



Submission to the Standing Committee on Health Inquiry into Chronic Disease Prevention and Management in Primary Health Care

National Herbalists Association of Australia

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Executive Summary

Scope

The main purpose of this report is to outline the important role of naturopaths and Western herbalists in Australia to support primary healthcare for chronic disease prevention and management. The substantial prevalence of use of naturopathy and WHM and the role of practitioners from these two professional groups for chronic disease prevention and management is presented. Opportunities of integration and collaboration between Primary Healthcare Networks with naturopaths and WHM to best assist chronic disease patients is examined and opportunities highlighted.

About the NHAA

The NHAA is a peak professional association representing appropriately qualified Western herbalists and naturopaths using herbal medicines as their primary treatment modality. It is the oldest professional association of complementary therapists in Australia, founded in 1920. The NHAA represents approximately one third of practising herbalists and naturopaths in Australia. The NHAA is the only national professional association specifically concerned with the practice and education of Western herbal medicine (WHM). Details of the Constitution and the Code of Ethics (including standards of practice) of the Association are detailed in Appendix 1.

The primary aims of the NHAA are to:

- Promote, protect and encourage the study, practice and knowledge of medical herbalism.
- Disseminate such knowledge by talks, seminars and publications.
- Encourage the highest ideals of professional and ethical standards.
- Promote herbal medicine within the community as a safe and effective treatment option.

The vision held by the NHAA for the professional practice of herbal medicine is summarised in the following statements:

- Practitioners and the practice of herbal and naturopathic medicine are fully integrated into the primary healthcare system in Australia.
- The NHAA is recognised as the peak body for herbal and naturopathic medicine.
- Herbal and naturopathic medicine is accessible to all.
- Maintain the integrity of the profession.
- Continue to promote the standards and quality of education, of the profession.
- Create career opportunities and research pathways for herbalists and naturopaths.
- Continue the integration of traditional medicine and evolving science.



The full membership of the association elects the Board of Directors of the NHAA, with each board member serving a two-year voluntary (unpaid) term after which they may stand for re-election.

Full members of the NHAA have completed training in Western herbal medicine sufficient to meet the educational standards (Appendix 2) as determined by the Examiners of the Board in consultation with tertiary education institutions (standards in line with but exceeding the requirements of the NSW Health Training Package), and must adhere to a comprehensive Code of Ethics and Continuing Professional Education system.

Since its inception, the NHAA and its members have been at the forefront of herbal medicine and have been influential in areas ranging from education and practice standards to government regulation and industry standards. The NHAA has a strong commitment to achieving high educational standards in herbal medicine practice and supports regulation of the profession.

Issue

It has been determined by the Australian government that an inquiry into Chronic Disease Prevention and Management in Primary Health Care in Australia is required. The impact of chronic disease on individuals the State and the Australian government is rising. Various ways of implementing prevention strategies is required.

Recommendations of the NHAAL

NHAAL recommends that the Government:

1. Develop equity-based health service models by enabling access for individuals who consult with a naturopath or Western herbal medicine practitioner for chronic disease prevention and management, particularly for those living in non-urban areas.
2. Provide access to reimbursement of naturopathic and WHM care from private health insurers be available to individuals with diagnosed chronic diseases within medium policy cover for general treatments.
3. Incorporate naturopaths and WHM practitioners into the Enhanced Primary Care Program in order to further improve patient outcomes for patients from low income communities.
4. Educate primary health care practitioners about the skills and attributes of naturopaths and naturopathic approach to care for the purposes of health promotion for chronic disease prevention and management.
5. Utilise naturopaths within health promotion initiatives targeting chronic disease prevention and management.
6. Utilise naturopathic expertise in patient-centred care and approach to the development of patient self-management to provide adjuvant support to existing chronic disease prevention and management programs.
7. Recognise the current contribution of naturopaths and WHM practitioners to chronic disease prevention and management in Australia.
8. Incorporate naturopaths into a patients' chronic disease prevention and management care team where there is evidence of the effectiveness of this type of care.
9. Utilise naturopaths as 'care guides' to assist the achievement of care goals for medium and long term chronic disease prevention and management.
10. Employ naturopaths and Western herbal medicine practitioners to work alongside pharmacists to provide oversight and guidance on potential and known drug-nutrient and drug-herb interactions for patients with chronic health conditions.
11. Develop inter-professional multi-disciplinary education programs which focus on promoting inter-professional communication and collaboration to enhance the outcomes of team health care in chronic disease prevention and management.
12. Include naturopaths within Primary Health Network infrastructure to optimise inter-professional collaboration and team healthcare for individuals with chronic disease utilising a broad range of services.
13. Endorse and facilitate open collaboration and communication between all health professionals currently providing care for patients with chronic disease(s), including naturopaths and Western herbal medicine practitioners.
14. Recognise the capacity for naturopaths and WHM practitioners to promote and encourage patient compliance by providing effective health education and lifestyle counselling as adjunct care, particularly for frequent users of medical and health services.

Context for naturopathy and Western herbal medicine in Australia

Defining naturopathy and Western herbal medicine practice

Naturopathy is a system of medicine that is defined by a set of underpinning philosophies and principles. These include *primum non nocere* (first do no harm), *vis naturae medicatrix* (the healing power of nature), *tolle causam* (find the cause), *docere* (doctor as teacher), *tolle totum* (treat the whole person), *prevanire* (prevention), and wellness.(1) It has also been defined by Australian regulatory training authorities by the therapeutic tools used by naturopathic practitioners with a focus on herbal and nutritional medicine, dietary therapy and lifestyle advice. (2)

Modern herbal medicine practice derived from the traditional practices of herbalism in Europe, United Kingdom and North America, and as such this discipline is referred to as Western herbal medicine (WHM). (3) Today WHM is increasingly being validated by scientific investigation which seeks to understand the active chemistry of the plant along with other clinically relevant information such as efficacy, safety and toxicology and dose.

