



Australian Traditional-  
Medicine Society Ltd

**Australian  
Traditional-Medicine  
Society** ABN 46 002  
844 233 PO Box 1027  
Meadowbank NSW  
2114 Tel (02) 8878  
1500 Fax (02) 9809  
7570 [Email  
info@atms.com.au](mailto:info@atms.com.au)

**Australian Traditional-Medicine Society Ltd  
(ATMS)  
Submission  
to the  
Chief Medical Officer:  
Natural Therapies – Review of  
Private Health Insurance Rebate**

January 2013

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## Executive Summary

- In response to the Federal Chief Medical Officer's review of natural therapies, this submission provides a detailed analysis of the issues surrounding private health insurance and the natural therapy profession.
- It argues strongly against restricting health funds from providing benefits to customers who choose to frequent natural therapy practitioners.
- The Australian Traditional-Medical Society is Australia's leading representative of the natural therapy profession, with 11,800 members.
- Natural therapy is an important and growing health sector that contributes to improving the overall health outcomes for Australians.
- It also outlines the current regulatory system and how private health insurance providers support the natural therapy sector.
- This submission outlines why the proposed changes will have significant, negative and lasting impacts on the businesses of ATMS members, the future viability of natural therapy in Australia and the health and the well-being of thousands of Australians who use the services of natural therapy professionals.
- The submission also summarises a literature review of into the efficacy of a natural therapy modalities.
- Finally, the Conclusion re-states our preference for keeping the current arrangements in place.

## Contact Details

Trevor Le Breton  
Chief Executive Officer  
Australian Traditional-Medicine Society  
PO Box 1027  
Meadowbank NSW 2114  
Telephone (02) 8878 1500 Mobile: 0430 920 460 Fax (02) 9807 8130  
[Email: trevor@atms.com.au](mailto:trevor@atms.com.au) Website: [www.atms.com.au](http://www.atms.com.au)

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## **Chief Medical Officer's Review of Private Health Insurance Rebate**

The Australian Traditional-Medicine Society (ATMS) welcomes this review process and would like to take the opportunity to thank the Chief Medical Officer of the Department of Health and Ageing for the opportunity to make a submission to the "Natural Therapies – Review of Private Health Insurance Rebate." The Review provides ATMS with a timely opportunity to represent the views of our members and clients and outline why traditional and alternative medicine is an important part of Australia's overall health system.

## **About the Australian Traditional-Medicine Society**

ATMS is Australia's largest professional association of natural therapy practitioners, representing approximately 65% of the total natural therapy profession. At October 2012, the membership of ATMS was 11,800 practitioners.

ATMS was founded in 1984 and is a not-for-profit company incorporated with the Australian Securities and Investments Commission (ABN 046 002 844 233).

### **1. Executive and Administration**

ATMS is governed by the Executive Board of Directors. The Society's administration consists of 9 full-time and part-time staff and six Departments have been established within ATMS to address the specific needs of massage therapy, traditional Chinese medicine, naturopathic nutrition, naturopathy, homeopathy and western herbal medicine practitioners.

### **2. Representation on Commonwealth Statutory Bodies**

ATMS is the only natural therapy professional association represented on two Commonwealth statutory bodies; i.e the Therapeutic Goods Advertising Code Council and the Complaints Resolution Panel; which have their legal authority underpinned in the *Therapeutic Goods Regulations 1990*.

### **3. Publications** ATMS publishes the:

- *Journal of the Australian Traditional-Medicine Society* (ISSN 1326-3390), a quarterly peer reviewed publication. The Journal is indexed in the following international bibliographic indexes: Alt Healthwatch (USA), Cumulative Index of Nursing and Allied Health (CINAHL) (USA) and CAB International (UK).
- *ATMS Annual Report*.

### **4. Continuing Professional Education Program**

ATMS is committed to a high quality Continuing Professional Education (CPE) program. The ATMS CPE program draws upon accomplished practitioners to discuss clinical experiences, as well as theoretical and philosophical perspectives. The CPE program is committed to quality education and it is mandatory that ATMS practising members participate in the CPE program.

### **5. ATMS Code of Conduct**

The ATMS Code of Conduct sets the standard for adequate professional conduct for ATMS members. The Code deals with duty of care, professional conduct, confidentiality, patients'

records, advertising and stationery. It is ATMS policy that members must adhere to the Code. A wide range of sanctions are imposed on members who breach the Code, with a serious breach of the Code resulting in removal from the Society.

#### **6. Criteria for a College to gain ATMS Recognised Status**

The ATMS Criteria for a Recognised College requires that a teaching institution must meet the ATMS requirements for advertising, refunds policy, student information, student grievances, recruitment procedures, general standards as well as a college inspection. If the requirement is met, a teaching institution is granted provisional status for a three year period before being granted full Recognised College status.

#### **7. Professional Indemnity Insurance**

Practising members should have professional indemnity insurance of at least \$1 million, and the Society has a master policy scheme with an insurer.

#### **8. First Aid Certificate**

Practising members must hold a current Level II First Aid Certificate.

#### **9. Website**

The ATMS website address is [www.atms.com.au](http://www.atms.com.au)

#### **10. Recognition by the Australian Taxation Office for GST-free Status**

ATMS gained a Private Ruling from the ATO on 27 November 2002 that allows its acupuncture, herbal medicine and naturopathy practitioners to have GST-free status.

ATO Private Ruling 21937 consists of two decisions. The first decision is that: ATMS is a professional association that has uniform national registration requirements for practitioners of natural and traditional medicine. Consequently practitioners (acupuncturists, herbalists and naturopaths) who are members of ATMS will be considered to be recognised professionals for the purposes of paragraph 38-10(1)(b) of the GST Act.

The second decision is that: Acupuncture, herbal medicine and naturopathy services will continue to be GST-free where the services are provided by:

- a practitioner that satisfies the 'recognised professional' criteria; and
- the services provided are considered by the profession as necessary for the appropriate treatment of the recipient.

ATMS acupuncturists, herbalists and naturopaths must be financial members of ATMS in order to have GST-free status.

Section 38-10(1) of the GST Act uses the term 'appropriate treatment'. For the purpose of GST legislation, appropriate treatment in this context refers to the process when the practitioner '...assesses the patient's state of health and determines a process to pursue, in an attempt to preserve, restore or improve the physical or psychological wellbeing of that patient insofar as that recognised professional's particular area of training allows'.

## Introduction

Natural therapy is an important and rapidly growing component of Australia's overall health system. More than 70% of Australians use a form of natural therapy as a regular part of their overall health care, with close to an estimated two million professional consultations conducted annually.

ATMS is deeply concerned that the removal of natural therapy practices from private health insurance will have significant, negative and lasting impacts on the businesses of ATMS members. Further, it threatens the future viability of Australian natural therapy practices and the health and the well-being of thousands of Australians who use the services of natural health practitioners.

