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# Complaints about dental practitioners: an analysis of 6 years of complaints about dentists, dental prosthetists, oral health therapists, dental therapists and dental hygienists in Australia

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## ABSTRACT

**Background:** Previous research has found dental practitioners at elevated risk of complaint compared with other health professions. This study aimed to describe the frequency, nature and risk factors for complaints involving dental practitioners.

**Methods:** We assembled a national dataset of complaints about registered health practitioners in Australia between January 2011 and December 2016. We classified complaints into 23 issues across three domains: health, performance and conduct. We compared rates of complaints about dental practitioners and other health practitioners. We used negative binomial regression analysis to identify factors associated with complaints.

**Results:** Dental practitioners made up 3.5% of health practitioners, yet accounted for approximately 10% of complaints. Dental practitioners had the highest rate of complaints among fourteen health professions (42.7 per 1000 practitioners per year) with higher rates among dentists and dental prosthetists than allied dental practitioners. Male practitioners were at a higher risk of complaints. Most complaints about dentists related to treatments and procedures (59%). Around 4% of dentists received more than one complaint, accounting for 49% of complaints about dentists. In 60% of closed cases no regulatory action was required. Around 13% of complaints resulted in restrictive actions, such as conditions on practice.

**Conclusion:** Improved understanding of patterns may assist regulatory boards and professional associations to ensure competent practice and protect patient safety.

**Keywords:** Complaints, dental practitioners, dentists, disciplinary action, regulation, risk regulation.

**Abbreviations and acronyms:** AHPRA = Australian Health Practitioner Regulation Agency; AIR = Adjusted incidence rate; HPCA = Health Professionals Council Authority; IRR = Incident rate ratio.

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## INTRODUCTION

Dental practice differs from many other health professions, with practitioners undertaking multiple high-risk surgical procedures on a daily basis and working predominantly in private practice (fee for service) rather than spread across the public and private sectors.<sup>1</sup> These characteristics may place dental practitioners at an increased risk of certain forms of legal and regulatory action compared with practitioners from other health professions. Although there is a growing literature on malpractice claims, complaints, and disciplinary action involving medical

practitioners, little is known about the risk factors for complaints about practitioners in the dental professions.

In one of the few published studies of complaints about dentists in Australia, Hopcraft and Sanduja analysed complaints against dental practitioners in Victoria from 2000 to 2004.<sup>2</sup> During the study period, there were 651 complaints against dental care providers: a rate of 41 complaints per 1000 practitioners per year.<sup>2</sup> Dentists were responsible for three-quarters of the complaints, with 10% involving dental prosthetists and 7% involving dental specialists.<sup>2</sup> Complaints resulted in an adverse finding in fewer

than 10% of the complaints about dentists and dental specialists, compared with adverse findings in 26% of complaints against dental prosthetists and in 67% of complaints against dental therapists.<sup>2</sup> The study also found that practitioner gender was associated with higher rates of complaints; male practitioners were more likely to be the subject of a complaint. 99% of complaints involved practitioners in the private sector, and 91% of complaints related to providers working in metropolitan Melbourne.<sup>2</sup> This research also indicated that a small number of dentists were responsible for a large number of complaints and adverse events for patients.<sup>2</sup>

We describe the frequency and nature of complaints amongst all dental practitioners (dentists, dental prosthetists, oral health therapists, dental therapists and dental hygienists) registered to practice in Australia between 1 January 2011 and 31 December 2016, and examine the factors associated with receiving a complaint.

## METHODS

### Setting

In Australia, dental practitioners are one of fifteen health professions registered under a National Registration and Accreditation Scheme.<sup>4</sup> As at 31 December 2017, there were over 20 000 registered dental practitioners in Australia spanning five registration sub-divisions and thirteen specialist categories.<sup>3</sup> Complaints regarding the health, conduct and performance of health practitioners are also managed under the scheme apart from two jurisdictions with models of co-regulation: New South Wales (since the inception of the scheme in July 2010) and Queensland (since July 2014).<sup>4</sup> Dental practitioners in these states are registered with AHPRA; however, complaints about dental practitioners in New South Wales are managed by that state's Health Professionals Council Authority (HPCA) and in Queensland by the Office of the Health Ombudsman rather than by AHPRA.

