

**Reducing the harm from
Alcohol, Tobacco and Obesity
in Indigenous Communities**

Key Approaches and Actions

Produced for the
National Preventative Health Taskforce

by

Dr John Boffa

Public Health Medical Officer
Central Australian Aboriginal Congress

Edward Tilton

Health and Social Policy Consultant

with

Associate Professor David Legge

School of Public Health
La Trobe University

Dr Bill Genat

Senior Lecturer in Aboriginal Health
Onemda VicHealth Koori Health Unit, University of Melbourne

March 2009

Acknowledgements

This paper was produced with the assistance of the National Preventative Health Taskforce and the Commonwealth Department of Health and Ageing.

Central Australian Aboriginal Congress supported the production of this paper through in-kind provision of Dr Boffa's time. The report has been informed and enriched by Congress' long experience of dealing with Indigenous health at both a practical and policy level. We would like especially to acknowledge the comments of Stephanie Bell (Director) and Donna Ah Chee (Deputy Director) on a draft version of this paper. However, the paper does not necessarily represent their views or those of Congress.

The review of the evidence base for interventions in the areas of Indigenous alcohol, smoking and obesity draws on work carried out by Associate Professor Robert Griew, Dr David Thomas and Edward Tilton for the Australian Population Health Development Principal Committee (APHDPC) in 2008.

The views in the paper do not necessarily represent those of the Australian Government or of the National Preventative Health Taskforce.

Table of Contents

EXECUTIVE SUMMARY	5
CLOSING THE INDIGENOUS HEALTH GAP	9
THE CONTRIBUTION OF ALCOHOL, TOBACCO AND OBESITY TO CURRENT HEALTH STATUS.....	9
Alcohol.....	9
Tobacco.....	10
Obesity.....	10
Regional differences.....	10
SPECIFIC ACTIONS ON ALCOHOL, TOBACCO AND OBESITY	11
Alcohol.....	11
Action 1. Interventions from the primary health care setting.....	11
Action 2. Treatment and rehabilitation.....	11
Action 3. Pricing of alcohol	12
Action 4. Other restrictions on alcohol supply.....	13
Action 5. Supporting community agency and local action.....	13
Tobacco.....	14
Action 6. Interventions from the primary health care setting.....	14
Action 7. Social marketing campaign and Quitlines.....	15
Action 8. Smoke free workplaces, community spaces and events	15
Action 9. Multi-component community-based programs.....	16
Obesity.....	17
Action 10. Interventions from the primary health care setting	17
Action 11. Antenatal, maternal and child health services	17
Action 12. Multi-component community-based healthy lifestyle programs.....	17
Action 13. Subsidising healthy food in remote areas.....	18
PRINCIPLES FOR SUCCESSFUL IMPLEMENTATION	18
BUILDING A PLATFORM FOR ACTION ON ALCOHOL, TOBACCO AND OBESITY	21
Comprehensive primary health care.....	21
Definition of comprehensive primary health care	21
Core services of comprehensive primary health care	22
Access to primary health care	23
Quality primary health care services.....	27
Integrated Children and Family Centres.....	28
Addressing workforce needs.....	28
Training and Ongoing Professional Development	29
Data Collection, Information and Research.....	29
APPENDIX 1: TEMPLATE OF SPECIFIC ACTIONS TO ADDRESS ALCOHOL, TOBACCO AND OBESITY	31
Alcohol.....	31
Tobacco.....	36
Obesity.....	40

**APPENDIX 2: AMSANT PROPOSAL FOR ESTABLISHMENT OF A NATIONAL
ABORIGINAL HEALTH AUTHORITY..... 45**

BIBLIOGRAPHY 46

EXECUTIVE SUMMARY

1. Broad multi-faceted action is needed to address the contribution made by alcohol, tobacco and obesity to the health gap between Indigenous and non-Indigenous Australia, combining specific programs addressing these issues with broad action on the social determinants of health and action to strengthen and extend health services, particularly comprehensive primary health care.
2. Alcohol, tobacco and obesity are together associated with significant levels (over ¼ or 28%) of the total burden of injury and disease of Australia's Indigenous population.
3. The quarter of Indigenous people living in remote areas are those with the greatest health needs. In particular, the harms due to alcohol, tobacco, and obesity are disproportionately felt by those in remote areas. However, the three quarters of Indigenous people living in urban areas collectively make the greatest contribution to the health gap between Indigenous and non-Indigenous Australia.
4. Key specific actions to reduce the high burden of disease due to alcohol among Indigenous Australians include:
 - Action 1. Resourcing of interventions from the primary health care setting;
 - Action 2. Reform and increased support for treatment and rehabilitation services;
 - Action 3. Actions on pricing of alcohol, including a broad review of Australia's alcohol taxation policy as part of a comprehensive approach to alcohol problems in Australia, as recently called for by the Royal Australasian College of Physicians;
 - Action 4. Action to restrict alcohol supply including numbers and types of licenses and hours of sale, especially for take away licences; and
 - Action 5. Supporting community agency and action through establishment of local community leadership groups..
5. Key specific actions to reduce the high burden of disease due to tobacco among Indigenous Australians include:
 - Action 6. Resourcing of interventions from the primary health care setting;
 - Action 7. Resourcing of an expertly designed and implemented Social Marketing campaign to shift social norms of smoking amongst Indigenous people, linked to Quitlines;
 - Action 8. Action to promote smoke free workplaces, community spaces and events especially through work with Aboriginal organisations, possibly through the employment of Tobacco Control Workers in NACCHO Affiliates;
 - Action 9. Resourcing of six to ten sites for multi-component community-based programs, including effective and professional evaluation.

6. Key specific actions to reduce the high burden of disease due to obesity among Indigenous Australians include:
- Action 10. Resourcing of interventions from the primary health care setting;
 - Action 11. Strengthening antenatal, maternal and child health systems for Indigenous communities;
 - Action 12. Multi-component community-based programs;
 - Action 13. Subsidising healthy food in remote areas
7. Addressing the broader social determinants of health – including poverty, lack of education and social exclusion – are critical parts of a broader strategy to tackle alcohol, tobacco and obesity in the Indigenous community.
8. Key principles for successful interventions to reduce the health impacts of alcohol, tobacco and obesity in the Australian Indigenous context include:
1. Genuine local Indigenous community engagement to maximise participation, up to and including formal structures of community control;
 2. Integration of vertical, targeted programs on alcohol, tobacco and obesity with broad-based comprehensive primary health care;
 3. Ensuring programs are adequately resourced for evaluation so they can contribute to intervention policy knowledge;
 4. Evidence-based approaches that are reflective and that involve the local community in adapting what is known to work elsewhere to local conditions and priorities;
 5. Adequate and secure resourcing to allow for actions to be refined and developed over time.
 6. Performance indicators and measurement that are linked to accountability and action.
9. Notwithstanding the powerful effects of social determinants of health such as relative and absolute poverty, lack of education and powerlessness, a well-resourced and robust primary health care has significant potential to contribute to closing the Indigenous health gap.
10. Comprehensive primary health care is widely recognised as a key strategy for improving the health of Indigenous Australians. A well-resourced and robust comprehensive primary health care system is a critically important platform from which to address alcohol, tobacco and obesity in the Indigenous community.
11. ‘Closing the gap’, including that part of the health gap attributable to alcohol, tobacco, and obesity, requires ensuring that primary health care services are resourced to deliver the full range of core services required under a comprehensive model of primary health care.

- 12.** The key long-term strategy for increased access to comprehensive primary health care is additional investment to extend the reach of Aboriginal community controlled health services to areas currently not serviced by them, either through establishing new services or resourcing current services to expand their coverage. This should take particular account of service gaps in urban and outer-metropolitan areas.
- 13.** Additional investment is required to build organisational capacity within Aboriginal community controlled health services and to resource on-staff public health expertise to maintain a focus on population health initiatives.
- 14.** Establishment of a National Aboriginal and Torres Strait Islander Health Authority is an important reform to strengthen and develop comprehensive primary health care system to meet the needs of Indigenous communities.
- 15.** A possible model for engaging mainstream General Practice in delivering care to Indigenous people while maintaining a commitment to Indigenous community control is that of Community Controlled Contracting Partnerships. Under this model, the Indigenous community controlled health sector would be resourced to contract local mainstream General Practices to provide services to Indigenous people in areas of poor access. The contracting organisation could be the local community controlled health service or NACCHO Affiliate as agreed.
- 16.** Under the Community Controlled Contracting Partnerships model, the General Practice would be resourced to put systems and practices in place to help increase Indigenous access to their service, and would also have to report against Indigenous health key performance Indicators.
- 17.** Adoption and implementation of a Community Controlled Contracting Partnerships model such as this would need to be negotiated with the community controlled health sector. Particular issues to consider would include:
 - resourcing of State / Territory NACCHO Affiliates to support and monitor contractual agreements and report on them annually;
 - resourcing of local community controlled health services including for the expertise to manage the contracts and engage with the contracted General Practices to ensure they are providing best-practice medical care (including brief interventions on alcohol, tobacco and obesity); and
 - assurance that the Community Controlled Contracting Partnerships model be used as an interim or transitional model for the provision of primary medical care, rather than an alternative to comprehensive primary health care under community control.
- 18.** Improving Indigenous access to primary health care also requires expanding the effort of State / Territory governments that provide primary health care services, including increased resources delivered with a maximum of local engagement, cultural security, and employment of local Indigenous community members.
- 19.** All primary health care services should be resourced and supported to undertake Continuous Quality Improvement (CQI) processes, including on-staff CQI and public

health expertise, access to external CQI programs, with possible external CQI facilitators resourced in each State and Territory NACCHO affiliate.

- 20.** Integrated Children and Family Centres as recently announced through the COAG process represent a long-term intervention for the prevention of ill health – including that part of it derived from alcohol, tobacco and obesity.
- 21.** Resourcing public health expertise in the Aboriginal community controlled health service sector is necessary to drive action on non-acute health and social issues such as alcohol, tobacco and obesity, implement quality improvement services, build relationships with other service providers (including contracted General Practices), and analyse and respond to health trends and evidence.
- 22.** Ongoing training and support for the primary health care workforce in Comprehensive Primary Health Care, Primary Health Care interventions, and Continuous Quality Improvement are required to strengthen primary health care capacity to reduce harms related to alcohol, tobacco and obesity.
- 23.** Data collection, information and research needs to be resourced to allow monitoring of CQI interventions in primary care, and to build the evidence base on effective interventions at the broader community level to address alcohol, tobacco and obesity.

CLOSING THE INDIGENOUS HEALTH GAP

In December 2007, all Australian Governments committed to closing the life expectancy gap between Indigenous and non-Indigenous Australians within a generation.

This is a welcome target. Other First World nations have significantly smaller health gaps as measured by life expectancy than Australia – in New Zealand it is around 8 years for men and 9 years for women; in Canada about 7 years for men and 5 years for women and in the United States it is around 6 years. In Australia, the life expectancy gap is about 17 years for both sexes [1] [2].

It is also an ambitious target. Despite improvements in some areas, Australia (unlike New Zealand, Canada and the United States) has failed to significantly narrow the health gap between its Indigenous and non-Indigenous citizens over recent decades [1] [3] [4] a fact that has been the subject of innumerable reports, campaigns and lobbying by Aboriginal communities, their representative health services, and researchers. The criticisms of Australia's failure to address Indigenous health are based not just on statistics, but also on the continuing experience of ill-health and early death of Indigenous people and families.

One of the critical challenges that the 'closing the gap' commitment must meet is that of the disparity in levels of sickness and death attributable to alcohol, tobacco and obesity. Together these factors contribute to almost quarter of the 'health gap' [5].

Addressing the contribution made by alcohol, tobacco and obesity to the health gap between Indigenous and non-Indigenous Australia will require broad action. Programs specifically targeting alcohol, tobacco and obesity need to be integrated with broad action on the social determinants of health, and with action to strengthen and extend health services, particularly comprehensive primary health care. Any policies or programs targeted specifically at alcohol, tobacco or obesity should be informed by a set of principles for implementation which will ensure maximum effectiveness and a contribution to the broad goals of reducing the health gap.

Broad multi-faceted action is needed to address the contribution made by alcohol, tobacco and obesity to the health gap between Indigenous and non-Indigenous Australia, combining specific programs addressing these issues with broad action on the social determinants of health and action to strengthen and extend health services, particularly comprehensive primary health care.

THE CONTRIBUTION OF ALCOHOL, TOBACCO AND OBESITY TO CURRENT HEALTH STATUS

In the current context of high levels of chronic disease in Indigenous communities, alcohol, tobacco and obesity make significant contributions to the burden of sickness, injury and death in Indigenous communities.

