

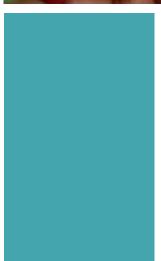


COMPLEMENTARY MEDICINE: 3 VITAL INVESTMENT PRIORITIES













With the support of









The National Institute of Complementary Medicine is seeking to leverage government, industry and community support for an evidence-based complementary medicines sector.

As this prospectus shows, with targeted investment in: a) Clinical Research b) Innovation and c) Communication and Policy Development, the health and economic benefits of complementary medicine can be realised on a viable and progressive international scale.

Complementary medicines encompass a diverse and growing range of health treatments, products and services.

Two out of three Australians use complementary medicine. spending more on complementary medicine products than out of pocket on pharmaceuticals. Many are prescribed or recommended by GPs. More than 40% of users take complementary medicines for chronic medical conditions, where current treatments may be expensive, ineffective or have unwanted side effects. Yet this use often occurs without a full understanding of the effectiveness of complementary medicine treatments.

It is vital for the health of all Australians that high quality research is undertaken into the safety and efficacy of complementary medicine. In many cases complementary medicine interventions have been shown to be clinically effective, some with better safety profiles and greater cost effectiveness than conventional care while others are of doubtful benefit.

Complementary medicine research at the University of Western Sydney has the highest ERA rating of 5, signalling research well above world standard, and has been recognised in 2013 with a



The benefits of support for complementary medicines research

- » Help Australian consumers and health professionals choose safe and effective complementary medicines
- » Grow a responsible and robust Australian complementary medicines industry with excellent export potential
- » Capitalise on Australia's research and manufacturing strengths and reputation
- » Fully utilise a range of approaches to address the growing chronic disease burden

prestigious international Chinese Government award for contribution to Chinese Medicine research, one of only three awarded internationally. Nonetheless, Australia fails to capitalise on its research strengths in this area, spending less than 0.2% of its health and medical research budget on complementary medicines.

Consumers of complementary medicines will benefit if government works in partnership with industry to promote research and development (R&D) in the sector. The complementary medicine industry is worth \$3.5 billion with an annual growth rate of 5.3% that will support nearly 45,000 jobs by 2018. International demand for complementary medicine products is growing at even higher rates than those experienced domestically,

with the quality of Australian products well recognised overseas. However, industry investment in research is minimal, partly because of the lack of relevant intellectual property protection for R&D in Australia that exists in other countries.

Translating complementary medicine research into better health outcomes for all Australians is essential in an ageing population with chronic medical conditions and increasing health costs. Support for industry led R&D will grow local complementary medicine manufacturing to develop new products, capture international export opportunities and deliver jobs for all Australians.

Professor Alan Bensoussan Director, National Institute of Complementary Medicine (NICM)

Key Recommendations



How can Australia capture the health benefits of complementary medicines?

Commit 1% of National Health and Medical Research Council (NHMRC) project funds annually (or \$8m pa) to complementary medicine research priorities and capacity building for 2014-2018.

The NHMRC allocations for research funding in complementary medicine have been low – 0.2% of total funding over the past ten years. This could be administered as an NHMRC Targeted Call for Research (TCR), a solicitation for grant applications addressing a defined research topic.

This recommendation does not require additional government funding and does not alter the overall budget for the NHMRC.

2 INNOVATION

How can Australia support and encourage greater industry-led investment in R&D?

Establish a Working Group to consider and implement key incentives that encourage greater industry-led investment in R&D to improve productivity, grow exports and increase employment opportunities.

The Working Group will consider improvements to the current regulatory regime that promote innovation for example, by providing data protection for new products supported by scientific research, as already in place internationally. Providing intellectual property protection for R&D in complementary medicines, along with other initiatives, will encourage product innovation, better quality complementary medicines and significant domestic and export industry growth.

This recommendation does not require additional government funding.

COMMUNICATION AND POLICY DEVELOPMENT

How can we ensure that we support relevant national research priorities, develop appropriate policy, and that research is translated into better health choices for consumers?

Continue matching support for Australia's national agency, the National Institute of Complementary Medicine.

The National Institute of Complementary Medicine was established in 2007 as Australia's national agency dedicated to working closely with key stakeholders including the NHMRC, ARC, disease foundations, health insurers, industry, consumers, clinicians, government and others, to guide the development of national research priorities in complementary medicine, strengthen relevant policy, and ensure informed healthcare choices through better information to consumers and clinicians.

Continuing Australian Government support in the form of \$2m pa is vital over 2014–18, and will be matched with cash and in-kind support by the University of Western Sydney, State Government, disease foundations, private sector and other stakeholders.