ATMS is also concerned that the changes to the rebate system will see private health insurance less attractive, as individuals will opt not to buy coverage with fewer additional and innovative extras such as natural therapies.

ATMS strongly believes that natural therapies are efficacious, cost-effective, safe and of a high standard, and therefore should be allowed to continue to be covered by private health insurance providers. As such, ATMS strongly supports leaving in place the current arrangements, which sees private health providers and individual consumers make their own decisions about incorporating natural therapies into their broader health care.

## Health Consumer Usage of Natural Therapies

For the purposes of this review, it is important to understand the Australian public's use of natural therapists. The following data gives an indication of the widespread support of natural therapies and the economic benefit of natural therapy to the Australian economy.

- In 1984, the Parliament of Victoria Social Development Committee *Inquiry into Alternative Medicine and the Health Food Industry* found that 22% of Victorians had used the services of a natural therapy practitioner in the preceding 5-year period (Parliament of Victoria Social Development Committee, 1986).
- In 1989, the Australian Bureau of Statistics found that 2.6% of the population used the services of a natural therapy practitioner (Australian Bureau of Statistics, 1991).
- In June 1995 *The Australian* newspaper reported that a private survey found 50% of the sample group of 400 respondents had consulted the services of a natural therapy practitioner (Ferrari, 1995).
- In 1996, Adelaide researchers found that 20.3% of 3,004 respondents in South Australia had used the services of a natural therapy practitioner (MacLennan, 1996). It was estimated that South Australians had spent AUD\$25 million annually in 1993. When age and sex are standardised to the national population this amounts to AUD\$621 million. This compares to the AUD\$360 million patient contributions for all classes of pharmaceutical drugs in 1992–1993 (MacLennan, 1996).
- In 2000, it was estimated that 52% of the population had used at least one complementary medicine, and that 23% had visited a natural therapy practitioner (MacLennan, 2002).

- In 2006, an article in the *West Australian* estimated that Australians spent AUD\$6 billion a year on natural therapy services and medicines (Pryer, 2006). Herbal medicine practitioners alone conduct 1.9 million consultations annually (Casey, Adams & Sibbritt, 2007).
- In 2007, Xue et al reported that Australians had made 69.2 million visits to natural therapy practitioners, compared to 69.3 million visits to biomedical practitioners (Xue et al, 2007). This study also estimated that national health consumer expenditure was AUD\$4.13 billion. Accordingly, this highlights strong health consumer community involvement and significant monetary expenditure on natural therapies.

## **Background – Current Regulatory System**

Currently, the Australian Government provides the private health insurance rebate to individuals and families to encourage the up-take and maintenance of private health insurance. Most people are eligible for a 30% rebate on their insurance costs. This has typically included the cost of additional coverage and optional extras, including natural therapies.

However, the release of the 2012-13 Budget included the announcement that the Federal Government will review this stance, with Government set to mandate private health insurance providers only pay benefits for natural therapy practices that have been found to be 'clinically effective'.

## **Private Health Insurance Providers and Natural Therapies**

Private health insurance providers are increasingly aware of the health benefits of natural therapies. In recent years, many of these therapies have been added to the list of ancillary or extras cover services.

The health fund insurers establish the eligibility criteria for a natural therapy practitioner to be registered.

The criteria includes:

- membership of a professional association recognised by the private health funds
- current professional indemnity insurance
- current senior first aid certificate
- ATMS Continuing Professional Education requirements
- Possible requirement of Registered Training Organisation qualification in the relevant field or a Government National Training Package qualification.

This arrangement, which ATMS wholeheartedly supports, ensures that clients accessing rebates are visiting highly qualified natural therapy practitioners. The process provides an extra layer of protection for clients who use natural therapies, ensuring quality health care. Fundamentally, it also ensures the private health insurance rebates and the Federal Government's contribution to private health providers are only going to accredited health professionals. This protects against wasteful spending.



Private health insurance providers are increasingly aware that natural therapies has a loyal customer base. Of course, the range of natural therapy disciplines covered by health insurance providers varies greatly between the private health funds and the level of coverage purchased. ATMS believes that the inclusion of natural therapies as extras offers private health funds with a powerful additional selling point encouraging customers to take out higher levels insurance coverage, as well as maintaining existing coverage, and differentiates between different health insurance providers.

Generally, naturopathy, herbal medicine, homoeopathy, nutrition as well as tactile therapies such as massage, reflexology and aromatherapy are all covered through private health insurance rebates.

The rebates are, generally speaking, more attractive for tactile therapies, because these consultations usually have a fixed price per visit as complementary medicines are not prescribed. The cost for ingestive modalities, such as naturopathy and herbal medicine, often varies from client to client, due to the additional costs of complementary medicines.

In addition, a range of other factors should be considered in this review of natural therapies:

1. Private health insurance providers cap the annual limit that can be claimed for natural therapy consultation. These caps depend on the level of cover – the higher the premium the higher the benefits, but these are typically between \$200 and \$300 per year. As a percentage of total private insurance benefit outlays, this is marginal, certainly when compared to overall benefits these services provide to health care outcomes in Australia.
2. Some health insurance providers offer coverage for some natural therapies, but may specifically exclude others. For example Australian Unity's "Super Extras" cover, provides benefits for naturopathy, but excludes kinesiology and shiatsu. This could be based on financial considerations or views about the efficacy of different natural therapy practices.
3. Generally, optional extras are only part covered; i.e the majority of costs fall on individuals, with the health fund reimbursing for a percentage of the total consultation cost or a fixed value. For example, Australian Unity's "Super Extra", their premium extras cover, provides a fixed \$25 benefit for remedial massage, capped at \$150 per person per year. However, this cover reimburses 80% of the consultation cost for naturopathy, capped at \$400 per person annually. This is not a high figure, compared to the natural therapies sector's contribution to mainstream health care.

The overall conclusion is that the private health insurance providers only provide a marginal level of funding to natural therapy clients. Many health insurance funds have already put in place mechanisms to ensure that funding only goes to natural therapies that are efficacious and complementary to mainstream health care.

## **Importance of Rebates to Natural Therapy Practitioners and Health Consumers**

The current system, which allows private health insurance providers to pay rebates to clients who use natural therapy, is extremely important to the natural therapies profession.

Rebates ease the financial cost of visiting natural therapy practitioners, particularly in lower-socio economic groups.

As there are no other schemes, either government or private, that provide assistance to natural therapy clients to improve health outcomes, private health insurance rebates are of vital importance. Medicare, for example, does not offer financial support for Australians that use natural therapy.

