

Best preventative investments for Scotland – what the evidence and experts say

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Neil Craig,
NHS Health Scotland

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1 South Gyle Crescent
Edinburgh EH12 9EB

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Summary

The aim of this updated paper* is to identify the best investments for preventing poor health, reducing 'failure demand' and narrowing health inequalities.

It sets out principles, and several specific areas for action, for policymakers to consider. These go beyond the health and social care sector. Overall the evidence to recommend specific interventions in the Scottish context is limited. However, it is growing. This paper couples review of evidence with expert opinion.

In general, prevention 'upstream', addressing the economic, social and environmental causes of health inequalities, is cost-effective. It is more likely to reduce health inequalities than either treatment of illness or 'downstream' measures to change behaviours delivered to individuals.

Looking across the sources identified in this paper, we suggest the following priorities:

1. programmes that ensure adequate incomes and reduce income inequalities
2. programmes that reduce unemployment in vulnerable groups or areas
3. programmes that improve physical environments, such as traffic calming schemes
4. programmes that target vulnerable groups by investing in more intensive services and other forms of support for such groups, in the context of universal provision
5. early years programmes
6. policies that use regulation and price (for example, minimum unit price or taxes) to reduce risky behaviours.

Many of these programmes operate across the whole population but, where appropriate, the scale or intensity of those actions should be proportionate to need (or disadvantage). They are policy areas that the present Scottish Government supports, where active measures are underway or under consideration, and where further action is necessary at sufficient depth and scale to make a difference. These matters would engage stakeholders at local and national levels, contributing across the policy spectrum to many of the policy ambitions set by the Scottish Government, for example, healthier, fairer and wealthier.

*The first version of this paper was prepared in July 2013

Introduction

The Scottish Government is committed to social justice, and to take measures that tackle health inequalities effectively. Following the recommendations of the Christie commission¹ and the Wanless reviews²⁻⁴, it recognises that future public spending is unsustainable if no action is taken to reduce demands relating to the ageing population. Investment in prevention ('preventative spend'), within and beyond the healthcare system, has the potential to help reconcile high demands on public services, squeezed resources and the policy goal of reducing health inequalities. A *Fairer, Healthier Scotland* is a strategy that commits NHS Health Scotland to helping reduce health inequalities in Scotland. This paper aims to encourage decision-makers to take cost-effective measures toward that aim.

Policy context – who is responsible for prevention?

The evidence summarised in this report shows that responsibility for developing preventative approaches to reduce health inequalities sits with a large number of organisations and groups. It sits at different levels of government, across a wide range of public and voluntary services. Importantly, it also sits with communities themselves. Some of the preventative measures identified below are the responsibility of central government at a UK level; others rest with Scottish Government. Some of the services that need to form part of preventative strategies are delivered by local government, but often these involve work with other community planning partners to plan and deliver services. The Scottish Government is also increasing emphasis on the role of community-led approaches as part of a preventative approach to improving health and reducing health inequalities.⁵ These involve building on the assets within communities so that preventative programmes are more aligned with the needs and preferences of local communities, empowering them to shape and build the services they need and use.

The wide array of organisations and groups involved in developing and delivering preventative strategies to reduce health inequalities carries risks. There is a risk that if something is everyone's responsibility it becomes no organisation's priority. There are limitations in the evidence base in relation to community-led, assets-based approaches.⁶ These create uncertainty about the nature of investment and relative priority that local partners should attach to community-led approaches to planning and delivering prevention, in particular compared to what are sometimes characterised as 'top-down' approaches informed by national or international evidence. In addition, there is a risk that community-led, assets-based approaches could widen health inequalities. This is because these approaches need to draw on the assets in communities, but many of the assets important for health – for example, income and employment, affordable, good standard housing, or healthy physical environments – are themselves unequally distributed across communities.

We do not suggest that preventative strategies should be either top-down **or** community-led. Rather, policies and services delivered by national and local government need to help create a more level playing field to enable and realise the potential of community-led, assets-based preventative approaches to help reduce health inequalities.

What is preventative spend and what impact might it have?

One possible impact of 'preventative spend' is to reduce public spending demands in the future by reducing avoidable health and social problems (so called 'failure demand'). However, in practice, the impact of preventative spend on future demands for public spending will depend on whether at least three important conditions are met:

1. The spending must reduce the length of time people spend in ill health, not just increase life expectancy; i.e. it must achieve 'compressed morbidity'.
2. Where reduced demands for public services are achieved, spending must reduce in those areas if resources are to be freed up for other uses. For example, if demand for a hospital clinic reduces by 25%, excess spending on that clinic must be reduced accordingly/proportionately and the costs 'stripped out'. This is a very difficult task and many studies highlighting potential savings from prevention do not specify whether or how this can be done. There are frequently fixed costs to running services and reducing demand can often result in a higher-quality service being provided rather than a service of the same quality being provided at reduced capacity and reduced cost.
3. Funds previously spent on meeting 'failure demand' must not be diverted to meeting other unmet needs arising from 'failure demand'. They must be freed up to invest in other programmes preventing these demands arising in the first place.

Improved service quality and reducing unmet need are both desirable outcomes, but both would mean that future savings, enabling more investment to be made in the shift to more preventative approaches, may not be realised.

A second possible impact of preventative spend, based on a public health definition of prevention, is that it improves population health by:

- reducing the incidence of health problems (primary prevention)
- reducing the progression of health problems (secondary prevention)
- reducing the impacts of disease (tertiary prevention).

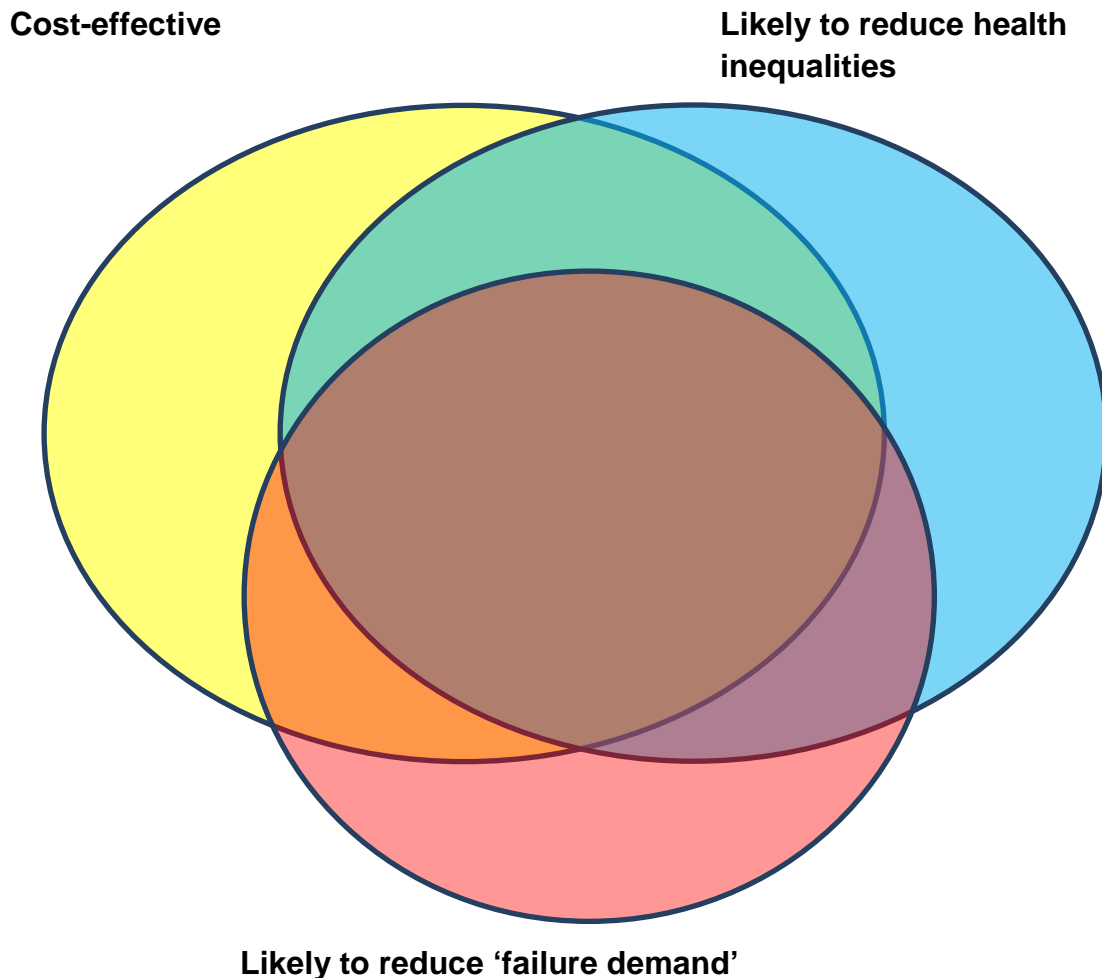
Given current pressures on public spending, priorities for prevention should include interventions that improve health in a cost-effective way i.e. achieve large improvements in health in relation to the resources required.

A third possible impact of preventative spend is to reduce health inequalities.

