

DENTAL WORKFORCE IN RURAL, REGIONAL & REMOTE AUSTRALIA

...good health and wellbeing in rural and remote Australia

The dental practitioner workforce in rural and remote areas is responsible for addressing the often so complex oral health concerns of people living in these regions. People in rural, regional and remote (RRR) Australia experience poor oral health at significantly higher rates than people living in major cities. There is emerging evidence linking poor oral health and chronic disease, and people living outside of major cities have higher rates of chronic disease. The existing disparities in oral health outcomes between RRR areas and major cities are best addressed through individual, whole of population, and targeted approaches. Yet data shows a consistent decrease of the dental practitioner workforce with increasing remoteness.



Spatial distribution of the dental workforce

The dental practitioner workforce data can be classified into five remoteness categories namely: major cities, inner regional, outer regional, remote and very remote.

More recent data has been classified under the Modified Monash Model (MMM) classification system. The MMM categorises metropolitan, regional, rural and remote areas according to both geographical remoteness and town size.

Sources of data on dental practitioners

The Dental Board of Australia publishes quarterly statistics on the number and type of dental practitioners in Australia. While this data is useful, it does not provide details regarding the distribution of that workforce particularly as it relates to rural and remote Australia. The current number of registered dental practitioners is reported as being 23, 730 as of April 2019 ¹.

Data presented in this fact sheets is mainly derived from the National Health Workforce Dataset (NHWDS).

This fact sheet gives a snapshot of the supply of each of the five types of dental practitioners in Australia (Dentists; Oral health therapists; Dental hygienists; Dental therapists; and Dental prosthetists) in rural, regional and remote (RRR) Australia. Each division of registered dental practitioner provides dental health care that is based on their education, training and competence.

Who makes up the dental workforce?

Dentists

Dentists work as independent practitioners and for the purpose of registration may practise all parts of dentistry within their competency and training. They provide assessment, diagnosis, treatment, management and preventive services to patients of all ages.

Figures from the NHWDS show that in remote and very remote areas there are less than half as many FTE dentists per 100,000 people as there are in the cities.²

In 2013, major cities had the highest number per 100,000 population of practising dentists (63.1) and remote/very remote areas had the lowest (25.7) across remoteness areas.³

In the years 2015, 2016 and 2017 major cities had the highest full time equivalent (FTE) rate of dentists (64; 65; and 66) respectively across remoteness areas. The FTE rate of dentists decreased with increased remoteness over the 3 year period (2015, 2016 and 2017) (Figure 1).

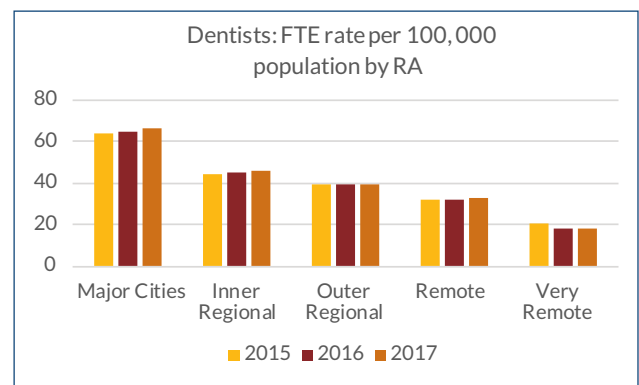


Figure 1: Dentists FTE rate per 100,000 population by Remoteness Area 2015 – 2017 (Source: <https://hwd.health.gov.au/datatool.html>)

Dentists had the highest supply of practitioners in all regions in the years 2015, 2016 and 2017 (see Figures 2, for example).

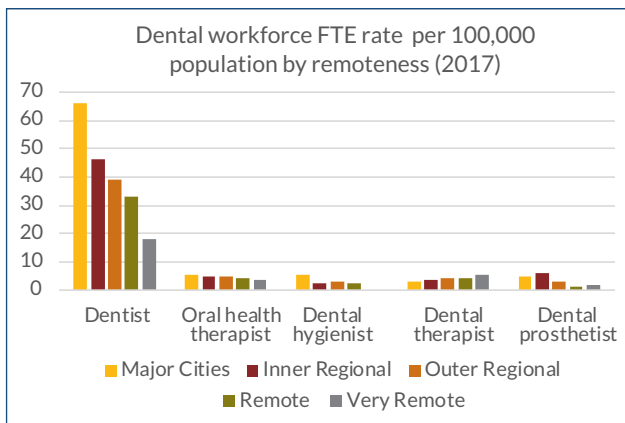


Figure 2: Dental workforce FTE rate per 100,000 population by Remoteness Area (2017) (Source: <https://hwd.health.gov.au/datatool.html>)

Oral Health Therapists

Oral health therapists are dual qualified as a dental therapist and dental hygienist. They provide oral health assessment, diagnosis, treatment, management and preventive services for children and adolescents and, if educated and trained in a program of study approved by the National Board, for adults of all ages.

