



Australian private health insurer attitudes towards osteopathy: A qualitative study

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ABSTRACT

Background: Australian osteopaths predominately work in private practice. The vast majority of patients who present to osteopaths fund their own care, with many receiving a rebate through their private health insurance cover. While there is little that describes the relationship between the Australian osteopathy profession and private health insurers, such information could provide an opportunity for insurers to improve coverage of osteopathy through enhanced benefits.

Objectives: To identify the extent of private health insurance cover available for osteopathy and to explore the attitudes of private health insurers towards the Australian osteopathy profession.

Methods: This qualitative study used: 1) content analysis of Australian private health insurers offerings for osteopathy, and 2) the Theoretical Domains Framework (TDF) to inform interviews with representatives from Australian private health insurers. The interviews were transcribed and coded with respect to the TDF.

Results: Of the 35 private health insurers in Australia, 33 offered benefits for osteopathy. Four interviews were conducted with representatives from the 10 largest private health insurers who provide benefits. Osteopathy represents a very small proportion of their services. The inclusion of osteopathic services is market driven. Private health insurance representatives had limited knowledge and understanding of osteopathy, however, they acknowledged the value that some of their members saw in receiving osteopathic care. Osteopathy is bundled with complementary and allied health services by 91.4% of insurers.

Conclusion: Osteopathy is included in the majority of Australian private health insurers' offerings because the service value-adds to their products. Further research into the efficacy and cost-effectiveness of osteopathy as well as an educational campaign that provides private health insurers with information about the scope of osteopathy are needed to secure its ongoing inclusion in private health insurance in Australia.

Implications for practice:

- Benefits for osteopathic treatment are covered by most private health insurers in Australia.
- Osteopathy is viewed favourably by these insurers.
- The findings from this research will inform strategies to secure the ongoing inclusion of benefits for osteopathic treatment by private health insurers in Australia.

1. Introduction

The Australian government's universal health care system is

designed to cover the cost of treating or preventing medical conditions [1]. Australians also have the choice of purchasing private health insurance to reimburse the cost of health services not covered by the

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federal system [2,3]. More than half the Australian population (53%) have some form of private healthcare insurance cover [4]. The reasons for choosing to purchase private health insurance are complex and include perceptions around the efficacy and cost-effectiveness of a particular modality.

Osteopathy is a primary health care discipline that focuses on assessment and treatment of the neuro-musculoskeletal system to relieve pain and restore function through manual therapy intervention [5]. In Australia, osteopaths represent <1% of all registered health practitioners [6] and are included as an ancillary health service for private health insurance rebates. In 2014, approximately 5.3% of private health rebates were allocated to ancillary health services such as chiropractic, physiotherapy and osteopathy [7]. People who purchased private health insurance that included ancillary products were one and a half times more likely to utilise these services compared to those who did not have private health insurance [3].

Consumers' choice of osteopathic care may influence their choice of insurance provider and level of cover. Consequently, public perceptions of the benefits of osteopathy can play a role in the decision to purchase private health insurance. Tomolo [8] identified marked differences between what the population understands about osteopathy compared to other health professions. The author went on to comment that those who sought osteopathic treatment also had very high satisfaction rates compared to those who sought other similar treatment modalities such as chiropractic and physiotherapy. Leach et al. [9] found that patients valued individual agency, professional expertise, the healthcare experience, the therapeutic process, and their relationship with their practitioner, all of which were associated with osteopathic care.

Perceptions of osteopathy and referral patterns among health professionals have been reported in the literature. For example, in 2005 Cohen et al. [10] found that general medical practitioners (GPs) did not consider the education of complementary therapy practitioners, including osteopaths, to be sufficient for the level of health care they offered. Perceptions of insufficient education were also reported in a 2014 survey of 630 Australian GPs [11,12]. However, GPs in rural Australia appear to have different attitudes towards complementary therapy practitioners than their colleagues in urban regions with osteopaths and chiropractors in rural areas reportedly receiving a high rate of referral from GPs [13]. According to the authors, this is because GPs have limited referral options in rural areas and need to use the resources at hand. Notwithstanding, there were still misconceptions among these rural GPs around the effectiveness of osteopathy and chiropractic.

