Estimating the marginal productivity of public expenditure on health and social care

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Abstract
The overall aim of this programme of EEPRU research is to strengthen and update estimates of the marginal productivity of NHS expenditure and extend this type of analysis to include other categories of public expenditure, including public health and (adult) social care. An estimate of the marginal productivity of public expenditure on health and social care is important for a wide range of resource allocation decisions. It reflects the additional beneficial outcome that could be gained with additional resource. It also reflects the benefit foregone if resources are committed to a specific type of expenditure and removed from the overall discretionary budget, so reflects the opportunity costs of investing in specific projects. The most recent published estimates of the cost per quality adjusted life year (QALY) associated with changes in NHS expenditure (Martin et al 2021) are discussed. The results of the most recent research are also presented, including analysis of later waves of CCG, primary care and specialised commissioning expenditure data, as well as how estimates differ across the mortality distribution. How this body of evidence might inform judgements about changes in the cost per QALY for NHS expenditure over time is also discussed. These results will be placed in the context of other recent research on the marginal productivity of public health and social care expenditure, which includes exploration of the interaction between health and social care expenditure. The future directions of this ongoing programme of research will also be discussed.

Recent publications

- Martin S, Lomas J, Claxton K, Longo F. How Effective is Marginal Healthcare Expenditure? New Evidence from England for 2003/04 to 2012/13. Applied Health Economics and Health Policy. 2021 Jul 21. https://doi.org/10.1007/s40258-021-00663-3
- Martin S, Longo F, Lomas J, Claxton K. Causal impact of social care, public health and healthcare expenditure on mortality in England: cross-sectional evidence for 2013/2014. BMJ Open. 2021 Oct 15;11(10):e046417. https://doi.org/10.1136/bmjopen-2020-046417
- Longo F, Claxton K, Lomas J, Martin S. Does public long-term care expenditure improve care-related quality of life of service users in England? Health Economics. 2021 Jul 27. https://doi.org/10.1002/hec.4396
- Martin S, Lomas J, Claxton K. Is an ounce of prevention worth a pound of cure? A cross-sectional study of the impact of English public health grant on mortality and morbidity. BMJ Open. 2020 Oct 10;10(10). e036411. https://doi.org/10.1136/bmjopen-2019-036411, https://doi.org/10.1136/bmjopen-2019-036411
- Soares MO, Sculpher MJ, Claxton K. Health Opportunity Costs: Assessing the Implications of Uncertainty Using Elicitation Methods with Experts. Medical Decision Making. 2020 May 1;40(4):448-459. https://doi.org/10.1177/0272989X20916450

EEPRU
This research is conducted as part of The Policy Research Unit in Economic Methods of Evaluation of Health and Social Care Interventions (EEPRU) which is a 5 year programme of work that started in January 2019 and is a collaboration between the Universities of York and Sheffield. EEPRU aims to assist policy makers in DHSC and arm's length bodies to improve the allocation of resources in health and social care through high quality research. EEPRU's current projects include the estimation of marginal productivity, evaluation of new antibiotics and health valuation methods.