The remainder of this paper identifies preventative interventions likely to meet one or more of these objectives; i.e. improving health in a cost-effective way, narrowing health inequalities, and/or helping to reduce 'failure demand'. Interventions that do all three are represented in the darkest shaded overlapping area in the centre of Figure 1. The diagram suggests that not all preventive interventions meet all three objectives. For example, the economic evidence below identifies a number of cost-effective preventative interventions that are unlikely to reduce health inequalities (the yellow area in Figure 1). The available evidence also suggests that many fiscal,

regulatory and legislative interventions would be both cost-effective and effective in reducing health inequalities (the green area in Figure 1).

Figure 1: identifying best buys in prevention



There are limitations in the evidence available. There is more economics evidence concerning downstream interventions delivered to individuals to change their behaviours than there is on upstream interventions addressing the inequalities in social, economic and physical environments that drive health inequalities. Much of the available evidence does not assess potential impacts on health inequalities. Good evidence on savings from prevention in practice is also limited. However, limiting recommendations to the available evidence would lead to a narrow focus on downstream behavioural interventions, which the Health Inequalities Policy Review shows are less effective in reducing health inequalities.⁷ Therefore, recommendations in this paper are based on a combination of evidence and expert opinion informed by evidence, theory and experience.

Because the evidence base is limited, a further recommendation from this work is that evaluation of impacts on health inequalities needs to be built into the process of implementation so that the evidence base becomes stronger in the future. However, we also need to act now by making better use of evidence and expert opinion currently available. This paper aims to support this process by drawing on recent

work reviewing and synthesising evidence on the effectiveness and cost-effectiveness of prevention.

What are the best buys in prevention?

Health Inequalities Policy Review for the Scottish Ministerial Task Force on Health Inequalities

The recent policy review on health inequalities reinforced the message that health inequalities are caused by inequalities in income, power and wealth across the population.⁸ Therefore, in general, policies and interventions which directly reduce these inequalities are likely to be the most important and effective in reducing health inequalities and the consequent unsustainable demands on public services in the future. Other policies that evidence suggests will help to reduce health inequalities or mitigate the impact of inequalities are:

- actions and policies which do not rely upon individuals having to 'opt in' to services (such as measures affecting the price of consumer goods like food and sugary drinks, alcohol or tobacco), improving the physical environment, introduction of higher standards for privately rented accommodation and introduction of a statutory minimum income for healthy living)
- a greater intensity of public service provision for those with greatest needs within a universal framework (e.g. by providing greater resources to nurseries and schools in the most deprived areas). This is sometimes referred to as 'proportionate universalism'.

Appendix 1 taken from the policy review offers a range of interventions that evidence suggests are likely to be effective in reducing health inequalities.

Evidence from economic studies

Economic evidence typically summarises the impact of interventions or programmes on health relative to their cost, based on cost-effectiveness analyses or other forms of economic evaluation. Much of this evidence relates to interventions that try and change the behaviours of individuals, such as smoking cessation services or brief advice to reduce alcohol consumption or increase physical activity. However, there is emerging evidence that fiscal, regulatory and legislative interventions are particularly cost-effective. In contrast, there is little evidence on the cost-effectiveness of assets-based approaches to improving health.^{9 10}

One of the most comprehensive sources of such evidence is the *Assessing Cost-Effectiveness in Prevention* (ACE-Prevention) study.¹¹ Evidence from this study on the cost-effectiveness of health improvement interventions in relation to four key risk factors is summarised in Appendix 2. This shows that there is relatively strong evidence on the cost-effectiveness of preventative interventions, in particular interventions that take a societal perspective involving regulation, legislation and/or the use of taxation.

Such measures are cost-effective because they require fewer resources to deliver them and they have wide reach. They also rely less upon individuals' capacity to 'opt in' to services and/or take on board messages and advice delivered through behavioural interventions. This means they are likely to yield substantial benefits in a cost-effective way and help reduce health inequalities (although they may have wider economic consequences, both positive and negative, that are not usually measured in cost-effectiveness studies).

Appendix 2 shows that many preventative interventions are potentially cost-saving. Interventions classified as 'dominant' are both effective and have the potential to reduce future demand for health services as a result of preventing or mitigating poor health. Note that the estimates for the cost-effectiveness of societal interventions targeting alcohol-related harm are likely to be underestimates of their cost-effectiveness in Scotland where rates of alcohol-related mortality are substantially higher.

Appendix 2 also shows that many individual-based interventions were found to be cost-effective but these are less likely to be effective in tackling health inequalities, as shown by Boxes 1 and 2 in Appendix 3. For example, the ACE work suggests pedometers and mass media programmes are both cost-effective and potentially cost-saving (the orange area in Figure 1). But Appendix 3 suggests they are not likely to be effective in reducing health inequalities.