Naturopaths and herbalists may also use a therapeutic tool described as nutritional medicine or orthomolecular nutrition whereby they recommend and prescribe nutritional/dietary supplements such as vitamins and minerals to individuals to address identified deficiencies and assist with the management of diagnosed health conditions and general health complaints.

Prevalence of naturopathy and Western herbal medicine use in Australia

Australian research indicates that more than two thirds (68.9%) of Australians have used at least one complementary medicine (CM) and a similar number (64.0%) had visited CM practitioners, in the previous 12 months including naturopathy and WHM (16.3%). (4) Extrapolation of the data gathered through this research suggests 69.2 million visits to CM practitioners are undertaken per year. (4) Most of this CM use is an out-of-pocket expense for users, with an estimated per capita annual expenditure of AUD\$182 on CM products, and AUD\$264 on CM practitioners, thereby contributing to an estimated total annual expenditure of AUD\$4.13 billion of which AUD\$1.73 billion is spent on CM practitioners.

Role of naturopaths and Western herbalists in chronic disease management

Chronic diseases are classified by the Australian Institute of Health and Welfare (AIHW) as characterised by complex causality, multiple risk factors, long latency periods, a prolonged course of illness and functional impairment or disability. (5) Current data suggests that more than 7 million Australians have at least one chronic condition (5), and these individuals are less likely to be in full time employment and are more likely to be unemployed and therefore not participate in the labour force compared with those without chronic disease. (6) For those who do participate in the work force, there are significant economic costs associated with absenteeism (approximately 57 000 person years) and early death (113 000 person years). There are additional economic losses associated with chronic disease for individuals participating part time in the labour force. These figures are likely an underestimate as they do not represent reduced productivity whilst at work or the losses associated with those who participate in the unpaid labour force (carers, parents, and volunteers). (6)

With this in mind, it is interesting to note the role that naturopaths and WHM practitioners have in the provision of care for individuals with chronic and significant health conditions. Results from a nationally-representative longitudinal study (7) has found that 22% of Australian women who identified with having depression consulted with a naturopath or herbalist, compared with 11% of women who did not have depression. This rate was higher (24%) for women who had experienced depression for a number of years. Amongst the general population, an increased likelihood of consulting with a naturopath has been reported for individuals with a range of chronic health conditions such as cardiovascular disease (3.8 times more likely), respiratory conditions such as asthma (1.8 times more likely), and mental health issues (5.4 times more likely). (8, 9)

Implementing the Australian National Chronic Disease Strategy

The prevalence of chronic disease within Australia and worldwide as well as risk factors for their development are increasing which places greater demands on government health systems and individual carers. In response to this impact of chronic health, The Australian National Chronic Disease Strategy was developed. It is a broad framework and set of principles for how care should be organised and delivered including providing evidence-based care, coordinating the care across a range of health settings, and promoting self-management. (10) Based upon the Strategy, the levels of health care required for individuals with chronic disease can be conceptualised across 3 levels: Level 1 – Self-management support; Level 2 – Disease/Care management; Level 3 – Care coordination.

Underpinning principles intended to focus the development of actions and interventions to respond to the needs of the chronic disease population are outlined within the Strategy. These principles are well supported by naturopathic practice as follows:

1. Adopt a population health approach and reduce health inequalities
2. Prioritise health promotion and illness prevention
3. Achieve person centred care and optimise self-management
4. Provide the most effective care
5. Facilitate coordinated and integrated multidisciplinary care across services, settings and sectors

In line with these principles this submissions outlines key issues related to providing appropriate primary health care to chronic disease populations and the potential role of naturopaths and herbalists amongst the government response to these issues.

Issues and Recommendations

Principle 1: Adopt a population health approach and reduce health inequities

Issue: Equity in access to naturopathic and Western herbal medicine

Population health emphasises the improved health of a specific population with a particular focus on reducing inequities through policies, programs, research and interventions designed to protect and enhance health. The outcome of this approach is health equity, whereby people have equitable access to services on the basis of need, including having the resources, capacities, and power to act upon the circumstances of their lives that determine their health. (11) A robust population health response to the burden of disease associated with chronic health conditions amongst the community requires close attention to issues of health equity.

It is important that the attention directed towards addressing health inequalities takes access to services into account. In line with this it is vital that the understanding of *access* includes all key dimensions such as: availability; geography; affordability; accommodation; timeliness; acceptability; and awareness.

With regard to naturopathy and Western herbal medicine services, challenges and opportunities affect the delivery of equality in access to primary health care services to ensure health equity amongst chronic disease populations. These directly relate to accessibility of services based on both geography and affordability but are also indirectly influenced by accommodation, timeliness, awareness and acceptability.

Accessibility of Services: Factors influencing the acceptability of naturopaths and herbalists as health care providers

The factors associated with an increased prevalence of naturopathic consultations in Australia has received increased attention in the last 10 years. Individuals with low health scores are more likely to consult with a naturopathy or herbalist which may also explain the increased frequency with which users of naturopath/herbalist services are also visiting with general practitioners or specialists. (12) Specific characteristics linked to an increased likelihood of visiting with a naturopath and herbalist for healthcare includes private health insurance coverage and positive attitudes to the level of support, communication, and appointment duration, provided by a naturopath/herbalist when compared with a conventional health provider. (13) In addition, individuals consulting with a naturopath/herbalist are more likely to perceive that natural medicine increases self-determination of their body and their health, as well as being more natural than conventional medicine. (13)