The trend in the supply of oral health therapists has changed over the years. While there were no oral health therapists in very remote areas in 2015, the subsequent years (2016 and 2017) have seen an increase in the supply of the profession in rural areas.

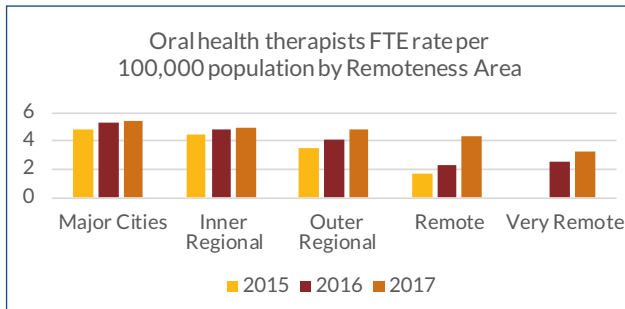


Figure 3: Oral health therapists FTE rate per 100,000 population by remoteness area (Source: <https://hwd.health.gov.au/datatool.html>)

Very remote areas had the lowest FTE rate of oral health therapists in 2017 (2.5) and major cities had the highest rate (5.3).

Major cities had the highest FTE rate of oral health therapists in the years 2015, 2016 and 2017 (4.8; 5.3; and 5.4) respectively.

Dental hygienists

Dental hygienists provide oral health assessment, diagnosis, treatment, management, and education for the prevention of oral disease to promote healthy oral behaviours to patients of all ages.

In 2016, major cities had the highest FTE rate of dental hygienists in the years 2015 (5.7); 2016 (5.8) and 2017 (5.6). In comparison, there were no dental hygienists in very remote areas in 2015, 2016 and 2017.

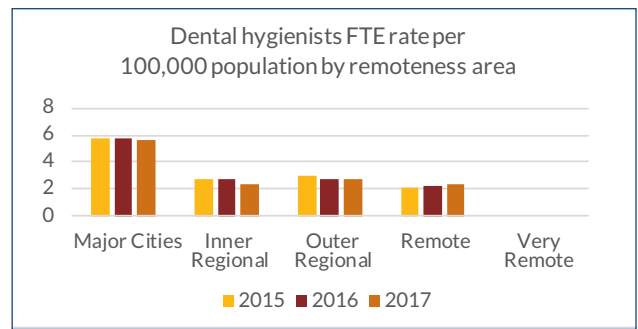


Figure 4: Dental hygienists FTE rate per 100,000 population by remoteness area (Source: <https://hwd.health.gov.au/datatool.html>)

Dental therapists

Dental therapists provide oral health assessment, diagnosis, treatment, management and preventive services for children, adolescents and young adults and, if educated and trained in a program of study approved by the National Board, for adults of all ages.

In 2015 and 2017, very remote areas had the highest FTE rate of dental therapists (7.2 and 5.1) respectively. Major cities had the lowest FTE rate of dental therapists in all the 3 years 2015, 2016 and 2017.

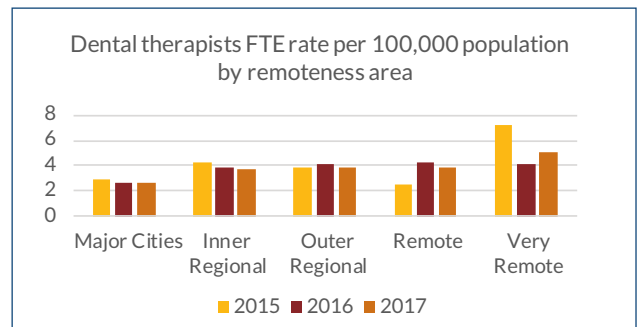


Figure 5: Dental therapists FTE rate per 100,000 population by remoteness area (Source: <https://hwd.health.gov.au/datatool.html>)

Dental prosthetist

Dental prosthetists work as independent practitioners in the assessment, treatment, management and provision of removable dentures; and flexible, removable mouthguards used for sporting activities.

In the years 2015, 2016 and 2017 inner regional areas had the highest FTE rate of dental prosthetist (6.2; 6.1 and 6.2) respectively.