The evidence from the ACE Prevention study is consistent with the evidence from other studies. For example, a recent report from the World Health Organization also highlights a range of programmes that evidence suggests are both cost-effective and likely to be effective in reducing health inequalities.¹² These are programmes that, in various ways, seek to address the social determinants of health. Evidence is provided on programmes in three areas:

- welfare programmes
- education programmes, including early years programmes
- urban development, housing and transport programmes.

Likewise, a recent review of the economic analysis carried out to inform the public health guidance issued by the National Institute for Health and Clinical Excellence (NICE) concluded that public health interventions are generally good value for money and that it is likely we are not investing enough in them.¹³ Interventions aimed at the population as a whole, such as legislation to reduce young people's access to cigarettes, were among the most cost-effective. Like the ACE Prevention study, the NICE review estimated that many preventative interventions were likely to be cost-saving.

More recent evidence from the King's Fund¹⁴ and Public Health England, in collaboration with the Institute for Health Equity,¹⁵ highlights the economic case for investing in programmes tackling the social determinants of health. Much of this economics evidence does not explicitly measure impacts on health inequalities. However, the kinds of programmes considered in these reports and in the accompanying evidence reviews¹⁶ are the sorts of interventions likely to help reduce health inequalities. Many are programmes that would be delivered by local

authorities or community planning partners other than the health service. The characteristics of these programmes are discussed in the next section.

Reducing health inequalities: expert opinion

As noted earlier, much of the available evidence on prevention does not quantify potential impacts on reducing health inequalities. This is equally true of the evidence base for preventative programmes based on community engagement: there is little evidence available on the impact of community engagement on health inequalities, although there is evidence that community engagement-based interventions have a positive impact on health behaviours and outcomes, self-efficacy and perceived social support.¹⁷

In the light of the limitations in the evidence base, two recent studies have combined the available evidence with expert opinion to try and identify interventions most likely to reduce health inequalities.

The first is a set of principles developed to inform the original review by the Ministerial Task Force on Health Inequalities by Professor Sally Macintyre and referred to in the recent policy review on health inequalities (see Appendix 3).

The second is a survey which explored the views of UK researchers, many of whom attended a symposium on health inequalities at Edinburgh University in December 2012.¹⁸ The study sought researchers' views on 99 proposals for policies and interventions, asking participants to what extent they agreed that each of these proposals would be likely to reduce health inequalities in the UK based on: (i) their expert opinion and (ii) the strength of available evidence.

Appendix 4 presents some key results from this survey. The first table illustrates a strong degree of consensus in terms of researchers' expert opinions about the importance of tackling fundamental causes, including upstream measures addressing social, economic physical environments and through interventions focusing on vulnerable groups. In contrast, the second table demonstrates less of a consensus regarding the strength of the available evidence and a stronger emphasis on behavioural interventions, probably reflecting the greater availability of evidence evaluating the impacts of these sorts of interventions referred to earlier.

Potential savings

It was pointed out earlier that potential savings will only be realised if certain conditions are met. Although it is plausible and widely argued, for example, in the Christie Commission report and the Finance Committee *Report on Preventative Spend*, that prevention has the potential to make savings across health and social care, the Finance Committee report also highlights the uncertainty that remains about the level of savings that can actually be realised and the difficulties of realising them.¹⁹ The quantitative empirical evidence on the savings to be made from prevention is very limited. A review of the potential impact of health improvement on demand for and costs of local authority services published by the Improvement and Development Agency concluded that:

‘Improving health may in some cases lead to short- or medium term cost savings although in many cases such savings will not occur. However, there is reason to think that improving health does generally result in cost savings in the very long term, as a result of improved health reducing disability in later life and therefore social care spending.’²⁰ (p. 4, emphasis added)

Conclusion

Preventative interventions have the potential to improve health in a cost-effective way, reduce health inequalities and reduce the future demand for and cost of health and other public services. Figure 1 suggests we should prioritise interventions that do all three. It highlights substantial potential overlap between these three goals but this will not always be the case: although many economic studies find individual-based interventions that aim to change behaviour to be cost-effective, evidence suggests that these interventions are not the most effective way to reduce health inequalities. In contrast, there is increasing evidence suggesting that using fiscal, regulatory and legislative interventions to change behaviours and to improve the wider determinants of health are likely to be both cost-effective and effective in reducing health inequalities. The evidence on whether such programmes would actually enable savings to be made by reducing failure demand is less clear cut.