Most complaints are made voluntarily by an individual or organization who wishes to raise a concern about a health practitioner. Mandatory notification by a fellow practitioner or employer is required in certain situations, such as where a practitioner has practised while intoxicated by alcohol or drugs, has placed the public at risk of substantial harm because of a health impairment, or has departed significantly from accepted professional standards.<sup>5</sup> In Western Australia and Queensland, certain exemptions apply for treating practitioners. The mandatory reporting requirements are described in more detail elsewhere.<sup>6</sup>

In six of Australia's eight States and Territories, complaints about dental practitioners are lodged with

AHPRA before being referred to the Dental Board of Australia. In Queensland, complaints are made to the Office of the Health Ombudsman and then referred to AHPRA as appropriate. In New South Wales, complaints are made to the Dental Council of New South Wales. We subsequently refer to these agencies as 'regulators'.

The relevant Dental Board, or a local committee of the Board, assesses each complaint and then initiates a more in-depth investigation in cases where this appears necessary. A board may decide no further action is warranted (before or after an investigation) or may take regulatory action that can lead, for example to a caution, reprimand, a fine, conditions, or – in the most serious cases – suspension or cancellation of a practitioner's registration. A guiding principle of the scheme is that restrictive actions on the practice of a health profession should only be imposed if it is necessary to ensure health services are provided safely and are of an appropriate quality.

### Study design

Using administrative data routinely collected by AHPRA and the HPCA, we identified all complaints about the health, performance or conduct of health practitioners lodged between 1 January 2011 and 31 December 2016. We used data from the register of health practitioners to calculate complaint rates and to identify predictors of complaints. The study was approved by the University of Melbourne's Human Ethics Sub-Committee (ethics approval number 1543670.5). The data were provided to us in de-identified form from AHPRA and the HPCA under strict data protection plans and deeds of confidentiality.

### Data collection

AHPRA provided us with data on all health practitioners registered between 1 January 2011 and 31 December 2016. This 'practitioner extract' consisted of variables indicating the period during which each practitioner was registered; the practitioner's age band, sex, profession and state or territory of practice, and the remoteness (as defined by the Australian Standard Geographical Classification Remoteness Structure<sup>7</sup>) based on the main practice location provided by the practitioner.<sup>8</sup>

AHPRA and the HPCA also provided a data extract relating to all complaints lodged about registered practitioners during the same study period. This 'complaint extract' included information collected at the time the complaint was lodged (e.g. lodgement date, source of complaint, primary issue raised), as well as information relating to the ensuing adjudication (e.g. closure date, case outcome). Anonymized, unique

identifiers enabled us to link the practitioner extract to the complaint extract.

We excluded practitioners registered to an address outside Australia and practitioners who did not practise during the study period.

## Measures

To protect confidentiality AHPRA provided practitioners' birth dates in 5-year bands (e.g. 1970–1974). We recoded this variable to reflect each practitioner's age group in 2015. We coded dental practitioners into three categories based on practice type and size of profession: (i) general dentists and dental specialists ('dentists'); (ii) dental prosthetists and (iii) oral health therapists, dental therapists and dental hygienists ('allied dental professionals'). Each complaint was originally coded into one of 149 complaint categories. Using methods we have applied previously,<sup>9</sup> two researchers independently recoded these into three domains and 23 complaint issues. These were: health impairment issues (e.g. mental health, drug use, alcohol use, physical or cognitive health); performance issues (e.g. treatment, infection control, communication, prescribing, access to care) and conduct issues (e.g. advertising and use of titles, records and reports, practising beyond scope, consent and confidentiality, interpersonal behaviour). Any coding differences were resolved by consensus.

The register of practitioners changes daily. We therefore used data on the dates practitioners became registered and unregistered with AHPRA to calculate practitioners' exposure time – the period each practitioner could potentially receive a complaint. For most practitioners, their exposure time began on 1 January 2011 and ended on 31 December 2016 (at the end of the data collection period). For practitioners whose registration began and/or ended within this interval (e.g. new graduates, migrants), their exposure time was adjusted accordingly.

To control for differences in clinical practice time we created a measure of exposure time ('practice years') and adjusted for it in analyses. Practice years were estimated at the clinician level, as a multiplicative function of two variables: the duration of registration and the average number of clinical hours worked per week by clinician of the same age, sex, and specialty<sup>9,10</sup> (see Appendix I).

## Analyses

We created a practitioner-level dataset for analysis. When a practitioner had specialist and general registrations, we selected the information from specialist registration. When a practitioner practised as two or more different professions or divisions (about 5%),

for example dentist and medical doctor, or dentist and allied dental professional, we randomly selected data for one profession and excluded data for the other profession(s).