Private health insurers choose the type of health professions for which they offer cover and the extent of that cover independently. Such choices are influenced by government policies and market pressures but are also influenced by the quality of the evidence for efficacy and cost-effectiveness of care. A number of studies have demonstrated the cost-effectiveness of manual therapies compared to standard medical care for specific musculoskeletal conditions [14–16]. For example, Tsertsivadze et al. [15], identified an economic advantage for using manual therapy (chiropractic, osteopathy and physiotherapy) in the management of lower back, neck and shoulder pain, as well as for ankle fracture compared to standard medical care.

Given private health insurance cover is a driver for the use of osteopathic services [7], it is important to understand the extent of private health insurance cover for osteopathic services and the factors that influence private health insurers' policy decisions about such cover. The aim of this study was to determine the extent of private health insurance cover available for osteopathy in Australia and to explore the attitudes of private health insurers towards the osteopathy profession.

2. Methods

2.1. Study design

This study was conducted in two parts. The first involved a content

analysis of private health insurers in Australia to determine the extent of insurance cover for osteopathic services. Content analysis is a widely used qualitative approach to interpret meaning from the content of data [17]. An initial discussion with a representative from Osteopathy Australia, the peak body representing the osteopathic profession in Australia, provided the initial list of insurers. The website of each private health insurer was scrutinised for detail of insurance cover for osteopathy with all data extracted from the website and put into tables for analysis. Four researchers (RE, SG, JPA and BOH) were involved in this data extraction.

In the second part of the study, the theoretical domains framework (TDF) was used as a conceptual basis for data analysis [18]. The TDF is a qualitative approach for exploring barriers and facilitators related to the implementation of best practice and behaviour change [19–21]. It was developed to help identify the impact on health care professionals' behaviours in implementation research. It identifies fourteen domains: knowledge; skills; social/professional role and identity; beliefs about capabilities; optimism; beliefs about consequences; reinforcement; intentions; goals; memory, attention and decision processes; environmental context and resources; social influences; emotion; and behavioural regulation.

2.2. Recruitment

Private health insurers were contacted and asked to provide the name and contact details of suitable representatives from their company who might participate in the study. Potential participants were identified from people employed in the private health insurance sector at a middle to senior management level and involved in the management of allied health services, including osteopathy. They were individually sent an email and information sheet inviting them to take part in the study. Those who agreed to participate in the study provided written informed consent.

2.3. Data collection

Our aim was to interview a single representative from each of the large health funds. Interviews were conducted via the Zoom platform by one of the researchers (BV), an osteopath with a PhD and over 8 years' experience in qualitative research. Interviews lasted between 45 and 60 min and commenced with a series of questions about osteopathy and its role in Australian healthcare. These questions were created based on prior discussions by three of the researchers (RE, SG and BV) on policy issues with the private health insurance industry and formulated using the TDF framework. Interviews were audio-recorded and transcribed with interviewees given the opportunity to review their transcripts and amend any comments they felt were inaccurate or inappropriate. Four researchers (BW, ND, JP, BOH) independently analysed each interview. This mitigated the potential for confirmation bias. Independent scrutiny of the analysis was provided by two other researchers (RE and SG) who were not involved in the initial analysis. Subsequent analyses involved assigning identified themes to TDF domains which was conducted collectively by the whole research team until consensus was reached.

2.4. Ethics

The study design and procedures were approved by the Human Research Ethics Committee at Southern Cross University (Approval number: ECN 2020/029).

2.5. Quality appraisal

Consolidated Criteria for Reporting Qualitative Research (COREQ) [22] was used to assure the quality of the data analysis.

3. Results

3.1. Part 1: Private health insurance cover for osteopathy in Australia

A total of 35 private health insurers were identified as currently operating in Australia, of which 33 included osteopathy as part of their top extras cover with varying levels of rebates, caps and groupings.

