



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).

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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 In recent years, these programs have been replaced by Bachelor of Oral Health courses training dual-qualified hygienists and therapists, commonly referred to as oral health therapists.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

Labour force status	Oral health practitioner type			Total	Percentage of oral health practitioner labour force
	Dental therapists	Hygienists	Oral health therapists		
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).

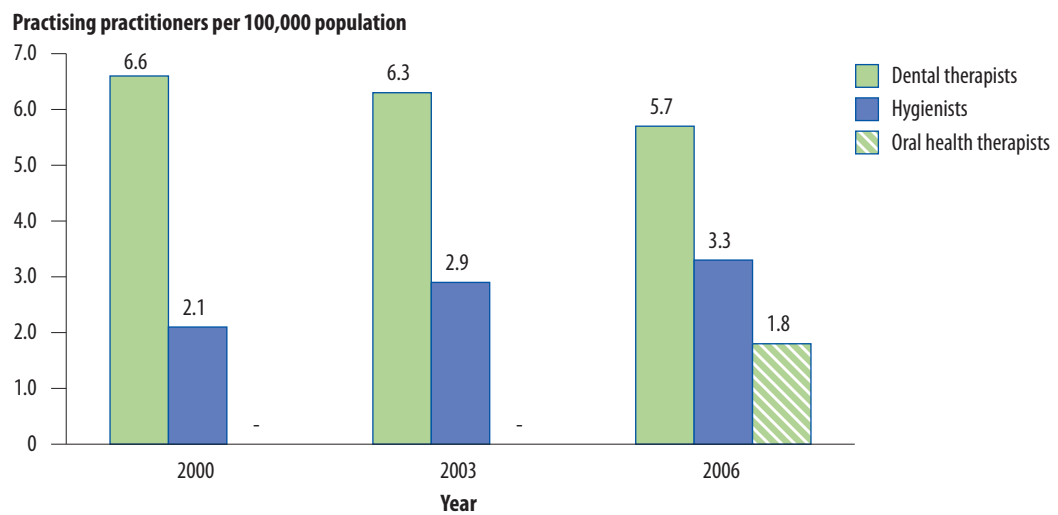


Figure 1: Practising oral health practitioners per 100,000 population, 2000, 2003 and 2006

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).

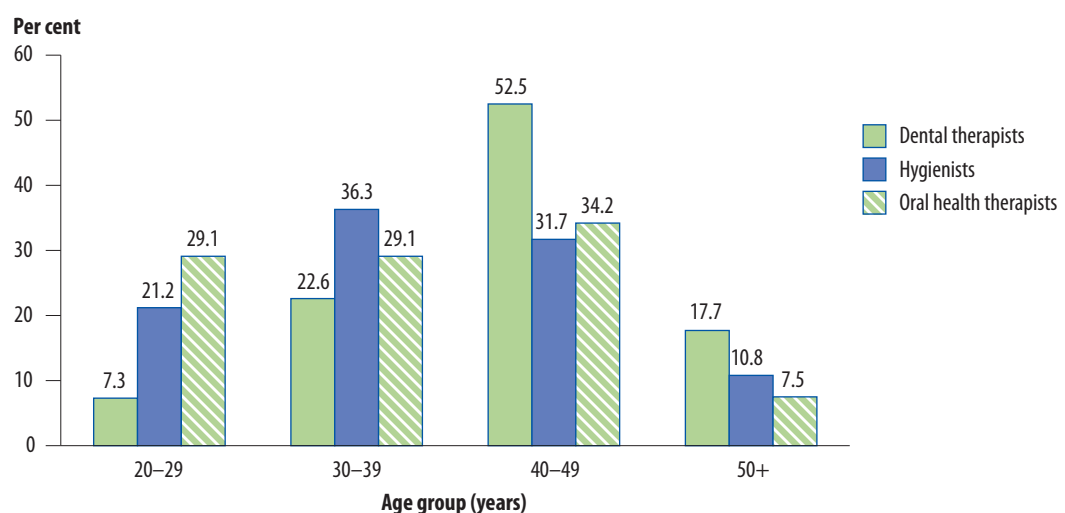


Figure 2: Proportion of practising oral health practitioners, by occupational group and age group, 2006

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).

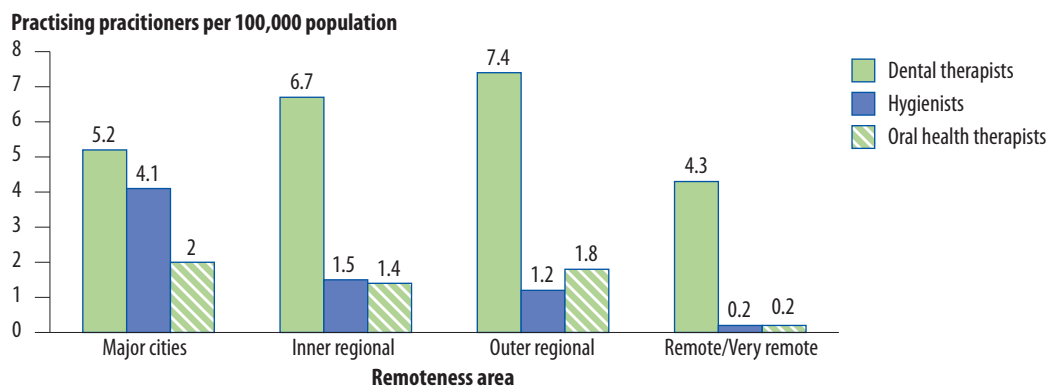
Table 2: Number of oral health practitioners and number practising per 100,000 population, by state and territory, 2006

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

Practice type	Dental therapists		Hygienists		Oral health practitioners	
	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 to 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).

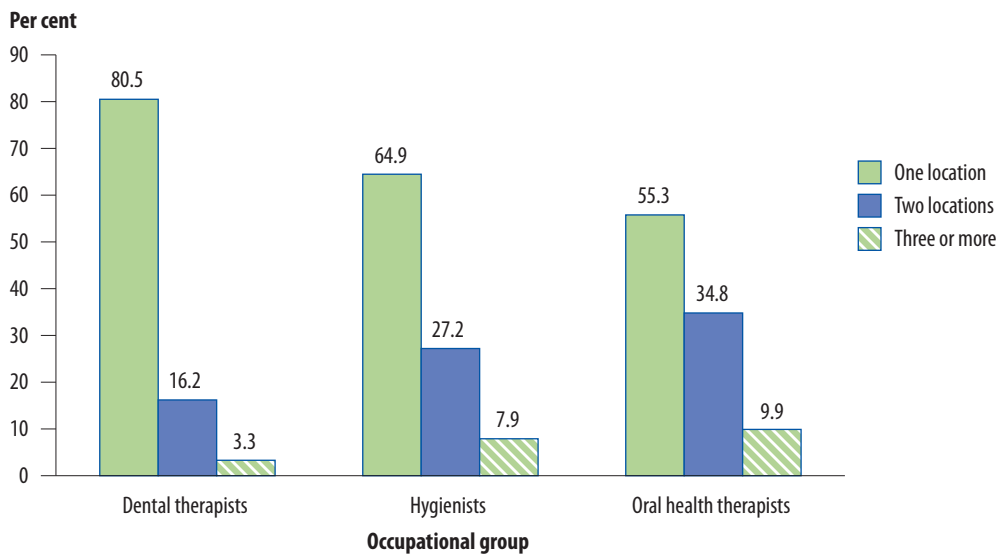
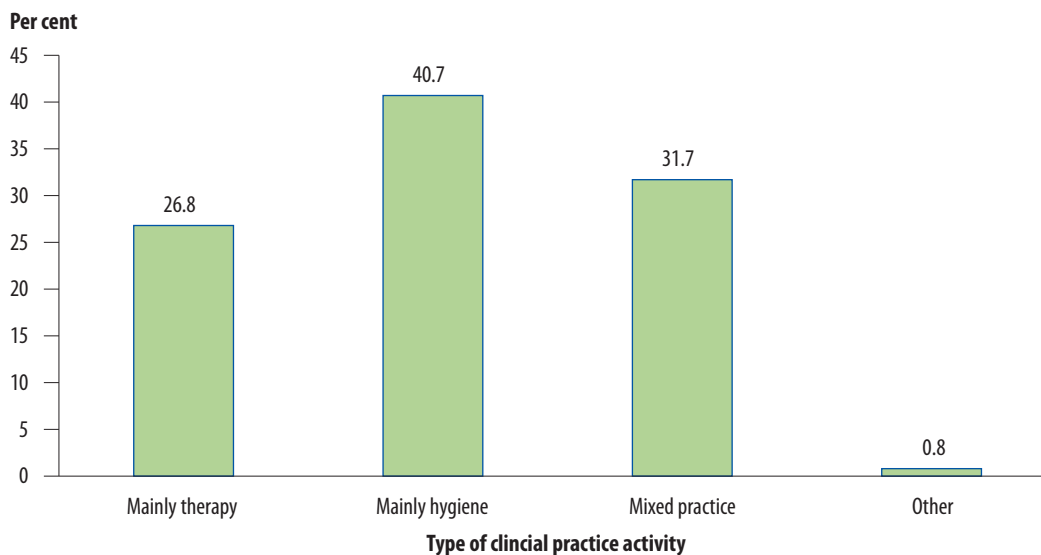