Looking across the sources identified in this paper, suggested priorities are:

1. programmes that ensure adequate incomes and reduce income inequalities
2. programmes that reduce unemployment in vulnerable groups or areas
3. programmes that improve physical environments, such as traffic calming schemes
4. programmes that target vulnerable groups by investing in more intensive services and other forms of support for such groups, in the context of universal provision
5. early years programmes
6. policies that use regulation and price (MUP or taxes) to reduce risky behaviours.

These are programmes that operate across the whole population but, where appropriate, the scale/intensity of those actions should be proportionate to need (or disadvantage).

These priorities are expressed in general terms because of the limitations in the available evidence base. Where evidence is available, such as the ACE Prevention evidence, we have been cautious about using the results on the **relative** cost-effectiveness of specific interventions to generate a prioritised list (or ‘league table’) because a number of factors suggest the estimates of relative cost-effectiveness would differ in Scotland.²¹ However, the advantage of suggesting priorities in general terms is that they provide a set of criteria that could be used to consider whether other potential programmes should be provided. These criteria, together with the available evidence, could be used to inform the development of financially sustainable, cost-effective preventative strategies that help reduce health inequalities.

Appendix 1: Examples of effective actions for reducing health inequalities in the Health Inequalities Policy Review

Theory of causation	Principles for effective action	Examples of effective actions
Fundamental causes	<ul style="list-style-type: none"> • Redistributive policies • Social equity and justice prioritised 	<ul style="list-style-type: none"> • Introduce a minimum income for health living • Ensuring welfare system provides sufficient income for healthy living and reduces stigma for recipients through universal provision in proportion to need • More progressive individual and corporate taxation • Active labour market policies to create good jobs • Creation of a vibrant democracy, greater and more equitable participation in elections and in decision making, including on action on health inequalities
Social, economic and physical environment	<ul style="list-style-type: none"> • Use of legislation, regulation, standards, fiscal policy and structural changes to ensure equity in the environment • Ensuring good work is available for all • Equitable provision of high quality and accessible education and public services 	<ul style="list-style-type: none"> • Housing: extend the Scottish Housing Quality Standard to privately rented accommodation; improved housing and building standards; implement affordable heating, ventilation and quality energy efficiency measures in all housing (e.g. without the need to apply for grants); changes to housing infrastructure (e.g. design, quality), re-housing and renovation to reduce the risk of falls and other accidental injuries • Neighbourhoods: create a Neighbourhood Quality Standard to ensure local service availability and high quality green and open spaces, including space for play • Air and water: greater controls on outdoor and indoor air pollution (e.g. second-hand smoke); water fluoridation • Food and alcohol: further restrict unhealthy food and alcohol advertising; further restriction of food outlets to reduce exposure to cheap unhealthy food (e.g. ban trans-fats and reduce salt content of foods; further restrictions on the number and ownership of alcohol outlets) • Transport: drink-driving regulations, lower speed limits, separation of pedestrians and vehicles, loan schemes for child restraints in cars • Fiscal: raise the price of harmful commodities like tobacco and alcohol through taxation; reduce or eradicate the price barrier for healthy products (e.g. healthy foods), essential services (e.g. water, education, healthcare) and prevention services (e.g. free smoking cessation, eye tests, school meals and fruit and milk in schools) • Environmental: area-wide traffic calming schemes; separation of pedestrians and vehicles; install hard-wired smoke alarms; implementation of the measures and principles of 'Designing Streets'; changes to physical environment to meet a new Neighbourhood Quality Standard

		<ul style="list-style-type: none"> • Protection from adverse work conditions; greater job flexibility; enhanced job control and in-work development; participation in workplace decision-making; increased job security; support for those returning to work and to enhance job retention • Provision of high-quality early childhood education and adult learning; accessible support and advice for young people on life skills, training and employment opportunities; providing work-based learning, including apprenticeships, for young people and those changing careers; increased availability of non-vocational lifelong learning • Ensure that public services are provided in proportion to need as part of a universal system (i.e. proportionate universalism)
<p>Individual experiences</p>	<ul style="list-style-type: none"> • Equitable experience of socio-economic and wider environmental exposures • Equitable experience of public services • Targeting high risk individuals • Intensive tailored individual support • Focus on young children and the early years 	<ul style="list-style-type: none"> • Training to ensure that the public sector workforce is sensitive to all social and cultural groups, to build on the personal assets of service users • Linking of services for vulnerable or high-risk individuals (e.g. income maximisation welfare advice for low income families linked to health care) • Provision of specialist outreach and targeted services for particularly high-risk individuals (e.g. looked after children and homeless) • Ensure that services are provided in locations and ways which are likely to reduce inequalities in access (i.e. linked to public transport routes and avoiding discrimination by language and internet access) • Culture of services is collaborative and seeks to co-produce benefits, including health and wellbeing, through work with service users

