*28.4*	*32.9*	*38.0*	*30.5*	*36.7*	*33.3*
Men	35.0	38.2	35.4	. .	33.4	38.0	. .	30.0	35.6
Women	30.9	34.7	33.4	28.4	32.8	. .	30.5	37.4	33.0

(a) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 and 2011.

(b) State and territory estimates for 2006 are based on state or territory of registration and should be treated with caution due to low response rates in some jurisdictions. Excludes Tasmania, Australian Capital Territory and Northern Territory. See Appendix A for further information.

(c) State and territory estimates for 2011 derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

Source: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

Remoteness areas

Oral health therapists in *Outer regional* areas worked the most average total weekly hours (36.3) in 2011, while those in *Major cities* worked the fewest (32.6).

Table 7.7: Employed oral health therapists: average total weekly hours[(a)] worked, remoteness area[(b)] of main job, 2006 and 2011

Sex	Major cities	Inner regional	Outer regional	Remote/Very remote[(c)]	Australia
			2006		
Persons	*33.3*	*32.6*	*35.4*	*39.2*	*33.4*
Men	39.9	35.0	—	—	39.1
Women	32.9	32.5	35.4	39.2	33.2
			2011		
Persons	*32.6*	*34.7*	*36.3*	*35.8*	*33.3*
Men	35.2	36.1	37.8	30.0	35.6
Women	32.2	34.5	36.0	36.3	33.0

(a) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 to 2011.

(b) Derived from remoteness area of main job where available; otherwise, remoteness area of principal practice is used as a proxy. If remoteness area details are unavailable, remoteness area of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(c) Includes *Migratory* areas.

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

Employment sector

Oral health therapists in the public sector were similar in average age, sex distribution and hours worked to those working in the private sector (Table 7.9). The large apparent drop in average hours in the public sector between 2006 and 2011 is due to a change in methodology: data prior to 2011 allocated total hours to the employment sector of the main job, whereas the 2011 data includes both public and or private hours worked and oral health therapists appear in each sector that they work in.

Table 7.8: Employed oral health therapists: selected characteristics, by employment sector, 2006 and 2011[(a)]

Characteristic	2006	2011
	Private	
Number	186	764
Average age	34.9	31.7
Aged 55 and over (per cent)	n.a.	1.9
Women (per cent)	95.5	88.3
Average weekly hours worked in sector	30.8	29.2
FTE number	151	587
	Public	
Number	104	375
Average age	37.7	34.2
Aged 55 and over (per cent)	n.a.	3.8
Women (per cent)	91.6	86.7
Average weekly hours worked in sector	36.2	28.7
FTE number	99	283

(a) Care should be taken in interpreting change in the estimates over time due to changes in the way practitioners were assigned to a sector. Data for 2006 are based on sector of main job whereas data for 2011 refer to all persons working in that sector. For calculation of average hours worked, 2011 data are based on reported hours worked in each sector whereas the 2006 data are based on all hours worked classified by sector of main job.

Sources: National Dental Labour Force Collection, 2006; NHWDS: dental practitioners 2011.

7.3 Geographic profile of employed oral health therapists

7.3.1 Remoteness areas of Australia

The distribution of oral health therapists across the remotness classification in Australia is of considerable interest to both government and communities. Information on the work location of oral health therapists is collected in the Dental Workforce Survey 2011, providing a means, in combination with other data on hours and population, of examining variability in the supply of oral health therapists across Australia.

Using the postcode of their main work location where available, each dental hygeinist is allocated to one of the following in the ASGC RA: *Major cities*, *Inner regional*, *Outer regional*,

Remote, *Very remote* and *Migratory* (see Glossary). Otherwise, remoteness area of principal practice is used as a proxy; if remoteness area of principal practice is unavailable, remoteness area of residence is used. Records with no information on all three locations are coded to 'Not stated' location. In this report, the *Remote*, *Very remot*e and *Migratory* categories have been combined due to small numbers.

Oral health therapists have shown considerable growth across all remoteness areas. *Major cities* have the highest supply of oral health therapists at 4.0 FTE per 100,000 population (Table 7.9).

Table 7.9: Employed oral health therapists: selected characteristics, remoteness area, 2006 and 2011

Characteristic	Major cities	Inner regional	Outer regional	Remote/Very remote[(a)]	Australia
			2006[(b)]		
Number	277	56	35	3	371
Average age	35.9	38.1	37.2	40.5	36.4
Aged 55 and over (per cent)	1.4	3.6	—	—	1.6
Women (per cent)	93.9	95.4	100.0	100.0	**94.8**
Average weekly hours[(c)] worked	33.3	32.6	35.4	39.2	33.4
FTE rate[(d)]	1.7	1.2	1.7	0.6	1.6
			2011[(e)]		
Number	729	173	79	12	994
Average age	32.5	33.2	32.1	33.1	32.6
Aged 55 and over (per cent)	1.8	4.7	—	n.p.	2.4
Women (per cent)	88.2	89.4	82.0	n.p.	87.9
Average weekly hours[(c)] worked	32.6	34.7	36.3	35.8	33.3
FTE rate[(d)]	4.0	3.7	3.7	2.2	3.9

(a) Includes *Migratory* areas.

(b) Remoteness area of main job.

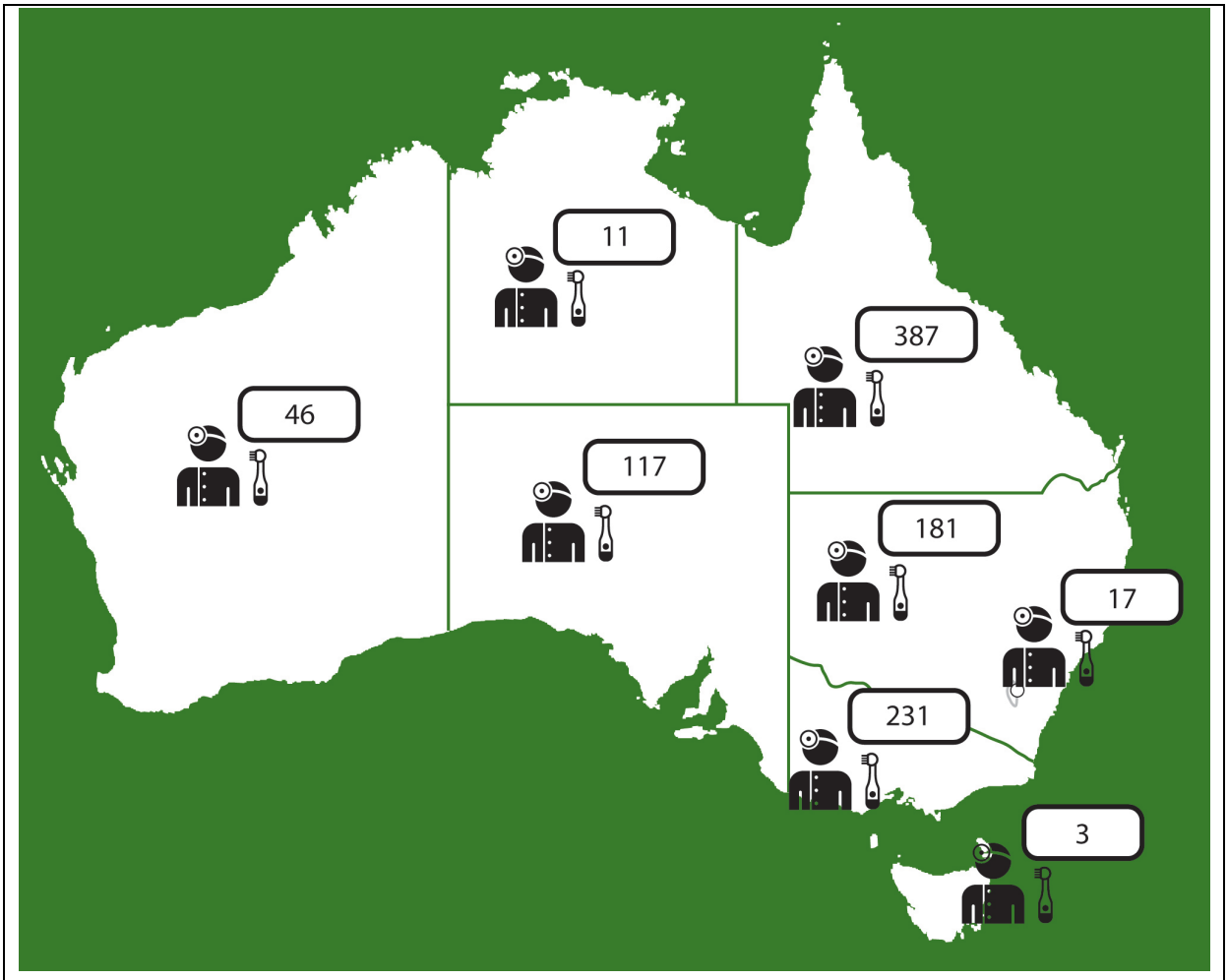
(c) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 to 2011.

(d) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

(e) Derived from remoteness area of main job where available; otherwise, remoteness area of principal practice is used as a proxy. If remoteness area details are unavailable, remoteness area of residence is used. Records with no information on all three locations are coded to 'Not stated'.

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

7.3.2 States and territories of Australia



Note: Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

Source: NHWDS: dental practitioners 2011.

Figure 7.5: Employed oral health therapists: state and territory, 2011

Between 2006 and 2011, the number of employed oral health therapists increased in all reported jurisdictions (Table 7.10).

Table 7.10: Employed oral health therapists: selected characteristics, state and territory, 2006 and 2011

Characteristic	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					2006[(a)]				
Number	39	41	228	38	26	. .	. .	. .	371
Average age	36.5	32.8	37.2	39.9	29.9	. .	. .	. .	36.4
Aged 55 and over (per cent)	5.1	—	1.3	2.6	—	. .	. .	. .	1.6
Women (per cent)	97.8	95.5	93.8	96.7	91.7	. .	. .	. .	94.6
Average weekly hours[(d)] worked	32.9	35.4	34.5	25.3	34	. .	. .	. .	33.4
FTE rate[(e)]	0.5	0.7	5.1	1.2	1.5	. .	. .	. .	1.6
					2011[(b)]				
Number	181	231	387	46	117	3	17	11	994
Average age	31.0	28.8	35.9	40.2	28.6	24.0	35.3	29.9	32.6
Aged 55 and over (per cent)	0.6	2.0	3.6	n.p.	—	—	—	—	2.4
Women (per cent)	80.6	86.7	92.7	n.p.	81.3	—	n.p.	n.p.	87.9
Average weekly hours[(c)] worked	31.7	35.2	33.6	28.4	32.9	38.0	30.5	36.7	33.3
FTE rate[(d)]	2.1	3.9	7.6	1.5	6.2	0.6	3.7	4.6	3.9

(a) State and territory estimates for 2006 are based on state or territory of registration and should be treated with caution due to low response rates in some jurisdictions. See Appendix A for further information.

