Australian Association of Gerontology

Submission to

NH&MRC Prevention Working Group

Preventive Health Care and Strengthening Australia's Social and Economic Fabric

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1 SUMMARY AND OVERVIEW

The AAG welcomes the NH&MRC initiative in developing a research program focusing on Preventive Health Care and Strengthening Australia's Social and Economic Fabric. Successful health promotion or illness prevention strategies will ultimately have outcomes measurable in mortality and morbidity rates amongst older Australians. Positive health outcomes will be reflected in increases in average life spans and in the extent to which older people remain disability free.

The broad areas, which AAG feels, are critical to a well-balanced strategy and key foci of a comprehensive research program are:

- Research into complex inter-related causes of the neurodegenerative disorders and Geriatric Syndromes including cognitive decline, sensory failure and mobility disorders of old age,
- Cardio-vascular health with particular reference to stroke prevention and preventing vascular dementia,
- Mental and emotional wellbeing of older people. This is intrinsically linked with the degree of social involvement and the impact such involvement has on the overall social fabric of Australia.
- The well being and health status of indigenous populations – and the fact that age associated disease has an age of onset up to 20 years before that of the community in general. The confluence of inequities in health, housing, education, training and employment remain persistent and powerful obstacles to good health for many Indigenous Australians.

In terms of the specific research approaches on which NH&MRC has sought comment, the AAG stresses that equitable and affordable access to health services and to a diversity of educational, occupational (paid or unpaid) and leisure activities is essential to well being. Research should target identifying effective forms of such service delivery. Research into the economic framework especially in relation to care for the aging is supported. In particular it is noted that incomes for older Australians must be sufficient to allow them to live with dignity and that the effect of demographic changes and changes in employment patterns on the capacity for informal care provided by family needs urgent research.

The AAG stresses that the role of education cannot be over estimated and therefore considers that ongoing life time education should be part of a core of a preventative health strategy, and should be amongst the essential elements of a strategy for promoting good health, alongside improved nutrition and increased exercise.

The AAG has a strong focus on ageing research and education across many fields. The breadth of this NH&MRC initiative is positive and the proposed research directions will go a long way towards overcoming the health disadvantages of being poor in our current society. Of particular importance, will measures to overcome the health disadvantage of being born an Aboriginal or Torres Strait Islander.

2 INTRODUCTION AND BACKGROUND

The Australian Association of Gerontology (AAG) has a broad multidisciplinary membership of academics, researchers, government administrators, service providers and others interested in the issues of ageing. The AAG welcomes the NH&MRC initiative in developing a research program focusing on "Preventive Health Care and Strengthening Australia's Social and Economic Fabric". Such a program must intrinsically involve multidisciplinary research and is of considerable interest to the Australian Association of Gerontology which is interested in promoting cross disciplinary research into the multifactorial issues which will influence ability for healthy ageing.

In terms of "ageing well" the AAG is well aware that this is closely correlated with socio-economic status and is pleased that the NH&MRC is proposing such wide ranging social research and in particular that it will examine the link between socio-economic status and health outcomes, including the chance to age with the minimum of disability.

3 RESEARCH CHALLENGES

Demographic transition is generating major research challenges across a wide range of economic, financial and policy areas. Ageing is a major issue for research and there are few aspects of medical, scientific or social research that will not impact upon or be affected by, the ageing pattern of the Australian community. With rapidly changing demographics, we are largely in uncharted territory in terms of our understanding of the many interrelated factors influencing the quality of life for older Australians. This is clearly the case for the older age groups, where multiple health problems may affect wellbeing and where there is an ever-growing need for research and understanding of the causes and treatment of medical conditions. As this NH&MRC proposal has recognised, understanding the social factors influencing well-being of older people is vital.

