

Health **Economics** News

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Latest CHE research papers

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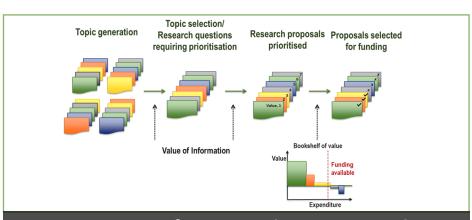
173 Who benefits from health insurance? Uncovering heterogeneous policy impacts using causal machine learning. Noemi Kreif, Andrew Mirelman, Rodrigo Moreno-Serra, Taufik Hidayat, Karla DiazOrdaz, Marc Suhrcke.

174 The relationship between social care resources and healthcare utilisation by older people in England: an exploratory investigation. Maria Lucia Pace, Dan Liu, Maria Goddard, Rowena Jacobs, Raphael Wittenberg, Gerard McGonigal, Anne Mason.

175 Does Health Technology Assessment guidance give adequate consideration to decisions about less costly and less effective alternatives? Susan Griffin, Francesco Fusco, Bhash Naidoo, Matthew Taylor, Simon Walker.

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Setting priorities for research: recommendations from The Professional Society for Health **Economics and Outcomes Research (ISPOR)** Value of Information Task Force

Claire Rothery, co-chair of ISPOR Value of Information Task Force

Research prioritisation is the art of developing a consensus on a number of priority areas that need to be underpinned by future investment in research. The concept of opportunity cost is very clear in this context – once resources are invested in one research topic, they are no longer available for other investments. This means that decisions about which research areas to fund should always aim to avoid wasting resources and maximise the health benefits gained from new information.

Commissioning further research implies that the uncertainty about outcomes is unacceptable and is considered important enough to justify the investment in research. Value of Information (VOI) methods provide a framework to quantify the expected benefits of research by estimating the value of reducing uncertainty in decision-making based on what is already known about the technologies. These estimates can be used to identify topics where research offers the greatest value, and allows research funders to determine highpriority areas.

VOI methods are the subject of two reports issued by the ISPOR Task Force. The first report outlines the role of VOI in supporting different types of research decisions and is intended for an audience of decision makers tasked with allocating resources to research. The second report provides guidance on selecting the most appropriate methods for computing VOI. Both reports provide important recommendations for good practices in VOI.

Further details here and here

New training resources for distributional cost-effectiveness analysis – making equity count

Editors: Richard Cookson, Susan Griffin, Ole F Norheim, Anthony J Culyer

Unfair health inequalities blight lives, generate enormous costs, and exist everywhere. Until recently, however, economic evaluation has focused on effectiveness and efficiency rather than equity. CHE staff have led the development of new training resources in methods of distributional cost-effectiveness analysis (DCEA) that can help to change this by quantifying the equity impacts of health programmes and the tradeoffs that sometimes arise between equity and efficiency.

The Oxford University Press <u>Handbook of Distributional Cost-Effectiveness Analysis</u> is an all-in-one guide for researchers, policy advisers, and research funders who wish to learn about, commission and use economic evaluation to reduce health inequalities and promote both equity and efficiency. It provides both hands-on training for postgraduate students and analysts and an accessible guide for academics, practitioners, managers, policymakers, and stakeholders. Accompanying spreadsheet training exercises are freely available. Updates on training courses are also available via the International Health Economics Association special interest group on equityinformative economic evaluation.

The Handbook offers a flexible suite of methods that can be tailored to suit the value judgements made in any decision context. We hope it will stimulate studies that combine efficiency and equity in all countries, whatever their stage of development, and spur theorists and practitioners to develop further techniques, better data and fairer decisions.

Diabetes, employment and behavioural risk factors in China

Project Team: Marc Suhrcke (CHE), Till Seuring (Luxembourg Institute of Socio-Economic Research), Pieter Serneels, MaxBachmann (University of East Anglia).

A diabetes diagnosis is a significant life event that may trigger important health behaviour changes and even economic consequences. But the influence on the onset of diabetes of hard-to-measure or hard to -observe factors, and of changes in health behaviour occurring before a diagnosis, complicate the identification of a causal relationship. Standard regression models cannot account for this bias. To overcome these challenges and to test robustness of results to varying assumptions, we use two complementary methods: marginal structural models and fixed-effects regression. While the former accounts for confounding and selection bias arising from time-variant factors, the latter controls for timeinvariant unobservable factors. With these methods, we assess the impact of diabetes diagnosis on health behavioural risk factors and employment probability in China, a country facing a sizeable and growing diabetes challenge.

Both methods reveal large gender differences in the effects of a diabetes diagnosis: while for women, employment probabilities are reduced considerably, men appear unaffected. Women also seem to fare worse than men in terms of behavioural risk factors such as hypertension and physical inactivity, post-diagnosis.

Our results illustrate a need for policies to reduce unnecessary health and economic harm for people with diabetes, particularly among women. To inform such policies, we need to better understand the underlying drivers of these gender differences, which may have to do with biological factors, differences in treatment and spousal support for behaviour change, among others.

Journal article is here: www

Informing NICE's appraisal methods for the evaluation of histology independent drugs

Project Team: Stephen Palmer, David Glynn,
Alessandro Grosso (CHE), Peter Murphy, Sofia Dias,
Rob Hodgson, Lindsay Claxton, Lucy Beresford, Kath Wright,
(CRD, University of York), Katy Cooper, Paul Tappenden,
Kate Ennis, Anna Cantrell, Matt Stevenson (ScHARR,
University of Sheffield)

The first histology-independent marketing authorisation was recently granted by the European Medicines Agency. This is the first time a cancer treatment has been approved based on a common biomarker rather than the location in the body where the tumour originated. This represents an important



paradigm shift, meaning that oncological diseases can now be classified by either tumour biomarker status or tumour histogenesis. The broad scope of histology-independent indications and the nature of the evidence base pose important challenges to the appropriate quantification of their value to the NHS and the effective mitigation of any additional risks.