Accessibility of services: Ensuring equity for communities in all areas

Health services in non-urban areas in Australia face a number of challenges directly linked to their location. These include health workforce recruitment and retention, geographic isolation, the rural locale, and broader health systems and social structures. (14) Addressing health services access issues in rural and remote communities requires not only that the 'supply' of health services is addressed but also that these match the 'demand' of the population needs and preferences. (15) This directly supports the need to ensure that health services align with patient's attitudes and beliefs about health and as well as the personal and practice characteristics of practitioners. (15)

Table 1: The ratio of General Practitioners to naturopaths in divisions of general practice in rural NSW

Division of General Practice	Population	Number of GPs	Number of Naturopaths	Ratio of GP to naturopath
Barrier	24 433	18	3	6.0
Barwon	55 619	43	4	10.8
Dubbo-Plains	99 361	69	12	5.8
Hastings McLeay	94 850	106	26	4.1
Hunter Rural	200 319	170	65	2.6
Mid-North Coast	125 861	116	54	2.1
Murrumbidgee	63 411	54	13	4.1
New England	64 155	63	15	4.2
NSW Central West	170 180	108	39	2.8
NSW Outback	17 051	16	3	5.3
NSW Southern	175 514	219	63	3.5
North West Slopes	59 979	54	10	5.4
Northern Rivers	158 801	174	138	1.3
Riverina	115 074	80	22	3.6
Shoalhaven	87 472	96	35	2.7
Southern Highlands	48 431	61	28	2.2
Tweed Valley	24 000	23	11	2.1
Total	1584 551	1470	541	2.7

Source: Wardle, J., et al., Aust J Rural Health, 2011. 19(4): p. 197-204.

Supply issues exist within rural Australia with non-urban residents reporting less satisfaction with their level of access to a medical specialist if needed and the number and choice of GPs. (16) Specific characteristics are associated with rural residents demand for health services including a higher prevalence of consultations with a naturopath or herbalist. (12) This finding has been explained by a number of factors including informal community networks, traditional cultural beliefs, and closer ties or referral between GPs and naturopaths in rural communities. (17)

The distribution of naturopath/herbalists amongst rural areas may potentiate the role they are currently playing in providing care to communities both well-served and under-served by GPs. This suggests that consultations with a naturopath/herbalist may not be driven by poor access to conventional services but rather by patient perceptions of healthcare acceptability. With this in mind, an appropriate approach to health equity requires that the population's needs and preferences are met, and thus extends to ensuring that patients' preferring to consult with a naturopath or herbalist as part of their chronic disease management team are appropriately supported to do so by the broader health system.

Recommendation: Develop equity-based health service models by enabling access for individuals who consult with a naturopath or Western herbal medicine practitioner for chronic disease prevention and management, particularly those living in non-urban areas.

Funding models: Ensuring equity for all socioeconomic groups

The scientific and medical advances over the years in addition to improved living standards have demonstrated the ability to save lives and contribute to a longer life expectancy, however a consequence of this is the growing challenge of people with chronic diseases. In a background and policy paper by Sharon Wilson (2014) on chronic diseases in Australia, she states that we cannot afford a 'business as usual' approach directed towards the effective management and treatment of specific chronic diseases in sick individuals. We need to look at changing the course of action in our chronic disease management. (18)

Considering that chronic disease accounts for the majority of deaths and illnesses in Australia, it correlates with the fact that it results in substantial spending in the health system. The AIHW (2014) found that in 2008-09, the government health system expenditure on chronic disease included \$7.74 billion for cardiovascular disease, \$6.38 billion for mental health, \$5.67 billion for musculoskeletal conditions, \$4.95 billion for cancer, \$4.59 billion for respiratory conditions, \$3.39 billion for nervous system disorders and \$1.52 billion for diabetes mellitus. (19)

Individual out of pocket expenses for chronic disease has also been found to be on the rise in addition to the cost private health funds absorb due to chronic health conditions. A study on older Australians with chronic disease(s) in 2012 found a positive relationship between the number of chronic conditions and out-of-pocket spending on health in addition, people with multiple chronic conditions tend to be on lower incomes. The research found that people with five or more chronic diseases or conditions spent on average five times as much on their health as those with no diagnosed chronic disease. Moreover, each additional chronic disease added 46% to the likelihood of a person facing a severe financial burden due to health costs. (20)

Therefore, while the Australian health policy may minimise out-of-pocket spending for individual conditions, the costs compounded by multiple conditions fall heavily on those individuals with the lowest incomes. It's time for new incentives and health strategies than can minimise these out-of-pocket expenses and support the patients who need the assistance most. An existing solution to this problem is the Enhanced Primary Care (EPC) program which has the capacity to play an integral role in prevention and management of chronic disease with the coordination from a primary health care practitioner.

Funding models for naturopathic and Western herbal medicine consultations

Costs associated with naturopathy and Western herbal medicine consultations in Australia are currently covered by the patient and through third party funding such as health insurance rebates. Health insurance rebates in Australia cover services such as dental treatment, chiropractic treatment, home nursing, podiatry, physiotherapy, occupational therapy, speech and eye therapy, naturopathy, western herbal medicine, acupuncture, massage, glasses and contact lenses and prosthesis. This is in addition to hospital and medical costs above the Medicare rebate. However, these are usually tiered so that access to rebates for naturopathy or herbal medicine consultations are limited to the highest level of cover for general treatments (21)

Recommendation: Ensure access to reimbursement of naturopathic and WHM care from private health insurers is available to individuals with diagnosed chronic diseases within medium policy cover for general treatments.