There were no dental prosthetists in remote areas in 2015 and none in very remote areas in 2016.

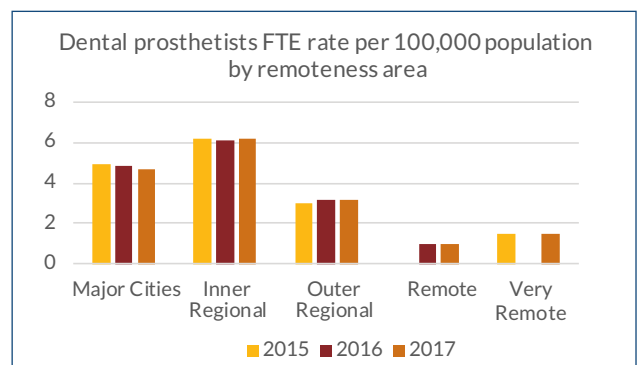


Figure 6: Dental prosthetists FTE rate per 100,000 population by remoteness area (Source: <https://hwd.health.gov.au/datatool.html>)

Policy Implications

Although the distribution of dental practitioners varies across remoteness areas, rural Australians generally have access to fewer dental practitioners overall compared to those living in major cities. In the three comparative years referred to in this fact sheet (2015, 2016 and 2017), major cities had the highest FTE rates for dentists, oral health therapists and dental hygienists. Inner regional had the highest supply of dental prosthetists in all the 3 years, while very remote areas had the highest supply of dental therapists in 2015 and 2017.

As a result of the lower supply of dental practitioners in remote and very remote areas, people living in these areas have poorer oral health than those in major cities⁴, and oral health status generally declines as remoteness increases. There are several factors that expose people living in remote and very remote areas to risk of poor oral health. These include: longer travel times, limited transport options to services, higher likelihood to smoke and drink alcohol at risky levels, taking illicit drugs, and reduced access to fluoridated drinking water.

The increased costs of healthy food and oral hygiene products have also been associated with poorer oral health outcomes. For example, Bishop and Laverty⁵ found the cost of a basket of healthy food to cost \$24 more per fortnight in rural areas than in a major city. Financial burden is therefore a contributing factor to poorer dental health outcomes. The cost of care results in people failing to seek regular dental care or comply with recommended treatment. In 2013, more people living in major cities (53%) had insurance than those in inner regional (45%) and outer regional areas (44%)⁷. People in rural and remote areas are therefore likely to face major challenges paying for dental care, as they are less likely to have insurance and so incurring more out of pocket expenses.

There is emerging evidence of association between oral health, overall health, and some diseases such as Cardiovascular Disease (CVD), stroke, aspiration pneumonia, adverse pregnancy, diabetes and rheumatic heart disease.⁵ The link between chronic disease and oral health status makes oral health a priority health issue, particularly for rural and remote Australians who already face compound challenges in accessing oral health care.

In light of the multiple factors influencing the oral health status of people living in rural, regional and remote Australia, integrated efforts that address workforce issues alongside the social determinants of oral disease and risk factors for oral disease and chronic disease are required. Initiatives that facilitate improved access to dental services should be developed and fully funded. The existing disparities in oral health outcomes between rural and remote areas and major cities are best addressed through individual, whole of population, and targeted approaches.

References

- ¹ Dental Board of Australia. Dental Board of Australia Registrant Data [Internet]. Australian Health Practitioner Registration Agency; 2019 [cited 2019 August 13]. <https://www.dentalboard.gov.au/About-the-Board/Statistics.aspx>
- ² The Department of Health. National Health Workforce Dataset [Internet]. Commonwealth of Australia; 2017 [updated 2017 January 1; cited 2019 April 23]. <https://hwd.health.gov.au/datatool.html>
- ³ Chrisopoulos S, Harford JE, Ellershaw A. Australian Institute of Health and Welfare (AIHW). Oral health and dental care in Australia: Key facts and figures 2015. Canberra: AIHW; 2016
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- ⁵ Bishop LM, Laverty MJ. Filling the gap: Disparities in oral health access and outcomes between metropolitan and remote and rural Australia. Canberra: Royal Flying Doctor Service of Australia; 2015. 64p.
- ⁶ AIHW. Oral Health and Dental Care in Australia [Internet]. Australian Government: AIHW; 2015 [updated 2016 January 28; cited 2019 April 23]. <https://www.aihw.gov.au/reports/dental-oral-health/oral-health-and-dental-care-in-australia-2015/contents/cost-of-dental-care>