The National Committee for Medicine of the Australian Academy of Science is highly supportive of investment in a preventive strategy to stem the rising burden of chronic disease in Australia. This strategy should:

- be informed by the best available evidence,
- train a research workforce in the translational science of disease prevention and health promotion,
- promote cross-jurisdictional linkages to underpin effective implementation, particularly between Federal and State agencies,
- incorporate robust evaluation.

Specific input to the consultation process is included under the headings provided in the consultation draft.

PREAMBLE

The ‘wide range of interlocking strategies’ specified on page 2 omits reference to physical activity. While the emphasis on improving the quality and availability of food is important, there is not a corresponding objective for increasing physical activity. Physical activity might be implied by ‘healthy living’, but given that food is mentioned specifically, the abundance of evidence on the health impacts of physical inactivity and the need for evidence to underpin and to guide new and emerging environmental and policy initiatives, it would seem appropriate that specific mention be made of physical activity as a key preventive strategy for a range of chronic diseases.

A: FRAMEWORK

In the Framework section, it would be helpful to reverse the order of a) and b). To lead with “enabling communities, workplaces, schools and other institutions …” would give a priority to creating the relevant conditions that would support “enabling individuals to make healthy living the norm.” Providing those supportive conditions is essential if we are to succeed with initiatives aimed at “enabling individuals”.

When considering environments to enable individuals, special consideration should be given to disadvantaged communities who are poorer and marginalised in our society. For these groups environmental factors such as housing, water, medical access, etc are of greater importance than traditional chronic disease risk factors.
B: PRINCIPLES

High Quality Research
The National Committee for Medicine endorses the adoption of the WHO principles for research strategy. In particular, the need for high-quality research to underpin and assess interventions is paramount. We further suggest that the principle of high quality research be expanded to encompass innovative and paradigm-shifting research.

Evaluation
Evaluation should also be considered as a key guiding principle. Interventions to improve public health, and the research initiatives that aim to guide and support them, both require rigorous evaluation. This evaluation must go beyond surrogate endpoints and evaluate real impact on behaviour and health over relevant time frames. While evaluation may be implicit in the “Impact” principle, it is such an important component of delivering and refining public health interventions that we believe it deserves to be a stand-alone principle.

C: RESEARCH PRIORITIES AND ACTIONS (2012-2016)

Research Priorities
- Interventions aimed at increasing levels of physical activity should be a key target. This includes not only participation in sports and recreational activities such as walking, jogging, cycling, but also physical activity through active transport. With growing national, state and local government investments in ‘active’ community infrastructure for physical activity (particularly walking and bike paths and trails) and in commuting options through active transport, it is crucial to understand their actual (and potential) behavioural and health impacts.

- Reducing sitting time should be a further key target distinct from increasing purposeful physical activity. Sedentary behaviour (too much sitting as distinct from too little exercise) has begun to be addressed in research and in very recent public health initiatives as a distinct behavioural risk factor for premature mortality, type 2 diabetes, cardiovascular disease and some cancers. Sitting time, separate to physical activity time, reflects the accumulated time spent in the numerous sedentary behaviours that involve sitting during commuting, in the workplace, the domestic environment, and during leisure time. Even if adults meet the public health recommendation of 30 minutes of moderate-to-vigorous physical activity on most days each week, there are deleterious metabolic consequences of the 9 to 10 hours of sitting that they can be exposed to each day.

- Strategies which integrate environmental, organisational and individual strategies are more likely to promote sustained behavioural change and should be encouraged and prioritised.

Implementation
Implementation research is currently limited by sub-optimal linkages between one or more of the jurisdictions of discovery, clinical trials, population- and community-based studies and policy implementation. The ANPHA research strategy should provide specific support and funding for projects linking jurisdictions, so as to deliver tangible health benefits. It is particularly important that barriers that exist due to the divide in responsibility between Commonwealth (primary care
and PBS) and the States (Hospital care and many areas of health education) are addressed. Specifically, the AHRC funding mechanism should:

(i) break down institutional barriers by funding integrative functions rather than the institutions; and,  
(ii) provide a proportion of existing funding (across the research, education and health sectors) on the basis of joint rather than separate institutional purposes.

Funding would be directed to support the complex multidisciplinary integration required to move from epidemiological and clinical trial evidence to policy implementation. This includes linking a broad expertise base including clinical physiology and epidemiology, evidence synthesis, communication theory, behavioural science, public policy, economics, organizational theory, system redesign, health informatics and qualitative research.¹

The distinctive ANPHA contribution to this should be to catalyse linkages through tactics which promote so-called push mechanisms (eg, grant support to targeted health outcomes) and also facilitate pull approaches, where clinical need is supported in ‘reaching back’ into the domains of investigator-led discovery and technology transfer for answers to public health needs.¹

Training/Capacity building
The research priorities and implementation goals will only be achieved with an expanded workforce literate across multiple relevant disciplines. Training an appropriately skilled workforce to underpin the jurisdictional linkages required for implementation will be a key success factor. Given the multi-ethnic nature of Australia, there is a specific need for development of a culturally broad workforce capable of implementing appropriate intervention strategies. Training and capacity building in interdisciplinary team research and translational health research should therefore have a high priority. While responsibility for funding courses and Centres of Clinical Research Excellence may not rest directly with ANPHA, if these are not provided the entire exercise could fail.

OTHER

We suggest that the term “health prevention”, which is used in the document (eg page 1, para 1 “....to facilitate a national health prevention research infrastructure....”), is an odd expression and potentially confusing – as if the goal is to “prevent health”. Suggested replacement terms include “disease prevention” and/or “health promotion”.

References: