

THE EFFICACY OF PUBLIC HEALTH SPENDING

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Introduction

Across the UK, local authorities and NHS boards are responsible for delivering changes to people's behaviour for areas associated with purportedly poor lifestyle choices. The Health and Social Care Act 2012 in particular lead to the decentralisation of public health spending, campaigns and interventions to local authorities in England.

Public health professionals in the UK are increasingly vocal in their criticism of individuals' lifestyles. A more intrusive approach by them has been witnessed, with Public Health England pontificating on individuals' apparent vices and hiring M&C Saatchi for their latest advertising campaign.

This research note examines the spending, access and cost effectiveness of four areas of public health spending across the UK: smoking, physical activity, obesity and alcohol. Respectively, it entailed asking about interventions and programmes for adults across the UK which sought to reduce or stop their smoking, take up sport, reduce their weight and diminish their alcohol intake. In England, these are non-statutory areas of spending.

This is especially important to debates around the rationale for government interventions, since such measures are often assumed to save taxpayers' money in the longer term, and reduce the 'societal cost' of such apparent behavioural ills. Yet societal costs of alcohol, smoking and obesity can be defined very broadly, and the calculations of the public health lobby are invariably misleading. Savings to taxpayers are often lazily lumped together with more intangible externalities, such as being a nuisance drunk. A 2017 study published in the British Medical Journal suggested that the total economic cost of smoking globally was \$1.4 trillion. This was subsequently defined as treatment costs in media coverage, which was far removed from the authors' position.¹

Whilst premature mortality is sub-optimal, the buttressing of public health's responsibilities to alter individuals' behaviour is disturbing. It is an abasement of the original function of public health practitioners, that of health protection. This entailed emergency preparedness, stopping the spread of infectious diseases and preventing the dangers of environmental hazards.

Finally, the escalation of indirect taxes on alcohol, tobacco and, from next year, sugar, is emblematic of the wider malaise in how public health has moved away from its original functions. Altering one's behaviour is achievable, without recourse to using taxpayers' funds in local authorities which have seen drastic changes in revenue and spending in recent years.

¹ <https://iea.org.uk/wp-content/uploads/2017/08/Smoking-and-the-Public-Purse.pdf>

Key findings

- The total amount spent by public health authorities in the UK in 2015-16 was at least **£235,160,984** on smoking, physical activity, obesity and alcohol reduction public health interventions.
- The average spend for the **171 public health authorities** assessed was **£1,679,721**.
- 22 per cent of interventions did not use a cost effectiveness measure, or near equivalent:
 - Of the 146 who responded and had a smoking intervention, 31 did not list a cost effectiveness measure.
 - Of the 114 who responded and had a physical activity intervention, 32 did not list a cost effectiveness measure.
 - Of the 127 who responded and had an obesity intervention, 28 did not list a cost effectiveness measure.
 - Of the 142 who responded and had an alcohol intervention, 28 did not list a cost effectiveness measure.
- On average, each public health authority spent **£718,634** on stop **smoking** programmes. This amounted to **£568** for each successful quitter.
- The **City of London Corporation** made the highest outlay per person for their smoking programmes, spending on average **£2,407** for **182 people** who stopped smoking.
- On average, each public health authority spent **£439,819** on **physical activity** programmes whose intention was to encourage residents to take up sport on a regular basis. This amounted to **£484** for each person who subsequently took up sport at conclusion of the programme.
- The **London Borough of Richmond upon Thames** made the highest outlay per person for their physical activity programmes, spending on average **£2,212** for each person who subsequently took up sport.
- On average, each public health authority spent **£368,047** on **obesity** programmes which seek to reduce the weight of participants. This amounted to **£912** for each person who lost weight.
- **Liverpool City Council** made the highest outlay per person for their obesity programmes, spending on average **£7,222** for each person who lost weight.
- On average, each public health authority spent **£1,059,136** on **alcohol** intake reduction programmes. This amounted to **£4,601** for each person who reduced or stopped their consumption of alcohol.
- The **Royal Borough of Kensington and Chelsea** made the highest outlay per person for their alcohol programmes, spending on average **£9,957** for each person who reduced their alcohol intake.
- The highest average regional spend was in the **West Midlands**, with **£2,216,953** per local authority.

- The local authority that spent the most on the four public health interventions in London was **Tower Hamlets**, with **£4,578,000**.
- The local authority that spent the most on the four public health interventions in the South East was **Kent County Council**, with **£4,519,160**.
- The local authority that spent the most on the four public health interventions in the South West was **Cornwall County Council** and the **Council of the Isles of Scilly**, with **£3,231,570**.
- The local authority that spent the most on the four public health interventions in the East Midlands was **Leicestershire County Council**, with **£4,749,181**.
- The local authority that spent the most on the four public health interventions in the East of England was **Suffolk County Council**, with **£2,965,289**.
- The local authority that spent the most on the four public health interventions in the West Midlands was **Birmingham City Council**, with **£7,170,000**.
- The local authority that spent the most on the four public health interventions in Yorkshire & the Humber was **Sheffield City Council**, with **£2,484,700**.
- The local authority that spent the most on the four public health interventions in the North West was **Lancashire County Council**, with **£12,016,336**.
- The local authority that spent the most on the four public health interventions in the North East was **Durham County Council**, with **£7,209,146**.
- The health board that spent the most on the four public health interventions in Wales was **Abertawe Bro Morgannwg Health Board**, with **£379,296**.
- The NHS board that spent the most on the four public health interventions in Scotland was **NHS Greater Glasgow and Clyde**, with **£3,869,075**.
- The total amount spent on the four public health interventions in **Northern Ireland** was **£8,400,000**.

