



Is an Ounce of Prevention Worth a Pound of Cure? Estimates of the Impact of English Public Health Grant on Mortality and Morbidity: A Summary

The report is an attempt to evaluate the impact of English public health expenditure on mortality and morbidity, two readily available health outcome measures tied to public health investment, across programmes by local area. By using the availability of a funding formula for local authority (LA) public health expenditure (prevention) and converting healthcare expenditure (treatment) to LA geography, the authors identify the relative contribution of both types of national health expenditure¹ to reductions in mortality and morbidity (quality of life).

The public health grant is allocated to local authorities based on estimated relative need to provide a range of primary prevention services, some of which are universal, such as the health visitor programme, sexual health, children 0-5 services, and others which are targeted at specific population needs, such as drug misuse treatment services. London's allocation is approximately £600m with varying amounts across boroughs (£9-30 mill). England-wide funding cuts to the public health grant have taken place since 2014/15 leading to a £700m real terms reduction between 2014/15 and 2019/20, equivalent to real spending per person falling by one fifth.

Summary of findings:

- At the margin, public health expenditure is three to four times more productive than healthcare expenditure: the public health cost per quality-adjusted life year (QALY) is about £3,800, while that of healthcare is £13,500 per QALY;
- Therefore, a 1% increase in public health expenditure (£25.107m), which reduces all-cause mortality by 0.115% maybe associated with a gain of 7,358 QALYs (0.115 x 63,981).
- The societal return on investment (ROI) associated with the public health grant is about 15 to 1 if the value of the QALY is about £60,000². National public health programmes, in particular, generated a median ROI of 27.2 to 1 (cost-benefit ratio (CBR) of 17.5), while local public health interventions, had a median ROI of 4.1 to 1 (median CBR was 10.3), suggesting that the vast majority of unique public health interventions are cost-efficient.

Conclusions:

- Reallocation of resources from NHS to public health is likely to improve health outcomes overall; the squeeze on the public health grant, while protecting NHS expenditure over recent years, is likely to have reduced health outcomes.
- Due to health opportunity costs of the public health grant being high, new investments in public health interventions and programmes need to offer less than £3,800 per QALY (lower cost, higher impact) to be accommodated within current levels of funding.
- Generally, the health opportunity costs faced are higher than those implied by the current norms used to judge whether new technologies are cost-effective (currently set at £20-30k per QALY by the National Institute for Health and Care Excellence (NICE), though some reviews suggest £30k may represent a reasonable lower bound), and may need to be reconsidered.

Original paper and references available [here](#). Published July 2019.

¹ This study considers public health expenditure as 'preventative' and healthcare expenditure as 'treatment' recognising that some expenditure from the public health grant will be spent on 'treatment'-like interventions, such as for substance misuse treatment services, and that some CCG healthcare expenditure will be spent on 'preventative' medications, such as for the management of long-term conditions.

² The UK's Department of Health and HM Treasury have adopted a value of £60,000 per QALY based primarily on the value of a statistical life from revealed preference studies.