Private health insurance rebates for naturopathic and WHM consultations provides an advantage to individuals with chronic disease who have the appropriate level of health insurance. These patients have an opportunity to benefit from qualified naturopathic care to assist with their chronic disease management (see section on p18 for details of effectiveness). However, this funding model does not facilitate health equity amongst all socioeconomic groups. Whilst relying solely on out-of-pocket expenses and/or third party funding for naturopathic consultations may not prevent patients from low-income communities from accessing naturopathic and Western herbal medicine treatments to manage their chronic disease, it does create a situation where the use of these treatments is more likely to occur without practitioner oversight. (22) Self-care is acknowledged as a vital element in chronic disease management for 70-80% of chronic disease population (10), however it is important that the public are accessing appropriate advice and guidance to direct their self-management approaches. The outcome is health inequality whereby patients from low-income communities may not receive the same level of care compared with those amongst higher income populations. In response, the extension of the ECP program is warranted to provide access to naturopathic consultations by chronic disease patients from low-income households.

Recommendation: Incorporate naturopaths and WHM practitioners into the enhanced primary care program in order to further improve patient outcomes for patients from low income communities

Principle 2: Prioritise health promotion and illness prevention

Issue: Significant, targeted and coordinated action is needed to optimise health promotion for the prevention and management of chronic disease

Health promotion is a key principle within the overall approach to chronic disease as it enables people to increase control over and improve their health. (23) Features of health promotion, as outlined in the Ottawa Charter for Health Promotion, include: building health policy; creating supportive environments; strengthening community action; developing personal skills; and reorienting health services.

The Victorian state health department in conjunction with Deakin University and the National Stroke Research Institute (24) conducted a research study that estimated the health status, economic and financial benefits of reducing the prevalence of six behavioural risk factors attributed to the development of chronic disease. It has been found that this study to date, provides the most robust and methodologically advanced approach to estimating the economic benefits of reducing chronic disease through reducing exposure to risk factors. This is an important point, and it shows the incorporation of integrated care for people with chronic disease can have a major impact on the cost burden on our Australian government, private health funds and individuals.

Given that these six behavioural risk factors play a major role in prevention of chronic diseases, identifying health modalities such as naturopathy that can assist in education and integration of health strategies may play an integral part in chronic disease management. As discussed, ensuring primary health care practitioners are fully informed of the capacity for naturopaths to contribute to health promotion for the prevention and management of chronic disease is imperative to the development of an integrated approach.

Recommendation: Educate primary health care practitioners about the skills and attributes of naturopaths and naturopathic approach to care for the purposes of health promotion for chronic disease prevention and management.

Naturopathic medicine has been defined at the beginning of this report but their involvement in health promotion deserves specific attention. There is a clear alignment between the features of naturopathy and the health promotion. (25) This is seen not only in the alignment between the principles underpinning both approaches (25) but also in the increased level of locus of control of their health reported by individuals consulting with naturopath/herbalist for their health (26)

Naturopaths prioritise attention to health and wellbeing rather than disease with an emphasis on health promotion, health education and patient empowerment which is proactive rather than reactive. Naturopathic physicians focus on individual behaviour changes such as lifestyle and nutritional changes, and primarily achieve this through clinical delivery of health promotion counselling. (27) Clinical textbooks such as “Clinical Naturopathy 2e: An evidence-based guide to practice.” By Sarris & Wardle (2014) explains in detail how naturopathic medicine uses evidence-based medicine to implement strategies for chronic diseases. (28) As such there is value in enabling naturopaths to assist in health promotion activities related to chronic disease.

Recommendation: Utilise naturopaths within health promotion initiatives targeting chronic disease prevention and management

Specific areas through which naturopaths may be best employed to assist in primary health care support for chronic disease prevention and management is through general application of preventive medicine as well as specific interventions such as lifestyle coaching and patient education

Preventive Medicine

Another opportunity for primary health networks to coordinate support for chronic disease prevention and management is through preventative medicine. Naturopathic medicine and WHM have a particular focus on preventative medicine and are an excellent option for implementing preventative strategies to patients with chronic disease. There has been a commitment to the prevention of disease and health promotion otherwise known as the wellness paradigm in addition to community health services implementing a wellness focus. (29) Recognising therapists such as naturopaths and WHM and the potential benefits to preventative medicine that they can attribute is critical. The emphasis on lifestyle is inherent for most CM therapies and it offers a unique opportunity for preventative health approaches. (30)

An example of preventative medicine is the low-grade inflammation diet. (31) The implication of low-grade chronic inflammation and chronic disease pathology has now been established, as an unresolved inflammatory response is likely to be involved from the early stage of disease development. It has been found that implementing a low-grade inflammatory diet can positively modulate inflammation, which in turn provides great benefit to patients with chronic disease. (31)

Many opportunities of implementing similar preventative medical interventions by naturopathic practitioners through the primary health care network can be made available. This would provide a valuable opportunity to decrease the onset and progression of certain chronic diseases in addition to decreasing health costs for both individuals and government authorities.

Lifestyle Coaching

Lifestyle coaching is a core foundation of naturopathic medicine and plays a major role in patient health and wellbeing, particularly in a patient-centred integrative care mode (32) An American study addressing an initiative for improving patient-centred care in the United States focused on implementing a lifestyle approach. The authors implemented a 1-year web based lifestyle intervention in addition to semi-structured interviews to ascertain patient's perception of this concept. The response to this intervention found a high level of satisfaction with the online lifestyle coaching (80%) and self-monitoring tools (57%). These findings suggest that utilisation of lifestyle coaching, despite the challenges for communicating effectively in an online forum, provides a valuable tool for patient-centred care and improving healthcare delivery and quality.