We used counts and percentages to describe the characteristics of dental practitioners and their complaints, including sex, practice location, the primary issue, the reporting source, and the final determination. We then conducted negative binomial regression analysis to estimate the incidence of complaints by practitioner profession, adjusted for age, sex, practice location and jurisdiction. The adjusted incidence rates (AIR) and incident rate ratios (IRR) were computed using marginal effects, derived directly from model estimates.<sup>11,12</sup> We also used the same model to examine the factors associated with higher rate of complaints in dental practitioners. We performed a sensitivity analysis examining the factors associated with complaint in cases that did not involve advertising, and in cases that resulted in an adverse outcome. All analyses were conducted using Stata 13.1.<sup>13</sup>

## RESULTS

### Rates of complaints across the health professions

During the period 2011–2016, a total of 688 206 individual health practitioners were registered by AHPRA, of whom 3.5% (24 316) were dental practitioners. During the same period, health regulators received 45 224 complaints about health practitioners: 10.5% (n = 4725) involved dental practitioners (i.e. general dentists and dental specialists, dental prosthetists, dental hygienists, dental therapists and oral health therapists).

After adjusting for age, sex, practice location and jurisdiction, the overall complaint rate for dental practitioners was 42.7 per 1000 practitioners per year (95% CI 41.0–44.4) – higher than for any other health profession. Within the dental profession, dentists had the highest rate of complaint (56.9 per 1000 practitioners per year, 95% CI 54.6–59.3), followed by dental prosthetists (50.0 per 1000 practitioners per year, 95% CI 42.8–57.2) (Table 1). Allied dental professionals (oral health therapists, dental therapists and dental hygienists) had significantly lower rates of complaint (11.2 per 1000 practitioners per year, 95% CI 9.1–13.3).

### Characteristics of dental practitioners and their complaints

Overall, the dental professions included similar numbers of men and women, with 49% women (11 997) and 51% men (12 319). However, most dentists and dental prosthetists were male (59% and 85%

**Table 1. Number of complaints and adjusted complaint rate per 1000 practitioners per year**

Profession	Number of complaints n = 45 224	Adjusted complaint rate per 1000 practitioners per year	95% confidence interval
Dental practitioner	4725	42.7	(41.0–44.4)
Dentists	4279	56.9	(54.6–59.3)
Dental prosthetist	320	50.0	(42.8–57.2)
Oral health therapist, dental therapist, dental hygienist	126	11.2	(9.1–13.3)
Medical practitioner	25 230	36.9	(36.2–37.6)
Pharmacist	2378	19.5	(18.6–20.5)
Psychologist	2440	21.6	(20.6–22.6)
Nurse/midwife	8803	6.0	(5.8–6.1)
Other health practitioner	1648	9.2	(8.7–9.7)

**Table 2. Demographic characteristics of dental practitioners registered between 2011 and 2016**

	Dentists n = 18 051	Dental prosthetists n = 1484	Oral health therapists, dental therapists, dental hygienists n = 4781
Age (%)			
≤35	37.0	15.5	47.7
36–45	21.8	17.4	20.0
46–55	16.2	29.1	19.0
56–65	15.2	25.1	12.6
≥66	9.7	12.9	0.7
Sex (%)			
Female	40.6	15.5	93.0
Male	59.4	84.5	7.0
Practice location (%)			
Metropolitan	80.9	73.4	77.1
Regional/remote area	19.1	26.6	22.9

respectively), whereas the vast majority (93%) of allied dental professionals were female. Four-fifths of dental practitioners practised in metropolitan locations (80%) (Table 2).

During the study period regulators received 4725 complaints about 3214 dental practitioners. More than 90% of complaints involving dental practitioners related to general dentists and dental specialists (Table 3). Almost 16% of dentists (general or specialist) were the subject of at least one complaint to regulators between 2011 and 2016. 4% of dentists (706 dentists) were the subject of more than one complaint to AHPRA: this group accounted for 49% of complaints (2107 complaints) about dentists.

The primary sources of complaints were patients (or relatives of patients) (including those received via a complaints commissioner) (84%) and other practitioners (6%). Complaints most commonly related to

issues of performance (73%), followed by conduct concerns (25%), with a minority relating to a potential health impairment (2%). Box 1 provides case examples of each of these types of concern (health, performance and conduct) that resulted in an adverse finding against a dentist by a tribunal.

