



Public Health as an Investment

New Zealand College of Public Health Medicine Policy Statement

Policy Statement

The New Zealand College of Public Health Medicine (NZCPHM) calls for increased and sustained investment in effective public health policy and programmes, to improve the health and wellbeing of the New Zealand population. This process involves the whole of society and the whole of government, and requires a human rights and people-centred approach that partners to achieve health equity.¹

The NZCPHM calls for, among other things:

1. investment in policies, programmes and services that improve population health and achieve health equity;
2. investment in public health infrastructure;
3. investment in political capital to implement policies that improve public health, including the World Health Organization (WHO)'s 'Best Buys';
4. health impact assessments (HIAs) across the policies of government entities and ministries;
5. partnerships that address the societal determinants of health, through
 - a. political commitment and leadership expressed through government policies,
 - b. strong governance, and
 - c. an intersectoral, whole-of-government approach to social investment,with eg. public health representation at all levels of government, full valuation of long-term outcomes consistently across government sectors, and management of commercial conflicts of interest in policy development.

Alongside this statement, the NZCPHM has also endorsed the New Zealand Medical Association's position statement on health as an investment.^{2,3}

Background

The context of public health and NZCPHM policy statements

Public health is the art and science of preventing disease, prolonging life, and promoting health through the organised efforts of society.⁴

Public health has always been the biggest driver of improved health for people.¹ Advancements in public health in the last 100 years, such as vaccination, control of infectious diseases through clean water and improved sanitation, and the recognition of tobacco use as a health hazard, have led to improvements in health and wellbeing, and a substantial increase in life expectancy.⁵

The NZCPHM represents the medical speciality of public health medicine in New Zealand. Public health medicine is defined as the branch of medicine concerned with the epidemiological analysis of the health and health care of populations and population groups. It involves the assessment of population health and health care needs, the development of policy and strategy, health promotion, the control and prevention of disease, and the organisation of services. Public health is focussed on achieving health equity across ethnic, socioeconomic, age, and cultural groups, and promoting environments in which everyone can be healthy.⁶

Public health medicine specialists have a professional responsibility to act as advocates for health for everyone in society.⁶⁻⁸ This means the NZCPHM advocates for and supports evidence-informed, equity-enhancing policy, that accords with te Tiriti o Waitangi, the United Nations (UN) Sustainable Development Goals, and health promotion and Health in All Policies approaches, each grounded in the societal¹, economic, and environmental determinants of health.⁷⁻¹⁷ As such, the NZCPHM calls for increased and sustained investment in public health, to improve equitable health and wellbeing outcomes for New Zealanders.

Health promotion is defined as ‘the process of enabling people to increase control over their health and its determinants, and thereby improve their health’, and Te Pae Mahutonga health promotion framework provides a uniquely New Zealand approach to health promotion (figure 1 below).^{14,18-20} This policy statement on public health as an investment aligns with all of Te Pae Mahutonga’s components of mauriora (cultural identity), waiora (physical environment), toiora (healthy lifestyles), te oranga (participation in society), ngā manukura (community leadership), and te mana whakahaere (autonomy).¹⁸⁻²⁰



Figure 1: Te Pae Mahutonga health promotion framework²⁰

Human health and wellbeing is linked inextricably to the health promoting characteristics and inter-dependencies of the family, work, educational, environmental, and planetary ‘settings’ the community finds itself in; this is depicted conceptually in Barton and Grant’s Health Map and Raworth’s Doughnut of social and ecological/planetary boundaries (figures 2 and 3 below).^{21,22} The NZCPHM’s policies recognise that individual health and wellbeing are not created in a vacuum; instead, individuals are born with a specific genome that has been shaped by the various

¹ Societal determinants of health include commercial, political, governance, economic, cultural, even religious determinants — being the societal structures that are the conditions for health and disease. Each of the structural determinants eventually impact on health in a positive or negative way.

environments of their forebears. Individuals grow and make choices in cultures and environments that support or impair their ability to live healthy flourishing lives, within wider planetary ecological limits.