Ageing Research has long recognised the complexity of ageing and the multi-factorial causality of age-related health and decline. It involves cross-disciplinary research, and includes study of multi-factorial preventive and clinical outcomes including social, environmental and biological factors responsible for late life decline. This will involve targeted medical, health science, social and economic research that examines socio-biological factors promoting successful ageing, including: mental and physical activity, social activity and support, nutritional factors, education and human capital accumulation, the local environment and social capital. These areas parallel those that are to be addressed by the NH&MRC in calling for these submissions.

Successful health promotion or illness prevention strategies will ultimately have outcomes measurable in mortality and morbidity rates amongst older Australians. Positive health outcomes will be reflected in increases in average life spans and in the extent to which older people remain disability free. It is the health of older Australians (morbidity and longevity) that provides the best indicator of the health of the population generally and of the success of preventative health measures.

New approaches to conducting research are needed that complement traditional investigator-led efforts by individuals and discipline based teams. In particular, promotion of collaborations is important. In order for research to have a significant positive impact on the lives of older people, we need to bring together researchers from multiple areas to work together in addressing issues of ageing. There has been limited incentive or ability for social scientists and medical and health researchers to

collaborate on research projects and it is hoped that this NH&MRC focus on the relationship between health and the social and economic fabric of society, will be of assistance in encouraging such multidisciplinary research.

The AAG recognises that healthy living and successful ageing are the outcomes of lifetime behaviours but argues that research into health promotion, which can have tangible benefits for older age groups, must not be overlooked. Preventative health measures taken by those in the 45-65 age group are likely to have major long-term benefits in the health of this cohort when they reach 80 years. Moreover there is substantial evidence that preventive health strategies undertaken by those in their 70s and 80s will continue to provide lasting long term health benefits.

Key aspects of a successful research program should

- Be multi-disciplinary (bio-psycho-social paradigms) to ensure that knowledge gains have value in informing constructive action. For example, the understanding of productivity and independence in later life, must jointly consider health, employment, leisure activities and family issues.
- Include participation by key stakeholders (consumer organizations, NGOs, government agencies, industries and services, etc) in the development, conduct, and application of research.
- Emphasize positive outcomes - how to maximize gains of various kinds – as well as how to prevent or ameliorate negative aspects of ageing.
- Be of sufficient scale, quality, and continuity to bring together collaborative teams and build substantial bodies of knowledge
- Incorporate mechanisms for dissemination and translation of research findings to increase the uptake and application of knowledge.

4 KEY RESEARCH FOCI

While the AAG recognises that health promotion and preventative care at all stages of life from birth (indeed conception) through to adulthood will influence ageing well outcomes, the focus of this submission will be on those aspects of preventative health research which have a major impact on the health status of our ageing population. Given the projections of an aging population Australian Association of Gerontology strongly supports preventative health research which may reduce the burden of illness and disability upon the population whose numbers are increasing most rapidly and who carry the greatest burden of acute illness, chronic disease, disability and social need - the "old-old" or people aged 75 to 100 years and over. For ageing research it is commonly the health status of the *old-old* that is the outcome variable of interest, whatever the issue, condition or age group under study.

There are four broad areas of research into the health and well being of older Australians that must underpin its health research strategy. Preventative health is one essential (perhaps the most essential) component of any such strategy. The broad areas that AAG feels are critical to a well balance strategy and key foci of a comprehensive research program are:

- Research into complex inter-related causes of the neurodegenerative disorders and geriatric syndromes including cognitive decline, sensory failure and mobility disorders of old age. The essential areas for research involve the search for new risk factors (eg nutrition or education) in delaying the onset of disease or ameliorating disease severity.
- Cardio-vascular health in particular with reference to stroke prevention and preventing vascular dementia. The essential research area is in the field of health promotion, involving implementation of known protective factors.

- Mental and emotional wellbeing of older people. This is intrinsically linked with the degree of social involvement and the interrelationship of such involvement with the overall social fabric. However, it also has strong associations with levels of disability and with early neurodegenerative disease.
- The well being and health status of indigenous populations – and the fact that age associated disease has an age of onset up to 20 years before that of community in general.