There are numerous other lifestyle coaching interventions which have shown positive responses for patient care in chronic disease. These include stroke, diabetes, cancer, leg ulcer patients and coronary heart disease. (33-38)

Patient Education

As mentioned previously, education both for medical and CM practitioners on how to integrate for patient-centred care in addition to patient education for chronic disease prevention and management is imperative for the future of health in Australia. The successful integration of medical and CM practitioners is integral for best patient outcomes. The barriers currently experienced between the two medical fields needs to be bridged to align values and concepts to best suit patient needs. This aspect needs be addressed first before patient education can be implemented.

Expanding on this concept is self-management health care - a theory based approach recognising the central role of an individual in taking care of their health, preventing disease and managing existing illnesses or conditions. Within this self-management, individuals with chronic conditions utilise CM and allied professionals to assist in the management and education of how to take care of and manage their current illness. In Australia, self-management practices have been found to be effective in improving both the process of care and patient outcomes and have been used to relieve the increasing pressure on the acute care system however, they are not firmly embedded in primary care. (39)

The development of multidisciplinary team environments and utilisation of the Enhanced Primary Care (EPC) package has assisted the integration of primary medical care and allied health professionals. However expansion of this model is necessary to assist in the increasing demand of chronic health in our Australian population. Education sessions and understanding of different health modalities and how they can be integrated needs to be implemented for all health professionals. It has been identified that the challenge of integrating various forms of health care is that each health modality needs to recognise that they could benefit from learning from each other and how they can assist each other's treatment. (40) From there, patient-centred education systems and self-management policies can be implemented to produce best patient outcomes.

Principle 3: Achieve person-centred care and optimise self-management

Issue: Individuals with chronic disease require personalised support to develop self-management skills and implement sustainable self-management plans

Person-centred care is a term, which is often used but equally often misused. Patient-centred care is care, which places the patient’s needs and preferences at the centre of the clinical interaction. There is a strong alignment between the characteristics of patient-centred care desired by patients, (41) and the naturopathic approach to consultation and the naturopathic principles underpinning practice (42) (see Table 2).

Table 2: Alignment between patient-centred care, naturopathic patient management and naturopathic principles

PATIENT-CENTRED CARE	NATUROPATHIC PATIENT MANAGEMENT	NATUROPATHIC PRINCIPLES
Explore the patients’ main reason for the visit, concerns, and need for information	Explore the range of problems	Identify and treat the cause
Seeks an understanding of the patients’ world (e.g. whole person, emotional needs, life issues)	Understand each problem	Treat the whole person
Finds common ground on what the problem is and mutually agrees on management	Determine the goals	
Enhances prevention and health promotion	Provide treatments Consolidate independence	Prevention
Enhances the continuing relationship between the patient and the doctor		Doctor as teacher

Particularly relevant to optimisation of self-management is the naturopathic principle of *docere* or ‘doctor as teacher’ through which naturopaths are expected to engage directly with educating patients about good health practices to optimise their current health and prevent future health concerns. In line with this, a key element in naturopathic patient management is the consolidation of independence whereby the practitioner works with the patient to ensure they have the necessary self-help skills to implement an agreed and ongoing self-management program.

In line with the stated position and approach of naturopaths to client management, is the perspective of clients towards naturopathy. A number of factors have been identified by users of naturopathic services to describe the reasons, which motivate their use:

- a) the **interpersonal** dimension of experience of the relationship between the consumer and the practitioner and the communication that occurred between them;
- b) the **physical** dimension of the experience which comprised of the sensations the consumer experienced through the treatment or that resulted from the treatment;
- c) the **affective** dimension which incorporated the more emotional aspects of treatment such as feeling empowered, happy or re-assured; and
- d) the **cognitive** dimension which reflected the experience occurred on a more abstract level e.g. attitudes and beliefs

Hence, positive perceptions of a naturopathic practitioner and belief in the treatment plays a major role in the motivation of a person to visit and comply with treatment from a naturopath. The high prevalence of consultations with a naturopath and public confidence in treatments employed by naturopaths opens up many opportunities for collaboration and integration with the Primary Health Networks. Achieving patient-centred care and optimising self-management is already a core focus of naturopathic care and as such would be easily achieved for primary health care by developing formal collaborations with naturopath as part of chronic disease case management teams. However, it also highlights an imperative to focus on open collaboration and communication between all health professionals when providing care to the same patient. (43)

Collaborative care, patient-centred care and naturopathy

The development of collaborative healthcare is a relatively recent phenomenon among medical and CM professionals. It is defined as the collaboration and interaction between western biomedical and CM for the best benefit of a patient. (40) Collaborative and integrative health care has been recognized internationally and occurs in various contexts e.g. hospitals, health clinics etc. Collaborative health care incorporates various aspects of inter-professional education and inter-professional collaboration. This has received increased attention globally since the early 1970's with the World Health Organization (WHO) establishing an Expert Committee on medical education and recognising the role of traditional, complementary and alternative medicine (TCAM) to enhance primary healthcare in 1978. (44)

Although the concepts of inter-professional education and collaboration and naturopathy are recognised and advancing, a paradox still exists. Both conventional and naturopathic fields of health are concerned with communicating about and attempting to resolve differences within their healthcare professions with the same fundamental goal of improving patient outcomes. However, they remain quite distinct fields of practice rather than functioning in a collaborative manner. This disconnection could be due to the fact that within conventional healthcare, integration is viewed within the confines of the common practices of medicines whilst the naturopathy and herbal medicine acknowledge the need for integration to cross professional boundaries and promote collaboration amongst all practitioners providing care to the same patient. (44)

Collaborative care, patient-centred care and responding to patient are far from mutually exclusive. The opportunity to effectively achieve these goals lies with the ability of health professionals to communicate, educate and collaborate with each other either in the same or separate locations for the best interest of the patient. (45, 46) This collaborative, team-based approach to care is vital if patient-centred care is to be supported for individuals who are currently choosing naturopaths to assist in the management of their chronic disease.