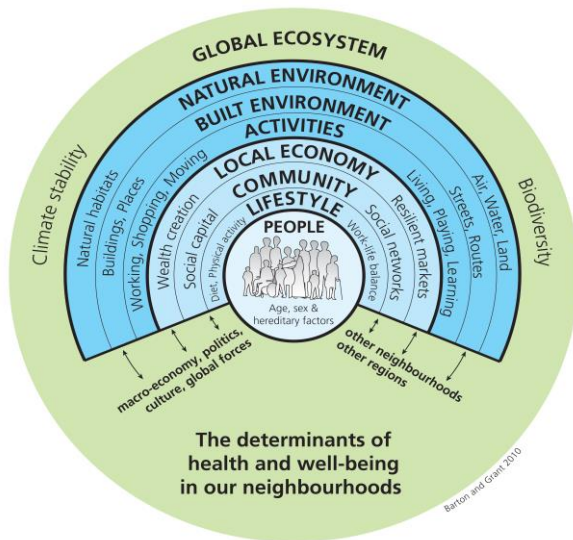


Figure 2: Barton and Grant's Health Map²¹

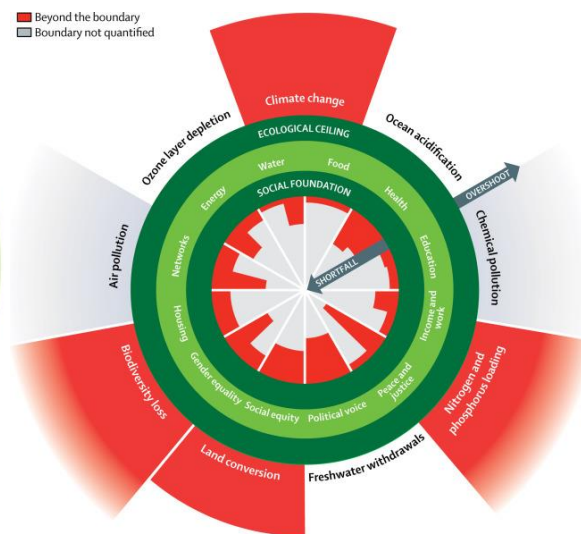


Figure 3: Raworth's Doughnut (social and ecological/planetary boundaries)²²

The NZCPHM recognises the importance of public policy, publicly funded programmes and regulation at the local and central government levels in enabling people and communities to ‘make the healthy choice the easy choice’. Various types of intervention are necessary to achieve the fundamental human right of ‘the enjoyment of the highest attainable standard of health ... without distinction of race, religion, political belief, economic or social condition’, living lives of dignity and opportunity whilst safeguarding the planet.^{22,23}

Introduction to public health as an investment

Investment in public health covers the intentional allocation and use of society’s resources to produce prolonged improvements in the health and wellbeing of whole populations and reduce health inequities. Public health investment necessarily takes a long-term perspective, rather than simply responding to immediate or short-term situations, and has to consider complex and wide benefits and costs.²⁴⁻²⁶ Public health approaches are aimed at protecting people from factors that harm health; interventions that prevent or reduce illness; and promoting improved health and wellbeing.

Investing in public health is broader than public health funding through Vote: Health. It also includes the political and governance investment needed to establish and maintain healthy public policy, programmes and regulation; investment in physical and social environments and infrastructure that protect and improve health; investment in public health and community programmes, capacity and services; and investment in developing people’s skills and knowledge to enable healthy life choices.²⁷⁻²⁹

Commonly, investing in public health entails challenges to adverse institutional, commercial and community interests in conflict with the health of populations. The NZCPHM holds that public health objectives need to take high priority, especially where there is substantial risk of harm to health and wellbeing.

Increased investment in public health, using a whole-of-society, whole-of-government approach, would support Treasury's Living Standards Framework (LSF) and the UN Sustainable Development Goals.^{12,30,31} Public health is recognised as a key driver and enabler of sustainable development.^{32,33} Increased investment in public health will provide the foundation for a healthy and productive society.

Public health and te Tiriti o Waitangi

Māori, as the indigenous people of Aotearoa New Zealand, have unique rights under te Tiriti o Waitangi and the UN Declaration on the Rights of Indigenous Peoples.^{34,35}

The NZCPHM upholds te Tiriti o Waitangi as the basis for partnership with Māori, recognises the special relationship between iwi and the Crown under te Tiriti, and recognises that Māori have the right to self-determination, and to monitor and evaluate the Crown.^{11,36}

As well as the Government's obligations to Māori under te Tiriti, there is also a moral and ethical obligation to address inequities between Māori and non-Māori. The principle of equity aligns closely with commitment to improving Māori health and achieving equity between Māori and non-Māori.¹⁰ Investment in public health constitutes and incorporates an investment in health equity and Māori health.¹¹

The importance of investing in public health

Spending on health (mainly through district health boards) is substantial, with eg. \$18.2 billion appropriated for Vote:Health in the 2018 budget.³⁷ Other significant health spending includes that of the Accident Compensation Corporation (ACC), other central government agencies, local government, and private funding sources such as insurance and out-of-pocket payments.³⁸

In recent years, governments around the world have responded to economic and budgetary difficulties by reducing relative spending on health, including public health.^{27,28,39} However, that approach will be damaging in the long term. Spending on health, including public health, is highly beneficial for society.⁴⁰ In addition to bringing improvements in health, wellbeing, and quality of life, it is associated with increased labour supply and productivity, and health has been shown to be a major contributor to economic growth.^{2,41}

Furthermore, evidence indicates that public health interventions are cost-effective (with some being cost-saving for healthcare systems and even revenue-raising for government) and contribute to improvements in health outcomes in the short, medium, and long term.^{27-29,42,43} A systematic review from 2017 assessed return on investment of public health interventions in high-income countries with universal healthcare (including New Zealand).²⁸ This review indicated that local and national public health interventions contribute to long-term health gain, with a median return on investment of 14:1 for health spending.²⁸ Considering these benefits, it is important that governments view and consider public health spending as a high-value investment, rather than a budgetary cost.^{44,45}

The NZCPHM advocates and works to achieve health gain and health equity. Currently, 1.1 million disability-adjusted life years (DALYs) are lost in New Zealand each year from people dying prematurely or suffering or living with a disease or disability.⁴⁶ This is equivalent to every adult and child losing 3 months of their 12-month year from ill-health or injuryⁱⁱ — either from life lost in future years because they have now died early, or from 'healthy life' lost because they suffer or are

ⁱⁱ 1,092,000 DALYs NZ 2013⁴⁶ ÷ estimated NZ population 2013 4.242-4.442m × 12 months/year

impaired right now and/or in future. Preventable disease and injury make up nearly 40% of these health losses, with the excess DALY losses in Māori being the leading cause of all health loss.^{11,46,47} Cost-effective investment in public health is key to addressing this situation and thus enabling the New Zealand population to reach its potential.

Health outcomes, opportunities and participation, and inequalities at different stages of life are also important, eg. addressing child poverty and addressing loneliness and exclusion in older age.

Investment in public health can be understood as investing in core public health activities and policies, and as investing in the wider determinants of healthⁱⁱⁱ.

Investment in core public health activities

Core public health activities are concerned with disease prevention, including emerging infectious diseases and the growing burden from long-term conditions. Continued and increased investment in public health is necessary.

Health systems around the world are facing many challenges, including the ‘longevity boom’ with ageing populations^{iv}, the growing burden from long-term health conditions, emerging infectious diseases including antimicrobial resistance, climate change, health inequity and poverty, and the increasing cost of new medical technologies.^{28,48} Health systems cannot address these challenges by focusing on curative services alone; investing in the primary and secondary preventive measures^v of public health, and embedding these approaches in social policy settings that include health equity, will be important to improving health outcomes and to keeping people healthy; that is, living well, staying well, getting well, and beginning and ending well.^{48,49}

Research indicates that investment in core public health activities adds value to the health sector and also helps to control the demand for other health services, and thus lessen the burden on the health system.^{27,49} The Organisation of Economic Co-operation and Development (OECD) predicts that nations’ healthcare costs will double by 2050 if we continue with business as usual (albeit framing health expenditure as solely a cost, not investment with benefits).⁵⁰ Investing in cost-effective core public health activities is essential.