4.1 Neurodegenerative disorders and Geriatric Syndromes

Knowledge of the causes and prevention of neuro-degeneration lags well behind understanding of the prevention of the systemic diseases (heart, lung, cancer etc). Research into modifiable risk factors to reduce the burden of neurodegenerative disease and disability in late old age must be initiated given demographic projections of rapid growth in the numbers of very old people. While the study of genetic risk factors has dominated recent research publication in the dementias, there remains good evidence for associated environmental factors, either causal, or as modifiers of timing of disease onset or rate of progression, both of which mechanisms might alter prevalence or morbidity. As with most environmental factors influencing disease prevalence, the relative effects will be heavily affected by socio-economic status.

The size of the projected dementia affected population in 50 years is so large that prevention or amelioration of dementia must be a priority for any research program. This focus on dementia however, should not allow research into the complex causation, and prevention of other aspects of the common multifactorial "Geriatric Syndromes" (gait instability and falls, slowing and reduced mobility, visual or hearing impairment, incontinence or depression) to be overlooked.

The AAG strongly supports the type of multifactorial socio-economic research envisaged by the NH&MRC in this call for submissions although this should be seen as additional too, not as an alternative, to basic biological research into neurodegenerative processes.

There are several specific areas where research into Preventive Health Care and Strengthening Australia's Social and Economic Fabric could lead to very positive overall health outcomes for older people. These include:

- Nutrition and the role of specific dietary factors in the prevention or delay of dementia, especially Alzheimer's disease (AD): There is some evidence suggesting that anti-oxidants in fruit and vegetables may be protective factors against dementia and possibly other forms of neurodegenerative decline. Even short delays in dementia onset or slowing in rate of decline will yield very large overall societal benefits in terms of the long-term health of the ageing population. Research into this relationship and subsequent translation through health promotion strategies promises to by synergistic with other health related messages focusing on diet, exercise and cardiovascular health.

- The role of nutrition in the causes and prevention of other neurodegenerative diseases such as gait disorders (especially Parkinson's disease) and the debilitating problems of macular and auditory degeneration: is also regarded as of high priority. Similarly the role of nutritional factors in the delay or ameliorations of other diseases of old-age should also be a priority for research both into the biological effects of diet and nutrition on the disabilities of older ages and into the effective health promotion strategies and removal of socio-economic obstacles to adopting a healthy lifestyle.

- The role of education as a preventative factor for cognitive decline should be further explored. There is increasing evidence of direct interaction between the social/educational environment and brain health itself. In terms of human life span, it is proposed that brain function responsible for the human capacities for learning, cognition, insight and social knowledge, is one determinant of longevity in human populations. Socioeconomic status, educational level, and mental ability or intelligence are closely linked. A cohort effect of increasing fluid intelligence, as measured by psychometric tests of verbal reasoning, spatial orientation and inductive reasoning, has been reported. This effect, which has been attributed to improvements in education, parallels observed changes in both education and longevity over the same period. Although no causal links have previously been suggested, it is arguable that improvements in education and fluid intelligence are in part responsible for increases in longevity and improved capacity to self manage health issues.

- The interaction of on-going mental stimulation and the rate of cognitive decline is another key area for research. The socio-economic factors will be significant in this research since those who continue to participate in the community whether in the workforce, as volunteers or in on-going learning are likely to have both higher levels of mental stimulation but also higher socio-economic status. However, if research were to demonstrate a direct causal relationship between mental stimulation and delay in cognitive decline, then the policy implications in terms of preventative health would be of great significance with large economic benefits expected through reduced levels of older age dependency and better quality of life for older people.

- Just as mental stimulation may have benefits in preventing cognitive decline, better understanding of the role of exercise in delaying or mitigating the physical disabilities has major potential benefits. Research into the types of physical activity which have preventative health benefit for people as they age will be of long term benefit, especially if linked with research into how to market these activities and ensure that those who can benefit especially those with lower socio-economic status may participate. The focus for such study should include those who are already showing some signs of physical decline and should extend to therapies of benefit to those already requiring some degree of assistance.

