

Research impact: making a difference

Helping the NHS deliver better care for less money

Health bodies in England used tools developed by LSE researchers to plan delivery of better patient care at a time of austerity

What was the problem?

More than £100 billion is spent on healthcare in England every year – almost 15% of government spending.

In the current era of reduced public spending there is continual pressure on the regional bodies that commission health services to make better use of their limited resources.

At the same time they have a duty to deliver improvements in the quality of care and achieve the best value for money, as set out in the Government's mandate.

The budget of the National Health Service has been growing by just 0.1% a year above the rate of inflation between 2011 and 2015. This level of expenditure is not expected to accommodate the growth in population and demands for newer and more expensive treatments unless significant cost efficiencies can be achieved.

What did we do?

Health economists have developed a framework to assess the impact of medical interventions in terms of the costs and the gains in health (cost-effectiveness analysis). This technique is, however, not easy to use by commissioning bodies to set healthcare priorities within a fixed financial budget. LSE researchers developed an assessment technique to help in making cost-effectiveness principles easier to use. This is STAR (Socio-Technical Allocation of Resources).

The researchers worked with three Primary Care Trusts in England – bodies responsible for commissioning services from providers – and with health authorities in Italy and Canada. They found that in each authority's area no data were available on the impact of interventions on the health of populations.

To address this deficit, the researchers designed a process that enabled clinicians, managers, patients, carers and members of the public to estimate health gains of different interventions and to compare their relative value for money.

What happened?

The Health Foundation, a leading UK health think-tank, invested £200,000 to produce a toolkit and guidance material for implementing STAR. The tool enables assessment of current and



Research impact: making a difference

future health interventions in terms of their health benefits and value for money and in terms of setting health priorities and targets for local populations.

The Global Fund, which is the world's largest financial supporter of programmes to fight AIDS, malaria and tuberculosis, invited the LSE team to run pilots to test its approach in helping countries develop clear investment plans that are good value-for-money. The first pilot was successful and more were scheduled for 2013/14.

LSE research conducted in collaboration with and for the Isle of Wight Primary Care Trust led to National Health Service Isle of Wight winning an award for Excellence in Commissioning from the Institute for Innovation and Improvement. This drew

"The tool used by IMPRESS ... should be adopted and adapted by all clinical communities of practice to estimate and visualise the marginal benefits of all aspects of care for the benefit of patients."

Sir Muir Gray, Chief Knowledge Officer, UK National Health Service

attention from, and influenced the thinking of, healthcare planners in the English NHS. One of the specific results of the collaboration was a 50% reduction in emergency asthma admissions by investing in improving patients' inhaler technique.

IMPRESS, a joint initiative between the two leading respiratory clinical societies in the UK, used STAR to develop a guide for commissioning authorities on chronic obstructive pulmonary disease. Sir Muir Gray, Chief Knowledge Officer of the National Health Service, recommended the IMPRESS tool be "adopted and adapted by all clinical communities of practice".

As a result of work done by the LSE on the Health Foundation's System Modelling for Performance Optimisation and Service Equity (SyMPOSE), National Health Service Sheffield changed the way it tackled eating disorders by expanding the scale of earlier interventions (which were seen as more cost-effective), thereby reducing the need for later intensive care (which was estimated to be less cost-effective). According to interviews with executives, this improved the experience of patients, improved the way services were coordinated and reduced costs by 15%, enabling more money to be spent on other services.

One of the LSE researchers, Professor Gwyn Bevan, gave evidence to two separate inquiries into healthcare commissioning conducted by the House of Commons Health Select Committee. The UK Department of Health commissioned two other researchers, Mara Airoldi and Alec Morton, to contribute to a seminar series to show how the LSE framework for commissioning the best health services at the greatest value for money could be used in developing policies for reducing health inequalities. They were also invited to present the LSE STAR tool to the Marmot Review, commissioned by then Secretary of State of Health Alan Johnson to examine the differences in health and wellbeing between social groups within England.



Research impact: making a difference

Dr Mara Airoldi is a former Course tutor within the Department of Management in Public Management and Governance and a former LSE Fellow and Research officer for three years working on a behavioural economics project about discounting of future outcomes. Dr Airoldi joined the Blavatnik School of Government at the University of Oxford as Departmental Lecturer in Economics and Public Policy in January 2015.

Email: mara.airoldi@bsg.ox.ac.uk

Website: http://www.bsg.ox.ac.uk/people/mara-airoldi#profile

Alec Morton is a former lecturer in the Department Management, LSE. He has a degree in Mathematics and Philosophy from the University of Manchester and MSc in Operational Research and PhD in Management Science from the University of Strathclyde. He has worked as an Operational Researcher for Singapore Airlines, a research fellow at the National University of Singapore and has been on secondment at the National Audit Office. His main research interests are in applications of multi-criteria decision analytic ideas in project prioritisation and resource allocation, in the operational management and modelling of acute hospitals, and in modelling to support mental health policy. Alec is now a Professor at the University of Strathclyde.

Email: alec.morton@strath.ac.uk

Website: http://www.strath.ac.uk/mansci/staff/mortonalecmr/

I CE availability advantal days the following for augment of this research.

LSE gratefully acknowledges the following for support of this research:

The Health Foundation

http://www.lse.ac.uk/researchImpact