Over 90% (93%) of the complaints had been closed by the end of the study period. Of those that had closed, the majority resulted in no further action (59%) or were referred to another agency (13%) (Table 3). A total of 28% resulted in regulatory action of some kind including cautions, fines, reprimands, voluntary undertakings, conditions, suspension or cancellation of practitioner's licence. The median time to resolution of complaints for dentists was 121 days, for dental prosthetists was 123 days, and for oral health therapists, dental hygienists and dental therapists was 153 days.

Over the study period, there were 320 complaints about dental prosthetists. Of the complaints made against dental prosthetists, 79% related to performance issues, and were predominantly made by patients or their relatives (88%) (Table 3). Allied dental professionals accounted for fewer than 3% of complaints (126 complaints), with nearly two-thirds of these complaints relating to professional conduct (60%). Approximately one in eight complaints about allied dental professionals were lodged by a fellow practitioner (12%).

### Health-related complaints

During the study period, only 101 complaints (2%) raised concerns about the health of a dental practitioner (Table 3). 94 of these complaints involved dentists; of these, almost half of these alleged substance misuse (41 complaints) and 22 related to mental illness.

### Performance-related complaints

Complaints relating to performance were common among dentists and dental prosthetists: this category of complaints was dominated by concerns about treatment and procedures (Table 3). Procedures involve invasive therapies, whereas treatment includes a broader range of clinical decisions. Together, these two categories accounted for around 80% of performance-related complaints about dentists (treatment n = 2157; procedure n = 377). Complaints relating to treatment and procedures were also common among dental prosthetists, accounting for around two-thirds of all complaints made against them.

### Conduct-related complaints

Concerns about fees – which included over-charging – was the most common conduct issue raised in

**Table 3. Characteristics of complaints involving dental practitioners**

	Dentists	Dental prosthodontists	Oral health therapists, dental therapists, dental hygienists
Sex n (%)			
Female	1076 (25.1)	32 (10.0)	106 (84.1)
Male	3203 (74.9)	288 (90.0)	20 (15.9)
Practice location n (%)			
Metropolitan	3535 (82.6)	241 (75.3)	106 (84.1)
Regional/remote area	744 (17.4)	79 (24.7)	20 (15.9)
Issue domain n (%)			
Health			
Physical health and cognition	29 (0.7)	1 (0.3)	4 (3.2)
Substance use	41 (1.0)	0	2 (1.6)
Mental health	22 (0.5)	0	0
Other health concerns	2 (<0.1)	0	0
Performance			
Treatment	2157 (50.4)	187 (58.4)	26 (20.6)
Procedures	377 (8.8)	20 (6.3)	8 (6.3)
Communication	87 (2.0)	4 (1.3)	2 (1.6)
Monitoring and follow-up	57 (1.3)	11 (3.4)	0
Access and delays	106 (2.5)	6 (1.9)	1 (0.8)
Assessment and diagnosis	84 (2.0)	1 (0.3)	0
Investigation and tests	21 (0.5)	0	1 (0.8)
Prescribing	33 (0.8)	0	2 (1.6)
Other performance concerns	108 (2.5)	12 (3.8)	1 (0.8)
Conduct			
Advertising and titles	143 (3.3)	8 (2.5)	30 (23.8)
Honesty	24 (0.6)	5 (1.6)	2 (1.6)
Fees	250 (5.8)	19 (5.9)	6 (4.8)
Over-servicing	121 (2.8)	2 (0.6)	0
Infection control	141 (3.3)	11 (3.4)	4 (3.2)
Interpersonal behaviour	154 (3.6)	14 (4.4)	9 (7.1)
Reports and certificates	4 (0.1)	0	0
Record keeping	65 (1.5)	1 (0.3)	1 (0.8)
Sexual boundaries	37 (0.9)	2 (0.6)	0
Other conduct concerns	216 (5.0)	16 (5.0)	27 (21.4)
Source of complaint n (%)			
Patient or relative <sup>a</sup>	3589 (83.9)	281 (87.8)	78 (61.9)
Fellow practitioner	265 (6.2)	13 (4.1)	15 (11.9)
Employer	70 (1.6)	2 (0.6)	10 (7.9)
Other	355 (8.3)	24 (7.5)	23 (18.3)
Outcome of complaint n (%)			
Open	317 (7.4)	17 (5.3)	12 (9.5)
Closed	3962 (92.6)	303 (94.7)	114 (90.5)
No regulatory action	1149 (59.7)	79 (47.6)	34 (64.2)
Referral to another agency	248 (12.9)	35 (21.1)	1 (1.9)
Caution, fine, reprimand, or voluntary undertaking	280 (14.5)	33 (19.9)	7 (13.2)
Conditions, suspension or cancellation	248 (12.9)	19 (11.4)	11 (20.8)
Median time to resolution	121 days (IQR 59–277 days)	123 days (IQR 55–263 days)	153 days (IQR 61–321 days)