Alcohol

Alcohol is associated with 5% of the burden of disease and injury borne by Indigenous Australians, in particular through homicide, violence and suicide. For Aboriginal men in

particular it is strongly associated with four of the top ten causes of premature mortality: suicide (9.1% of potential years of life lost), road traffic accidents (6.2%), alcohol dependence and harmful use (3.9%), and homicide and violence (2.8%) [5]. Drinking while pregnant is also associated with Foetal Alcohol Spectrum Disorders (FASD), which are estimated as being between 3 and 7 times as common in the Indigenous population as the non-Indigenous [6]. One in six Indigenous adults report drinking in such a way as to pose a long-term high risk to their health, up from 13% in 2001; one in five (19%) report short-term, high-risk (or binge drinking) at least once a week [7]. There is emerging evidence that alcohol is also making a major contribution to premature deaths from heart disease in Aboriginal communities, consistent with the possible impact that binge drinking has had on cardiac deaths in Russia [8] [9].

Tobacco

Tobacco smoking is associated with 12% of the total burden of disease and injury and is the major single contributor to ill health in the Indigenous community, predominantly through Ischaemic heart disease, COPD, and lung cancer [5]. A high proportion of Indigenous people smoke (around 50%) [10] compared to the Australian population as a whole (23%) [11], with smoking rates of up to 83% for men and 73% for women being recorded in some communities [12]. There appears to be minimal or no change in these rates while the trends in smoking rates for Australia as a whole have been consistently downwards since the early 1970s [13] [14] [15].

Obesity

Overweight and obesity (high body mass) has been estimated as contributing to 11% of the total burden of injury and disease of Indigenous Australians and is particularly associated with Type 2 diabetes and ischaemic heart disease [5]. In 2004-05, 57% of Indigenous adults were overweight or obese, a significant increase from 1995 (48%) [7]. Obesity and overweight is also an issue for Indigenous children [16] [17].

Alcohol, tobacco and obesity are together associated with significant levels (over ¼ or 28%) of the total burden of injury and disease of Australia's Indigenous population.

Regional differences

There are differences in the health of Indigenous Australians according to where they live: those in remote areas (about one quarter of the Indigenous population) make up 40% of the health gap; those in towns and cities (about three quarters of Indigenous people) bear the remaining 60% [5]. In other words, while those with the greatest need are those in remote areas, the greatest burden of ill health occurs in urban areas. This is an important point in a policy and political environment that often conflates 'Indigenous health' with 'health in remote Indigenous communities'.

The proportion of the health gap attributable to alcohol, tobacco and obesity is also distributed unevenly. While Indigenous people in remote areas make up 26% of the total Indigenous population, they contribute 34% of the total health gap attributable to tobacco, 38% of the health gap due to high body mass, and a full 50% of the health gap due to alcohol.

The quarter of Indigenous people living in remote areas are those with the greatest health needs. In particular, the harms due to alcohol, tobacco, and obesity are disproportionately felt by those in remote areas. However, the three quarters of Indigenous people living in urban areas collectively make the greatest contribution to the health gap between Indigenous and non-Indigenous Australia.

SPECIFIC ACTIONS ON ALCOHOL, TOBACCO AND OBESITY

The information in this section is summarised in the “templates” on actions at Appendix 1.

Alcohol

Action 1. Interventions from the primary health care setting

Brief interventions delivered in the primary health care setting have been shown to be effective in other populations, and there are some reports of effectiveness in the Australian Indigenous context [6] [18]. On this basis, they should be a routine part of the delivery of primary health care to Indigenous clients.

A key to success is to ensure that primary health care services are resourced to be able to deliver brief interventions: simply funding the production of materials to support the interventions, even if accompanied by training in their use, is unlikely to embed their delivery in practice. Instead, funding of services to deliver the full suite of core services of comprehensive primary health care (see below) is critical to building a robust platform from which such clinical interventions can be made. At the same time, services have a responsibility to ensure that resources for interventions to address alcohol within the health service are protected from being overwhelmed by acute need.

Particularly important is ensuring that on-staff public health expertise is available to initiate, monitor and maintain a focus on non-acute care, and that quality improvement systems – such as the Audit of Best practice in Chronic Disease (ABCD) – which have been shown to increase brief intervention rates in Indigenous primary care settings are also resourced [19] [20].

Training of staff (including Aboriginal Health Workers) is important, along with access to follow up counseling and/or treatment within the service or through referral.

Action 2. Treatment and rehabilitation

Residential and community-based treatment programs, most of them under local Aboriginal community control and run on an abstinence model, are amongst the most common alcohol intervention for Aboriginal communities. Few have been rigorously evaluated and performance indicators are only process indicators with no requirement to demonstrate outcomes at 12 months after the commencement of treatment. It is therefore not known what percentage of clients who undergo treatment achieve abstinence or reduced alcohol consumption after treatment, although mainstream literature suggests that in the best programs this figure should be around 20% [21].

Assisting and resourcing existing alcohol treatment and rehabilitation centres to increase their effectiveness should be an important part of the prevention of alcohol related harm, as should extending the availability of such services into the primary health care

sector to allow for ambulatory rehabilitation options and not only residential treatment. Key services needed include:

- ensuring that Indigenous communities have access to the appropriate range of treatment and rehabilitation options, including motivational interviewing, cognitive behavioural therapy, family therapy, relapse prevention etc with goals of total abstinence for dependent drinkers and reduced consumption for others;
- ensuring access to pharmacotherapies for dependent drinkers as part of relapse prevention [6];
- social and cultural support for clients during and after they leave treatment programs to assist them to continue to remain sober or reduce their drinking levels. This includes support to find appropriate accommodation, enter education and training programs and employment [22] [23].

However, many existing services are under-resourced and under-skilled in these areas [24]. A program of capital investment (especially for residential facilities), support and training for staff, management and community members [25] [26], and evaluation and quality improvement systems should be resourced for these services, in addition to the extra resources needed to deliver the key services.

In order to ensure that CBT and other counseling options are available, access to a registered psychologist in each alcohol treatment program is needed. This is probably best provided as a visiting service from a local Aboriginal community controlled primary health care service. Locating a psychologist or Alcohol and Other Drugs therapist within the primary health care sector ensures they are also available to provide ambulatory treatment for clients who do not want to undertake residential care [27].

Given the high importance of community acceptance of such services, non-Aboriginal controlled services in areas of high need should begin a process of building collaborative relationships with local Indigenous organisations (particularly primary health care services) and communities in order to maximise their services to Indigenous clients.

Action 3. Pricing of alcohol

There is incontrovertible evidence that increasing the price of alcohol reduces consumption and alcohol related harm; it is also a highly cost effective intervention [28] [29] [30] [31]. While this is a whole-of-population level intervention, it can be expected to have particular benefits for disadvantaged populations, as it has been shown to be most effective amongst the heaviest drinkers and young people [31]. Government interventions on alcohol pricing are beginning to be adopted by governments in countries with high levels of consumption [32] including in Australia on 'alcopops' [33].

The two main policy levers on price are either a volumetric tax or a floor price on alcohol. Taxing alcohol products (or some 'high risk' alcohol products) according to their alcohol content (the volumetric approach) has the advantage of generating tax income a proportion of which could be set aside specifically for campaigns and programs to lessen alcohol consumption and harm.

The floor price approach – adopted recently by the Scottish Government and recommended to by the United Kingdom's Chief Medical Officer [32] [34] – imposes a

lower limit on price per unit of alcohol, preventing the sale and discounting of cheap alcohol. For example, the introduction of a floor price of one dollar per standard drink in Australia would remove the many products that currently sell at the 30 cents per standard drink mark – the products of choice amongst the heaviest drinkers. Such an intervention is likely to reduce alcohol consumption and related harms most amongst disadvantaged populations and young people. It will also not affect the price of relatively more expensive products that the majority of responsible drinkers purchase. Thus, it is a more selective approach and probably worth trying to implement prior to a volumetric tax.

In either case, balancing political sensitivities with public health benefits is likely to require broad and informed public debate. The Royal Australasian College of Physicians has recently called for a broad review of Australia's alcohol taxation policy to begin this debate [35].

Action 4. Other restrictions on alcohol supply

There is strong evidence that reducing the supply of alcohol reduces alcohol related harm including admissions to hospital, assaults and sexual offences [36] [37] [38] [39] [40]. Restrictions can include reductions of numbers of licenses (especially take away licenses), restrictions on hours of sale especially take away trading hours, and restrictions on quantities or types of alcohol to be sold.

Such interventions need to be well-designed for best effect and should especially take into account the possibility of displacement of drinkers to different locations, or the substitution of one type of alcohol for another [41] [42].

Restrictions to supply are best adapted to local conditions as part of multi-component strategy to combat alcohol misuse with broad community support [43], with Indigenous organisations important as local advocates.

Some restrictions would lend themselves to a multicentre evaluated trial in regional centres in different states and territories. This would include the introduction of one day each week with a total take-away ban linked to the payment of Centrelink benefits on the same day. There is evidence that this is an effective strategy and this warrants more widespread implementation with evaluation [25].

Action 5. Supporting community agency and local action

Supporting and restoring the ability of local Indigenous communities to tackle health and social issues such as alcohol misuse have been advocated by several high profile Indigenous leaders and reports [44] [45] [46]. In these cases, the emphasis is put upon capacity building for Indigenous leadership at the local community level and restoring Indigenous social and cultural standards, with Government's role being to support community leaders to address alcohol-related problems at the local level.

In Cape York, this has taken the form of the establishment of the Family Responsibilities Commission (FRC), a statutory body including local community leaders with the responsibility for (amongst other things) ensuring that community members do not commit drug, alcohol or family violence offences [45]. This arrangement has only been in place for nine months and has not yet been evaluated. A similar approach – establishment of Community Justice Groups with a broad role of setting community rules and community

sanctions consistent with the law – was recommended by the *Little Children Are Sacred* report [46].

Establishing local groups of senior Indigenous men and women to promote greater individual and family responsibility in relation to alcohol should be investigated, with broad and local consultation on a number of test sites. The precise powers of, and support needed by, such groups would need to be the matter of consultation and local agreement, as well as possibly needing legislative change. However, their roles could include meeting with individuals who commit low-level alcohol-related offences and their families to counsel them and refer them as necessary for support or treatment, dispute resolution, development of protocols between the community and outside agencies, provide information to communities about available programs, and possibly imposition of sanctions for repeat offenders, including (as in the case of the FRC, imposition of ‘soft sanctions’ such as full or partial welfare payment quarantining, removal of the right to purchase alcohol, or restrictions of types of alcohol available implemented through an ID Card purchasing system.

Key specific actions to reduce the high burden of disease due to alcohol among Indigenous Australians include:

- Action 1. Resourcing of interventions from the primary health care setting;
- Action 2. Reform and increased support for treatment and rehabilitation services;
- Action 3. Actions on pricing of alcohol, including a broad review of Australia’s alcohol taxation policy as part of a comprehensive approach to alcohol problems in Australia, as recently called for by the Royal Australasian College of Physicians;
- Action 4. Action to restrict alcohol supply including numbers and types of licenses and hours of sale, especially for take away licences; and
- Action 5. Supporting community agency and action through establishment of local community leadership groups..

Tobacco

Action 6. Interventions from the primary health care setting

There are a number of interventions for smoking that can be delivered from the clinical primary health care setting. These include brief interventions, Nicotine Replacement Therapy (NRT), smoking cessation advice and support in pregnancy; and pharmacotherapies such as bupropion, varenicline and nortriptyline. All of these have been shown to have effect in other populations [12] [47] [48] [49] [50]; brief interventions and NRT have been shown [51] [52] [53] to have similar but smaller effects in the Australian Indigenous context.

As for alcohol, resourcing primary health care to deliver, monitor, measure and evaluate these interventions is critical including especially including on-staff public health expertise and a functioning quality improvement program.

Additionally with tobacco, training of staff (including Aboriginal Health Workers) to deliver brief interventions must be accompanied by (or preceded by) resourced programs to assist Indigenous staff themselves to quit [6] [54] [55]. Also, given the high Indigenous maternal smoking rates [56] [57] and their relation to low birth weight and possible future development of chronic disease, a particular focus on supporting pregnant Indigenous women to quit smoking is warranted.

Finally, brief interventions must once again be followed up with counseling and follow up to increase effectiveness [58] [59]. This is best done by a specialist smoking cessation counselor after a patient has indicated a willingness to be referred following a brief intervention or through self referral from the community.