There are a number of flow-on benefits from private health fund rebates assisting the health consumer using natural therapies ie

- it helps build hardworking local natural therapy businesses and supports the natural therapy profession
- encourages people to engage more with their health
- offers more healthcare choices for Australians
- improves the health and wellbeing of many thousands of Australians.

## **Impact of Proposed Changes on ATMS Members and Health Consumers**

ATMS and its member practitioners are deeply concerned about the impact the proposed changes will have on the traditional therapies sector, particularly those modalities in which adverse findings are made about the clinical efficacy of the particular therapy.

ATMS believes that the changes to the rebate system could see practitioners forced to close, costing jobs and undermining other local businesses. It could also see dedicated natural therapy clients forced to cease natural therapy treatment.

Changes to the system could dramatically undermine the vital work done in recent years by the natural therapies sector in building public awareness and demonstrating its contribution to achieving positive health outcomes and improving the wellbeing of natural therapy health consumers. Cutting the rebates would send a dangerous message to the general public that natural therapies are unsafe or mere “quackery”, in spite of substantial evidence that natural therapy practices improve health. ATMS believes this is counterproductive and an unfair attack on an industry that is dedicated to improving the health and wellbeing of all its health consumers.

Three main hypotheses have been proposed to explain the health consumer’s demand for natural therapies (Astin, 1998; Astin et al, 1998; Baer, 2001; MacLennan, Wilson & Taylor, 2002; Siahpush, 1998). The first was dissatisfaction with the outcomes of medical treatment, including adverse drug effects. The second was discontent with the medical patient-doctor relationship encounter, that is, duration of the consultation and lack of personal attention.

The third was that natural therapy placed emphasis upon nature and natural, as well as on health rather than disease. An increasing number of health consumers want to participate in the healing process.

Clients who use natural therapy practitioners for their health care are taking a more active role in their long-term health and are deeply interested in holistic healthcare. Removing this assistance, could see these people become less healthy. ATMS is also concerned that the loss of rebates will negatively impact the wider health of many of thousands of people who rely on their health care provided by natural therapy professionals.

Finally, ATMS is deeply concerned about the impact cuts to the rebates will have on the private insurance industry. Private insurance optional extras, such as benefits for natural therapies are a key selling point for private insurance customers. We believe that the proposed changes could render private health insurance less attractive as people feel they are getting less value-for-money. Certainly, such a move could discourage people from taking out more comprehensive cover.

## **Literature Review – Evidence Supporting Natural Therapies**

In the wake of the Chief Medical Officer's "Natural Therapies - Review of Private Health Insurance Rebate", ATMS has provided a literature review of Australian and international studies into natural therapies. This review shows the overwhelmingly positive impact most natural therapy practices have on Australia's long-term health outcomes. It shows, for the most part, natural therapies are underpinned by a robust evidence base.

We strongly believe that this review gives it a high degree of credibility, and thus its findings should be taken into consideration when reviewing what disciplines should continue to be allowed to attract the Health Insurance Rebate.

### **1. What Constitutes Evidence?**

Evidence-based practice is a formal problem-solving framework that helps practitioners make informed clinical decisions about the care of individual patients (Wilson, Mills, McGowan, & Guyatt, 2002). Grant (2005) states that 'evidence-based practice is a methodology for decision-making in clinical practice which describes the finding of the best quality information about treatment with reference to the hierarchy of evidence applicable to practice'(p. 5).

The National Health and Medical Research Council of Australia has developed a guide to ranking evidence or research findings according to the level, quality, relevance and strength of

the intervention study. The hierarchy of evidence provides a useful guide for dealing with the volume and complexity of information available to practitioners and encourages critical appraisal of clinical evidence (Grant, 2005). It informs practitioners about the strength of research evidence supporting their assessments, treatments and recommendations for individual patients.

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In natural therapies, informed clinical decisions are based not only on current best evidence from research findings and scientific trials, but also on clinical experience and traditional usage and knowledge. The Complementary Medicine Evaluation Committee within the Therapeutic Goods Administration includes traditional evidence as part of its evaluation process. Traditional evidence is the accumulation of experience of practitioners over hundreds and sometimes thousands of years (Mills et al., 2002). It is the systematic accounts in the spoken and written records of systems of medicines passed on through generations. An example is the materia medica used by herbal medicine practitioners which details traditional knowledge from many cultures and historical perspectives that formed the basis of health, healing and medicine within their culture.

Grace (2008) and Khoury (2009) argue that evidence paradigm for what is accepted as truth is socially constructed, as once a paradigm meets with unavoidable and substantial anomalies, it is abandoned for another paradigm. Therefore, the value of experiential knowledge based on the critical appraisal of past experiences of clinical effectiveness by both clients and practitioners is an important form of evidence. There is equal value in different ways of knowing and as society gains greater knowledge and choice in health care then the definition of what constitutes evidence is likely to evolve.

The two main weaknesses of evidence-based practice are the hypothesis testing and statistical p-values. Firstly, the hypothesis testing in randomised controlled trials rests in inductive logic, since the hypotheses one begins with are not axioms, but are based on previous experience and expectation. The problem with inductive logic is that it develops sophisticated argument from sensory experience, which is in discord to EBM tenets (Nordin, 2006). Secondly, the statistical p-values calculated at the end of randomised controlled trials actually represent the probability of the data given the null hypothesis, whereas the real interest lies in knowing the probability of the hypothesis (Kulkarni, 2005).

The Cochrane Complementary Medicine Field was established to meet the need for scientific evidence-based research in natural therapies. Even if it is accepted that randomised controlled trials are the gold standard to test for efficacy, it is clear that single studies are not fully convincing. Systematic reviews and meta-analyses which combine multiple randomised controlled trials and statistically pool the data may provide more compelling biomedical science evidence.

The randomized controlled trial model is problematic in natural therapies research, because it assumes a relative equivalence of all cases with a particular condition, and therefore averages the uncertainty factor. In doing so, it provides no mechanism by which interactions between the intervention itself and the practitioner, clinical setting and context variables can be studied (Thorne et al, 2002). Also, blinding the patient and the practitioner to the therapeutic option is often difficult, if not impossible, given the contextual nature of diagnostic processes, negotiations around options and the degree of active involvement each party plays in the therapeutic relationship. Furthermore, the notion of placebo raises considerable suspicion in the herbal medicine context (Hilsden & Verhoef, 1999). Consequently, as a placebo effect exists, it is axiomatic that the helpful interaction of a placebo is in itself beneficial (Thorne et al, 2002). Moreover, factors such as trust, relationship and transmission of healing energy are an inherent component of the natural therapies therapeutic relationship.

The number of systematic reviews of natural therapies research is increasing and this goes part-way towards answering calls for high quality research in natural therapy practices. However, the scope of natural therapy, with its diversity of practices, language, and cultural norms, presents specific challenges for conducting reviews, such as the choice of appropriate topic for combining trials (Grace, 2008). Moreover, relying solely on the hierarchy of evidence to inform best practice and intervention does not suit all aspects of health care, especially considering the larger public health and social aspects of disease (Grant, 2005). One of the strengths of natural therapy practice is its focus on patient education for disease prevention which is an important public health initiative.

