



Health Economics News

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Project Team: Anastasia Arabadzhyan, Adriana Castelli, Martin Chalkley, James Gaughan, Maria Ana Matias

Like many other parts of the economy, the NHS grows over time but there is a great deal of interest in whether what it produces (output) increases more than what it uses (inputs). When that occurs, we say there has been productivity growth. CHE has been involved in measuring productivity of the NHS since 2004 and in 10 out of 15 years during this period there has been productivity growth, with typically the NHS performing better than the economy as a whole on this measure. This research paper details the calculation for the period from 2017/18 to 2018/19 and finds that productivity declined by 0.75% - whilst output continued to grow by over 2%, inputs grew by closer to 3%. Whilst the decline is not unprecedented, and the productivity growth figures do naturally vary from year to year, this does indicate that in the year approaching the Covid19 pandemic the NHS was already suffering a reversal of recent performance. The pandemic has of course posed huge challenges for the NHS and will make the future measurement of productivity very difficult, but it will be increasingly important to measure how it performs.

Read CHE Research Paper 182 here: [www](http://www.york.ac.uk/che/publications)

CHE articles from 'The Conversation'

What India's government needs to do to avoid another healthcare meltdown.

The deadly second wave of coronavirus infections in India over the past few weeks has led to a sharp spike in deaths and overwhelmed the health system. [Read more...](#)

Written by **Sumit Mazumdar**



COVID restrictions: the data that explains why England is facing four more weeks of lockdown.

UK prime minister Boris Johnson announced on June 14 that the fourth and final stage of England's lockdown easing, due to take place on June 21, would be delayed by four weeks. [Read more...](#)

Written by **Peter Sivey** and **James Gaughan**

Digital Mental Health Interventions: Methods to determine cost effectiveness

Project Team: Dina Jankovic, Laura Bojke, Pedro Saramago Goncalves (CHE), David Marshall, Rachel Churchill, Hollie Melton (CRD, York), Sally Brabyn, Lina Gega (Health Sciences, York)



Digital interventions are accessed via technology platforms, such as computers and smartphones. They can make a difference in mental health and addiction problems. Investment in digital interventions for mental health conditions (DMHIs) is growing

rapidly, offering the potential to alleviate systems that are overstretched and allow remote access to treatments.

Despite a growing literature on the economic evaluation of DMHIs, there is no conclusive evidence regarding their cost-effectiveness and there are no agreed methods to establish value for money. Agreeing on methods will help to harmonise evaluation, which will aid decision making. To address this gap, we conducted a systematic review to identify all economic evaluations of DMHIs. We looked at the methods used in each of the studies and assessed whether these meet the requirements for healthcare decision-making.

Of the 67 papers evaluating DMHIs, the majority were conducted alongside trials, failing to capture all relevant available evidence and comparators, and the long-term impacts of mental health disorders. DMHIs are complex and heterogeneous. As a result, there are a number of challenges in evaluation, including estimation of all costs and outcomes and identification of relevant comparators. A taxonomy for DMHIs would inform what interventions can reasonably be pooled and compared.

Read the full article here: www.che.ac.uk/news/digital-mental-health-interventions-methods-to-determine-cost-effectiveness

War and Peace

Kath Devlin

In March 2021, two final dissemination events were held for the research project, War and Peace – the Health



and Health System Consequences of Conflict in Colombia. The events marked the end of a three year collaboration with Universidad de los Andes, LSHTM and colleagues in the Department of Politics, University of York.

Over 90 people attended the first event 'Health between pandemic and post-conflict: a look after the peace agreement with the FARC', a virtual meeting to present the results of the project to academic and non-academic audiences. Alongside presentations by Colombian co-investigators, Fan Yang presented 'Health-related quality of life of a conflict-affected population in Colombia'; and Rodrigo Moreno-Serra presented 'The Effects of Conflict Violence Reduction on Pregnancy Outcomes: Evidence from a Natural Experiment in Colombia'.

The second event was for invited policymakers and stakeholders from the Meta province in Colombia, where project fieldwork was conducted. Stakeholder engagement has been integral throughout the project, and this event was an opportunity to present results to guide local post-conflict health policy. Attendees included the Governor of Meta, municipal mayors, members of the Department Assembly of Meta, Secretaries of Health, and Secretaries of Human Rights, along with other local stakeholders.

Find out more here: www.che.ac.uk/news/war-and-peace

News from CHE

We are delighted to congratulate **Fan Yang, James Love-Koh** and **James Gaughan**, who were recently promoted.



