THOMAS MASON

Applied Economist
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PROFILE

Applied economist with 15 years' experience using quasi-experimental methods and large-scale administrative data to evaluate the economic and distributional effects of policy. My research spans labour supply and workforce economics, population ageing and its implications for the care workforce, provider incentives, and regional economic policy, applied to health and social care: a sector accounting for around one in eight UK jobs and a first-order setting for AI's labour market effects. I currently lead the quantitative evaluation of Scotland's community wealth building programme (a synthetic control study against English comparators), and my research has been carried directly into government decision-making, including the resource allocation formula adopted as the basis for target allocations of the public health grant from 2016. I have worked in academia and the private sector, with a sustained record of translating findings for policy audiences including NHS England, the Department of Health and the Home Office.

RESEARCH EXPERTISE

- **Causal inference:** difference-in-differences, event studies, synthetic control, panel data econometrics, instrumental variables, matching; specialist in natural experiment designs.
- **Large-scale data:** built longitudinal panels of millions of observations from national administrative data (HES, CPRD, NDTMS); linked survey and administrative sources.
- **Labour and workforce:** health workforce planning and modelling, provider incentive design (pay-for-performance), and the supply of formal and informal care.
- **Methods development:** age-period-cohort models of population ageing, morbidity and health care labour supply; need-based resource allocation formulae; predictive machine learning on linked clinical data.
- **Software:** Stata (advanced, 15 years; large-scale data pipelines and econometrics); AI-assisted research workflows (Claude Code) in daily use; Python and SQL (currently developing).

EMPLOYMENT

Senior Lecturer (Associate Professor) in Health Economics, Lancaster University | 2022–present

- Lead the £1.6m synthetic control evaluation of community wealth building, a regional economic policy (**CoWBELLs**, NIHR, 2025–2028), comparing Scottish and English localities; line-manage a postdoctoral researcher.
- Co-lead the drug and alcohol research theme of the £11m **NIHR Mental Health Research Group** (awarded 2026).
- Deliver, as co-investigator, NIHR studies of primary care nurse continuity in long-term conditions (£100k, CPRD) and of the quantitative evidence local public health decision makers use in commissioning (£50k).
- Direct research strategy across a multidisciplinary division as **Co-Director of Research**; advise study teams nationally as methods expert to the NIHR Research Support Service.
- Assess national funding applications as a member of the **NIHR Public Health Research Programme Funding Committee** (2025–present).
- Supervise part-time PhD students in health economics and policy (completed doctoral supervision at Manchester); lead postgraduate teaching in applied health economics.

Research Fellow in Health Economics & Lecturer in Economics, University of Manchester | 2020–2022

- Designed and taught economics of health on the MSc Economics programme: supply, regulation and financing; incentives in health care.
- Evaluated the NHS Diabetes Prevention Programme; delivered the evaluation of a hospital domestic violence advisor service that secured its permanent commissioning and informed an NHS England national business case.

Senior Research Analyst, HEOR Ltd (private sector consultancy) | Dec 2018–Jan 2020

- Led a team of three health economists delivering commissioned research to deadline for government, third sector and pharmaceutical clients; lead economist on a Bristol-Myers Squibb-funded study (£55,675) of anticoagulation control costs using linked CPRD–HES data, with an associated applied machine learning publication (2021).

Research Associate, then Research Fellow, Manchester Centre for Health Economics, University of Manchester | 2010–2018