Our research, funded by the National Institute for Health Research HTA programme, sought to inform NICE's methods and processes to enable a single, biomarker-driven appraisal for histology-independent cancer drugs. We developed a decision-framework to help inform approval and research policies. The framework explored the uncertainties and risks associated with different policies. Alternative approaches to managing risk were identified, including the role of further data collection, the use of pricing schemes and stratified decision making. We concluded that routine presentation of the scale of the consequences of heterogeneity and decision uncertainty may provide important additional assessments to those specified in the current NICE methods guide.

For more details read full report here: www

COVID-19, social distancing and violence against women in Brazil (BRAVE)

Project Team: Rodrigo Moreno-Serra, Noemi Kreif, Samuel Lordemus, Kath Devlin (CHE), Maria Dolores Montoya Diaz, Fabiana Fontes Rocha, Paula Pereda (Universidad de São Paulo, Brazil)

BRAVE is an 18-month project funded via the UKRI Agile COVID-19 GCRF and Newton Fund call. The project will investigate the health, economic and societal consequences of social distancing upon gender-based violence in different regions of Brazil.

The full impact of the COVID-19 pandemic and social distancing measures upon vulnerable individuals' and communities' health, physical safety and economic security is still being revealed. What has become apparent from early reports is that there has been a global increase in the rate of domestic violence against women since the start of the pandemic. Emerging data indicates that Brazil is being particularly affected by this; a situation compounded by pre-existing high rates of gender-based violence. The results of this research will help to inform future policies for social distancing measures across Brazil and globally.

Find out more. www

Is working longer hours bad for nurses' health: evidence from a large mental health hospital in England

Project Team: Idaira Rodriguez Santana, Misael Anaya Montes, Rowena Jacobs, Martin Chalkley (CHE), Jane Suter, Tina Kowalski (York Management School)

The working conditions of health carers and the impact of those conditions on their own health are under increasing scrutiny in the context of COVID-19. There has long been a concern that the long hours and shift patterns that are prevalent in the healthcare sector may give rise to fatigue and poor mental health which in turn may lead to accidents. This study looks in depth at the impact of increasing shift lengths for nurses in the particular setting of a large mental health hospital in England. By observing nurses' sickness both before and after shifts increased from eight to twelve hours and by using detailed data on the staff, the patients they were treating and the working environment, our study tried to isolate the effect of longer shifts on the health of staff. Longer shifts were associated with increased nurse sickness hours with the effect that each ward effectively lost one-person shift per week. This demonstrates that



the hours that health care professionals are asked to work can exert a detrimental impact on their own health. This is important to know, and potentially worrying, during the current pandemic as nurses are being asked to work longer and harder.

The article this relates to is here: www

News from CHE













We are delighted to congratulate María José Aragón, Jessica Ochalek and Katja Grasic, who were recently promoted.

Also, huge congratulations to **Susan Griffin**, **Paul Revill** and **Laura Bojke**, who were all promoted to Chair – well done, professors!

Staff Activites

In September, Francesco Longo presented 'Does public social care expenditure improve care-related quality of life in England?' At the Policy Research Unit Events seminar funded by NIHR Policy Research Unit in Adult Social Care.

Adriana Castelli presented the paper entitled 'Response to COVID-19: Was Italy (un)prepared?' at the European Health Policy Group conference 'COVID-19: impacts on health and health care systems in Europe' held virtually in September and organised by London School of Economics.

Luis Fernandes, Luigi Siciliani and **Laurie Rachet Jacquet** participated in the European Training Network's Marie Skłodowska-Curie grant Final Results Workshop.

Richard Cookson gave a talk on how distributional cost-effectiveness analysis could be used to inform decisions about prioritising access to COVID treatments and vaccinations, as part of the International Society for Pharmacoeconomics and Outcomes Research Webinar Series on 'Balancing Economics and Ethics: How Can VA/HTA Support Equitable Resource Allocation'.

Katja Grasic gave a presentation entitled 'Incentivising hospital quality through evidence-based care bundle payment' in October for the European Health Economics Association digital seminar series.

Ana Duarte presented a workshop at the 4th Annual European meeting on Gene Therapy for Rare Disorders. The session was entitled 'HTA and reimbursement of Cell Therapies'.

The Society for Medical Decision Making 42nd Annual North American Meeting was held in October. Susan Griffin and Fan Yang delivered a short course entitled 'Quantifying and Valuing Health Inequality Impacts in Economic Evaluation'. Fan Yang also presented 'Uncertainty Analysis in Intervention Impact on Health Inequality for Resource Allocation Decisions' at the meeting.

See our website for full details of CHE staff news. www

New funding

EC H2020 - PROFID: Implementation of personalised risk prediction and prevention of sudden cardiac death after myocardial infarction

Andrea Manca

Funder: European Commission 1 Jan 2020 - 31 Dec 2024

CHE Publications July 2020 - October 2020

Abramovich A, **de Oliveira C**, Kiran T, et al. Assessment of health conditions and health service use among transgender patients in Canada. *JAMA Network Open* 2020;3(8):e2015036.

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Essue BM, Iragorri N, Fitzgerald N, **de Oliveira C**. The psychosocial cost burden of cancer: A systematic literature review. *Psycho-Oncology* 2020;doi: 10.1002/pon.5516.

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