Author/s:
Ong, KS;Carter, R;Vos, T;Kelaher, M;Anderson, I

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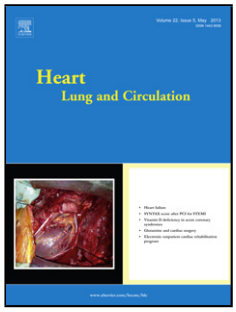

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Author: Katherine S Ong Rob Carter Theo Vos Margaret Kelaher Ian Anderson

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Cost-effectiveness of Interventions to Prevent Cardiovascular Disease in Australia's Indigenous Population

Katherine S Ong, MBBS, PhD[1]

Rob Carter, PhD[2]

Theo Vos, PhD[3]

Margaret Kelaher, PhD[1]

Ian Anderson, MBBS, PhD[4]

[1] Centre for Health Policy, Programs and Economics, School of Population Health, The University of Melbourne, Carlton, Victoria 3010, Australia

[2] Deakin Health Economics, Deakin Strategic Research Centre – Population Health, Deakin University, Burwood Highway, Burwood, Victoria 3125, Australia

[3]Centre for Burden of Disease and Cost-effectiveness, School of Population Health, The University of Queensland, Herston Road, Herston, Queensland 4006, Australia

[4] Murrup Barak, Melbourne Institute for Indigenous Development, The University of Melbourne, Carlton, Victoria 3010, Australia

Corresponding Author:
Katherine Ong
Centre for Health Policy, Programs and Economics
The University of Melbourne
Level 4, 207 Bouverie Street
Carlton Victoria 3010
Tel: +61 402 108 179
Fax: +61 3 9348 1174
Email: ksong@unimelb.edu.au

Abstract

Background

Cardiovascular disease is the leading cause of disease burden in Australia's Indigenous population, and the greatest contributor to the Indigenous 'health gap'. Economic evidence can help identify interventions that efficiently address this discrepancy.

Methods

Five interventions (one community-based and four pharmacological) to prevent cardiovascular disease in Australia's Indigenous population were subject to economic evaluation. Pharmacological interventions were evaluated as delivered either via Aboriginal Community Controlled Health Services or mainstream general practitioner services. Cost-utility analysis methods were used, with health benefit measured in disability-adjusted life-years saved.

Results

All pharmacological interventions produced more Indigenous health benefit when delivered via Indigenous health services, but cost-effectiveness ratios were higher due to greater health service costs. Cost-effectiveness ratios were also higher in remote than in non-remote regions. The polypill was the most cost-effective intervention evaluated, while the community-based intervention produced the most health gain.

Conclusions

Local and decision-making contextual factors are important in the conduct and interpretation of economic evaluations. For Australia's Indigenous population, different models of health service provision impact on reach and cost-effectiveness results. Both the extent of health gain and cost-effectiveness are important

considerations for policy-makers in light of government objectives to address health inequities and bridge the health gap.

Key Words

Economics, Medical

Health services, Indigenous

Cardiovascular diseases

Prevention and control

Socioeconomic factors

Introduction

It is well documented that the health of Australia's Aboriginal and Torres Strait Islander (or Indigenous) population is worse than that of non-Indigenous Australians. In 2005-2007, Indigenous life expectancy was approximately 10 years less than the general Australian populations' [1], and in 2001-2005 standardised mortality and infant mortality ratios were more than twice as high [2]. Cardiovascular disease (CVD) is the leading cause of disease burden in the Indigenous population, comprising 17% of total disability-adjusted life-years (DALYs) [3]. For adults, CVD is the major contributor to the Indigenous health gap, comprising 23% of the difference in DALYs between Indigenous and non-Indigenous Australians in 2003 [3]. Therefore, interventions aimed at preventing CVD have great potential to improve Indigenous health and help reduce inequities.

Economic evaluations can assist decision-makers determine which interventions provide the best 'value for money' with regards to improving health. However, there is minimal economic evidence surrounding the primary prevention of CVD in Australia's Indigenous population. A review of the literature only revealed one cost-effectiveness study [4], which was a treatment study aimed at those with end-stage kidney failure, and therefore not primary prevention. One additional study was identified that is investigating the effectiveness and cost-effectiveness of the polypill in high risk Indigenous adults [5], however this trial is ongoing and is yet to produce results.

One reason for this lack of Indigenous health economics evidence is that, because of the relatively small size of this population group, there is limited intervention cost and

effectiveness data from Indigenous settings on which to base evaluations. As a result, resource allocation decisions may be based on mainstream economic evidence that is not necessarily representative, or may not incorporate economic evidence at all. Allocations based upon inappropriate economic evidence may perpetuate or even exacerbate health inequities.

The need to allocate additional resources to address Indigenous health is widely recognised and reflected in Australian policy recommendations [6, 7]. Therefore, more economic evidence is needed to help guide decision-making in a contextually appropriate manner. The research presented in this paper was undertaken to help address this evidence gap. Conducted as part of the Assessing Cost Effectiveness in Prevention (ACE-Prevention) study, it both updates and expands on information presented in the ACE-Prevention Final Report and associated dissemination pamphlets [8, 9].

Methods

Five interventions to prevent cardiovascular disease in Indigenous Australians were selected for economic evaluation. These included one community-based intervention, and four pharmacological interventions. The interventions were targeted at the entire Australian Indigenous population aged 35 years and above, as a designated high cardiovascular risk group. This broad target population was selected rather than individuals at high cardiovascular risk, as Indigenous individual level cardiovascular risk factor data on which to model intervention effectiveness was not available. Interventions were evaluated as delivered from either mainstream general practitioner (GP) services or Aboriginal Community Controlled Health Services (ACCHSs), the

latter assumed to be the preferred Indigenous model of primary health care [10]. For interventions delivered via ACCHSs, sub-analysis was also performed for the remote and non-remote Indigenous population separately, to account for differences in service delivery and population demographics.

The Assessing Cost Effectiveness (ACE) methods of economic evaluation were used [11]. This involved cost-utility analysis, with costs measured in dollars, and outcomes measured in disability-adjusted life-years (DALYs) averted. The reference year was 2003. Interventions were assessed from a health sector perspective, and compared to the hypothetical 'null scenario' where it was assumed that no cardiovascular preventive interventions were currently in place (the Generalised Cost-Effectiveness Approach [12]). This required a back-calculation to determine disease rates in the absence of current practice treatments, based on the results of population risk factor prevalence surveys and current medication use [13], adjusted to reflect the Indigenous population [14, 15].

Looma Healthy Lifestyle

A broad-based literature search was undertaken to identify interventions to prevent cardiovascular disease targeting the Indigenous population. This revealed only one study containing sufficient cost and effectiveness data to allow economic evaluation, called 'Looma Healthy Lifestyle' [16, 17]. Although this study was an interrupted time series, and thus of a lower level of evidence than is generally preferred for economic evaluation, it has been evaluated to ensure Indigenous specific evidence that is available is utilised.

Looma Healthy Lifestyle was a community-based intervention, initiated and developed by the Looma community in the remote Kimberly region of Western Australia [16, 17]. The intervention aimed to reduce morbidity from diabetes and cardiovascular disease. Although comprising two separate components targeting either 'those with diabetes' or the 'rest of the community', it has been specified in its broad population-based format for this economic evaluation. This intervention involved a diabetes nurse educator who developed the program with the community, and two Aboriginal health workers who ran the program. Features included regular health promotion activities, physical activity groups, improved nutritional content of food items at the local store, and introduction of smoking restrictions in public buildings. A sport and recreation officer and a community driver were also employed [16, 17]. Detailed feedback occurred with community surveys, including measurement of physiological and biological markers. These revealed the intervention was successful in improving the cardiovascular risk profile of the community by reducing cholesterol and fasting insulin levels, but with no observed effect on rates of hypertension, obesity, diabetes or smoking.

Pharmacological interventions

Several interventions originally evaluated for the general Australian population in the ACE-Prevention project were adapted to the Indigenous setting. These original evaluations have been detailed elsewhere [18-20] and are described briefly here. Intervention evidence has been adapted from the general Australian population to the Indigenous population using the 'Indigenous Health Service Delivery (IHSD) Template' developed by the authors [10]. This template identifies the differences in costs and outcomes when interventions are delivered from ACCHSs compared to

mainstream GP practices, and allows adaptation of mainstream data so it can be evaluated *as if* the intervention were delivered from an Indigenous setting. In doing so, economic evaluation results are made more relevant to the Indigenous context when Indigenous specific evidence is deficient. For comparison, evaluation of these same interventions has also been performed as delivered to the Indigenous population from mainstream GP services.

The interventions selected for this analysis were considered particularly amenable to implementation in the Indigenous context having regard to: patterns of disease and demographics; the involvement of a health care practitioner (required for adaptation using the IHSD Template); and the level of available evidence. Therefore, pharmacological interventions have been selected, and while acknowledging these interventions are not necessarily most in keeping with the holistic models of care valued by Indigenous peoples [21], they are commonly used and there is merit in ensuring all evaluations are relevant to Indigenous contexts.

The cardiovascular interventions selected for evaluation in the Indigenous population include:

- ***HMG-CoA reductase inhibitors (Statins)*** – Hypercholesterolaemia is an established risk factor for cardiovascular disease, contributing 31% of the Indigenous cardiovascular disease burden [3]. Statins effectively reduce cholesterol levels, and therefore prevent cardiovascular disease with minimal side effects [22]. Thus statins may potentially be used as a broader population-wide preventive measure.

- ***Low dose diuretics*** – This is the first-line drug treatment for hypertension [23, 24], the cause of 25% of the Indigenous cardiovascular disease burden [3]. At low dosage, this medication has had a good safety profile, and as an older drug is of lower cost [23]. It is therefore a good candidate for primary prevention at the population level.

- ***Angiotensin Converting Enzyme Inhibitors (ACE inhibitors)*** – ACE inhibitors also reduce blood pressure, and have the added advantage of preventing progression of diabetic kidney disease [25, 26]. Therefore, there are benefits for use in the Indigenous population, who have significantly higher rates of type 2 diabetes and renal complications compared to the general Australian population [27]. As the medication has few side effects, it has particular potential for implementation as a preventive measure. Beneficial results were achieved when trialled in Indigenous communities as treatment for diabetics and those with impaired renal function [28, 29].

- ***Polypill*** – This currently experimental formulation combines several different medications to prevent cardiovascular disease in a single pill. For this example, a statin, a diuretic, a beta blocker, and a calcium channel blocker have been used. Advantages include the simplicity of taking a single pill, which may in turn improve both the administration of and adherence to treatment [30]. Results from clinical trials have been promising, with treatment well-tolerated and resulting in a marked reduction in CVD risk [31]. Therefore, this treatment would also appear potentially appropriate as a preventive measure.

The medications contained in the polypill differ from those evaluated as monotherapy. Selected interventions were those considered most relevant to the Indigenous health

context. Each of these pharmacological interventions was assumed to be administered under the care of a general practitioner, and to involve annual monitoring of biochemical markers.

Modelling to health outcomes

Intervention effectiveness was measured as the relative risk reduction in the chance of incident cardiovascular events or stroke, drawn from the literature (Table 1). This was modelled to the DALY outcome by using a decision-analytic Markov model constructed in Microsoft Excel [20]. Four mutually exclusive health states ('alive and disease free'; 'alive after acute coronary syndrome (ACS)'; 'alive after stroke'; and 'dead') were defined through which cohorts of disease free individuals, stratified by age and sex, transited in one yearly cycles until death or age 85 years.

Intervention costs and cost-offsets

Pathway costing, where each component of the intervention is clearly specified, was used to determine resource use and associated costs. In line with the health sector perspective, costs to both government and patients were included. Prices were expressed in Australian dollars for the year 2003, adjusted where necessary using health price deflators [35]. For the pharmacological interventions, costs from mainstream GP services were adapted to reflect costs of delivery via ACCHSs using the IHSD Template [10]. As the polypill is an experimental treatment, a range of hypothetical costs was used guided by expert opinion.

Calculated per capita intervention costs are detailed in Table 2. The costs of the pharmacological interventions were based on the cost of the medication, the number of initial and follow-up GP visits, and the amount of initial and ongoing blood testing required. Differences in intervention costs can be explained by differential follow up requirements. For statins, it was assumed that only one GP visit was required in the first year for initiation of treatment, followed by twice-yearly visits in subsequent years. Conversely, for the blood pressure lowering medications it was assumed that three GP visits were required in the first year to ensure stabilisation of blood pressure, which then reverted to twice-yearly follow-up.

Cost offsets were based on cardiovascular disease and stroke treatment costs [20], adjusted to take into account greater severity of disease and co-morbidities in the Indigenous population [36].

Sensitivity and uncertainty analysis

The effect of uncertainty in input parameters has been included using Monte Carlo simulation (using @Risk, Palisade Corporation, New York) in both the ICVD Prevention Model and the IHSD Template. Ranges of values were specified as inputs, either taken directly from source studies or data sets, or where estimates were used, a triangular distribution of +/- 20% was applied. A probabilistically generated value was selected from each uncertainty range for use in modelling calculations. For each calculation, 2000 iterations were performed to produce a range of outcome values that incorporated the uncertainty contained within the input parameters. Results are therefore presented as the median and 95% uncertainty ranges bounded by the 2.5 and

97.5 centile values of the 2000 iterations. One-way sensitivity analysis was performed to assess the impact of varying the cost of the polypill.

Results

Table 3 lists the economic evaluation results for the interventions delivered to the total Indigenous population from either mainstream GP services or ACCHSs in league table format. The results for ACCHSs separated by remoteness are in Table 4.

The results (Table 3) show the polypill is the most cost-effective option for the Indigenous population, resulting in health gains with cost savings when delivered from mainstream GP practices at prices up to $200 annually, and favourable cost-effectiveness ratios when delivered from ACCHSs ($21,000 per DALY saved when priced at $500 per annum). Low dose diuretics ($11,000 per DALY from mainstream GP practices and $31,000 per DALY from ACCHSs) and ACE-inhibitors ($31,000 per DALY from mainstream GP practices and $50,000 per DALY from ACCHSs) are also cost-effective options if the conventional $50,000 per DALY saved [9] threshold is applied. In terms of maximum benefit, more DALYs are saved if interventions are delivered to the Indigenous population via ACCHSs compared to mainstream GP practices (for the polypill, 7,100 compared to 4,700 DALYs saved respectively), although higher costs result in higher overall cost-effectiveness ratios.

When focusing on the remote Indigenous population (Table 4), the Looma intervention appears the least cost-effective ($210,000 per DALY saved). However, this intervention also makes the biggest impact on remote Indigenous health, providing between 75 to 150% more benefit in terms of DALYs saved than the next

most effective option, the polypill (2,600 compared to 1,500 DALYs saved respectively for the remote Indigenous population). In general terms, it is also observed that cost-effectiveness ratios are lower in non-remote as opposed to remote regions, and this can be explained by the higher costs of providing health services in remote areas.

Discussion

The economic evaluation results presented should be interpreted in light of Indigenous health care system objectives, with a pressing policy imperative to close the health gap. Therefore, total health benefit for the Indigenous population is of upmost importance in addition to cost-effectiveness. Table 3 shows 50% more health gain can be achieved if cardiovascular preventive interventions are delivered to the Indigenous population via ACCHSs compared to mainstream GP practices. However, this comes at greater cost, with cost-effectiveness ratios subsequently higher. The economic question is therefore broadened from 'What is the best value for money?' to 'Is the additional health gain value for money?' The answer, in part, depends on what is considered reasonable to address Indigenous health inequities, and may involve reconsideration of conventional cost-effectiveness 'thresholds'.