There are fundamental differences between the underlying philosophies of biomedicine and natural therapy. These differences have created misconceptions about the validity of natural therapies in the health care system. These differences include the traditional reductionist, mechanistic approach of biomedicine as opposed to the biocultural and holistic approach of natural therapy; biomedicine's focus on eliminating the disease-producing agent as opposed to natural therapy's focus on encouraging the innate ability of the human body to restore itself to health; and biomedicine's focus on illness as opposed to natural therapy's focus on wellness (Grace 2008).

Randomised controlled trials do not take into account the holistic view and the complex treatment protocols offered by many natural therapy practices. The emphasis on an evidence-based approach to establishing the efficacy of single herbs and nutrients, for example, overlooks the way that natural therapy practitioners actually use these substances in practice (Grant, 2005). Moreover, blinding is impossible in physical therapies such as massage and when treatment requires the active cooperation of the patient such as in dietary or environmental changes.

Despite the complexities of finding or developing suitable methodologies for natural medicine research, it is possible to design research studies for natural medicine that generate evidence capable of informing clinical practice. Several alternative approaches have been proposed as capable of providing a genuine assessment of the efficacy of natural medicine (Grace 2008). These include:

- Systematic clinical auditing, with its large samples of clients, can be used to determine future research questions for randomised clinical trials.
- Pragmatic research that considers complete natural therapy treatment programs without identifying the underlying mechanism of action for each intervention may be useful, provided that there is a clear, clinically relevant outcome. A particular advantage of this approach is that it recognises that natural therapy treatment programs are frequently multifocal, collaborative (with the client) and integrated into the client's lifestyle unlike the specific, isolated (distinguishable) treatments that are commonly delivered by medical practitioners.
- Outcome measures (questionnaires used as standardised proxy measures of effectiveness of treatment) are proving to be particularly useful in pragmatic research designs and have been keenly taken up by natural therapy researchers. They are simple to administer and their standardised scoring systems allow comparisons of clients' responses over time. It is the reported validity of these outcome measures in different client populations that is having a considerable impact on the biomedical science evidence base for natural medicine.

## 2. Scientific Evidence Base for Natural Therapies

Ernst's critical appraisal of available scientific evidence-base for natural therapies provides a resource for natural medicine practitioners on the available scientific research and evidence to inform practice (Ernst, 2006). Since this publication, well respected experts in their specialist field of natural therapy practice in Australia, such as Braun and Cohen, Galvin and Bishop, Leach and Gillham, Sarris and Wardell, Grace and Deal have published books with extensive analysis of the most current available and valid scientific research findings. These combined works further the ongoing agenda to position and justify natural therapy practices in terms of their evidence-base practice (Braun & Cohen, 2010; Galvin & Bishop, 2010; Leach & Gillham, 2008; Sarris & Wardell, 2010; Grace & Deal, 2012).

### Table 1 Scientific-evidence for Natural Therapies

Data used to construct Table 1 was derived from 313 systematic reviews dealing with the effectiveness of natural therapies. Cochrane Reviews, Medline and AMED databases were used to locate the systematic reviews in this summary. The five categories are based on the nature of the author(s)' conclusions:

1. Evidence of benefit (+): supporting evidence for natural therapy effectiveness. For example, phrases such as "evidence suggests/shows/supports" without need for further research to confirm the results have been assigned to this evidence level
2. Inconclusive but worth further research (I+): inconclusive but promising or positive results from limited quality trials. In these cases the authors suggested further research was required to confirm the results.
3. Inconclusive (I): insufficient data to confirm or refute the claims.
4. Inconclusive but probably not worth further research (I-): there was no evidence of benefit from good quality trials and/or evidence of no benefit from poor quality trials.
5. Evidence of no benefit (-): reviews with evidence of no benefit from good quality trials Table 1 contains more reviews on nutritional supplements (33.2%) than any other natural therapy. Herbal medicine had the highest percentage of reviews reporting evidence of benefit (40.6%). Only 5.4% of all reviews in the summary reported evidence of no benefit. Some reviews also belong to mainstream medicine, such as those comparing physiotherapy with other physical therapies and those reporting on nutritional supplements which are not exclusive to natural therapies.

Some areas of natural therapy, namely nutritional and herbal medicine supplementation, have been subject to thousands of scientific studies. Nutritional medicine, in particular, is an area of natural therapy practice that overlaps with other health care practices such as medicine, pharmacy and dietetics. High quality evidence exists for many nutritional medicines. This may be because of the popularity of nutrition as a research area, strong funding support by interest groups and stakeholders, and its suitability for gold standard randomised double blind controlled trials.

**Table 1: What the scientific literature (based on systematic reviews) says about natural therapies**

Natural Therapies	Author(s)' conclusions (%)					Total
	+	I+	I	I-	-	
<b>Acupuncture</b>	15.6	23.4	56.3	0	4.7	<b>10.2</b>
<b>Chinese herbal medicine</b>	8	52	40	0	0	<b>8.0</b>
<b>Chiropractic and osteopathy</b>	26.5	20.6	44.1	0	8.8	<b>10.9</b>
<b>Herbal medicine</b>	40.6	32.8	23.4	0	3.1	<b>10.2</b>
<b>Massage, aromatherapy, touch therapies</b>	19.0	38.1	42.9	0	0	<b>6.7</b>
<b>Nutritional supplement</b>	10.6	27.9	50	3.8	7.7	<b>33.2</b>
<b>Combined therapies</b>	19.6	32	39.3	2.7	6.3	<b>17.9</b>
		<b>30.4</b>	<b>44.9</b>	<b>1.8</b>		
	<b>17.6</b>		<b>77.1</b>		<b>5.4</b>	<b>100</b>

**Key:**

<b>+</b>	Evidence of benefit
<b>I+</b>	Inconclusive but worth further research
<b>I</b>	Inconclusive
<b>I-</b>	Inconclusive but probably not worth further research
<b>-</b>	Evidence of no benefit

Hechtman's (2011) recent text, *Clinical Naturopathic Medicine*, includes a comprehensive chapter on nutritional medicine. In this chapter essential major macro- and micro-nutrients are

evaluated and assessed in terms of recent available scientific research into biochemical function, basic physiological requirements, pharmacological and therapeutic dose ranges and accompanying clinical application. Further evidence is provided on interactions (medications, nutrients and dietary), toxicity, dietary intake and the need for supplementation. Over two hundred in-text citations are made in this chapter to scientific research published in peer reviewed journals.