(b) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(c) Care should be taken in interpreting change in the estimates on hours worked due to changes in the question on hours worked from 2006 to 2011.

(d) Full-time equivalent (FTE) number per 100,000 population. FTE is based on total weekly hours worked (see Glossary).

Sources: National Dental Labour Force Collection 2006; NHWDS: dental practitioners 2011.

7.4 Supply of oral health therapists

7.4.1 Overall supply

Data on the size and characteristics of the oral health therapists workforce present a valuable profile of oral health therapists, but do not give a complete picture of the overall level of service provided. Some oral health therapists have long working weeks and others work part time; therefore, their relative contributions to the level of service need to be taken into account to measure the overall supply effectively.

To do this, information on the number of employed oral health therapists, together with their average hours worked, has been used to calculate an FTE number of practitioners, based on a standard full-time working week of 38 hours (Box 3.2).

To take account of population differences across Australia, and across time, ABS estimated resident population figures have been used to convert the FTE number to an FTE rate (FTE per 100,000 population) (see Appendix D).

7.4.2 Supply of employed oral health therapists

Across Australia, the overall supply of oral health therapists increased between 2006 and 2011, from 1.6 FTE per 100,000 population in 2006 to 3.9 in 2011 (Table 7.11). As noted earlier, because oral health therapists have dual qualification/registrations as dental hygienists and dental therapist, and some issues with potential double counting in earlier years, the separate trends for oral health therapists, dental hygienists and dental therapists are not clear.

8 Sources of new entrants and re-entrants to the dental workforce

There are three sources of recruits to the dental workforce. The main source is through the training of new graduates. The time required for students to complete training and enter the workforce is such that any acute change in the demand for dental practitioners cannot be met by this group. In addition, the pool of dental practitioners who have maintained their registration or enrolment but who are not employed in dental health is a potential source of re-entrants. The third source of recruits is through the migration of overseas-trained people. This chapter discusses data relevant to the first two sources.

Data on migrant, overseas-trained dental practitioners will become available as the NRAS matures and new entrants can be tracked more thoroughly.

8.1 Dental practitioner training

Information on dentistry student commencements and completions of higher education (university) courses are derived from data provided by the Department of Education, Employment and Workplace Relations. Data on dental hygienist, therapist and prosthetist training is sourced from the National Centre for Vocational Education Research (NCVER).

To qualify as a dental practitioner in Australia, a student must meet the entry requirements of one of the Australian tertiary education institutions offering dental courses, and then complete the required academic and clinical training. If dentists wish to specialise, they must complete extra study after completing a period of clinical experience in general practice.

Box 8.1: The Australian Dental Council

The Australian Dental Council (ADC) is an independent national standards body for dental education and training. It acts as the external accreditation authority for the Dental Board of Australia under the Health Practitioner Regulation National Law Act 2009.

In the interest of promoting and protecting the oral health of the Australian community the ADC ensures the standards and quality of education and training programs and assessment for the dental and oral health professions by:

- leadership in developing national statements of attributes and competencies for the dental and oral health professions
- developing national accreditation standards for education and training courses leading to registration of graduates as dental practitioners
- implementing accreditation processes for education and training courses that are peer-based, independent, professional, effective and well regarded by the public, the profession, educational institutions, registration authorities and government
- assessing the qualifications and conducting examinations of overseas qualified dental professionals leading to registration for practice in Australia.

(continued)

Box 8.1 (continued): The Australian Dental Council

The main activities of the ADC are:

- assessing programs of study that lead to general or specialist registration of graduates for practice as dental practitioners in Australia to determine whether the programs meet approved accreditation standards
- overseeing the assessment of the knowledge, clinical skills and professional attributes of overseas qualified dental practitioners who are seeking registration to practise in Australia and whose qualifications are not approved qualifications under the Health Practitioner Regulation National Law Act.

No nationally consistent curriculum model exists across the universities. Undergraduate degrees last 4–5 years. Universities are continuously reviewing competencies and subject units. Theory and clinical study is undertaken, and at the end of the degree successful students are fully qualified dentists. During assessment, students must demonstrate the 'Professional Attributes and Competencies of the Newly Qualified Dentist' as detailed by the Australian Dental Council's publication (Version 1.0, June 2010), to become a qualified dentist.

There are three ways in which overseas qualified dental practitioners can enter the profession in Australia:

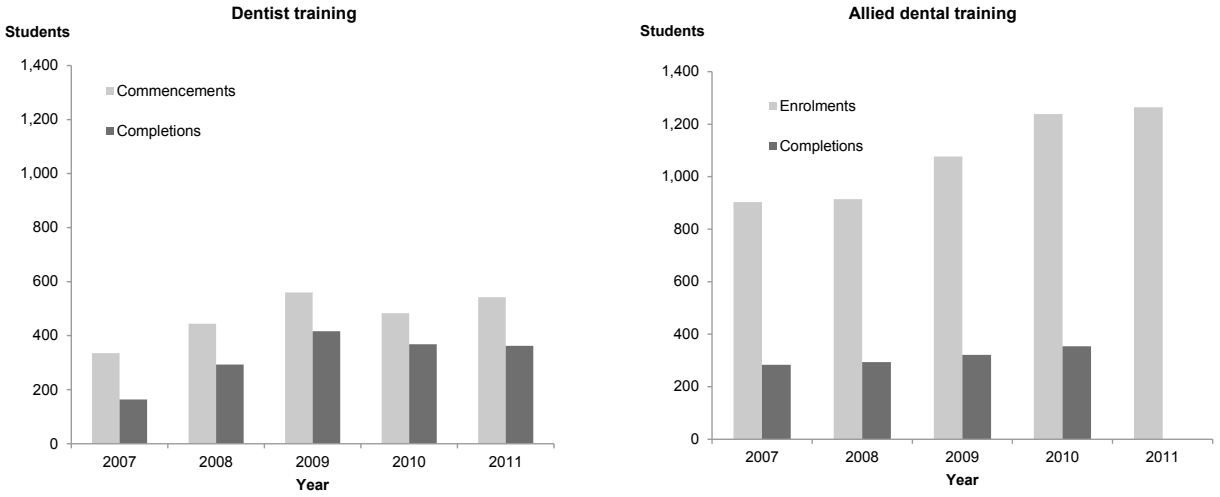
- by enrolling with an Australian education provider with an accredited program of study in the relevant discipline, where they may be granted some credit for previous study
- by recognition of their overseas qualifications by the Dental Board of Australia
- by successfully completing the ADC examinations.

Under the Trans-Tasman Mutual Recognition Arrangement (TTMRA), individuals registered or licensed to practise an occupation in New Zealand are entitled to practise the equivalent occupation in any Australian state and territory, and vice versa. The TTMRA applies irrespective of where training was undertaken.

The ADC conducts examinations for overseas qualified general dentists and undertakes assessment of overseas qualified dental hygienists and dental therapists in conjunction with other examining bodies authorised by the ADC.

Source: Australian Dental Council website, 2013

Commencements in university courses leading to qualification as a dentist by domestic students in Australia have increased by 61.8%, from 335 in 2007 to 542 in 2011. Over the same period, completions have increased by 120.7%, from 164 to 362 (Figure 8.1). Enrolments in vocational education and training courses leading to qualifications as a dental hygienist, prosthetist, technician or therapist have increased by 40.0%, from 903 in 2007 to 1,264 in 2011.



Notes

1. For registered dentist training, 'course' refers to a higher education general dentistry course required for initial registration as a dentist.
2. Dentist training data includes undergraduate and postgraduate numbers.
3. Allied dental training data include dental hygienists, dental prosthetists, dental technicians and dental therapists.
4. For higher education students, 'domestic' refers to Australian citizens or permanent residents (excluding New Zealand citizens).

Sources: Department of Industry, Innovation, Science, Research and Tertiary Education, unpublished data; National Centre for Vocational Education Research, unpublished data.

Figure 8.1: Domestic Australian students enrolled in and completing dentistry or oral health courses, 2007 to 2011

8.2 Dental practitioners not employed in dental health

The Dental Workforce Survey collects some basic information on those dental practitioners who are registered or enrolled, but who are not actively employed in dental health in Australia; that is, dental practitioners on extended leave, working overseas, employed elsewhere or not employed. This does not include dental practitioners who are not registered at the time of the survey.

Among dentists, the youngest group not actively employed in dentistry are those not employed and looking for work in dentistry (38.5 years) (Table 8.1). Not surprisingly, the group with the oldest average age are the retired dentists (65.0 years). The proportion of women among dentists not actively employed in dentistry is higher than the proportion of women among employed dentists (43.6% and 35.6%, respectively).

Table 8.1: Dentists not actively employed in dentistry in Australia: selected characteristics, 2011

Workforce status	Number	Average age	Aged 55 and over (per cent)	Women (per cent)	Metropolitan residence (per cent)[(a)(b)]
	Dentists not actively employed in oral health in Australia				
On extended leave of 3 months or more	477	40.8	18.5	54.9	90.8
Looking for work in dentistry	*78*	*38.8*	*13.3*	*59.0*	*88.3*
Employed elsewhere	11	40.1	20.7	12.3	67.6
Not employed	66	38.5	12.0	67.1	91.9
Overseas	464	43.2	20.3	34.2	. .
Not looking for work in dentistry	*261*	*44.3*	*26.4*	*50.3*	*80.3*
Employed elsewhere	112	46.4	29.5	37.1	74.4
Not employed	149	42.7	24.1	60.3	84.8
Retired from regular work	165	65.0	89.2	19.9	90.1
Total	**1,445**	**44.9**	**28.3**	**43.6**	**69.6**
	Total employed dentists				
	12,734	**43.5**	**23.0**	**35.6**	**93.4**

(a) Based on postcode of home residence concorded to ASGC regions. (See Glossary.)

(b) Percentage calculations exclude 'Not stated' values for ASGC region of home residence. 'Metropolitan' includes *Major cities* and *Inner regional* areas.

Source: NHWDS: dental practitioners 2011.