Recommendation: Utilise naturopathic expertise in patient-centred care and approach to the development of patient self-management to provide adjuvant support to existing chronic disease prevention and management programs.

Principle 4: Provide the most effective care

Issue: Ensure individuals with chronic disease have access to the most effective care in line with evidence-based practice principles

Evidence-based practice represents a confluence of three key areas: the best available evidence, clinical experience, and patient preference. With this in mind, and in acknowledgement of the use of naturopathy by individuals with chronic disease, it is important to consider the best available evidence related to these individuals' preferences. In addition, substantial research attention has been directed towards therapies, treatments and interventions used by naturopaths in clinical practice. These include dietary therapy, lifestyle counselling, nutritional supplements, and herbal medicine amongst others. A review of the current research literature identifies a number of conditions for which naturopathic care has been found to be both effective and safe (see Table 3).

Examining the current research evidence in addition to potential areas of assistance, the opportunities for integration of health professionals for best patient outcomes could be implemented for the following chronic diseases:

- Chronic kidney disease
- Cardiovascular disease
- Diabetes mellitus
- Mental illness
- Pain
- Musculoskeletal disease
- Osteoporosis
- Asthma and other breathing disorders
- Auto-immune diseases
- Chronic Neurological diseases
- Chronic Digestive disease

Table 3: A preliminary overview of research evidence associated with the safety and effectiveness of naturopathy and Western herbal medicine in the prevention and management of chronic disease

Year	Author	Condition	n=	Methodology	Results
Asthma and other breathing disorders					
2014	Rao (47)	Asthma	159	Retrospective analysis	Combination of naturopathy and yoga had a beneficial effect for the management of asthma
Autoimmune disease					
2009	Burgos (48)	Rheumatoid arthritis (RA)	60	Prospective, DB RCT	<i>Andrographis paniculata</i> use showed reduction in rheumatoid factor, IgA, and C4. May be useful as a complement treatment in RA
2008	Shinto (49)	Multiple Sclerosis	45	3 arm RCT	Naturopathic intervention alongside standard care showed a trend in general health improvement (SF-36)
2005	Weinstock-Guttman (50)	Multiple Sclerosis	31	DB RCT	Low fat dietary invention with omega 3 showed moderate benefits in MS concurrent medical care
2004	Duffy (51)	Systemic lupus erythematosus	52	DB, RCT	Significant improvement in modifying symptomatic disease activity compared to controls. Decline in SLAM-R score (p=0.05) in experimental group compared to placebo.
Cardiovascular Disease					
2013	Seely (52)	Cardiovascular Disease (CVD)	246	RCT	Additional naturopathic care to usual care may reduce those at risk of CVD
2011	Bradley (53)	Hypertension	85	Retrospective cohort	High risk population with hypertension showed improvement in blood pressure measurements during naturopathic care
2014	Herman (54)	Cardiovascular Disease	246	Cost-effective analysis	Naturopathic approach to CVD significantly reduced CVD risk over usual care. Outcomes was associated with reduced costs and biometric screening.

Year	Author	Condition	n=	Methodology	Results
Chronic Digestive Disease					
2006	Hanai (55)	Ulcerative colitis (UC)	89	DB, RCT	Curcumin showed promise in maintaining remission in patients diagnosed with UC
2000	Milliman (56)	Hepatitis C	41	Consecutive case series	Conventional approach alongside dietary and lifestyle medication showed to be effective in the treatment of Hepatitis C.
Chronic Kidney Disease					
2012	Vahid (57)	Chronic kidney disease	31	RCT	<i>Achillea millefolium</i> treatment group had decreased plasma nitrite and nitrate concentrations after 2 months, Results were clinically but not statistically significant
Chronic Neurological diseases					
2014	Canevelli (58)	Alzheimer's disease	828	Prospective multicentre cohort study	<i>Ginkgo biloba</i> may provide some cognitive benefits for patients already using cholinesterase inhibitors in Alzheimer's.
Diabetes mellitus					
2012	Bradley (59)	Diabetes mellitus (Type 2)	40	Prospective observational with controls	Self-monitoring noted improvements in glucose, diet, motivation and food following naturopathic care in inadequately controlled type 2 diabetes.
2009	Bradley (60)	Diabetes mellitus (Type 2)	37	Retrospective cohort	Preliminary outcomes showed risk factor improvements with naturopathic care.
2006	Bradley (61)	Diabetes mellitus (Type 2)	16	Retrospective cohort	Most naturopathic care to participants was conjunctive. Evidence based lifestyle changes were commonly recommended.

Year	Author	Condition	n=	Methodology	Results
Mental illness					
2014	Sarris (62)	Depression & anxiety	8	Observational pilot study	Preliminary data revealed that naturopathic medicine may provide some benefit in improving mood and reducing anxiety.
2009	Sarris (63)	Major depressive disorder with comorbid anxiety	28	RCT	St John's Wort and Kava gave a greater reduction in self-reported depression on the BDI-II over placebo.
2009	Cooley (64)	Anxiety	75	RCT	Both naturopathic care and psychological therapy lead to significant improvements in anxiety.
Musculoskeletal Disease					
2009	Szczurko (65)	Rotator Cuff Tendinitis	85	RCT	Naturopathic care showed greater improvement in should function compared to PE group. Statically significant improvements were also noted in quality of life measures for the naturopathic care group.
2008	Ritenbaugh (66)	Temporomandibular Joint Disorders	160	3 arm RCT	Both naturopathic care and Traditional Chinese medicine resulted in greater reduction of pain and psychosocial interference than speciality care.
Pain					
2007	Szczurko (67)	Chronic Low Back Pain	75	RCT	Naturopathic care showed significant improvement in chronic back pain compared to physiotherapy advice.
2008	Herman (68)	Low back pain	75	Cost-effective analysis	Naturopathic care was found to be more cost-effective compared to standard physiotherapy education regimen in chronic low back pain.