Whilst many public health authorities do not go into particular detail about the specific programmes that are provided, there are some examples of arcane spending which stand out:

- **Knowsley Metropolitan Borough Council** gave **£75** to the **Knowsley Flower Show** as part of its physical activity spending within public health.
- **Bury Metropolitan Borough Council** gave **£7,500** to the Bury'd Treasure scheme. This is "a pirate adventure game that's perfect for families to have fun together."
- **NHS Greater Glasgow and Clyde** used a portion of their £158,000 Healthier Inverclyde Project budget to deliver alcohol education and awareness sessions to primary school children.

[Click here to see the full data](#)

Sources and methodology

171 public health authorities were contacted with a Freedom of Information request, which was derived from the Association of Directors of Public Health. This included 149 Directors of Public Health in England, who invariably sit within a unitary authority, such as a county council or London borough. Public health in Scotland is mostly managed by NHS Boards, of which there are 14. Public health in Wales is split between Public Health Wales and 7 health boards. Public Health Agency has responsibility for programmes in Northern Ireland as a whole, and so a regional or county breakdown is not possible. 146 of these had provided a response to the Freedom of Information request by 27th September. All spending figures are in 2015-16 prices.

Some local authorities share a Director of Public Health, but the spending and participation information was still given for each authority. The exception to this was Cornwall and the Isles of Scilly, and Dorset County Council, who gave aggregated information for Bournemouth and Poole Borough Councils.

Some councils have no entries for each of the four interventions areas, but have a spending figure presented in the total sheet in the data provided. This is because they use holistic or 'lifestyle' services, which integrate some or all of the four interventions and so cannot disaggregate between some or all of the areas. The financial year 2015-16 was used because data for 2016-17 for the four interventions in each local authority has not yet been adequately published. Further, 2015-16 was also a useful year for England, since this allowed sufficient time for the newly devolved public health regime to be introduced.

Cost effectiveness refers to "the estimated costs of the interventions or services in relation to their expected health benefits".² It was important to include this as part of the research, since it establishes whether or not each public health authority has given consideration to the *potential* health benefits of their spending. Many English Directors of Public Health use guidance and cost effectiveness recommendations provided by the National Institute for Health and Care Excellence (NICE). The latest evidence provided by Public Health England was also referenced, as well as Return on Investment tools. This was also often the case in Scotland and Wales.

It is also necessary to note that many councils use slightly different definitions for the efficacy of their programmes. For the sake of consistency, some information provided has been left out, particularly with respect to participation. Though information was asked specifically for adults, on occasion, spending on children was also included.

With respect to obesity, many public health authorities have varying definitions of weight loss. A five per cent reduction in body mass was most common, whilst some used three per cent as a measure of a successful intervention. In addition, many of these authorities contributed funds to existing programmes, such as Slimming World and Weight Watchers. These are Tier 2 lifestyle interventions (a mixture of primary care and community interventions), as defined by NICE. Tier 3 specialist care, with a multi-disciplinary team and intensive level of interaction, was also used but less frequently.

Physical activity information on those who accessed the intervention was relatively limited. This is because many of the programmes that local authorities or NHS boards use for residents entail subsidies to existing schemes. For example, many English Directors of Public Health give a certain proportion of their budget to a leisure centre, which in turn then records the total amount of visits,

² <https://www.nice.org.uk/process/pmg6/chapter/assessing-cost-effectiveness>

rather than individuals who attend in the course of the year. Other programmes included Exercise on Referral schemes and walking programmes.

Much of the information for smoking is publicly available. However, a Freedom of Information request was still necessary because councils have varying measures of efficacy and cost effectiveness. For instance, some base their four week quit rate on self-reported information from smokers, whilst others use a carbon monoxide test to validate efficacy.

The information for alcohol is limited. This is for two reasons. Many councils are not able to disaggregate spending on substance misuse, which includes alcohol, drugs and non-opiates. This is because many who use alcohol services have been recommended for a reduction in their intake of other substances and services are provided holistically. As such, the net current expenditure in the data is significantly lower than the total amount spent on public health interventions for alcohol across the country.

The information on the programmes that public health authorities use was limited, with it ranging from Alcohol Brief Interventions to Tier 3 structured treatment for dependent drinkers.