Among other oral health practitioners, the youngest group not actively employed in dentistry are those not employed and looking for work in dentistry (35.3 years) (Table 8.2).The group with the oldest average age are the retired practitioners (59.4 years). The proportion of women among practitioners not actively employed in dentistry is higher than the proportion of women among employed practitioners (85.8%% and 73.1%, respectively).

Table 8.2: Other oral health practitioners not actively employed in oral health in Australia: selected characteristics, 2011

Workforce status	Number	Average age	Aged 55 and over (per cent)	Women (per cent)	Metropolitan residence (per cent)[(a)(b)]
	Other oral health practitioners not actively employed in oral health in Australia				
On extended leave of 3 months or more	230	38.6	8.7	86.6	87.7
Looking for work in oral health	*36*	*40.2*	*9.6*	*75.4*	*96.1*
Employed elsewhere	16	46.3	21.5	91.2	100.0
Not employed	20	35.3	—	62.6	93.0
Overseas	26	37.9	9.3	92.2	. .
Not looking for work in oral health	*119*	*41.0*	*11.1*	*90.8*	*85.2*
Employed elsewhere	44	45.0	13.1	89.7	72.8
Not employed	74	38.6	9.9	91.4	92.6

(continued)

Table 8.2 (continued): Other oral health practitioners not actively employed in oral health in Australia: selected characteristics, 2011

Workforce status	Number	Average age	Aged 55 and over (per cent)	Women (per cent)	Metropolitan residence (per cent)[(a)(b)]
	Other oral health practitioners not actively employed in oral health in Australia				
Retired from regular work	23	59.4	75.6	62.5	91.3
Total	**434**	**40.5**	**13.1**	**85.8**	**83.8**
	Total employed Other oral health practitioners				
	4,190	**41.6**	**13.5**	**73.1**	**90.8**

(a) Based on postcode of home residence concorded to ASGC regions. (See Glossary.)

(b) Percentage calculations exclude 'Not stated' values for ASGC region of home residence. 'Metropolitan' includes *Major cities* and *Inner regional* areas.

Source: NHWDS: dental practitioners 2011.

Appendix A: Explanatory notes on Dental Workforce 2011 data sources

A.1 National Health Workforce Data Set: dental practitioners

Background

Dental practitioners are required by law to be registered with the Dental Board of Australia to practise in Australia.

The National Health Workforce Data Set (NHWDS): dental practitioners is a combination of data collected through the registration renewal process for dental practitioners. The majority of dental practitioners are due to renew their registrations on 30 November each year. Dental practitioners can renew their registration either online via the AHPRA website or by using a paper form provided by the AHPRA.

When they are first registered, the process is more exhaustive. Graduates of approved (accredited) programs of study can apply for registration online, and later provide supplementary supporting documentation. Other applicants must initially apply in hard copy. Registration data collected include demographic information such as age, sex, country of birth, and details of health qualification(s) and registration status (see <http://www.dentalboard.gov.au/Registration-and-Endorsement/Forms.aspx>). The Health Practitioner Registration National Law (National Law) requires the AHPRA to publish the 'the qualification relied upon for registration'. However, this may not include all of the qualifications held by the practitioner.

When dental practitioners renew their registration online, they are also asked to complete an online version of the Dental Workforce Survey questionnaire. The questionnaire collects information on the employment characteristics, primary work location and work activity of dental practitioners (see <http://www.aihw.gov.au/workforce-publications/>.) The AHPRA stores both the online registration data and the survey information in separate databases, and then sends these two data sets to the AIHW, where they are merged into a de-identified national data set.

When dental practitioners renew their registration on a paper form, they are also asked to complete a paper version of the Dental Workforce Survey questionnaire. The paper registration and survey forms are sent back to the AHPRA, where the paper registration forms are scanned and the data added to the registration data obtained from those who renew online. The AHPRA sends the paper survey forms to Health Workforce Australia (HWA) to be scanned into a data set. HWA then sends this data set to the AIHW for merging with the registration data for all registrants and the survey data for those who have completed the process online.

The AIHW then undertakes cleansing and adjustment for non-response to form a nationally consistent data set. The final data set is then known as the National Health Workforce Data Set: dental practitioners. The AIHW produces and releases reports and data tables based on the NHWDS: dental practitioners. These reports and data tables are available from the

AIHW website at <http://www.aihw.gov.au/workforce-publications/> (select link to *Dental workforce 2011*).

A.2 National Registration and Accreditation Scheme registration data

The Council of Australian Governments at its meeting of 26 March 2008 signed an Intergovernmental Agreement on the Australian health workforce, for the first time creating the National Registration and Accreditation Scheme (NRAS) (see <http://www.coag.gov.au/coag_meeting_outcomes/2008-03-26/docs/iga_health_workforce.rtf>). Ten health professions were included in the initial national system implemented on 1 July 2010 (18th October for Western Australia): chiropractors, dental practitioners, medical practitioners, nurses and midwives, optometrists, osteopaths, pharmacists, physiotherapists, podiatrists and psychologists.

For these professions, practitioners need to be registered with their respective professional boards to practise in Australia. As part of the initial registration and registration renewal process, the AHPRA collects information on the registration details and demographic characteristics of practitioners. Much of the data held on the AHPRA database for people registered before June 2010 was migrated from state and territory systems. The information is collectively referred to as the 'registration data'.

In 2011, dental practitioners were the third profession, after medical practitioners in 2010 and nursing and midwifery in 2011, to be included in the NRAS reporting cycle.

Scope and coverage

The AHPRA is scheduled to provide the AIHW with an extract of registration data as at the end of the annual dental practitioner registration renewal process in November. Due to a number of factors, a revised data set containing dental practitioners with valid registration data as at 15 January 2012 (the effective cut-off date for the November 2011 registration process) was extracted from the AHPRA back-up database of 2 February 2012.

Data for dental practitioners was merged with the Dental Workforce Survey 2011 data to create a national data set, the NHWDS: dental practitioners 2011.

Table A1: Registered dental practitioners: state and territory, 2006[(a)], 2009[(a)] and 2011[(b)]

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia[(c)]
Dentist									
2006[(a)]	4,135	2,706	2,280	868	1,186	182	86	245	11,686
2009[(a)]	4,466	3,062	2,539	1,326	1,004	208	252	84	12,941
2011[(b)]	4,687	3,349	2,716	1,460	1,077	204	251	104	14,179
Oral health therapist									
2006[(a)]	42	46	243	40	26	. .	. .	. .	398
2009[(a)]	52	163	263	51	84	. .	11	10	616
2011[(b)]	204	253	431	55	133	3	17	11	1,108
Hygienist									
2006[(a)]	160	145	76	159	173	7	38	12	770
2009[(a)]	287	157	114	200	170	14	40	9	978
2011[(b)]	351	168	116	264	221	14	51	7	1,206
Dental therapist									
2006[(a)]	275	233	254	359	139	59	20	25	1,364
2009[(a)]	299	186	283	356	118	60	22	17	1,338
2011[(b)]	244	179	210	339	107	56	13	17	1,165
Dental prosthetist									
2006[(a)]	416	271	150	108	34	46	14	. .	1,040
2009[(a)]	435	311	202	104	44	48	19	5	1,157
2011[(b)]	409	323	215	80	45	51	15	5	1,145
All dental practitioners									
2006[(a)]	5,028	3,401	3,003	1,534	1,558	294	158	282	15,258
2009[(a)]	5,539	3,879	3,401	2,037	1,420	330	344	125	17,030
2011[(b)]	5,895	4,271	3,687	2,198	1,583	328	346	144	18,803

(a) Before 2011, the AIHW DSRU Dental Labour Force Survey collected state and territory of registration as reported in this table. The survey was administered by individual state and territory health departments or authorities, or the AIHW Dental Statistics Research Unit; therefore, the estimates above include a factor to remove the effect of dental practitioners who were registered in more than one jurisdiction, except where this was suppressed for confidentiality reasons in 2009 data.

(b) Derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

(c) Includes 'Not stated' and overseas for 2011 and for earlier years may include a greater allowance for removing the effect of dental practitioners who were registered in more than one jurisdiction because this was suppressed for confidentiality reasons for some jurisdictions in 2009 but not in 2006.

Sources: National Dental Labour Force Collection, 2006, and 2009; NHWDS: dental practitioners 2011.

Data issues

The following data issues need to be considered when interpreting registration data from the NRAS in the NHWDS: dental practitioners 2011 (see the Data Quality Statement at Appendix E, and online *User guide for the NHWDS: dental practitioners 2011* available from the AIHW website at <http://www.aihw.gov.au/workforce-publications/> (select link to *Dental workforce 2011*).

- *Incomplete registration data*—(for example, due to migrated data from state and territory dental boards/councils). In particular, some records had some or all of date of birth, sex, and state and territory of principal practice missing. This is an issue because these data items are required for weighting and imputation purposes. Tasmanian data was most affected with almost a third of sex data being missing.
- *Issues with overseas residents*—many dental practitioners who are overseas could not be identified by the registration process. They have been included with those whose state or territory of principal practice could not be determined. Therefore, the missing values of state and territory of principal practice cannot be imputed, and thus affected the calculation of survey weights.
- *Invalid postcode formats*—postcode of principal practice and residence contained text strings, such as invalid postcodes, suburb names and overseas postal codes. Therefore, after cleaning and recoding, many of these were still coded to the 'Not stated' category. As a result, the derivation of ASGC Remoteness Area (RA) categories for these records was not possible.
- *Invalid year formats*—invalid values entered in data fields relating to years may have affected data items such as date of birth.
- *Non-supply of many registration variables*—only a subset of the originally agreed registration variables to be supplied by the AHPRA were made available to the AIHW. This is due to a range of reasons: lack of migrated data, the fact that AHPRA does not collect or maintain the requested field, the scope of the data requested from AHPRA and AHPRA data management constraints. This resulted in large numbers of missing values or data of questionable quality for some fields. As a result, the following data were incomplete or not supplied: Date of death, (not required for collection under the National Law), country of first qualification, country of birth (these data were excluded by agreement in 2012), Citizen status (not required under the National Law for registration purposes and excluded from data set by agreement in 2012), Endorsement (not originally requested but will be provided in future data transfers), initial qualification, state of first qualification, year of first qualification, (all excluded from data transfer by agreement in 2012), registration end date, registration start date, resident status (not collected for registration purposes) and Student identifier (the student register is not a publicly accessible database under the National Law).

A.3 Dental Workforce Survey

The Dental Workforce Survey 2011 collected information on the employment characteristics, primary work location and work activity of dental practitioners in Australia who renewed their registration with the Dental Board of Australia via the NRAS. This survey data was then combined with the NRAS registration data to form the NHWDS: dental practitioners 2011.

The estimates published in this report are not always directly comparable with estimates derived from the earlier AIHW Dental Labour Force Survey data. This is due to a change in the data collection methodology, including the survey design and questionnaires (see 'A.5: Comparison with previous AIHW Dental Labour Force Survey data'). For further information, refer to the Data Quality Statement (Appendix E) and the online *User guide for the NHWDS: dental practitioners 2011,* available from the AIHW website at <http://www.aihw.gov.au/workforce-publications/> (select link to *Dental workforce 2011*).

Scope and coverage

The survey is undertaken in association with the NRAS registration renewal process. As such, only dental practitioners who are on the register at the time of the survey, and who are required to renew their registration, receive a questionnaire for completion. New registrants registering outside the registration renewal period will not receive a survey form. These dental practitioners will receive a survey form when they first renew their registration.

Estimation procedures

The AIHW uses the NRAS registration data collected in tandem with that from the Dental Workforce Survey 2011 to derive estimates of the total dental practitioner workforce. Not all dental practitioners who receive a survey respond because it is not mandatory. In deriving the estimates, two sources of non-response to the survey are accounted for:

- *Item non-response*—which occurs as some respondents return partially completed questionnaires. Some survey records were so incomplete that it was decided to omit them from the reported survey data.
- *Population non-response*—which occurs because not all registered dental practitioners who receive a questionnaire respond.

A separate estimation procedure is used for each. Imputation is used to account for item non-response, and weighting for population non-response.

Both of these procedures are described below.

Imputation: estimation for item non-response

The imputation process involves an initial examination of all information provided by a respondent. If possible, a reasonable assumption is made about any missing information based on responses to other survey questions. For example, if a respondent provides information on hours worked and the area in which they work, but leaves the workforce question blank, it is reasonable to assume that they were employed.

Missing values remaining after this process are considered for their suitability for further imputation. Suitability is based on the level of non-response to that item. Imputation is usually applied only in cases where the proportion of missing values is less than 5% of the total.

In imputation, the known probabilities of particular responses occurring are used to assign a response category value to each record using a random number generator. Imputed values are based on the distribution of responses occurring in the responding sample. Therefore, fundamental to imputing missing values for survey respondents who returned partially completed questionnaires is the assumption that respondents who answer various questions are similar to those who do not.

Age and sex values within each state and territory of principal practice are first imputed to account for missing values. Other variables deemed suitable for this process were then imputed. These include hours worked in dental practice the week before the survey and principal role of main job.

Weighting: estimation for population non-response

Each survey record (or respondent) is assigned a weight that is calibrated to align with independent data on the population of interest, referred to as 'benchmarks'. In principle, this

weight is based on the population number (the benchmark) divided by the number in the responding sample. The resulting fraction becomes the expansion factor applied to the record, referred to as the 'weight', providing an estimate of the population when aggregate output is generated. Therefore, the weight for each record is based on particular characteristics that are known for the whole population.

The total number of registered dental practitioners in Australia is used to benchmark the survey (see 'Data issues' in this section).

The calculation of weights is usually part of the data processing for a sample survey in which the sample is selected before the survey is done. In the Dental Workforce Survey 2011, all renewing registrants were sent a workforce survey questionnaire when registration renewal was due. Therefore, technically, it was a census of dental practitioners. However, because not all renewing registrants in scope respond to the survey, there is a very large 'self-selecting sample' bias in the data. Since the group of respondents in the data set is not random, standard errors are not a suitable means of gauging variability.

The benchmark data used for the weighting are the number of registered practitioners in each state and territory (based on the location of principal practice), by dental division, age group and sex within the NRAS registration data supplied by the AHPRA.

Producing estimates for the population by weighting the data from respondents does adjust for bias in the responding group of practitioners, but only for *known* population characteristics (such as age and sex, where provided, in the case of the Dental Workforce Survey 2011). If information for a variable is not known for the whole population, the variable cannot be used in the calculation of weights and cannot be used in the adjustment process.

For variables not used in the calculation of weights (for the NHWDS: dental practitioners 2011, that is all variables *other* than state and territory of principal practice, dental division, age and sex), it is assumed, for estimation purposes, that respondents and non-respondents have the same characteristics. If the assumption is incorrect, and non-respondents are different from respondents, then the estimates will have some bias. The extent of this cannot be measured without obtaining more detailed information about non-respondents. Therefore, there will be some unquantifiable level of bias in the estimates.

Response rate

The overall response rate to the Dental Workforce Survey 2011 was 80.3%; that is, the number of responses to the survey represented 80.3% of registered dental practitioners (Table A.2). Of these respondents, 84.5% completed the survey online and 15.5% used the paper form.

Table A2: Survey response rate: state and territory, 2006, 2009[(a)] and 2011[(b)]

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Dentist									
2006[(a)]	90.7	77.0	73.8	67.5	86.9	62.2	33.1	49.5	79.6
2009[(a)]	75.1	86.8	62.3	58.2	71.6	59.3	59.2	56.4	72.5
2011[(b)]	80.5	80.3	81.3	76.4	88.0	79.6	87.6	84.0	80.7
Oral health therapist									
2006[(a)]	97.8	93.6	78.5	66.7	92.3	. .	. .	. .	82.0
2009[(a)]	80.8	81.0	34.2	94.1	69.0	. .	100.0	70.0	50.2
2011[(b)]	75.2	71.3	73.9	70.9	76.5	50.0	84.2	90.9	74.1
Dental hygienist									
2006[(a)]	89.2	87.8	66.7	68.1	77.3	100.0	31.7	n.a.	76.7
2009[(a)]	68.5	88.6	34.2	50.9	69.9	57.1	52.5	55.6	53.3
2011[(b)]	80.5	79.4	82.1	76.0	80.1	78.6	88.1	85.7	79.9
Dental therapist									
2006[(a)]	91.4	75.5	78.4	79.1	79.6	96.7	95.0	52.0	81.4
2009[(a)]	74.1	95.8	34.2	59.0	83.7	78.3	59.1	46.9	58.1
2011[(b)]	94.3	82.2	85.8	73.2	99.1	83.6	93.3	100.0	84.7
Dental prosthetist									
2006[(a)]	56.3	69.3	69.9	31.5	64.9	100.0	57.1	n.a.	61.3
2009[(a)]	60.9	80.1	53.5	35.7	59.1	100.0	68.4	60.0	64.0
2011[(b)]	85.5	69.7	75.5	67.5	88.9	78.4	81.3	100.0	77.6
All dental practitioners									
2011[(b)]	81.3	79.0	80.3	75.4	86.7	79.9	87.5	87.1	80.3

(a) Before 2011, the AIHW Dental Labour Force Survey collected state and territory of registration and reported in this table. The survey was administered by a mix of AIHW DSRU and individual state and territory boards and councils; therefore, some dental practitioners were registered in more than one jurisdiction.

(b) Derived from state and territory of principal practice where available; otherwise, state and territory of main job is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'.

Sources: National Dental Labour Force Collection, 2006 and 2009; NHWDS: dental practitioners 2011.

As previously stated, the jurisdiction-based data collection used to collect information on the workforce characteristics of the dental workforce was replaced with a single data collection as part of the national registration scheme introduced on 1 July 2010. As a result, the response rates are not directly comparable due to differences in survey design and methodology.

Survey response rates rose in 2011 for all groups, and specifically for dentists by 8.1 percentage points from 72.5% in 2009 to 80.7% in 2011.

Data issues

A number of data issues need to be considered when interpreting dental practitioners' workforce survey data in the NHWDS: dental practitioners 2011. These issues are outlined in this section.

Sample

The NHWDS: dental practitioners will be produced annually during the national registration renewal process, conducted from early October to 30 November (the renewal date) each year. While the reference time is notionally the renewal date, legislation allows for a one month rate period beyond the registration expiry date. Thus, the official registration closure date is one month after the renewal date. The AHPRA allows a further 2 weeks to allow for mail and data entry delays before the registrations are considered expired. As a result, for maximum completeness, the extraction of data (the extraction date) is at a point in time a month and a half after the renewal date. Ages are calculated as at the official registration closure date.

Practitioners with limited registration are due for renewal on the anniversary of their first registration and can thus renew and complete a survey at any time throughout the year.

Survey design

The Dental Practitioners Workforce Survey 2011 used only a single survey forms for all types of dental practitioners.

In 2011, the online survey questionnaire did not include electronic sequencing of questions to automatically guide the respondent to the next appropriate question based on previous responses.

The order of the response categories to the 'Reason not working in dental in Australia' question appears to be an issue. The question has 'Retired from regular work' after 'Not working in paid employment at all', which may not be logical as dental practitioners may be retired but still work irregularly (for example, as an occasional locum). On this basis, the category 'Retired from regular work' should appear before 'Not working in paid employment at all'. The issue with the order in the 2011 survey questionnaire is that it may lead to an undercount of those retired from regular work and an over-representation of those not working in paid employment.

A number of survey questions have allowed invalid responses to be recorded. A number of these responses could not be recoded to a valid category—for example, text entered as responses to the 'hours worked' questions.

Variation between the online and paper surveys has resulted in additional data quality issues for a number of questions. For example, the state and territory of main job question included the category 'Other territories' on the paper form while the same response category in the online form was labelled 'Other'. The data showed a large number in the 'Other' category captured in the online method, which was not similarly found in the paper responses. In addition, both state and territory of principal practice and residence data items do not include the category 'Other territories' or 'Other'. Another issue is that the 'temporary resident status' question is explicitly asked only on the paper survey form (see 'A.5: Comparison with previous AIHW Dental Labour Force Survey data').

It is expected that the online and paper versions of the survey questionnaire will be harmonised in future iterations.

Data structure

Due to unstructured data entry formats, a number of questions that required a numeric value contained text string responses. Where possible, these were recoded to the appropriate numeric value, but this was not possible in all instances. For example, for a number of records, the postcodes of main job information contained values other than valid postcodes, such as text strings and overseas postal identifiers. Conversely, suburb of main job information contained invalid suburb names, 4-digit codes resembling postcodes and even complete street addresses. These issues are complicated where people reported inconsistent combinations of working in particular Australian states, postcodes similar to Australian postcodes, and suburbs that were clearly not in Australia—for example, in Auckland, New Zealand.

Issues with the online survey, such as sequencing and allowing invalid values, will be corrected in future iterations of the data collection.

