

# Facebook legal and regulatory advertising compliance by specialist orthodontic practices: a cross-sectional survey

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*Background:* Healthcare providers are increasingly using social media websites such as Facebook to advertise their services. The Australian Health Practitioner Regulation Agency guidance on the advertising of healthcare is based on the National Law in Australia and prohibits advertising that is contrary to the patient's best interests.

*Aim:* To determine the legal and regulatory advertising compliance of the Facebook pages of specialist orthodontic practices in Australia.

*Methods:* The Facebook pages of specialist orthodontic practices were identified following a systematic search strategy. The content uploaded to each 'eligible' page between March 2019 and February 2020 was reviewed with regard to five specific domains of prohibited advertising. Cronbach's Alpha Test was used to determine intra-rater agreement.

*Results:* The Facebook pages of 147 specialist orthodontist practices in Australia, representing 288 specialist orthodontists, satisfied inclusion criteria. Most Facebook pages (82.3%) breached the Law in one or more domains. The mean number (standard deviation) of domains breached was 1.65 (1.3), range 0–5. Non-compliance regarding 'the use of testimonials' (76.9%) and 'information that was likely to create unrealistic expectations of orthodontic treatment' (40.8%) were the domains most commonly contravened. All five domains were breached in 5.4% of practice Facebook pages. Intra-rater scores were strong, ranging from 0.84 to 0.94.

*Conclusions:* Compliance of the Facebook pages of specialist orthodontic practices in Australia with legal and regulatory advertisement requirements is poor. Greater awareness of the relevant obligations by specialist orthodontists responsible for their practice Facebook content is necessary to ensure that their advertising is not liable to charges of legal and/or professional misconduct.

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## Introduction

Social media platforms are internet-based technologies that facilitate the sharing of information, opinions, products and services between people.<sup>1,2</sup> Social media websites such as Twitter, WhatsApp, Instagram and YouTube have transformed how people communicate.<sup>3</sup> The most commonly used social media website is Facebook, with more than two billion users.<sup>4</sup> Created in 2004, Facebook can present text, image and video formats easily on its platform. Initially developed for personal use, Facebook has become an efficient

tool for businesses, such as providers of healthcare services, to advertise goods and services to current and prospective clients. Its cost-effectiveness and its immediacy offer advantages over traditional forms of advertising.<sup>1,5</sup>

This relatively 'new' format of advertising, however, must still comply with the regulatory requirements related to the advertising of health services. In Australia, these requirements are placed on healthcare providers by the Australian Health Practitioner Regulation Agency (AHPRA) and the 15 National Boards

(including the Dental Board of Australia). AHPRA and the Boards have established guidelines to assist healthcare providers understand their responsibilities when advertising a regulated health service.<sup>6</sup> The guidelines were principally developed from section 133 of the (Health Practitioner Regulation) National Law and aim to uphold the fundamental purpose of AHPRA and the National Boards, which is to protect the public.<sup>7</sup> Failure to comply with the guidelines may result in patient disappointment in addition to disciplinary proceedings or prosecution of the healthcare provider.<sup>6</sup>

Several investigations have explored the relationship of orthodontics and social media in the provision of patient education, research dissemination, patient experience and marketing.<sup>2,3,8-10</sup> There appears to be little research, however, regarding social media compliance with advertising regulatory requirements. Although a recent study found that over 70% of Facebook pages of Australian general dental practices were not compliant with the National Law, evidence is lacking related to orthodontic practices.<sup>11</sup>

The aim of the present investigation, therefore, was to determine the compliance of Facebook pages of specialist orthodontic practices in Australia with legal and regulatory advertising requirements.

## Material and methods

Ethical approval was not required as the study only evaluated publicly available information.

### *Search strategy*

A fictional Facebook account was created and used to access the Facebook pages evaluated in this investigation. The term 'specialist orthodontist' was entered into the most commonly used online search engine in Australia. The first 400 website links were subjected to an initial evaluation. The unique resource locator (URL) of all specialist orthodontic practice websites that 'belonged' to (an) AHPRA registered specialist orthodontist(s) were recorded on a Microsoft Office Excel spreadsheet (Microsoft, DC, USA). Websites that were not exclusively specialist orthodontic practices were not recorded. The Facebook page of each practice was then accessed 'through' the website's Facebook icon. If the practice's website did not contain a Facebook icon, the practice

name was entered into the Facebook search facility to establish whether the practice had a Facebook page. Data regarding the state or territory location of the practice and the number of specialist orthodontists working within the practice were recorded.