If only efficiency (narrowly defined) was considered, and resources allocated strictly according to 'cost per DALY' league tables, interventions would be delivered to the Indigenous population via mainstream GP practices rather than ACCHSs. This would result in diminished Indigenous health gain, and widening of the health gap. Moreover, resources would be redirected from remote to non-remote health services as the more cost-effective option, despite greater health need in remote areas. It is

clear that purely efficiency-based decision rules for priority setting would not be accepted by the community on social justice grounds.

The need to consider other factors beyond 'efficiency' (or to broaden the concept of 'benefit' within the efficiency definition) is gaining greater acceptance among economists, particularly in relation to issues of equity and social justice. There are several methods by which this can be achieved, including the use of qualitative judgements or quantitative weighting techniques. These issues have been explored in a separate paper by the authors [37], and will not be elaborated on here. However, these results demonstrate the potential for adverse consequences should equity factors be ignored.

The importance of broader contextual factors when interpreting cost-effectiveness ratios is also highlighted. Economic evaluation results for the same intervention differ according to the health service type from which they are delivered. It cannot be assumed that the economic evaluation results for an intervention delivered from mainstream GP services will accurately reflect the results if that same intervention were delivered from an ACCHS. Therefore, the argument for separate economic evaluations relevant to particular population sub-groups and settings is strengthened.

Specific economic evaluation results reveal that the polypill, in particular, has significant potential to improve Indigenous health and warrants further investigation as a cardiovascular preventive measure. Other medication-based treatments also have potential, but questions remain regarding their acceptability to Indigenous peoples, as

narrow individual based treatments are less in keeping with Indigenous understandings of health and illness.

There is limited effectiveness evidence from Indigenous community based interventions, however Looma Healthy Lifestyle provided a useful case study. The economic evaluation indicated that broad community based programs could potentially produce significantly more health gain than narrower pharmacological interventions for the remote Indigenous population, a group with particularly poor health. However, the greater costs involved with such interventions again make cost-effectiveness ratios higher.

It is noted that the health impact of the Looma intervention (and that of other broad community-based interventions) is likely to be greater than that measured using biochemical markers. This is because this intervention could be expected to have broader community benefits beyond that measured in individuals. Moreover, other disease processes beyond cardiovascular effects are likely to be impacted. However, as broader concepts of benefit were not included in this analysis, and more complex multi-disease state modelling was considered beyond the scope of this study, the decision-analytic modelling focused only on the intervention's impact on cardiovascular disease and these other health benefits were not accounted for. A sensitivity analysis attributing estimates of 50% and 100% additional health benefit to the Looma intervention found that the cost-effectiveness ratio was reduced from $210,000 per DALY saved to $140,000 per DALY and $97,000 per DALY respectively. Although these latter results are still above the conventional cost-

effectiveness threshold, they may be considered more favourably by policy makers keen on incorporating equity concerns and closing the Indigenous health gap.

Caution is required in extrapolating the results from Looma Healthy Lifestyle to the whole remote Indigenous population, as by definition a 'community initiated and directed' intervention is specific to that particular community. Instead, this evaluation indicates the potential benefits should similar community directed interventions be implemented more broadly.

This research remains exploratory, and there are several limitations. Some data inputs have had to be estimated or extrapolated from other sources to fill evidence gaps. This includes the construction and use of the IHSD Template [10]. However, it is argued that these evaluations still more accurately characterise the Indigenous context than unaltered mainstream data, and processes can be refined as more data becomes available in the future.

In addition, due to the unavailability of Indigenous individual level cardiovascular risk factor data, interventions have been applied to the entire Indigenous population aged 35 years and above rather than those at high cardiovascular risk. Consequently, cost-effectiveness ratios are higher than if they had been specifically targeted at high risk individuals. Once more data becomes available, refinement of the decision-analytic model is an area for future research.