Appendix 2: Summary of ACE Prevention cost-effectiveness estimates for alcohol, tobacco, physical activity, obesity

Topic area	Cost-effectiveness	Intervention	Cost per disability adjusted life year (DALY) averted	Strength of evidence
Alcohol	Dominant	Taxation	Dominant	Likely
		Advertising bans	Dominant	Limited
		Increase minimum legal drinking age to 21	Dominant	Limited
	Very cost-effective	Licensing controls	3,200	Likely
		GP Brief intervention	3,800	Sufficient
		GP Brief intervention with telemarketing support	7,500	Sufficient
	Cost-effective	Drink drive mass media	14,000	Limited
		Random breath testing	23,000	Likely
Tobacco	Dominant	Taxation	Dominant	Likely
	Very cost-effective	Cessation aid: varenicline	5800	Sufficient
		Cessation aid: bupropion	7700	Sufficient
		Cessation aid: NRT	8900	Sufficient
Physical activity	Dominant	Pedometers	Dominant	Sufficient
		Mass media	Dominant	Inconclusive
	Very cost-effective	Internet info and advice	2,400	Sufficient
		GP Prescription	9,500	Limited
	Cost-effective	GP referral to exercise physiologist	21,000	Limited
		Travelsmart	21,000	May be effective
	Not cost-effective	School walking bus ²²	760,000	Weak
Body mass	Dominant	Front of pack traffic light nutrition labelling	Dominant	No evidence
		Unhealthy food tax 10%	Dominant	May be effective
		Banning advertisement of energy-dense food ²²	Dominant	Limited
		School-based education programme to reduce television viewing ²²	Dominant	Inconclusive

		Multi-faceted school-based programme including nutrition and physical activity ²²	Dominant	Limited
	Dominant	School-based education programme to reduce sugar sweetened drink consumption ²³	Dominant	Limited
		Family-based targeted programme for obese children ²³	Dominant	Sufficient
		Multi-faceted school-based targeted child healthy weight programmes ²³	Dominant	Limited
	Very cost-effective	Gastric banding – adolescents ²³	4,400	Sufficient
		Family-based GP-mediated programme ²³	4,700	Limited
		Laparoscopic adjustable gastric banding BMI>35	5,800	Sufficient
	Cost-effective	Orlistat for adolescents ²⁴	11,000	Limited
		Multi-faceted targeted school-based programme without an active physical activity component ²³	21,300	Limited
		Diet and exercise for BMI>25	28,000	Sufficient
		Low-fat diet for BMI>25	37,000	Limited
	Not cost-effective	Active After Schools Communities Programme ²³	82,000	None
		Weight watchers	84,000	Sufficient
		'Lighten up' combined weight loss, diet and physical activity for adults	94,000	May be effective
Sibutramine for BMI>30		230,000	Sufficient	
Orlistat for BMI>30		700,000	Sufficient	

Appendix 3: Professor Sally Macintyre principles for reducing health inequalities

Box 1: Principles for effective policies to reduce inequalities in health

- Maintain and extend equity in health and welfare systems
- Address 'upstream' and 'downstream' causes
- Level up, not down
- Reduce inequalities in life circumstances especially education, employment and income
- Prioritise early years interventions, and families with children
- Address both healthcare and non-healthcare solutions
- Target, and discriminate in favour of, both deprived places and deprived people
- Remove barriers in access to health and non-healthcare goods and services
- Prioritise structural and regulatory policies
- Recognise need for more intensive support among more socially disadvantaged groups
- Monitor the outcome of policies and interventions, both in terms of overall cost effectiveness and differential cost-effectiveness
- Ensure programmes are suitable for the local context
- Encourage partnership working across agencies, and involvement of local communities and target groups

Box 2: Characteristics of policies more likely to be effective in reducing inequalities in health

- **Structural changes in the environment:** (e.g. area-wide traffic calming schemes, separation of pedestrians and vehicles, child-resistant containers, installation of smoke alarms, installing affordable heating in damp cold houses)
- **Legislative and regulatory controls** (e.g. drink driving legislation, lower speed limits, seat belt legislation, child restraint loan schemes and legislation, house building standards, vitamin and folate supplementation of foods)
- **Fiscal policies** (e.g. increase price of tobacco and alcohol products)
- **Income support** (e.g. tax and benefit systems, professional welfare rights advice in healthcare settings)
- **Reducing price barriers** (e.g. free prescriptions, school meals, fruit and milk, smoking cessation therapies, eye tests)
- **Improving accessibility of services** (e.g. location and accessibility of primary health care and other core services, improving transport links, affordable healthy food)
- **Prioritising disadvantaged groups** (e.g. families and communities in multiple deprivation, the unemployed, fuel poor, rough sleepers and the homeless)
- **Offering intensive support** (e.g. systematic, tailored and intensive approaches involving face-to-face or group work, home visiting, good quality pre-school day care)