### *Assessment criteria*

The content uploaded to each 'eligible' Facebook page between March 2019 and February 2020 was reviewed with regard to five specific domains of prohibited advertising. The domains were adapted from an assessment framework used in a similar study evaluating the Facebook pages of general dental practices in New South Wales (NSW).<sup>11</sup> The domains, in turn, relate to section 133 of the National Law in all States/Territories and AHPRA's guidelines related to social media policy and advertising regulated health services.<sup>6,7</sup> Each domain corresponded to a specific prohibition:

1. Providing information that was 'false/misleading or deceptive'. For example, claims regarding orthodontic treatment that are not supported by the available evidence or displays of clinical photographs that have been digitally altered are likely to fall into this category.
2. Offering a gift, discount or other inducement to attract potential patients without clearly stating the terms and conditions. This domain also relates to unclear or ambiguous information regarding treatment costs and discounts.
3. Using 'testimonials or purported testimonials' in which patients recommend and/or support clinical features of the provided orthodontic treatment.
4. Creating an 'unrealistic expectation of beneficial treatment'. For instance, does the provided information only discuss or imply the benefits of orthodontic treatments without considering the risks? A display of 'pre-' and 'post-' treatment photographs only without any further information is considered to create an unrealistic patient expectation of treatment.
5. Encouraging the 'indiscriminate/unnecessary use' of orthodontic/dental services. This can occur, for example, when prizes, time-limited offers and discounts are used to encourage individuals to accept orthodontic services that are independent of clinical necessity and treatment benefit.

Each Facebook page was accorded a ‘yes, there was a breach’ or ‘no, there was no breach’ against each domain. In some cases, an individual infringement may have corresponded to a breach of two domains.

In addition, each practice page was checked for evidence regarding whether identifiable patients featured within the page had provided consent for their inclusion.

**Statistical analysis**

The Facebook pages were evaluated by a single researcher. Data were documented in a Microsoft Office Excel spreadsheet (Microsoft, DC, USA) in April 2020. Repeat evaluation occurred six weeks later. Descriptive statistics and intra-rater agreement (using Cronbach’s Alpha Test) were determined using IBM SPSS Statistics, Version 25.0 software (IBM Corp., NY, USA).

**Results**

The Facebook pages of 147 specialist orthodontist practices, representing 288 specialist orthodontists,

satisfied inclusion criteria (Figure 1). Most pages were from practices based in New South Wales/ACT and Victoria (Figure 2).

The majority of the Facebook pages (82.3%) breached the Law in one or more domains. The mean number (standard deviation) of domains breached was

**Table I.** Distribution by region of specialist orthodontic practice Facebook pages and total number of specialist orthodontists represented.

State	Specialist orthodontic practice Facebook pages	Total number of specialist orthodontists represented
ACT/NSW	51	85
Qld	25	55
SA/NT	16	30
Vic/Tas	37	79
WA	18	39
TOTAL	147	288

KEY: ACT: Australian Capital Territory. NSW: New South Wales. Qld: Queensland. SA: South Australia. Vic: Victoria. Tas: Tasmania. WA: Western Australia.