## Acupuncture

For acupuncture there is a large number of studies of treatments of various disorders. The current evidence supports the claim that acupuncture is more effective than placebo for some conditions such as dental pain and nausea, especially post-operative (Ernst, 2001). Most of the seven Cochrane Reviews on acupuncture show inconclusive results based on too few and too poorly designed studies. There are some good quality studies on pain but no claims can be made about duration of benefit because of trials had relatively short follow-up periods. Overall, acupuncture seems to be beneficial for headache (Ezzo, 2003). Studies of nausea have found real acupuncture to be more effective than sham procedures. In general, needling acupuncture points is more effective than needling false points.

## Chinese Herbal Medicine

Zemaphyte, for example, may improve erythema, surface damage to the skin, sleep disturbance and itching. Some pioneering research has examined the co-prescription of Chinese herbal medicines with Western pharmaceuticals. Examples include the use of Huangqi decoctions in patients on chemotherapy. Compared with patients treated by chemotherapy alone, patients treated with chemotherapy and Huangqi decoctions were less likely to experience nausea and vomiting or low white cell counts. There was some evidence to suggest that the decoctions also stimulated cells of the immune system, but did not affect the levels of antibodies in the blood. Other Chinese herbal medicines when combined with antipsychotics may be beneficial for people with schizophrenia.

## Herbal Medicine

Many herbs contain active ingredients that have been found to be effective and they are often incorporated into orthodox pharmacy where research examines single compounds. In research into whole plants it is not always clear which components of the plant are the most pharmacologically significant. For example, it was thought that the active ingredient in St John's wort was water-soluble *hypericin* which acted as a monoamine oxidase inhibitor. Later studies found the fat-soluble *hyperforin* to be equally important. The herb is now thought to inhibit serotonin uptake.

Peters et al. (2002) lists the following eight herbal medicines as having a strong research-derived evidence base, mostly emanating from randomised controlled trials:

- *Ginkgo biloba* for delaying the clinical course of dementia, improving circulation, aiding short-term memory loss, and tinnitus.
- *Aesculus hippocastanum* seeds for chronic venous insufficiency
- *Serenoa repens* for symptomatic treatment of benign prostatic hypertrophy
- *Hydrastis* for long-term, low-grade depression, mild to moderate major depression, and as an immune system enhancer
- *Echinacea* as an immune enhancer. It improves white blood cell production and mobility.
- *Angelica sinensis* for dysmenorrhoea.
- *Pygeum africanum* for benign prostatic hypertrophy.

There are more than 20 completed Cochrane Reviews on herbal medicines (Ezzo, 2004). They have provided the following further information. Herbal medicines containing beta-sitosterols, extracts from *Pygeum africanum*, cernilton and *Serenoa repens* may all help relieve urinary systems caused by benign prostatic hyperplasia. Cranberries are useful for treating urinary tract infections, although they appear to have a role in their prevention. The reverse appears to be true for *Echinacea* - it does not appear to be useful in preventing common colds but taking *Echinacea* after onset of cold symptoms shortens duration or decreases severity of symptoms, compared with placebo.

There is some evidence of the efficacy of *Ginkgo biloba* for dementia and cognitive impairment and extracts of St. John's wort (*Hypericum perforatum*) seem more effective than placebo and similarly effective as standard antidepressants for treating mild to moderate depressive symptoms. Avocado soybean unsaponifiables show beneficial effects in people



with osteoarthritis and studies of gamma-linolenic acid in the treatment of rheumatoid arthritis are promising. Compared with placebo, kava extract might be an effective symptomatic treatment for anxiety. There is good evidence for recommending *Ginkgo biloba* for patients with mild to moderate cerebral insufficiency and possible intermittent claudication.

## Homoeopathy

The Swiss government's inquiry into homeopathy and complementary and alternative medicine, with findings published in late 2011, points toward a strong body of evidence to support the homeopathic treatment of upper respiratory tract infections and respiratory allergies, with 24 out of 29 studies reporting positive outcomes in favour of homeopathy. Other benefits to homeopathic treatment compared to conventional treatment were the efficacy, reduced side effects, and cost effectiveness of homeopathic medicine alongside clear public demand for this treatment option (Bornhoft & Matthiessen, 2011). This research demonstrates the viability of homeopathy as a valid treatment option for particular prevalent disorders within the wider population which will reduce demands on the conventional medical systems.

In 1991 the *British Medical Journal* published a review of all clinical trials of homoeopathy. The authors concluded that there were some trials that found positive results. In the 22 most rigorous trials, 15 found homoeopathy superior to placebo. For example, taking homoeopathic Oscilloccinum after the onset of influenza might shorten the illness, but more research is needed. A meta-analysis conducted by Linde et al. (1997) yielded a positive overall result for homeopathy.

A placebo controlled study carried out at the Faculty of Medicine of Marseilles was designed to determine the effectiveness of *Arnica* 7C and *Hypericum* 15C for people suffering from dental neuralgia. 60 people received either 4 pilules of *Arnica* alternated with 4 pilules of *Hypericum* every 4 hours or placebo administered in the same way. Pain levels were assessed over 3 days from the beginning of the trial. From this assessment it was found that 12 of the 30 people who received the placebo had a positive response to this intervention, and 23 of the 30 people given the homeopathic medicines responded positively (Albertini et al, 1985)

Fifty-three people suffering from fibromyalgia took part in this trial, comparing individualised homoeopathic treatment to placebo. The levels of tender points and tender point pain as well as quality of life, mood and general health were assessed by the practitioners and subjects involved in the trial. Three months after commencing treatment, all parameters were found to be improved by the use of homoeopathy when compared to placebo (Bell et al, 2004).

A pilot study was carried out on 25 people from an Indian village where arsenic contamination was endemic and 18 people from another Indian village without arsenic contamination. These people were randomly assigned to receive either *Arsenicum album* 30C or a succussed placebo control. After 2 months on either active medicine or placebo, these people had their blood and urine assessed for arsenic as well as several widely accepted toxicity biomarkers and pathological parameters related to arsenic toxicity. The use of *Arsenicum album* 30C had a beneficial effect on these biomarkers. It was also found to

improve the appetite and general health of those people who previously exhibited signs and symptoms of arsenic toxicity (Belon et al, 2007).

Seventy-one post-parturient women who were unwilling or unable to breast feed were divided into 2 groups, one being given a placebo and the other group being given a mixture of *Apis* 9C and *Bryonia* 9C, to determine the effects of either on lactation pain. A significant improvement was noted in the group using the mixture, when compared to those in the placebo group (Berrebi et al, 2001).

Pruritis, commonly experienced by those undergoing haemodialysis, was treated in 20 subjects under double-blind placebo-controlled randomised trial conditions comparing individualised homeopathic treatment to placebo. Assessments were made at 15, 30, 45 and 60 days treatment, and after collating the results, researchers found that homeopathic management reduced pruritis by 49%. The majority of the reduction in pruritis had occurred by day 30 (Cavalcanti et al, 2003).