<sup>a</sup>Includes complaints commissions.

complaints about dentists (5.8% of all complaints) (Table 3). Advertising and misuse of titles (3.3%) was the next most common conduct issue resulting in complaints among dentists. Allegations of over-servicing accounted for 3% of complaints. 37 complainants (1%) alleged breaches of sexual boundaries by dentists; all of them involved male dentists.

Among dental prosthetists, fees (28% of conduct complaints) and interpersonal behaviour (21%), were the most common conduct issues raised in complaints. Among allied dental professionals advertising and misuse of titles (40%), interpersonal behaviour (12%), and fees (8%) were the most frequently notified conduct issues.

### Factors associated with complaints

After adjusting for age, sex, remoteness, and jurisdiction, dentists and dental prosthetists had five times higher risk of complaints compared with allied dental professionals (dentists IRR = 5.1; 95% CI 4.2–6.2; dental prosthetists IRR = 4.5; 95% CI 3.5–5.7) (Table 4). When compared with dental practitioners aged 35 years or younger, older practitioners had higher risks of receiving a complaint (e.g. IRR = 1.6 for 36–45 age group, IRR = 1.6 for 46–55, IRR = 1.5 for 56–65 and IRR = 1.8 for ≥66). The rates for male practitioners were 50% higher than for female practitioners (IRR = 1.5; 95% CI 1.4–1.6).

**Box 1. Case studies of health, performance and conduct concerns****Health issue (drug misuse)**

A dentist ran a successful dentistry and cosmetic surgery practice in a large city, but began using ice after the death of his brother in 2010. The dentist failed to attend a number of drug testing appointments and, to avoid being tested, fabricated airline tickets and sales receipts to make it appear as if he was on holidays at the time of the tests. The dentist was found guilty of professional misconduct and his registration was cancelled for a period of 3 years before he could apply for review.<sup>14</sup>

**Performance issue (poor treatment)**

A dentist failed to provide timely and appropriate treatment to six patients. In particular, he did not develop adequate treatment plans, failed to complete treatments in a timely way, failed to obtain crowns and dentures that patients had paid for, and did not keep adequate records. He did not reply to letters from the Dental Board and did not appear at his Tribunal hearing. The Tribunal found that the dentist was guilty of unprofessional conduct for his dealings with each of the patients and that, collectively, this amounted to professional misconduct. The dentist had his name removed from the register of practitioners and was banned from reapplying for registration for 2 years.<sup>15</sup>

**Conduct issue (advertising breach)**

A dentist advertised his dental practice on a website that included patient testimonials (or alleged testimonials) and statements that were false and misleading and created an unreasonable expectation of beneficial treatment. The Tribunal found that in publishing (or allowing the publishing of) the website the dentist had engaged in unprofessional conduct. The dentist was required to pay a \$3500 fine, read and consider a number of documents on advertising health services and required to undergo additional education and training.<sup>16</sup>

**DISCUSSION****Main findings**

This national study of complaints about health practitioners, lodged over a 6-year period, found that dental practitioners had the highest rate of complaints amongst all health professions (42.7 per 1000 practitioners per year,  $p < 0.001$ ). Within the dental professions, dentists and dental prosthetists had a higher risk of receiving a complaint compared with allied dental professionals. Approximately 16% of dentists were the subject of at least one complaint to regulators between 2011 and 2016, and 4% of dentists were the subject of more than one complaint to AHPRA: this group accounted for nearly 49% of all complaints about dentists. Male dental practitioners had a higher risk of being subject to a complaint compared with female peers. Older practitioners were also at higher risk than younger peers.