4.2 Emotional health

Research should focus on the person not just the disease, with the primary aim being extension of healthy, happy, non-disabled life span. The principle health outcomes from getting this research right will relate to the emotional and mental health of older Australians. By remaining connected, feeling needed and part of wider community it is anticipated that depressive illnesses resulting from loneliness or lack of a defined role will be greatly reduced. Reduced depression will lead to less medication and higher levels of activity with consequent improvement in cardiovascular health and mobility, which will lead to reduced levels of dependency and a longer time residing in community settings.

The key areas where the AAG believes research into the social fabric of Australia will yield positive mental health outcomes amongst the ageing include:

- Participation by older Australian in the community whether in the workforce, as volunteers or in leisure activities: Participation promotes social contacts, which in turn promotes good health and happiness. One of the negative outcomes of

lower socioeconomic status results from social isolation. Amongst older people the area of essential research, needs to go towards identifying forms of social interaction that are accessible and affordable. Study is needed as to what older people currently do, what they would like to do and what prevents them from participating to the extent that they would like. Particular study should be made of the financial affordability of leisure activities and into affordable options.

- The role of community support structures: For older people most community involvement is structured to some degree with activities centred round a specific purpose. Religious or community groups, charities, sports clubs, service clubs and cultural groups each have roles but there is a tendency for these groups to have a focus in relatively affluent areas and to be poorly provided in areas of social disadvantage.

- The role of families and carers in maintaining the emotional health of ageing people: There are a multitude of issues which will affect the way carers interact with ageing dependents and the mental health implications are significant both for the older people and for their long suffering carers. These issues must be a focus of research and in particular there must be emphasis on the impact of social disadvantage on the role of carers, who themselves may be faced with deteriorating health.

4.3 Cardiovascular health

The AAG recognises the key role cardiovascular health plays in ensuring longevity and a healthy disability free old age. Not only does poor cardiovascular health cause premature death but also contributes to disability through stroke or vascular dementia. The primary risk factors for poor cardiovascular health, eg diet, exercise and smoking are well understood (at least relative to the neurodegenerative disorders). They are principally risk factors modifiable by lifestyle changes.

The focus of research should be on effective health promotion and health education measures, which encourage adoption of lifestyles, which reduce the risk of disease. It is recognised that the NH&MRC in calling for submissions on preventive Health Care and Strengthening Australia's Social and Economic Fabric has already identified the need for such lifestyle change as a key area of preventative health research and is therefore further discussed under 5.4.

4.4 Aboriginal and Torres Strait Islanders

The experience of indigenous health and ageing in Australia is almost a case study of the effect of socio-economic disadvantage upon health status. Within a prosperous country, with one of the world best health status outcomes (measured in terms of longevity) one small culturally distinct group has the health status of a poor or developing nation. The 20-year longevity gap between indigenous Australians and the general population has not reduced in the past three decades and in many cases may be increasing. Compared to an average life expectancy of over 80 years for non-indigenous Australians, Aboriginal life expectancy is currently less than 60 years (57 for males and 63 for females). The age structure of the Aboriginal population in Australia is similar to that of the non-indigenous population in the early 1900s with falling infant mortality, but a high birth rate, a growing (younger) population and a small number of older Aboriginal people.

The structural inequities that have resulted in a lack of advanced ageing, in both rural and urban Aboriginal communities, are a paradigm of socioeconomic, education,

housing and health factors that lead to “Unsuccessful Ageing” and away from “Ageing Well, Ageing Productively.

There have been many reports and inquiries into the health status of indigenous Australians but little evidence of change. All of these reports acknowledge that the poor health of Indigenous Australians is part of a broader historical pattern of economic, political and social disadvantage and as such, redress cannot be expected by the efforts of the health sector alone. The confluence of inequities in health, housing, education, training and employment remain persistent and powerful obstacles for many Indigenous Australians. In accepting this, we must then accept that such obstacles will only be removed by a multi-faceted approach that attempts to eliminate the multiple disadvantages present and persistent in the lives of Indigenous Australians.