The largest ten private health insurers controlled 92.4% of the total Australian market, with the top five alone controlling 80.5% [23]. Two of the smaller private health insurers did not offer rebates for osteopathy. Three (8.6%) offered cover for osteopathy in its own right; the rest offered rebates for osteopathy in combination with other health services (86% or 30/35). For example, rebates for osteopathic services were combined with chiropractic services by 60% (21/35) of insurers and with various combinations of complementary therapies (e.g., massage, Chinese medicine, acupuncture) and allied health services (e.g., exercise physiology, speech therapy, occupational therapy and dietetics) by 26% (9/35) of insurers. Two insurers (6%) combined osteopathy with physiotherapy. Table 1 summarises osteopathy cover offered by the top 10 private health insurers in Australia [24].

3.2. Part 2: Private health insurers' knowledge of, and attitudes towards, osteopathy

Four health funds responded to the invitation with interviews conducted with representatives from three of the ten largest private health insurers between September and October 2021. Two of these interviews came from the top five. Key themes were identified across the TDF domains previously described and summarised in Table 2.

1. Market influence

The inclusion of osteopathy in private health fund schemes and its levels of cover is market-driven. Osteopathy is a very small part of private health insurance in Australia with relatively few claims and few fraud issues. According to participants, including osteopathy in private health insurance packages allows them to value-add to their products. For little cost, they can extend their range of allied health services. To exclude even a small profession like osteopathy could reduce the available market share.

It's only a very small amount of our business ... it comes back to that marketing. Everyone else is doing it ... In this case, it's more about expanding the offering. (P1)

Participants described the very competitive nature of the health insurance industry. They always looked for the best package of services to offer their customers compared to their competitors. They commented on the great variation in their customer usage of services and how they encouraged their customers to use their services as much as possible, regardless of their level of cover. Three participants reported that claims for osteopathic services were increasing, suggesting an increasing level of usage. Although participants personally had a limited understanding of osteopathy, they appreciated the value the service appeared to provide their customers. They described the importance of maintaining services their customers wanted.

We have no plans to change products or remove any of these key services that members are accessing at the moment. To strip product benefits is not the philosophy of our fund. We keep saying we're for [our members] so it's hardly worth it if we strip out a service that is in the top 10 most utilised services. (P3)

We will spend in excess of 1.1 billion [on benefits]. Osteopathic benefits are probably about 10 million. So, without discrediting osteopathy, it's a drop in the ocean ... but [osteopaths] play an important role in treating our customers. So, we would encourage their continued participation in private health. I would not like to see

it drop off the radar, because we're spending \$10 million in benefits. And I think from memory, it's probably around about 250,000 services a year. That's a lot of services that have been delivered to our customers who feel that it's an important service. (P4)

2. Importance of evidence

Customers' perceptions of benefit of a health service, even in the absence of a strong body of scientific evidence, were highly valued by health funds. Health funds also supported the use of low-cost services that could prevent or delay high-cost surgical interventions.

I had this argument with people who used to say we should not pay for Reiki or for this or that before they got removed. What's 32 bucks for those services, if people feel they're getting value? The mind is (a) very powerful tool. So that's far cheaper than escalating and needing surgical intervention. So from that angle, if going to get osteo, or whatever, helps people have a better quality of life before it progresses to any hospitalisation, that's a far better outcome and far cheaper than paying for hospital admission. If you are in constant pain, you've got a sore neck, and you don't get that fixed, then it can have a flow on. So to me, I think [osteopathy] obviously has value. This is the philosophy of the fund for having those services that can potentially create a longer lead time to get to high-cost interventions, or that help with the rehab. If people think they're getting value from their health insurance that makes them more 'sticky' (likely to stay). (P3)

However, there is a risk that health funds could develop new consumer packages in the future that exclude health services like osteopathy if the evidence-base is not strong. Osteopathy was generally seen as effective by all participants but stronger evidence, particularly evidence of cost-effectiveness, is needed to secure its place in the private health fund suite of offerings. One participant felt that osteopathy was cost-effective in that it delayed surgery.