- **Starting young** (e.g. pre- and postnatal support and interventions, home visiting in infancy, preschool day care)

Appendix 4: Priorities from online survey of health inequalities researchers undertaken by the Global Public Health Unit at Edinburgh University

Table 1: The 10 policy proposals receiving the most support from participants when asked whether they felt proposals would reduce health inequalities based on their 'expert opinion'

Policy proposal	% disagree and strongly disagree	% agree and strongly agree
Review and implement more progressive systems of taxation, benefits, pensions and tax credits that provide greater support for people at the lower end of the social gradient and do more to reduce inequalities in wealth	5.00	92.50
Develop and implement a minimum income for healthy living	7.69	92.31
Invest more resources in support for vulnerable populations, by providing better homeless services, mental health services, etc.	0.00	91.67
Invest more resources in active labour market programmes to reduce long-term unemployment	2.50	90.00
Invest more resources in primary care health services serving very deprived areas	2.63	89.47
Support an enhanced home building programme and invest in decent social housing to bring down housing costs	4.88	87.80
Increase the national minimum wage	10.00	87.50
Reduce speeds in urban areas, starting with the poorest areas (20 mph is plenty)	7.50	87.50
Increase social protection for those on the lowest incomes and provide more flexible income and welfare support for those moving in and out of work	5.13	87.18
Increase the proportion of overall government expenditure allocated to the early years and ensure this expenditure is focused progressively across the social gradient	0.00	87.18

Table 2: The 10 policy proposals receiving the most support from participants when asked whether they believed the ability of policy proposals to reduce health inequalities was 'strongly supported' by available evidence

Policy proposal	% disagree and strongly disagree	% agree and strongly agree
Review and implement more progressive systems of taxation, benefits, pensions and tax credits that provide greater support for people at the lower end of the social gradient and do more to reduce inequalities in wealth	5.00	85.00
Fluoridate domestic water supplies (where this is not already done)	2.78	77.78
Provide stop-smoking services with additional targeting within poorer communities	0.00	74.29
Increase the price of tobacco products via tax increases	8.33	72.22
Increase social protection for those on the lowest incomes and provide more flexible income and welfare support for those moving in and out of work	5.13	71.79
Reduce speeds in urban areas, starting with the poorest areas (20 mph is plenty)	10.26	71.79
Reduce the availability of tobacco products (both legal and illicit)	5.71	71.43
Introduce standardised packaging of tobacco products (i.e. remove branding)	2.94	70.59
Maintenance (and improvement) of the NHS in a recognisable form	5.88	70.59
Introduce a minimum price for alcohol products via minimum unit pricing	7.50	70.00

References

- ¹ Scottish Government. *Commission on the future delivery of public services*. Edinburgh: Scottish Government; 2011.
- ² HM Treasury. *Securing good health for the whole population: Final report*. London: HM Treasury; 2004.
- ³ The King's Fund. *Securing Good Care for Older People: taking a long-term view*. London: The King's Fund; 2006.
- ⁴ HM Treasury. *Securing Our Future Health: Taking A Long-Term View*. London: HM Treasury; 2002.
- ⁵ National Community Planning Group. *Statement of Ambition*. Edinburgh: Scottish Government; 2012. Available at: www.scotland.gov.uk/Topics/Government/local-government/CP/soa The role of community engagement in preventative strategies was recently highlighted and reinforced by the National Community Planning Group. See note of meeting 10 June 2014 at: www.scotland.gov.uk/Topics/Government/PublicServiceReform/CP/communityplanningreview/PublicServiceReform/CP/communityplanningreview
- ⁶ Scottish Public Health Observatory. Assets: www.scotpho.org.uk/life-circumstances/assets
- ⁷ Beeston C, McCartney G, Ford J et al. *Health Inequalities Policy Review for the Scottish Ministerial Task Force on Health Inequalities*. Edinburgh: NHS Health Scotland; 2013. Available at: www.healthscotland.com/documents/23047.aspx
- ⁸ Beeston C, McCartney G, Ford J et al. *Health Inequalities Policy Review for the Scottish Ministerial Task Force on Health Inequalities*. Edinburgh: NHS Health Scotland; 2013. Available at: www.healthscotland.com/documents/23047.aspx
- ⁹ University of Glasgow. *Assets and resilience: an economic perspective*. Health Economics Health Technology Assessment. Glasgow: Institute of Health and Wellbeing, University of Glasgow; 2013. Research funded by Glasgow Centre for Population Health.
- ¹⁰ O'Mara-Eves et al, Community engagement to reduce inequalities in health: a systematic review, meta-analysis and economic analysis. *Public Health Research*, 2013, Vol. 1, No. 4. Doi:10.3310/phr01040. Available at: www.journalslibrary.nihr.ac.uk/_data/assets/pdf_file/0006/94281/FullReport-phr01040.pdf
- ¹¹ Vos T, Carter R, Barendregt J et al. for the ACE Prevention team. *Assessing Cost-Effectiveness in Prevention*. Final Report. Melbourne: University of Queensland, Brisbane and Deakin University; September 2010.