Action 7. Social marketing campaign and Quitlines

Social marketing campaigns, centred around sustained, national high profile television advertisements, have been credited as key part of success in shifting normative behaviour and reducing smoking amongst mainstream populations. There is now considerable evidence and expertise in designing and delivering such campaigns [51].

There is evidence that Indigenous people are as aware of the mainstream anti-smoking media campaigns as the general population, and anecdotal accounts of their effect on decisions to quit [12] [60].

This raises the question of why Indigenous smoking rates have not fallen at the rate of mainstream rates over recent decades. However, despite this, given the strong evidence associated with such campaigns there is reason to advocate for an expertly designed and implemented social marketing campaign (including television) aimed to shift social norms of smoking amongst Indigenous people. More work may need to be done as to whether such a campaign should be Indigenous specific, or a mainstream campaign with Indigenous reach made specifically part of the design brief. In either case, the campaign should draw on the substantial evidence of what works, be well-funded and sustained, and include pre-testing of messages and evaluation. There are suggestions that focusing on the harmful health effects on children and family may be an important message for Indigenous communities.

The social marketing campaign should be linked to Quitlines, which are highly cost effective. Overseas evidence suggests mainstream Quitlines are effective for Indigenous people [61] [62] [63]; Quitlines should however identify Indigenous clients to allow for monitoring of their own and social marketing campaign effectiveness. They should be further supported and reinforced by the previously suggested smoking cessation counselors.

Action 8. Smoke free workplaces, community spaces and events

Restrictions on smoking in workplaces and public spaces has been cited as a key intervention in mainstream populations [64]. They may have had lesser reach in Indigenous communities marked by low employment, poor infrastructure and weak enforcement mechanisms [26], but given the strength of the evidence in the mainstream context, action to support this approach is warranted.

Additional regulation may not be necessary (although extending smoking bans to cars containing children is expected to benefit all children, including Indigenous children).

Instead, enforcing current regulation in Indigenous contexts and supporting community sanctioned smoke free homes, public spaces, workplaces and meetings may be important vehicles for change. They also offer an important way for Indigenous organisations such as councils to demonstrate leadership on tobacco control [65].

Employing Tobacco Control Workers in NACCHO Affiliates with the specific initial task of developing awareness-raising and action amongst other Aboriginal organisations may be a useful first step.

Action 9. Multi-component community-based programs

Locally-based multi-component programs to tackle tobacco use have been suggested as a key approach [66], with evidence from one study in the Australian Indigenous context reporting an increase in readiness to quit, although without recording a change in smoking rates [67].

Once again the specific forms of such multi-component programs would depend on local community priorities, but could include advocacy and action on smoke free spaces, school-based education, workplace cessation programs, interventions focused on social norms in family and peer groups, worker training, and ensuring responsible selling practices including at remote community stores. Such programs could reinforce other strategies, such as a broadly-based social marketing campaign.

Building in evaluation – including measurements of smoking prevalence at local levels – are essential to both refine and direct the programs themselves and to begin building a stronger evidence about what approaches are most effective at this level.

We propose testing this approach in six to ten locations in Indigenous Australia, with broader roll out planned using lessons learned after two years. There must be a long-term commitment to funding the sites that sees evaluation not as the end point of the program but as part of an ongoing cycle of evaluation-reflection-planning-implementation that allows local communities to adapt and change their approach to maximise effectiveness.

Community controlled health services are important loci for such programs. Sites for testing should be selected in consultation with the community controlled health sector taking into account capacity of the service, prioritisation of smoking by the community, and diversity (that is, sites from a number of different regions / contexts such as remote, urban, regional, outer-metropolitan etc).

The program should be expanded to other locations using the learning generated from the test sites after two years.

Key specific actions to reduce the high burden of disease due to tobacco among Indigenous Australians include:

- Action 6. Resourcing of interventions from the primary health care setting;
- Action 7. Resourcing of an expertly designed and implemented Social Marketing campaign to shift social norms of smoking amongst Indigenous people, linked to Quitlines;

<u>Action 8.</u>	Action to promote smoke free workplaces, community spaces and events especially through work with Aboriginal organisations, possibly through the employment of Tobacco Control Workers in NACCHO Affiliates;
<u>Action 9.</u>	Resourcing of six to ten sites for multi-component community-based programs, including effective and professional evaluation.

Obesity

Action 10. Interventions from the primary health care setting

As for both alcohol and tobacco, brief interventions on diet and exercise have been shown to be effective in the mainstream to decrease fat consumption, increase fibre consumption, and increase physical activity [68] [69]. There is no evaluated evidence specific to the Australian Indigenous context.

Successful interventions are likely to be dependent on the same factors as for alcohol and tobacco: adequate resourcing to allow a focus on non-acute issues, training, public health expertise on staff, and quality improvement systems.

Similarly to the other areas, follow up sessions to the initial consultation are critical to improvements over the long term [69].

Action 11. Antenatal, maternal and child health services

Poor nutrition in the first years of life and low birth weight is associated with lifetime higher rates of overweight and obesity and increased risk of chronic disease later in life [70]. Well-resourced and best-practice antenatal, maternal and child health services are a core component of comprehensive primary health care, and should include antenatal care, encouragement and support of breast-feeding, programs to monitor infant growth and development, support and advice to parents about child nutrition and child growth monitoring and action.

All primary health care services serving Indigenous communities should be resourced to deliver such services as a critical investment in future health.

There are numerous examples of health services that have acted on maternal and child health effectively including Central Australian Aboriginal Congress, the Townsville Aboriginal and Islander Health Service, Nganampa Health Council, Maari Ma Health Aboriginal Corporation and the Northern Territory Government's Strong Women, Strong Babies, Strong Culture.

Action 12. Multi-component community-based healthy lifestyle programs

Multi-component healthy lifestyle programs have been adopted by a number of Indigenous communities to reduce overweight and obesity and address the risk factors for chronic disease. Generally, they are community-based and combine action on nutrition, physical activity and smoking, and frequently involve the promotion of traditional activities (such as, where possible, hunting gathering expeditions). Addressing the availability of fresh and nutritious food – especially through remote area stores – is also often a key component of such interventions [71]. These programs have been shown to be effective in the Australian Indigenous context in improving biochemical markers of

chronic disease risk and health indicators [65] [72] [73] [74], and effective in overseas Indigenous populations in increasing physical activity [75].

Possible areas for action, depending on local community priority, capacity and location, include nutrition, availability and affordability of healthy food (for example at community stores – see also Action 13 below), physical activity including subsidised access to gyms, pools, sporting facilities etc, and smoking.

It is also important to note the strong evidence that outstation living and access to traditional lands is associated with reduced risk of obesity, improved physical health and overall lower chronic disease risk and mortality [76] [77] [78] [79] [80].

Action 13. Subsidising healthy food in remote areas

The links between poverty and obesity are well-established. In the remote Indigenous context, the effects of poverty are combined with the high cost of fruit and vegetables – around 30% higher than in capital cities with the price gap apparently widening [81]. In the Northern Territory, it has been shown that it is the high cost of healthy foods that is the primary barrier to their consumption [82]. This is reflected nationally in the lower consumption of fruit and vegetables in remote Indigenous communities compared to those in non-remote areas [7].

The ‘Outback Stores’ program set up by the Australian Government in 2006 and now running stores across the Northern Territory and in Western Australia, as well as several community-driven programs, appear to be successful in increasing the range and affordability of healthy foods in remote stores.

However, given the substantial and apparently widening price gap, the subsidization of healthy foods in remote Indigenous communities across Australia – particularly directed at transport costs which contribute substantially to the extra costs – has been recommended. [83].

Key specific actions to reduce the high burden of disease due to obesity among Indigenous Australians include:

- Action 10. Resourcing of interventions from the primary health care setting;
- Action 11. Strengthening antenatal, maternal and child health systems for Indigenous communities;
- Action 12. Multi-component community-based programs;
- Action 13. Subsidising healthy food in remote areas.

PRINCIPLES FOR SUCCESSFUL IMPLEMENTATION

The use of tobacco and alcohol, and the poor nutrition and lack of physical activity which contribute to obesity, are embedded in a complex social, historical and political context, marked by processes of intergenerational powerlessness, poverty and social exclusion. Health inequality is intimately bound up with these processes [84].

It is now known that a person’s social and economic position in society, their early life experiences, their exposure to stress, their educational attainment and their employment status all exert a powerful influence on their health throughout life [85]. Social exclusion

and the amount of control people have over their lives have been shown to be critical social determinants of health [86] [87] [88] [89].

There is a strong association between the alcohol and tobacco use, and obesity, and these social determinants of health [85]. Therefore, addressing the broader social determinants of health – including poverty, lack of education and social exclusion – are critical parts of a broader strategy to tackle alcohol, tobacco and obesity in the Indigenous community.

This context also has a number of implications for the design and implementation of interventions to address alcohol, tobacco and obesity in the Indigenous context. Key principles for successful interventions include:

1. **Genuine local Indigenous community engagement to maximise participation, up to and including formal structures of community control.** There is no simple process for applying specific ‘interventions’, however well-evidenced, to address alcohol, tobacco and obesity. Any action to address these specific issues must do so in a way that contributes to tackling the broader issues of social exclusion and disadvantage. Failure to do so risks not only being ineffective in a narrow sense; there is a real danger that well-intentioned but naive interventions that ignore this broader picture could actually add to the processes of exclusion and disadvantage and thus to further ill health.

While certain interventions (for example, the imposition of an alcohol tax or floor price) may be by their nature ‘top-down’, and others (such as clinical interventions) are driven predominantly by best-practice clinical care, recognising and supporting the agency of communities and families is critical for success for all interventions.

The participation of the organised community controlled health service sector, through the National Aboriginal Community Controlled health organisation (NACCHO) and its affiliates, is critical to Indigenous primary health care partnership formation and building broad Indigenous community support, participation and ownership.

2. **Integration of vertical, targeted programs on alcohol, tobacco and obesity with broad-based comprehensive primary health care.** Action to address alcohol, tobacco and obesity require the horizontal integration of vertical targeted programs and broad-based programs at the regional and local level. In particular this includes strengthening and extending access to quality comprehensive primary health care. These services are particularly important as they are a strong and robust platform from which specific actions can be delivered; a key collaborator on program design and implementation for services delivered from outside the primary health care sector; and an effective locus for intervention in the broader determinants of health.
3. **Ensuring programs are adequately resourced for evaluation and monitoring so they can contribute to intervention policy knowledge.** The evidence of ‘what works’ to address alcohol, tobacco or obesity is in some cases highly developed, but this evidence-base is predominantly from mainstream and/or overseas populations. Taking account of this evidence is important. However, given the need to work with Indigenous communities’ own histories, priorities and capacities, flexibility and innovation on the basis of the evidence is likely to be more effective than attempts to

rigidly apply interventions that worked elsewhere. It is important to ensure programs contribute to evidence-based intervention policy knowledge through adequate resourcing for evaluation.

- 4. Evidence-based approaches that are reflective and that involve the local community in adapting what is known to work elsewhere to local conditions and priorities.** Alcohol, tobacco and obesity are not necessarily the top priorities for communities. Any sustainable program needs to make provision for flexibility and negotiation between local priorities and program priorities. Community controlled health services and their peak bodies provide an important arena in which the dialogue between community priorities and an evidenced based approach to population health challenges can take place.
- 5. Adequate and secure resourcing to allow for actions to be refined and developed over time.** Short-term pilot programs can undermine community commitment and resolve to address health challenges. Funding for programs should be ongoing subject to evidence-based monitoring. Evaluation studies and the necessary resources to undertake them are critical for refining and developing interventions. Five year funding blocks are minimal requirement for effective implementation.
- 6. Performance indicators and measurement that are linked to accountability and action.** Indicators that are not located within networks of accountability will not lead to change. All stakeholders need to accept shared responsibility for performance indicators, and the use of reciprocal indicators (flexibility of government funding programs, prompt release of funds etc) investigated.

Addressing the broader social determinants of health – including poverty, lack of education and social exclusion – are critical parts of a broader strategy to tackle alcohol, tobacco and obesity in the Indigenous community.

Key principles for successful interventions to reduce the health impacts of alcohol, tobacco and obesity in the Australian Indigenous context include:

1. Genuine local Indigenous community engagement to maximise participation, up to and including formal structures of community control;
2. Integration of vertical, targeted programs on alcohol, tobacco and obesity with broad-based comprehensive primary health care;
3. Ensuring programs are adequately resourced for evaluation so they can contribute to intervention policy knowledge;
4. Evidence-based approaches that are reflective and that involve the local community in adapting what is known to work elsewhere to local conditions and priorities;
5. Adequate and secure resourcing to allow for actions to be refined and developed over time.
6. Performance indicators and measurement that are linked to accountability and action.