I think our CEOs would be the first to tell you, they'd love a lot more research [supporting osteopathy]. And particularly some cost effectiveness research ... [Osteopathy] is certainly seen as a good and strong profession, but it'd be nice to see a bit more evidence to help guide practice and demonstrate the reported effectiveness. (P1)

We don't have evidence but would love to have evidence as to the outcome of conditions - that's one of the main focuses that we have. (P4)

Participants advised that evidence was needed to secure and extend the profession's inclusion in offerings by private health insurers.

... to be able to demonstrate value [for osteopathy] in a way which, at the moment, you mostly obviously can't. I'd want a constant trade on the unique selling point for competitive advantage ... I don't think osteo is big enough or has enough of the evidence base behind it for health funds to do much more alignment. When you have that evidence, you can demonstrate [the effectiveness of] osteopathy in the academic literature, then you can expect more from the health funds. (P1)

3. Bundled services

Osteopathy was frequently bundled with other services, including complementary medicine and allied health. This was related to the relatively small size of the profession and the limited understanding of osteopathy by members of the public.

Table 1

Top 10 health funds in Australia (largest to smallest): osteopathy coverage August 2021 (Osteopathy Australia, 2021).

Fund	Top extras	2nd tier extras	3rd tier extras	4th tier extras	5th tier extras
Health Fund 1	Top extras 90: Fixed benefit on consultation only, up to \$500 annual limit combined with chiropractic; max benefit: \$63.60 initial/\$44.00 subsequent.	Top extras 75: Fixed benefit on consultation only, up to \$400 annual limit combined with chiropractic; max benefits: \$52.50 initial/\$36.10 subsequent. Growing Family (70%): combined \$600 annual limit with podiatry, chiropractic, physiotherapy. Fixed benefit (<70%) on consult only, max benefit: \$52.50 initial/\$36.10 subsequent.	Top extras 60: \$200 annual limit; benefit: \$41.30 initial/\$28.40 subsequent. Growing Family (60%): combined \$300 annual limit with podiatry, chiropractic, physiotherapy. Fixed benefit (<60%) on consult only, max benefit: \$41.30 initial/\$28.40 subsequent.	Essential Extras 75%: physiotherapy/chiropractic/osteopathy combined \$450 annual limit. Osteo consultation only, fixed benefit (<75%): \$52.50 initial/\$36.10 subsequent.	Healthy Start: Combined \$500 annual limit with general and major dental, chiropractic and physiotherapy, mental health support, dietetics, pharmaceuticals. Payment <60% for non- Members Choice (MC), 60% for MC providers – max benefit: \$41.30 initial/\$28.40 subsequent.
Health Fund 2	Top Extras 90: Combined with chiropractic annual limit \$700 per person/\$1400 per membership. Benefit: initial \$50.80 x 10 services across osteopathy and chiropractic, then \$25.40; subsequent \$35 x 10 (osteopathy and chiropractic) then \$17.50.	Top Extras 75: Total annual limit \$600 per person/\$1200 per membership combined with chiropractic. Benefit: initial \$42.40 x 10 (osteopathy and chiropractic)/then \$21.20; subsequent \$29.20 x 10 (osteopathy and chiropractic)/then \$14.60.	Top Extras 60: Annual limit \$500 per person/\$1000 per membership combined with chiropractic. Benefit: initial \$33.90 x 10 (osteopathy and chiropractic)/then \$16.95; subsequent \$23.30 x 10 (osteopathy and chiropractic)/then \$11.65.	Your Choice 60: Cover for choice of four services – annual limits combined with chiropractic: \$350–\$700 Year 1–6+ per individual/\$500–\$1000 per membership Year 1–6+. Benefit: initial \$31.50 x 10 (osteopathy and chiropractic)/then \$15.75; subsequent \$21.50 x 10 (osteopathy and chiropractic)/then \$10.75. Freedom 60: \$700 annual limit combined with dental, physiotherapy and chiropractic; limit increases by \$100 per year up to a max of \$900. Benefit: 60% of cost. Budget Extras 60: Annual limit \$350 combined with physiotherapy, chiropractic, antenatal–midwife, acupuncture, remedial massage, Chinese herbalism, exercise physiology. Benefit: initial \$31.50/subsequent \$21.50.	Freedom 50: \$500 annual limit combined with dental, physiotherapy and chiropractic; limit increases by \$100 per year up to a max of \$700. Benefit: 50% of cost.
Health Fund 3	Top: \$300 p.a. Combined year 1 limit with chiropractic. Benefit: initial \$50/subsequent \$40; 100% back on initial at participating providers subject to annual limits.	Vital: \$250 combined Year 1 limit with chiropractic. Benefit: initial \$48/subsequent \$38; 100% back on initial at participating providers subject to annual limits.	Mid: \$150 combined limit with chiropractic, remedial massage, acupuncture, Chinese medicine and other services. Benefit: initial \$46/subsequent \$36.	Core and Wellbeing: 60% back up to \$300 annual limit combined for chiropractic and osteopathy.	Starter: \$150 combined limit with chiropractic, remedial massage, acupuncture, Chinese medicine and other services. Benefit: initial \$40/subsequent \$30.
Health Fund 4	Top: 75% of fee back up to \$500 annual limit combined for chiropractic and osteopathy.				Core and Core Boost: Packages do not include osteopathy
Health Fund 5	Top 70: 70% back up to \$400 p.a. Combined with chiropractic.	Complete 60: 60% back up to \$500 p.a. Combined with chiropractic, physiotherapy, exercise physiology, podiatry.	Flex 60: 60% back up to \$1000 p.a. Combined with chiropractic general dental, exercise physiology, healthy living programs, major dental, natural therapies, pharmaceuticals, physiotherapy, and remedial massage.	Flex 50: 50% back up to \$800 p.a. Combined with chiropractic general dental, exercise physiology, healthy living programs, major dental, natural therapies, pharmaceuticals, physiotherapy.	Basic: Benefit: \$22 initial/\$17 subsequent, annual limit \$250 combined with physiotherapy and chiropractic.
Health Fund 6	Comprehensive: \$500 per person annual limit (\$1000 per family) combined with chiropractic; benefit: \$35 initial/\$24 subsequent. Advanced 80%: 80% of cost to \$500 annual limit combined with chiropractic.	Classic: 70% of cost to \$500 annual limit combined with physiotherapy and chiropractic.	Intermediate: 60% of cost, \$400 annual limit combined with physiotherapy and chiropractic.	Standard: 60% of cost to \$400 annual limit combined with physiotherapy, chiropractic, myotherapy, acupuncture and remedial massage.	Basic: Combined annual limit \$350 with physiotherapy, chiropractic, myotherapy, acupuncture and remedial massage; benefit: \$25 per consultation.

