# research report 55

### Visits supplied in dental practice in Australia

### **Summary**

This report provides information on dental practice in Australia. Data are presented on the time spent working and the number of patient visits supplied by dentists in private general practice between 1983 and 2010.

### **Main findings**

While the number of hours per year a dentist spent working was stable in 1983, the mean number of hours worked per dentist per year decreased by 2010.

There was also a decline in the number of patient visits supplied per dentist per hour during the study period.

The observed decline in the number of patient visits supplied per dentist per hour over the study period, along with a reduction in hours worked per dentist per year, was reflected in a decline in the number of patient visits supplied per dentist per year.

These findings may indicate a reduction in the overall mean level of service provided per dentist, an issue that could have implications for the capacity to supply dental services.

## ContentsSummary1Main findings1Methodology2Response2Practice activity measures2Hours worked per dentist per year by dentist age and sex3Patient visits per dentist per hour supplied by dentist age and sex4Patient visits per dentist per year supplied by dentist age and sex5Hours worked per dentist per year over the study period6Patient visits per dentist per hour over the study period6Patient visits per dentist per year over the study period7Conclusions7References7Acknowledgments7

### Methodology

The Longitudinal Study of Dentists' Practice Activity has collected information on dentists, practices and services from a random sample of 10% of male dentists and 40% of female dentists in each state and territory of Australia at five-year intervals since 1983–84. Data have been collected in 1983–84, 1988–89, 1993–94, 1998–99, 2003–04 and 2009–10.

Further details on methods are reported by Brennan and Spencer (2006).

### Response

Table 1 shows the sample and response across the waves of the study. At each time, the response was approximately 70%.

Table 1: Response by time of study

Table it itesponde by time of state			
Time of study	Sampled	Responded	% Response
1983-84	1,033	730	73.4
1988–89	1,166	855	75.5
1993–94	1,212	817	73.9
1998–99	1,416	943	71.2
2003-04	1,567	962	76.0
2009–10	2,103	1,148	67.1

### **Practice activity measures**

Estimates of time and patient measures were collected directly through a mailed self-complete questionnaire sent to sampled Australian dental practitioners. Respondents completed questions related to their current practice experience. Practitioners provided estimates of the number of patients treated per day, and the number of hours per day, days per week and weeks per year spent working. From these estimates the three dependent variables forming the basis of this analysis—hours per dentist per year, patient visits per dentist per hour and patient visits per dentist per year—were calculated as follows:

- Hours per dentist per year (HPY) = hours per day × days per week × weeks per year
- Patient visits per dentist per hour (PVPH) = patients per day / hours per day
- Patient visits per dentist per year (PVPY) = PVPH × HPY.

### Hours worked per dentist per year by dentist age and sex

Dentists worked a mean of 1,700 hours per dentist per year over the study period (1983 to 2010 combined). The mean number of hours worked per dentist per year was higher for male than female dentists, and also varied by age of dentist.

Male dentists worked more hours per year than females in each age group (Figure 1). For male dentists, hours worked per dentist per year were highest in the 30–39 year age group and lowest in the 60 years and older age group. For female dentists, hours worked per dentist per year were highest in the 20–29 year age group and, as for male dentists, was lowest in the 60 years and older age group.

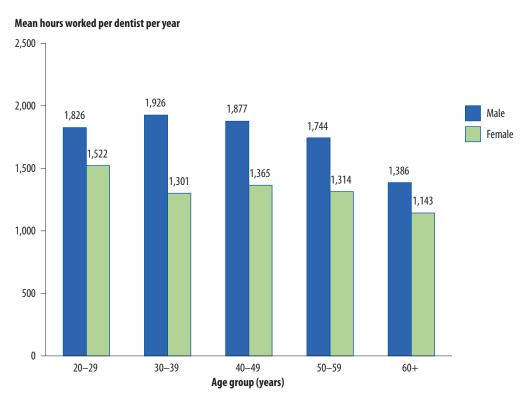


Figure 1: Mean hours worked per dentist per year by age and sex of dentist over the study period (1983 to 2010 combined)

### Patient visits per dentist per hour supplied by dentist age and sex

Dentists supplied a mean of 1.64 patient visits per dentist per hour over the study period (1983 to 2010 combined). The mean numbers of patient visits per dentist per hour supplied by a dentist was higher for male than female dentists, and also varied by age of dentist.