BUILDING A PLATFORM FOR ACTION ON ALCOHOL, TOBACCO AND OBESITY

Comprehensive primary health care

There have been a number of studies that have demonstrated the link between socioeconomic status and mortality in the Australian Indigenous context, and these estimate that income, employment status and education account for between one-third and one-half of the gap in health status between Indigenous and non-Indigenous Australia [90]. This still leaves health care able to make a substantial contribution to 'closing the gap' [5]. Well-resourced and appropriate health care is therefore in itself a potent determinant of health [91].

Amongst Indigenous peoples elsewhere, the comparative success of the United States in reducing the life expectancy gap between Indigenous and non-Indigenous peoples has been attributed to the federal government's adoption of administrative responsibility for the provision of health care to Native Americans, and the establishment of the Indian Health Service with a strong primary and preventive focus incorporating health promotion and disease prevention [4] [92] [93]. There is also evidence from New Zealand that decreased access to preventive and primary health care services due to the introduction of market economic reforms is associated with higher mortality amongst Indigenous people [94].

For Australian Indigenous peoples, primary health care has come to be recognised by policy makers, health professionals and the Indigenous community as the key strategy for improving the health of Indigenous Australians, and to the extent that there have been health improvements, these have been credited to improved primary health care [95]. Even where measurable improvements are limited (for example in chronic disease mortality rates), the conclusion has been drawn that while the social determinants continue to drive high levels of ill health, improved primary health care services are at least providing a brake on what would otherwise be accelerating mortality rates [96].

Notwithstanding the powerful effects of social determinants of health such as relative and absolute poverty, lack of education and powerlessness, a well-resourced and robust primary health care has significant potential to contribute to closing the Indigenous health gap.

Definition of comprehensive primary health care

The term 'primary health care' (PHC) gained widespread currency following the Alma-Ata Conference held by the World Health Organisation in 1978 [97]. WHO updated and refined its definition more recently [98]. Using these international models, a definition of a model of primary health care has developed in Australia as follows:

Primary Health Care seeks to extend the first level of the health system from sick care to the development of health. It seeks to protect and promote the health of defined communities and to address individual and population health problems at an early stage. Primary health care services involve continuity of care, health promotion and education, integration of prevention with sick care, a concern for population as well as individual health, community involvement and the use of appropriate

technology (Australian Health Ministers' Council 1988; Commonwealth Department of Health and Family Services 1988) [99].

This is a comprehensive model of primary health care, distinct from primary health care models based solely on individual clinical interventions (often called primary medical care). While primary medical care remains an important part of comprehensive primary health care, the comprehensive model also captures the ideals of 'wellness' as a goal, and prevention, health promotion, advocacy and community development as major methods to achieve it. It also emphasises the need for maximum community and individual self-reliance and participation and involves collaboration with other sectors [100].

A comprehensive model of primary health care that is able to integrate clinical interventions with broader population-based programs that require community action and support is widely recognised as a key strategy for addressing Indigenous health (see for example [101] [102] [103]).

A comprehensive model of primary health care is particularly important as a platform for addressing the complex individual and population health and social issues surrounding alcohol, tobacco and obesity in the Indigenous community.

Comprehensive primary health care is widely recognised as a key strategy for improving the health of Indigenous Australians. A well-resourced and robust comprehensive primary health care system is a critically important platform from which to address alcohol, tobacco and obesity in the Indigenous community.

Core services of comprehensive primary health care

Much work has been done within Australia in recent years to define the elements of successful comprehensive primary health care, extending and building on the concept described at Alma Ata in 1978 in the light of the Australian Indigenous experience and evidence. A number of definitions exist, but most agree on some of the key elements [104] [105]:

- **Clinical Services** including both primary medical care services and population health programs such as chronic disease screening and management, immunisation and maternal and child health;
- **Preventive Programs** to address determinants of health outside the boundaries of clinical health services including specific programs on alcohol, tobacco and obesity;
- **Management and support programs** including facilitation of access to secondary and tertiary care and allied health services, as well as training/ education and administration;
- **Policy and advocacy** at both a client and system level, including engagement with other sectors and action for system change such as equitable access to programs and resources for better health.

The core services model has been recently further developed in the Northern Territory as part of implementing an expanded primary health care service system through the Emergency Response [106].

'Closing the gap', including that part of the health gap attributable to alcohol, tobacco, and obesity, requires ensuring that primary health care services are resourced to deliver the full range of core services required under a comprehensive model of primary health care.

Access to primary health care

Despite the important place given to primary health care in addressing Indigenous ill-health, there are continuing barriers to access to such services and it is widely accepted that extending access to primary health care services is a critical goal of the Australian health care system. We propose two inter-related strategies:

1. a long-term strategy for expanding access to comprehensive primary health care (including primary medical care) through extending and strengthening the Aboriginal community controlled health service sector; and, because this may take some years to achieve; and
2. an interim strategy to improve access to primary medical care for Indigenous people, using mainstream General Practice contracted to local community controlled health services or NACCHO Affiliate.

In addition, State / Territory Governments need to expand their effort in addressing the health care needs of Indigenous Australians.

1. EXPANDING ACCESS TO COMPREHENSIVE PRIMARY HEALTH CARE THROUGH ABORIGINAL COMMUNITY CONTROLLED HEALTH SERVICES (ACCHSS)

ACCHSs were first established by Aboriginal communities in the 1970s. ACCHSs promote a comprehensive model of primary health care, including culturally safe practice and a multi-disciplinary team approach to service delivery in which Aboriginal Health Workers (AHWs) play a significant role alongside nurses, doctors and other health care professionals. These factors make them the ideal service platforms for addressing complex health and social issues such as alcohol, tobacco and obesity.

Their effectiveness has long been recognised. Many Indigenous primary health care services are able to document better health outcomes for the communities they serve and a recent review found that they contributed significantly to reductions in communicable disease, improved detection and management of chronic disease, and better child and maternal health outcomes including reductions in preterm births and increases in birthweight [105].

Almost one third (30%) of Indigenous people report attending an ACCHS as a regular source of health care; this varies from less than one sixth (15%) in major cities to over three quarters (76%) in very remote areas [1]. These figures have, however, been critiqued by the community-controlled sector on a number of levels, including that the survey methodology was flawed and that the figure is not consistent with Service Activity Reporting data collected by the Department of Health and Ageing [107]. For these reasons, such figures are likely to underestimate the use of ACCHSs by the community.

In addition, many Indigenous people do not live within easy travelling distance to a ACCHS, and in some cases under-resourcing of these services mean long waiting times; under these circumstances, many Indigenous people choose to use mainstream general

practice and/or hospital emergency departments for primary health care. Under these circumstances, and given the often-stated preference of Indigenous people for seeking their health care from ACCHSs, usage figures probably reflect lack of access rather than a preference for other sources of care, especially in urban settings.

Therefore a key action to build a platform from which Indigenous ill-health can be tackled – including that resulting from alcohol, tobacco and obesity – is to increase resourcing to strengthen and extend Indigenous community-controlled comprehensive primary health care services. The recent interim report of the National Health and Hospital Reform Commission (NHHRC) crucially made this point:

We believe that increased investment is required to ensure equitable access to effective primary health care [through ACCHSs]. This means additional coverage of some areas, and increased capacity in others. We also believe additional support is required to assist Aboriginal Community Controlled Health Services build organisational capacity. We expect that this would include governance and leadership, financial planning and management, and recruitment [108].

It is important to note that it appears that there is beginning to be broad acceptance of a national approach to resourcing and organising locally-based community controlled Indigenous primary health care on the basis of ‘health service delivery areas’, each of which would be funded at a sufficient ‘dollars per capita’ level to allow the delivery of the core suite of comprehensive primary health care services, with funding directed through the community controlled health service sector.

The NHHRC advocated the establishment of a National Aboriginal and Torres Strait Islander Health Authority to purchase services specifically for Aboriginal and Torres Strait Islander Australians and their families as a mechanism for closing the gap. In broad terms, this proposal has seen cautious support from the Indigenous health sector, although significant debate remains about the structure and function of such an authority [107]. The Aboriginal Medical Services Alliance Northern Territory has developed a detailed model on the structure and role of such an Authority – it is attached at Appendix 2.

The key long-term strategy for increased access to comprehensive primary health care is additional investment to extend the reach of Aboriginal community controlled health services to areas currently not serviced by them, either through establishing new services or resourcing current services to expand their coverage. This should take particular account of service gaps in urban and outer-metropolitan areas.

Additional investment is required to build organisational capacity within Aboriginal community controlled health services and to resource on-staff public health expertise to maintain a focus on population health initiatives.

Establishment of a National Aboriginal and Torres Strait Islander Health Authority is an important reform to strengthen and develop comprehensive primary health care system to meet the needs of Indigenous communities.

2. IMPROVING ACCESS TO PRIMARY MEDICAL CARE THROUGH MAINSTREAM GENERAL PRACTICE

In the absence of accessible ACCHSs, private General Practitioners continue to provide a significant proportion of primary health care services to the Indigenous population – 60% of those surveyed in the National Aboriginal and Torres Strait Islander health survey of 2004-05 reported that they went to a doctor if they had a problem with their health. This figure varies widely according to where Indigenous people live: from 80% in major cities to only 6% in very remote areas [1]¹. Overall however, less than 1% of private General Practice patients are Indigenous, despite their being 2.4% of the population, indicating significant barriers to access for a population that is sicker than the mainstream.

The situation whereby many Indigenous people rely on mainstream General Practice for their primary care needs is likely to persist for some time, even given the necessary commitment to expanding access to comprehensive primary health care advocated above and recommended in the National Health and Hospital Reform Committee interim report. In the interim, expanding access to mainstream primary medical care to Indigenous clients especially in urban areas is a key reform challenge. Key points to note in considering this challenge are:

- General Practice services operate on a model of primary medical care, rather than the comprehensive primary health care model that is widely agreed to be necessary to address the health of disadvantaged communities. The vital public and preventive health and health advocacy functions of comprehensive primary health care are rarely part of private General Practice;
- mainstream General Practice services lack the structures for community engagement and control that are critical for addressing the complex health and social challenges posed by alcohol, tobacco and obesity; and
- while some GPs no doubt do provide culturally appropriate services, it is persistently reported that the cultural awareness and sensitivity of mainstream general practice to the needs of Indigenous people is patchy at best and that this remains a significant barrier to access [1].

There is no widely accepted model for engaging mainstream General Practice in assisting to 'close the gap'; recent 'brokerage models' are unevaluated and have also been the subject of criticism by the community controlled health sector. A possible alternative model, which engages the mainstream primary care sector while maintaining a commitment to Indigenous community control, is that of Community Controlled Contracting Partnerships between ACCHSs and private General Practices.

This model is based upon ACCHSs receiving a needs-based population grant for all the Aboriginal people living in their health service delivery area. If areas of poor access are identified, the Indigenous community controlled health sector could use some of the population grant to contract local mainstream General Practices to provide services to Indigenous people in those areas. Generally, the contracting organisation would be expected to be the local community controlled health service, although it could also be the State or Territory NACCHO Affiliate.

¹ See section under Aboriginal community controlled health services above on usage figures.

Under the terms of such a contract, the General Practice would be resourced to put systems and practices in place to help increase Indigenous access to their service, such as cultural security measures, identification of Indigenous clients, bulk-billing of Indigenous clients, access to section 100 pharmaceuticals, employment of Indigenous staff in the practice. They would also have to report against Indigenous health key performance Indicators.

Adoption and implementation of a model such as this would need to be negotiated with the community controlled health sector. Particular issues to consider would include:

- resourcing of State / Territory NACCHO Affiliates to support and monitor contractual agreements and report on them annually;
- resourcing of local community controlled health services not just for the amount necessary for the contract, but additionally for the expertise to manage the contracts and engage with the contracted General Practices to ensure they are providing best-practice medical care (including for example, brief interventions on alcohol, tobacco and obesity as necessary); and
- assurance that the Community Controlled Contracting Partnerships model be used as an interim or transitional model for the provision of primary medical care, rather than an alternative to comprehensive primary health care under community control.

A possible model for engaging mainstream General Practice in delivering care to Indigenous people while maintaining a commitment to Indigenous community control is that of Community Controlled Contracting Partnerships. Under this model, the Indigenous community controlled health sector would be resourced to contract local mainstream General Practices to provide services to Indigenous people in areas of poor access. The contracting organisation could be the local community controlled health service or NACCHO Affiliate as agreed.

Under the Community Controlled Contracting Partnerships model, the General Practice would be resourced to put systems and practices in place to help increase Indigenous access to their service, and would also have to report against Indigenous health key performance Indicators.