Table 1: total spending for each intervention, 2015-16

Smoking (£)	Physical activity (£)	Obesity (£)	Alcohol (£)	Total (£)
94,141,068	41,343,027	37,908,798	45,542,828	235,160,984

Table 2: usage of cost effectiveness measurements, 2015-16

Local Authority/Health Board	Use of cost effectiveness for all commissioned interventions
Barking and Dagenham	N
Barnet	Y
Barnsley	No response given
Bath and North East Somerset	No response given
Bedford Borough	Y
Bexley	N
Birmingham	N
Blackburn with Darwen	Y
Blackpool	Y
Bolton	N
Bournemouth (joint spending with Dorset and Poole)	
Bracknell Forest	N
Bradford	No response given
Brent	Y
Brighton and Hove	Y
Bristol, City of	Y
Bromley	N
Buckinghamshire	N
Bury	Y
Calderdale	Y
Cambridgeshire	Y
Camden	Y

Local Authority/Health Board	Use of cost effectiveness for all commissioned interventions
Central Bedfordshire	Y
Cheshire East	Y
Cheshire West and Chester	N
City of London	Y
Cornwall (joint spending with Isles of Scilly)	Y
Coventry	<i>No response given</i>
Croydon	Y
Cumbria	Y
Darlington	N
Derby	Y
Derbyshire	Y
Devon	Y
Doncaster	N
Dorset (joint spending with Poole and Bournemouth)	
Dudley	Y
Durham	Y
Ealing	Y
East Riding of Yorkshire	Y
East Sussex	Y
Enfield	<i>No response given</i>
Essex	N
Gateshead	N
Gloucestershire	Y
Greenwich	Y
Hackney	N
Halton	Y
Hammersmith and Fulham	Y
Hampshire	Y
Haringey	Y
Harrow	Y
Hartlepool	N
Havering	Y
Herefordshire	N
Hertfordshire	Y
Hillingdon	Y
Hounslow	Y
Isle of Wight	N
Isles of Scilly (joint spending with Cornwall)	
Islington	Y
Kensington and Chelsea	Y
Kent	Y
Kingston upon Hull, City of	Y
Kingston upon Thames	N
Knowsley	Y
Lambeth	Y

Local Authority/Health Board	Use of cost effectiveness for all commissioned interventions
Lancashire	N
Leeds	N
Leicester	Y
Leicestershire	Y
Lincolnshire	Y
Lewisham	Y
Liverpool	Y
Luton	Y
Manchester	Y
Medway	N
Merton	<i>No response given</i>
Middlesbrough	N
Milton Keynes	N
Newcastle upon Tyne	Y
Newham	N
Norfolk	N
North East Lincolnshire	N
North Lincolnshire	Y
North Somerset	N
North Tyneside	Y
North Yorkshire	Y
Northumberland	Y
Northamptonshire	Y
Nottingham	Y
Nottinghamshire	Y
Oldham	Y
Oxfordshire	N
Peterborough	Y
Plymouth	N
Poole (joint spending with Dorset and Bournemouth)	
Portsmouth	N
Reading	N
Redbridge	<i>No response given</i>
Redcar and Cleveland	<i>No expenditure data provided</i>
Richmond upon Thames	N
Rochdale	N
Rotherham	Y
Rutland	Y
Salford	N
Sandwell	<i>No response given</i>
Sefton	Y
Sheffield	Y
Shropshire	Y
Slough	Y
Solihull	<i>No response given</i>

Local Authority/Health Board	Use of cost effectiveness for all commissioned interventions
Somerset	No response given
South Gloucestershire	No response given
South Tyneside	Y
Southampton	N
Southend-on-Sea	Y
Southwark	N
St. Helens	N
Staffordshire	Y
Stockport	Y
Stoke-on-Trent	No response given
Suffolk	Y
Sunderland	Y
Surrey	Y
Sutton	N
Swindon	Y
Tameside	N
Thurrock	N
Torbay	No response given
Tower Hamlets	Y
Trafford	N
Wakefield	Y
Walsall	N
Waltham Forest	Y
Wandsworth	No response given
Warrington	No response given
Warwickshire	N
West Berkshire	Y
West Sussex	Y
Westminster	Y
Wigan	Y
Wiltshire	N
Windsor and Maidenhead	No response given
Wirral	No response given
Wokingham	N
Wolverhampton	Y
Worcestershire	Y
York	Y
Public Health Agency (NI)	Y
Abertawe Bro Morgannwg Health Board	Y
Aneurin Bevan Health Board	No response given
Betsi Cadwaladr Health Board	N
Cardiff and Vale Health Board	No response given
Cwm Taf Health Board	No response given
Hywel Dda University Health Board	No response given
Powys Teaching Health Board	No expenditure data provided

Local Authority/Health Board	Use of cost effectiveness for all commissioned interventions
NHS Ayrshire and Arran	N
NHS Borders	N
NHS Dumfries and Galloway	Y
NHS Fife	<i>No response given</i>
NHS Forth Valley	N
NHS Grampian	<i>No response given</i>
NHS Greater Glasgow and Clyde	Y
NHS Highland	Y
NHS Lanarkshire	N
NHS Lothian	<i>No response given</i>
NHS Orkney	<i>No response given</i>
NHS Shetland	<i>No expenditure data provided</i>
NHS Tayside	N
NHS Western Isles	N