How can Australia capture the health benefits of complementary medicines?

Commit 1% of NHMRC project funds annually (\$8m pa) to complementary medicine research priorities and capacity building 2014–2018

Complementary medicines are an accepted part of the healthcare landscape

At least two out of three Australians use some form of complementary medicine,² with rates as high as 87% among specific patient groups, such as those with breast cancer.³

Australians invest heavily in complementary medicines, spending over \$3.5 billion each year on complementary medicines and therapies.⁴ Consumers use them as part of their self-care approach and seek better information to support their healthcare choices.⁵

Complementary medicines can make an effective contribution to chronic disease management

Australia currently spends 9.3% of GDP on healthcare which is predicted to increase with an ageing population. The utilisation and further development of high quality, cost effective and safe complementary medicines provides an opportunity to defray these costs through better disease prevention and more effective chronic disease management, and potentially less reliance on the hospital system and the PBS.

Research enables the identification of effective complementary medicines which should be adopted for better healthcare, and ineffective complementary medicines which should not be promoted. Evidence has shown many complementary medicines to have excellent safety and efficacy profiles, providing advantages over current treatments.

Complementary medicine may improve outcomes when integrated with conventional care

The following complementary medicines have evidence to support their use in this integrated fashion:

- » St. John's wort for mild-moderate depression.7
- » Acupuncture for pain relief.8
- » Co-enzyme Q10 for hypertension.9
- » Saw Palmetto for benign prostatic hypertrophy.¹⁰
- » Calcium and vitamin D supplementation to reduce the incidence and severity of osteoporosis.¹¹
- » Fish oil supplements to prevent secondary cardiovascular mortality and morbidity in Australia.⁴
- » Acupuncture for the management of lower back pain when used in combination with conventional treatments. For instance, the UK National Institute for Health and Clinical Excellence (NICE) recommends that patients are offered a course of acupuncture alongside conventional therapies.⁴

Australian Government support for complementary medicine research is minimal

Globally the importance and benefits of complementary medicine has been recognised by a substantial international investment in the sector. The US currently invests approximately \$300m per annum in complementary medicine research across National Institute of Health (NIH) centres.¹³ By comparison, Australia allocated \$32.7m in 2005-07 on complementary medicine research, with industry contributing 37% of total funds.¹⁴ A total of \$3.65m was provided for complementary

medicine research by the NHMRC during this period. The research investment by the NHMRC has fallen further in recent years to negligible levels.¹

NHMRC funding for complementary medicine has been 0.2% of total funding from 2003-2012, despite high levels of usage by the Australian public and despite being acknowledged as a major health issue in successive NHMRC Strategic Plans.

In 2012, funding for complementary medicines fell to 0.14% of total funding or \$1.24m out of a total of \$780m.

While Australian investment in complementary medicine research remains minimal, Australians spent \$2 billion in out of pocket expenses on complementary medicines in 2010–11. This is more than

the out of pocket contribution to pharmaceuticals of \$1.6 billion.⁶ The Government contribution to benefit-paid pharmaceuticals was \$8.2 billion in the same period.⁶

Australian consumers' reliance upon complementary medicines is not adequately reflected in research investment and policy direction by government.

Quality use of complementary medicines is hampered by the lack of investment in research

Funding for complementary medicine research is important to both prove the safety and efficacy of existing complementary medicines and also to develop new complementary medicines. Industry and research institutions are committed to addressing this problem. For example, in 2009, industry members and research institutions together committed approximately \$75m to a Cooperative Research Centre bid. The aim of this bid was to develop a multi-sector response to improve the quality use of medicines in areas of health priority including dementia, cardiovascular and metabolic disorders, where complementary medicines currently show promise and existing pharmaceutical treatments are inadequate.

2

How can Australia support and encourage greater industry-led investment in R&D?

Establish a Working Group to Consider and Implement Key Incentives that Encourage Greater Industry-led R&D

Complementary medicines represent a substantial, growing industry with manufacturing jobs and export potential in Asia

Industry revenue is currently \$3.5 billion and is expected to grow to \$4.6 billion in 2017–18.12 Over this period, employment is anticipated to rise to 45,000.12 Australian companies export around \$200m in complementary medicines to more than 20 countries in Southeast Asia, Europe and the Americas and this continues to grow at higher rates than domestic consumption.15 There is enormous growth potential for the export market.

Australia needs to provide a regulatory environment which supports product innovation

Australia needs to ensure it remains at the leading edge in complementary medicine R&D by developing solutions to key barriers to product innovation, including examining methods of data protection, mutual recognition of herbal ingredients from similarly-regulated jurisdictions, and improving the communication of information about complementary medicines to clinicians and consumers.