Despite easier access to health care and to other facilities the health needs of Indigenous Australians residing in urban areas is little better than that of those in rural areas. The health status of Indigenous Australian people from different areas has more in common than it does with the health status of non-Indigenous people from the same area. Certainly, the magnitude of health disadvantage for Indigenous Australians, irrespective of where they live, is substantially greater than that experienced by non-Indigenous Australians.

The AAG is particularly concerned at a perceived lack of information on indigenous ageing and has established an Aboriginal and Torres Strait Islanders Ageing Committee. With participants from indigenous health services, including the aged care sector, from community organisations, from government and academia, the committee represents an opportunity to get researchers, practitioners, providers, policy makers and educators together to discuss the many issues associated with indigenous aging and particularly the very poor health of older Aboriginal and Torres Strait Islanders. Indeed the key question, which must be asked, is:

- Where are the Aboriginal aged? A successful outcome will be an increase in the number of older Aboriginal and Torres Strait Islanders.

- Why are other countries doing relatively well in ageing their indigenous populations while Australia is doing so badly? At the same time in North America (both in the United States and Canada) and in New Zealand, the reported gap in life expectancy between indigenous and non-indigenous peoples has narrowed, from 20 years to around 5 to 7 years.

- Issues of access to education, income, nutrition, housing, workforce participation, community participation and ownership, self-determination, legal rights and basic human rights will all contribute and will all require study.

While research into provision of better health care for the Aboriginal and Torres Strait Islanders community, in relation to their burden of disease disability and risk factors, is important as an essential right, we do not see better health care as the major factor in improving longevity and reducing disease and disability rates. We believe that the answers will be multi-factorial and multi-disciplinary and are intrinsically part of the socio-economic fabric of society.

5 SPECIFIC NH&MRC RESEARCH QUESTIONS

The call for submissions has asked respondents to comment on four broad research approaches, and the AAG comment on each of these approaches is outlined below.

It should be noted that the health disadvantage of Aboriginal and Torres Strait Islanders is the most striking example of the adverse impact of social economic and cultural factors influencing health outcomes. However rather than identifying indigenous concerns specifically under each of the headings below, it should be assumed that the particular socio-economic disadvantages of indigenous Australians are a priority target area for addressing socio-economic disadvantage and that successful tackling of this major health concern will provide an example of a way forward for other socially disadvantaged sectors.

5.1 The social and economic fabric:

The issues identified by the NH&MRC include investigating the effects, and mechanisms of action of urban development; tax and transfer systems; employment/unemployment/conditions of work, community resilience/vulnerability; and education (including health education).

Clearly, this is an extremely broad potential research agenda but is encouraging that the interrelationship between health and social fabric is now becoming recognised. The key objective will be to build the social capital of older people.

5.1.1 Urban development

Understanding how the urban framework impacts on healthy ageing is a very broad area of research but some important areas of focus are:

- **Access to services:** This is a key aspect of healthy ageing and particularly continued community living. Urban design, planning and the location of government services will be elements of effective planning for health ageing. Access must incorporate the ease of reaching necessary care or health services.

- **Access to leisure activities:** Effective social participation relies on the ability to get out and meet others and to have meaningful leisure activities. Study of methods of ensuring there is adequate access including funding demonstration or pilot projects will be needed. Diversity will be very important in this context and an essential element of a healthy ageing population will be ensuring that there is a good mix of social activities for the healthy ageing and also for the partially disabled. Research into cost–effective means of providing a diversity of services/activities will be essential.

- **Transportation issues:** Access will affect all aspects of the ageing experience. Lack of available, affordable and accessible transport reduces social participation and becomes a major cause of social isolation, especially for the increasing numbers of older people without strong family support A NSW Division of AAG seminar on the transport needs of older Australians identified key research gaps including the inter-relationship between transport, housing and urban planning and noted that the relationships are not well understood and that little information exists on the economic implications of poor coordination between these sectors. Little is understood about patterns of transport usage amongst older people or current and projected levels of demand. This in turn has been shown to increase the demand for and reliance on government support services, including both community-based and residential care.