Examples of public health interventions with demonstrated effectiveness and cost-effectiveness include: childhood vaccinations; screening programmes eg. for cervical cancer; environmental interventions, eg. removing lead in paint and petrol, and enforcing drinking water standards.^{27,51} Public health modelling suggests other interventions that could potentially generate large health gains while being cost-effective include dietary salt reduction and transitioning to plant-based diets.^{52,53}

By way of specific example: the dollar investment in prevention for diseases attributable to tobacco, alcohol and unhealthy food is less than 0.5% of Vote:Health,⁵⁴ yet these unhealthy commodities contribute to an estimated one third of health loss.⁴⁶

ⁱⁱⁱ Investment in public health, in this context, is in two broad categories: what health services do (“core” and health sector public health), and what other sectors do that affects population health (the wider determinants of health).

^{iv} Conversely however, societies need to also to reframe how they perceive and embrace increased healthy longevity, to further unlock productivity and other benefits.

^v Primary preventive measures aim to prevent disease before it ever occurs, eg. immunisation against infectious diseases. Secondary preventive measures aim to reduce the impact of a disease that has already occurred, eg. daily low-dose aspirin to prevent further cardiovascular disease events.

The Public Health Clinical Network in New Zealand has described five areas of core public health activity. These are:⁴⁸

1. health assessment and surveillance;
2. public health capacity development;
3. health promotion;
4. health protection;
5. preventive interventions.

Additionally, the Network has defined seven key principles that underpin core public health activity in New Zealand. These are:⁴⁸

1. focusing on the health of communities rather than individuals;
2. influencing health determinants;
3. prioritising improvements in Māori health;
4. reducing health disparities;
5. basing practice on the best available evidence;
6. building effective partnerships across the health sector and other sectors;
7. remaining responsive to new and emerging health threats.

These five areas of core public health activity and seven underlying principles provide a framework for how increased investment in core public health could be directed. Investment should focus particularly on:

- interventions with demonstrated effectiveness and cost-effectiveness, allocating resources sustainably for health issues with high need/disease burden and large inequities (see NZCPHM Statement on [Choosing Wisely](#));⁵⁵
- developing the public health workforce and the wider health workforce in public health;¹ and
- improving collaboration and coordination between public health practitioners and the wider health system.

Such an approach would align with and contribute towards the fulfilment of the New Zealand Health Strategy of keeping people healthy, that is living well, staying well, getting well.²⁶

Investment in the wider determinants of health

The wider determinants of health are the factors outside of the health system that contribute to people's health and wellbeing. The wider determinants of health that have the greatest influence on health outcomes include housing, income, education, and employment.⁵⁶ Evidence indicates that wider determinants of health constitute the greatest overall influence on people's health.^{43,57,58}

Best health outcomes are not gained necessarily by investing in the latest (and sometimes very expensive) health technologies or programmes. Better outcomes will likely come from improving the accessibility and acceptability of existing health services and from investing in effective upstream approaches.³ Inequities in the underlying social determinants of health must also be addressed.

Figure 4 below, from The King's Fund (London), shows estimates of the various factors that influence health and wellbeing in a population; although estimates vary, as depicted in the figure, the wider socio-economic environment has the largest impact.⁴³ To have the maximal impact on improving

people's health and wellbeing, there needs to be increased investment in these wider determinants of health.⁵⁹