Researchers at the Tunbridge Wells Homeopathic Hospital in the UK enrolled 31 female outpatients who had complained of menopausal flushes in this trial. They were treated using individualized homeopathic management and after their initial consultation and at least one follow-up, patients completed their own self-assessment rating of the treatment. 79% of the women enrolled in the study reported a reduction in both the severity and frequency of hot flushes as a result of the treatment (Clover & Ratsey, 2002).

In this trial, 12 subjects suffering from major depression, social phobia or panic disorder, were treated for 7 to 80 weeks with individually prescribed homeopathic remedies and assessed on a Clinical Global Improvement Scale (CGIS) or self-rated SCL-90 scale and the Social Phobia Scale (SPS). Subjects were given homeopathic treatment either because they asked for it directly or because conventional treatment had been unsuccessful. The overall response rates for homeopathy were 58% on the CGIS and 50% on the SCL-90 and SPS (Davidson et al, 1997).

In this randomised double blind trial involving 93 women, a combination of homeopathic *Caulophyllum*, *Actea racemosa*, *Arnica*, *Pulsatilla* and *Gelsemium*, all in 5C potency, was used to determine its effect on the length of labour and complication rates. The medicine was used from the beginning of the ninth month of pregnancy, and reduced the average time of labour to 5.1 hours, in comparison to the placebo, the use of which was associated with an average labour time of 8.5 hours. The rate of complications for those using the homeopathic combination was 11.3% while the complication rate under placebo was 40% (Dorfman et al, 1987).

A study published in the *British Journal of Clinical Pharmacology* reported that 487 people suffering from influenza were assigned to either Oscillocoquinum (Anas barb.) 200C or placebo, twice daily for 5 days. Significant results were achieved with the homeopathic medicine over the placebo in all areas measured (Ferley et al, 1989).

114 children attending a paediatric practice where conventional and homeopathic medicines were used, and who were previously diagnosed with ADHD, were given individualised homeopathic medicines (increasing potencies of the most similar LM remedy). On a parent

assessed basis (confirmed by the clinician), if a minimum 50% improvement was not noted within a certain period of time they were placed on methylphenidate. 75% of the children responded to homoeopathy and 22% required methylphenidate. 3% of patients did not respond to either regime (Frei, Thurneysen, 2001).

83 children diagnosed as suffering from ADHD using DSMIV criteria were treated with individually prescribed homeopathic medicines. Using the Connor's Global Index Scale it was determined that 63 of these children responded to treatment. These children were then randomised to receive either placebo or homeopathic medicines for 6 weeks and at this point were crossed over to receive placebo if they'd been using the homeopathics or vice versa. At the end of this period it was found that homeopathic therapy provided significantly better results than placebo (Frei et al, 2005).

The *International Journal of Clinical Pharmacology and Therapeutics* reported a trial of 131 children who were suffering from medically diagnosed otitis media were split into two groups. 28 were treated by a team of four ear, nose and throat practitioners using singly or in combination, nasal drops, antibiotics, secretolytics or antipyretics (Group B). 103 children were treated by one homoeopath using single homoeopathic remedies (Group A). The average duration of pain for Group A was 2 days, as opposed to 3 days for Group B. 70.7% of the Group A children were free of recurrences within the first year of treatment and 29% had a maximum of 3 recurrences while in Group B, 56.5% were free of recurrences within the first year of treatment and 43.5% had a maximum of 6 recurrences (Frieze et al, 1997).

In this study, carried out at the Glasgow Homeopathic Hospital, 41 people suffering from rheumatoid arthritis were treated with enteric coated aspirin and 54 people suffering from the same condition were treated with individualised homeopathic treatment. The results of the two forms of therapy were compared at the end of the trial and it was found that those on homeopathic treatment did considerably better than those on aspirin. In addition, 16 of the 41 people taking aspirin during the trial experienced side effects while those taking homeopathics experienced no side effects (Gibson et al, 1978).

In this controlled, randomised, prospective study, 43 people suffering from chronic low back pain were treated for two months either by homeopathy or by standardised physiotherapy. Assessment based on the initial and final clinical investigations, an Oswestry questionnaire, and visual analog scale, found that the most successful method of treatment was homeopathy (Gmunder & Kissling, 2002).

### **Massage and Other Touch Therapies**

The Australian Association of Massage Therapy (AAMT) has also made a submission, the Effectiveness of Massage Therapy – A Summary of Evidence-Based Research, (Ng and Cohen, 2013) to the Chief Medical Officer's review of Natural Therapies and their access to the Private Health Rebate.

The AAMT report consists of a research paper written by Dr K Ng, a member of the AAMT and Professor M Cohen from the School of Health Sciences at RMIT University. The paper looks at evidence based research into the efficacy of massage therapy.

In preparing the report, the authors reviewed 740 Australian, international and academic research papers, covering all types of massage therapies.

The key findings of the AAMT report indicate that:

- “A growing body of research supports massage therapy as being an evidence-based therapeutic modality
- There is strong evidence supporting acupressure management of nausea and vomiting
- Massage therapy is effective in managing sub-acute/chronic low back pain, delayed-onset muscle soreness (DOMS), anxiety, stress and relaxation, and helps support the wellbeing of patients with chronic and/or terminal diseases such as cancer
- There are opportunities for further research into the benefits of massage therapy for infants, depression and post-natal depression, labour pain, fibromyalgia, premenstrual syndrome, urinary symptoms in multiple sclerosis, myofascial pain and knee osteoarthritis
- There is consistent and conclusive evidence that massage therapy is safe. However, the importance of qualified massage therapists adhering to appropriate scopes of practice, safety guidelines and ethical procedures is stressed
- Clinicians are encouraged to collaborate with professional massage practitioners for best practice management to patients who may benefit from massage therapy.”

The AAMT also indicates that a recently conducted national survey indicated that 70% of survey participants used some form of complementary and alternative medicine (CAM), with 45% of people indicating they had visited a practitioner in the preceding year; figures similar to the USA. Massage therapy was one of the modalities of CAM most commonly used.

In preparing their report, the AAMT noted the challenge of pulling together the disparate research evidence for their modality and indicated the need for an archive of evidence which could be accessed to provide information of existing evidence. However, the Australian Massage Research Foundation has commissioned a body of knowledge that would archive research evidence relevant to massage therapy.

The research papers which were examined looked at the effectiveness of massage therapy for the management of health, medical conditions or clinical symptoms. The therapies considered by the research document included all hands-on, direct physical contact massage therapy without the use of machines, devices or equipment or tools (eg acupuncture was not included).