Adoption and implementation of a Community Controlled Contracting Partnerships model such as this would need to be negotiated with the community controlled health sector. Particular issues to consider would include:

- resourcing of State / Territory NACCHO Affiliates to support and monitor contractual agreements and report on them annually;
- resourcing of local community controlled health services including for the expertise to manage the contracts and engage with the contracted General Practices to ensure they are providing best-practice medical care (including brief interventions on alcohol, tobacco and obesity); and

- assurance that the Community Controlled Contracting Partnerships model be used as an interim or transitional model for the provision of primary medical care, rather than an alternative to comprehensive primary health care under community control.

3. INCREASED EFFORT BY STATE AND TERRITORY GOVERNMENTS

State and Territory Government primary health care clinics provide health care to remote Indigenous communities across Northern Australia. Generally speaking these clinics provide primary medical care at the local level, with population health and other services provided from central locations on a visiting basis, if at all. These jurisdictions also run community health centres and programs which are also used by Indigenous people in urban and regional areas.

In both cases, the degree of engagement with local communities, their commitment to culturally secure practice, and the degree to which they support local employment varies. Unfortunately, State or Territory Governments have not matched increases in community and public health funding to their Indigenous citizens provided by the Australian Government [109]. Reform must include State / Territory governments expanding their efforts with greater resourcing delivered with a maximum of local engagement, cultural security, and employment of local Indigenous community members.

Improving Indigenous access to primary health care also requires expanding the effort of State / Territory governments that provide primary health care services, including increased resources delivered with a maximum of local engagement, cultural security, and employment of local Indigenous community members.

Quality primary health care services

Continuous Quality Improvement (CQI) is an essential part of the health system. Primary health care CQI programs such as the Australian Primary Care Collaboratives (APCC) and the Audit of Best practice in Chronic Disease (ABCD) have been demonstrated to be effective at improving service delivery in Aboriginal health services throughout Australia [19] [20].

CQI activities need to be resourced so that practitioners in services know for example how well they are doing with brief interventions and they know how often they are recording a patients smoking status, alcohol consumption or body mass.

Critical to the success of CQI processes within primary health care services are on-staff dedicated CQI and public health resources and expertise supported by external programs such as the APCC or ABCD program and external CQI facilitators resourced in each State and Territory NACCHO affiliate.

All primary health care services should be resourced and supported to undertake Continuous Quality Improvement (CQI) processes, including on-staff CQI and public health expertise, access to external CQI programs, with possible external CQI facilitators resourced in each State and Territory NACCHO affiliate.

Integrated Children and Family Centres

There is now strong evidence that some of the most important determinants of health occur in early childhood [110]. The experience of the child, even while still within its mother's body, is critical for building a healthy life and deficits at this time are linked to disadvantage and ill health later in life. In particular, there is an association between adverse early childhood development and chronic disease in adult life [111], and between early childhood neglect and abuse and addiction to alcohol and drugs in later life [112]. This evidence has led to recommendations for the establishment of early childhood development centres to address early childhood disadvantage in a holistic and strategic way [46] [113].

In July 2008, all Australian Governments agreed to work together to improve the early childhood outcomes of Indigenous children by (amongst other things) the establishment of integrated Children and Family Centres to provide a mix of services including child care, early learning and parent and family support services [114].

Integrated Children and Family Centres as recently announced through the COAG process represent a long-term intervention for the prevention of ill health – including that part of it derived from alcohol, tobacco and obesity.

Addressing workforce needs

The development of sustainable prevention programs targeting alcohol, tobacco and obesity requires a dedicated, qualified workforce. As well as some of the specific proposals outlined above, it will require substantial investment in the capacity of primary health care services – particularly for public health capacity to drive action on non-acute health and social issues, implement quality improvement services, build collaborative relationships with other service providers (especially, for example, with contracted private General Practices) and analyse and respond to health trends and evidence.

The key principles essential to the implementation of the prevention strategies in this document indicate the need for these functions to be resourced at the local level within each health service delivery area. Public health functions resourced at this level will need to be flexible, but may include the following as a model:

- Public Health Officer – to coordinate prevention policy and program development targeting the local Indigenous population, to monitor epidemiological data covering the population, organise public health training for primary health care staff working with the population and overall project management;
- Quality Enhancement Nurse – to coordinate clinical systems development including audits and monitoring, clinical practice protocols and best practice guidelines and overall primary health care team engagement in continuous quality improvement cycles (CQI);
- Systems Manager – to coordinate data linkage, technical support and IT Systems management across the Aboriginal health service delivery area;

- Data Integrity Officer – to monitor and review data collection quality across multiple sites within the information collection system;
- Indigenous Health Promotion Officer – to bring Indigenous leadership to the overall public health prevention effort within the Aboriginal health service delivery area and to policy program and program development, interventions designs and systems development.

Resourcing public health expertise in the Aboriginal community controlled health service sector is necessary to drive action on non-acute health and social issues such as alcohol, tobacco and obesity, implement quality improvement services, build relationships with other service providers (including contracted General Practices), and analyse and respond to health trends and evidence.

Training and Ongoing Professional Development

In addition to increased staff, this requires significant investment in training and ongoing professional development for key members of primary health care teams engaged with the prevention effort in Aboriginal health service delivery areas. Three particular areas of training are critical:

- Training in Comprehensive Primary Health Care multi-component interventions with a particular emphasis on community development;
- Training in Individual-level Primary Health Care interventions including brief interventions, counselling and uses of pharmacotherapies;
- Training on leadership of and participation within Continuous Quality Improvement programs.

Ongoing training and support for the primary health care workforce in Comprehensive Primary Health Care, Primary Health Care interventions, and Continuous Quality Improvement are required to strengthen primary health care capacity to reduce harms related to alcohol, tobacco and obesity.

Data Collection, Information and Research

Beyond existing population level data collections undertaken by the Australian Bureau of Statistics through the census and the National Aboriginal and Torres Strait Islander Health Strategy that inform prevention targets and strategies at the broader level, two key data collection, information transfer and research strategies are at the centre of the approaches set out in this paper. These are data collection strategies focused upon:

- Episodes of Primary Clinical Care: Individual care episodes captured on existing health services databases and collated at the service level and either regionally or nationally to provide a comparative service level analysis are integral to Continuous Quality Improvement in clinical care. A common data linkage system linking all primary care service clinics including those providing residential and rehabilitative services should extend across each Aboriginal service delivery area and beyond. This approach is a key tool of clinical audit and ongoing client

and systems monitoring as well as linking individual level interventions with key client and service outcome indicators.

- Community-based Multi-component Intervention Strategies: There exists a need to refocus research (and research funding) from describing these largely well-known problems and their causes to building a body of knowledge regarding effective evidence-based interventions. There is very little known about effective programs directed toward changing social norms around alcohol and tobacco use and preventing obesity in Aboriginal settings. Within these interventions it is critical that community members are involved in all aspects of design, implementation and evaluation of community-based programs.

Both these areas of data collection require substantial resourcing through a dedicated workforce as outlined above, working within the principles outlined earlier in this paper and supported by the ongoing training and professional development outlined above for staff working at the primary care level.

Data collection, information and research needs to be resourced to allow monitoring of CQI interventions in primary care, and to build the evidence base on effective interventions at the broader community level to address alcohol, tobacco and obesity.

APPENDIX 1: TEMPLATE OF SPECIFIC ACTIONS TO ADDRESS ALCOHOL, TOBACCO AND OBESITY

Alcohol

Action	Setting	Evidence	Key conditions for success Note that the Principles for Successful Implementation outlined above remain key conditions for success across all interventions.	Key Partnerships	Core Measurements
ACTION 1 Interventions from the primary health care setting	Community controlled health services General Practice State/Territory primary health care services to Indigenous communities	Brief interventions effective in other populations Anecdotal reports of effectiveness in the Australian Indigenous context [18] [6]	PHC clinical services resourced to allow focus on non-acute issues plus service responsibility to ensure quarantining of resources for prevention Training of staff (including Aboriginal Health Workers) PHC public health expertise resourced to allow continued leadership on prevention Clinical management and quality improvement systems to focus and measure action – resourced internally to PHC service and supported externally Follow up counseling and/or treatment within service or through referral Production of materials (local / national)	ACCHSs NACCHO NACCHO Affiliates RACGP AGPN ACRRM State/Territory Governments	Proportion of patients aged 15-55 with complete adult health check in previous 2 years Proportion of patients with identified alcohol problem who have had a brief intervention

Action	Setting	Evidence	Key conditions for success Note that the Principles for Successful Implementation outlined above remain key conditions for success across all interventions.	Key Partnerships	Core Measurements
ACTION 2 Treatment and rehabilitation	Aboriginal community controlled residential alcohol treatment services Aboriginal community controlled community-based alcohol treatment services (including within primary health care services)	Pharmacotherapies effective in other populations, unevaluated in Australian Indigenous context [6] Withdrawal management, motivational interviewing, cognitive behavioural therapy, relapse prevention effective in other populations, unevaluated in the Australian Indigenous context [6] Residential treatment poorly evaluated in Australian Indigenous context	Residential or community-based (e.g. located within primary health care service) Should include: <ul style="list-style-type: none"> • access to appropriate range of treatment and rehabilitation options, including motivational interviewing, cognitive behavioural therapy, family therapy, relapse prevention etc with goals of total abstinence for dependent drinkers and reduced consumption for others; • access to pharmacotherapies for dependent drinkers; • social and cultural support for clients during and after they leave treatment programs Support and training for staff, management and community members [25] [26] Access to a registered psychologist or specialist AOD counselor needed (visiting from primary health care service) Services resourced for evaluation and quality improvement systems Capital investment may be required in residential facilities to ensure appropriate environment [25] [26] Collaborative relationships necessary between non-Aboriginal controlled services and local Indigenous organisations (particularly primary health care services)	ACCHSs Community controlled alcohol treatment and rehabilitation services Mainstream treatment and rehabilitation services ANCD NIDAC State/Territory Governments	Number of clients Proportion of clients who complete treatment Proportion of clients abstaining 12 months after treatment Proportion of clients with reduced drinking levels 12 months after treatment

Action	Setting	Evidence	Key conditions for success Note that the Principles for Successful Implementation outlined above remain key conditions for success across all interventions.	Key Partnerships	Core Measurements
ACTION 3 Pricing of alcohol	National / State level government intervention	<p>Strong international evidence shows increasing price reduces consumption and alcohol related harm [29] [30] [31]</p> <p>Living with Alcohol levy in the Northern Territory resulted in fall in acute alcohol-related mortality through traffic accidents, assault, and suicide[115] [116]</p>	<p>Government interventions on alcohol pricing beginning to be adopted by governments in countries with high levels of consumption [32] including in Australia [33]</p> <p>Should include:</p> <ul style="list-style-type: none"> • volumetric tax • floor price per unit of alcohol <p>Used differentially to shift consumption to less hazardous alcoholic drinks [33]</p> <p>Broad review of Australian alcohol taxation policy needed to assess most effective approach and build broad community support [35]</p>	NACCHO NACCHO Affiliates ANCD NIDAC RACP PHAA AGPN AMA NAAARV PAAC Australian, State and Territory governments Liquor Licensing Commissions NDRI NDARC MSHR CRCAH	<p>Implementation of a floor price at \$1 per standard drink</p> <p>Regional per capita consumption of pure alcohol</p> <p>Annual evaluation of jurisdictions</p> <p>Reduction in an agreed core set of harm indicators at a regional level (see [117])</p>

Action	Setting	Evidence	Key conditions for success Note that the Principles for Successful Implementation outlined above remain key conditions for success across all interventions.	Key Partnerships	Core Measurements
ACTION 4 Restrictions on alcohol supply	National / State level regulations adapted to local conditions	Strong evidence of effectiveness overseas and within Australia to reduce consumption and alcohol related harm including admissions to hospital, assaults and sexual offences [36] [37] [38] [39] [40] Possible displacement of drinkers offset by benefits [41]	Can include: <ul style="list-style-type: none"> • restrictions on numbers of licenses, especially take away • restrictions on hours of sale (especially take away: total hours in week or one 'no take away' day per week) • restrictions on quantities / types of alcohol to be sold (e.g. cask wine) Well-designed interventions adapted to local conditions important for greatest effect [42] Best as part of multi-component strategy to combat alcohol misuse with broad community support [43]	NACCHO NACCHO Affiliates ANCD NIDAC PHAA RACP AGPN AMA NAAARV PAAC Australian, State and Territory governments Liquor Licensing Commissions NDRI NDARC MSHR CRCAH	Total Numbers of licenses per population Total number of take-away licenses per population Total number of take-away trading hours Regional per capita alcohol consumption of alcohol (pure and broken down by category)