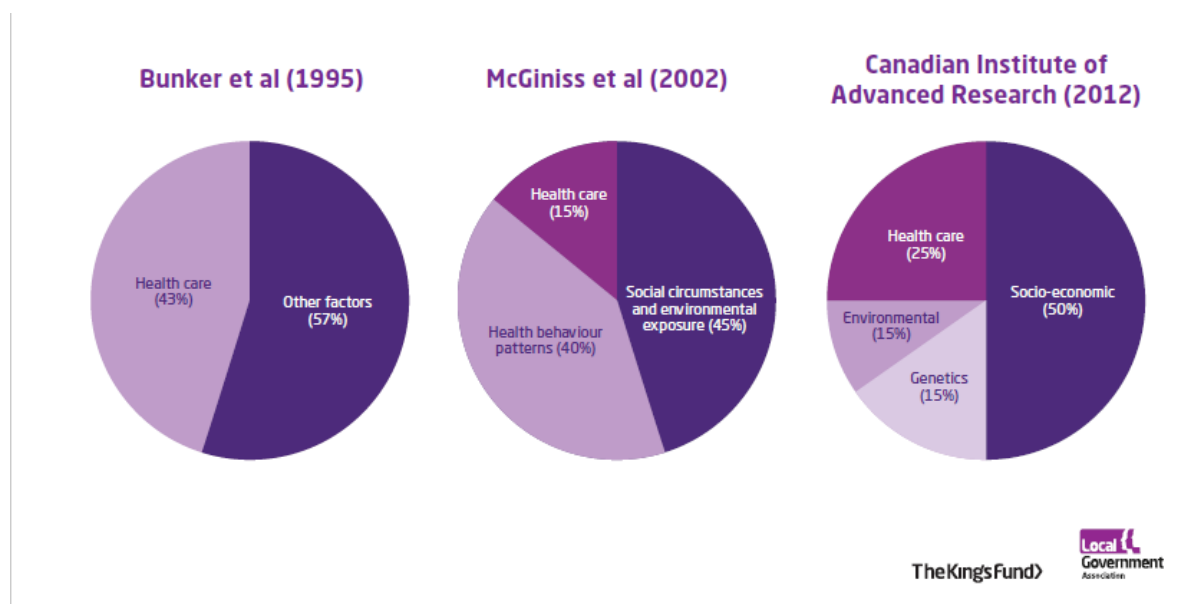


Figure 4: Factors influencing health and wellbeing in a population⁴³

A key principle underpinning public health is achieving health equity.¹⁰ Health inequities are differences in health outcomes that are unfair, avoidable, and repairable.⁶⁰ Addressing the wider determinants of health would significantly improve the health of the population overall and would also reduce health inequities between population groups.² Addressing health equity should also contribute to a healthier more productive population, with improvements in economic performance.^{6,10,56,61-63} It would also slow the growth in demand, and therefore the rising cost, of health services.^{10,56,61-63} Addressing equity is also an ethical and human rights imperative, since inequities arise largely from the societal conditions in which people are born, grow, live, work and age, not just from individual actions.⁶⁴

Public health and a whole-of-government approach

Most of the societal determinants of health^{vi} lie outside the health sector. Therefore an inter-sectoral and whole-of-government approach is needed.² Action on the societal determinants of health must be a major focus for both the health sector, and wider government and society.² Active collaboration between public health and other sectors is both necessary and important, to craft policy in areas such as transport, education, housing, taxation, and trade. Core public health services alone are not a 'silver bullet' for health and wellbeing; public health is about the organised efforts of the whole of society.^{1,4} Effective public health is intersectoral — working with a variety of agencies and partners to improve health and wellbeing through the use of a Health in All Policies approach.^{15,16,65}

Working across sectors, with the shared goal of improved health outcomes, requires political commitment and leadership, strong governance, and a whole-of-government approach to health and wellbeing.^{1,65} It includes:

^{vi} Social/societal determinants of health are the conditions in which people are born, grow, live, work and age, including factors such as indigenous status, early life conditions, disability status, education, employment/unemployment and working conditions, food security, gender, health care services, housing, income, ethnic differences, social position and social exclusion.¹⁰

- Strong governance to manage conflicts of interests, with the explicit assertion of primacy of public interests over corporate and personal private interests.¹
- Intersectoral mechanisms that increase collaboration, and a shared understanding of how the work of different sectors contributes to the health and wellbeing of the population.^{1,65}
- Public health involvement at all levels of government — national, regional, and local.¹