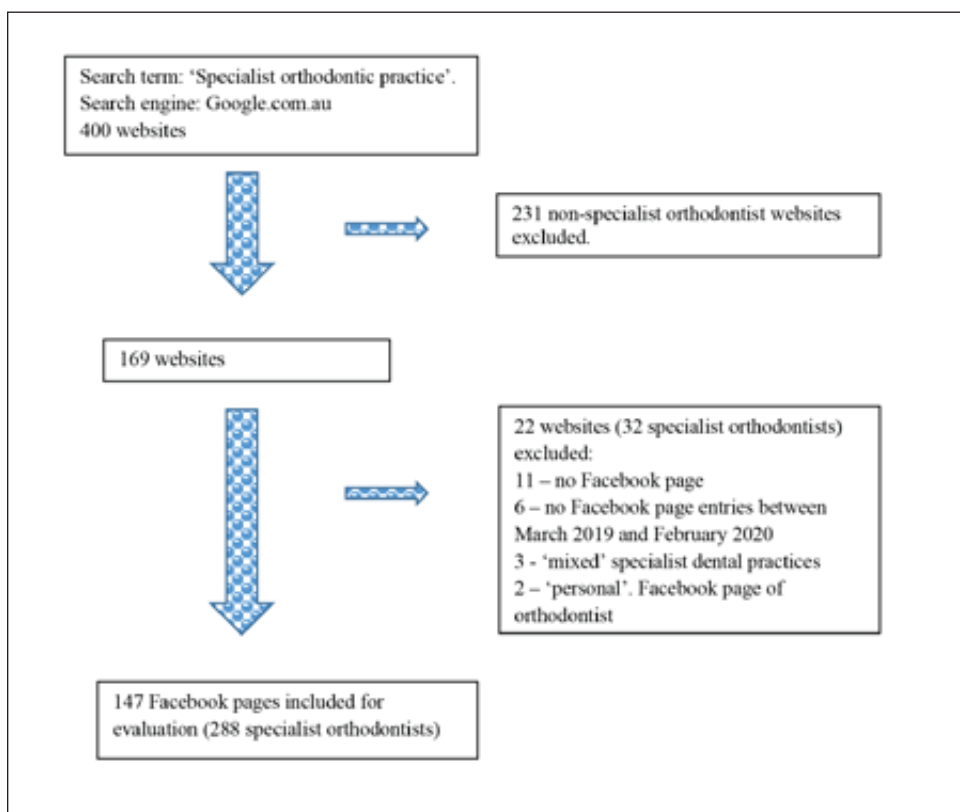


Figure 1. Flowchart showing Facebook pages selection.

1.65 (1.3), range 0–5. Figure 3 shows that non-compliance regarding ‘the use of testimonials’ (76.9%) and ‘information that was likely to create unrealistic expectations of orthodontic treatment’ (40.8%) were the domains most commonly contravened.

All five domains were ‘breached’ in 5.4% of Facebook pages (Figure 4). Table II indicates that intra-rater scores were strong for all domains, ranging from 0.84 to 0.94.

Patient consent for their inclusion on the practice page was indicated in two out of the 107 (1.9%) Facebook pages that featured identifiable patients.

### Discussion

The presented study appears to be the first to investigate the legal and regulatory advertising compliance of the Facebook pages of specialist orthodontic practices in Australia. The outcomes of this investigation are relevant as recent research has shown that Facebook is the most frequently used social media website of orthodontists and patients/guardians.<sup>1</sup>

The Facebook pages of 147 specialist orthodontist practices were identified and evaluated. This represented a total of 288 specialist orthodontists,

which is 46% of the 628 specialist orthodontists registered with AHPRA at the time of the present study.<sup>12</sup> The relative percentage rate of specialists who use Facebook to advertise their practices is likely to be higher if those registered specialist orthodontists not associated with practices using Facebook are excluded; such as, for example, retired practitioners.

The results of this cross-sectional survey were disappointing as more than 80% of Facebook pages breached the National Law in at least one of the five domains of prohibited advertising. If prosecuted and found guilty, the ‘owner/author’ of the Facebook page may be liable to a \$5,000–\$10,000 financial penalty.<sup>6</sup> In addition, he/she/they may face action for unprofessional conduct (known as ‘unsatisfactory professional conduct’ in New South Wales) by

Table II. Intra-rater score for each domain.