*RCT = Randomised controlled trial, DB = Double blind

This illustrates that inclusion of naturopaths within a patients' chronic disease prevention and management care team supports provision of effective care. Aligning primary healthcare with evidence based medicine assists in building trust and support between all health professionals and encourages the proposition of collaborating for best care of patients.



Recommendation: Recognise the current contribution of naturopaths and WHM practitioners to chronic disease prevention and management in Australia.

Recommendation: Incorporate naturopaths into patients' chronic disease prevention and management care team where there is evidence of the effectiveness of this type of care.

Principle 5: Facilitate coordinated and integrated multidisciplinary care across services, settings and sectors

Issue: Identify best practice of multidisciplinary teams chronic disease management in primary health care

The management of chronic disease is very complex with many Australians living with multiple chronic diseases. In 2007-08 it was reported that one in 50 people in Australia had four or more chronic health conditions including asthma, type 2 diabetes, coronary heart disease, cardiovascular disease, arthritis, osteoporosis, chronic obstructive pulmonary disease, depression and high blood pressure. This number increased proportionally with age as 8% of people aged 65 or older had four or more these chronic diseases. (18)

Chronic disease management interventions are most likely to be effective in the context of Australian primary care when the primary health care teams are engaged to support patient self-management strategies. (39) Effective team healthcare, however, centres on the following key principles: shared goals; clear roles; mutual trust; effective communication; measurable processes and outcomes. (69)

There are a number of different models of team-oriented healthcare practice which can be conceptualised along a continuum (70) (see Figure A).

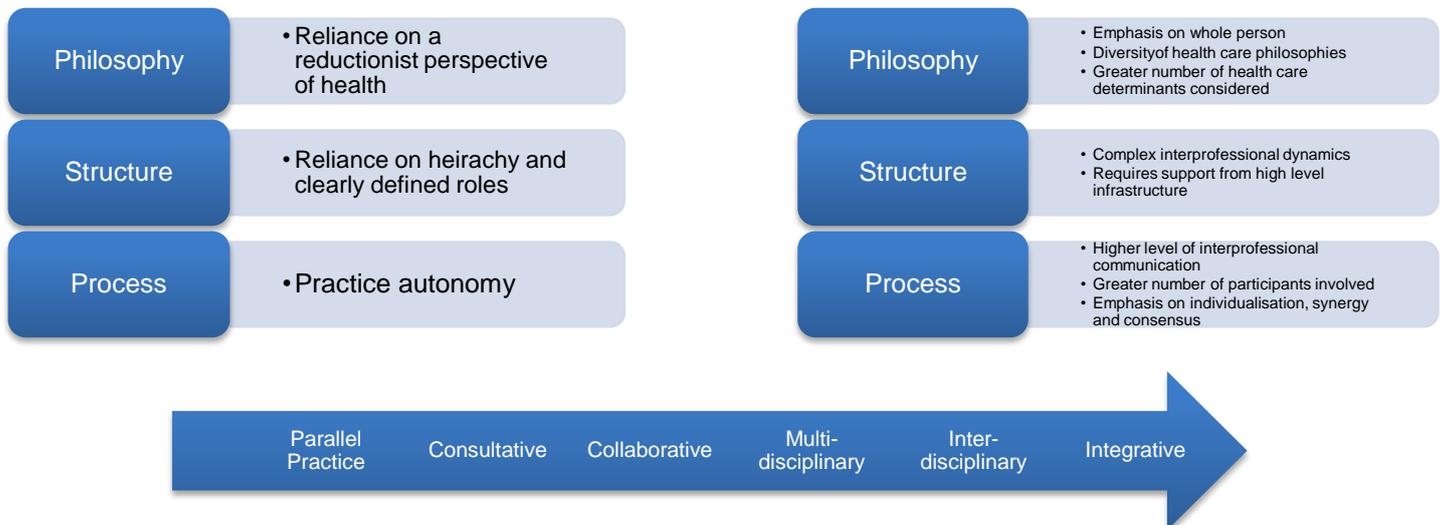


Figure A: Continuum of team health-care models

The most important factor to consider when developing multidisciplinary models is to link the model of practice with patient needs. Individuals with complex, chronic conditions have been hypothesized to have better outcomes with team-oriented practice models that provide more interdisciplinary and integrative care. (70) Overall, it is recommended that a number of different practice models for different types of care is needed above focusing on a single model to allow patients to choose the type of care that suits their needs.

With this in mind, a number of multi-disciplinary and collaborative team care arrangements are proposed below to address the needs of chronic disease patients, with particular reference to naturopathic and Western herbal medicine. The requirements needed to enact the principles of team-based health care are also presented.

GP-led care team – more than Enhanced Primary Care

General practitioners (GP) are the well-established providers of primary carer for the Australian general population. Therefore, GP's have been the main health professional leading and coordinating the chronic disease prevention and management plan for each patient. Recent research has identified that when GP's offer GP-led integrated care to patients with chronic health conditions the effectiveness of this approach hinges on the GPs ability to provide a flexible and personalised approach to care. (71) Other research has found employing practice nurses to lead the care of individuals with stable chronic conditions had a similar cost-utility compared with GP-led care. (72, 73)

Within the GP-led care team approach the skills and knowledge of naturopaths and Western herbalists has the capacity to enhance the outcomes of the traditional primary care team. This can be through functioning as 'care guides' (74) whereby they can provide support to patients in achieving care goals. These care goals can be agreed through consensus by the multidisciplinary team providing care to the patient and in discussion with the patient themselves.