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Table 1 (continued)

Fund	Top extras	2nd tier extras	3rd tier extras	4th tier extras	5th tier extras
Health Fund 7	Top Extras: Combined annual limit for chiropractic and osteopathy is \$480 per person, (\$300 sub limit for group therapy). Benefit: \$45 – 1st visit, \$40 visit 2–4, \$32 visit 5+, \$20 chiropractic–osteopathy group therapy.				Essential Extras: Combined annual limit for chiropractic and osteopathy is \$250 (no group therapy for chiropractic–osteopathy). Benefit: \$40 visits 1–4/\$32 5+ visits.
Health Fund 8	Top: 75% or \$29 initial/\$22 subsequent (set benefit); chiropractic/osteopathy annual limit: \$350 per person.		Mid: 65% or \$26 initial/\$20 subsequent (set benefit); chiropractic/osteopathy annual limit: \$300 per person.		Basic: Not covered
Health Fund 9	Premier Extras: Chiropractic/osteopathy annual limit \$750; \$54 initial/\$40 subsequent.		Value Extras: Chiropractic/osteopathy annual limit \$550; \$45 initial/\$32 subsequent.		Essentials: Chiropractic/osteopathy annual limit \$450; \$36 initial/\$26 subsequent.
Health Fund 10	Top: \$720 osteopathy annual limit; 70% of cost up to \$61 for initial/\$35 subsequent.		Intermediate: Annual limit \$250 with chiropractic; 70% up to \$61 for initial/\$35 subsequent.		Essentials: Annual limit \$200 with physiotherapy and chiropractic; 70% up to \$61 for initial/\$35 subsequent.