Domain	Intra-rater score
‘False/misleading’	0.9
‘Offers/inducements’	0.9
‘Testimonials’	0.94
‘Unrealistic expectations’	0.88
‘Indiscriminate/unnecessary’	0.84

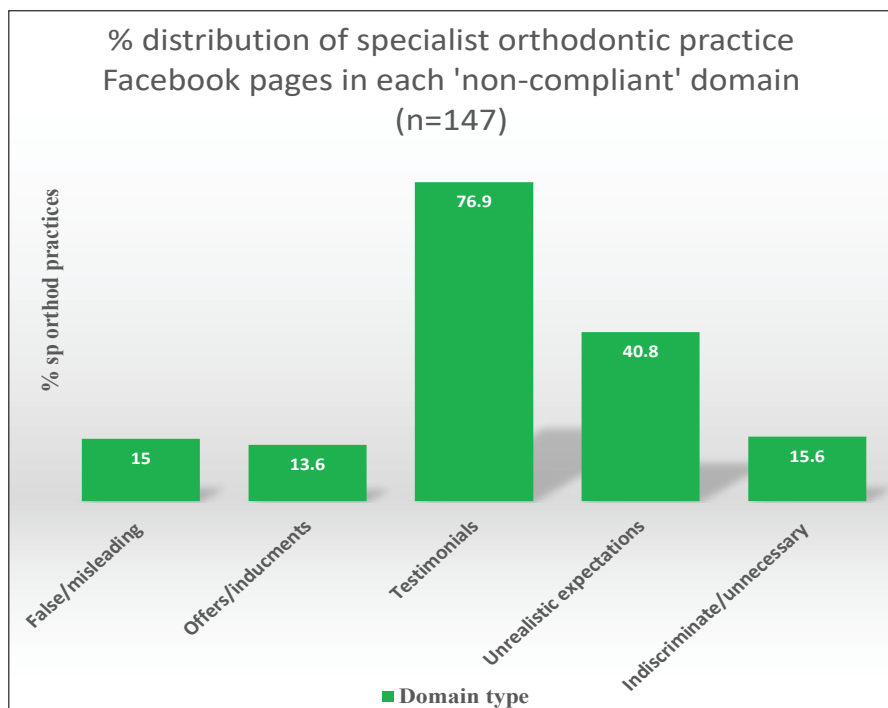


Figure 2. % distribution of specialist orthodontic practice Facebook pages in each ‘non-compliant’ domain (N=147).

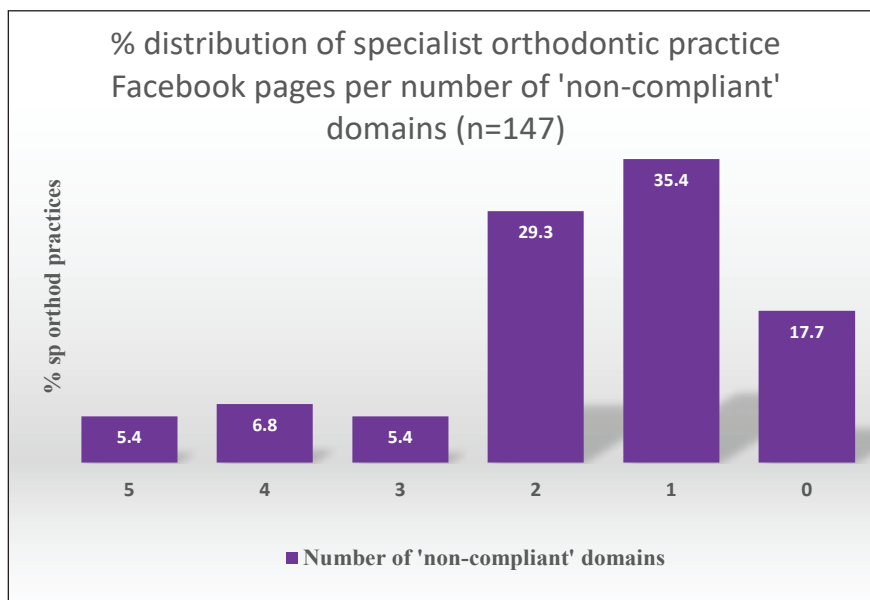


Figure 3. % distribution of specialist orthodontic practice Facebook pages per number of 'non-compliant' domains (N=147).