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- ¹² World Health Organization. *The economics of the social determinants of health and health inequalities: a resource book*. Geneva: WHO; 2013. Available at: www.who.int/social_determinants/publications/9789241548625/en/
- ¹³ Owen L, Morgan A, Fischer A et al. The cost-effectiveness of public health interventions. *Journal of Public Health* 2012; 34(1): 37–45.
- ¹⁴ Buck D, Gregory S. *Improving the public's health. A resource for local authorities*. London: The King's Fund; 2013. Available at: www.kingsfund.org.uk/publications/improving-publics-health
- ¹⁵ Institute for Health Equity/Public Health England. *Local action on health inequalities: understanding the economics of investments in the social determinants of health*. London: Public Health England; 2014. Available at: www.gov.uk/government/uploads/system/uploads/attachment_data/file/356051/Briefing9_Economics_of_investments_health_inequalities.pdf
- ¹⁶ Institute for Health Equity/Public Health England. *Local action on health inequalities: evidence papers*. London: Public Health England; 2014. Available at: www.gov.uk/government/publications/local-action-on-health-inequalities-evidence-papers
- ¹⁷ O'Mara-Eves et al. Community engagement to reduce inequalities in health: a systematic review, meta-analysis and economic analysis. *Public Health Research*, 2013, Vol. 1, No. 4. Doi:10.3310/phr01040. Available at: www.journalslibrary.nihr.ac.uk/data/assets/pdf_file/0006/94281/FullReport-phr01040.pdf
- ¹⁸ Smith KE, Kandlik Eltanani M. What kinds of policies to reduce health inequalities in the UK do researchers support? *Journal of Public Health*, 2014, 36(3): pp1–12. Doi:10.1093/pubmed/fdu057.
- ¹⁹ Scottish Parliament Finance Committee. Report on Preventative Spend, SP Paper 555, 1st Report 2011, Session 3. Available at: <http://archive.scottish.parliament.uk/s3/committees/finance/reports-11/fir11-01.htm>
- ²⁰ Matrix Evidence Ltd. *Valuing health: developing a business case for health improvement. Final report*. London: Improvement and Development Agency; 2009.
- ²¹ Craig N, Bhatti F, McCartney G, Lowther M. *Prevention – clinical and cost effectiveness: a critique of the ACE Prevention study and discussion of its implications for priority setting in Scotland*. Report for Scottish Government. Edinburgh: NHS Health Scotland; 2012.
- ²² Strength of evidence data taken from Haby et al, (2006) A new approach to assessing the health benefit from obesity interventions in children and adolescents: the assessing cost-effectiveness in obesity project; *International Journal of Obesity*

30, 1463–1475. ‘Cost per DALY averted’ data taken from Gortmaker et al, (2011) Changing the future of obesity: science, policy, and action; *Lancet*, 378: 838–47

²³ Strength of evidence data taken from Haby et al, (2006) A new approach to assessing the health benefit from obesity interventions in children and adolescents: the assessing cost-effectiveness in obesity project; *International Journal of Obesity* 30, 1463–1475. ‘Cost per DALY averted’ data taken from Gortmaker et al, (2011) Changing the future of obesity: science, policy, and action; *Lancet*, 378: 838–47

²⁴ Effect and strength of evidence data taken from Haby et al, (2006) A new approach to assessing the health benefit from obesity interventions in children and adolescents: the assessing cost-effectiveness in obesity project; *International Journal of Obesity* 30, 1463–1475. Cost data taken from Carter R et al (2009) Assessing cost-effectiveness in obesity (ACE-obesity): an overview of the ACE approach, economic methods and cost results. *BMC Public Health*, 9:419. doi:10.1186/1471-2458-9-419.



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