China seeks to strengthen the scientific evidence and uptake of traditional Chinese medicines internationally through very substantial R&D investments, the establishment of the International Traditional Chinese Medicine Program for Cooperation in Science and Technology¹⁶ and through initiatives such as the China/NSW Collaborative Research Program which provided \$500,000 in joint funding for traditional Chinese medicines research in 2010.17 Australia is the first Western nation to recognise and regulate the

practice of Chinese medicine and boasts world class researchers and facilities in this area. As a result, China is looking to Australia as a strong research partner in traditional Chinese medicines, including in undertaking clinical trials. Such opportunities will be lost if Australia is unable to commit funds to sustain R&D in this sector.

While Australian companies are well-placed to capture the export opportunities in Asia, product innovation in Australia lags behind other countries due to the lack of regulatory protection afforded to R&D in this field. Any investment in R&D may be readily utilised by competitors in the absence of appropriate protective mechanisms. Mechanisms of protection of scientific data as reward for successful research investment are available in some countries. China has established this type of protection for traditional Chinese medicines which are manufactured in China and have been included into the national drug standards with a term of protection between 7 and 30 years.18

The Complementary Medicines Working Group is an appropriate mechanism to consider sector proposals that help ensure robust and efficacious product development, improved manufacturing and exports, and quality use of complementary medicines. No such Working Group currently exists.

3

How can we ensure that we support relevant national research priorities, develop appropriate policy, and that research is translated into better health choices for consumers?

Provide matching support for Australia's national agency, the National Institute of Complementary Medicine

The National Institute of Complementary Medicine

The National Institute of
Complementary Medicine
(NICM) was established in 2007
with bipartisan support from
the Commonwealth Coalition
Government and the NSW Labour
Government with two years of
seed funding (\$4.6m) to help build
national collaborations and capacity
in complementary medicine
research. NICM has since received
over \$2.9m cash and over \$1m inkind funding from industry, university
and philanthropic organisations.

NICM has provided leadership and support for strategically directed research into complementary medicine and the translation of evidence into clinical practice and relevant policy to benefit the health of all Australians.

NICM has a clear strategy to improve the evidence based development and use of complementary medicine in Australia to promote better healthcare outcomes and world class research, as follows:

 Continue to develop the scientific evidence to examine the value proposition of complementary medicine.

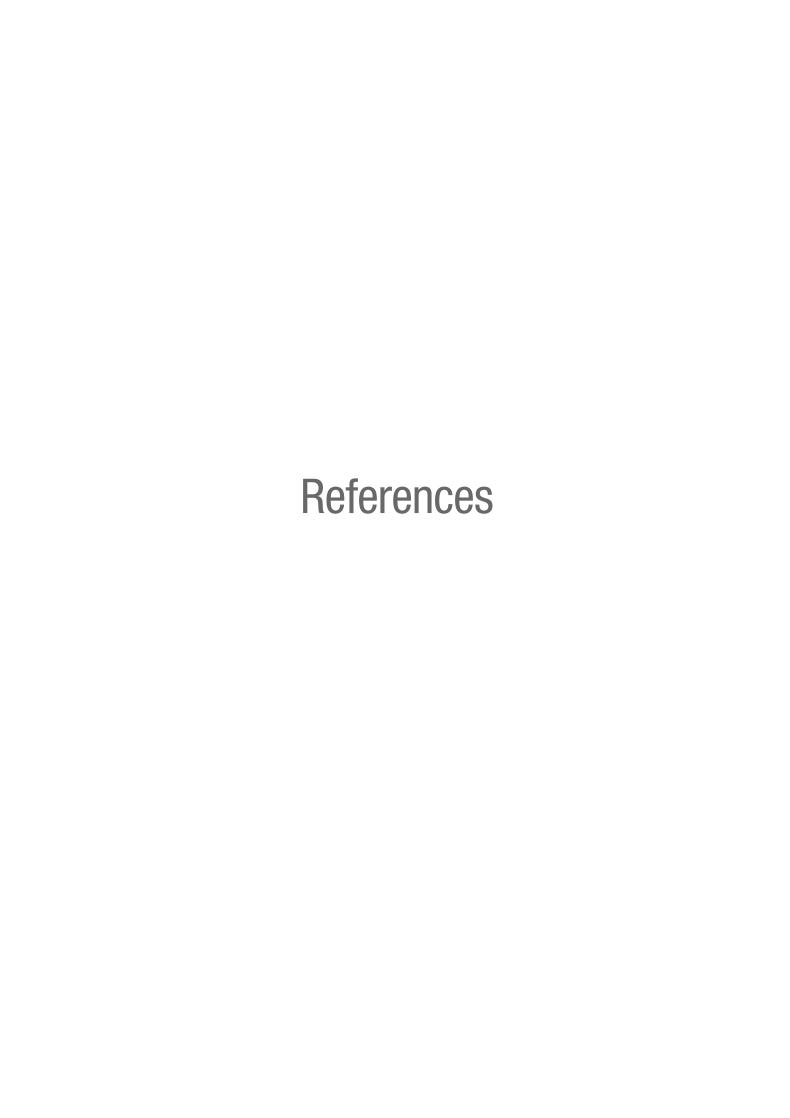
NICM will develop longitudinal data sets and linkages with key partners that lead to robust data on health outcomes, and on the cost-effectiveness of key complementary medicine interventions.