Staff from CHE have contributed to some major conferences over the past few months including:

- In May, the Virtual ISPOR conference 2021. Further details about the presentations can be found here: www.che.ac.uk/news/ispor-2021
- In July, the Virtual iHEA 2021 Congress. Further details are here: www.che.ac.uk/news/ihea-2021
- In June, the Summer 2021 HESG University of Cambridge meeting. **Adriana Castelli** contributed the paper, 'Hospital specialty level productivity: the case of

paediatric departments and specialised children's hospitals', co-authored with **Maria Ana Matias** and **James Gaughan**. **Luis Fernandes** contributed the paper, 'Doctors' wages and NHS activity: Evidence from a UK pension reform', co-authored with **Nils Gutacker** and **Martin Chalkley**.

See our website for full details of CHE staff presentations and visits. More News about CHE can be found here on our website. www.che.ac.uk/news

Cost-effectiveness of in-house vs contracted-out Vision Rehabilitation Services

Project Team: Francesco Longo, Pedro Saramago, Helen Weatherly (CHE), Parvaneh Rabiee, Yvonne Birks (SPRU, York), Ada Keding, Illary Sbizzera (Health Sciences, York)

The importance of rehabilitation to local authorities (LAs) is highlighted in the Care Act 2014. LAs are required to promote well-being and independence before people reach crisis point. An area of increasing population demand is that of vision rehabilitation (VR). Evidence to support delivery of VR, however, is limited.

This research (funded by NIHR SSCR) provides initial evidence to inform decision makers about the cost-effectiveness of two dominant models of VR services in England: in-house and contracted-out VR. LAs fund all VR services but some LAs provide VR in-house while others contract-out these services to external organisations. The analysis was carried out from both a UK social care perspective and a combined social care and health care perspective.

In-house service users were referred to the service for more varied reasons, and their rehabilitation goals were more likely to include areas of support in addition to rehabilitation-based interventions. They had longer planned VR duration and longer service waiting times. Contracted-out services were more likely to provide group-based activities.

We found that in-house VR services were more likely to be cost-effective from a social care perspective, but less likely from a perspective covering social care and health care. This is because contracted-out VR users tend to use fewer health care resources. We conclude therefore that contracted-out VR may be better value for money in the context of integrated social care and health care systems.

Read the full article here: www.bmjsm.com



Quality adjusted life years based on health and consumption

Project Team: Richard Cookson and Ieva Skarda (CHE), Owen Cotton-Barratt, Toby Ord (University of Oxford), Matthew Adler (Duke University), Miqdad Asaria (London School of Economics)

Many “cross-sectoral” public policies have important long-run impacts on both living standards and health, including policies on social protection, education, employment and crime as well as health care and public health. Standard benefit-cost analysis converts living standards and health into monetary units, which can be misleading and has been criticised on various grounds.

We introduce an alternative approach which directly incorporates living standards and health into a summary wellbeing measure. We call our measure a “good life year” or a “wellbeing quality adjusted life year (wellbeing QALY)”. A good life year is interpreted as a year spent in full health and enjoying a good standard of living, which we set equal to the living standards of the average person in a modern high-income country. This is aligned with the healthy life year (or health QALY), but adds consumption as well as health.



Our measure can be constructed using widely available data on health-related quality of life, mortality and consumption, after making normative assumptions about three parameters. As well as providing a general measure for cost-effectiveness analysis and cost-benefit analysis, our approach also facilitates distributional analysis in terms of how many good years different population subgroups can expect to live under different policy scenarios.

Read the full article here: www.bmjsm.com

Anderson M, Pitchforth E, Asaria M et al (includes **Drummond M, Smith P**). LSE-Lancet Commission on the future of the NHS: re-laying the foundations for an equitable and efficient health and care service after COVID-19. *The Lancet* 2021;397(10288):1915-1978.

Arabadzhyan A, Figini P, Vici L. Measuring destination image: a novel approach based on visual data mining. A methodological proposal and an application to European islands. *Journal of Destination Marketing & Management* 2021;20:100611.

Aubert J, Durán D, Monsalves M et al (includes **Cuadrado C**). Diagnostic properties of the definitions of suspected cases of COVID-19 in Chile, 2020. *Rev Panam Salud Publica* 2021;45:e14.

Ávalos D, **Cuadrado C**, Dunstan J et al. Mathematical model for estimating nutritional status of the population with poor data quality in developing countries: The case of Chile. In Parlier GH, Liberatore F, Demange M (eds). *ICORES 2021 - Proceedings of the 10th International Conference on Operations Research and Enterprise Systems*. SciTePress 2021;p:408-415.