The NZCPHM welcomes the shift in focus in central government’s budget allocation process, from measuring fiscal and economic variables alone to the development of intergenerational wellbeing, and the embedding of wellbeing as at the being core of the process.⁶⁶⁻⁶⁹ Focussing on economic growth alone can be counterproductive and associated with poor outcomes such as greater inequality and environmental degradation.⁶⁷ Economic growth should not be viewed as the sole measure of a country’s success; the fair distribution of health, wellbeing and environmental and social sustainability are equally important goals.¹⁰

Public health investment should value long-term outcomes fully and take a consistent approach across government sectors, including:

- The balancing of cost-effectiveness with need, equity, affordability, and sustainability.^{55,70}
- Using cost-effectiveness analyses that adequately assess longer term benefits against upfront costs. This includes the discounting^{vii} of non-budgetary benefits and costs over time — ie. balancing the relative value of benefits and costs in future — with discount rates that better incorporate time preference, risk and intergenerational impacts.^{24,71-86,viii}
- The use of the same value of life calculation in effect across all government sectors, when determining funding.³ For example, the New Zealand Medical Association has calculated that the imputed historical values of lives saved for published pharmaceutical investments in New Zealand have been 15 to 19 times less than that of recent major roading decisions.⁸⁷

The NZCPHM supports Treasury’s work to date on measuring wellbeing, in particular the LSF.^{30,67,74,75} The LSF considers not just fiscal sustainability, but also the wellbeing of the population; it defines wellbeing as 12 wellbeing domains (current wellbeing)^{ix} and four capitals (future wellbeing): natural, social, human, and financial/physical — incorporating also equity (“distribution”) and risk and resilience. The NZCPHM recommends the LSF:

- more explicitly consider the wider societal determinants of health and wellbeing;

^{vii} Further information on discounting can be found online in eg. Gravelle & Smith (2000)⁸¹ and Severens & Milne (2004)⁸².

^{viii} Discount rates should suitably incorporate time preference, risk and intergenerational impacts. The NZCPHM considers the discounting of non-budgetary costs and benefits over time^{71-75,81,82} should use a social rate of time preference^{24,76-78} with a long-term rate of return that is riskless (ie. risk-free) rather than risk-adjusted,^{79,80,83-85} and which considers intergenerational impacts.^{85,86}

The risk-free discount rate reflects a rate of return in reference to long-term government bond yields (ie. the rate at which the New Zealand Government can borrow),^{78,83,84} currently set at 3%.^{71,72} The 6% default discount rate is the rate used to appraise initiatives (including regulatory proposals) in CBAX^{74,75} (Treasury’s cost benefit analysis tool), reflecting the risk-adjusted rate of return.^{74,75,78} Other discount rates are used across government, most notably, the 3% risk-free rate for accounting valuations; these are used as the basis for valuing a number of public sector assets and liabilities, eg. insurance liabilities (particularly ACC’s insurance claims liability), employee benefits (such as pensions), and the student loan book.^{73,78} PHARMAC’s cost-effectiveness analyses for pharmaceuticals and medical devices discount using a riskless rate of return,⁸⁴ set by PHARMAC in 2007 at 3.5% (based on the then 5-year average real risk-free long-term government bond rate).^{83,84} PHARMAC says that it does not incorporate risk into the discount rate for cost-effectiveness analyses, as discounting represents individuals’ time preferences and any risk (or future uncertainty) is taken into account elsewhere in modelling.⁸³

^{ix} Wellbeing domains in the LSF:³¹ civic engagement and governance, cultural identity, environment, health, housing, income and consumption, jobs and earnings, knowledge and skills, safety, social connection, subjective wellbeing, time use

- include children’s wellbeing;
- be made more relevant to the New Zealand setting, including specifically Te Ao Māori perspectives and New Zealand cultural identity.^{68,88,89}

It will also be important that the separate work of other government agencies on the measurement of wellbeing^{90,91} be coordinated.^{66,67,69}