- **Living environments:** Accommodation type, whether community living or residential care will influence the extent to which older people can adopt healthy lifestyles, involving physical and mental activity with appropriate social interaction and community participation. For those who continue to live in the community in their own home issues of home maintenance and modification need to be considered in the context of effective urban planning and service delivery.

5.1.2 Tax and transfer issues

This is another broad area of research but some important areas of focus are:

- **Retirement incomes:** Incomes for older Australians must be sufficient to allow them to live with dignity and maintain functionality. Full participation in society takes money and resources. This requires financial independence and capacity to pay for a healthy and satisfying old age as well as to manage the costs of increasing dependence and assistance. Financial obstacles may prevent many disadvantaged older people from taking up physical leisure activities such as golf, tennis, aerobics, yoga or even the traditional lawn bowls, which may require club membership fees, expensive equipment or high session fees. Ensuring that older people have financial means to participate in leisure activities must form part of the research and discussion on tax and transfer issues.

- **Positive incentives for an active lifestyle for older people:** The tax/transfer arrangements must provide positive incentive for older people to stay active and should not discourage part time work and/or volunteering. There should be incentives for community involvement and possibly also incentives for involvement in active leisure programs, whether involving physical activity or on-going education and learning. The best financial arrangements for promoting such positive incentives warrant further research.

5.1.3 Employment

- **Employment:** Given the relationship between employment and good health, getting people into the workforce is a desirable objective. Understanding the role of older individuals in the workplace will be an essential element in developing models for funding the ageing of the Australian population. The AAG stresses that this effort should include older people particularly those in the 65 –75 age group who although officially retired may wish to continue with a role in the workforce although possibly with reduced hours. Research into developing workforce options which suit older workers is essential, not just to meet workforce demands as the population ages but also to ensure may people have financial incomes needed to support good health and also have an on-going role in the community.

- **Volunteering**: The role of volunteering as a means of maintaining the social connections of older people especially those facing socio-economic disadvantage needs further research. Volunteering is a valuable means of helping define identity and will be particularly important as the population ages.

5.1.4 Education

The role of education and life time learning as a possible protective measure in its own right has already been discussed above (4.1). The principle areas of research likely to yield benefits in terms of preventative health for an ageing population are:

- Education and human capital accumulation – understanding the role of education, in a broad sense, in accumulating human capital across the life span,

in preserving brain function, and in producing an educated older group who will have improved capacity to self-manage their own health, to self-manage chronic illness when it occurs, and to use the health and aged care systems effectively.
- Public education i.e. getting the message out about healthy lifestyles. This message must be accessible i.e. must be in a form suitable for the visually impaired, hearing impaired or less educated, and must be culturally appropriate. Study of the most effective forms of communication is essential.

The AAG stresses that the role of education cannot be underestimated and therefore considers that ongoing life time education should form part of the core of a preventative health strategy, and should be amongst the essential elements of a strategy for promoting good health, alongside improved nutrition and increased exercise.

5.1.5 Community resilience

This once again is a very broad area of research. The AAG notes the following particular research issues that relate to socio-economic status and healthy ageing:

- **Family and informal care** and the effect of demographic change on the capacity for informal care need urgent research. Demographic projections forecast a decline in the availability of family support, but limited information is as yet available predicting the consequential impact on demand for formal support services. The health consequences of insufficient family carer support could be considerable.

- **The extent of social connection** of older persons relative to the past or to those in countries with a similar level of socio-economic development. Issues such as involvement in civic entitlements and participations in the business of government, need to be examined.

- **Lifestyles**: Understanding the lifestyles of the elderly and their evolving needs for support services. This should include the full range of leisure activities with which older people may wish to be involved. One aspect of research is the extent to which the market will address the needs of older people. It is likely that as the baby boom/60s generation ages, the traditional organised leisure for older persons will need to be expanded and an effective framework will be needed to cater to diverse tastes. The capacity of market forces to meet the demands of the ageing population needs research.