A.4 Data inconsistencies between survey and registration data

There were a number of inconsistencies between the data sourced from the NRAS registration data and the workforce survey data. It is not known if these are due to real changes that occurred between the time the survey was completed and the date the registration data was captured, or if they are due to other sources of error.

State and territory, and location (postcode and suburb) of principal practice recorded in the registration data, were in some instances different from the corresponding details of the main job recorded in the survey. Although this is generally valid for states and territories with common borders, there were some records where the state or territory of the principal practice did not adjoin the state or territory of the main job. It was apparent from this that the principal practice address was not accurately reflecting the current location of people in some cases. However, under the National Law, medical practitioners are required to reconfirm their principal place of practice each year as part of the registration renewal cycle. Under the National Law, ***Principal place of practice***, *for a registered health practitioner, means the address declared by the practitioner to be the address –*

> *at which the practitioner is predominantly practising the profession; or*
>
> *if the practitioner is not practising the profession or is not practising the profession predominantly at one address, that is the practitioner's principal place of residence.*

The registration data also contains residential addresses that have been migrated from state systems and may be a number of years out of date. As a result, the derivation of ASGC RA categories for place of residence may not be current.

Overall, in spite of the high number of not stated records in the state or territory of main job, the comparison of the number of people within states and territories aligns reasonably between main job and principal practice. The state or territory with the poorest alignment is the Northern Territory, where it appears that 9.4% more dental practitioners have the Northern Territory as their state of main job in the week before the survey than have it as

their principal practice location. This may reflect temporary movement to the Northern Territory.

The decision was therefore taken to use a derived location, based firstly on main job information, then on principal practice location (if the main job location was missing) and subsequently on residential address if the principal practice location was also missing. This derived state is used in all tables except where otherwise stated. As a consequence of this methodology, those who were working overseas but maintained an Australian contact address have been allocated in state tables to the state where that contact address was.

For generating weights, the principal state was derived using principal practice location, residential address and main job location in that order.

Table A.3: Dental practitioners comparison of different state variables, states and territories[(a)], 2011

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Other[(a)]	Australia
					Employed					
Derived (used in tables unless specified otherwise)	5,329	3,957	3,419	1,982	1,464	304	322	134	14	16,925
Principal practice (derived for weights)	5,333	3,966	3,421	1,991	1,463	298	316	123	13	16,925
Principal practice (original)	5,329	3,957	3,410	1,988	1,416	301	315	120	88	16,925
Main job	5,101	3,751	3,256	1,871	1,400	293	307	132	814	16,925
Residence	5,317	3,953	3,439	1,984	1,467	293	305	113	53	16,925
					Registered					
Derived (used in tables unless specified otherwise)	5,895	4,271	3,687	2,198	1,583	328	346	144	350	18,803
Principal practice (derived for weights)	5,899	4,277	3,688	2,206	1,586	323	343	132	349	18,803
Principal practice (original)	5,875	4,253	3,664	2,197	1,533	325	340	129	486	18,803
Main job	5,289	3,882	3,364	1,957	1,457	308	314	134	2,099	18,803
Residence	5,863	4,249	3,693	2,191	1,585	316	329	120	458	18,803

(a) Other includes 'Other territories', overseas, not stated, invalid and, for state or territory of main job, people without a main job.

Source: NHWDS: dental practitioners 2011.

A.5 Comparison with previous Dental Labour Force Survey data

In the past, dental labour force data published by the AIHW was produced using dental labour force questionnaires developed by the Dental Statistics and Research Unit (University of Adelaide). The Dental Workforce Survey collects similar data items, but the survey methodology has changed, as has the method of obtaining benchmark data on which the numbers of total registrations are based. With the establishment of the AHPRA, there is one source of benchmark data, and there is less chance of inconsistency between jurisdictions and years in the scope of benchmark data.

In 2011, dental practitioners renewing their registration could either complete the voluntary Dental Workforce Survey online (at the end of the formal registration process) or complete

the paper form sent to their postal address with their registration form. The use of online and/or paper surveys varied between jurisdictions and between years with the previous AIHW Dental Labour Force Survey.

Some data items previously collected as part of the AIHW Dental Labour Force Survey—such as date of birth, country of first qualification, specialty of practice, and sex—are now collected as part of the registration and renewal process. However, the data for some of these items are either incomplete, or the data migrated from previous jurisdictional registration systems are inaccurate, or were not provided in the latest extracts, by agreement.

Some oral and maxillofacial surgeons are dual-registered dentists and medical practitioners and may have their specialties on only one of or both the medical register and the dental register.

The 2011 Dental Workforce Survey questionnaire contains fewer questions related to workforce information than was collected before 2010. The survey questions were agreed for inclusion with Health Workforce Australia.

A significant point of difference is that the previous AIHW Dental Labour Force Survey consisted of three different forms covering dentists, allied dental and dental prosthetist workforces separately.

Due to the differences in data collection methods, it is recommended that comparisons between data from the NHWDS: dental practitioners 2011 and previous AIHW Dental Labour Force Survey data be made with caution.

Differences between the 2011 questionnaire and surveys in previous years

The following data items collected in the Dental Workforce Survey 2011 questionnaire were either not collected previously in the AIHW Dental Labour Force Survey or were collected using different questions or response categories.

Question 1—Indigenous status

The Dental Workforce Survey 2011 collected Indigenous status from dental practitioners in both the online and paper form. This question was not included in past AIHW Dental Labour Force Surveys.

Question 2—Temporary resident status and visa category number

The Dental Workforce Survey 2011 collected temporary resident status and visa category number from dental practitioners in both the online and paper form. However, the online question does not ask respondents to answer whether or not they are a temporary resident, but only to enter their visa category number if they self-identify as a temporary resident. The paper form, however, asks respondents to check 'Yes' or 'No' to the temporary resident question, and if 'No' to move on to question 3, or if 'Yes' to provide the visa category number. This may have created some variation in the data between the online and paper respondent groups. All three 2009 surveys had a three category tick box question for Australian citizen, Permanent resident and Temporary resident.

Questions 3 to 5—Employment

The three employment-related questions in the Dental Workforce Survey 2011 questionnaire are nationally consistent. This is an improvement on the previous AIHW Dental Labour Force Survey where the questionnaire was different in this respect from that for other professions. The 2011 questions have been grouped and sequenced logically: the first question relates to the working status of the dental practitioner, followed by the reason why they are not working in dentistry in Australia, and then whether or not they are looking for work.

The new questions in the Dental Workforce Survey 2011 were designed based on a combination of the questions previously used by jurisdictions in the Dental Labour Force Survey. Because this survey is based nationally, the components of the employment questions relating to working in other states were not required.

Question 10—Principal area of main job in dentistry

The question response options used before 2011 in the AIHW Dental Labour Force Survey were different from those used in the 2011 Dental Workforce Surveys. The 2011 response categories are, however, slightly different in scope and the same for all three groups which had different forms previously.

Question 11—Work setting of main job in dentistry

Work setting response categories in the 2011 survey are similar to those in previous years. The 2011 response categories are, however, slightly different in scope and the same for all three groups which had different forms previously.

Question 12—Number of years worked in dentistry in Australia

Number of years worked in dentistry in Australia was not previously collected by the AIHW Dental Labour Force Survey.

Question 13—Number of years practitioner intends to remain in the dental workforce

Number of years a dental practitioner intends to remain in the dental workforce was not previously collected by the AIHW Dental Labour Force Survey.

A.6 Comparison with ABS Census data

The ABS Census of Population and Housing, conducted every 5 years, collects information from all persons aged 15 and over about their employment status, occupation and qualifications. The results of the 2006 and 2011 Censuses include data on occupations classified using the Australian and New Zealand Standard Classification of Occupations (ANZSCO) (ABS 2006) for 2006 and ANZSCO revision 1 (ABS 2009) for 2011. Occupation data are collected for the main job held during the week before Census night.

Unlike the AIHW definition of a dentist, the ANZSCO definition excludes non-clinicians. For this reason, the AIHW data in this appendix relate to dentists working primarily as clinicians. Dentists reported in the Census totalled 9,071 for 2006 and 10,986 for 2011. The total number of employed dentists working primarily as clinicians derived from AIHW data was 10.6% higher than the number derived from the Census of Population and Housing for 2011 and 10.3% higher for 2006.

Table A4: Employed dentists: ABS Census of Population and Housing and AIHW data, state and territory, 2006 and 2011

Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					AIHW dental workforce surveys				
2006[(a)]	3,433	2,357	1,959	1,030	757	172	218	75	10,001
2011[(b)]	4,092	2,959	2,412	1,269	915	183	224	87	12,154
					ABS Census				
2006	3,313	2,143	1,747	921	780	134	167	63	9,071
2011	3,714	2,696	2,169	1,103	872	170	195	67	10,986
					Per cent difference				
2006	3.6	10.0	12.1	11.8	–2.9	28.4	30.5	19.0	10.3
2011	10.2	9.8	11.2	15.0	4.9	7.6	14.9	29.9	10.6

(a) State and territory estimates for 2006 are based on state or territory of registration and should be treated with caution due to low response rates in some jurisdictions. See Appendix A for further information.

(b) State and territory estimates for 2011 derived from state and territory of main job where available; otherwise, state and territory of principal practice is used as a proxy. If principal practice details are unavailable, state and territory of residence is used. Records with no information on all three locations are coded to 'Not stated'. Australian total includes dentists who did not state or adequately describe their state or territory and those who were overseas.

Sources: AIHW dental Labour Force Survey, 2006; NHWDS: dental practitioners 2011; ABS 2006 Census of Population and Housing data; ABS 2011 Census of Population and Housing data.

The reasons for the higher estimates in the AIHW data than in the Census data are not well understood. There are a range of differences in the scope and collection methodologies of the two collections, and these may contribute to the differences in the figures between the two sources. Several key differences are highlighted below.

In the Census, responses are handwritten, which are interpreted using intelligent character recognition technology and then coded using ANZSCO. The Census method may result in under identification of dentists with accurate coding dependent on the level of detail provided and the legibility of responses. There were 189,017 not stated and unknown responses in the Census, plus 32,125 Professionals (not further defined) and 2,114 Health professionals (not further defined) coded in the Census.

In the 2006 AIHW data, estimates of the number of dentists are derived from survey responses weighted to registration numbers provided by state and territory dental boards (known as benchmarks) and adjusted for multi-state registrations. These weighted figures are not likely to underestimate numbers of dentists. The 2011 data is based on the NRAS registrations and survey data combined.

A proportion of part-time clinicians are excluded from both data sources, but via different methods. The Census gathers information about a person's main job only, so if they work part-time as a clinical dentist and it is not their main job then they will not be classed as a dentist. This also excludes some dentists who undertake clinical work in addition to a non-clinical main job (for example, research, teaching, administration, etc.).