Action	Setting	Evidence	Key conditions for success Note that the Principles for Successful Implementation outlined above remain key conditions for success across all interventions.	Key Partnerships	Core Measurements
ACTION 5 Supporting community agency and local action	Community	<p>Approach advocated by Indigenous leaders and reports [44] [45] [46]</p> <p>Capacity building for Indigenous leadership at the local community level and restoring Indigenous social and cultural standards</p> <p>Draw on examples such as Cape York Family Responsibility Commission (FRC) and <i>Little Children are Sacred</i> Community Justice Groups</p>	<p>Establishment of local groups of senior Indigenous men and women to promote greater individual and family responsibility in relation to alcohol</p> <p>Membership and powers of groups to be negotiated, but could include:</p> <ul style="list-style-type: none"> • meeting with individuals who commit low-level alcohol-related offences and their families to counsel them • referral for support or treatment • dispute resolution • development of protocols between the community and outside agencies • provide information to communities about available programs • possible imposition of 'soft sanctions' for repeat offenders, including welfare payment quarantining. <p>Legislative change possibly needed</p> <p>Implement after broad and local negotiation at test sites</p> <p>Resourcing for support, monitoring and evaluation needed</p>	<p>NACCHO</p> <p>NACCHO Affiliates</p> <p>Other indigenous organisations such as Land Councils and Housing Associations</p> <p>Cape York Institute</p> <p>Australian, State and Territory governments</p>	<p>Six test sites running and under continuous evaluation by 2011</p>

Tobacco

Action	Setting	Evidence	Key conditions for success Note that the Principles for Successful Implementation outlined above remain key conditions for success across all interventions.	Key Partnerships	Core Measurements
ACTION 6 Interventions from the primary health care setting	Community controlled health services General Practice State/Territory primary health care services to Indigenous communities	Brief interventions effective in other populations, with similar but smaller effect in Indigenous populations [12] [47] [48]; NRT effective in other populations [51] with similar but smaller effect in Australian Indigenous population [52] [53] Very high Indigenous maternal smoking rates [56] [57] of concern as related to low birth weight and possible future development of chronic disease Smoking cessation programs during pregnancy have been shown to be effective in other populations [49] Bupropion effective in Indigenous population overseas [50]	Can include: <ul style="list-style-type: none"> • brief interventions; • Nicotine Replacement Therapies (NRT); • smoking cessation advice and support in pregnancy; • other pharmacotherapies (including bupropion, varenicline and nortriptyline) PHC clinical services resourced to allow focus on non-acute issues plus service responsibility to ensure quarantining of resources for prevention Training of staff (including Aboriginal Health Workers) Indigenous staff may need assistance to quit [6] [54] [55] Counseling and follow up required to complement brief interventions [58] [59] PHC public health expertise resourced to allow continued leadership on prevention Clinical management and quality improvement systems to focus and measure action – resourced internally to PHC service and supported externally Production of materials (local / national)	ACCHSs NACCHO NACCHO Affiliates RACGP ACRRM AMA State/Territory Governments CEITC MSHR CRCAH	Number of PBAC free/subsidised NRT scripts for Indigenous people PHC services to monitor number of brief interventions delivered to patients who are smokers No of individual patients who use smoking cessation counselors

Action	Setting	Evidence	Key conditions for success Note that the Principles for Successful Implementation outlined above remain key conditions for success across all interventions.	Key Partnerships	Core Measurements
ACTION 7 Social Marketing campaign and Quitlines	National	<p>Credited as key part of success in mainstream populations [51]</p> <p>High recall amongst Indigenous people of mainstream anti-smoking media campaigns, and anecdotal accounts of their effect on decisions to quit [12]</p> <p>Australian evaluations have found no obvious differences between Victorian Indigenous communities and the general population in terms of the message out-take or the impact of advertisement on smoking intention [60]</p> <p>Quitlines cost effective for mainstream populations; overseas evidence suggests mainstream Quitlines effective for Indigenous people [61] [62] [63].</p>	<p>Multi-media campaign (including television) aimed to shift social norms of smoking</p> <p>Expertly designed and implemented, drawing on substantial international evidence of what works</p> <p>Include pre-testing, campaign, and evaluation</p> <p>Well funded, sustained, national campaign</p> <p>May be Indigenous-specific or ensure mainstream campaigns designed to maximise Indigenous reach (e.g. messages / models targeted specifically at Indigenous community)</p> <p>Targeted to media outlets accessed by Indigenous people (mainstream and Indigenous-specific)</p> <p>Focused on harmful effects on children and families</p> <p>Include access to Quitlines</p>	<p>NACCHO</p> <p>NACCHO Affiliates</p> <p>Australian, state and Territory governments</p> <p>PHAA</p> <p>AMA</p> <p>RACP</p> <p>AGPN</p> <p>MSHR</p> <p>CRCAH</p> <p>QUIT (Vic, SA etc)</p> <p>Cancer Council</p>	<p>Indigenous smoking prevalence (through 3 yearly ABS Indigenous health survey and campaign evaluation)</p> <p>Tobacco sales data from stores in remote Aboriginal communities where there are only a small number of suppliers</p>

Action	Setting	Evidence	Key conditions for success Note that the Principles for Successful Implementation outlined above remain key conditions for success across all interventions.	Key Partnerships	Core Measurements
ACTION 8 Smoke free workplaces, community spaces and events	Community	Key part of success in mainstream populations [64] May have had lesser reach in Indigenous communities marked by low employment, poor infrastructure and weak enforcement mechanisms [26] Significant for Indigenous organisations / councils to demonstrate leadership on tobacco control [65]	May include community sanctioned smoke free homes, public spaces, workplaces and meetings NACCHO Affiliate Tobacco Control Workers to develop awareness-raising and action amongst other Aboriginal organisations	ACCHSs NACCHO NACCHO Affiliates Australian, state and Territory governments PHAA RACP AMA AGPN MSHR CRAH QUIT (Vic, SA etc) Cancer Council	Indigenous smoking prevalence (through 3 yearly ABS Indigenous health survey) Annual report from NACCHO Affiliates

Action	Setting	Evidence	Key conditions for success Note that the Principles for Successful Implementation outlined above remain key conditions for success across all interventions.	Key Partnerships	Core Measurements
ACTION 9 Multi-component community-based programs	Community	Multi-component strategies suggested as key approach [66] [67] Evidence from one study in the Australian Indigenous context concludes no change in smoking rates, but possible increase in readiness to quit [67]	Can include local community advocacy and action on: <ul style="list-style-type: none"> • smoke free spaces • education/prevention • workplace cessation programs • reinforcing broader social marketing • interventions focused on social norms in family & peer groups • worker training • responsible selling including at remote community stores Community controlled health service or other Aboriginal organisation as locus of action Particular components / form driven by local community priorities and capacities informed by evidence Set up in six to ten locations in Indigenous Australia, with broader roll out planned using lessons learned after two years Sites selected in consultation with community controlled health sector for capacity, need, and diversity Evaluation using participatory action research methodology built in Long term commitment to funding of sites to continue evaluation-reflection-planning-implementation cycle	ACCHSs NACCHO NACCHO Affiliates Australian, State and Territory governments CEITC MSHR CRCAH	Smoking prevalence at sites, pre-implementation and throughout Community acceptance and participation

Obesity

Action	Setting	Evidence	Key conditions for success Note that the Principles for Successful Implementation outlined above remain key conditions for success across all interventions.	Key Partnerships	Core Measurements
ACTION 10 Brief interventions	Community controlled health services General Practice State/Territory primary health care services to Indigenous communities	Brief interventions effective in mainstream to decrease fat consumption, increase fibre consumption [68]; Brief interventions on physical activity effective in other populations over short- and long-term periods [69] Little evaluated evidence specific to the Australian Indigenous context	PHC clinical services resourced to allow focus on non-acute issues plus service responsibility to ensure quarantining of resources for prevention Training of staff (including Aboriginal Health Workers) Follow up sessions to the initial consultation critical to improvements over the long term [69] PHC public health expertise resourced to allow continued leadership on prevention Clinical management and quality improvement systems to focus and measure action – resourced internally to PHC service and supported externally Production of materials (local / national)	NACCHO NACCHO Affiliates RACGP Divisions of General Practice State/Territory Governments WHO Collaborating Centre for Obesity Prevention (Deakin University/University of Melbourne) AGPN ACRRM	Proportion of patients aged 15-55 with complete adult health check in previous 2 years Proportion of patients with identified weight problem who have had a brief intervention Proportion of patients overweight or obese

Action	Setting	Evidence	Key conditions for success Note that the Principles for Successful Implementation outlined above remain key conditions for success across all interventions.	Key Partnerships	Core Measurements
ACTION 11 Antenatal, maternal and child health services	Community controlled health services General Practice State/Territory primary health care services to Indigenous communities	Poor nutrition in the first years of life is associated with lifetime higher rates of overweight and obesity	Core part of comprehensive primary health care; all community controlled health services to be resourced to provide Proper resourcing, professional support and management critical to success Can include: <ul style="list-style-type: none"> • antenatal care • programs to monitor infant growth and development • encouragement and support of breast-feeding • support and advice to parents about child nutrition • child growth monitoring and action 	ACCHSs NACCHO and NACCHO Affiliates RACGP ACRRM AGPN ABA Maternity Coalition ACMI CRANA	Proportion of low birth weight infants < 2500g Proportion of children breastfed to 6mths, 12mths and 2 years Proportion of children aged 0 to 5 < 3 rd centile Proportion of pregnant women presenting in 1 st trimester for antenatal care

Action	Setting	Evidence	Key conditions for success Note that the Principles for Successful Implementation outlined above remain key conditions for success across all interventions.	Key Partnerships	Core Measurements
ACTION 12 Multi-component community-based healthy lifestyle programs	Community	<p>Effective in overseas Indigenous populations in increasing physical activity [75]</p> <p>Effective in the Australian Indigenous context in improving biochemical markers of chronic disease risk and health indicators [65] [72] [73] [74]</p> <p>Strong evidence in Australian Indigenous context that outstation living and access to traditional lands is associated with reduced risk of obesity, improved physical health and overall lower chronic disease risk and mortality [76] [77] [78] [79] [80]</p>	<p>Can include local community advocacy and action on:</p> <ul style="list-style-type: none"> • nutrition • physical activity • smoking • access to traditional activities and land • availability / affordability of healthy food (e.g at community stores) • subsidised access to gyms, pools, sporting facilities etc <p>Community controlled health service or other Aboriginal organisation as locus of action</p> <p>Particular components / form driven by local community priorities and capacities informed by evidence</p> <p>Set up in six to ten locations in Indigenous Australia, with broader roll out planned using lessons learned after two years</p> <p>Sites selected in consultation with community controlled health sector for capacity, need, and diversity</p> <p>Evaluation using participatory action research methodology built in</p> <p>Long term commitment to funding of sites to continue evaluation-reflection-planning-implementation cycle</p>	ACCHSs NACCHO NACCHO Affiliates Australian, State and Territory governments MSHR CRCIAH	<p>Obesity prevalence at sites, pre-implementation and throughout</p> <p>Community acceptance and participation</p>

Action	Setting	Evidence	Key conditions for success Note that the Principles for Successful Implementation outlined above remain key conditions for success across all interventions.	Key Partnerships	Core Measurements
ACTION 13 Subsidised healthy food in remote areas	Community	Consumption of fruit and vegetables in remote Indigenous communities significantly lower than in non-remote communities [7] Cost of fruit and vegetables in remote communities 30% higher than in capital cities with price gap widening [81] High cost of healthy foods in remote areas is primary barrier to healthier diet [82]	Action to ensure promotion and availability of healthy food (especially fruit and vegetables) in remote stores Government subsidy on transport costs for healthy foods to remote Indigenous communities	NACCHO NACCHO Affiliates Australian, State and Territory governments MSHR CRCAH	Obesity prevalence at sites, pre-implementation and throughout

Acronyms used in Template

ABA	Australian Breastfeeding Association
ACCHSs	Aboriginal community controlled health services
ACM	Australian College of Midwives
ACRRM	Australian College of Rural and Remote Medicine
AGPN	Australian General Practice Network
AMA	Australian Medical Association
ANCD	Australian National Council on Drugs
CEITC	University of Melbourne Centre for Excellence in Indigenous Tobacco Control
CRANA	Council of remote Area Nurses of Australia
CRCAH	Cooperative Research Centre for Aboriginal Health
MSHR	Menzies School of Health Research
NAAARV	National Alliance Against Alcohol Related Violence
NACCHO	National Aboriginal Community Controlled Health Organisation
NACCHO Affiliates	State / Territory Affiliates of NACCHO
NDARC	National Drug and Alcohol Research Centre
NDRI	National Drug Research Institute
NIDAC	National Indigenous Drug and Alcohol Committee
PAAC	Peoples Alcohol Action Coalition
PHAA	Public Health Association of Australia
RACGP	Royal Australian College of General Practitioners
RACP	Royal Australian College of Physicians