Osteopathy is generally lumped in with the physical therapies and most people don't really understand the difference, unless they've got a significant problem in which case they try things. (P1)

Osteopathy was most often bundled with chiropractic. Health funds managed these services by monitoring the number of benefits claimed. Chiropractic was a popular choice of service, and it was seen as an advantage for osteopathy to be bundled with it.

We're in a very competitive market, and there would have to be some strong support for us to actually separate chiropractic and osteopathy, because I don't see them as competitors. I really don't see it as a competitive advantage. For the small number of people who are claiming for chiro and osteo, I think for the majority are looking at the top four or five of [allied health services on offer] and chiro is one and osteo fits with it. (P1)

Health funds used very few item numbers to describe services in manual therapies, compared with dentistry for example, where an extensive range of item numbers detailed the type of service provided. Consequently, it would be difficult for private health insurers to discriminate between different manual therapy services.

We don't capture a lot of information online about the reasons people are attending an osteopath or a chiropractor or a physiotherapist for that matter. We have a lot more visibility in the dental space, because of the nature of the item description that tells us what the servicer is performing. But unfortunately, in hands-on therapies, the information that we get is limited to a consultation or subsequent consultation or a time-based consultation. (P3)

4. Discussion

The majority of Australian private health insurers include rebates for osteopathic services. Most of these combine rebates for osteopathy with chiropractic while some combine them with other complementary therapies and allied health services. Using the TDF, thematic analysis of the interviews with private health insurers revealed three themes (see Table 3). These suggest that private health insurers have a positive view of osteopathy in general, despite their lack of specific knowledge about the profession and its practices. Interviewees acknowledged the small size of the profession ('a drop in the ocean') within the overall private health insurance industry. The total number of registered osteopaths in Australia in 2020 was relatively small compared to other manual therapy professions: osteopathy - 2765 practitioners [6]; chiropractic - 5783 practitioners [25]; physiotherapy - 37,316 practitioners [26]; (in 2017,

52.7% of physiotherapists reported their principal scope of practice as musculoskeletal [27]). However, increasing utilisation of osteopathy services was reported by participants. One participant reported that the number of claims for osteopathic services had increased by 8% annually, which was greater than the fund's natural growth of 5–6%. This growth was interpreted by the participant as an indication of the value of osteopathy to their customers. This may indicate the inter-relationship between musculoskeletal conditions and a range of chronic diseases. For example, musculoskeletal conditions may affect exercise capacity, which has been linked to obesity, Type II diabetes and cardiovascular disease [28–30].

Participants felt that without large numbers of osteopaths, it was difficult to promote an agenda for osteopathy. However, in April 2019, following a Review of the Australian Government Rebate on Private Health Insurance for Natural Therapies, the Australian Government removed its subsidy for sixteen complementary medicine therapies which led to removal of these services by private health insurers [31]. The reason given for their removal was that there was insufficient evidence to support the use of these therapies. While this action did not affect rebates for osteopathic services, the osteopathy profession recognises the opportunity to grow its capacity to promote and increase recognition of the benefits of osteopathy to the general public [32]. Participants in this study strongly supported the ongoing inclusion of osteopathic services and stated that they would oppose any proposal from the Australian government to remove subsidies for osteopathy.

Our summary of the extent of cover offered to consumers of osteopathy care by Australian private health insurers highlights that the vast majority (94%) include osteopathy in their products. A total of 60% of all private health insurers bundle osteopathy with chiropractic, while others bundled it with acupuncture, Chinese medicine, myotherapy, remedial massage, physiotherapy, exercise physiology, podiatry, and dietetics. Bundling services allowed insurers to value-add to their products at little additional cost, and for the time being at least, secure the ongoing inclusion of osteopathy in their product offerings. However, a strong evidence-base for osteopathy is needed to guarantee its future in this area.