For the AIHW data, a clinician is a dentist who reported their role in their main job was a clinical one ('General practice', 'Registered specialist' and 'Restricted practice' for 2006 and 'Clinician' for 2011) during the week before the survey (see Glossary). Dentists who stated that most of their time was spent working outside clinical practice, as an educator, administrator, researcher, teacher, or other are classed as non-clinicians. As a result, the number of clinicians reported by the AIHW will not include those clinicians who spend less

time on clinical work than in other fields. However, unlike the Census, the AIHW data on clinical dentists includes those dentists who undertake clinical work in addition to a non-dental main job.

State and territory allocation may also differ. The AIHW 2006 data is based on state or territory of registration, where dentists indicated that they mainly or only worked in that state or territory at the time of the survey. The AIHW 2011 data is based largely on state of main job reported in the survey. The state or territory from the Census data was based on the self-reported place of work on Census night.

The 2006 registration periods and processes differed across jurisdictions, resulting in the survey administration taking place throughout the year. The 2011 workforce survey nominally ended 30 November 2011, while the registration data was based on an extract of 2 February 2012. This may have resulted in some variation in state and territory allocation compared with the Census, which provides a point-in-time snapshot.

Appendix B: 2011 dental registration numbers from the Australian Health Practitioner Regulation Agency

Numbers of registrations from the Australian Health Practitioner Regulation Agency are contained in Table B1 and B2 for comparison purposes.

Table B1: Registered practitioners by profession, principal place of practice and registration type, reported by the Australian Health Practitioner Regulation Agency, 30 June 2011

Dental practitioner	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Not stated	Australia
						Number				
General	5,026	3,582	3,189	1,868	1,384	281	283	106	499	16,218
General and specialist	440	346	281	140	131	5	35	4	45	1,427
Limited	103	95	55	28	42	7	7	2	90	429
Non-practising	45	62	16	40	4	5	—	1	36	209
Specialist	5	7	1			17	1		5	36
Total	**5,619**	**4,092**	**3,542**	**2,076**	**1,561**	**315**	**326**	**113**	**675**	**18,319**
						Percentage of total registrations				
General	89.4	87.5	90.0	90.0	88.7	89.2	86.8	93.8	73.9	89.4
General and specialist	7.8	8.5	7.9	6.7	8.4	1.6	10.7	3.5	6.7	7.8
Limited	1.8	2.3	1.6	1.3	2.7	2.2	2.1	1.8	13.3	1.8
Non-practising	0.8	1.5	0.5	1.9	0.3	1.6	—	0.9	5.3	0.8
Specialist	0.1	0.2	—	—	—	5.4	0.3	—	0.7	0.1
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: AHPRA 2011.

Table B2: Registered practitioners by profession, principal place of practice and division, reported by the Australian Health Practitioner Regulation Agency, 30 June 2011

Dental divisions	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Not stated	Australia
						Number				
Dental hygienist	337	161	118	251	203	12	36	6	24	1,148
Dental hygienist and dental prosthetist	1	—	—	—	—	—	—	—	—	1
Dental hygienist and dental prosthetist and dental therapist	1	1	—	—	—	—	—	—	—	2
Dental hygienist and dental therapist	7	127	7	49	273	88	1	56	3	610
Dental prosthetist	351	323	212	76	46	48	18	4	82	1,160
Dental therapist	259	183	215	340	116	56	15	18	4	1,206
Dentist	4,507	3,231	2,580	1,360	1,071	198	245	77	561	13,830
Oral health therapist	108	66	143	—	37	1	5	1	1	362
Dental practitioner total	**5,619**	**4,092**	**3,542**	**2,076**	**1,561**	**315**	**326**	**113**	**675**	**18,319**
						Percentage of total registrations				
Dental hygienist	6.0	3.9	3.3	12.1	13.0	3.8	11.0	5.3	3.6	6.3
Dental hygienist and dental prosthetist	—	—	—	—	—	—	—	—	—	—
Dental hygienist and dental prosthetist and dental therapist	—	—	—	—	—	—	—	—	—	—
Dental hygienist and dental therapist	0.1	3.1	0.2	2.4	17.5	27.9	0.3	49.6	0.4	3.3
Dental prosthetist	6.2	7.9	6.0	3.7	2.9	15.2	5.5	3.5	12.1	6.3
Dental therapist	4.6	4.5	6.1	16.4	7.4	17.8	4.6	15.9	0.6	6.6
Dentist	80.2	79.0	72.8	65.5	68.6	62.9	75.2	68.1	83.1	75.5
Oral health therapist	1.9	1.6	4.0	—	2.4	0.3	1.5	0.9	0.1	2.0
Dental practitioner total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: AHPRA 2011.

Appendix C: Additional information available from the AIHW website

Tables

In addition to the tables in this report, more detailed tabulations from the Dental Workforce Survey 2011 are published on the AIHW website <http://www.aihw.gov.au/workforce-publications/> (select link to *Dental workforce 2011*).

Workforce Survey questionnaire

The questionnaire used in the Dental Workforce Survey 2011 is available from the AIHW website <http://www.aihw.gov.au/workforce-publications/> (select link to *Dental workforce 2011*).

Data Quality Statement: NHWDS: dental practitioners 2011

A full description of the data quality of the data set is in Appendix E or available from the AIHW's METeOR website at <http://meteor.aihw.gov.au>.

User guide for the NHWDS: dental practitioners 2011

A user guide for the NHWDS: dental practitioners 2011, which provides further information on the survey components and data specifications, is available from the AIHW website at <http://www.aihw.gov.au/workforce-publications/> (select link to *Dental workforce 2011*).

Appendix D: Population estimates

This report presents time series information about dental practitioners, using measures such as number per 100,000 population and FTE rate. To derive these measures, the population estimates (often referred to as 'estimated resident population') are obtained from the ABS. The estimates are as at 30 June for each year and based on the 2011 Census of Population and Housing adjusted for population flows, including births, deaths, net migration, and short-term travellers to Australia and absences from Australia.

These figures are used to derive population and FTE rates in this report.

Table D1: Population estimates at 30 June: remoteness area and state and territory, 2006 to 2011

Remoteness area	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia[(a)]
					2006				
Major cities	4,946,348	3,834,245	2,438,355	1,139,198	1,470,503	. .	333,609	. .	14,162,258
Inner regional	1,386,564	1,037,150	897,047	188,761	258,570	316,805	510	. .	4,085,407
Outer regional	445,099	250,368	621,118	180,797	191,557	162,980	. .	115,385	1,967,304
Remote	33,528	4,777	84,648	45,239	92,747	7,565	. .	46,547	315,051
Very remote[(b)]	4,548	. .	49,740	13,893	46,004	2,601	. .	48,695	165,481
Total	**6,816,087**	**5,126,540**	**4,090,908**	**2,059,381**	**1,567,888**	**489,951**	**334,119**	**210,627**	**20,697,880**
					2007				
Major cities	5,009,607	3,904,620	2,501,482	1,508,259	1,151,585	. .	341,065	. .	14,416,618
Inner regional	1,395,750	1,045,527	910,664	268,271	191,383	319,324	502	. .	4,131,421
Outer regional	442,405	249,779	629,955	193,313	180,225	164,032	. .	118,525	1,978,234
Remote	32,960	4,681	84,921	93,987	45,321	7,638	. .	47,396	316,904
Very remote[(b)]	4,482	. .	50,067	50,011	14,045	2,574	. .	49,100	170,279
Total	**6,885,204**	**5,204,607**	**4,177,089**	**2,113,841**	**1,582,559**	**493,568**	**341,567**	**215,021**	**21,013,456**
					2008				
Major cities	5,088,411	3,983,643	2,567,410	1,553,374	1,163,488	. .	346,809	. .	14,703,135
Inner regional	1,407,822	1,055,226	925,585	280,150	194,398	322,473	499	. .	4,186,153
Outer regional	442,587	249,585	640,923	195,818	179,734	165,803	. .	122,541	1,996,991
Remote	32,587	4,634	85,711	95,036	45,531	7,730	. .	48,625	319,856
Very remote[(b)]	4,482	. .	50,462	54,199	14,192	2,559		49,769	175,663
Total	**6,975,891**	**5,293,088**	**4,270,091**	**2,178,577**	**1,597,343**	**498,565**	**347,308**	**220, 935**	**21,381,798**
					2009				
Major cities	5,169,841	4,073,714	2,634,657	1,602,275	1,177,493	. .	353,280	. .	15,011,260
Inner regional	1,419,339	1,067,238	942,458	291,642	197,228	325,858	526	. .	4,244,289
Outer regional	443,548	249,600	651,304	198,060	179,572	167,932	. .	126,542	2,016,558
Remote	32,521	4,585	86,181	96,405	45,741	7,786	. .	49,794	323,013
Very remote[(b)]	4,458	. .	50,826	58,277	14,341	2,518	. .	50,505	180,925
Total	**7,069,707**	**5,395,137**	**4,365,426**	**2,246,659**	**1,614,375**	**504,094**	**353,806**	**226,841**	**21,776,045**

(continued)

Table D1 (continued): Population estimates at 30 June: remoteness area by state and territory, 2006 to 2011

Remoteness area	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia[(a)]
					2010				
Major cities	5,236,573	4,137,647	2,677,643	1,636,822	1,189,755	. .	360,145	. .	15,238,858
Inner regional	1,428,330	1,077,999	951,668	300,769	200,092	328,773	608	. .	4,288,239
Outer regional	443,190	248,259	656,996	199,030	179,173	169,138	. .	129,131	2,024,917
Remote	32,390	4,525	86,586	97,635	45,844	7,801	. .	50,334	325,115
Very remote[(b)]	4,445	. .	51,265	61,873	14,570	2,495	. .	50,850	185,498
Total[(c)]	**7,144,928**	**5,468,430**	**4,424,158**	**2,296,129**	**1,629,434**	**508,207**	**360,753**	**230,315**	**22,062,354**
					2011				
Major cities	5,295,728	4,195,976	2,715,743	1,676,314	1,198,438	. .	367,136	. .	15,449,335
Inner regional	1,436,745	1,087,651	958,313	310,794	201,501	331,136	616	. .	4,326,756
Outer regional	442,387	246,455	661,321	200,259	177,911	169,934	. .	130,050	2,028,317
Remote	32,191	4,444	87,172	99,167	45,757	7,675	. .	50,358	326,764
Very remote[(b)]	4,417	. .	51,549	65,681	14,625	2,450	. .	50,923	189,645
Total	**7,211,468**	**5,534,526**	**4,474,098**	**2,352,215**	**1,638,232**	**511,195**	**367,752**	**231,331**	**22,323,933**

(a) Includes Other territories in Australian total but not in remoteness area estimates.