AHPRA. Furthermore, the pages may contravene other relevant laws under the regulatory control of the Australian Competition and Consumer Commission (ACCC) and the Therapeutic Goods Administration (TGA).<sup>6,13</sup> The Advertising Code of the Therapeutic Goods Act, for instance, proscribes 'false and misleading' information regarding prescription-only therapeutic agents, which may include advertising related to devices such as orthodontic clear aligners.<sup>14</sup>

Non-compliance regarding 'the use of testimonials' (76.9%) was the domain most commonly contravened. This compares with 71.05% recorded in a similar study assessing the Facebook pages of general dental practices in NSW.<sup>11</sup> The National Law explicitly states that testimonials cannot be used or quoted to advertise the health practitioner's service on that health practitioner's business site.<sup>6</sup> A breach was recorded only when a narrative, written testimonial regarding orthodontic treatment was displayed. Those Facebook pages displaying 'out-of-five star-ratings' only were not documented, as it is not currently clear whether the National Law considers this a breach. In addition, testimonials related to matters not directly related to the provided orthodontic service (such as compliments regarding parking facilities outside the practice) were not considered to be infringements. It is important to note, however, that the regulations regarding testimonials and reviews apply *only* to social media platforms 'owned' by providers of healthcare

services; patients are not prohibited from reviewing or recommending healthcare services in online platforms not 'owned' by providers of healthcare services. It is also important to bear in mind that the regulations are applicable to the content of 'conversations' with (prospective) patients on the personal/'non-business' Facebook pages of specialist orthodontists.

Almost 41% of Facebook pages were identified in the current survey as displaying 'information that was likely to create unrealistic expectations of orthodontic treatment'. This is over twice as many as the study that reviewed and reported the Facebook pages of general dental practices in NSW (19.55%).<sup>11</sup> The most common breach involved 'pre' and 'post' treatment intraoral photographs without any information regarding biological cost and treatment risk. The photographs were frequently presented with the term 'Transformation' and the day of the week (for example, 'Transformation Thursday'). This is likely to constitute a further infringement as it may suggest that the "treatment is infallible, unfailing, magical, miraculous or certain".<sup>6</sup>

More than one in seven Facebook pages (15%) contravened the domain regarding 'false/misleading or deceptive' information. The majority of these contained claims that one treatment modality was 'faster' or superior in some aspect than alternative options despite the lack of supporting evidence.

Most of the practice Facebook pages contained photographs of identifiable individuals. Only 1.9% affirmed that participant consent had been obtained. Although not a breach of the regulations per se, a statement of consent may be regarded as ethically appropriate practice.<sup>11,15</sup>

The authors acknowledge the limitations associated with this study. The evaluation of the pages was carried out by one researcher only, which may result in interpretation bias. However, the criteria making up each domain were strictly followed, and the high intra-rater scores reflected the consistency in their application.

The high non-compliance rates outlined in the present study may be due to a lack of knowledge among specialist orthodontists regarding advertising regulations and/or their applicability to social media. Suggestions to increase compliance include the removal of the 'Review' facility and deletion of all reviews from the practice Facebook page. Many practices may be reluctant to adopt this strategy, however, as turning off the page's testimonial/review function results in the loss of 'location services'. There may be concern that prospective patients will not consider a particular practice for treatment if the webpage lacks details on its location(s). Providing context to the 'pre-' and 'post-' treatment photographs such as details regarding individual suitability, treatment information and risks will further reduce non-compliance with the Law. Resources available on the AHPRA website provide additional useful and relevant guidance for those responsible for managing Facebook pages.<sup>6,16,17</sup>

The findings of the presented investigation illustrate the tension between complying with the advertising regulations related to health services and the provision of a health service in a business environment. The advertising regulations regarding the provision of health services are more stringent than those pertaining to other business types. This is to ensure that patients are not misled and that they are exposed to balanced, accurate and evidence-based information.<sup>18</sup> Specialist orthodontists must make sure that the professional and ethical obligations of patient care are not compromised by the demands of managing the business of providing that care.

## Conclusions

- Compliance of the Facebook pages of specialist orthodontic practices, with legal and regulatory

requirements regarding advertising in Australia, is poor.

- Greater awareness of the relevant obligations by specialist orthodontists responsible for their practice Facebook content is required to ensure that their advertising is not liable to charges of legal and/or professional misconduct.

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Furthermore, the authors declare that they have no conflict of interest, financial or otherwise, related to this study.

## Conflict of interest

The authors declare no conflict of interest.

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