Three-quarters of complaints involving dentists were due to concerns about performance issues, usually relating to procedures and treatment. Around one quarter of complaints involving dentists related to

**Table 4. Factors associated with complaint**

	Dental practitioners who had at least one complaint: n (%)	Adjusted incidence rate ratio (95% confidence interval)	P-value
Registration category			<0.001
Dentist n = 18 051	2878 (15.9)	5.1 (4.2–6.2)	
Dental prosthetist n = 1484	217 (14.6)	4.5 (3.5–5.7)	
Oral health therapist, dental hygienist, dental therapist (ref.) n = 4781	119 (2.5)	1.0	
Age			<0.001
≤35 (ref.)	767 (8.3)	1.0	
36–45	790 (15.3)	1.6 (1.5–1.8)	
46–55	705 (16.5)	1.6 (1.4–1.8)	
56–65	644 (17.3)	1.5 (1.4–1.7)	
≥66	308 (15.6)	1.8 (1.6–2.1)	
Sex			<0.001
Female (ref.)	934 (7.8)	1.0	
Male	2280 (18.5)	1.5 (1.4–1.6)	
Practice location			0.043
Metropolitan (ref.)	2659 (13.7)	1.0	
Regional/remote area	555 (11.3)	0.9 (0.8–1.0)	

Incidence rate ratio adjusted for variables in the table and jurisdiction.

conduct concerns: these most commonly alleged concerns about advertising, misuse of titles, fees and interpersonal behaviour. Relatively few complaints raised concerns about the health of the practitioner: among these complaints mental illness and substance misuse were the issues most commonly raised.

The primary sources of complaints were patients (or relatives of patients) (84%). Of the complaints received by regulators against dentists during the study period, 93% had been closed. In the majority of closed cases (59%), no further action was taken. Approximately 13% of complaints resulted in restrictive actions, almost all of which were forms of an undertaking or conditions on practice.

**Strengths and limitations**

To the best of our knowledge, this is the largest published study to investigate risk factors for complaint among dental practitioners. A key strength of our study is its comprehensiveness: the analysis included every health practitioner registered in Australia including all dentists, dental prosthetists, and allied dental professionals. The detailed data on dental practitioners' demographic characteristics, and the complaints lodged, allowed us to disaggregate complaint rates while accounting for registration time and an estimate of clinical hours worked.

Our study has several limitations. First, we were not able to measure certain practitioner-level variables

that are likely to be related to the risks of complaint. These include patient volume, type of practice, history of disciplinary actions and country of training. Previous studies have identified associations between these factors and disciplinary outcomes.<sup>2,11</sup> Second, 8% of the complaints in our sample did not have final decisions at the time the study data were extracted. Cases that take longer to resolve tend to involve more serious outcomes, and the time taken to investigate and resolve complaints means that more recent complaints may still have been open at the end of our study period.<sup>17</sup> The implication of this for our findings is that we may underestimate the number of complaints that end in restrictive actions, especially those involving suspension or cancellation of practice. Third, we note that the Australian national scheme was still in its early years at the time of this study. The quality and completeness of data collected by health regulators is likely to improve as the scheme matures. For example the coding of complaints relies on information included in the initial complaint and does not account for issues that may have been uncovered during investigation. Finally, we note that complaints data do not capture all concerns about the health, conduct and performance of dental practitioners, and that not all complaints are associated with poor performance or wrongdoing by a practitioner. However, regardless of the outcome, the fact that a complaint was lodged means that someone was sufficiently worried or dissatisfied to raise a concern, and this can result in a time-consuming and stressful experience for the dental practitioner concerned.

### Interpretation and implications

Dentists, including general dentists and dental specialists, are at higher risk of complaints to health regulators than any other registered health profession in Australia. Most of the complaints about dentists and dental prosthetists related to treatments and procedures, which may reflect the high risk, and often irreversible, nature of procedures such as prosthodontics, endodontics, restorative dentistry, oral surgery, implants and orthodontics.<sup>8,18–27</sup> In addition, dentists work on conscious patients and do many procedures per day.

Despite the high level of complaints against dentists, 60% resulted in no further action being taken against the practitioner. We note that a finding of no further action does not mean that the complaint was unfounded.<sup>25</sup> Regulators often take no further action where the practitioner can show that appropriate remedial action has already been taken, and that regulatory action is not required to protect the public. Further research could helpfully explore the basis for the 60% of complaints in which no further regulatory

action was required, to understand whether there are opportunities to avert or resolve these complaints before they reach the regulator.