Participants commented on the efficacy and cost-effectiveness of osteopathy. They generally believed that osteopathy was potentially beneficial for their members in either delaying or preventing surgery or other high-cost interventions at a later date, especially for those patients with protracted musculoskeletal pain. One interviewee mentioned the lack of randomised control trials (RCT) investigating the effectiveness of osteopathy specifically. However, much of the research in manual therapies applies equally to osteopathy as the various manual therapy

Table 3
Identified themes using the Theoretical Domains Framework (TDF) domains.

Identified themes		
Market influence	Importance of evidence	Bundled services
Beliefs about capabilities	Knowledge	Social/professional role and identity
Optimism	Skills	Intentions
Beliefs about consequences	Goals	Memory, attention and decision processes
Reinforcement		
Environmental context and resources		
Social influences		
Emotion		
Behavioural regulation		

professions have many techniques in common [33]. Furthermore, it was difficult for health funds to assess cost-effectiveness themselves as they either lacked the resources (particularly the small health funds) or were unable to obtain the required information for privacy reasons. It is clear that further research is needed to better assess the cost effectiveness of osteopathy and the influences it has on policy.

All participants commented on their limited understanding of osteopathy, apart from its function in their insurer's offerings. Information campaigns are required to educate the public, health professionals and policy makers about osteopathic services and their role in Australian health care. As consumers of health care, the general public plays a key role in how health policy is formed. Although generally supportive of the profession, there is no research on whether the public fully understands the scope of osteopathy [34]. Participants in this study also highlighted the limited information that was available on service delivery through item numbers listed on claims. An expansion of these item numbers to more clearly differentiate the types of services offered by manual therapists, including osteopaths, could increase awareness of the scope of osteopathy. Furthermore, a number of studies have reported favourably on the cost-effectiveness of manual therapy intervention for low back and neck pain [35,36].

It is clear from the nature of the three themes reported in this study: market influence, importance of evidence, and bundled services, that the profession has the capability to address the first two of these themes by adopting simple strategies that will require changes in behaviour. The first is to significantly increase support for research that focuses on the efficacy and/or cost-effectiveness of osteopathy. This would address the theme 'importance of evidence' reported in this study and begin to improve market influence by providing evidence to the private health insurance industry about the benefits of osteopathic care. The second is to combine this approach with an educational campaign that provides private health insurers with information about the scope of osteopathy. This would address the theme of 'market influence' by managing the clear lack of knowledge on the part of private insurers about osteopathy reported in this study.

4.1. Limitations

The main limitation of this study is the small number of participants in the interview phase. However, primary data was derived from representatives from the peak body representing all private health insurers as well as three of the five largest funds. While the study also provides an up-to-date comparison of Australian private health insurers cover of osteopathic services, its currency is subject to changes in the offerings of the included private health insurers.

5. Conclusion

Although this research provided a generally optimistic view of the

osteopathic profession in Australia, much can be done to improve the knowledge and attitudes of private health insurers towards osteopathy. It is also clear that there is a large gap in the knowledge of what osteopathy does and the sorts of conditions it can treat and that this is limited by the few item numbers allocated to manual therapies. Because of the relatively small size of osteopathy, private health insurers bundle osteopathy with other health services to value-add to their products. Further research into the efficacy and cost-effectiveness of osteopathy as well as educating insurers about scope of practice is needed to secure its ongoing inclusion in private health insurance in Australia.

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Ethical approval

The study design and procedures were approved by the Human Research Ethics Committee at Southern Cross University (Approval number: ECN 2020/029).

CRediT authorship contribution statement

Roger Engel: conceived the idea for the study, contributed to the design and planning of the research, were involved in data collection, Formal analysis, wrote the first draft of the manuscript. **Sandra Grace:** conceived the idea for the study, contributed to the design and planning of the research, were involved in data collection, Formal analysis, wrote the first draft of the manuscript. **Nicole Duncan:** Formal analysis. **Brooke Wade:** Formal analysis. **Josh Paterson-Allsop:** Formal analysis. **Bryce O'Hara:** Formal analysis. **Brett Vaughan:** contributed to the design and planning of the research, were involved in data collection.

Declaration of competing interest

Roger Engel is on the editorial board of the International Journal of Osteopathic Medicine but was not involved in the journal review decisions of this manuscript. All other authors declare they do not have any conflicts of interest.

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