A range of therapies were considered including:

- |                            |                                    |
|----------------------------|------------------------------------|
| • Acupressure              | • Infant                           |
| • Aromatherapy             | • Manual Lymphatic Drainage        |
| • Ayurvedic                | • Myofascial Release               |
| • Bowen therapy            | • Pregnancy                        |
| • Deep Tissue              | • Reflexology                      |
| • Deep Transverse Friction | • Remedial                         |
| • Hawaiian / Lomi-lomi     | • Rolfing / Structural Integration |
| • Indian Head              | • Seated                           |

- Shiatsu
- Sports
- Swedish (includes effleurage/petrissage)
- Thai
- Traditional Chinese Medicine (TCM) including Tuina/Qigong
- Trager
- Trigger point therapy

The research identified that the following areas had been the most common studied:

- Musculoskeletal
- Oncology combined with palliative care
- Sports
- Neurology
- Obstetrics
- Surgery
- Geriatrics
- Mental Health
- Physiology

A number of key findings resulted from the research paper which included:

- Acupressure was effective for the management of nausea and vomiting
- Massage therapy for sub-acute and chronic low back pain was more effective than a placebo
- Massage therapy was effective in managing anxiety, stress and promoting relaxation
- Positive outcomes following massage therapy included the reduction of pain, improved quality of life, improved sleep and reduced depressive symptoms
- Studies into the benefits of massage therapy for maternal and infant care reported a reduction in infant distress, significant newborn growth and development, improved mother-infant interaction and reduced symptoms of post-natal depression

A key finding from the research paper was the adverse events associated with massage therapy were scarce and treatments safe when guidelines are adhered to an instituted by appropriately trained and/or qualified massage practitioners.

The authors of this report indicate that there is a growing body of evidence into massage therapy, particularly from 1978 to 2008, which is a reflection of a growing interest in the use of massage therapy as a therapeutic modality. The authors noted that some indications for massage therapy are yet to be supported by research but concluded that massage therapy, because of its excellent safety profile, should be seen as part of integrative medicine with clinicians encouraged to collaborate with massage therapists in managing treatment of patients.

In addition to the report prepared by AAMT, some clinical trials have shown effectiveness of massage therapy in the following areas:

- reducing anxiety and improving the perceived quality of life for patients with cancer
- reducing anxiety and depression in women who had been sexually abused
- improving function and self-image and reducing anxiety and depression in adults with multiple sclerosis
- improving lymphatic drainage and tissue oxygenation

- improving respiratory function in asthmatics
- reducing pain and stiffness in chronic inflammatory conditions such as rheumatoid arthritis (Peters et al, 2002).

Massage has been shown to reduce short-term anxiety (Brattberg, 1999; Field et al., 1996; Hernandez-Reif et al., 2000). Systematic reviews show that massage gives some relief from back pain that has continued for many weeks or months and that the benefit may last at least a year after massage treatments cease. Infant massage may be useful for mother-infant interaction, infant sleeping and crying, and reducing the production of stress hormones but further research is needed. Antenatal perineal massage helps reduce both perineal trauma during birth and pain afterwards.

## **Nutritional Therapies**

Systematic reviews have found the following benefits of nutritional supplementation:

- Calcium supplements help prevent pre-eclampsia and lower the risk of death or serious complication.
- Calcium may have a moderate protective effect on development of colorectal adenomatous polyps.
- The dietary supplement chitosan may have a small effect in aiding weight loss.
- Vitamin B1 and magnesium may help reduce the pain of dysmenorrhoea.
- Folate may reduce depressive symptoms in people with depressive disorders.
- Folate supplementation reduces the side effects in patients receiving methotrexate for rheumatoid arthritis.
- Supplementing preterm babies who have respiratory distress with the nutrient inositol may reduce death and disability.
- Melatonin is remarkably effective in preventing or reducing jet lag and occasional short-term use appears to be safe.
- There is evidence of benefit of vitamin A supplementation in children with HIV infection, but no evidence for micronutrient supplementation with adults.
- Probiotics appear to be a useful adjunct to rehydration therapy in treating acute, infectious diarrhoea in adults and children.
- Omega-3 fatty acid supplementation for intermittent claudication reduces blood triglycerides without improving lower leg discomfort measured by walking distance.
- There is limited evidence that selenium supplementation might help reduce symptoms of chronic asthma, but more research is needed.
- Vitamin A supplementation for pregnant women in areas where deficiency is common can reduce night-blindness, but more research is needed on other possible health benefits.
- Vitamin E has been evaluated for treating neuroleptic-induced tardive dyskinesia but so far the benefit of this medication seems small and restricted to avoidance of deterioration
- Some evidence exists for the effectiveness of oral protein and energy feeds for hip fracture aftercare in older people, but overall the evidence for the effectiveness of nutritional supplementation remains weak.

## Conclusion

Ultimately, if the CMO decides in favour of cutting the Health Insurance Rebate for natural therapies, especially when it can be demonstrated that many natural therapy modalities are backed up by a strong evidence base that shows their efficacy, the Federal Government risks undermining the extraordinary contribution this sector continues to make towards achieving genuine health care outcomes for Australians.

ATMS notes that in this year's budget \$15.4 billion was committed to State Health Services. The existing Federal funding for natural medicines in comparison is a meagre \$30 million per year, yet considering this sector contributes to the improved health care of Australian the federal government does not give the industry the credit it deserves.

ATMS believes that it should be up to individuals as to whether they chose optional private health insurance cover for natural therapies, based on their individual circumstances, health needs, and their traditional use of natural therapies. The clients of natural therapies practitioners would almost universally say that all natural therapy modalities are effective, safe and affordable.

ATMS also believes that each individual private health insurance provider should be free to decide whether it offers natural therapy as an optional extra for its clients, based on the demands of their customers, financial and commercial considerations, the effectiveness of natural therapies in appealing to potential new customers and their own judgment on whether such extras add value and promote good health outcomes for their customers. The fact that many, if not all, private health insurance providers offer benefits for natural therapy consultations is a strong indication that the natural therapies sector meets many of these benchmarks.

To conclude, ATMS believes the Federal Government should see natural therapies as preventive and lifestyle medicine. ATMS's members help prevent and maintain health outcomes for many thousands of Australians every year, through the provision of primary and quality health care.

Natural therapies are highly cost effective and, as shown, are based on supporting evidence and a long history of support from many thousands of clients in Australia. It is no surprise, considering this, that natural therapy is a booming professional sector.

ATMS thus proposes that the current system be left in place. If anything, on the evidence presented in this submission, federal funding for many natural therapies disciplines, should be greatly increased, not decreased.