The median time to resolution for all groups was over 120 days, with some practitioners waiting upwards of a year for a final decision. Previous research has found that being the subject of a complaint can be highly stressful for practitioners.<sup>25</sup> Our findings underscore the importance of ongoing efforts to ensure effective early triage of complaints and timely resolution.

The rates of complaints relating to fees and over-servicing – are consistent with previous research. Two previous studies of patient complaints in Australia<sup>2,26</sup> have found that cost-related issues (lack of information, over-charging, inadequate billing, misrepresentation, fees) and over-servicing are common sources of complaint about dentists.<sup>27,28</sup> Given that 85% of dental practitioners work in the private sector, and that even insured patients may face high out of pocket costs, this result is not surprising. International commentary suggests that cost-related concerns and over-servicing are more common in fee-for-service systems, whereas under-treatment tends to arise in capitated practices.<sup>29–32</sup> Regardless of the cause, these findings raise important ethical issues for the dental profession insurers and government funders.

Around 4% of dentists (674 dentists) were responsible for almost 50% of all complaints against dentists. This finding suggests that complaints about dentists are clustered among a relatively small group of practitioners. Similar findings have been noted in analyses of complaints and medical malpractice claims involving doctors.<sup>23</sup> Further analysis of individual and systemic factors leading to recurrent complaints about this group of practitioners is needed, in order to inform interventions to support them back into safe practice.

Fewer than 2% of complaints about dentists were lodged by fellow practitioners. Research undertaken in Queensland has found that practitioners in the dental profession often face ethical dilemmas relating to the quality of care provided by other members of the profession, specifically regarding substandard treatment, yet this does not appear to be reflected in the complaints data.<sup>28</sup>

Overall, allied dental professionals were at markedly lower risk of complaint than dentists and dental prosthetists. This finding is consistent with previous research, and is likely due to the nature of their clinical practice and the lower risk procedures performed, and a reflection of the employment relationships most allied dental professionals work under.<sup>29</sup> A study of complaints in Victoria, Australia, by Hopcraft *et al.* identified very few complaints to a complaints commissioner against dental therapists and none about dental hygienists.<sup>2</sup>

However, nearly a quarter of complaints about allied dental professionals related to misleading or deceptive advertising or misuse of titles, perhaps reflecting the evolving scopes of practice for this group. Our study design did not enable us to identify whether some of these complaints may have been motivated by professional rivalry, rather a genuine concern for patient safety.<sup>29</sup> Ensuring all dental practitioners comply with the Guidelines for Advertising Regulated Health Services should be an important area of focus for the profession.<sup>33</sup>

The evidence that male dental practitioners are at higher risk of complaints than their female peers is unsurprising. Previous research in Australia<sup>2,3</sup> and internationally<sup>22,23</sup> has shown that male dentists are over-represented in complaints; this finding is also consistent with previous research in Australia<sup>26</sup> and internationally<sup>18,27</sup> for doctors. Findings that older practitioners were also at higher risk of receiving a complaint than their younger peers are also consistent with previous research in Australia for doctors.<sup>34</sup>

This study found that dental practitioners are at higher risk of complaint than any other registered health profession in Australia, with treatments, procedures and fees being the most common grounds for complaint. Key areas for focus may include: supporting early resolution of patient concerns; enhancing clinical communication skills, among male practitioners in particular; identifying and remediating performance concerns among the small group of dentists who account for a disproportional share of complaints; addressing concerns about fees through improved financial informed consent and more equitable funding for dental services; and ensuring that advertising of dental services is fair, accurate and supports patients to make informed choices. This will require a multifaceted approach with collaboration between educators, professional dental associations and health regulators including the Dental Board of Australia.

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## DISCLOSURE

Matthew Hopcraft is the CEO of the Australian Dental Association Victorian Branch. The authors have no other affiliations or links with industry other than the funders listed below.

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## APPENDIX

### Appendix 1. Predicted working hours

	Aged ≤36		Aged 36–45		Aged 46–55		Aged 56–65		Aged ≥66	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Dentist	36.4	33.4	36.2	27.7	35.2	27.9	32.3	26.8	20.3	21.4
Dental prosthetist	28.6	25.9	29.7	23.9	29.5	27.5	30.0	27.0	25.4	27.0
Oral Health Therapist, Dental Hygienist or Dental Therapist	28.8	29.7	30.8	23.8	33.1	25.8	30.9	25.3	33.1	20.6