Figure 4: Practising oral health practitioners, by occupational group and number of practice locations worked, 2006

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

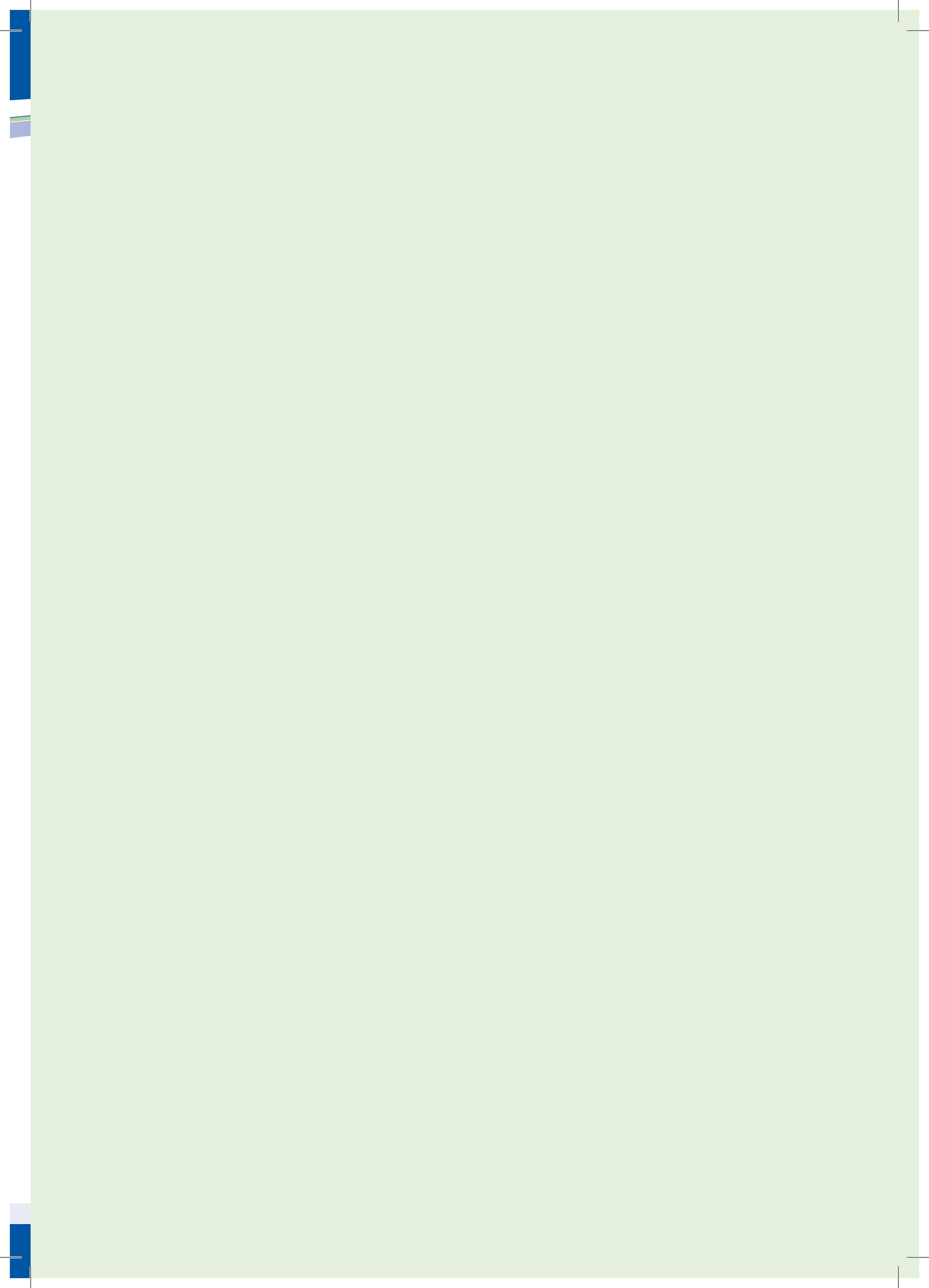
References

- Australian Bureau of Statistics (ABS) 2006. Statistical geography: volume 1 Australian Standard Geographical Classification (ASGC) 2006. ABS cat. no. 1216.0. Canberra: ABS.
- Balasubramanian M & Teusner DN 2011. Dentists, specialists and allied practitioners: the Australian dental labour force 2006. Dental statistics and research series no. 53. Cat. no. DEN 202. Canberra: AIHW.

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