APPENDIX 2: AMSANT PROPOSAL FOR ESTABLISHMENT OF A NATIONAL ABORIGINAL HEALTH AUTHORITY

1. The goal of the NAHA is to oversee the strengthening and further development of Aboriginal Community Controlled Health Services (ACCHSs) nationally.
2. The NAHA needs to be a statutory authority accountable to the government of the day through the Minister for Health.
3. The NAHA should be governed by a board of experts with the majority being Aboriginal people. Appointment should be made by negotiation between NACCHO and the Australian government
4. The NAHA should receive all of the current PHC funding for Aboriginal people: \$550 million recurrent from OATSIH, \$400 million recurrent from COAG and the state and territory Aboriginal PHC funding. This would achieve a total allocation of about \$1.2 billion for Aboriginal PHC services which would enable an average expenditure across Australia of about \$3000 per person for the 470,000 Aboriginal people.
5. The funding should then be allocated to Aboriginal Health Service Delivery Areas (AHSDAs) using a needs-based population funding formula with weightings for remoteness, non-English speaking groups and other factors. The AHSDAs would range from areas of 3,000 to 25,000 Aboriginal people and the goal would be to establish a single ACCHS in each AHSDA within 3 to 5 years.
6. The NAHA will provide NACCHO and affiliates with dedicated funding for capacity building to assist the development of an ACCHS in each AHDSA that does not already have a single ACCHS.
7. An agreed set of core PHC services, based on the NT template, will need to be delivered to all Aboriginal people throughout Australia through these ACCHSs.
8. ACCHSs should have the flexibility to contract some providers who will either provide services in the ACCHS or at their own practice. This could be particularly useful for large urban ACCHSs who could contract GPs who are working within their AHSDA to provide bulk billed GP services. They could be paid a retainer to provide these services but would be required to undergo cross cultural training and orientation to the regional ACCHS service.
9. Section 100 or its equivalent should be made available to all Aboriginal people across Australia so PBS pharmaceuticals are available free of charge.
10. Fee-for-service payments should be in addition to the grant funding in a "mixed model" funding model consistent with the Primary Health Care Access Program

BIBLIOGRAPHY

- [1] Australian Health Ministers' Advisory Council (AHMAC). Aboriginal and Torres Strait Islander Health Performance Framework Report 2006. Canberra, 2006.
- [2] Hill K, Barker B, Vos T. Excess Indigenous mortality: are Indigenous Australians more severely disadvantaged than other Indigenous populations? *International Journal of Epidemiology* 2007; 36:580-9.
- [3] Ring I, Firman D. Reducing indigenous mortality in Australia: lessons from other countries. *Medical Journal of Australia* 1998; 169:528-33.
- [4] Kunitz SJ, Brady M. Health care policy for Aboriginal Australians: the relevance of the American Indian experience. *Aust NZ J Public Health* 1995; 19:549-58.
- [5] Vos T, Barker B, Stanley L, Lopez AD. The burden of disease and injury in Aboriginal and Torres Strait Islander peoples 2003. Brisbane: School of Population Health, The University of Queensland, 2007.
- [6] Gray D, Siggers S, Atkinson D, Wilkes E. Substance misuse. In: Couzos S, Murray R, editors. *Aboriginal Primary Health Care: An Evidence Based Approach* Melbourne: Oxford University Press, 2008.
- [7] Australian Bureau of Statistics and Australian Institute of Health and Welfare. *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples* 2008. 2008.
- [8] Dr Alex Brown (pers.comm). Head of the Centre for Indigenous Vascular and Diabetes Research, Baker IDI Heart and Diabetes Institute. 2009.
- [9] Zaridze D, Maximovitch D, Lazarev A, Igitov V, Boroda A, Boreham J, Boyle P, Peto R, Boffetta P. Alcohol poisoning is a main determinant of recent mortality trends in Russia: evidence from a detailed analysis of mortality statistics and autopsies. *International Journal of Epidemiology* 2009; 38:143-53.
- [10] Australian Bureau of Statistics. *National Aboriginal and Torres Strait Islander Health Survey: Australia, 2004-05*. Canberra: Australian Bureau of Statistics, 2006:vi, 78.
- [11] Australian Bureau of Statistics. *Tobacco smoking in Australia: a snapshot, 2004-05*. Canberra: Australian Bureau of Statistics, 2006.
- [12] Ivers RG. A review of tobacco interventions for Indigenous Australians. *Australian and New Zealand Journal of Public Health* 2003; 27:294-9.
- [13] Cunningham J. *Cigarette smoking among Indigenous Australians, 1994*. Canberra: Australian Bureau of Statistics, 1997:1-28.
- [14] Australian Bureau of Statistics. *National Aboriginal and Torres Strait Islander Social Survey, 2002*. Canberra: Australian Bureau of Statistics, 2004:1-80.
- [15] White V, Hill D, Siahpush M, Bobevski I. How has the prevalence of cigarette smoking changed among Australian adults? *Trends in smoking prevalence between 1980 and 2001*. *Tobacco Control* 2003; 12.
- [16] Mackerras D. Birth weight changes in the pilot phase of the Strong Women Strong Babies Strong Culture Program in the Northern Territory. *Australia and New Zealand Journal of Public Health* 2001; 25:34-40.
- [17] Heath DL, Panaretto KS. Nutrition status of primary school children in Townsville. *Australian Journal of Rural Health* 2005; 13:282-9.
- [18] Brady M. Giving away the grog: an ethnography of Aboriginal drinkers who quit without help. *Drug and Alcohol Review* 1993; 12:401-11.
- [19] Bailie R, Dowden M, Si D, O'Donoghue L, Kelly A. *Audit and Best Practice for Chronic Disease Project Progress Report*. Darwin: Menzies School of Health Research 2005.
- [20] Bailie RS, Si D, O'Donoghue L, Dowden M. Indigenous health: effective and sustainable health services through continuous quality improvement. *MJA* 2007; 186:525-7.

- [21] Anton RF, Moak DH, Waid LR, Latham PK, Malcolm RJ, Dias JK. Naltrexone and cognitive behavioural therapy for the treatment of outpatient alcoholics: results of a placebo controlled trial. *American Journal of Psychiatry* 1999; 156 1758 - 64.
- [22] Sarrazin MV, Hall JA. Impact of lowa case management on provisions of social support for substance abuse clients. *Care Management Journals* 2004; 5:3-11.
- [23] McLellan AT, Hagan TA, Levine M, Gould F, Meyers K, Bencivengo M, Durrell J. Supplemental social services improve outcomes in public addiction treatment. *Addiction*. *Addiction* 1998; 93:1489-99.
- [24] Brady M. Indigenous residential treatment programs for drug and alcohol problems: Current status and options for improvement. Canberra: Centre for Aboriginal Economic Policy Research, The Australian National University, 2002:1-28.
- [25] Gray D, Siggers S, Sputore B, Bourbon D. What works?: a review of evaluated alcohol misuse interventions among Aboriginal Australians. *Addiction* 2000; 95:11-22.
- [26] Ministerial Council on Drug Strategy. National Drug Strategy: Aboriginal and Torres Strait Islander Peoples Complementary Action Plan 2003-2009: background paper. Canberra: Ministerial Council on Drug Strategy, 2006.
- [27] Aboriginal Medical Services Alliance of the Northern Territory (AMSANT). A model for integrating alcohol and other drug, community mental health and primary health care in Aboriginal Medical Services in the Northern Territory. 2008.
- [28] Babor TF, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K, Grube J, Gruenewald P, Hill L, Holder H, Homel R, Osterberg E, Rehm J, Room R, Rossow I. *Alcohol: No Ordinary Commodity. Research and Public Policy*. Oxford: Oxford University Press, 2005.
- [29] World Health Organisation. Strategies to reduce the harmful use of alcohol. 2008.
- [30] Godfrey C. Can tax be used to minimise harm? A health economist's perspective. In: Plant M, Single E, Stockwell T, editors. *Alcohol Minimising the Harm What works?* London: Free Association Books, 1997:29-42.
- [31] Coghlan A. WHO considers global war on alcohol abuse. *New Scientist* 2008.
- [32] Scottish Government. Tackling alcohol misuse. 2009.
- [33] Chikritzhs TN, Dietze PM, Allsop SJ, Daube MM, Hall WD, Kypri K. The "alcopops" tax: heading in the right direction. *eMJA: Rapid Online Publication* 2009; 2 March 2009.
- [34] The Guardian. Cost of some alcohol could double under plan to tackle binge culture. <http://www.guardian.co.uk/society/2009/mar/15/alcohol-double-prices-recommendation>, 2009.
- [35] Skov SJ. Alcohol taxation policy in Australia: public health imperatives for action (A statement by the Royal Australasian College of Physicians for the Royal Australasian College of Physicians Alcohol Advisory Group). *eMJA Rapid Online Publication* 2009; 16 March 2009.
- [36] Gray D, Siggers S, Sputore BA, Bourbon D. What works: a review of evaluated alcohol misuse interventions among Aboriginal Australians. *Addiction* 2000; 95:11-22.
- [37] d'Abbs P, Togni S, Duquemin A. Evaluation of restrictions on the sale of alcohol from Curtin Springs Road House, Northern Territory. Darwin: Menzies School of Health Research, 1999.
- [38] d'Abbs P, Togni S. Liquor licensing and community action in regional and remote Australia: a review of recent initiatives. *Aboriginal and Islander Health Worker Journal* 2001; 25:18-26.
- [39] Donnely N, Poynton S, Weatherburn D, Bamford E, Nottage J. Liquor outlet concentrations and alcohol-related neighbourhood problems. *Alcohol Studies Bulletin* 2006; 8.

- [40] Gray D, Siggers S, Atkinson D, Sputore B, Bourbon D. Beating the grog: an evaluation of the Tennant Creek liquor licensing restrictions. *Australian and New Zealand Journal of Public Health* 2000; 24:39-44.
- [41] d'Abbs P, Togni S. Liquor licensing and community action in regional and remote Australia: a review of recent initiatives. *Australian and New Zealand Journal of Public Health* 2000; 24:45-53.
- [42] Hogan E, Boffa J, Rosewarne C, Bell S, Ah Chee D. What price do we pay to prevent alcohol-related harms in Aboriginal communities?: the Alice Springs trial of liquor licensing restrictions. *Drug and Alcohol Review* 2006; 25:207-12.
- [43] Stempel P, Siggers S, Gray D, Stearne A. Indigenous drug and alcohol projects: elements of best practice. Canberra: Australian National Council on Drugs, 2004.
- [44] Northern Territory Emergency Response Review Board. Report of the NTER Review Board October 2008. <http://www.nterreview.gov.au/index.htm>, 2008.
- [45] Cape York Institute for Policy and Leadership. Alcohol. <http://www.cyi.org.au/alcohol.aspx>, 2009.
- [46] Anderson P, Wild R. Little Children are Sacred: Report of the Northern Territory Board of Inquiry into the Protection of Aboriginal Children from Sexual Abuse. In: Government NT, editor. Darwin, 2007.
- [47] Litt J. Smoking and GPs: time to cough up: Successful interventions in general practice. . *Australian Family Physician* 2005; 34.
- [48] Royal Australian College of General Practitioners (RACGP). Smoking Cessation Guidelines for Australian General Practice: Practice Handbook.: Royal Australian College of General Practitioners, The Cancer Council Australia, National Heart Foundation, Australian Divisions of General Practice, New Zealand Guidelines for Smoking Cessation Advisory Group, University of Sydney Family Medicine Research Centre. , 2004.
- [49] Lumley J, Oliver S, Waters E. Interventions for promoting smoking cessation during pregnancy. *Cochrane Review*. Oxford: The Cochrane Library, 2003.
- [50] Holt S, Timu-Parata C, Ryder-Lewis S, Weatherall M, Beasley R. Efficacy of bupropion in the indigenous Maori population in New Zealand. *Thorax* 2005; 60:120-3.
- [51] Chapman S. Public health advocacy and tobacco control: making smoking history. Oxford: Blackwell, 2007.
- [52] Ivers RG, Farrington M, Burns CB, Bailie RS, D'Abbs PH, Richmond RL, Tipiloura E. A study of the use of free nicotine patches by Indigenous people. *Australian and New Zealand Journal of Public Health* 2003; 27:486-90.
- [53] DiGiacomo M, Davidson PM, Davison J, Moore L, Abbott P. Stressful life events, resources, and access: key considerations in quitting smoking at an Aboriginal Medical Service. *Australian and New Zealand Journal of Public Health* 2007; 31:174-6.
- [54] Lindorff K. Tobacco, time for action: National Aboriginal and Torres Strait Islander Tobacco Control project. Canberra: National Aboriginal Community Controlled Health Organisation, 2002:1-151.
- [55] Harvey D, Tsey K, Cadet-James Y, Minniecon D, Ivers R, McCalman J, Lloyd J, Young D. An evaluation of tobacco brief intervention training in three Indigenous health care settings in north Queensland. *Australian and New Zealand Journal of Public Health* 2002; 26:426-31.
- [56] Costa Cd, Child A. Pregnancy outcomes in urban Aboriginal women. *Medical Journal of Australia* 1996; 164:523-6.
- [57] Eades SJ, Read AW, the Bibbulung Gnarnep Team. Infant care practices in a metropolitan Aboriginal population. *Journal of Paediatrics and Child Health* 1999; 35:541-4.
- [58] Michie S, Jochelson K, Markham W, Bridle C. Low-income groups and behaviour change interventions: a review of intervention content and effectiveness. Kings Fund UK, 2008.