While patient visits supplied per dentist per hour were higher for male compared to female dentists in each age group (Figure 2), the difference was small among younger age groups and more pronounced among dentists aged 50-59 years and older. For male dentists, the mean number of patient visits supplied per dentist per hour was lowest for the 20-29 year age group and highest for the 50-59 year age group. For female dentists, the mean number of patient visits supplied per dentist per hour was lower among dentists aged 50-59 and 60 years or older and was highest in the 30-39 and 40-49 year age groups.

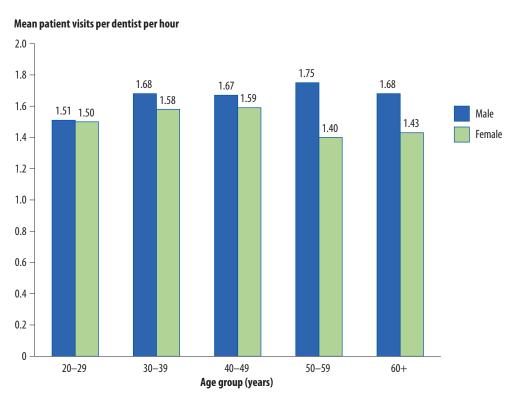


Figure 2: Mean patient visits per dentist per hour by age and sex of dentist over the study period (1983 to 2010 combined)

### Patient visits per dentist per year supplied by dentist age and sex

Dentists provided a mean of 2,767 patient visits per dentist per year over the study period (1983 to 2010 combined). The mean number of patient visits per dentist per year supplied by dentists was higher for male compared to female dentists, and varied by age of dentist.

The mean number of patient visits supplied per dentist per year was consistently higher for male compared to female dentists in each age group (Figure 3). For male dentists, the mean number of patient visits supplied per dentist per year was lowest among those aged 60 years or older and was highest for those in the 30–39 year age group. For female dentists, the mean number of patient visits supplied per dentist per year was lowest in the 60 years or older age group and highest for those aged 20–29 years.

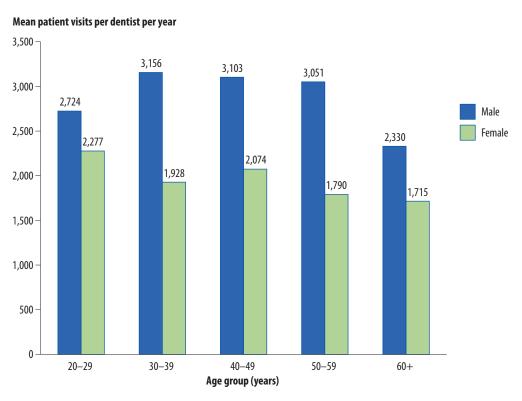


Figure 3: Mean patient visits per dentist per year by age and sex of dentist over the study period (1983 to 2010 combined)

### Hours worked per dentist per year over the study period

Figure 4 shows the mean number of hours worked per dentist per year over the study period.

While time spent working was relatively stable over the beginning of the study period, there was a reduction in hours worked per dentist per year over the last three points in time during the study period.

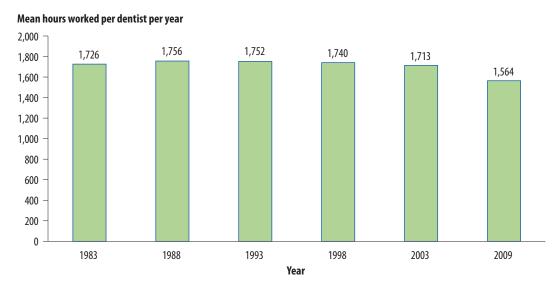


Figure 4: Mean hours worked per dentist per year by year of study, 1983–2009

### Patient visits per dentist per hour over the study period

Figure 5 shows the mean number of patient visits per dentist per hour supplied per dentist over the study period.