Conclusion

This paper has described the economic evaluation of several interventions to prevent cardiovascular disease in Australia's Indigenous population. The results reveal the significant impact that interventions such as the polypill could have on Indigenous health, while achieving cost savings. Interventions delivered via Aboriginal Community Controlled Health Services were found to provide up to 50% more Indigenous health gain than if those same interventions were delivered via mainstream GP practices. Moreover, community based interventions such as Looma Healthy Lifestyle could result in significant health improvements for remote Indigenous populations. However, the greater costs of these targeted interventions mean that cost-effectiveness ratios are also higher.

This research has highlighted the importance of considering local contextual factors for disadvantaged populations, both in the conduct of economic evaluations, and in the interpretation of results. Failure to do so may result in redirection of resources away from where they are needed most to address health inequities. Thus decisions must be made about what represents an equitable allocation for those who experience health disadvantage, and conventional cost-effectiveness thresholds may need to be redefined. There is good argument for policy-makers to explicitly incorporate factors such as equity concerns alongside efficiency considerations in resource allocation decision-making.

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Table 1 Intervention effect sizes

Intervention	RR ACS	RR Stroke	Sources
Looma Healthy Lifestyle	0.83	0.93	Rowley et al 2000, 2001 [16, 17]
Statins	0.77	0.78	Baignet et al 2005 [22]
Low dose diuretics	0.79	0.71	Psaty et al 2003 [24]
ACE inhibitors	0.80	0.68	Yusef et al 2000 [32]
Polypill	0.45	0.31	Multiplicative effect of ACE inhibitor, beta-blocker, calcium channel blocker and statin (personal communication, Prof Anthony Rogers, University of Sydney)
Beta blockers*	0.93	0.71	Psaty et al 1997 [33]
Calcium channel blockers*	0.79	0.61	Blood Pressure Lowering Treatment Triallists' Collaboration, 2000 [34]

* Beta blockers and calcium channel blockers were not evaluated as monotherapy, but individual effect sizes are included in this table as these are used in calculating the effect size of the polypill.

Table 2 Per capita intervention costs (AUD $, 2003 prices)

Intervention	Mainstream GP practices		ACCHSs					
			Total population		Non-remote population		Remote population	
	Yr 1	Subseq yrs	Yr 1	Subseq yrs	Yr 1	Subseq yrs	Yr 1	Subseq yrs
Looma Healthy Lifestyle	-	-	-	-	-	-	$950	$740
Statins	$540	$560	$640	$730	$620	$680	$720	$860
Low dose diuretics	$290	$210	$560	$380	$480	$330	$760	$510
ACE inhibitors	$480	$400	$750	$570	$670	$520	$950	$700
Polypill $50	$210	$150	$480	$320	$400	$270	$670	$450
Polypill $500	$660	$600	$930	$770	$850	$720	$1120	$900

Table 3 Cost-effectiveness results[†] for total Indigenous population aged 35+ years by mode of health service delivery (2 significant figures)

Intervention	Mainstream GP practice			ACCHS		
	DALYs saved Thousands (LL – UL)[§]	**Net costs**[‡] AUD $ millions (LL – UL)[§]	**CER** AUD $ thousands/DALY (LL – UL)[§]	**DALYs saved** Thousands (LL – UL)[§]	**Net costs**[‡] AUD $ millions (LL – UL)[§]	**CER** AUD $ thousands/DALY (LL – UL)[§]
Polypill $50	4.7 (3.2 – 6.7)	-34 (-72 – -12)	Health gain with cost saving (dominant* – dominant*)	7.1 (4.8 – 10)	5.5 (-42 – 44)	0.8 (dominant* – 6.8)
Polypill $100	4.7 (3.2 – 6.7)	-24 (-58 – -1.9)	Health gain with cost saving (dominant* – dominant*)	7.1 (4.8 – 10)	21 (-24 – 60)	3.1 (dominant* – 9.3)
Polypill $150	4.7 (3.2 – 6.7)	-13 (-46 – 8.5)	Health gain with cost saving (dominant* – 2.1)	7.1 (4.8 – 10)	37 (-7.6 – 78)	5.3 (dominant* – 12)
Polypill $200	4.7 (3.2 – 6.7)	-2.1 (-33 – 19)	Health gain with cost saving (dominant* – 4.6)	7.1 (4.8 – 10)	53 (8.4 – 96)	7.5 (1.2 – 15)
Polypill $500	4.7 (3.2 – 6.7)	62 (33 – 95)	13 (6.9 – 20)	7.1 (4.8 – 10)	150 (95 – 210)	21 (14 – 30)
Low dose diuretics	1.8 (1.1 – 2.8)	19 (3.9 – 34)	11 (1.8 – 25)	2.7 (1.6 – 4.2)	84 (53 – 120)	31 (17 – 56)
ACE inhibitors	1.9 (1.1 – 2.9)	59 (38 – 82)	31 (19 – 57)	2.8 (1.6 – 4.3)	140 (99 – 190)	50 (34 – 84)
Statins	1.5 (1.1 – 2.2)	91 (65 – 120)	59 (49 – 71)	2.3 (1.6 – 3.1)	180 (130 – 240)	80 (66 – 97)