(b) Includes *Migratory* areas.

Source: Unpublished ABS estimated resident population data.

Appendix E: Data Quality Statement: National Health Workforce Data Set: dental practitioners 2011

Summary of key issues

The National Health Workforce Data Set (NHWDS): dental practitioners 2011 contains information on the demographics, employment characteristics, primary work location and work activity of all dental practitioners in Australia who renewed their dental registration with the Dental Board of Australia via the National Registration and Accreditation Scheme (NRAS) introduced on 1 July 2010.

This is the first data published for dental practitioners from the new national registration scheme. The data set is comprised of registration (including demographic) information provided by the Australian Health Practitioner Regulation Agency (AHPRA) and workforce details obtained by the Dental Workforce Survey. The survey instrument varies significantly in some areas from previous years, however, is now nationally consistent.

This data quality statement should be read in conjunction with the detailed commentary on specific data issues in Appendix A.2 to A.5 and in footnotes and commentary accompanying tables throughout the publication.

Description

The NHWDS: dental practitioners 2011 is a combination of data collected through the dental practitioner registration renewal process.

Dental practitioners are required to renew their registration with the Dental Board of Australia through the NRAS, either online via the AHPRA website or using a paper form provided by the AHPRA. For initial registration, dental practitioners must use a paper form and provide supplementary supporting documentation. This information is referred to as 'registration data'. Data collected include demographic information such as age, sex, country of birth; and details of health qualification(s) and registration status (see <http://www.dentalboard.gov.au/Registration/Types.aspx>, select link to *Registration type* then *Registration form*).

When dental practitioners renew their registration online they are also asked to complete an online version of the Dental Workforce Survey questionnaire. The questionnaire collects information on the employment characteristics, work locations and work activity of dental practitioners (see <http://www.aihw.gov.au/workforce-publications/>, select link to *Dental workforce 2011*). The AHPRA stores both the online registration data and the survey information in separate databases. They then send these two data sets to the Australian Institute of Health and Welfare (AIHW), where they are merged into a de-identified national data set.

When dental practitioners renew their registration on a paper form they are also asked to complete a paper version of the Dental Workforce Survey questionnaire. The paper registration and survey forms are sent back to the AHPRA, where the paper registration forms are scanned and merged with the data obtained from the online process. The AHPRA sends the paper survey forms to Health Workforce Australia (HWA) to be scanned into a

data set. The HWA then sends this data set to the AIHW for merging with the online survey forms and registration data, cleansing and adjustment for non-response to form a nationally consistent data set. The final data set is then known as the National Health Workforce Data Set: dental practitioners, containing information sourced from registration data and workforce survey data.

Institutional environment

The AIHW is a major national agency set up by the Australian Government under the *Australian Institute of Health and Welfare Act* 1987 to provide reliable, regular and relevant information and statistics on Australia's health and welfare. It is an independent statutory authority established in 1987, governed by a management board, and accountable to the Australian Parliament through the Health and Ageing portfolio.

The AIHW aims to improve the health and wellbeing of Australians through better health and welfare information and statistics. It collects and reports information on a wide range of topics and issues, ranging from health and welfare expenditure, hospitals, disease and injury, and mental health, to ageing, homelessness, disability and child protection.

The Institute also plays a role in developing and maintaining national metadata standards. This work contributes to improving the quality and consistency of national health and welfare statistics. The Institute works closely with governments and non-government organisations to achieve greater adherence to these standards in administrative data collections to promote national consistency and comparability of data and reporting.

One of the main functions of the AIHW is to work with the states and territories to improve the quality of administrative data and, where possible, to compile national data sets based on data from each jurisdiction, to analyse these data sets and disseminate information and statistics.

The *Australian Institute of Health and Welfare Act 1987*, in conjunction with compliance to the *Privacy Act 1988* (Cwlth), ensures that the data collections managed by the AIHW are kept securely and under the strictest conditions with respect to privacy and confidentiality. For further information, see the AIHW website at <http://www.aihw.gov.au>.

The AIHW receives registration (including demographic) information on dental practitioners via the mandatory national registration process administered by the AHPRA and the voluntary Dental Workforce Survey data collected at the time of registration renewal. The registration and workforce survey data are combined, cleansed and adjusted for non-response to form a national data set known as NHWDS: dental practitioners 2011.

The AIHW is the data custodian of the NHWDS: dental practitioners 2011.

Timeliness

The NHWDS: dental practitioners will be produced annually from the national registration renewal process, conducted between 1 October and 30 November (the renewal date) each year. While the reference time is notionally the renewal date, legislation allows for a 1-month period of grace. Thus, the official registration closure date is 1 month after the renewal date. The AHPRA allow a further 2 weeks to allow for mail and data entry delays before the registrations are considered expired. As a result, for maximum completeness, the extraction of data (the extraction date) is at a point in time a month and a half after the renewal date. Ages are calculated as at the official registration closure date.

The Dental Workforce Survey will also be collected between 1 October and 30 November, as it is administered as part of the registration renewal process. The exceptions to this timetable are in relation to limited and provisional registrations, where the registrant is renewed on the anniversary of their commencement. Limited and provisional registrations renewals are given paper forms only. These responses are included with the regular survey respondents.

Due to significant delays with release of data from the new national registration system, complete and final data were provided to the AIHW much later than originally scheduled. Initial data provided needed joint reviews by the AHPRA, AIHW and HWA to manage the range of considerations and data quality issues described in this publication. This review process improved data quality, data definitions, metadata and data cleansing. The process also led to improvements in AHPRA's extracting scripts to provide consistency in data exchange specifications. This process delayed the supply of data but improved the overall quality. The AIHW expected to receive both the registration and workforce survey data simultaneously in February 2012. Due to the factors above, the AIHW received complete useable registration and workforce survey data from AHPRA in October 2012. AHPRA have indicated that future data provision is anticipated to be timely and provided six weeks from the close of registration on 30 November.

Accessibility

Results from the NHWDS: dental practitioners 2011 are published in the *Dental workforce 2011* report. The report, workforce survey questionnaire, user guide to the data set and additional detailed tables are available on the AIHW website at <http://www.aihw.gov.au/workforce-publications/> (select link to *Dental workforce 2011*).

Users can request data not available online or in reports via the Communications, Media and Marketing Unit on (02) 6244 1032 or via email to info@aihw.gov.au. Requests that take longer than half an hour to compile are charged for on a cost-recovery basis.

Access to the master unit record file may be requested through the AIHW Ethics Committee.

Interpretability

Information to aid in the interpretation of the NHWDS: dental practitioners 2011 is in Appendix A of the *Dental Workforce 2011* report. The report is based on this data set. See 'Accessibility' for details.

Relevance

Scope and coverage

The NHWDS: dental practitioners 2011 contains registration details of all registered dental practitioners in Australia at the renewal date of 30 November 2011.

Dental practitioners are required by law to be registered with the Dental Board of Australia to practice in Australia, and must complete the formal registration renewal form(s). This is the compulsory component of the renewal process. Registration details on NHWDS: dental practitioners 2011 were collected either from the compulsory registration renewal form or registration details migrated from the respective state and territory dental boards before their dissolution. See 'Accuracy' for quality of migrated data.

The Dental Workforce Survey is voluntary and only practitioners who are on the register at the time of the survey and required to renew their registration receive a questionnaire for completion. New registrants registering outside the registration renewal period will not receive a survey form. These practitioners will receive a survey form when they renew their registration the following year, during the registration renewal period.

Accuracy

Response rates and mode

The NHWDS: dental practitioners 2011 contains registration details of all registered dental practitioners in Australia at 30 November 2011.

The data set also contains workforce information for registered dental practitioners who completed the Dental Workforce Survey. The overall response rate was 80.3 %. Of these respondents, 84.5 % completed the survey online and 15.5 % used the paper form.

The data include employed dental practitioners who did not state or adequately describe their location variables and employed dental practitioners currently overseas. Therefore, the national estimates include this group.

Response rates for 2011 are not directly comparable with 2009 and earlier years because the previous jurisdiction-based data collection used to collect information on the workforce characteristics of dental practitioners was replaced with a single data collection as part of the national registration scheme introduced on 1 July 2010.

Registration data from the NRAS

Some data items collected, up to and including 2009, as part of the previous AIHW Dental Labour Force Survey, such as date of birth, sex and specialty of practice, are now data items collected as part of the registration and renewal process. However, the data for some of these items is incomplete due to the quality of the data migrated from previous jurisdictional registration systems.

There were a number of data items that had significant numbers of incomplete records. In particular, date of birth, sex and state and territory of principal practice, which are items used in the survey estimation process. Missing values of date of birth and sex were imputed. The jurisdiction most affected was Tasmania where almost a third of records were missing sex.

Only a subset of the originally agreed registration variables to be supplied by AHPRA was made available to the AIHW. Large numbers of missing values, technical issues or data of questionable quality mean that the following data was not supplied: Date of first registration, Date of death, Country of first qualification and others, Country of birth, Citizen status, Endorsement, Initial qualification. State of first qualification. Year of first qualification, Registration end date, Registration start date, Resident status and Student identifier.

Many dental practitioners who were overseas could not be identified by the registration process. They have been included with practitioners whose state or territory of principal practice could not be determined. Therefore, the missing values cannot be imputed, and thus affected the weighting method.

Some data items have allowed invalid responses to be recorded as a valid category, for example registration type of 'General and specialist'.

The NRAS allows a dental practitioner to record more than one specialty, with up to three specialties recorded for dental practitioners in 2011. However the National Law does not require or enable practitioners to identify their primary specialty. The non-identification of a main specialty of practice also means headcounts are not possible. While the primary specialty of practice is not identified, for the small number of practitioners with more than one specialty the survey data item, Area of practice was used to decide which specialty to allocate them to. Almost all of these dental specialists were allocated to the oral and maxillofacial surgeon category.

In addition, there were 185 dental practitioners who were also on the 2011 medical practitioner registration file—16 of these were oral and maxillofacial surgeons only on the dental register, 7 were oral and maxillofacial surgeons only on the medical register and 72 were oral and maxillofacial surgeons on both registers. Given the registration files are as at different points in time, this comparison is only indicative.