- **Labour and workforce economics:** developed methods for health care workforce planning (funded by the Centre for Workforce Intelligence); published critiques of need-based workforce planning models (*Health Economics*, 2017); contributed to analysis of the supply of formal and informal care (*Health Economics*, 2019).
- **Incentives and provider behaviour:** delivered difference-in-differences evaluations of national pay-for-performance schemes, including the Department of Health-commissioned Payment by Results for Drugs Recovery evaluation (*Addiction*, 2015, 2018, 2021).
- **Regional policy and resource allocation:** co-developed the public health resource allocation formula for English local authorities (DH Policy Research Programme, £194,351); led the population health formula covering 46% of the budget, adopted from 2016 following public consultation.
- **Population ageing and labour supply:** developed age-period-cohort models of ageing and morbidity and their implications for health care planning and workforce requirements (*Social Science & Medicine*, 2015).
- Advised research teams nationally for the NIHR Research Design Service (2016–2018); taught **Econometrics** (BSc Economics, 2011–2015), earning a departmental teaching award with student ratings in the top 5% of tutors.

EDUCATION

- **PhD Health Economics**, University of Manchester (2012–2019, part-time alongside research posts): difference-in-differences and event study analysis of national administrative data on substance misuse admissions and costs.
- **MSc Economics**, University of Manchester (2009–2010).
- **BA (Hons) Economics and Politics**, Keele University (2005–2008).
- **Professional development:** CodeChella Causal Inference Workshop on Difference-in-Differences, Mixtape Sessions, CUNEF Universidad, Madrid, May 2026 (recent developments in DiD methods; AI-assisted research workflows using Claude Code).

SELECTED PUBLICATIONS

1. Will the need-based planning of health human resources currently undertaken in several countries lead to excess supply and inefficiency? *Health Economics*, 2017.
2. * Exploring the limitations of age-based models for health care planning. *Social Science & Medicine*, 2015.
3. * Did paying drugs misuse treatment providers for outcomes lead to unintended consequences for hospital admissions? Difference-in-differences analysis of a pay-for-performance scheme in England. *Addiction*, 2021.
4. * The impact of paying treatment providers for outcomes: difference-in-differences analysis of the ‘payment by results for drugs recovery’ pilot. *Addiction*, 2015. (Shortlisted, EMCDDA Scientific Committee award, 2016.)
5. Investigating the relationship between formal and informal care: an application using panel data for people living together. *Health Economics*, 2019.
6. Development of a resource allocation formula for substance misuse treatment services. *Journal of Public Health*, 2018.
7. Using machine learning to predict anticoagulation control in atrial fibrillation: a UK Clinical Practice Research Datalink study. *Informatics in Medicine Unlocked*, 2021.
8. Could diabetes prevention programmes result in the widening of sociodemographic inequalities in type 2 diabetes? *Journal of Epidemiology and Community Health*, 2023.

* denotes first-authored. Full list of 30 publications: orcid.org/0000-0003-3135-0364

RESEARCH FUNDING

Current roles on four NIHR awards totalling £12.8m (awarded 2025–2026): NIHR Mental Health Research Group, £11m (co-lead, drug and alcohol theme); CoWBELLs, NIHR Public Health Research, £1.6m (lead, synthetic control quantitative work package); NIHR Three Research Schools Prevention Research Programme, £100k; NIHR Research Support Service Methodology Fund, £50k. Previously co-applicant or lead on funded research totalling over £1.2m (Medical Research Council £968,653, lead health economist; Department of Health Policy Research Programme £194,351; NHS England £23,386, lead applicant; Bristol-Myers Squibb £55,675, lead economist). Between 2010 and 2018 I worked across more than ten externally funded projects at Manchester, for funders including NHS England, the Department of Health, NIHR, the Centre for Workforce Intelligence and the Royal College of Optometrists.

POLICY ENGAGEMENT AND EXTERNAL ROLES

- Research presented to NHS England, the Department of Health, the Home Office, the Advisory Committee on Resource Allocation, and the Technical Advisory Group on Resource Allocation.
- Expert peer reviewer: Home Office (*The Social and Economic Costs of Crime*, 2012); Oak Foundation (2015).
- Co-convenor, NIHR School for Public Health Research Network for Health Economics; steering committee member on two NIHR-funded clinical trials; lead organiser, UK Health Economists’ Study Group winter conference 2016.