## References

- Astin, J.A. (1998). Why patients use alternative medicine. *Journal of the American Medical Association* 279, 1548–1553.
- Astin, J.A., Marie, A., Pelletier, K.R., Hansen, E., Haskell, W.L. (1998). A review of the incorporation of complementary and alternative medicine by mainstream physicians. *Archives of Internal Medicine* 158, 2303–2308.
- Australian Bureau of Statistics. (1991). *1989–90 National health survey: Summary of results*. Cat. No. 4364.0. Canberra: ABS.
- Baer, H.A. (2001). The socio-political status of US naturopathy at the dawn of the 21st century. *Medical Anthropology Quarterly* 15(3), 329–346.
- Bornhoft, G., & Matthiessen, P. (2011) *Homeopathy in Healthcare: Effectiveness, Appropriateness, Safety, Costs*. Goslar, Germany: Springer.
- Brattberg, G. (1999). Connective tissue massage in the treatment of fibromyalgia. *European Journal of Pain*, 3, 235-245.
- Braun, L., & Cohen, M. (2010). *Herbs and Natural Supplements an evidence based guide* (3rd ed.). Australia: Elsevier
- Casey, M.G., Adams, J., Sibbritt, D. (2007). An examination of the prescription and dispensing of medicines by Western herbal therapists: a national survey in Australia. *Complementary Therapies in Medicine* 15, 13–20.
- Ernst, E. (2006). *The desktop Guide to Complementary and Alternative Medicine An evidence-based approach* (second ed.). United Kingdom: Elsevier Ltd.
- Ezzo, J. (2003). From the five blind men to Cochrane Complementary Medicine Systematic Reviews. *The Journal of Alternative and Complementary Medicine*, 9(6), 969-972.
- Ezzo, J. (2004). A brief history of time: the power of botanical systematic reviews. *The Journal of Alternative and Complementary Medicine*, 10(4), 692-697.
- Ferrari, J. (1995, June 3). "Alternative remedies woo 1 in 2". *The Australian*.
- Field, T., Grizzle, N., Scafidi, F., & Schanberg, S. (1996). Massage relaxation therapies' effects on depressed adolescent mothers. *Adolescence*, 31, 903-911.
- Galvin, K., & Bishop, M. (2010). *Case studies for complementary therapists : a collaborative approach* Chatswood, N.S.W.: Elsevier.
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Grace, S. (2008) *Integrative Medicine in Australian Health Care*. Postgraduate Theses retrieved 17 May 2011 from The Sydney eScholarship Repository/Postgraduate Theses/Sydney Digital Theses <http://ses.library.usyd.edu.au/handle/2123/4048>

Grace, S., & Deal, M. (2012). *Textbook of remedial massage* (first ed.). Chatswood, Australia: Elsevier.

Grant, A. (2005). Education in natural medicine: what's love got to do with it? *Integrative Medicine: A Clinician's Journal*, 4(1), 30-34.

Hechtman L. (2011). *Clinical naturopathic medicine* (pp. 48 - 102). Australia: Elsevier. Chapter 5: Nutritional medicine

Hernandez-Reif, M., Martinez, A., & Field, T. (2000). Premenstrual symptoms are relieved by massage therapy. *Journal of Psychosomatic Obstetrics and Gynaecology*, 18, 238-245.

Hilsden, R.J., Verhoef, M.J. (1999). Complementary therapies: evaluating their effectiveness in cancer. *Patient Education and Counseling* 38, 101–108.

Khoury, R. (2009). *The Professionalisation of Herbal Medicine 1980-2007: Usurpation, Schism and the Culture of Professionalism*. Unpublished PhD Thesis, University of Sydney.

Kulkarni, A.V. (2005). The challenges of evidence-based medicine: a philosophical perspective. *Medicine, Health Care and Philosophy* 8, 255–260.

Leach, M. (2010). *Clinical decision making in complementary medicine*. Australia: Elsevier.

Leach, M., & Gillham, D. (2008). Evaluation of the Evidence-Based practice Attitude and utilization Survey for complementary and alternative medicine practitioners. *Journal Of Evaluation In Clinical Practice*, 14(5), 792-798.

Linde, K., Clausius, N., Ramirez, G., Melchart, D., Eitel, F., Hedges, I. V., et al. (1997). Are the clinical effects of homoeopathy placebo effects? A meta-analysis of placebo-controlled trials. *Lancet*, 350, 834-843.

MacLennan, A.H., Wilson, D.H., Taylor A.W. (1996). Prevalence and cost of alternative medicine in Australia. *Lancet* 347, 569–573.

MacLennan, A.H., Wilson, D.H., Taylor, A.W. (2002). The escalating cost and prevalence of alternative medicine. *Preventive Medicine* 35, 166–173.

Mills, E. J., Hollyer, T., Guyatt, G., Ross, C. P., Saranchuk, R., & Wilson, K. (2002). Teaching evidence-based complementary and alternative medicine: 1. A learning structure for clinical decision changes. *Journal of Alternative & Complementary Medicine*, 8(2), 207-214.

National Health and Medical Research Council. (YEAR) Evidence-based clinical practice guidelines. Available from [www.nhmrc.gov.au/publications/synopses/cp65syn.htm](http://www.nhmrc.gov.au/publications/synopses/cp65syn.htm) .

Ng, K.C.W. and Cohen, M. (2013). The Effectiveness of Massage Therapy – A summary of Evidence-Based Research.

Nordin, I. (2006). Complex causation and the virtue of pluralism. *Medicine, Health Care and Philosophy* 9, 321–323.

Parliament of Victoria Social Development Committee. (1986). *Inquiry into alternative medicine and the health food industry. Vols I and II*. Melbourne.

Peters, D., Chaitow, L., Harris, G., & Morrison, S. (2002). *Integrating complementary therapies in primary care*. Edinburgh: Churchill Livingstone.

Pryer, W. (2006, 4 July). The cost of being healthy. *West Australian*.

Sarris, J., & Wardell, J. (2010). *Clinical Naturopathy an evidence based guide to practice* Australia: Elsevier.

Siahpush, M. (1998). Postmodern values, dissatisfaction with conventional medicine and popularity of alternative therapies. *Journal of Sociology* 34(1), 59–70.

Thorne, S., Best, A., Balon, J., Kelner, M., Rickhi, B. (2002). Ethical dimensions in the borderland between conventional and complementary/alternative medicine. *Journal of Alternative and Complementary Medicine* 8, 907–915.

Wilson, K., Mills, E. J., McGowan, J., & Guyatt, G. (2002). Teaching evidence-based complementary and alternative medicine: 5. Interpreting the results of a study on therapy and applying them to a patient. *Journal of Alternative & Complementary Medicine*, 8(6), 867-873.

Xue, C.C.L., Zhang, A.L., Lin, V., Da Costa, C., Story, D.F. (2007). Complementary and alternative medicine use in Australia: A national population-based survey. *Journal of Alternative and Complementary Medicine* 13, 643–650.