Recommendation: Utilise naturopaths as 'care guides' to assist the achievement of care goals for medium and long term chronic disease prevention and management

Naturopaths are trained to be able to provide nutritional education incorporating concepts of clinical nutrition. (28) Clinical nutrition is a growing area of research that focuses on essential scientific information on nutritional and metabolic care and the relationship between nutrition and disease both in the setting of basic science and clinical practise. Clinical nutrition and clinical nutritional care has gained global clinical and scientific interest during the past decades (e.g. Clinical Nutrition Journal: <http://www.clinicalnutritionjournal.com/>). The increasing knowledge of metabolic disturbances and nutritional assessment in chronic diseases has stimulated rapid advances in the design, development and clinical application of nutritional support and research.

In addition, naturopaths and WHM practitioners have an in-depth understanding of interactions between nutrients and herbs and pharmaceutical drugs. The adjunct of specified nutraceutical and herbal medicine supplementation has the ability to increase the efficacy of pharmaceutical drugs in addition to decrease side effects, support quality of life and prevent further deterioration of the chronic disease(s). In comparison, a number of studies have identified low levels of confidence and knowledge gaps in these areas for many Australian community pharmacists. (75, 76)

Recommendation: Employ naturopaths and Western herbal medicine practitioners to work alongside pharmacists to provide oversight and guidance on potential and known drug-nutrient and drug-herb interactions for patients with chronic health conditions.

However, to embody the principles of team-based healthcare, there is a need to develop and strengthen each team members understanding of other professionals within the team, including a clear definition of roles. When considering naturopaths and WHM practitioners, it is important for GP's to know when, how and why they would refer patients to these health professionals, and how to facilitate and encourage communication between each member of the care team. Current evidence indicates there is little interaction (both via referrals as well as the development of professional relationships) between the naturopathic and GP communities in localised regions, despite the likelihood of shared responsibility of care for patients utilising both services. (77)

Patients with chronic disease are frustrated with the lack of communication between allopathic medical practitioners and their naturopathic practitioners. In addition to patient's frustration with the lack of communication, it has also been recognised that there is a substantial impact on economic, social, psychological, emotional and collateral costs to the patient, the patient's social network, the clinicians and the larger society in general due to poor communication between patients, naturopathic practitioners and the medical fraternity. Bridging the gap and focusing on communication as the heart of the agenda should assist in opening dialogues between health care professionals and encourage collaboration for best care of the patients. (78)

The basis of chronic disease models has already been set so expanding on this concept and implementation requires micro-interactional determinants for interpersonal relationships of team members for best practice of a multidisciplinary team. This incorporates the willingness of health professionals to collaborate, build trust, have mutual respect and build good communication channels. (79)

The willingness to collaborate can come from many different aspects including from education, previous experience and even personal maturity. The key interactional determinants that will require time, effort and knowledge are building mutual respect and trust. This begins with mutual respect for each other profession in addition to professional competence and experience. Communication as in all areas is considered to be the core competency of any successful collaborative relationship. (44) To initiate this relationship the creation of formal non-threatening learning environments is essential such as small-group and case-based learning, collaborative competencies, inter-professional facilitation and appropriate timing. (80, 81)

Recommendation: Develop inter-professional multi-disciplinary education programs which focus on promoting inter-professional communication and collaboration to enhance the outcomes of team health care in chronic disease prevention and management

Recommendation: Include naturopaths within Primary Health Network infrastructure to optimise inter-professional collaboration and team healthcare for individuals with chronic disease utilising a broad range of services.

Recommendation: Endorse and facilitate open collaboration and communication between all health professionals currently providing care for patients with chronic disease(s), including naturopaths and Western herbal medicine practitioners.

Team-based healthcare of chronic disease prevention and management to improve outcomes for high-end frequent users of medical and health services.

The burden of chronic disease is not evenly distributed with the low socioeconomic groups, homeless, indigenous, Torres Strait Islander and rural and remote residents being identified as the high end frequency users. In figure 4 documentation of factors that affect health status that is linked with high frequency uses is illustrated. Specific models for high-end frequency chronic disease users for medical and health services involves all the strategies discussed within this report. However, an example of research on a model of naturopathic practices and a chronic disease was outlined by Bradley and Oberg (2006) who researched naturopathic medicine and type 2 diabetes. (82) Bradley and Oberg found that naturopathic medicine was adjunctive for type 2 diabetes and they provided evidence-based lifestyle recommendations which was supported by high level of evidence. The naturopaths evaluated incorporated 100% dietary counselling, 69% conducted stress reduction techniques, and 94% prescribed exercise. In addition, patients received prescriptions for botanical and nutritional supplementations in combination with their conventional medicine. It was concluded that education of other health care providers, patients, and health policy makers regarding the value of naturopathic practices in treatment and prevention of type 2 diabetes is warranted. (82)

Recommendation: Recognise the capacity for naturopaths and WHM practitioners to promote and encourage patient compliance by providing effective health education and lifestyle counselling as adjunct care, particularly for frequent users of medical and health services.

Conclusion

Contemporary healthcare requires a patient-centred approach and this is particularly important for individuals with chronic health conditions. Responding to the ongoing challenges of chronic disease within the health system requires innovative, and cost-effective models of care which also acknowledge the needs and preferences of the patient population. This submission argues that naturopaths and herbalists are already making a valuable contribution to the prevention and management of chronic disease in Australia. We propose a number of recommendations which will strengthen the overall response to the challenges of primary health care management and prevention of chronic disease populations.

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Appendix 1

Constitution and codes of Practice and Ethics of the NHAA

<http://www.nhaa.org.au/about/code-of-ethics-constitution>

Appendix 2

NHAA Course Accreditation System

<http://www.nhaa.org.au/education/course-accreditation-system-cas>