Social, economic and environmental factors are complex and interconnected, and impact on health and wellbeing.⁶⁷ Health is a key determinant of wellbeing,⁹² but this relationship is bidirectional – where wellbeing also impacts on health.⁹³⁻⁹⁵ Many of the societal determinants of health are also determinants of wellbeing. The NZCPHM supports embedding the wellbeing approach into policy-making across the entire public service^{66-69,90,91} to help entrench public health principles in institutional norms, reinforcing the whole-of-government approach to health and wellbeing.⁶⁵ This includes incorporating wellbeing indicators into the Public Finance Act 1989 and the State Sector Act 1998.^{67,69,96}

Investment in core public health and the wider determinants of health is critical to achieving the UN Sustainable Development Goals. Investment in public health can be a driver and enabler of sustainable development, and can contribute to prosperity and security.^{32,33} A recent European systematic review reported how investment for health and wellbeing drives and enables sustainable development by improving health outcomes, improving equity between population groups, and improving economic outcomes through direct, indirect, and induced economic effects.³³ Health is an important component of sustainable development, and investing in the wider determinants of health brings many benefits to a society.

Key Recommendations

Public health is a key component of the New Zealand health system and is a high-value government investment. Public health works at all levels to achieve health equity and improve the health of the population. There needs to be continued and increased investment in public health. As with health overall, this relies on ongoing demonstration and understanding of the need for and benefits of public health interventions.

The NZCPHM calls for:

1. **Increased funding for policies, programmes and services known to improve the population’s health and achieve health equity:** increasing investment in the health sector, and in particular public health, to achieve social and economic benefits.
2. **Enhanced public health infrastructure:** within the health sector, investment in an appropriate mix and configuration of publicly-funded health services, including increased investment in cost-effective core public health services and in the public health workforce.
3. **Implementation of recommended policies:** implementing the policies recommended in the WHO’s ‘Best Buys’,^{x,97-99} and in authoritative New Zealand reports such as the Law Commission’s 2010 report on alcohol.^{100,101} Such implementation often includes the

^x The WHO’s ‘Best Buys’⁹⁷⁻⁹⁹ are recommended interventions to address non-communicable diseases (NCDs), listing options for each of four key risk factors for NCDs (tobacco, harmful use of alcohol, unhealthy diet, physical inactivity) and four disease areas (cardiovascular disease, diabetes, cancer, chronic respiratory disease).

investment in political capital to engage with and counter those whose commercial or other interests conflict with the health of populations.⁹⁷⁻⁹⁹

4. **Strengthened policy coherence:** investment in health impact assessments (HIAs) across the policies of government entities and ministries, to achieve better policy coherence across non-health sectors. This could include the social investment approach to public policy and New Zealand's public sector spending, and having HIAs embedded in all regulatory impact assessments/statements.¹⁰²⁻¹⁰⁵
5. **Partnerships that address the societal determinants of health and achieve health equity:** political commitment and leadership expressed through government policies; strong governance; and an intersectoral, whole-of-government approach to investing in societal determinants. This includes:
 - a. public health representation at all levels of government;
 - b. a consistent approach across government sectors to fully valuing long-term outcomes;
 - c. incorporating wellbeing indicators into the Public Finance Act 1989 and the State Sector Act 1998;
 - d. more explicit consideration of the wider determinants of health in central government's work on wellbeing and the Living Standards Framework;
 - e. addressing commercial determinants and strongly managing conflicts of interest in policy development.

The NZCPHM has also endorsed the New Zealand Medical Association's position statement on health as an investment.^{2,3}

Links with other NZCPHM policies

Priority actions for health in New Zealand⁶

Health equity

Māori Health

Sustainability

Choosing Wisely

Pacific Peoples' Health

Child poverty and health

First 1000 days of life

Housing

Physical Activity and Health

Screening

Transport

Alcohol

Childhood obesity

Fluoridation

Immunisation

Rheumatic fever

Tobacco control

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This policy statement was developed by the NZCPHM Policy Committee, NZCPHM members, and staff. Authorship or review is recorded in the list of policy statement main authors on the College's Policy Statements webpage at <https://www.nzcphm.org.nz/policy-publications>.

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This version: Minor amendment made October 2019 to correct first line of page 5 to ‘nearly 40%’.