Baliunas D, Selby P, **de Oliveira C** et al. Primary care-based smoking cessation treatment and subsequent healthcare service utilisation: a matched cohort study of smokers using linked administrative healthcare data. *Tobacco Control* 2021;doi:10.1136/tobaccocontrol-2021-056522.

Bellasi S, Lister J, Kitchen C et al (includes **Jacobs R**). Living with diabetes alongside a severe mental illness: a qualitative exploration with people with severe mental illness, family members and healthcare staff. *Diabetic Medicine* 2021;doi:10.1111/dme.14562.

Blower S, Berry V, Bursnell M et al (includes **Richardson G, Walker S**). Enhancing Social-Emotional Outcomes in Early Years (E-SEE): Randomized pilot study of incredible years infant and toddler programs. *Journal of Child and Family Studies* 2021;30(8):1933-1949.

Bojke L, Soares M, Claxton K, Colson A, Fox A, Jackson C, **Jankovic D** et al. Developing a reference protocol for structured expert elicitation in health-care decision-making: a mixed-methods study. *Health Technology Assessment* 2021;25(37).

Bosa I, **Castelli A**, Castelli M, Ciani O et al. Response to COVID-19: Was Italy (un) prepared? *Health Economics, Policy and Law* 2021;doi:10.1017/S1744133121000141.

Candio P, Meads D, Hill A, **Bojke L**. Taking a local government perspective for economic evaluation of a population-level programme to promote exercise. *Health Policy* 2021;125(5):651-657.

Chalkou K, Steyerberg E, Egger M, **Manca A** et al. A two-stage prediction model for heterogeneous effects of treatments. *Statistics in Medicine* 2020;doi:10.1002/sim.9034.

Cleverley K, Stevens K, Davies J et al (includes **de Oliveira C**). Mixed-methods study protocol for an evaluation of the mental health transition navigator model in child and adolescent mental health services: the Navigator Evaluation Advancing Transitions (NEAT) study. *BMJ Open* 2021;11(6):e051190.

Costa E, **Santos R**, Barros P. The financial sustainability of the Portuguese health system. In Baltagi BH, Moscone F (eds). *The Sustainability of Health Care Systems in Europe*. Vol.295. Emerald 2021;p209-229.

de Oliveira C, Mondor L, Wodchis W, Rosella L. Looking beyond administrative health care data: the role of socioeconomic status in predicting future high-cost patients with mental health and addiction. *The Canadian Journal of Psychiatry* 2021;doi:10.1177/07067437211004882.

Duarte A, Walker S, Metry A, Wong R, Panovska-Griffiths J, **Sculpher M**. Jointly modelling economics and epidemiology to support public policy decisions for the COVID-19 response: a review of UK studies. *PharmacoEconomics* 2021;doi:10.1007/s40273-021-01045-2.

Federic C, Reckers-Droog V, Ciani O et al (includes **Drummond M**). Coverage with evidence development schemes for medical devices in Europe: Characteristics and challenges. *The European Journal of Health Economics* 2021;doi:10.1007/s10198-021-01334-9.

Iragorri N, **de Oliveira C**, Fitzgerald N, Essue B. The out-of-pocket cost burden of cancer care - A systematic literature review. *Current Oncology* 2021;28(2):1216-1248.

Jarvis S, Roberts D, Flemming K, **Richardson G**, Fraser L. Transition of children with life-limiting conditions to adult care and healthcare use - a systematic review. *Pediatric Research* 2021;doi:10.1038/s41390-021-01396-8.

Kohli M, Maschio M, Mould-Quevedo J, Ashraf M, **Drummond M**, Weinstein M. The cost-effectiveness of expanding vaccination with a cell-based influenza vaccine to low risk adults aged 50 to 64 years in the United Kingdom. *Vaccines* 2021;9(6):598.

Leon-Giraldo S, Casas G, Cuervo-Sanchez J, González-Urbe C, Bernal O, **Moreno Serra R**, **Suhrcke M**. Health in conflict zones: Analyzing inequalities in mental health in Colombian conflict-affected territories. *International Journal of Public Health* 2021;doi:10.3389/ijph.2021.595311.

MacChioni Giaquint A, Jones A, **Rice N**, Zantomio F. Labour supply and informal care responses to health shocks within couples: evidence from the UKHLS. *Global Labor Organization* 2021; *Discussion Paper Series*; 806.