CER Cost-effectiveness ratio

[†] Median values including cost-offsets

[‡] Net costs = total costs – cost offsets

[§] Lower Limit – Upper Limit: 95% Uncertainty range

* Dominant means that more benefits can be achieved at a lower cost (i.e. health gain with cost saving)

Table 4 Cost effectiveness results[†] for the Indigenous population aged 35+ years via ACCHSs, by remoteness location (2 significant figures)

Intervention	Non-remote ACCHSs			Remote ACCHSs		
	DALYs saved Thousands (LL – UL)[§]	**Net costs**[‡] AUD $ millions (LL – UL)[§]	**CER** AUD $ thousands/DALY (LL – UL)[§]	**DALYs saved** Thousands (LL – UL)[§]	**Net costs**[‡] AUD $ millions (LL – UL)[§]	**CER** AUD $ thousands/DALY (LL – UL)[§]
Polypill $50	5.9 (4.0 – 8.2)	-11 (-51 – 18)	Health gain with cost saving (dominant* – 3.7)	1.5 (1.1 – 2.1)	12 (0.3 – 24)	8.0 (0.1 – 16)
Polypill $100	5.9 (4.0 – 8.2)	1.4 (-37 – 31)	0.24 (dominant* – 6.1)	1.5 (1.1 – 2.1)	16 (4.1 – 29)	11 (2.6 – 19)
Polypill $150	5.9 (4.0 – 8.2)	13 (-24 – 45)	2.3 (dominant* – 8.4)	1.5 (1.1 – 2.1)	19 (7.6 – 33)	13 (5.1 – 22)
Polypill $200	5.9 (4.0 – 8.2)	25 (-10 – 59)	4.4 (dominant* – 11)	1.5 (1.1 – 2.1)	23 (11 – 37)	15 (7.3 – 24)
Polypill $500	5.9 (4.0 – 8.2)	99 (60 – 150)	17 (10 – 25)	1.5 (1.1 – 2.1)	45 (30 – 65)	30 (21 – 41)
Low dose diuretics	2.2 (1.3 – 3.5)	51 (28 – 79)	23 (11 – 45)	0.6 (0.4 – 0.9)	30 (19 – 43)	51 (31 – 86)
ACE inhibitors	2.3 (1.3 – 3.6)	96 (66 – 130)	41 (26 – 73)	0.6 (0.4 – 0.9)	43 (30 – 60)	71 (48 – 120)
Statins	1.9 (1.3 – 2.6)	130 (93 – 170)	68 (56 – 83)	0.5 (0.4 – 0.7)	52 (36 – 71)	110 (87 – 130)
Looma Healthy Lifestyle (20+ yrs)	-	-	-	2.6 (1.6 – 3.6)	550 (530 – 570)	210 (150 – 360)

CER Cost-effectiveness ratio
[†] Median values including cost-offsets
[‡] Net costs = total costs – cost offsets
[§] Lower Limit – Upper Limit: 95% Uncertainty range
* Dominant means that more benefits can be achieved at a lower cost (i.e. health gain with cost saving)