Workforce Survey 2011 sample

All registered dental practitioners are provided a form upon renewal of their registration each year. Some initial registrants may not receive a survey if they are not required to renew within the target period.

Workforce Survey 2011 design

In 2011, the online survey questionnaire did not include electronic sequencing of questions to automatically guide the respondent to the next appropriate question based on previous responses. This resulted in a number of inconsistent responses. For instance, respondents not correctly following the sequencing instructions for the employment questions may be assigned to an incorrect labour force status or not assigned a status due to incomplete data.

The order of the response categories for the 'Reason not working in dental practice in Australia' question appears to be an issue. The question has 'Retired from regular work' after 'Not working in paid employment at all' which may not be logical as practitioners may be retired but still work irregularly (for example, as an occasional locum). On this basis, the category 'Retired from regular work' should appear before 'Not working in paid employment at all'. The issue with the order in the 2011 survey questionnaire is that it may lead to an undercount of those retired from regular work and an over representation of those not working in paid employment.

Variation between the online and paper surveys has provided additional data quality issues for a number of questions. For example, the state of main job included the category 'Other territories' on the paper form while the same response category in the online form was labelled 'Other'. The data showed a large number in the 'Other' category captured in the online method, which was not similarly found in the paper responses. In addition, state/territory of principal practice and residence data items does not include the category 'Other territories' or 'Other'.

In 2011, the online Dental Workforce Survey did not ask practitioners to answer whether or not they were a temporary resident, but only to enter their visa category number if they self-identified as a temporary resident. However, the paper form asked practitioners to check 'Yes' or 'No' to the temporary resident question and, depending on the response, either answer or skip the visa category question. In both cases a number of respondents entered permanent visa code.

Inconsistencies between workforce survey and registration data

There were a number of inconsistencies between the data sourced from the NRAS and the workforce survey data.

Location of principal practice recorded in the registration data was different from the corresponding details of their main job self-reported by practitioners in the survey. Although this is valid for states and territories with common borders, there were some records where the two locations did not adjoin each other.

The decision was therefore taken to use a derived location based firstly on main job information, then on principal practice location if the main job location was missing, and subsequently on residential address if the principal practice location was also missing. This derived state is used in all tables except where otherwise stated

Structure and format of data items

Due to unstructured data entry formats, a number of items in the NHWDS: dental practitioners 2011 that required a numeric value contained text string responses. Where possible, these were recoded to the appropriate numeric value, but this was not possible in all instances. For example, for a number of records, 'Postcode of principal practice' contained values other than valid post codes, including text strings, overseas postal identifiers, etc. Conversely, 'Suburb of main job' contained invalid suburb names and 4-digit codes resembling postcodes.

Coherence

Workforce Survey 2011

Dental labour force data for 2009 and earlier years published by the AIHW was the result of collated jurisdiction–level occupation–specific surveys. The current survey, Dental Workforce Survey 2011, collects similar data items; however, the survey methodology has changed, as has the method of obtaining benchmark data on which the numbers of total registrations are based. With the establishment of AHPRA, there is one source of benchmark data instead of eight and there is less chance of inconsistency between jurisdictions and years in the scope of benchmark data.

The scope and coverage of the Dental Workforce Survey 2011 is also different to that of the previous surveys because in some jurisdictions not all types of registered dental practitioners were sent a survey form.

The dental workforce survey for 2009 and earlier years had three different forms, one for dentists, one for dental prosthetists and one for allied dental practitioners. There are a number of differences between these forms and between them and the Dental Workforce Survey 2011 form.

Date of birth, country of initial qualification, specialty of practice and sex are some data items previously collected by the Dental Labour Force Survey, but now collected by the NRAS. However, data for some of these items are either incomplete or inaccurate (see 'Accuracy').

Speciality of practice, in 2011, is recorded as part of the registration data by the NRAS. A small number of dental practitioners (54) have more than one specialty. The data collected by the NRAS does not identify the primary specialty. However, the AIHW allocated a primary specialty on the basis of the responses to question 10, Principal area of main job.

In 2009 and earlier years, specialty information was self-reported by registered dental practitioners in the Dental Labour Force Survey.

There have also been minor changes in the classification of categories of specialty of practice used in the NHWDS: dental practitioners 2011 compared with that used in the Dental Labour Force Surveys. There were only eight specialties specified in the question for the Dental Labour Force Surveys. There are 13 valid specialties in the NHWDS: dental practitioners 2011, with the addition of Oral medicine, Oral surgery, Public health dentistry (community dentistry), Special needs dentistry, and Forensic odontology. In particular, because of the addition of the Oral surgery category, there has been a large apparent decline in the Oral and maxillofacial surgery category. Thus, comparison of 2011 specialty data with results from AIHW Dental Labour Force Survey should be treated with caution.

In the AIHW Dental Labour Force Surveys of 2009 and earlier years, temporary resident status was collected on a different basis with a question directed as to whether the respondent was an Australian Citizen a permanent resident or a temporary resident. Visa category number was not collected in previous years.

Work setting response categories in 2011 are somewhat different to those in 2009 and earlier years. The 2011 categories are more similar to categories in other collections, while the 2009 and earlier categories are more specific to dental practice. For example, there are now three categories of private practice (solo, group and locum) compared with seven in previous years (solo, solo with assistant, partnership, associateship, assistant, locum and health fund) available in previous years for dentists. The Allied Dental Labour Force Survey categories for work setting were very different, including categories such as Private: general practice, Private: specialist orthopaedic practice, Private: specialist periodontal practice, and Private: specialist other.

The number of years worked in dental in Australia was not previously collected by the Dental Labour Force Survey (last conducted in 2009).

Due to the differences in data collection methods, including survey design and questionnaire, it is recommended that comparisons between workforce data in the NHWDS: dental practitioners 2011 and Dental Labour Force Survey data up to and including 2009 be made with caution.

Glossary

Aboriginal: A person of Aboriginal descent who identifies as an Aboriginal and is accepted as such by the community in which he or she lives.

Benchmark data: For the Dental Workforce Survey 2011, responses were weighted to the number of registered dental practitioners by division of registration (that is, type of practitioner) in each state and territory, by sex and age group to take account of survey questionnaire non-response. These numbers are referred to as 'benchmarks' throughout this report, and may not be equivalent to that reported in the Australian Health Practitioner Regulation Agency 2010–11 annual report, due to scope and reporting time differences.

Clinical area of dental/oral health activity: The area where dental practitioners were working the most hours in the week before the survey. The categories comprise:

- general dental practice
- dento-maxillofacial radiology
- endodontics
- oral and maxillofacial surgery
- oral surgery
- oral medicine
- oral pathology
- orthodontics
- paedodontics
- periodontics
- prosthodontics
- public health dentistry
- special needs dentistry
- other.

Clinician: A clinician is a dental practitioner who spends the majority of his or her time working in the area of clinical practice; that is, the diagnosis, care and treatment and including recommended preventive action, of patients or clients.

Employed: An employed dental practitioner is one who either:

- worked for a total of 1 hour or more in the week before the survey in a job or business for pay, commission, payment in kind or profit, mainly or only in a particular state or territory
- usually worked, but was away on leave (with some pay) for less than 3 months, on strike or locked out, or rostered off.

Full-time equivalent (FTE) number: FTE number measures the number of standard-hour workloads worked by employed dental practitioners. This provides a useful measure of supply because it takes into account both the number of dental practitioners who are working and the hours that they work.

FTE number is calculated by: the number of employed dental practitioners in a particular category multiplied by the average hours worked by employed dental practitioners in the category divided by the standard working week hours. In this report, 38 hours is assumed to be a standard working week and equivalent to 1 FTE.

Full-time equivalent (FTE) rate: The FTE rate (number of FTE dental practitioners per 100,000 population) is a measure of supply. By defining supply in terms of the FTE rate, meaningful comparisons of supply can be made across geographic areas and over time. FTE rate is calculated as: the number of FTE dental practitioners divided by the relevant population count multiplied by 100,000.

Hours worked: The total number of weekly hours worked is self-reported by dental practitioners relates to the number of hours worked in dentistry/oral health jobs in the week before the survey. In editing survey responses, maximum hours worked accepted were 125 hours per week. Reported hours of greater than 125 are considered unreliable and therefore not included in the analysis of total hours worked by dental practitioners.

In this report, the ABS definition has been used for the cut-off for full-time and part-time work:

- full-time work: 35 hours or more per week
- part-time work: less than 35 hours per week.

For data before 2011, average weekly hours are calculated only where hours are greater than zero. That is, employed respondents with 'Not stated' hours worked are excluded from the calculation.

For 2011 data, average weekly hours was imputed where missing or invalid.

Indigenous: A person of Aboriginal and/or Torres Strait Islander descent who identifies as an Aboriginal and/or Torres Strait Islander and is accepted as such by the community in which he or she lives.

Principal role: Unless otherwise stated in this report, the role of the dental practitioner refers to the main role (that is, the core role with the most number of hours worked in the week before the survey) in the dental practitioner's main job (that is, the job with the most number of hours worked in the week before the survey). Core roles are divided into two main groups, with several categories in each group, as follows:

- *Clinical role*: Before 2011: for dentists this included general practice, registered specialist restricted practice. For 2011: clinician.
- *Non-clinical role*: this comprises:
  - administrators
  - teacher/educator
  - researcher
  - other.

Remoteness area: The Remoteness Area Structure within the Australian Standard Geographical Classification (ASGC), produced by the Australian Bureau of Statistics, has been used in this report to present regional data for dental practitioners.

The Remoteness Area Structure of the ASGC is based on the Accessibility/Remoteness Index of Australia, where the remoteness index value of a point is based on the physical road

distance to the nearest town or service in each of six population size classes based on the 2006 Census of Population and Housing. These classes are:

- *Major cities*
- *Inner regional*
- *Outer regional*
- *Remote*
- *Very remote*
- *Migratory*.

Due to the small numbers in the *Migratory* class, they have been combined and reported as *Very remote* in this report.

Torres Strait Islander: A person of Torres Strait Islander descent who identifies as a Torres Strait Islander and is accepted as such by the community in which he or she lives.

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List of tables

List of figures

List of boxes

The number of dental practitioners registered in Australia in 2011 was 18,803, of whom 14,179 were dentists. The supply of employed dentists increased from 50.9 to 56.1 full-time equivalent practitioners per 100,000 population between 2006 and 2011, which reflected a 22.4% increase in dentists.

The gender balance continued to shift, with women making up 35.6% of dentists in 2011 compared with 29.0% in 2006. The average hours worked each week by dentists decreased slightly from 38.5 to 37.4.