- [59] Stead LF, Bergson G, Lancaster T. Physician advice for smoking cessation. 2008.
- [60] K Hassard (ed). National Tobacco Campaign evaluation report. Canberra: Department of Health and Aged Care, 1999.
- [61] Maher J, Rohde K, Dent C, Stark M, Pizacani B, Boysun M, Dilley J, P Yepassis-Zembrou. Is a statewide tobacco quitline an appropriate service for specific populations? *Tobacco Control* 2007; 16:65-70.
- [62] Hayward LM, Campbell HS, C Sutherland-Brown. Aboriginal users of Canadian quitlines: an exploratory analysis. 2007; *Tobacco Control*:60-4.
- [63] Wilson N, Grigg M, Graham L, Cameron G. The effectiveness of television advertising campaigns on generating calls to a national Quitline by Maori. *Tobacco Control* 2005; 14:284-6.
- [64] Chapman S, Borland R, Scollo M, Brownson RC, Dominello A, Woodward S. The impact of smoke-free workplaces on declining cigarette consumption in Australia and the United States. *Am J Public Health* 1999; 89:1018-23.
- [65] Rowley KG. Improvements in circulating cholesterol, antioxidants, and homocysteine after dietary intervention in an Australian Aboriginal community. *American Journal of Clinical Nutrition* 2001; 74:442.
- [66] Campbell S, Duquemin A, Swinbourne A, McDermott R. The North Queensland Indigenous Tobacco Project 2003-2006. Adelaide: University of South Australia, 2008.
- [67] Ivers RG, Castro A, Parfitt D, Bailie RS, d'Abbs PH, Richmond RL. Evaluation of a multi-component community tobacco intervention in three remote Australian Aboriginal communities. *Australian and New Zealand Journal of Public Health* 2006; 30:132-6.
- [68] Beresford SAA, Curry SJ, Kristal AR, Lazovich D, Feng Z, Wagnew E. A dietary intervention in primary care practice: The eating patterns study. *American Journal of Public Health* 1997; 84:610-6.
- [69] NICE Public Health Collaborating Centre. A rapid review of the effectiveness of brief interventions in primary care to promote physical activity in adults. 2006.
- [70] Power C, Li L. Cohort study of birthweight, mortality, and disability. *BMJ* 2000; 320:840-1.
- [71] NSW Centre for Overweight and Obesity, University of Sydney. A literature review of the evidence for interventions to address overweight and obesity in adults and older Australians, with special reference to people living in rural and remote Australia and Aboriginal and Torres Strait Islanders. Sydney: University of Sydney, 2005:68.
- [72] Rowley K, Lee AJ, Yarmirr D, O'Dea K. Homocysteine concentrations lowered following dietary intervention in an Aboriginal community. *Asia Pacific Journal of Clinical Nutrition* 2003; 12:92-5.
- [73] Lee A, Bonson A, Yarmirr D, O'Dea K, Mathews J. Sustainability of a successful health and nutrition program in a remote Aboriginal community. *Medical Journal of Australia* 1995; 162:632-5.
- [74] Rowley KG, Daniel M, Skinner K, Skinner M, White GA, O'Dea K. Effectiveness of a community-directed 'healthy lifestyle' program in a remote Australian Aboriginal community. *Australian and New Zealand Journal of Public Health* 2000; 24:136-44.
- [75] Coble JD, Rhodes RE. Physical activity and Native Americans: a review. *Am J Prev Med* 2006; 31:36-46.
- [76] Rowley KG, O'Dea K, Anderson I, McDermott R, Saraswati K, Tilmouth R, Roberts I, Fitz J, Wang Z, Jenkins A, Best JD, Wang Z, Brown A. Lower than expected morbidity and mortality for an Australian Aboriginal population: 10-year follow-up in a decentralised community. *MJA* 2008; 188:283-7.
- [77] O'Dea K, White N, Sinclair A. An investigation of nutrition-related risk factors in an isolated Aboriginal community in Northern Australia: advantages of a traditionally-orientated life-style. *Medical Journal of Australia* 1988; 148:177-80.
- [78] Morice RD. Woman dancing dreaming: Psychosocial benefits of the Aboriginal outstation movement. *Med J Aust* 1976; 2:939-42.

- [79] Burgess CP, Johnston F. *Healthy Country: Healthy People - Indigenous Natural and Cultural Resource Management and Health*. Darwin: Menzies School of Health Research, 2007.
- [80] McDermott R, O'Dea K, Rowley K, Knight S, Burgess P. Beneficial impact of the Homelands Movement on health outcomes in central Australian Aborigines. *ANZJPH* 1998; 22:653-8.
- [81] Harrison MS, Coyne T, Lee AJ, Leonard D, Lawson S, Groos A, Ashton BA. The increasing cost of the basic foods required to promote health in Queensland. *Medical Journal of Australia* 2007; 186:9-14.
- [82] Brimblecombe J. Poverty underlies poor nutrition. *The Chronicle* 2007; 10:15-6.
- [83] O'Dea K. Preventable Chronic Diseases Among Indigenous Australians: The Need for a Comprehensive National Approach. *Heart, Lung and Circulation* 2005; 14:167-71.
- [84] Popay J, Escorel S, Hernández M, Johnston H, Mathieson J, Rispel L. *Understanding and Tackling Social Exclusion: Final Report to the WHO Commission on Social Determinants of Health*. Social Exclusion Knowledge Network, 2008.
- [85] World Health Organisation. *Social determinants of Health: The Solid Facts*. In: Marmot M, Wilkinson R, editors. Denmark: International Centre for Health and Safety, 2003.
- [86] Marmot M, Siegrist J, Thorell T. Health and the psychosocial environment. In: Marmot M, Wilkinson RG, editors. *The Social Determinants of Health* Oxford University Press, 2006.
- [87] Syme SL. Social determinants of health: The community as an empowered partner. *Preventing Chronic Disease: Public Health Research, Practice, and Policy* 2004; 1:1-5.
- [88] Devitt J, Hall G, Tsey K. *An introduction to the social determinants of health in relation to the Northern Territory Indigenous population*. Darwin: Cooperative Research Centre for Aboriginal and Tropical Health, 2001.
- [89] Tsey K, Whiteside M, Deemal A, Gibson T. Social determinants of health, the 'control factor' and the Family Wellbeing Empowerment Program. *Australasian Psychiatry* 2003; 11:34-9.
- [90] Booth A, Carroll N. *The health status of Indigenous and non-Indigenous Australians*. Discussion Paper No 486. Canberra: Centre for Economic Policy Research, Australian National University, 2005.
- [91] Nolte E, McKee M. *Does healthcare save lives? Avoidable mortality revisited*. London: The Nuffield Trust, 2004.
- [92] Kunitz SJ. *Disease and social diversity: the European impact on the health of non-Europeans*. New York: Oxford University Press, 1994.
- [93] Hisnanick J, Coddington D. Measuring human betterment through avoidable mortality: a case for universal health care in the USA. *Health Policy* 1995 34:9-19.
- [94] Tobias M, Jackson G. Avoidable mortality in New Zealand, 1981-97. *Australian and New Zealand Journal of Public Health* 2001; 25:12-20.
- [95] Australian Health Ministers' Advisory Council (AHMAC). *Aboriginal and Torres Strait Islander Health Performance Framework Report 2008*. Canberra, 2008.
- [96] Thomas DP, Condon JR, Anderson IP, Li SQ, Halpin S, Cunningham J, Guthridge SL. Long-term trends in Indigenous deaths from chronic disease in the Northern Territory; a foot on the brake, a foot on the accelerator. *MJA* 2006; 185:145-9.
- [97] World Health Organization. *Alma-Ata: Primary Health Care.*, 1978.
- [98] World Health Organisation. *Primary Health Care: A Framework for Future Strategic Directions*. 2003.
- [99] Fry D, Furler J. *General practice, primary health care and population health interface. General Practice in Australia: 2000*. Canberra: Commonwealth Department of Health and Aged Care, 2000.

- [100] Australian Primary Health Care Research Institute. What is primary health care? http://www.anu.edu.au/aphcri/General/phc_definition.php, 2009.
- [101] National Aboriginal and Torres Strait Islander Health Council. National Strategic Framework for Aboriginal and Torres Strait Islander Health: Framework for action by Governments, NATSIHC, Canberra., 2003.
- [102] Australian Medical Association. Position paper on Aboriginal and Torres Strait Islander Health - 2005. <http://www.ama.com.au/node/2023>, 2005.
- [103] National Aboriginal Community Controlled Health Organisation (NACCHO). Primary health care. <http://www.naccho.org.au/definitions/primaryhealth.html>, 2006.
- [104] Aboriginal Medical Services Alliance of the Northern Territory (AMSANT). AMSANT Administration Manual. <http://www.amsantmanual.com/03aboriginalhealth.html#a04>.
- [105] Dwyer J, Silburn K, Wilson G. National strategies for improving Indigenous health and health care. Aboriginal and Torres Strait Islander Primary Health Care Review: Consultant Report No 1. Canberra: Commonwealth of Australia, 2004.
- [106] Northern Territory Aboriginal Health Forum. Indigenous Access to Core Primary Health Care Services in the Northern Territory. 2007.
- [107] National Aboriginal Community Controlled Health Organisation (NACCHO). Response to the National Health and Hospitals Reform Commission: A Healthier Future for All Australians (Interim Report December 2008). 2009.
- [108] National Health and Hospitals Reform Commission. A Healthier Future For All Australians: Interim Report of the National Health and Hospitals Reform Commission. 2008.
- [109] Australian Institute of Health and Welfare. Expenditures on health for Aboriginal and Torres Strait Islander peoples 2004–05. In: AIHW, editor. Canberra, 2008.
- [110] Stanley F, Richardson S, Prior M. Children of the Lucky Country? How Australian society has turned its back on children and why children matter. Sydney: Macmillan, 2005.
- [111] Barker DJ, editor. Fetal and infant origins of adult disease. London: BMJ Publishing Group, 1993.
- [112] Felitti VJ, Anda RF, Nordenberg D, Williamson DF, Spitz AM, Edwards V, Koss MP, Marks JS. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *Am J Prev Med* 1998; 14:245-58.
- [113] Griew R, Tilton E, Stewart J, Eades S, Lea T, Peltola C, Livingstone L, Harmon K, Dawkins Z. Family Centred Primary Health Care. Canberra: Office for Aboriginal and Torres Strait Islander Health Department of Health and Ageing, 2007.
- [114] Council of Australian Governments. National Partnership Agreement for Indigenous Early Childhood Development. 2008.
- [115] Holder HE. Editorial: The public policy importance of the Northern Territory's Living with Alcohol Program, 1992–2002. *Addiction* 2005; 100:1571–2.
- [116] Chikritzhs T, Stockwell T, Pascal R. The impact of the Northern Territory's Living With Alcohol program, 1992-2002: revisiting the evaluation. *Addiction* 2005; 100:1625-36.
- [117] Chikritzhs T, Pascal R, Gray D. National Alcohol Indicators Bulletin 11: Trends in alcohol-attributable deaths among Indigenous Australians, 1998-2004. <http://www.ndrcurtin.edu.au/publications/naiph.html>. Perth: National Drug Research Institute Curtin University of Technology, 2007.