- 2. Develop national complementary medicine research priorities.
- NICM will work with key clinical experts, disease foundations and research organisations to assess the potential of complementary medicine in national health priority areas. This continues the work previously commenced in the development of a national complementary medicine Research Priorities report and in the commissioning of a report assessing the cost-effectiveness of five complementary medicine interventions.
- 3. Contribute to Government and Industry policy to strengthen
 Australian manufacturing and exports.
 NICM will work with the manufacturing sector to address industry challenges in quality control of products, data

- protection mechanisms and value adding through high quality R&D. NICM's priority is to encourage the growth of a strong, responsible yet innovative industry that contributes to improved health outcomes in the community and strengthens manufacturing and high quality exports for Australia.
- 4. Ensure informed healthcare choices through better provision of independent and accurate information to consumers and clinicians.

 NICM will play an active role in the dissemination of evidence to support informed clinical decisions by clinicians and consumers leading to improved quality use of medicines.

The National Institute of Complementary Medicine is ideally positioned to continue serving as Australia's only national agency dedicated to building an evidence-based complementary medicines sector for the benefit of all Australians. Demonstrating Australian Government leadership is critical and this will be matched with cash and in-kind funding.





- NHMRC Research Funding Datasets 2003-2012.
- National Prescribing Service. National Consumer Survey 2006: final report. Sydney: National Prescribing Service, 2006.
- 3 Kremser T, Evans A, Moore A, Luxford K, Begbie S, Bensoussan A, et al. Use of complementary therapies by Australian women with breast cancer. *Breast*. 2008;17(4):387-94. DOI: 10.1016/j. breast.2007.12.006
- 4 Access Economics (2010) Cost effectiveness of complementary medicines, Report to the National Institute of Complementary Medicine, Sydney, Australia.
- 5 National Prescribing Service, Information Use and Needs of Complementary Medicines Users, December 2008.
- Australia Institute of Health and Welfare (2012). Health expenditure Australia 2010-2011. (Health and welfare expenditure series no. 47. Cat. no. HWE 56).
- 7 Morgan AJ, Jorm AF. Self-help interventions for depressive disorders and depressive symptoms: a systematic review. *Ann Gen Psychiatry*. 2008; 7:13.

- 8 Vickers AJ, et al. Acupuncture for chronic pain: individual patient data meta-analysis. Arch Intern Med. 2012; 172(19):1444-1453. Published online September 10, 2012. doi:10.1001/archinternmed.2012.3654.
- 9 Rosenfeldt FL, et al. Coenzyme Q10 in the treatment of hypertension: a meta-analysis of the clinical trials. *Journal of human* hypertension. 2007; 21(4): 297-306.
- Beckman TJ, Mynderse LA. Evaluation and medical management of benign prostatic hyperplasia. *Mayo. Clin. Proc.* 2005: Oct;80(10):1356-62.
- 11 Tang BMP, et al. Use of calcium or calcium in combination with vitamin D supplementation to prevent fractures and bone loss in people aged 50 years and older: a meta-analysis. The Lancet. 2007; 370(9588): 657-666.
- 12 IBIS World, *Alternative Health Therapies in Australia*, August 2012.
- 13 This figure represents the combined investment in complementary and alternative medicines through the National Institute of Health's National Center for Complementary and Alternative Medicines and National Cancer Institute.

- 14 National Institute of Complementary Medicine, Complementary Medicine Research Activity & Capacity: researcher audit update, September 2008.
- 15 CHC Industry Audit May 2011.
- 16 http://ie.china-embassy.org/eng/ScienceTech/iccst/t427577.html.
- 17 http://www.business.nsw.gov.au/innovationand-research/grants-and-assistance/ chinanswcollaborative-research-program.
- 18 http://www.kingandwood.com/article. aspx?id=Protecting-Biological-and-Pharmaceutical-Intellectual-Property-Rightsin-China-Part-I-of-Il&language=en.

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