McGuire F, **Kreif N, Smith P**. The effect of distance on maternal institutional delivery choice: Evidence from Malawi. *Health Economics* 2021;doi:10.1002/hect.4368.

Minian N, Ahad S, Ivanova A et al (includes **de Oliveira C**). The effectiveness of generic emails versus a remote knowledge broker to integrate mood management into a smoking cessation program in team based primary care: A cluster randomized trial. *Implementation Science* 2021;16:30.

Moscelli G, **Gravelle H**, Siciliani L. Hospital competition and quality for non-emergency patients in the English NHS. *The Rand Journal of Economics* 2021;doi:10.1111/1756-2171.12373.

Nikolaïdis G, **Woods B, Palmer S, Soares M**. Classifying information-sharing methods. *BMC Medical Research Methodology* 2021;21:107.

Omrani H, Modroui M, Lenzi J, Omrani B, Said Z, **Suhrcke M** et al. COVID-19 in Europe: Dataset at a sub-national level. *Data in Brief* 2021;35:106939.

Pandya A, **Griffin S, Walker S**. Responding to health-improving but cost-ineffective care. *JAMA Health Forum* 2021;doi:10.1001/jamahealthforum.2021.0229.

Phillips A, Bansil-Matharu L, Cambiano V et al (includes **Revill P**). The potential role of long-acting injectable cabotegravir-rilpivirine in the treatment of HIV in sub-Saharan Africa: a modelling analysis. *The Lancet Global Health* 2021;9(5):e620-e627.

Pongiglione B, Torbica A, Blommestein H et al (includes **Drummond M**). Do existing real-world data sources generate suitable evidence for the HTA of medical devices in Europe? Mapping and critical appraisal. *International Journal of Technology Assessment in Health Care* 2021;37(1):E62.

Rocco L, Fumagalli E, Mirelman A, **Suhrcke M**. Mortality, morbidity and economic growth. *PLOS ONE* 2021;doi:10.1371/journal.pone.0251424.

Sarchiapone M, Lopez-Castroman J, Gramaglia C et al (includes **Palmer S**). Increased risk for mental disorders and suicide during the COVID-19 pandemic: Position statement of the Section on Suicidology and Suicide Prevention of the European Psychiatric Association. *Global Psychiatry* 2021;4(1):4-19.

Soares M, Sculpher M, Claxton K. Authors' response to: 'Health opportunity costs and expert elicitation: A comment on Soares et al.' by Sampson, Firth and Towse. *Medical Decision Making* 2021;41(3):258-260.

Stacey N, Mirelman A, **Kreif N, Suhrcke M** et al. Facility standards and the quality of public sector primary care: Evidence from South Africa's 'Ideal Clinics' program. *Health Economics* 2021;doi:10.1002/hect.4228.

Vigod S, Slyfield Cook G, Macdonald K et al (includes **de Oliveira C**). Mother matters: Pilot randomized wait-list controlled trial of an online therapist-facilitated discussion board and support group for postpartum depression symptoms. *Depression and Anxiety* 2021;doi:10.1002/da.23163.

Walker S, Fox A, Altunkaya J, Colbourn T, **Drummond M, Griffin S, Gutacker N, Revill P, Sculpher M**. Program evaluation of population- and system-level policies: evidence for decision-making. *Medical Decision Making* 2021;doi:10.1177/0272989X211016427.

Weatherly H, Davies C. Economic evaluation of OT services: Guidance and opportunities. *British Journal of Occupational Therapy* 2021;doi:10.1177/0308022621998570.

Whittall A, Nicod E, **Drummond M**, Facey K. Examining the impact of different country processes for appraising rare disease treatments: a case study analysis. *International Journal of Technology Assessment in Health Care* 2021;37(1):E65.

Yang F, León-Giraldo S, **Moreno Serra R**. Health-related quality of life of a conflict-affected population in Colombia. *Quality Of Life Research* 2021;doi:10.1007/s11136-021-02805-5.

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Latest CHE research papers

181 Financial incentives and prescribing behaviour in primary care. Olivia Bodnar, Hugh Gravelle, Nils Gutacker, Annika Herr.

182 Productivity of the English National Health Service: 2018/19 Update. Anastasia Arabadzhyan, Adriana Castelli, Martin Chalkley, James Gaughan, Maria Ana Matias.

183 Paying for Health Gains. Luigi Siciliani, James Gaughan, Nils Gutacker, Hugh Gravelle, Martin Chalkley.

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