5.2 Communities of place

The NH&MRC stated objective is establishing how disadvantaged communities (in the broadest sense) may have their disadvantage reduced. The AAG would like to suggest the following research themes to assist with this study:

- **Ageing in place** is an emerging research theme, which is being put forward as important but with very little work done on the social geography of ageing, i.e. how do older people, including those with cognitive impairment, construct and relate to place versus space, how important is place in successful ageing (eg. own home, local neighbourhood, local communities). How do localized dynamics impact on service providers planning strategies?

- **Population health research** that addresses responses to geographic patterns of ageing in the majority of Australian old-old people who remain community living.

The patterns of ageing must be considered in context with the socio-economic indicators of the geographic region.

- **Special groups** in the ageing population, including people with disabilities and those living in isolated communities as well as their ageing carers, will have different outcomes and different needs and the relevance of research findings to special groups needs to be established. A significant group where health problems are severe and where social disadvantages leads to poor health are the mentally ill.

5.3 Autonomy, poverty and health

The NH&MRC has identified the investigation of how distinct groups of factors (structural, material, behavioural and psychosocial and especially and most directly poverty) contribute individually and collectively to problems of autonomy and the ability or inability to make autonomous choices as a broad focus for research.

Education is the most significant structural factor that influences healthy ageing. The link between poverty and education is well established and understood. The link between poverty and poor health outcomes is now recognised and it is pleasing to see this reflected in this NH&MRC call for submissions. What is less well understood is the link between education and good health. Education assists health partially by raising income and therefore access to services and information and also by increasing capacity to read and understand health promotion messages and providing the skills to implement health prevention messages.

However, AAG notes that the role of education may also have a direct causal effect on good health, largely through reducing neurodegenerative decline in the areas of cognition, resulting in the delay or avoidance of the onset of dementias such as Alzheimer's. The potential preventative health implications of any such delay in dementia is of major public health significance. Understanding the mechanisms by which education acts to delay dementia is in its infancy, but AAG strongly encourages research into the relationship. One essential component of any such research will be longitudinal studies, which can examine the link between education, lifetime learning and health outcomes in old age, especially on the prevalence or severity of dementias.

5.4 Promoting change

The NH&MRC has asked for comment on investigation strategies for changing behaviour and influencing choices related to, for example, nutrition and physical activity at the individual, institutional and societal level and translating research findings into policy and practice.

The role nutrition and exercise plays in the prevalence of cardiovascular disease is well-recognised and the AAG supports health promotion strategies targeting healthy living recognising that this must be a lifetime process starting at birth or indeed with prenatal health care. Similarly, communication strategies which stress the importance of harm avoidance, i.e., reduced smoking, or drug and alcohol abuse is supported and success will be reflected in the numbers of people experiencing healthy old age.

The specific issues AAG wishes to see addressed include strategies for promoting preventative health measures amongst older people. Socioeconomic disadvantage and communication difficulties whether through failing eyes or hearing, poor literacy or limited English will become accentuated in old age and it is essential that public

health promotion strategies include older Australians in the public health message. The target audiences will include the consumers but also their carers and in many cases health professionals.

6 CONCLUSION

The Australian Association of Gerontology has a strong focus on ageing research and education across many fields. Its members have considerable expertise in both in-depth medical, scientific and social research, as well as in cross-disciplinary projects. The Association welcomes the opportunity to contribute to further development of the Australian research agenda, both now and in the future.

The breadth of this NH&MRC initiative is positive and the proposed research directions will go a long way towards overcoming the health disadvantages of being poor in our current society. The positive outcomes of improved health will be most marked amongst the ageing and it is hoped this will lead to greater longevity, but without disability. Of particular importance, will be measures to overcome the health disadvantage of being born an Aboriginal or Torres Strait Islander.