The mean number of patient visits supplied per dentist per hour declined from 1983 to 1998.

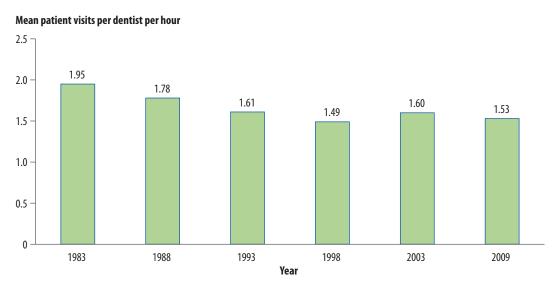


Figure 5: Mean patient visits supplied per dentist per hour by year of study, 1983–2009

### Patient visits per dentist per year over the study period

The mean number of patient visits supplied per dentist per year declined consistently over the study period (Figure 6). However, this decline in patient visits supplied per dentist per year was most visible from 1983 through to 1998, with smaller reductions observed in 2003 and 2009.

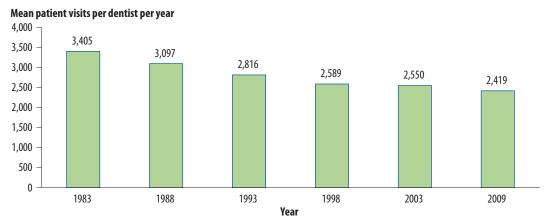


Figure 6: Mean patient visits supplied per dentist per year by year of study, 1983–2009

### **Conclusions**

The mean hours per year spent working by dentists declined over time and this reflected a stable pattern over most of the period, with a decline at the last point in time.

The observed decline in patient visits supplied per dentist per year occurred consistently across each time point and this decline preceded the decline in hours per dentist per year spent working.

The decline in patient visits supplied per dentist per year could have implications for the capacity to supply dental services.

### References

Brennan DS & Spencer AJ 2006. Practice activity patterns of dentists in Australia: trends over time by age of patients. Dental statistics and research series no. 32. Canberra: AIHW.

### **Acknowledgments**

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

The Longitudinal Study of Dentists' Practice Activity has been supported by the Australian Government Department of Health and Ageing, the National Health and Medical Research Council, and the AIHW.



The Dental Statistics and Research Unit (DSRU) is a collaborating unit of the AIHW established in 1988 at The University of Adelaide, located in the Australian Research Centre for Population Oral Health (ARCPOH), School of Dentistry, The University of Adelaide. The research unit aims to improve the oral health of Australians through the collection, analysis and reporting of information on oral health and access to dental care, the practice of dentistry and the dental labour force in Australia.

### © Australian Institute of Health and Welfare 2011

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced without prior written permission from the Australian Institute of Health and Welfare. Requests and enquiries concerning reproduction and rights should be directed to the Head of the Communications, Media and Marketing Unit, Australian Institute of Health and Welfare, GPO Box 570, Canberra ACT 2601.

This publication is part of the Australian Institute of Health and Welfare's Dental Statistics and Research Unit Research report series. A complete list of the Institute's publications is available from the Institute's website < www.aihw.gov.au>.

ISSN 1445-775X ISBN 978-1-74249-187-5

### **Suggested citation**

Australian Institute of Health and Welfare 2011. Visits supplied in dental practice in Australia. Research report series no. 55. Cat. no. DEN 212. Canberra: AlHW.

### **Australian Institute of Health and Welfare**

Director David Kalisch

Any enquiries about or comments on this publication should be directed to:

Communications, Media and Marketing Unit Australian Institute of Health and Welfare GPO Box 570 Canberra ACT 2601 Phone: (02) 6244 1032 Email: info@aihw.qov.au

Published by the Australian Institute of Health and Welfare